



INSTRUCTION MANUAL

EM-W590

Microwave Oven

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Read these instructions carefully before use. If you follow the instructions, your microwave oven will provide you with many years of good service.

SAVE THESE INSTRUCTIONS

SPECIFICATIONS

Model	EM-W590
Power Consumption	1370W
Maximum Output	900W*
Oven Capacity	35 L
Turntable Diameter	360 mm
Dimensions (w x h x d)	550 mm x 311 mm x 451 mm
Weight (Approx.)	21 kg

*According to IEC-705 test procedures.

Specifications subject to change without notice.

PROPER AND SAFE USE OF YOUR OVEN

- The oven must be level.
- The turntable and turntable roller rest must be in the oven during cooking.
- Place the cookware gently on the turntable and handle it carefully to avoid possible breakage.
- The oven has several built-in safety switches to ensure that the power remains off when the door is open. Do not tamper with these switches.
- Do not operate the microwave oven empty.
- Do not overcook food. A small quantity of food with low moisture content or high fat or sugar content can burn.
- Do not cook bacon directly on the turntable. Excessive local heating of the turntable may cause it to break.
- Avoid heating baby bottles or baby food jars. Transfer the food into a suitable container for the microwave oven. The food temperature should be tested before giving it to the baby.
- Do not heat narrow-necked containers, such as syrup bottles.
- Do not attempt to deep-fry in your microwave oven as the temperature of oil cannot be controlled.
- Do not heat cans. Transfer the contents into a microwave-safe dish before heating.
- Do not use this microwave oven for commercial purposes. This microwave oven is made for household use only.

NOTE

- It is quite normal for steam to be emitted around the door, for misting to occur on the door, or even for water droplets to appear below the door during the cooking cycle. This is merely condensation from the heat of the food.

PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

- (a) Never interfere or tamper with 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 door sealing surfaces. Wipe the door sealing area frequently with a mild detergent, rinse and wipe dry. Never use abrasive powders or pads.
- (c) When open, the door must not be subjected to strain; for example, a child hanging on the opened door or any load on it could cause the oven to fall forward, and the weight could also damage the door.
- (d) Do not operate the oven if it is damaged. It is particularly important that the oven door closes properly and that there is no damage to the:
 - (1) DOOR (bent)
 - (2) HINGES AND LATCHES (broken or loosened)
 - (3) DOOR SEALS AND SEALING SURFACES

IMPORTANT SAFETY INSTRUCTIONS

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

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

1. **Read all instructions before using.**
2. As with most cooking appliances, close supervision is necessary to reduce the risk of a fire in the oven cavity.

If a fire should start:

- Keep the oven door closed
- Turn the oven off, and
- Disconnect the power cord or shut off power at the fuse or circuit breaker panel.

Keep in mind the following rules at all times:

- a. Do not overcook food. Overcooked food can cause fires in the oven. Carefully attend to the oven's activities, especially if paper, plastic, or other combustibles are inside.
 - b. Do not store combustible items such as bread, cookies, paper products, etc. inside the oven. They may catch fire if turned on accidentally.
 - c. Do not use wire twist-ties in the oven. Be sure to inspect purchased items for wire twist-ties and remove before placing food in the oven.
3. Some products such as eggs in the shell, water with oil or fat, sealed containers and closed glass jars may explode and therefore should not be heated in this oven.
 4. Use this oven only for its intended uses as described in the manual. It is not designed for industrial or laboratory use. Never use corrosive chemicals or vapors in this oven.
 5. As with any appliance, children should use the oven only under adult supervision.
 6. Do not store or use this appliance outdoors.
 7. Keep the oven away from heat and water sources. Exposure to heat and water can lower efficiency and lead to malfunctioning.
 8. When heating water or other liquids, use a wide necked container to allow air bubbles to escape freely. Using narrow-necked containers may cause the liquid to boil over. This may happen even after the cooking has stopped.
 9. It is important to keep the door and the oven interior clean.
(See "Cleaning" instructions on page 14.)

WARNING

- (a) Do not adjust or repair microwave oven yourself. Do not operate the oven if it is damaged, until it has been repaired by a service engineer trained by the manufacturer.
- (b) It is dangerous for anyone other than a properly qualified engineer trained by the manufacturer to carry out adjustments or repairs.
- (c) If the power supply cord is damaged, it must be replaced by the manufacturer, as a specially prepared cord is required.
- (d) On no account remove or interfere with any parts or screws.
THIS COULD PROVE VERY DANGEROUS.

SAVE THESE INSTRUCTIONS

EARTHING INSTRUCTIONS

This appliance must be earthed. If there is an electrical short circuit, earthing reduces the risk of electric shock by providing an escape wire for the electric current. This appliance is equipped with a cord that has a earthing wire with a earthing plug. The plug must be plugged into an outlet that is properly installed and earthed.

The electrical power cord must be kept dry and must not be pinched or crushed in any way.

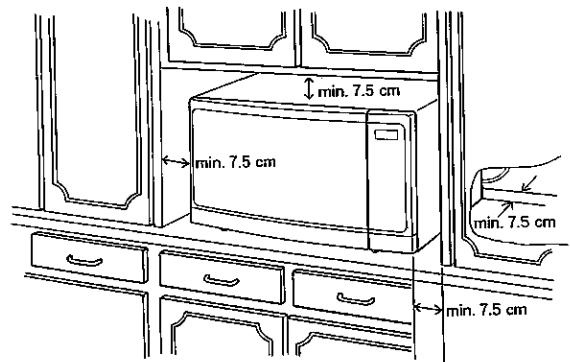
WARNING - Improper use of the earthing plug can result in electric shock.

INSTALLATION

Remove all packing material and accessories. Examine the oven for any damage such as dents or a broken door. Do not install if oven is damaged.

1. Select a level surface that provides enough open space (see illustration at right) for the inlet and/or outlet vents.
 - Leave a minimum clearance of 7.5 cm above the oven.
 - Do not remove the legs from the bottom of the oven.
 - Blocking the inlet and/or outlet openings can damage the oven.
 - Do not install oven over a range, cooktop or other heat-producing appliance.
 - Place the oven as far away from radios and T.V.'s as possible.
 - When the cabinet is covered with a protective film, remove the film to fully show the intended colour and finish.
2. Plug your oven into a standard household outlet. Be sure that your microwave oven is the only appliance on the circuit.

When installing in a "Built-in" situation, you must allow a minimum of 7.5 cm on each side and the top and at the back of the microwave oven for ventilation. Failing to do so might cause damage to the microwave oven.

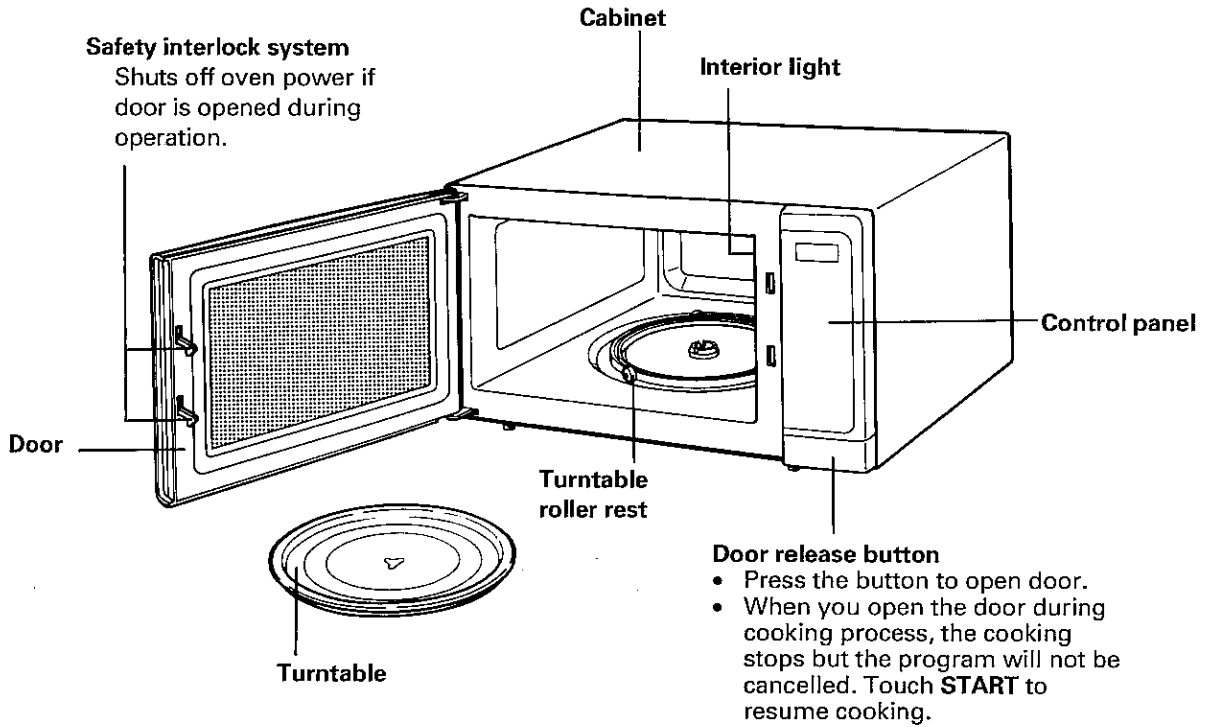


A minimum clearance of 7.5 cm is required between the oven and any adjacent walls including the back wall.

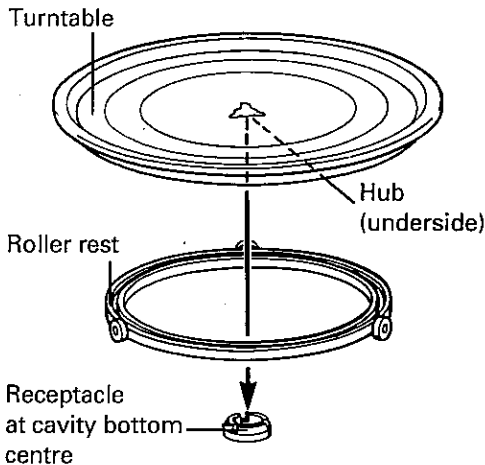
NAMES OF OVEN PARTS AND ACCESSORIES

Remove the oven and all materials from the carton.
Your oven comes with the following accessories:

Turntable	1
Turntable roller rest	1
Instruction Manual	1

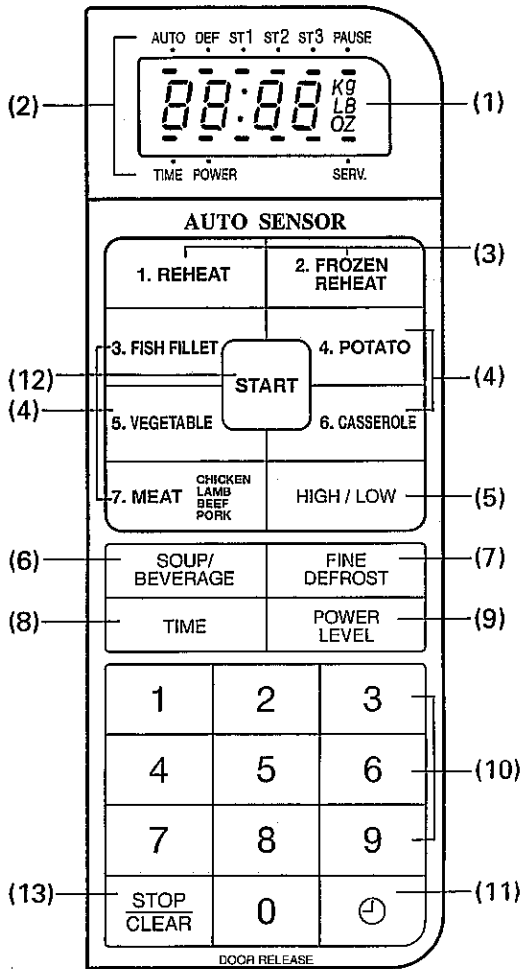


TURNTABLE INSTALLATION



1. Place the roller rest on the cavity bottom.
 2. Place the turntable on top of the roller rest as shown in the diagram. Make sure the turntable hub is securely locked in the receptacle. **Never place the turntable upside down.** The turntable rotation should never be restricted.
- Both turntable and roller rest must always be used during cooking.
 - All food and containers of food are always placed on this turntable for cooking.
 - **This turntable returns to its original starting position when cooking is finished.** The light and fan will remain on but microwave power is turned off.
 - This turntable rotates clockwise or counterclockwise; this is normal.

CONTROL PANEL AND FEATURES



(1) Display Window

Counts down cooking time in seconds.
Shows clock time when oven is not in use.

(2) Indicators

ST1/ ST2/ ST3 : Cooking stage indicators
AUTO/ DEF/ PAUSE : Cooking mode indicators

TIME/ POWER/ SERV./ Kg/ g :

A flashing indicator prompts you to enter desired cooking time, power setting, food weight or number of servings.

AUTO SENSOR keypads

(pages 9 - 10 and 15 - 20)

(3) Sensor Reheating keypads

- 1. REHEAT
- 2. FROZEN REHEAT

(4) Sensor Cooking keypads

- 3. FISH FILLET
- 4. POTATO
- 5. VEGETABLE
- 6. CASSEROLE
- 7. MEAT (page 10)

(5) HIGH/LOW keypad (page 9)

AUTO menu keypads

(6) SOUP/BEVERAGE (page 7)

(7) FINE DEFROST (page 8)

Other keypads

(8) TIME (page 11)

(9) POWER LEVEL (page 11)

(10) NUMBER

(11) CLOCK (page 5)

(12) START

(13) STOP/CLEAR

Clears all previous setting if pressed before cooking starts. During cooking: touch once to stop oven; twice to stop and clear all entries.

Beep Sound

A beep tone sounds when a keypad on the control panel is touched to indicate a setting has been entered.

AUTO SENSOR Direct Access Keypads

Designed for easy-to-use operation, the Auto Sensor keypad group provides **2 Sensor Reheating** courses and **5 Sensor Cooking** courses. The oven determines all settings by measuring the steam generated from the food in the oven -- no need for you to enter time, power level or food weight.

AUTO Menu Keypads








The **SOUP/BEVERAGE** keypad is programmed to prepare 1 to 3 cups of beverages with simple direct access operation.

Use the **FINE DEFROST** keypad for Automatic Defrost by Weight feature.

SETTING CLOCK

When your oven is plugged in for the first time or when power resumes after a power interruption, the numbers in the display reset to **0:00**. Set the clock.

Example: To set 3:15 :

1.  Touch .
2.    Touch number keypads **3**, **1** and **5**.
3.  Touch .
The clock starts counting.


Remember:

- If the clock (or display) shows any abnormality, unplug the oven from the AC outlet. Plug it in again and then reset the clock.

CHILD LOCK-OUT


Your oven has a safety feature which prevents children from accidentally turning it on. Even if the oven is accidentally programmed to cook, no cooking takes place when this feature is set.

To set :

1. Touch .
2. Touch **9** four times.
3. Touch **START**.

Indicator **L** lights and clock display reappears.

To cancel :

1. Touch .
2. Touch **7** four times.
3. Touch **START**.

Indicator **L** disappears and clock display reappears.

UTENSILS

MATERIALS YOU CAN USE IN MICROWAVE OVEN

Utensils	Use	Remarks
Aluminium foil	Shielding	Small smooth pieces can be used to cover thin parts of meat or poultry to prevent overcooking. Arcing can occur if foil is too close to oven walls. The foil should be at least 2.5 cm away from oven walls.
Browning dish	Searing meats	Follow manufacturer's instructions. The bottom of browning dish must be at least 5 mm above the turntable. Incorrect usage may cause the turntable to break.
Dinnerware	Reheating and short-term cooking	Microwave-safe only. Follow manufacturer's instructions. Do not use cracked or chipped dishes.
Glass jars	Warming	Always remove lid. Use only to heat food until just warm. Most glass jars are not heat resistant and may break.
Glassware	Cooking	Heat-resistant oven glassware only. Make sure there is no metallic trim. Do not use cracked or chipped dishes.
Oven cooking bags	Cooking	Follow manufacturer's instructions. Do not close with metal tie. Make slits to allow steam to escape.
Paper plates and cups	Short-term warming and cooking	Use for short-term cooking/warming only. Do not leave oven unattended while cooking.
Paper towels	Reheating and short-term cooking	Use to cover food for reheating and absorbing fat. Use with supervision for a short-term cooking only.
Parchment paper	Cooking	Use as a cover to prevent spattering or a wrap for steaming.
Plastic	Reheating and short-term cooking	Microwave-safe only. Follow the manufacturer's instructions. Should be labeled "Microwave Safe." Some plastic containers soften as the food inside gets hot.
Plastic wrap	Cooking	Microwave-safe only. Use to cover food during cooking to retain moisture. Do not allow plastic wrap to touch food.
Thermometers	Cooking	Microwave-safe only (meat and candy thermometers).
Wax paper	Cooking	Use as a cover to prevent spattering and to retain moisture.

MATERIALS TO BE AVOIDED IN MICROWAVE OVEN

Utensils	Remarks
Aluminium tray	Aluminium tray may cause arcing. Transfer the food into a microwave-safe dish before cooking.
Food carton with metal handle	May cause arcing. Transfer food into microwave-safe dish.
Metal or metal-trimmed utensils	Metal shields the food from microwave energy. Metal trim may cause arcing.
Metal twist ties	They may cause arcing and could cause a fire in the oven.
Paper bags	May cause a fire in the oven.
Plastic foam cups	Plastic foam may melt or contaminate the liquid inside when exposed to high temperature.
Wood	Wood will dry out when used in the microwave oven and may split or crack.

UTENSIL TEST: Fill a microwave-safe container with 1 cup of cold water (250 mL) and place it in the oven along with the utensil in question. Cook on **HI** power for 1 minute. Carefully feel the utensil. If the empty utensil is warm, it should not be used for microwave cooking. **Do not exceed 1 minute testing time.** This test cannot be used for plastic containers.

CAUTION:

Make sure that closed containers are opened and plastic pouches pierced before cooking. Tightly-closed utensils could explode.

BEVERAGE REHEATING

SOUP/BEVERAGE keypad allows you to reheat one to three servings of beverages or soup automatically. (Foods must be room or refrigeration temperature.)

Simply touch the appropriate keypads, once for each cup and then touch **START**.

Food Reheating Tips:

- Follow the directions included in the chart.
- Stir the contents after reheating.

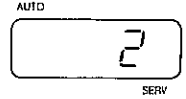
Example: To reheat 2 servings of soup:

1.



twice

Touch **SOUP/BEVERAGE** twice*.



2.



Touch **START**.
Reheating starts. The time counts down in the display.

* Enter the number of servings by touching a **SOUP/BEVERAGE** keypad 1 to 3 times until the correct serving number appears in the display.

SOUP/BEVERAGE — coffee/tea, soup, hot chocolate

Cover soup. No cover for coffee/tea and hot chocolate.
Stir after reheating.

1 touch	1 serving	230 mL
2 touches	2 servings	460 mL
3 touches	3 servings	690 mL

NOTE: Use microwave-safe cup only.

AUTOMATIC DEFROST BY WEIGHT

The Auto Defrost by Weight feature allows precise, even defrosting of frozen foods — automatically. Just touch the **FINE DEFROST** key, then enter the frozen food's weight using the number keys (weight up to 2.9 kg). The menu selects 1 kg if a weight is not entered.

Pause Reminder

For the best results, microwave defrosting requires rearranging the food about halfway through the process. A **pause reminder** mechanism is built into this feature to alert you with five beeps to open the door and check, separate or turn the food. The **PAUSE** indicator also flashes for five seconds. If you do not open the door at the pause reminder, the oven continues to complete the defrosting.

Auto Defrosting chart appears on page 21.

For manual defrosting using Time Cooking, see page 11.

Defrosting Tips:

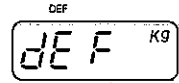
- Check the food during defrosting.
- Remove frozen food from its original paper or plastic wrap. When it is difficult to remove the wrap, defrost the food in the wrap until Pause appears. At the pause, remove the wrap.
- Place foods in a flat microwave-safe baking dish or roasting rack to catch drippings.
- Food should still be somewhat icy in the centre when removed from the oven.
- The Auto Defrost menu includes standing time.
- Food can be defrosted in a styrofoam package.

Example: To defrost 1.2 kg of chicken pieces:

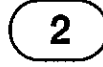
1.



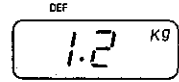
Touch **FINE DEFROST**.



2.



Enter the weight by touching 1 and then 2.



3.



Touch **START**.
The oven starts and the defrost time counts down in the display.

4.

When the five-beep Pause Reminder sounds, open the door to separate, rearrange or turn food over.

5.



Touch **START** to resume defrosting.

Remember:

- The oven automatically selects 1 kg if the weight is not entered.
- Only one digit can be entered after a decimal point. If in doubt, convert to the lower number.

CONVERSION TABLE

lbs - oz	grams	kg	lbs - oz	grams	kg
4 oz	100	0.1	3 lb-9 oz	1600	1.6
7 oz	200	0.2	3 lb-12 oz	1700	1.7
10 oz	300	0.3	4 lb	1800	1.8
14 oz	400	0.4	4 lb-3 oz	1900	1.9
1 lb-2 oz	500	0.5	4 lb-7 oz	2000	2.0
1 lb-5 oz	600	0.6	4 lb-10 oz	2100	2.1
1 lb-9 oz	700	0.7	4 lb-14 oz	2200	2.2
1 lb-12 oz	800	0.8	5 lb-1 oz	2300	2.3
2 lb	900	0.9	5 lb-5 oz	2400	2.4
2 lb-4 oz	1000	1.0	5 lb-8 oz	2500	2.5
2 lb-7 oz	1100	1.1	5 lb-12 oz	2600	2.6
2 lb-11 oz	1200	1.2	5 lb-15 oz	2700	2.7
2 lb-14 oz	1300	1.3	6 lb-3 oz	2800	2.8
3 lb-2 oz	1400	1.4	6 lb-6 oz	2900	2.9
3 lb-5 oz	1500	1.5			

AUTOMATIC SENSOR COOKING

Automatic Sensor cooking/reheating allows direct access operation for a variety of foods. Two reheating courses and five cooking courses are provided.


At the beginning of a cooking period, the sensor measures the steam generated from the food in the oven to determine the correct cooking time and power level.

See pages 15 - 20 for more information on Sensor Cooking and sample recipes.



Cooking Tips:

- Cover food with plastic wrap, wax paper or well-fit casserole lid. Loose-fitting covers may cause the oven to miscalculate cooking time. **(Never use tightly sealed plastic containers.)**
- Small quantities of foods (less than 115 g) should not be cooked using Auto Sensor. Cook using Time cooking.
- The room temperature should be below 35°C.
- Keep the inside of oven, the turntable and the outside of cooking containers dry. Wipe off all spillovers. Excessive humidity in the oven may result in an incorrect cooking time.
- Do not open the oven door while the display still shows the selected course number at the beginning of cooking. During this period, the oven sensor measures the amount of steam in the oven to determine the cooking time, which appears in the display when the process has completed.

Example: To reheat 1 serving of beef stew:

1.  1. REHEAT


Touch **REHEAT**. Enter the desired course by touching an Auto Sensor menu keypad. Course number appears in the display.


2.  HIGH/LOW

Touch **HIGH/LOW** once or twice to adjust doneness, if desired.

Touch once for longer cooking time. Indicator H appears.

Touch twice for shorter cooking time. Indicator L appears.

The oven automatically sets to medium doneness if no selection is made.
3.  START

Touch **START**. After sensor measures steam, cooking time appears in the display window.

AUTO SENSOR Cooking/Reheating courses

Auto Sensor Reheating	1. REHEAT (to reheat non-frozen foods)
	2. FROZEN REHEAT (to defrost/ reheat frozen foods)
Auto Sensor Cooking	3. FISH FILLET
	4. POTATO
	5. VEGETABLE
	6. CASSEROLE
	7. MEAT (to cook Chicken, Lamb, Beef, Pork)*

* MEAT keypad allows you to cook Chicken, Lamb, Beef, Pork. See next page for details.

HIGH/LOW Doneness key:

Proper food doneness varies with each individual. After a few Auto Sensor Cooking trials, you will learn which setting produces the best results for you.

Remember:

If an error message (E1 or E2) flashes:

- If the door is opened before time countdown appears in the display, E1 will flash. Press **STOP/CLEAR** twice and restart using Time Cooking. (Partially-cooked foods are no longer suitable for Auto Sensor Cooking.)
- E2 will flash if the oven has not been plugged into a power supply for more than five minutes when you start a sensor cooking. Press **STOP/CLEAR** twice and wait for 5 minutes to restart from step 1.

AUTOMATIC SENSOR COOKING (CONT.)

Automatic Sensor Cooking, **MEAT** keypad allows you to cook various kind of meat such as Chicken, Lamb, Beef, Pork. Touch **MEAT** 1 - 4 times to select desired course.

Pause

This feature has a built-in pause mechanism to allow for checking, turning and rearranging the food. The oven stops at halfway through cooking time (about 1/2 of the total cooking time).

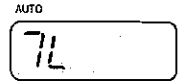
If you do not open the door at the pause, the oven restarts after 5 minutes and commences the second cooking period.

Example: To cook Lamb:

1.



Touch **MEAT** twice. Course number appears in the display.



1 touch	CHICKEN
2 touches	LAMB
3 touches	BEEF
4 touches	PORK

2.



Touch **HIGH/LOW** once or twice to adjust doneness, if desired.

Touch once for longer cooking time. Indicator H appears.

Touch twice for shorter cooking time. Indicator L appears.

The oven automatically sets to medium doneness if no selection is made.

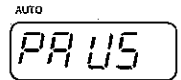
3.



Touch **START**. After sensor measures steam, cooking time appears in the display window.

4.

The oven stops automatically at pause. Separate, rearrange or turn food over.



5.



Touch **START**.

TIME COOKING

This basic microwave cooking method allows you to cook food for a desired time. In addition to the **HI** (maximum) power level, you can select different microwave power from 9 levels, **1** (10% of total power) to **9** (90% power) for the foods that require slower cooking. The oven also provides power level **0** (no power) so that the clock can be utilized as a minute timer. See page 12 for details.





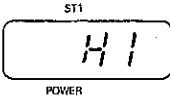

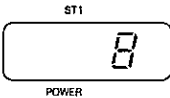

Foods with high moisture content should be cooked on maximum power, as this is the fastest cooking method and best maintains the natural flavour and texture of the foods.

To check the power level during cooking, touch **POWER LEVEL**. The power level appears in the display window.

Manual Defrosting

For manual defrosting (without using Auto Defrost features), use power level 3. To speed up the defrosting of dense foods over 450 g, you may start on **HI** for **2 minutes**, then reduce to the level 3.

Example: To cook at power level 8 for 40 seconds:

1.  Touch **TIME**.
2.   Enter 40 seconds by touching **4** and then **0**.
3.  Touch **POWER LEVEL**.  ST1
POWER
4.  Touch **8** to select power level 8. The display shows **8**.  ST1
POWER
5.  Touch **START**.

Remember:

- Cooking time can be set up to 99 minutes 99 seconds.
- When you cook on **HI** power, skip steps 3 and 4.







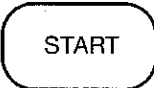
MULTIPOWER SETTING GUIDE

Power Level	Cooking Examples
1	<ul style="list-style-type: none"> • Softening cream cheese and butter. • Keeping casseroles and main dishes warm.
2	<ul style="list-style-type: none"> • Softening chocolate and clarifying butter. • Heating breads, rolls, pancakes, tacos, tortillas and French toast. • Taking the chill out of fruit. Heating small amounts of food.
3	<ul style="list-style-type: none"> • Completing the cooking cycle of casseroles, stews and sauces. • Manual defrosting. • Thawing meat, poultry and seafood.
4	<ul style="list-style-type: none"> • Cooking less tender cuts of meat in liquid or slow-cooking dishes. • Completing the cooking cycle of less tender roasts.
5	<ul style="list-style-type: none"> • Cooking stews and soups after bringing to a boil. • Cooking custards and pasta. • Cooking rump roast, ham, veal and lamb.
6	<ul style="list-style-type: none"> • Cooking scrambled eggs. Baking cakes.
7	<ul style="list-style-type: none"> • Cooking cheese dishes.
8	<ul style="list-style-type: none"> • Reheating precooked or prepared food quickly. Cooking fish.
9	<ul style="list-style-type: none"> • Cooking onions, celery and green peppers quickly. • Reheating rice and pasta.
HI	<ul style="list-style-type: none"> • Cooking poultry, vegetables and most casseroles. • Preheating a browning dish. Boiling water.

MINUTE TIMER

You can use the timer function of your oven for purposes other than cooking.

Example: To set 3 minutes for a telephone call:

1.  Touch **TIME**.
2.    Touch **3**, **0** and **0**.
3.  Touch **POWER LEVEL**.
4.  Touch **0** (power level 0).
5.  Touch **START**.

MULTISTAGE COOKING

- You can program up to 3 stages of cooking in sequence. To program 2-stage or 3-stage cooking, repeat the Time Cooking steps 1 to 4 on the previous page and touch **START**.
- Using the Minute Timer feature for the first stage, you can delay cooking start time by up to 99 minutes and 99 seconds.
- Using the Auto Defrost by Weight feature for the first stage, you can defrost first and can program up to 3 stages of cooking.
- When one stage of programmed cooking is completed, the next stage will begin automatically.

QUESTIONS AND ANSWERS

OPERATION

- Q.** What is wrong when the oven light will not glow?
- A.** There may be several reasons why the oven light does not glow.
- The light bulb has burned out.
 - **START** has not been touched.
- Q.** Why is steam coming out of the air exhaust vent?
- A.** Steam is normally produced during cooking. The microwave oven has been made to vent this steam.
- Q.** Can the microwave oven be damaged if it operates empty?
- A.** Yes. Never operate while empty or without the turntable positioned correctly on the roller rest.
- Q.** Why is there noise coming from the turntable when the oven is turned on?
- A.** This noise occurs when the turntable roller rest and cavity bottom are dirty. Frequent cleaning of these parts should eliminate or reduce the noise.
- Q.** Instructions for aluminium foil use are confusing. When should I use foil?
- A.** It should be used to shield portions of food from becoming overcooked or overdefrosted. Use small flat pieces of foil for shielding.

SENSOR

- Q.** Why couldn't I get good results even though I cooked food using Auto Sensor Cooking?
- A.** There are several possible reasons. Perhaps:
- The food was not covered properly. (See pages 15 - 17 for instructions on how to prepare food).
 - The **STOP/CLEAR** button was pressed, or the door was opened, while the sensor was programming the right cooking time and power level.
 - The oven had not been plugged into a power supply for at least 5 minutes before you started cooking.
 - You may need to use the **HIGH/LOW** keypad to adjust the cooking level to your taste. If you do not select a preferred level of doneness, the oven automatically cooks to medium doneness.
 - The food being cooked was not suitable for Auto Sensor Cooking. Some foods will not fall into one of the Auto Sensor categories, and should be cooked using Time Cooking.
 - There may have been too much, or not enough food to ensure proper results from Auto Sensor Cooking. When cooking more than 900 g or less than 115 g of food, you should use Time Cooking.

FOODS

- Q.** What is wrong when baked foods have a hard, dry, brown spot?
- A.** This is caused by overcooking. Shorten cooking or reheating time.
- Q.** Why do eggs sometimes pop?
- A.** The egg yolk may pop because of steam build-up inside the membrane. To prevent this, simply pierce the membrane with a toothpick before cooking it.
- CAUTION: Never microwave eggs in the shell since they may explode.**
- Q.** Why are scrambled eggs sometimes a little dry after cooking?
- A.** Eggs dry out if they are overcooked. You may need to vary the cooking time for one of these reasons:
- Eggs vary in size.
 - Eggs are at room temperature one time and at refrigerator temperature another time.
 - The shapes of utensils vary, which makes it necessary to vary cooking time.
 - Eggs continue cooking during standing time.
- Q.** What is wrong when three potatoes bake thoroughly and the fourth one is still not cooked?
- A.** The fourth potato may be slightly heavier than the others and should be cooked 30 to 60 seconds longer. Remember to allow 2.5 cm around each potato when baking. For more even cooking, place potatoes in a circle.
- Q.** Why do baked apples sometimes burst during cooking?
- A.** As in regular cooking methods, steam is formed in the interior of the apple, causing it to swell and expand during the cooking process.
- Q.** How are boil-overs avoided?
- A.** Use a larger utensil than usual for cooking. If you open the oven door or touch **STOP/CLEAR**, the food will stop boiling.
- Q.** Why does the dish become hot when I microwave food in it?
- A.** As the food becomes hot it will conduct the heat into the dish. Use oven mitts to remove food after cooking.

CLEANING

Wipe the oven inside and outside with a soft cloth and a mild detergent solution. Then rinse and wipe dry. This should be done on a weekly basis — more often if needed. Never use cleaning powders or rough pads. Excessive oil splatters on the inside top will be difficult to remove if left for many days. Wipe spatters with a wet paper towel, especially after cooking chicken or bacon.

REMOVABLE PARTS

The following parts may be removed as described. They should be washed in warm (not hot) water with a mild detergent and a soft cloth. Once they are clean, rinse them well and dry with a soft cloth. Never use cleaning powders, steel wool or rough pads.

- The turntable may be cleaned at the sink. Be careful not to chip or scratch the edges as this may cause the turntable to break during use.
- The turntable roller rest should be cleaned regularly.

SPECIAL CARE

For best performance and safety, the inner door panel and the oven front frame should be free of food or grease buildup. Wipe them often with a mild detergent. Then rinse and wipe dry. Never use cleaning powders or rough pads.

After cleaning the control panel, touch **STOP/CLEAR** to clear any entries that might have been entered accidentally while cleaning the panel.

BEFORE CALLING FOR SERVICE

You can often correct operating problems yourself. If your microwave oven fails to work properly, locate the operating problem in the chart below and try the solutions marked for each problem.

If the microwave oven still does not work properly, contact the nearest authorized service centre.

PROBLEMS

Oven will not start	X	X	X										
Err displays				X									
Arcing or sparking					X					X			
Incorrect time											X		
Unevenly cooked foods					X	X		X					X
Overcooked foods								X					
Undercooked foods					X	X	X	X					
Improper defrosting					X			X					X

POSSIBLE CAUSES

- Is power cord plugged in?
- Is door closed?
- Cooking time not set.
- Touch **STOP/CLEAR**.
- Use microwave-safe cookware only.
- Completely defrost food.
- Turn or stir food.
- Reset clock.
- Do not operate with oven empty.
- Use correct time/cooking power level.
- Check to see that oven ventilation ports are not restricted.

COOKING GUIDE

AUTO SENSOR REHEATING

1. REHEAT

Use to reheat cooked food of room or refrigerated temperature: canned entrees, pizza, fried chicken, etc.

2. FROZEN REHEAT

Use to defrost and heat precooked frozen food: meat loaf, frozen entree and casserole.

For best reheating results :

- Auto Sensor Reheat is best used for 1 - 2 servings.
- Always cover foods loosely but completely with wax paper, plastic wrap or casserole lid. (Do not use any snap closing lids.)
- Do not use Auto Sensor reheat for less than 115 g or more than 560 g of food. Use Time cooking.
- Very dense foods, such as refrigerated or frozen lasagna should be allowed to stand covered after reheating.
- Do not use **REHEAT/FROZEN REHEAT** keypads to heat uncooked food. All foods must be precooked and can be at room, refrigerated or frozen temperature.
- The following types of foods are not recommended:
Boil-in-the-bag entrees or vegetables, raw or uncooked food, frozen cheesecake, dried foods, bread or pastry, beverages.

REHEAT/FROZEN REHEAT GUIDE

Food	Amount	Special Notes
Casserole Entree	115 g - 560 g	Cover with plastic wrap or casserole lid. Stir after reheating. Unstirrable foods (ex. lasagna) should be allowed to stand covered after reheating.
Plate of food	115 g - 560 g	Arrange less dense foods in centre of plate. Cover with plastic wrap or wax paper. Allow to stand covered.
Fried chicken	2 - 4 pieces	Cover with wax paper.
Pizza	2 - 4 slices	No cover. Place on paper towel or paper plate.

Note: Do not reheat in foil containers.

AUTO SENSOR COOKING

3. FISH FILLET

Suitable for fresh or defrosted fish fillets and fish steaks. (170 g - 900 g)

For best results:

- Fish should be completely thawed before cooking.
- Arrange in a single layer in dish.
- Cover dish with plastic wrap.

4. POTATO

Suitable for all types of fresh whole, quartered or sliced potatoes: white baking potatoes, sweet potatoes or red boiling potatoes. (170 g - 1.4 kg)

For best results:

- When cooking quartered or sliced potatoes, use LOW doneness setting.
- Allow 5 - 10 minutes standing time.
- The best container for quartered or sliced potatoes is a ½ to 1½ litre microwave-safe casserole.
- Turn over after cooking time appears in the display window.

5. VEGETABLE

Suitable for a wide variety of fresh or frozen vegetables and vegetable combinations. (115 g - 900 g)

For best results:

- The best container for cooking vegetables is a ½ to 2 litre microwave-safe casserole.
- When cooking frozen vegetables, use LOW doneness setting.

SENSOR COOKING GUIDE

Food	Amount	Water	Preparation
Fish			
Fish fillets, 1.25 cm thick	170 g - 900 g	-	Arrange in a single layer in dish. Seasoned as desired. Cover.
Fish steaks, 2.5 cm thick	170 g - 900 g	-	Turn or rearrange fish after cooking time appears in the display window.
Potato			
White potatoes, Sweet potatoes, Whole: 170 - 230 g each.	1 - 6	none	Wash, scrub and pierce several places with fork. Place on paper towel. Arrange potatoes in circle avoiding centre of the turntable. When cooking a potato, place it away from the turntable centre.
Quartered or sliced:	225 g - 450 g	¼ cup (50 mL)	Peel and quarter or slice. Add water. Cover with plastic wrap or casserole lid.
Red potato, boiling New potatoes, small	225 g - 450 g	¼ cup (50 mL)	Wash and/or peel. Pierce with fork. Add water. Cover with plastic wrap or casserole lid.
Vegetables			
Artichokes, Beans, Broccoli, Brussels sprouts, Cabbage, Carrots, Corn, Cauliflower, Eggplant, Mushrooms, Onion, Okra, Pea, Spinach, Squash, Zucchini, or mixture of these.	115 g - 900 g	1 - 4 tbsps (15 - 60 mL)	Wash. Prepare and cut into slices or cube. Add water. Cover with plastic wrap or casserole lid. Stir large quantities of vegetables after cooking time appears in the display window. Let stand 3 - 5 minutes.

AUTO SENSOR COOKING (CONT.)

6. CASSEROLE

Suitable to cook one-container dishes such as full bodied meat, vegetable and liquid combinations.

For best results:

- Stir foods once after cooking time appears in the display window. Press **START** after closing the door.
- A standing time is automatically included at the end of cooking time.

7. MEAT

CHICKEN
LAMB
BEEF
PORK

Suitable for fresh or defrosted chicken, lamb, beef, pork.
(450 g - 2.3 kg)

For best results:

- Doneness varies with meat of different shape and weight.
- Meat should be completely thawed before cooking.
- Place meat on a microwave-safe roasting rack set in a dish.
- All meat may be seasoned as desired before cooking.
- Aluminium foil can be used to cover thin parts of meat or chicken wings and legs to prevent overcooking. Foil should be applied after cooking time appears in the display window.
- While chicken or meat is standing, cover with foil to keep in the heat.

SENSOR COOKING GUIDE

Food	Preparation
Meat	
Chicken, Whole:	Remove the giblets, rinse in cold water and pat dry. Tie legs together with string. Place breast side down on a roasting rack set in a dish. Cover with plastic wrap completely. Turn over at pause. Let stand 10 - 20 minutes.
Pieces:	Arrange pieces skin side down. Cover with plastic wrap completely. Turn and rearrange at pause. Let stand 5 - 10 minutes. Use LOW doneness setting for best results.
Lamb Beef Pork	Tie meat with string. Place meat fat side down on a roasting rack set in a dish. Cover with plastic wrap completely. Turn over at pause. Let stand 10 - 20 minutes.

Note: Use heat resistant microwave-safe wrap only.

SENSOR COOKING RECIPES

FISH FILLET RECIPES

Fish Fillets with Mushrooms

Cooking Time : About 13 - 17 minutes

450 g fish fillets
2 tablespoons (30 mL) butter or margarine
2 tablespoons (30 mL) dry white wine
½ teaspoon (2 mL) lemon juice
½ cup (115 g) sliced fresh mushrooms
2 green onions, finely chopped
1 tomato, peeled and diced
½ teaspoon (2 mL) salt

Arrange fish fillets so that thick portions are toward the outer edges of 20 cm microwave-safe baking dish. Dot with butter. Combine wine and lemon juice, and pour over fish. Sprinkle with mushrooms, green onions, and tomato.

Cover with plastic wrap.
Place in oven. Cook on **FISH FILLET**.
Remove from oven and let stand covered, 2 minutes.

6 servings

VEGETABLE RECIPES

Carrot and Basil Bake

Cooking Time : About 7 - 10 minutes

450 g carrots, peeled and shredded
1 small onion, minced
2 tablespoons (30 mL) butter or margarine
2 tablespoons (30 mL) water
1 teaspoon (5 mL) parsley flakes
½ teaspoon (2 mL) basil
½ teaspoon (2 mL) salt

Combine all ingredients in 2 litre microwave-safe casserole.
Cover with casserole lid.
Cook on **VEGETABLE**.
Stir once after cooking time appears in the display window.
Let stand 3 minutes before serving.

6 servings

Asparagus with Mustard Sauce

Cooking Time : About 6 - 9 minutes

450 g asparagus, cleaned and cut into pieces
¼ cup (50 mL) water
⅓ cup (75 mL) mayonnaise
1 tablespoon (15 mL), minced fresh parsley
1 teaspoon (5 mL) prepared dijon-style mustard
½ teaspoon (2 mL) onion salt
White pepper to taste

Combine asparagus and water in 1½ litre microwave-safe casserole.
Cover with casserole lid. Place in oven.
Cook on **VEGETABLE**.
Drain. Set aside.
Combine remaining ingredients in small bowl.
Pour over asparagus and toss lightly to coat asparagus.
Cook on HI, 1 to 1½ minutes or until heated through.

6 servings

Creamy Cabbage

Cooking Time : About 10 - 14 minutes

450 g cabbage, shredded
¼ cup (50 mL) water
1 package (85 g) cream cheese, cut into cubes
2 tablespoons (30 mL) milk
½ teaspoon (2 mL) celery seed
½ teaspoon (2 mL) salt
Dash pepper
Chopped parsley

Place cabbage and water in 2 litre microwave-safe casserole.
Cover with casserole lid. Place in oven.
Cook on **VEGETABLE**.
Add remaining ingredients except parsley. Stir.
Cover. Cook on HI, 4 to 5 minutes.
Let stand 2 minutes.
Stir and sprinkle with parsley before serving.

5 - 6 servings

SENSOR COOKING RECIPES (CONT.)

CASSEROLE RECIPES

Ham and Potato Scallop

- 1 cup (250 mL) white sauce, seasoned as desired
- 3 medium potatoes, peeled and thinly sliced (about 450 g)
- 140 g diced cooked ham
- 1 teaspoon (5 mL) instant minced onion
- ¼ cup (30 g) shredded cheddar cheese

4 servings

Cooking Time : About 25 - 35 minutes

Place potatoes in 1½ litre microwave-safe casserole.

Add ham and onion.

Pour white sauce over ham and potatoes mixture, stir to combine.

Cover with casserole lid. Place in oven.

Cook on **CASSEROLE**.

Stir once after cooking time appears in the display window.

After cooking, sprinkle with cheese. Cover and let stand 10 minutes or until cheese is melted.

Hearty Beef Vegetables Stew

- 2¼ cups (550 mL) water
- 2 beef bouillon cubes
- 450 g round steak, cut into 1.25 cm cubes
- 3 tablespoons (45 mL) cornstarch
- 2 large potatoes, peeled and cubed
- ¾ cup (175 mL) thinly sliced carrots
- ½ cup (125 mL) thinly sliced celery
- 1 medium onion, diced
- ½ teaspoon (2 mL) salt
- ¼ teaspoon (1 mL) freshly ground pepper
- ¼ teaspoon (1 mL) thyme
- 1 bay leaf, crushed

4 - 6 servings

Cooking Time : About 70 - 80 minutes

Place all ingredients in 3 litre microwave-safe casserole, and stir. Cover with casserole lid.

Cook on **CASSEROLE**.

Stir once after cooking time appears in the display window.

Ratatouille

- 1 eggplant (450 g) , chopped
- 1 medium onion, chopped
- 2 cloves garlic, minced
- 2 tablespoons (30 mL) olive oil
- 4 medium tomatoes, chopped
- 1½ cups (375 mL) sliced zucchini
- 1 green pepper, cut into strips
- 1 tablespoon (15 mL) lemon juice
- 1 teaspoon (5 mL) basil
- thyme to taste
- freshly ground pepper to taste
- ¼ cup (50 mL) minced fresh parsley
- 2 tablespoons (30 mL) grated parmesan cheese

6 servings

Cooking Time : About 55 - 65 minutes

Combine eggplant, onion, garlic and oil in 3 litre microwave-safe casserole. Cover with casserole lid and cook on HI, 4 to 5 minutes.

Add remaining ingredients except parsley and cheese. Blend well. Cover.

Cook on **CASSEROLE**.

Stir once after cooking time appears in the display window.

After cooking, stir in parsley and sprinkle with cheese.

SENSOR COOKING RECIPES (CONT.)

CASSEROLE RECIPES

Casserole Italiano

Cooking Time : About 35 - 45 minutes

225 g lean ground beef
¾ cup (175 mL) spaghetti sauce
½ can (115 g) tomato sauce
¾ cup (175 mL) water
½ can (230 g) green beans, drained
3 cups (115 g) uncooked medium-width egg noodles
1 tablespoon (15 mL) onion flakes
1 clove garlic, minced
1 tablespoon (15 mL) sugar
1 teaspoon (5 mL) Italian herb seasoning
¼ teaspoon (1 mL) salt
pepper to taste
1 cup (115 g) shredded mozzarella cheese

Crumble beef into 2 litre microwave-safe casserole. Place in oven.
Cook on HI, 3 to 4 minutes.
Stir to break up beef. Drain.
Add remaining ingredients except cheese to beef. Blend well.
Cover with casserole lid. Place in oven.
Cook on **CASSEROLE**.
Stir once after cooking time appears in the display window.
After cooking, sprinkle with cheese.
Stir and let stand before serving.

6 - 8 servings

Bacon Vegetable Soup

Cooking Time : About 70 - 80 minutes

200 g slices bacon, diced
1 medium tomato, peeled and chopped
1 carrot, sliced
1 stalk celery, sliced
1 medium red potato, cubed
1 small zucchini, sliced
1 medium onion, chopped
2 bay leaves
1 teaspoon basil
1 teaspoon Italian herb seasoning,
season as desired
3 cups (750 mL) beef broth

Combine all ingredients in 3 litre microwave-safe casserole.
Cover with Casserole lid.
Cook on **CASSEROLE**.
Stir once after cooking time appears in the display window.

4 - 6 servings

Onion-Beef Soup

Cooking Time : About 55 - 65 minutes

3 medium onions, thinly sliced
¼ cup (50 mL) butter or margarine
4 cups (1000 mL) beef broth
¼ cup (50 mL) white wine
1 teaspoon (5 mL) worcestershire sauce
1 teaspoon (5 mL) salt
1 teaspoon (5 mL) soy sauce
½ teaspoon (2 mL) paprika
Grated Parmesan cheese

Combine onions and butter in 3 litre microwave-safe casserole.
Cover with casserole lid.
Cook on HI, 4 to 6 minutes.
Add remaining ingredients, except cheese. Blend well. Cover.
Cook on **CASSEROLE**.
Stir once after cooking time appears in the display window.
Serve in bowls with cheese sprinkled on top.

6 servings

AUTOMATIC DEFROST CHART

- Set Auto Defrost by Weight according to instructions on page 8.
- Remove food from wrapper and place in a microwave-safe dish or place on a microwave-safe roasting rack.
- Cover thin parts with aluminium foil.
- Large roasts should be still icy in centre. Allow to stand.
- Fish and seafood should also be slightly icy.
- Food can be defrosted in a styrofoam package.
- Some types of food will need to be rearranged at the Pause.

Item	Special Notes
Beef	
Ground beef	Turn over and remove defrosted portion at pause.
Liver	Drain liquid as it defrosts. Separate pieces.
Roasts	Turn over at pause. Cover ends with foil.
Sirloin steak	Turn over at pause.
Rib or T-bone	Turn over at pause.
Flank steak	Turn over at pause.
Stewing meat	Break apart at pause.
Pork	
Bacon	Defrost in original wrapper. Turn over at pause. Centre should be slightly icy.
Chops	Separate and turn over at pause.
Ribs	Turn over at pause.
Roasts	Turn over at pause. Cover ends with foil.
Lamb	
Chops	Separate and turn over at pause.
Ribs	Turn over at pause.
Roasts	Turn over at pause. Cover ends with foil.
Poultry	
Chicken, whole, up to 1.4 kg	Check for and remove any metal clamps or wires before defrosting. Turn over at pause. Cover ends with foil. Rinse under cold water.
Pieces	Separate and turn over at pause.
Cornish hens	Check for and remove any metal clamps or wires before defrosting. Turn over at pause. Rinse under cold water.
Fish and Seafood	
Crabmeat, prawns	Break apart at pause.
Fish fillets	Turn over and rearrange at pause. Rinse under cold water to separate.
Fish whole, steaks	Turn over at pause. Cover head and tail with foil.
Scallops	Break apart at pause. Remove defrosted scallops.

QUICK REFERENCE

AUTOMATIC SENSOR

1. Touch **REHEAT, FROZEN REHEAT, FISH FILLET, POTATO, VEGETABLE** or **CASSEROLE**
2. Touch **HIGH/LOW** once or twice to adjust doneness, if desired.
3. Touch **START**.

MEAT

1. Touch **MEAT 1 - 4** times to select desired course.

1 touch	CHICKEN
2 touches	LAMB
3 touches	BEEF
4 touches	PORK

2. Touch **HIGH/LOW** once or twice to adjust doneness, if desired.
3. Touch **START**.
4. At pause, rearrange food.
5. Touch **START** to restart.

HIGH/LOW

1. Set the desired sensor course.
2. Touch **HIGH/LOW** once or twice to adjust doneness, if desired.

1 touch	longer cooking time
2 touches	shorter cooking time

NOTE: The oven automatically sets to medium doneness if no selection is made.
(See manual for details.)

TIME COOKING

1. Touch **TIME**.
2. Touch numbers for cooking time (in minutes and seconds).
3. Touch **POWER LEVEL**.
4. Touch a number (1 - 9) for power level.
5. Touch **START**.

NOTE: To set **HI POWER** cooking, skip steps 3 and 4.

AUTOMATIC DEFROST

1. Touch **FINE DEFROST**.
2. Enter the weight of food in kg.
3. Touch **START**.
4. At pause reminder, rearrange food.
5. Touch **START** to restart.

NOTE: If you do not open the door at the pause reminder, the oven continues to complete the defrosting.



BEVERAGE REHEATING

1. Touch **SOUP/BEVERAGE** 1 - 3 times until desired serving number appears.
2. Touch **START**.

MINUTE TIMER

1. Touch **TIME**.
2. Touch numbers for time.
3. Touch **POWER LEVEL**.
4. Touch **0** (power level 0).
5. Touch **START**.

CLOCK

1. Touch .
2. Touch numbers to set time.
3. Touch .

For your protection in the event of theft or loss of this product, please fill in the information below :

Model No.

(Located on the front of unit)

Serial No.

(Located on the front of unit)

Date of Purchase

Purchased Price

Where Purchased

SANYO

SANYO Electric Co., Ltd.

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