

REFRIGERATOR MANUFACTURER  
***Turbo air***

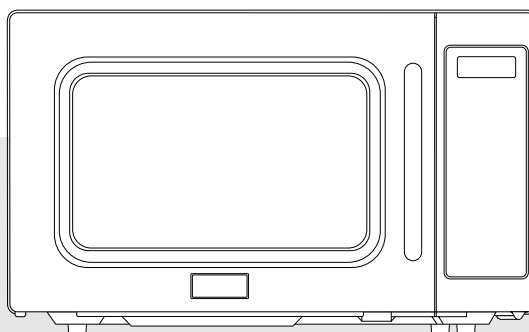
1250 Victoria St.  
CARSON, CA 90746  
TEL: (562) 981-0123  
FAX: (562) 981-0124  
Toll Free: 1-800-627-0032  
(U.S.A. In Canada)  
<http://www.turboairinc.com>

**TURBO air** REFRIGERATOR MANUFACTURER

# MICROWAVE OVEN

TMW-1100E

OPERATING  
INSTRUCTIONS



Before operating this oven, please read these instructions completely.

# PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

**(a) Do not attempt to operate this oven with the door open** since open-door operation can result in harmful exposure to microwave energy. It is important not to defeat or tamper with the safety interlocks.

**(b) Do not place any object** between the oven front face and the door or allow soil or cleaner residue to accumulate on sealing surfaces.

**(c) Do not operate the oven if it is damaged.** It is particularly important that the oven door close properly and that there is no damage to the: (1) door (bent), (2) hinges and latches (broken or loosened), (3) door seals and sealing surfaces.

(d) The oven should not be adjusted or repaired by anyone except properly qualified service personnel.

## TABLE OF CONTENTS

PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY .....	1
TABLE OF CONTENTS .....	1
IMPORTANT SAFETY INSTRUCTION .....	2
FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT .....	3
GROUNDING INSTRUCTIONS .....	3
INSTALLATION .....	4
SPECIFICATIONS .....	5
FEATURES DIAGRAM .....	6
OPERATION PROCEDURE .....	8
CONTROLS .....	9
TIME DEFROSTING .....	9
COOKING IN ONE STAGE .....	10
MEMORY FUNCTION .....	11
+30 SEC .....	12
CHECK FUNCTION .....	12
DOUBLE QUANTITY FUNCTION .....	12
CHILD SAFETY LOCK .....	13
POWER SAVE MODE .....	13
MUTE FUNCTION .....	13
TO STOP THE OVEN WHILE THE OVEN IS OPERATING .....	13
COOKING INSTRUCTION .....	14
COOKING UTENSILS .....	14
MICROWAVING PRINCIPLES .....	15
HOW MICROWAVES COOK FOOD .....	15
COOKING TECHNIQUES .....	16
DEFROSTING GUIDE .....	17
DEFROSTING CHART .....	18
COOKING CHART .....	19
REHEATING CHART .....	20
CARE OF YOUR MICROWAVE OVEN .....	22
USE YOUR MICROWAVE OVEN SAFELY .....	23
BEFORE YOU CALL FOR SERVICE .....	24
QUESTIONS AND ANSWERS .....	24
WARRANTY .....	26

# 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 the appliance.
2. Read and follow the specific "PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY" found on page 1.
3. This appliance must be grounded. Connect only to properly grounded outlet.  
See "GROUNDING INSTRUCTIONS" found on page 3.
4. Install or locate this appliance only in accordance with the provided installation instructions.
5. Some products such as whole eggs and sealed containers - for example, closed glass jars-are able to explode and should not be heated in this oven.
6. Use this appliance only for its intended use as described in this manual. Do not use corrosive chemicals or vapors in this appliance. This type of oven is specifically designed to heat, cook, or dry food. It is not designed for industrial or laboratory use.
7. As with any appliance, close supervision is necessary when used by children.
8. Do not operate this appliance if it has a damaged cord or plug, if it is not working properly, or if it has been damaged or dropped.
9. This appliance should be serviced only by qualified service personnel.  
Contact nearest authorized service facility for examination, repair or adjustment.
10. Do not cover or block any openings on the appliance.
11. Do not store this appliance outdoors. Do not use this product near water — for example, near a kitchen sink, in a wet basement, or near a swimming pool, or similar locations.
12. Do not immerse cord or plug in water.
13. Keep cord away from heated surfaces.
14. Do not let cord hang over edge of table or counter.
15. Either:
  - a) When cleaning surfaces of door and oven that comes together on closing the door, use only mild, non-abrasive soaps or detergents applied with a sponge or soft cloth , or
  - b) When separate cleaning instructions are provided, See door surface cleaning instructions on.
16. To reduce the risk of fire in the oven cavity:
  - a) Do not overcook food. Carefully attend appliance when paper, plastic, or other com-bustible materials are placed inside the oven to facilitate cooking.
  - b) Remove wire twist-ties from paper or plastic bags before placing bag in oven.
  - c) If materials inside the oven ignite, keep oven door closed, turn oven off, and disconnect the power cord, or shut off power at the fuse or circuit breaker panel.
  - d) Do not use the cavity for storage purposes. Do not leave paper products, cooking utensils, or food in the cavity when not in use.
17. Do not use this microwave oven to heat corrosive chemicals (for example, sulfides and chlorides). Vapours from such corrosive chemicals may interact with the contact and springs of the safety interlock switches thereby rendering them inoperable.
18. Keep the waveguide cover clean at all times. Wipe the oven interior with a soft damp cloth after each use. If you leave grease or fat anywhere in the cavity it may overheat, smoke or even catch fire when next using the oven.
19. Never heat oil or fat for deep frying as you cannot control the temperature and doing so may lead to overheating and fire.
20. Liquids, such as water, coffee, or tea are able to be overheated beyond the boiling point without appearing to be boiling due to surface tension of the liquid. Visible bubbling or boiling when the container is removed from the microwave oven is not always present. **THIS COULD RESULT IN VERY HOT LIQUIDS SUDDENLY BOILING OVER WHEN A SPOON OR OTHER UTENSIL IS INSERTED INTO THE LIQUID.** To reduce the risk of injury to persons:
  - ① Do not overheat the liquid.
  - ② Stir the liquid both before and halfway through heating it
  - ③ Do not use straight-sided containers with narrow necks.
  - ④ After heating, allow the container to stand in the microwave oven for a short time before removing the container.
  - ⑤ Use extreme care when inserting a spoon or other utensil into the container.

## SAVE THESE INSTRUCTIONS

# FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

**WARNING:**

This equipment generates and uses ISM frequency energy and if not installed and used properly, that is in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception.

It has been type-tested and found to comply with limits for an ISM Equipment pursuant to part 18 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the followings.

- Reorient the receiving antenna of radio or television.
- Relocate the Microwave oven with respect to the receiver.
- Move the microwave oven away from the receiver.
- Plug the microwave oven into a different outlet so that microwave oven and receiver are on different branch circuits.

THE MANUFACTURER is not responsible for any radio or TV interference caused by UNAUTHORIZED MODIFICATION to this microwave oven. It is the responsibility of the user to correct such interference.

## GROUNDING INSTRUCTIONS

This appliance must be grounded. In the event of an electrical short circuit, the grounding plug reduces the risk of electric shock by providing an escape wire for electric current. This appliance is equipped with a cord having a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.

**WARNING:**

Improper use of the grounding can result in a risk of electric shock.

Consult a qualified electrician or serviceman if the grounding instructions are not completely understood, or if doubt exists as to whether the appliance is properly grounded, and either :

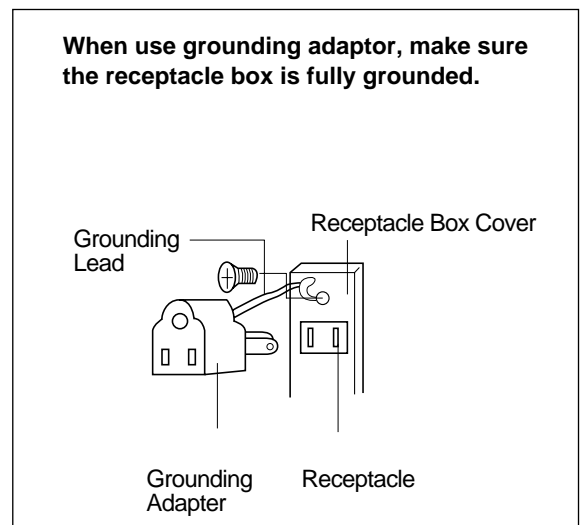
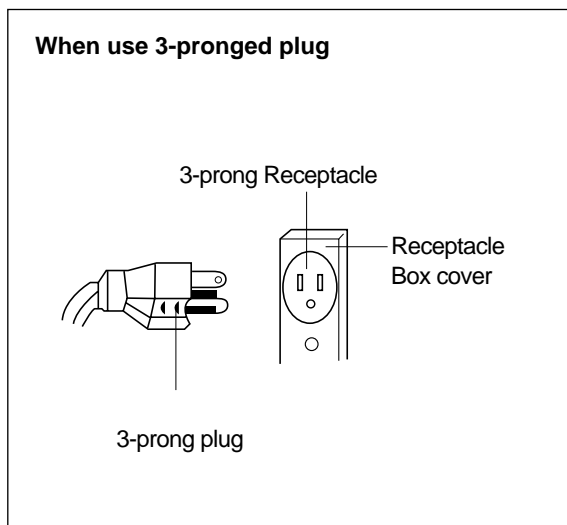
- (1) If it is necessary to use an extension cord, use only a 3-wire extension cord that has a 3-blade grounding plug, and a 3-slot receptacle that will accept the plug on the appliance. The marked rating of the extension cord shall be equal to or greater than the electrical rating of the appliance.  
or
- (2) Do not use an extension cord, if the power supply cord is too short, have a qualified electrician or serviceman install an outlet near the appliance.

**WARNING:**

Do not cut or remove the third (ground) prong from the power cord under any circumstances.

# INSTALLATION

- 1 Examine the oven after unpacking.** Check for damage such as a misaligned door, broken door or dent in the cavity.  
If any damage is visible, DO NOT INSTALL, and notify your dealer immediately.
- 2 Level, flat location.** Install the microwave oven on a level, flat surface.
- 3 Ventilation.** Do not block air vents. If they are blocked during operation, the oven may overheat and eventually cause a failure. For proper ventilation, allow 4 inches of space between oven top, sides, rear and adjacent surfaces.
- 4 Away from radio and TV sets.** Poor television reception and radio interference may result if the oven is located close to a TV, radio, antenna, feeder, etc. Place the oven as far from them as possible.
- 5 Away from heating appliances and water taps.** Keep the oven away from heat, steam or splashing liquids. These things can adversely affect oven wiring and contacts.
- 6 Power supply.** This microwave oven requires a power supply of approximately 14.5 Amperes, 120 Volts, 60Hz and a grounded outlet. A short power cord is provided to reduce the risk of the user becoming entangled in or tripping over a longer cord. Longer cord sets or extension cords are available and may be used if care is exercised in their use.  
If an extension cord is used, the marked electrical rating of the cord should be at least as great as the electrical rating of the oven.  
The extension cord must be a grounding-type 3-wire cord. The longer cord should be arranged so that it will not drape over the table top or counter where it can be pulled on by children or tripped over unintentionally.
- 7** The minimum height of free space necessary above the top surface of the oven is 4inch.

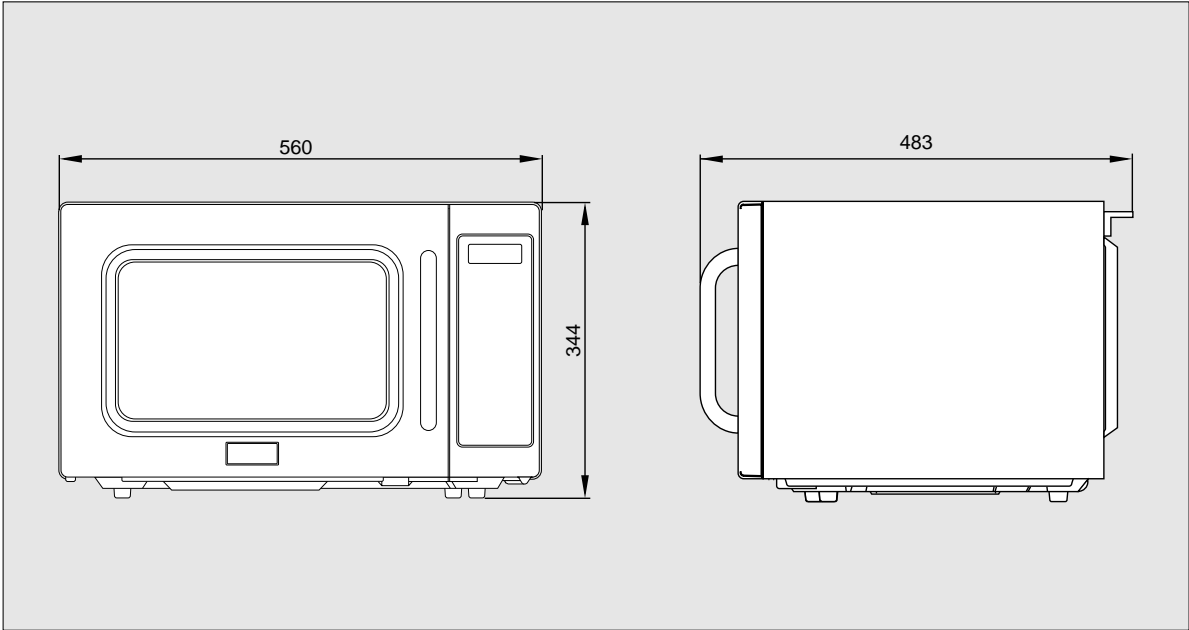


“THE CANADIAN ELECTRICAL CODE DOES NOT ALLOW THE USE OF THE GROUNDING ADAPTOR”

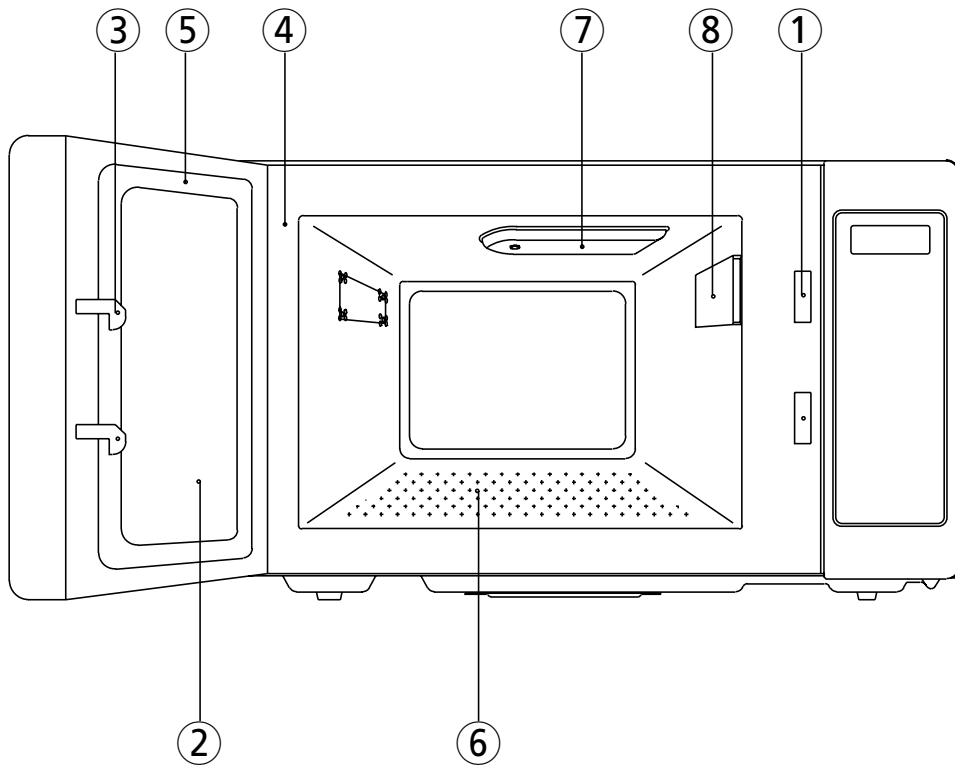
# SPECIFICATIONS

POWER SUPPLY		120V AC 60 Hz SINGLE PHASE WITH GROUNDING
MICROWAVE	POWER CONSUMPTION	1500W
	OUTPUT POWER	1100W
	FREQUENCY	2450 MHZ
OUTSIDE DIMENSIONS (WXHxD)		560X344X483 mm ( 22.0X13.5X19.0 in. )
CAVITY DIMENSIONS (WXHxD)		369X221X400 mm ( 14.5X8.7X15.7 in. )
NET WEIGHT		APPROX. 16.5 Kg ( 36.4 lbs. )
TIMER		59 min. 99 sec.
POWER SELECTIONS		4 LEVELS

\* Specifications are subject to change without notice.



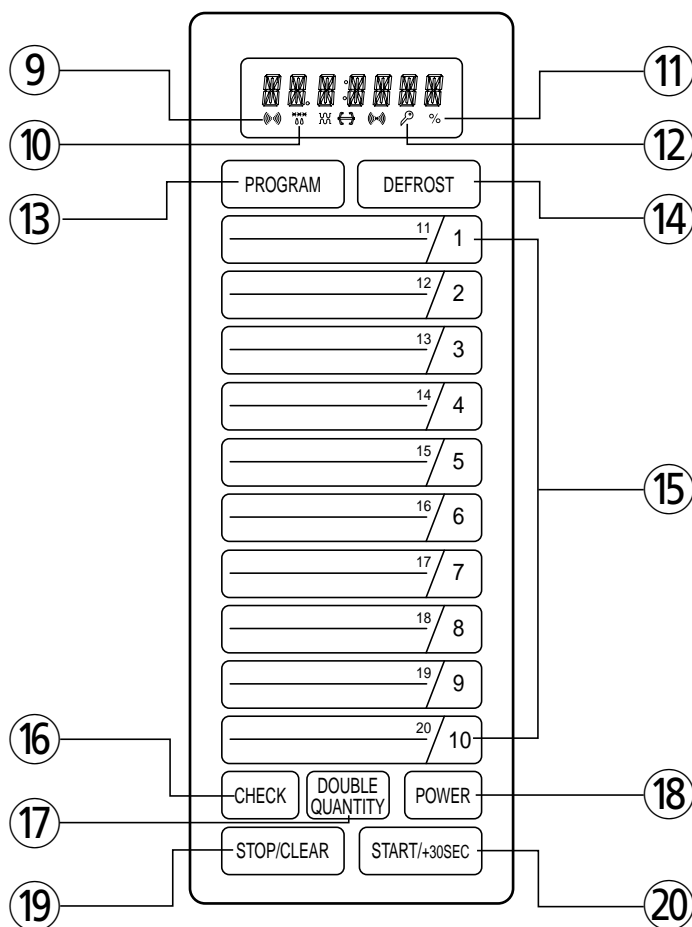
# FEATURES DIAGRAM



- ① **Safety Interlock System.**
- ② **Door Viewing Screen** - Allows viewing of food. The screen is designed so that light can pass through, but not the microwave.
- ③ **Door Hook** - When door is closed, it will automatically shut off. If the door is opened while the oven is operating, magnetron will immediately stop operating.
- ④ **Oven Cavity.**
- ⑤ **Door Seal** - Door seal maintains the microwave energy within the oven cavity and prevents microwave leakage.
- ⑥ **Plate Tray** - Made of special heat resistant glass. Food in a proper receptacle is placed on this tray for cooking.
- ⑦ **Stirrer Cover** - This is located on the ceiling with the stirrer fan.
- ⑧ **Inlet cover** - Protect the air hole from splashes of cooking foods.



# FEATURES DIAGRAM (continued)



⑨ MICROWAVE indicator, showing microwaving in progress.

⑩ DEFROST indicator, showing defrosting in progress.

⑪ PERCENTAGE of power indicator.

⑫ CHILD LOCK indicator.

⑬ PROGRAM - Used to save cooking data.

⑭ DEFROST - Used to defrost foods for time.

⑮ TIME SET PAD - Used to set the cooking time.

⑯ CHECK - Used to check cooking data.

⑰ DOUBLE QUANTITY - Used to extend programmed cooking time.

⑱ POWER - Used to set power level.

⑲ STOP/CLEAR - Used to stop the oven operation or to delete the cooking data.

⑳ START /+30 SEC - Used to start the oven and also used to set a reheat time.

# OPERATION PROCEDURE

This section includes useful information about oven operation.

1. Plug power supply cord into a standard 3- pronged 15 Amp, 120V AC 60Hz power outlet.
2. After placing the food in a suitable container, open the oven door and put it on the glass tray.  
The glass tray and roller guide must always be in place during cooking.
3. Shut the door. Make sure that it is firmly closed.
- 1 The oven light is on when the microwave oven is operating or the door is opened.
- 2 The oven door can be opened at any time during operation by opening the door. The oven will automatically shut off.
- 3 Each time a pad is touched, a BEEP will sound to acknowledge the touch.
- 4 The oven automatically cooks on full power unless set to a lower power level.
- 5 The display will show ":0" when the oven is plugged in.
- 6 When the STOP/CLEAR pad is touched during the oven operation, the oven stops cooking and all information retained.  
To erase all information, touch the STOP/CLEAR pad once more. If the oven door is opened during the oven operation, all information is retained.
- 7 If the START pad is touched and the oven does not operate, check the area between the door and door seal for obstructions and make sure the door is closed securely.  
The oven will not start cooking until the door is completely closed or the program has been reset.

Make sure the oven is properly installed and plugged into the electrical outlet.

## WATTAGE OUTPUT CHART

- The power-level is set by touching the POWER pad. The chart shows the display, the power level and the percentage of power.

Touch POWER pad	Power Level (Display)	Approximate Percentage of Power
once	100	100%
twice	80	80%
3 times	60	60%
4 times	40	40%

# CONTROLS

## TIME DEFROSTING

---

When DEFROST is selected, the automatic cycle divides the defrosting time into periods of alternating defrost and stand times by cycling on and off.

---

DEFROST	1. Touch DEFROST pad.	The DEFROST indicator lights and " : 0" is displayed.
	2. Touch number pads for the desired defrosting time.	The display will show the numbers you pressed in the order you touched.
	3. Touch START pad.	<b>NOTE:</b> Your oven can be programmed for 59 minutes 99 seconds.(59:99)

---

When you touch START pad, the DEFROST indicator lights to show the oven is in the DEFROST mode. The display counts down the time to show you how much defrosting time is left in the DEFROST mode. The oven beeps during the defrosting cycle to signal that the food needs to be turned or rearranged. When the defrosting time ends, you will hear 3 beeps.

---

## COOKING IN ONE STAGE

---

POWER

x3

1. Touch POWER pad.  
(Select desired power level.)
2. Touch the number pads for the cooking time.

The MICROWAVE and % indicators light.  
The display will show what you touched.

This example shows power level 60.  
The display will show the numbers you pressed in the order you touched.

**NOTE:** Your oven can be programmed for 59 minutes 99 seconds. (59:99) but, in case of full power(100%), maximum time is 20 minutes 00 seconds. (20:00)

3. Touch START pad.

---

When you touch START pad, the MICROWAVE indicator lights to show the oven is cooking. The display counts down the time to show how much cooking time is left. When the cooking time ends, you will hear 3 beeps.

---

**NOTE:** Using lower power levels increases the cooking time which is recommended for foods such as cheese, milk and slow cooking of meats.

**NOTE:** The cooling fan may operate to prevent the oven being overheated.

## MEMORY FUNCTION

This microwave oven has 20 programmable pads (1~20).

PROGRAM		
	1. Touch PROGRAM pad.	The display will show "PROGRAM".
	2. Touch the number pads. ex)5	The display will show "PROG-05".
	3. Touch POWER pad. (Select desired power level.)	The MICROWAVE and % indicators light.
	4. Touch the NUMBER pads for cooking time.	The display will show what you touched.
	5. Touch START pad to save cooking time and power level.	The display will show "STAGE-2" and long beep sounds.
	6. Touch STOP/CLEAR pad.	When you touch STOP/CLEAR pad, MEMORY function ends.

**NOTE 1:** If you want cooking in two or three stage, repeat step 3~5 once or twice, and display will show "STAGE-2" or "STAGE-3".  
After touching START pad to save cooking time and power level in 3-stage, you can see " - END - " on the display.

**NOTE 2:** In case of original set, number 1~10 is programmed but cooking data is changeable later.  
And number 11~20 is not programmed, so you will save cooking data.

After programming is finished, just touch the NUMBER pad of the memory number you want to select. Then the oven will automatically start heating according to the pre-programmed cooking time and power level.

### \* Preprogrammed Cooking Times and Power Level

Pad	Cooking Time	Power Level
1	20 sec.	100 %
2	40 sec.	100 %
3	1 min.	100 %
4	1:30 min.	100 %
5	2 min.	100 %
6	3 min.	100 %
7	4 min.	100 %
8	6 min.	100 %
9	8 min.	100 %
10	10 min.	100 %

## +30 SEC

---

+30 SEC allows you to reheat for 30 seconds at 100% (full power) by simply touching the +30 SEC pad.

By repeatedly touching the +30 SEC pad, you can also extend reheating time to 5 minutes by 30 second increments.

---

+30 SEC	1. Touch +30 SEC pad.	When you touch +30 SEC, ":30" is displayed.
		The oven will start immediately. It will add 30 seconds to the time counting down each time the pad is touched.

---

## CHECK FUNCTION

---

This feature allows you to check the programmed cooking time and power level.

---

CHECK	1. Touch CHECK pad.	The display will show "CHECK".
	2. Touch the NUMBER pads which you want confirmation. ex)5	The display will show "PROG-05".

---

The display will show cooking time, power level each stage.  
If you want to end, touch STOP/CLEAR pad.

---

## DOUBLE QUANTITY FUNCTION

---

This feature allows you to extend programmed cooking time twice temporarily.

But, the extended cooking time can't exceed maximum cooking time.

Maximum cooking time of this oven is 59 minutes 99 seconds except full power.

In case of full power (100%), maximum cooking time is 20 minutes 00 seconds.

---

DOUBLE QUANTITY	1. Touch DOUBLE QUANTITY pad.	The display will show "DOUBLE".
	2. Touch the NUMBER pads which is programmed. ex)5	The display will show "PROG-05". After 1.5 seconds, the oven automatically start cooking.

## CHILD SAFETY LOCK

---

The safety lock prevents unwanted oven operation such as by small children.

To set, press and hold STOP/CLEAR for 3 seconds, LOCK indicator lights.

To cancel, press and hold STOP/CLEAR for 3 seconds, LOCK indicator goes off.

---

## POWER SAVE MODE

---

This function is used for saving energy.

To set, press and hold CHECK pad for 3 seconds. The oven will beep and nothing appears in the display. Now the oven is in power save mode.

To operate the oven in power save mode, press any pad. Then “ : 0” will shown and the operation of all function key will be same as in normal mode.

But, if there is no operation within 10 seconds in clear mode or while manipulating the key, all the contents of display will disappear.

To cancel, after press any pad, press and hold CHECK pad for 3 seconds.

Then the oven is again available for normal use.

---

## MUTE FUNCTION

---

To set, press and hold DOUBLE QUANTITY pad for 3 seconds.

The display will show “MUTE” for 1 second.

Then you will not hear beeps, when you press any pad.

To cancel, press and hold DOUBLE QUANTITY pad for 3 seconds.

---

## TO STOP THE OVEN WHILE THE OVEN IS OPERATING

---

1. Press STOP/CLEAR pad.

- You can restart the oven by touching START pad.
- Touch STOP/CLEAR once more to erase all instructions.
- You must enter in new instructions.

2. Open the door.

- You can restart the oven by closing the door and touching START.

**NOTE:** Oven stops operating when door is opened.

# COOKING INSTRUCTIONS

Utensils should be checked to ensure that they are suitable for use in microwave ovens.

## UTENSILS TEST

Place the utensil in question next to a glass measure filled with water, in the microwave oven. Microwave at high power for 1-2 minutes. If the water heats up, but the utensil remains cool, the utensil is microwave-safe. However if the utensil becomes warm, microwaves are being absorbed by the utensil and it should not be 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. Read through the following checklist.

## COOKING UTENSILS

### *Recommended Use*

- **Glass and glass-ceramic bowls and Dishes** - Use for heating or cooking.
- **Microwave browning dish** - Use to brown the exterior of small items such as steaks, chops, or pancakes. Follow the directions provided with you browning dish.
- **Microwaveable plastic wrap** - Use to retain steam. Leave a small opening for some steam to escape and avoid placing it directly on the food.
- **Wax paper** - Use as a cover to prevent spattering.
- **Paper towels, and napkins** - Use for short term heating and covering; they absorb excess moisture and prevent spattering. Do not use recycled paper towels, which may contain metal and can catch fire.
- **Thermometers** - Use only those labeled "Microwave Safe" and follow all directions. Check the food in several places. Conventional thermometers may be used once the food has been removed from the oven.
- **Microwave cling film, microwave roasting bags** - Microwave cling film and bags must be vented for steam to escape, pierce in 4~5 places. Do not use plastic or metal ties as they may melt or catch fire due to electrical 'arcing'.

### *Limited Use*

- **Aluminum foil** - Do not use foil. Using foil can damage your oven.
- **Ceramic, porcelain, and stoneware** - Use these if they are labeled "Microwave Safe." If they are not labeled, test them to make sure they can be used safely. Never use dishes with metallic trim.
- **Plastic** - Use only if labeled "Microwave Safe." Other plastics can melt.
- **Thin plastic, paper, straw and wooden containers** - Always attend the oven closely. Look at the oven from time to time when cooking or reheating food in disposable containers of plastic, paper or other combustible material. Only use for warming food. Pay special attention as over-heating may cause a fire in your oven.

### *Not Recommended*

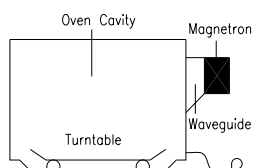
- **Glass jars and bottles** - Regular glass is too thin to be used in a microwave, and can shatter.
- **Paper bags** - These are a fire hazard, except for popcorn bags that are designed for microwave use.
- **Styrofoam plates and cups** - These can melt and leave an unhealthy residue on food.
- **Plastic storage and food containers** - Containers such as margarine tubs can melt in the microwave.
- **Metal utensils** - These can damage your oven. Remove all metal before cooking.



# MICROWAVING PRINCIPLES

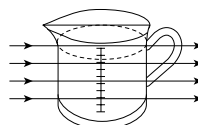
Microwave energy has been used in this country to cook and reheat food since early experiments with RADAR in World War II. Microwaves are present in the atmosphere all the time, both naturally and manmade sources. Manmade sources include radar, radio, television, telecommunication links and car

## HOW MICROWAVES COOK FOOD



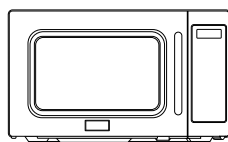
In a microwave oven, electricity is converted into microwave by the **MAGNETRON**.

### ► TRANSMISSION



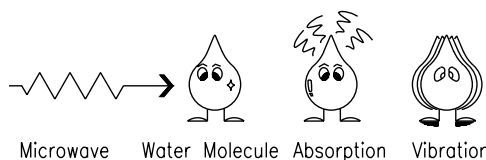
Then they pass through the cooking containers to be absorbed by the water molecules in the food, all foods contain water to a more or lesser extent.

### ► REFLECTION



The microwaves bounce off the metal walls and the metal door screen.

### ► ABSORPTION



The microwaves cause the water molecules to vibrate which causes **FRICTION**, i.e. **HEAT**. This heat then cooks the food. Microwaves are also attracted to fat and sugar particles, and foods high in these will cook more quickly. Microwaves can only penetrate to a depth of 1½ - 2 inches (4-5cm) and as heat spreads through the food by conduction, just as in a traditional oven, the food cooks from the outside inwards.

WEIGHT MEASURES	
15 g	1/2 oz.
25 g	1 oz.
50 g	2 oz.
100 g	4 oz.
175 g	6 oz.
225 g	8 oz.
450 g	1 lb.

VOLUME MEASURES	
30 ml	1 fl.oz.
100 ml	3 fl.oz.
150 ml	5 fl.oz. (1/4 pt)
300 ml	10 fl.oz. (1/2 pt)
600 ml	20 fl.oz. (1pt)

SPOON MEASURES	
1.25 ml	1/4 tsp
2.5 ml	1/2 tsp
5 ml	1 tsp
15 ml	1 tbsp

FLUID MEASUREMENTS		
1 Cup	= 8 fl.oz.	= 240 ml
1 Pint	= 16 fl.oz. (UK 20 fl.oz.)	= 480 ml (UK 560 ml)
1 Quart	= 32 fl.oz. (UK 40 fl.oz.)	= 960 ml (UK 1120 ml)
1 Gallon	= 128 fl.oz. (UK 160 fl.oz.)	= 3840 ml (UK 4500 ml)

# COOKING TECHNIQUES

## STANDING TIME

Dense foods e.g. meat, jacket potatoes and cakes, require standing time (inside or outside of the oven) after cooking, to allow heat to finish conducting to cook the center completely. Wrap meat joints and jacket potatoes in aluminium foil while standing. Meat joints need approx. 10-15 minutes, jacket potatoes 5 minutes. Other foods such as plated meal, vegetables, fish etc require 2-5 minutes standing. After defrosting food, standing time should also be allowed. If food is not cooked after standing time, return to the oven and cook for additional time.

## MOISTURE CONTENT

Many fresh foods e.g. vegetables and fruit, vary in their moisture content throughout the season, particularly jacket potatoes. For this reason cooking times may have to be adjusted. Dry ingredients e.g. rice, pasta, can dry out during storage so cooking times may differ.

## DENSITY

Porous airy foods heat more quickly than dense heavy foods.

## CLING FILM

Cling film helps keep the food moist and the trapped steam assists in speeding up cooking times. Pierce before cooking to allow excess steam to escape. Always take care when removing cling film from a dish as the build-up of steam will be very hot.

## SHAPE

Even shapes cook evenly. Food cooks better by microwave when in a round container rather than square.

## SPACING

Foods cook more quickly and evenly if spaced apart. NEVER pile foods on top of each other.

## STARTING TEMPERATURE

The colder the food, the longer it takes to heat up. Food from a fridge takes longer to reheat than food at room temperature.

## LIQUIDS

All liquids must be stirred before and during heating. Water especially must be stirred before and during heating, to avoid eruption. Do not heat liquids that have previously been boiled. DO NOT OVERHEAT.

## TURNING & STIRRING

Some foods require stirring during cooking. Meat and poultry should be turned after half the cooking time.

## ARRANGING

Individual foods e.g. chicken portions or chops, should be placed on a dish so that the thicker parts are towards the outside.

## QUANTITY

Small quantities cook faster than large quantities, also small meals will reheat more quickly than large portions.

## PIERCING

The skin or membrane on some foods will cause steam to build up during cooking. These foods must be pierced or a strip of skin should be peeled off before cooking to allow the steam to escape. Eggs, potatoes, apples, sausages etc, will all need to be pierced before cooking. DO NOT ATTEMPT TO BOIL EGGS IN THEIR SHELLS.

## COVERING

Cover foods with microwave cling film or a lid. Cover fish, vegetables, casseroles, soups. Do not cover cakes, sauces, jacket potatoes or pastry items.

# DEFROSTING GUIDE

## GENERAL INFORMATION

- ⇒ Put the food on a microwave rack (roasts, bone-in pieces) or in a microwave casserole (small pieces such as cubes or strips) or weigh at home on a kitchen scale. Round number to the nearest tenth of a pound and choose that number with each item pads.
- ⇒ The shape of food items, especially larger ones, will vary affect the way defrost. Always check the status after the standing time. Fish, seafood and poultry should still be somewhat icy in the center the held under cold running water to finish defrosting. If more time is needed, use DEFROST by time to add time in small increments.
- ⇒ Halfway through the defrosting process, a series of beeps will indicate that it is time to change the position of the item being defrosted. The includes turning over or rotating the item, separating defrosted pieces or sections, or shielding.
- ⇒ Shielding means to use a 2-inch strip of aluminum foil to protect thinner or unevenly shaped part from beginning to cook. Microwave energy will not penetrate the foil. Some rules apply to the use of foil:  
Do not let the foil pieces touch each other or the sides of the microwave oven.  
Be sure that all ends are touched under and lie flat to the food.  
Remember to adjust foil when a item is turned over and cover with wax paper.
- ⇒ To prepare food for freezer storage(and later defrosting), wrap tightly in moisture proof packaging. If using freezer plastic bags, be sure to let all the air out to prevent freezer bump on the food. Package so that food is as evenly shaped as possible ease in defrosting

# DEFROSTING CHART

Item and Weight	Defrosting Time	Standing Time	Special Techniques
<b>BEEF</b> Mined beef 454g (1 lb.)	5-7 min.	5-7 min.	Break apart and remove thawed portions with fork.
Stew Meat 681 (1 <sup>1</sup> / <sub>2</sub> lbs.)	6-8 min.	5-7 min.	Separate and rearrange once.
Loin Roast 907g (2 lbs.)	10-12 min.	5-7 min.	Turn over after half the time. Shield as needed.
Patties 4 (113g (4 oz.))	2-4 min.	5-7 min.	Turn over after half the time.
<b>PORK</b> Loin Roast 907g (2 lbs.)	8-10 min.	7-10 min.	Turn over after half the time. Shield as needed.
Spareibs 454g (1 lb.)	3-5 min.	5-7 min.	Separate and rearrange once.
Chops 4 (142g (5 oz.))	3-5 min.	5-7 min.	Separate and turn over once.
Minced 454g (1 lb.)	4-6 min.	5-7 min.	Break apart and remove thawed portions with fork.
<b>POULTRY</b> Whole Chicken 1134g (2 <sup>1</sup> / <sub>2</sub> lbs.)	10-14 min.	10-15 min.	Breat side down. Turn over after half the time. Shield as needed.
Chicken Breasts 454g (1 lb.)	5-7 min.	5-7 min.	Separate and rearrange once.
Fryer Chicken (cut up) 907g (2 lbs.)	7-9 min.	5-7 min.	Separate and rearrange once.
Chicken Thighs 681g (1 <sup>1</sup> / <sub>2</sub> lbs.)	6-10 min.	5-7 min.	Separate and rearrange once.
<b>FISH &amp; SEAFOOD</b> Whole Fish 454g (1 lb.)	2-3 min.	5-7 min.	Turn over after half the time. Shield as needed.
Fish Fillets 681g (1 <sup>1</sup> / <sub>2</sub> lb.)	3-4 min.	5-7 min.	Separate and turn over once.
Shrimp 227g (1/2 lb.)	1-2 min.	5-7 min.	Separate and rearrange once.

\* The times are approximate because freezer temperatures vary.

# COOKING CHART

Check time per 1lb. in chart below and multiply by the weight of the item.

MEAT		
ITEM	POWER LEVEL	COOKING TIMER PER POUND
<b>Beef</b>		
Standing/rolled Rib - Rare	P-80	5-7 min.
- Medium	P-80	6-8 min.
- well done	P-80	7-9 min.
Ground Beef(to brown for casserole)	P-HI	4-6 min.
Hamburgers, Fresh or defrosted (4 oz. Each)		
2 patties	P-HI	1-2 min.
4 patties	P-HI	2-3 min.
<b>Pork</b>		
Loin, Leg	P-80	8-10 min.
Bacon		
4 slices	P-HI	1-2 min.
6 slices	P-HI	2-3 min.

**NOTE:** The above times should be regarded only as a guide. Allow for difference in individual tastes and preferences. The times may vary due to the shape, cut, and composition of the meat.

POULTRY		
ITEM	POWER LEVEL	COOKING TIMER PER POUND
<b>Chicken</b>		
Whole	P-HI	5-7 min.
Breast(boned)	P-80	3-5 min.
portions	P-80	4-6 min.
<b>Turkey</b>		
Whole	P-HI	7-10 min.

**NOTE:** The above times should be regarded only as a guide. Allow for difference in individual tastes and preferences. The times may vary due to the shape and composition of the food.

FRESH FISH				
ITEM	POWER LEVEL	COOKING TIME PER POUND	METHOD	STANDING TIME
Fish Fillets	P-HI	2-3 min.	Add 15-30 ml(1-2 Tbsp)	2-3 min.
Whole Mackerel, Cleaned and Prepared	P-HI	2-3 min.	-	3-4 min.
Whole Trout, Cleaned and Prepared	P-HI	3-5 min.	-	3-4 min.
Salmon Steaks	P-HI	3-5 min.	Add 15~30 ml(1~2 Tbsp)	3-4 min.

VEGETABLE					
ITEM	POWER LEVEL	PREPARATION	QUANTITY	COOKING TIME	STANDING TIME
Artichokes, fresh	P-HI	Whole	4(8 oz. each)	5-7 min.	5 min.
Artichokes, frozen	P-HI	Hearts	250g(9 oz. pkg)	6-8 min.	5 min.

<b>VEGETABLE</b>					
ITEM	POWER LEVEL	PREPARATION	QUANTITY	COOKING TIME	STANDING TIME
Asparagus, fresh	P-HI	1 1/2-in.pieces	500g(1 lb.)	3-5 min.	3 min.
Asparagus, frozen	P-HI	Whole spears	280g(10 oz. pkg)	5-7 min.	3 min.
Broccoli, fresh	P-HI	Spears	500g(1 lb.)	3-5 min.	-
Broccoli, frozen	P-HI	Whole or cut	280g(10 oz. pkg)	5-7 min.	3 min.
Brussels sprouts, fresh	P-HI	Whole	280g(10 oz. tub)	3-5 min.	-
Brussels sprouts, frozen	P-HI	Whole	280g(10 oz. pkg)	5-7 min.	3 min.
Carrots, fresh	P-HI	1/2-in.slices	500g(1 lb.)	4-6 min.	3 min.
Carrots, frozen	P-HI	Sliced	280g(10 oz. pkg)	3-4 min.	3 min.
Cauliflower, frozen	P-HI	florets	280g(10 oz. pkg)	3-4 min.	3 min.
Celery, fresh	P-HI	1/2-in.slices	500g(1 lb.)	3-5 min.	5 min.
Corn, fresh	P-HI	on cob, husked	4 ears	5-7 min.	5 min.
Corn, frozen	P-HI	on cob, husked	4 ears	5-7 min.	5 min.
	P-HI	whole kernel	280g(10 oz. pkg)	4-6 min.	3 min.
Eggplant, fresh	P-HI	cubed	500g(1 lb.)	3-5 min.	3 min.
	P-HI	whole, pierced	500-700g(1-1 1/2 lb.)	4-6 min.	5 min.
Leeks fresh	P-HI	whole, ends	500g(1 lb.)	4-6 min.	5 min.
Lima beans, frozen	P-HI	whole	280g(10 oz. pkg)	4-6 min.	3 min.
Mixed vegetables frozen	P-HI	-	280g(10 oz. pkg)	4-6 min.	3 min.
Mushrooms, fresh	P-HI	sliced	500g(1 lb.)	2-3 min.	3 min.
Okra, frozen	P-HI	sliced	280g(10 oz. pkg)	4-6 min.	5 min.
Onions, fresh	P-HI	whole, peeled	8-10 small	5-7 min.	5 min.
Pea pods(snow peas), frozen	P-HI	whole	170g(6 oz. pkg)	2-3 min.	3 min.
Peas and carrots	P-HI	-	280g(10 oz. pkg)	2-3 min.	3 min.
Parsnips, fresh	P-HI	cubed	500g(1 lb.)	4-6 min.	5 min.
Potatoes, white or sweet, fresh	P-HI	whole	4(6 oz. each)	15-17 min.	3 min.
	P-HI	whole	8(6 oz. each)	18-20 min.	5 min.
Squash, summer, fresh	P-HI	1/2-in.slices	500g(1 lb.)	3-5 min.	3 min.
Squash, summer, frozen	P-HI	sliced	280g(10 oz. pkg)	3-5 min.	3 min.
Squash, winter, fresh	P-HI	whole, pierced	700g(1 1/2lbs.)	6-8 min.	5 min.
Squash, winter, frozen	P-HI	whipped	340g(12 oz. pkg)	4-6 min.	3 min.
Succotash, frozen	P-HI	-	280g(10 oz. pkg)	3-5 min.	3 min.
Turnips	P-HI	cubed	4 cups	4-6 min.	3 min.

## REHEATING CHART

ITEM	QUANTITY	POWER LEVEL	COOKING TIME	SPECIAL INSTRUCTION
Appetizers (bite size)	2 servings	P-HI	1-2 min.	Heat 12 at time on paper towel lined paper plate or microwave oven roasting rack
Breakfast entrée	110~140g(4-5 oz.)	P-HI	1-2 min.	If containers is 3/4-inch deep, remove foil cover and replace foil tray in original box. For containers more then 3/4-inch deep, remove food to similar size glass container; heat, covered. If no top crust stir occasionally.
Entrée	250g(8-9 oz.)	P-HI	6-8 min.	
Regular TV-style dinner	600g(21 oz.)	P-HI	10-12 min.	
Hearty TV-style dinner	300g(11 oz.)	P-HI	4-6 min.	
	480g(17 oz.)	P-HI	5-8 min.	

ITEM	QUANTITY	POWER LEVEL	COOKING TIME	SPECIAL INSTRUCTION
Fried chicken	2 pieces	P-HI	1-2 min.	Arrange, on paper tower lined paper plate, covered with paper tower.
	4 pieces	P-HI	2-4 min.	
	6 pieces	P-HI	3-5 min.	
Fried fresh fillets	2 fillets	P-HI	1-2 min.	
	4 fillets	P-HI	2-4 min.	
Pizzas (sliced)	1	P-HI	1-2 min.	Arrange on microwave oven roasting rack.
	2	P-HI	2-3 min.	
	4	P-HI	3-6 min.	
Pouch dinners	140-160g(5-6 oz.)	P-HI	2-3 min.	Pierce pouch. Set on plate. Turn over halfway through cooking.
	280-300g(10-11 oz.)	P-HI	5-7 min.	
Bagels	2	P-60	1-2 min.	Each individually wrapped in paper toweling (for 1-2) or arrange on paper plate, cover with paper toweling.
	4	P-60	2-4 min.	
Danish	1	P-60	1/2-1 min.	
	2	P-60	1-2 min.	
	4(6 oz. pkg)	P-60	2-3 min.	
	6(13 oz. pkg)	P-60	3-4 min.	
Dinner rolls	6	P-60	1-2 min.	
Hard rolls	1(1-1 1/4 oz.)	P-60	1/2-1 min.	
	2	P-60	1-2 min.	
	4	P-60	2-3 min.	
Frozen Juice	170g(6 oz.)	P-HI	1-2 min.	Remove lid. If container is foil lined transfer to a pitcher or open carton. Let stand after defrosting.
Concentrates	340g(12 oz.)	P-HI	2-3 min.	
Non-Dairy creamer	450g(16 oz.)	P-60	6-8 min.	
Pancake	280g(10 oz.)	P-60	3-5 min.	
Frozen vegetables	160g(6 oz.)	P-60	5-7 min.	Pierce box, set on plate. If box is foil wrapped, remove foil. If vegetables are in pouch, pierce pouch. Let stand 5 min.
	280g(10 oz.)	P-60	6-10 min.	
Cheese cake	500g(17 oz.)	P-60	3-4 min.	Remove from original container. Arrange on a serving plate. Let stand 5 minutes after cooking(to defrost). Add an additional 1-2 minutes to serve warm.
Brownies	360g(13 oz.)	P-60	1-3 min.	
Pound cake	300g(10 <sup>3</sup> / <sub>4</sub> oz.)	P-60	1-2 min.	
Coffee cake	300-340g(11-12 oz.)	P-60	2-3 min.	

# CARE OF YOUR MICROWAVE OVEN

- 1 Turn the oven off before cleaning.
- 2 Keep the inside of the oven clean. When food spatters or spilled liquids adhere to **oven walls, plate tray, stirrer cover and inlet cover** wipe with a damp cloth. Mild detergent may be used if the oven gets very dirty. The use of harsh detergent or abrasives is not recommended.
- 3 The outside oven surface should be cleaned with soap and water, rinsed and dried with a soft cloth. To prevent damage to the operating parts inside the oven, water should not be allowed to seep into the ventilation openings.
- 4 If the Control Panel becomes wet, clean with a soft, dry cloth. Do not use harsh detergents or abrasives on Control Panel.
- 5 If steam accumulates inside or around the outside of the oven door, wipe with a soft cloth. This may occur when the microwave oven is operated under high humidity conditions and in no way indicates malfunction of the unit.

## IMPORTANT CAUTIONS

1. Do not operate after removed food.
2. Do not operate the oven without **stirrer cover** in place.
3. Do not remove the **stirrer cover** and **plate tray**.



# USE YOUR MICROWAVE OVEN SAFELY

## ***General Use***

Do not attempt to defeat or tamper with safety interlocks.

Do not place any object between the oven front frame and the door or allow residue to build up on sealing surfaces. Wipe with a mild detergent, rinse and dry. Never use abrasive powders or pads.

Do not subject the oven door to strain or weight such as a child hanging on an open door.

This could cause the oven to fall forward resulting in injury to you and damage to the oven.

Do not operate the oven if door seals or sealing surfaces are damaged; or if door is bent; or if hinges are loose or broken.

Do not operate the oven empty. This will damage the oven.

Do not attempt to dry clothes, newspapers or other materials in the oven. They may catch on fire.

Do not use recycled paper products as they may contain impurities which may cause sparks or fires.

Do not hit or strike the control panel with hard objects. This can damage the oven.

## ***Food***

Never use your microwave oven for home canning. The oven is not designed for proper home canning. Improperly canned food may spoil and be dangerous to consume.

Always use the minimum recipe cooking time. It is better to undercook rather than overcook foods.

Undercooked foods can be returned to the oven for more cooking. If food is overcooked, nothing can be done.

Heat small quantities of food or foods with low moisture carefully. These can quickly dry out, burn or catch on fire.

Do not heat eggs in the shell. Pressure may build up and eggs can explode.

Potatoes, apples, egg yolks and sausages are examples of food with non-porous skins.

These must be pierced before cooking to prevent bursting.

Do not attempt to deep fat fry in your microwave oven.

Always stir liquids before heating. Heated liquids can erupt, if not mixed with air.

Do not leave the oven unattended while popping corn.

Do not pop corn in a paper bag unless it is the commercially prepared Microwave Popcorn product. The kernels can overheat and ignite a brown paper bag.

Do not put packaged Microwave Popcorn bags directly on the oven tray. Place the package on a microwave safe glass or ceramic plate to avoid overheating and cracking the oven tray.

Do not exceed the Microwave Popcorn manufacturers' suggested popping time. Longer popping does not yield more popcorn but it can result in scorch, burn or fire. Remember, the Popcorn bag and tray can be too hot to handle. Remove with caution and use pot holders.

## ***ARCING***

***If you see arcing, open the door and correct the problem.***

Arcing is the microwave term for sparks in the oven.

Arcing is caused by:

- Metal or foil touching the side of the oven.
- Foil not molded to food (upturned edges act like antennas).
- Metal, such as twist-ties, poultry pins, or gold rimmed dishes, in the microwave.
- Recycled paper towels containing small metal pieces being used in the microwave.

# BEFORE YOU CALL FOR SERVICE

Refer to following checklist, you may prevent an unnecessary service call.

\* The oven doesn't work;

1. Check that the power cord is securely plugged in.
2. Check that the door firmly closed.
3. Check that the cooking time is set.
4. Check for a blown circuit fuse or tripped main circuit breaker in your house.

\* Sparking in the cavity;

1. Check that utensils are metal containers or dishes with metal trim.
2. Check that metal skewers touch the interior walls.

If there is still a problem, contact the service station.

A list of these stations is included in the oven.

**DO NOT ATTEMPT TO SERVICE THE OVEN YOURSELF!**

## QUESTIONS AND ANSWERS

\* **Q : I accidentally ran my microwave oven without any food in it. Is it damaged?**

A : Running the oven empty for a short time will not damage the oven.  
However, it is not recommended.

\* **Q : Can the oven be used with the glass tray or roller guide removed?**

A : No. Both the glass tray and roller guide must always be used in the oven before cooking.

\* **Q : Can I open the door when the oven is operating?**

A : The door can be opened anytime during the cooking operation. Then microwave energy will be instantly switched off and the time setting will maintain until the door is closed and START is touched.

\* **Q : Why do I have moisture in my microwave oven after cooking?**

A : The moisture on the side of your microwave oven is normal. It is caused by steam form cooking food heating the cool oven surface.

\* **Q : Dose microwave energy pass through the viewing screen in the door?**

A : No. The metal screen bounces back the energy to the oven cavity. The holes are made to allow light to pass through. They do not let microwave energy pass through.

\* **Q : Why do eggs sometimes pop?**

A : When baking or poaching eggs, the yolk may pop due to steam build-up inside the yolk membrane. To prevent this, simply pierce the yolk with a toothpick before cooking. Never cook eggs without

# QUESTIONS AND ANSWERS (continued)

**\* Q : Why is standing time recommended after the cooking operation has been completed?**

A : Standing time is very important.

With microwave cooking, the heat is in the food, not in the oven. Many foods build up enough internal heat to allow the cooking process to continue, even after the food is removed from the oven. Standing time for joints of meat, large vegetables and cakes allows the inside to cook completely, without overcooking the outside.

**\* Q : What does “standing time” mean?**

A : “Standing time” means that food should be removed from the oven and covered for additional time to allow it to finish cooking. This frees the oven for other cooking.

**\* Q : Why does my oven not always cook as fast as the microwave cooking guide says?**

A : Check your cooking guide again, to make sure you’ve followed directions exactly ; and to see what might cause variations in cooking time. Cooking guide times and heat settings are suggestions, to help prevent over-cooking... the most common problem in getting used to a microwave oven.

Variations in the size, shape and weights and dimensions could require longer cooking time. Use your own judgement along with the cooking guide suggestions to check whether the food has been properly cooked just as you would do with a conventional cooker.

**\* Q : Will the microwave oven be damaged if it operates while empty?**

A : Yes. Never run it empty.

**\* Q : Can I operate my microwave oven without the turntable or turn the turntable over to hold a large dish?**

A : No. If you remove or turn over the turntable, you will get poor cooking results. Dishes used in your oven must fit on the turntable.

**\* Q : Is it normal for the turntable to turn in either direction?**

A : Yes. The turntable rotates clockwise or counterclockwise, depending on the rotation of the motor when the cooking cycle begins.

**\* Q : Can I pop popcorn in my microwave oven? How do I get the best results?**

A : Yes. Pop packaged microwave popcorn following manufactures guidelines or use the preset POPCORN pad. Do not use regular paper bags. Use the “listening test” by stopping the oven as soon as the popping slows to a “pop” every 1 or 2 seconds. Do not repop unpopped kernels. Do not pop popcorn in glass cookware.

## **Warranty Application**

New, unused Turbo Air Commercial microwave ovens purchased in the United States of America are warranted against manufacturing defects in materials and workmanship as follows:

### **Warranty Period**

1. Magnetron Tube - For 2 years from the date of purchase.
2. Other Parts - For 1 years from the date of purchase.
3. Accessories (Namely Plate Tray, Lost or Broken Air Filters, Light Bulbs) - No Warranty.

### **Turbo Air's Responsibility**

During the warranty period, Turbo Air, will repair, or at its option, replace Microwave Oven with a new or refurbished one, which shows evidence of a manufacturing defect in materials or workmanship, which will be determined by Turbo Air.

### **What is not covered.**

1. Microwave oven purchased in a used condition.
2. Problems due to product set-up and installation.
3. Adjustments that are outlined in the Operating Manual.
4. Accessory items including Plate Tray, Lost or Broken Air Filters, Light Bulbs.
5. Damage to or failure of Microwave oven due to any misuse, abuse, negligence, accident, shipping damage, or improper power supply voltages.
6. Damage to or failure of Microwave Oven due to unsanitary conditions.
7. Alteration, change, modification or repair made on the Microwave Oven by any party other than Turbo Air's authorized service representatives.

### **Original Commercial Purchaser's Responsibility**

The Original purchaser must call Turbo Air Warranty Department (800-627-0032)

1. To get a Return Goods Authorization Number.
2. Must provide an original, dated proof of purchase.
3. Provide a detailed description of the problem. Must be legible (Typed or Print)
4. Unit **MUST BE CLEAN!** If unit is shipped without being cleaned, a cleaning fee of \$25.00 will be assessed.
5. Freight of unit to Turbo Air must be Pre-Paid by End-user.
6. Original purchaser is responsible for the cost of any MAINTAINCE (other than warranty repair) necessary on the Microwave Oven.

### **Warranty becomes VOID**

This warranty becomes void if the product's serial number is altered or removed in any way or if any repair to the product is made by other than Turbo Air.

### **Limitations**

Turbo Air reserves the right to change or improve the design of the model of the product warranted hereunder without incurring any obligation to make any modifications to or to install any improvements in or on the product. In no event shall Turbo Air be liable for special or consequential damage arising from the use of this product.

### **Statutory Warranties**

The above provisions do not preclude the operation of any applicable provincial statute which in certain circumstances may not allow some of the limitation and exclusions described in this warranty. Where any terms of the Warranty are prohibited by such a statute, they shall be deemed null and void but the remainder of this warranty shall remain in effect.