

SHARP

Important



ENGLISH



R-20AO

MICROWAVE OVEN - OPERATION MANUAL

800 W (IEC 60705)

OPERATION MANUAL

This operation manual contains important information which you should read carefully before using your microwave oven.

IMPORTANT: There may be a serious risk to health if this operation manual is not followed or if the oven is modified so that it operates with the door open.

If you require any advice or assistance regarding your Sharp product, please visit our website:
<http://www.sharp.com.my>

For service enquiries you may telephone our toll free number (during office hours)
1 - 800 - 888 - 678 (8.30am - 5.30pm)
or Fax to:
03- 5102 5329

**Attention:**

Your product is marked with this symbol.
It means that used electrical and electronic products should not be mixed with general household waste. There is a separate collection system for these products.

A. Information on Disposal for Users (private households)

1. In the European Union

Attention: If you want to dispose of this equipment, please do not use the ordinary dust bin!

Used electrical and electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment.

Following the implementation by member states, private households within the EU states may return their used electrical and electronic equipment to designated collection facilities free of charge*.

In some countries* your local retailer may also take back your old product free of charge if you purchase a similar new one.

*) Please contact your local authority for further details.

If your used electrical or electronic equipment has batteries or accumulators, please dispose of these separately beforehand according to local requirements. By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

2. In other Countries outside the EU

If you wish to discard this product, please contact your local authorities and ask for the correct method of disposal.

For Switzerland: Used electrical or electronic equipment can be returned free of charge to the dealer, even if you don't purchase a new product. Further collection facilities are listed on the homepage of www.swico.ch or www.sens.ch.

B. Information on Disposal for Business Users

1. In the European Union

If the product is used for business purposes and you want to discard it:

Please contact your SHARP dealer who will inform you about the take-back of the product. You might be charged for the costs arising from take-back and recycling. Small products (and small amounts) might be taken back by your local collection facilities.

For Spain: Please contact the established collection system or your local authority for take-back of your used products.

2. In other Countries outside the EU

If you wish to discard of this product, please contact your local authorities and ask for the correct method of disposal.



CONTENTS

INFORMATION ON PROPER DISPOSAL	
CONTENTS.....	1
SPECIFICATIONS.....	2
OVEN AND ACCESSORIES.....	3
CONTROL PANEL.....	4
IMPORTANT SAFETY INSTRUCTIONS.....	5-7
INSTALLATION.....	7
MICROWAVE POWER LEVELS.....	8
MICROWAVE COOKING.....	8
DEFROSTING GUIDE.....	9
SUITABLE OVENWARE.....	9
CARE AND CLEANING.....	10



SPECIFICATIONS

Model name:	R-20AO
AC Line Voltage	: 230-240 V, 50 Hz single phase
Distribution line fuse/circuit breaker	: 10 A
AC Power required: Microwave	: 1270 W
Output power: Microwave	: 800 W (IEC 60705)
Off Mode (Energy Save Mode)	: less than 1,0 W
Microwave Frequency	: 2450 MHz* (Group 2/Class B)
Outside Dimensions (W) x (D) x (H) mm	: 439,5 x 338,2 x 256,2
Cavity Dimensions (W) x (D) x (H)** mm	: 306,0 x 306,6 x 208,2
Oven Capacity	: 20 litres**
Turntable	: ø 255 mm
Weight	: approx. 10.9 kg
Oven lamp	: 25 W/240 V

* This Product fulfils the requirement of the European standard EN55011.

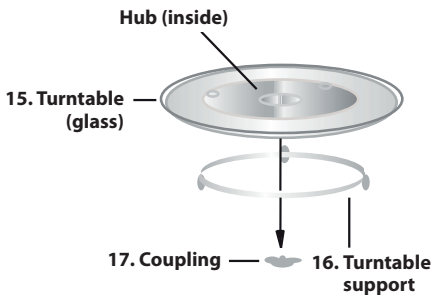
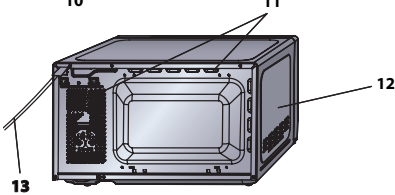
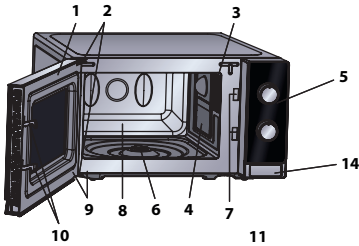
In conformity with this standard, this product is classified as group 2 class B equipment.

Group 2 means that the equipment intentionally generates radio-frequency energy in the form of electromagnetic radiation for the heat treatment of food.

Class B equipment means that the equipment is suitable to be used in domestic establishments.

** Internal capacity is calculated by measuring maximum width, depth and height. Actual capacity for holding food is less.

AS PART OF A POLICY OF CONTINUOUS IMPROVEMENT, WE RESERVE THE RIGHT TO ALTER DESIGN AND SPECIFICATIONS WITHOUT NOTICE.



OVEN

1. Door
2. Door hinges
3. Oven lamp
4. Waveguide cover (DO NOT REMOVE)
5. Control panel
6. Coupling
7. Door latches
8. Oven cavity
9. Door seals and sealing surfaces
10. Door safety latches
11. Ventilation openings
12. Outer cabinet
13. Power supply cord
14. Door opening button

ACCESSORIES:

Check to make sure the following accessories are provided:

(15) Turntable (16) Turntable support (17) Coupling
Place the turntable support in the centre of the oven floor so that it can freely rotate around the coupling. Then place the turntable on to the turntable support so that it locates firmly into the coupling. To avoid turntable damage, ensure dishes and containers are lifted clear of the turntable rim when removing them from the oven.

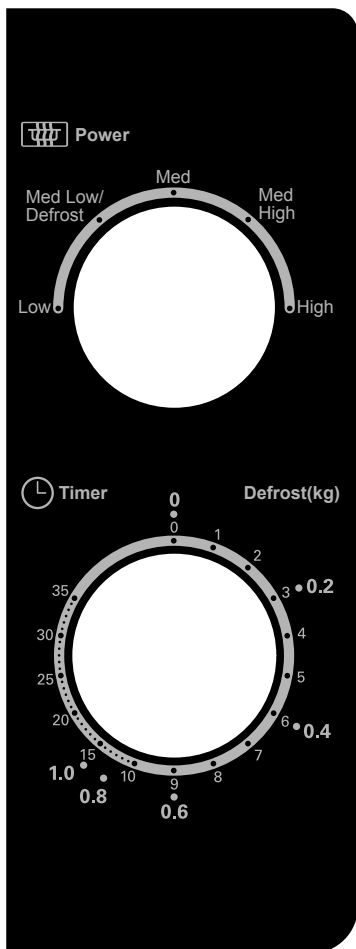
NOTE: When you order accessories, please mention two items: part name and model name to your dealer or SHARP authorised service centre.

NOTES:

- The waveguide cover is fragile. Care should be taken when cleaning inside the oven to ensure that it is not damaged.
- Always operate the oven with the turntable and turntable support fitted correctly. This promotes thorough, even cooking. A badly fitted turntable may rattle, may not rotate properly and could cause damage to the oven.
- All food and containers of food are always placed on the turntable for cooking.
- The turntable rotates clockwise or anti-clockwise. The rotary direction may change each time you start the oven. This does not affect cooking performance.



CONTROL PANEL



1. MICROWAVE POWER CONTROL knob

Power level

100% = HIGH

70% = MEDIUM HIGH

50% = MEDIUM

30% = MEDIUM LOW/Defrost

10% = LOW

2. TIMER/ DEFROST GUIDE knob



IMPORTANT SAFETY INSTRUCTIONS: READ CAREFULLY AND KEEP FOR FUTURE REFERENCE

To avoid the danger of fire.

The microwave oven should not be left unattended during operation. Power levels that are too high, or cooking times that are too long, may overheat foods resulting in a fire.

This oven is designed to be used on a countertop only. It is not designed to be built into a kitchen unit.

Do not place the oven in a cabinet.

The electrical outlet must be readily accessible so that the unit can be unplugged easily in an emergency.

The AC power supply must be 230 V, 50 Hz, with a minimum 10 A distribution line fuse, or a minimum 10 A distribution circuit breaker.

A separate circuit serving only this appliance should be provided.

Do not place the oven in areas where heat is generated. For example, close to a conventional oven.

Do not install the oven in an area of high humidity or where moisture may collect.

Do not store or use the oven outdoors.

If smoke is observed, switch off or unplug the oven and keep the door closed in order to stifle any flames.

Use only microwave-safe containers and utensils. See Page GB-9. Utensils should be checked to ensure that they are suitable for use in microwave ovens.

When heating food in plastic or paper containers, keep an eye on the oven due to the possibility of ignition.

Clean the waveguide cover, the oven cavity, the turntable and turntable support after use. These must be dry and free from grease. Built-up grease may overheat and begin to smoke or catch fire.

Do not place flammable materials near the oven or ventilation openings.

Do not block the ventilation openings.

Remove all metallic seals, wire twists, etc., from food and food packages. Arcing on metallic surfaces may cause a fire.

Do not use the microwave oven to heat oil for deep frying. The temperature cannot be controlled and the oil may catch fire.

To make popcorn, use only special microwave popcorn makers.

Do not store food or any other items inside the oven.

Check the settings after you start the oven to ensure the oven is operating as desired.

To avoid overheating and fire, special care must be taken when cooking or reheating foods with a high sugar or fat content, for example, Sausage rolls, Pies or Christmas pudding.

See the corresponding hints in the operation manual.

To avoid the possibility of injury

WARNING:

Do not operate the oven if it is damaged or malfunctioning. Check the following before use:

- The door; make sure the door closes properly and ensure it is not misaligned or warped.
- The hinges and safety door latches; check to make sure they are not broken or loose.
- The door seals and sealing surfaces; ensure that they have not been damaged.
- Inside the oven cavity or on the door; make sure there are no dents.
- The power supply cord and plug; ensure that they are not damaged.

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

Never adjust, repair or modify the oven yourself. It is hazardous for anyone other than a competent person to carry out any service or repair operation which involves the removal of a cover which gives protection against exposure to microwave energy.

Do not operate the oven with the door open or alter the door safety latches in any way. Do not operate the oven if there is an object between the door seals and sealing surfaces.

Do not allow grease or dirt to build up on the door seals and adjacent parts. Clean the oven at regular intervals and remove any food deposits. Follow the instructions for "Care and Cleaning" on page GB-10. Failure to maintain the oven in a clean condition could lead to a deterioration of the surface that could adversely affect the life of the appliance and possibly result in a hazardous situation.

Individuals with PACEMAKERS should check with their doctor or the manufacturer of the pacemaker for precautions regarding microwave ovens.

To avoid the possibility of electric shock

Under no circumstances should you remove the outer cabinet.

Never spill or insert any objects into the door lock openings or ventilation openings. In the event of a spill, turn off and unplug the oven immediately, and call an authorised SHARP service agent.

Do not immerse the power supply cord or plug in water or any other liquid.

Do not let the power supply cord hang over the edge of a table or work surface.

Keep the power supply cord away from heated surfaces, including the rear of the oven.

Keep the appliance and its cord out of reach of children less than 8 years.



IMPORTANT SAFETY INSTRUCTIONS

Do not attempt to replace the oven lamp yourself or allow anyone who is not an electrician authorised by SHARP to do so. If the oven lamp fails, please consult your dealer or an authorised SHARP service agent. If the power supply cord of this appliance is damaged, it must be replaced with a special cord. The exchange must be made by an authorised SHARP service agent.

To avoid the possibility of explosion and sudden boiling:

WARNING: Liquids and other foods must not be heated in sealed containers since they are liable to explode.

Microwave heating of beverages can result in delayed eruptive boiling, therefore care must be taken when handling the container.

Never use sealed containers. Remove seals and lids before use. Sealed containers can explode due to a build up of pressure even after the oven has been turned off.

Take care when microwaving liquids. Use a wide mouthed container to allow bubbles to escape.

Never heat liquids in narrow necked containers such as baby bottles, as this may result in the contents erupting from the container when heated and cause burns.

To prevent sudden eruption of boiling liquid and possible scalding:

1. Do not use excessive amount of time.
2. Stir liquid prior to heating/reheating.
3. It is advisable to insert a glass rod or similar utensil (not metal) into the liquid whilst reheating.
4. Let liquid stand for at least 20 seconds in the oven at the end of cooking time to prevent delayed eruptive boiling.

Do not cook eggs in their shells, and whole hard boiled eggs should not be heated in microwave ovens since they may explode even after microwave cooking has ended. To cook or reheat eggs which have not been scrambled or mixed, pierce the yolks and the whites, or the eggs may explode. Shell and slice hard boiled eggs before reheating them in the microwave oven.

Pierce the skin of such foods as potatoes, sausages and fruit before cooking, or they may explode.

To avoid the possibility of burns

WARNING: The contents of feeding bottles and baby food jars must be stirred or shaken and the temperature checked before consumption, in order to avoid burns.

Use pot holders or oven gloves when removing food from the oven to prevent burns.

Always open containers, popcorn makers, oven cooking bags, etc., away from the face and hands to avoid steam burns and eruption of boiling.

To avoid burns, always test food temperature and stir before serving and pay special attention to the temperature of food and drink given to babies, children or the elderly. Accessible parts may become

hot during use. Young children should be kept away. Temperature of the container is not a true indication of the temperature of the food or drink; always check the food temperature.

Always stand back from the oven door when opening it to avoid burns from escaping steam and heat.

Slice stuffed baked foods after heating to release steam and avoid burns.

Keep children away from the door to prevent them burning themselves.

To avoid misuse by children

WARNING: Only allow children aged from 8 years and above to use the oven without supervision when adequate instructions have been given so that the child is able to use the oven in a safe way and understands the hazards of improper use. When the appliance is operated in the GRILL, MIX GRILL and AUTO MENU operation, children should only use the oven under adult supervision due to the temperature generated. 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. Children should be supervised to ensure that they do not play with the appliance.

Do not lean or swing on the oven door. Do not play with the oven or use it as a toy.

Children should be taught all important safety instructions: use of pot holders, careful removal of food coverings; paying special attention to packaging (e.g. self-heating materials) designed to make food crisp, as they may be extra hot.

Other warnings

Never modify the oven in any way.

Do not move the oven while it is in operation.

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.

This oven is for home food preparation only and may only be used for cooking food. It is not suitable for commercial or laboratory use.

To promote trouble-free use of your oven and avoid damage.

Never operate the oven when it is empty. When using a browning dish or self-heating material, always place a heat-resistant insulator such as a porcelain plate under it to prevent damage to the turntable and turntable support due to heat stress. The preheating time specified in the dishes instructions must not be exceeded.

IMPORTANT SAFETY INSTRUCTIONS



Do not use metal utensils, which reflect microwaves and may cause electrical arcing. Do not put cans in the oven.

Use only the turntable and the turntable support designed for this oven. Do not operate the oven without the turntable.

To prevent the turntable from breaking:

- (a) Before cleaning the turntable with water, leave the turntable to cool.
- (b) Do not put hot foods or hot utensils on a cold turntable.
- (c) Do not put cold foods or cold utensils on a hot turntable.

Do not place anything on the outer cabinet during operation.

NOTE:

Do not use plastic containers for microwaving if the oven is still hot from using the GRILL and MIX GRILL operation because they may melt.

Plastic containers must not be used during above modes unless the container manufacturer says they are suitable.

If you are unsure how to connect your oven, please consult an authorised, qualified electrician.

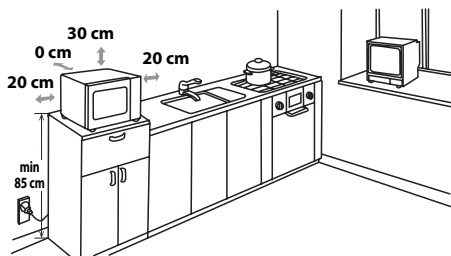
Neither the manufacturer nor the dealer can accept any liability for damage to the oven or personal injury resulting from failure to observe the correct electrical connection procedure.

Water vapour or drops may occasionally form on the oven walls or around the door seals and sealing surfaces. This is a normal occurrence and is not an indication of microwave leakage or a malfunction.

INSTALLATION



1. Remove all packing materials from the inside of the oven cavity and remove any protective film found on the microwave oven cabinet surface.
2. Check the oven carefully for any signs of damage.
3. Place the oven on a secure, level surface, strong enough to take the oven weight, plus the heaviest item likely to be cooked in the oven. Do not place the oven in a cabinet.
4. Select a level surface that provide enough open space for the intake and/or outlet vents. The rear surface of appliance shall be placed against a wall.
 - The minimum installation height is 85 cm.
 - A minimum space of 20 cm is required between the oven and any adjacent walls.
 - Leave a minimum space of 30 cm above the oven.
 - Do not remove the feet from the bottom of the oven.
 - Blocking the intake and/or outlet openings can damage the oven.
 - Place the oven as far away from radios and TV as possible. Operation of microwave oven may cause interference to your radio or TV reception.



5. Securely connect the plug of the oven to a standard earthed (grounded) household electrical outlet.

WARNING: Do not place the oven where heat, moisture or high humidity are generated, (for example, near or above a conventional oven) or near combustible materials (for example, curtains). Do not block or obstruct air vent openings. Do not place objects on top of the oven.



MICROWAVE POWER LEVELS

There are 5 microwave power levels available as listed below.

The microwave power level is varied by the microwave energy switching on and off. When using power levels other than HIGH (100%) you will be able to hear the microwave energy pulsing on and off as the food cooks or defrosts.

Generally the following recommendations apply:

100% = HIGH - used for fast cooking or reheating

e.g. for casseroles, hot beverages, vegetables etc.

70% = MEDIUM HIGH - used for longer cooking of

dense foods such as roast joints, meat loaf and plated

meals, also for sensitive dishes such as sponge cakes.

At this reduced setting, the food will cook evenly without

over cooking at the sides.

50% = MEDIUM - for dense foods which require

a long cooking time when cooked conventionally, e.g.

beef casserole, it is advisable to use this power setting

to ensure the meat will be tender.

30% = MEDIUM LOW - to defrost, select this

power setting, to ensure that the dish defrosts evenly.

This setting is also ideal for simmering rice, pasta,

dumplings and cooking egg custard.

10% = LOW - for gentle defrosting, e.g. cream

gateaux or pastry.



MICROWAVE COOKING

1. Prepare and place food in a suitable container (refer to "SUITABLE OVENWARE" given on page MY-9), position food/container directly onto the middle of the turntable. Close the door.
2. Turn the **MICROWAVE POWER CONTROL** knob to the desired setting; any one of the five microwave power levels.
3. Turn the **TIMER/ DEFROST GUIDE** knob to the desired cooking/defrosting time and the oven will start automatically.
4. When cooking/defrosting is complete, the **TIMER/ DEFROST GUIDE** returns to "0" zero and the signal will sound. The oven lamp will turn off automatically and the turntable stops rotating. Open the oven door, remove the food/container carefully. Leave food to stand as required.

COOKING HINTS:

When the oven starts, the oven lamp will light and the turntable will rotate clockwise or anticlockwise.

If you wish to stop cooking before the cooking time has elapsed, turn the **TIMER/ DEFROST GUIDE** knob back to "0" (off), or open the oven door. The oven door may be opened at any time during cooking. To continue cooking, close the door. If you wish to change the cooking time during cooking, simply turn the **TIMER/ DEFROST GUIDE** knob to the desired new setting.

When cooking/defrosting for less than 3 minutes, turn the **TIMER/ DEFROST GUIDE** knob past the 10 minute mark, and then back to the desired setting. The timer will then run more accurately.

To change the power level during cooking, turn the **MICROWAVE POWER CONTROL** knob to the desired setting.

WARNING:

Ensure the **TIMER/ DEFROST GUIDE** is returned to "0" zero position at the end of cooking, or the oven will start automatically when the oven door is closed.

IMPORTANT:

- If you cook the food over the standard time with only 800 W, the power of the oven will lower automatically to avoid overheating. (The microwave power level will be reduced).

Cooking Mode	Standard time
Microwave 100 P	30 minutes

DEFROSTING GUIDE



This guide is designed to make defrosting specific foods easier.

It can be used for defrosting: Chicken portions, chops, fish (whole or fillets), minced meat and sausages.

Example: To defrost 0.4 kg of chicken portions:

1. Place chicken portions in a flan dish, and place on the turntable into the oven.
2. Turn the **MICROWAVE POWER CONTROL** knob to DEFROST setting (MEDIUM LOW).
3. Turn the **TIMER/ DEFROST GUIDE** to 0.4 kg setting. The oven will start immediately. Turn the chicken portions over 1-2 times during defrosting.
4. After defrosting, cover the food in foil and leave to stand until thoroughly defrosted.

Note: The defrosting time is based on standard conditions. Please check the defrosting result and, if necessary, adjust the defrosting times accordingly.

SUITABLE OVENWARE



To cook/defrost food in a microwave oven, the microwave energy must be able to pass through the container to penetrate the food. Therefore it is important to choose suitable cookware.

Round/oval dishes are preferable to square/oblong ones, as the food in the corners tends to overcook. A variety of cookware can be used as listed below.

Cookware	Microwave Safe	Comments
Aluminium foil Foil Containers	✓ / ✗	Small pieces of aluminium foil can be used to shield food from overheating. Keep foil at least 2 cm from the oven walls, as arcing may occur. Foil containers are not recommended unless specified by the manufacturer, e.g. Microfoil®, follow instructions carefully.
Browning dishes	✓	Always follow the manufacturers instructions. Do not exceed heating times given. Be very careful as these dishes become very hot.
China and ceramics	✓ / ✗	Porcelain, pottery, glazed earthenware and bone china are usually suitable, except for those with metallic decoration.
Glassware e.g. Pyrex®	✓	Care should be taken if using fine glassware as it can break or crack if heated suddenly.
Metal	✗	It is not recommended to use metal cookware as it will arc, which can lead to fire.
Plastic/Polystyrene e.g. fast food containers	✓	Care must be taken as some containers warp, melt or discolour at high temperatures.
Cling film	✓	It should not touch the food and must be pierced to let the steam escape.
Freezer/Roasting bags	✓	Must be pierced to let steam escape. Ensure bags are suitable for microwave use.
Paper - Plates, cups and kitchen paper	✓	Do not use plastic or metal ties, as they may melt or catch fire due to the metal 'arcing'.
Straw and wooden Containers	✓	Only use for warming or to absorb moisture. Care must be taken as overheating may cause fire.
Recycled paper and newspaper	✗	Always attend the oven when using these materials as overheating may cause fire. May contain extracts of metal which will cause 'arcing' and may lead to fire.



WARNING:

When heating food in plastic or paper containers, monitor the oven due to the possibility of ignition.



CARE AND CLEANING

CAUTION: DO NOT USE COMMERCIAL OVEN CLEANERS, STEAM CLEANERS, ABRASIVE, HARSH CLEANERS, ANY THAT CONTAIN SODIUM HYDROXIDE OR SCOURING PADS ON ANY PART OF YOUR MICROWAVE OVEN.

CLEAN THE OVEN AT REGULAR INTERVALS AND REMOVE ANY FOOD DEPOSITS - Keep the oven clean, or the oven could lead to a deterioration of the surface. This could adversely affect the life of the appliance and possibly result in a hazardous situation.

Oven exterior

The outside of your oven can be cleaned easily with mild soap and water. Make sure the soap is wiped off with a moist cloth, and dry the exterior with a soft towel.

Control panel

Open the door before cleaning to de-activate the control panel. Care should be taken in cleaning the control panel. Using a cloth dampened with water only, gently wipe the panel until it becomes clean.

Avoid using excessive amounts of water. Do not use any sort of chemical or abrasive cleaner.

CAUTION:

Take care not to move the TIMER knob from "0" (off) position during cleaning, or the oven will start as soon as you close the door.

Oven Interior

1. For cleaning, wipe any splatters or spills with a soft damp cloth or sponge after each use while the oven is still warm. For heavier spills, use a mild soap and wipe several times with a damp cloth until all residues are removed. Do not remove the waveguide cover.

2. Make sure that mild soap or water does not penetrate the small vents in the walls which may cause damage to the oven.

3. Do not use spray type cleaners on the oven interior.

Keep the waveguide cover clean at all times.

The waveguide cover is constructed from a fragile material and should be cleaned with care (follow the cleaning instructions above).

NOTE: Excessive soaking may cause disintegration of the waveguide cover. The waveguide cover is a consumable part and without regular cleaning, will need to be replaced.

Turntable and Turntable support

Remove the turntable and turntable support stay from the oven.

Wash the turntable and turntable support in mild soapy water. Dry with a soft cloth. Both the turntable and the turntable support are dishwasher safe.

Door

To remove all trace of dirt, regularly clean both sides of the door, the door seals and adjacent parts with a soft, damp cloth. Do not use abrasive cleaner.

NOTE: A steam cleaner should not be used.

Cleaning tip - For easier cleaning of your oven:

Place half a lemon in a bowl, add 300 ml (1/2 pint) water and heat on 100% for 10 -12 minutes.

Wipe the oven clean using a soft, dry cloth.

SHARP



Printed in China

PN.:261800313039