



OWNER'S MANUAL

MICROWAVE OVEN

Please read this owner's manual thoroughly before operating.

MS204 *** * *** (optional, please check model specification)



PRECAUTIONS

Precautions to avoid possible exposure to excessive microwave energy.

You cannot operate your oven with the door open due to the safety interlocks built into the door mechanism. These safety interlocks automatically switch off any cooking activity when the door is opened; which in the case of a microwave oven could result in harmful exposure to microwave energy. It is important not to tamper with the safety interlocks.

Do not place any object between the oven front face and the door or allow food or cleaner residue to accumulate on sealing surfaces.

Do not operate your 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.

Your oven should not be adjusted or repaired by anyone except qualified service personnel.

Warning

Please ensure cooking times are correctly set as over cooking may result in the FOOD catching fire and subsequent damage to your oven.

When heating liquids, e.g. soups, sauces and beverages in your microwave oven, overheating the liquid beyond boiling point can occur without evidence of bubbling. This could result in a sudden boil over of the hot liquid. To prevent this possibility the following steps should be taken:

- 1. Avoid using straight sided containers with narrow necks.
- 2. Do not overheat.
- 3. Stir the liquid before placing the container in the oven and again halfway through the heating time.
- 4. After heating, allow to stand in the oven for a short time and check the temperature of the liquid before consumption to avoid burns (especially, contents of feeding bottles and baby food jars).

Warning

Always allow food to stand after being cooked by microwaves and check the temperature of them before consumption. Especially contents of feeding bottles and baby food jars. Never leave lids on bottles when heating as they will explode and may cause personal injury and damage the oven.

How the Microwave Oven Works

Microwaves are a form of energy similar to radio and television waves and ordinary daylight. Normally, microwaves spread outwards as they travel through the atmosphere and disappear without effect. Microwave ovens, however, have a magnetron which is designed to make use of the energy in microwaves. Electricity, supplied to the magnetron tube, is used to created microwave energy.

These microwaves enter the cooking area through openings inside the oven. A turntable or tray is located at the bottom of the oven. Microwaves cannot pass through metal walls of the oven, but they can penetrate such materials as glass, porcelain and paper, the materials out of which microwave-safe cooking dishes are constructed.

Microwaves do not heat cookware, though cooking vessels will eventually get hot from the heat generated by the food.

With Safety in mind

Your microwave oven has built in safety features for peace of mind. When the door is opened, the oven automatically stops producing microwaves. Microwave energy is converted completely to heat when it enters food, leaving no "left over" energy to harm you when you eat your food.

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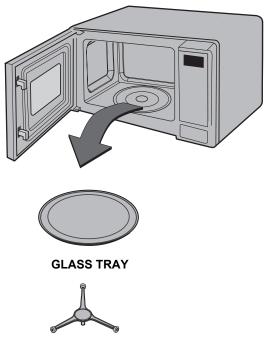
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UNPACKING & INSTALLING

By following the basic steps on these two pages you will be able to quickly check that your oven is operating correctly. Please pay particular attention to the guidance on where to install your oven. When unpacking your oven make sure you remove all accessories and packing. Check to make sure that your oven has not been damaged during delivery.

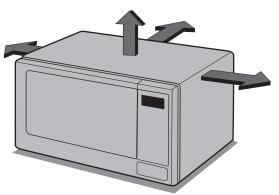


Unpack your oven and place it on a flat level surface.



ROTATING RING

Place your oven on a flat, level surface but make sure there is at least **20 cm** of space on the top and **% Wa** on the rear and sides so there is air flow for ventilation. Exhaust outlets are located in the back and side of your oven. Blocking the outlets can damage your oven. The microwave oven must not be placed in a cabinet.

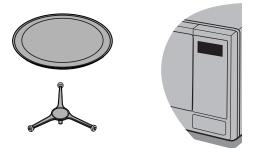


THIS OVEN SHOULD NOT BE USED FOR COMMERCIAL CATERING PURPOSES, IT IS INTENDED FOR INDOOR DOMESTIC USE ONLY AND FOR THE PURPOSES OF HEATING OR COOKING FOODS.

UNPACKING & INSTALLING

Plug your oven into a standard household socket. Make sure your oven is the only appliance connected to the socket. If your oven does not operate properly, unplug it from the electrical socket and then plug it back in.

Open your oven door by pressing the **DOOR OPEN** button. Place the **ROTATING RING** inside the oven and place the **GLASS TRAY** on top.



Fill a **microwave safe container** with 300 ml (1/2 pint) of water. Place on the **GLASS TRAY** and close the oven door. If you have any doubts about what type of container to use please refer to page 14.





Enter the time by touching [3] and [0]. And touch **START/Q-START.**

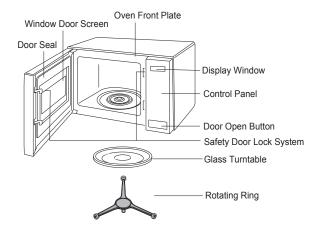


The **DISPLAY** will count down from 30 seconds. When it reaches 0 it will sound BEEPS. Open the oven door and test the temperature of the water. If your oven is operating the water should be HOT. **Be careful when removing the container it may be hot.**



YOUR OVEN IS NOW INSTALLED

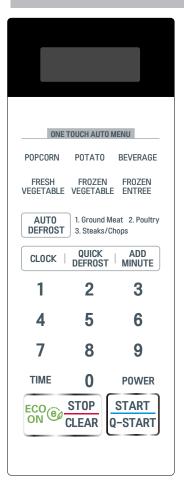
FEATURE DIAGRAM



Remove your Microwave Oven and all material from the shipping carton. Your oven will be packed with the following materials:

Glass Turntable1	each
Owner's Manual1	each
Rotating Ring1	each

This microwave oven is designed for household use only. It is not recommended for commercial purposes.



CONTROL PANEL

	ONE
ONE TOUCH AUTO MENU	POPCORN
POPCORN POTATO BEVERAGE	FRESH VEGETABLE
FRESH FROZEN FROZEN VEGETABLE VEGETABLE ENTREE	AUTO DEFROST
AUTO DEFROST 1. Ground Meat 2. Poultry 3. Steaks/Chops	СГОСК
CLOCK QUICK ADD DEFROST MINUTE	1
1 2 3	
4 5 6	4
7 8 9	7
TIME O POWER	ТІМЕ
ECO STOP START	
MS20//2DB	

ON	TOUCH AUTO	MENUL
	TUUCHAUTU	
POPCORN	ΡΟΤΑΤΟ	BEVERAGE
FRESH VEGETABLE	FROZEN VEGETABLE	FROZEN ENTREE
AUTO DEFROST	1. Ground Me 3. Steaks/Cho	at 2. Poultry ps
СГОСК	OUICK	ADD MINUTE
1	2	3
4	5	6
7	8	9
TIME	0	POWER
ECO	STOP	START

MS2042D

MS2042DB

MS2042U

CLEAR

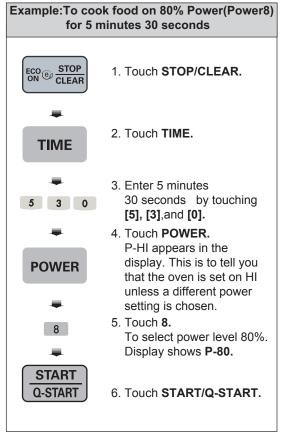
Q-START

NOTE: A beep sounds when a key pad on the control panel is touched to indicate that the setting has been entered.

OPERATING INSTRUCTIONS

TIMED COOKING (manual cooking)

This function allows you to cook food for a desired time. There are 11 power levels available. The example below shows how to set 80% power level for the desired time.



When cooking is complete, four short tones will sound. The word **End** shows in the display window. Then the oven shuts itself off.

NOTE:

If you do not select the power level, the oven will operate at power HIGH. To set HI-POWER cooking, skip steps 4 & 5 above.

2 or 3 STAGE TIMED COOKING

For Two Stage cooking, repeat timed cooking steps 2 to 5 from the above example before pressing the START/Q-START button. The 2nd stage will continue on from the 1st stage and apply the set time and set power level automatically. Auto Weight Defrost can be programmed as the first stage to defrost first and then a second stage cook.

MICROWAVE POWER LEVELS

Your microwave oven is equipped with eleven power levels to give you maximum flexibility and control over cooking. The adjacent table will give you some idea of which foods are prepared at each of the various power levels.

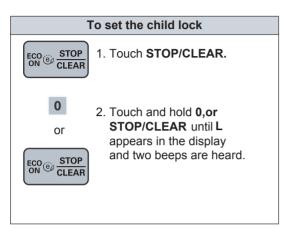
* The below chart shows the power level settings for your oven.

MICROWAVE POWER LEVEL CHART

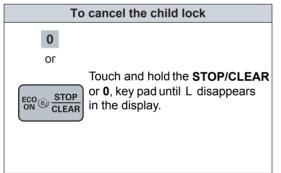
Power Level	Use
High (100%)	 * Boiling water. * Browning ground beef. * Making candy. * Cooking poultry pieces, fish, & vegetables. * Cooking tender cuts of meat.
90	* Reheating rice, pasta, & vegetables.
80	* Reheating prepared foods quickly.* Reheating sandwiches.
70	 * Cooking egg, milk and cheese dishes. * Cooking cakes, breads. * Melting chocolate.
60	 * Cooking veal. * Cooking whole fish. * Cooking puddings and custard.
50	* Cooking ham, whole poultry, lamb. * Cooking rib roast, sirloin tip.
40	* Thawing meat, poultry and seafood.
30	 * Cooking less tender cuts of meat. * Cooking pork chops, roast.
20	* Taking chill out of fruit. * Softening butter.
10	 * Keeping casseroles and main dishes warm. * Softening butter and cream cheese.
0	* Standing time. * Independent.

CHILD LOCK

This is a unique safety feature that prevents unwanted oven operations. Once the CHILD LOCK is set, no cooking can take place.



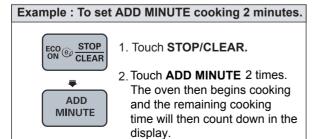
If the CHILD LOCK was already set and you touch another cooking pad, the word L shows in the display. You can cancel the CHILD LOCK according to below procedure.



After the CHILD LOCK is turned off, The oven will operate normally.

ADD MINUTE

A time-saving option, this simplified control lets you quickly set and start microwave cooking without the need to touch START/Q-START



NOTE:

If you touch **ADD MINUTE**, it will add 1 minute increments up to 99 minutes 59 seconds.

QUICK START

The QUICK START feature allows you to set 30 seconds intervals of HIGH power cooking with a touch of the START/Q-START.

Example: Set 2 minutes of cooking on high power.



The oven will start before you have finished the fourth touch.

During QUICK START cooking, you can extend the cooking time up to 10 minutes by repeatedly touching the START/Q-START key if longer cooking times are required.

ENERGY SAVING

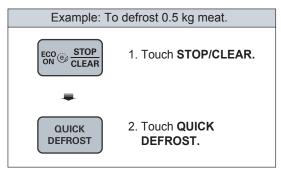
ECO ON feature saves energy by turning off the display. This feature only operates when the STOP/ CLEAR (ECO ON) button is touched and then cancels when the door is opened or any button is touched.



1.Touch **STOP/CLEAR (ECO ON)** The display will go out and ECO ON will be active.

Touch the STOP/CLEAR (ECO ON) or any other button to cancel this feature when it is on.

QUICK DEFROST



The Quick Defrost feature provides you with the express defrosting method for 500g of frozen minced meat. if more than 500g is required to be defrosted, this should be done separately in weights of 500gms for each cycle.

NOTE:

The oven will beep during the DEFROST CYCLE. At this time open the door and turn over, separate, or rearrange the food.

Quick Defrost provides just enough defrosting that the foods can be used in recipes or for cooking. There will be some ice crystals remaining.

(minutes)

5 - 20

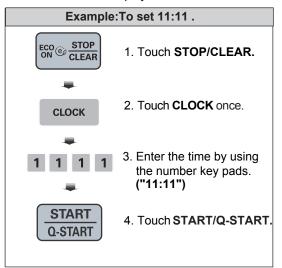
Weight Standing Time Initial Code Menu Instructions Limit Temperature Use this function to defrost mince meat. Minced Meat 0.5 kg Frozen Remove the meat completely from it's wrapping. Place the mince onto a microwave- safe rack over a plate or shallow dish. During the program the oven will beep . At this point remove the mince from the microwave oven. remove any defrosted mince to a plate, cover and set aside. Turn the frozen mince over and return to the microwave oven. Press start to continue. At the end of the program remove the mince from the microwave oven, cover with foil and allow to stand 5-20 minutes or until completely thawed.

QUICK DEFROST MENU INSTRUCTIONS

1

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".



NOTE :

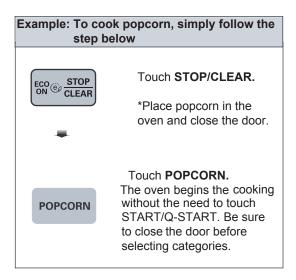
If the clock (or display) shows any strange looking symbols, unplug your oven from the electrical socket and plug it back in and reset the clock.

ONE TOUCH AUTO MENU CHART

Кеу	Touch	Serving size	Directions
POPCORN	1 Time 2 Times 3 Times	100 g. 85 g. 50 g.	 Follow package instructions. Use popcorn package which is made especially for microwave cooking. Do not try to pop unpopped kernels. Heat only 1 package at a time. Do not leave the microwave oven unattended while popping popcorn.
ΡΟΤΑΤΟ	1 Time 2 Times 3 Times 4 Times	1 ea 2 ea 3 ea 4 ea	 Place in center of the oven on paper towel. Pierce potato several times with fork. After cooking, let stand for 5 minutes.
BEVERAGE	1 Time 2 Times	1 cup 2 cups	Use mug or microwave-safe cup.Stir after reheating.
FRESH VEGETABLE	1 Time 2 Times 3 Times 4 Times	1 cup 2 cups 3 cups 4 cups	 Prepare vegetable(wash and cut into 12.7mm pieces). Cover with plastic wrap and vent.
FROZEN VEGETABLE	1 Time 2 Times 3 Times 4 Times	1 cup 2 cups 3 cups 4 cups	 Arrange food on turntable tray. Cover with plastic wrap and vent.
FROZEN ENTREE	1 Time	284 g.	Follow the package instructions.

ONE TOUCH AUTO MENU

Use this function to cook food without entering a cooking time or power level. Refer to the One touch Auto Menu table below for more information.



AUTO WEIGHT DEFROST

Three defrost sequences are preset in the oven. The defrost feature provides you with the best defrosting method for frozen foods. The cooking guide will show you which defrost sequence is recommended for the food you are defrosting. With the Auto Weight Defrost feature, the oven automatically sets the defrosting time and power levels for you.

The oven automatically determines required defrosting times for each food item according to the weight you enter.

For added convenience, the Auto Weight Defrost Feature contains a built-in beep mechanism that lets you check, turn over, separate or rearrange as recommended in the Auto Defrosting AUTO WEIGHT DEFROST GUIDE.

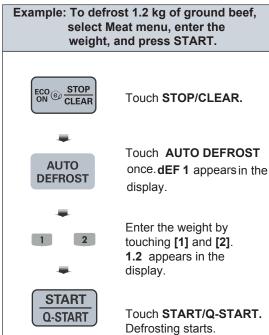
Three different defrosting levels are provided.

dEF 1 : GROUND MEAT dEF 2 : POULTRY dEF 3 : STEAKS/CHOPS

*You can select the category by touching the key once (GROUND MEAT), twice (POULTRY), or three times(STEAKS/CHOPS).

*Available weight is 0.1~4.0 kg.

However, when you want to defrost and cook consecutively, you should enter less than 4.0 kg. If you attempt to defrost and cook 4.1 kg consecutively, **Err** will show in the display window.



NOTE:

When you touch the START/Q-START, the display changes to the defrost time count down. The oven will beep during the DEFROST cycle. At this time, open the door and turn, separate, or rearrange the food. Remove any portions that have thawed. Return frozen portions to the oven and touch START/Q-START to resume the defrost cycle.

OPERATING TIPS

- For best results, remove fish, shellfish, meat, and poultry from its original wrapping paper or plastic package. Otherwise, the wrap will hold steam and juice close to the foods, which can cause the outer surface of the foods to cook.
- For best results, shape your ground meat into the form of a doughnut before freezing. When defrosting, separate any thawed meat when the beep sounds and continue defrosting.
- Place foods in a shallow container or on a microwave roasting rack to catch drippings.
- Food should still be somewhat icy in the center when removed from the oven.

AUTO WEIGHT DEFROST SEQUENCE LIST

Sequence	Food
1 GROUND MEAT	Ground beef, Round steak, Cubes for stew, Tenderloin steak, Pot roast, Rib roast, Rump roast, Chuck roast, Hamburger patty. LAMB Chop(25.4mm thick), Rolled roast PORK Chop(12.7mm thick), Hot dogs, Spareribs, Country-style ribs. Rolled roast, Sausage. VEAL Cutlets(0.5 kg,12.7mm thick)
2 POULTRY	POULTRY Whole(under 4 kg), Cut up Breasts (boneless) CORNISH HENS Whole TURKEY Breast(under 4 kg)
3 STEAKS/ CHOPS	STEAKS Round steaks,Tenderloin steak. CHOPS Lamb chops (25.4mm thick), Pork chops (12.7mm thick).

OPERATING INSTRUCTIONS

HEATING OR REHEATING GUIDE

To heat or reheat successfully in the microwave, it is important to follow several guidelines. Measure the amount of food in order to determine the time needed to reheat. Arrange the food in a circular pattern for best results. Room temperature food will heat faster than refrigerated food. Canned foods should be taken out of the can and placed in a microwavable container. The food will be heated more evenly if covered with a microwavable lid or plastic wrap and vented. Remove cover carefully to prevent steam burns. Use the following chart as a guide for reheating cooked food. Never cook or reheat with lids fitted to containers or bottles.

Items	Cook time (at HIGH)	Special Instructions
Sliced meat 3 slices (0.5 cm thick)	1-2 ¹ /2 minutes	Place sliced meat on microwavable plate. Cover with plastic wrap and vent. *Note: Gravy or sauce helps to keep meat juicy.
Chicken pieces 1 breast 1 leg and thigh	2-31/2 minutes 3-4 minutes	Place chicken pieces on microwavable plate. Cover with plastic wrap and vent.
Fish fillet (230 g)	1-2 ¹ /2 minutes	Place fish on microwavable plate. Cover with plastic wrap and vent.
Lasagna 1 serving (300 g)	4-7 minutes	Place lasagna on microwavable plate. Cover with plastic wrap and vent.
Casserole 1 cup 4 cups	1-3½ minutes 5-9 minutes	COOK covered in microwavable casserole dish. Stir once halfway through cooking.
Casserole – cream or cheese 1 cup 4 cups	1-3 minutes 31/2-7 minutes	COOK covered in microwavable casserole dish. Stir once halfway through cooking.
Sloppy Joe or Barbecued beef 1 sandwich (1/2 cup meat filling) without bun	1-3 minutes	Reheat filling and bread separately. Cook filling covered in microwavable casserole dish . Stir once. Heat bun as directed in chart below.
Mashed potatoes 1 cup 4 cups	1 ^{1/2} -3 minutes 7-10 minutes	COOK covered in microwavable casserole dish. Stir once halfway through cooking.
Baked beans 1 cup	11/2-31/2 minutes	COOK covered in microwavable casserole dish. Stir once halfway through cooking.
Ravioli or pasta in sauce 1 cup 4 cups	2 ¹ /2-5 minutes 8 ¹ /2-13 minutes	COOK covered in microwavable casserole dish. Stir once halfway through cooking.
Rice 1 cup 4 cups	1-11/2 minutes 3-6 minutes	COOK covered in microwavable casserole dish. Stir once halfway through cooking.
Sandwich roll or bun 1 roll	17-34 seconds	Wrap in paper towel and place on glass mircrowavable rack
Vegetables 1 cup 4 cups	11/2-21/2 minutes 5-7 minutes	COOK covered in microwavable casserole dish. Stir once halfway through cooking.
Soup 1 serving (230 g)	1 ¹ /2-3 minutes	COOK covered in microwavable casserole dish. Stir once halfway through cooking.

OPERATING INSTRUCTIONS

FRESH VEGETABLE GUIDE

Vegetable	Amount	Cook time at HIGH	Instructions	Standing Time
Artichokes (230 g each)	2 medium 4 medium	4 ¹ /2~9 11~14	Trim. Add 2 tsp water and 2 tsp juice. Cover.	2-3 minutes
Asparagus, Fresh, Spears	450 g	21/2~7	Add 1 cup water. Cover.	2-3 minutes
Beans, Green & Wax	450 g	8~13	Add 1/2 cup water in 11/2 qt. casserole dish. Stir halfway through cooking.	2-3 minutes
Beets, Fresh	450 g	13~18	Add 1/2 cup water in 11/2 qt. casserole dish. Rearrange halfway through cooking.	2-3 minutes
Broccoli, Fresh, Spears	450 g	6~9	Place broccoli in baking dish. Add 1/2 cup water.	2-3 minutes
Cabbage, Fresh, Chopped	450 g	4~8	Add 1/2 cup water in 11/2 qt. covered casserole dish. Stir halfway through cooking.	2-3 minutes
Carrots, Fresh, Sliced	2 cups	2~4	Add 1/4 cup water in 1 qt. covered casserole dish. Stir halfway through cooking.	2-3 minutes
Cauliflower, Fresh, Whole	450 g	6~9	Trim. Add 1/4 cup water in 1 qt. covered casserole dish. Stir halfway through cooking.	2-3 minutes
Flowerettes, Fresh Celery, Fresh, Sliced	2 cups 4 cups	2 ^{1/} 2~5 ^{1/} 2 7~10	Slice. Add 1/2 cup water in 11/2 qt. covered casserole dish. Stir halfway through cooking.	2-3 minutes
Corn, Fresh	2 cobs	5~10	Husk. Add 2 tbsp water in 11/2 qt. baking dish. Cover.	2-3 minutes
Mushrooms, Fresh, Sliced	230 g	2 ¹ /2~4 ¹ /2	Place mushrooms in 11/2 qt. covered casserole dish. Stir halfway through cooking.	2-3 minutes
Parsnips, Fresh, Sliced	450 g	5~9	Add ¹ / ₂ cup water in 11/ ₂ qt. covered casserole dish. Stir halfway through cooking.	2-3 minutes
Peas, Green, Fresh	4 cups	7~11	Add ¹ / ₂ cup water in 1 ¹ / ₂ qt. covered casserole dish. Stir halfway through cooking.	2-3 minutes
Sweet Potatoes Whole Baking (170~230 g each)	2 medium 4 medium	5~11 8~14	Pierce potatoes several times with fork. Place on 2 paper towels. Turn over halfway through cooking.	2-3 minutes 2-3 minutes
White Potatoes, Whole Baking (170~230 g_each)	2 potatoes 4 potatoes	6~10 12~16	Pierce potatoes several times with fork. Place on 2 paper towels. Turn over halfway through cooking.	2-3 minutes 2-3 minutes
Spinach, Fresh, Leaf	450 g	5~9	Add 1/2 cup water in 2 qt. covered casserole dish.	2-3 minutes
Squash, Acorn or Butternut, Fresh	1 medium	7~10	Cut squash in half. Remove seeds. Place in 8 x 8-inch baking dish. Cover.	2-3 minutes
Zucchini, Fresh, Sliced	450 g	4 ¹ /2~9 ¹ /2	Add ¹ / ₂ cup water in 11/ ₂ qt. covered casserole dish. Stir halfway through cooking.	2-3 minutes
Zucchini, Fresh, Whole	450 g	7~11	Pierce. Place on 2 paper towels. Turn zucchini over and rearrange halfway through cooking.	2-3 minutes

Never use metal or metal trimmed utensils in your microwave oven

Microwaves cannot penetrate metal. They will bounce off any metal object in the oven and cause arcing, an alarming phenomenon that resembles lightning.

Most heat resistant non metallic cooking utensils are safe for use in your microwave oven. However, some may contain materials that render them unsuitable as microwave cookware. If you have any doubts about a particular utensil, there's a simple way to find out if it can be used in your microwave oven.

Place the utensil in question next to a glass bowl filled with water in the microwave oven. Microwave at power HIGH for 1 minute. If the water heats up but the utensil remains cool to the touch, the utensil is microwave-safe. However, if the water does not change temperature but the utensil becomes warm, microwaves are being absorbed by the utensil and it is not safe for use in the microwave oven. You probably have many items on hand in your kitchen right now that can be used as cooking equipment in your microwave oven. Just read through the following checklist.

Dinner plates

Many kinds of dinner-ware are microwave-safe. If in doubt consult the manufacturer's literature or perform the microwave test.

Glassware

Glassware that is heat-resistant is microwavesafe. This would include all brands of oven tempered glass cookware. However, do not use delicate glassware, such as tumblers or wine glasses, as these might shatter as the food warms.

Plastic storage containers

These can be used to hold foods that are to be quickly reheated. However, they should not be used to hold foods that will need considerable time in the oven as hot foods will eventually warp or melt plastic containers and cause them to pressurize and possibly explode.

Paper

Paper plates and containers are convenient and safe to use in your microwave oven, provided that the cooking time is short and foods to be cooked are low in fat and moisture. Paper towels are also very useful for wrapping foods and for lining baking trays in which greasy foods such as bacon are cooked. In general, avoid colored paper products as the colour may run. Some recycled paper products may contain impurities which could cause arcing or fires when used in the microwave oven.

Plastic cooking bags

Provided they are made specially for cooking, cooking bags are microwave safe. However, be sure to make a slit in the bag so that steam can escape. Never use ordinary plastic bags for cooking in your microwave oven, as they will melt and rupture.

Plastic microwave cookware

A variety of shapes and sizes of microwave cookware are available. For the most part, you can probably use items you already have on hand rather than investing in new kitchen equipment.

Pottery, stoneware and ceramic

Containers made of these materials are usually fine for use in your microwave oven, but they should be tested to be sure.

CAUTION

Some items with high lead or iron content are not suitable for cooking utensils.

Dinner plates or cups that have painted finishes should not be used in the microwave as the decorative paint will cause arching and damage to the paint's finish if the paint is metallic based.

FOOD CHARACTERISTICS & MICROWAVE COOKING

Keeping an eye on things

The recipes in this book have been formulated with great care, but your success in preparing them depends on how much attention you pay to the food as it cooks. Always watch your food while it cooks. Your microwave oven is equipped with a light that turns on automatically when the oven is in operation so that you can see inside and check the progress of your food. Directions given in recipes to elevate, stir, and the like should be thought of as the minimum steps recommended. If the food seems to be cooking unevenly, simply make the necessary adjustments you think appropriate to correct the problem.

Factors affecting microwave cooking times Many factors affect cooking times. The temperature of ingredients used in a recipe makes a big difference in cooking times. For example, a cake made with ice-cold butter, milk. and eggs will take considerably longer to bake than one made with ingredients that are at room temperature. All of the recipes in this book give a range of cooking times. In general, you will find that the food remains under-cooked at the lower end of the time range, and you may sometimes want to cook your food beyond the maximum time given, according to personal preference. The governing philosophy of this book is that it is best for a recipe to be conservative in giving cooking times. While overcooked food is ruined for good. Some of the recipes, particularly those for bread, cake, and custards, recommend that food be removed from the oven when they are slightly undercooked. This is not a mistake. When allowed to stand, usually covered, these foods will continue to cook outside of the oven as the heat trapped within the outer portions of the food gradually travels inward. If the food is left in the oven until it is cooked all the way through, the outer portions will become overcooked or even burnt. You will become increasingly skilful in estimating both cooking and standing times for various foods.

Density of food

Light, porous food such as cakes and bread cook more quickly than heavy, dense foods such as roasts and casseroles. You must take care when microwaving porous food that the outer edges do not become dry and over cooked. Over cooked foods can be a fire hazard.

Height of food

The upper portion of tall food, particularly roasts, will cook more quickly than the lower portion. Therefore, it is wise to turn tall food during cooking, sometimes several times.

Moisture content of food

Since the heat generated from microwaves tends to evaporate moisture, relatively dry food such as roasts and some vegetables should either be sprinkled with water prior to cooking or covered to retain moisture.

Bone and fat content of food

Bones conduct heat and fat cooks more quickly than meat. Care must be taken when cooking bony or fatty cuts of meat that they do not cook unevenly and do not become overcooked.

Quantity of food

The number of microwaves in your oven remains constant regardless of how much food is being cooked. Therefore, the more food you place in the oven, the longer the cooking time. Remember to decrease cooking times by at least one third when halving a recipe.

Shape of food

Microwaves penetrate only about 2.5 cm into food, the interior portion of thick foods are cooked as the heat generated on the outside travels inward. Only the outer edge of food is cooked by microwave energy; the rest is cooked by conduction. The worst possible shape for a food that is to be microwaved is a thick square. The corners will burn long before the centre is even warm . Round thin foods and ring shaped foods cook successfully in the microwave.

Covering

A cover traps heat and steam which causes food to cook more quickly. Use a lid or microwave cling film with a corner folded back to prevent splitting.

Browning

Meats and poultry that are cooked fifteen minutes or longer will brown lightly in their own fat. Food that is cooked for a shorter period of time may be brushed with a browning sauce such as Worcestershire sauce, soy sauce or barbecue sauce to achieve an appetizing colour. Since relatively small amounts of browning sauce is added to food, the original flavour of the recipe is not altered.

Covering with greaseproof paper

Greaseproofing effectively prevents spattering and helps food retain some heat. But because it makes a looser cover than a lid or clingfilm, it allows the food to dry out slightly.

Arranging and spacing

Individual foods such as baked potatoes, small cakes and hors d'oeuvres will heat more evenly if placed in the oven an equal distance apart, preferably in a circular pattern. Never stack foods on top of one another.

FOOD CHARACTERISTICS & MICROWAVE COOKING

Stirring

Stirring is one of the most important of all microwaving techniques. In conventional cooking, food is stirred for the purpose of blending. Microwaved food, however, is stirred in order to spread and redistribute heat. Always stir from the outside towards the centre as the outside of the food heats first.

Turning over

Large, tall foods such as roasts and whole chickens should be turned so that the top and bottom will cook evenly. It is also a good idea to turn cut up chicken and chops.

Placing thicker portions facing outwards

Since microwaves are attracted to the outside portion of food, it makes sense to place thicker portions of meat, poultry and fish to the outer edge of the baking dish. This way, thicker portions will receive the most microwave energy and the food will cook evenly.

Shielding

Strips of aluminium foil (which block microwaves) can be placed over the corners or edges of square and rectangular food to prevent those portions from overcooking. Never use too much foil and make sure the foil is secured to the dish and does not come into contact with the oven cavity as it may cause 'arcing' in the oven.

Elevating

Thick or dense foods can be elevated so that microwaves can be absorbed by the underside and centre of the foods.

Piercing

Foods enclosed in a shell, skin or membrane are likely to burst in the oven unless they are pierced prior to cooking. Such foods include yolks and whites of eggs, clams and oysters and whole vegetables and fruits.

Testing if cooked

Food cooks so quickly in a microwave oven, it is necessary to test it frequently. Some foods are left in the microwave until completely cooked, but most foods, including meats and poultry, are removed from the oven while still slightly undercooked and allowed to finish cooking during standing time. The internal temperature of foods will rise between 3°C and 8°C during standing time.

Standing time

Foods are often allowed to stand for 3 to 10 minutes after being removed from the microwave oven. Usually the foods are covered during standing time to retain heat unless they are supposed to be dry in texture (some cakes and biscuits, for example). Standing allows foods to finish cooking and also helps flavour blend and develop.

To Clean Your Oven

1 Keep the inside of the oven clean

Food spatters or spilled liquids stick to oven walls and between the oven and door surface. It is best to wipe up spillovers with a damp cloth immediately. Not doing so could cause the paint finish to become damaged. Crumbs and spillovers will absorb microwave energy and lengthen cooking times. Use a damp cloth to wipe out crumbs that fall between the door and the frame. It is important to keep this area clean to assure a tight seal. Remove greasy spatters with a soapy cloth then rinse and dry. Do not use harsh detergent or abrasive cleaners. The glass tray can be washed by hand or in the dishwasher.

2 Keep the outside of the oven clean

Clean the outside of your oven with soap and water then with clean water and dry with a soft cloth or paper towel. To prevent damage to the operating parts inside the oven, the water should not be allowed to seep into the ventilation openings. To clean control panel, open the door to prevent oven from accidentally starting, and then wipe the control panel with a damp cloth, followed immediately by a dry cloth. Press STOP after cleaning whilst the door is still open.

3 If steam accumulates inside or around the outside of the oven door, wipe the panels with a soft cloth. Condensation may also form inside the door. To prevent or reduce this occurrence, reduce the cooking power, or reduce the cooking time. This may occur when the microwave oven is operated under high humidity conditions and in no way indicates a malfunction of the unit.

4 The door and door seals should be kept clean. Use only warm, soapy water, rinse then dry thoroughly.
DO NOT USE ABRASIVE MATERIALS, SUCH AS CLEANING POWDERS OR STEEL AND PLASTIC PADS.
Metal parts will be easier to maintain if wiped frequently with a damp cloth.

IMPORTANT SAFETY INSTRUCTIONS

Please keep for future reference. Read and follow all instructions before using your oven to prevent the risk of fire, electric shock, personal injury, or damage when using the oven.

This guide does not cover all possible conditions that may occur. Always contact your service agent or manufacturer about problems that you do not understand.

This is the safety alert symbol. This symbol alerts you to potential hazards that can kill or hurt you and others. All safety messages will follow the safety alert symbol and either the word "WARNING" or "CAUTION". These word means :

This symbol will alert you to hazards or unsafe practices which could cause serious bodily harm or death.

This symbol will alert you to hazards or unsafe practices which could cause bodily injury or property damage.

- 1 Do not attempt to tamper with, or make any adjustments or repairs to the door, door seals, control panel, safety interlock switches or any other part of the oven which would involve the removal of any cover protecting against exposure to of service technician.the microwave oven are faulty. Repairs should only be undertaken by a qualified service technician.
- Unlike other appliances, the microwave oven is a high-voltage and a highelectrical-current piece of equipment. Improper use or repair could result in harmful exposure to excessive microwave energy or in electric shock.
- 2 Do not use the oven for the purpose of dehumidification.(ex. Operating themicrowave oven with wet newspapers, clothes, toys, electric devices, pet or child etc.)
- It can be the cause of serious damage to safety such as a fire, a burn or a sudden death due to an electric shock.
- **3** This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Improper use may cause damage such as a fire, electric shock or burn.
- 4 Accessible parts may become hot during use. Young children should be kept away.
- They may get a burn.
- 5 Liquids or other foods must not be heated in sealed containers since they are liable to explode. Remove the plastic wrapping from food before cooking or defrosting. Note though that in some cases food should be covered with plastic film, for heating or cooking.
- They could burst.
- 6 Be certain to use proper accessories on each operation mode.
- Improper use could result in damage to your oven and accessories, or could make spark and a fire.
- 7 The children should not allow to play with accessories or hang down from the door handle.

• They may get hurt.

8 If the door or door seals are damaged, the oven must not be operated until it has been repaired by a competent person.

- 9 It is hazardous for anyone other than a competent person to carry out any service or repair operation that involves the removal of a cover which gives protection against exposure to microwave energy.
- 10 When the appliance is operated in the combination mode, children should only use the oven under adult supervision due to the temperatures generated.

- 1 You cannot operate your oven with the door open due to the safety interlocks built into the door mechanism. It is important not to tamper with the safety interlocks.
- It could result in harmful exposure to excessive microwave energy. (Safety interlocks automatically switch off any cooking activity when the door is opened.)
- 2 Do not place any object (such as kitchen towels, napkins, etc.) between the oven front face and the door or allow food or cleaner residue to accumulate on sealing surfaces.
- It could result in harmful exposure to excessive microwave energy.
- 3 Do not operate your 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.
- It could result in harmful exposure to excessive microwave energy.
- 4 Please ensure cooking times are correctly set, Small amounts of food require shorter cooking or heating time.
- Over cooking may result in the food catching on fire and subsequent damage to your oven.
- 5 When heating liquids, e.g. soups, sauces and beverages in your microwave oven,
 - * Avoid using straight sided containers with narrow necks.
 - * Do not overheat.
 - * Stir the liquid before placing the container in the oven and again halfway through the heating time.
 - * After heating, let it stand in the oven for a short time; stir or shake it again carefully and check the temperature of it before consuming to avoid burns (especially, contents of feeding bottles and baby food jars).
 - * Microwave heating of beverages can result in delayed eruptive boiling, therefore care has to be taken when handling the container.
- 6 An exhaust outlet is located on the top, bottom or side of the oven. Don't block the outlet.
- It could result in damage to your oven and poor cooking results.
- 7 Do not operate the oven when empty. It is best to leave a glass of water in the oven when not in use. The water will safely absorb all microwave energy, if the oven is accidentally started.
- Improper use could result in damage to your oven.
- 8 Do not cook food wrapped in paper towels, unless your cook book contains instructions for the food you are cooking. And do not use newspaper in place of paper towels for cooking.
- Improper use can cause an explosion or a fire.
- 9 Do not use wooden containers and ceramic containers that have metallic (e.g. gold or silver) inlays. Always remove metal twist ties. Check that the utensils are suitable for use in microwave ovens before use.

Metallic containers for food and beverages are not allowed during microwave cooking.

• They may heat-up and char. Metal objects in particular may arc in the oven, which can cause serious damage.

10 Do not use recycled paper products.

- They may contain impurities which may cause sparks and/or fires when used in cooking.
- 11 Do not rinse the tray and rack by placing it in water just after cooking. This may cause breakage or damage.
 - Improper use could result in damage to your oven.
- 12 Be certain to place the oven so the front of the door is 8 cm or more behind the edge of the surface on which it is placed, to avoid accidental tipping of the appliance.
 - Improper use could result in bodily injury and oven damage.
- 13 Before cooking, pierce the skin of potatoes, apples or any such fruit or vegetable.
 - They could burst.
- 14 Do not cook eggs in their shell. Eggs in their shell and whole hardboiled eggs should not be heated in microwave ovens since they may explode, even after microwave heating has ended.
 - Pressure will build up inside the egg which will burst.
- 15 Do not attempt deep fat frying in your oven.
 - This could result in a sudden boil over of the hot liquid.
- 16 If smoke is observed (or emitted), switch off or unplug the appliance and keep the door closed in order to stifle any flame.
 - It can cause serious damage such as a fire or electric shock.
- 17 When food is heated or cooked in disposable containers made of plastic, paper or other combustible materials, keep an eye on the oven and check it frequently.
 - Your food may be poured due to the possibility of container deterioration, which also can cause a fire.
- 18 The temperature of accessible surfaces may be high when the appliance is operating. Do not touch the oven door, outer cabinet, rear cabinet, oven cavity, accessories and dishes during grill mode, convection mode and auto cook operations, before clearing make sure they are not hot.
 - As they will become hot, there is the danger of a burn unless wearing thick culinary gloves .
- 19 The oven should be cleaned regularly and any food deposits should be removed. Failure to maintain the oven in a clean condition could lead to deterioration of the surface that could adversely affect the life of the appliance and possibly result in a hazardous situation.
- 20 Only use the temperature probe recommended for this oven.
 - You can not ascertain that the temperature is accurate with an unsuitable temperature probe.
- 21 Follow exact directions given by each manufacturer for their popcorn product. Do not leave the oven unattended while the corn is being popped. If corn fails to pop after the suggested times, discontinue cooking. Never use a brown paper bag for popping corn. Never attempt to pop leftover kernels.

• Overcooking could result in the corn catching a fire.

22 This appliance must be earthed.

The wires in the mains lead are colored in accordance with the following codes

BLUE ~ Neutral BROWN ~ Live GREEN & YELLOW ~ Earth As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is colored BLUE must be connected to the terminal which is marked with the letter N or Colored BLACK. The wire which is colored BROWN must be connected to the terminal which is marked with the letter L or colored RED. The wire which is colored GREEN & YELLOW or GREEN must be connected to the terminal which is marked with the letter E or \pm .

If the supply cord is damaged, it must be replaced by the manufacturer, a service agent or a similarly qualified person in order to avoid potential hazards.

- Improper use may cause serious electric damage.
- 23 This oven should not be used for commercial catering purposes.
 - Improper use could result in damage to your oven.
- 24 The connection may be achieved by having the plug accessible or by incorporating a switch in the fixed wiring in accordance with the wiring rules.
 - Using improper plug or switch can cause an electric shock or a fire.
- 25 Children should be supervised to ensure that they do not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- 26 The appliance is not intended to be operated by means of an external timer or separate remote-control system.
- 27 Only use utensils that are suitable for use in microwave ovens.
- 28 This microwave oven must not be placed in a cabinet.
- 29 This microwave oven is intended to be used freestanding.
- 30 Keep the appliance and its cord out of reach of children less than 8 years.
- 31 The door or the outer surface may get hot when the appliance is operating.
- 32 This appliance is intended to be used in household and similar applications such as
 - staff kitchen areas in shops, offices and other working environments
 - farm houses
 - by clients in hotels, motels and other residential environments
 - bed and breakfast type environments
- **33** The microwave oven is intended for heating food and beverages. Drying of food or clothing and heating of warming pads, slippers, sponges, damp cloth and similar may lead to risk of injury, ignition or fire.
- 34 The contents of feeding bottles and baby food jars are to be stirred or shaken and the temperature checked before consumption, in order to avoid burns.
- 35 According to the installation requirements set, otherwise the impact of heat, prone to danger.
- **36** This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervisionor instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- 37 Steam cleaner is not to be used.

QUESTION & ANSWERS

- Q What's wrong when the oven light will not glow?
- A There may be several reasons why the oven light will not glow.

Light bulb has blown. Door is closed.

- Q Does microwave energy pass through the viewing screen in the door?
- A No. The holes, or ports, are made to allow light to pass; they do not let microwave energy through.
- Q Why does the beep tone sound when a key pad on the Control Panel is touched?
- A The beep tone sounds to assure that the setting is being properly entered.
- Q Will the microwave oven be damaged if it operates empty?
- A Yes. Never run it empty or without the glass tray.

Q Why do eggs sometimes pop?

- A When baking, frying, or poaching eggs, the yolk may pop due to steam build up inside the yolk membrane. To prevent this, simply pierce the yolk before cooking. Never microwave eggs in the shell.
- Q Why is standing time recommended after microwave cooking is over?
- A After microwave cooking is finished, food keeps on cooking during standing time. This standing time finishes cooking evenly throughout the food. The amount of standing time depends on the density of the food.

Q Is it possible to pop corn in a microwave oven?

A Yes, if using one of the two methods described:

- 1 Popcorn-popping utensils designed specifically for microwave cooking.
- 2 Prepackaged microwave popcorn that contains specific times and power outputs needed for an acceptable final product.

FOLLOW EXACT DIRECTIONS GIVEN BY EACH MANUFACTURER FOR THEIR POPCORN PRODUCT. DO NOT LEAVE THE OVEN UNATTENDED WHILE THE CORN IS BEING POPPED. IF CORN FAILS TO POP AFTER THE SUGGESTED TIMES, DISCONTINUE COOKING. OVERCOOKING COULD RESULT IN THE CORN CATCHING FIRE.

CAUTION

NEVER USE A BROWN PAPER BAG FOR POPPING CORN. NEVER ATTEMPT TO POP LEFTOVER KERNELS.

Q Why doesn't my oven always cook as fast as the cooking guide says?

A Check your cooking guide again to make sure you've followed directions correctly, and to see what might cause variations in cooking time. Cooking guide times and heat settings are suggestions, chosen to help prevent overcooking, the most common problem in getting used to a microwave oven. Variations in the size, shape, weight and dimensions of the food require longer cooking time. Use your own judgement along with the cooking guide suggestions to test food condition, just as you would do with a conventional cooker.

PLUG WIRING INFORMATION

Warning

This appliance must be earthed

The wires in this mains lead are colored in accordance with the following codes BLUE ~ Neutral BROWN ~ Live GREEN & YELLOW ~ Earth

TECHNICAL SPECIFICATIONS

MODEL	MS2042D / MS2042DB	MS2042U
Power Supply	230 ~ 240 V / 50 Hz	230 / 240 V~ 50 Hz
Rated Power Consumption	1000 W	1000 W
Microwave Output power.	*700W	*700W
Frequency	2450 MHz	2450 MHz
Overall Dimensions(WXHXD)	455 X 260 X 316 (mm)	455 X 260 X 320 (mm)
Oven Cavity Dimensions(WXHXD)	317 X 204 X 294 (mm)	317 X 204 X 294 (mm)
NET WEIGHT	9.3 Kg	9.3 Kg
SHIPPING WEIGHT	11.2 Kg	10.9 Kg

*IEC 60705 RATING STANDARD

Specifications subject to change without prior notice.



FOR **CUSTOMER** SERVICE PLEASE CONTACT LG SERVICE ON 1300 LG CARE (1300 54 2273) AUSTRALIA, OR 0800 LG CARE (0800 54 2273) NEW ZEALAND.

> LG Electronics Australia 2 Wonderland Drive Eastern Creek NSW 2766 (ABN: 98 064 531 264)

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