Service Manual Commercial Microwave Convection Oven

Model No. NE-SCV2BPQ

Product Colour : Silver Destination : United Kingdom



A WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE =

There are special components used in this equipment which are important for safety. These parts are marked by \triangle in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

•The specifications and the parts of this product are subject to change without notice for performance improvement or other purposes.

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1 Safety Precautions

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WARNING

 This product should be serviced only by trained, qualified personnel. This service manual covers products for following markets.
 When troubleshooting or replacing parts, please refer to the country identifications shown below for your applicable product specification.

BPQ ... For United Kingdom

⚠ WARNING

Be careful about receiving an electric shock from the high voltage parts. • Never touch any circuit wiring with your hand nor with an insulated tool during operation.

DO NOT measure the voltage in high voltage circuit including filament voltage of magnetron. • It is neither necessary nor advisable to attempt measurement of the high voltage.

WARNING

Be careful about receiving an electric shock.

• When doing electric connection service such as voltage measurement, please be careful enough about receiving an electric shock at electric charging parts and cable terminal parts.

Pull out electric plug when doing repair work.

 Disassembling and assembling and replacing parts should be done after pulling out electric plug. Receiving an electric shock or getting an injury may occur.

Please discharge high voltage capacitor.

For 30 seconds after the oven is turned off, an electric charge remains in the high voltage capacitor.

· Process of discharge the high voltage capacitor.

- 1. Unplug the oven from its power source and leave it for 30 sec.
- 2. Touch chassis side first then short to the high voltage capacitor terminal.

Do not touch any rotating object with hand unless it stops completely.

• Slow rotation may also roll on your hands and cause injure.

Be sure wiring routing structure of cables should be its forme state after doing repair work.

· Do not touch rotating part and high temperature part of lead wires, high voltage part and surface of parts.

It may be the cause of failure, smoke, ignition or receiving an electric shock.

CAUTION

Please wear gloves when disassembling, replacing and assembling.

· Always wear gloves to prevent an injury by the metal end face or an electric shock at the time of the electricity service.

2 Specifications

Outside Dimensions (W x D x H)		474 mm x 565 mm x 412 mm		
Cavity Effective Dimensions (W x D x H	270 mm x 330 mm x 110 mm			
Cavity Capacity		10 L (approx.)		
Net Weight		38.3 kg (approx.)		
Shipping	Dimensions (W x D x H)	584 mm x 712 mm x 579 mm		
	Gross Weight	46 kg (approx.)		
Length of Power Cord	·	1500 mm (approx.)		

Rated Voltage		230-240 V, Single phase				
Rated Frequency		50 Hz				
Rated Power Consumption		3.6 kW				
Rated High-Frequency Outp	out	1050 W				
Rated Oscillation Frequency	/	2450 MHz				
Microwave	Power Consumption	2.24 kW				
	High-Frequency Output	1050 W / 900 W / 800 W / 700 W / 600 W / 500 W / 300 W / 200 W / 0 W				
Convection	Power Consumption	1.465 kW (100% Fan Speed)				
	Heater Output	1.35 kW				
Grill (High) *1	Power Consumption	1.915 kW (100% Fan Speed)				
	Heater Output	1.80 kW				
Grill (Low) *1	Power Consumption	1.265 kW (100% Fan Speed)				
	Heater Output	1.15 kW				
Covection + Grill (High) *1	Power Consumption	3.265 kW (100% Fan Speed)				
	Heater Output	Grill: 1.80 kW / Convection: 1.35 kW				
Convection + Grill (Low) *1	Power Consumption	2.615 kW (100% Fan Speed)				
	Heater Output	Grill: 1.15 kW / Convection: 1.35 kW				
Convection + Microwave	Power Consumption	3.18 kW (100% Fan Speed)				
	Heater Output	1.35 kW				
	High-Frequency Output	800 W				
Grill (High) + Microwave *1	Power Consumption	3.60 kW (100% Fan Speed)				
	Heater Output	1.80 kW				
	High-Frequency Output	800 W				
Grill (Low) + Microwave *1	Power Consumption	3.48 kW (100% Fan Speed)				
	Heater Output	1.15 kW				
	High-Frequency Output	1050 W				

*1 : The power consumption during grilling, etc. indicates a value measured with the oven pre-heated.

• The power consumption indicates a value measured after the rotation of the cooling fan.

• The power consumption of the oven with the power plug plugged into an outlet and its display turned off is approx. 2.5 W. (Approx. 4 W when the oven has the initial screen displayed on its display)

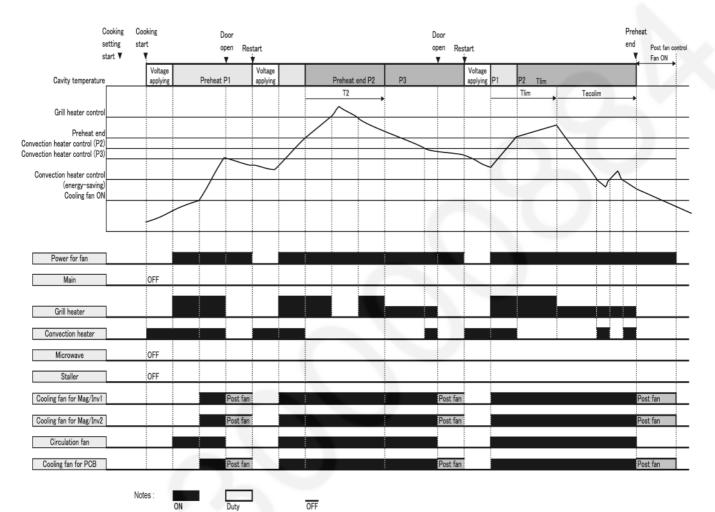
Menu	Function	Maximum cooking time
Preheating	Heating (180 ~ 280 °C)	
Convection	Heating (180 ~ 280 °C) • Fan Speed (30 ~ 100%)	30 min
Grill (High / Low)	Heating • Fan Speed(30 ~ 100%)	30 min
Convection + Grill (High / Low)	Heating (180 ~ 280 °C) • Fan Speed (30 ~ 100%)	30 min
Convection + Microwave	Heating (180 ~ 280 °C) + Microwave (~ Max800 W) • Fan Speed (30 ~ 100%)	2 min
Grill (High) + Microwave	Heating + Microwave (~ Max800 W) • Fan Speed (30 ~ 100%)	2 min
Grill (Low) + Microwave	Heating + Microwave (~ Max1050 W) • Fan Speed (30 ~ 100%)	2 min
Cooking in Steps	Maximum Microwave Power Consumption & Maximum Cooking Time by E (Convection & Microwave / Grill & Microwave)	ach Step
	Step1 : Max 800 W (In case Grill (Low), Max 1050 W)	2 min
	Step2 : Max 600 W	2 min
	Step3 : Max 300 W	30 min
Memory Cooking	Heating with a Saved Cooking Programme.	
Cooling	The inside of the oven can be cooled after convection cooking or grilling.	45 min

3 Technical Descriptions

3.1. Operation description

3.1.1. Manual cooking operation

3.1.1.1. Preheating



UN

Post fan

Stay ON until the temperature is approx. 190 $^\circ\text{C}$ or less (Medium rotation) Turn OFF when the temperature drops to approx. 190 $^\circ\text{C}$ or less

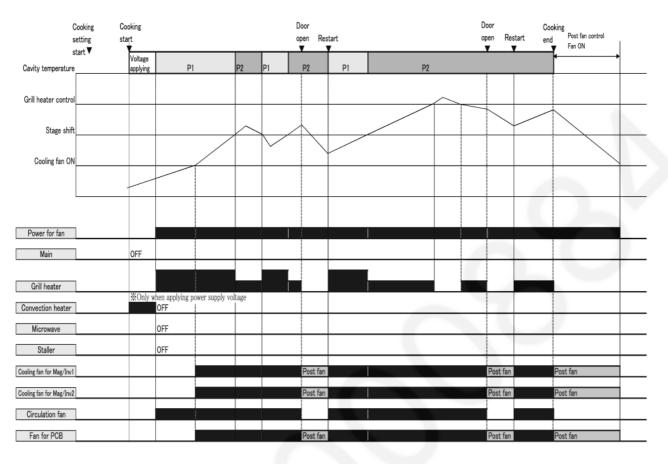
3.1.1.2. Convection Cooking

Cookir setting start	sta						Door oper ▼		Cooking end	Post fan c Fan ON	ontrol
Cavity temperature		Voltage applying			Coo	king			-		
Convection heater control											
Cooling fan ON										<u> </u>	
	,										
L								_			
Power of fan										-	
Main			OFF					-			
Grill heater			OFF								
Convection heater		*Only w	hen apply	ying power supply	voltage						
Microwave			OFF								
Staller			OFF		_			_			
Cooling fan for Mag/Inv1							Po	ost fan	Pos	t fan	
Cooling fan for Mag/Inv2						<u> </u>	Po	ost fan	Pos	t fan	
Circulation fan											
Fan for PCB					<u> </u>		P	ost fan	Pos	t fan	



Post fan Stay ON until the temperature is approx. 190 °C or less (Medium rotation) Turn OFF when the temperature drops to approx. 190 °C or less

3.1.1.3. Grill Cooking



Notes : ON Duty OFF

■ Upper heater output (With the grill set to high): 1800 W (P1 stage), 420 W (P2 stage) Upper heater output (With the grill set to low): 1150 W (P1 stage), 420 W (P2 stage)

Post fan

Stay ON until the temperature is approx. 190 $^\circ$ C or less (Medium rotation) Turn OFF when the temperature drops to approx. 190 $^\circ$ C or less

3.1.1.4. Convection-and-Grill Cooking

se	ooking itting art ▼	Cooking start ▼						0		estart ▼	Cooking end	Post fan control Fan ON	1
Cavity temperature		Voltage applying				Cooking							→
Grill heater control							\sim					-	_
Convection heater control									$\overline{\mathbf{N}}$			_	
Cooling fan ON													
Power for fan													
Main		OFF											
Grill heater													
Convection heater		∦Only wh	en applying	g power sup	ply voltage								
Microwave		OFF											
Staller		OFF											
Cooling fan for Mag/Inv1									Post far	1	Post f	an	
Cooling fan for Mag/Inv2								÷	Post far	1	Post f	an	
Circulation fan								<u> </u>					
Fan for PCB						-			Post far	1	Post f	an	<u> </u>
		Notes		DN	Duty]	_						

Upper heater output : 1800 W (With the grill set to high) / 1150 W (With the grill set to low)

Post fan Stay ON until the temperature is approx. 190 °C or less (Medium rotation) Turn OFF when the temperature drops to approx. 190 °C or less

3.1.1.5. Microwave Cooking

	2nc		Door open ▼		Cooking end Post fan control Fan ON
Cavity temperature		Cooking			
Power for fan					
Main				_	
Main					
Grill heater	It depends on the setting of previous stage.	OFF			
Convection heater	It depends on the setting of previous stage.	OFF			
Microwave (P8-P3)	It depends on the setting of previous stage.				
Microwave (P2-P1)	It depends on the setting of previous stage.				
Staller	It depends on the setting of previous stage.				
Cooling fan for Mag/Inv1	It depends on the setting of previous stage.		Pos	t fan	Post fan
Cooling fan for Mag/Inv2	It depends on the setting of previous stage.		Pos	t fan	Post fan
		OFF			-
	It depends on the setting of previous stage.		Dee	t fan	Post fan
Cooling fan for PCB	ir ocheurs on me seittik oi hisviora arake.		Pos		Post Tan

Notes :

ON

OFF

Post fan

Stay ON until the temperature is approx. 190 °C or less (High rotation for the first 1 minute and medium rotation afterwards) Turn OFF when the temperature drops to approx. 190 °C or less

Maximum	microwav	e power	and co	oking time	for each step
		0			

	Convection and Microwave/						
	Grill and Microwave						
	Maximum	Maximum cooking					
	microwave power	time					
Step 1	P6 (800 W)*	2 min.					
Step 2	P4 (600 W)	2 min.					
Step 3	P2 (300 W)	30 min.					

*You can also select P7 (900 W) and P8 (1050 W) when you using Grill Low.

In Step 1, it is not possible to set only Microwave.

Cooking Cooking Door Cooking Post fan control Post fan control setting Restart start open end Fan ON start 🔻 V • ٦ Voltage Cooking Cavity temperature applying Convection heater control Cooling fan ON Power for fan Main OFF Grill heater XOnly when applying power supply voltage Convection heater Microwave Depends on the output power of the microwave Depends Staller Cooling fan for Mag/Inv1 Post fan Post fan Cooling fan for Mag/Inv2 ost far Post fan Circulation fan Fan for PCB Post fan Post fan

3.1.1.6. Convection-and-Microwave Cooking

Notes : ON Duty OFF

Post fan

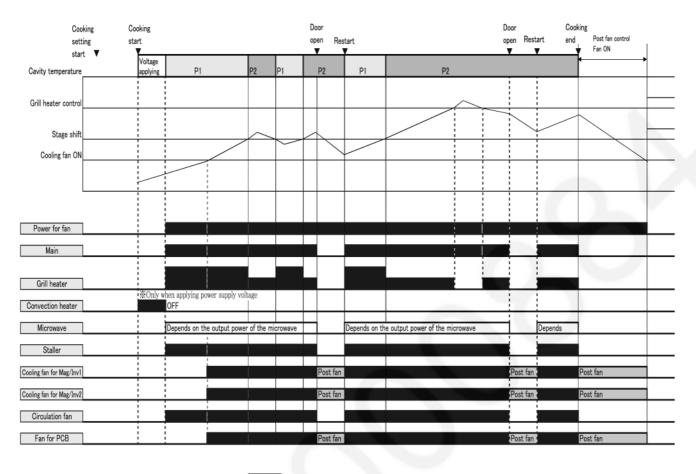
Stay ON until the temperature is approx. 190 $^\circ C$ or less (Medium rotation) Turn OFF when the temperature drops to approx. 190 $^\circ C$ or less

Maximum microwave power and cooking time for each step

	Convection and Microwave/					
	Grill and Microwave					
	Maximum	Maximum cooking				
	microwave power	time				
Step 1	P6 (800 W)*	2 min.				
Step 2	P4 (600 W)	2 min.				
Step 3	P2 (300 W)	30 min.				
	Step 2	Grill and Maximum microwave power Step 1 P6 (800 W)* Step 2 P4 (600 W)				

*You can also select P7 (900 W) and P8 (1050 W) when you using Grill Low.

• In Step 1, it is not possible to set only Microwave.



3.1.1.7. Grill-and-Microwave Cooking

Notes : ON

Duty

OFF

Upper heater output (With the grill set to high): 1800 W (P1 stage), 420 W (P2 stage) Upper heater output (With the grill set to low): 1150 W (P1 stage), 420 W (P2 stage)

Post fan

Stay ON until the temperature is approx. 190 °C or less (Medium rotation) Turn OFF when the temperature drops to approx. 190 °C or less

Maximum microwave power and cooking time for each step

	Convection and Microwave/						
	Grill and Microwave						
	Maximum	Maximum cooking					
	microwave power	time					
Step 1	P6 (800 W)*	2 min.					
Step 2	P4 (600 W)	2 min.					
Step 3	P2 (300 W)	30 min.					

*You can also select P7 (900 W) and P8 (1050 W) when you using Grill Low.

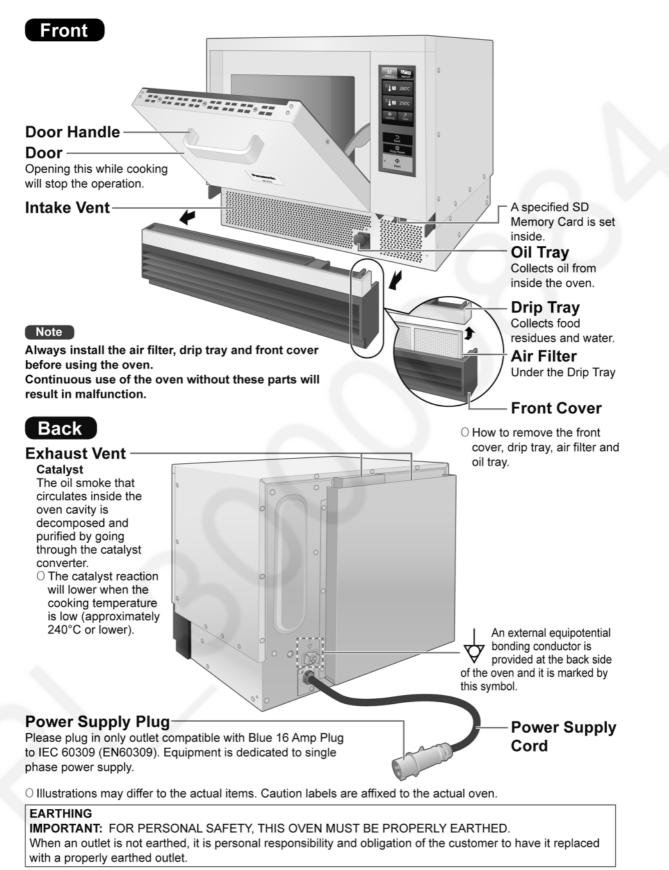
In Step 1, it is not possible to set only Microwave.

3.1.1.8. Cooling

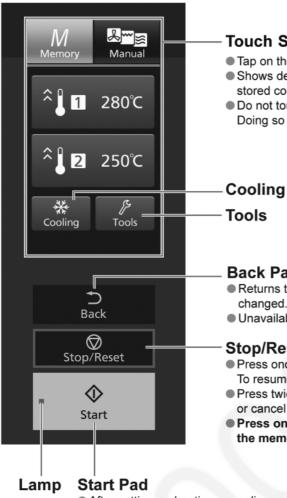
	Cooling start		Cooling end	Cooling start	Cooling end
Cavity temperature		Cooling	- T	Coolin	
	Tcool				
Fan OFF					
Power for fan					
Main	OFF				
Grill heater	OFF				
Convection heater	OFF				
Microwave	OFF				
Staller	OFF				
Cooling fan for Mag/Inv1		-			
Cooling fan for Mag/Inv2					
Circulation fan					
Fan for PCB					
	Notes : ON	Duty	OFF		

Regardless of whether the door is opened or closed, cooling will be performed.

4 Location of Controls and Components



Control Panel (initial screen)



Touch Screen (display)

- Tap on the screen directly to use the controls.
- Shows details such as the cooking temperature, cooking time, stored cooking programme, beep information, and so on.
- Do not touch the screen with a sharp object. Doing so will cause damage.

Back Pad

- Returns to the previous control screen so that settings can be changed.
- Unavailable after cooking has started.

Stop/Reset Pad

- Press once to temporarily stop the cooking process. To resume cooking, press the Start pad.
- Press twice to clear your instructions (returns to the initial screen) or cancel cooking.
- Press once to cancel cooking of a stored programme when the memory lock is turned on.
- After setting preheating or cooling, press this pad.
- After preheating, setting memory cooking or manual cooking and press this pad to start cooking.
- The lamp will flash to encourage you to press the pad.

Auto Power OFF Function

The initial screen of the display turns off automatically if it is not used for 5 minutes.

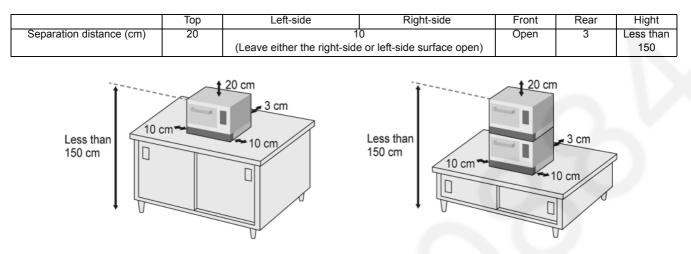
To turn the power ON

In Auto Power OFF mode, opening the door turns the power ON.

Installation Instructions 5

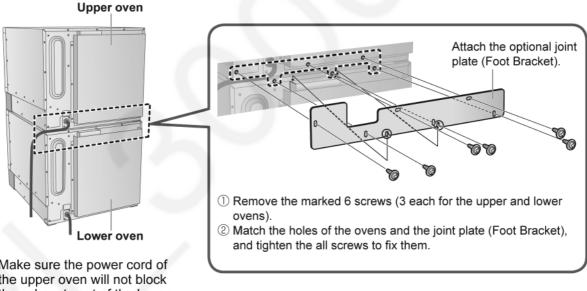
Keep the following proper distances between the outer surfaces of the oven and walls.

- Otherwise, overheating can cause damage to the walls, etc., such as burn, deformation or ignition.
- To ensure the safe use of the oven, keep distances greater than the ones indicated in the table below between its outer surfaces and the walls.



Instruction for Stacking 6

Oven can be stacked up to two ovens by fixing with the Panasonic joint plate (Foot Bracket/A11343G80BP). The joint plate is an optional item. Contact the dealer or a service agent. Request the installation to an electric constructor. (The construction cost is not included in the price of the oven.)



Make sure the power cord of the upper oven will not block the exhaust vent of the lower one.

7 Important Safety Instructions

INSTALLATION

EXAMINE YOUR OVEN

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

ATTACH CAUTION LABEL.

If a caution label is enclosed with your oven, please attach it to the top of the appliance before using.

EARTHING

IMPORTANT: FOR PERSONAL SAFETY, THIS APPLIANCE MUST BE PROPERLY EARTHED. When an outlet is not earthed, it is personal responsibility and obligation of the customer to have it replaced with a properly earthed outlet.

VOLTAGE AND POWER WARNING

The voltage used must be the same as specified on the microwave oven. Using a higher voltage than that which is specified is dangerous, and may result in a fire or other type of accident causing damage. Do not plug your oven in via an extension cable as this can be dangerous. It is important to plug the oven directly into a wall socket. The back of the appliance heats up during use. Do not allow the cord to be in contact with the back of the appliance or cabinet surface.

GUARANTEE CARD

Fill out and post the pre-addressed guarantee card.

PLACEMENT OF THE OVEN

Locate the oven on a surface which is flat and stable. The oven is freestanding type and shall not be placed in a cabinet. Do not place the oven in a hot or damp place; e.g. near a gas or electric range. Do not operate the oven when the room temperature is higher than 40°C and/or the humidity is more than 85%. Free airflow around the oven is important. There is a possibility of a small amount of interference with weak broadcast signals if the oven is too close to a radio or TV. For safe and efficient operation, the oven must have sufficient air flow to the air vents i.e. at least 10 cm at both sides, 3 cm at the rear and 20 cm at the top. The front side must not be blocked. Do not install the oven at 150 cm or more above the floor. Doing so may result in danger of burns. Only a combination of same models are allowed when stacking. Oven must be placed for easy access to control panel and door and also, for disconnect power or shut off power by fuse or circuit breaker.

 \downarrow

An external equipotential bonding conductor is provided at the back side of the oven and it is marked by this symbol.

WARNING

- If the door or door seals are damaged, the oven must not be operated until it has been repaired by a competent person.
- The contents of feeding bottles and baby food jars shall be stirred or shaken and the temperature checked before consumption, in order to avoid burns.
- 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.
- It is hazardous for anyone other than a competent person to carry out any service or repair operation that involves the removal of a cover which gives protection against exposure to microwave energy.
- 6. Floor at adjacent to the appliance may be slippery, care should be taken.
- Appliances must be disconnected from their power supply during cleaning or maintenance and when replacing parts.
- To avoid scalding, do not use loaded containers with liquids or cooking goods which becomes fluid by heating in higher levels than those which can be easily observed.
- Accesible parts may become hot during use. Young children should be kept away.

- 1. To reduce the risk of burns, electric shock, fire, injury to persons or excessive microwave energy, read all instructions before using oven.
- 2. In order to maintain the high quality of the magnetron tubes and other components, you are requested not to turn the oven on with no food inside.
- 3. High voltages are present inside the cabinet. Repairs and adjustments should be done only by qualified service personnel.
- 4. This oven requires free airflow in the back and front for maximum cooling efficiency. You should keep the air vents clear while cooking.
- 5. Do not dry clothes in the oven since there is a possibility of the clothes burning if left in the oven for too long of a time.
- 6. Use this oven only for its intended use as described in this manual.
- 7. Do not use this oven or accessories, if they are not working properly, or if they have been damaged or dropped.
- 8. Do not use outdoors.
- 9. Do not immerse cord or plug in water.
- 10. Keep cord away from heated surfaces.
- 11. Do not let cord hang over edge of table or counter.
- 12. To reduce the risk of fire in the oven cavity:
 - a) Do not overcook food. Carefully attend oven if paper, plastic, or other combustible materials are placed inside the oven to facilitate cooking.
 - b) Remove wire twist-ties from bags before placing bag in oven.
 - c) If materials inside the oven should ignite, keep oven door closed, unplug the oven, or shut off power at the fuse or circuit breaker panel.
 Always follow "Types of Container to Use".
- 13. Do not store flammable materials next to, on top of, or in the oven. It could be a fire hazard.
- 14. Do not overturn or drop this oven or accessories. Doing so may cause injury, electric shock, or microwave leakage.
- 15. Do NOT use this oven to heat chemicals or other non-food products. Do NOT clean this oven with any product that is labelled as containing corrosive chemicals. The heating of corrosive chemicals in this oven may cause microwave radiation leaks.
- 16. Do not use your oven for home canning or the heating of any closed jar. Pressure will build up and the jar may explode. In addition, the oven cannot maintain the food at the correct canning temperature. Improperly canned food may spoil and be dangerous to consume.
- 17. Do not attempt to deep fat fry in your oven.

- Potatoes, apples, egg yolks, whole squash and sausages are examples of foods with nonporous skins. This type of food must be pierced before cooking, to prevent bursting.
- 19. When reheating babies bottles always remove top and teat. Liquid at the top of the bottle will be much hotter than at the bottom and must be shaken thoroughly before checking the temperature. The lid must also be removed from babies food jars, the contents must also be stirred or shaken before the temperature is checked.

Always follow "Types of Container to Use".

- 20. The door seals and door seal areas should be cleaned with a damp cloth.
- 21. If smoke is observed, turn off or unplug the oven and keep the door closed in order to stifle any flames.
- 22. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- 23. Before use, the user should check that utensils are suitable for use in the oven.
- 24. When heating liquids, e.g. soup, sauces and beverages in your oven, overheating the liquid beyond boiling point can occur without evidence of bubbling. This could result in a sudden boil over the hot liquid. To prevent this possibility the following steps should be taken:
 - a) Avoid using straight-sided containers with narrow necks.
 - b) Do not overheat.
 - c) Stir the liquid before placing the container in the oven and again halfway through cooking time.
 - d) After heating, allow to stand in the oven for a short time, stirring again before carefully removing the container.
- 25. When heating food in plastic or paper containers, keep an eye on the oven due to the possibility of ignition.

Always follow "Types of Container to Use".

- 26. The oven is intended for heating food and beverages. Drying of food or clothing and heating of warming pads, slippers, sponges, damp cloth and similar may lead to risk of Injury, ignition or fire.
- 27. Eggs in their shell and whole hard-boiled eggs should not be heated in ovens since they may explode, even after microwave heating has ended.
- 28. This oven can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the oven in a safe way and understand the hazards involved. Children shall not play with the oven. Cleaning and user maintenance shall not be made by children without supervision.
- 29. The oven should not be cleaned with a water jet.
- 30. The oven should not be cleaned with a steam cleaner.

- 31. Electromagnetic fields can present a possible danger. We would recommend that people using a heart pacemaker avoid proximity to these fields.
- 32. When the oven is not in use, it is recommended that items are removed. If left inside and the switch is accidentally activated, there is potential for damage to occur.
- 33. During service and/or replacement of parts, the oven should be disconnected from the power supply. Once the plug is removed, it should remain visible to the service operator to avoid inadvertent reconnection.
- 34. The oven should be cleaned regularly and any food deposits removed.
- 35. Do not heat with oil from the leftover food or the food left in the accessories in the oven cavity. Doing so may generate sparks and cause fire or smoking.
- 36. Failure to maintain the oven in a clean condition could lead to deterioration of the surface that could adversely affect the life of the appliance and possibly result in a hazardous situation.
- 37. Do not use metalware, ceramics trimmed with gold or silver, or any container with a metal content when cooking with the microwave. ONLY THE PROVIDED WIRE RACK CAN BE USED.
- 38. It is recommended to use personal protection equipment in case of spreading hot food stuff.
- 39. Exterior oven surfaces, including air vents on the cabinet and the oven door will get hot during use. Take care when opening or closing door and when inserting or removing food and accessories.
 The even has bestern situated in the tap and hask of the even.

The oven has heaters situated in the top and back of the oven. After use, the roof, walls and floor will be very hot.

- 40. Take caution when removing the hot accessories after cooking. It may cause burn. Use oven gloves.
- 41. Take caution when rapidly cooling the hot accessories after cooking. It may cause burn with steam or airborne droplets. It may also cause injury by the accessories breaking.
- 42. It is essential reheated food is served "piping hot". Always check before serving and if in doubt return food to oven for further heating. All temperatures provided are for guidance only. Local legislation of food temperature requirements should be applied, to ensure a safe temperature has been reached before serving any food.
- 43. The standing time is essential for foods cooked or reheated by CONVECTION-AND-MICROWAVE, or GRILL-AND-MICROWAVE. During the standing time, heat will continue to conduct to the centre to cook the food completely. The denser the food, the longer the standing time. Reheated foods also require a standing time.

- 44. Follow specific instructions in this guide for proper use of oven accessories and cookware. Failure to do so could damage the oven. Take care when removing food and/or accessories from the oven.
- 45. When the oven has finished operating, the fan motor will continue to rotate in order to cool the electric components. This is normal and food can still be removed from the oven during this cooling period. Do not remove the plug or turn off the breaker.

USING YOUR OVEN

Do not store any objects inside the oven in case it is accidentally turned on. In case of electronic failure, the oven can be turned off at wall outlet.

MAINTENANCE OF YOUR OVEN

If your oven should require a service, please contact +44 344 844 3899 (UK) / +353 012 898 333 (IR) and we will provide details of an appropriate service agent. Do not attempt to make any adjustments or repairs to any part of the oven. (Phone numbers are subject to change without notice.)

WARRANTY: 12 months on-site warranty for the United Kingdom is included in the purchase price of this product.

WHEN THE HEATER IS TURNED ON FOR THE FIRST TIME

You may detect smoke or a harsh odour. This is normal and is caused by the burning off of the oil that is used to protect the oven cavity.

You may prefer to perform a blank baking as described below if you find this unpleasant;

- 1. Place the supplied Base Plate Liner, Ceramic Tray and Wire Rack into the oven.
- 2. Select Manual and preheat the oven at 280°C for 20 minutes.
- 3. Once this operation is completed, open then close the door and press the Stop/ Reset pad to return to the initial screen.
- •Always ventilate when performing a blank baking.
- There is no food sanitation issues even if you use the oven without performing a blank baking first.

8 Types of Container to Use

CONVECTION-AND-MICROWAVE/ GRILL-AND-MICROWAVE

As these programmes use microwaves and heat (CONVECTION or GRILL), you must choose the container carefully.

DO USE: Ceramics, Heat Resistant glass eg. Pyrex®

• As for metal, ONLY THE PROVIDED WIRE RACK CAN BE USED.

DO NOT USE:

Plastics, Cling film, Metal, Metal skewers, Aluminum foils, Silicon, Lacquerware, Glass without heat resistance, Paper, Wood, Wicker

CONVECTION/GRILL/CONVECTION-AND-GRILL

DO USE: Ceramics, Heat Resistant glass eg. Pyrex[®], Metal, Metal skewers, Aluminum foil DO NOT USE:

Plastics, Cling film, Silicon, Lacquerware, Glass without heat resistance, Paper, Wood, Wicker

MICROWAVE

You can use microwave only cooking at Step 2 and Step 3 in Cooking in Steps.

DO USE: Ceramics, Heat Resistant glass eg. Pyrex[®], Plastics/Cling film/Silicon with heat resistance of 180°C or higher

As for metal, ONLY THE PROVIDED WIRE RACK CAN BE USED.

You can not use any dish with METAL PATTERN or TRIM.

DO NOT USE:

Metal, Metal skewers, Aluminum foil, Plastics with heat resistance less than 180°C, Polyethylene, Melamine, Phenol, Urea resin, Lacquerware, Glass without heat resistance, Paper, Wood, Wicker

 Please observe the heatproof temperature described in the package when using heat-resistant cooking sheet or parchment paper, etc.

-Heating Methods

Convection

A convection heater (circulation fan heater) circulates heat throughout the oven cavity and cooks food fully while controlling the set temperature.

Grill

A grill heater provides heat and a circulation fan operates to distribute the heat throughout the oven cavity.

Every surface of the food is well-cooked.

Convection and Grill

Both convection heater (circulation fan heater) and grill heater circulate heat in the oven cavity while controlling the temperature.

Cooks the food throughout while browning on the surface.

Microwave

Applies microwaves to the food causing the molecules in the food to strongly collide and give rise to heating by friction.

As a result, the food is heated about the same on the surface and inside.

Convection and Microwave

Combined cooking with convection heater (circulation fan heater) and microwave. A convection heater circulates heat throughout the oven cavity with controlling the set temperature while the microwave heats the food fully. The cooking time is reduced.

Grill and Microwave

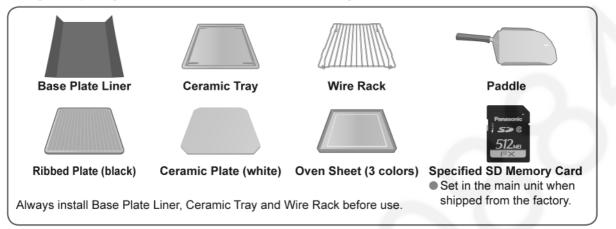
Combined cooking with grill heater and microwave.

A grill heater adds heat while a microwave heats the food, and additionally a circulation fan operates to give the entire surface a crisp finish. The cooking time is reduced.

9 Operating Instructions

9.1. Accessories

• To purchase accessories, please contact the dealer or a service agent. Take care when handling Ceramic Tray, Ribbed Plate and Ceramic Plate as they are breakable. If they are damaged, stop using them and contact the dealer or a service agent.



Procedure to attach the Base Plate Liner

Use the Base Plate Liner to prevent the food and oil stains on the bottom surface of the oven cavity .

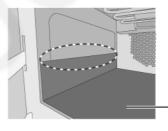
- After removing the Base Plate Liner from the packaging, turn it over and bend it along the left and right bend lines. (Bend the Base Plate Liner in the opposite direction to the orientation when removed from the packaging.)
- (2) Remove all the accessories from the oven, insert the bent Base Plate Liner up to the inside of the oven cabinet, and ensure that it is in close contact with the inside of the oven cabinet.

(Ensure close contact so that there is no gap between the inner side of the oven and the Base Plate Liner. If there is a gap, oil, etc. will collect there.)

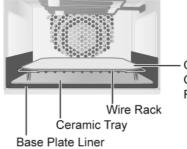
③ Place the Ceramic Tray, Wire Rack, and accessories required for cooking on the Base Plate Liner in that order. Orientation when removed from the packaging

Turn over and bend on the left and right

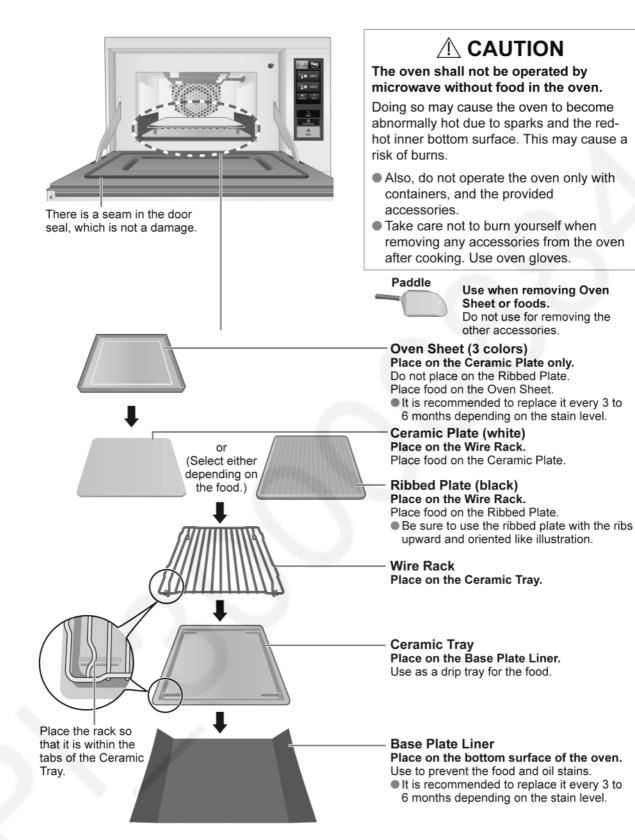




Base Plate Liner



Ceramic Plate, Oven Sheet, Ribbed Plate etc.



Illustrations may differ to the actual items.



Specified SD Memory Card

- Set in the main unit when shipped from the factory.
- When saving or deleting a cooking process, or when cooking according to a saved programme, be sure to set up and use the specified SD Memory Card. If a card other than the specified SD Memory Card is set up, "U17" appears.
- You can also save a cooking programme data onto the specified SD Memory Card using your personal computer.

Notes

- ·Be careful not to impart static electricity to the SD Memory Card while it is not set in the main unit.
- Do not dismantle or modify.
- Do not bend, drop, wet or subject the SD Memory Card to strong impacts.
- Do not touch the metal terminals with your hands or metal.
- Do not peel off the pasted labels. Also, do not paste new labels or stickers.
- Do not expose to direct sunlight or place in other hot locations.
- Do not place in humid or dusty locations.
- Do not place in locations where corrosive and other gases are generated.
- Always close the SD Memory Card cover except when inserting and taking out the card to prevent contamination by water and dirt.

• If the SD Memory Card is lost or becomes faulty, please contact the dealer or a service agent to obtain a replacement.

How to insert/remove

Before you insert / remove an SD Memory Card, always unplug the oven for personal safety.

Insert and remove the SD Memory Card with the display unit turned off.

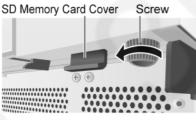
Data may be destroyed when it is inserted or removed immediately after the power supply plug is inserted or when the display unit is turned on.

How to remove

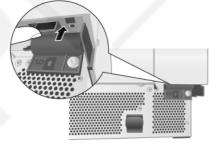




(2) Turn the screw and open the SD Memory Card cover by tools

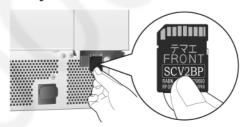


③ Push in the SD Memory Card with your finger Take out the SD Memory Card when it comes out.



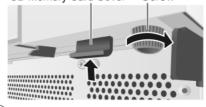
How to insert

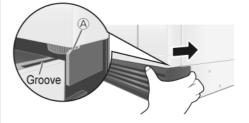
 Insert the SD Memory Card all the way inside



(2) Close the SD Memory Card cover and tighten the screw by tools

SD Memory Card Cover Screw

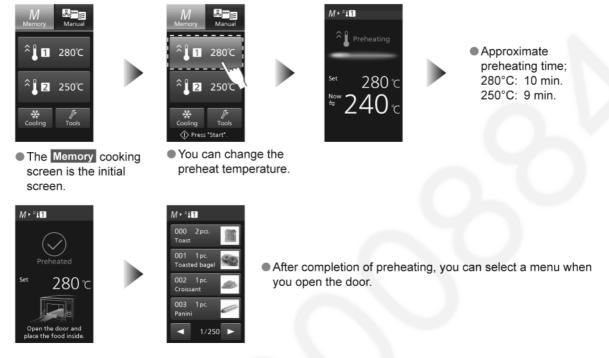




9.2. How to Operate the Touch Screen

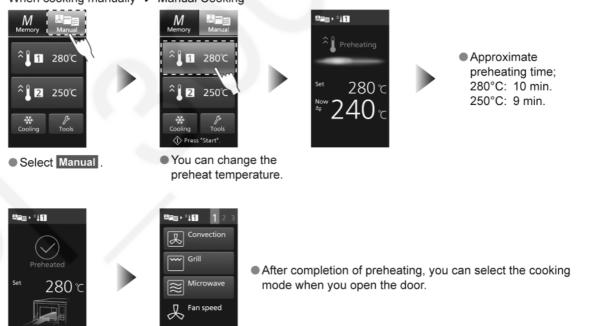
Memory

When cooking with the stored heating programme - "Cooking with a Saved Cooking Programme"



Manual

When cooking manually -> "Manual Cooking"



Cooling

The inside of the oven can be cooled when the cavity is hot after cooking.



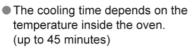




 Open the door slightly to lock it in place. (Keep your face away.)





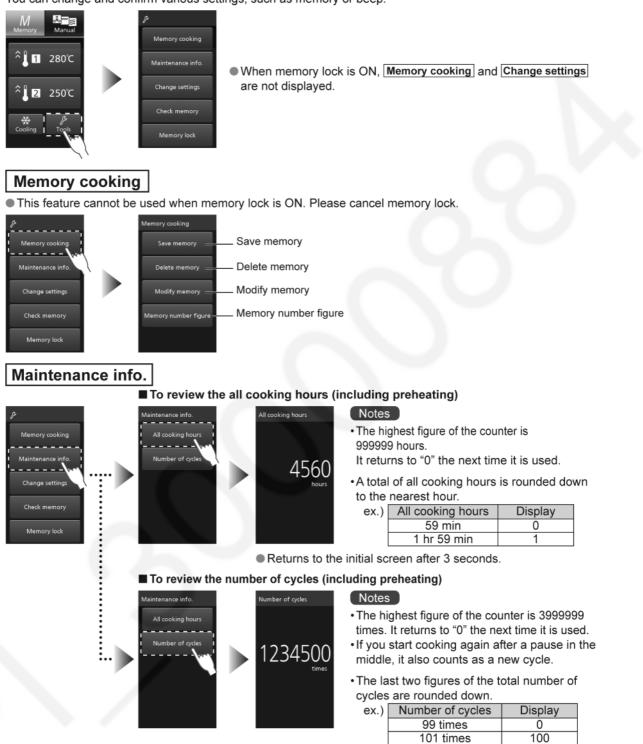






Tools

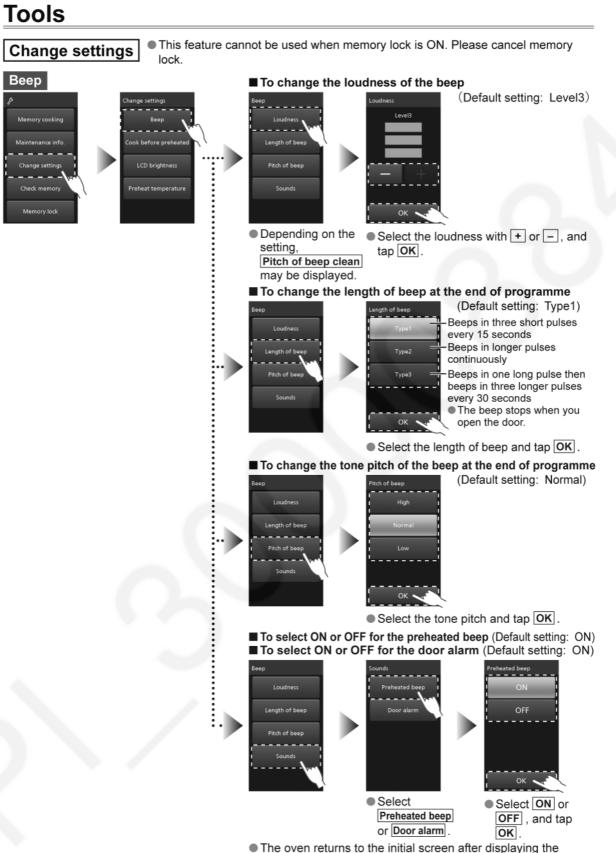
You can change and confirm various settings, such as memory or beep.



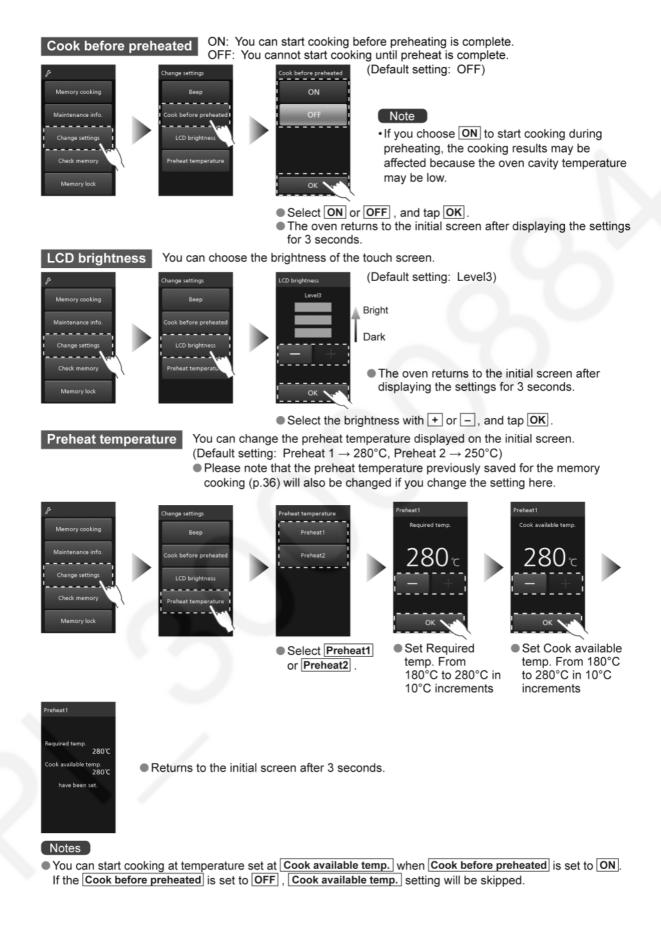
Returns to the initial screen after 3 seconds.

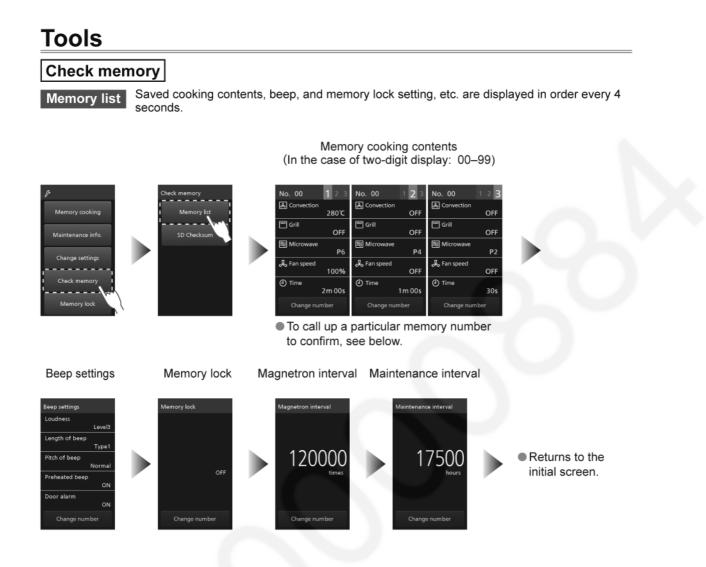
1100 times

1100



settings for 3 seconds.



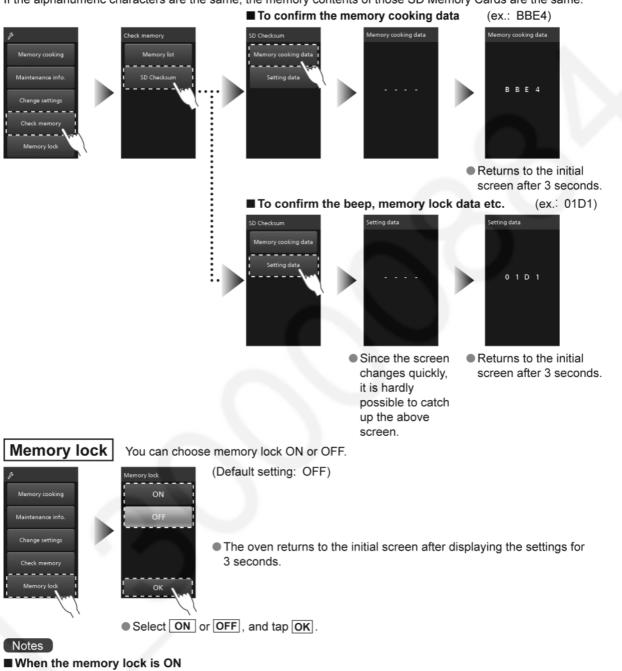


In order to call up a particular memory number to confirm, press the Stop/Reset pad while the display is changing, then tap Change number, enter the memory number and tap OK. The memory contents are displayed by pressing the Start pad.
 (ex.: To call up memory number 52)



SD Checksum

Use to confirm whether the contents of multiple SD Memory Cards are the same. The memory contents in the SD Memory Card are displayed as four-figure alphanumeric characters. If the alphanumeric characters are the same, the memory contents of those SD Memory Cards are the same.



- Memory cooking starts automatically after you select a memory number even without pressing the Start pad.
- If you press the Stop/Reset pad in the middle of memory cooking, or open the door, the remaining time is
- cancelled and the oven returns to the initial screen.
 Memory cooking and Change settings are not displayed.

When the memory lock is OFF

Memory cooking starts when you press the Start pad after entering the memory number.

9.3. Preheating

Use the preheating function to warm up the oven in advance.

1 280°C and 2 250°C are set as default.

Preheating will resume automatically every time cooking has finished once the preheating has been set.
Set the provided Base Plate Liner, Ceramic Tray, Wire Rack and other accessories suitable for the intended cooking mode, in the oven before starting preheating, except Oven Sheet and Paddle.

(ex.: Memory , 1 280°C)







 Pausing or opening and closing the door during preheating will automatically resume preheating after 10 seconds.



- The default setting is that the beep sounds after preheating is complete. After putting the food into the oven, close the door immediately and set memory cooking or manual cooking.
- You can turn off the beep.
 "To select ON or OFF for the preheated beep"
- If you leave the door open during preheating or after preheating has completed, the beep sounds after 30 seconds and 50 seconds.
- If the Cook before preheated is set to OFF and you leave the door open for 1 minute or more after preheating is complete, the oven cavity temperature will drop so cooking cannot be started. Close the door, press the Start pad and preheat again.
- If the Cook before preheated is set to ON , you can start cooking during preheating.
 "Cook before preheated"
- If the pads are not used after preheating is complete, preheating will be cancelled after 4 hours.
- To cancel preheating

Press the Stop/Reset pad twice.

3 Preheating has been completed

 Approximate preheating time;
 280°C: 10 min.
 250°C: 9 min.



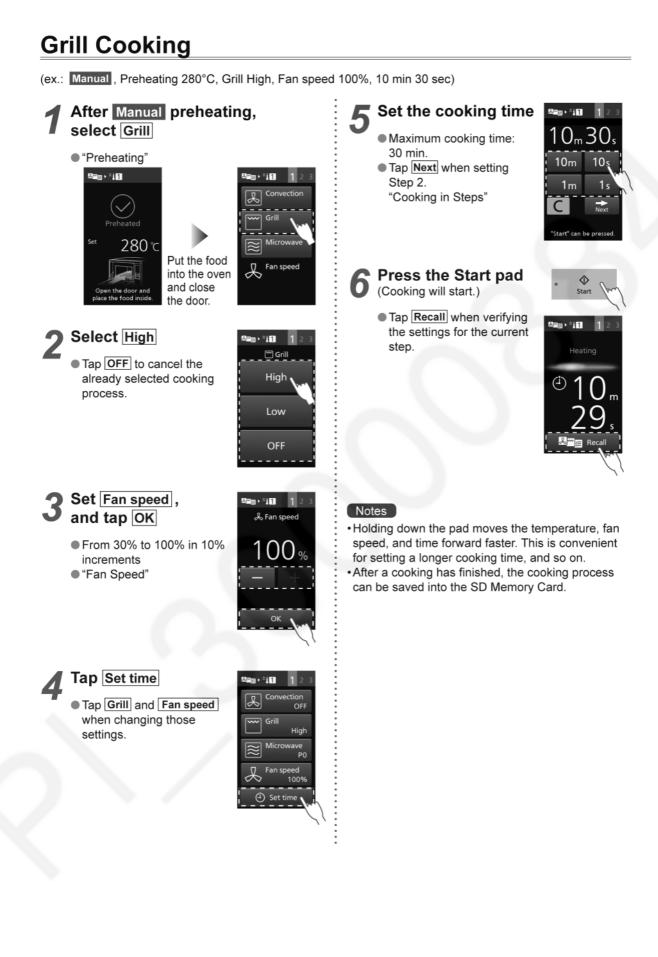
9.4. Manual Cooking

Convection Cooking

(ex.: Manual , Preheating 280°C, Convection 280°C, Fan speed 100%, 10 min 30 sec)



• After a cooking has finished, the cooking process can be saved into the SD Memory Card.



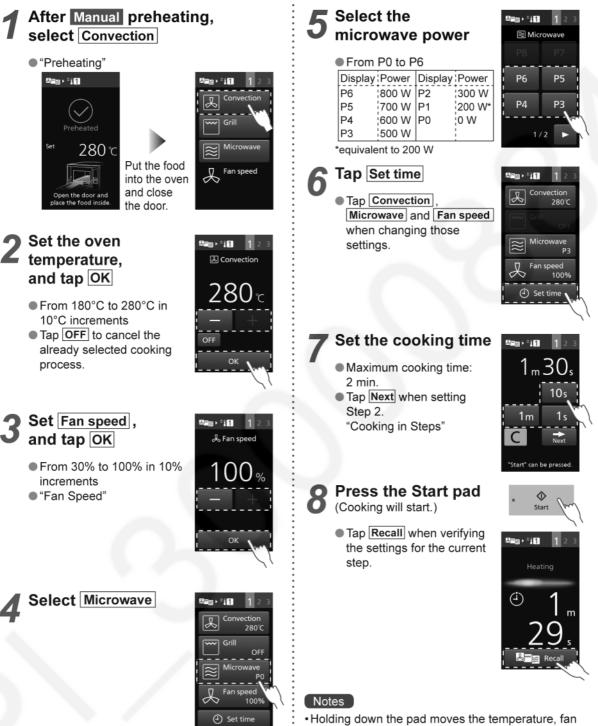
Convection-and-Grill Cooking

(ex.: Manual , Preheating 280°C, Convection 280°C, Fan speed 100%, Grill High, 2 min 30 sec)



Convection-and-Microwave Cooking

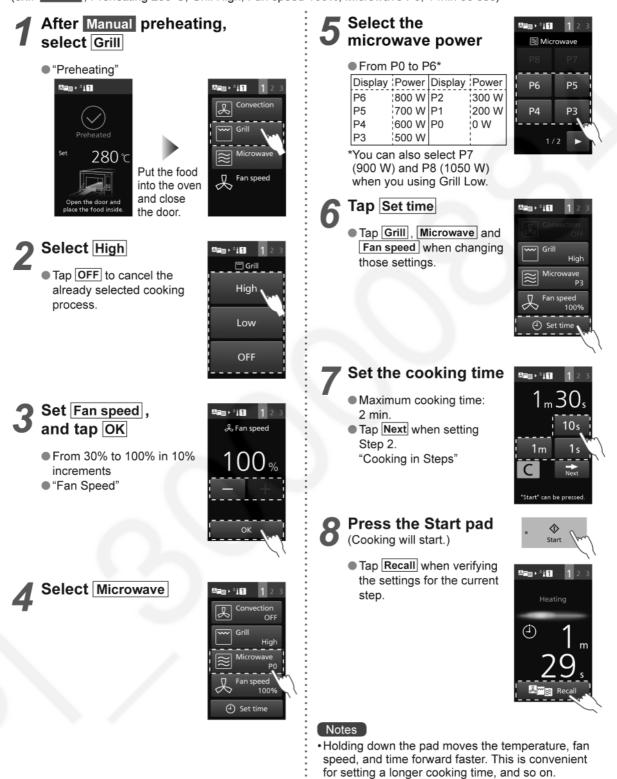
(ex.: Manual, Preheating 280°C, Convection 280°C, Fan speed 100%, Microwave P3, 1 min 30 sec)



Holding down the pad moves the temperature, fan speed, and time forward faster. This is convenient for setting a longer cooking time, and so on.
After a cooking has finished, the cooking process can be saved into the SD Memory Card.

Grill-and-Microwave Cooking

(ex.: Manual , Preheating 280°C, Grill High, Fan speed 100%, Microwave P3, 1 min 30 sec)



- •After a cooking has finished, the cooking process
- can be saved into the SD Memory Card.

Cooking in Steps

The microwave power, temperature, cooking time or other can be set for up to three continuous steps. Use Convection, Grill and Microwave functions to suit your recipe.

ex.: Manual , Preheating $280^{\circ}C \rightarrow$ Step 1 Convection $280^{\circ}C$, Fan speed 100%, Microwave P5, 1 min \rightarrow Step 2 Microwave P4, 50 sec → Step 3 Grill High, Fan speed 30%, 30 sec

You can use microwave only cooking at Step 2 and Step 3 in Cooking in Steps.

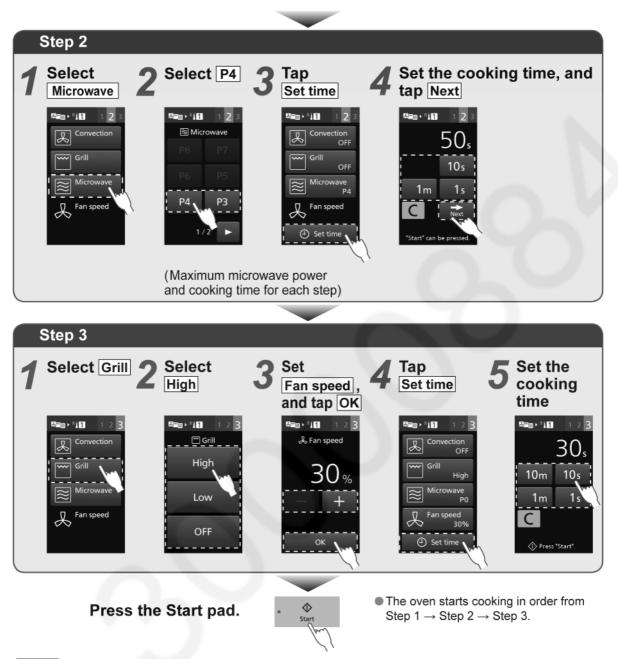


Maximum microwave power and cooking time for each step

	Convection and Microwave/		
	Grill and Microwave		
	Maximum	Maximum cooking	
	microwave power	time	
Step 1	P6 (800 W)*	2 min.	
Step 2	P4 (600 W)	2 min.	
Step 3	P2 (300 W)	30 min.	

*You can also select P7 (900 W) and P8 (1050 W) when you using Grill Low.

In Step 1, it is not possible to set only Microwave.



Notes

- Holding down the pad moves the temperature, fan speed, and time forward faster. This is convenient for setting a longer cooking time, and so on.
- •After a cooking has finished, the cooking process can be saved into the SD Memory Card.

9.5. Memory Cooking

ex.: Memory , Preheating 280°C → Step 1 Convection 280°C, Fan speed 100%, Microwave P6, 1 min → Step 2 Convection 280°C, Fan speed 60%, 50 sec \rightarrow Step 3 Grill High, Fan speed 30%, 30 sec

Memory number: 37

How to Save Memory

There are two methods to save memory cooking – saving a cooking programme after manual cooking and saving a cooking programme in advance.

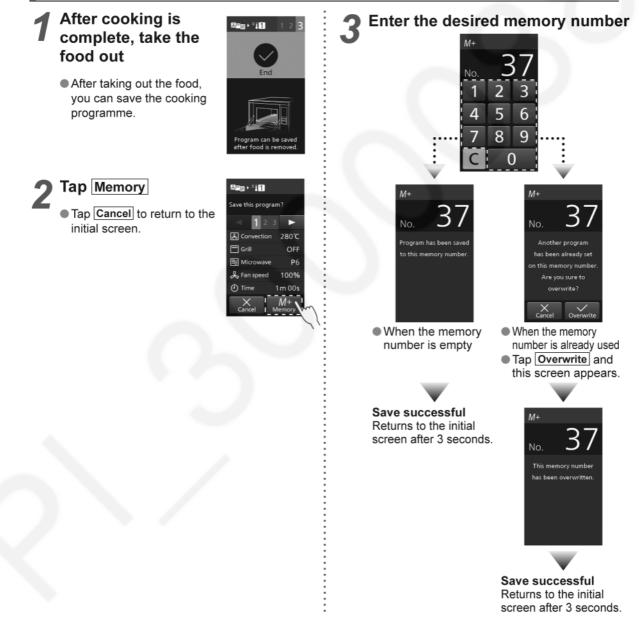
Up to 100 kinds (default setting: 00–99) of cooking programmes can be saved to the memory. The default menu is registered in No. 00–No. 18.

It is useful to cook everyday menus.

You can also overwrite, change or erase previously saved contents.

This feature cannot be used when memory lock is ON. Please cancel memory lock.

Save the programme after manual cooking



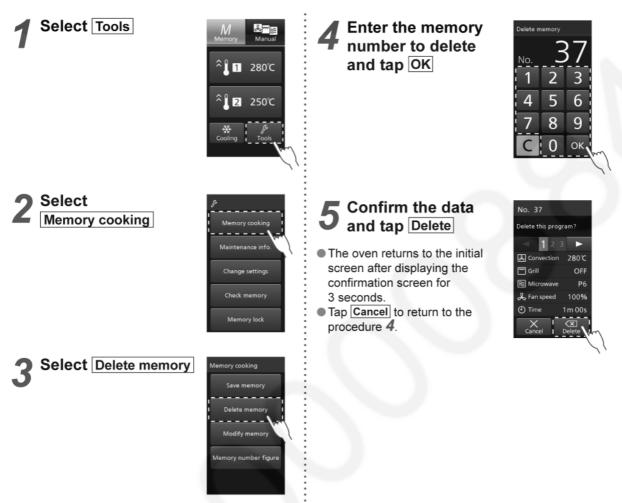
Save a programme in advance



Please note that the preheat temperature saved for the memory cooking will be changed if you change the setting of Preheat temperature.

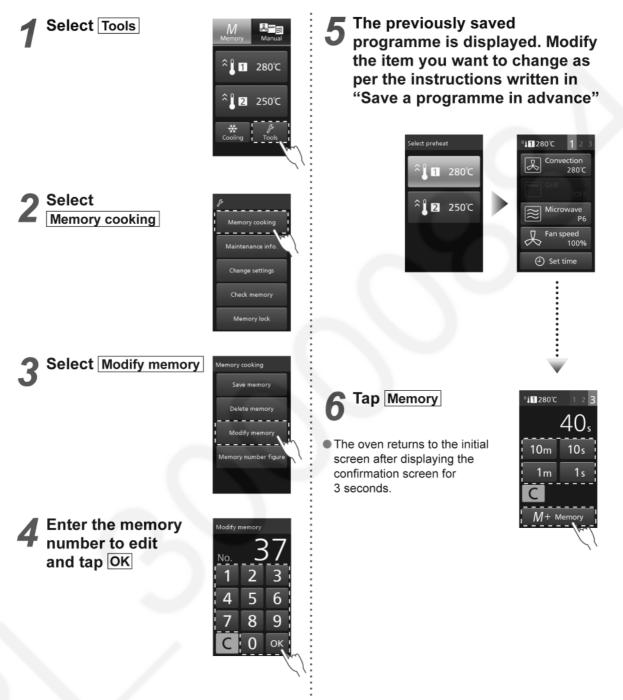
How to Delete Memory

This feature cannot be used when memory lock is ON. Please cancel memory lock.



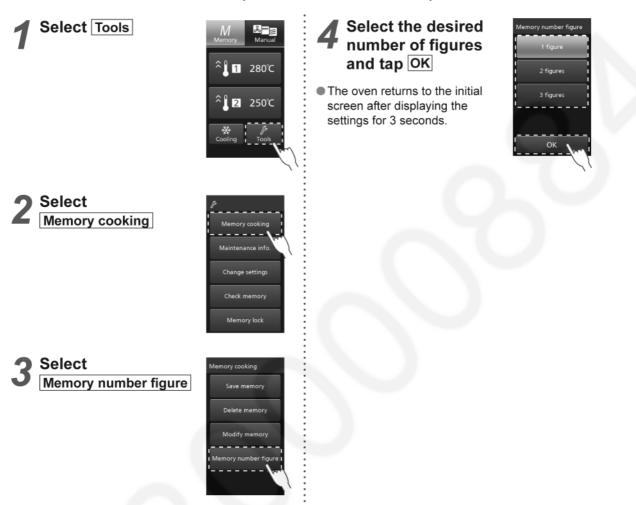
How to Modify Memory

• This feature cannot be used when memory lock is ON. Please cancel memory lock.



How to Set the Memory Number Figure

The number of figures for the memory number is set to double as default setting (100 kinds: 00–99). You can also set single-figure (10 kinds: 0–9) or triple figures (1000 kinds: 000–999). ● This feature cannot be used when memory lock is ON. Please cancel memory lock.



Cooking with a Saved Cooking Programme





Press the Start pad

Pausing or opening and closing the door during preheating will automatically resume preheating after 10 seconds.



n

Preheating has been MM completed



A Select a menu after putting the food into the oven and close the door

On is displayed on the screen when memory lock is ON.

 When memory lock is ON, cooking starts automatically.



5 The programme is displayed Toast (\mathbf{i}) Press the Start pad (Cooking will start.) Tap Recall when verifying

the settings for the current step. When memory lock is OFF, cooking starts after pressing the Start pad.



No.000

9.6. Care of your Oven

It is essential that you follow these points to get the maximum use from your oven. Microwaves are attracted to moisture and grease: therefore a dirty oven does not cook EFFICIENTLY. Failure to maintain the oven in a clean condition could lead to deterioration of the surface that could adversely affect the life of the appliance and possibly result in a hazardous situation. This oven requires regular maintenance.

- Pull out the power plug before maintenance.
- If not, this may result in electric shock.
 Wait for the oven cavity to cool down first before cleaning.
 - If not, this may result in burns and injuries.

■Before Cleaning

- Do not clean this oven with a water jet.
- Do not pour detergent and leftover food into the gap and punching holes. This will result in a malfunction.
- If the oven becomes damaged in any way, contact the dealer or a service agent before continuing use.
- Only part that is dishwasher-safe is the Wire Rack. It is prohibited for other accessories, since they may deteriorate due to effect of the detergent (possibility of strong alkaline used), or chipping or cracking due to ceramic parts hitting each other by strong water stream.

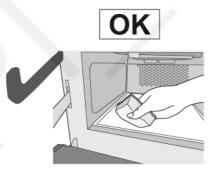
Clean these parts Every Day.

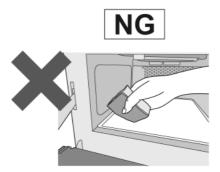
■Oven Cavity • Door Inner Side • Door Seal

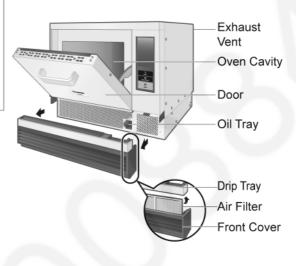
Wipe with a damp cloth

Thoroughly wipe away water, oil and leftover food stains frequently to prolong the use of the oven. Failure to remove burnt food remains and dust may cause rust.

- If the stains are bad, wipe away with a cloth soaked in a neutral kitchen detergent.
- Do not use alkaline detergent.
- If the stains are even worse, only for the metal part on the inner side of the door, you can use an abrasive cleanser with a hard scrubber.
- Do not scrape the parts other than the metal part inside the door (door seal area etc.) with a hard scrubber, which may cause damage of the door seal and malfunction of the oven. Be sure to use only a soft scrubber.
- Do not splash detergent directly onto the top and rear surfaces of oven cavity. This will result in a malfunction.







■Outer Areas

Wipe with a damp cloth

Wipe away oil and food stains immediately.

Do not use thinner, benzene, abrasive cleanser, bleaching agent, alkaline residential or household synthetic detergent.

If the stains are bad, wipe away with a cloth soaked in a neutral kitchen detergent. Take care not to allow the kitchen detergent to enter the exhaust vent and gaps.

Outer side of the door • handle area
 After wiping with a wet cloth, wipe the areas with soft, dry cloth.

Ceramic Tray • Wire Rack • Ceramic Plate • Ribbed Plate • Oven Sheet • Paddle • Base Plate Liner

Be careful not to rub on the Base Plate Liner when removing accessories.

Wash with a soft scrubber soaked in a neutral kitchen detergent

• Do not use alkaline detergent.

Clean them every time you use it if the stains become a concern. Only when the dirt is severe, wipe away dirt with rollup plastic wrap or aluminium soaked in water and abrasive cleanser.

Except for Base Plate Liner, Oven Sheet and Paddle.

Disassemble and clean this part Every Day.

Drip Tray

Wipe with a damp cloth

Refer to "How to remove/attach parts".

Disassemble and clean these parts Once a Week.

Refer to "How to remove/attach parts".

Front Cover

Wipe with a damp cloth

Wipe away oil and food stains immediately. If the stains are bad, wipe away with a cloth soaked in a neutral kitchen detergent.

Do not use alkaline detergent.



Clean it after every use it if the stains are bad. The filter may lose its effect if the stains are left behind. The temperature of the internal parts may also rise, resulting in a malfunction.

Wipe away oil stains with a soft cloth or paper towel

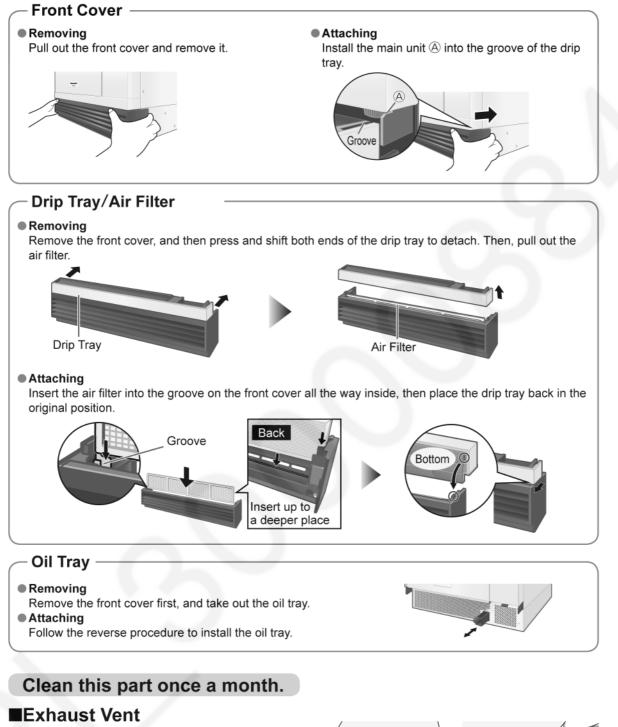
If the stains are bad, clean the area with a soft scrubber dipped in a neutral kitchen detergent and dry.

• Do not use alkaline detergent.

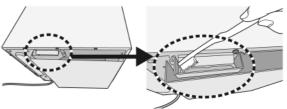




How to remove/attach parts



Clean the rear exhaust vent with a toothbrush and a towel

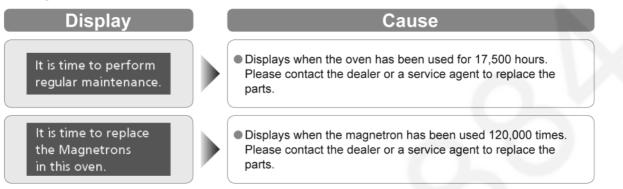


9.7. Regular Maintenance

When one of the following is displayed, oven maintenance is required. Continuing to use the oven may cause failure.

Please contact the dealer or a service agent promptly.

 Displays until maintenance is done when the power plug is removed and reinserted or when there has been no operation for a while. In addition, the oven will beep 6 times after completing cooking regardless of the settings.



• The above time and number of operations is not a guarantee.

Check inside of the Tray

When an engineer provide service, please remove the oil inside of the tray.

When you remove the oil, firstly remove the cabinet and exhaust guide A and wipe away the oil with a soft cloth or paper towel from the tray.









Tray

Exhaust guide A Tray

Exhaust guide A

9.8. Troubleshooting

Troubleshoot following the next procedure when there is a problem.

Symptom	Cause
It does not operate at all	 Is there a power outage? Is the breaker in the power distribution board tripped, or the power supply plug unplugged? Is the initial screen displayed in the control panel? If the auto power OFF function is in operation, perform the operation after the initial screen is displayed by opening the door.
It does not cook correctly	 Is the cook setting, accessory, or the cook time incorrect? Has the oven been sufficiently preheated?
There is a sound	• There will be a sound of cooking starting and the fan will sound.
There is smoke or harsh odour	• A smoke or harsh odour may occur due to burning of the oil for oven cavity protection when the heater is turned on for the first time. Always ventilate and perform a blank baking if it concerns you.
There are sparks during cooking	 A metal container can only be used in the oven when not using microwave power. Is a container containing gold or silver particles used? Is any metal (aluminium foil, metallic skewer, etc.) touching the wall of the oven cavity? Is the oven cavity rusted? A rust may cause sparks.
The buzzer does not beep	• Is the loudness of the beep set to OFF? The buzzer will not beep when it is set to OFF.
There is an odour or smoke	• This is not a malfunction. The catalyst reaction will lower when the cooking temperature is low (approximately 240°C or lower). Also, it may exceed the processing ability when the amount of oil smoke generated during cooking is high.
There is a sour odour	• Depending on the food, a sour odour may occur during cooking, but this is caused by the catalyst reaction and it is not abnormal.
Foods "explode" during neating	 Microwave power level is too high. Reduce power level. Skins of foods i.e potatoes, chicken are not pierced. Pierce skins on foods to release pressure build up during heating. NEVER try to boil eggs in shells.
Smoke appears around the door when grilling	• Fat from foods is splashing on to the grill elements and burning. Stop the oven and drain away all excess fat and juices. Watch the food carefully as it grills. Ensure the cavity ceiling and all accessories are cleaned regularly.
The cooking result of a certain memory cooking is different from that of the previous time	• Did the preheat temperature or cooking mode that were set into memory change?

9.9. Self Diagnostics Failure Code

If a "U" or "F" Appears In The Display

Start all over again after checking the contents when the following display appears. Display disappears when Stop/Reset pad is pressed.

Display	Cause	
U16	 The SD Memory Card is locked. Insert the SD Memory Card again after releasing the lock. 	FRONT SCV2BP NAWN SUITAGORGE ASST: WELL AVAN
U17	 A card other than the specified SD Memory Card is inserted. Take out the SD Memory Card and check. If the "U17" appears even after inserting the specified SD Memory Card, the SD Memory Card may be damaged. 	
U19	The SD Memory Card is not inserted. • Please insert the specified SD Memory Card.	
U40	The appliance is operated without food in the oven. • Put the food into the oven and heat.	
U41	Earthing is incomplete. • Contact the dealer or a service agent.	
U88	 The touch screen is touched for a while. Has the screen been touched for 25 seconds or more? Is there any dirt stuck on the screen? 	
F code e.g. F30 etc.	If the "F" code does not disappear even after pressing the Stop/ Reset pad, pull out the plug and then plug it in again after 5 seconds. The oven is faulty if the "F" code still appears. Contact the dealer or a service agent.	

10 Service Mode

To prevent accidents during repair and ensure your safety after the repair, be sure to read or refer to "Safety Precautions" describing precautions that you must observe when repairing.

CAUTION

- 1. Check grounding before checking for trouble.
- 2. Be careful of the high voltage circuit.
- 3. Discharge high voltage capacitor.
- 4. When checking the continuity of the switches or the high voltage transformer, disconnect one lead wire from these parts and then check continuity with the AC plug removed. To do otherwise may result in a false reading or damage to your meter.

When disconnecting a plastic connector from a terminal, you must hold the plastic connector instead of the lead wire and then disconnect it, otherwise lead wire may be open or the connector cannot be removed.

5. Be sure to ground any static electric charge built up in your body, before handling the circuit parts.

10.1. Failure code function

In the event of a failure, a failure code is displayed to stop the operation.

- If an "F 18," "F 19," "F 97," "F 98," "FE 7," or "FE 8" code failure occurs for the first time, or if the failure occurs a second time, you are taken back to the initial display screen. If the failure occurs a third time, the corresponding failure code is displayed.
- If an "F 98" or "FE 8" code failure occurs for the first time, you are taken back to the initial display screen. If the failure occurs a second time, the corresponding failure code is displayed.
- Once displayed, the failure code "F 18," "F 19," "F 97," "F 98," "FE 7" or "FE 8 is stored in memory, which prevents the oven from operating even if any part is replaced, and it remains displayed until the stored failure code is erased. Erase the stored failure code before conducting an operation test.
- Even if displayed, the failure code "F 00," "F 06," cannot be stored.

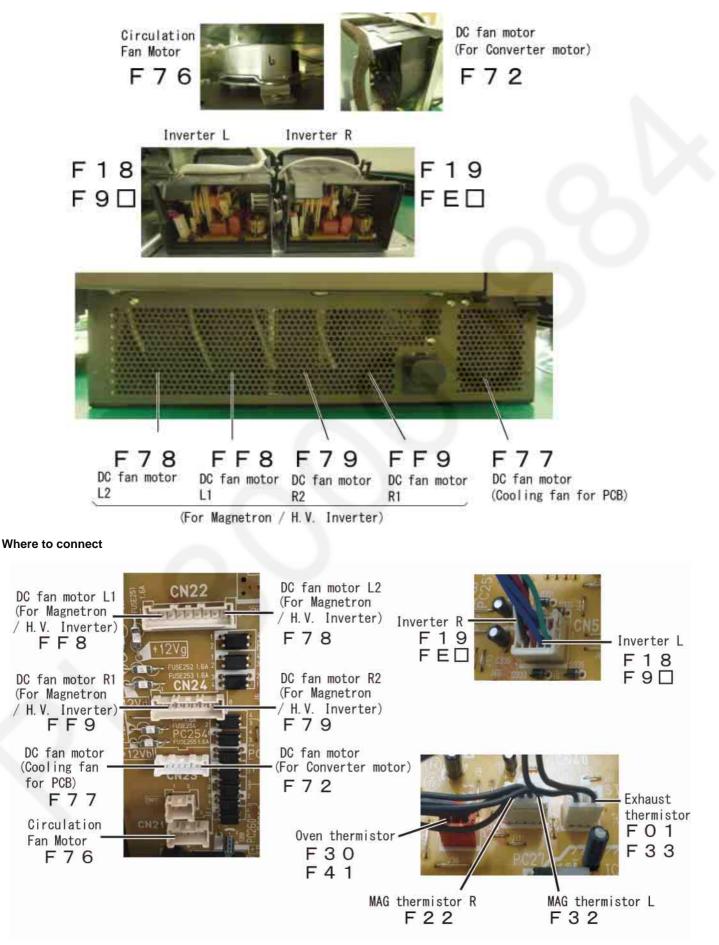
10.1.1. Failure code list

F Device failure

DISPLAY				
Left circuit Right circuit	CONDITIONS	RESET	CAUSES / REMEDIES	
FÓO	 Communication error between the microcomputer and the memory IC. 	 Press Pause/Reset button to return to the initial display screen. 	PC Board	
F01	 Abnormal rise in the exhaust temperature (120 °C or higher.) (Overheating and ignition of food in the oven) Short-circuit in the exhaust thermistor. 	 N/A (Turn off the power) Reset when the temperature in the oven drops to 60 °C or less The buzzer stops when the reset key is pressed or when the door is opened. 	 Clean the inside of the oven and the exhaust channel.Replace parts if necessary. Exhaust thermistor (insulation failure) 	
F03	 Upon detection of a voltage of 250 V or higher for 10 seconds. Displayed only when the failure code is called up. 		 Check the power-supply voltage. PC Board 	
F06	 Communication error between SD card and the microcomputer. 	 Press Pause/Reset button to return to the initial display screen. 	SD cardSD Board	
F08	Communication error between the display microcomputer and the microcomputer.		 PC Board Display Board 	
F18 F19	 Error in detection of the secondary current. 	 Press Pause/Reset button to return to the initial display screen. 	Connector disconnection H.V. Inverter	
F30	 Open - circuit in the oven thermistor. 		Oven thermistor	
F32 F22	 Open- or short-circuit in the MAG thermistor. 		MAG thermistor	
F33	 Open - circuit in the exhaust thermistor. 		Exhaust thermistor	
F35	 Exhaust thermistor failure. 		 Exhaust thermistor 	
F41	Short-circuit in the oven thermistor.		Oven thermistor	
F44	 With a continued press of the same key for 2 minutes. (Short-circuited keyboard) 	 Press Pause/Reset button to return to the initial display screen. 	Keyboard	

DISI	PLAY				
Left circuit Right circuit		CONDITIONS	RESET	CAUSES / REMEDIES	
F72		Detection of locked fan of the cooling fan motor. (for Circulation Fan Motor)	 Press Pause/Reset button to return to the initial display screen. 	DC fan motor (Cooling fan for Circulation Fan Motor)	
F76 F77		 Detection locked fan of the circulation fan motor. 	 Press Pause/Reset button to return to the initial display screen. 	Circulation Fan Motor DC fan motor (Cooling fan for PCB)	
		 Detection locked fan of the cooling fan motor (for PCB.) 	 Press Pause/Reset button to return to the initial display screen. 		
(L1) FF8	(R1) FF9	Detection locked fan of the cooling fan motor (for MAG / INV.)	 Press Pause/Reset button to return to the initial display screen. 	DC fan motor (Cooling fan for Magnetron / H.V. Inverter)	
(L2) F78	(R2) F79	Detection locked fan of the cooling fan motor (for MAG / INV.)	 Press Pause/Reset button to return to the initial display screen. 	DC fan motor (Cooling fan for Magnetron / H.V. Inverter)	
F90	FE0	 Abnormal temperature in IGBT of the inverter. 	 Press Pause/Reset button to return to the initial display screen. 	 Insufficient cooling of H.V. Inverter(Fan Motor / fan motor drive circuit) 	
F92	FE2	 Magnetron failure(Detection of A-K short circuit.) 	 Press Pause/Reset button to return to the initial display screen. 	Magnetron	
F95	FE5	 Inverter actuation signal failure (At startup of the inverter, actuation signal has not yet been input.) 	Press Pause/Reset button to return to the initial display screen.	Inverter connector disconnection Latch adjustment failure	
F96	FE6	 Inverter actuation signal failure. (During non-actuation of the inverter, the actuation signal is Lo.) 	 Press Pause/Reset button to return to the initial display screen. 	H.V. Inverter PC Board	
F97	FE7	 Inverter actuation signal failure. (During actuation of the inverter, the actuation signal is Hi) (At startup of the inverter, the actuation signal is Hi.) 	 Press Pause/Reset button to return to the initial display screen. 	 Absence of any inverter AC input(Door switch / relay circuit / relay connector / CN702 disconnection, etc.) Magnetron 	
F98	FE8	 Inverter actuation signal failure. (At startup of the inverter, the actuation signal is Lo) 	 Press Pause/Reset button to return to the initial display screen. 	 Magnetron (break in heater wire, etc.) H.V. Inverter Disconnection of Magnetron's Lead Wire 	
F99	FE9	 If actuation (inverter ON) signal is input to the microcomputer at the time of non-actuation of the inverter during operation. 	Press Pause/Reset button to return to the initial display screen.	PC Board	

10.1.2. Fan / inverter / Magnetron / thermistor-related failure code Fan / inverter location

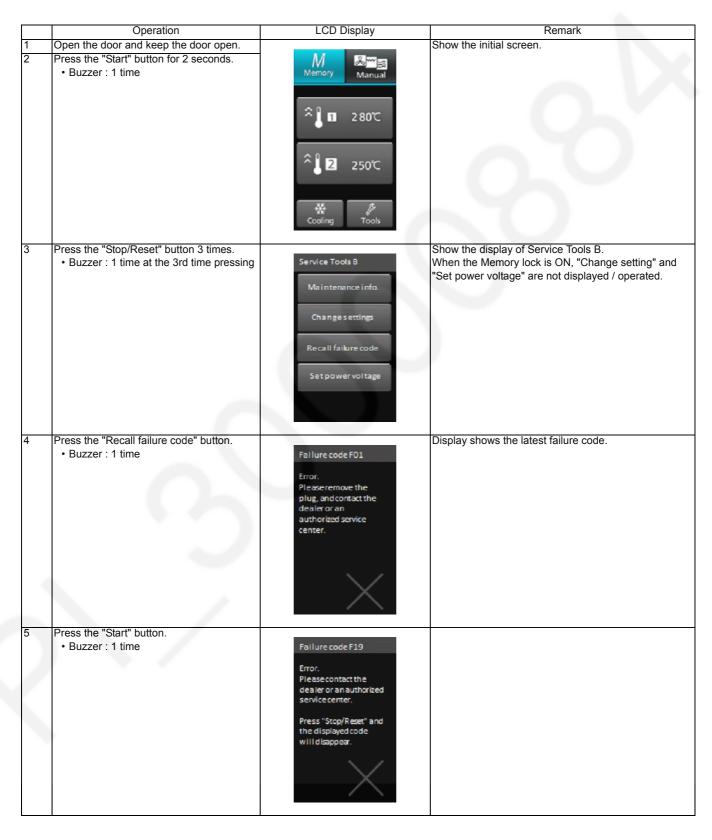


10.2. Procedure for showing the failure code

10.2.1. How to call up or erase the memory

Follow the steps below to call up the failure code.

- If you call up a failure code that is not stored in memory, the message "No Failure code" appears.
- 5 failure codes can be stored.
- Failure codes are stored in PC Board



6	Operation	LCD Display	Remark
	Press the "Start" button. • Buzzer : 1 time	FailurecodeF03	Display shows the 3rd failure code.
	Press the "Start" button. • Buzzer : 1 time	Failure code F44 Error. Please contact the dealer or an authorized service center. Press "Stop/Reset" and the displayed code will disappear.	Display shows the 4th failure code.
	Press the "Start" button. • Buzzer : 1 time	Failure code F30 Error. Please contact the dealer or an authorized service center.	Display shows the 5th failure code.
	Press the "Stop/Reset" button. • Buzzer : 1 time [In the case of deleting the memorized failure code] Press the "Start" button for 2 seconds. • Buzzer : 1 time	Service Tools B Maintenance info. Change settings Recall failure code Set power voltage	Back to the display of Service Tools B. The failure code is NOT deleted from EEPROM. When the Memory lock is ON, "Change setting" and "Set power voltage" are not displayed / operated. Back to the display of Service Tools B. The failure code is deleted from EEPROM. When the Memory lock is ON, "Change setting" and "Set power voltage" are not displayed / operated.
0	Press the "Stop/Reset" button for 2 seconds. • Buzzer : 1 time	Memory Manual Manual Autor	Show the initial screen.

a. "U" failure codes except for "U65" and "U66" are not displayed because they are not memorized.

b. "F00" and "F06" are not displayed because they are not memorized.

11 Troubleshooting Guide

CAUTION

About lead free solder (PbF)

Distinction of PbF PCB :

PCB (manufactured) using lead free solder will have a PbF stamp on the PCB. Caution

Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a high temperature solder iron and set it to 700 ±20°F (370 ±10°C). Pb free solder will tend to splash when heated too high (about 1100°F / 600°C).

11.1. Precautions when repairing

To prevent accidents during repair and ensure your safety after the repair, be sure to read or refer to "Safety Precautions" describing precautions that you must observe when repairing.

11.2. Before repair

Unlike many other appliances, the microwave oven is high-voltage, high-current equipment. Though it is free from danger in ordinary use, extreme care should be taken during repair.

CAUTION

Servicemen should remove their watches whenever working close to or replacing the magnetron.

11.2.1. Removal of Oil Tray

If you vertically flip the oven with Oil Tray attached, the oil in Oil Tray will leak into the oven.

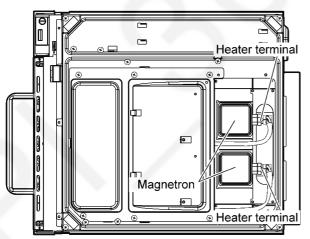
Remove Oil Tray in advance.

(See 8.6. "Care of your oven")

11.2.2. High voltage capacitor discharging

If you have to inspect a part of the oven being energized, be sure to unplug Power Supply Plug to discharge the high voltage capacitor of H.V. Inverter.

• How to discharge the capacitor: Use a tool such as needlenose plier to get the heater terminal of Magnetron shorted with the oven.



WARNING

There is high-voltage present, with high-current capabilities in the circuits of the high voltage winding and filament winding of the high voltage transformer. It is extremely dangerous to work on or near these circuits with oven energized.

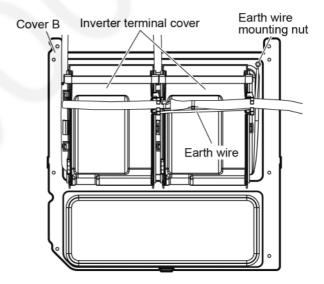
DO NOT measure the voltage in the high voltage circuit including filament voltage of magnetron.

WARNING

Never touch any circuit wiring with your hand nor with an insulated tool during operation.

11.2.3. Cover B grounding

Make sure that the earth wire is properly secured to Cover B. Otherwise, an electric shock may occur.



11.3. Checking of energization after repair

After repair, follow the steps below to perform an energization check.

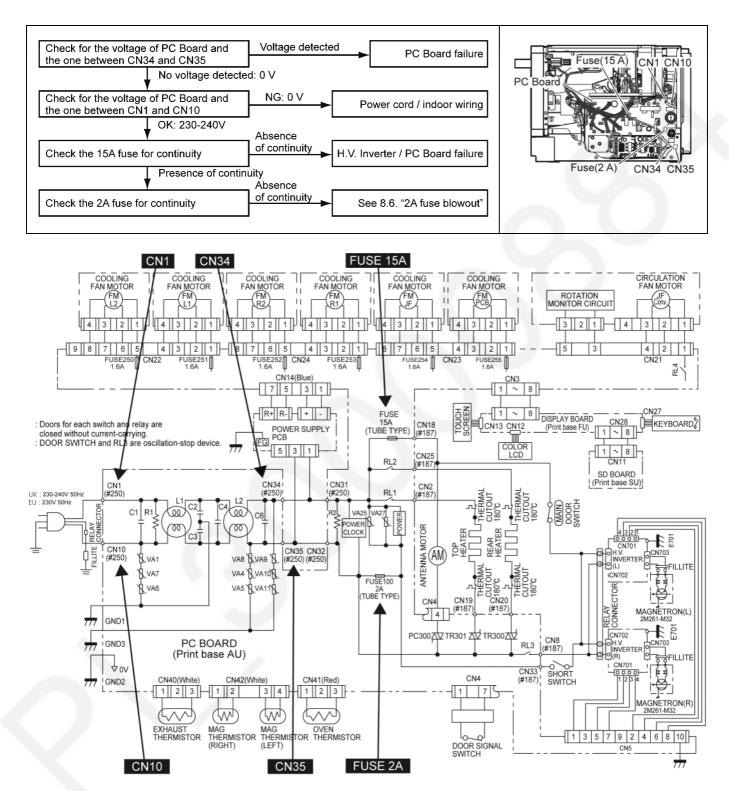
- 1. Connect the disconnected connector.
- 2. Temporarily attach Covers.
- 3. Perform an energization check.

CAUTION MICROWAVE RADIATION

DO NOT BECOME EXPOSED TO RADIATION FROM THE MICROWAVE GENERATOR OR OTHER PARTS CONDUCTING MICROWAVE ENERGY.

11.4. Power failure

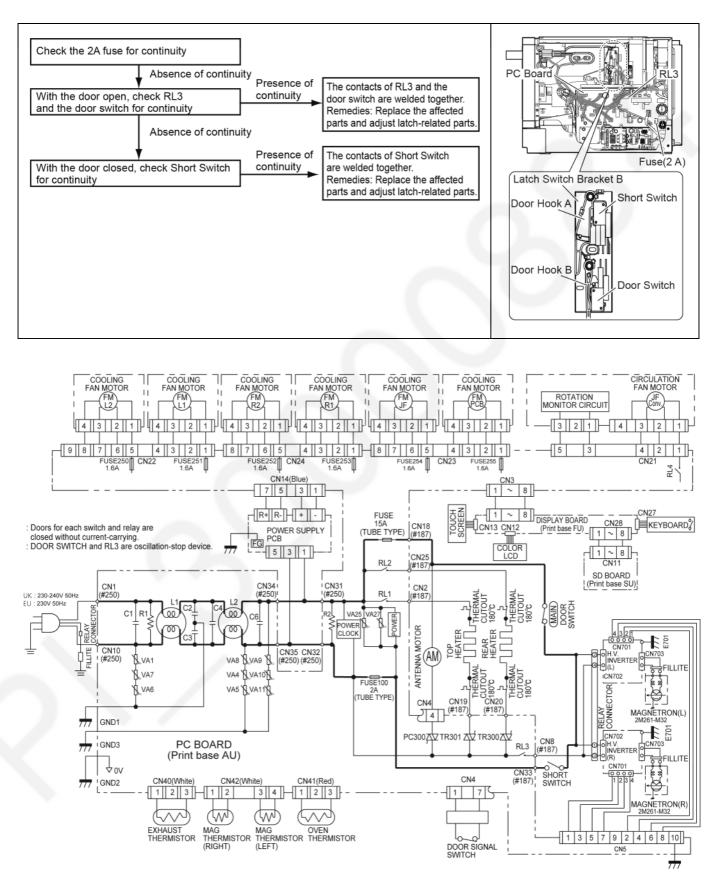
(Failure to energize the oven: The initial screen cannot be displayed even if the door has been opened. Nor can any key be operated.)



11.5. 2A fuse blowout

Short circuit was formed, allowing a short-circuit current to flow through and blow the fuse.

(Designed such that the 2A fuse will be blown when a shot circuit is formed to cause short-circuit current to flow through it)

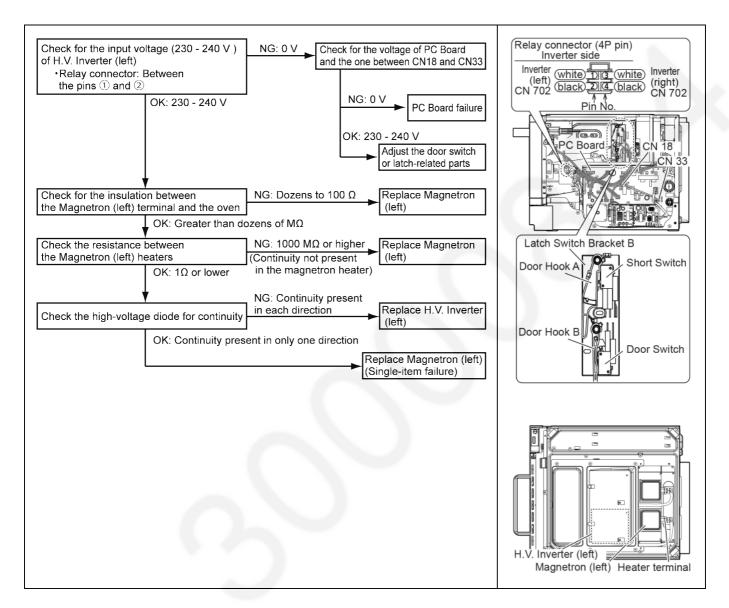


11.6. The oven does not heat up

"FE 2," "F 92," "FE 5," "F 95," "FE 7," "F 97," "FE 8" or "F 98" is displayed to stop the operation.

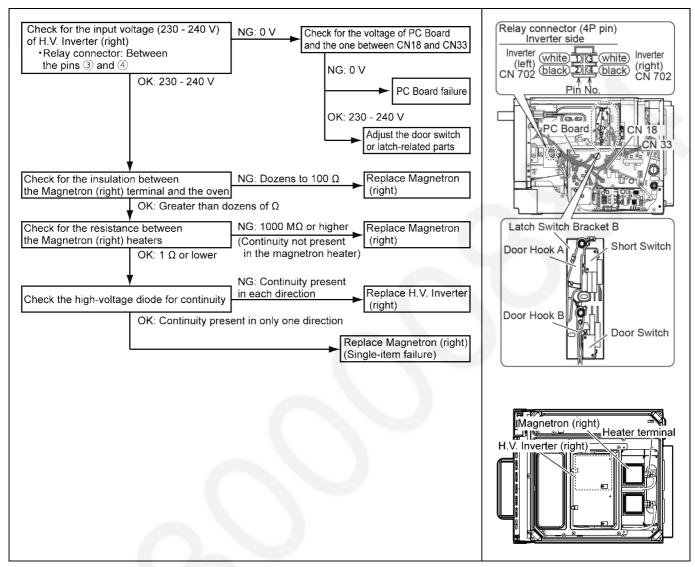
11.6.1. "F 92," "F 95," "F 97" or "F 98" is displayed to stop the operation.

(For those parts subject to "F 92," "F 95," "F 97" or "F 98," see the figure below.)



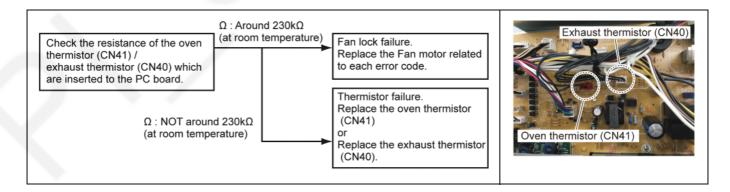
11.6.2. "FE 2," "FE 5," "FE 7," or "FE 8" is displayed to stop the operation.

(For those parts subject to "FE 2," "FE 5," "FE 7" and "FE 8," see the figure below.)



11.7. Fan lock failure or Oven / Exhaust thermistor shorted failure

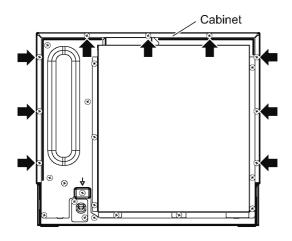
"F72," "F76," "F77," "F78," "F79," "FE8", or "FE9" is displayed within 1 min after operation.

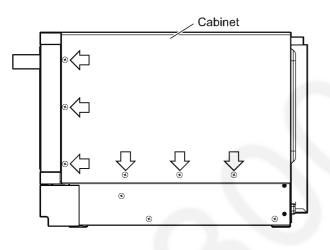


12 Disassembly and Assembly Instructions

12.1. Cabinet

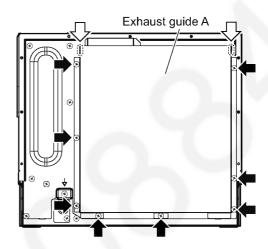
- 1. Remove the Front cover and the Oil tray from the front surface of the lower part of the oven.
- 2. Remove the Cabinet. (Black arrows: 9 screws; White arrows: 6 screws on each side)



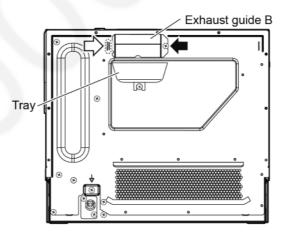


12.2. Back Plate

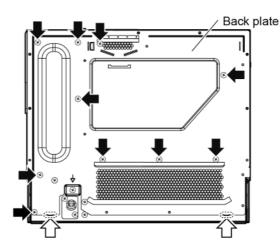
- 1. Remove the Cabinet. (See "12.1 Cabinet")
- 2. Remove the Exhaust guide A. (Black arrows: 8 screws; White arrows: 2 tabs)
 - Slide Exhaust guide A upward to remove.



3. Remove the Exhaust guide B and Tray. (Black arrow: 2 screw; White arrow: 2 tab)

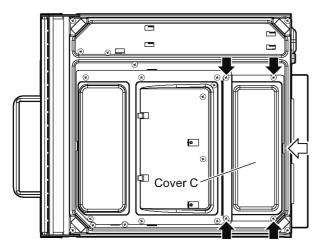


4. Remove the Back plate. (Black arrows: 10 screws; White arrows: 2 tabs)

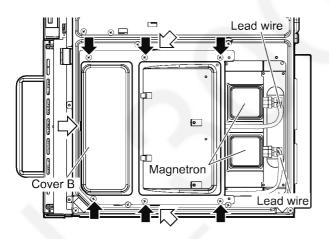


12.3. Cover C / Cover B

- 1. Remove the Front cover and the Oil tray from the front surface of the lower part of the oven.
- 2. Turn over the product.
- 3. Remove the Cover C. (Black arrows: 4 screws; White arrow: 1 tab)

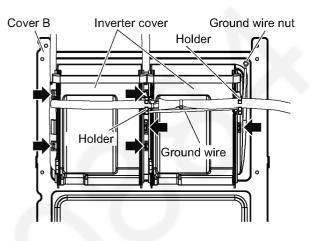


- 4. Disconnect the 2 lead wires from the connector of each Magnetron.
- 5. Remove the Cover B. (Black arrows: 6 screws; White arrows: 3 tabs)
 - Slide Cover B towards the rear of the oven, and raise it to remove.
 - Turn over the Cover B while disengaging the lead wires from the Inverter cover holders.

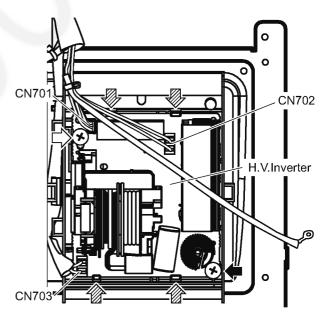


12.4. H.V.Inverter

- 1. Remove the Cover B. (See 12.3 "Cover C / Cover B")
- 2. Undo the ground wire nut to remove the ground wire.
 - * During assembly, be sure to secure the ground wire to Cover B.
- 3. Disengage the lead wires from the holders.
- 4. Remove the Inverter cover. (Black arrows: 3 tabs each)

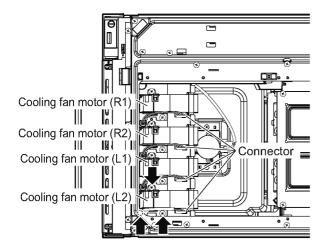


- 5. Disconnect the connectors (CN701, CN702, CN703). (3 places each)
- 6. Remove the H.V.Inverter. (Black arrow: 1 fixing nut each; White arrow: 1 grounding screw each; Diagonally shaded arrows: 4 tabs each)



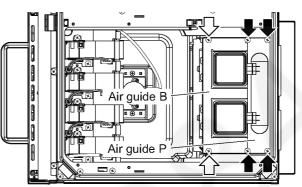
12.5. Cooling Fan Motors for MAG/ INV

- 1. Remove the Cover B. (See 12.3 "Cover C / Cover B")
- 2. Disconnect the connector. (1 connector each)
- 3. Remove the Cooling fan motors. (3 screws each)

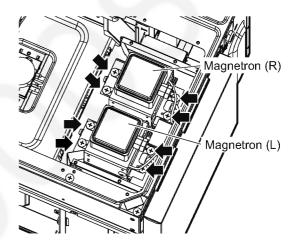


12.6. Magnetron

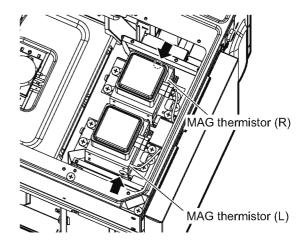
- 1. Remove the Cover B. (See 12.3 "Cover C / Cover B")
- 2. Remove the Air guide P. (Black arrows: 4 screws)
- 3. Remove the Air guide B. (White arrows: 2 screws)



4. Remove each Magnetron. (4 screws each)

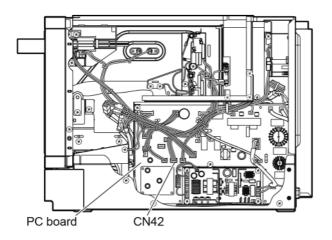


5. Remove each MAG thermistor. (1 screw each)

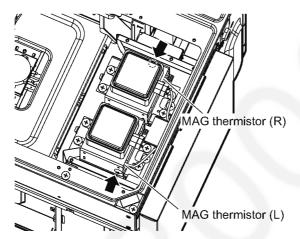


12.7. MAG thermistor

- 1. Remove the Back plate. (See 12.2. "Back Plate")
- 2. Disconnect the connector (CN42) for the PC board.
- Disengage the disconnected lead wire from each holder.

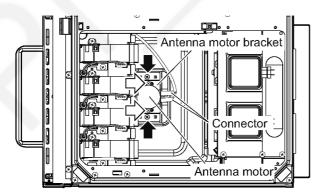


- 3. Remove each Magnetron. (See 12.6. "Magnetron")
- 4. Remove each MAG thermistor. (1 screw each)



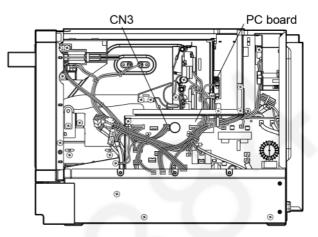
12.8. Antenna Motor

- 1. Remove Cover B. (See 12.3 "Cover C / Cover B")
- 2. Disconnect the connector.
- 3. Remove Antenna Motor Bracket. (Black arrows: 2 screws)
- 4. Remove Antenna Motor. (White arrows: 2 screws)

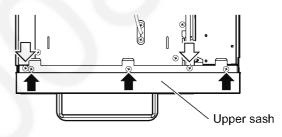


12.9. Operation Panel U

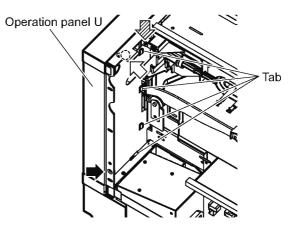
- 1. Remove the Cabinet. (See "12.1 Cabinet")
- 2. Disconnect the connector (CN3) for the PC board.



3. Remove the Upper sash. (Black arrows: 3 screws; White arrows: 2 screws)

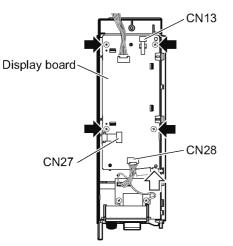


 Remove the Operation panel U. (Black arrow: 1 screw; White arrow: 1 screw; Diagonally shaded arrow: 1 screw; 4 tabs)

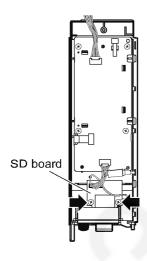


12.10. Display Board / SD Board

- 1. Remove the Operation panel U. (See 12.9. "Operation Panel U")
- 2. Disconnect the connectors (CN13, CN27, CN28).
- 3. Remove the Display board. (Black arrows: 4 screws; White arrow: 1 tab)

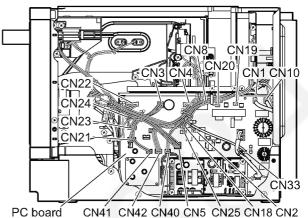


4. Remove the SD board. (2 screws)

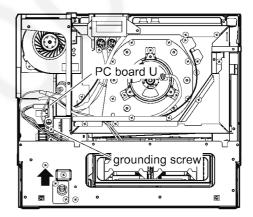


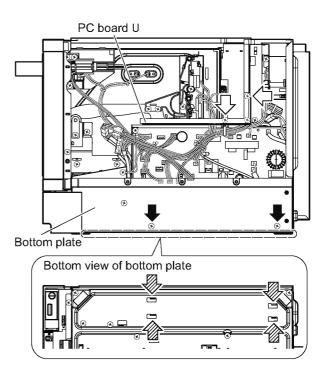
12.11. PC Board / Power Supply PCB

- 1. Remove the Back plate. (See 12.2. "Back Plate")
- 2. Disconnect the connector for the PC board.
- Disengage the disconnected lead wire from each holder.

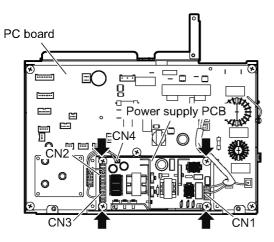


- 3. Remove the grounding screw. (1 screw)
- 4. Remove the PC board U. (Black arrows: 3 screws; White arrow: 2 screws; Diagonally shaded arrows: 4 tabs)
 - Slide PC board towards the door, and raise it to remove.

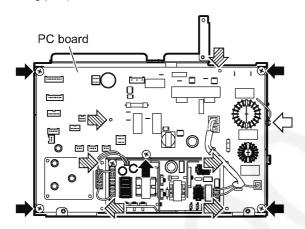




- 5. Disconnect the connectors (CN1, CN2, CN3, CN4).
- 6. Remove the Power supply PCB. (4 screws)

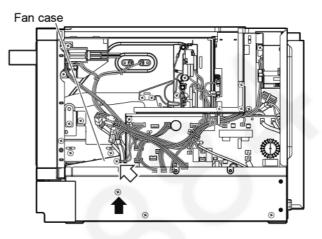


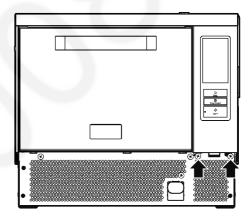
 Remove the PC board. (Black arrows: 5 screws; White arrow: 1 grounding screw; Diagonally shaded arrows: 6 fixing pins)



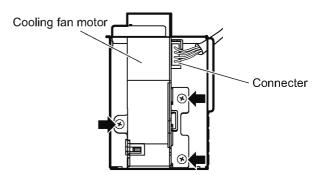
12.12. Cooling Fan Motor for PCB

- 1. Remove the Cabinet. (See "12.1 Cabinet")
- 2. Remove the Fan case. (Black arrows: 3 screws; White arrow: 1 screw)



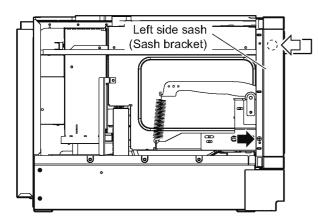


- 3. Disconnect the connector.
- 4. Remove the Cooling fan motor. (3 screws)

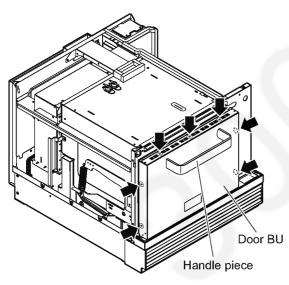


12.13. Door BU / Door AU

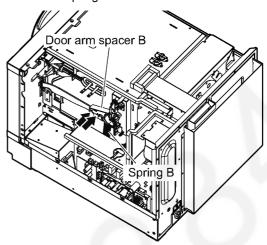
- 1. Remove the Operation panel U. (See 12.9. "Operation Panel U")
- 2. Remove the Left side sash and the Sash bracket. (Black arrow: 1 screw; White arrow: 1 tab)
 - Slide Left side sash (Sash bracket) upward to remove.



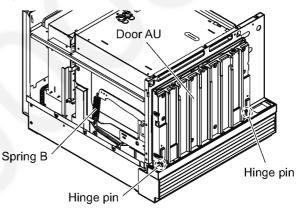
- 3. Remove the Door BU. (7 screws)
 - Unscrew the top screws last.
 - Leave the door closed, and hold the Handle piece to remove.



- 4. Leave the door half-open.
- 5. Remove the Door arm spacer B. (2 screws)
- 6. Remove the Spring B.



- 7. Remove the Hinge pins. (1 piece on each side)• Pull out each pin outward to remove.
- 8. Remove the Spring B, and pull out the Door AU towards you to remove.

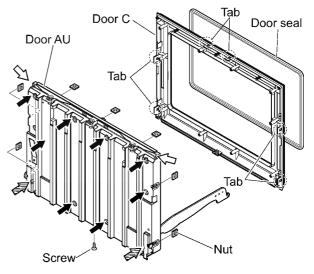


12.14. Door C / Door Seal

- 1. Remove the Door AU. (See 12.13. "Door BU / Door AU")
- 2. Remove the Door C. (Black arrows: 8 screws; White arrows: 2 screws; Diagonally shaded arrows: 2 screws; 1 countersunk screw; 6 tabs)

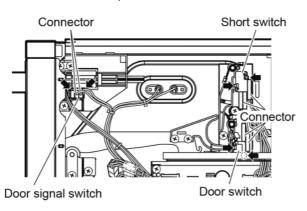
* When removing the Door C, keep the Door C upward not to drop the fixing nuts.

3. Remove the Door seal.



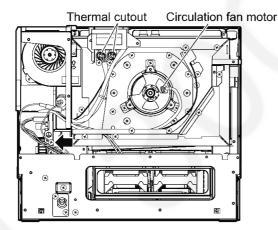
12.15. Door Switch / Short Switch / Door Signal Switch

- 1. Remove the Cabinet. (See "12.1 Cabinet")
- 2. Open the door.
- 3. Disconnect each connector.
- 4. Remove the switches from the mounting plate. (Black arrows: 2 tabs each)



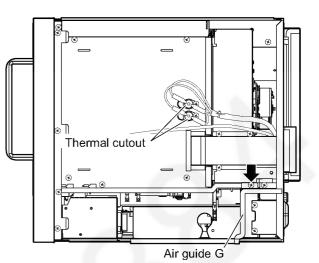
12.16. Circulation Fan Case U

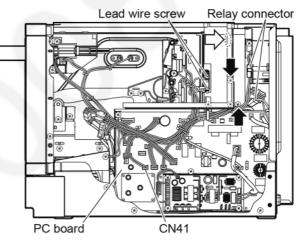
- 1. Remove the Back plate. (See 12.2. "Back Plate")
- 2. Disconnect the connectors from each Thermal cutout. (2 places each)
- 3. Disconnect the connector for the Circulation fan motor. (1 place)
- 4. Remove the grounding screw. (Black arrow: 1 screw)



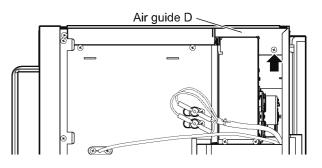
- 5. Disconnect the connectors from each Thermal cutout. (2 places each)
- Remove the connector (CN41) for the PC board, the relay connectors (2 places), and the lead wire screws (2 places).
 - Disengage the lead wire (oven thermistor) of the removed connector (CN41) from each holder.

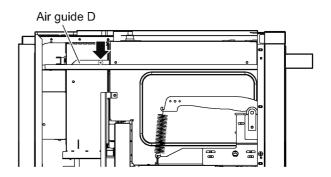
7. Remove the Air guide G. (Black arrows: 3 screws; White arrow: 1 tab)



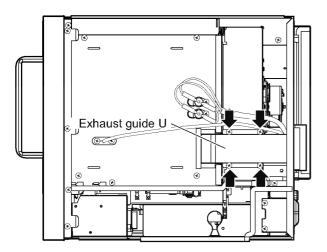


8. Remove the Air guide D. (2 screws)

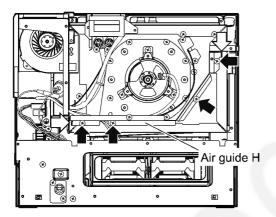




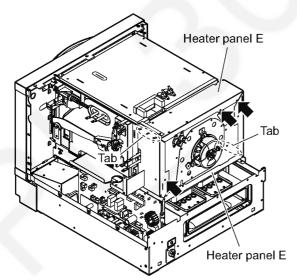
9. Remove the Exhaust guide U. (4 screws)



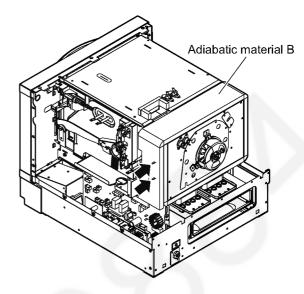
10. Remove the Air guide H. (Black arrows: 4 screws; White arrows: 2 tabs)



- 11. Remove each Heater panel E (3 screws).
 - If they are hard to remove, remove them separately by unhooking the tabs (3 tabs on each side).

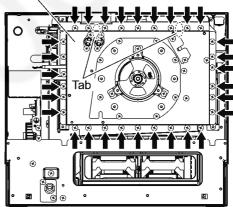


- 12. Remove the Adiabatic material B. (Black arrows: 2 tabs)
 - Raise the tabs with a tool like a flathead screwdriver.



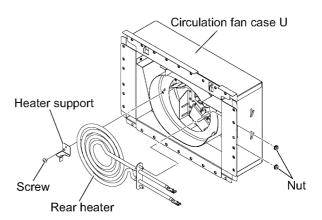
- 13. Remove the Circulation fan case U. (Black arrows: 30 screws; 2 tabs)
 - Slide Circulation fan fase U upward to remove.

Circulation fan case U



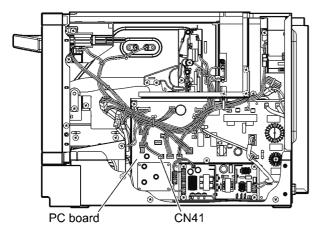
12.17. Rear Heater

- 1. Remove the Circulation fan case U. (See 12.16. "Circulation Fan Case U")
- 2. Remove the Heater support. (1 screw)
- 3. Remove the Rear heater. (Nuts: 2 pieces)
 * During assembly, install the Rear heater so that its terminal tabs point towards the top surface of the oven.

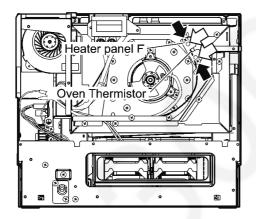


12.18. Oven Thermistor

- 1. Remove the Back plate. (See 12.2. "Back Plate")
- 2. Disconnect the connector(CN41).
- Disengage the lead wire of the removed connector (CN41) from each holder.



- 3. Remove the Heater panel F. (Black arrows : 2 screws)
- 4. Remove the Oven thermistor. (White arrows : 2 screws)To remove it, spread the adiabatic materials at the
 - Ioremove it, spread the adiabatic materials at the location where it is installed.
 * During assembly, be careful not to pinch the adiabatic
 - * During assembly, be careful not to pinch the adiabatic materials.

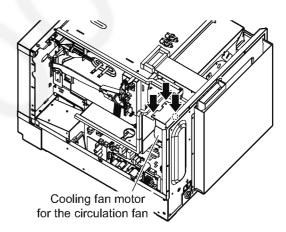


12.19. Cooling Fan Motor for the Circulation Fan

- 1. Remove the Back plate. (See 12.2. "Back Plate")
- 2. Disconnect the connector.

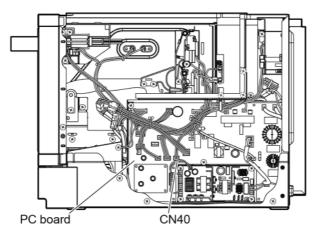
Cooling fan motor for the circulation fan

3. Remove the Cooling fan motor for the circulation fan. (3 screws)



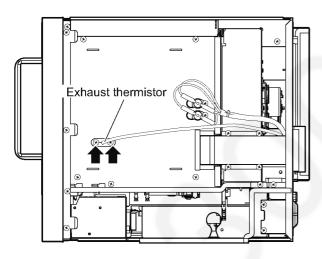
12.20. Exhaust Thermistor

- 1. Remove the Back plate. (See 12.2. "Back Plate")
- 2. Disconnect the connector (CN40) for the PC board.
- Disengage the disconnected lead wire from each holder.



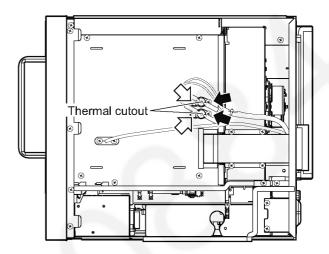
- 3. Remove the Exhaust thermistor. (2 screws)
 - To remove it, spread the adiabatic materials at the location where it is installed.

* During assembly, be careful not to pinch the adiabatic materials.



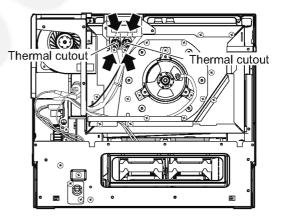
12.21. Thermal Cutout (for Top Heater)

- 1. Remove the Cabinet. (See "12.1 Cabinet")
- 2. Disconnect the connectors from each Thermal cutout.
- 3. Remove each Thermal cutout. (Black arrow: 1 screw each; White arrow: 1 tab each)



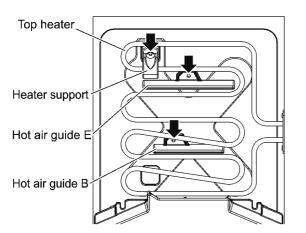
12.22. Thermal Cutout (for Rear Heater)

- 1. Remove the Back plate. (See 12.2. "Back Plate")
- 2. Disconnect the connectors from each Thermal cutout.
- 3. Remove each Thermal cutout. (2 screws each)



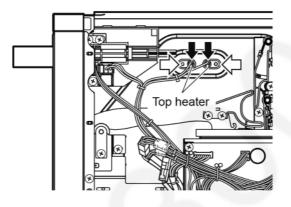
12.23. Top Heater

- 1. Remove the Cabinet. (See "12.1 Cabinet")
- 2. Open the door.
- 3. Remove the Heater support, Hot air guide B and the Hot air Guide E from the top interior surface of the oven. (1 screw each)



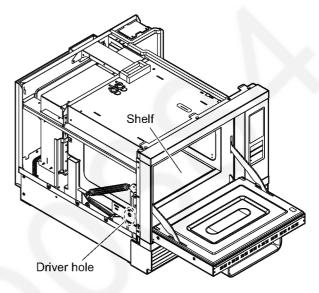
4. Remove the Top heater. (Black arrows: 2 screws; White arrows: 2 nuts)

* During assembly, install the Top heater so that its terminal tabs point towards the top surface of the oven.

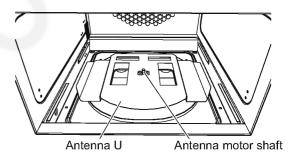


12.24. Antenna U / Spacer

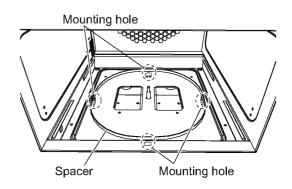
- 1. Remove the Cabinet. (See "12.1 Cabinet")
- 2. Open the door.
- 3. Remove the Shelf.
- Insert a driver into the driver hole on the left side of the oven, and push the driver tip up to raise the tray. (Hole diameter: Approx. 8mm)



4. Remove the Antenna U from the shaft of Antenna Motor.



- 5. Remove the Spacer.
 - Align the hooks on Spacer to the respective mounting holes to remove. (4 places)



13 Measurements and Adjustments

13.1. Oven output measurement

If we heat 1 liter of water in P7 (the oven 900W) for one minute and we let T 1 $^{\circ}$ C be the water temperature before heating and let T 2 $^{\circ}$ C be the one after heating, the output (W) is obtained from the following equation.

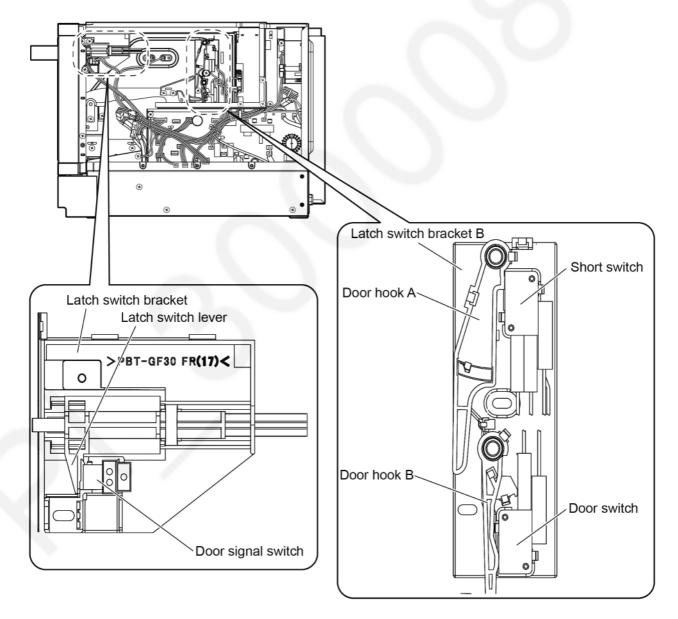
Output (W) = (T 2 - T 1) x 70 = T x 70

Load	Measurement time	Output tolerance (W)	Water temperature rise value (°C)
1 L of water	1 minute	810 to 1035	11.5 to 14.8

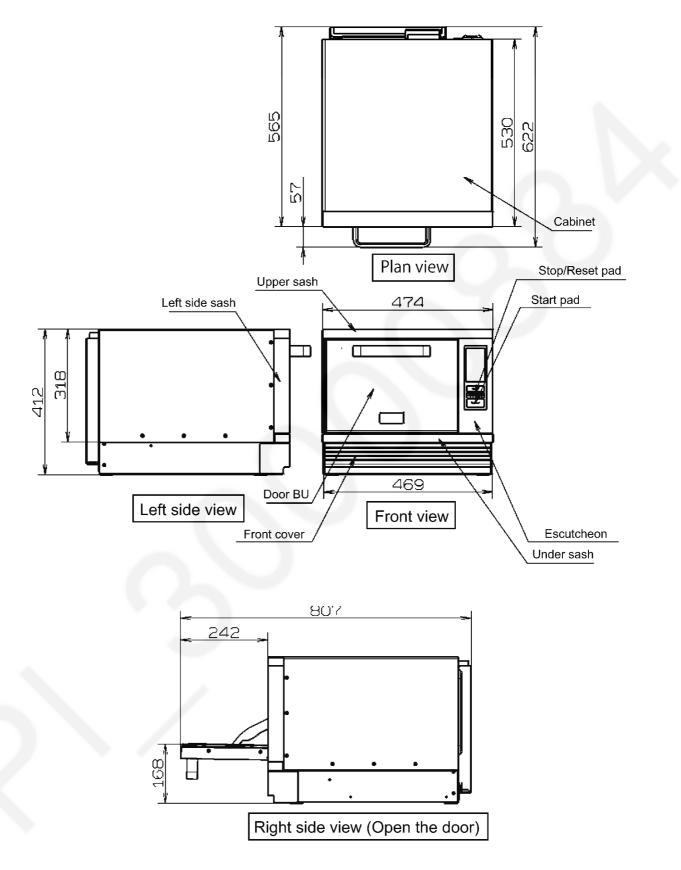
13.2. Adjustment of hinge and latch

Check the operation for each switch after disassembly, assembly and replacement of parts for door and latch switch.

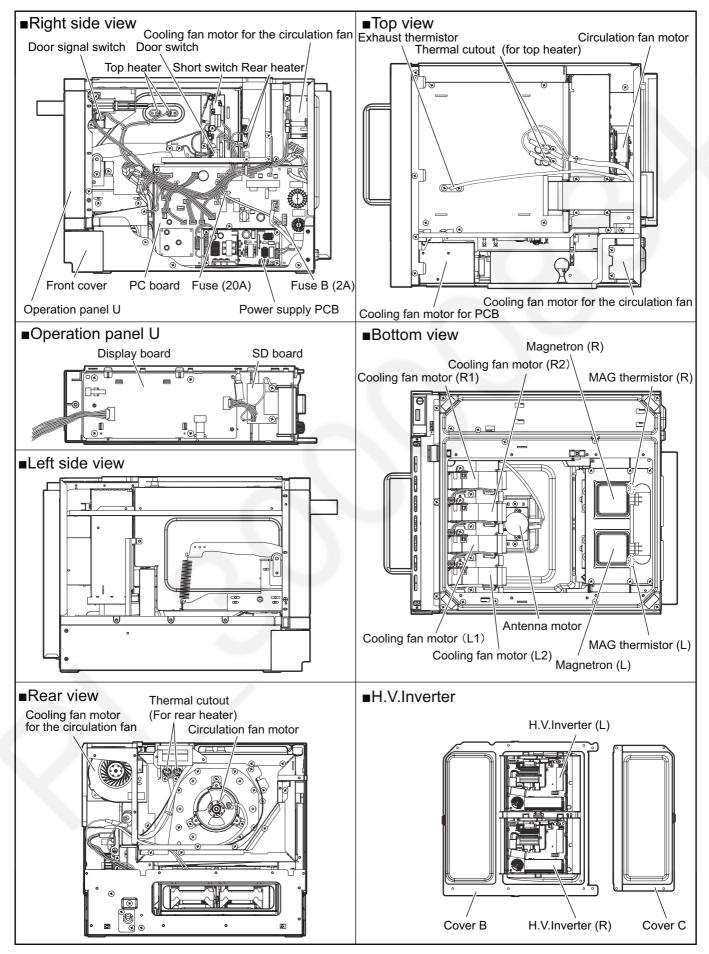
- If an operational failure occurs on door switch, door signal switch and short switch, perform the adjustment outlined below. 1. Adjustment of hinge
 - Close the door, fit the hinge on the front of oven and tighten the hinge attachment screw.
 - 2. Adjustment of latch switch bracket
 - a. Close the door, loosen the attachment screw for each latch switch bracket, slide the bracket back and forth to adjust latch switch lever and door hook A/B as pressing against the actuator of each switch.
 - b. Check the operation for door opening and closing and each switch.



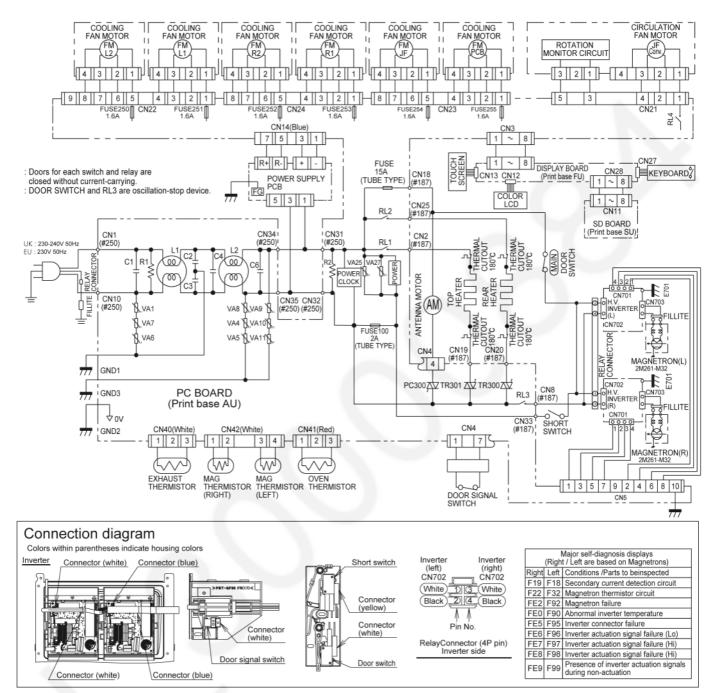
14 Dimensions



15 Block Diagram

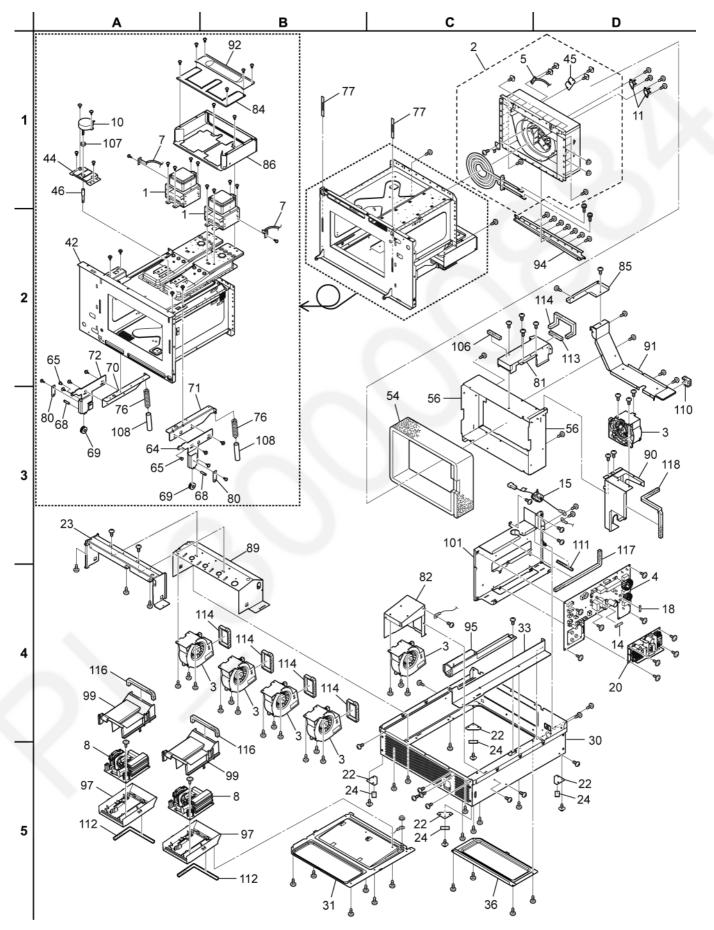


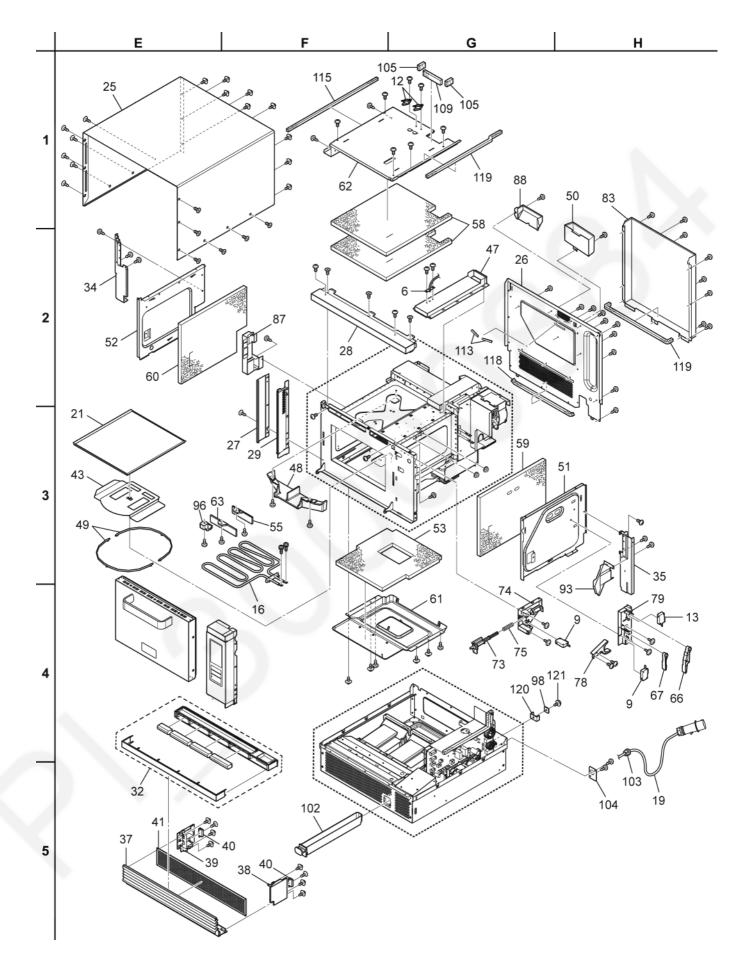
16 Wiring Connection Diagram



17 Exploded View and Replacement Parts List

17.1. Exploded view and parts list





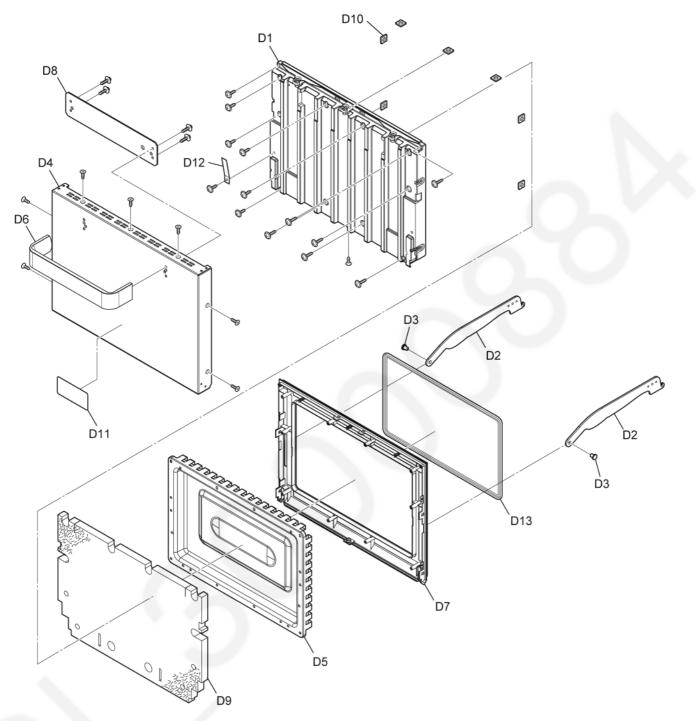
PARTS LIST

- NOTE 1: When ordering replacement part(s), please use part number(s) shown in this parts list. Do not use description of the part.
 - 2: Important safety notice: Components identified by <u>∧</u> mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

	•					
Safety	Ref. No.		Part Name & Description	Pcs/set	Remarks	
	1	2M261-M32J1Y	MAGNETRON	2		
	2	A203M3G80BP	CIRCULATION FAN CASE (U)	1		
\mathbb{A}	3	A400A-3G60	MOTOR, DC, 18 W	5		
\wedge	4	A603L3G80BP	PCB W/COMPONENTS	1		
	5	A605A-3G90	TEMP.THERMISTER	1		
	6	A605Y-3G90	TEMP.THERMISTER	1		
	7	A606B-3G60	TEMP.THERMISTER	1		
⚠	8	A606Y3G70AP	H.V.INVERTER	2		
Δ	9	A61424T00AP	MICRO SWITCH, (V-16G-3C26-M)	1		/
	10	A6144-1T60	MOTOR, AC, 3W	1		
	11	A6145-1E30	THERMAL CUTOUT 180°C	2		
<u>^</u>						
⚠	12	A61458020BP	THERMAL CUTOUT 180°C	2		
	13	ANE61784L0AG	MICRO SWITCH, (V-16G-2C25)	1		
	14	A62303A60AP	FUSE 15A	1		
	15	A621A-3G60	FILTER COIL	1		
	16	A64133G80BP	SHEATH HEATER A	1		
	18	A6595-3G60	FUSE B, 2A	1		
	19	A900C3G80BP	CORD W/PLUG	1		
	20	N0AE1GJ00030	PCB, POWER SUPPLY	1		
	21	A010T3G80BP	SHELF	1		
	22	A1007-3280	FOOT	4		
	23	A1007-3G60	FOOT A	1		
	24	A1008-3280	RUBBER FOOT	4		
	25	A1009-3G60	CABINET	1		
	26	A100Q3G60WT	BACK PLATE	1		
	27	A1013-3G60	SASH, LEFT	1		
	27	A1015-3G60 A1015-3G60	SASH UPPER	1		
	-					
	29	A1018-3G60	SASH BRACKET	1		
	30	A101S-3G60	BOTTOM PLATE U	1		
	31	A1028-3G60	COVER	1		
	32	A102E-3G60	SASH, BOTTOM	1		
	33	A1040-3G60	REINFORCING PLATE	1		
	34	A1148-3G60	BRACKET, OVEN	1		
	35	A1149-3G60	BRACKET, OVEN	1		
	36	A1154-3G60	COVER	1		
	37	A1600-3G60	COVER, FRONT, AL	1		
	38	A1601-3G62	COVER, RIGHT	1		
	39	A1602-3G62	COVER, LEFT	1		
	40	A1607-3G60	BRACKET, COVER	2		
	41	A1615-3G60	MESH FILTOR	1		
	42	A200A-3G90	OVEN U	1		
	43	A202K-3G60	ANTENNA U	1		
	44	A2027-3G60	BRACKET, MOTOR	1		
	45	A2257-3G90	HEATER PANEL	1		
	46	A2080-3G60	ANTENNA SHAFT	1		
	40	A2088-3G60	EXHAUST GUIDE	1		
	48	A2038-3G00 A2235-3G90	AIR GUIDE	1		
	49	A2133-3G60	SPACER	2		
	50	A48843G60WT	TRAY	1		
	51	A2236-3G60	HEATER PANEL (RIGHT)	1		
	52	A2237-3G60	HEATER PANEL (LEFT)	1		
	53	A2242-3G60	ADIABATIC MATERIAL A	1		
	54	A2243-3G60	ADIABATIC MATERIAL B	1		
	55	A2246-3G90	HOT AIR GUIDE B	1		
	56	A2256-3G60	HEATER PANEL E	2		
	58	A2259-3G60	ADIABATIC MATERIAL D	2		
	59	A2260-3G60	ADIABATIC MATERIAL E	1		
	60	A2261-3G60	ADIABATIC MATERIAL F	1		
	61	A2277-3G60	HEATER PANEL (BOTTOM)	1		
	01					
	62	A2278-3G60	HEATER PANEL (UPPER)	1		

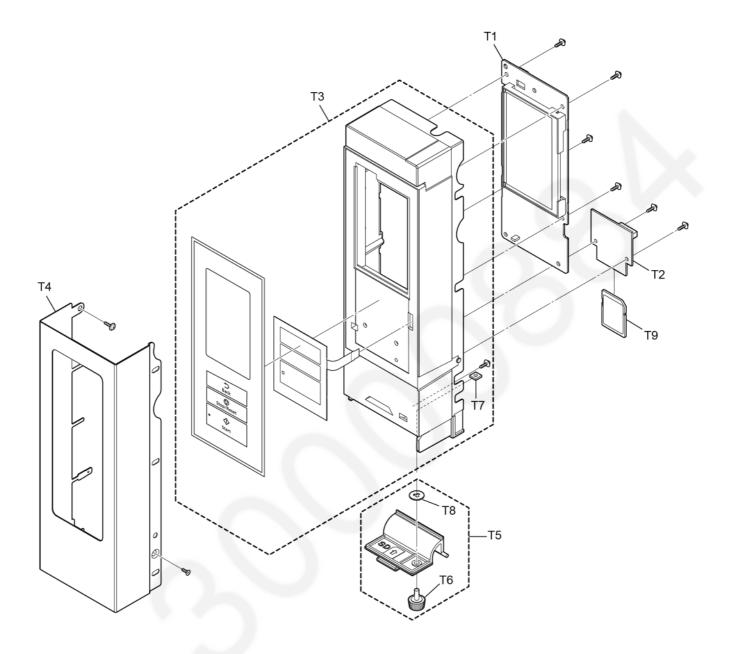
Salety	Ref. No.		Part Name & Description	Pcs/set	Remarks
	64	A3007-3G60	HINGE B	1	
	65	A3008-3G60	HINGE PIN	2	
	66	A3020-3G60	DOOR HOOK A	1	
	67	A3030-3G60	DOOR HOOK B	1	
	68	ANE3033-560	DOOR GUIDE ROLLER PIN	2	
	69	ANE3034-560	DOOR GUIDE ROLLER	2	
	70	A3060-3G60	SPACER B, DOOR HINGE	1	
	71	A3081-3G60	SPACER, DOOR HINGE	1	
	72	A3092-3G60	HINGE C	1	
	73	A3102-3G60	LEVER, LATCH SWITCH	1	
	74	A3103-3G60	BRACKET, LATCH SW	1	
	75	ANE3155-610	SPRING	1	
	76	A32303G80BP	SPRING B	2	
	77	A3252-3G60	SPACER, DOOR ARM	2	
	78	A3264-3G60	SPACER B, DOOR ARM	1	
	79	A3291-3G60	BRACKET, LATCH SW	- 1	
	80			2	
		A3379-3G60	BRACKET, GUIDE ROLER		
	81	A400K-3G60	EXHAUST GUIDE U	1	
	82	A4021-3G60	COVER, FAN CASE	1	
	83	A4024-3G60	EXHAUST GUIDE A	1	
	84	A4026-3G60	AIR GUIDE B	1	
	85	A4030-3G60	AIR GUIDE D	1	
	86	A4031-3G60	AIR GUIDE C	1	
	87	A4047-3G60	AIR GUIDE E	1	
	88	A41073980AP	EXHAUST GUIDE B	1	
	89	A4118-3G60	AIR GUIDE	1	
	90	A4209-3G60	AIR GUIDE G	1	
	91	A4211-3G90	AIR GUIDE H	1	
	92	A4287-3G60	AIR GUIDE P	1	
	93	A4880-3G60	DRAIN PLATE	1	
	94	A4881-3G60	DRAIN PLATE B	1	
	95	A4885-3G60	BRACKET WATER SEALING	1	
	96	A6418-3G60	HEATER SUPPORT	1	
	97	A6585-3G60	BRACKET, INV, PCB	2	
	98	A66623170GP	WASHER	1	
	99	A6720-3G60	COVER, INVERTER PCB	2	
	101	A6793-3G60	BRACKET, PCB	1	
	102	A8023-3G60	OIL TRAY	1	
	103	ANE9027510RN	CORD BUSHING	1	
	104	A90353040AP	CORD BRACKET	1	
	105	A0920-3G60	CUSHION RUBBER	2	
	106	A0937-3G60	CUSHION RUBBER	1	
	107	A0938-3G60	TUBE	1	
	108	A0941-3G60	TUBE	1	
	109	A0984-3G60	CUSHION RUBBER	1	
	110	ANE0902000DB	CUSHION RUBBER A	1	
	111	ANE0902000DB	CUSHION RUBBER A	1	
	112	ANE0961000AM	CUSHION RUBBER D	2	
	113	ANE0962000AE	CUSHION RUBBER D	3	
	114	ANE0962000AN	CUSHION RUBBER	9	
	115	ANE0962000AW	CUSHION RUBBER D	1	
	116	ANE0963000AK	CUSHION RUBBER D	2	
	117	ANE0963000AQ	CUSHION RUBBER D	1	
	118	ANE0963000AR	CUSHION RUBBER D	2	
	119	ANE0963000AU	CUSHION RUBBER D	2	
	120	XWNANE65GV	BRACKET EARTH	1	
	120	XWNANE03GV XYE6+F20FJ	SCREW	1	
	141	1110 17 2070	C CALEM		

DOOR ASSEMBLY



Safety	Ref. No.	Part No.	Part Name & Description	Pcs/set	Remarks
	D1	A3001-3G60	DOOR A	1	
	D2	A3004-3G60	DOOR ARM	2	
	D3	A3008-3G60	HINGE PIN	2	
	D4	A300A-3G60	DOOR BU	1	
	D5	A301Q-3G60	DOOR E U	1	
	D6	A3070-3G60	HANDLE PIECE	1	
	D7	A30853G80BP	DOOR C	1	
	D8	A3181-3G60	BRACKET, HANDLE	1	
	D9	A2385-3G60	ADIABATIC MATERIAL H	1	
	D10	A4892-3G60	NUT	7	
	D11	A3186-3G80	DOOR PANEL	1	
	D12	A90093G60WT	TAB	1	
	D13	A33343G80BP	DOOR SEAL	1	

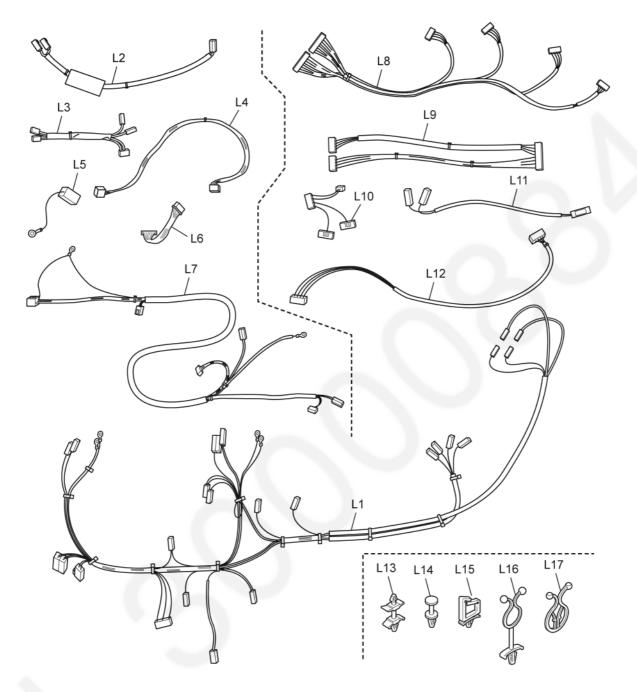
ESCUTCHEON BASE ASSEMBLY



Safety	Ref. No.	Part No.	Part Name & Description	Pcs/set	Remarks
	T1	A605Q3G80BP	DISPLAY BOARD	1	
	т2	A608T-3G60	PCB, SD SLOT	1	
	т3	A800L3G60WT	OPERATION PANEL U	1	
	т4	A8058-3G60	ESCUTCHEON	1	
	т5	A8030-3G60	COVER, SD	1	
	тб	A4091-3G60	SCREW, M4	1	
-	т7	A4892-3G60	NUT M4	7	
	т8	A6408-3280	WASHER	1	
	т9	RPSDFC51CS15	MEMORY CARD	1	

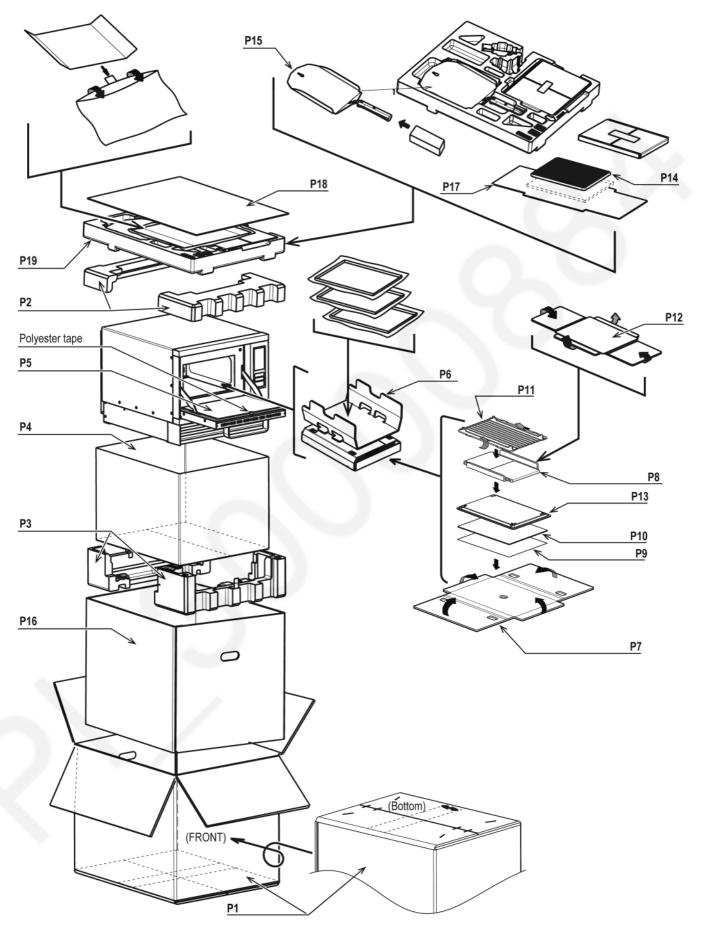
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NE-SCV2BPQ
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WIRING MATERIAL

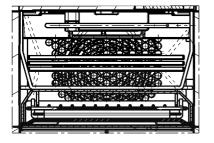


Safety	Ref. No.	Part No.	Part Name & Description	Pcs/set	Remarks
Δ	L1	A030A3G80BP	LEAD WIRE HARNESS AU	1	
A	L2	A030E3G60WT	LEAD WIRE U	2	
⚠	L3	A030F-3G60	LEAD WIRE HARNESS BU	1	
A	L4	A030H-3G60	LEAD WIRE HARNESS CU	1	
	L5	A0305-3G60	LEAD WIRE A	1	
	L6	A031F-3G60	LEAD WIRE HARNESS DU	1	
	L7	A031H-3G60	LEAD WIRE HARNESS FU	1	
	L8	A031K-3G60	LEAD WIRE HARNESS GU	1	
	L9	A031L-3G60	LEAD WIRE HARNESS HU	1	
	L10	A031M-3G60	LEAD WIRE HARNESS IU	1	
	L11	A031N-3G60	LEAD WIRE HARNESS JU	1	
	L12	A031P3G80BP	LEAD WIRE HARNESS KU	1	
	L13	A6544-3G60	SPACER A	6	
	L14	A6545-3G60	SPACER B	2	
	L15	ANE9108X70AP	LEAD WIRE HOLDER K	1	
	L16	ANE9072-400	LEAD WIRE HOLDER C	1	
	L17	ANE9073-900	LEAD WIRE HOLDER D	8	

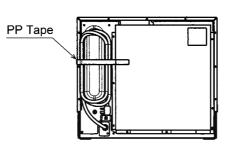
PACKING AND ACCESSORIES



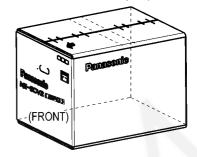
Inside of oven cavity



Fixing method for cable



Complete packaging view



Safety	Ref. No.	Part No.	Part Name & Description	Pcs/set	Remarks
	P1	A01023G80BP	PACKING CASE PAPER	1	
	P2	A0104-3G60	UPPER FILLER	1	
	P3	A0105-3G60	LOWER FILLER	1	
	P4	A01063040AP	VINYL COVER	1	
	P5	A0107-3G60	DOOR SHEET	1	
	P6	A00183G80BP	TRAY PACKING	1	
	P7	A0117-3G60	TRAY PACKING B	1	
	P8	A0227-3G90	TRAY PACKING	1	
	P9	A04203G80BP	OPERATION GUIDE SHEET	1	
⚠	P10	A05063G80BP	INSTRUCTION BOOK	1	
	P11	A0602-3G90	BAKING RACK	1	
	P12	A0749-3G80	CERAMIC PLATE	1	
	P13	A4542-3G60	TRAY	1	
	P14	A45473G80BP	RIBBED PLATE	1	
	P15	A011H3G81BP	PADDLE	1	
	P16	A01033G80BP	INNER PACKING BOX	1	
	P17	A02283G80BP	PLATE PACKING B	1	
	P18	A01263G80BP	UPPER PACKING	1	
	P19	A01143G80BP	UPPER FILLER B	1	

		•			
afetv	Ref. No.	Part No.	Part Name & Description	Pcs/set	Remarks
1		A11343G80BP	FOOT BRACKET	1	
⚠		A0005-2601	EARTH LABEL	1	
⚠		A02673G80BP	SERVICE NOTICE	1	
		A00064080BP	CAUSION LABEL	1	
⚠		A01573G80BP	NAME PLATE	1	

Safety	Ref. No.	Part No.	Part Name & Description	Pcs/set	Remarks
	X1	XTW3+6BJ	SCREW	8	
	X2	XTNA3+10GJ	SCREW	2	
	Х3	XTW3+10BJ	SCREW	24	
	X4	XTW3+10QJ	SCREW	15	
	X5	XTW3+20QJ	SCREW	2	
	X6	XTS3+8FXR	SCREW	2	
	X8	XTWANE3+8EX	SCREW	2	
	х9	XYNA35+C7US	SCREW	4	
	X10	XST4+6FN	SCREW	4	
	X11	XTT4+8RDN	SCREW	146	
	X12	XTTANE4+8SX	SCREW	29	
	X13	XTW4+8TJ	SCREW	2	
	X14	XTWA4+8SJ	SCREW	22	
	X15	XTWANE4+8BN	SCREW	4	
	X16	XYF4+AF8J	SCREW	4	
	X17	XSS4+10UM	SCREW	7	
	X18	XTC4+10BC	SCREW	12	
	X19	XTS4+10JJ	SCREW	8	
	X21	XTTANE4+12BN	SCREW	49	
	X22	XTTANE4+12SX	SCREW	3	
	X23	XTW4+12TJ	SCREW	4	
	X24	XTWANE4+12DN	SCREW	9	
	X25	XYD4+EE12FJ	SCREW	4	
	X26	XTW4+16QJ	SCREW	4	
	X27	XYN4+F18SJ	SCREW	8	
	X28	XNW4EFN	NUT	5	
	X29	XTWANE4+10BN	SCREW	2	