

Amana.

Radarrange Plus™
3+1 microwave cooking center

Use & Care Manual



Model RCC-6

Shown with optional (extra cost) hood

Radarange Plus.
3+1 microwave cooking center

Record in space below the Model No., Serial No. and Manufacturing No. recorded on the nameplate of your Cooking Center. To locate nameplate, open lower oven door and look on frame above door.

Model No. _____

Serial No. _____

Manufacturing No. _____

Date Installed _____

Retain these numbers for future reference. We also suggest you retain your sales receipt as proof of date of purchase.

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4 Defrost Cook

IMPORTANT RULES FOR SAFE OPERATION

3

Inspection and Preparation for Use

1. Unpack and visually check the unit. After the Cooking Center is uncrated, all packing material must be removed.

Inspect the Radarange Oven for any damage such as misaligned door, damaged gasketing around the door, dents or holes in the screen of the door or dents inside the oven cavity. Inspect the entire Cooking Center.

Any dents or breakage should be reported to your Amana Dealer and the delivering carrier immediately. Your Amana Dealer will tell you if the unit will operate correctly.
2. Record the model number, serial number and manufacturing number stamped on the metal nameplate in the space provided on page 1 of this manual. To locate the nameplate, open the lower oven door and look on the frame above the oven.
3. Complete the warranty registration. Included with the packet that comes with the Cooking Center is a punched registration card.

This must be filled out and returned to Amana Refrigeration, Inc., Amana, Iowa 52203. Federal regulations require that all manufacturers of microwave ovens have a permanent record of the owners of each oven.
4. **ELECTRICAL WARNING:** The entire Radarange Plus 3+1 Microwave Cooking Center must be properly grounded by a qualified installer to avoid shock hazard. It is the personal responsibility and obligation of the customer to contact a qualified electrician/installer and have the unit connected to a properly grounded circuit in accordance with the National Electrical Code.

Read and follow these Rules for Safe Operation of the Radarange Microwave Oven:

The Amana Radarange Cooking Center is designed to be safe and reliable. Now we ask you to do your part. As with all appliances, there are certain rules to follow — some that apply to all microwave ovens and ranges plus some which are unique. Make sure everyone who cooks is familiar with this product's operation and with these precautions.

1. WARNING — TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY:

- A) Do not attempt to operate the Radarange 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 closes 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 personnel.

2. Warnings about general use

- A) **Extreme overcooking**, as in conventional cooking, can cause food to smoke or possibly ignite. In the rare event this happens, push the **STOP** switch, keep the oven door closed and the fire will self extinguish.
- B) **Do not operate the oven when it is empty.** Microwave energy can damage the magnetron tube if the oven is operated empty for an extended period of time.
- C) **Water** must never be poured into the bottom of the oven.
- D) **Do not remove the oven's outer case, door or control panel at any time.** Doing so would expose you to extremely high voltage. All service and repair must be performed by a qualified service technician.

3. Warnings regarding specific features

- A) The **temperature probe** must always be stored outside the oven when not in use.
- B) The **temperature probe** must always be securely inserted into food. If the probe should fall out, it will sense air temperature and the food will overcook.
- C) The **temperature probe plug** must not be immersed in water for cleaning, and should not be washed in a dishwasher. Wash the probe with hot, soapy water. Rinse and dry thoroughly.
- D) When **holding a food at temperature** in your Radarange Oven, you must always select a temperature of 140°F or above to prevent the growth of bacteria and toxins.

4. Warnings regarding specific types of foods, etc.

- A) **Eggs** must not be cooked or reheated in the shell or with an unbroken yolk. To do so may cause a pressure build-up and eruption. Always 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.
- B) **Potatoes, tomatoes, or other foods with a "skin"** must only be cooked in the microwave oven after the skin has been pierced. You must be sure that all foods with an outer skin or membrane are pierced to allow steam to escape during cooking.
- C) **Ordinary popcorn** must only be popped in the Radarange Microwave Oven in the specially designed Radarange Microwave

Oven Popcorn Popper. Special popcorn in bags designed and labeled for microwave only may also be used.

- D) **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, it can erupt in the oven or when removed.
- E) **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. USDA extension specialists do not recommend home canning in microwave ovens.

5. Warnings regarding **utensils**

- A) **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.
- B) **Regular cooking thermometers** must not be used in the Radarange Oven. Most cooking thermometers contain mercury and may cause "arcing" in the oven.
- C) **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.
- D) **Metal cookware** is not recommended for use in the microwave oven. Do not wrap food in aluminum foil except when recommended in the recipe (as poultry). The use of metal cookware, "TV" dinner trays or foil will increase cooking time and decrease energy efficiency. It usually causes uneven cooking and can cause "arcing". Also, with extended use, metal cookware could damage the magnetron tube of any microwave oven designed for home use.
- E) **Newspapers** should never be placed in a microwave oven. Some types of printers' ink can absorb microwave energy and could cause the paper to ignite.
- F) **Paper towels** which contain nylon or other synthetic fibers woven through them should not be used because the heated synthetics could cause the paper to ignite.

CAUTION:

Do not store items of interest to children in cabinets above your range — children climbing on the range to reach items could be seriously injured.

Do not touch surface heating areas or adjacent surfaces, oven elements, or interior surfaces —

Heating areas and adjacent surfaces, oven elements, and interior surfaces may be hot enough to cause burns even though they look cool.

During and after use, do not touch or let clothing or other flammable materials contact heating areas and adjacent surfaces, oven elements, and interior surfaces until they have had sufficient time to cool. Other surfaces of the appliance may become hot enough to cause burns — among these surfaces are the top of the oven door, the grill above the oven door, and the front edge of the cooking surface.

CAUTION

Don't use a broken or cracked rangetop. Liquid can penetrate through the broken rangetop to create a shock hazard. Call your authorized service agency immediately.

Check operation of the latch and interlock switch systems on the Radarange Oven

The Radarange Oven contains latch and interlock switches to assure no microwave energy is generated when the oven door is open.

When the door is closed, the timer set and the start switch pushed, a latch automatically locks the door before microwave energy is generated. As long as the oven is cooking (with time left on the timer and the start switch pushed) the door is latched. In addition, hidden back-up interlocks sense motion of the door if it is opened, and automatically turn the oven off.

Here is how you may check the operation of the latch:

- A. Put a glass of water in the Radarange Oven.
- B. Locate these switches on the Radarange Oven control panel:

START

STOP
- C. **Turn the Timer dial clockwise.** The timer dial light will come on.
- D. **Push the START switch.** The oven should now be operating, the latch should be engaged, and the oven cavity light should be on.
- E. **Push the STOP switch.** The oven should shut off immediately. The sound of the motor should cease and the oven cavity light should go out. The latch should now be disengaged and the door should open freely.
- F. **Open the door fully.** The cavity light will come on whenever the door is opened.
- G. **Turn the timer dial counterclockwise until OFF is lined up with the notch above it.** The timer light should go off, and the cavity light will go off when the door is closed.

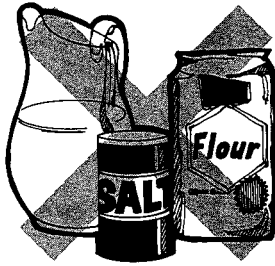
If under any of the preceding conditions the oven does not operate as stated, do not use it. Call your Amana dealer or authorized service agency.

Important Precautions for Safe Conventional Oven and Smoothtop Range Cooking:

1. Precautions about **general use**
 - A) Your range or oven should not be used for **warming or heating the room.**
 - B) **Small children** should not be left unattended near a range when it is in use. Never allow them to sit or stand on any part of the range.
 - C) **Dress appropriately** — don't risk burns — fasten long hair, avoid wearing synthetic wigs and loosely hanging clothing or accessories that might accidentally contact hot surfaces.
 - D) Contact an authorized Amana Service Center or your Amana Dealer should your Cooking Center require service. **Do not attempt to perform service yourself.**
 - E) **Flammable materials** should not be stored in an oven or near surface heating areas.

In case of grease fires

NO!



- F) **Smother grease fires** with a non-flammable lid or dry chemical (baking soda) or foam type extinguisher. Not water. Not salt. Not flour.
- G) **Use dry** (never damp) **hot pads** when touching hot utensils or oven racks to avoid steam burns. Don't let hot pad touch hot oven elements.
- H) **Household cleaning products** should never be mixed. Chemical mixtures may interact with objectionable or even hazardous results.
- I) **Remember your range is a cooking device** and will get hot. Train yourself and your family to avoid hot surfaces.
- J) **Plastic items** should not be placed on warm heating areas. They could melt and stick.

YES!



When cleaning ...
NEVER mix
 cleaning products

2. Precautions regarding **rangetop use**

- A) If a **wet paper towel** is used to wipe spills on a warm heating area, be careful to **avoid steam burns**.
- B) **Allow heating areas to cool** before cleaning. Fumes could be hazardous.
- C) **Choose flat-bottomed pans large enough** to cover the heating area. This assures most effective energy utilization. If you must use a small pan on a large heating area, be careful of loose clothing, potholders, paper towels, etc., which can burn on contact with exposed part of the heating area.
- D) When **heating fat** remain nearby. While the heating areas are cooler during cooking than most rangetops, fats can smoke and ignite if they boil over or spill onto hot surfaces.
- E) **Earthenware, pottery, glass ovenware, stoneware or china** should not be used on the rangetop. They may break due to sudden change of temperature unless their manufacturer states otherwise.
- F) **Turn pot handles away** from outer edge and don't extend them over adjacent heating area. This minimizes your risk of burns, ignition of flammable material and spillage due to accidentally hitting the handle.
- G) **Use Corning™ Cleaner-Conditioner** with paper towel regularly. If abrasive cleansing powders are used over a period of time (approximately 6 months) they will roughen the surface of the glass-ceramic rangetop.
- H) **Wipe up spillovers containing sugar immediately** (while still hot) with several wadded paper towels. Scrape with razor blade. Clean thoroughly. If not done immediately, pitting or flaking of the rangetop will result.
- I) **Cookware with rough bottoms** should not be used. Avoid sliding rough metal objects across the cooking surface. Scratching or metal-marking may result.

- J) **Avoid using sponge or dishcloth to clean top.** They can leave film of soil-laden detergent water on surface which may turn brown and discolor next time an area is heated. If this should happen, Cleaner-Conditioner will remove the discoloration.
- K) **Aluminum foil** or foods packaged in foil should not be placed directly on the rangetop for cooking. Use of foil will damage the rangetop.

3. Precautions regarding **conventional oven use**

- A) Open **oven door** slowly. Let hot air or steam escape before removing or replacing food.
- B) **Unopened food containers should not be heated.** Pressure build-up may cause container to burst and result in injury.
- C) Keep **oven vent ducts** unobstructed.
- D) Place **oven rack** in desired position while oven is cool. If you must move rack while oven is hot, do not let potholder contact hot heating elements in oven.
- E) **Door gasket** should not be cleaned — it is essential for a good seal. Take care not to rub, damage or move the gasket.
- F) **Harsh abrasives, chemicals, commercial chemical-type oven cleaners or liner protective coatings should not be used** on the interior of the range. If cleaners are not entirely removed (they are not always visible) a reaction may result with the oven interior at the high temperature of the self-cleaning cycle, causing etching of oven interior.
- G) Only **parts listed** in this guidebook should be cleaned as directed.
- H) **Broiler pan, Cookmates® cookware,** and any other utensil should be removed before self-cleaning the oven.
- I) **Sides of oven shelves** should be lubricated with cooking oil after self-cleaning the oven. This will help to avoid damaging the oven shelf guides and let the shelf slide easier.

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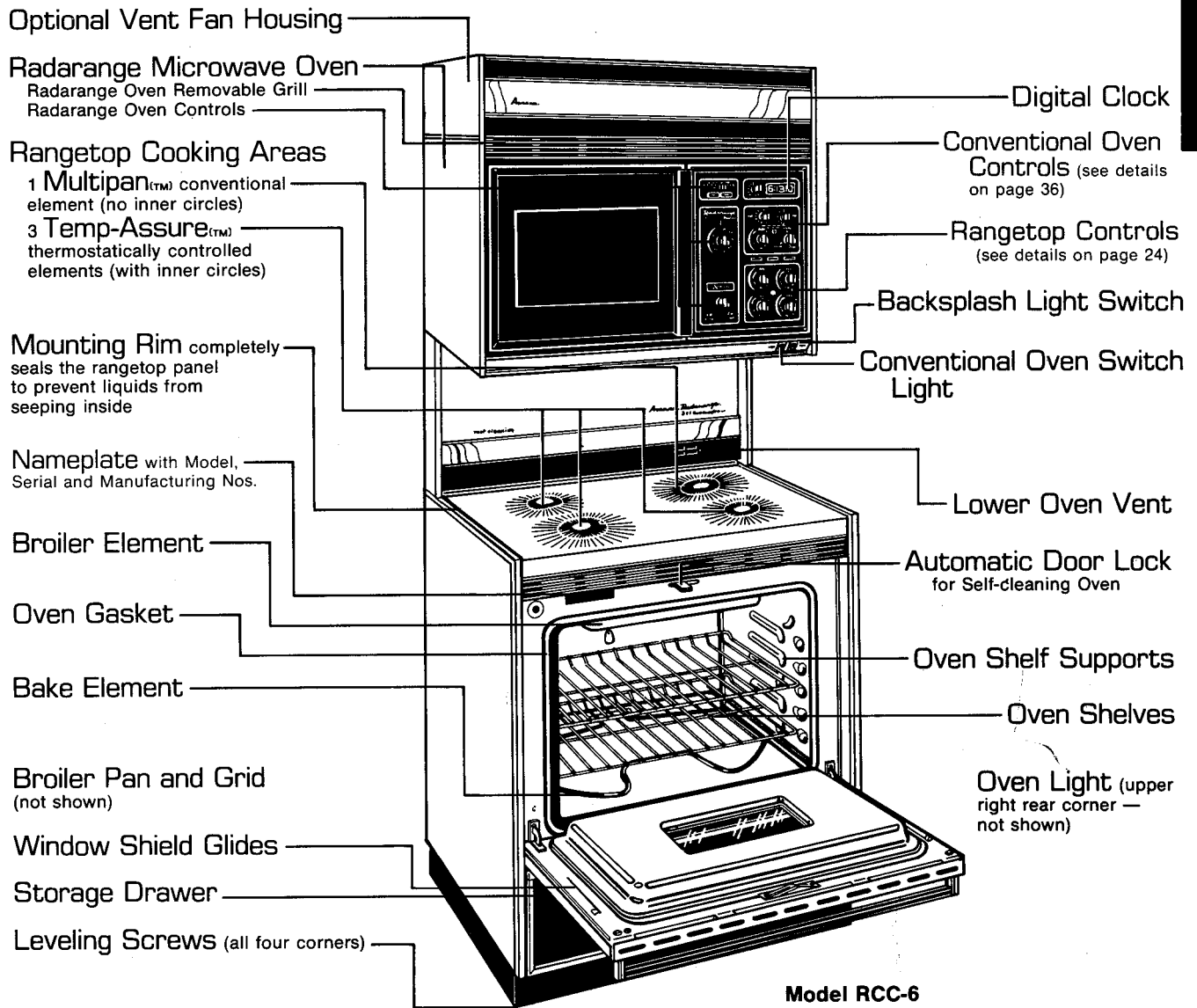
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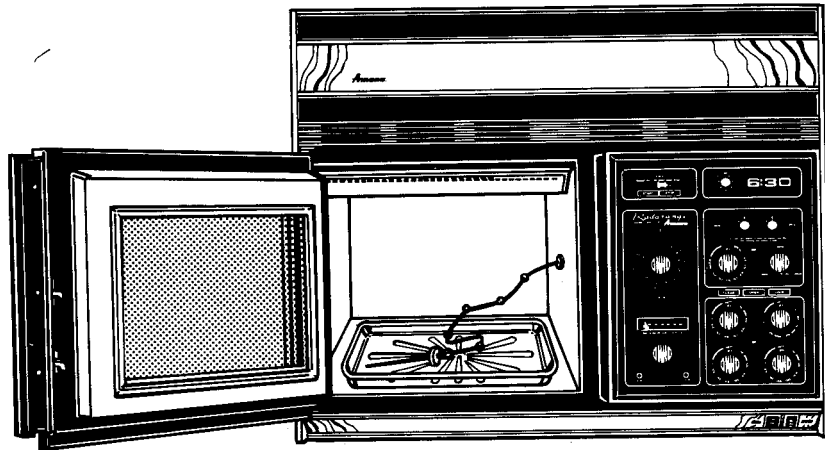
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Radarange Cooking Center Features and Controls



Model RCC-6

Part 2 - Radarange Oven Mini Cooking School



Your Radarange Plus 3 + 1 Microwave Cooking Center is now ready to use and you are familiar with the basic precautions for its safe use. In this section of your Use and Care Manual, you'll begin your own Radarange Oven Mini Cooking School course. While you are gradually completing it, we suggest you read **Part 3**, which explains use of the 3 + 1 smoothtop range and conventional oven.

Session 1

11

Read "Introduction to Radarange Oven Cooking", the first section of your Amana cookbook. In reading this section you'll learn:

- how to use the cookbook
- the meanings of microwave cooking terms
- types of accessories and utensils recommended for use in your microwave oven
- many microwave cooking techniques
- how to adapt your favorite conventional recipes for the microwave oven.

Session 2

Learning the Radarange Oven Controls/ Cooking by Time/ Defrosting

The picture on the next page shows the Radarange Oven controls on your Cooking Center. Locate each of these controls:

COOKMATIC^(TM) POWER SHIFT — Used to select the power setting desired. Used when cooking by time and when cooking to temperature.

START SWITCH — Used to start cooking operation. You must set cooking time or temperature before pushing start switch.

STOP SWITCH — Pushed any time you want to stop cooking. When cooking, you **must** push **STOP** switch before door can be opened.

TIMER SETTING MARK — For precise measurement of time.

TIMER DIAL — Used **only** when cooking by time. Turned (clockwise) to select the amount of cooking time desired.

TEMPERATURE CONTROL READOUT — Provides readout of both the set and actual food temperatures when cooking to temperature.

TEMPERATURE SELECTOR DIAL — Used **only** when cooking to temperature. Turned to select the end temperature desired.

HOLD LIGHT — Glows red when oven is holding at temperature.

COOK LIGHT — Glows red when oven is cooking by time or to temperature; flashes on and off when cooking on a lower Cookmatic power level.

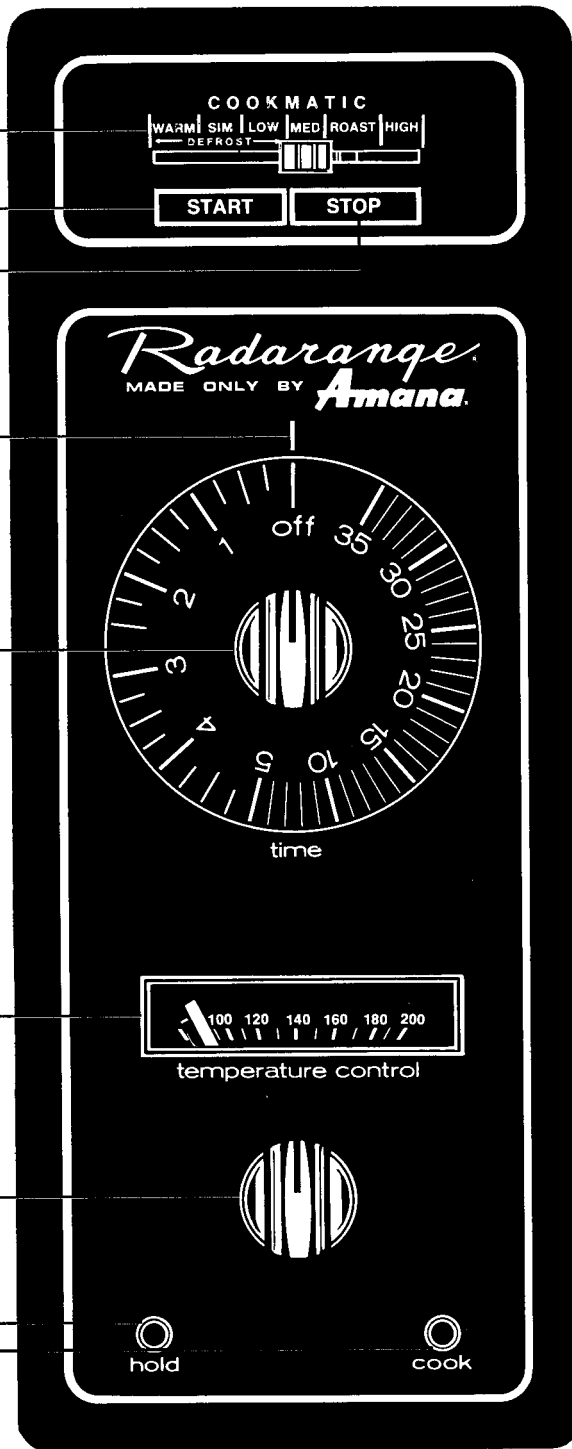
TRY IT! Cooking By Time With High Power

There are two basic ways to cook in your Radarange Microwave Oven:

- 1) by time, or
- 2) to temperature.

If you're cooking by time you just cook the length of time specified in the recipe.

- A. **Be sure the temperature probe is not in the Radarange Oven.** The probe cannot be in the oven when cooking by time.



COOKMATIC

WARM DEFROST | SIM | LOW | MED | ROAST | HIGH

START

STOP

Radarange
MADE ONLY BY *Amana*

off

35

30

25

20

15

10

5

2

3

4

5

time

100 120 140 160 180 200

temperature control

hold

cook

- B. **Put a casserole filled with water in the Radarange Oven.** This is to absorb the microwaves as you experiment with the controls. When there is no food, water or other "load" to absorb the microwave energy, it could damage parts of the microwave oven.
- C. **Look at the timer dial.** Notice it is numbered from "1" to "35". These numbers represent minutes of cooking time. Notice there are 3 small marks between each of the numbers from "1" to "5". These each represent 15 seconds. For example, the middle mark between "4" and "5" means 4 minutes, 30 seconds. To cook for 4 minutes, 30 seconds, you'd set the timer dial at this mark.

The marks between the "5" and the "35" each represent one minute. If, for example, you wanted to cook something for 6 minutes, you'd set the timer dial at the 1st mark to the left of the "5". The next mark is for 7 minutes, etc. The next numbered minute would be "10".

Notice the last number is "35". This means that when you're cooking by time, the longest cooking time you can set is 35 minutes. That's as much as you'll need for cooking most foods. And if you want to cook longer, all you do is reset the timer after the first 35 minutes is up and start the oven again.

- D. **Set the timer for 10 minutes by turning the timer dial clockwise until the "10" is directly below the Timer Setting Mark.**

Notice that the Timer Dial and Radarange Oven cavity lights are turned on.

- E. **Locate the Cookmatic Power Shift. Slide the shift as far to the right as it will go, to the HIGH setting** (you'll cook at other settings later in this session). Cooking with **HIGH** power is the fastest and easiest way to cook in a microwave oven. When at **HIGH** power your Radarange Oven will provide approximately 675 watts of cooking power. It's **very** fast!

- F. **Push the **START** switch.** The oven is now cooking. Notice the timer dial move counterclockwise as the time expires. You can estimate the amount of cooking time remaining by looking at the setting directly below the time setting mark. Also, notice the red light above **cook** indicates that the Radarange Oven is now cooking.

- G. Occasionally you may make a mistake when setting a cooking time. Or you may decide to change the time setting after you've started cooking. If so, it's easy to change the time setting on your Radarange Oven. For example, suppose you decide you only want to cook 5 minutes more. **Turn the dial counterclockwise to the 5 minute setting.** Easy!

- H. You may also want to stop the oven at some time to check the cooking, to stir, etc. If so, it's easy. **Just push the **STOP** switch.** The oven will turn off immediately. **Open the door, check the food, then close it again.** Now **push the **START** switch.** The oven will start cooking again from the point where it stopped when you pushed the "stop" switch.

1. Push the **STOP** switch again. Suppose now that the food is done and needs no more cooking. Just move the timer dial back to the off position.

SUMMARY — To Cook With High Power

1. Turn timer dial clockwise to desired setting. (To cook 3 minutes, set at "3".)
2. Check to be sure the Cookmatic Power Shift is at the highest position.
3. Push **START** switch.

TRY IT! Cooking By Time At Lower Cookmatic Levels

Many foods cook very well at full microwave power (HIGH). However, just as some foods cook better at lower rather than higher oven temperatures, some foods cook better at lower rather than higher microwave power levels. Your Amana Cookmatic Radarange Microwave Oven has an almost infinite range of microwave power settings. For convenience and exactness, the Cookmatic Power Shift control has been divided into six "basic" settings: **HIGH, ROAST, MED** (medium), **LOW, SIM** (simmer), and **WARM**. These power levels are attained by cycling the microwave power on and off at various time intervals. Each power level is particularly well suited for cooking different types of foods.

Each recipe in the Amana Radarange® Microwave Oven Cook Book specifies the Cookmatic power level to be used for cooking. To heat a cup of hot chocolate:

- A. Place a cup of chocolate milk (or a cup of water) in the Radarange Oven.
- B. Set the timer for 1 minute 45 seconds. (Remember — each mark between "1" and "5" represents 15 seconds.)
- C. Slide the Cookmatic Power Shift to the **ROAST** setting. (The red line on the power shift should line up with the **ROAST** label.)
- D. Push **START** Switch. The oven is now cooking at the **ROAST** Cookmatic Power Level. Watch the **cook** light. It will cycle on and off, indicating the oven is cooking at a lower Cookmatic level. You may notice a slight pulsing sound. This sound is normal when cooking at lower Cookmatic levels. This sound is a result of the magnetron tube cycling on and off to produce the lower Cookmatic level. When the cooking time has elapsed a signal will sound.

16 SUMMARY — To Cook at Lower Cookmatic Power Levels

1. Turn timer dial clockwise to desired time setting.
2. Slide Cookmatic Power Shift to desired power setting.
3. Push **START** switch.

TRY IT! Changing Cookmatic Levels During Cooking

Sometimes you may want to switch the Cookmatic power level as you're cooking. For example, if something is cooking too quickly or appears likely to boil over, you'll want to shift the Cookmatic power level to a lower setting. With your Amana Radarange Microwave Oven you can change the power level instantly, without even stopping the oven.

- A. **Place a cup of hot tap water in the Radarange Oven.**
- B. **Set the timer for 3 minutes.**
- C. **Slide the Cookmatic Power Shift to HIGH.**
- D. Push **START** switch. The oven is now cooking at **HIGH** power.
The water will start to boil during the three minutes. When it does, **slide the Cookmatic Power Shift to SIM** (simmer). Watch the water — it will stop boiling but will stay hot.
- E. **Slide the Cookmatic Power Shift to various positions.** Notice power can be set anywhere — even **between** the six "basic" settings.

SUMMARY — To Change Cookmatic Level While Cooking

Just move the Cookmatic Power Shift to the desired power setting.

TRY IT! Defrosting

Your Radarange Microwave Oven is designed to allow quick defrosting of frozen foods. Most foods are defrosted using one or more of the lowest three Cookmatic Power Levels (**LOW, SIM, or WARM**). The lower power levels pulse microwave energy on and off automatically. During the "on" periods microwave energy is produced, heating the exterior of the frozen food. During the "off" periods the heat is conducted to the interior of the food. This allows the food to be evenly defrosted, with little or no cooking of the exterior before the interior is completely thawed.

Defrosting instructions for specific types of foods are provided at the beginning of appropriate chapters of your Amana cookbook. A 10-oz. package of frozen fruit is defrosted in 3½ to 4½ minutes at the **LOW** Cookmatic Power Level.

- A. **Unwrap and place 10-oz. frozen fruit in a 1-quart covered casserole.** If the fruit is packaged in a plastic bag, merely slit the bag to allow steam to escape. (If you do not have frozen fruit on hand, place 2 ice cubes in a cup in the Radarange Oven.)
- B. **Place fruit or cup of ice in Radarange Oven.**
- C. **Set the timer for 3½ minutes.** (Note: Start with the shortest amount of time and increase only if needed.)
- D. **Slide the Cookmatic Power Shift to the LOW setting.**
- E. **Push **START** switch.** Notice the red light above **cook**. It will flash on and off as the microwave power pulses on and off.
- F. **At the end of 3½ minutes, remove the casserole from Radarange Oven. Remove cover, and stir fruit.**
- G. **If additional defrosting is necessary, set the timer for 1 minute; then push **START** switch.**

Note: Many foods, especially meats, need to be completely defrosted before cooking begins. If not completely defrosted on the inside as well as the outside, cooking will be uneven. If ice crystals remain in the inside of meats when cooking starts, the meat will be done on the outside while the inside is underdone. Defrosting times and power levels suggested in your Amana cookbook have been thoroughly tested to provide optimum defrosting. Be sure to follow defrosting instructions exactly.

SUMMARY — To Defrost

1. Turn timer dial clockwise to desired defrosting time setting.
2. Slide Cookmatic Power Shift to the desired defrost power setting.
3. Push **START** switch.

In this session you've learned to cook by time in your Radarange Oven. You've learned to cook with **HIGH** microwave power and with the lower settings, including those ideally suited for defrosting. We suggest you practice what you've learned in Session #2 before going on to Session #3. Try cooking and defrosting at several power levels.

Session 3

Cooking to Temperature/ Holding at Temperature

Your Amana Radarange Oven has an automatic temperature control system which allows you to cook food to the precise temperature desired. You'll find this feature particularly helpful for cooking meats to the exact degree you like. You can also use it to reheat leftovers, to warm soups and beverages and for many other cooking tasks. The temperature system is **not** intended for use as a candy thermometer. The highest temperature sensed by the system is 200°F, while most candies require temperatures 230°F or higher.

To cook to temperature you'll use sections of the Radarange Oven control you didn't use in Sessions #1 or #2. Locate these controls on your Radarange Oven:



TEMPERATURE CONTROL READOUT — Provides readout of set and actual food temperatures when cooking to temperature.

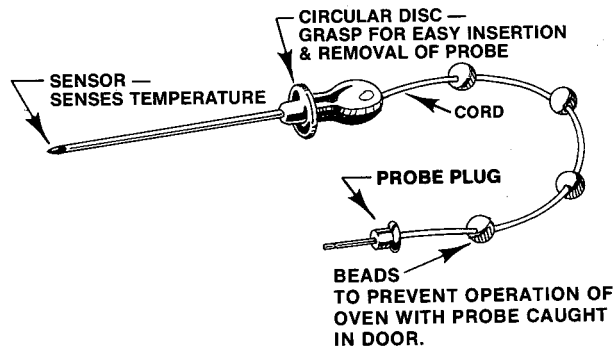
DESIRED TEMPERATURE INDICATOR — This pointer is set to the desired end temperature.

ACTUAL TEMPERATURE INDICATOR — This pointer indicates the actual temperature of the food.

TEMPERATURE SELECTOR DIAL — Used **only** when cooking to temperature. Turned (clockwise) to select end temperature desired.

HOLD LIGHT — Glows red when oven is holding food at a preset temperature.

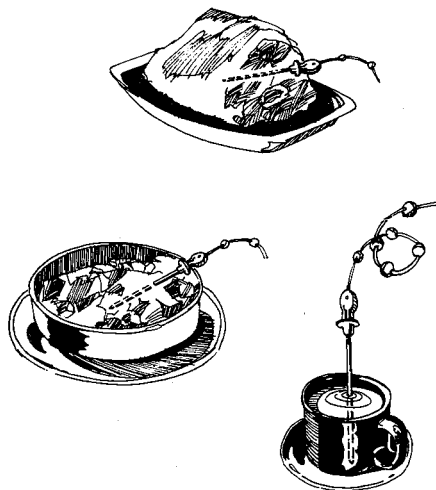
The temperature probe looks like this:



Special Hints for Using the Temperature Control System

19

Do

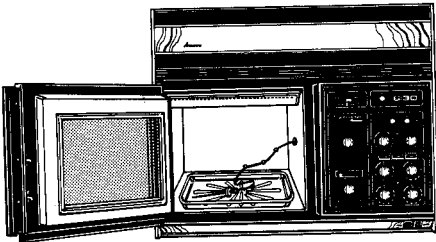


1. Insert probe as instructed in recipe or as shown at left:
 - a. Meats
 - With the sensor tip in the thickest section, away from fat and bone.
 - b. Casseroles, Leftovers
 - With tip in center of casserole or dish, not touching bottom or sides.
 - c. Beverages
 - With tip in center of liquid.
2. Be sure probe is **securely** inserted into food. If probe should accidentally fall out of food it will sense air temperature and the food will overcook. If the probe tends to slip out of the food, loop the cord as shown in the beverage drawing to the left. The cord can be secured in the slit in the bead closest to the probe plug. Simply loop the cord, then press a section of the cord into the slit in the bead.
3. Defrost food completely before inserting temperature probe. The sensor tip of the probe can be damaged if forced into frozen food. Also, if the temperature probe is in contact with a frozen area (such as the center of a partially defrosted roast), results may be unsatisfactory.
4. If a recipe suggests covering with plastic wrap, using a heavy duty plastic wrap such as one made of Saran Wrap™. Some lightweight plastic wraps can melt if in contact with a hot temperature probe for a long time.
5. If necessary, use a hot pad to remove hot temperature probe. During cooking the probe could become hot enough to burn you.
6. Wash the probe with hot, soapy water. Do not immerse the probe plug in water or wash in an automatic dishwasher. Rinse and dry probe thoroughly.
7. **Always** remove the temperature probe after use. Store the temperature probe somewhere other than inside the Radarange Oven, in a place where it won't be lost or damaged.

Don't

1. Do not attempt to force the temperature probe into solidly frozen foods. The temperature sensor tip could be damaged or the probe could break.
2. Do not use the temperature probe in conjunction with foil or other metal. Arcing could result. **If a recipe suggests the use of foil, do not use the temperature probe for cooking.**
3. Do not immerse the temperature probe plug in water or wash in an automatic dishwasher. An electrical problem could occur.
4. Do not store the temperature probe inside the Radarange Oven.
5. Do not attempt to operate the microwave oven if the temperature probe should accidentally get caught in the oven door.
6. Do not use the Automatic Temperature Control System when cooking different dishes or foods in the Radarange Oven at the same time. Because different foods cook at different rates, the results may be unsatisfactory.

TRY IT! Cooking To Temperature/ Holding At Temperature



Try using the automatic temperature control to heat water to 190°F to make instant coffee.

- A. **Before using the temperature probe, wash it in hot soapy water. Do not immerse the probe plug in water. Rinse and dry.**
- B. **Place cup of fresh cold water in the Radarange Oven.**
- C. **Insert probe jack securely into the probe receptacle on the right side of the microwave oven cavity. Temperature control Readout will light.**
- D. **Place tip of probe in center of cup.**
- E. **Close Radarange Oven door.**
- F. **Turn the Temperature Selector Dial clockwise until the white desired temperature pointer is aligned with the 190°F setting (the mark between "180" and "200" on the Temperature Control Readout). If the Temperature Control Readout is not lit, check to be sure the probe jack is securely inserted into the oven receptacle.**
- G. **Slide the Cookmatic Power Shift to the HIGH setting.**
- H. **Push the START switch.** Notice the cook light is on. This indicates you are cooking at **HIGH** power. **Also notice** — you didn't select a cooking time. When cooking to temperature, no cooking time is selected. It doesn't matter if the timer dial is set at a time setting or at **OFF**. The oven ignores any time setting when the temperature probe is in place.

- I. **Watch the Temperature Control Readout.** As the water heats, you'll see the red pointer move toward the white Desired Temperature Indicator. This red pointer is the **Actual Temperature Indicator**. For example, when the pointer lines up with the mark below the 160, you'll know the water is 160°F. The lowest temperature which can be sensed by the temperature probe is 110°F; the highest is 200°F.
- J. **When the Actual Temperature Indicator reaches 190°F, look at the light beside HOLD.** It will glow red, indicating the oven is now holding the water at the selected temperature. The automatic temperature control system cycles the microwave power on and off to hold the temperature you selected, until you shut the oven off. This temperature-holding capability allows you to prepare evenly cooked, tender meats. You can also maintain a precise simmer of sauces, stews, and soups for as long as you wish. And, you can hold a casserole, fondue, meat or almost any other food at serving temperature for even the latest of the late-comers.

Note: Most foods — and especially cooked meat, fish or poultry — should be held at 140°F or above to prevent the growth of bacteria or the production of toxins.

Also Note: Occasionally you may want to change the desired end temperature while you're cooking. This can be done while cooking to temperature or while holding at temperature. Just turn the temperature selector dial until the white pointer is at the desired end temperature setting.

- K. Push the **STOP** switch, whenever you want to stop holding at temperature.
- L. **Add instant coffee to water.**

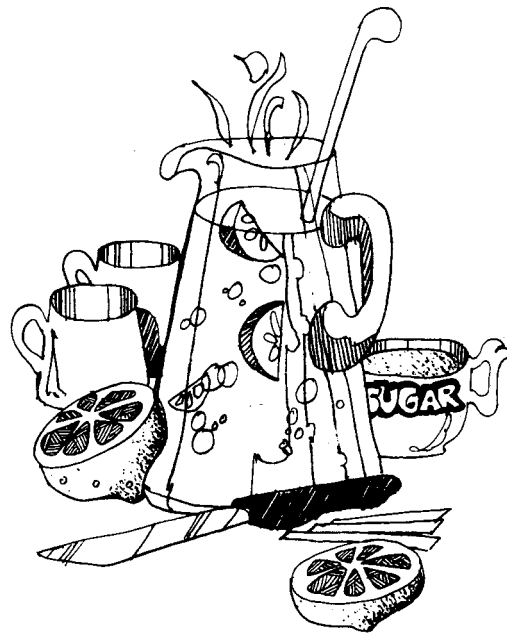
SUMMARY — To Cook to Temperature and Hold

1. Insert probe into food and oven receptacle.
2. Turn temperature selector dial until the white pointer is at the desired temperature setting.
3. Slide Cookmatic Power Shift to desired power setting.
4. Push **START** switch.
5. Push **STOP** switch to turn oven off.

In this session you have learned to use the automatic temperature control system both to cook to temperature and to hold food at a given temperature. We'd suggest trying each of these cooking procedures on your own before going on to Session #4. In Session #4 you'll learn how to make entire meals in your microwave oven.

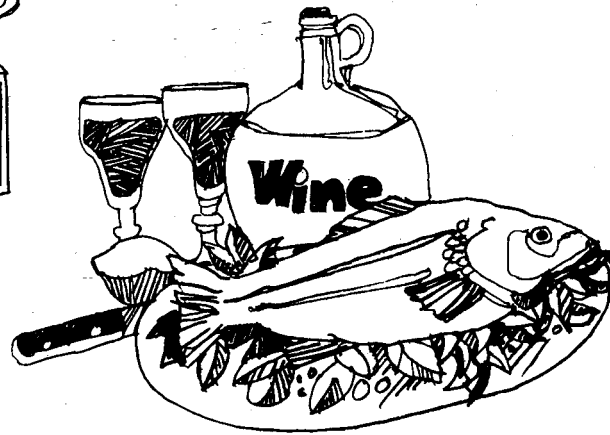
Remember — the temperature probe should not be stored in the Radarange Oven when not in use. When you're through using it:

- Unplug the probe plug from the oven receptacle.
- Wash the probe in hot, soapy water. Do not immerse the plug in water or wash in a dishwasher. Rinse and dry probe thoroughly.
- Store the probe somewhere other than inside the Radarange Oven. Store the probe in a place where it won't be lost or damaged.



Session 4 ²³

Read "Meal Planning," the second section of your Amana cookbook. In this section you'll learn how to make entire meals in your microwave oven.

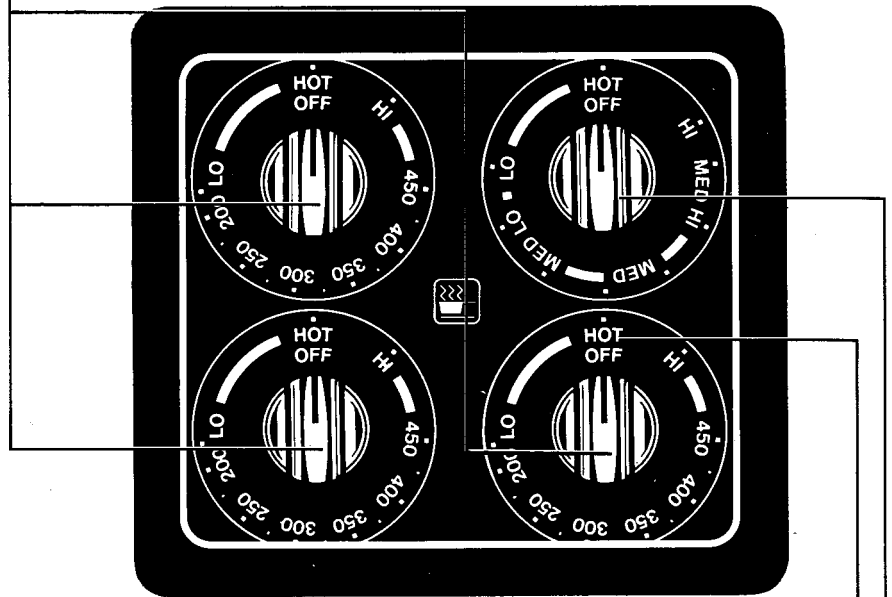


Part 3- Rangetop and Conventional Oven Cooking

Rangetop Controls

Beneath the glass ceramic top of your Amana Radarange Plus 3 + 1 Microwave Cooking Center are three grid-like Temp-Assure™ heating elements, each with its own exclusive built-in thermostat to give you more precise cooking than any other smoothtop design — or any range. There's also one conventional Multipan™ element for cooking foods that don't require critical temperatures. You enjoy precise temperature control, even heating, fast heat-up and cooler cooking. For a full explanation of how the elements work, see pages 32-33.

TEMP-ASSURE™ RANGETOP CONTROL KNOBS AND INDICATOR LIGHTS — Push in and turn control knobs to turn on rangetop cooking areas. (Knobs are arranged to match the location of rangetop area they control.) Light glows continuously when the corresponding knob is turned on and illuminates the setting.



"HOT" LIGHTS — remain on after each rangetop heating area is turned off until burst area cools to a safe temperature.

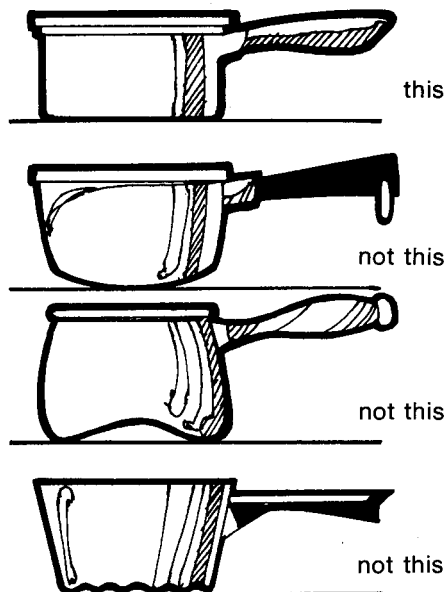
MULTIPAN™ RANGETOP COOKING AREA CONTROL KNOB AND INDICATOR LIGHT — Push in and turn control knob to turn on proper rangetop cooking area. Light glows continuously while the knob is turned on and illuminates the setting.

How to Start Rangetop Cooking

You will find that your rangetop will serve you best if you remember some of its special features when you start to cook, and follow the suggested steps that appear below. They can help you avoid unnecessary cleaning, prevent over-cooking and save on electrical power.

Before using the rangetop for the first time, thoroughly clean and coat the surface with Cleaner-Conditioner (see page 50) and follow these basic steps:

1. Make sure bottom of cookware and cooking area are **clean, dry, and smooth**. In regions where there is abundant sand or dust, use a damp paper towel to remove surface particles before using.
2. Use one of the 3 **Temp-Assure™** units or the **Multipan™** unit depending on the size and type of pot you are using and the cooking you plan to do (see below and page 27).
3. Center cookware on a cooking area which most nearly matches the size of the bottom of the cookware.
4. Turn **control knob** to start cooking. As a safety feature, all knobs must be pushed in before they can be turned. A chart of suggested settings is on pages 29-30.
5. Reset the **control knob** as necessary for required changes in cooking.
6. Use Cleaner-Conditioner and follow cleaning instructions (page 50) when cooking is finished and the pot has cooled sufficiently.
7. Read information on "HOT" lights on page 28.



Which pots to use:

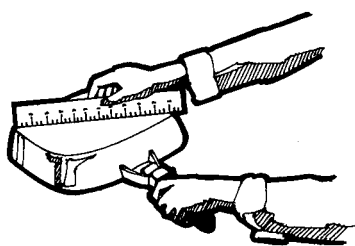
For best cooking results, always use cookware which is:

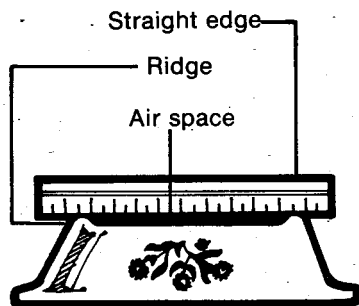
1. **Flat**
2. **Stays flat when heated**
3. **Most nearly matches the size of the heating area**

This is particularly important with the three **Temp-Assure** heating areas since the thermostats directly under the surface actually read the temperature of the bottom of flat pans. If pans that aren't perfectly flat are used on these three units, a higher setting will generally be required.

On the **Multipan** area most any pot or pan may be used. However, the flatter the pan, the more efficient the cooking will be.

When we say flat, we mean all-over flatness without grooves, recessed bottoms, other dents or warpage. One check of flatness is to place a straight edge ruler parallel to the bottom as shown. Rotate the straight edge a full 360° around the bottom, checking for flatness in all directions. If there is no gap between the ruler and the bottom of the pan, it will cook satisfactorily. Some bottoms of metal pans may become "flat" when heated, so the best guideline is: **TRY THE PAN.**





Corning Ware® cookware:

When using Corning Ware® cookware, use the **Multipan** heating area and a "LO" heat setting. Corning Ware pans will not work efficiently on the 3 **Temp-Assure** areas because the cookware has a slight ridge on the bottom and foods will take longer to cook. The glass-ceramic material is identical to that used in Cookmates® cookware, but the latter have smooth, flat-ground bottoms to give best cooking results. Remember, all of your Corning Ware cookware may be used in the oven or as serving pieces.

Remember:

Corning Ware cookware and Cookmates cookware are NOT the same. Although they're made from the same material, Cookmates bottoms are flat. Corning Ware pans are not.

Cookmates® cookware:

Cookmates cookware is made of a white glass-ceramic material and is especially designed to match the flat rangetop. Precision-ground bottoms remain flat when heated. They give the best possible contact with the smooth cooking area for best heat transfer and they allow predictable cooking results every time you cook on the 3 **Temp-Assure** heating areas.

Of course, Cookmates cookware may be used on the **Multipan** unit, too. And in fact, because they are perfectly flat, they'll be more efficient and use less heat than warped metal pans.

You can use Cookmates® cookware in a variety of ways:

- **On the top:** Cookmates cookware retain heat so they help keep food warm for serving.
- **In the oven:** Cookmates cookware may be used under the broiler or in the oven. The detachable handle may be used with some smaller Cookmates pieces. Use the handle to remove Cookmates skillets or saucepans from broiler or oven. Plastic cover on Cookmates cookware are for storage only and should never be used in the presence of heat.
- **For microwave cooking:** Cookmates cookware without metal parts can be used for microwave cooking and are marked under the lug "good for microwave." Those with metal parts or made of metal should not be used (beverage server, the fry pan with non-removable handle, 8-quart saucepot and the aluminum griddle).
- **For refrigerator or freezer storage.**
- **For food preparation:** Good for marinating meats in acid based foods. (e.g. tomato sauces, wine, vinegar.)
- **For serving:** Special cradles are available.

(CAUTION: Don't attempt to use handle with 3 or 5-qt. saucepans. The handle could break resulting in injury from spilled hot foods.)

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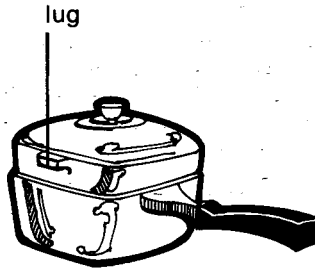
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Sizes of Cookmates® cookware: Located on underside of lug.

To order additional Cookmates cookware: See pages 34-35 for the complete selection available for all cooking needs. Available locally or direct from Corning.



About double boilers:

Because the 3 **Temp-Assure™** units evenly distribute low heat, most sauces, custards and other "heat-sensitive" foods can be successfully cooked without a double boiler. See suggested settings on pages 29-30.

Of course, you can use a Pyrex® brand or a metal double boiler (the flatter the better) on the **Multipan™** unit and by alternating lugs on two sizes of Cookmates saucepans, a double-boiler can be improvised. (See sketch.)

For Canning Instructions Contact:

Your local extension office
U. S. Dept. of Agriculture
Washington, D.C. 20250-

Ball Brothers Company
Consumer Service Dept.
1509 S. Macedonia Ave.
Muncie, Indiana 47302

Kerr Glass Mfg. Corp.
Research and Development Dept.
Consumer Products Division
Sand Springs, Okla. 74063

Which rangetop area to use:

You can use both kinds of heating areas on your rangetop for general cooking. When using flat pans you'll enjoy the precise temperature control of the **Temp-Assure** units. For favorite pots which aren't perfectly flat, use the **Multipan** area.

Using the 3 **Temp-Assure** heating areas for:

- All heat sensitive foods such as melting butter or chocolate, or for sauces such as hollandaise, cream or cheese.
- For long slow cooking and when you want to keep a simmer a simmer.
- For just right browning without watching.

Use the **Multipan** heating area for:

- Canning
- Pressure cooking
- Any high temperature cooking: frying, browning, boiling quantities of water, etc. While it may take a little longer to heat up than the 3 **Temp-Assure** areas, it will reach a higher temperature on "Hi."

Cooking directly on the surface: Although it is possible to cook directly on the heated cooking area, it is not recommended. Best results are obtained when food is cooked in cookware. Besides, it is always easier to wash the cookware than to clean the entire cooking surface.

Please Note: If you have a favorite pan you would like to use, TRY IT! You can experiment using the **Temp-Assure** units and if you don't get the performance you expect, shift the pan to the **Multipan** unit. It will not damage the rangetop so long as the bottom is smooth. Because of the many different metals available on the market and their various cooking characteristics, no hard and fast instructions can be given. For more explicit details on the mechanical functioning of the **Temp-Assure** and **Multipan** heating areas see page 33.

How the "HOT" Lights Safety Feature Works:

When you turn on any glass-ceramic cooking area, each will glow yellow at medium to high settings. However, when you turn off the heating area, the surface will return to its original whiteness before it has safely cooled. For this reason, Amana 3+1 ranges have a safety "HOT" light for each surface area above the control knob for that area.

WHEN ANY SURFACE UNIT IS TURNED OFF, THE "HOT" LIGHT REMAINS ON UNTIL THE CORRESPONDING SURFACE HEATING AREA IS AT A SAFE TEMPERATURE.

Note:

- The amount of heat in any surface heating area is determined by the length of time the unit is on and the type of pan used as well as the dial setting. *Therefore, the length of time each "HOT" light remains "on" will vary.* Do not expect the lights for two different heating areas to go off at the same time even if the units are turned off simultaneously.
- The **Multipan™** unit's "HOT" light will usually remain "on" longer than the **Temp-Assure™** unit's. Why? Because the **Multipan** unit develops a higher temperature and takes longer to cool down.

Important:

For the "HOT" light to activate, the surface unit must have been turned on for a minimum of two to five minutes.

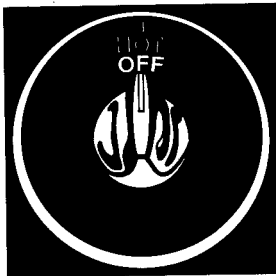
In other words, if you turn the surface unit "OFF" after a brief time period the surface could be at an elevated temperature without the "HOT" light indicator glowing.

Save energy:

- If a "HOT" light is on when starting to cook again, use that area to speed cooking and save energy.
- Use retained heat indicated by "HOT" light to hold foods for serving.



When surface unit is ON, indicator light glows



When surface unit is OFF but still HOT, light still glows



When surface unit is OFF and safely cooled, light goes off

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What Rangetop Heat Settings To Use

(Temp-Assure settings were developed using Cookmates® cookware. You may adjust them to suit other cookware.)

	Temp-Assure™	Multipan™	Tips for Cooking
Beverage Coffee Percolator • bring to fast perk • to maintain perk Hot chocolate	→ 350-375	Hi Med Med	After lowering heat, maintain one perk per second. Pyrex brand percolator may be used on Multipan unit without wire grid. Stir occasionally.
Blanching	→	Hi	
Breads French Toast Pancakes Sandwiches, grilled	350-375 375-400 350	Med Med Hi ←	To test temperature drop a little cold water onto skillet; water should "dance" on it. For pancakes, grease skillet lightly after pre-heated. For grilled sandwiches, brush bread with melted butter.
Candy Fondant Fudge Hard Candy Peanut Brittle	325-350 300-350 Hi 400	Lo-Med Lo Lo-Med Lo Hi Med Hi	Use candy thermometer for accuracy. Heat adjustments may be necessary depending on recipe, quantity and cookware.
Canning Pressure cooker canners or water bath canners	→	Hi	See page 27 for sources of canning instructions.
Cereals Regular and quick cereal • to boil water • to cook cereal	Hi 250-275	Hi Lo	
Desserts Pudding and Pie Fillings, packaged	350	Med	Stir constantly.
Deep Fat Frying (In the interest of safety, we do not recommend that deep fat frying be attempted in any glass or glass-ceramic vessel such as Cookmates® or Corning Ware® cookware.)	→	Hi Use metal utensil only	For safety's sake never fill utensil more than 1/3 full with fat or oil. This allows space for foaming when food is added without dangerous spattering or foaming over. Use deep fat thermometer. Let fat cool before moving utensil.
Eggs Fried, Scrambled, Omelet, Fried, crispy brown edges Poached, hard and soft cooked • to boil water • to poach or cook	275-300 375 Hi Lo or Off	Med Lo Med Hi OFF	Skillet will heat to correct temperature. No need to start on Hi. Retained heat can finish cooking eggs.
Jellies, Jams, Preserves	→	Hi	Use large metal utensil to allow sufficient space for boil ups.
Melting Butter Chocolate	250-275 Lo	← ←	Stir while melting.
Pastas • to boil water • to cook	Hi Hi	Hi Hi	Add pasta slowly to boiling water to prevent sticking.

What Rangetop Heat Settings To Use (cont'd)

	Temp-Assure™	Multipan™	Tips for Cooking
Poultry and Meats			
Bacon	325-350	Med Lo	For frying or browning meat, preheat skillet.
Hamburgers	375-400	Med-Med Hi	To reduce spattering, dry meat before adding to hot fat.
Browning (uncovered)	350-400	Med-Med Hi	
Braising (covered)	250-275	Med Lo	Use spatter shield if desired.
Simmering (covered)	250-275	Med Lo	
Popcorn			
• to heat fat	375-400	Hi	Heat oil with two kernels of corn in Dutch oven until they pop. Add corn and pop shaking occasionally until regular popping ceases. Remove from heat until all popping ceases, shaking several times.
• to pop corn	Hi	OFF	
Pressure Cookers			
• to bring to pressure	Hi	Hi	For best results use Multipan area with pressure cookers which are not flat or do not remain flat when heated.
• to maintain pressure	375-400	Med-Med Hi	
Rice			
• to boil water (covered)	Hi	Hi	Follow package instructions but turn to OFF last 10 minutes.
• after adding rice	300-325	Med Lo	
Cold start			When turned OFF, fluff rice lightly, cover again and let stand on area 10 minutes.
Add rice to cold water (uncovered)	Hi	Hi	
When water boils: cover; turn to	250-275	Med Lo	
After 14 minutes turn to	OFF	OFF	
Sauces			
Fruit	300-325	←	No double boiler needed. Use Cookmate® cookware with suggested setting.
Hollandaise	200-250	←	
Tomato base	250-275	←	
White			Stir occasionally.
• to melt butter	250-275	←	
• to cook	300-325	←	
Slow Cooker Recipes			
• to brown meats	350-400	←	Heat may be increased to speed cooking. To thicken gravy use 300-325.
• to slow cook	225-250	←	
Soups			
Heating creamed soups	250	Lo-Med Lo	Heat covered. Stir creamed soups occasionally.
Heating clear soups	350	Med	
Steaming			
All foods (covered)			For a steamer, use rack in Cookmate Dutch Oven or in 8-quart aluminum kettle. Correct heat obtained for steaming when droplets run down, leaving cover clear.
• to boil water	Hi	Hi	
• to steam cook	325-350	←	
Vegetables			
Fresh			Starchy vegetables — bring water to a boil in covered pan, add vegetables slowly, stir and cover. Finish cooking on lower heat.
• to boil water	Hi	Hi	
• to cook	250-275	Lo to Med Lo	
Frozen			Frozen vegetables require only 2 to 4 tablespoons water. Substitute 1 tablespoon butter for added flavor. Cook covered. For 5 minute vegetables, turn to OFF after water boils — do not raise cover.
• to bring to boil	Hi	Hi	
• to cook	250-275 OFF	Lo to Med Lo	
Warming — Holding			
Leftovers (covered)	Lo-200	←	For safety — meat, milk, poultry, eggs, fish and items made from them should never be held more than two hours
Holding foods and beverages (covered)	Lo-200	←	

Remember:

• In the unlikely event the rangetop breaks, do not use any part of it. Call your authorized service agency immediately.

• Do not use aluminum foil or place foods packaged in aluminum foil directly on the rangetop for cooking. Use of foil will damage the rangetop.

• If a wet sponge or cloth is used to wipe spills on a hot cooking area, be careful to avoid steam burn.

• Do not use rangetop as a cutting board.

• Do not put plastic items on warm cooking areas.

• Do not slide oven shelves across surface. Scratching or metal marking may result.

• Wipe up spillovers that contain sugar immediately (while cooking surface is still warm) with wadded paper towels. If sugar is allowed to burn on, it may pit the surface.

Hints for using the rangetop:

- When bringing to boil use "Hi" setting and cover cookware.
- Remember, the three **Temp-Assure™** cooking areas always heat up with full power until the selected setting is reached on the rangetop surface. To enjoy the full benefit of this controlled heat cooking system, **use "Hi" setting only when necessary — boiling water, for example.**
- Whenever possible, start liquids boiling before adding other ingredients. This will keep starchy foods, such as potatoes, from sticking.
- If a boilover is developing, remove the cover or take the cookware off the cooking area.
- It's wise to start with a lower setting and increase heat gradually if needed. Quicker changes in cooking action can be observed when settings are turned up than when settings are turned down due to the retained heat.
- When turning setting down to slow the rate of cooking, allow time for the retained heat in the Cookmates® cookware and cooking area to be used.
- When cooking is almost completed, make use of the heat retained in the cookware and cooking area to finish the cooking. Turn the **control knob** to "OFF" and leave the cookware in place until cooking is finished.
- Some foods, such as eggs, are more sensitive to heat than others and cook in a short period. With foods that tend to scorch or burn easily, start with the lowest recommended setting. For example, the suggested setting for cereal indicates 250-275, so start with 250. Setting can then be increased if more heat is needed.

Please note: Because they are so flat, Cookmates cookware can in rare instances actually "**stick**" to the rangetop (a vacuum is formed) or "**dance**" on the surface, if liquid is trapped between pot and rangetop. To prevent this make sure pot bottom and rangetop remain dry and avoid spillovers by using suggested settings.

The **spinning** of cookware also results when smooth, flat pans meet a smooth, flat cooking surface. Generally, the Cookmates' lugs stay cool during cooking so you can stir with one hand and grasp the pan's lug or handle with the other.

How the 3+1 Glass-Ceramic Rangetop Works

SURFACE COOKING

PANEL — made of PYROCERAM® brand glass-ceramic material which is durable, nonporous and withstands any temperature change which occurs in cooking. The surface is flat to transfer even heat to the flat-bottomed cookware.

SURFACE COOKING AREAS

— each is marked by a burst design on the cooking panel. The entire surface of each cooking area heats at any setting. The rangetop has one large Temp-Assure cooking area (8-inch, 2000 watts) and two small Temp-Assure areas (6-inch, 1200 watts). These three areas are identified by the small inner circle within the burst design. There is one large Multipan conventional cooking area (9-inch, 2200 watts).

MULTIPAN™ HEATING UNIT

— is mounted below the cooking panel beneath the right rear burst design. This unit develops a higher temperature and operates as conventional electric elements do.

TEMP-ASSURE™ HEATING

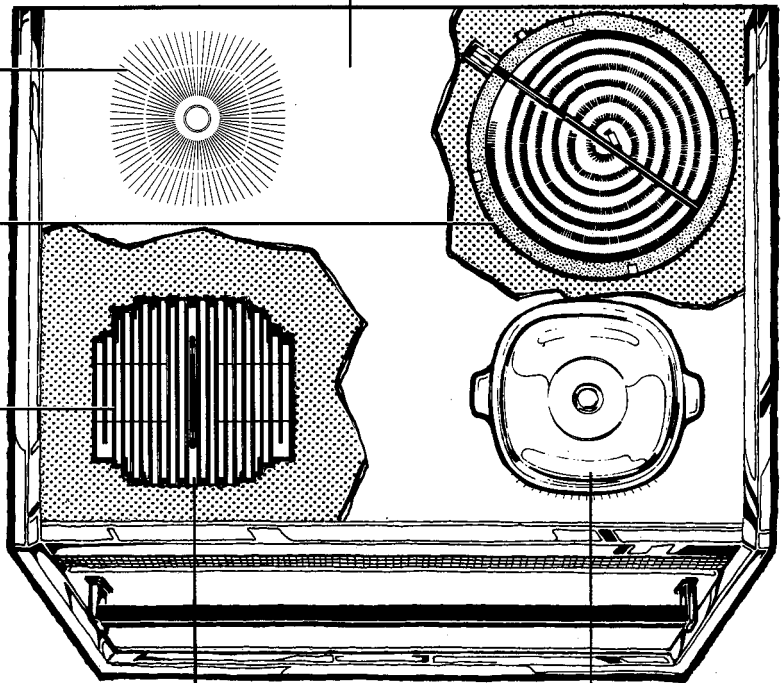
UNIT — is mounted against the cooking panel beneath each of the three burst designs with inner circles. Each heating unit matches the size of the design. It consists of a mica card wound with closely spaced metal heating ribbon.

TEMP-ASSURE™ THERMOSTATIC

SENSOR — is centered within each of the three Temp-Assure heating units.

COOKMATES®

COOKWARE — see pages 34-35.



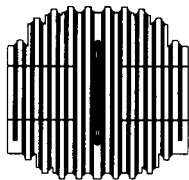
How the Temp Assure™ cooking system works:



When the dial is set . . .



electricity comes on . . .



Unit heats rapidly until desired setting is reached. Thermostats cycle heat on and off to maintain exact setting.



Heat passes through glass-ceramic into Cookmates® cookware and food.

For example:

If cold food is added

Ingredients are cooled

Temperature drops so more heat is needed

Temp-Assure™ sensor calls for more electricity (to maintain temperature)

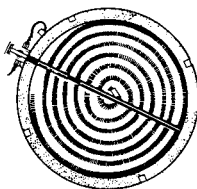
How the Multipan™ conventional unit works:



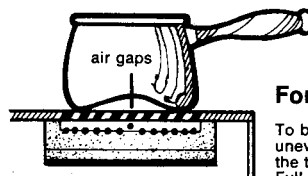
When the dial is set . . .



electricity comes on . . .



Unit heats more slowly by cycling on and off, on and off, etc., to reach desired setting.



Turn to HI for full power then back to desired setting as cooking starts.

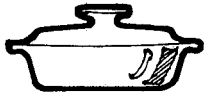
For example:

To boil water in an uneven pan, you set the temperature on HI. Full heating power overcomes the "air gaps" and "heat leaks" of non-flat pans to bring water to a boil. Then, to prevent boilover, you must reset heat to lower level by hand.

Remember:

- When each unit is operating, the heat is generally confined to the area of the burst pattern.
- The glass-ceramic material readily absorbs heat directly above the heating unit, allowing little heat to spread outward. Therefore, when one unit is turned on, the adjacent cooking areas remain cool. Because the **Multi-pan™** unit (right rear) gets hotter than the 3 **Temp-Assure™** units there will be greater heat spread outside the burst area.
- The 3-digit numbers used on **Temp-Assure** dials are numbers only and do not indicate the temperature of the food. For instance, water will not boil at a 225 setting. Use "Hi" to bring water to a boil.

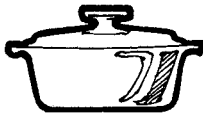
Cookmates® Cookware for All Special Needs



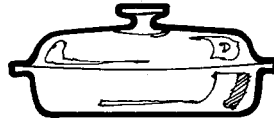
1-Quart
Covered Saucepan
No. KA-SP-1



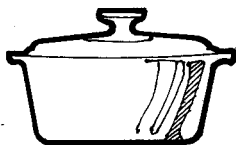
8-inch Covered Skillet
No. KA-SK-8



1½-Quart
Covered Saucepan
No. KA-SP-1½



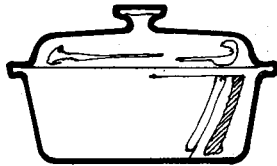
10-inch Covered Skillet
No. KA-SK-10



3-Quart
Covered Saucepan
No. KA-SP-3



22-Oz. Petite Pan Set
set of 2 pans and
2 plastic covers
No. K-PP-43
(glass covers are
available as options)



5-Quart Covered
Dutch Oven with Rack
No. KA-DO-5



7-Cup Beverage Server
No. K-TP-7

Cookmates cookware containing metal parts (beverage server, lock-on handles) should not be used in the microwave oven.

How to order Cookmates® cookware and accessories:

35

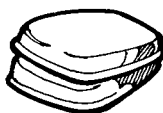
To order:

We encourage you to purchase Cookmates cookware locally or order directly from Corning* if you cannot obtain what you need locally.

Cookmates replacement parts and accessories:

A complete assortment of Cookmates replacement parts including Pyrex® brand covers and accessories (serving cradles, detachable handles and plastic storage covers) are available locally and also directly from Corning*. You may also obtain covers and accessories at your local Corning Ware® products dealer.

*Contact: Consumer Service Department, Houghton Park E-2, Corning Glass Works, Corning, N.Y. 14830.



Plastic Storage Covers

No. A-1-PC (set of 2)
use with
1-qt. Saucepan
1½-qt. Saucepan



Serving cradles

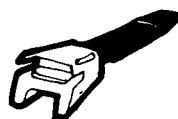
No. A-1-M, use with
1-qt. Saucepan**
1½-qt. Saucepan



No. P-41-HG
use with
Petite Pans

No. A-2-PC, use with
3-qt. Saucepan
8-inch Skillet

No. A-2-M, use with
3-qt. Saucepan
8-inch Skillet



No. A-10-HG
Use with 1, 1½ qt.
saucepans
8, 10-inch skillets

IMPORTANT: Don't
attempt to use with
3 or 5-qt. sauce-
pans. This handle
could break.

No. P-41-C (set of 4)
use with
22-oz. Petite Pans

No. A-10-M, use with
5-qt. Dutch Oven
10-inch Skillet



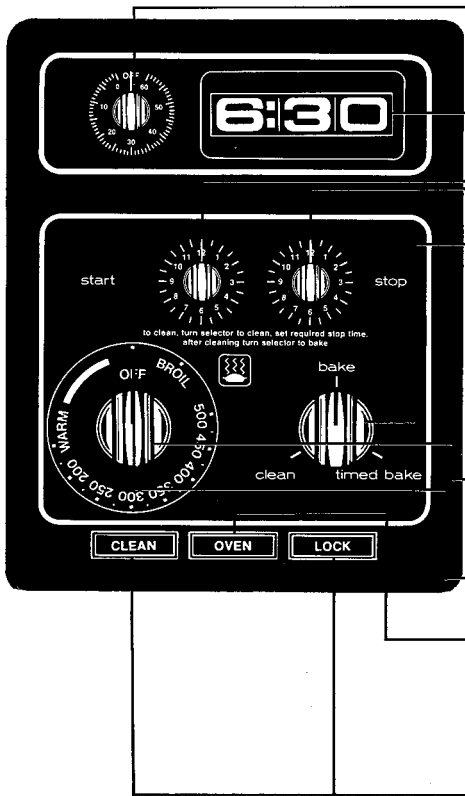
Glass Covers

No. P-41-GC (set of 2)
use with
Petite Pans

**The sizes of Cookmates cookware are located on the underside of the lugs.
(e.g. KA-SP-1 is Saucepan — 1 quart)

Conventional Oven Controls

Locate the conventional oven controls on your Radarange Plus Cooking Center:



MINUTE TIMER times short cooking operations up to 60 minutes. It does not control any cooking. Turn dial to the desired timing. A buzzer will sound when the time has elapsed. To stop buzzer, turn dial to "OFF."

DIGITAL CLOCK: Linked to the **start time** and **stop time knobs** to aid in automatic oven operation (see pages 45-47).

START TIME KNOB and **STOP TIME KNOB:** used in automatic oven operation (see pages 45-47).

OVEN OPERATION CONTROL KNOB: the three settings are as follows:

- "BAKE" — use this setting for all normal baking and broiling operations.
- "TIMED BAKE" — use this setting to operate oven automatically as described on pages 45-47.
- "CLEAN" — see oven self-cleaning instructions on pages 56-59.

OVEN TEMPERATURE CONTROL KNOB: the basic heat control for all oven cooking operations (baking, roasting and broiling). Settings range from "WARM" to "500" and "BROIL."

OVEN INDICATOR LIGHT: this light glows continuously whenever the oven is "on" during baking or broiling.

OVEN OPERATING LIGHT: this light glows until the oven heats to the desired temperature setting. It then cycles on and off during baking to indicate power is cycling on and off to maintain oven temperature. In recipes calling for the oven to be "preheated" wait for this light to turn off before placing food in the oven. It also operates during oven self-cleaning.

OVEN CLEAN LIGHT and **OVEN LOCK LIGHT:** these lights glow only when the oven is self-cleaning (see pages 57-59).

Baking without automatic timing*:

*For automatic oven timing, see pages 45-47. Use the **minute timer** for manual oven operations up to 60 minutes. (See page 36.) It does not control oven operation, but can be used as an audible reminder when oven times are finished.

Prior to baking:

1. Place oven shelves in proper position (see baking hints page 38).
2. Check that **oven vent** is not covered.

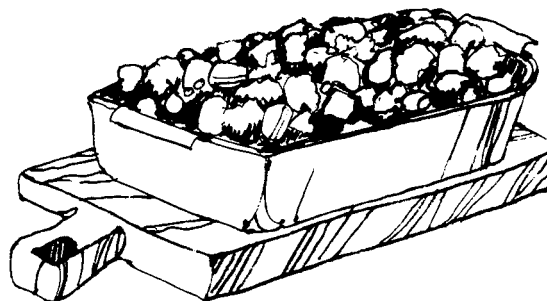
To bake:

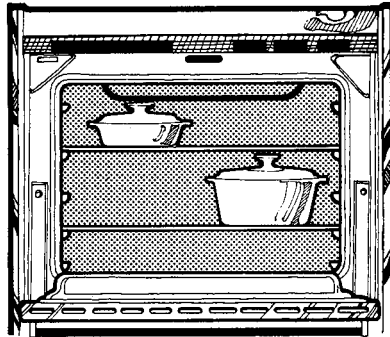
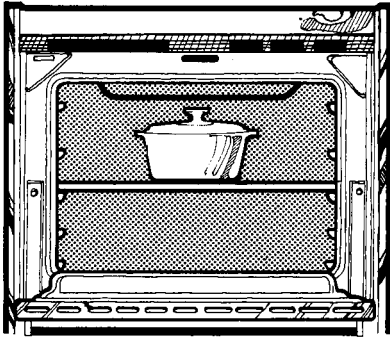
1. Check that **oven operation control knob** is on "BAKE."
2. Turn **oven temperature control knob** to desired temperature. (See time and temperature chart for baking, page 39). The **oven indicator light** will glow. The **oven operating light** will go on and off during baking to indicate power is cycling on and off to maintain oven temperature.
3. Place food in oven when **oven operating light** goes off. Oven is then pre-heated.
4. Turn **oven temperature control knob** to "OFF" when food is done.

This is how oven operates during baking

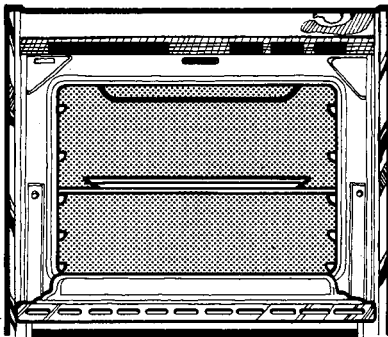
Lower oven unit comes on at full power and cycles off and on during baking. The upper oven unit cycles on one-fourth power to help maintain even distribution of heat for best baking results.

NOTE: Only the lower oven unit will glow red.



Spacing shelves

Cookie sheet, jelly roll pan, etc. Use one rack at a time for best results.

**Baking hints:**

- Follow recipe instructions.
- Choose and use correct bakeware.
- Use size pans as recommended in recipe.
- Use flat bottom pans. Warped or dented pans may cause uneven browning.
- Spacing shelves:
 1. If foods are to be baked on one shelf, use one of the middle shelf positions.
 2. If foods are to be baked on two oven shelves, place shelves in the second and fourth from top shelf positions of oven, if possible.
- Spacing pans:

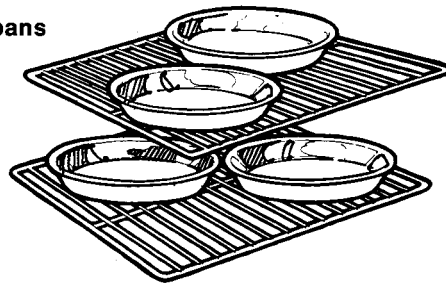
To allow for proper circulation of heat:

 1. Pans should never touch each other or any side of the oven. Allow at least one inch of space between pans, oven walls and oven door.
 2. Stagger pans so that one is not placed directly above another.
 3. Cookie sheets should be at least two inches smaller than the oven.
- Only open oven after minimum baking time has elapsed. For example, if recipe suggests baking for 20-30 minutes, set timer for 20 minutes to check.

Note: Cookmates® cookware, CORNING WARE® cookware and PYREX® ware can be used for oven baking. If glass or glass-ceramic cake dishes are used, temperature settings should be lowered about 25°F as glass absorbs heat faster than metal.

Remember:

1. Do not place aluminum foil on oven bottom, oven unit or cover entire oven shelf as this will interfere with proper heat circulation.
2. Do not place anything directly on heating unit in the oven or in front of oven vent holes in backsplash.

Spacing pans

Baking time and temperature chart:

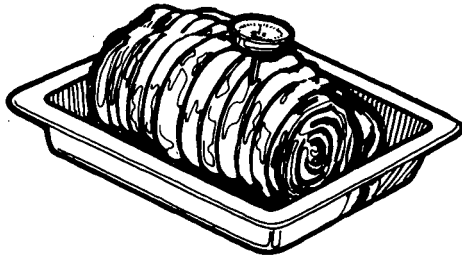
Baking times and temperatures given are guides only.
Recipes, utensils and personal preferences may alter these.

Food	Oven Temperature	Approx. Time in Minutes
BREADS, QUICK		
Biscuits	450°F	10 to 15
Corn Bread	425°F	20 to 25
Gingerbread	350°F	30 to 40
Muffins	425°F	20 to 25
Nut Bread*	350°F	60 to 75
Popovers	400°F	45 to 50
Quick Coffee Cakes	400°F	25 to 30
BREADS, YEAST		
Loaves*	375°F	45 to 60
Rolls, Plain	400°F to 425°F	15 to 20
Rolls, Sweet	375°F	20 to 25
Coffee Cakes	375°F	25 to 30
CAKES		
Angel Food*	325°F to 375°F	40 to 65
Sponge*	350°F	40 to 45
Cup Cakes	375°F	15 to 25
Layer	350°F to 375°F	30 to 40
Square or Oblong	350°F	30 to 40
Loaf*	325°F	45 to 60
Fruit		
Large	250°F	3 to 4 hours
Small	250°F to 300°F	1½ to 2 hours
Pound	325°F	60 to 75
COOKIES		
Bar	350°F	25 to 30
Drop	375°F	10 to 15
Rolled	375°F	8 to 10
Refrigerator	375°F	10 to 15
PIES		
Shell Only	450°F	10 to 15
Tart Shells	450°F	5 to 10
2-Crust, Fruit, Fresh	425°F	40 to 60
2-Crust, Fruit, Frozen	400°F	45 to 75
Custard	375°F to 400°F	30 to 45
Pumpkin	375°F to 400°F	45 to 60
MISCELLANEOUS		
Baked Potatoes	400°F	45 to 60
Scalloped Potatoes	350°F	40 to 50
Souffle Dishes	325°F	35 to 45
Candied Sweet Potatoes	375°F	45 to 60
Baked Macaroni and Cheese	350°F	40 to 50
Baked Apples	400°F	30 to 40
Rice Pudding	325°F	50 to 60

*Shelf position. Second from bottom of oven.

Roasting without automatic timing*:

*For automatic oven timing see pages 45-47.



Prior to roasting:

- Place meat with fat side up in an open shallow container.
- To reduce spattering, select container as close to the size of the meat as possible.
- Use a small rack or trivet under the meat unless bones form a natural rack, as on a standing rib roast.
- Do not add water or cover meat, unless recommended by recipe.
- A meat thermometer is the most accurate means of judging the degree of doneness. Insert it so:
 - point is in the center of thickest part of lean meat.
 - it does not touch bone, gristle or fat.

For unstuffed poultry, insert meat thermometer so that point is in center of inside thigh muscle, or the thickest part of the breast.

To roast:

Before turning **oven temperature control knob**, check that:

- **Oven vent** is not covered.
- **Oven operation control knob** is on "BAKE."
- Place oven shelf on lowest oven shelf support.
- Consult time and temperature chart for roasting on page 41.

Roasting hints:

- Defrosted meat takes less electricity to cook. However, when roasting meat that is still frozen:
 - allow about $\frac{1}{3}$ to $\frac{1}{2}$ more cooking time for unthawed meat, depending on size and shape of meat.
 - insert meat thermometer after meat has cooked long enough for easy insertion of thermometer.
- Allow meat to stand 15 to 30 minutes after removing from oven before carving. This sets the juices and makes carving easier.
- Use meat drippings in Cookmates® skillet to make gravy while meat is standing.



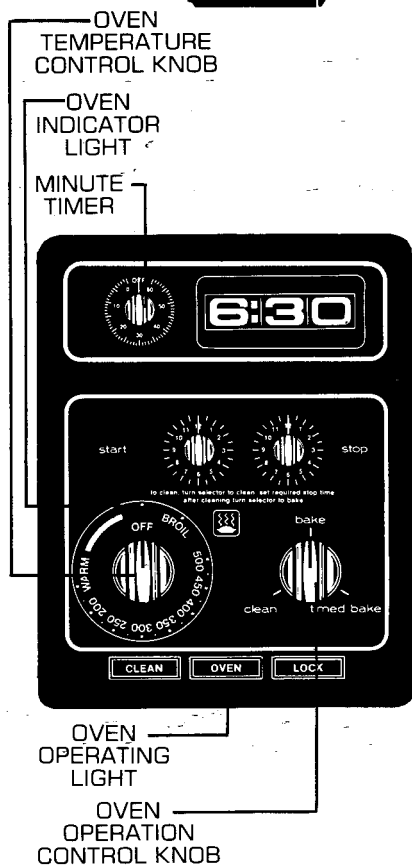
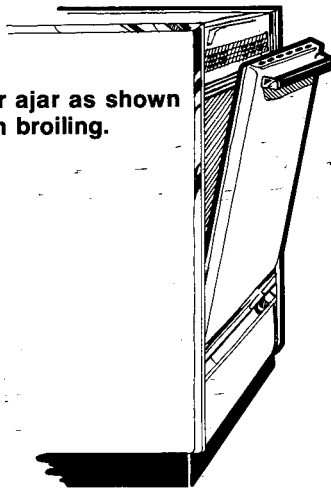
Roasting time and temperature chart:

Roasting times and temperatures given are guides only. Size, shape, fat-covering, and initial temperature of roast influence the total cooking time. Roasting times are based on refrigerated meat. Thaw frozen meat before following this chart.

Food	Pounds Approx.	Oven Temperature	Internal Temperature	Approx. Min. Per Pound
BEEF ROASTS				
Standing Rib — Rare	3 to 4	300°F	140°F	22 to 26
Medium			160°F	26 to 30
Well-done			170°F	33 to 35
Standing Rib — Rare	6 to 8	300°F	140°F	22 to 28
Medium			160°F	25 to 30
Well-done			170°F	33 to 37
Rolled Rib — Rare	5 to 7	300°F	140°F	25 to 30
Medium			160°F	30 to 33
Well-done			170°F	35 to 40
VEAL ROASTS				
Loin	4 to 5	300°F	180°F	35 to 40
Shoulder, Whole	3 to 5	300°F	180°F	35 to 40
Shoulder, Boned	4	300°F	180°F	40 to 45
LAMB ROASTS				
Leg	5 to 6	300°F	180°F	30 to 35
Shoulder, Rolled	3 to 5	300°F	180°F	40 to 45
PORK ROASTS, FRESH				
Loin, Center	5	325°F	170°F	35 to 40
Boston Butt	4	325°F	170°F	45 to 50
Picnic Shoulder, Whole	5	325°F	170°F	40 to 45
PORK ROASTS, SMOKED				
<i>Cook-Before-Eating</i>				
Ham, Piece	4 to 5	300°F	160°F	30 to 35
Ham, whole	8 to 10	300°F	160°F	20 to 25
Picnic Shoulder, Whole	5 to 7	300°F	170°F	30 to 35
<i>Fully-Cooked</i>				
Ham, Whole	8 to 10	300°F	130°F	12 to 15
POULTRY, STUFFED				
Chicken	4 to 5	325°F	185°F	25 to 35
Turkey	6 to 12	325°F	185°F	30 to 35
	12 to 16	325°F	185°F	24 to 27
	16 to 20	325°F	185°F	23 to 26

For Poultry — If thermometer is placed in center of stuffing, roast to 165°F. Unstuffed turkeys require about 5 minutes per pound less time than stuffed.

Note:
Leave door ajar as shown
for all oven broiling.



Broiling:

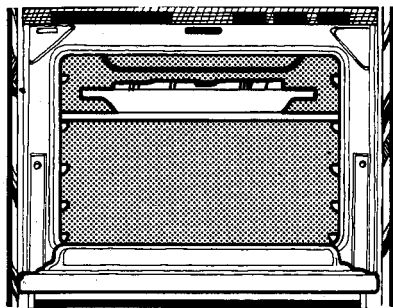
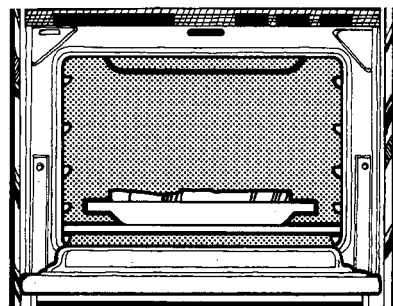
Prior to broiling:

- Prepare meat:
- Allow frozen meat to thaw before broiling to save energy.
- Meats for broiling should be tender cuts and preferably at least $\frac{3}{4}$ inch thick.
- Cut excess fat from meats and slash remaining fat edge of meat to prevent curling while broiling.
- Arrange food on grid of broiler pan. Always use grid as it allows fats to drip away from the meat as it cooks, thus reducing smoking. A small amount of water in the bottom of the broiler pan (under rack) also helps cut down on smoke.

To broil:

Before turning **oven temperature control knob** to "BROIL," check that:

- **Oven operation control knob** is on "BAKE."
- **Oven vent** is not covered.
- Consult time and shelf position chart for broiling (page 44).
- Turn **oven temperature control knob** to "BROIL." The **oven indicator light** and **oven operating light** will stay on during broiling.
- Broiler unit (upper oven unit) operates alone for broiling.
- Center broiler pan under the broiler unit on even shelf. Use **minute timer** for convenience in timing.
- Leave door partly open at the "stop" position for all broiling. A spring mechanism in the door will hold it ajar. This allows the broiler unit to stay "on" and reduces spattering.
- Turn **oven temperature control knob** to "OFF" when broiling is completed. Remove broiler pan from oven . . . if pan and grid are left in heated oven they will be more difficult to clean.

Close:**Quick brown, rare meat e.g. rare steaks****Farther away:****Slow brown, well done e.g. chicken****General broiling rule:**

The closer the meat is placed to the broiler unit the faster the surface browns and the rarer the meat will be . . . and . . . the farther away the meat is placed, the slower the surface browns and the more well done the meat will be. For very rare meat, preheat broiler unit and place food close to unit.

Broiling hints:

- For rare, brown steaks, select cuts 1½" or thicker.
- Turn meat with tongs to avoid piercing and loss of juices.
- Test meat for doneness by cutting a slit in the meat near the bone and noting the inside color.
- Remove meat just before it reaches the degree of doneness desired. Cooking will continue after removing from heat.
- As soon as broiling is completed, remove broiler pan from oven.
 - drain drippings from pan.
 - for easier cleaning sprinkle grid and pan with undiluted detergent or cleanser.
 - place dampened paper towels on detergent.
 - when cool, wash pan and grid.
- Cookmates® saucepans and skillets can be used under the broiler for browning, or melting foods.

Remember:

- Do not use Teflon II® coated griddle or fry pan with non-removable handle for broiling.
- Don't cover broiler rack with foil. It prevents fat from draining and can cause fire or smoke.
- Do use the broiler rack in the proper position. If it is put in upside down grease will collect in the rim and could be hazardous.

Broiling time and temperature Chart:

Broiler times given are guides only. Individual preferences vary greatly in meat broiling. Raise or lower shelf position and adjust time to suit personal preference. Meat temperature also influences broil time.

Food	Thickness	Shelf Position from Top of Oven	Approx. Minutes	
			1st Side	2nd Side
BEEF STEAKS				
Rare	1 inch	1st	5 to 6	4 to 5
Medium	1 inch	2nd	9 to 10	6 to 8
Well-done	1 inch	3rd	12 to 14	10 to 12
BEEF STEAKS				
Rare	1½ inch	2nd	8 to 10	6 to 8
Medium	1½ inch	2nd	12 to 14	9 to 11
Well-done	1½ inch	3rd	18 to 22	16 to 18
GROUND BEEF PATTIES				
Rare	¾ inch	1st	4 to 5	3 to 4
Medium	¾ inch	2nd	6 to 7	4 to 5
Well-done	¾ inch	3rd	8 to 9	6 to 7
LAMB CHOPS				
	1 inch	3rd	10 to 12	9 to 11
LIVER				
	½ inch	2nd	5 to 7	3 to 5
CHICKEN, Broiler				
	Split and flattened	4th or 5th	20 to 25	15 to 20
HAM SLICE, Precooked				
	1 inch	3rd	12 to 13	11 to 12
FISH				
Small Fish	—	3rd	18 to 22	—
Large Fish	—	3rd	25 to 27	—
Lobster Tails, Thawed	—	2nd	8 to 10	—
FRANKFURTERS				
	—	3rd	7 to 9	3 to 5
BACON				
	—	3rd	5 to 6	1 to 2
FRUITS & VEGETABLES				
Fruits, Canned	—	3rd	10 to 11	—
Grapefruit Halves	—	3rd	10 to 11	—
Tomato Halves	—	3rd	10 to 11	—
Mushrooms	—	2nd	6 to 8	—
Sweet or White Potatoes, Cooked	—	2nd	5 to 6	3 to 4

Frozen Foods — Allow about ⅓ to ½ more cooking time. Lower the oven shelf.

For increased Browning — Preheat until broiler unit is red hot (about 5 minutes).

Setting automatic oven to start "now":

1. Place food in oven.
2. Check that **clock** is set at correct time of day.
3. Set controls as follows:
 - Check if **start time knob** is set to correspond with the time on the **clock**.
 - Push in and turn **stop time knob** to time you wish food to stop cooking.
 - Turn **oven operation control knob** to "TIMED BAKE."
 - Turn **oven temperature control knob** to correct cooking temperature.

Example:

If the time of day is 2:00 p.m., and the food is to be cooked 2½ hours at 325°F, here's what you do:

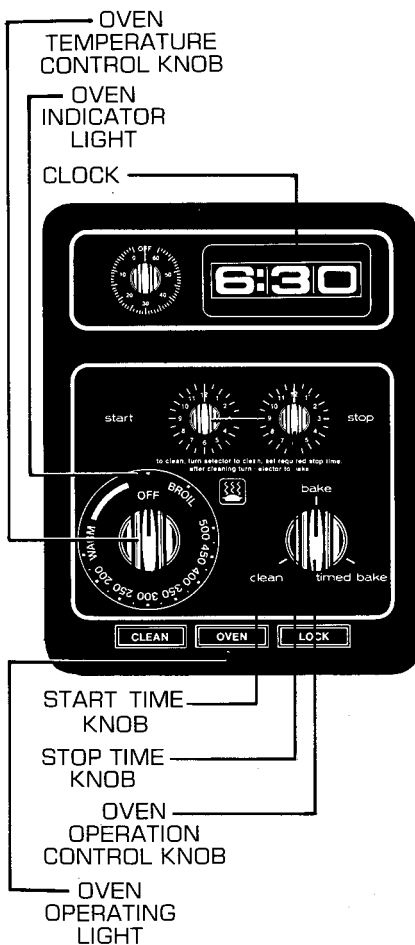
- Push in and turn **stop time knob** to 4:30 p.m.
- Turn **oven operation control knob** to "TIMED BAKE."
- Turn **oven temperature control knob** to 325°F.

Here is what happens:

- The oven comes on immediately and both the **oven indicator light** and the **oven operating light** will glow at once.
- When selected temperature of 325°F is reached, **oven operating light** cycles off indicating oven temperature is being maintained.
- At 4:30 the oven turns off automatically. Both the **oven indicator light** and **oven operating light** turn off.
- Food is finished cooking.

When food is cooked and to reset oven for regular use:

- Turn **oven temperature control knob** to "OFF."
- Turn **oven operation control knob** to "BAKE."



Setting automatic oven to start "later":

1. Place food in oven.
2. Check that **clock** is set at correct time of day.
3. Set controls as follows:
 - Turn **oven temperature control knob** to correct cooking temperature.
 - Push in and turn **start time knob** to the time of day food is to start cooking.
 - Push in and turn **stop time knob** to time you wish food to stop cooking.
 - Turn **oven operation control knob** to "TIMED BAKE."

Example

If the time of day now is 1:00 p.m., and food is to be cooked for 2 hours at 350°F, and should be ready to serve at 6:00 p.m. . . . here's what to do:

- Turn **oven temperature control knob** to 350°F.
- Push in and turn **start time knob** to "4" o'clock. (3 hours ahead.)
- Push in and turn **stop time knob** to "6" o'clock.
- Turn **oven operation control knob** to "TIMED BAKE."

Here is what happens:

- At 4:00 p.m., start time setting will turn oven on. Both the **oven indicator light** and the **oven operating light** will glow.
- When selected temperature of 350°F is reached, **oven operating light** begins cycling off and on indicating that temperature is being maintained.
- At 6:00 p.m., the **stop time knob** will turn oven off automatically.
- Both **oven indicator light** and **oven operating light** will turn off.
- Oven is now completely turned off until you are ready to reset it for another use.

To stop or interrupt automatic oven cooking:

- Turn **oven temperature control knob** to "OFF."
- Turn **oven operation control knob** from "TIMED BAKE" to "BAKE."

To reset oven for regular use:

- Turn **oven temperature control knob** to "OFF."
- Turn **oven operation control knob** to "BAKE."



An excellent use of this feature is for a complete oven meal.

When setting automatic oven to start cooking later, choose foods that can stand at room temperature with no danger of spoilage, such as:

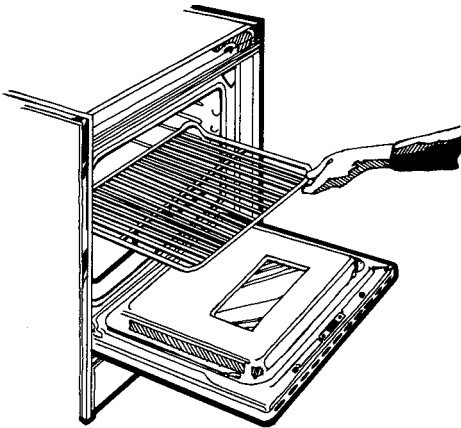
- Cured or frozen meats
- Most fruits and vegetables

Foods of highly perishable nature, such as milk, eggs, fish, stuffings, poultry and pork should be used in oven cooking that is "Start Now," not "Start Later."

In all cases, choose foods which cook at the same temperature for about the same length of time.

Remember:

Set "stop time" as close to the time for serving as possible. Retained heat in the oven will continue to cook the food after the oven turns off.



Oven hints:

- Before oven is turned on and heats, check that oven shelves are correctly placed. Oven shelf supports on opposite sides of oven provide four shelf positions for easy adjustments to any baking or broiling operations.
- Oven shelves can be pulled forward to the shelf lock "stops" for safe, easy loading and unloading. Shelves should have the turned corners to rear.
- To remove shelves, pull out to "stop" position, then lift up and out.
- To remove shelves, pull out to "stop" position, then lift up and out.
- To replace shelves, place on selected shelf supports with turned up corners to the rear and push, lifting the front edge slightly to slide past lock "stop."

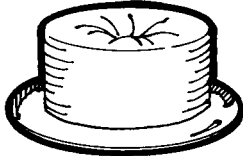
Remember:

- Do not obstruct oven vent when oven is being used (baking, roasting, broiling) or while in self-clean process.
- Do not place aluminum foil directly on oven bottom, on oven unit or cover entire oven shelf.
- If oven shelves remain in oven during cleaning cycle, wipe shelf sides with cooking oil after cleaning to prevent damage to the porcelain oven interior.
- Use care when opening oven door — let hot air or steam escape before removing or replacing food.
- Don't let potholder contact hot heating elements in oven if oven shelves must be moved while oven is hot.

Solutions to baking problems:

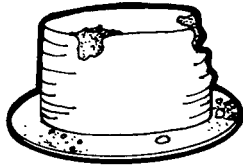
**Flat Cake**

- Oven temperature too high or too low
- Pan too large
- Overmixing or undermixing
- Too much or too little liquid
- Improper placement of oven shelf

**Fallen Cake**

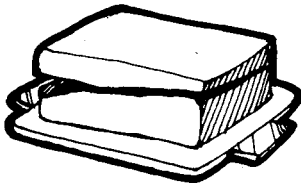
(or dipped in center)

- Oven temperature too low
- Pan too small
- Baking time too short
- Oven door opened too soon
- Too much or too little liquid

**Crumbly**

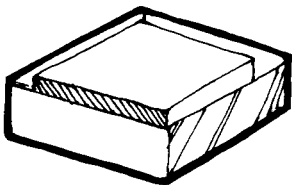
(or dry)

- Oven temperature too high
- Baking time too long
- Too little liquid

**Uneven Layers**

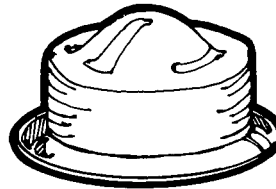
(or uneven browning)

- Uneven heat circulation
- Bent or warped pans
- Pans too close together or too close to oven walls
- Range not level

**Excessive Shrinkage**

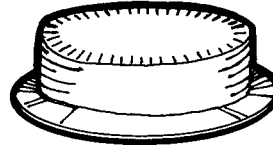
(from sides of pan)

- Oven temperature too high
- Pans placed too close together or too close to oven walls
- Baking time too long
- Overmixing

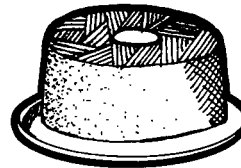
**Humped Cake**

(or peaked in center)

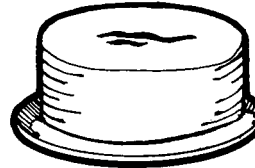
- Oven temperature too high
- Pan too small
- Pans placed too close together or too close to oven walls
- Baking time too long
- Overmixing
- Too little liquid

**Pale Top Crust**

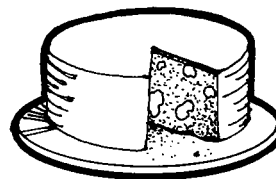
- Oven temperature too low
- Pan too large
- Opening oven door too often
- Overmixing
- Too much liquid

**Uneven Texture**

- Oven temperature too low
- Baking time too short
- Undermixing
- Too much liquid

**Crack on Top**

- Oven temperature too high
- Overmixing
- Too much leavening

**Holes and Tunnels**

- Oven temperature too high
- Baking time too long
- Overmixing or undermixing
- Improper placement of oven shelf

High altitude baking:

When baking at high altitudes, recipes and baking times vary. For accurate information write the Extension Service of your state college or university or Extension Service, Colorado State University, Fort Collins, Colorado 80521. There may be a cost for the bulletins . . . do specify the type of information you want (i.e. cakes, cookies, breads, etc.)

You will find the Radarange Oven is easy to keep clean. The following hints will be useful for regular care.

To Clean The Radarange Interior

The inside walls and floor are made of stainless steel. If they should become splattered, all you do is wipe them with a paper towel or clean with a mild detergent in warm water and a soft sponge or cloth. If desired, a cup of water can be boiled in the oven to loosen soil before cleaning.

Do not use an abrasive to clean the inside. It might damage the 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 water and detergent or in the dishwasher. Replace with drip tray pattern up. Do not operate the oven without tray in position.

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

To Clean The Discharge Air Vent

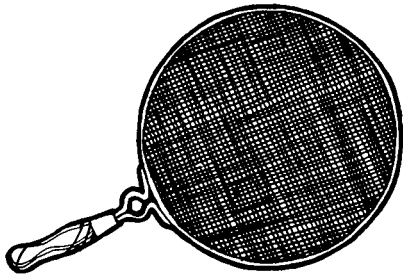
There will be slight buildup of cooking vapors in the discharge vent, a portion of the black grill above the Radarange Oven door (see diagram on page 9). This vent should be cleaned occasionally with a damp cloth. The vent is also removable for thorough cleaning in mild detergent and warm water. To remove the black grill, remove the screws.

To Clean the Splatter Shield Inside Oven

The splatter shield keeps the top of the oven and stirrer (fan-like blades which reflect the microwaves inside the oven) 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. Remove the screws at the front of the oven. To avoid bending the stirrer fan, carefully pull the shield toward the front of the oven just enough to free the shield from the supporting clips at the back of the oven. Then pull the shield downward away from the stirrer, and toward the front 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 blades of the stirrer fan. Also be sure the splatter shield fits snugly in the clips at the back of the oven before replacing the screws.



Use a spatter shield



Use daily

Amana Stain Remover and Amana Cleaner-Conditioner are available from your Amana dealer.



Use to remove discoloration

DELETE® cleaner is available at better food markets nationally.

BAR KEEPERS FRIEND may also be used and may be found at hardware, houseware or food stores.

How to Care For and Clean the Rangetop

Without messy drip pans or clumsy burners and grids to worry about, you'll want to keep your smoothtop gleaming. It's so much easier, you can clean it more often with less effort than ever before.

To save on clean-up time, follow these simple precautions:

- Make sure bottom of cookware and cooking area are clean and dry.
- Select correct heat settings and use cookware large enough to accommodate food and liquid to eliminate boilovers and spattering.
- If possible, wipe up food spills and splatters from adjacent heating areas before using such areas for cooking.
- Use a spatter shield when shallow frying.

Regular daily care:

Use Amana Cleaner-Conditioner daily. As it cleans, it leaves a protective coating of silicone on the smooth surface which helps prevent scratches and abrasions in which food particles can collect. It also helps prevent build-up of mineral deposits and will make future cleaning easier.

- Apply a dab of Cleaner-Conditioner in center of each unit to be cleaned. (For normal cleaning, start with about 1/8 tsp. of Cleaner-Conditioner and apply more if needed.)
- Dampen clean paper towel and clean unit.
- Wipe off this application with another clean, damp paper towel, and wipe dry.

How to remove and prevent surface discoloration:

- Use Amana Stain Remover, Delete® or Bar Keepers Friend routinely once or twice a week to prevent discoloration, especially in hard water areas. Directions for use are found on page 53.

Other materials may be used for cleaning (see page 51.) For special cleaning problems see page 53.

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Use non-al
cleaners



Remember:

- If a wet paper towel is used to remove spillovers from a warm cooking area, be careful to avoid steam burns.
- Never mix household cleaning products! Chemical mixtures may interact, with objectionable or even hazardous results.
- Do not use sponge or dishcloth. They may leave film of soil-laden detergent water on heating area which may turn brown and resemble a discoloration next time area is heated. If that should happen, Cleaner-Conditioner will remove it.
- Wait until rangetop has cooled before cleaning with DELETE® or other cleansers. Fumes could be hazardous.
- Make sure diamond ring is not in contact with glass-ceramic rangetop when cleaning or cooking. It could scratch the surface.



Do use a razor blade to remove excess burn-ons. Hold blade so entire edge is at a 30° angle.

How to deal with burned-on spots:

1. Make sure area to be cleaned is cooled. To cool quickly, you can put ice cubes directly on hot surfaces or place an ice-filled Cookmates pan on the area.
2. Remove excess soil with a single edge razor blade (see illustration).
3. Clean off remainder of burn-on using Cleaner-Conditioner.

Other cleaning materials you can use:**Do use:**

Amana Cleaner-Conditioner and Amana Stain Remover should be used regularly to clean and protect cooking surface. If you run out, you may temporarily use one or more of these:

1. Baking soda as a cleaning powder.
2. A fine-polishing cleansing powder such as BON AMI® polishing powder.
3. Non-impregnated plastic and nylon pads, some examples are: DOBIE® scouring pad, SKRUFFY scouring brush, TUFFY® plastic mesh ball.
4. PAN DANDY.
5. DELETE® cleaner. Specially formulated to clean hard water spots.
6. BAR KEEPERS FRIEND.

Use non-abrasive cleaners



**Do not use:**

Some cleaning materials recommended by manufacturers for general use on "glass" may contain an ingredient which can damage the surface. Use only the type of materials recommended on page 51.

1. Avoid abrasive impregnated plastic, nylon and cloth pads such as: RESCUE® brand scouring pads, SCOTCH-BRITE® brand scouring pads, GOLDEN FLEECE® pot cleaner and scour cloths — these can scratch.
2. Avoid metal pads such as: CHORE GIRL® pot cleaners, KURLY KATE pot cleaners, S.O.S.® soap pads, PADDY® soap pads — these can metal-mark and scratch.
3. Avoid abrasive, heavy-duty cleansing powders such as: AJAX® cleanser, COMET® cleanser — these can scratch, depending on their abrasiveness and the cleaning pressure applied in use.
4. Avoid chemical oven cleaners — these can etch the glass-ceramic surface and are caustic.
5. Avoid rust stain removers containing hydrofluoric acid such as: WHINK® rust stain remover.
6. Avoid ZUD® rust stain remover.
7. Avoid CLOROX® and other bleaches.

Rang**Proble**

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Fine "brow
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Metal mar
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Pitting or
flaking.

Hard water
spots.
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brown disc
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Cleaner-
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Problem	Cause	To Remove	To Prevent
Brown streaks and specks.	<ul style="list-style-type: none"> • Cleaning with a sponge or dishcloth that has been used for other kitchen cleaning tasks and may contain soil-laden detergent water. 	<ul style="list-style-type: none"> • Use a light application of Cleaner-Conditioner with clean, damp paper towel. 	<ul style="list-style-type: none"> • Use Cleaner-Conditioner only with clean, damp paper towel.
Blackened burned-on spots.	<ul style="list-style-type: none"> • Spatters or spillovers onto a hot cooking area. • Accidental melting of a plastic film, such as a bread bag or similar items. 	<p>When area has cooled:</p> <ul style="list-style-type: none"> • Use Cleaner-Conditioner with damp paper towel to remove as much burn-on as possible. • Use Cleaner-Conditioner with non-impregnated plastic nylon pads such as: <ul style="list-style-type: none"> DOBIE® scouring pad SKRUFFY® scouring brush TUFFY® plastic mesh ball • If burn-on persists, CAREFULLY scrape with a single edge razor blade. Hold blade so entire length of edge is on surface at a 30° angle. Use a blade holder if you have one. 	<ul style="list-style-type: none"> • Select correct heat settings and large enough cookware to eliminate boilovers and spattering. • Whenever possible, wipe spatters and food spills as they occur. • Use an inexpensive spatter shield available in houseware departments and some supermarkets. <ul style="list-style-type: none"> • Don't put plastic items on warm cooking areas.
Fine "brown lines" (tiny scratches or abrasions which have collected soil).	<ul style="list-style-type: none"> • Coarse particles (salt, sand, sugar or grit) caught between bottom of cookware and rangetop that are not removed before cooking. • Using incorrect cleaning materials. 	<ul style="list-style-type: none"> • Tiny scratches are not removable but can be minimized by continual use of Cleaner-Conditioner. Such scratches do not affect cooking performance. 	<ul style="list-style-type: none"> • In areas where there is an abundance of sand or dust, be sure to wipe rangetop each time before using. • Daily use of Cleaner-Conditioner.
Metal marking (gray or black marks).	<ul style="list-style-type: none"> • Sliding or scraping metal utensils or oven shelves across rangetop. 	<ul style="list-style-type: none"> • Apply Cleaner-Conditioner with dampened paper towel to cooled surface. 	<ul style="list-style-type: none"> • Do not slide shelves or other sharp metal objects across rangetop.
Pitting or flaking.	<ul style="list-style-type: none"> • Boilover of sugar syrup and adherence of sugar syrup to hot rangetop. This can cause pitting if not removed immediately. 	<ul style="list-style-type: none"> • Turn unit to LO; take several paper towels and <i>wipe hot cooktop immediately</i>. • Scrape off remainder of burn with a single edge razor blade held at 30° angle while unit is still warm. Use a blade holder if you have one. 	<ul style="list-style-type: none"> • Select correct heat settings and large enough cookware to eliminate boilovers and spattering. <ul style="list-style-type: none"> • Watch sugar syrup carefully to avoid boilover.
Hard water spots. (A gray or brown discoloration that does not seem to be removed using Cleaner-Conditioner.)	<ul style="list-style-type: none"> • In cooking, condensation often collects and drips from cookware covers removed during cooking. • The minerals found in the water supply and acids in foods may spill on the surface and cause gray or brown deposits. The layer is so thin it often seems to be in or under the cooking surface and cannot readily be felt. 	<ul style="list-style-type: none"> • Mix a small quantity of Amana Stain Remover with tap water to form a thick wet paste. <p>After stain is removed:</p> <ul style="list-style-type: none"> • Clean remaining paste away with damp paper towel. • Apply dab of Corning Cleaner-Conditioner and polish with paper towel. • Apply this mixture to stained area. • Scrub surface vigorously. • Apply dab of Amana Cleaner-Conditioner and polish with paper towel. 	<ul style="list-style-type: none"> • Daily use of Cleaner-Conditioner applied with a clean, damp paper towel will help to keep the glass-ceramic surface free from hard water mineral deposits and food-caused discolorations.

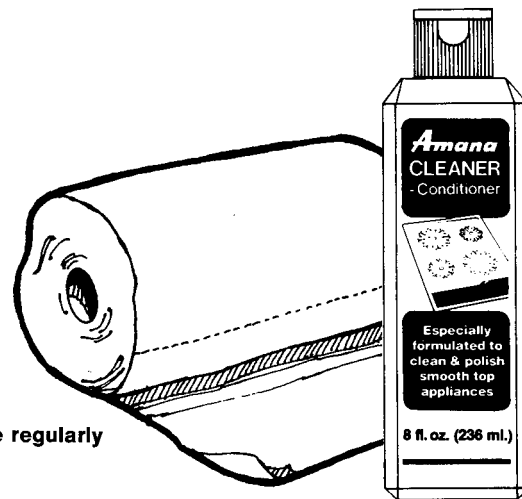
Cleaning hints:

- Deposits of moisture (dropped onto the rangetop while removing lid of a pan) or cleaning agents left from a previous cleaning may appear as soil on the flat, shiny-white surface when heated. Or if the cooking areas or the cookware have an invisible residue of soil-laden detergent water, discoloration or specks may appear when the surface is heated. This can occur when a dishcloth or sponge used for washing dishes has been used to wipe the rangetop.
- To eliminate "discoloration" or "specks" always finish cleaning by wiping with a clean damp paper towel. Remember, when the rangetop is clean, it's all clean — there is no hidden dirt beneath the sealed panel.
- Cleaner-Conditioner can be used for cleaning both the inside and the outside of Cookmates® cookware, CORNING WARE® cookware and other glass dishware. It is non-toxic and is not harmful. Do NOT use in vessels used for beating egg whites. Egg whites may not reach full volume.
- Control knobs on control panels are removable for cleaning. Metal mounting rims can be cleaned with clean cloth rinsed in a detergent and water solution. Dry with a clean cloth.

Remember:

If Cleaner-Conditioner is not used regularly or not used at all, and only heavy-duty abrasive cleansing powders are used, over a period of time (approximately 6 months) this will roughen the surface of the glass-ceramic rangetop. Cleaning may become progressively more difficult and discoloration may occur.

Use regularly



Cookmates cookware stays smooth and clean with regular care and the use of recommended cleaning materials. For normal soil, use hot detergent water followed by thorough rinsing and drying. Wash either by hand or in automatic dishwasher.

For special problems, use chart below.

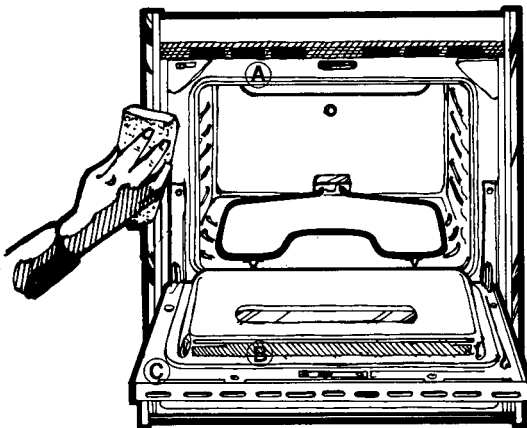
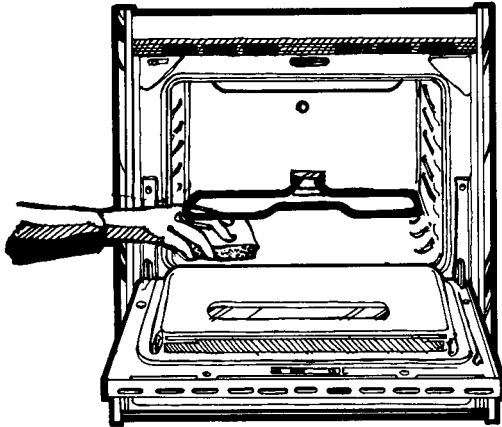
Cleaner-Conditioner will remove some difficult soil. It's non-toxic and is not harmful if used inside cookware.

Problem	To Remove	To Prevent
Burned-on or scorched-on food.	<ul style="list-style-type: none"> • Soak immediately in hot detergent water. Loosen soil with plastic or nylon pads (example: DOBIE® scouring pad, SKRUFFY® scouring brush, or TUFFY® plastic mesh ball) or wooden spoon. Use cleansing powders (example: BON AMI®) with damp cloth, paper towel or sponge. 	<ul style="list-style-type: none"> • Use lowest heat in cooking which will do the job.
Sugary or starchy burned-on food.	<ul style="list-style-type: none"> • Use baking soda as cleansing powder. • Soak with baking soda solution (3 tablespoons soda to 1 quart water). • Boil soda solution in cookware if necessary. 	<ul style="list-style-type: none"> • See above
Greasy burned-on food.	<ul style="list-style-type: none"> • Soak in hot water and detergent. • Soak in household ammonia. • Treat with a cleaner containing ammonia. 	<ul style="list-style-type: none"> • See above
Gray marks from soft-metal stirring utensils.	<ul style="list-style-type: none"> • Use plastic or nylon pads such as: DOBIE® scouring pad. • Use cleansing powders (example: BON AMI®) with damp cloth, paper towel or sponge. • Use DELETE® cleaner. • Avoid impregnated plastic or nylon pads such as RESCUE® brand soap pads, SCOTCH-BRITE® brand scouring pads, GOLDEN FLEECE® pot cleaner and scour cloths. • Avoid metal scouring pads. 	<ul style="list-style-type: none"> • Use plastic, wooden or coated stirring utensils. • Use recommended cleaning methods.
Discoloration as in beverage maker.	<ul style="list-style-type: none"> • Add one tablespoon of automatic dishwasher detergent, fill with hot water, stir until dissolved. Allow to stand over night, rinse thoroughly and dry. 	<ul style="list-style-type: none"> • After each use, wash and rinse thoroughly; dry. • Treat regularly for mineral deposits, if necessary.
Mineral deposits from water which may or may not be discolored.	<ul style="list-style-type: none"> • Fill with vinegar solution (1 part vinegar to 6 parts water) to cover the deposit. Boil about 20 minutes. Up to full-strength vinegar may be used. • Rinse. If some deposit remains, sprinkle with powdered cleanser and scrub with a plastic mesh ball. • Apply a wet paste of DELETE® cleaner and then scrub with a damp paper towel. Rinse thoroughly. 	<ul style="list-style-type: none"> • After each use, wash and rinse thoroughly; dry. • Beverage servers require regular treatment. • Avoid boiling dry. This leaves a heavy mineral deposit.

To clean PYREX® brand covers, use a powdered cleanser such as BON AMI® or baking soda. If a scouring pad is preferred use one like DOBIE®, SKRUFFY® or TUFFY®. Avoid using harsh, scratchy pads such as RESCUE®, SCOTCH-BRITE®, CHORE GIRL®, KEEN®, S.O.S.®, BRILLO® or GOLDEN FLEECE®.

CAUTION: Do not try to clean COOKMATES® cookware in oven during pyrolytic self-cleaning cycle. The glass-ceramic material will survive the cleaning cycle, but satisfactory cleaning of the cookware may not be accomplished.

The Self-Cleaning Oven



What happens before self-cleaning cycle:

1. Remove all pots, pans, broiler pans, and anything else that may be stored in the oven.
2. Remove shelves unless they need cleaning. Shelves change color with heat and may stick after cleaning. Most color change occurs during the first few cleaning operations.
3. Wipe excessive grease and spillovers from bottom of oven (see upper drawing at left). *Heavy spillovers that can be readily wiped up should be removed from the oven before the cleaning cycle is started.* These thick spillovers keep the cleaning heat from reaching the bottom of the spillover and could leave small dark uncleaned spots. Removing the heavy spillovers also helps eliminate excessive smoking during the self-cleaning cycle. The lower oven unit lifts up for ease in removing these spillovers.
4. Remove all soil from (see lower drawing at left):
 - oven frame (area around gasket) A
 - side of raised portion on door B
 - door liner (area around raised section on door) C

Wipe entire surface even though it may not appear dirty. The reason — heat will cause sometimes unnoticeable soil and spatters to bake on and they will be more difficult to remove after self-cleaning cycle. If necessary, sponge areas (A, B, C) with detergent water or mild cleanser and use steel wool soap pads to remove soil.

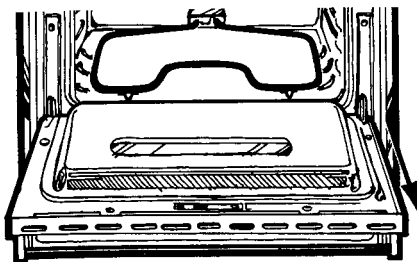
Note: Surface cooking units may be used during self-cleaning cycle.

Remember:

- Wipe sides of oven shelves with cooking oil after cleaning cycle is completed. This helps shelves slide easily and avoids damaging the porcelain oven interior.
- Do not use chemical oven cleaners. If cleaners are not entirely removed (they are not always visible), they may have a reaction with oven interior at the high temperature of the self-cleaning cycle, causing etching of oven interior.
- Do not scrub or clean oven gasket.

Prior to setting:

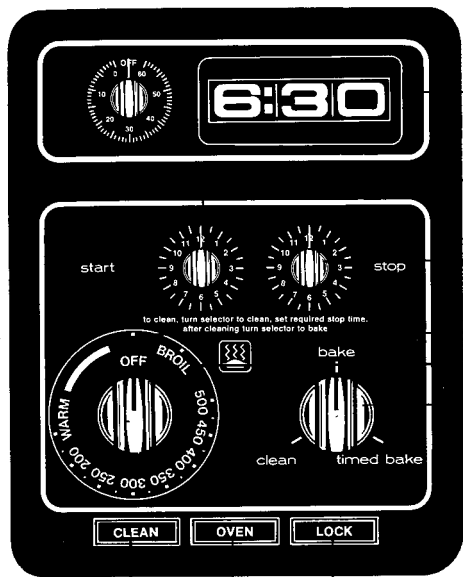
Open oven door and raise the window heat shield. Slide the two side glides to door top until both snap into holding position.



Setting self-cleaning cycle:

Prior to setting:

1. Check inside of oven (read: "What happens before self-cleaning" on page 56).
2. Make sure the **clock** and **start time knob** (shaft in "out" position) are set for correct time of day.
3. **Oven temperature control knob** is in "OFF" position.
4. **Oven vent** is not covered.
5. Close oven door tightly.



- CLOCK
- START TIME KNOB
- STOP TIME KNOB
- OVEN INDICATOR LIGHT
- OVEN TEMPERATURE CONTROL KNOB
- OVEN OPERATION CONTROL KNOB

- CLEAN LIGHT
- LOCK LIGHT
- OVEN OPERATING LIGHT

To set:

When you do this:	This happens:
1. Turn oven operation control knob to "CLEAN."	1. The door is automatically locked by the latch in top edge of the oven. You can hear a noise as door is locked. The oven indicator light will come on and remain on during the cleaning cycle.
2. Push in and turn stop time knob to the time you wish the oven to stop cleaning. Recommended cleaning time is 2-3 hours depending upon the amount of soil in the oven.	1. The oven will begin heating. 2. The oven operating light and clean light , will come on. 3. When the oven reaches the temperature at which it starts to clean the lock light will come on. 4. The oven operating light will cycle on and off to indicate the power is cycling on and off to maintain oven temperature.

What happens during self-cleaning cycle:

- Both the upper and lower oven units are on during cleaning.
- The temperature will continue to rise to about 900°F where it will stay for the remainder of the cleaning time. (**NOTE:** The first few times the self-cleaning system is used, there may be minor smoking and a slight odor as the oven insulation "cures". This will disappear after the first few cleaning cycles.)
- The vapor and smoke generated during the self-cleaning cycle is catalytically cleaned before discharge into the room.
- The **oven vent**, located on the right of the backsplash, exhausts vapor and warm air during self-cleaning cycle. It should always be left unobstructed. Air circulation around oven sides and back (double wall construction) helps to keep side panels at a safe temperature.
- You may notice some wisps of smoke from around the door or oven vent at the beginning of the cleaning cycle.
- The **clean light** will go out at the end of the cleaning time.

To interrupt self-cleaning cycle:

1. Before "**lock**" light goes on:
 - Turn **stop time knob** to correspond with the time on the **clock** (shaft will pop out). **Oven operating light** will go off.
 - Turn **oven operation control knob** to "BAKE."
2. After "**lock**" light has gone on:
 - Turn **stop time knob** to correspond with the time on the **clock** (shaft will pop out). **Oven operating light** will go off.
 - Allow oven to cool until "**lock**" indicator light goes out.
 - Turn **oven operation control knob** to "BAKE."

Safety features:

- The "locking system" during the self-cleaning cycle is designed so that the door can NOT be opened when oven is at self-cleaning temperatures (**lock light** is "on") even if the **oven operation control knob** is accidentally turned back to "BAKE" while the oven is in the self-cleaning cycle or before the oven has cooled to be at a safe temperature.
- Range has UL designation (located on the nameplate) which shows it has passed Underwriters' Laboratories, Inc. safety tests.

What happens after self-cleaning cycle:

The oven temperature will drop to about 550°F and the **lock light** will go out.

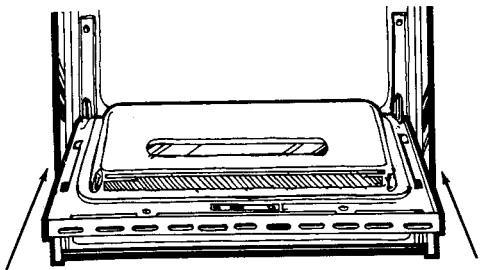
1. Turn **oven operation control knob** from "CLEAN" to "BAKE." This unlocks oven door.
2. Leave door ajar to finish cooling oven.
3. Remove any ash from bottom of oven with a damp paper towel. If small, dark burned-on spots remain they may require some manual cleaning.
4. Remove any baked-on soil from around oven door and oven frame with damp cloth and cleanser.
5. Lubricate sides of oven shelves with a little cooking oil. The shelves will slide more easily and the oil prevents friction and possible damage to oven shelf supports.

Oven self-cleaning hints:

- A convenient time to self-clean the oven is in the evening, when normal oven use is completed.
- It is normal to notice a slight amount of smoke escaping around upper part of door during self-cleaning when soil is heavy. **Excessive** smoke may indicate excessive spillovers have not been wiped up or there may be a faulty gasket which should be checked by an authorized service man.
- If oven shelves are left in during self-cleaning, shelves will change color after a few cleanings. This does not affect their performance.
- The oven should be cleaned before it gets "excessively dirty" — which means something different to every cook! If the oven is not clean after one cycle, repeat cleaning cycle.

Suggested self-cleaning times:

Light soil	1½ hours
Moderate soil	2 hours
Heavy soil	3 hours

**Lower window shield**

Press in the two slide glides and slide towards door bottom until entire window is revealed.

Care and Cleaning of Other Cooking Center Parts

Part	Cleaning Aids	How to Clean	Tips and Precautions
Chrome-Plated Control Knobs	<ul style="list-style-type: none"> • Soap and water • Bristle brush, if necessary 	<ul style="list-style-type: none"> • Be certain control is "OFF" • Remove knobs by pulling straight toward yourself. • Wash with dishes, rinse, dry. 	<ul style="list-style-type: none"> • Do not clean in Oven Clean Cycle. Chrome will discolor. Knobs will melt.
Glass Control Panel	<ul style="list-style-type: none"> • Glass cleaner, e.g. Windex® 	<ul style="list-style-type: none"> • Remove control knobs. • Clean with glass cleaner. • Wipe with lintless cloth or towel. 	<ul style="list-style-type: none"> • Be careful not to spray cleaner inside panel. Shafts are gasketed to help prevent this.
Painted & Brushed Aluminum & Glass Backsplash	<ul style="list-style-type: none"> • Soap and water 	<ul style="list-style-type: none"> • Wash, rinse, dry with soft cloth. 	<ul style="list-style-type: none"> • Avoid abrasive cleansing powders which might scratch finish.
Stainless Steel Trim Rim	<ul style="list-style-type: none"> • Soap and water 	<ul style="list-style-type: none"> • Wash, rinse, dry with soft cloth. 	<ul style="list-style-type: none"> • Avoid abrasive cleansers which might scratch or dull the finishes.



Care and Cleaning of Other Cooking Center Parts (cont'd)

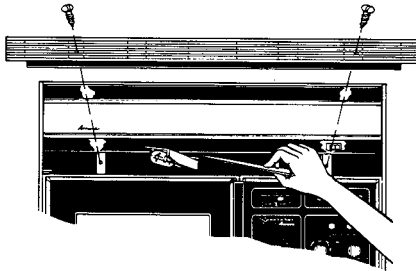
Part	Cleaning Aids	How to Clean	Tips and Precautions
Painted Steel Range Sides	<ul style="list-style-type: none"> • Soap and water 	<ul style="list-style-type: none"> • Clean regularly when range has cooled. 	
Chrome-Plated Oven Shelves	<ul style="list-style-type: none"> • Soap and water • Soap filled scouring pads 	<ul style="list-style-type: none"> • Wash, rinse, dry regularly. • For stubborn spots: use scouring pads. 	<ul style="list-style-type: none"> • May be cleaned in Oven Clean Cycle, but will discolor due to high temperatures. • Do not allow spills and splatters to "bake" on.
Fiberglass Oven Gasket	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Do not clean. 	<ul style="list-style-type: none"> • Do not scrub or clean gasket. Cleaning will deteriorate this special heat-saving seal.
Porcelain Enamel Oven frame, Oven interior, Door liner	<ul style="list-style-type: none"> • Soap and water • Non-abrasive cleaners • Self-cleaning cycle 	<ul style="list-style-type: none"> • Before setting self-cleaning cycle: <ol style="list-style-type: none"> 1. Remove any items in oven. 2. Wipe all interior areas noted to prevent burn on of heavy soils and excessive smoking. • Set Oven Clean Cycle. Review detailed instructions on pages 	<ul style="list-style-type: none"> • Lower oven heating unit lifts up for easier wiping of oven interior. • Do not clean range control knobs or utensils in self-cleaning cycle. • Clean oven before it becomes "excessively soiled."
Upper & Lower Conventional Oven Heating Units	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Bake and broil units clean themselves during operation and self-cleaning cycle. 	<ul style="list-style-type: none"> • Do not clean with any water or cleansers. Electrical parts can be damaged.
Glass Oven Door	<ul style="list-style-type: none"> • Soap and water • Non-abrasive cleaners • Glass cleaner 		
Storage Drawer and Floor Covering	<ul style="list-style-type: none"> • Soap and water 	<ul style="list-style-type: none"> • Remove storage drawer by pushing down to disengage 2 metal clips on runners. Lift out drawer for easier cleaning of drawer and floor. 	<ul style="list-style-type: none"> • Replace drawer by setting on runners. Clips will automatically realign when drawer is closed.
Broiler Grid and Broiler Pan	<ul style="list-style-type: none"> • Soap and water • Undiluted detergent • Paper toweling 	<ul style="list-style-type: none"> • Remove from oven promptly after broiling and drain drippings. • Sprinkle grid & pan with detergent. • Place damp toweling on detergent. • When cool, wash, rinse dry. 	<ul style="list-style-type: none"> • Do not leave in oven after broiling. Soil will burn on, danger of grease fire. • Do not clean in Oven Clean Cycle.
Filter for Optional Vent Fan	<ul style="list-style-type: none"> • Soap and water 	<ul style="list-style-type: none"> • Remove aluminum mesh filter and wash in warm, soapy water. Rinse thoroughly and shake out excess water. Filter may be cleaned in dishwasher. • The charcoal filter (if used) should only be cleaned with a damp cloth. • Do not submerge or soak charcoal filter in water. • Replace by sliding back into original position. 	<ul style="list-style-type: none"> • For venting efficiency, clean periodically.

How to Replace the Lights

Important:

Before removing or replacing the lights:

1. Disconnect the electric current to the range at the fuse box or circuit breaker box.
2. Wait until the oven and/or light has cooled.



Radarange Oven Light Bulb

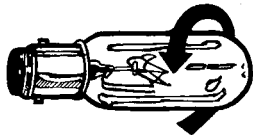
The Radarange Oven light is reached from the front of the Cooking Center by removing the black grill above the Radarange door (see diagram at left).

To remove grill:

Remove the screws and remove the grill. You may need to pry the side trim slightly from the unit for easier removal of the grill.

To remove light bulb:

- With the grill removed, you can locate a metal tab near the left side. This metal tab is the upturned end of a metal strip which is attached to the light bulb socket.
- Lift the tab slightly upward and you will see the light bulb (and socket) as it is removed from its recess. (A slight twisting motion may be necessary.)
- Pull the tab forward until the light bulb is at the front of the oven.
- Turn the metal strip to the right so the light can be reached easily.
- To remove the bulb, press into socket and turn counterclockwise, as pictured. Be careful not to burn fingers or break the bulb. **DO NOT PULL THE WIRES MORE THAN IS NECESSARY TO HOLD LAMP SOCKET.**



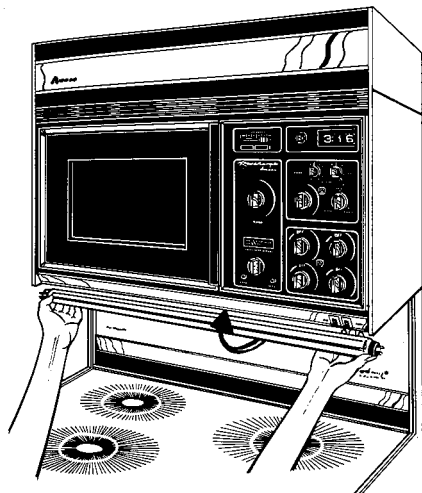
Press bulb in and turn counterclockwise to remove.

To replace light bulb:

- Replace with a 25-watt 25T8DC bayonet base bulb. To replace, press bulb into socket and turn clockwise.
- Using the tab and metal strip, guide the light back into its recess.
- Replace grill, securing with the screws.

Backsplash Fluorescent Tube

(Located under the microwave oven at the top of the backsplash.)



Rotate fluorescent tube upward to remove.

To remove glass cover:

- The glass cover is secured with a metal retainer. Release the retainer by removing the three screws. Be careful to prevent the glass cover from falling.
- Lift the glass cover up and out.

To remove fluorescent light tube:

- Place fingers under tube on both sides. Rotate upward as pictured. Lift tube away.

To replace fluorescent light tube:

- Slide tube pins located at each end of tube into lamp holder slots. Push down slightly and roll away from you until you hear it click into socket.

To replace glass cover:

- Reposition glass cover in backsplash slot.
- Secure glass cover with metal retainer by replacing the three screws.

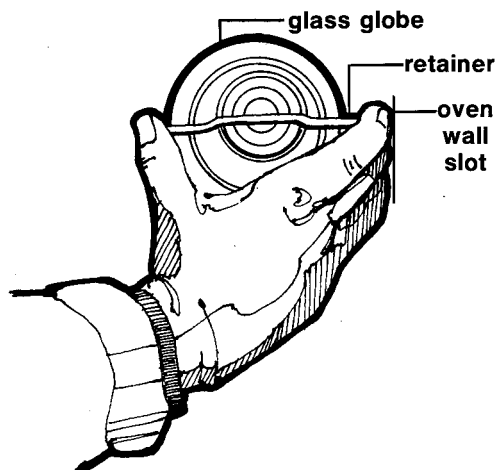
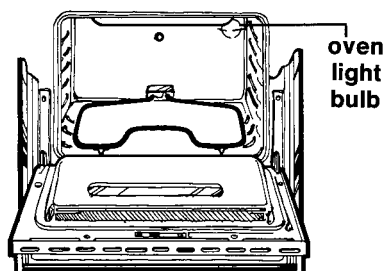
Oven Light Bulb:

To remove glass globe:

- Hold hand under glass globe to prevent its falling when freed.
- With the fingers and thumb of your other hand, press the retainer wire toward the globe until the wire slips out of the oven wall slot and frees the globe.

To replace the light bulb:

- Turn the bulb counterclockwise to remove. (A dry oven mitt or cloth will protect against broken glass.)
- Replace with a 40-watt appliance bulb, rotating it clockwise.
- Secure the glass globe over the bulb by reinserting the retainer wire into the oven wall slots.



Service Information

Before You Call for Service:

About the Radarange Oven

If the glass Radarange Oven tray should break . . .

- The glass oven tray must be in place when operating the Radarange 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 from your Amana Dealer.

If the Radarange Oven won't turn on . . .

- Is the Cooking Center properly wired to the power source?
- Is a fuse blown or circuit breaker open?

If microwave power won't come on . . .

- Did you push the **START** switch?
- Is the oven door securely closed?

If food is overcooked . . .

- Did you remember to shift to the correct Cookmatic Power Level? (Review instructions, page 15.)

If food is undercooked . . .

- Did you remember to shift to the correct Cookmatic Power Level?
- Are there other energy-consuming appliances on the same circuit as the microwave oven? (Review installation instructions.)
- 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 voltage is low the oven light will often pulse from bright to dim.

If a pulsing sound is heard when cooking at lower Cookmatic levels . . .

- This is normal. The pulsing sound is the result of the magnetron tube cycling on and off to produce the lower Cookmatic level.

If the temperature probe appears not to function correctly . . .

- Is the probe plug securely inserted into the receptacle?
- Is the food you're attempting to heat already hotter than the temperature you have set?
- Is the food completely defrosted?

If another feature doesn't appear to be operating correctly . . .

- Have you followed the use and care instructions exactly? Review them to be sure.

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 room lights dim or pulse dimmer, then brighter when the oven is in use:

- Is the microwave oven on a separate circuit? (Review installation instructions.)

About the Rangetop and Conventional Oven

If the rangetop or conventional oven will not heat . . .

- Is the Cooking Center properly wired to the power source?
- Is a fuse blown or circuit breaker open?
- Are you using the control panel properly? (Review instructions.)

How to tell if your heating units need service:

Each heating unit can be replaced individually. If you suspect you have a faulty unit, use the performance tests below to determine if service is necessary.

Performance test for small Temp-Assure™ heating unit:

1. Turn to "Hi" heat and allow to preheat 5 minutes.
2. Fill 3 qt. (KA-SP-3) Cookmates® Saucepan with 1 qt. 60°F tap water.
3. Cover saucepan.
4. Place on small cooking area.
5. Time the number of minutes until water comes to a complete rolling boil. Water should take about **7-9 minutes to boil**.

Performance test for large Temp-Assure heating unit:

1. Turn to "Hi" heat and allow to preheat 5 minutes.
2. Fill 5 qt. (KA-DO-5) Cookmates Dutch Oven with 3 qts. of 60°F tap water.
3. Cover Dutch Oven.
4. Place on large cooking area.
5. Time the number of minutes until water comes to a complete rolling boil. Water should take about **13-15 minutes to boil**.

When Service is Required:

Call nearest authorized service agency. (The dealer from whom you purchased your Radarange Plus™ 3 + 1 Microwave Cooking Center can give you the name of your nearest authorized Service Center.) Help them give you prompt service by providing:

1. An accurate description of the trouble.
2. Complete model, serial and manufacturing numbers recorded on the nameplate of your Cooking Center. (To locate, open conventional oven door and look on frame above oven.)
3. Date of installation. (We also suggest you retain your sales slip.)

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 and ask for Customer Relations.

When You Move:

Your Amana Radarange Plus 3 + 1 Microwave Cooking Center was delivered from the factory in packing material specially designed to prevent damage during shipping. If the Cooking Center is moved as part of a household move, insure that:

1. Loose parts such as the microwave oven tray, conventional oven shelves, etc., are properly packed to prevent loss or damage.
2. The upper oven is properly supported so its supports are not strained or deformed during the move.