

## **4-14 Appliances**

## 4-14 Appliances

The appliance section contains all the pertinent operating information for the appliances contained in the coach. Please read all safety instructions before operating any of the appliances.

### 4-14.1 Sharp Carousel Convection Microwave Oven

### 4-14.2 Important Safety Instructions

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

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**▲WARNING:** To reduce the risk of burns, electric shock, fire, injury to persons or exposure to excessive microwave energy:

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1. Read all instructions before using the appliance.
2. Read and follow the specific "PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY" immediately following these steps.
3. Some products such as whole eggs and sealed containers - for example, closed glass jars - may explode and should not be heated in this oven.
4. Stir liquids briskly before and after heating to avoid eruption.
5. Use this appliance only for its intended use as described in this manual. Do not use corrosive chemicals or vapors in this appliance. This type of oven is specifically designed to heat, cook or dry food. It is not designed for industrial or laboratory use.
6. As with any appliance, close supervision is necessary when used by children.
7. Do not operate this appliance if it has a damaged cord or plug, if it is not working properly or if it has been damaged or dropped.
8. This appliance should be serviced only by qualified service personnel. Contact nearest Sharp Authorized Service dealer for examination, repair or adjustment.
9. Do not cover or block any openings on the appliance.
10. Do not immerse cord or plug in water.
11. Keep cord away from heated surfaces.
12. Do not let cord hang over edge of table or counter.
13. See door surface cleaning instructions under Cleaning and Care section.
14. To reduce the risk of fire in the oven cavity:
  - a. Do not overcook food. Carefully attend appliance if paper, plastic or other combustible materials are placed inside the oven to facilitate cooking.
  - b. Remove wire twist-ties from paper or plastic bags before placing bag in oven.
  - c. If materials inside the oven should ignite, keep oven door closed, turn oven off and disconnect the power cord or shut off power at the fuse or circuit breaker panel.
  - d. Do not use the cavity for storage purposes. Do not leave paper products, cooking utensils or food in the cavity when not in use.
15. Clean ventilation openings and grease filters frequently - Grease should not be allowed to accumulate on ventilation openings, hood (louver) or grease filters.
16. Use care when cleaning the louver and the grease filters. Corrosive cleaning agents, such as lye-based oven cleaners, may damage the louver and the grease filters.
17. When flaming food under the hood, turn the fan on.
18. This appliance is suitable for use above both gas and electric cooking equipment 36" wide or less.

**PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY**

- a) Do not attempt to operate this oven with the door open since open-door operation can result in harmful exposure to microwave energy. It is important not to defeat or tamper with the safety interlocks.
- b) Do not place any object between the oven front face and the door or allow soil or cleaner residue to accumulate on sealing surfaces.
- c) Do not operate the oven if it is damaged. It is particularly important that the oven door close properly and that there is no damage to the: (1) door (bent), (2) hinges and latches (broken or loosened), (3) door seals and sealing surfaces.
- d) The oven should not be adjusted or repaired by anyone except properly qualified service personnel.

## 4-14.3 Important Information

### 4-14.3.1 About Your Oven

This Operation Manual is valuable: read it carefully and always save it for reference.

A good microwave cookbook is a valuable asset. Check it for microwave cooking principles, techniques, hints and recipes. See The Ultimate Accessory section for ordering instructions for the Ultimate Accessory, the Sharp Carousel Microwave Cookbook.

**NEVER** use the oven without the turntable and support nor turn the turntable over so that a large dish could be placed in the oven. The turntable will turn both clockwise and counterclockwise. See Manual Microwave Operation for complete instructions.

**ALWAYS** have food in the oven when it is on to absorb the microwave energy.

When using the oven at power levels below 100%, you may hear the magnetron cycling on and off.

The fan will automatically start when heat rises from range surface units or burners and when convection, high mix, low mix or the broil settings are used.

Condensation is a normal part of microwave cooking. Room humidity and the moisture in food will influence the amount of moisture that condenses in the oven. Generally, covered foods will not cause as much condensation as uncovered ones. Ventilation openings must not be blocked.

The oven is for food preparation only. It should not be used to dry clothes or newspapers.

The oven is rated 850 watts by using the IEC Test Procedure. In using recipes or package directions, check food a minute or two before the minimum time and add time accordingly.

### 4-14.3.2 About Food

FOOD	DO	DON'T
Eggs, sausages, fruits & vegetables	<ul style="list-style-type: none"> <li>• Puncture egg yolks before cooking to prevent "explosion".</li> <li>• Pierce skins of potatoes, apples, squash, hot dogs and sausages so that steam escapes.</li> </ul>	<ul style="list-style-type: none"> <li>• Cook eggs in shells.</li> <li>• Reheat whole eggs.</li> <li>• Dry nuts or seeds in shells.</li> </ul>
Popcorn	<ul style="list-style-type: none"> <li>• Use specially bagged popcorn for the microwave oven.</li> <li>• Listen while popping corn for the popping to slow to 1 or 2 seconds or use special POPCORN pad.</li> </ul>	<ul style="list-style-type: none"> <li>• Pop popcorn in regular brown bags or glass bowls.</li> <li>• Exceed maximum time on popcorn package.</li> </ul>
Baby food	<ul style="list-style-type: none"> <li>• Transfer baby food to small dish and heat carefully, stirring often. Check temperature before serving.</li> <li>• Put nipples on bottles after heating and shake thoroughly. "Wrist" test before feeding.</li> </ul>	<ul style="list-style-type: none"> <li>• Heat disposable bottles.</li> <li>• Heat bottles with nipples on.</li> <li>• Heat baby food in original jars.</li> </ul>
General	<ul style="list-style-type: none"> <li>• Cut baked goods with filling after heating to release steam and avoid burns.</li> <li>• Stir liquids briskly before and after heating to avoid "eruption".</li> <li>• Use deep bowl, when cooking liquids or cereals, to prevent boilovers.</li> </ul>	<ul style="list-style-type: none"> <li>• Heat or cook in closed glass jars or air tight containers</li> <li>• Can in the microwave as harmful bacteria may not be destroyed.</li> <li>• Deep fat fry.</li> <li>• Dry wood, gourds, herbs or wet papers.</li> </ul>

### 4-14.3.3 About Microwave Cooking

- Arrange food carefully. Place thickest areas towards outside of dish.
- Watch cooking time. Cook for the shortest amount of time indicated and add more as needed. Food severely overcooked can smoke or ignite.
- Cover foods while cooking. Check recipe or cookbook for suggestions: paper towels, wax paper, microwave plastic wrap or a lid. Covers prevent spattering and help foods to cook evenly.
- Shield with small flat pieces of aluminum foil any thin areas of meat or poultry to prevent overcooking before dense, thick areas are cooked thoroughly.
- Stir foods from outside to center of dish once or twice during cooking, if possible.
- Turn foods over once during microwaving to speed cooking of such foods as chicken and hamburgers. Large items like roasts must be turned over at least once.
- Rearrange foods such as meatballs halfway through cooking both from top to bottom and from the center of the dish to the outside.
- Add standing time. Remove food from oven and stir, if possible. Cover for standing time which allows the food to finish cooking without overcooking.
- Check for doneness. Look for signs indicating that cooking temperatures have been reached.
- Doneness signs include:
  - Food steams throughout, not just at edge.
  - Center bottom of dish is very hot to the touch.
  - Poultry thigh joints move easily.
  - Meat and poultry show no pinkness.
  - Fish is opaque and flakes easily with a fork.

### 4-14.3.4 About Safety

- Check foods to see that they are cooked to the United States Department of Agriculture's recommended temperatures.

TEMP	FOOD
160°F	...for fresh pork, ground meat, boneless white poultry, fish, seafood, egg dishes and frozen prepared food.
165°F	...for leftover, ready-to-reheat refrigerated, and deli and carry-out "fresh" food.
170°F	...white meat of poultry.
180°F	...dark meat of poultry.

To test for doneness, insert a meat thermometer in a thick or dense area away from fat or bone. NEVER leave the thermometer in the food during cooking, unless it is approved for microwave oven use.

- Always use potholders to prevent burns when handling utensils that are in contact with hot food. Enough heat from the food can transfer through utensils to cause skin burns.
- Avoid steam burns by directing steam away from the face and hands. Slowly lift the farthest edge of a dish's covering and carefully open popcorn and oven cooking bags away from the face.
- Stay near the oven while it's in use and check cooking progress frequently so that there is no chance of overcooking food.
- Never use the cavity for storing cookbooks or other items.
- Select, store and handle food carefully to preserve its high quality and minimize the spread of food borne bacteria.
- Keep waveguide cover clean. Food residue can cause arcing and/or fires.
- Use care when removing items from the oven so that the utensil, your clothes or accessories do not touch the safety door latches.

### 4-14.3.5 About Children and the Microwave

Children below the age of 7 should use the microwave oven with a supervising person very near to them. Between ages 7 and 12, the supervising person should be in the same room.

The child must be able to reach the oven comfortably; if not, he/she should stand on a sturdy stool.

At no time should anyone be allowed to lean or swing on the oven door.

Children should be taught all safety precautions: use potholders, remove coverings carefully, pay special attention to packages that crisp food because they may be extra hot.

Don't assume that because a child has mastered one cooking skill he/she can cook everything.

Children need to learn that the microwave oven is not a toy. See Child Lock Feature later in this manual.

### 4-14.3.6 About Utensils and Coverings

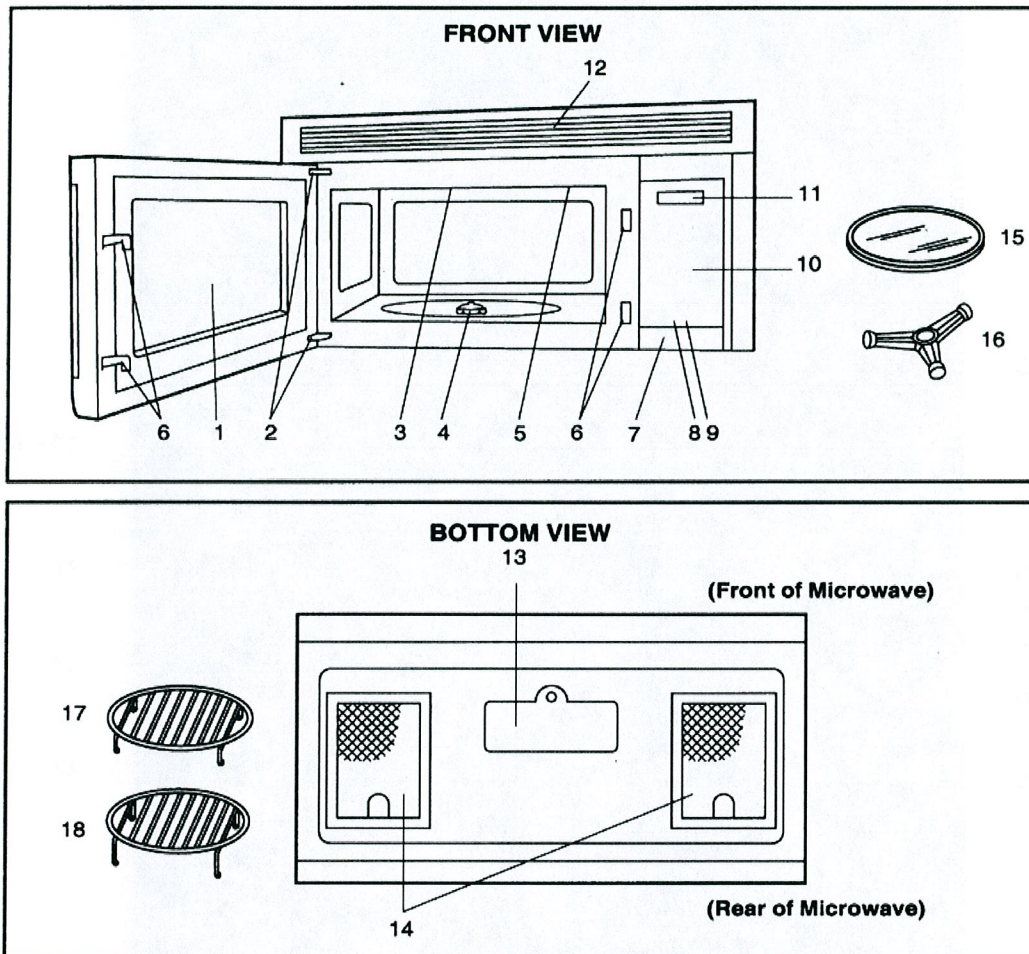
It is not necessary to buy all new cookware. Many pieces already in your kitchen can be used successfully in your new microwave convection oven. The chart below will help you decide what utensils and coverings should be used in each mode.

<b>UTENSILS AND COVERINGS</b>	<b>MICROWAVE ONLY</b>	<b>CONVECTION BROIL, SLOW COOK</b>	<b>HIGH MIX/ROAST LOW MIX/BAKE</b>
Aluminum Foil	Yes Small flat pieces of aluminum foil placed smoothly on food can be used to shield areas from cooking or defrosting too quickly. Keep foil at least 1 inch from wall of oven.	Yes For shielding	Yes For shielding
Aluminum containers	Yes Can be used if 3/4 filled with food. Keep 1 inch away from walls and do not cover with lid.	Yes Broil - No cover	Yes Can be used if 3/4 filled with food. Keep 1 inch away from walls and do not cover with foil.
Browning dish	Yes Do not exceed recommended preheating time. Follow manufacturer's directions.	No	No
Glass ceramic (Pyroceram®)	Yes Excellent.	Yes Excellent.	Yes Excellent.
Glass, heat-resistant	Yes Excellent.	Yes Excellent.	Yes Excellent.
Glass, non-heat resistant	No	No	No
Lids, glass	Yes	Yes Broil - No cover	Yes
Lids, metal	No	Yes Broil - No cover	No
Metal cookware	No	Yes	Yes Do not use metal coverings.
Metal, misc: dishes with metallic trim, etc. Metal twist-ties	No	No	No
Oven cooking bags	Yes Good for large meals or foods that need tenderizing. DO NOT use metal twist-ties.	Yes Broil - No	Yes Do not use metal coverings.
Paper plates	Yes For reheating.	No	No
Paper towels	Yes to cover for reheating and cooking. Do not use recycled paper towels which may contain metal fillings.	No	No
Paper, ovenable	Yes	Yes for temperatures up to 400°F. Do not use for broiling.	Yes for temperatures up to 400°F.
Microwave-safe plastic containers	Yes Use for reheating and defrosting. Follow manufacturer's directions.	No	No
Plastic, Thermoset®	Yes	Yes Are heat resistant up to 425°F. Do not use for broiling.	Yes
Plastic wrap	Yes Use brands specially marked for microwave use. DO NOT allow plastic wrap to touch food. Vent so steam can escape.	No	No
Pottery, stoneware, porcelain	Yes Check manufacturer's recommendation for being microwave-safe.	Yes	Yes Must be microwave-safe and ovenable.
Styrofoam	Yes For reheating	No	No
Wax paper	Yes Good covering for cooking and reheating.	No	No
Wicker, wood, straw	Yes May be used for short periods of time. Do not use with high fat or high sugar content foods. Could char.	No	No

**DISH CHECK.** If you wish to check if a dish is safe for microwaving, place the empty dish in the oven and microwave on HIGH for 30 seconds. If the dish becomes very hot, DO NOT use it for microwaving.

**ACCESSORIES** There are many microwave accessories available for purchase. Evaluate carefully before you purchase so that they meet your needs. A microwave-safe thermometer will assist you in determining correct doneness and assure you that foods have been cooked to safe temperatures. Sharp is not responsible for any damage to the oven when accessories are used.

## 4-14.4 Part Names



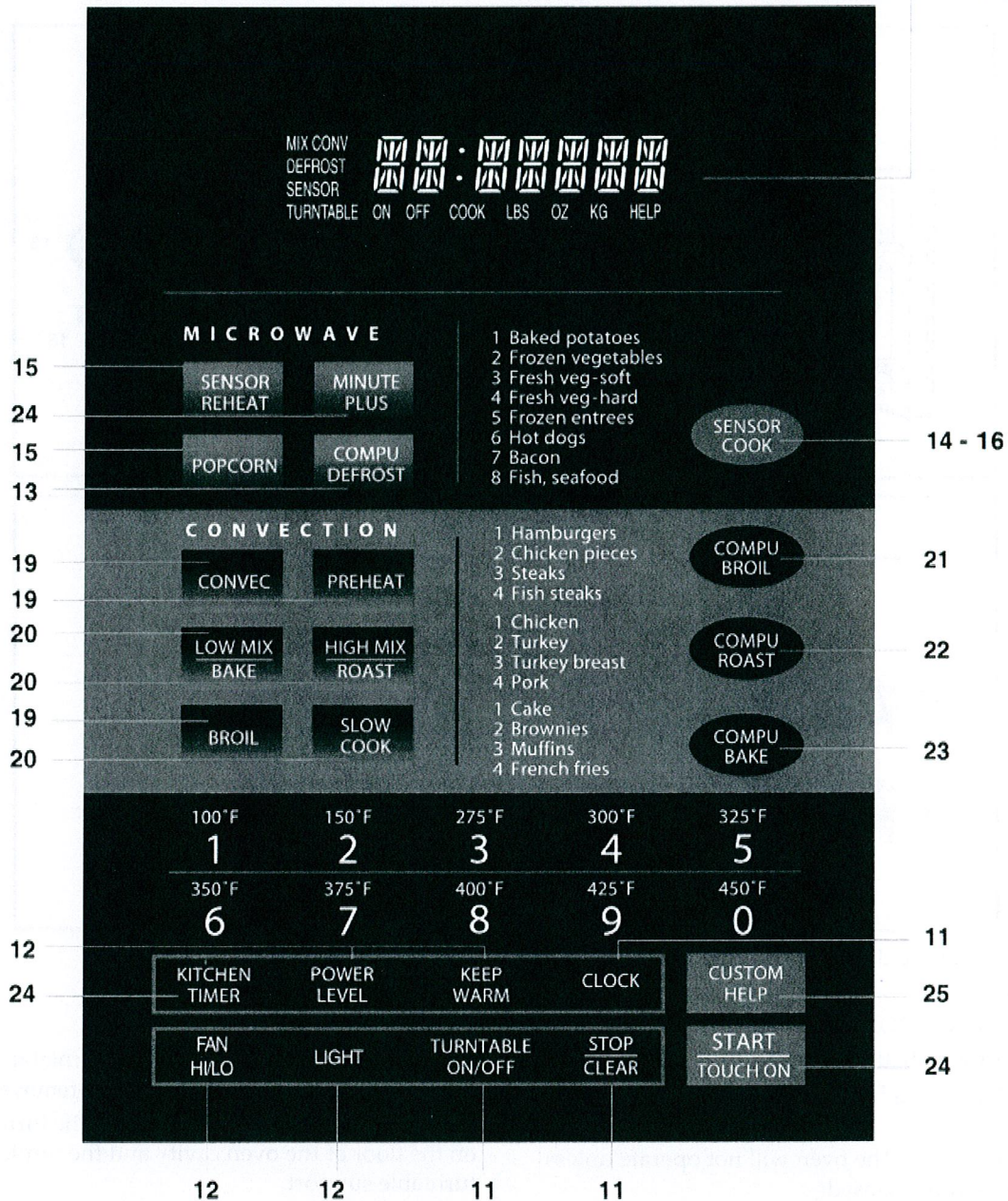
- |   |  |
|---|--|
| 1. Oven door with see-through window.   | 12. Ventilation openings.  |
| 2. Door hinges.   | 13. Light cover.   |
| 3. Waveguide cover DO NOT REMOVE.   | 14. Grease filters.  |
| 4. Turntable motor shaft.   | 15. Removable ceramic turntable. The turntable will rotate clockwise or counterclockwise. Only remove for cleaning.                      |
| 5. Oven light. It will light when oven is operating or door is open.                  | 16. Removable turntable support. Place the turntable support on the floor of the oven cavity and the turntable on the turntable support. |
| 6. Safety door latches. The oven will not operate unless the door is securely closed. | 17. Removable low rack for broiling and meat and poultry roasting.   |
| 7. One touch DOOR OPEN button. Push to open door.                                     | 18. Removable high rack for two level baking.  |
| 8. FAN HI/LO button. Push for high/low/off.   |  |
| 9. LIGHT button. Push for on/off.   |  |
| 10. Auto-Touch control panel.   |  |
| 11. Time display: Digital display, 99 minutes 99 seconds.                             |  |

# 4-14.5 Touch Control Panel

## MODEL R-1874

### INTERACTIVE DISPLAY

Words will light in the display to indicate features and cooking instructions.





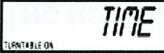
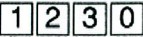



Number next to the control panel illustration indicates page on which there are feature descriptions and usage information.

## 4-14.6 Before Operating

- Before operating your new microwave oven make sure you read and understand this operation manual completely.
- Before the oven can be used, follow these procedures:
  1. Plug in the oven. Close the door. The oven display will show **SHARP SIMPLY THE BEST PRESS CLEAR AND PRESS CLOCK.**
  2. Touch the STOP/CLEAR pad. : will appear.
  3. Touch CLOCK and follow directions to set.

### 4-14-6.1 To Set the Clock

Suppose you want to enter the correct time of day 12:30 (a.m. or p.m.) Follow these 3 easy steps:

PROCEDURE	DISPLAY
<b>1</b>  Touch <b>CLOCK</b> pad.	 
<b>2</b>  Enter the correct time of day by touching the numbers in sequence.	
<b>3</b>  Touch <b>CLOCK</b> pad.	

This is a 12 hour clock. If you attempt to enter an incorrect clock time, ERROR will appear in the display. Touch the STOP/CLEAR pad and re-enter the time.

1. If the electrical power supply to your microwave oven should be interrupted, the display will intermittently show **SHARP SIMPLY THE BEST PRESS CLEAR AND PRESS CLOCK** after the power is reinstated. If this occurs during cooking, the program will be erased. The time of day will also be erased. Simply touch STOP/CLEAR pad and reset the clock for the correct time of day.

*NOTE: Your oven can be programmed with the door open except for START/ TOUCH ON, MINUTE PLUS, SENSOR REHEAT and POPCORN.*

### 4-14.6.2 Stop/Clear

Touch the STOP/CLEAR pad to:

1. Erase if you make a mistake during programming.
2. Cancel kitchen timer.
3. Stop the oven temporarily during cooking.
4. Return the time of day to the display.
5. Cancel a program during cooking, touch twice.

## 4-14.7 Manual Microwave Operation

### 4-14.7.1 Turntable On/Off

For most cooking, the turntable should be on; however the turntable can be turned off so that it does not rotate when extra large dishes, such as the popular 13"x9"x2" glass utility casserole, are used. The casserole should be placed on the turntable so that it is level.

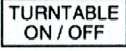
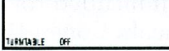

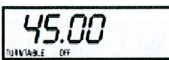





Suppose you want to cook lasagna in a 13"x9"x2" casserole for 45 minutes on 40% power. Follow the steps in illustration at right.

*NOTE: The door can be opened for checking food and the turntable will stay in the off position. After checking, close door and touch START/TOUCH ON.*

The turntable will stay off for one minute after door is opened when time-of-day appears in the display. It is possible to reprogram the oven during that minute without touching the TURNTABLE ON/OFF pad. The display always indicates whether the turntable is off or on.

The TURNTABLE SHOULD ALWAYS BE ON WHEN USING THE SPECIAL FEATURES. On/off function can be used with manual cooking modes and Sensor Reheat. Turntable off condition will automatically change to on condition when you select auto cooking except Sensor Reheat and CompuBake.

When cooking large quantities of food which cannot be stirred, it is best to use a lower power level such as 40 or 50%. You may speed cooking of large amounts by programming 5 to 10 minutes on 100% power (HIGH) followed by the desired time on lower power. See Multiple Sequence Cooking section later in manual to program multiple sequences. You may wish to reverse a large casserole once during cooking; simply open door, reposition casserole door and touch START/ TOUCH ON.

PROCEDURE	DISPLAY
<b>1</b>  Touch <b>TURNTABLE ON/OFF</b> pad and note TURNTABLE OFF in the display.	
<b>2</b>  Enter cooking time.	
<b>3</b>   Enter power level.	
<b>4</b>  Touch <b>START/TOUCH ON</b> pad.	



### 4-14.7.2 Hood Light/Hood Fan

Your oven is equipped with a Hood Light and a Hood Fan which can be used whether the door is open or closed.

To turn the Hood Light on, touch the LIGHT pad once.

To turn the Hood Light off, touch the LIGHT pad again.

To turn the Hood Fan on, touch the FAN HI/LO pad once for high speed. To turn the Hood Fan to low speed, touch pad twice and touch the pad three times to turn the fan off.

### 4-14.7.3 Time Cooking - Microwave

Your oven can be programmed for 99 minutes 99 seconds (99.99). Always enter the seconds after the minutes, even if they are both zeros.



Suppose you want to cook for 5 minutes at 100%, just follow instructions to the right.

#### PROCEDURE

- 1 **4 0 0** Touch the desired cook time for 1 baked potato. (Ex: 4 minutes.)
- 2 **KEEP WARM** Touch **KEEP WARM** pad.
- 3 **START TOUCH ON** Touch **START/TOUCH ON** pad.

At the end of cook time, KEEP WARM is displayed warming food until end of 30 minutes.

#### PROCEDURE      DISPLAY

- 1 **5 0 0**  Enter cooking time.
- 2 **START TOUCH ON**  Touch **START/TOUCH ON** pad.

### 4-14.7.4 Keep Warm

**KEEP WARM** can only be programmed with manual cooking or as a separate program.

Suppose you want to cook a baked potato for 4 minutes at 100% power and you want to keep it warm after cooking for 30 minutes. Follow steps at right.

To use **KEEP WARM** as a separate program, touch **KEEP WARM** pad within 1 minute after cooking, closing the door or touching the **STOP/CLEAR** pad.




### 4-14.7.5 To Set Power Level

There are eleven preset power levels. (see illustration at right)

Using lower power levels increases the cooking time which is recommended for foods such as cheese, milk and long slow cooking of meals. Consult cookbook or recipes for specific recommendations.

Suppose you want to defrost for 5 minutes at 30% with the turntable on.

#### PROCEDURE      DISPLAY

- 1 **5 0 0**  Enter defrosting time.
- 2 **POWER LEVEL 3**  Touch **POWER LEVEL** pad. Enter power level.
- 3 **START TOUCH ON**  Touch **START/TOUCH ON** pad.

TOUCH POWER LEVEL PAD ONCE THEN TOUCH	APPROXIMATE PERCENTAGE OF POWER	COMMON WORDS FOR POWER LEVELS
POWER LEVEL	100%	High
9	90%	
8	80%	
7	70%	Medium High
6	60%	
5	50%	Medium
4	40%	
3	30%	Med Low/Defrost
2	20%	
1	10%	Low
0	0%	

## 4-14.8 Microwave Features

### 4-14.8.1 Compu Defrost

CompuDefrost automatically defrosts ground meat, steaks and chicken pieces.

Suppose you want to defrost a 2.0 pound steak. Follow the 6 steps below:

PROCEDURE	DISPLAY
<p><b>1</b> </p> <p>Touch <b>COMPU DEFROST</b> pad once. Then touch <b>COMPU DEFROST</b> pad two more times to select steak.</p>	
<p><b>2</b> </p> <p>Enter weight by touching the number pads. (Ex. 2.0 lb)</p>	
<p><b>3</b> </p> <p>Touch <b>START/TOUCH ON</b> pad.</p> <p>The oven will stop and directions will be displayed. Follow the indicated message.</p>	
<p><b>4</b> After the 1st stage, open the door. Turn steak over and shield any warm portions. Close the door.</p> <p></p> <p>Touch <b>START/TOUCH ON</b> pad.</p>	
<p><b>5</b> </p> <p>Touch <b>START/TOUCH ON</b> pad.</p>	
<p><b>6</b> After defrost cycle ends, cover and let stand as indicated in chart below.</p>	

NOTE:

1. The weight can be entered in increments of 0.1 lb. If you attempt to enter more or less than the allowed amount ERROR WEIGHT TOO SMALL or TOO LARGE will appear in the display.
2. CompuDefrost can be programmed with More/Less Time Adjustment. See More or Less Time Adjustment section later in manual.
3. To defrost other foods or foods above or below the weights allowed on CompuDefrost Chart, use time and 30% power. See Manual Defrost section later in manual.

### 4-14.8.2 Compu Defrost Chart

TOUCH COMPU DEFROST PAD*	FOOD	FOR AMOUNT	PROCEDURE
once	Ground Meat	0.5-3.0 lb. (0.2 - 1.4 kg)	Remove any thawed pieces after each stage. Let stand, covered, for 5 to 10 minutes.
twice	Steaks (chops, fish)	0.5-4.0 lb. (0.2 - 1.8 kg)	After each stage of defrost cycle, rearrange and if there are warm or thawed portions, shield with small flat pieces of aluminum foil. Remove any meat or fish that is nearly defrosted. Let stand, covered, for 10 to 20 minutes.
3 times	Chicken Pieces	0.5-3.0 lb. (0.2 - 1.4 kg)	After each stage of defrost cycle, if there are warm or thawed portions, rearrange or remove. Let stand, covered, for 10 to 20 minutes.

\*Number of touches AFTER initial touch to access COMPU DEFROST.

*NOTE: Check foods when oven signals. After final stage, small sections may still be icy. Let stand to continue thawing. Do not defrost until all ice crystals are thawed. Shielding prevents cooking from occurring before the center of the food is defrosted. Use small smooth strips of aluminum foil to cover edges and thinner sections of the food.*

### 4-14.8.3 Manual Defrost

If the food that you wish to defrost is not listed on the CompuDefrost Chart or is above or below the limits in the "Amount" column on the chart, you need to defrost manually.

You can defrost any frozen food, either raw or previously cooked, by using power level 3. Follow the exact 3-step procedure found under To Set Power Level section found previously. Estimate defrosting time and press 3 for 30% when you select the power level.

For either raw or previously cooked frozen food, the rule of thumb is approximately 5 minutes per pound. For example, defrost 5 minutes for 2-3 cups of casserole or 1 pound of frozen spaghetti sauce.

Always stop the oven periodically to remove or separate the portions that are defrosted. If food is not defrosted at the end of the estimated defrosting time, program the oven in 1 minute increments on power level 3 until totally defrosted.

When using plastic containers from the freezer, defrost only long enough to remove from the plastic in order to place food in a microwave safe dish.

### 4-14.8.4 Sensor Cooking

Sharp's Sensor is a semi-conductor device that detects the vapor (moisture and humidity) emitted from the food as it heats. The Sensor adjusts the cooking times and power level for various foods and quantities. It takes the guesswork out of microwave cooking.

#### Using Sensor Settings:

1. Room temperature should not exceed 95°F.
2. Be sure the exterior of the cooking container and the interior of the oven are dry. Wipe off any moisture with a dry cloth or paper towel.
3. Sensor cooking can only be entered within 1 minute after cooking, opening and closing the door or touching the STOP/CLEAR pad.
4. During the first part of sensor cooking, **SENSOR REHEAT, POPCORN REGULAR SENSOR, BAKED POTATO, FROZEN VEG, SOFT FRESH VEG, HARD FRESH VEG, FROZEN ENTRÉE, HOT DOGS, BACON or FISH** will appear on display. Do not open oven door or touch STOP/CLEAR during this part of the cooking cycle. The measurement of vapor will be interrupted. If this occurs, **ERROR** will appear and sensor cooking will be interrupted. To continue cooking, touch the STOP/CLEAR pad and select cooking time and power. When sensor detects the vapor emitted from the food, remainder of cooking time will appear. Door may be opened when remaining cooking time appears on display. At this time, you may stir or season food, as desired.
5. Check food for doneness after cooking with sensor settings. If additional time is needed, continue to cook with variable power and time.
6. If the sensor does not detect vapor, **ERROR** will appear and the oven will shut off.
7. At the end of any cycle, open oven door or touch STOP/CLEAR pad. The time of day will reappear on the display.
8. Any sensor setting can be programmed with More or Less Time Adjustment. See More or Less Time Adjustment section later in manual.

#### Selecting Foods:

1. The sensor works with foods at normal storage temperature. For example, foods for reheating would be at refrigerator temperature and potatoes for baking would be room temperature.
2. More or less food than the quantity listed in the charts should be cooked by time and variable power.

#### Covering Foods:

Some foods work best when covered. Use the cover recommended in the Sensor Cooking chart for these foods.

1. Casserole lid.
2. Plastic wrap: Use plastic wrap recommended for microwave cooking. Cover dish loosely; allow approximately ½ inch to remain uncovered to allow steam to escape. Plastic wrap should not touch food.
3. Paper towel: Use paper towels to absorb excess fat and moisture when cooking bacon and potatoes. Line the turntable when baking potatoes.
4. Wax paper: Cover dish completely; fold excess wrap under dish to secure. If dish is wider than paper, overlap two pieces at least one inch to cover.

### 4-14.8.5 Instant Sensors

Your oven has Instant Sensor Popcorn and Instant Sensor Reheat. To use any of the Instant Sensors, simply touch the chosen pad. The oven will start automatically. Any sensor setting can be programmed with More/Less Time Adjustment.

### 4-13.8.6 Instant Sensor Reheat

#### Turntable On:

You can reheat many foods by touching just one pad. You don't need to calculate reheating time or power level. To reheat food with turntable on, simply touch the SENSOR REHEAT pad.

#### Turntable Off:

You may reheat using a 11"x8"x2" or 13"x9"x2" casserole with the turntable off. First touch TURNTABLE ON/OFF and note indicator. Then touch SENSOR REHEAT. The display will indicate turntable off and oven will start automatically. After cooking, **LET STAND COVER** will be displayed.

### 4-14.8.7 Instant Sensor Popcorn

Suppose you want to pop a 3.5 oz. bag of popcorn. This sensor setting works well with most brands of microwave popcorn. You may wish to try several and choose your favorite. Pop only one bag at a time. Unfold the bag and place in oven according to directions.

TOUCH POPCORN PAD	FOR AMOUNT
once	3.0 and 3.5 oz. bag (regular size)
twice	1.5 and 1.75 oz. bag (snack size)

### 4-14.8.8 Instant Sensor Chart

FOOD	AMOUNT	PROCEDURE
Leftovers such as rice, potatoes, vegetables casserole	4-32 oz.	Place in dish or casserole slightly larger than amount to be reheated. Flatten, if possible. Cover with lid, plastic wrap or wax paper. Use covers such as plastic wrap or lids with larger quantities of more dense foods such as stews.
Soups	1-4 cups	After reheating, stir well if possible. Foods should be very hot. If not, continue to heat with variable power and time. After stirring, recover and allow to stand 2 to 3 minutes.
Canned entrees and vegetables	4-16 oz.	Use less Time Adjustment by touching POWER LEVEL pad twice for small quantities of canned vegetables.
Dinner Plate 1 plate	3-6 oz. of meat plus vegetables and/or potato/rice	Use this pad to reheat precooked foods from the refrigerator. Place meaty portions and bulky vegetables to outside of plate. Cut large items like baked potatoes in smaller pieces. Flatten foods such as mashed potatoes and other dense foods. Cover with wax paper or plastic wrap. ONE PLATE ONLY. After cooking, check that food is very hot throughout and that the bottom center of the plate is very hot. If not, continue heating using time and power level. Allow to stand, covered, 2 to 3 minutes.
Popcorn	Only 1 package at a time	Use only popcorn packaged for microwave oven use. Try several brands to decide which you like best. Do not try to pop unpopped kernels. More/Less Time Adjustment can be used to provide adjustment needed for older popcorn or individual tastes.

#### PROCEDURE

**SENSOR REHEAT**

Touch **SENSOR REHEAT** pad. (Note : Sensor Reheat can be programmed with turntable on or off).

**SENSOR REHEAT** will be displayed repeatedly. When sensor detects the vapor emitted from the food, remainder of cooking time will appear. After cooking, **LET STAND COVER** will be displayed.

#### PROCEDURE

**POPCORN**

Touch **POPCORN** pad once. (Ex: Touch **POPCORN** once for regular size bag.)

**SENSOR POPCORN REGULAR** will be displayed repeatedly. After cooking, **END** will be displayed.

### 4-14.8.10 Sensor Cook

Suppose you want to cook a baked potato. Just follow the directions at the right.

Open oven door or touch STOP/CLEAR pad. The time of day will appear in the display.

PROCEDURE	DISPLAY
<b>1</b> <b>SENSOR COOK</b>	<b>SELECT</b> <b>FOOD</b>
Touch <b>SENSOR COOK</b> pad.	<b>NUMBER</b>
<b>2</b> <b>1</b>	<b>BAKED</b> <b>POTATO</b>
Select desired sensor setting. Touch <b>1</b> to cook baked potatoes.	<b>PRESS</b> <b>START</b>
Touch <b>START/TOUCH ON</b> pad.	
<b>3</b> When sensor detects the vapor emitted from the food, the remainder of cooking time will appear.	<b>LET</b> <b>STAND</b>
	<b>COVER</b>

Open oven door or touch **STOP/CLEAR** pad. The time of day will appear in the display.

FOOD	AMOUNT	PROCEDURE
1. Baked potatoes	1-6 medium	Pierce. Place on paper-towel-lined turntable. After cooking, remove from oven, wrap in aluminum foil and let stand 5 to 10 minutes.
2. Frozen vegetable	1-6 cups	Cover with lid or plastic wrap. After cooking, stir and let stand 3 minutes, covered.
3. Fresh vegetables - soft Broccoli Brussels sprouts Cabbage Cauliflower (flowerets) Cauliflower (whole) Spinach Zucchini Baked apples	0.25-2.0 lb. 0.25-2.0 lb. 0.25-2.0 lb. 0.25-2.0 lb. 1 medium 0.25-2.0 lb. 0.25-2.0 lb. 2-4 medium	Wash and place in casserole. Add no water if vegetables have just been washed. Cover with lid for tender vegetables. Use plastic wrap for tender-crisp vegetables. Stir before standing, if possible. After cooking, let stand, covered, 2 to 5 minutes.
4. Fresh vegetables - hard Carrots, sliced Corn on the cob Green beans Winter squash: diced halves	0.25-1-5 lb. 2-4 pcs. 0.25-1.5 lb. 0.25-1.5 lb. 1-2	Place in casserole. Add 1-4 tbsp. water. Cover with lid for tender vegetables. Use plastic wrap cover for tender-crisp vegetables. Stir before standing, if possible. After cooking, let stand, covered, 2 to 5 minutes.
5. Frozen entrees	6-17 oz.	Use for frozen convenience food. It will give satisfactory results for most brands. You may wish to try several and choose your favorite. Remove package from outer wrapping and follow package directions for covering. After cooking, let stand, covered, for 1 to 3 minutes.
6. Hot dogs	1-4 servings	Place hot dog in bun and wrap in paper towel or paper napkin.
7. Bacon	2-6 slices	Place bacon on paper plate, lined with paper towel. Bacon should not extend over the rim of plate. Cover with paper towel
8. Fish, seafood	0.25-2.0 lb.	Arrange in ring around shallow glass dish (roll fillet with edges underneath). Cover with vented plastic wrap. After cooking, let stand, covered, 3 minutes.

### 4-15.9 Manual Convection/Automatic Mix Operation

This section of the Operation manual gives you specific cooking instructions and procedures. Please consult your Sharp Carousel Convection Microwave Cookbook for helpful hints for convection and combination cooking. The oven should not be used without the turntable in place, and it should never be restricted so that it cannot rotate. You may remove the turntable when preheating the oven and when preparing food to be cooked directly on the turntable.

#### 4-15.9.1 Convection Cooking

During convection heating, hot air is circulated throughout the oven cavity to brown and crisp foods quickly and evenly. This oven can be programmed for ten different convection cooking temperatures for up to 99 minutes, 99 seconds.

#### 4-15.9.2 To Cook with Convection

Suppose you want to cook at 350°F for 20 minutes.

PROCEDURE	DISPLAY
<b>1</b> <span style="border: 1px solid black; padding: 2px;">CONVEC</span> Touch <b>CONVEC</b> pad.	<span style="border: 1px solid black; padding: 2px;">SELECT</span> <span style="border: 1px solid black; padding: 2px;">TEMP</span>
<b>2</b> Touch number pad for desired temperature. (Ex: Pad <span style="border: 1px solid black; padding: 2px;">6</span> for 350°F.)	<span style="border: 1px solid black; padding: 2px;">350F</span> <span style="border: 1px solid black; padding: 2px;">ENTER</span> <span style="border: 1px solid black; padding: 2px;">COOKING</span> <span style="border: 1px solid black; padding: 2px;">TIME</span>
<b>3</b> Enter cooking time. (Ex: <span style="border: 1px solid black; padding: 2px;">2</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">0</span> min.)	<span style="border: 1px solid black; padding: 2px;">20.00</span>
<b>4</b> <span style="border: 1px solid black; padding: 2px;">START TOUCH ON</span> Touch <b>START/TOUCH ON</b> pad.	

#### 4-15.9.3 To Preheat and Cook with Convection

Your oven can be programmed to combine preheating and convection cooking operations. You can preheat at the same temperature as the convection temperature or change it to a higher or lower temperature.

Suppose you want to preheat until 350°F and then cook 25 minutes at 375°F convection.

NOTE: To preheat and cook with the same temperature, enter same temperature in steps 2 and 3.

PROCEDURE	DISPLAY
<b>1</b> <span style="border: 1px solid black; padding: 2px;">PREHEAT</span> Touch <b>PREHEAT</b> pad.	<span style="border: 1px solid black; padding: 2px;">SELECT</span> <span style="border: 1px solid black; padding: 2px;">PREHEAT</span> <span style="border: 1px solid black; padding: 2px;">TEMP</span>
<b>2</b> Touch number pad for desired temperature. (Ex: Pad <span style="border: 1px solid black; padding: 2px;">6</span> for 350°F.)	<span style="border: 1px solid black; padding: 2px;">350F</span> <span style="border: 1px solid black; padding: 2px;">PRESS</span> <span style="border: 1px solid black; padding: 2px;">START</span> <span style="border: 1px solid black; padding: 2px;">OR</span> <span style="border: 1px solid black; padding: 2px;">PRESS</span> <span style="border: 1px solid black; padding: 2px;">CONVEC</span>
<b>3</b> Touch <b>CONVEC</b> then touch number pad for temp. (Ex: <span style="border: 1px solid black; padding: 2px;">7</span> for 375°F)	<span style="border: 1px solid black; padding: 2px;">SELECT</span> <span style="border: 1px solid black; padding: 2px;">TEMP</span> <span style="border: 1px solid black; padding: 2px;">375F</span> <span style="border: 1px solid black; padding: 2px;">ENTER</span> <span style="border: 1px solid black; padding: 2px;">COOKING</span> <span style="border: 1px solid black; padding: 2px;">TIME</span>
<b>4</b> Enter number pads for cooking time. (Ex: <span style="border: 1px solid black; padding: 2px;">2</span> <span style="border: 1px solid black; padding: 2px;">5</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">0</span> )	<span style="border: 1px solid black; padding: 2px;">25.00</span>
<b>5</b> <span style="border: 1px solid black; padding: 2px;">START TOUCH ON</span> Touch <b>START/TOUCH ON</b> pad.	<span style="border: 1px solid black; padding: 2px;">PREHEAT</span>

### 4-14.9.4 To Broil

In the BROIL setting, preheating is automatic. Just enter the actual broiling time and wait for preheat to be over before adding food. (Preset 450°F). Oven temperature cannot be changed.

Suppose you want to broil a ham steak for 15 minutes. Refer to illustration at right for directions.

PROCEDURE	DISPLAY
<b>1</b> <span style="border: 1px solid black; padding: 2px;">BROIL</span> Touch <b>BROIL</b> pad.	<span style="border: 1px solid black; padding: 2px;">450F</span> <span style="border: 1px solid black; padding: 2px;">ENTER</span> <span style="border: 1px solid black; padding: 2px;">COOKING</span> <span style="border: 1px solid black; padding: 2px;">TIME</span>
<b>2</b> Touch number pads to enter cooking time. (Ex: <span style="border: 1px solid black; padding: 2px;">1500</span> )	<span style="border: 1px solid black; padding: 2px;">PREHEAT</span>
<b>3</b> <span style="border: 1px solid black; padding: 2px;">START TOUCH ON</span> Touch <b>START/TOUCH ON</b> pad.	

PROCEDURE	DISPLAY
<b>1</b> <span style="border: 1px solid black; padding: 2px;">SLOW COOK</span> Touch <b>SLOW COOK</b> pad.	<span style="border: 1px solid black; padding: 2px;">300F</span> <span style="border: 1px solid black; padding: 2px;">4 HOURS</span> <span style="border: 1px solid black; padding: 2px;">PRESS</span> <span style="border: 1px solid black; padding: 2px;">START</span>
<b>2</b> <span style="border: 1px solid black; padding: 2px;">START TOUCH ON</span> Touch <b>START/TOUCH ON</b> pad. The oven begins counting and continues to 4 hours.	

### 4-14.9.5 To Slow Cook

Slow Cook is a preset at 300°F. Slow Cook is programmed for 4 hours. Oven temperature can be changed to temperature below 300°F. Simply touch the SLOW COOK pad and touch the desired numbered pad with temperature below 300°F.

### 4-14.9.6 Automatic Mix Cooking

This oven has two pre-programmed settings that make it easy to cook with both convection heat and microwave automatically.

	OVEN TEMPERATURE	MICROWAVE POWER
HIGH MIX	325°F	30%
LOW MIX	325°F	10%

With the exception of those foods that cook best by convection heating alone, most foods are well suited to mix cooking using either LOW MIX/BAKE or HIGH MIX/ROAST.

The marriage of these two cooking methods produces juicy meats, moist and tender cakes and fine textured breads, all with just the right amount of browning and crispness.

The temperature can be changed; however, the microwave power cannot.

The oven temperature can be changed from 100°F to 450°F. To change the temperature, first touch HIGH MIX or LOW MIX, then touch the same pad again. When the display says **SELECT TEMP**, touch desired temperature pad. Ex. HIGH MIX, HIGH MIX, pad 7 and START/TOUCH ON. The mix temperature will change automatically.

### 4-14.9.7 To Cook with Automatic Mix

Suppose you want to bake a cake at low mix for 20 minutes. See illustration at right.

PROCEDURE	DISPLAY
<b>1</b> <span style="border: 1px solid black; padding: 2px;">LOW MIX BAKE</span> Touch <b>LOW MIX/BAKE</b> pad.	<span style="border: 1px solid black; padding: 2px;">325F</span> <span style="border: 1px solid black; padding: 2px;">ENTER</span> <span style="border: 1px solid black; padding: 2px;">COOKING</span> <span style="border: 1px solid black; padding: 2px;">TIME</span>
<b>2</b> <span style="border: 1px solid black; padding: 2px;">2000</span> Touch number pads to select time.	<span style="border: 1px solid black; padding: 2px;">20.00</span> <span style="border: 1px solid black; padding: 2px;">PRESS</span> <span style="border: 1px solid black; padding: 2px;">START</span>
At the end of the baking time, 1 long tone will sound and <span style="border: 1px solid black; padding: 2px;">END</span> will be displayed.	

### 4-14-9.8 To Preheat and Cook with Automatic Mix

Your oven can be programmed to combine preheating and Automatic Mix cooking operations. You can preheat at the same temperature as the present combination temperature or change it to a different temperature.

Suppose you want to preheat until 350°F and then cook 25 minutes on 325°F Low Mix bake. Follow the 5 steps at the left.

PROCEDURE	DISPLAY
<b>1</b> <span style="border: 1px solid black; padding: 2px;">PREHEAT</span> Touch <b>PREHEAT</b> pad.	<span style="border: 1px solid black; padding: 2px;">SELECT</span> <span style="border: 1px solid black; padding: 2px;">PREHEAT</span> <span style="border: 1px solid black; padding: 2px;">TEMP</span>
<b>2</b> Touch number pad for desired temperature (Ex: Pad <span style="border: 1px solid black; padding: 2px;">6</span> for 350°F.)	<span style="border: 1px solid black; padding: 2px;">350F</span> <span style="border: 1px solid black; padding: 2px;">PRESS</span> <span style="border: 1px solid black; padding: 2px;">START</span> <span style="border: 1px solid black; padding: 2px;">OR</span> <span style="border: 1px solid black; padding: 2px;">PRESS</span> <span style="border: 1px solid black; padding: 2px;">CONVEC</span>
<b>3</b> <span style="border: 1px solid black; padding: 2px;">LOW MIX BAKE</span> Touch <b>LOW MIX/BAKE</b> pad.	<span style="border: 1px solid black; padding: 2px;">325F</span> <span style="border: 1px solid black; padding: 2px;">ENTER</span> <span style="border: 1px solid black; padding: 2px;">COOKING</span> <span style="border: 1px solid black; padding: 2px;">TIME</span>
<b>4</b> <span style="border: 1px solid black; padding: 2px;">2</span> <span style="border: 1px solid black; padding: 2px;">5</span> <span style="border: 1px solid black; padding: 2px;">0</span> <span style="border: 1px solid black; padding: 2px;">0</span> Touch number pads to select time.	<span style="border: 1px solid black; padding: 2px;">25.00</span> <span style="border: 1px solid black; padding: 2px;">PRESS</span> <span style="border: 1px solid black; padding: 2px;">START</span>
<b>5</b> <span style="border: 1px solid black; padding: 2px;">START TOUCH ON</span> <span style="border: 1px solid black; padding: 2px;">PREHEAT</span> Touch <b>START/TOUCH ON</b> pad.	

At the end of the baking time, 1 long tone will sound and END will be displayed.

### 4-14.10 Convection Automatic Mix Features

This section of the operation manual offers instructions for preparing 12 popular foods using CompuBroil, CompuRoast and CompuBake. After selecting the desired feature, follow the directions indicated in the display.

For helpful hints, simply touch CUSTOM HELP anytime HELP is lighted in the display.

#### 4-14.10.1 Compu Broil

CompuBroil automatically broils hamburgers, chicken pieces, steaks and fish steaks.

Suppose you want to broil 2 hamburgers. Follow steps 1-5 on the right for directions.

**NOTE:**

1. CompuBroil can be programmed with More/Less Time Adjustment.
2. If you attempt to enter more or less than the allowed weight **ERROR WEIGHT TOO LARGE PRESS CLEAR** or **ERROR WEIGHT TOO SMALL PRESS CLEAR** will appear in the display. If you enter more or less than the allowed number **ERROR 0 QTY PRESS CLEAR** or **ERROR TOO MANY PRESS CLEAR** will appear in the display.
3. To broil other foods or foods above or below the weight or number allowed on the chart below, follow instructions in the Sharp Carousel Convection Microwave Cookbook. See Broiling Chart to follow.

PROCEDURE	DISPLAY
<b>1</b> <span style="border: 1px solid black; padding: 2px;">COMPU BROIL</span> Touch <b>COMPU BROIL</b> pad.	<span style="border: 1px solid black; padding: 2px;">SELECT</span> <span style="border: 1px solid black; padding: 2px;">FOOD</span> <span style="border: 1px solid black; padding: 2px;">NUMBER</span>
<b>2</b> <span style="border: 1px solid black; padding: 2px;">1</span> Touch number pad. (Ex: for hamburgers, touch <span style="border: 1px solid black; padding: 2px;">1</span> .)	<span style="border: 1px solid black; padding: 2px;">HAM-</span> <span style="border: 1px solid black; padding: 2px;">BURGERS</span> <span style="border: 1px solid black; padding: 2px;">USE</span> <span style="border: 1px solid black; padding: 2px;">LOW</span> <span style="border: 1px solid black; padding: 2px;">RACK</span> <span style="border: 1px solid black; padding: 2px;">HOW</span> <span style="border: 1px solid black; padding: 2px;">MANY</span> <span style="border: 1px solid black; padding: 2px;">PRESS</span> <span style="border: 1px solid black; padding: 2px;">NUMBER</span>
<b>3</b> <span style="border: 1px solid black; padding: 2px;">2</span> Touch number pad to enter quantity. (Ex: <span style="border: 1px solid black; padding: 2px;">2</span> .) Follow information in display for cooking information.	<span style="border: 1px solid black; padding: 2px;">2</span> <span style="border: 1px solid black; padding: 2px;">NO FOOD</span> <span style="border: 1px solid black; padding: 2px;">IN OVEN</span> <span style="border: 1px solid black; padding: 2px;">FOR</span> <span style="border: 1px solid black; padding: 2px;">MEDIUM</span> <span style="border: 1px solid black; padding: 2px;">PRESS</span> <span style="border: 1px solid black; padding: 2px;">START</span>
<b>4</b> <span style="border: 1px solid black; padding: 2px;">START TOUCH ON</span> <span style="border: 1px solid black; padding: 2px;">ON PREHEAT <small>TURNABLE OR COOK HELP</small></span> Touch <b>START/TOUCH ON</b> pad.	
After broil preheat cycle ends, 4 long tones will sound. <span style="border: 1px solid black; padding: 2px;">PREHEAT</span> <span style="border: 1px solid black; padding: 2px;">OVER</span> <span style="border: 1px solid black; padding: 2px;">PLACE</span> <span style="border: 1px solid black; padding: 2px;">FOOD</span> <span style="border: 1px solid black; padding: 2px;">IN OVEN</span> will be displayed repeatedly. Open the door and place hamburgers into oven. Close the door.	
<b>5</b> <span style="border: 1px solid black; padding: 2px;">START TOUCH ON</span> Touch <b>START/TOUCH ON</b> pad.	
After broil cycle ends, 1 long tone will sound and <span style="border: 1px solid black; padding: 2px;">END</span> will be displayed.	



### 4-14.10.2 Compu Broil Chart

SETTING/FOOD	AMOUNT	PROCEDURE
1. Hamburgers	1-8 pieces 1/4 lb each	Use this setting to broil hamburger patties. Place on low rack.
2. Chicken pieces	0.5-2.0 lb	Arrange pieces on low rack. After cooking, let stand, 3-5 minutes. Dark meat should be 180°F, and white meat should be 170°F.
3. Steaks	0.5-2.0 lb.	Use this setting to broil steaks from 3/4" to 1" thick. Individual boneless steaks broil evenly. Place steak on low rack. For well done, touch POWER LEVEL once; for rare, touch POWER LEVEL twice.
4. Fish steaks	0.5-2.0 lb.	Use this setting to broil fish steak which is 3/4" to 1" thick. Place on low rack.

### 4-14.10.3 Compu Roast

CompuRoast automatically roasts chicken, turkey, turkey breast or pork.

Suppose you want to roast a 2.5 pound chicken.

**NOTE:**

1. CompuRoast can be programmed with More/Less Time Adjustment.
2. If you attempt to enter more or less than the allowed weight. ERROR WEIGHT TOO LARGE PRESS CLEAR or ERROR WEIGHT TOO SMALL PRESS CLEAR will appear in the display.
3. To roast other food or foods above or below the weights allowed on the chart below, check the Sharp Carousel Convection Microwave Cookbook's Combination Roasting Chart.

PROCEDURE	DISPLAY
<b>1</b> <span style="border: 1px solid black; padding: 2px;">COMPU ROAST</span>	<span style="border: 1px solid black; padding: 2px;">SELECT</span> <span style="border: 1px solid black; padding: 2px;">FOOD</span> <span style="border: 1px solid black; padding: 2px;">NUMBER</span>
Touch <b>COMPU ROAST</b> pad.	
<b>2</b> <span style="border: 1px solid black; padding: 2px;">1</span>	<span style="border: 1px solid black; padding: 2px;">CHICKEN</span> <span style="border: 1px solid black; padding: 2px;">USE</span> <span style="border: 1px solid black; padding: 2px;">LOW</span> <span style="border: 1px solid black; padding: 2px;">RACK</span> <span style="border: 1px solid black; padding: 2px;">ENTER</span> <span style="border: 1px solid black; padding: 2px;">WEIGHT</span>
Touch number pad. (Ex: for chicken touch <span style="border: 1px solid black; padding: 2px;">1</span> .)	
<b>3</b> <span style="border: 1px solid black; padding: 2px;">2</span> <span style="border: 1px solid black; padding: 2px;">5</span>	<span style="border: 1px solid black; padding: 2px;">2.5</span> <span style="border: 1px solid black; padding: 2px;">PRESS</span> <span style="border: 1px solid black; padding: 2px;">START</span>
Touch number pad to enter weight. (Ex: 2.5)	
<b>4</b> <span style="border: 1px solid black; padding: 2px;">START TOUCH ON</span>	Touch <b>START/TOUCH ON</b> pad.

After COMPU ROAST cycle end, a long tone will sound. LET STAND COVERED FOR 5-10 MIN will be displayed.

### 4-14.10.4 Compu Roast Chart

SETTING FOOD	AMOUNT	RACK	PROCEDURE
1. Chicken	2-5 - 7.0 lb. (1.2 - 3.1 kg)	Low	After the cycle ends, cover with foil and let stand for 5-10 minutes. Internal temperature of white meat should be 170°F and of dark meat, 180°F.
2. Turkey (Unstuffed)	6.5 - 9.0 lb. (3.0 - 4.0 kg)	Low	Season, as desired. Place on low rack. After the cycle ends, cover with foil and let stand 10 minutes. Internal temperature of white meat should be 170°F and of dark meat, 180°F.
3. Turkey breast	3.0 - 6.0 lb. (1.4 - 2.7 kg)	Low	Season, as desired. Place on low rack. After the cycle ends, cover foil and let stand 10 minutes. Internal temperature of white meat should be 170°F.
4. Pork	2.0 - 3.5 lb. (0.9 - 1.5 kg)	Low	Boneless pork loin is recommended because it cooks evenly. Place on low rack. After cooking, remove from oven, cover with foil and allow to stand 5-10 minutes. Internal temperature should be 160°F.

### 4-14.10.5 Compu Bake

CompuBake automatically bakes cakes, brownies, muffins and French fries.

Suppose you want to bake a 13"x9"x2" cake.

NOTE:

1. CompuBake can be programmed with More/Less Time Adjustment.
2. To bake other food, see the Sharp Carousel Convection Microwave Cookbook's Baking Section.

PROCEDURE	DISPLAY
<b>1</b> <b>COMPU BAKE</b>	<b>SELECT</b> <b>FOOD</b> <b>NUMBER</b>
Touch <b>COMPU BAKE</b> pad. Note: Turntable function is automatically turned OFF.	
<b>2</b> <b>1</b>	<b>CAKE</b> <b>USE</b> <b>13X9X2</b> <b>INCH</b> <b>METAL</b> <b>PAN</b> <b>ON</b> <b>LOW</b> <b>RACK</b> <b>NO FOOD</b> <b>IN OVEN</b> <b>PRESS</b> <b>START</b>
Touch number pad. (Ex: for cake, touch <b>1</b> .)	
<b>3</b> <b>START TOUCH ON</b>	<b>PREHEAT</b> <small>TURNTABLE OFF COOK HELP</small>
Touch <b>START/TOUCH ON</b> pad.	
After CompuBake preheat cycle ends, 4 tones will sound. The display will indicate <b>PREHEAT</b> <b>OVER</b> <b>PLACE</b> <b>FOOD</b> <b>IN OVEN</b> . Open door. Place the cake pan inside. Close door and touch <b>START/TOUCH ON</b> .	
<b>4</b> <b>START TOUCH ON</b>	Touch <b>START/TOUCH ON</b> pad.
After <b>COMPU BAKE</b> cycle ends, 1 long tone will sound, and <b>END</b> will be displayed.	







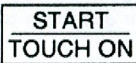
### 4-14.10.6 Compu Bake Chart

SETTING FOOD	PAN SIZE/QTY	RACK	PROCEDURE
1. Cake	13"x9"x2"	Low	Ideal for packaged cake mix or your own recipe for 13"x9"x2" pan. Prepare according to package or recipe directions and place in a greased and floured 13"x9"x2" baking pan. After the preheat is over, place pan in oven centered on low rack. Cool before frosting and serving.
2. Brownies	13"x9"x2"	Low	Ideal for packaged brownie mix or your own recipe for 13"x9"x2" pan. Prepare according to package or recipe directions and place in a greased and floured 13"x9"x2" baking pan. After the preheat is over, place pan in oven centered on low rack. Cool before cutting into serving pieces.
3. Muffins	12 cup Muffin pan	Low	Ideal for packaged muffin mix or your own recipe for 12 medium size muffins. Prepare according to package or recipe directions and place in one 12-cup muffin pan. After the preheat is over, place pan in oven centered on low rack.
4. French Fries	3 to 24 oz. Cookie sheet to hold	Low	Use frozen prepared French Fries. No preheat is required for the French Fries baking procedure. Place French Fries on cookie sheet on low rack. For shoestring potatoes, touch <b>POWER LEVEL</b> pad twice to enter less time before touching <b>START/TOUCH ON</b> pad.

## 4-14.11 Other Convenient Features

### 4-14.11.1 Multiple Sequence Cooking

The oven can be programmed for up to 4 automatic cooking sequences for the microwave mode and 3 automatic cooking sequences for convection mode, switching from one setting to another automatically.

PROCEDURE		
1		Touch <b>POWER LEVEL</b> pad once.
2		Touch <b>POWER LEVEL</b> number. (Ex: 90%)
3		Enter cooking time. (Ex: 5 minutes.)
4		Touch <b>POWER LEVEL</b> pad again.
5		Touch <b>POWER LEVEL</b> number. (Ex: 50%)
6		Enter cooking time. (Ex: 30 minutes.)
7		Touch <b>START/TOUCH ON</b> pad.

Sometimes cooking directions tell you to start on one power level and then change to a different power level. Your oven can do this automatically.

Suppose you want to cook roast beef for 5 minutes at 90% and then continue to cook for 30 minutes at 50%. Follow the directions in illustration at left.

**NOTE:**

1. If **POWER LEVEL** pad is touched twice, **HIGH** will be displayed.
2. If 100% is selected as the final sequence, it is not necessary to touch the **POWER LEVEL** pad.
3. If you wish to know power level, simply touch the **POWER LEVEL** pad. As long as your finger is touching the **POWER LEVEL** pad, the power level will be displayed.


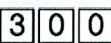

### 4-14.11.2 More or Less Time Adjustment

**More:** Should you discover that you like any of the **COMPU DEFROST**, **COMPU ROAST**, **COMPU BAKE**, **COMPU BROIL**, **SENSOR COOK** or **INSTANT SENSOR** settings more done, touch the **POWER LEVEL** pad once after touching your choice of pads.

**Less:** Should you discover that you like any of the **COMPU DEFROST**, **COMPU ROAST**, **COMPU BAKE**, **COMPU BROIL**, **SENSOR COOK** or **INSTANT SENSOR** settings slightly less done, touch the **POWER LEVEL** pad twice after touching your choice of pads.

### 4-14.11.3 Kitchen Timer

Suppose you want to time a 3 minute long distance phone call. Follow the steps in the illustration at right.

PROCEDURE		
1		Touch <b>KITCHEN TIMER</b> pad.
2		Enter time.
3		Touch <b>START/TOUCH ON</b> pad.

### 4-14.11.4 Minute Plus

Minute Plus allows you to cook for a minute at 100% by simply touching the **MINUTE PLUS** pad. You can also extend cooking time in multiples of 1 minute by repeatedly touching the **MINUTE PLUS** pad during manual cooking using microwave, convection, mix or broil.

Suppose you want to heat a cup of soup for one minute.

**NOTE:**

1. Touch **MINUTE PLUS** pad within 1 minute after cooking, closing the door, touching the **STOP/CLEAR** pad or during cooking. Minute Plus cannot be used to start the oven if any program is on display.
2. Minute Plus cannot be used with Special Features.

PROCEDURE		
		Touch <b>MINUTE PLUS</b> pad.

### 4-14.11.5 Demonstration Mode

To demonstrate, touch CLOCK, 0 and START/TOUCH ON and hold for three seconds. DEMO ON DURING DEMO NO OVEN POWER SHARP SIMPLY THE BEST and DEMO will appear in the display. Cooking operations and special features can now be demonstrated with no power in the oven. For example, touch MINUTE PLUS, and the display will 1.00 and count down quickly to 0 and the END.

To cancel, touch CLOCK, the number 0 and STOP/CLEAR.

### 4-14.11.6 Help

Each setting of CompuDefrost, CompuBroil, CompuRoast, CompuBake and Sensor Cook has a cooking hit. If you wish to check, touch CUSTOM HELP whenever HELP is lighted in the Interactive Display.

### 4-14.11.7 Custom Help

Custom Help provides 5 features which make using your oven easy because specific instructions are provided in the Interactive Display.

#### 1. Child Lock

The Child Lock prevents unwanted oven operation such as by small children. Note: Child Lock is not applicable to Hood Fan and Hood Light buttons.

The oven can be set so that the control panel is deactivated or locked. To set, touch CUSTOM HELP, the number 1 and START/TOUCH ON pad. Should a pad be touched, LOCK will appear in the display.

To cancel, touch CUSTOM HELP, the number 1 and STOP/CLEAR.

#### 2. Audible Signal Elimination

If you wish to have the oven operate with no audible signal, touch CUSTOM HELP, the number 2 and STOP/CLEAR. To cancel and restore the audible signal, touch CUSTOM HELP, the number 2 and START/TOUCH ON.

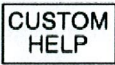


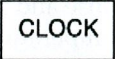
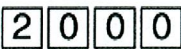

#### 3. Auto Start

If you wish to program your oven to begin cooking automatically at a designated time of day, follow this procedure: Suppose you want to start cooking a stew for 20 minutes on 50% at 4:30. Before setting, check to make sure the clock is set correctly.

**NOTE:**




1. Auto Start can be used for manual cooking, CompuBroil/Roast/Bake, if clock is set.
2. If the oven door is opened after programming Auto Start, it is necessary to touch the START/TOUCH ON pad for the time of day to appear in the readout so that the oven will automatically begin programmed cooking at the chosen Auto Start time.
3. Be sure to choose foods that can be left in the oven safely until the Auto Start time. Baked potatoes are often a good choice.

**PROCEDURE**

- 1  Touch **CUSTOM HELP** pad.
- 2  Touch the number.
- 3  Enter the start time.
- 4  Touch **CLOCK** pad.
- 5  Enter cooking program.
- 6  Touch **START/ TOUCH ON** pad.

#### 4. Language Selection

The oven comes set for the English language. To change, touch CUSTOM HELP and the number 4. Continue to touch the number 4 until your choice is selected from the table below. Then touch START/TOUCH ON pad.

NUMBER 4	LANGUAGE	DISPLAY
Once	English	
Twice	Spanish	
3 times	French	

**5. Weight/Temp Selection**

The oven comes set for U.S. Customary Unit-pounds. To change, touch CUSTOM HELP and the number 5. Continue to touch the number 5 until your choice is selected from the list. Then, touch START/TOUCH ON pad. Refer to illustration at right for more information.

NUMBER 5	STANDARD OF WEIGHT AND TEMPERATURE	DISPLAY
Once	Pound/Fahrenheit	LB F
Twice	Kilogram/Celsius	KG C

**PROCEDURE**

-  Continuously touch **START/TOUCH ON** pad. The cooking time will begin counting up.
- When the cheese is melted to desired degree, remove finger from **START/TOUCH ON** pad. Oven stops immediately.

**4-14.11.8 Touch On**

Touch On allows you to cook at 100% power by touching the START/TOUCH ON continuously. Touch On is ideal for melting cheese, bringing milk to just below boiling, etc. The maximum cooking time is 3 minutes.

Suppose you want to melt cheese on a piece of toast.

**NOTE:**

- Note time it takes for frequently used foods and program that time in the future.
- Touch the TOUCH ON pad within 1 minute after cooking, opening and closing the door or touching the STOP/CLEAR pad.
- TOUCH ON can only be used 3 times in a row. If more times are needed, open and close door or touch STOP/CLEAR.

**4-14.12 Cleaning and Care**

**4-14.12.1 Exterior**

The outside surface is pre-coated metal and plastic. Clean the outside with mild soap and water; rinse and dry with a soft cloth. Do not use any type of household or abrasive cleanser.

**4-14.12.2 Door**

Wipe the window on both sides with a damp cloth to remove any spills or splatters. Metal parts will be easier to maintain if wiped frequently with a damp cloth. Avoid the use of harsh abrasives.

**4-14.12.3 Touch Control Panel**

Care should be taken in cleaning the touch control panel. If the control panel becomes soiled, open the oven door to inactivate the control panel before cleaning. Wipe the panel with a cloth dampened slightly with water only. Dry with a soft cloth. Do not scrub or use any sort of chemical cleaners. Avoid the use of excess water. Close door and touch STOP/CLEAR.

**4-14.12.4 Interior - After Microwave Cooking**

The oven walls, ceiling and floor are stainless steel. Cleaning after microwave cooking is easy because no heat is generated to the interior surface; therefore, there is no baking and setting of spills or splattering. To clean the interior surface, wipe with a soft cloth and warm water. **DO NOT USE ABRASIVE OR HARSH CLEANERS OR SCOURING PADS.** For heavier soil, use mild soap; rinse thoroughly with hot water.

**4-14.12.5 Interior - After Convection, Mix or Broil Cooking**

Splatters may occur because of moisture and grease. Wash immediately after use with hot, soapy water. Rinse and polish dry. Harder to remove splatters may occur if oven is not thoroughly cleaned or if there is long time/high temperature cooking. If so, you may wish to purchase an oven cleaner pad with liquid cleaner within it-not a soap filled steel pad-for use on stainless or porcelain surfaces. Follow manufacturer's directions carefully and be especially cautious not to get any of the liquid cleaner in the perforations on the wall or ceiling or any door surfaces. Rinse thoroughly and polish dry.

### 4-14.12.6 Waveguide Cover

The waveguide cover is located on the ceiling in the oven cavity. It is made from mica so requires special care. Keep the waveguide cover clean to assure good oven performance. Carefully wipe with a damp cloth any food spatters from the surface of the cover immediately after they occur. Built-up splashes may overheat and cause smoke or possibly catch fire. DO NOT REMOVE THE WAVEGUIDE COVER.

### 4-14.12.7 Odor Removal

Occasionally, a cooking odor may remain in the oven. To remove, combine 1 cup water, grated peel and juice of 1 lemon and several whole cloves in a 2-cup glass measuring cup. Boil for several minutes using 100% power. Allow to set in oven until cool. Wipe interior with a soft cloth.

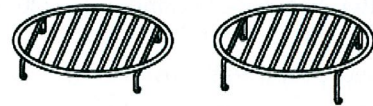
### 4-14.12.8 Turntable/Turntable Support

The ceramic turntable and turntable support can be removed for easy cleaning. Wash them in mild, sudsy water; for stubborn stains use a mild cleanser and scouring sponge as described above. They are also dishwasher-safe using top rack.



### 4-14.12.8 Oven Racks

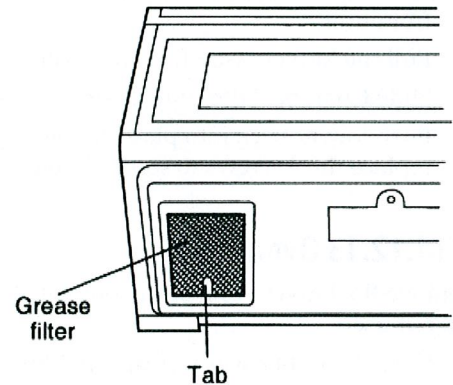
The high and low baking racks can be removed for easy cleaning and stored away from the microwave oven when racks are not needed. After each use, wash them in mild, sudsy water. For any stubborn stains, use a mild kitchen cleanser and scouring sponge as described above. They are dishwasher-safe.



### 4-14.12.9 Grease Filters

Filters should be cleaned at least once a month. Never operate the fan or oven without the filters in place.

1. Pull the tab toward the front of the oven, down slightly and remove the filter. Repeat for the other filter.
2. Soak the filters in a sink or dish pan filled with hot water and detergent. DO NOT use ammonia or other alkali; they will react with the filter material and darken it.
3. Agitate and scrub with a brush to remove embedded dirt.
4. Rinse thoroughly and shake dry.
5. Replace by fitting the filter back into the opening.



### 4-14.12.10 Fan

The fan will automatically start when heat rises from range surface units or burners and when convection, high mix, low mix or the broil settings are used. This protects the microwave oven from excessive temperature rise. The fan will stay on until the temperature decreases. It cannot be turned off manually during this time.

For other uses, select either high or low speed.

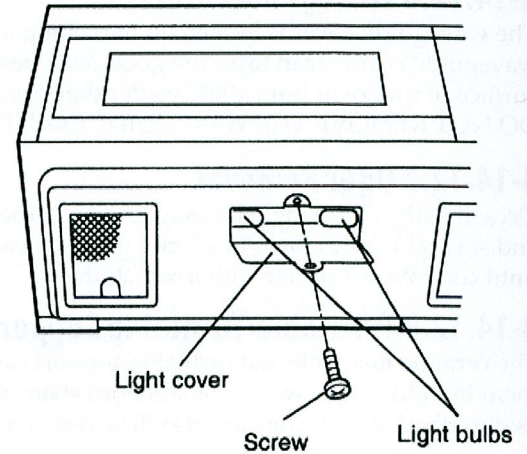
PRECAUTIONS FOR PROPER USE:

1. DO NOT leave range unattended while using high temperatures. Automatic fan may start and provide excessive air to the surface units. This may cause spattering or boil over.
2. Avoid burning food.
3. Keep grease filters clean.

### 4-14.12.11 Light

1. To replace light bulbs, first disconnect power to the oven at the circuit breaker panel or by unplugging.
2. To release cover remove the screw on the light cover. (see illustration)
3. Replace bulbs only with equivalent watt bulbs available from a Sharp Authorized Service or parts distributor. Bulbs are also available at most hardware stores or lighting centers. **DO NOT USE A BULB LARGER THAN 30 WATTS.**
4. Close light cover and secure with screw removed in step 2.

**!!CAUTION: Light cover may become very hot. Do not touch glass when light is on. Do not use light for long time use such as a night light.**



### 4-14.12.12 Charcoal Filter

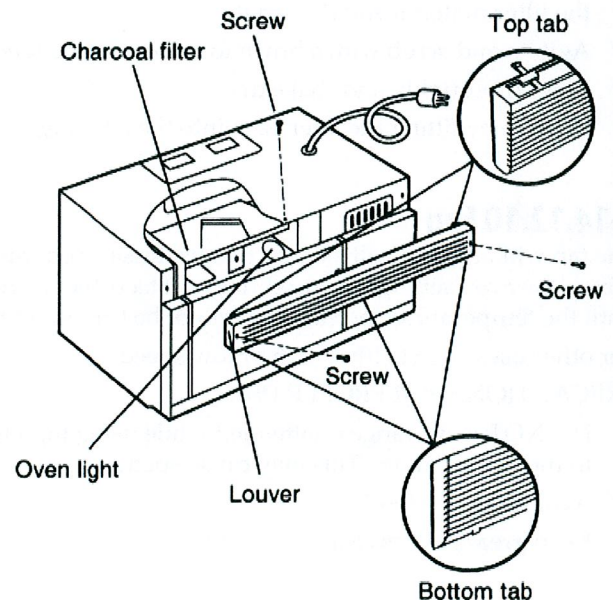
Charcoal Filter, Sharp Part Number RK-220 is used for No-vented, re-circulated installation. The filter should be changed every 6 to 12 months depending on use.

1. Disconnect power to the oven at the circuit breaker panel or by unplugging.
2. Remove 3 screws that secure louver.
3. Remove louver by inserting flat edge of screwdriver over each tab depressing the tab down and moving louver away from unit.
4. Pull the louver away from the oven.
5. Slide Charcoal Filter into position on support tabs.
6. Push louver back into place and gently snap tabs into place by hand (engaging both the bottom and top tabs) and replace the 3 screws to secure louver.

### 4-14.12.13 Oven Light

Remove the louver per instructions 1-4 above and charcoal filter, if used.

1. Slide the light cover forward and lift up.
2. Remove old light bulb and replace only with an equivalent watt bulb available from a Sharp Authorized Servicer or parts distributor. Bulbs are also available at most hardware stores or lighting centers. **DO NOT USE A BULB LARGER THAN 30 WATTS.**
3. Replace the oven light cover and charcoal filter, if used; push louver back in place (engaging both the bottom and top tabs) and replace the louver mounting screws.



4-14.13 Auto-Touch Guide

<p><b>SET CLOCK</b></p> <p>If <b>SHARP</b> <b>SIMPLY</b> <b>THE</b> <b>BEST</b> <b>PRESS</b>  <b>CLEAR</b> <b>AND</b> <b>PRESS</b> <b>CLOCK</b> is in the display,          first touch <b>STOP/CLEAR</b>.</p> <p>1. Touch <b>CLOCK</b> pad.</p> <p>2. Enter correct time of day by touching numbers in sequence. (Ex: 12:30)</p> <p>3. Touch <b>CLOCK</b> pad again.</p> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin: 2px;">CLOCK</div>  <div style="display: flex; justify-content: center; gap: 5px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">3</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">0</div> </div>  <div style="border: 1px solid black; padding: 2px; display: inline-block; margin: 2px;">CLOCK</div> </div>	<p><b>MANUAL OPERATION</b></p> <p><b>High Power Cooking</b></p> <div style="text-align: right; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">1</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">3</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">0</div> </div> <p>1. Enter cooking time by touching numbers pads. (Ex: 1 min. 30 sec.)</p> <p>2. Touch <b>START/TOUCH ON</b> pad.</p> <div style="text-align: right; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">START</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">TOUCH ON</div> </div> <p><b>Variable Power Cooking</b></p> <p>2. After Step 1 above, touch <b>POWER LEVEL</b> pad.</p> <p>3. Select power level (Ex: 5 for 50%) and touch <b>START/TOUCH ON</b> pad.</p> <div style="text-align: right; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">POWER</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">LEVEL</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">5</div> </div> <div style="text-align: right; margin-bottom: 5px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">START</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">TOUCH ON</div> </div>
<p><b>INSTANT SENSOR POPCORN</b></p> <p>Touch <b>POPCORN</b> pad. Touch once for regular size and twice for snack size. See page 15.</p> <div style="text-align: right; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">POPCORN</div> </div>	<p><b>MINUTE PLUS</b></p> <p>Touch <b>MINUTE PLUS</b> for one minute at 100% power or to add additional minutes.</p> <div style="text-align: right; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">MINUTE PLUS</div> </div>
<p><b>INSTANT SENSOR REHEAT</b></p> <p>Touch <b>SENSOR REHEAT</b> once. The oven will start automatically. <b>SENSOR REHEAT</b> can be programmed with turntable on or off. See Instant Sensor Chart on page 15.</p> <div style="text-align: right; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">SENSOR REHEAT</div> </div>	<p><b>TOUCH ON</b></p> <p>Continuously touch <b>START/TOUCH ON</b> for 100% power cooking. Remove finger and oven will stop instantly.</p> <div style="text-align: right; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">START</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">TOUCH ON</div> </div>
<p><b>SENSOR COOK</b></p> <p>1. Touch <b>SENSOR COOK</b> pad.</p> <p>2. Select desired <b>SENSOR COOK</b> setting. (Ex: 1)</p> <p>3. Touch <b>START/TOUCH ON</b> pad.</p> <p>See Sensor Cook Chart, page 16.</p> <div style="text-align: right; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">SENSOR COOK</div>  <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">1</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">START</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">TOUCH ON</div> </div>	<p><b>COMPU DEFROST</b></p> <p>1. Touch <b>COMPU DEFROST</b> pad (Ex: three times for a steak).</p> <p>2. Enter weight by touching number pad. (Ex: 2 and 0.)</p> <p>3. Touch <b>START/TOUCH ON</b> pad.</p> <p>During defrosting, oven will stop. Check food. See CompuDefrost Chart on page 13.</p> <div style="text-align: right; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">COMPU DEFROST</div>  <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">2</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">0</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">START</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">TOUCH ON</div> </div>
<p><b>TO PREHEAT AND COOK WITH CONVECTION</b></p> <p>1. Touch <b>PREHEAT</b> pad.</p> <p>2. Touch number pad for desired temperature. (Ex: touch pad 6 for 350° F.)</p> <p>3. Touch <b>CONVEC</b> pad.</p> <p>4. Touch number pad for desired temperature. (Ex: 5 for 325°F.)</p> <p>5. Enter cooking time by touching number pads. (Ex: 2 0 0 0.)</p> <p>6. Touch <b>START/TOUCH ON</b> pad.</p> <div style="text-align: right; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">SELECT</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">PREHEAT</div>  <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">TEMP</div>  <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">350F</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">PRESS</div>  <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">START</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">OR</div>  <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">PRESS</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">CONVEC</div> </div> <div style="text-align: right; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">SELECT</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">TEMP</div>  <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">325F</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">ENTER</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">COOKING</div>  <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">TIME</div>  <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">20.00</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">PRESS</div>  <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">START</div>  <div style="border: 1px solid black; padding: 2px; display: inline-block;">PREHEAT</div> </div>	<p><b>COMPU ROAST</b></p> <p>or CompuBake or CompuBroil</p> <p>1. Touch desired <b>COMPU</b> pad.</p> <p>2. Select desired Compu setting. (Ex: Touch 1 for chicken.)</p> <p>3. Touch number pad for weight or quantity.</p> <p>4. Touch <b>START/TOUCH ON</b> pad.</p> <p>See CompuRoast, Bake and Broil Charts on pages 21, 22 and 23.</p> <div style="text-align: right; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">COMPU ROAST</div>  <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">1</div>  <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">2</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">5</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px;">START</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">TOUCH ON</div> </div>
<p>When the oven reaches the programmed temp., it will automatically hold at the preheat temperature for 30 minutes and then the display will change to the time of day. Whenever <b>STOP/CLEAR</b> is touched during this 30 minute period, <b>PRESS CONVEC</b> or <b>PRESS MIX</b> will be displayed and cooking mode and time can be entered.</p> <p>For more information on convection cooking, see pages 19 and 20.</p>	<p><b>TO COOK WITH AUTOMATIC MIX</b></p> <p>Touch <b>LOW MIX/BAKE</b> pad, enter desired cooking time and touch <b>START/TOUCH ON</b> pad. Follow information on the display.</p> <div style="text-align: right; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">325F</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">ENTER</div>  <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">COOKING</div> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">TIME</div>  <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-right: 5px; margin-bottom: 5px;">PRESS</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">START</div> </div> <p>Your oven can be programmed to combine preheating and automatic mix cooking operations. See page 19 for information.</p>

**SHARP**  
 SHARP ELECTRONICS CORPORATION  
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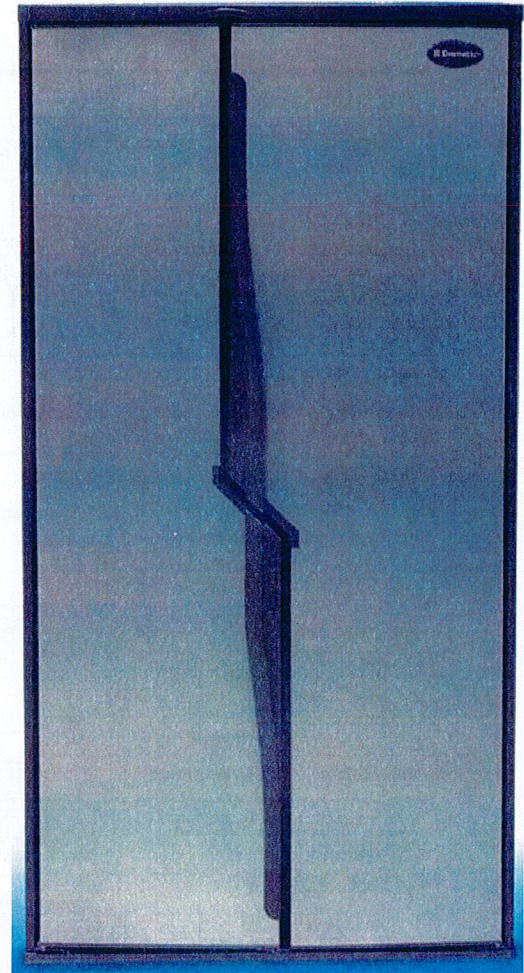
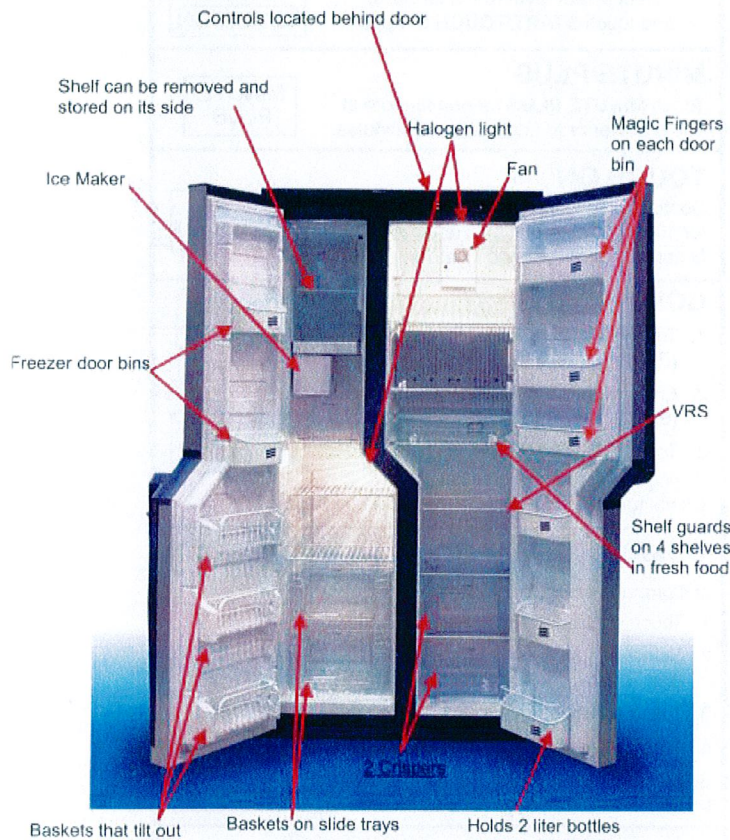


## 4-14-14 Gas Refrigerator

The standard refrigerator for the 450 LXi is a 13.5 cu. ft. Dometic SideWise Refrigerator.

### 4-14-14.1 Exterior

This refrigerator from the outside makes a statement of being non-RV. The full silver and black stainless doors will make a real statement in most galley layouts. The full-length door handle system provides a customer-friendly means for unlocking the doors.



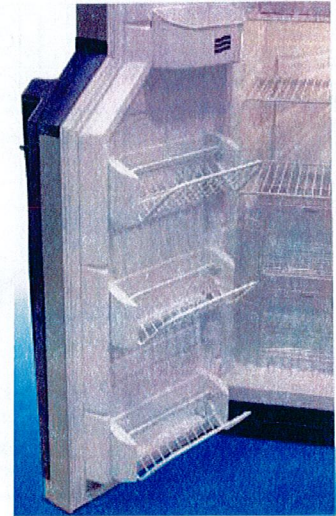
### 4-14.14.2 Fresh Food Side

- Control package is located behind the door. Once the refrigerator is turned on and the temperature is set, there is no reason to have it exposed.
- The control package makes the SideWise look very residential.

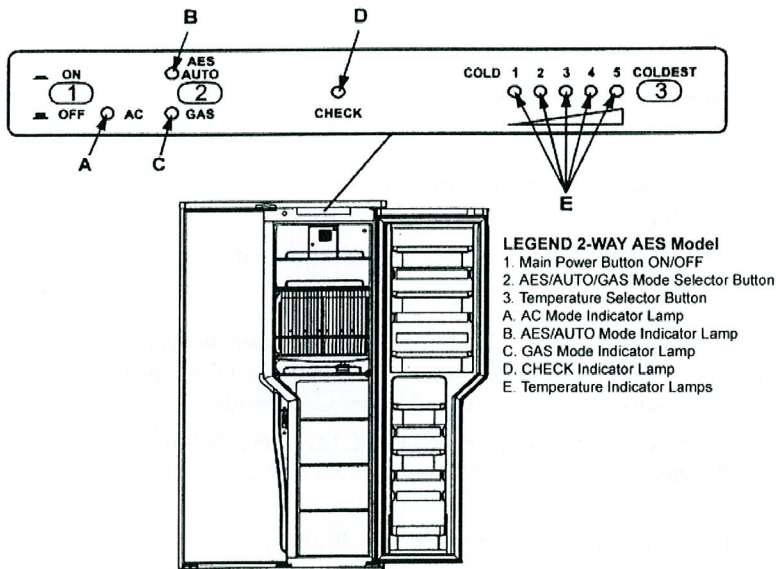
- Halogen light provides great light intensity throughout the interior.
- A brushless fan designed to run continually when the refrigerator is on providing even temperature from top to bottom even when there isn't any space between items on each shelf.
- VRS enables the consumer to move 3 of the shelves in one-inch increments providing the best space utilization.
- The second shelf folds back against the evaporator to provide height for very tall items.
- One slide-out shelf makes it easier to remove a large heavy pan standing straight up compared to bending your back.
- Different width shelves will provide better utilization of the available space.
- Shelf guards allow items to be blocked from falling over or off the shelf when opening the door. When you need an item, just lift up on the shelf guard bar and drop it down. As the customer removes items from the shelf, they simply keep pushing the shelf guard back.
- Two large clear view slide-out crispers just like you may have at home, for fresh produce and meats.
- Space for 2-liter bottles. The lower door bin will hold any 2-liter bottle and has a retainer bar for tall slender containers.
- Magic fingers - each door shelf has one set so smaller items can be wedged in securely.

### 4-14.14.3 Freezer Section

- This freezer section offers 58% more than ever before.
- The top shelf can be removed and stored on the side to provide space for tall items in the upper section of the freezer.
- Optional ice maker.
- Halogen light illuminates the area. Never before has there been an absorption refrigerator with a light in the freezer.
- Three wire bins that tilt out. This allows for full use of the space between the bins.
- Two additional door bins to house smaller items.
- Two clear view baskets with individual side tracks. This provides the ease of loading and removing items without complete removal of the heavy baskets when full.



### 4-14.14.3 Refrigerator Control Panel



### 4-14.14.4 Operating Instructions

#### IMPORTANCE OF LEVELING A REFRIGERATOR

In an absorption refrigerator system, ammonia is liquefied in the finned condenser coil at the top rear of the refrigerator. The liquid ammonia then flows into the evaporator (inside the freezer section) and is exposed to a circulating flow of hydrogen gas, which causes the ammonia to evaporate, creating a cold condition in the freezer.

When starting this refrigerator for the very first time, the cooling cycle may require up to four hours of running time before the cooling unit is fully operational.

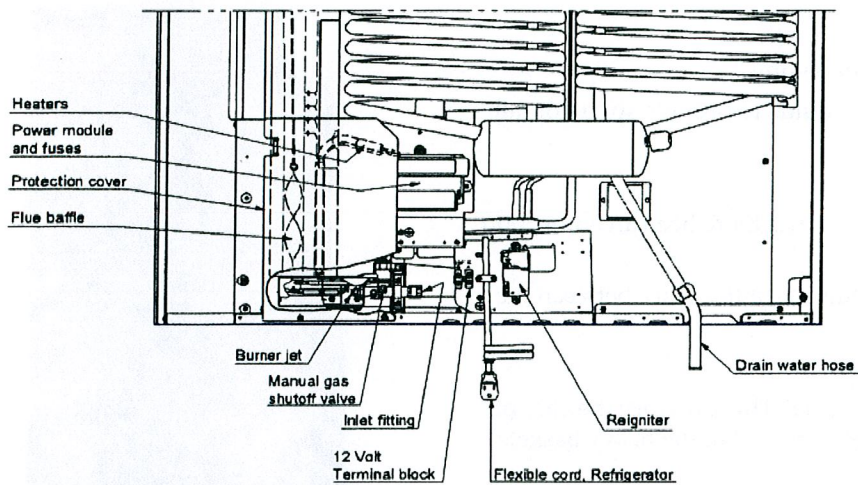
The tubing in the evaporator section is specifically sloped to provide a continuous movement of liquid ammonia, flowing downward by gravity through this section. If the refrigerator is operated when it is not level and the coach is not moving, liquid ammonia will accumulate in sections of the evaporator tubing. This will slow the circulation of hydrogen and ammonia gas, or in severe cases, completely block it, resulting in a loss of cooling.

Any time the coach is parked for several hours with the refrigerator operating, the coach should be leveled to prevent this loss of cooling. The coach needs to be leveled only so it is comfortable to live in (no noticeable sloping of floor or walls).

When the coach is moving, the leveling is not critical, as the rolling and pitching movement of the coach will pass to either side of level, keeping the liquid ammonia from accumulating in the evaporator tubing.

#### OPERATION

Before starting the refrigerator, check that all the manual gas valves are in the ON position. DO NOT forget the manual shutoff valve on the rear of the refrigerator (see Fig. 1).



This refrigerator is equipped with an Automatic Energy Selector (AES) control system, which can automatically select the most suitable energy source which is available, either 120 Volt AC, or LP gas operation. The system can be set by the user to be fully automatic, or if desired, LP gas only. The refrigerator controls will work down to 9.6 volt DC.

**▲ WARNING:** Most LP gas appliances used in recreational coaches are vented to the outside of the coach. When parked close to a gasoline pump, it is possible that the gasoline fumes could enter this type of appliance and ignite from the burner frame, CAUSING A FIRE OR AN EXPLOSION.

FOR YOUR SAFETY, when refueling, shut off all LP gas appliances which are vented to the outside.

### 4-14.14.5 Start Up Instructions

- A. A continuous 12 volt DC supply must be available for the electronic control to function.
- B. Press the main power ON/OFF button (1) to the DOWN position.
- C. Press the TEMPERATURE SELECTOR button (3) until the lamp at the desired setting is illuminated.

#### AES/AUTO MODE

1. Press the AES/AUTO/GAS mode selector button (2) to turn ON the AES/AUTO lamp (B). If 120 volts is available, the AC mode indicator lamp (A) will illuminate indicating AC operation. If 120 volts AC is not available, the GAS indicator lamp (C) will illuminate indicating the control has automatically switched to the GAS mode.
2. If the CHECK indicator lamp (D) illuminates and the GAS mode indicator lamp (C) is off, the controls have failed to ignite the burner in the GAS mode. GAS operation may be reset by pressing the main power ON/OFF button (1) to the OFF then ON position. (See step 2 under GAS MODE).
3. Press the TEMPERATURE SELECTOR button (3) until the lamp at the desired position is illuminated.

#### GAS MODE

1. Press the AES/AUTO/GAS mode selector button (2) to turn OFF the AES/AUTO lamp (B). The GAS mode indicator lamp (C) will illuminate. Within 45 seconds the burner should be ignited and operating normally.
2. On the initial refrigerator start-up, it may take longer than 45 seconds to allow air to be purged from the gas line. If the gas does not ignite within 45 seconds the CHECK indicator lamp (D) will illuminate and the GAS mode indicator lamp (C) will go off.  
To reset when the CHECK indicator lamp (D) is illuminated, press the main power ON/OFF button (1) to the OFF and then ON position.

**NOTE:** Do not continue to reset GAS operation if the CHECK indicator lamp continues to be illuminated after several tries.

3. Press the TEMPERATURE SELECTOR button (3) until the lamp at the desired position is illuminated.

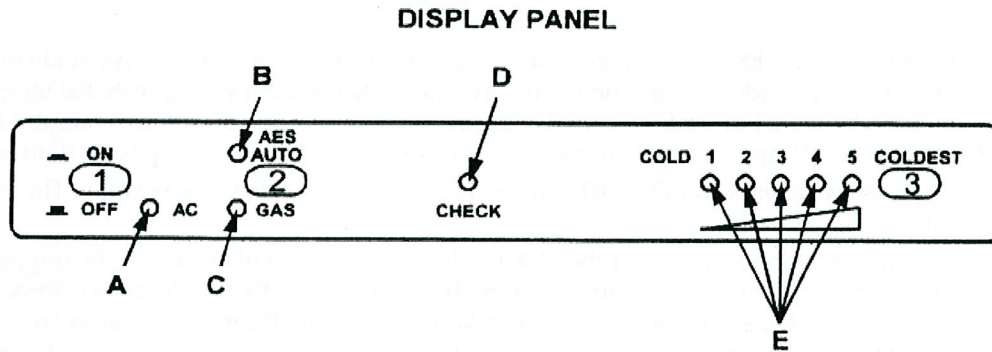
**THERMOSTAT**

The thermostat on the refrigerator controls both the gas and electric operation, thereby eliminating the necessity of resetting each time a different energy source is employed.

After the initial start-up, the thermostat should be moved from "COLDEST" to the desired temperature setting, usually at mid setting.

**TO SHUT OFF THE REFRIGERATOR**

The refrigerator may be shut off while in any mode of operation by pressing the main power ON/OFF button to the UP (OFF) position. This shuts off all DC power to the refrigerator, including the interior light.

**4-14.14.6 Start Up Instructions**

- A. A continuous 12 volt DC supply must be available for the electronic control to function.
- B. Press the main power ON/OFF button (1) to the DOWN position.
- C. Press the TEMPERATURE SELECTOR button (3) until the lamp at the desired setting is illuminated.

**AES/AUTO MODE**

1. Press the AES/AUTO/GAS mode selector button (2) to turn ON the AES/AUTO lamp (B). If 120 volts is available, the AC mode indicator lamp (A) will illuminate indicating AC operation. If 120 volts AC is not available, the GAS mode indicator lamp (C) will illuminate indicating the control has automatically switched to the GAS mode.
2. If the CHECK indicator lamp (D) illuminates and the GAS mode indicator lamp (C) is off, the controls have failed to ignite the burner in the GAS mode. GAS operation may be reset by pressing the main power ON/OFF button (1) to the OFF then ON position. (See step 2 under GAS MODE).
3. Press the TEMPERATURE SELECTOR button (3) until the lamp at the desired position is illuminated.

**GAS MODE**

1. Press the AES/AUTO/GAS mode selector button (2) to turn OFF the AES/AUTO lamp (B). The GAS mode indicator lamp (C) will illuminate. Within 45 seconds the burner should be ignited and operating normally.
2. On the initial refrigerator start-up, it may take longer than 45 seconds to allow air to be purged from the gas line. If the gas does not ignite within 45 seconds the CHECK indicator lamp (D) will illuminate and the GAS mode indicator lamp (C) will go off.

To reset when the CHECK indicator lamp (D) is illuminated, press the main power ON/OFF button (1) to the OFF and then ON position.

**NOTE:** Do not continue to reset GAS operation if the CHECK indicator lamp continues to be illuminated after several tries.

3. Press the TEMPERATURE SELECTOR button (3) until the lamp at the desired position is illuminated.

**THERMOSTAT**

The thermostat on the refrigerator controls both the gas and electric operation, thereby eliminating the necessity of resetting each time a different energy source is employed.

After the initial start-up, the thermostat should be moved from "COLDEST" to the desired temperature setting, usually at mid setting.

## 4-14.14.7 Description of Operating Modes

### AES/AUTO MODE

When operating in the AES/AUTO mode, the AES/AUTO mode indicator lamp (B) will illuminate. The control system will automatically select between AC and GAS operation with AC having priority over GAS. Either the AC indicator lamp (A) or the GAS indicator lamp (C) will illuminate depending on the energy source selected by the control system. If the control system is operating with AC energy and it then becomes unavailable, the system will automatically switch to GAS. As soon as AC becomes available again the control will switch back to AC regardless of the status of GAS operation. Refer to Display Panel found previously for illustration.

### GAS MODE

When operating in the GAS mode the AES/AUTO mode indicator lamp (B) will be off and the GAS mode indicator lamp (C) will be illuminated. This mode provides LP gas operation only. The control system will activate the ignition system and will make three attempt to light the burner for a period of approximately 45 seconds with two minutes interval. If unsuccessful, the CHECK indicator lamp (D) will illuminate and the GAS mode indicator lamp (C) will turn off.

To restart GAS operation, press the main power ON/OFF button (1) to the OFF and then ON position. The control system will attempt a new ignition sequence.

If the refrigerator has not been used for a long time or the LP tanks have just been refilled, air may be trapped in the supply lines. To purge the air from the lines may require resetting the main power ON/OFF button (1) three or four times. If repeated attempts fail to start the LP gas operation, check to make sure that the LP gas supply tanks are not empty and all manual shutoff valves in the lines are open. If the problem is still not corrected, contact a service center for assistance.

If the control is switched to AC operation while the CHECK indicator lamp is on, it will function properly, but the CHECK indicator lamp will not go off until the main power ON/OFF button is pressed to the OFF then ON position.

### LIMP MODE OF OPERATION

This control system contains a feature where it will continue to operate the cooling system in the event of a failure of a major operating component. Two different modes of operation can occur in this category.

If for some reason the display module becomes non functional, the control system will revert to full automatic operation selecting the best energy source available with AC, Gas priority. The temperature of the refrigerator will be maintained at the MID position within normal temperature tolerances. The power module will continually attempt to reestablish operation of the display module.

The second limp mode of operation will execute when a failure of the temperature sensing device or associated electronic circuitry occurs. If this should occur, the control system will operate on the energy source selected via the control panel. The cooling unit will run continuously on the selected energy source. The refrigerator will continue to operate in this module indefinitely or until a new sensor is installed and the system is reset.

## 4-14.14.8 How to Use the Refrigerator

### FOOD STORAGE COMPARTMENT

The food storage compartment is completely closed and unventilated, which is necessary to maintain the required low temperature for food storage. Consequently, foods having a strong odor or those that absorb odors easily should be covered. Vegetables, salads etc. should be covered to retain their crispness. The coldest positions in the refrigerator are under the cooling fins and at the bottom of the refrigerator. The warmer areas are on the upper door shelves. This should be considered when placing different types of food in the refrigerator.

When the refrigerator is heavily loaded, it will take a longer time to lower the temperature; therefore, to get maximum efficiency the refrigerator and food items should be pre-cooled prior to loading. The shelves should not be covered with paper or plastic, and the food items should be arranged so air can circulate freely.

If you need more space in the refrigerator you can lift up the front of the second shelf from the top and push the shelf in, the shelf will fall down against the finned evaporator. This shelf cannot be relocated to a different position within the refrigerator.

The middle shelf is a sliding shelf, to slide out grasp the front of the shelf and pull forward. Push the shelf in to return to original position. This shelf cannot be relocated to a different position within the refrigerator.

The lower door shelf is designed for large containers or bottles (1/2-gallon milk or juice).

### FROZEN FOOD STORAGE COMPARTMENT

Quick frozen soft fruits and ice cream should be placed in the coldest part of the compartment, which is on the top freezer shelf. Frozen vegetables, may be stored in any part of the compartment.

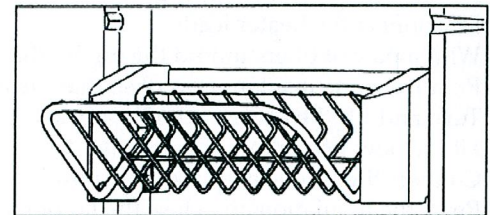
This compartment is not designed for deep or quick-freezing of food. Meat or fish, whether raw or prepared, can be stored in the frozen food storage compartment provided they are pre-cooled first in the refrigerator. They can be stored about three times longer in the frozen food compartment as compared to the fresh food compartment. To prevent food from drying out, keep it in covered dishes, containers, plastic bags or wrapped in aluminum foil.

Total Refrigerated Volume is 13.2 cu. ft.

### ICE MAKING

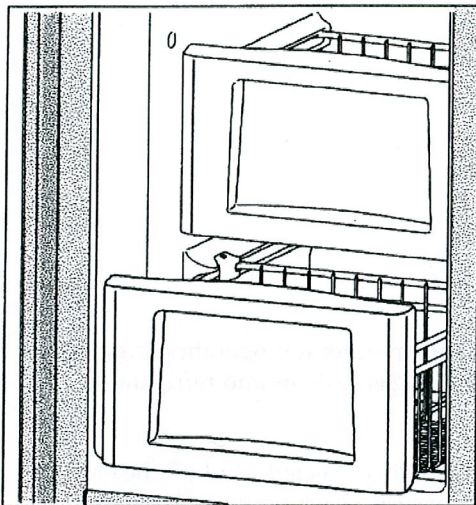
Ice cubes can be made in ice trays placed in the freezer compartment. For faster ice making, the trays should be placed in direct contact with the aluminum shelf.

Ice will be made more rapidly if the thermostat is set at its highest position. It is a good idea to do this a few hours before the anticipated need for ice, but be sure to move the thermostat back to normal setting, usually about mid setting when the ice is formed. Food in the fresh food compartment may be frozen if the setting is left on "COLDEST" position.



### FREEZER DOOR

The freezer door has three wire door baskets for frozen food items, such as bagged vegetables.



### FREEZER COMPARTMENT

The freezer compartment has two sliding wire baskets for more convenient access to the frozen foods.

### DEFROSTING

Shut off the refrigerator by pressing the main power ON/OFF button to the UP (OFF) position.

Empty the refrigerator, leaving the drip tray under the finned evaporator, and the cabinet and freezer doors open. Filling ice trays with hot water and placing them on the freezer shelves can reduce defrosting time.

When all the frost has melted, dry the interior of the refrigerator and freezer with a clean cloth. Replace all food and set the thermostat to the COLDEST temperature setting for a few hours. Then reset the thermostat to the desired setting, usually at mid setting.

**!!CAUTION: Do not use a hot air blower. Permanent damage could result from warping the metal or plastic parts. DO NOT use a knife or an ice pick, or other sharp tools to remove frost from the freezer shelves. They can create a leak in the ammonia system.**

### CLEANING

Cleaning the refrigerator is usually done after it is defrosted or put into storage. To clean the interior liner of the refrigerator, use lukewarm weak soda solution. Use only warm water to clean the finned evaporator, ice trays and shelves. NEVER use strong chemicals or abrasives to clean these parts, as the protective surfaces will be damaged. It is important to always keep the refrigerator clean.

### SHUT OFF - STORAGE PROCEDURE

Shut off the refrigerator by pressing the main power ON/OFF button to the UP (OFF) position.

If the refrigerator will not be in operation for a period of weeks, it should be emptied, defrosted, cleaned and the doors left ajar. The ice trays should also be dried and kept outside the cabinet.

**▲WARNING: DO NOT store explosive substances in the refrigerator, such as cigarette lighter gas, gasoline, ether or the like.**

**NOTE: Sodium chromate is used for corrosion protection (less than 2-weight % of the coolant).**

## 4-14.14.9 Electric Equipment

### HEATERS

The heat necessary for the operation of an absorption cooling unit is supplied by an electric heater mounted in a pocket of the boiler system.

This model is equipped with a series connected twin heater.

To replace the heater proceed as follows:

1. Disconnect the wall plug, and the 12 volt wires.
2. Remove the protection cover.
3. Remove the power module cover.
4. Disconnect the heater leads.
5. With a pair of pliers unfold the lug holding the lid of the boiler casing and open the lid.
6. Remove some insulation wool so that the heater is accessible.
7. Turn and lift the heater out of its pocket.
8. Fit the new heater into the pocket.
9. Connect the leads and put on the power module cover.
10. Reset the insulation and close the lid of the boiler.
11. Replace the protection cover.

### FUSES

This model is equipped with 2 fuses, one for the refrigerator control system and one for AC cartridge heater. (see table below).

To replace fuses proceed as follows:

1. Disconnect the wall plug, and the 12 volt wires.
2. Remove the power module cover. (see Fig. 1)
3. Snap the fuse out of the fuse holder.
4. Fit a new fuse in to the fuse holder.
5. Replace the power module cover.

Control System	3 Amp
AC Heater	5 Amp

## 4-14.14.10 Maintenance and Service

The user should be aware of service that must be done on a regular schedule to keep the refrigerator operating properly. The service should only be performed by qualified technicians who are familiar with LP gas systems and refrigerators.

### REFRIGERATOR REMOVAL

Before working on the refrigerator, make sure the AC voltage and DC voltage leads are disconnected. Shut off the gas supply. Disconnect the gas supply line at the rear of the refrigerator (see Fig. 1). Always use a back up wrench when loosening and tightening this connection. Cap the gas supply line loosen the screws anchoring the refrigerator to the enclosure and slide the refrigerator out of the compartment.

When replacing the refrigerator make sure that the sealing strips are properly positioned.

Replacement is the reverse of removal. Check all connections for gas leaks.

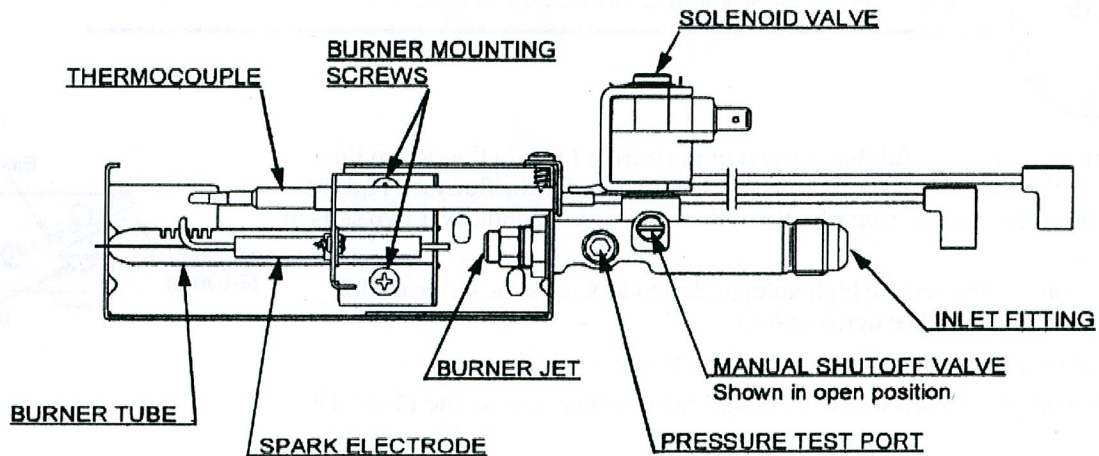
### PERIODIC MAINTENANCE

To keep your Dometic refrigerator operating efficiently and safely, periodic inspection and cleaning of several components once or twice a year is recommended.

- A. It is important to keep the area at the back of the refrigerator clean. Check the lower vent, upper vent and area between these openings for any obstructions such as bird/insect nests, spider webs, etc. Clean the coils on the back of the refrigerator. Use a soft bristled brush to dust off the coils.

It is important to keep the refrigerator area free from combustible material, gasoline and other flammable vapors or liquids.

## GAS EQUIPMENT ASSEMBLY



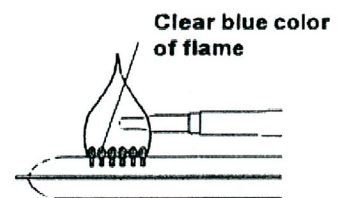
**NOTE:** The following maintenance is required once or twice a year, but should only be done by a qualified serviceman who is familiar with LP gas systems and refrigerators.

- B. Check all connections in the LP gas system (at the back of the refrigerator) for gas leaks. The LP gas supply must be turned on. Apply a non-corrosive bubble solution to all LP gas connections. The appearance of bubbles indicates a leak and should be repaired immediately by a QUALIFIED SERVICE PERSON WHO IS FAMILIAR WITH GAS SYSTEM AND REFRIGERATORS.

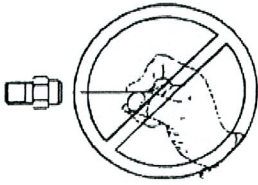
**▲WARNING:** DO NOT use a flame to check for gas leaks.

- C. Check the AES control system by connecting/disconnecting 120 volt AC power, start/stop the engine, etc. Compare the operation with the operation described in description of operating modes.
- D. The LP gas pressure should be checked and the main regulator readjusted if pressure is incorrect. The correct operating pressure is 11 inches of water column. The correct place to take the LP gas pressure is at the test port just ahead of the burner jet.
- E. Inspect the fuel baffle. It should be reasonably clean and free of soot. Heavy soot formation indicates improper functioning of the burner. The flue and burner both require cleaning in the following manner.
1. Unplug the refrigerator power cord from the 120 volt AC outlet.
  2. Disconnect or shut off the 12 volt power to the refrigerator.
  3. Turn manual shutoff valve to OFF. (see Fig. 1).
  4. Remove cover from the burner housing. (See Fig. 1).
  5. Disconnect the wire from the high voltage electrode.
  6. Remove the burner mounting screws and remove the burner assembly.
  7. Remove the wire and the flue baffle from the top of flue tube. Clean the flue tube from the top using a flue brush. Blowing compressed air into the flue will not properly clean soot and scale out of the flue tube. Replace the flue baffle.
  8. Clean burner tube with a brush. Blow out burner with compressed air.
  9. Before removing burner jet, clean burner area of soot and scale that fell out of flue tube. Remove the burner jet. Soak the jet in wood alcohol and blow it out with compressed air. Reinstall and tighten burner jet.

**NOTE:** The color of the flame shall be clear blue over the slots of the burner.  
(See figure at right.)

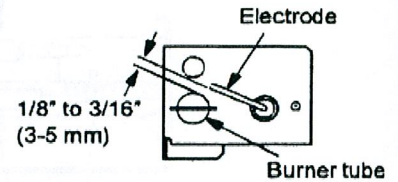






**▲WARNING:** DO NOT use a wire or pin when cleaning the burner jet as damage can occur to the precision opening. This can cause damage to the refrigerator or create a fire hazard.

10. Reinstall burner, being careful that the end of the burner fits into the slot on the burner bracket. Check to make sure slots are centered under the flue tube and the thermocouple is positioned properly (tip of thermocouple extends over two slots of burner).
11. Be sure to reconnect the wire to high voltage electrode. Check the electrode for proper location and gap. (See figure at left)
12. Turn on manual gas shutoff valve and check all fittings for leaks.
13. Connect 120 volt power cord to the outlet and reconnect or turn on the 12 volt DC power.
14. Check LP gas safety shutoff.



### REPLACING A HALOGEN LAMP

**!!CAUTION:** Turn off the refrigerator before replacing the lamp. Wear gloves as protection against hot lamp, broken glass and as protection of the new lamp.

#### Refrigerator

The lamp is located at the top of the refrigerator compartment.

To replace the lamp proceed as follows:

1. Unhook the tab on the lamp cover by pressing in with the thumb on the side of the lamp cover.
2. Remove the lamp cover.
3. With gloves, pull out the lamp from the socket and replace it with a new 12V, 10-watt halogen lamp base G4.
4. Replace the lamp cover by placing the two tabs into the corresponding slots of the lamp house and press the tab into place.

#### Freezer

The lamp is located on the right side of the freezer compartment.

To replace the lamp proceed as follows:

1. Unhook the tab on the lamp cover by pressing in with the thumb on the side of the lamp cover.
2. Remove the lamp cover.
3. With gloves, pull out the lamp from the socket and replace it with a new 12V, 5-watt halogen lamp base G4.
4. Replace the lamp cover by placing the two tabs into the corresponding slots of the lamp house and press the tab into place.

### 4-14.14.11 Troubleshooting

The Refrigerator Does Not Cool Properly

- A. Burner jet clogged. Clean. (See Maintenance and Service section, item 2, Periodic Maintenance, Paragraph E, Item 1-14.)
- B. Check level of refrigerator.
- C. Venting problem. Restriction in air flow across cooling unit.
- D. Heavy frost buildup on evaporator fins. Defrost
- E. Flue baffle not inserted properly in flue tube.
- F. Improperly set thermostat. (See Operating Instructions, part Start Up Instructions.)
- G. Burner dirty. Clean. (See Maintenance and Service, Item 2, Periodic Maintenance, Paragraph E, Item 1-14.)
- H. LP Gas pressure low at burner. Set main regulator so pressure does not drop below 11 inches water column at pressure tap.
- I. Burner not located properly under flue tube. Relocate.
- J. Burner damaged. Replace.
- K. Odors from fumes.
  - 1. Dislocated burner.
  - 2. Damaged burner.
  - 3. Dirty flue tube.
- L. Fuses
  - 1. Refrigerator AC Supply.
  - 2. Control system, See Fuse section.

**NOTE:** *Avoid spraying water through the refrigerator vents while washing the coach.*

All the above instructions are to be followed closely. The refrigerator is quality-guaranteed. However, we are not responsible for any failures caused by improper adjustments and unfavorable installation conditions. Contact service point or distributor service department for assistance.

### 4-14.15 Electric Refrigerator (Optional)

The KitchenAid® Stainless Steel w/Black 22.0 cu. ft. Superba® Side-by-Side Refrigerator with Thru-the-Door Ice and Water may be purchased as an alternative to the Dometic gas refrigerator that comes standard.

#### 4-14.16.1 Features:

**Warranty:** 1 Year

**Capacity:** Freezer: 7.5 cu. ft.

**Capacity:** Fresh Food Volume: 14.5 cu. ft.

**Capacity:** Total Shelf Area: 22.0 sq. ft.

**Energy:** Kilowatt Hrs. per Year: 607

**Energy Star Compliant:** Yes

**Ice Maker:**

**Type:** Ice maker, factory installed

**Thru-the-Door Dispenser:** Type: Ice and water

**Water Filtration:** Yes

**Fresh Food Shelves:** 3 adjustable Rollertrac™ plus Spillclean™ shelves  
3 adjustable Rollertrac™ plus Spillclean™ slide-out shelves

**Fresh Food Bins: Egg Bin:** Clearvue™ egg container

**Meat Keeper:** Freshchill™ convertible meat locker

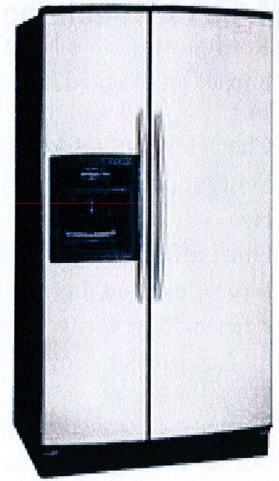
**Special Items Bin:** Wine rack

**Vegetable Crisper:** Freshseal™ humidity-controlled vegetable crisper.

**Freezer Features:** 2 White Triple Tall Slide-Out Freezer Basket System 3 Freezer Shelves

*This chart explains some of the features that are standard with this refrigerator.*

Feature	Description	Benefit
<b>Power Switch</b>	Button that will turn on cooling and control display when it is pressed and held for 2 seconds.	Allows you to operate digital controls.
<b>Max Cool</b>	Button that simultaneously changes and overrides both the refrigerator and freezer temperature to a colder setting for 24 hours. After the 24 hour period, the refrigerator and freezer temp changes back to the previous temperature setting.	Maintains Freshness - cools refrigerated foods 30% faster and freezer foods 20% faster.
<b>Water Filter Reset</b>	Button that resets the Water Filter Indicator light to Green (Good Filter). You must hit reset after changing the filter.	Easier to reset - You no longer need to press the light switch 5 times within 10 seconds to reset.
<b>Over Temp Reset</b>	Button that turns off overtemp alarm which comes on when either the refrigerator or freezer temperature exceed 48°F or 15°F, respectively, for over 1.5 hours. The alarm will deactivate if the overtemp condition self-corrects but a light will continue to flash.	Peace of Mind - Alerts you to check food in the event of a power failure or an overtemp condition such as door ajar or system malfunction.
<b>Numeric Temperature Display</b>	Numeric Control can display temperature settings in Celsius and Fahrenheit degree units. The digital controls can adjust the refrigerator and freezer temperatures 2° up or down.	Customization - allows you to override the refrigerator and/or freezer temperature default settings.
<b>ExtendFresh™ Temperature Management System</b>	An Indicator light that is steadily lit when the Smart™ Fan runs.	Peace of Mind - You know that the ExtendFresh™ Temperature Management System is operating.



### 4-14.15.2 ExtendFresh™ Temperature Management System

Some benefits are:

- Keeps temperature within 1°F of setting.
- Independent temperature controls for both freezer and refrigerator components.
- Dual Sensors immediately identify changes in temperature, triggering the Smart™Fan
- Smart™Fan pulls air from the Freezer into the Refrigerator without turning on the compressor, saving energy.

### 4-14.15.3 AquaSense™ In-Door -Ice Dispensing System

KitchenAid® did independent research and found that the #1 dislike of customers was lack of freezer space and as a result of that research they have developed a system which moves the ice pitcher from the cabinet to the door, creating 19% more usable freezer space in 25 Cubic Feet refrigerators and 27% more in 22 Cubic Feet refrigerators. The AquaSense™ In-Door-Ice Dispensing System is an ideal companion to the AquaSense™ Ice and Water Filtration system and just as practical. The conveniently positioned ice maker makes it easy to access a fresh supply of ice when refilling ice buckets and blenders.



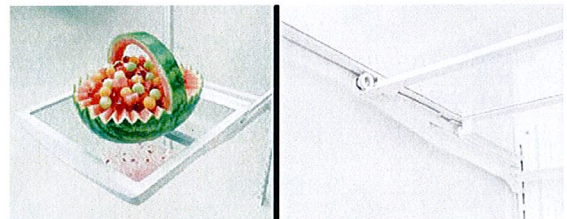
### 4-14.15.4 AquaSense™ Water Filtration System



The AquaSense™ Twice-The-Life™ ice and water filter offers 500 gallons of filtering to remove lead, chlorine, particles and turbidity. A monitor lighting system takes the guesswork out of when to change the filter: green-good filter, yellow-order filter, red-change filter. The up front grille location allows for a quick and easy filter change without the need to remove food from refrigerator shelf.

### 4-14.15.5 SpillClean™ RollerTrac™ Adjustable Glass Shelves

SpillClean™ Glass Shelves have raised edges to keep spills in place for fast and easy cleaning - which keeps your refrigerator looking like new. KitchenAid® door shelves, crisper and meat pan drawers, and the roll-out freezer floor all feature the Roller Trac™ Plus system. Rollers allow the shelves, drawers and floors to glide out smoothly and quietly for easier reach of stored items. Roll-out shelves sustain up to 60 pounds even when fully loaded and the freezer floor holds up to 75 pounds.



### 4-14.15.6 FreshChill™ Temperature Controlled Convertible Vegetable/Meat Locker

The major benefit of the FreshChill™ Locker is how it lets you properly store expensive prepared meat in a compartment that is colder than the rest of the refrigerator to help preserve freshness. The FreshChill™ temperature-controlled meat locker maintains a temperature range of 28-32 degrees F inside the meat locker without affecting the rest of the refrigerator. Top-to-bottom See Through Fresh Seal Crisper and Fresh Chill Meat Locker are engineered for freshness. The humidity-controlled crisper is sealed with gaskets on all four sides and the meat locker is temperature-controlled. For added convenience, the meat locker converts to a crisper.



### 4-14.15.7 Slide N Lock™ Door Storage System

Slide N Lock™ Door Bins and Can Racks offer unparalleled flexibility and convenient refrigerator door storage. All can racks and door bins carry a lifetime warranty. KitchenAid® four-sided adjustable door bins are sturdy enough to lift out even when fully loaded. The unique, laddered system lets you adjust the bins up and down to fit your storage needs. The Gallon Door Storage Bin allows you to free up shelf space by storing gallon containers in the door. It's ergonomic position at the bottom of the door allows you to easily lift them out and replace them. The gallon bin is removable for easy cleaning.

### 4-14.15.8 FreshSeal™ Dairy Locker System

The FreshSeal™ Dairy Locker System is transparent for easy viewing and slides up smoothly for loading and unloading. A gasket along the front of the cover presents air from entering and seals in freshness. Many KitchenAid® Refrigerators includes a high quality, Pyrex glass butter dish for convenience.



### 4-14.15.9 FreshSeal™ Humidity-Controlled Crispers

KitchenAid® ClearVue™ humidity-controlled crispers provide more flexible storage and preservation for your fruits and vegetables than ever before. The crispers are clear for easy viewing and the seal at the front of the crisper locks in the humidity that is needed to keep leafy vegetables crisp and fresh. KitchenAid® crispers are sealed on all four sides with gaskets to prevent colder air from escaping while maintaining the freshness of fruits and vegetables longer. The seal provides over 80% humidity retention, optimizing storage of fruits and leafy vegetables. Controls are easy to read and can be quickly adjusted to set the desired crisper temperature. Air flows in through the vents located along the front of the crisper. The placement of the vents prevent any spills in the refrigerator from leaking into the crisper when they are open.

### 4-14.15.10 Cleaning

Cleaning of this refrigerator is much like that of a house refrigerator. Use warm soapy water for tough stains. Do not use abrasive cleansers as they may scratch the surface of the refrigerator.

## 4-14.16 In-Sink-Erator

### 4-14.16.1 Instant Hot Water Dispenser

Your coach is equipped with an In-Sink-Erator Instant Hot Water Dispenser. This will give you hot water as easy as turning on a faucet.

#### *This is how your dispenser works*

Water is electrically heated to near boiling (190°F/88°C) in a compact tank that mounts under the sink. A thermostat maintains it at this approximate temperature. When you turn the handle, cold water enters the tank and forces hot water out of the faucet. The system is vented so the tank is not pressurized.

**NOTE:** Due to the unique operation of your Instant Hot Water Dispenser, you may experience a slight delay in the dispensing of water after the handle is actuated. This assures maximum water temperature and is not indicative of a problem with the unit.

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**▲ WARNING:** This product dispenses water at approximately 190°F, which is hot enough to cause severe burns. Caution should be exercised when installing and using this product. Do not allow children to operate this appliance without adult supervision.

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**!!CAUTION:** Do not, under any circumstances use bleach, abrasive liquids, powders or scouring pads to clean the faucet as doing so could void your warranty. Occasional cleaning with a soft cloth and warm soapy water is sufficient.

### 4-14.16.2 Adjusting Temperature

The thermostat is factory pre-set at approximately 190°F (88°C). If the temperature needs to be adjusted, follow the steps outlined below.

1. Unplug or disconnect the unit from the electrical supply.
2. Remove the screw securing the access cover to the unit.
3. Insert a small flat blade screwdriver into the thermostat adjusting screw.
4. Turn the screw ½ dial marker clockwise to increase the temperature (1/2 dial marker counterclockwise to decrease water temperature).
5. Replace access cover and screw.
6. Reconnect the electrical supply.
7. Draw three (3) cups of water and allow the unit to reheat.
8. Check the water temperature and repeat the process if necessary.

Do not allow the unit to boil.

### 4-14.16.3 Draining the Tank

1. Unplug or disconnect the unit from the electrical supply.
2. Allow water to run from the dispenser head until cool (approximately ½ gallon).
3. Shut off the supply of water to the dispenser.
4. Place a drain pan or other similar container underneath the tank.
5. Remove the drain cap located at the bottom of the tank and drain water (approximately ½ gallon).
6. Replace drain cap. Do not over tighten.
7. Reconnect water supply.
8. Actuate dispenser head handle until water flows from the dispenser head.
9. Reconnect the electrical supply.

### 4-14.16.4 Seasonal Storage

Seasonal storage of the unit is recommended if the unit is to be left unattended for long periods of time (typically more than two weeks) particularly if the unit could be exposed to freezing temperatures.

1. Unplug or disconnect the unit from the electrical supply.
2. Allow water to run from the dispenser head until cool (approximately ½ gallon).
3. Shut off the supply of water to the dispenser.
4. Place a drain pan or other similar container underneath the sink.
5. Remove the drain cap located on the bottom of the tank and drain water (approximately ½ gallon).
6. Replace drain cap. Do not over tighten.

**!!CAUTION: Remember – do not reconnect the electrical supply unless the tank is completely filled with water and water flows from the dispenser head.**

### 4-14.16.5 Cleaning

Use only a soft cloth and warm soapy water to clean the dispenser head and tank. The use of harsh cleaning agents containing acids, alkaline and organic solvents can destroy the dispenser head and tank finishes.

Problem	Possible Cause	What to Do
Water is not hot	Unit not plugged in or electric outlet is inoperative.	Check that the unit is connected to a properly grounded electric outlet and that circuit breakers or fuses are in good order.
	Thermal overload protector has tripped	Contact your In-Sink-Erator dealer for service.
Water too hot or not hot enough	Thermostat not adjusted to your taste	Adjust thermostat. See Adjusting Temperature.
Water dripping from the spout or vent: • When heating  • Constantly	Low water pressure preventing the expansion chamber from draining properly.	Unplug the unit. If the dripping stops within a few minutes, your water pressure may not be sufficient to properly drain the expansion chamber.  Check that there are no obstructions in the water line reducing the supply pressure below 20 pounds per square inch. For example: a poorly mounted saddle valve, a clogged water filter (not supplied), or a partially opened shut-off valve (not supplied).
	Construction debris from water line obstructing the faucet valve seat causing a slow water leak.	Contact your In-Sink-Erator dealer for service.
Water comes out the vent instead of the spout.	Outlet tube is blocked Flow straightener is blocked	Check that the outlet tube is not kinked, twisted or pinched. Remove flow straightener from end of spout by twisting counterclockwise. Remove any debris or scale accumulation. Soak in a mild vinegar solution if necessary to loosen scale deposits. Reinstall flow straightener by threading it on clockwise.
Water and steam spits forcefully from spout without turning on the dispenser faucet.	Unit is boiling	Reduce water temperature. See Adjusting Temperature.
Water taste or odor	Normal start-up.	Under some water conditions your unit may need a few days to “season”. Open the dispenser faucet and run until the water is cold. Allow the unit to reheat. Repeat several times per day over 3-4 days to season the unit.
	Chlorine or contaminants in the incoming water supply may be more noticeable in hot water.	Provide a suitable drinking water filter. Contact your local water authority for suggestions.
Water does not flow immediately after the actuating handle.	Normal functioning of the unit	No correction needed.

## 4-14.17 Princess Two Burner Cook Top

The standard cook top supplied with the 450 LXI is a Princess two burner, gas cook top. Basic information concerning operating and maintaining your cook top are as follows:

### 4-14.17.1 What To Do if You Smell Gas

- Evacuate all persons from the coach.
- Shut off the gas supply at the gas container or source.
- Do not touch any electrical switch, or use any phone or radio in the coach.
- Do not start the coach's engine or electrical generator.
- Contact the nearest gas supplier or qualified service technician for repair.
- If you cannot reach a gas supplier or qualified service technician, contact nearest fire department.
- Do not turn on the gas supply until the gas leak(s) has been repaired.

### 4-14.17.2 Carbon Monoxide Poisoning

- Do not use any cooking appliance for space heating because of potential danger to occupants of the coach and damage to the cook top.
- A window or air vent should be open slightly while using any cooking appliance. Gas flame consumes oxygen which must be replaced to assure proper combustion and prevent carbon monoxide.

*NOTE: Be sure you know where the main gas shut off valve is located so that you will know how and where to turn off the gas supply when necessary. There is a shutoff switch in the pantry area next to water pump switch. There is also a main shut off valve at the lp tank. It is recommended that user familiarize themselves with both of these shut off mechanisms in case of an emergency.*

### 4-14.17.3 To Light the Burners

1. Push down the knob and turn counterclockwise to "IGNITE" position.
2. Hold the knob down fully until the spark ignites the gas and continue to hold the knob down for approximately 5 to 10 seconds. The thermocouple will be heated to activate the safety mechanism.
3. Release the knob and set to desired setting.
4. To turn off the burner flame, turn the knob clockwise to "OFF" position.

#### **!!CAUTION:**

- Be sure your cook top is installed properly.
- Do not operate cook top if it is damaged or not working properly.
- Do not store flammable materials on or near the cook top.
- Never leave lit burners unattended. A boil over may result, causing smoke or fire.
- Do not use your cook top for warming or heating the room.
- The handle of utensil should be positioned so that they are turned inward but not extending over adjacent burner.
- To reduce the risk of burns and ignition of flammable materials, the burner flame should not extend beyond the edge of the cooking utensil.
- Grease is flammable. Never allow grease to collect around top burners or cook top surface. Wipe spillovers immediately.
- Only certain types of glass, glass/ceramic, earthenware, or other glazed utensils are suitable for cook top use without breaking due to sudden change in temperature.
- Do not use water on grease fire. Smother the fire or flame or use baking soda, multipurpose dry chemical or foam type fire extinguisher.
- Children should not be left alone or unattended in area where cook top is in use. Children should never be allowed to sit or stand on any part of the cook top.
- Do not heat unopened containers. They could explode.
- Do not touch burners, grates or areas near cook top after use. Units may be hot even though it may not be obvious. Areas near burners and grates may become hot enough to cause burns. During and after use, do not touch, or let clothing or other flammable material contact cook top or areas near it until they have had sufficient time to cool.



### 4-14.17.4 Care and Cleaning

Regular cleaning with a soft cloth and a warm detergent solution is generally enough to keep your cook top clean and beautiful. This is done when the cook top is cool. Use a dry cloth or paper towel to clean splatters and spills when surfaces are warm.

**GLASS** – We recommend the use of Hope's Cleaning Cream for care and maintenance of the glass surfaces. For more information about this product and a dealer near you, contact:

The Hope Company, Inc. – (800) 325-4026

## 4-14.18 Princess Two Burner Electric Cook Top (optional)

Offered as an option is the Princess Model 2247 Two Burner Ceran Glass Top Electric Stove.

### 4-14.18.1 Features

- Drop-in, flush mount Ceran glass
- Available in 120v or 240v.
- Halogen burners available, 240 volt only
- Limiters in burners to prevent overheating.
- Black glass top with white graphics.
- UL 858 Certified.
- 2 Burners
- 120 volts/20 amps
- 240 volts/15 amps per leg
- Overall Dimensions: 22W x 13D x 4H
- Cutout Dimensions: 21 3/8W x 12 3/8D x 4H
- Colors: White Graphics on Black
- Shipping Weight: 20 lbs.

### 4-14.18.2 Cleaning

It is recommended that the cook top be cleaned with non-abrasive cleaner such as warm soapy water and a soft cloth. For tough stains use a reputable cleanser designed for Ceran glass cook tops.

