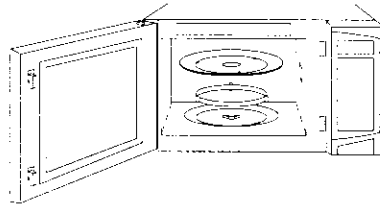




Panasonic

Operating Instructions Microwave Oven

Models: NN-S654BF



Safety Information

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READ ALL INSTRUCTIONS CAREFULLY BEFORE USING THE OVEN.

Para instrucciones en español, voltee el libro.

For assistance, please call: 1-800-211-PANA(7262)
or send e-mail to: consumerproducts@panasonic.com
or visit us at www.panasonic.com

(U.S.A)

For assistance, please call: 787-750-4300
or visit us at www.panasonicpr.com

(Puerto Rico)

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Microwave Oven Safety

Your safety and the safety of others are very important.

We have provided important safety messages in this manual and on your appliance. Always read and obey all safety messages.



This is the safety alert symbol. It is used to alert 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 "DANGER", "WARNING" or "CAUTION". These words mean:

DANGER

You can be killed or seriously injured if you don't immediately follow instructions.

WARNING

You can be killed or seriously injured if you don't follow instructions.

CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.



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.

Thank you for purchasing a Panasonic Microwave Oven.

Your microwave oven is a cooking appliance and you should use as much care as you use with a stove or any other cooking appliance. When using this electric appliance, basic safety precautions should be followed, including the following:

IMPORTANT SAFETY INSTRUCTIONS

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 this appliance.
2. Read and follow the specific "PRECAUTIONS TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY," found on the inside front cover.
3. This appliance must be grounded. Connect only to a properly grounded outlet. See "GROUNDING INSTRUCTIONS" found on page 4.
4. As with any cooking appliance, **DO NOT** leave oven unattended while in use.
5. Install or locate this appliance only in accordance with the installation instructions found on page 3.
6. **DO NOT** cover or block any openings on this appliance.
7. **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.
8. Use this appliance only for its intended use as described in this manual. **DO NOT** use corrosive chemicals, vapors, or non-food products in this appliance. This type of oven is specifically designed to heat, or cook food. It is not designed for industrial or laboratory use. The use of corrosive chemicals in heating or cleaning will damage the appliance and may result in radiation leaks.
9. When cleaning surfaces of the door and oven that come together on closing the door, use only mild, non-abrasive soaps or detergents applied with a sponge or soft cloth.
10. **DO NOT** allow children to use this appliance, unless closely supervised by an adult. **DO NOT** assume that because a child has mastered one cooking skill he/she can cook everything.
11. **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.
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 a table or counter.
15. This appliance should be serviced only by qualified service personnel. Contact the nearest authorized service center for examination, repair or adjustment.
16. Some products such as whole eggs with or without shell, narrow neck bottles and sealed containers—for example, closed glass jars—may explode and should not be heated in this oven.
17. To reduce the risk of fire in the oven cavity:
 - (a) Do not overcook food. Carefully attend appliance when paper, plastic, or other combustible materials are placed inside the oven to facilitate cooking.
 - (b) Remove wire twist-ties from paper or plastic bags before placing bag in oven.
 - (c) **If material inside the oven ignites, 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.

⚠ IMPORTANT SAFETY INSTRUCTIONS
(continued)

18. Liquids, such as water, coffee, or tea are able to be overheated beyond the boiling point without appearing to be boiling. Visible bubbling when the container is removed from the microwave oven is not always present. **THIS COULD RESULT IN VERY HOT LIQUIDS SUDDENLY BOILING OVER WHEN THE CONTAINER IS DISTURBED OR A UTENSIL IS INSERTED INTO THE LIQUID.**
To reduce the risk of injury to persons:
- (a) **STIR THE LIQUID BOTH BEFORE AND HALFWAY THROUGH HEATING IT.**
 - (b) **Do not heat water and oil, or fats together. The film of oil will trap steam, and may cause a violent eruption.**
 - (c) Do not use straight-sided containers with narrow necks.
 - (d) After heating, allow the container to stand in the microwave oven for a short time before removing the container.
19. **DO NOT** cook directly on the turntable. It can crack, cause injury or damage to the oven.

⚠ CAUTION

TO AVOID THE RISK OF SHOCK:

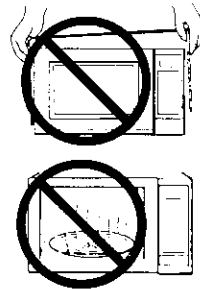
DO NOT remove outer panel from oven. Repairs must be done only by a qualified service person.

TO REDUCE THE RISK OF EXPOSURE TO MICROWAVE ENERGY:

DO NOT tamper with, or make any adjustments or repairs to Door, Control Panel Frame, Safety Interlock Switches, or any other part of oven, microwave leakage may result.

TO AVOID THE RISK OF FIRE:

- 1. **DO NOT** operate the oven empty. The microwave energy will reflect continuously throughout the oven causing overheating and damage, if food or water is not present to absorb energy.
- 2. **DO NOT** store flammable materials next to, on top of, or in the oven.
- 3. **DO NOT** dry clothes, newspapers or other materials in the oven, or use newspaper or paper bags for cooking.
- 4. **DO NOT** hit or strike Control Panel. Damage to controls may occur.
- 5. **DO NOT** use recycled paper products unless the paper product is labeled as safe for microwave oven use. Recycled paper products may contain impurities which may cause sparking.



TO AVOID THE RISK OF SCALDING:

POT HOLDERS should always be used when removing items from the oven. Heat is transferred from the **HOT** food to the cooking container and from the container to the Glass Tray. The Glass Tray can also be very **HOT** after removing the cooking container from the oven.

SAVE THESE INSTRUCTIONS

For proper use of your oven read remaining safety cautions and operating instructions.

IMPORTANT SAFETY INSTRUCTIONS (continued)

Glass Tray

1. **DO NOT** operate the oven without the Roller Ring and the Glass Tray in place.
2. **DO NOT** operate the oven without the Glass Tray fully engaged on the drive hub. Improper cooking or damage to the oven could result. Verify that the Glass Tray is properly engaged and rotating by observing its rotation when you press Start. **Note:** The Glass Tray can turn in either direction.
3. Use only the Glass Tray specifically designed for this oven. **DO NOT** substitute any other glass tray.
4. If the Glass Tray is hot, allow to cool before cleaning or placing in water.
5. **DO NOT** cook directly on the Glass Tray. Always place food in a microwave safe dish, or on a rack set in a microwave safe dish.
6. If food or utensil on the Glass Tray touches oven walls, causing the tray to stop moving, the tray will automatically rotate in the opposite direction.

Roller Ring

1. The Roller Ring and oven floor should be cleaned frequently to prevent excessive noise.
2. Always replace the Roller Ring and the Glass Tray in their proper positions.
3. The Roller Ring must always be used for cooking along with the Glass Tray.

INSTALLATION AND GROUNDING INSTRUCTIONS

Examine Your Oven

Unpack oven, remove all packing material and examine the oven for any damage such as dents, broken door latches or cracks in the door. Notify dealer immediately if oven is damaged. **DO NOT** install if oven is damaged.

Placement of Oven

1. The oven must be placed on a flat, stable surface. Place the front surface of the door three inches or more from the counter top edge to avoid accidental tipping of the microwave oven during normal use. For proper operation, the oven must have sufficient air flow. Allow 3-inches (7.6 cm) of space on both sides of the oven and 1-inch (2.5 cm) of space on top of the oven.
 - (a) **DO NOT** block air vents. If they are blocked during operation, the oven may be overheated and damaged.
 - (b) **DO NOT** place oven near a hot, damp surface such as a gas or electric range, or dishwasher.
 - (c) **DO NOT** operate oven when room humidity is excessive.
2. This oven is manufactured for household use only. It is not approved or tested for commercial or marine use.

Installation

1. **DO NOT** block air vents. If they are blocked during operation, the oven may overheat. If the oven overheats, a thermal safety device will turn the oven off. The oven will remain inoperable until it has cooled.
2. If the oven is designed for installation into a wall cabinet by using the proper trim kit available from a local Panasonic dealer. Follow all instruction packed with the kit.

INSTALLATION AND GROUNDING INSTRUCTIONS *(continued)*

WARNING

—IMPROPER USE OF THE GROUNDING PLUG CAN RESULT IN A RISK OF ELECTRIC SHOCK.

Consult a qualified electrician or service person if the grounding instructions are not completely understood, or if doubt exists as to whether the appliance is properly grounded. If it is necessary to use an extension cord, use only a three wire extension cord that has a three prong polarized grounding plug, and a three slot receptacle that will accept the plug on the appliance. The marked rating of the extension cord should be equal to or greater than the electrical rating of the appliance.

Grounding Instructions

THIS APPLIANCE MUST BE GROUNDED. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the 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.

- **Plug into properly installed and grounded 3 prong outlet.**
- **DO NOT remove ground prong.**
- **DO NOT use an adapter.**

Power Supply

1. A short power-supply cord is provided to reduce the risks resulting from becoming entangled in or tripping over a longer cord.
2. Longer cord sets or extension cords are available and may be used if care is exercised in their use. **Do not** let cord hang over edge of a table or counter.
3. If a long cord or extension cord is used, (1) the marked electrical rating of the cord set or extension cord should be at least as great as the electrical rating of the appliance, (2) the extension cord must be a grounding-type 3-wire cord, and (3) the longer cord should be arranged so that it will not drape over the counter top or table-top where it can be pulled on by children or tripped over accidentally.



Wiring Requirements

The oven must be operated on a SEPARATE CIRCUIT. No other appliance should share the circuit with the microwave oven. If it does, the branch circuit fuse may blow or the circuit breaker may trip. The oven must be plugged into at least a 20 AMP, 120 VOLT, 60 Hz GROUNDED OUTLET. Where a standard two-prong outlet is encountered, it is the personal responsibility and obligation of the consumer to have it replaced with a properly grounded three-prong outlet. The VOLTAGE used must be the same as specified on this microwave oven (120 V, 60 Hz). Using a higher voltage is dangerous and may result in a fire or oven damage. Using a lower voltage will cause slow cooking. Panasonic is NOT responsible for any damages resulting from the use of the oven with any voltage other than specified.

TV / Radio Interference

1. Operation of the microwave oven may cause interference to your radio, TV or similar equipment.
2. When there is interference, it may be reduced or eliminated by taking the following measures:
 - (a) Place the radio, TV, etc. away from the microwave oven as far as possible.
 - (b) Use a properly installed antenna to obtain stronger signal reception.
 - (c) Clean door and sealing surfaces of the oven. (See Care and Cleaning of Your Microwave Oven)



Safety Precautions

Follow These Safety Precautions When Cooking in Your Oven.

IMPORTANT

Proper cooking depends upon the power, the time setting and quantity of food. If you use a smaller portion than recommended but cook at the time for the recommended portion, fire could result.

1) HOME CANNING / STERILIZING / DRYING FOODS / SMALL QUANTITIES OF FOODS

- **DO NOT** use your oven for home canning. Your oven cannot maintain the food at the proper canning temperature. The food may be contaminated and then spoil.
- **DO NOT** use the microwave oven to sterilize objects (baby bottles, etc.). It is difficult to keep the oven at the high temperature needed for sterilization.
- **DO NOT** dry meats, herbs, fruits or vegetables in your oven. Small quantities of food or foods with low moisture content can dry out, scorch or catch on fire if overheated.

2) POPCORN

Popcorn may be popped in a microwave oven corn popper. Microwave popcorn which pops in its own package is also available. Follow popcorn manufacturers' directions and use a brand suitable for the cooking power of your microwave oven.

CAUTION: When using pre-packaged microwave popcorn, you can follow recommended package instructions or use the popcorn pad (refer to page 12). Otherwise, the popcorn may not pop adequately or may ignite and cause a fire. Never leave oven unattended when popping popcorn. Allow the popcorn bag to cool before opening, always open the bag away from your face and body to prevent steam burns.

3) DEEP FAT FRYING

- **DO NOT** deep fat fry in your microwave oven. Cooking oils may burst into flames and may cause damage to the oven and perhaps result in burns. Microwave utensils may not withstand the temperature of the hot oil, and can shatter or melt.

4) FOODS WITH NONPOROUS SKINS

- **DO NOT COOK/REHEAT WHOLE EGGS, WITH OR WITHOUT THE SHELL.** Steam buildup in whole eggs may cause them to explode, and possibly damage the oven or cause injury. Reheating SLICED hard-boiled eggs and cooking SCRAMBLED eggs is safe.
- **Potatoes, apples, whole squash and sausages** are examples of foods with non-porous skins. These types of foods must be pierced before microwave cooking to prevent them from exploding.
CAUTION: Cooking dry or old potatoes can cause fire.



Safety Precautions

(continued)

5) GLASS TRAY / COOKING CONTAINERS / FOIL

- Cooking containers get hot during microwaving. Heat is transferred from the HOT food to the container and the Glass Tray. Use pot holders when removing containers from the oven or when removing lids or plastic wrap covers from cooking containers, to avoid burns.
- The Glass Tray will get hot during cooking. It should be allowed to cool before handling or before paper products, such as paper plates or microwave popcorn bags, are placed in the oven for microwave cooking.
- When using foil in the oven, allow at least 1-inch (2.5 cm) of space between foil and interior oven walls or door.
- Dishes with metallic trim should **not** be used, as arcing may occur.

6) PAPER TOWELS / CLOTHS

- **DO NOT** use paper towels or cloths which contain a synthetic fiber woven into them. The synthetic fiber may cause the towel to ignite. Use paper toweling under supervision.

7) BROWNING DISHES / OVEN COOKING BAGS

- Browning dishes or grills are designed for microwave cooking only. Always follow instructions provided by the manufacturer. **DO NOT** preheat browning dish more than 6 minutes.
- If an oven cooking bag is used for microwave cooking, prepare according to package directions. **DO NOT** use a wire twist-tie to close bag, instead use plastic ties, cotton string or a strip cut from the open end of the bag.

8) THERMOMETERS

- **DO NOT** use a conventional meat thermometer in your oven. Arcing may occur. Microwave-safe thermometers are available for both meat and candy.

9) BABY FORMULA / BABY FOOD

- **DO NOT** heat baby formula or baby food in the microwave oven. The glass jar or surface of the food may appear warm while the interior can be so hot as to burn the infant's mouth and esophagus.

10) REHEATING PASTRY PRODUCTS

- When reheating pastry products, check temperatures of any fillings before eating. Some foods have fillings which heat faster and can be extremely hot, while the surface remains warm to the touch (ex. Jelly Donuts).

11) GENERAL OVEN USAGE GUIDELINES

- **DO NOT** use the oven for any purpose other than the preparation of food.

Specifications	
NN-S654BF	
Power Source:	120 V, 60 Hz
Power Consumption:	12.7 Amps, 1,460 W
Cooking Power:*	1,300 W
Outside Dimensions (H x W x D):	11 ⁷ / ₈ " x 20 ³ / ₈ " x 15 ⁷ / ₈ " (301 mm x 518 mm x 404 mm)
Oven Cavity Dimensions (H x W x D):	8 ⁷ / ₈ " x 14 ³ / ₄ " x 15 ³ / ₁₆ " (225 mm x 375 mm x 386 mm)
Operating Frequency:	2,450 MHz
Net Weight:	Approx. 23 lbs. (10.5 kg)

*IEC Test procedure Specifications subject to change without notice.

User's Record

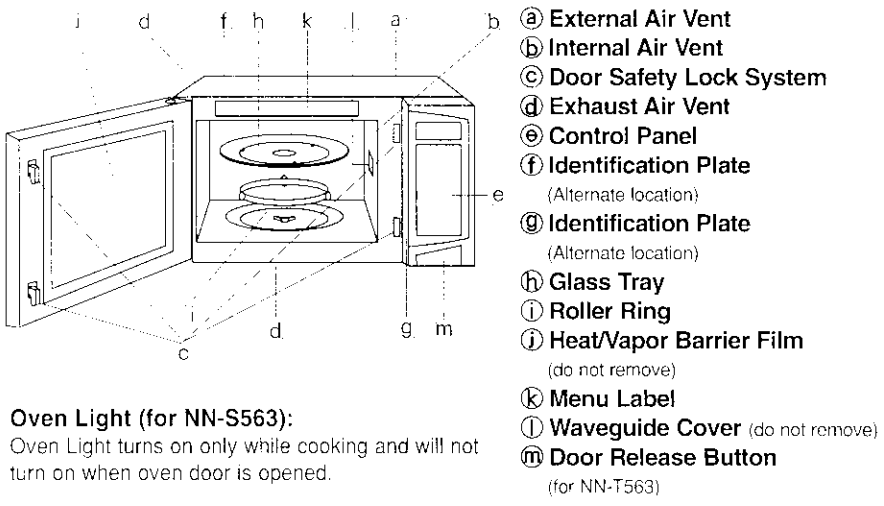
The serial number of this product may be found on the back side of the oven or the left side of the control panel. You should note the model number and the serial number of this oven in the space provided and retain this book as a permanent record of your purchase for future reference.

Model No. _____

Serial No. _____

Date of Purchase _____

Oven Components Diagram



Limited Warranty & Customer Services Directory

PANASONIC CONSUMER ELECTRONICS COMPANY,
DIVISION OF MATSUSHITA ELECTRIC
CORPORATION OF AMERICA
One Panasonic Way
Secaucus, New Jersey 07094

PANASONIC SALES COMPANY,
DIVISION OF MATSUSHITA
ELECTRIC OF PUERTO RICO, INC.,
Ave. 65 de Infanteria, Km. 9.5
San Gabriel Industrial Park
Carolina, Puerto Rico 00985

Panasonic Microwave Oven Product Limited Warranty

Limited Warranty Coverage

If your product does not work properly because of a defect in materials or workmanship, Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "the warrantor") will, for the length of the period indicated on the chart below, which starts with the date of original purchase ("warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

	PARTS	LABOR
ALL PARTS (EXCEPT MAGNETRON TUBE)	1 (ONE) YEAR	1 (ONE) YEAR
MAGNETRON TUBE	5 (FIVE) YEAR	1 (ONE) YEAR

During the "Labor" warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must carry-in or mail-in your product during the warranty period. This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold "as is". A purchase receipt or other proof of the original purchase date is required for warranty service.

Carry-In or Mail-In Service

For Carry-In or Mail-In Service in the United States call 1-800-211-PANA(7262) or visit Panasonic Web Site: <http://www.panasonic.com>

For assistance in Puerto Rico call Panasonic Sales Company (787)-750-4300 or fax (787)-768-2910.

Limited Warranty Limits And Exclusions

This warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER glass, plastic parts, temperature probes(if included) and normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or commercial use (such as in a hotel, office, restaurant, or other business), rental use of the product, service by anyone other than a Factory Service center or other Authorized Servicer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, or travel to and from the servicer. The items listed are not exclusive, but are for illustration only.) **ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have others rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Service center. If the problem is not handled to your satisfaction, then write to the warrantor's Consumer Affairs Department at the addresses listed for the warrantor.

PARTS AND SERVICE WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY ARE YOUR RESPONSIBILITY.

Customer Services Directory

**For Product Information, Operating Assistance, Literature Request, Dealer Locations, and all Customer Service inquiries please contact:
1-800-211-PANA (7262), Monday-Friday 9 am-9 pm; Saturday-Sunday 9 am-7 pm, EST.**

**Web Site: <http://www.panasonic.com>
you can purchase parts, accessories or locate your
nearest service center by visiting our Web Site.**

Accessory Purchases:

1-800-332-5368 (Customer Orders Only)
Panasonic Services Company 20421 84th Avenue South, Kent, WA 98032
(6 am to 5 pm Monday-Friday; 6 am to 10:30 am Saturday; PST)
(Visa, MasterCard, Discover Card, American Express, Check)

**Service in Puerto Rico
Matsushita Electric of Puerto Rico, Inc. Panasonic Sales Company/Factory Service center:
Ave. 65 de Infanteria, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985
Phone (787) 750-4300 Fax (787) 768-2910**