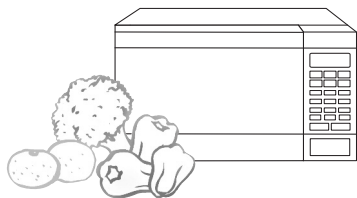



Panasonic®


Operating Instructions Microwave Oven Household Use Only

**Models No. NN-SA631B
NN-SA631W
NN-SA651S
NN-SA661S**

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)

contact us via the web at:

<http://www.panasonic.com>

(U.S.A and Puerto Rico)

For microwave oven safety reference, please visit FDA's webpage at:

<http://www.fda.gov/Radiation-EmittingProducts/ResourcesforYouRadiationEmittingProducts/Consumers/ucm142616.htm>

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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 4.
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.



IMPORTANT SAFETY INSTRUCTIONS

(continued)

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.**
18. **Superheated Liquids**

Liquids, such as water, coffee, or tea are able to be overheated beyond the boiling point without showing evidence (or signs) of boiling. Visible bubbling is not always present when the container is removed from the microwave oven. 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, and cause injury or damage to the oven.



IMPORTANT SAFETY INSTRUCTIONS

(continued)

! WARNING

TO AVOID THE RISK OF SHOCK:

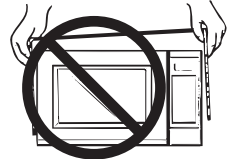
DO NOT remove outer panel from oven. Repairs must be done only by a qualified service person.

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.

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 counter top household use only. It is not intended for built-in operation and is not approved or tested for mobile vehicle, marine, or commercial use.

Installation

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.

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.

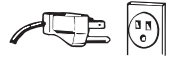


INSTALLATION AND GROUNDING INSTRUCTIONS

(continued)

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 tabletop 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 13). 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 facing 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 nonporous 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.



Care and Cleaning of Your Microwave Oven

BEFORE CLEANING:

Unplug oven at wall outlet. If outlet is inaccessible, leave oven door open while cleaning.

AFTER CLEANING:

Be sure to place the Roller Ring and the Glass Tray in the proper position and press **Stop/Reset Pad** to clear the Display.

Label:

Do not remove, wipe with a damp cloth.

Glass Tray:

Remove and wash in warm soapy water or in a dishwasher.

Outside oven surfaces:

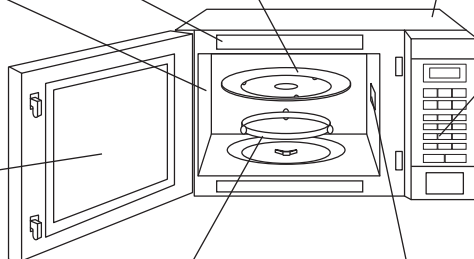
Clean with a damp cloth. To prevent damage to the operating parts inside the oven, water should not be allowed to seep into ventilation openings.

Inside of the oven:

Wipe with a damp cloth after using. Mild detergent may be used if needed. Do not use harsh detergents or abrasives.

Oven Door:

Wipe with a soft dry cloth when steam accumulates inside or around the outside of the oven door. During cooking, steam is given off from the food. (Some steam will condense on cooler surfaces, such as the oven door. This is normal.) Inside surface is covered with a heat and vapor barrier film. **Do not remove.**



Control Panel:

* Covered with a removable protective film to prevent scratches during shipping. Small bubbles may appear under this film. *(Hint - To remove film, apply masking or clear tape to an exposed corner and pull gently.)*
* If the Control Panel becomes wet, clean it with a soft dry cloth. Do not use harsh detergents or abrasives.

Roller Ring and oven cavity floor:

Clean the bottom surface of the oven with mild detergent water or window cleaner, and dry. Roller Ring may be washed in mild soapy water or dishwasher. These areas should be kept clean to avoid excessive noise.

Do not remove wave guide cover: It is important to keep cover clean in the same manner as the inside of the oven.

IT IS IMPORTANT TO KEEP THE OVEN CLEAN AND DRY. FOOD RESIDUE AND CONDENSATION MAY CAUSE RUSTING OR ARCING AND DAMAGE TO THE OVEN. AFTER USE, WIPE DRY ALL SURFACES-INCLUDING VENT OPENINGS, OVEN SEAMS, AND UNDER GLASS TRAY.

PARTS DESCRIPTION

Instructions / Operating Manual (this book)
Glass Tray
Roller Ring Assembly

PART NUMBER

F00039Y10AP
F06015Q00AP
F290D5Q01AP

Accessory Purchases (U.S.A and Puerto Rico)

Purchase Parts, Accessories and Instruction Books online for all Panasonic Products by visiting our Web Site at: <http://www.pstc.panasonic.com> or, send your request by E-mail to: npcparts@us.panasonic.com

You may also contact us directly at:
1-800-332-5368 (Phone) 1-800-237-9080 (Fax Only) (Monday-Friday 9 am to 8 pm, EST.)
Panasonic Service and Technology Company
20421 84th Avenue South,
Kent, WA 98032
(We Accept Visa, MasterCard, Discover Card, American Express, and Personal Checks)

For hearing or speech impaired TTY users, TTY: 1-866-605-1277



Before Requesting Service

These things are normal:

The oven causes interference with my TV.

Some radio and TV interference might occur when you cook with the microwave oven. This interference is similar to the interference caused by small appliances such as mixers, vacuums, blow dryers, etc. It does not indicate a problem with your oven.

Steam accumulates on the oven door and warm air comes from the oven vents.

During cooking, steam and warm air are given off from the food. Most of the steam and warm air are removed from the oven by the air which circulates in the oven cavity. However, some steam will condense on cooler surfaces such as the oven door. This is normal. After use, the oven should be wiped dry (see page 23).

PROBLEM

POSSIBLE CAUSE

REMEDY

Oven will not turn on.



The oven is not plugged in securely.

Remove plug from outlet, wait 10 seconds and re-insert.

Main circuit breaker or main fuse is tripped or blown.

Reset main circuit breaker or replace main fuse.

There is a problem with the outlet.

Plug another appliance into the outlet to check if it is working.

Oven will not start cooking.



The door is not closed completely.

Close the oven door securely.

Start Pad was not pressed after programming.

Press **Start** Pad.

Another program is already entered into the oven.

Press **Stop/Reset** Pad to cancel the previous program and enter new program.

The program is not correct.

Program again according to the Operating Instructions.

Stop/Reset Pad has been pressed accidentally.

Program oven again.

The Glass Tray wobbles.



The Glass Tray is not positioned properly on the Roller Ring or there is food under the Roller Ring.

Take out Glass Tray and Roller Ring. Wipe with a damp cloth and reset Roller Ring and Glass Tray properly.

When the oven is operating, there is noise coming from the glass tray.



The Roller Ring and oven bottom are dirty.

Clean these parts according to **Care and Cleaning of your Microwave Oven** (see page 23).

The word "Child" appears in the **Display Window**.



The CHILD LOCK was activated by pressing **Start** pad 3 times.

Deactivate LOCK by pressing **Stop/Reset** pad 3 times.

The oven stops cooking and "H00" appears in the display window.



The oven unit power supply source failed.

Please contact an authorised Service Center (see page 25).



Specifications

	NN-SA631B	NN-SA631W	NN-SA651S	NN-SA661S
Power Source:	120 V, 60 Hz			
Power Consumption:	12.4 Amps, 1,480 W			
Cooking Power:*	1,200 W			
Outside Dimensions (W x H x D):	20 ¹¹ / ₁₆ " x 12 ¹ / ₄ " x 15 ¹³ / ₁₆ " (525 mm x 310 mm x 401 mm)			
Overall Oven Cavity Dimensions (W x H x D):	13 ⁵ / ₈ " x 9 ¹⁵ / ₁₆ " x 14 ³ / ₈ " (347 mm x 251 mm x 365 mm)			
Operating Frequency:	2,450 MHz			
Net Weight:	Approx. 25.5 lbs. (11.5 kg)			

Trim Kit for NN-SA651S/SA661S:

Model Number:	NN-TK621S AP (Stainless)
Outside Dimensions (W x H):	27" x 16 ¹ / ₂ " (686 mm x 419 mm)
Cabinet Opening (W x H x D):	22 ¹¹ / ₁₆ " x 15 ⁵ / ₁₆ " x 21" (576.3 mm x 389 mm x 533 mm)

*IEC Test procedure

Specifications subject to change without notice.