

DAEWOO ELECTRONICS CO., LTD. 686, AHYEON-DONG MAPO-GU SEOUL, KOREA C.P.O. BOX 8003 SEOUL, KOREA TELEX: DWELEC K28177-8 CABLE: "DAEWOOELEC" E-MAIL : G7F00E @web.dwe.co.kr FAX: 02) 360-8184 TEL: 02) 360-8179~8180

PRINTED DATE: Dec. 1999



# **Service Manual**

## Microwave Oven

Model	:KOG-371G0S	KOG-391G0S
	KOG-371H0S	KOG-391H0S
	KOG-376T1S	KOG-396T1S
	KOG-371R0S	KOG-391R0S
	KOG-374R0S	KOG-375R0S
	KOG-373R0S	KOG-393R0S

DAEWOO ELECTRONICS CO., LID.

## PRECAUTIONS TO BE OBSERVED BEFORE AND DURING SERVICING TO AVOID POSSIBLE EXPOSURE TO EXCESSIVE MICROWAVE ENERGY

- (a) Do not operate or allow the oven to be operated with the door open.
- (b) Make the following safety checks on all ovens to be serviced before activating the magnetron or other microwave source, and make repairs as necessary: (1) Interlock operation, (2) Proper door closing, (3) Seal and sealing surfaces (arcing, wear, and other damage), (4) Damage to or loosening of hinges and latches, (5) Evidence of dropping or abuse.
- (c) Before turning on power to the microwave oven for any service test or inspection within the microwave generating compartments, check the magnetron, wave huide or transmission line, and cavity for proper alignment, integrity, and connections.
- (d) Any defective or misadjusted components in the interlock, monitor, door seal, and microwave generation and transmission systems shall be repaired, replaced, or adjusted by procedures described in this manual before the oven is released to the owner.
- (e) A microwave leakage check to verify compliance with the Federal Performance Standard should be performed on each oven prior to release to the owner.

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## SAFETY AND PRECAUTIONS

#### **1. FOR SAFE OPERATION**

Damage that allows the microwave energy (that cooks or heats the food) to escape will result in poor cooking and may cause serious bodily injury to the operator.

IF ANY OF THE FOLLOWING CONDITIONS EXIST, OPERATOR MUST NOT USE THE APPLIANCE. (Only a trained service personnel should make repairs.)

- 1) A broken door hinge.
- 2) A broken door viewing screen.
- 3) A broken front panel, oven cavity.
- 4) A loosened door lock.
- 5) A broken door lock.

The door gasket plate and oven cavity surface should be kept clean.

No grease, soil or spatter should be allowed to build up on these surfaces or inside the oven. DO NOT ATTEMPT TO OPERATE THIS APPLIANCE WITH THE DOOR OPEN. The microwave oven has concealed switches to make sure the power is turned off when the door is opened. Do not attempt to defeat them. DO NOT ATTEMPT TO SERVICE THIS APPLIANCE UNTIL YOU HAVE READ THIS SERVICE MANUAL.

#### 2. FOR SAFE SERVICE PROCEDURES.

- 1) If the oven is operative prior to servicing, a microwave emission check should be performed prior to servicing the oven.
- 2) If any certified oven unit is found to servicing, a microwave emission check should be performed prior to servicing the oven.
  - (a) inform the manufacturer, importer or assembler,
  - (b) repair the unit at no cost to the owner,
  - (c) attempt to ascertain the cause of the excessive leakage,
  - (d) tell the owner of the unit not to use the unit until the oven has been brought into compliance.
- 3) If the oven operates with the door open, the service person should tell the user not to operate the oven and contact the manufacturer immediately.

#### IMPORTANT

: Earth
: Neutral
: Live
is appliance may not correspond with the coloured markings ollows:
st be connected to the terminal in the plug which is marked ellow.
ected to the terminal which is marked with the letter 'N' or
ected to the terminal which is marked with the letter 'L' or

**NOTE :** This oven is designed for counter-top use only.

## **SPECIFICATIONS**

MODEL		KOG-371G/H/R0S, KOG-374R/5R0S	KOG-391G/H/R0S	
POWER SUPPLY		230~, 50Hz SINGLE PHASE WITH EARTHING		
	MICROWAVE	1200W	1350W	
POWER CONSUMPTION	GRILL	1050W	1050W	
	COMBINATION	2200W	2350W	
MICROWAVE ENERGY O	UTPUT	800W	900W	
MICROWAVE FREQUENC	Y	2450	MHz	
OUTSIDE DIMENSIONS(W	VXHXD)	465X279X360mm	495X294X388mm	
		(18.3X11.0X14.2 in)	(19.5X11.6X15.3 in)	
CAVITY DIMENSIONS(WX	(HXD)	290X220X306mm	320X244X338mm	
		(11.4X8.7X12.0 in)	(12.6X9.6X13.3 in)	
NET WEIGHT		APPROX. 14Kg(30.9 lbs)	APPROX. 16Kg(35.3 lbs)	
TIMER		59 min. 90 sec.		
FUNCTION SELECTIONS		MICROWAVE / GRILL / COMBINATION		
POWER SELECTIONS*		10 LEVELS / 5 LEVELS		
CAVITY VOLUME		0.7 Cu. Ft.	0.9 Cu. Ft.	

- POWER SELECTIONS\* : KOG-371R/391R0S : 5 LEVELS.

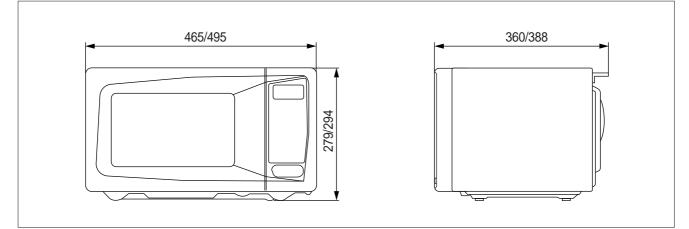
MODEL		KOG-376T1S	KOG-396T1S
POWER SUPPLY		230~, 50Hz SINGLE PHASE WITH EARTHING	
	MICROWAVE	1200W	1350W
POWER CONSUMPTION	GRILL	1050W	1050W
	COMBINATION	2200W	1350W
MICROWAVE ENERGY O	UTPUT	800W	950W
MICROWAVE FREQUENC	Y	2450	MHz
OUTSIDE DIMENSIONS(V	VXHXD)	465X279X370mm	495X294X403mm
		(18.3X11.0X14.6 in)	(19.5X11.6X15.9 in)
CAVITY DIMENSIONS(W)	(HXD)	290X220X306mm	320X244X338mm
		(11.4X8.7X12.0 in)	(12.6X9.6X13.3 in)
NET WEIGHT		APPROX. 14Kg(30.9 lbs)	APPROX. 16Kg(35.3 lbs)
TIMER		60 min. 00 sec.	
FUNCTION SELECTIONS		MICROWAVE / GRILL / COMBINATION	
POWER SELECTIONS		4 LEVELS	
CAVITY VOLUME		0.7 Cu. Ft.	0.9 Cu. Ft.

MODEL		KOG-373R0S	KOG-393R0S
POWER SUPPLY		230~, 50Hz SINGLE PHASE WITH EARTHING	
	MICROWAVE	1200W	1350W
POWER CONSUMPTION	GRILL	1050W	1050W
	COMBINATION	2200W	2350W
MICROWAVE ENERGY O	UTPUT	800W	950W
MICROWAVE FREQUENC	CY	2450	MHz
OUTSIDE DIMENSIONS(V	VXHXD)	465X279X365mm	495X294X392mm
		(18.3X11.0X14.4 in)	(19.5X11.6X15.4 in)
CAVITY DIMENSIONS(W)	(HXD)	290X220X306mm	320X244X338mm
		(11.4X8.7X12.0 in)	(12.6X9.6X13.3 in)
NET WEIGHT		APPROX. 14Kg(30.9 lbs)	APPROX. 16Kg(35.3 lbs)
TIMER		59 min. 90 sec.	
FUNCTION SELECTIONS		MICROWAVE / GRILL / COMBINATION	
POWER SELECTIONS		5 LEVELS	
CAVITY VOLUME		0.7 Cu. Ft.	0.9 Cu. Ft.

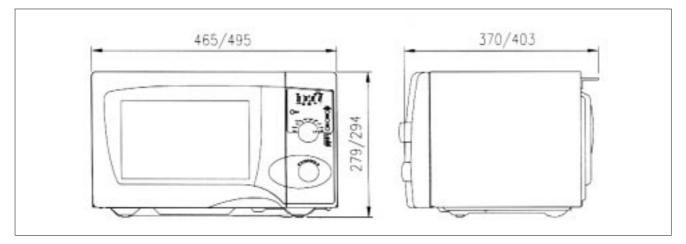
## **EXTERNAL VIEW**

#### **1. OUTER DIMENSION**

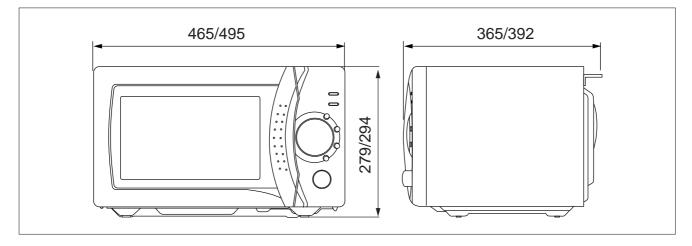
1) KOG-371G/H0S, KOG-391G/H0S



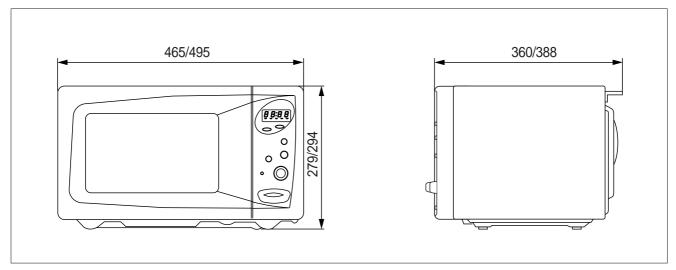
#### 2) KOG-376T1S, KOG-396T1S



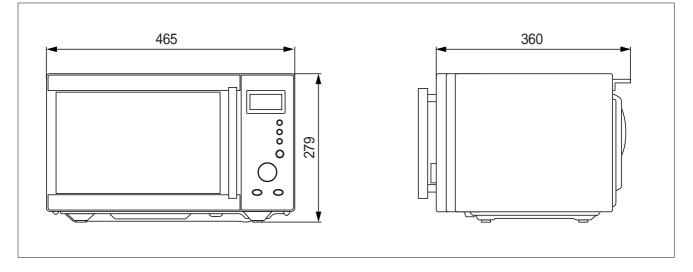
#### 3) KOG-373R0S, KOG-393R0S



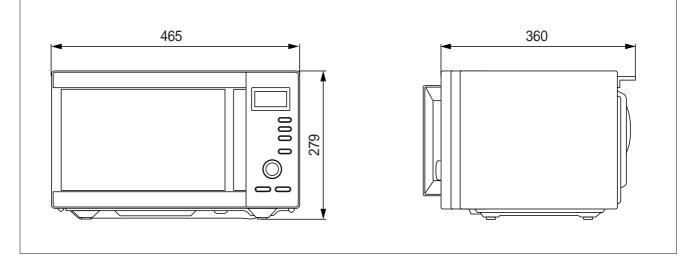
### 4) KOG-371R0S, KOG-391R0S



#### 5) KOG-374R0S

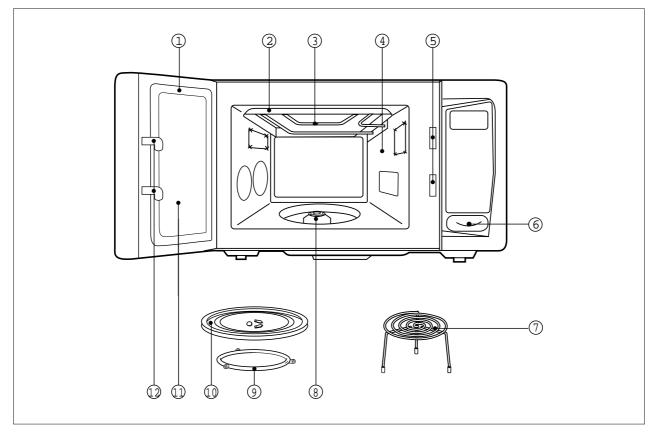


## 6) KOG-375R0S



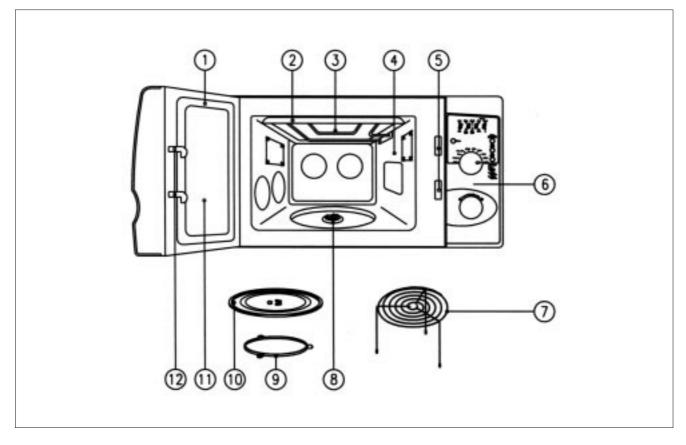
#### 2. FEATURE DIAGRAM

#### 1) KOG-371G/H0S, KOG-391G/H0S



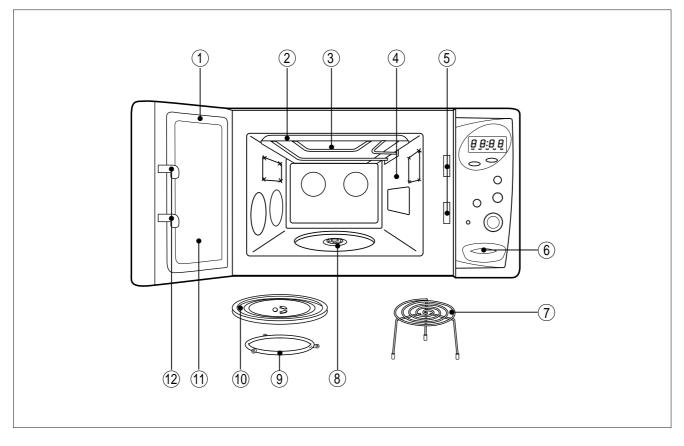
- 1. DOOR SEAL Door seal maintains the microwave energy within the oven cavity and prevents microwave leakage.
- 2. REFLECTOR(Insulator Heater)
- **3. HEATING ELEMENT**
- 4. OVEN CAVITY
- 5. SEFETY INTERLOCK SYSTEM
- 6. DOOR RELEASE BUTTON By pushing this button the latch system cut off all circuits and stops the oven before the door is opened.
- 7. METAL RACK
- **8.** COUPLER This fits over the shaft in the center of the ovens cavity floor. This is to remain in the oven for all cooking.
- 9. ROLLER GUIDE This must always be used for cooking together with the glass cooking tray.
- **10. GLASS COOKING TRAY** Made of special heat resistant glass. Food in a proper receptacle is placed on this tray for cooking.
- **11. DOOR VIEWING SCREEN** Allows viewing of food. The screen is designed so that light can pass through, but not the microwave.
- 12. DOOR HOOK When the door is closed, it will automatically shut off. If the door is opened while the

#### 2) KOG-376T1S, KOG-396T1S



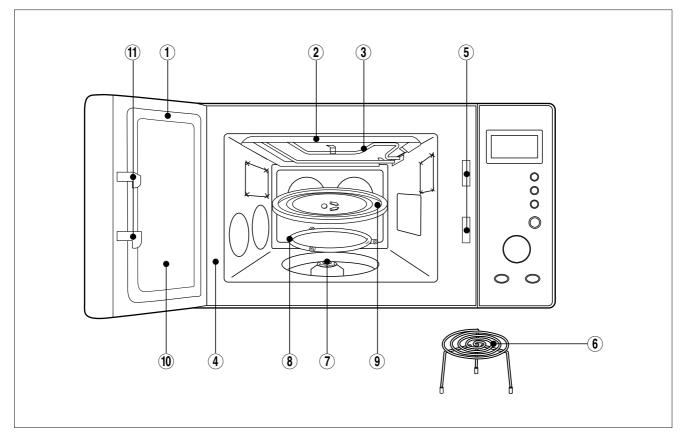
- **1. DOOR SEAL** Door seal maintains the microwave energy within the oven cavity and prevents microwave leakage.
- 2. REFLECTOR(Insulator Heater)
- **3. HEATING ELEMENT**
- 4. OVEN CAVITY
- 5. SEFETY INTERLOCK SYSTEM
- 6. CONTROL PANEL
- 7. METAL RACK
- **8. COUPLER** This fits over the shaft in the center of the ovens cavity floor. This is to remain in the oven for all cooking.
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- **12. DOOR HOOK** When the door is closed, it will automatically shut off. If the door is opened while the oven is operating, the magnetron will immediately stop operating.

#### 3) KOG-371R0S, KOG-391R0S



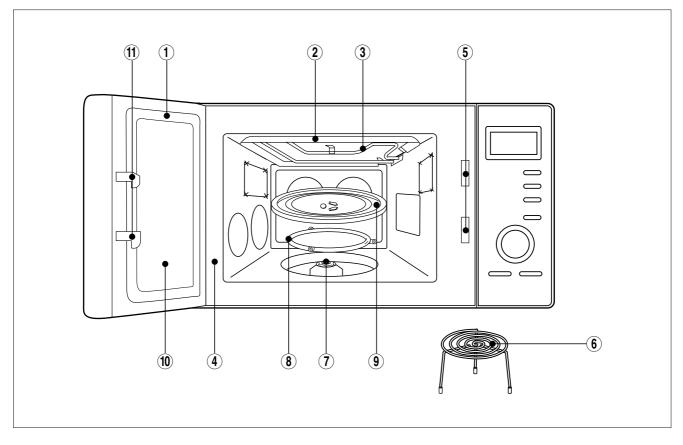
- **1. DOOR SEAL** Door seal maintains the microwave energy within the oven cavity and prevents microwave leakage.
- 2. REFLECTOR(Insulator Heater)
- **3. HEATING ELEMENT**
- 4. OVEN CAVITY
- 5. SEFETY INTERLOCK SYSTEM
- 6. CONTROL PANEL
- 7. DOOR OPENING BUTTON
- 8. METAL RACK
- **9. COUPLER** This fits over the shaft in the center of the ovens cavity floor. This is to remain in the oven for all cooking.
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- **13. DOOR HOOK** When the door is closed, it will automatically shut off. If the door is opened while the oven is operating, the magnetron will immediately stop operating.

#### 4) KOG-374R0S



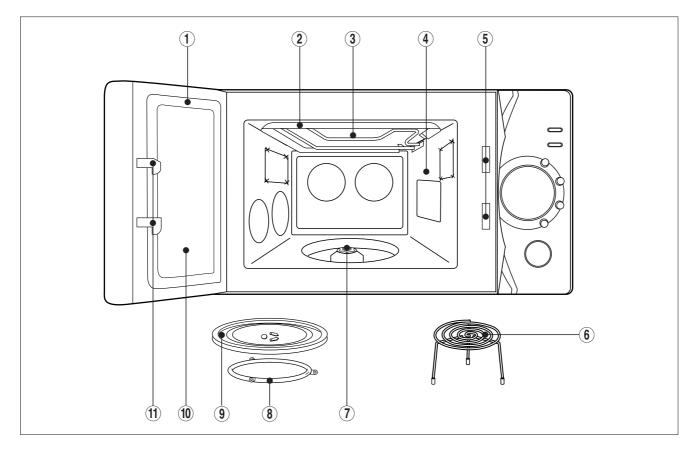
- **1. DOOR SEAL** Door seal maintains the microwave energy within the oven cavity and prevents microwave leakage.
- 2. REFLECTOR(Insulator Heater)
- **3. HEATING ELEMENT**
- 4. OVEN CAVITY
- 5. SEFETY INTERLOCK SYSTEM
- 6. METAL RACK
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#### 5) KOG-375R0S



- **1. DOOR SEAL** Door seal maintains the microwave energy within the oven cavity and prevents microwave leakage.
- 2. REFLECTOR(Insulator Heater)
- **3. HEATING ELEMENT**
- 4. OVEN CAVITY
- 5. SEFETY INTERLOCK SYSTEM
- 6. METAL RACK
- **7. COUPLER** This fits over the shaft in the center of the ovens cavity floor. This is to remain in the oven for all cooking.
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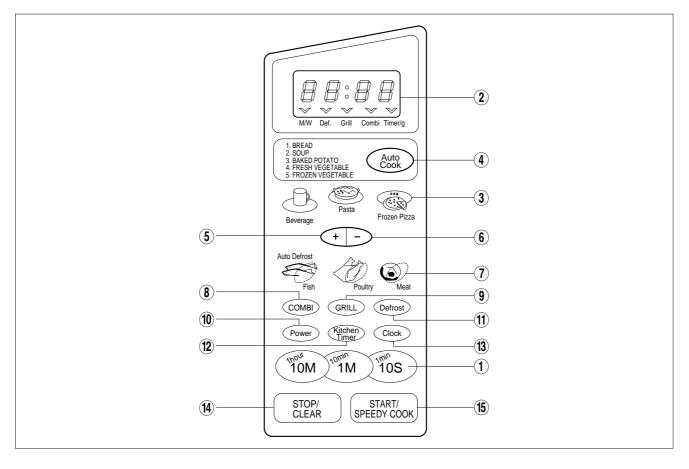
#### 6) KOG-373R0S, KOG-393R0S



- **1. DOOR SEAL** Door seal maintains the microwave energy within the oven cavity and prevents microwave leakage.
- 2. REFLECTOR(Insulator Heater)
- **3. HEATING ELEMENT**
- 4. OVEN CAVITY
- 5. SEFETY INTERLOCK SYSTEM
- 6. METAL RACK
- **7. COUPLER** This fits over the shaft in the center of the ovens cavity floor. This is to remain in the oven for all cooking.
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- **11. DOOR HOOK** When the door is closed, it will automatically shut off. If the door is opened while the oven is operating, the magnetron will immediately stop operating.

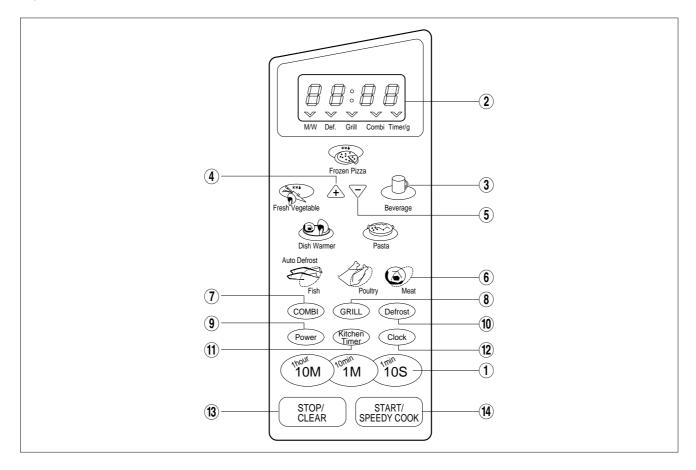
#### **3. CONTROL PANEL**

1) KOG-371G0S, KOG-391G0S



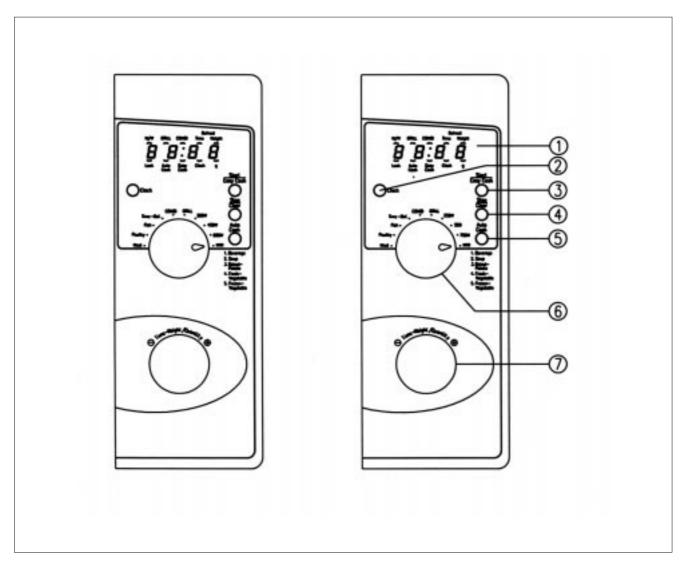
- 1. TIME SET PAD Used to set the cooking time and the present time.
- **2. DISPLAY** Cooking time, power level, indicators and present time are displayed.
- 3. ONE TOUCH Used to cook or reheat specific quantities of food.
- 4. AUTO COOK Used to cook or reheat.
- 5. MORE Used to add time to cooking.
- 6. LESS Used to remove time from cooking.
- 7. AUTO DEFROST Used to defrost foods.(for weight)
- 8. COMBI Used to cook COMBI.
- 9. GRILL Used to cook GRILL.
- 10. POWER Used to set power level.
- 11. DEFROST
- **12. KITCHEN TIMER** Used as a minute timer, to delay the start of cooking, or to set a holding time after cooking.
- **13. CLOCK** Used to set clock.
- 14. STOP/CLEAR Used to stop the oven operation or to delete the cooking data.
- **15. START/SPEEDY COOK** Used to start the oven and also used to set a reheat time.

2) KOG-371H0S, KOG-391H0S



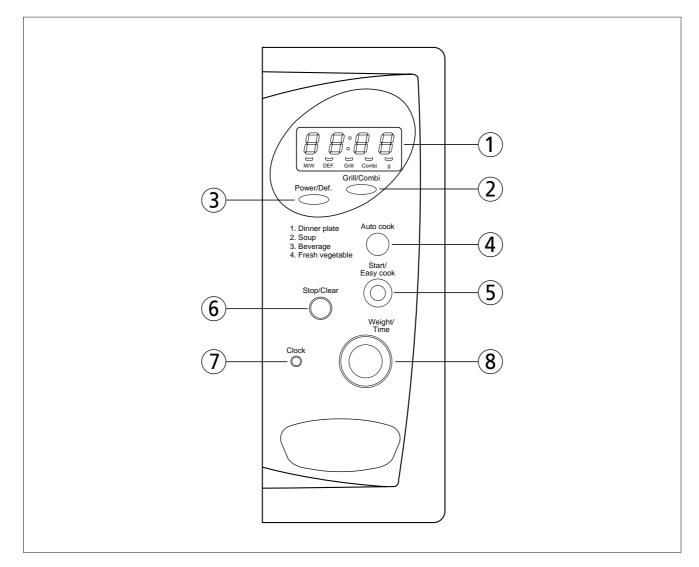
- 1. TIME SET PAD Used to set the cooking time and the present time.
- 2. DISPLAY Cooking time, power level, indicators and present time are displayed.
- 3. ONE TOUCH Used to cook or reheat specific quantities of food.
- 4. MORE Used to add time to cooking.
- 5. LESS Used to remove time from cooking.
- 6. AUTO DEFROST Used to defrost foods.(for weight)
- 7. COMBI Used to cook COMBI.
- 8. GRILL Used to cook GRILL.
- 9. POWER Used to set power level.
- **10. DEFROST**
- **11. KITCHEN TIMER** Used as a minute timer, to delay the start of cooking, or to set a holding time after cooking.
- 12. CLOCK Used to set clock.
- 13. STOP/CLEAR Used to stop the oven operation or to delete the cooking data.
- 14. START/SPEEDY COOK Used to start the oven and also used to set a reheat time.

#### 3) KOG-376T1S, KOG-396T1S



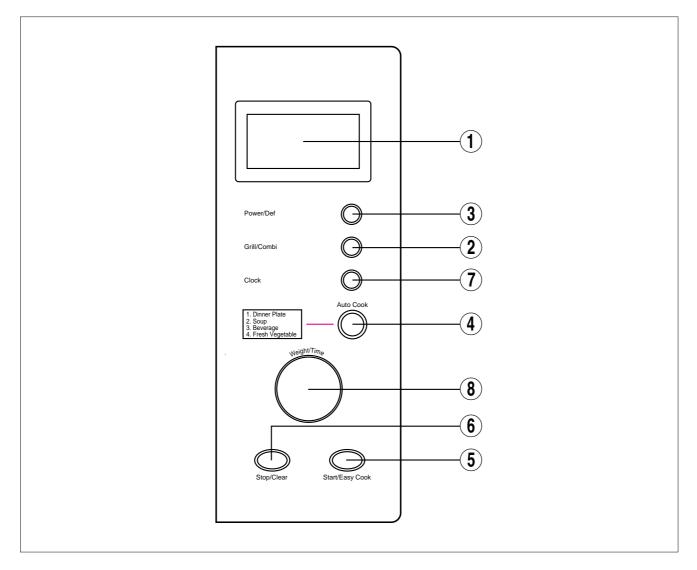
- **1. Display** Cooking time, power level, indicators and present time are displayed.
- 2. Clock Used to set clock.
- **3. Start/Easy Cook** Used to start operation, also for easy start (each press adds 30 seconds microwave cooking time).
- 4. Stop/Clear Used to stop the operation or to delete the cooking data.
- 5. Auto Cook Used to cook using a program.
- 6. Knob Turm to set the cooking menu and select a microwave power level.
- **7. Knob** Dial for setting time and weight.(You can also extend the time of the current operation by 1 minute by turning the dial knob, except defrosting)

#### 4) KOG-371R0S, KOG-391R0S



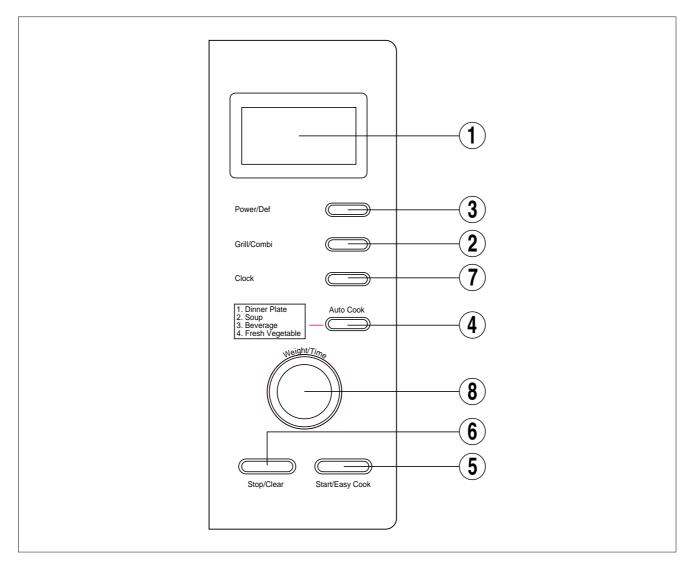
- 1. Display Cooking time, power level, indicators and present time are displayed.
- 2. Grill/Combi Used to cook GRILL or COMBI.
- 3. Power/Def Used to set power level and DEFROST.
- 4. Auto cook Used to cook using a program or to reheat.
- 5. Start / Easy cook Used to start the oven operation and also increase the reheat time by 30 seconds.
- 6. Stop / Clear Used to stop the oven operation or to erase all entries.
- 7. Clock Used to set clock.
- 8. Dial Knob Used to set the time and weight.

#### 4) KOG-374R0S



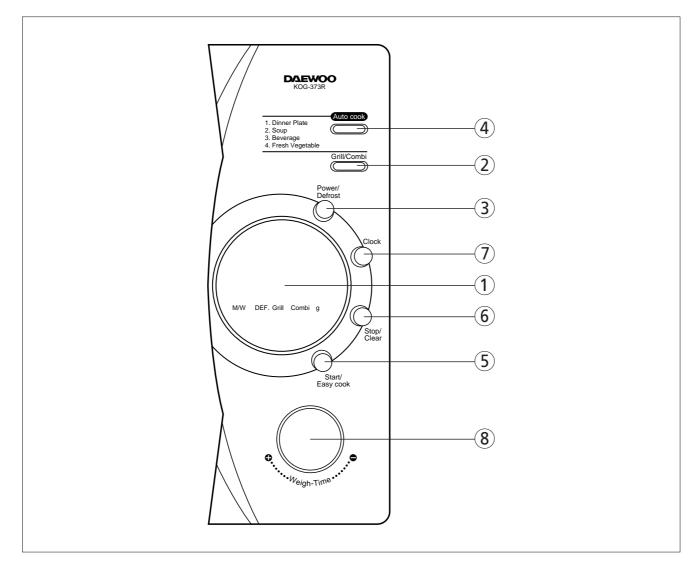
- **1. Display** Cooking time, power level, indicators and present time are displayed.
- 2. Grill/Combi Used to cook GRILL or COMBI.
- 3. Power/Def Used to set power level and DEFROST.
- 4. Auto cook Used to cook using a program or to reheat.
- 5. Start / Easy cook Used to start the oven operation and also increase the reheat time by 30 seconds.
- 6. Stop / Clear Used to stop the oven operation or to erase all entries.
- 7. Clock Used to set clock.
- 8. Dial Knob Used to set the time and weight.

#### 4) KOG-375R0S



- **1. Display** Cooking time, power level, indicators and present time are displayed.
- 2. Grill/Combi Used to cook GRILL or COMBI.
- 3. Power/Def Used to set power level and DEFROST.
- 4. Auto cook Used to cook using a program or to reheat.
- 5. Start / Easy cook Used to start the oven operation and also increase the reheat time by 30 seconds.
- 6. Stop / Clear Used to stop the oven operation or to erase all entries.
- 7. Clock Used to set clock.
- 8. Dial Knob Used to set the time and weight.

#### 5) KOG-373R0S, KOG-393R0S



- **1. Display** Cooking time, power level, indicators and present time are displayed.
- 2. Grill/Combi Used to cook grill/combi.
- 3. Power/Def Used to set power level. Used to defrost foods by weight or time.
- 4. Auto cook Used to cook using a program or to reheat.
- 5. Start / Easy cook Used to start the oven operation and also increase the reheat time by 30 seconds.
- 6. Stop / Clear Used to stop the oven operation or to erase all entries.
- 7. Clock Used to set clock.
- 8. Dial Knob Used to set the time and weight.

## INSTALLATION

#### 1. Steady, flat location

This microwave oven should be set on a steady, flat surface. This microwave oven is designed for counter top use only.

#### 2. Leave space behind and side

All air vents should be kept a clearance. If all vents are covered during operation, the oven may overheat and, eventually, cause failure.

#### 3. Away from radio and TV sets

Poor television reception and radio interference may result if the oven is located close to a TV, radio, antenna or feeder and so on.

Position the oven as far from them as possible.

#### 4. Away from heating appliances and water taps

Keep the oven away from hot air, steam or splash when choosing a place to position it, or the insulation might be adversely affected and breakdowns occur.

#### 5. Power supply

- Check your local power source.
- This microwave oven requires a current of approximately 11 amperes, 230 Volts, 50 Hz.
- Power supply cord is about 1.4 meters long.
- The voltage used must be the same as specified on this oven. Using a higher voltage may result in a fire or other accident causing oven damage. Using low voltage will cause slow cooking. We are not responsible for damage resulting from use of this oven with a voltage of ampere fuse other than those specified.
- This appliance is supplied with cable of special type, which, if damaged, must be reparied with cable of same type. Such a cable can be purchased from DAEWOO and must be installed by Qualified Person.

#### 6. Examine the oven after unpacking for any damage such as:

A misaligned door, broken door or a dent in cavity. If any of the above are visible, DO NOT INSTALL, and notify dealer immediately.

#### 7. Do not operate the oven if it is colder than room temperature

(This may occur during delivery in cold weather.) Allow the oven to become room temperature before operating.

#### EARTHING INSTRUCTIONS

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

**WARNING :** Improper use of the earthing plug can result in a risk of electric shock. Consult a qualified electrician or serviceman if the earthing instructions are not completely understood, or if doubt exists as to whether the appliance is properly earthed, and either : If it is necessary to use an extension cord, use only a 3-wire extension cord that has a 3-blade earthing plug, and a 3-slot receptacle that will accept the plug on the appliance. The marked rating of the extension cord should be equal to or greater than the electrical rating of the appliance, or Do not use an extension cord.

## **OPERATION AND FUNCTIONS**

- 1. Connect the main lead to an electrical outlet.
- 2. After placing the food in a suitable container, open the oven door and put it on the glass tray. The glass tray must always be in place during cooking.
- 3. Close the door securely.
- 4. When the oven door is opened, the light turns off.
- 5. The oven door can be opened at any time during operation by touching the door release button on the control panel.

The oven will automatically shut off. To restart the oven, close the door and then touch START.

- 6. Each time a pad or a button is touched, a BEEP will sound to acknowledge the touch.
- 7. The oven automatically cook on full power unless set to a lower power level.
- 8. The display will show : 0 when the oven is plugged in.
- 9. Time clock returns to the present time when the cooking time ends.
- 10. When the STOP/CLEAR pad or button is touched during the oven operation, the oven stops cooking and all information retained.

To erase all infomation (except the present time), touch the STOP/CLEAR pad once more. If the oven door is opened during the oven operation, all information is retained.

- 11. If the START pad is touched and the oven does not operate, check the area between the door and door is closed securely. The oven will not start cooking under the door is completely closed or the program has been reset.
- 12. When using the GRILL or COMBI mode;
  - Do not open the door so often, the temperature inside the oven derease and the cooking may not be completed in setting time.
  - Never touch the oven window and metal interior of the oven when taking food in and out, because the temperature inside the oven and door is very high.
  - When using these modes, be careful as the tray will be hot to touch, use oven gloves or pot holders while handling tray.

Make the oven is properly installed and plugged into the electrical outlet.
make the overne property induced and plagged into the electrical outlet.

#### Wattage output chart

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

Touch Power pad	Power le	evel (Display)	Approximate Percentage of Power	
or button	Α	В	Α	В
Once	P-H1	P-HI	100%	100%
Twice	P-90	P-80	90%	80%
3 times	P-80	P-60	80%	60%
4 times	P-70	P-40	70%	40%
5 times	P-60	P-20	60%	20%
6 times	P-50		50%	_
7 times	P-40	—	40%	—
8 times	P-30		30%	
9 times	P-20		20%	
10 times	P-10		10%	
11 times	P-00		0%	_

\*A : KOG-371G/H0S, KOG-391G/H0S

\*B : KOG-371R0S, KOG-391R0S, KOG-374R/375R0S

## DISASSEMBLY AND ASSEMBLY

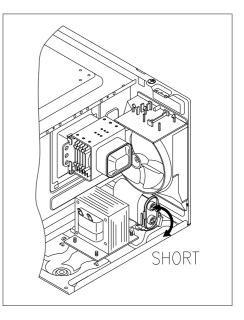
#### Cautions to be observed when trouble shooting

Unlike many other appliances, the microwave oven is a high-voltage, high-current equipment. It is completely safety during normal operation. However, carelessness in servicing the oven can result in an electric shock or possible danger from a short circuit. You are asked to observe the following precautions carefully.

- 1. Always remove the power plug from the outlet before servicing.
- 2. Use an insulated screwdriver and ware rubber gloves when servicing the high voltage side.
- 3. Discharge the high voltage capacitor before touching any oven components or wiring.
- (1) Check the earthed.

Do not operate on a two wire extension cord. The microwave oven is designed to be used with earthed. It is imperative, therefore, to makes sure it is earthed properly before beginning repair work.

- (2) Warning about the electric charge in the high voltage capacitor. For about 30 seconds after the operation stopped, and electric charge remains in the high voltage capacitor. When replacing or checking parts, short between oven chassis and the negative high terminal of the high voltage capacitor, by using a properly insulted screwdriver to discharge.
- 4. When the 15A fuse is blown out due to the operation of the monitor switch; replace primary interlock switch, secondary interlock switch and interlock monitor switch. Refer to next page for the necessary adjustment.



- 5. After repair or replacement of parts, make sure that the screws are properly tightened, and all electrical connections are tightened.
- 6. Do not operate without cabinet.

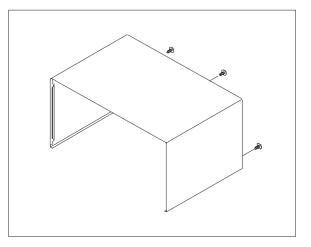
**CAUTION :** Service personnel should remove their watches whenever working close to or replacing the magnetron.

WARNING : When servicing the appliance, need a care of touching or replacing high potential parts because of electrical shock or exposing microwave. These parts are as follows-HV Transformer, Magnetron, HV Capacitor, HV Diode. HV Fuse.

## DISASSEMBLY AND ASSEMBLY

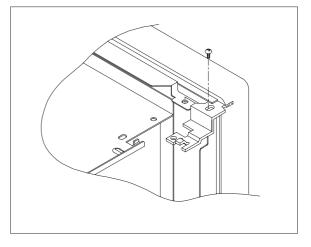
#### 1. To remove cabinet.

- 1) Remove three screws on cabinet back.
- 2) Push the cabinet backward.



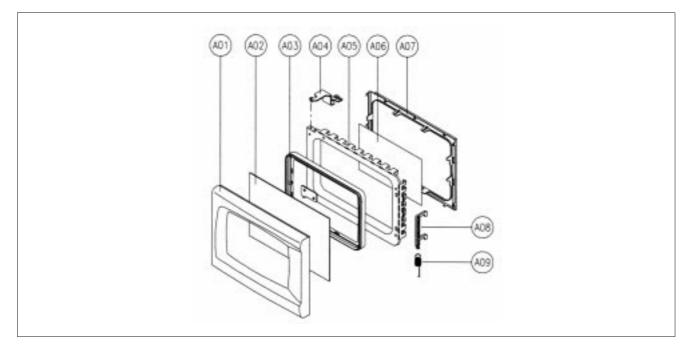
#### 2. To remove door assembly.

- 1) Remove a screw which secure the stopper hinge top.
- 2) Remove the door assembly from top plate of cavity.
- 3) Reverse the above for reassembly.



**NOTE :** After replacing the door assembly, perform a check of correct alignment with the hinge and cavity front plate.

## 3. To remove door parts.



## (1) KOG-371G0S/371H0S/371R0S

REF. NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
A01	3512203800	FRAME DOOR	ABS XR-401 H-2938	1	
A02	3517003050	BARRIER-SCREEN*0	ACRYL	1	
A03	3515304610	SUPPORTER BARR-S*0	PP	1	
A04	3515204100	STOPPER HINGE *T AS	KOR-63150S	1	
A05	3511705500	DOOR WELD AS	KOR-61150S	1	
A06	3517002800	BARRIER-SCREEN *I	POLYESTER T0.1	1	
A07	3512300200	GASKET DOOR	PP	1	
A08	3513100700	HOOK	POM	1	
A09	3515101300	SPRING HOOK	PW1	1	

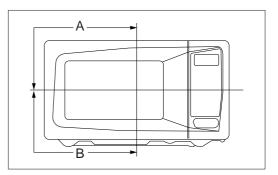
## (2) KOG-391G0S/391H0S/391R0S

REF. NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
A01	3512204100	FRAME DOOR	ABS XR-401 H-2938	1	
A02	3517003150	BARRIER-SCREEN*0	ACRYL	1	
A03	3515304410	SUPPORTER BARR-S*0	PP	1	
A04	3515204100	STOPPER HINGE *T AS	KOR-63150S	1	
A05	3511705620	DOOR WELD AS	KOR-81250S	1	
A06	3517002900	BARRIER-SCREEN *I	POLYESTER T0.1	1	
A07	3512300400	GASKET DOOR	PP	1	
A08	3513100700	HOOK	POM	1	
A09	3515101300	SPRING HOOK	PW1	1	

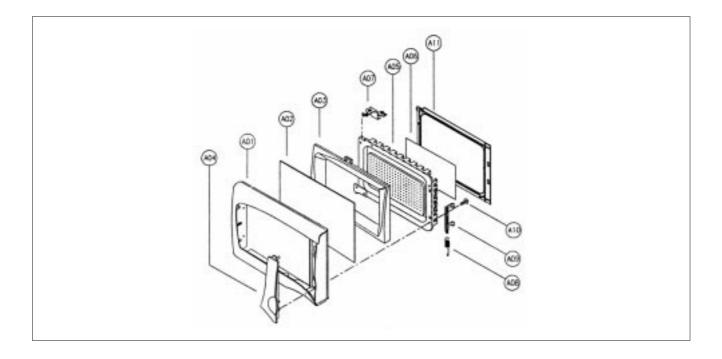
- 1) Remove the gasket door from door plate.
- 2) Remove the barrier screen inner from door plate.
- 3) Remove the door frame from door plate.
- 4) Remove the stopper hinge top from door plate.
- 5) Remove the spring and the hook.
- 6) Remove the supporter barrier screen outer from door frame.
- 7) Remove the barrier screen outer from door frame.
- 8) Remove the above steps for reassembly.

#### 4. Method to reduce the gap between the door seal and the oven front surface.

- 1) To reduce gap located on part 'A'.
  - Loosen a screw on stopper hinge top, and then push the door to contact the door seal to oven front surface.
  - Tighten a screw.
- 2) To reduce gap located on part 'B'.
  - Loosen two screws on stopper hinge under, and then push the door to contact the door seal to oven front surface.
  - Tighten two screws.



**NOTE :** A small gap may be acceptable if the microwave leakage does not exceed 4mW/cm<sup>2</sup>.



## (3) KOG-376T1S

REF. NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
A01	3512203830	FRAME DOOR	ABS	1	
A02	3517005610	BARRIER-SCREEN*0	PMMA 1.5t	1	
A03	3515306500	SUPPORTER BARR-S*0	ABS	1	
A04	3511603800	DECORATOR DOOR	ABS	1	
A05	3511706100	DOOR PAINTING AS	KOR-61150S	1	
A06	3517002800	BARRIER-SCREEN *I	KOR-61150S PE 0.1t	1	
A07	3515204110	STOPPER HINGE *T AS	KOR-636T1S SCP T2.6	1	
A08	3515101310	SPRING HOOK	HSW-3	1	
A09	3513100730	HOOK	KOR-6325 POM	1	
A11	7122401211	SCREW TAPPING	T2S TRX 4X12 MFZN		
A12	3512300200	GASKET DOOR	KOR-61150S PP	1	

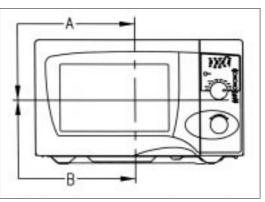
## (4) KOG-396T1S

REF. NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
A01	3512204130	FRAME DOOR	ABS	1	
A02	3517005710	BARRIER-SCREEN*0	PMMA 1.5t	1	
A03	3515306600	SUPPORTER BARR-S*0	ABS	1	
A04	3511604000	DECORATOR DOOR	ABS	1	
A05	3511711800	DOOR PAINTING AS	KOR-866T1S	1	
A06	3517006000	BARRIER-SCREEN *I	KOR-866T1S PE 0.1t	1	
A07	3515204110	STOPPER HINGE *T AS	KOR-636T1S SCP T2.6	1	
A08	3515101310	SPRING HOOK	HSW-3	1	
A09	3513100730	HOOK	KOR-6325 POM	1	
A11	7122401211	SCREW TAPPING	T2S TRX 4X12 MFZN	1	
A12	3512302000	GASKET DOOR	KOR86671S PP	1	

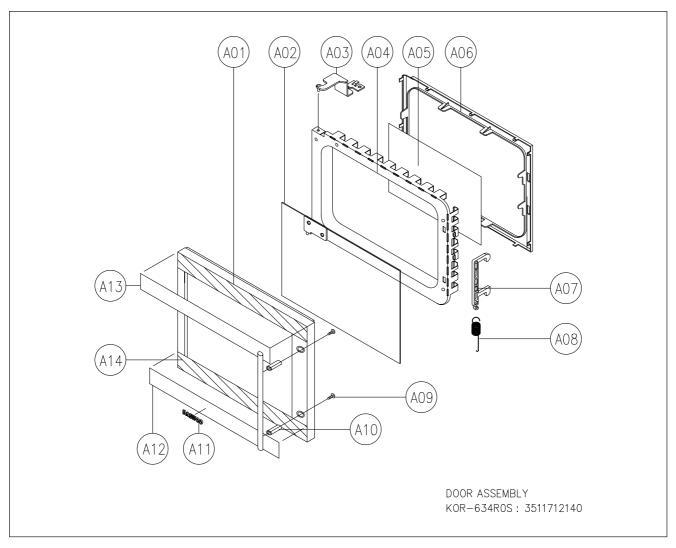
- 1) Remove the gasket door from door plate.
- 2) Remove a screw which secure the door plate and door frame.
- 3) Remove the door frame from door plate.
- 4) Remove the stopper hinge top from door plate.
- 5) Remove the spring and the hook.
- 6) Remove the supporter barrier screen outer from door frame.
- 7) Remove the barrier screen outer from door frame.
- 8) Remove the decorater door rrom door frame.
- 9) Reverse the above steps for reassembly.

#### 4. Method to reduce the gap between the door seal and the oven front surface.

- 1) To reduce gap located on part 'A'.
  - Loosen a screw on stopper hinge top, and then push the door to contact the door seal to oven front surface.
  - Tighten a screw.
- 2) To reduce gap located on part 'B'.
  - Loosen two screws on stopper hinge under, and then push the door to contact the door seal to oven front surface.
  - Tighten two screws.



**NOTE :** A small gap may be acceptable if the microwave leakage does not exceed 4mW/cm<sup>2</sup>.



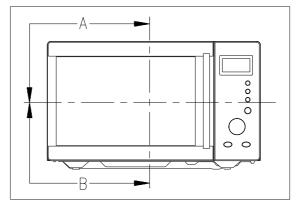
## (5) KOG-374R0S

REF NO.	PART CODE	PART NAME	DESCRIPTION	Q'TY	REMARK
A01	3512203850	FRAME DOOR	ABS XR-401, H-2938	1	
A02	3517005620	BARRIER-SCREEN*O	TEMP GLASS T3.2	1	
A03	3515204100	STOPPER HINGE*T AS	KOR-63150S	1	
A04	3511706120	DOOR PAINTING AS	KOR-634R0S	1	
A05	3517002800	BARRIER-SCREEN*I	PE 0.1T	1	
A06	3512300200	GASKET DOOR	PP	1	
A07	3513100730	HOOK	POM BLACK	1	
A08	3515101310	SPRING HOOK	HSW-3	1	
A09	7001503311	SCREW MACHINE	PAN 5X33 MFZN	2	
A10	3512603210	HANDLE DOOR	STEEL NI + CR	1	
A11	3511601500	DECORATOR LOGO	AL T1.5	1	
A12	3511604610	DECORATOR DOOR*U	STS T0.6	1	
A13	3511604600	DECORATOR DOOR*T	STS T0.6	1	
A14	3516003940	SPECIAL DOUBLE TAPE	H0 SUNG 550M	1	

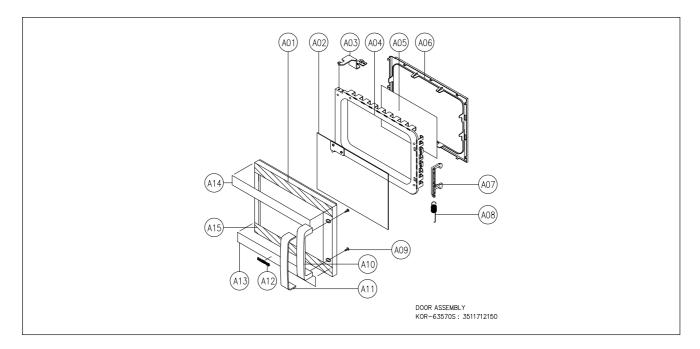
- (1) Remove the gasket door from door weld as.
- (2) Remove the barrier screen inner from weld as.
- (3) Remove the door frame from door weld as.
- (4) Remove the stopper hinge top from door weld as.
- (5) Remove the spring and the hook.
- (6) Remove the barrier screen outer from door frame.
- (7) Reverse the above steps for reassembly.

#### 4. Method to reduce the gap between the door seal and the oven front surface.

- (1) To reduce gap located on part 'A'
  - Loosen two screws on stopper hinge top, and then push the door to contact the door seal to oven front surface.
  - Tighten two screws.
- (2) To reduce gap located on part 'B'
  - Loosen two screws on stopper hinge under, and then push the door to contact the door seal to oven front surface.
  - Tighten two screws.



**NOTE** : A small gap may be acceptable if the microwave leakage does not exceed 4mW/cm<sup>2</sup>.



#### (6) KOG-375R0S

REF NO.	PART CODE	PART NAME	DESCRIPTION	Q'TY	REMARK
A01	3512203850	FRAME DOOR	ABS XR-401, H-2938	1	
A02	3517005620	BARRIER-SCREEN*O	TEMP GLASS T3.2	1	
A03	3515204100	STOPPER HINGE*T AS	KOR-63150S	1	
A04	3511706120	DOOR PAINTING AS	KOR-634R0S	1	
A05	3517002800	BARRIER-SCREEN*I	PE 0.1T	1	
A06	3512300200	GASKET DOOR	PP	1	
A07	3513100730	HOOK	POM BLACK	1	
A08	3515101310	SPRING HOOK	HSW-3	1	
A09	7122401611	SCREW TAPPING	T2SN TRS 4X16 MFZN	2	
A10	3512603300	HANDLE DOOR *U	ABS XR-401, H-2938	1	
A11	3512603400	HANDLE DOOR *T	STS T0.6	1	
A12	3511601500	DECORATOR LOGO	AL T1.5	1	
A13	3511604610	DECORATOR DOOR*U	STS T0.6	1	
A14	3511604600	DECORATOR DOOR*T	STS T0.6	1	
A15	3516003940	SPECIAL DOUBLE TAPE	H0 SUNG 550M T0.15 27MM	1	

(1) Remove the gasket door from door plate.

(2) Remove the barrier screen inner from door plate.

(3) Remove the door frame from door plate.

(4) Remove the stopper hinge top from door plate.

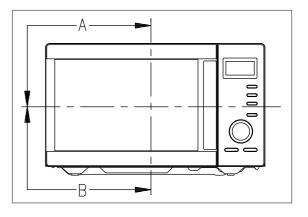
(5) Remove the spring and the hook.

(6) Remove the barrier screen outer from door frame.

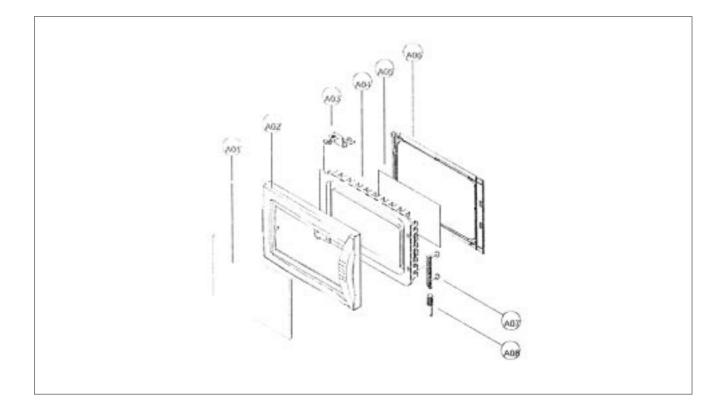
(7) Reverse the above steps for reassembly.

#### 4. Method to reduce the gap between the door seal and the oven front surface.

- (1) To reduce gap located on part 'A'
  - Loosen two screws on stopper hinge top, and then push the door to contact the door seal to oven front surface.
  - Tighten two screws.
- (2) To reduce gap located on part 'B'
  - Loosen two screws on stopper hinge under, and then push the door to contact the door seal to oven front surface.
  - Tighten two screws.



**NOTE**: A small gap may be acceptable if the microwave leakage does not exceed 4mW/cm<sup>2</sup>.



## (7) KOG-373R0S

REF. NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
A01	3512203860	FRAME DOOR	ABS SG-175	1	
A02	3517005630	BARRIER-SCREEN*0	SAN	1	
A03	3515204100	SUPPER HINGE*T AS	KOR-63150S	1	
A04	3511705500	DOOR WELD AS	KOR-61150S	1	
A05	3517002800	BARRIER-SCREEN*I	POLYESTER T0.1	1	
A06	3512300200	GASKET DOOR	PP	1	
A07	3513100700	HOOK	POM	1	
A08	3515101300	SPRING HOOK	PW1	1	

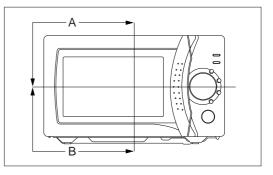
## (8) KOG-393R0S

REF. NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
A01	3512204170	FRAME DOOR	ABS SG-175	1	
A02	3517005740	BARRIER-SCREEN*0	ACRYL	1	
A03	3515204100	SUPPER HINGE*T AS	KOR-63150S	1	
A04	3511705620	DOOR WELD AS	KOR-81250S	1	
A05	3517002900	BARRIER-SCREEN*I	POLYESTER T0.1	1	
A06	3512300400	GASKET DOOR	PP	1	
A07	3513100700	HOOK	POM	1	
A08	3515101300	SPRING HOOK	PW1	1	

- 1) Remove the gasket door from door plate.
- 2) Remove the barrier screen inner from door plate.
- 3) Remove the door frame from door plate.
- 4) Remove the stopper hinge top from door plate.
- 5) Remove the spring and the hook.
- 6) Remove the supporter barrier screen outer from door frame.
- 7) Remove the barrier screen outer from door frame.
- 8) Remove the above steps for reassembly.

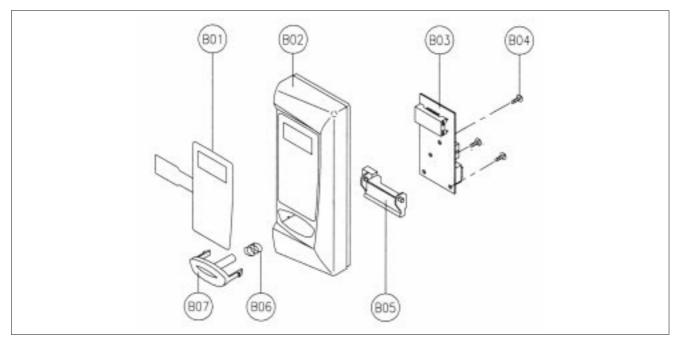
#### 4. Method to reduce the gap between the door seal and the oven front surface.

- 1) To reduce gap located on part 'A'.
  - Loosen a screw on stopper hinge top, and then push the door to contact the door seal to oven front surface.
  - Tighten a screw.
- 2) To reduce gap located on part 'B'.
  - Loosen two screws on stopper hinge under, and then push the door to contact the door seal to oven front surface.
  - Tighten two screws.



**NOTE**: A small gap may be acceptable if the microwave leakage does not exceed 4mW/cm<sup>2</sup>.

### 5. To remove control panel parts.



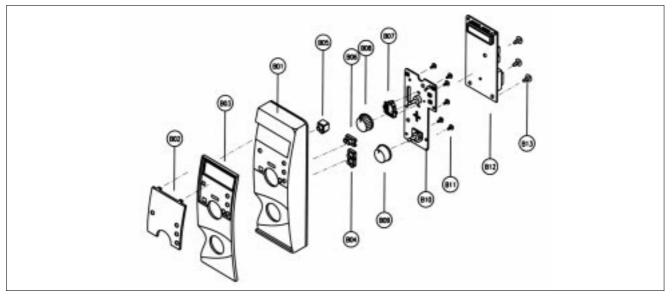
## (1) KOG-371G0S/371H0S

REF. NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
B01	3518521610	SWITCH MEMBRANE	KOG-371G0S	1	
DUI	3518521600		KOG-371H0S	1 1 1 3	
B02	3516719400	CONTROL-PANEL	ABS XR-401 H-2938	1	
B03	3514320800	PCB MAIN AS	KOG-371G0S	1	
B04	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	3	
B05	3513702700	LEVER DOOR OPEN	ABS XR-401 H-2938	1	
B06	441G430171	SPRING BUTTON	SWP DIA0.7	1	
B07	3516906900	BUTTON DOOR OPEN	ABS XR-401 H2938	1	

## (2) KOG-391G0S/391H0S

REF. NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
B01	3518521700	SWITCH MEMBRANE	KOG-391G0S	1	
DUT	3518521710		KOG-391H0S		
B02	3516720200	CONTROL-PANEL	ABS XR-401 H-2938	1	
B03	3514321000	PCB MAIN AS	KOG-391G0S	1	
B04	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	3	
B05	3513702700	LEVER DOOR OPEN	ABS XR-401 H-2938	1	
B06	441G430171	SPRING BUTTON	SWP DIA0.7	1	
B07	3516906900	BUTTON DOOR OPEN	ABS XR-401 H2938	1	

- 1) Remove the screw which secure the control panel, push up two snap fits and draw forward the control panel assembly.
- 2) Remove the door open lever from the control panel.
- 3) Remove four screws which secure the PCB assembly to control panel.
- 4) Disconnect membrane tail from the connector of the PCB assembly.
- 5) Detach membrane from the control panel.
- 6) Remove door open button and button spring from the control panel.
- 7) Reverse the above steps for reassembly.



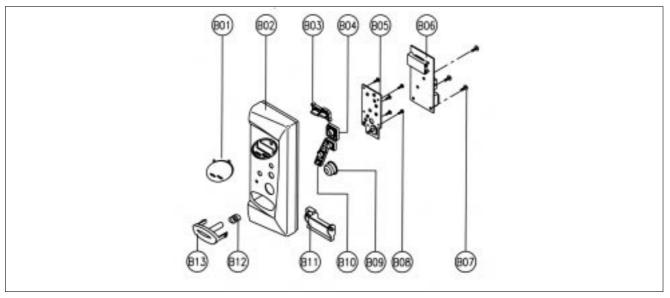
#### (3) KOG-376T1S

REF. NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
B01	3516719440	CONTROL-PANEL	ABS	1	
B02	3515501510	WINDOW DISPLAY	PMMA	1	
B03	3511603900	DECORATOR C-PANEL	ABS	1	
B04	3516907410	BUTTON FUNCTION	ABS	1	
B05	3516907510	BUTTON FUNCTION	ABS	1	
B06	3516907610	BUTTON START	ABS	1	
B07	3517401700	COUPLER VPC KNOB	POM	1	
B08	3513405530	KNOB VPC	ABS	1	
B09	3513405220	KNOB VOLUME	ABS	1	
B10	3514321410	PCB SUB AS	KOR-636T1S	1	
B11	7621301011	SCREW TAPPING	T2 PAN 3*10 PW MFZN	6	
B12	3514321320	PCB MAIN AS	KOG-376T1S	1	
B13	7122401211	SCREW TAPPING	T2S TRS 4*12 MFZN	3	

#### (4) KOG-396T1S

REF. NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
B01	3516720240	CONTROL-PANEL	ABS	1	
B02	3515501510	WINDOW DISPLAY	PMMA	1	
B03	3511604100	DECORATOR C-PANEL	ABS	1	
B04	3516907410	BUTTON FUNCTION	ABS	1	
B05	3516907510	BUTTON FUNCTION	ABS	1	
B06	3516907610	BUTTON START	ABS	1	
B07	3517401700	COUPLER VPC KNOB	POM	1	
B08	3513405530	KNOB VPC	ABS	1	
B09	3513405220	KNOB VOLUME	ABS	1	
B10	3514321410	PCB SUB AS	KOR-636T1S	1	
B11	7621301011	SCREW TAPPING	T2 PAN 3*10 PW MFZN	6	
B12	3514321520	PCB MAIN AS	KOG-396T1S	1	
B13	7122401211	SCREW TAPPING	T2S TRS 4*12 MFZN	3	

- 1) Remove the screw which secure the control panel, push up two snap fits and draw forward the control panel assembly.
- 2) Remove the door open lever from the control panel.
- 3) Remove four screws which secure the PCB assembly to control panel.
- 4) Disconnect membrane tail from the connector of the PCB assembly.
- 5) Detach membrane from the control panel.
- 6) Remove door open button and button spring from the control panel.
- 7) Reverse the above steps for reassembly.



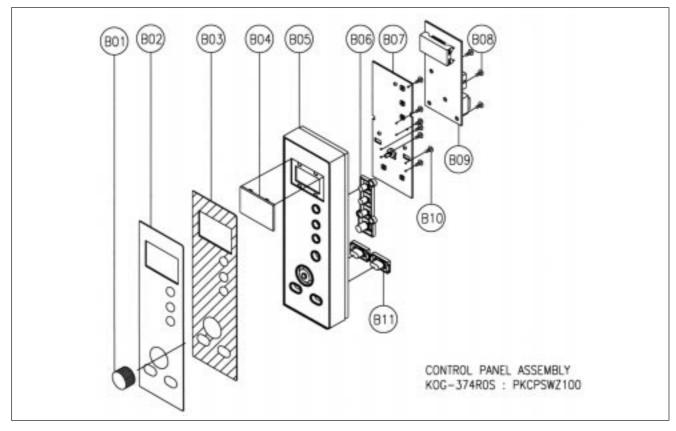
#### (5) KOG-371R0S

REF. NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
B01	3515501500	WINDOW DISPLAY	PMMA	1	
B02	3516719420	CONTROL PANEL	ABS XR-401 H-2938	1	
B03	3516907400	BUTTON FUNCTION	ABS	1	
B04	3516907600	BUTTON FUNCTION	ABS	1	
B05	3514321400	PCB SUB AS	KOR-631R0S	1	
B06	3514321330	PCB MAIN AS	KOG-371R0S	1	
B07	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	3	
B08	7621301011	SCREW TAPPING	T2 PAN 4X12 MFZN	4	
B09	3513405210	KNOB VOLUME	ABS	1	
B10	3516907500	BUTTON FUNCTION	ABS	1	
B11	3513702700	LEVER DOOR OPEN	ABS	1	
B12	441G430171	SPRING BUTTON	SWP DIA 0.7	1	
B13	3516906900	BUTTON DOOR OPEN	ABS	1	

#### (6) KOG-391R0S

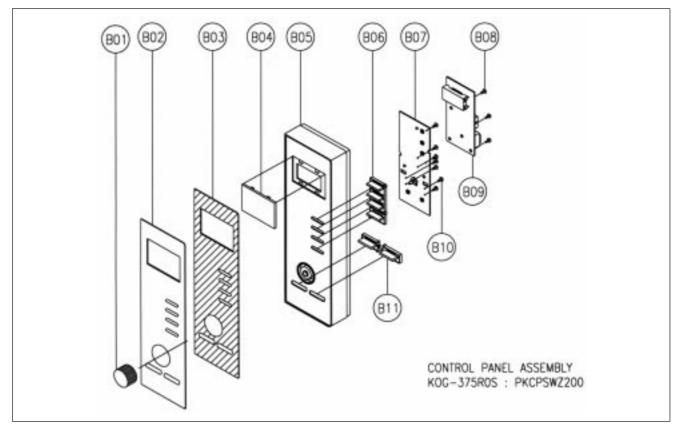
REF. NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
B01	3515501500	WINDOW DISPLAY	PMMA	1	
B02	3516720220	CONTROL PANEL	ABS	1	
B03	3516907400	BUTTON FUNCTION	ABS	1	
B04	3516907600	BUTTON FUNCTION	ABS	1	
B05	3514321400	PCB SUB AS	KOR-631R0S	1	
B06	3514321530	PCB MAIN AS	KOG-391R0S	1	
B07	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	3	
B08	7621301011	SCREW TAPPING	T2 PAN 3X10 PW MFZN	4	
B09	3513405210	KNOB VOLUME	ABS	1	
B10	3516907500	BUTTON FUNCTION	ABS	1	
B11	3513702700	LEVER DOOR OPEN	ABS	1	
B12	441G430171	SPRING BUTTON	SWP DIA 0.7	1	
B13	3516906900	BUTTON DOOR OPEN	ABS	1	

### (7) KOG-374R0S

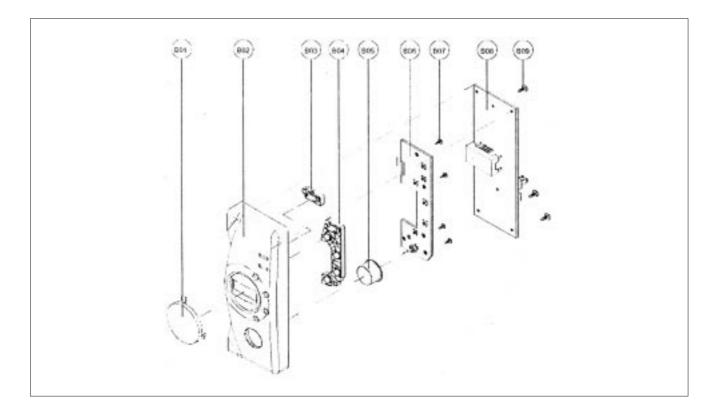


REF NO.	PART CODE	PART NAME	DESCRIPTION	Q'TY	REMARK
B01	3513404620	KNOB VOLUME	ABS XR-401, H-2938	1	
B02	3511604510	DECORATOR C-PANEL	STS T0.6	1	
B03	3516003910	SPECIAL DOUBLE TAPE	H0 SUNG 550M T0.15	1	
B04	3515501530	WINDOW DISPLAY	PMMA T2.0	1	
B05	3516721460	CONTROL PANEL	ABS XR-401, H-2938	1	
B06	3516907430	BUTTON FUNCTION	ABS XR-401, COATING	1	
B07	PKBPMSZY00	SUB PCB AS	KOR-634R0S	1	
B08	7121401611	SCREW TAPPING	T2S PAN 4X16 MFZN	3	
B09	PKMPMSZ100	MAIN PCB AS	KOR-374R0S	1	
B10	7621301011	SCREW TAPPING	T2S TRS 4X12 MFZN	8	
B11	3516906320	BUTTON FUNCTION	ABS XR-401, COATING	2	

### (8) KOG-375R0S



REF NO.	PART CODE	PART NAME	DESCRIPTION	Q'TY	REMARK
B01	3513403800	KNOB VOLUME	ABS XR-401, H-2938	1	
B02	3511604530	DECORATOR C-PANEL	STS T0.6	1	
B03	3516003960	SPECIAL DOUBLE TAPE	H0 SUNG 550M T0.15	1	
B04	3515501530	WINDOW DISPLAY	PMMA T2.0	1	
B05	3516723700	CONTROL PANEL	ABS XR-401, H-2938	1	
B06	3516907440	BUTTON FUNCTION	ABS XR-401	1	
B07	PKBPMSZY00	SUB PCB AS	KOR-634R0S	1	
B08	7121401611	SCREW TAPPING	T2S PAN 4X16 MFZN	3	
B09	PKMPMSZ100	MAIN PCB AS	KOR-374R0S	1	
B10	7621301011	SCREW TAPPING	T2S TRS 4X12 MFZN	8	
B11	3516904600	BUTTON FUNCTION	ABS XR-401	2	



### (9) KOG-373R0S

REF. NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
B01	3515501540	WINDOW DISPLAY	PMMA	1	
B02	3516723730	CONTROL PANEL	ABS SG-175	1	
B03	3516907530	<b>BUTTON FUCTION *A</b>	ABS SG-175	1	
B04	3516907540	<b>BUTTON FUCTION *B</b>	ABS SG-175	1	
B05	3513405240	KNOB VOLUME	ABS	1	
B06	PKBPMSZ300	PCB SUB AS	KOG-373R0S	1	
B07	7621301011	SCREW TAPPING	T2 PAN 2X10 PW MFZN	4	
B08	PKMPMSZ600	PCB MAIN AS	KOG-373R0S	1	
B09	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	3	

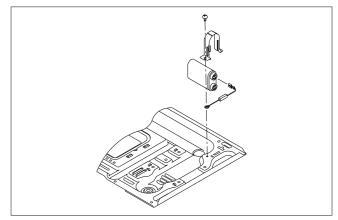
# (10) KOG-393R0S

REF. NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
B01	3515501540	WINDOW DISPLAY	PMMA	1	
B02	3516723730	CONTROL PANEL	ABS SG-175	1	
B03	3516907530	<b>BUTTON FUCTION *A</b>	ABS SG-175	1	
B04	3516907540	<b>BUTTON FUCTION *B</b>	ABS SG-175	1	
B05	3513405240	KNOB VOLUME	ABS SG-175	1	
B06	PKBPMSZ300	PCB SUB AS	KOG-373R0S	1	
B07	7621301011	SCREW TAPPING	T2 PAN 2X10 PW MFZN	4	
B08	PKMPMST500	PCB MAIN AS	KOG-393R0S	1	
B09	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	3	

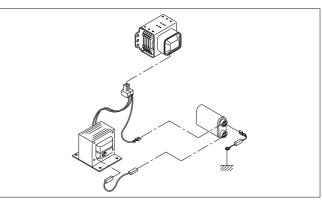
- 1) Remove the screw which secure the control panel, push up two snap fits and draw forward the control panel assembly.
- 2) Remove the door open lever from the control panel.
- 3) Remove four screws which secure the PCB assembly to control panel.
- 4) Disconnect membrane tail from the connector of the PCB assembly.
- 5) Detach membrane from the control panel.
- 6) Remove door open button and button spring from the control panel.
- 7) Reverse the above steps for reassembly.

#### 6. To remove high voltage capacitor.

- 1) Remove a screw which secure the grounding ring terminal of the H.V.diode and the capacitor holder.
- 2) Remove the H.V.diode from the capacitor holder.
- 3) Reverse the above steps for reassembly.

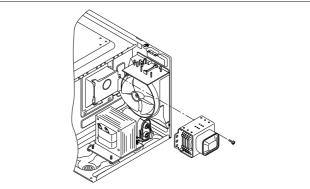


High voltage circuit wiring

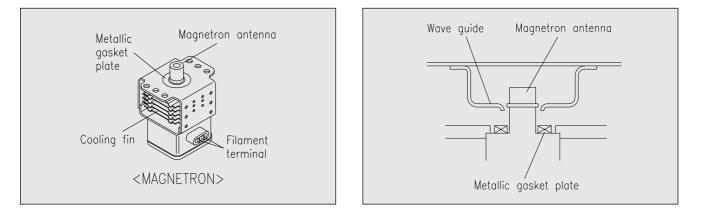


#### 7. To remove magnetron.

- 1) Remove a screw which secure the magnetron.
- 2) Remove the magnetron.
- 3) Reverse the above steps for reassembly.

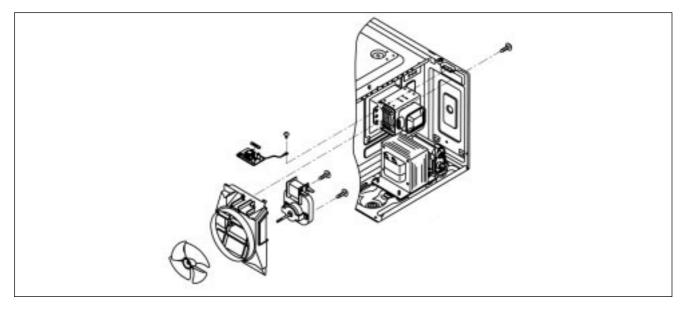


**NOTE :** Never install the magnetron without the metallic gasket plate which is packed with each magnetron to prevent microwave leakage. Whenever repair work is carried out on magnetron, check the microwave leakage. It shall not exceed 4mW/cm<sup>2</sup> for a fully assembled oven with door normally closed.



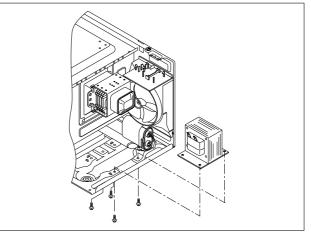
#### 8. To remove wind guide assembly.

- 1) Remove a screw for earthing.
- 2) Remove the noise filter from the wind guide.
- 3) Remove a screw which secure the wind guide assembly.
- 4) Draw forward the wind guide assembly.
- 5) Pull the fan from the motor shaft.
- 6) Remove two screws which secure the motor shaded pole.
- 7) Remove the motor shaded pole.
- 8) Reverse the above steps for reassembly.



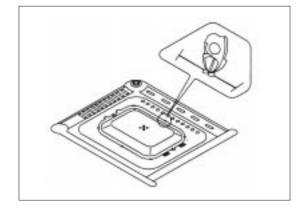
### 9. To remove H.V.transformer.

- 1) Remove four screws holding the H.V.transformer.
- 2) Remove the H.V.transformer.
- 3) Reverse the above steps for reassembly.

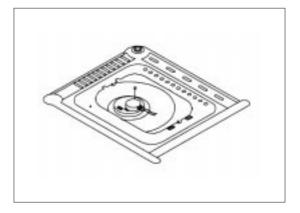


#### 10. To remove tray motor.

- (1) Remove the coupler in the cavity.
- (2) Turn the set upside down.
- (3) Cut the tray motor cover part from the base plate.
- (4) Remove the tray motor cover.

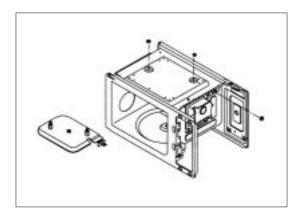


- (5) Remove a screw which secure the tray motor.
- (6) Remove the tray motor.
- (7) Reverse the above steps for reassembly except for securing the tray motor cover with screw.

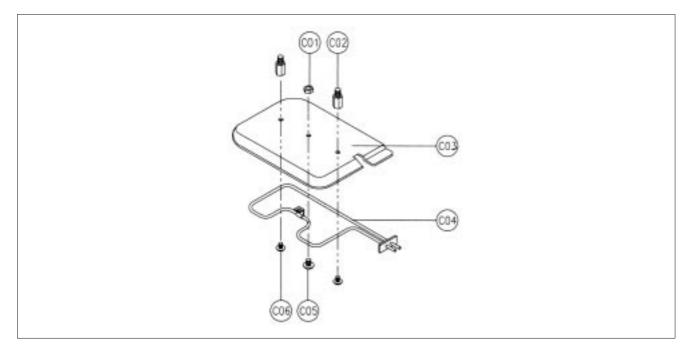


#### 11. To remove heater assmbly.

- (1) Remove the three nuts.
- (2) Remove the insulator heater assembly.
- (3) Reverse the above steps for reassembly.



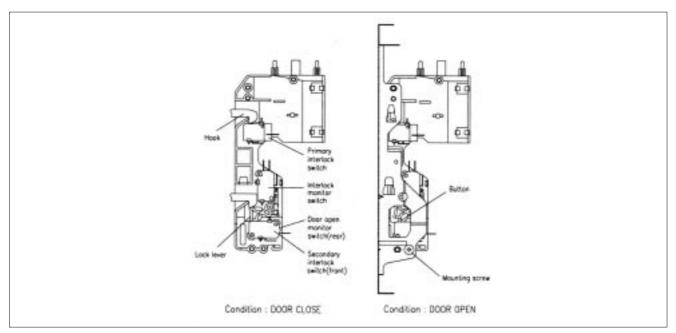
### 12. To remove heater parts.



REF. NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
C01	7392500008	NUT HEX	6N-2-5 SUS	1	
C02	3515000600	SPACER INSULATOR *I	C377BD	2	
C03	3513301100	INSULATOR HEATER	SPP T0.8	1	
C04	3512803400	HEATER	230V 1000W 1R67994001	1	
C05	7002500613	SCREW MACHINE	TRS 5X6 MFCR	1	
C06	7002400413	SCREW MACHINE	TRS 4X4 MFCR	2	

# INTERLOCK MECHANISM AND ADJUSTMENT

The door lock mechanism is a device which has been specially designed to completely eliminate microwave radiation when the door is opened during operation, and thus to perfectly prevent the danger resulting from the leakage of microwave.



#### (1) Primary interlock switch

When the door is closed, the hook locks the oven door. If the door is not closed properly, the oven will not operate. When the door is closed, the hook pushes the button of the microswitch. Then the button of the primary interlock switch bring it under ON condition.

(2) Secondary interlock switch and interlock monitor switch

When the door is closed, the hook pushes the lock lever downward. The lock lever presses the button of the interlock minitor switch to bring it under NO condition and presses the button of the secondary interlock switch to bring it under ON condition.

#### ADJUSTMENT :

Interlock monitor switch

When the door is closed, the interlock monitor switch should be changed(NO condition) before other switches are closed.

When the door is opened, the interlock monitor switch should be changed(NC condition) after other switches are opened.

#### (3) Adjustment steps

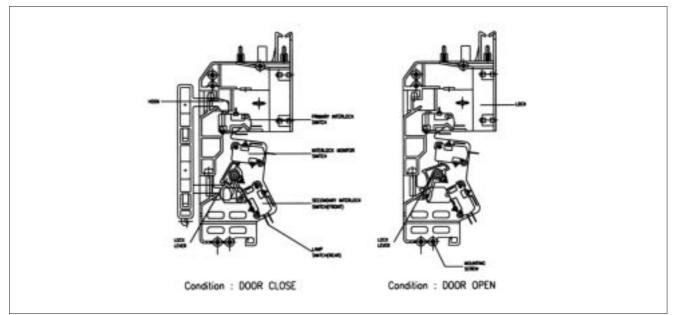
- a) Loosen the one mounting screw.
- b) Adjust interlock switch assmbly position.
- c) Make sure that lock lever moves smoothly after adjustment is completed.
- d) Tighten completely one mounting screw.

**NOTE :** Microwave emission test should be performed after adjusting interlock mechanism. If the microwave emission exceed 4 mW/cm<sup>2</sup>, readjust interlock mechanism.

# INTERLOCK MECHANISM AND ADJUSTMENT

The door lock mechanism is a device which has been specially designed to completely eliminate microwave radiation when the door is opened during operation, and thus to perfectly prevent the danger resulting from the leakage of microwave.

#### 1) KOG-374R/375R0S



#### (1) Primary interlock switch

When the door is closed, the hook locks the oven door. If the door is not closed properly, the oven will not operate. When the door is closed, the hook pushes the button of the microswitch. Then the button of the primary interlock switch bring it under ON condition.

(2) Secondary interlock switch and interlock monitor switch

When the door is closed, the hook pushes the lock lever downward. The lock lever presses the button of the interlock minitor switch to bring it under NO condition and presses the button of the secondary interlock switch to bring it under

#### ADJUSTMENT :

Interlock monitor switch

When the door is closed, the interlock monitor switch should be changed(NO condition) before other switches are closed.

When the door is opened, the interlock monitor switch should be changed(NC condition) after other switches are opened.

ON condition.

(3) Adjustment steps

a) Loosen the one mounting screw.

b) Adjust interlock switch assmbly position.

**NOTE :** Microwave emission test should be performed after adjusting interlock mechanism. If the microwave emission exceed 4 mW/cm<sup>2</sup>, readjust interlock mechanism.

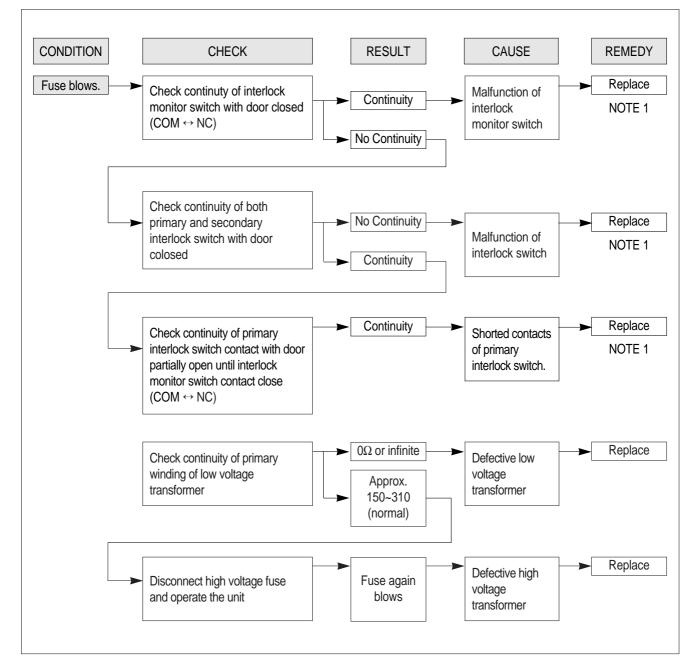
# **TROUBLE SHOOTING GUIDE**

#### Following the procedure below to check if the oven is defective or not.

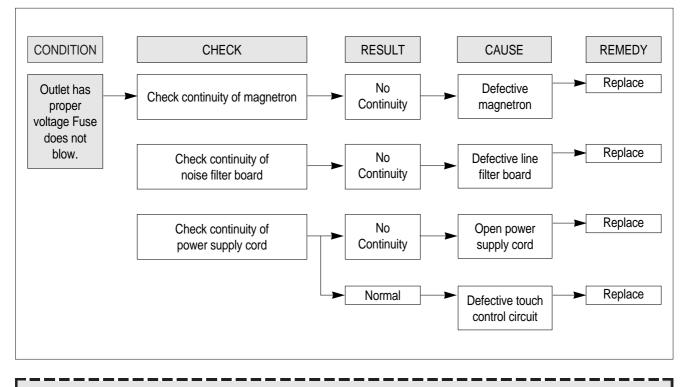
- 1) Check earthing before trouble checking.
- 2) Be careful of the high voltage circuit.
- 3) Discharge the high voltage capacitor.
- 4) When checking the continuity of the switches, fuse or high voltage tranformer, disconnect one load wire from these parts and check continuity with the AC plug removed.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

**NOTE :** When electric parts are checked, be sure the power cord is not inserted the wall outlet. Check wire harness, wiring and connected of the terminals and power cord before check the parts listed below.

#### (TROUBLE 1) Oven does not operate at all : any inputs can not be accepted.



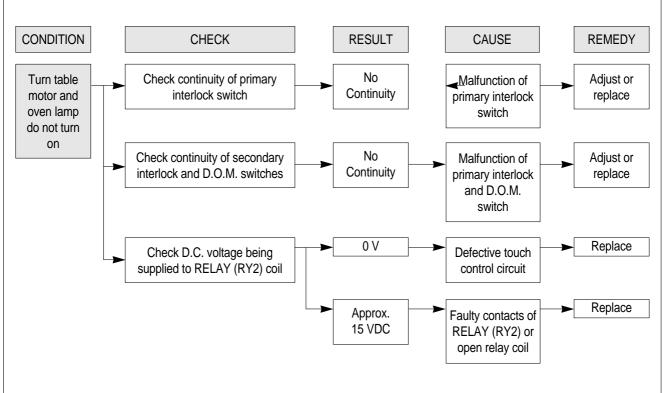
# TROUBLE SHOOTING GUIDE



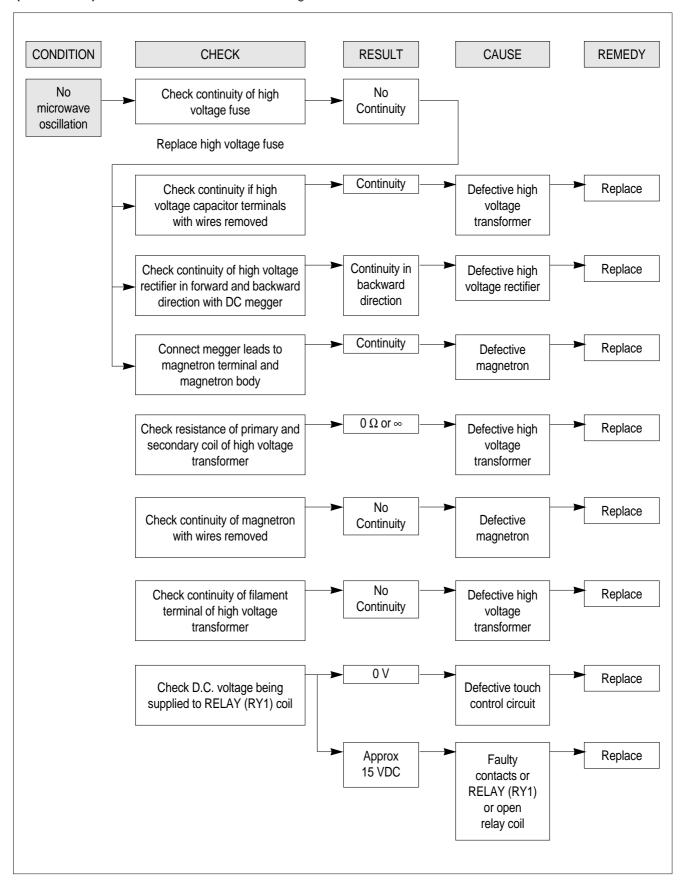
NOTE

All these switches must be replaced at the same time, please refer to "Interlock Mechanism And Adjustment".

(TROUBLE 2) Display shows all figures selected, but oven does not start cooking, even though desired program and time are set and start pad is tapped.

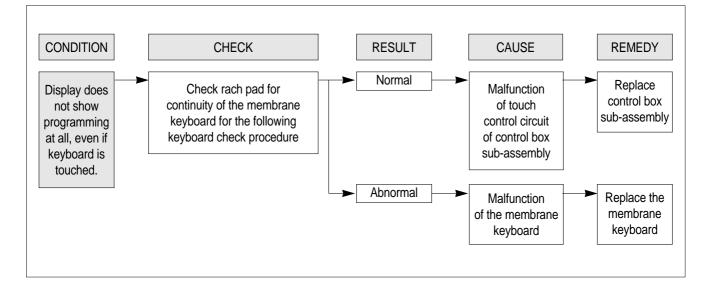


(TROUBLE 3) No microwave oscillation even though fan motor rotates.



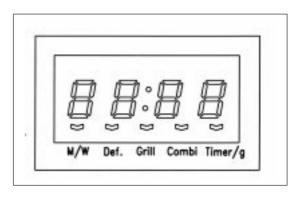
(TROUBLE 4) The following visual conditions indicate a probable defective touch control circuit or membrane switch assembly

- 1. Incomplete segments,
  - 1) Segments missing.
  - 2) Partical segments missing.
  - 3) Digit flickering other than normal display slight flickering.
  - 4) ":0" does not display when power is on.
- 2. A distinct change in the display are not on when they numbers is the display.
- 3. One or more digits in the display are not on when they should be.
- 4. Display indicates a number different from one touched.
- 5. Specific numbers (for example 2 or 3) will not display when the panel is touched.
- 6. Display does not count down or up with time cooking or clock operation.
- 7. Oven is programmable and cooks normally but no display shows.
- 8. Display obviously jumps in time while counting down.
- 9. Display counts down noticeable too fast while cooking.
- 10. Display does not show the time of day when dlear pad is touched.
- 11. Oven lamp and turntable motor do not stop although cooking is finished. Check if the RELAY 2 contacts close if they are close, replace touch control circuit.



#### NOTE (KOG-371G/H, KOG-391G/H)

Before following the particular steps listed above in the trouble shooting guide for the membrane keyboard's, failure, please check for the continuity of each wire-harness between the membrane keyboard and P.C.B. assembly.



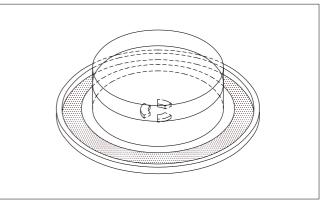
## **MEASUREMENT AND TEST**

### 1. MEASUREMENT OF THE MICROWAVE POWER OUTPUT

Microwave output power can be checked by indirectly mmeasuring the temperature rise of a certain amount of water exposed to the microwave as directed below.

#### PROCEDURE

- 1. Microwave power output measurement is made with the microwave oven supplied at rated voltage and operated at its maximum microwave power setting with a load of 100 ± 5cc of potable water.
- 2. The water is contained in a cylindrical borosilicate glass vessel having a maximum material thickness of 3 mm and an outside diameter of approximately 190 mm.
- 3. The oven and the empty vessel are at ambient temperature prior to the start of the test. The initial temperature of the water is  $10 \pm 2^{\circ}$ C ( $50 \pm 3.6^{\circ}$ F). If is measured immediately before the water is added to the vessel. After addition of the water to the vessel, the load is immediately placed on the center of the shelf, which is in the lowest normal position.
- 4. Microwave power is switched on.
- Heating time should be exactly A seconds. (Refer to table as following) Heating time is measured while the microwave generator is operating at full power. The filament heatup time for magnetron is not included.
- 6. The initial and final temperature of water is selected so that the maximum difference between the ambient and final water temperature is 5K.
- 7. The microwave power output P in watts is calculated from the following formula:



P = 4187 X ∆ T/t

- $\bullet \Delta T$  is difference between initial and ending temperature.
- t is the heating time.

The power measured be B (Refer to SPECIFICATIONS) W  $\pm$  10.0 %.

#### CAUTION

- 1. Water load should be measured exactly to 1 liters.
- 2. Input power voltage should be exactly specified voltage (Refer to SPECIFICATIONS).
- 3. Ambient temperature should be  $20 \pm 2^{\circ}C$  (68  $\pm 3.6^{\circ}F$ )

#### \* Heating time for power output:

A (second)	70	64	60	56	52	49	47	44	42	40	38
B (W)	600	650	700	750	800	850	900	950	1000	1050	1100

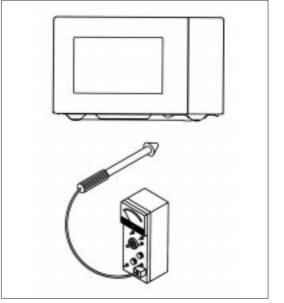
### 2. MICROWAVE RADIATION TEST

#### CAUTION

- 1. Make sure to check the microwave leakage before and after repair of adjustment.
- 2. Always start measuring of an unknown field to assure safety for operating personnel from microwave energy.
- 3. Do not place your hands into any suspected microwave radiation field unless the safe density level is known.
- 4. Care should be taken not to place the eyes in direct line with the source of microwave energy.
- 5. Slowly approach the unit under test until the radiometer reads an appreciable microwave leakage from the unit under the test.

#### PROCEDURE

- 1. Prepare Microwave Energy Survey Meter, 600cc glass beaker, and glass thermometer 100°C (212°F).
- Pour 275cc ± 15cc of tap water initially at 20 ± 5°C (68 ± 9°F) in the 600 cc glass beaker with an inside diameter of approx. 95 mm(3.5 in.).
- 3. Place it at the center of the tray and set it in a cavity.
- 4. Close the door and operate the oven.
- 5. Measure the leakage by using Microwave Energy Survey Meter with dual ranges, set to 2450MHz.
  - 1) Measured radiation leakage must not exceed the value prescribed below. Leakage for a fully assembled oven with door normally closed must be less than 4mW/cm<sup>2</sup>.
  - 2) When measuring the leakage, always use the 5 cm (2 in.) space cone with probe. Hold the probe perpendicular to the cabinet and door. Place the space cone of the probe on the



door, cabinet, door seem, door viewing screen, the exhaust air vents and the suction air vents.

- 3) Measuring should be in a counter-clockwise direction at a rate of 1 in./sec. If the leakage of the cabinet door seem is unknown, move the probe more slowly.
- 4) When measuring near a corner of the door, keep the probe perpendicular to the areas making sure the probe end at the base of the cone does not get closer than 2 in. from any metal. If it does not, erroneous reading may result.

### **3. COMPONENT TEST PROCEDURE**

- High voltage is present at the high voltage terminal of the high voltage transformer during any cooking cycle.
- It is neither necessary nor advisable to attempt measurement of the high voltage.
- Before touching any oven components or wiring, always unplug the oven from its power source and discharge the capacitor.

#### 1. High voltage transformer

- 1) Remove connections from the transformer terminals and check continuity.
- 2) Normal readings should be as follows : Secondary winding ... Approx. 110  $\Omega$ ±10% Filament winding ... Approx. 0  $\Omega$ Primary winding ... Approx. 1  $\Omega$

#### 2. High voltage capacitor

- 1) Check continuity of capacitor with meter on the highest OHM scale.
- 2) A normal capacitor will show continuity for a short time, and then indicate  $10M\Omega$  once the capacitor charged.
- 3) A shorted capacitor will show continuous continuity.
- 4) An open capacitor will show constant  $10M\Omega$ .
- 5) Resistance between each terminal and chassis should be infinite.

#### 3. High voltage diode

- 1) Isolate the diode from the circuit by disconnecting the leads.
- 2) With the ohmmeter set on the highest resistance scale measure the resistance across the diode terminals. Reverse the meter leads and again observe the resistance reading. Meter with 6V, 9V or higher voltage batteries should be used to check the front-back resistance of the diode, otherwise an infinite resistance may be read in both directions. A normal diode's resistance will be infinite in one direction and several hundred k  $\Omega$  in the other direction.

#### 4. Magnetron

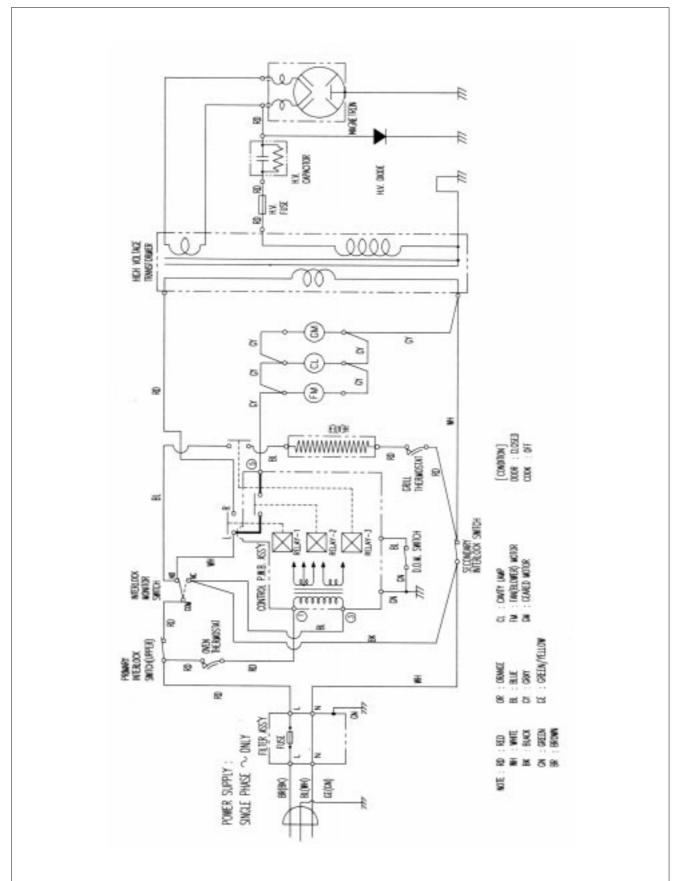
For complete magnetron diagnosis, refer to "Measurement of the Microwave Power Output." Continuity checks can only indicate and open filament or a shorted magnetron. To diagnose for an open filament or a shorted magnetron, 1) Isolate magnetron from the circuit by disconnecting the leads.

- 2) A continuity check across magnetron filament terminals should indicate 0.1  $\Omega$  or less.
- 3) A continuity check between each filament terminal and magnetron case should read open.

#### 5. Fuse

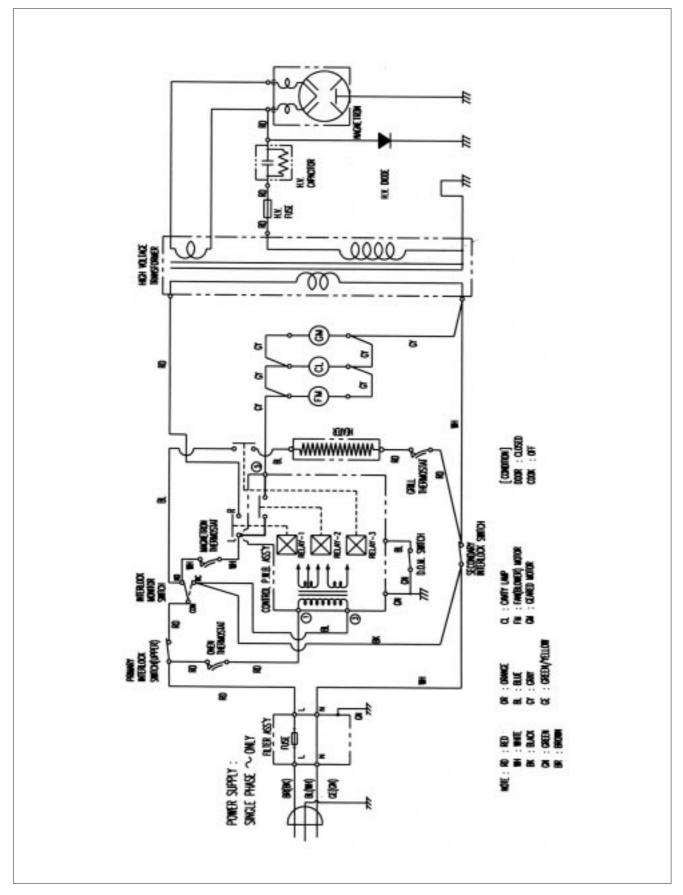
If the fuse in the primary and monitor switch circuit is blown when the door is opened, check the primary and monitor switch before replacing the blown fuse. In case the fuse is blown by an improper switch operation, replace the defective switch and fuse at the same time. Replace just the fuse if the switches operate normally.

# WIRING DIAGRAM



(1) KOG-371G/H/R0S, KOG-391G/H/R0S, KOG-376T1S, KOG-374R/375R0S, KOG-373R/393R0S

### (2) KOG-396T1S



# PRINTED CIRCUIT BOARD <KOG-371G/H0S, KOG-391G/H0S>

### **1. CIRCUIT CHECK PROCEDURE**

#### 1. Low voltage transformer check

The low voltage transformer is located on the P.C.B. Measuring condition: Input voltage: 230V / Frequency: 50Hz

Terminal Voltage	LOAD	NO LOAD
4-7	AC 25.8 V	AC 28.4 V

#### NOTE

1. Refer to Ciruit Diagram (point 4).

2. Secondary side voltage of the low voltage transformer changes in proportion to fluctuation of power source voltage.

3. The allowable tolerance of the secondary voltage is within  $\pm$  5% of nominal voltage.

#### 2. Voltage Check

- Key check point

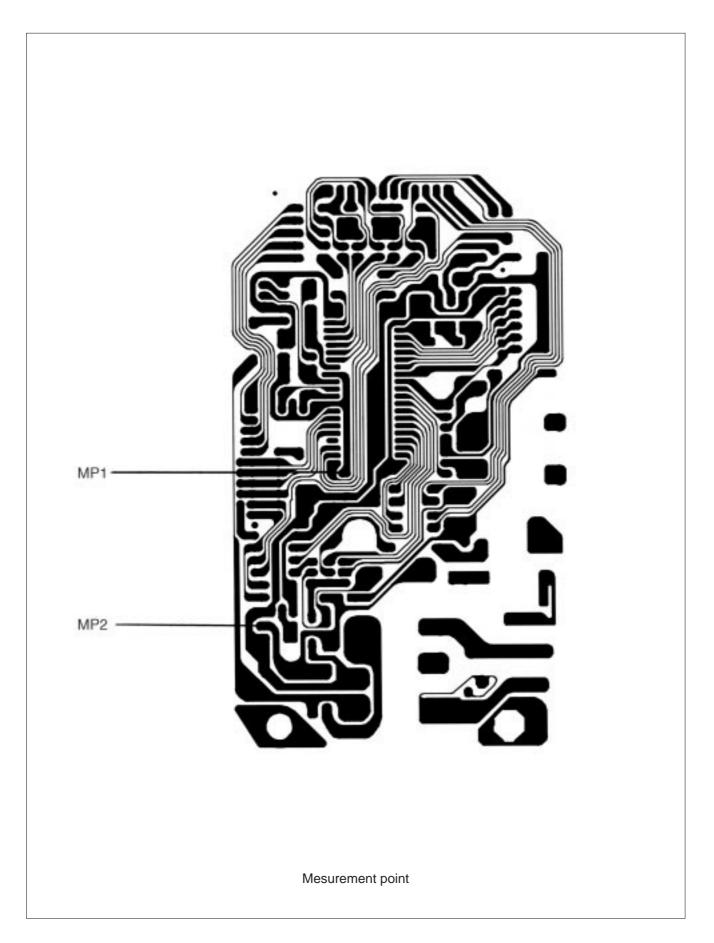
NO	CHECK POINT	REMARK
1	IC1 PIN 2, 21, 30, 34	-5VDC
2	IC1 PIN 35	<sup>0V</sup> -5V 
3	IC1 PIN 31 OR 32	<sup>0V</sup> -5V T : 250 ns(4MHz)

#### - Check method

N	MEASURE POINT	WAVE FORM	REMEDY	REMARK
1	MP1	DC -5V±0.25V	Replace VL1, EC1	NO LOAD
2	MP2	DC -12V±2.0V	Replace EC2, D12,13,14	NO LOAD

#### **NOTE** Fach measure point must be measured y

Each measure point must be measured with GND points.



#### 3. When there is no microwave oscillation

- 1) When touching **START** pad, oven lamp does not turn on.
  - Fan motor do not rotate, but cook indicator in display comes on.
  - \* Cause : **RELAY 2** does not operate.  $\rightarrow$  refer to Circuit Diagram (point 3)
  - Check method

POINT	Α	В
RELAY 2 ON	-5VDC	GND
RELAY 2 OFF	GND	-12VDC

2) When touching **START** pad, oven lamp turns on.

Fan motor and turntable rotate and cook indicator in display comes on.

\* Cause : **RELAY 1** does not operate. → refer to Circuit Diagram (point 2)

- Check method

POINT	Α	В
RELAY 1 ON	-5VDC	GND
RELAY 1 OFF	GND	-12VDC

#### 4. When there is no grill oscillation.

\* Cause : RELAY 3 does not operate. → refer to Circuit Diagram (point 6)

- Check method

POINT	Α	В
RELAY 3 ON	-5VDC	GND
RELAY 3 OFF	GND	-12VDC

#### 5. When the door is opened during operation, the count down timer does not stop.

 $\rightarrow$  refer to Circuit Diagram (point 1)

- Check method

STATE	POINT	Α		В
	1) DOOR OPEN	OPEN		-5VDC
2	2) DOOR CLOSED	CLOSE		GND
CHECK NO	HETHO	D		REMEDY
1	Check the stage(ON, OFF) of the switch by resistance measurem		Repla	ace door open monitor switch.

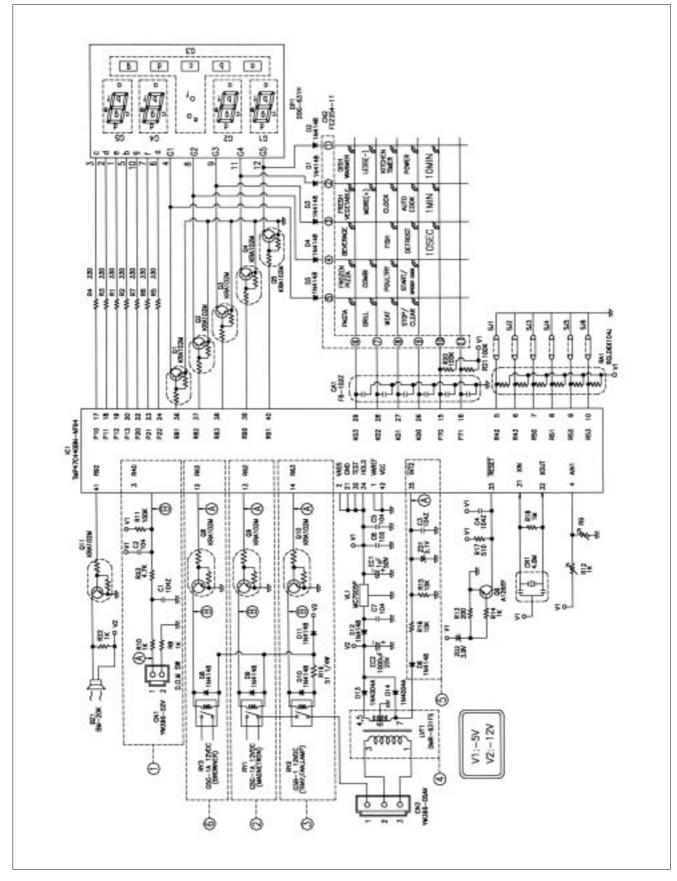
#### 6. When the digital clock does not operate properly.

 $\rightarrow$  refer to Circuit Diagram (point 5)

POINT	WAVE FORM		
A	<sup>0V</sup> -5V T: 20 ms(50Hz)		

\* If clock does not keep exact time, you must check resistor R15,16, zener diode ZD1.

### 2. P.C.B. CIRCUIT DIAGRAM



# 3. P.C.B. LOCATION NO

(1) KOG-371G0S/371H0S

NO	NAME	SYMBOL	SPECIFICATION	PART CODE	Q'TY
1	BUZZER	BZ1	BM-20K	3515600100	1
2	C ARRAY	CA1	7P(6) 102 M 50V	CN6XB-102M	1
3	CAPACITOR ELEC	EC1	50V RS 1µF	CEXE1H109A	1
4	CPAPCITOR ELEC	EC2	25V RSS 1000µF	CEXF1E102V	1
5	CONNECTOR WAFER	CN1	YW396-02AV	3519150520	1
6	CONNECTOR FILM	CN2	FCZ254-11	441M367160	1
7	CONNECTOR WAFER	CN3	YW396-05AV	3519150510	1
8	DIODE RECTIFY	D1~6, 8~12	1N4148	DZN4148	11
9	DIODE RECTIFY	D13, 14	1N4002A	DZN4002A	2
10	DIODE ZENER	ZD1	UZ-5.1BSB	DZUZ5R1BSB	1
11	DIODE ZENER	ZD2	UZ-3.9BSB	DZUZ3R9BSB	1
12	LED DISPLAY	DP1	DDG-631H	DDDG631H01	1
13	PCB MAIN	M158	81.5X139.9	3514315410	1
14	R ARRAY	RA1	7P(6) 1/8 100K J	RA-87X104J	1
15	RESISTOR	R1~R7	1/6W 330 5%	RD-AZ331J-	7
16	RESISTOR	R8, 10, 12, 14, 22	1/6W 1K 5%	RD-AZ102J-	5
17	RESISTOR	R11, 20, 21	1/6W 100K 5%	RD-AZ104J-	3
18	RESISTOR	R13	1/6W 200 5%	RD-AZ201J-	1
19	RESISTOR	R15, 16	1/6 10K 5%	RD-AZ103J-	2
20	RESISTOR	R17	1/6 510 OHM J	RD-AZ511J-	1
21	RESISTOR	R18	1/6W 1M 5%	RD-AZ105J-	1
22	RESISTOR	R19	1/4W 51 5%	RD-4Z510J-	1
23	RESISTOR	R23	1/6 4.7K OHM J	RD-AZ472J-	1
24	REGULATOR	VL1	MC7905C	1MC7905C	1
25	TRANSISTOR	Q1~5, 8~11	KRA-102M	TZRA102M	9
26	TRANSISTOR	Q6	KTA-1266Y	TZTA1266Y-	1
27	TRANS POWER	LVT1	DMR-631FS	5EPV035303	1
28	WIRE COPPER	J1~3,5~8,10~12,17~21	1/0.52 TIN COATING	85801052GY	15
29	WIRE COPPER	SJ4	1/0.52 TIN COATING	85801052GY	1
30	IC MICOM	IC1	TMP47C440BN-NF94	13GS371GH0	1
31	RESONATOR CERA	CR1	KBR-4.0MKSTF	5PKBR40MKS	1
32	SW RELAY	RY1, RY3	G5G-1A DC 12V	5SC0101121	2
33	SW RELAY	RY2	G5B-1 DC12V	5SC0101110	1
34	CAPACITOR CERA	C6	102 50V Z AXIAL	CCZB1H102K	1
35	CAPACITOR CERA	C1~5, C7	104 50V Z AXIAL	CCZF1H104Z	6

### (2) KOG-391G0S/391H0S

NO	NAME	SYMBOL	SPECIFICATION	PART CODE	Q'TY
1	BUZZER	BZ1	BM-20K	3515600100	1
2	C ARRAY	CA1	7P(6) 102 M 50V	CN6XB-102M	1
3	CAPACITOR ELEC	EC1	50V RS 1µF	CEXE1H109A	1
4	CPAPCITOR ELEC	EC2	25V RSS 1000µF	CEXF1E102V	1
5	CONNECTOR WAFER	CN1	YW396-02AV	3519150520	1
6	CONNECTOR FILM	CN2	FCZ254-11	441M367160	1
7	CONNECTOR WAFER	CN3	YW396-05AV	3519150510	1
8	DIODE RECTIFY	D1~6, 8~12	1N4148	DZN4148	11
9	DIODE RECTIFY	D13, 14	1N4002A	DZN4002A	2
10	DIODE ZENER	ZD1	UZ-5.1BSB	DZUZ5R1BSB	1
11	DIODE ZENER	ZD2	UZ-3.9BSB	DZUZ3R9BSB	1
12	LED DISPLAY	DP1	DDG-631H	DDDG631H01	1
13	PCB MAIN	M158	81.5X139.9	3514315410	1
14	R ARRAY	RA1	7P(6) 1/8 100K J	RA-87X104J	1
15	RESISTOR	R1~R7	1/6W 330 5%	RD-AZ331J-	7
16	RESISTOR	R8, 10, 12, 14, 22	1/6W 1K 5%	RD-AZ102J-	5
17	RESISTOR	R11, 20, 21	1/6W 100K 5%	RD-AZ104J-	3
18	RESISTOR	R13	1/6W 200 5%	RD-AZ201J-	1
19	RESISTOR	R15, 16	1/6W 10K 5%	RD-AZ103J-	2
20	RESISTOR	R17	1/6 510 OHM J	RD-AZ511J-	1
21	RESISTOR	R18	1/6W 1M 5%	RD-AZ105J-	1
22	RESISTOR	R19	1/4W 51 5%	RD-4Z510J-	1
23	RESISTOR	R23	1/6 4.7K OHM J	RD-AZ472J-	1
24	REGULATOR	VL1	MC7905C	1MC7905C	1
25	TRANSISTOR	Q1~5, 8~11	KRA-102M	TZRA102M	9
26	TRANSISTOR	Q6	KTA-1266Y	TZTA1266Y-	1
27	TRANS POWER	LVT1	DMR-631FS	5EPV035303	1
28	WIRE COPPER	J1~3,5~8,10~12,17~21	1/0.52 TIN COATING	85801052GY	15
29	WIRE COPPER	SJ1, SJ4	1/0.52 TIN COATING	85801052GY	2
30	IC MICOM	IC1	TMP47C440BN-NF94	13GS371GH0	1
31	RESONATOR CERA	CR1	KBR-4.0MKSTF	5PKBR40MKS	1
32	SW RELAY	RY1, RY3	G5G-1A DC 12V	5SC0101121	2
33	SW RELAY	RY2	G5B-1 DC12V	5SC0101110	1
34	CAPACITOR CERA	C6	102 50V Z AXIAL	CCZB1H102K	1
35	CAPACITOR CERA	C1~5, C7	104 50V Z AXIAL	CCZF1H104Z	6

# PRINTED CIRCUIT BOARD <KOG-376T1S, KOG-396T1S>

### **1. CIRCUIT CHECK PROCEDURE**

#### 1. Low voltage transformer check

The low voltage transformer is located on the P.C.B. Measuring condition : Input voltage : 230V/Frequency : 50Hz

Terminal Voltage	LOAD	NO LOAD
8 - 9	AC 23V	AC 27.7V
6 - 7	AC 2.27V	AC 2.79V

#### NOTE

- 1. Refer to Circuit Diagram (point 4).
- 2. Secondary side voltage of the low voltage trasformer changes in proportion to fluctuation of power source voltage.
- 3. The allowable tolerance of the secondary voltage is within 5% of nominal voltage.

#### 2. Voltage Check

- Key check point

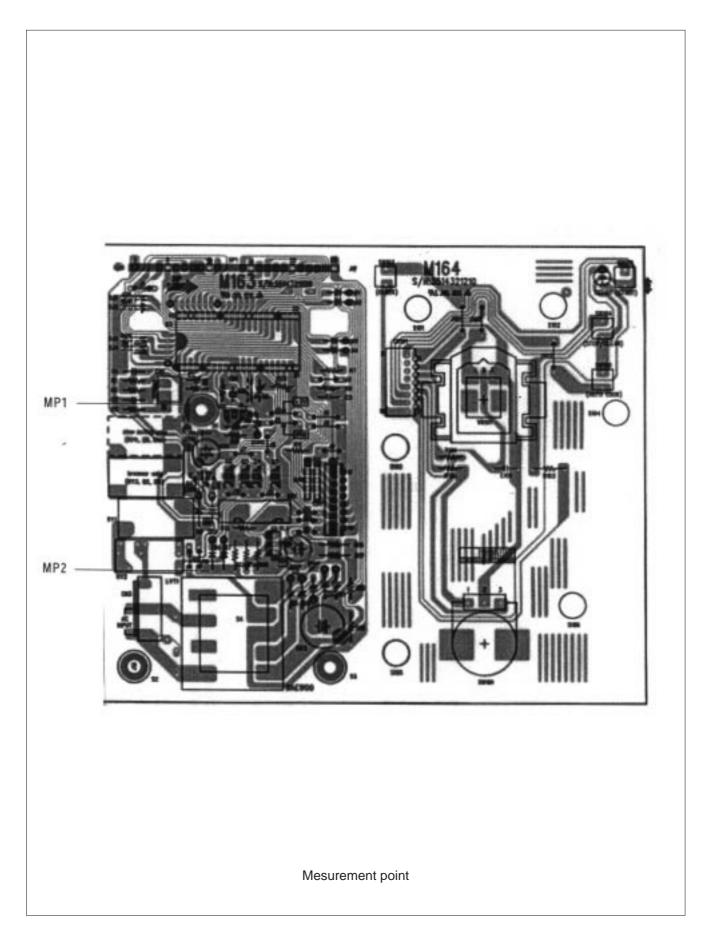
NO	CHECK POINT	REMARK
1	IC1 PIN 6, 10, 11	-5VDC
2	IC1 PIN 22	0V -5V T : 20ms(50Hz)
3	IC1 PIN 8 OR 9	<sup>0V</sup> -5V T : 250 ns(4MHz)

#### - Check method

NO	MEASURE POINT	WAVE FORM	REMEDY	REMARK
1	MP1	DC -5V±0.25V	Replace VL1, EC1	NO LOAD
2	MP2	DC -24V±2.0V	Replace EC3, D8-11	NO LOAD

#### NOTE

Each measure point must be measured with GND points.



#### 3. When there is no microwave oscillation

- 1) When touching **START** pad, oven lamp does not turn on.
  - Fan motor do not rotate, but cook indicator in display comes on.
  - \* Cause : **RELAY 2** does not operate.  $\rightarrow$  refer to Circuit Diagram (point 3)
  - Check method

POINT	Α	В
RELAY 2 ON	-5VDC	GND
RELAY 2 OFF	GND	-24VDC

2) When touching **START** pad, oven lamp turns on.

Fan motor and turntable rotate and cook indicator in display comes on.

\* Cause : **RELAY 1** does not operate.  $\rightarrow$  refer to Circuit Diagram (point 2)

- Check method

POINT	Α	В
RELAY 1 ON	-5VDC	GND
RELAY 1 OFF	GND	-24VDC

#### 4. When there is no grill oscillation.

\* Cause : RELAY 3 does not operate. → refer to Circuit Diagram (point 6)

- Check method

POINT	Α	В
RELAY 3 ON	-5VDC	GND
RELAY 3 OFF	GND	-24VDC

#### 5. When the door is opened during operation, the count down timer does not stop.

 $\rightarrow$  refer to Circuit Diagram (point 1)

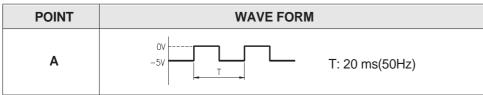
- Check method

POINT	A	В
1) DOOR OPEN	OPEN	-5VDC
2) DOOR CLOSED	CLOSE	GND

CHECK NO	HETHOD	REMEDY
1	Check the stage(ON, OFF) of the door open monitor switch by resistance measurement.	Replace door open monitor switch.

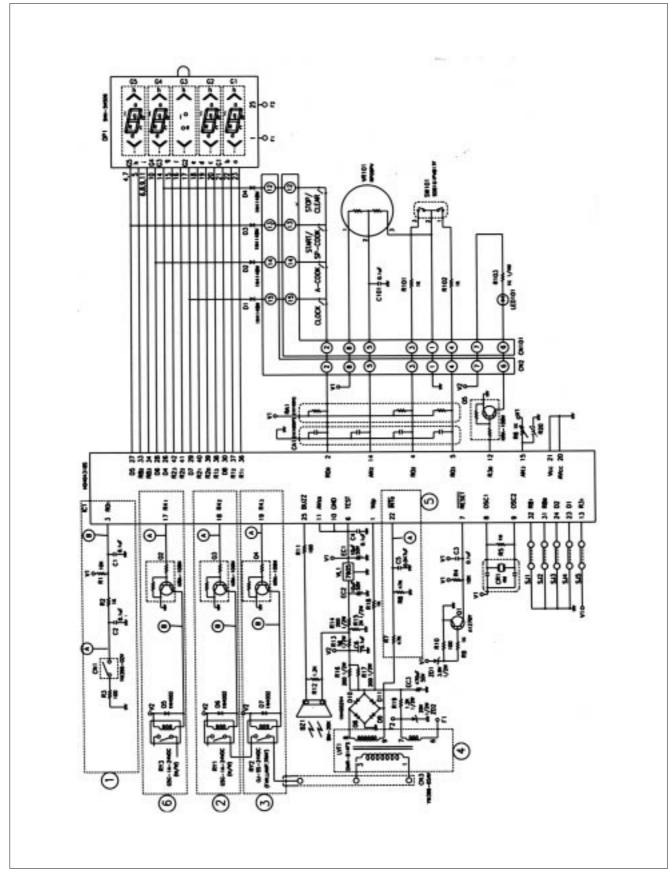
#### 6. When the digital clock does not operate properly.

→ refer to Circuit Diagram (point 5)



\* If clock does not keep exact time, you must check resistor R7,8,C5.

### 2. P.C.B. CIRCUIT DIAGRAM



### 3. P.C.B. LOCATION NO

(1) KOG-376T1S

NO	NAME	SYMBOL	SPECIFICATION PART COD		Q'TY	REMARK
1	BUZZER	BZ1	BM-20K	3615600100	1	MAIN
2	C ARRAY	CA1	5P(6) 102 M 50V	CN4XB-102M	1	"
3	CAPACITOR ELEC	EC1, 2	50V RSS 10µF	CEXE1H100A	2	"
4	CAPACITOR ELEC	EC3	50V RSS 470µF	CEXE1H471V	1	"
5	CONNECTOR WAFER	CN1	YW396-02AV	3519150520	1	"
6	CONNECTOR WAFER	CN2	HLEM15S-1	4CW215SBD0	1	"
7	CONNECTOR WAFER	CN3	YW396-05AV	3519150510	1	"
8	DIODE SWITCH	D1~4	1N4148	DZN4148	4	"
9	DIODE RECTIFY	D5~11	1N4004A	DZN4004A	7	"
10	DIODE ZENER	ZD1	MTZ 3.9VB 1/2W	DZUZ3R9BSB	1	"
11	DIODE ZENER	ZD2	MTZ 20VB 1/2W	DZUZ20BSB-	1	"
12	VFD DISPLAY	DP1	SVM-5MS06	DSVM5MS06-	1	"
13	VFD HOLDER		PP(BLACK)	3513002600	1	"
14	R ARRAY	RA1	5P(4) 1/8 100K J	RA-85X104J	1	"
15	RESISTOR	R12	1/6W 1.2K 5%	RD-AZ122J-	1	"
16	RESISTOR	R2, 6, 9, 18	1/6W 1K 5%	RD-AZ102J-	4	"
17	RESISTOR	R7, 8	1/6W 47K 5%	RD-AZ473J-	2	"
18	RESISTOR	R3, 10, 11	1/6W 100 5%	RD-AZ101J-	3	"
19	RESISTOR	R1, 4	1/6W 10K 5%	RD-AZ103J-	2	"
20	RESISTOR	R5	1/6W 1M 5%	RD-AZ105J-	1	"
21	RESISTOR	R13	1/2W 56 5%	RD-2Z560JS	1	"
22	RESISTOR	R15, 16, 17	1/2W 200 5%	RD-2Z201JS	3	"
23	RESISTOR	R19	1/2W 1.2K 5% RD-2Z122JS		1	"
24	RESISTOR	R15	1/2W 2K 5%	RD-2Z202JS	1	"
25	REGULATOR	VL1	MC7905C	1MC7905C	1	"
26	WIRE COPPER	Q2~5	KRA-106M	TZRA106M	4	"
27	CAPACITOR CERA	Q1	KTA-1270Y	TZTA1270Y-	1	"
28	CAPACITOR CERA	LVT1	DMR-814FS	3EPV035301	1	"
29	WIRE COPPER	J1-J16, SJ3	1/0.52 TIN COATING	85801052GY	17	"
30	CAPACITOR CERA	C1~4, C6	104 50V Z AXIAL	CCZF1H104Z	5	"
31	CAPACITOR CERA	C5	473 50V Z AXIAL	CCZF1H473Z	1	"
32	CAPACITOR CERA	CR1	KBR-4.0MSTF	5PKBR40MKS	1	"
33	SW RELAY	RY1, 3	G5G-1A DC24V	5SC0101122	2	"
34	SW RELAY	RY2	OJ-SS 124LM	5SC0101405	1	"
35	IC MICOM	IC1	HD404318E08S	147S636T00	1	"
36	PCB MAIN	M163	M163	3514321120	1	"
37	LED	LED101	DLSR-302D(5.5)	DDLSR302D1	1	SUB
38	WIRE FLAT	WF1	1.25X15X90CWH WSJ-159007		1	"
39	SW TACT	SW102~105	KPT-1115AM	5S50101Z93	4	"
40	SW ROTARY	SW101	SDB161PVB17F 123636 5S101090		1	"
41	VR ROTARY	VR101	RP09PV	5V1104103B	1	"
42	CONNECTOR WAFER	CN101	HLEM15R-`	4CW215RBD0	1	"
43	RESISTOR	R101, 102	1/6W 1K 5%	RD-AZ102J-	2	"
44	RESISTOR	R103	1/4W 1K 5%	RD-AZ102J-	1	"
45	CAPACITOR CERA	C101	104 50V Z AXIAL	CCZF1H104Z	1	"
46	WIRE COPPER	J101~103	1/0.52 TIN COATING		3	"
47	PCB SUB	M164	M164	3514321210	1	"

### (2) KOG-396T1S

NO	NAME	SYMBOL	SPECIFICATION	PART CODE	Q'TY	REMARK
1	BUZZER	BZ1	BM-20K	3615600100	1	MAIN
2	C ARRAY	CA1	5P(6) 102 M 50V	CN4XB-102M	1	"
3	CAPACITOR ELEC	EC1, 2	50V RSS 10µF	CEXE1H100A	2	"
4	CAPACITOR ELEC	EC3	50V RSS 470µF	CEXE1H471V	1	"
5	CONNECTOR WAFER	CN1	YW396-02AV	3519150520	1	"
6	CONNECTOR WAFER	CN2	HLEM15S-1	4CW215SBD0	1	"
7	CONNECTOR WAFER	CN3	YW396-05AV	3519150510	1	"
8	DIODE SWITCH	D1~4	1N4148	DZN4148	4	"
9	DIODE RECTIFY	D5~11	1N4004A	DZN4004A	7	"
10	DIODE ZENER	ZD1	MTZ 3.9VB 1/2W	DZUZ3R9BSB	1	"
11	DIODE ZENER	ZD2	MTZ 20VB 1/2W	DZUZ20BSB-	1	"
12	VFD DISPLAY	DP1	SVM-5MS06	DSVM5MS06-	1	"
13	VFD HOLDER		PP(BLACK)	3513002600	1	"
14	R ARRAY	RA1	5P(4) 1/8 100K J	RA-85X104J	1	"
15	RESISTOR	R12	1/6W 1.2K 5%	RD-AZ122J-	1	"
16	RESISTOR	R2, 6, 9, 18	1/6W 1K 5%	RD-AZ102J-	4	"
17	RESISTOR	R7, 8	1/6W 47K 5%	RD-AZ473J-	2	"
18	RESISTOR	R3, 10, 11	1/6W 100 5%	RD-AZ101J-	3	"
19	RESISTOR	R1, 4	1/6W 10K 5%	RD-AZ103J-	2	"
20	RESISTOR	R5	1/6W 1M 5%	RD-AZ105J-	1	"
21	RESISTOR	R13	1/2W 56 5%	RD-2Z560JS	1	"
22	RESISTOR	R15, 16, 17	1/2W 200 5%	RD-2Z201JS	3	"
23	RESISTOR	R19	1/2W 1.2K 5% RD-2Z122JS		1	"
24	RESISTOR	R15	1/2W 2K 5%	RD-2Z202JS	1	"
25	REGULATOR	VL1	MC7905C	1MC7905C	1	"
26	WIRE COPPER	Q2~5	KRA-106M	TZRA106M	4	"
27	CAPACITOR CERA	Q1	KTA-1270Y	TZTA1270Y-	1	"
28	CAPACITOR CERA	LVT1	DMR-814FS	3EPV035301	1	"
29	WIRE COPPER	J1-J16, SJ3	1/0.52 TIN COATING	85801052GY	17	"
30	CAPACITOR CERA	C1~4, C6	104 50V Z AXIAL	CCZF1H104Z	5	"
31	CAPACITOR CERA	C5	473 50V Z AXIAL	CCZF1H473Z	1	"
32	CAPACITOR CERA	CR1	KBR-4.0MSTF	5PKBR40MKS	1	
33	SW RELAY	RY1, 3	G5G-1A DC24V	5SC0101122	2	"
34	SW RELAY	RY2	OJ-SS 124LM	5SC0101405	1	"
35		IC1	HD404318E08S	147S636T00	1	"
36	PCB MAIN	M163	M163	3514321120	1	
37		LED101	DLSR-302D(5.5)	DDLSR302D1	1	SUB "
38	WIRE FLAT	WF1	1.25X15X90CWH WSJ-15900		1	"
39	SW TACT	SW102~105	KPT-1115AM	5S50101Z93	4	"
40	SW ROTARY	SW101	SDB161PVB17F 123636 5S10109002		1	"
41		VR101	RP09PV	5V1104103B	1	"
42	CONNECTOR WAFER	CN101	HLEM15R-`	4CW215RBD0	1	"
43	RESISTOR	R101, 102	1/6W 1K 5%	RD-AZ102J-	2	"
44	RESISTOR	R103	1/4W 1K 5%	RD-AZ102J-	1	"
45		C101	104 50V Z AXIAL	CCZF1H104Z	1	"
46 47	WIRE COPPER PCB SUB	J101~103 M164	1/0.52 TIN COATING M164	85801052GY	3	"
41		111104	11104	3514321210		

# PRINTED CIRCUIT BOARD <KOG-371R0S, KOG-391R0S>

### **1. CIRCUIT CHECK PROCEDURE**

#### 1. Low voltage transformer check

The low voltage transformer is located on the P.C.B. Measuring condition: Input voltage: 230V / Frequency: 50Hz

Terminal Voltage	LOAD	NO LOAD
4-7	AC 25.8 V	AC 28.4 V

#### NOTE

1. Refer to Ciruit Diagram (point 4).

2. Secondary side voltage of the low voltage transformer changes in proportion to fluctuation of power source voltage.

3. The allowable tolerance of the secondary voltage is within  $\pm$  5% of nominal voltage.

#### 2. Voltage Check

- Key check point

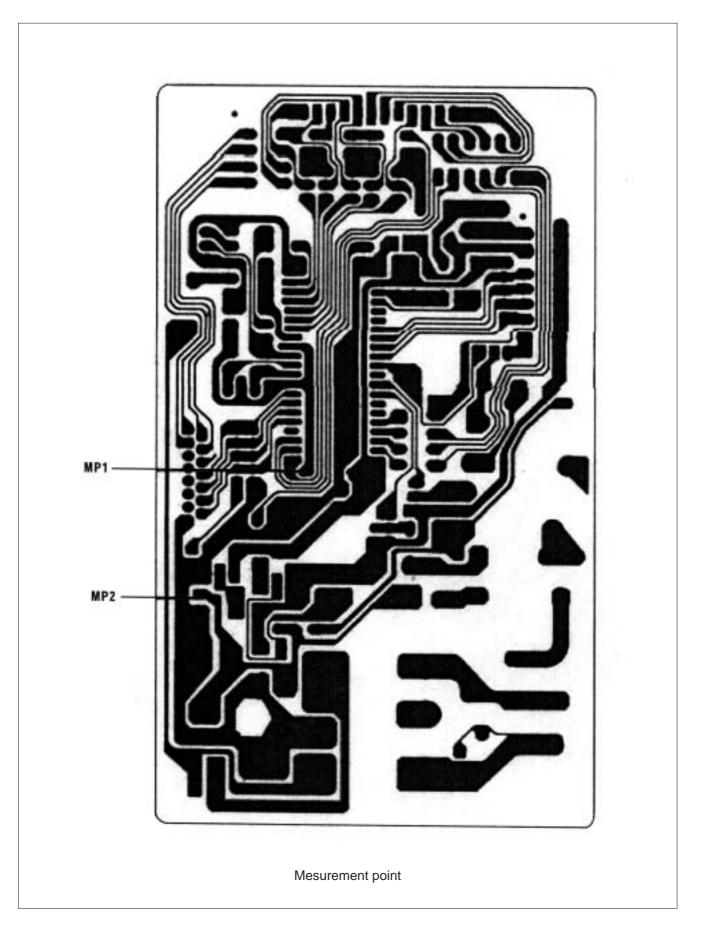
NO	CHECK POINT	REMARK
1	IC1 PIN 2, 21, 30, 34	-5VDC
2	IC1 PIN 35	OV -5V T : 20ms(50Hz)
3	IC1 PIN 31 OR 32	<sup>0V</sup> -5V T : 250 ns(4MHz)

#### - Check method

N	MEASURE POINT	WAVE FORM	REMEDY	REMARK
1	MP1	DC -5V±0.25V	Replace VL1, EC1	NO LOAD
2	MP2	DC -12V±2.0V	Replace EC2, D6, 11, 12	NO LOAD

#### NOTE

Each measure point must be measured with GND points.



#### 3. When there is no microwave oscillation

- 1) When touching **START** pad, oven lamp does not turn on.
  - Fan motor do not rotate, but cook indicator in display comes on.
  - \* Cause : **RELAY 2** does not operate.  $\rightarrow$  refer to Circuit Diagram (point 3)
  - Check method

POINT	Α	В
RELAY 2 ON	-5VDC	GND
RELAY 2 OFF	GND	-12VDC

2) When touching **START** pad, oven lamp turns on.

Fan motor and turntable rotate and cook indicator in display comes on.

\* Cause : **RELAY 1** does not operate. → refer to Circuit Diagram (point 2)

- Check method

POINT	Α	В
RELAY 1 ON	-5VDC	GND
RELAY 1 OFF	GND	-12VDC

#### 4. When there is no grill oscillation.

\* Cause : RELAY 3 does not operate. → refer to Circuit Diagram (point 6)

- Check method

POINT	Α	В
RELAY 3 ON	-5VDC	GND
RELAY 3 OFF	GND	-12VDC

#### 5. When the door is opened during operation, the count down timer does not stop.

 $\rightarrow$  refer to Circuit Diagram (point 1)

- Check method

STATE	POINT	Α		В	
1) DOOR OPEN		OPEN		-5VDC	
2) DOOR CLOSED		CLOSE		GND	
CHECK NO	HETHO	D		REMEDY	
1	Check the stage(ON, OFF) of the switch by resistance measurem			Replace door open monitor switch	

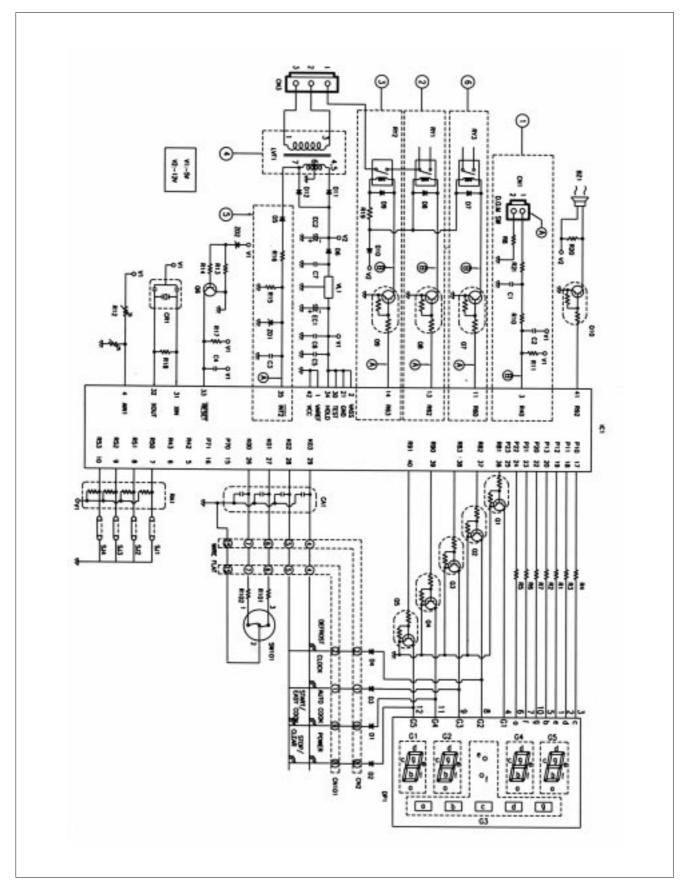
#### 6. When the digital clock does not operate properly.

→ refer to Circuit Diagram (point 5)

POINT	WAVE FORM	
A	<sup>0V</sup> -5V T: 20 ms(50Hz)	

\* If clock does not keep exact time, you must check resistor R15,16, zener diode ZD1.

### 2. P.C.B. CIRCUIT DIAGRAM



# 3. P.C.B. LOCATION NO

(1) KOG-371R0S

NO	NAME	SYMBOL	SPECIFICATION	PART CODE	Q'TY	REMARK
1	PCB MAIN	M160	82X139.9	3514321100	1	MAIN PCB
2	BUZZER	BZ1	BM-20K	3515600100	1	
3	C ARRAY	CA1	5P(4) 102 M 50V	CN4XB-102M	1	
4	C ELECTRO	EC1	16V RSS 100µF	CEXF1C101V	1	
5	C ELECTRO	EC2	25V RSS 1000µF	CEXF1E102V	1	
6	CONNECTOR WAFER	CN1	YW396-02AV	3519150520	1	
7	CONNECTOR WAFER	CN3	YW396-05AV	3519150510	1	
8	CONNECTOR WAFER	CN2	HLEM15S-1	4CW215SBD0	1	
8	DIODE	D1~10	1N4148	DZN4148	10	
9	DIODE	D11, 12	1N4004A	DZN4004A	2	
10	DIODE ZENER	ZD1	MTZ 5.1VB 1/2W	DZTZ5R1B11	1	
11	DIODE ZENER	ZD2	MTZ 3.9VB 1/2W	DZTZ3R9B	1	
12	LED DISPLAY	DP1	DDG-631H	DDDG631H	1	
13	R ARRAY	RA1	5P(4) 1/8 100K J	RA-85X104J	1	
14	R CARBON FILM	R1~R7	1/6W 330 5%	RD-AZ331J-	7	
15	R CARBON FILM	R8, 10, 12, 14, 20	1/6W 1K 5%	RD-AZ102J-	5	
16	R CARBON FILM	R11	1/6W 100K 5%	RD-AZ104J-	1	
17	R CARBON FILM	R13	1/6W 100 5%	RD-AZ101J-	1	
18	R CARBON FILM	R15~17	1/6W 10K 5%	RD-AZ103J-	3	
19	R CARBON FILM	R18	1/6W 1M 5%	RD-AZ105J-	1	
20	R CARBON FILM	R19	1/4W 27 5%	RD-4Z270J-	1	
21	R CARBON FILM	R21	1/6W 4.7K 5%	RD-AZ472J-	1	
22	IC REGULATOR	VL1	MC7905C	1MC7905C	1	
23	TRANSISTOR	Q1~5, 7~10	KRA-106M	TZRA106M	9	
24	TRANSISTOR	Q6	KTA-1266Y	TZTA1266Y-	1	
25	TRANS POWER	LVT1	DMR-631FS	5EPV035303	1	
26	WIRE COPPER	J1~J17	1/0.52 TIN COATING	85801052GY	17	
27	IC MICOM	IC1	TMP47C440BN-1A49	13GS371R00	1	
28	RESONATOR CERA	CR1	KBR-4.0MSTF	5PKBR40MKS	1	
29	SW RELAY	RY1, 3	G5G-1A DC12V	5SC0101121	2	
30	SW RELAY	RY2	G5B-1 DC12V	5SC0101110	1	
31	C CERA	C6	102 50V Z AXIAL	CCZB1H102K	1	
32	C CERA	C1~5, C7	104 50V Z AXIAL	CCZF1H104Z	6	
33	PCB SUB	M161	70X122	3514321200	1	SUB PCB
34	SW TACT	SW102~107	KPT-1115AM	5S50101Z93	6	
35	SW ROTARY	SW101	SDB161PVB17F123636	5S10109002	1	
36	R CARBON FILM	101, 102	1/6W 1K 5%	RD-AZ102J-	2	
37	WIRE FLAT	WF1	1.25X15X90XCWH	SWJ-159007	1	
38	WIRE COPPER	J101	1/0.52 TIN COATING	85801052GY	1	
39	CONNECTOR WAFER	CN101	HLEM15R-1	4CW215RBD	1	

### (2) KOG-391R0S

NO	NAME	SYMBOL	SPECIFICATION	PART CODE	Q'TY	REMARK
1	PCB MAIN	M160	82X139.9	3514321100	1	MAIN PCB
2	BUZZER	BZ1	BM-20K	3515600100	1	
3	C ARRAY	CA1	5P(4) 102 M 50V	CN4XB-102M	1	
4	C ELECTRO	EC1	16V RSS 100µF	CEXF1C101V	1	
5	C ELECTRO	EC2	25V RSS 1000µF	CEXF1E102V	1	
6	CONNECTOR WAFER	CN1	YW396-02AV	3519150520	1	
7	CONNECTOR WAFER	CN3	YW396-05AV	3519150510	1	
8	CONNECTOR WAFER	CN2	HLEM15S-1	4CW215SBD0	1	
8	DIODE	D1~10	1N4148	DZN4148	10	
9	DIODE	D11, 12	1N4004A	DZN4004A	2	
10	DIODE ZENER	ZD1	MTZ 5.1VB 1/2W	DZTZ5R1B11	1	
11	DIODE ZENER	ZD2	MTZ 3.9VB 1/2W	DZTZ3R9B	1	
12	LED DISPLAY	DP1	DDG-631H	DDDG631H	1	
13	R ARRAY	RA1	5P(4) 1/8 100K J	RA-85X104J	1	
14	R CARBON FILM	R1~R7	1/6W 330 5%	RD-AZ331J-	7	
15	R CARBON FILM	R8, 10, 12, 14, 20	1/6W 1K 5%	RD-AZ102J-	5	
16	R CARBON FILM	R11	1/6W 100K 5%	RD-AZ104J-	1	
17	R CARBON FILM	R13	1/6W 100 5%	RD-AZ101J-	1	
18	R CARBON FILM	R15~17	1/6W 10K 5%	RD-AZ103J-	3	
19	R CARBON FILM	R18	1/6W 1M 5%	RD-AZ105J-	1	
20	R CARBON FILM	R19	1/4W 27 5%	RD-4Z270J-	1	
21	R CARBON FILM	R21	1/6W 4.7K 5%	RD-AZ472J-	1	
22	IC REGULATOR	VL1	MC7905C	1MC7905C	1	
23	TRANSISTOR	Q1~5, 7~10	KRA-106M	TZRA106M	9	
24	TRANSISTOR	Q6	KTA-1266Y	TZTA1266Y-	1	
25	TRANS POWER	LVT1	DMR-631FS	5EPV035303	1	
26	WIRE COPPER	J1~J17, SJ1	1/0.52 TIN COATING	85801052GY	18	
27	IC MICOM	IC1	TMP47C440BN-1A49	13GS371R00	1	
28	RESONATOR CERA	CR1	KBR-4.0MSTF	5PKBR40MKS	1	
29	SW RELAY	RY1, 3	G5G-1A DC12V	5SC0101121	2	
30	SW RELAY	RY2	G5B-1 DC12V	5SC0101110	1	
31	C CERA	C6	102 50V Z AXIAL	CCZB1H102K	1	
32	C CERA	C1~5, C7	104 50V Z AXIAL	CCZF1H104Z	6	
33	PCB SUB	M161	70X122	3514321200	1	SUB PCB
34	SW TACT	SW102~107	KPT-1115AM	5S50101Z93	6	
35	SW ROTARY	SW101	SDB161PVB17F123636	5S10109002	1	
36	R CARBON FILM	101, 102	1/6W 1K 5%	RD-AZ102J-	2	
37	WIRE FLAT	WF1	1.25X15X90XCWH	SWJ-159007	1	
38	WIRE COPPER	J101	1/0.52 TIN COATING	85801052GY	1	
39	CONNECTOR WAFER	CN101	HLEM15R-1	4CW215RBD	1	

## PRINTED CIRCUIT BOARD <KOG-374R0S, KOG-375R0S>

#### **1. CIRCUIT CHECK PROCEDURE**

- 1. Low Voltage Transformer check
- The low voltage transformer is located on the P.C.B.
- Measuring condition: input voltage : 230V/Frequency : 50Hz

Terminal Voltage	LOAD	NO LOAD
4-7	AC 25.8 V	AC 28.4 V

#### NOTE :

н

L

1. Refer to Circuit Diagram (point 4).

2. Secondary side voltage of the low voltage transformer changes in proportion to fluctuation of power source voltage.

3. The allowable tolerance of the secondary voltage is within  $\pm$  5% of nominal voltage.

#### 2. Voltage check

#### Key check point

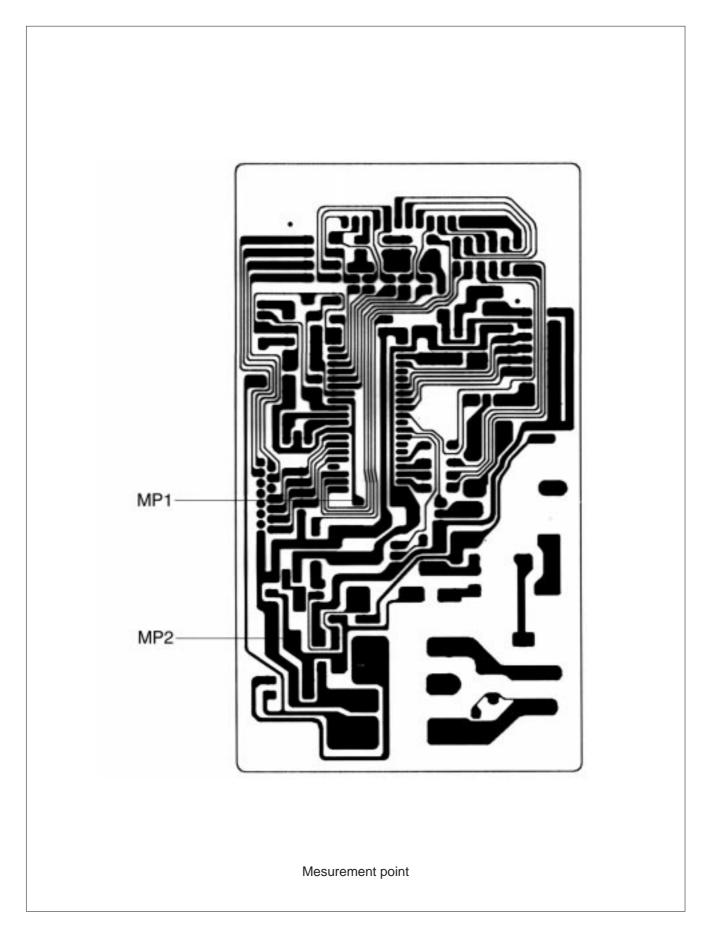
NO	CHECK POINT	REMARK
1	IC 1 PIN 2, 21, 30, 34	-5 VDC
2	IC 1 PIN 35	0V -5V T:20ms(50Hz)
3	IC 1 PIN 31 OR 32	0V -5V T: 250 ns (4MHz)

#### · Check method

NO	MEASURE POINT	WAVE FORM	REMEDY	REMARK
1	MP1	DC -5V±0.25V	Replace VL1, EC1	NO LOAD
2	MP2	DC -12V±2.0V	Replace EC2, D6, D11, D12	NO LOAD

NOTE :

Each measure point must be measured with GND points.



#### 3. When there is no microwave oscillation

- 1) When touching **START** pad, oven lamp does not turn on.
  - Fan motor do not rotate, but cook indicator in display comes on.
  - \* Cause : **RELAY 2** does not operate.  $\rightarrow$  refer to Circuit Diagram (point 3)
  - Check method

POINT	Α	В
RELAY 2 ON	-5VDC	GND
RELAY 2 OFF	GND	-12VDC

2) When touching **START** pad, oven lamp turns on.

Fan motor and turntable rotate and cook indicator in display comes on.

\* Cause : **RELAY 1** does not operate.  $\rightarrow$  refer to Circuit Diagram (point 2)

- Check method

POINT	Α	В
RELAY 1 ON	-5VDC	GND
RELAY 1 OFF	GND	-12VDC

#### 4. When there is no grill oscillation.

\* Cause : RELAY 3 does not operate. → refer to Circuit Diagram (point 6)

- Check method

POINT	Α	В
RELAY 3 ON	-5VDC	GND
RELAY 3 OFF	GND	-12VDC

#### 5. When the door is opened during operation, the count down timer does not stop.

 $\rightarrow$  refer to Circuit Diagram (point 1)

- Check method

STATE	POINT	Α		В
1) DOOR OPEN		OPEN		-5VDC
2) DOOR CLOSED		CLOSE		GND
CHECK NO	HETHO	D		REMEDY
1	Check the stage(ON, OFF) of the switch by resistance measurem		Replace door open monitor switch	

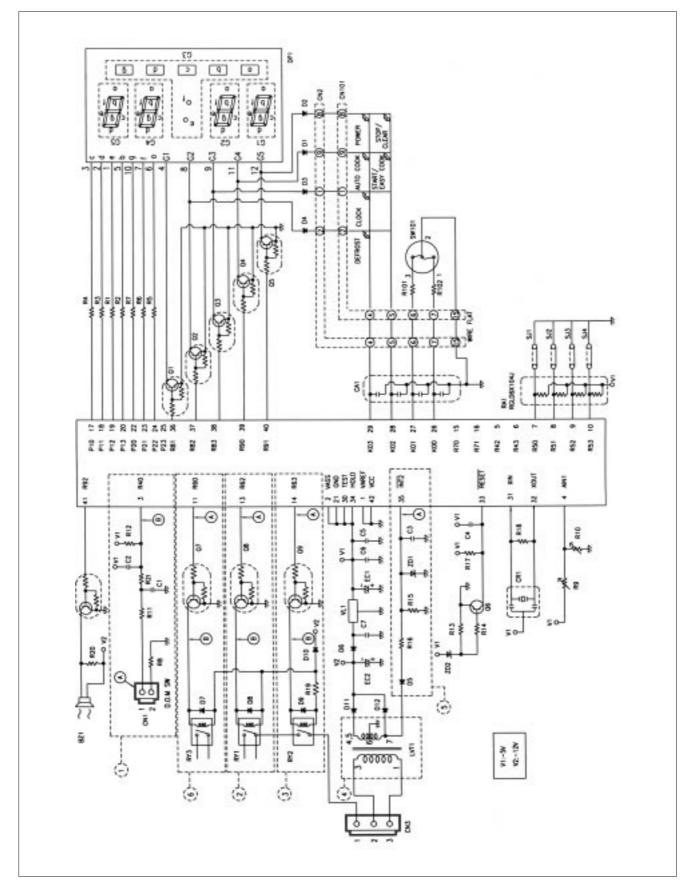
#### 6. When the digital clock does not operate properly.

→ refer to Circuit Diagram (point 5)

POINT	WAVE FORM	
A	<sup>0V</sup> -5V T: 20 ms(50Hz)	

\* If clock does not keep exact time, you must check resistor R15,16, zener diode ZD1.

## 2. P.C.B. CIRCUIT DIAGRAM



## 3. P.C.B. LOCATION NO

(1) KOG-374R0S/375R0S

NAME	NAME	SYMBOL	SPECIFICATION	PART CODE	Q'TY	REMARK
1	PCB MAIN	M166	82 X 146.8	3514321140	1	MAIN PCB
2	BUZZER	BZ1	BM-20K	3515600100	1	
3	C ARRAY	CA1	5P(4) 1000PF M 50V	CN4XB-102M	1	
4	CAPACITOR CERA	C6	102 50V Z AXIAL	CCZB1H102K	1	
5	CAPACITOR CERA	C1~5, C7	104 50V Z AXIAL	CCZF1H104Z	6	
6	CAPACITOR ELEC	EC1	16V RSS 100MF	CEXF1C101V	1	
7	CAPACITOR ELEC	EC2	25V RSS 1000MF	CEXF1E102V	1	
8	CONNECTOR WAFER	CN1	YW396-02V	3519150520	1	
9	CONNECTOR WAFER	CN2	HLEM15S-1	4CW215SBDO	1	
10	CONNECTOR WAFER	CN3	YW396-05AV	3519150510	1	
11	DIODE SWITCHING	D1~10	1N4148	DZN4148	10	
12	DIODE RECTIFY	D11,12	KN4004A	DZN4004A	2	
13	DIODE ZENER	ZD1	MTZ- 5.1VB 1/2W	DZTZ5R1B	1	
14	DIODE ZENER	ZD2	MTZ- 3.9VB 1/2W	DZTZ3R9B	1	
15	IC MICOM	IC1	TMP47C440BN-1A49	13GS371R00	1	
16	IC REGULATOR	VL1	MC7905C	1MC7905C	1	
17	LED DISPLAY	DP1	DDG-631H	DDDG631H	1	
18	R ARRAY	RA1	RGLD4X104J	RA-85X104J	1	
19	R CARBON FILM	R19	1/4W 27 5%	RD-4Z270J-	1	
20	R CARBON FILM	R13	1/6W 100 5%	RD-AZ101J-	1	
21	R CARBON FILM	R1~R7	1/6W 330 5%	RD-AZ331J-	7	
22	R CARBON FILM	R8,9,11,14,20	1/6W 1K 5%	RD-AZ102J-	5	
23	R CARBON FILM	R21	1/6W 4.7K 5%	RD-AZ472J-	1	
24	R CARBON FILM	R15~17	1/6W 10K 5%	RD-AZ103J-	3	
25	R CARBON FILM	R12	1/6W 100K 5%	RD-AZ104J-	1	
26	R CARBON FILM	R18	1/6W 1M 5%	RD-AZ105J-	1	
27	RESONATOR CERA	CR1	KBR-4.0MKSTF	5PKBR40MKS	1	
28	SW RELAY	RY1, RY3	G5G-1A 1C 1P DC12V	5SC0101121	2	
29	SW RELAY	RY2	OJ-SS-112LM DC 12V	5SC0101404	1	
30	TRANSISTOR	Q1~5, Q7~10	KRA-106M	TZRA106M	9	
31	TRANSISTOR	Q6	KTA-1266Y	TZTA1266Y-	1	
32	TRANS POWER	LVT1	DMR-631FS	5EPV035303	1	
33	WIRE COPPER	J1~J5,J8,J10~13,J15,J17	1/0.52 TIN COATING	85801052GY	12	7.5mm
34	WIRE COPPER	J9,J14,J16	1/0.52 TIN COATING	85801052GY	3	10.0mm
35	WIRE COPPER	J6,J7	1/0.52 TIN COATING	85801052GY	2	12.5mm
36	WIRE FLAT	WF1	15/90 WH C	WSJ-159007	1	
37	PCB SUB	M167	82 X 161	3514321220	1	SUB PCB
38	CONNECTOR WAFER	CN101	HLEM15R-1	4CW215RBDO	1	
39	R CARBON FILM	R101, R102	1/6W 1K 5%	RD-AZ102J-	2	
40	SW ROTARY	SW101	SDB161PVB17F123636	5S10109002	1	
41	SW TACT	SW102~SW107	KPT-1115AM	5S50101Z93	6	
42	WIRE COPPER	J101	1/0.52 TIN COATING	85801052GY	1	7.5mm

## PRINTED CIRCUIT BOARD <KOG-373R0S, KOG-393R0S>

#### **1. CIRCUIT CHECK PROCEDURE**

- 1. Low Voltage Transformer check
- The low voltage transformer is located on the P.C.B.
- Measuring condition: input voltage : 230V/Frequency : 50Hz

Terminal Voltage	LOAD	NO LOAD
4-7	AC 25.8 V	AC 28.4 V

#### NOTE :

L

1. Refer to Circuit Diagram (point 4).

н 2. Secondary side voltage of the low voltage transformer changes in proportion to fluctuation of power source voltage. 

3. The allowable tolerance of the secondary voltage is within  $\pm 5\%$  of nominal voltage.

#### 2. Voltage check

#### · Key check point

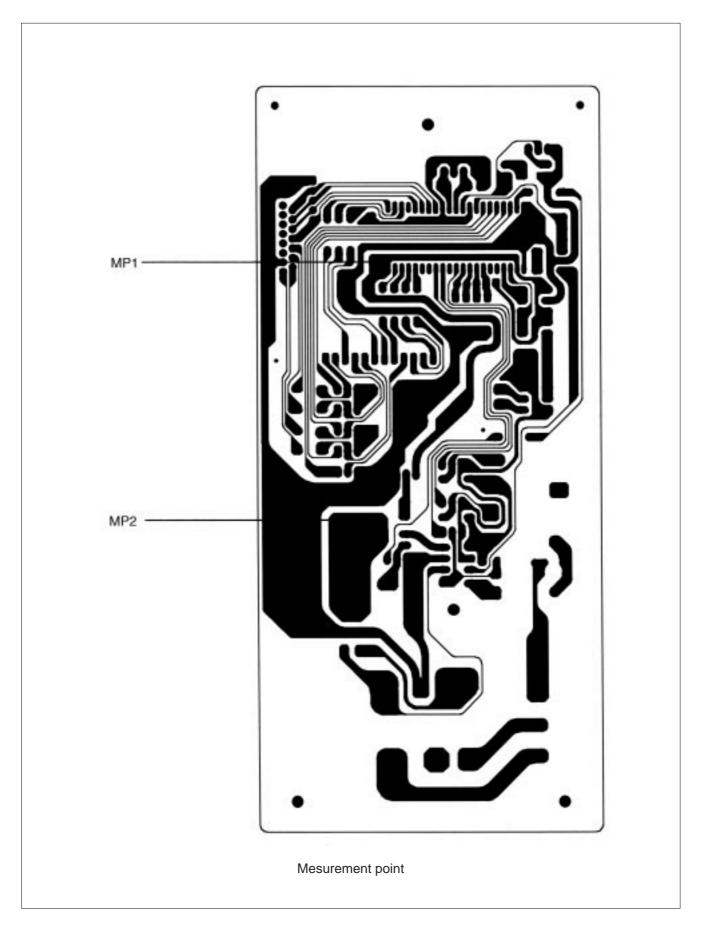
NO	CHECK POINT	REMARK
1	IC 1 PIN 2, 21, 30, 34	-5 VDC
2	IC 1 PIN 35	0V -5V T:20ms(50Hz)
3	IC 1 PIN 31 OR 32	0V -5V T: 250 ns (4MHz)

#### Check method

NO	MEASURE POINT	WAVE FORM	REMEDY	REMARK
1	MP1	DC -5V±0.25V	Replace VL1, EC1	NO LOAD
2	MP2	DC -12V±2.0V	Replace EC2, D10, D11, D12	NO LOAD

#### NOTE : I

Each measure point must be measured with GND points.



#### 3. When there is no microwave oscillation

- 1) When touching **START** pad, oven lamp does not turn on.
  - Fan motor do not rotate, but cook indicator in display comes on.
  - \* Cause : **RELAY 2** does not operate. → refer to Circuit Diagram (point 3)
  - Check method

POINT	Α	В
RELAY 2 ON	-5VDC	GND
RELAY 2 OFF	GND	-12VDC

2) When touching **START** pad, oven lamp turns on.

Fan motor and turntable rotate and cook indicator in display comes on.

\* Cause : **RELAY 1** does not operate.  $\rightarrow$  refer to Circuit Diagram (point 2)

- Check method

POINT	Α	В
RELAY 1 ON	-5VDC	GND
RELAY 1 OFF	GND	-12VDC

#### 4. When there is no grill oscillation.

\* Cause : RELAY 3 does not operate. → refer to Circuit Diagram (point 6)

- Check method

POINT	Α	В
RELAY 3 ON	-5VDC	GND
RELAY 3 OFF	GND	-12VDC

#### 5. When the door is opened during operation, the count down timer does not stop.

 $\rightarrow$  refer to Circuit Diagram (point 1)

- Check method

STATE	POINT	Α		В	
1) DOOR OPEN		OPEN		-5VDC	
2) DOOR CLOSED		CLOSE		GND	
CHECK NO	HETHC	D	REMEDY		
1	Check the stage(ON, OFF) of the switch by resistance measurem			Replace door open monitor switch.	

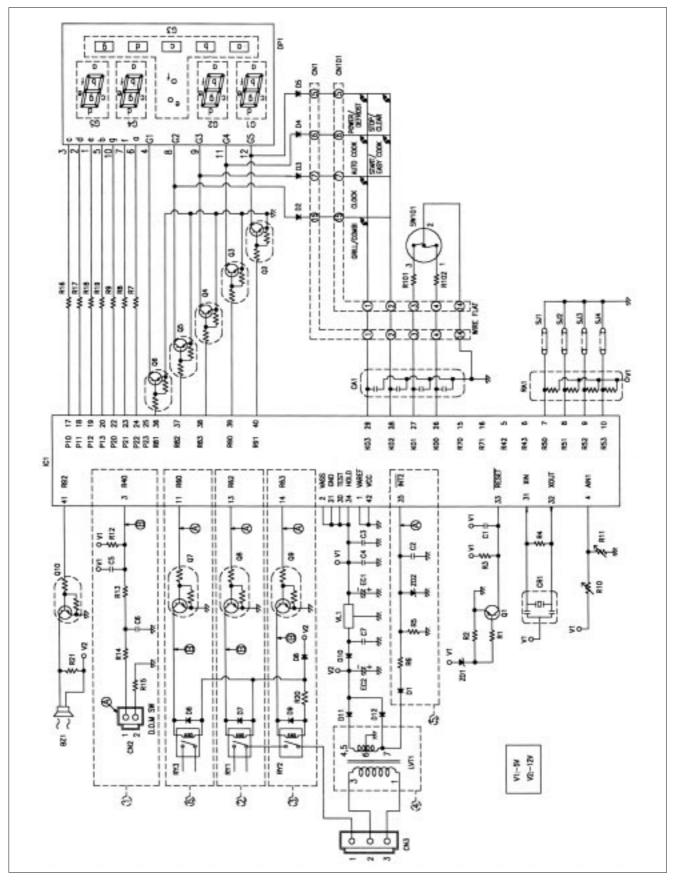
#### 6. When the digital clock does not operate properly.

→ refer to Circuit Diagram (point 5)

POINT	WAVE FORM		
A	<sup>0V</sup> -5V T: 20 ms(50Hz)		

\* If clock does not keep exact time, you must check resistor R15,16, zener diode ZD1.

#### 2. P.C.B. CIRCUIT DIAGRAM



## 3. P.C.B. LOCATION NO

(1) KOG-373R0S

NAME	NAME	SYMBOL	SPECIFICATION	PART CODE	Q'TY	REMARK
1	PCB MAIN	M169	90 X 197	3514321150	1	MAIN PCB
2	BUZZER	BZ1	BM-20K	3515600100	1	
3	C ARRAY	CA1	5P(4) 1000PF M 50V	CN4XB-102M	1	
4	CAPACITOR CERA	C4	102 50V Z AXIAL	CCZB1H102K	1	
5	CAPACITOR CERA	C1~C3, C5~C7	104 50V Z AXIAL	CCZF1H104Z	6	
6	CAPACITOR ELEC	EC1	16V RSS 100MF	CEXF1C101V	1	
7	CAPACITOR ELEC	EC2	25V RSS 1000MF	CEXF1E102V	1	
8	CONNECTOR WAFER	CN1	HLEM15S-1	4CW215SBDO	1	
9	CONNECTOR WAFER	CN2	YW396-02V	3519150520	1	
10	CONNECTOR WAFER	CN3	YW396-05AV	3519150510	1	
11	DIODE SWITCHING	D1~10	1N4148	DZN4148	10	
12	DIODE RECTIFY	D11,12	KN4004A	DZN4004A	2	
13	DIODE ZENER	ZD1	UZ-3.9SBS	DZUZ3R9BSB	1	
14	DIODE ZENER	ZD2	UZ-5.1SBS	DZUZ5R1BSB	1	
15	IC MICOM	IC1	TMP47C440BN-1A49	13GS371R00	1	
16	IC REGULATOR	VL1	MC7905C	1MC7905C	1	
17	LED DISPLAY	DP1	DDG-631H	DDDG631H	1	
18	R ARRAY	RA1	RGLD4X104J	RA-85X104J	1	
19	R CARBON FILM	R20	1/4W 27 5%	RD-4Z270J-	1	
20	R CARBON FILM	R2	1/6W 100 5%	RD-AZ101J-	1	
21	R CARBON FILM	R7~R9, R16~R19	1/6W 330 5%	RD-AZ331J-	7	
22	R CARBON FILM	R1, 10, 13, 15, 21	1/6W 1K 5%	RD-AZ102J-	5	
23	R CARBON FILM	R14	1/6W 4.7K 5%	RD-AZ472J-	1	
24	R CARBON FILM	R3, R5, R6	1/6W 10K 5%	RD-AZ103J-	3	
25	R CARBON FILM	R12	1/6W 100K 5%	RD-AZ104J-	1	
26	R CARBON FILM	R4	1/6W 1M 5%	RD-AZ105J-	1	
27	RESONATOR CERA	CR1	KBR-4.0MKSTF	5PKBR40MKS	1	
28	SW RELAY	RY1, RY3	G5G-1A 1C 1P DC12V	5SC0101121	2	
29	SW RELAY	RY2	OJ-SS-112LM DC 12V	5SC0101404	1	
30	TRANSISTOR	Q2~10	KRA-106M	TZRA106M	9	
31	TRANSISTOR	Q1	KTA-1266Y	TZTA1266Y-	1	
32	TRANS POWER	LVT1	DMR-631FS	5EPV035303	1	
33	WIRE COPPER	J3, J5~J10	1/0.52 TIN COATING	85801052GY	7	7.5mm
34	WIRE COPPER	J1, J4	1/0.52 TIN COATING	85801052GY	2	10.0mm
35	WIRE COPPER	J2	1/0.52 TIN COATING	85801052GY	1	12.5mm
36	WIRE FLAT	WF1	15/90 WH C	WSJ-159007	1	
37	PCB SUB	M170	70 X 197	3514321230	1	SUB PCB
38	CONNECTOR WAFER	CN101	HLEM15R-1	4CW215RBDO	1	
39	R CARBON FILM	R101, R102	1/6W 1K 5%	RD-AZ102J-	2	
40	SW ROTARY	SW107	SDB161PVB17F123636	5S10109002	1	
41	SW TACT	SW101~SW106	KPT-1115AM	5S50101Z93	6	
42	WIRE COPPER	J101	1/0.52 TIN COATING	85801052GY	1	10mm

### (2) KOG-393R0S

NAME	NAME	SYMBOL	SPECIFICATION	PART CODE	Q'TY	REMARK
1	PCB MAIN	M169	90 X 197	3514321150	1	MAIN PCB
2	BUZZER	BZ1	BM-20K	3515600100	1	
3	C ARRAY	CA1	5P(4) 1000PF M 50V	CN4XB-102M	1	
4	CAPACITOR CERA	C4	102 50V Z AXIAL	CCZB1H102K	1	
5	CAPACITOR CERA	C1~C3, C5~C7	104 50V Z AXIAL	CCZF1H104Z	6	
6	CAPACITOR ELEC	EC1	16V RSS 100MF	CEXF1C101V	1	
7	CAPACITOR ELEC	EC2	25V RSS 1000MF	CEXF1E102V	1	
8	CONNECTOR WAFER	CN1	HLEM15S-1	4CW215SBDO	1	
9	CONNECTOR WAFER	CN2	YW396-02V	3519150520	1	
10	CONNECTOR WAFER	CN3	YW396-05AV	3519150510	1	
11	DIODE SWITCHING	D1~10	1N4148	DZN4148	10	
12	DIODE RECTIFY	D11,12	KN4004A	DZN4004A	2	
13	DIODE ZENER	ZD1	UZ-3.9SBS	DZUZ3R9BSB	1	
14	DIODE ZENER	ZD2	UZ-5.1SBS	DZUZ5R1BSB	1	
15	IC MICOM	IC1	TMP47C440BN-1A49	13GS371R00	1	
16	IC REGULATOR	VL1	MC7905C	1MC7905C	1	
17	LED DISPLAY	DP1	DDG-631H	DDDG631H	1	
18	R ARRAY	RA1	RGLD4X104J	RA-85X104J	1	
19	R CARBON FILM	R20	1/4W 27 5%	RD-4Z270J-	1	
20	R CARBON FILM	R2	1/6W 100 5%	RD-AZ101J-	1	
21	R CARBON FILM	R7~R9, R16~R19	1/6W 330 5%	RD-AZ331J-	7	
22	R CARBON FILM	R1, 10, 13, 15, 21	1/6W 1K 5%	RD-AZ102J-	5	
23	R CARBON FILM	R14	1/6W 4.7K 5%	RD-AZ472J-	1	
24	R CARBON FILM	R3, R5, R6	1/6W 10K 5%	RD-AZ103J-	3	
25	R CARBON FILM	R12	1/6W 100K 5%	RD-AZ104J-	1	
26	R CARBON FILM	R4	1/6W 1M 5%	RD-AZ105J-	1	
27	RESONATOR CERA	CR1	KBR-4.0MKSTF	5PKBR40MKS	1	
28	SW RELAY	RY1, RY3	G5G-1A 1C 1P DC12V	5SC0101121	2	
29	SW RELAY	RY2	OJ-SS-112LM DC 12V	5SC0101404	1	
30	TRANSISTOR	Q2~10	KRA-106M	TZRA106M	9	
31	TRANSISTOR	Q1	KTA-1266Y	TZTA1266Y-	1	
32	TRANS POWER	LVT1	DMR-631FS	5EPV035303	1	
33	WIRE COPPER	J3, J5~J10, SJ1	1/0.52 TIN COATING	85801052GY	8	7.5mm
34	WIRE COPPER	J1, J4	1/0.52 TIN COATING	85801052GY	2	10.0mm
35	WIRE COPPER	J2	1/0.52 TIN COATING	85801052GY	1	12.5mm
36	WIRE FLAT	WF1	15/90 WH C	WSJ-159007	1	
37	PCB SUB	M170	70 X 197	3514321230	1	SUB PCB
38	CONNECTOR WAFER	CN101	HLEM15R-1	4CW215RBDO	1	
39	R CARBON FILM	R101, R102	1/6W 1K 5%	RD-AZ102J-	2	
40	SW ROTARY	SW107	SDB161PVB17F123636	5S10109002	1	
41	SW TACT	SW101~SW106	KPT-1115AM	5S50101Z93	6	
42	WIRE COPPER	J101	1/0.52 TIN COATING	85801052GY	1	10mm

## EXPLODED VIEW AND PARTS LIST <KOG-371G/H/R0S, KOG-391G/H/R0S>

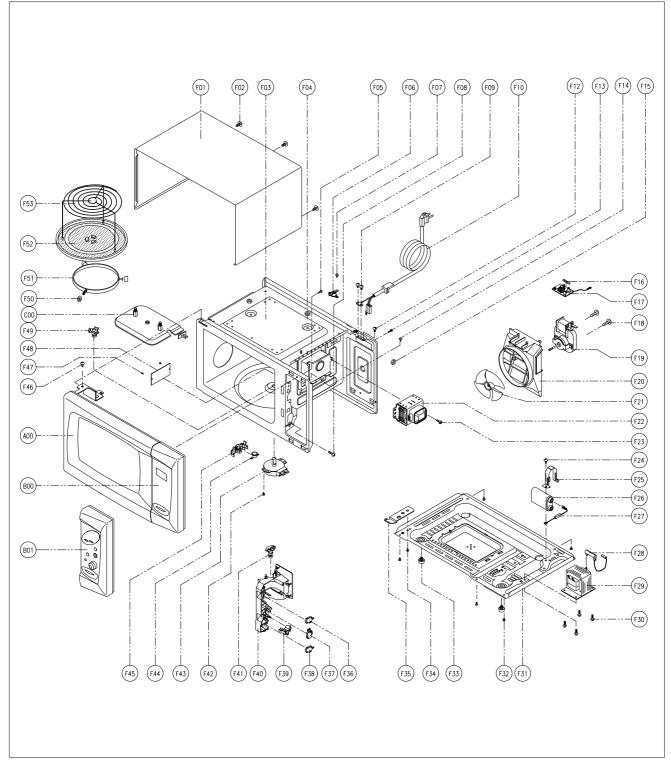
### 1. DOOR ASSEMBLY

Refer to Disassembly and assembly

## 2. CONTROL PANEL ASSEMBLY

Refer to Disassembly and assembly

## **3. TOTAL ASSEMBLY**



### (1) KOG-371G0S/371H0S/371R0S

REF NO	PART CODE	PART NAME	DESCRIPTION	Q'TY
A00	3511710300	DOOR AS	KOG-63150S	1
B00	3516721610	CONTROL PANEL AS	KOG-371G0S	1
	3516721600	CONTROL PANEL AS	KOG-371H0S	1
B01	3516721630	CONTRON PANEL AS	KOG-371R0S	1
F01	3510801310	CABINET	SECC	1
F02	7112401011	SPECIAL SCREW	T1 TRS 4X10 MFZN	3
F03	3516109610	CAVITY AS	CAVITY AS	1
F04	7392500008	NUT HEX	6N-2-5	2
F05	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1
F06	3518904500	THERMOSTAT	OFF : 100 ON : 90 HN #187	1
F07	7121300611	SCREW TAPPING	T2S PAN 3X6 MFZN	1
F08	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1
F09	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	2
F10	35113A5QJ5	CORD POWER AS	3X1.5 80X80 120-RTML 1.4M	1
F12	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	1
F13	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1
F14	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	1
F15	7S627W50X1	NUT HEX	NUT FLANGE M5X0.8P MFZN	1
F16	4414A25110	FUSE	250V 15A 65TS	1
-	4414A25100	FUSE	250V 15A MDA15	1
F17	3518606100	NOISE-FILTER	DWLF-M13	1
F18	7121402511	SCREW TAPPING	T2S PAN 4X25 MFZN	2
F19	3963513100	MOTOR SHADED POLE	230V 17W OEM-10DWC2-A07	1
	3963512310	MOTOR SHADED POLE	230V 20W MW10CA-M02	1
F20	3512517000	GUIDE WIND	PP	1
F21	3511800300	FAN	PP+30% GLASS	1
F22	3518002200	MAGNETRON	2M218H(MF)	1
F23	3516004000	SPECIAL SCREW	T2 BOLT FLANGE 5X12 DACRO	1
F24	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 SE MFZN	1
F25	3513003200	HOLDER HV CAPACITOR	SECC	1
F26	3518302200	CAPACITOR HV	2100VAC 0.98µF #187	1
F27	3518400400	DIODE HV	HVR-1X-3AB 12KV #187	1
F28	3518701100	FUSE HV	5KV 0.55A HV-41A55-02	1
F29	3518113700	TRANS HV	DY-N80S0-63T	1
F30	3516003700	SPECIAL SCREW	TT3 HEX 4X8 FLG MFZN	4
F31	3510311700	BASE	SBHG	1
F32	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	5

REF NO	PART CODE	PART NAME	DESCRIPTION	Q'TY
F33	3512100900	FOOT	PP DASF-130	2
F34	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 MFZN	1
F35	3515201101	STOPPER HINGE *U	SCP-1	1
F36	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	1
F37	4415A66910	SW MICRO	VP-531A-OF/SZM-V16-FA-61	1
F38	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	2
F39	3513702600	LEVER LOCK	РОМ	1
F40	3513811700	LOCK	POM	1
F41	3513601600	LAMP	BL 240V 25W T25 C7A H187	1
F42	7112401011	SCREW TAPPING	T2 TRS 4X10 MFZN	1
F43	3966310100	MOTOR SYNCRO	220V 2.5W GM-16-24FD12	1
-	3966310110	MOTOR SYNCRO	220V 2.5W M2LJ49ZT52	1
F44	3518905300	THERMOSTAT	OFF: 75 ON: 65 H #187 NB	1
F45	3513003400	HOLDER THERMOSTAT	PBT	1
F46	7272400811	SCREW TAPTITE	TT3 TRS 4X8 MFZN	1
F47	4078502031	BUTTON LOCKING	PP HONAM A353	2
F48	3511405100	COVER WAVE GUIDE	MICA	1
F49	3517400620	COUPLER	XAREC	1
F50	3514700710	ROLLER	TEFLON	3
F51	3512517300	GUIDE ROLLER	PP 5113MF6 A353B	1
	3512517500	GUIDE ROLLER AS	KOR-63150S	1
F52	3517203600	TRAY	GLASS	1
F53	3517206900	TRAY RACK AS	KOG-37150S 110MM	1

### (2) KOG-391G0S/391H0S/391R0S

REF NO	PART CODE	PART NAME	DESCRIPTION	Q'TY
A00	3511710700	DOOR AS	KOR-86150S	1
B00	3516721700	CONTROL PANEL AS	KOG-391G0S	1
-	3516721710	CONTROL PANEL AS	KOG-391H0S	1
B01	3516721730	CONTROL PANEL AS	KOG-391R0S	1
F01	3510801400	CABINET	SECC	1
F02	7112401011	SPECIAL SCREW	T1 TRS 4X10 MFZN	3
F03	351609910	CAVITY AS	CAVITY AS	1
F04	7392500008	NUT HEX	6N-2-5	2
F05	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1
F06	3518904500	THERMOSTAT	OFF : 100 ON : 90 HN #187	1
F07	7121300611	SCREW TAPPING	T2S PAN 3X6 MFZN	1
F08	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1
F09	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	2
F10	35113A5QJ5	CORD POWER AS	3X1.5 80X80 120-RTML 1.4M	1
F12	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	1
F13	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1
F14	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	1
F15	7S627W50X1	NUT HEX	NUT FLANGE M5X0.8P MFZN	1
F16	4414A25110	FUSE	250V 15A 65TS	1
	4414A25100	FUSE	250V 15A MDA15	1
F17	3518606100	NOISE-FILTER	DWLF-M13	1
F18	7121402511	SCREW TAPPING	T2S PAN 4X25 MFZN	2
F19	3963513100	MOTOR SHADED POLE	230V 17W OEM-10DWC2-A07	1
-	3963512310	MOTOR SHADED POLE	230V 20W MW10CA-M02	1
F20	3512517000	GUIDE WIND	PP	1
F21	3511800300	FAN	PP+30% GLASS	1
F22	3518002200	MAGNETRON	2M218H(MF)	1
F23	3516004000	SPECIAL SCREW	T2 BOLT FLANGE 5X12 DACRO	1
F24	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 SE MFZN	1
F25	3513003200	HOLDER HV CAPACITOR	SECC	1
F26	3518302200	CAPACITOR HV	2100VAC 0.98µF #187	1
F27	3518400400	DIODE HV	HVR-1X-3AB 12KV #187	1
F28	3518701100	FUSE HV	5KV 0.55A HV-41A55-02	1
F29	3518114800	TRANS HV	DY-N90S0-86T B	1
F30	3516003700	SPECIAL SCREW	TT3 HEX 4X8 FLG MFZN	4
F31	3510311900	BASE	SBHG	1
F32	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	5

REF NO	PART CODE	PART NAME	DESCRIPTION	Q'TY
F33	3512100900	FOOT	PP DASF-130	2
F34	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 MFZN	1
F35	3515201101	STOPPER HINGE *U	SCP-1	1
F36	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	1
F37	4415A66910	SW MICRO	VP-531A-OF/SZM-V16-FA-61	1
F38	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	2
F39	3513702600	LEVER LOCK	POM	1
F40	3513811700	LOCK	POM	1
F41	3513601600	LAMP	BL 240V 25W T25 C7A H187	1
F42	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	1
F43	3966310100	MOTOR SYNCRO	220V 2.5W GM-16-24FD12	1
-	3966310110	MOTOR SYNCRO	220V 2.5W M2LJ49ZT52	1
F44	3518905300	THERMOSTAT	OFF: 75 ON: 65 H #187 NB	1
F45	3513003400	HOLDER THERMOSTAT	PBT	1
F46	7272400811	SCREW TAPTITE	TT3 TRS 4X8 MFZN	1
F47	4078502031	BUTTON LOCKING	PP HONAM A353	2
F48	3511405100	COVER WAVE GUIDE	MICA	1
F49	3517400620	COUPLER	XAREC	1
F50	3514700900	ROLLER	TEFLON	3
F51	3512509210	GUIDE ROLLER	PP	1
	3512510620	GUIDE ROLLER AS	KOR-61150S	1
F52	3517203500	TRAY	GLASS	1
F53	3517206900	TRAY RACK AS	KOG-37150S 110MM	1

## EXPLODED VIEW AND PARTS LIST <KOG-376T1S, KOG-396T1S>

#### **1. DOOR ASSEMBLY**

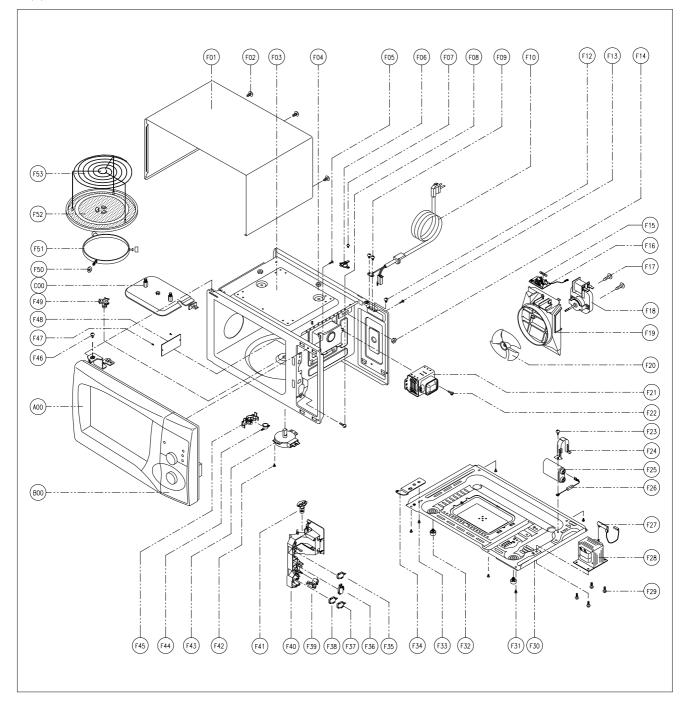
Refer to Disassembly and assembly

### 2. CONTROL PANEL ASSEMBLY

Refer to Disassembly and assembly

#### 3. TOTAL ASSEMBLY

#### (1) KOG-376T1S

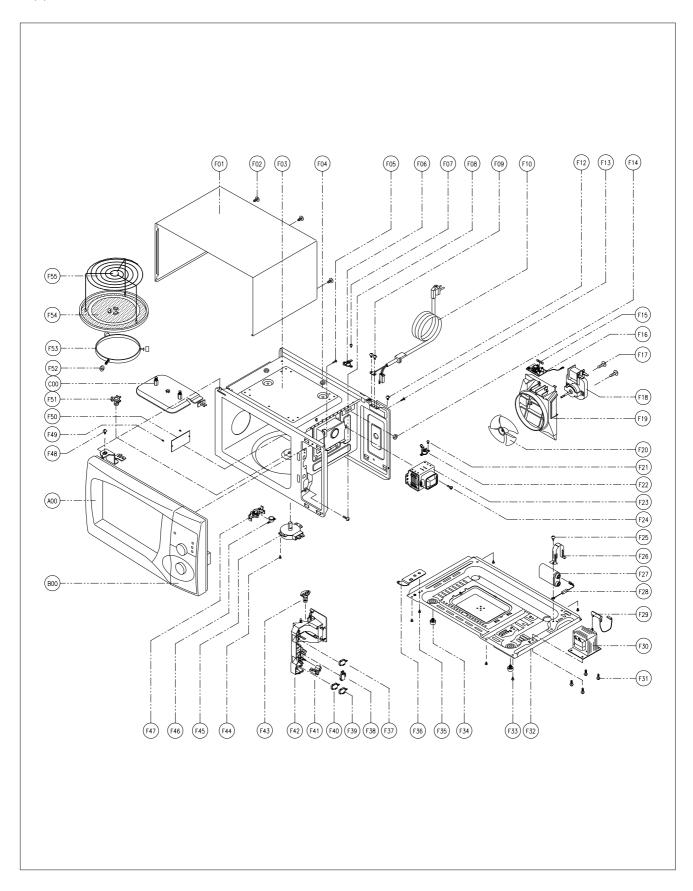


### (2) KOG-391G0S/391H0S/391R0S

REF NO	PART CODE	PART NAME	DESCRIPTION	Q'TY
A00	3511710380	DOOR AS	KOR-636T1S	1
B00	3516721620	CONTROL-PANEL AS	KOG-376T1S	1
C00	3513302700	INSULTOR HEATER AS	KOG-37150S	1
F01	3510801310	CABINET	SECC	1
F02	7112401011	SPECIAL SCREW	T1 TRS 4X10 MFZN	3
F03	3516109610	CAVITY AS	CAVITY AS	1
F04	7392500008	NUT HEX	6N-2-5	2
F05	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1
F06	3518904500	THERMOSTAT	OFF : 100 ON : 90 HN #187	1
F07	7121300611	SCREW TAPPING	T2S PAN 3X6 MFZN	1
F08	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1
F09	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	2
F10	35113A5QJ5	CORD POWER AS	3X1.5 80X80 120-RTML 1.4M	1
F12	7S312X40A1	SPECIAL SCREW	T1 TRS 4X10 SE MFZN	1
F13	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1
F14	7S627W50X1	NUT HEX	NUT FLANGE M5X0.8P MFZN	1
F15	4414A25110	FUSE	250V 15A 65TS	1
-	4414A25100	FUSE	250V 15A MDA15	1
F16	3518606100	NOISE-FILTER	DWLF-M13	1
F17	7121402511	SCREW TAPPING	T2S PAN 4X25 MFZN	2
F18	3963513100	MOTOR SHADED POLE	230V 17W OEM-10DWC2-A07	1
F19	3512517000	GUIDE WIND	PP	1
F20	3511800300	FAN	PP+30%GLASS	1
F21	3518002200	MAGNETRON	2M218H(MF)	1
F22	3516004000	SPECIAL SCREW	T2 BOLT FLANGE 5X12 DACRO	1
F23	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 SE MFZN	1
F24	3513003200	HOLDER HV CAPACITOR	SECC	1
F25	3518302200	CAPACITOR HV	2100VAC 0.98µF #187	1
F26	3518400400	DIODE HV	HVR-1X-3AB 12KV #187	1
F27	3518701100	FUSE HV	5KV 0.55A HV-41A55-02	1
F28	3518115300	TRANS HV	DW-N80S0-63T	1
F29	3516003700	SPECIAL SCREW	TT3 HEX 4X8 FLG MFZN	4
F30	3510311700	BASE	SBHG	1
F31	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	5
F32	3512100900	FOOT	PP DASF-130	2
F33	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 MFZN	1
F34	3515201101	STOPPER HINGE *U	SCP-1	1

REF NO	PART CODE	PART NAME	DESCRIPTION	Q'TY
F35	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	1
F36	4415A66910	SW MICRO	VP-531A-OF/SZM-V16-FA-61	1
F37	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	1
F38	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	1
F39	3513702610	LEVER LOCK	РОМ	1
F40	3513811710	LOCK	РОМ	1
F41	3513601600	LAMP	BL 240V 25W T25 C7A H187	1
F42	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	1
F43	3966310100	MOTOR SYNCRO	220V 2.5W GM-16-24FD12	1
F44	3518905300	THERMOSTAT	OFF: 75 ON: 65 H #187 NB	1
F45	3513003400	HOLDER THERMOSTAT	PBT	1
F46	3516003700	SPECIAL SCREW	TT3 TRS 4X8 FLG MFZN	1
F47	4078502031	BUTTON LOCKING	PP HONAM A353	2
F48	3511405100	COVER WAVE GUIDE	MICA	1
F49	3517400620	COUPLER	XAREC	1
F50	3514700710	ROLLER	TEFLON	3
F51	3512517300	GUIDE ROLLER	PP 5113MF6 A353B	1
	3512517500	GUIDE ROLLER AS	KOR-63150S	1
F52	3517503600	TRAY	GLASS	1
F53	3517206900	TRAY RACK AS	KOG-37150S 110MM	1

### (2) KOG-396T1S



## (1) KOG-396T1S

NO.	PART CODE	PART NAME	DESCRIPTION	SUPPLY	REMARK
A00	Refer to 6.	DOOR AS	Refer to 6. Disassembly and	0	
B00	Disassembly and	CONTROL-PANEL AS	assembly	0	
C00	assembly	INSULATOR HEATER AS		0	
F01	3510801310	CABINET	SECC	0	
F02	7112401011	SPECIAL SCREW	T1 TRS 4X10 MFZN	0	
F03	3516109910	CAVITY AS	KOG-37150S	0	
F04	7392500008	NUT HEX	6N-2-5	0	
F05	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	0	
F06	3518904500	THERMOSTAT	OFF:100 ON:90 HN #187	0	
F07	7121300611	SCREW TAPPING	T2S PAN 3X6 MFZN	0	
F08	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	0	
F09	7272400811	SCREW TAPTITE	TT3 TRS 4X8 MFZN	0	
F10	35113A5QJ5	CORD POWER AS	3X1.5 80X70 120-RTML	0	
F12	7272400811	SCREW TAPTITE	TT3 TRS 4X8 MFZN	0	
F13	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	0	
F14	7S627W50X1	NUT HEX	NUT FL M5X0.8P MFZN	0	
F14	4414A25110	FUSE	250V 15A 65TS	0	
FIJ	4414A25100	FUSE	250V 15A 0513	0	
F16		NOISE-FILTER		0	
	3518606100		DWLF-M13		
F17	7121402511	SCREW TAPPING	T2S PAN 4X25 MFZN	0	
F18	3963513100	MOTOR SHADED POLE	230V 17W OEM-10DWC2-A07	0	
= 10	3963512310	MOTOR SHADED POLE	230V 20W MW10CA-M02	-	
F19	3512517000	GUIDE WIND	PP	0	
F20	3511800300	FAN	PP+30% GLASS	0	
F21	7121300611	SCREW TAPPING	T2S PAN 3X6 MFZN	0	
F22	3518903400	THERMOSTAT	OFF:150 ON:60 V #187	0	
F23	3518002200	MAGNETRON	2M218H (MF)	0	
F24	3516004000	SPECIAL SCREW	T2 BOLT FL 5X12 DACRO	0	
F25	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 MFZN	0	
F26	3513003200	HOLDER HV CAPACITOR	SECC	0	
F27	3518302200	CAPACITOR HV	2100VAC 0.98µF #187	0	
F28	3518400400	DIODE HV	HVR-1X-3AB 112KV #187	0	
F29	3518701100	FUSE HV	5KV 0.55A HV-41A55-02 #187	0	
F30	3518114800	TRANS HV	DY-N90S0-86TB	0	
F31	3516003700	SPECIAL SCREW	TT3 HEX 4X8 SE MFZN	0	
F32	3510311900	BASE	SBHG	0	
F33	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	0	
F34	3512100900	FOOT	PP DASF-130	0	
F35	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 MFZN	0	
F36	3515201101	STOPPER HINGE*U	SCP-1	0	
F37	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	0	PRIMARY
F38	4415A66910	SW MICRO	VP-531A-OF/SZM-V16-FA-61	0	MONITOR
F39/F40		SW MICRO	VP-533A-OF SPNO #187 200G	0	SECONDARY
F41	3513702610	LEVER LOCK	POM	0	JEGONDANT
F41	3513702010	LOCK	POM	0	
F42	3513601600	LAMP	BL 240V 25W T25 C7A H187	0	
F43	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	0	
F44 F45			220V 2.5 GM-16-24FD12	0	
	3966310100	MOTOR SYNCRO			
F46	3518905600	THERMOSTAT	OFF:80 ON:50 #187 NB	0	
F47	3513003400	HOLDER THERMOSTAT	PBT	0	
F48	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 SE MFZN	0	
F49	4078502031	BUTTON LOCKING	PP	0	
F50	3511405100	COVER WAVE GUIDE	MICA	0	
F51	3517400620	COUPLER	XAREC	0	
F52	3514700900	ROLLER	TEFLON	Х	
F53	3512509210	GUIDE ROLLER	PP	Х	
	3512510620	GUIDE ROLLER AS	KOR-61152S	0	
F54	3517203500	TRAY	GLASS	0	
F55	3517206900	TRAY RACK AS	KOG-37150S 110MM	0	

## EXPLODED VIEW AND PARTS LIST <KOG-374R0S>

#### 1. DOOR ASSEMBLY

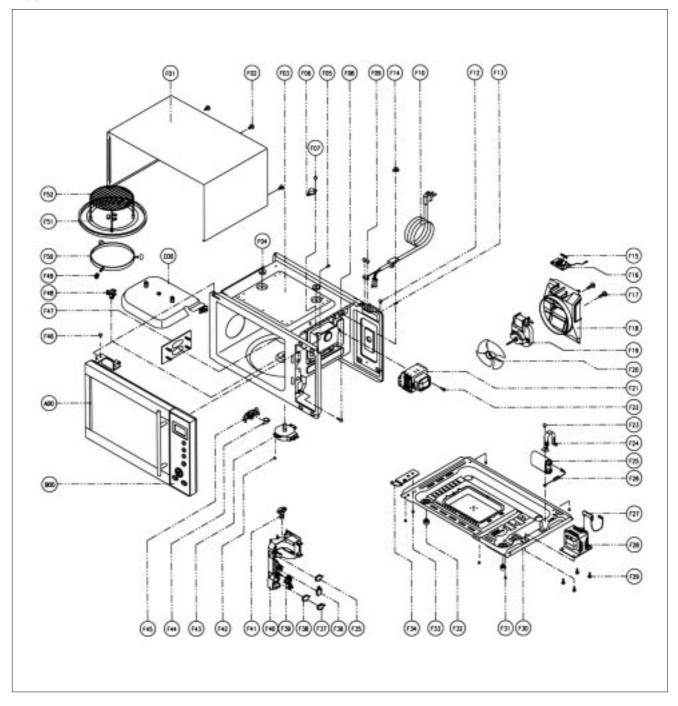
Refer to Disassembly and assembly

## 2. CONTROL PANEL ASSEMBLY

Refer to Disassembly and assembly

## **3. TOTAL ASSEMBLY**

(1) KOG-374R0S



## (1) KOG-374R0S

NO.	PART CODE	PART NAME	DESCRIPTION	SUPPLY	REMARK
A00	Refer to 6.	DOOR AS	Defende C. Disessembly and	0	
B00	Disassembly and	CONTROL-PANEL AS	Refer to 6. Disassembly and assembly	0	
C00	assembly	INSULATOR HEATER AS	assembly	0	
F01	3510801310	CABINET	SECC	0	
F02	7112401011	SPECIAL SCREW	T1 TRS 4X10 MFZN	0	
F03	3516109610	CAVITY AS	KOG-37150S	0	
F04	7392500008	NUT HEX	6N-2-5	0	
F05	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	0	
F06	3518904500	THERMOSTAT	OFF:100 ON:90 HN #187	0	
F07	7121300611	SCREW TAPPING	T2S PAN 3X6 MFZN	0	
F08	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	0	
F09	7272400811	SCREW TAPTITE	TT3 TRS 4X8 MFZN	0	
F10	35113A5QJ5	CORD POWER AS	3X1.5 80X70 120-RTML	0	
F12	7272400811	SCREW TAPTITE	TT3 TRS 4X8 MFZN	0	
F13	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	0	
F14	7S627W50X1	NUT HEX	NUT FL M5X0.8P MFZN	0	
= 1 =	4414A25110	FUSE	250V 15A 65TS	0	
F15	4414A25100	FUSE	250V 15A MDA		
F16	3518606100	NOISE-FILTER	DWLF-M13	0	
F17	7121402511	SCREW TAPPING	T2S PAN 4X25 MFZN	0	
F18	3512517000	GUIDE WIND	PP	0	
	3963513100	MOTOR SHADED POLE	230V 17W OEM-10DWC2-A07	0	
F19	3963512310	MOTOR SHADED POLE	230V 20W MW10CA-M02		
F20	3511800300	FAN	PP+30% GLASS	0	
F21	3518002200	MAGNETRON	2M218H (MF)	0	
F22	3516004000	SPECIAL SCREW	T2 BOLT FL 5X12 DACRO	0	
F23	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 MFZN	0	
F24	3513003200	HOLDER HV CAPACITOR	SECC	0	
F25	3518302200	CAPACITOR HV	2100VAC 0.98µF #187	0	
F26	3518400400	DIODE HV	HVR-1X-3AB 112KV #187	0	
F27	3518701100	FUSE HV	5KV 0.55A HV-41A55-02 #187	0	
F28	3518113700	TRANS HV	DY-N80S0-63T	0	
F29	3516003700	SPECIAL SCREW	TT3 HEX 4X8 MFZN	0	
F30	3510311700	BASE	SBHG	0	KOG-37150S
F31	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	0	
F32	3512100900	FOOT	PP DASF-130	0	
F33	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 MFZN	0	
F34	3515201101	STOPPER HINGE*U	SCP-1	0	
F35	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	0	PRIMARY
F36	4415A66910	SW MICRO	VP-531A-OF/SZM-V16-FA-61	0	MONITOR
F37/F38	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	0	SECONDARY
F39	3513702610	LEVER LOCK	POM	0	OLOONDART
F40	3513811710	LOCK	POM	0	
F41	3513601600	LAMP	BL 240V 25W T25 C7A H187	0	
F41	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	0	
F42	3966310100	MOTOR SYNCRO	220V 2.5 GM-16-24FD12	0	
F43	3518905300	THERMOSTAT	OFF:75 ON:65 #187 NB	0	
F44 F45	3513003400	HOLDER THERMOSTAT	PBT	0	
F45	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 SE MFZN	0	
F40	3511405100	COVER WAVE GUIDE	MICA	0	
F47	3517400620	COUPLER	XAREC	0	
F48 F49	3517400620	ROLLER	TEFLON	X	
F49		GUIDE ROLLER	PP 5113MF6 A353B	X	
F50	3512517300		KOR-63150S	0 X	
E51	3512517500	GUIDE ROLLER AS TRAY		-	
F51 F52	3517203600		GLASS	0	
го2	3517206900	TRAY RACK AS	KOG-37150S 110MM	0	

## EXPLODED VIEW AND PARTS LIST <KOG-375R0S>

#### 1. DOOR ASSEMBLY

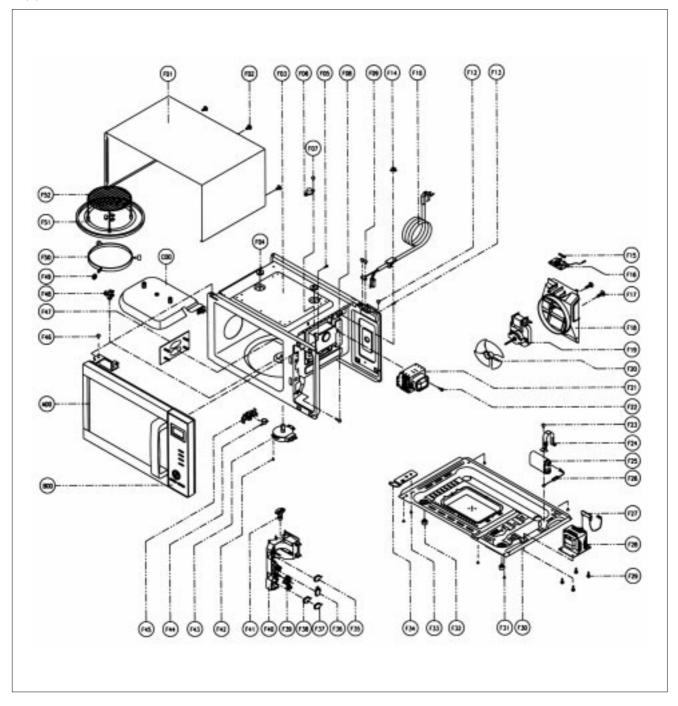
Refer to Disassembly and assembly

## 2. CONTROL PANEL ASSEMBLY

Refer to Disassembly and assembly

## **3. TOTAL ASSEMBLY**

(1) KOG-375R0S



## (1) KOG-375R0S

NO.	PART CODE	PART NAME	DESCRIPTION	SUPPLY	REMARK
A00	Refer to 6.	DOOR AS		0	
B00	Disassembly and	CONTROL-PANEL AS	Refer to 6. Disassembly and	0	
C00	assembly	INSULATOR HEATER AS	assembly	0	
F01	3510801310	CABINET	SECC	0	
F02	7112401011	SPECIAL SCREW	T1 TRS 4X10 MFZN	0	
F03	3516109610	CAVITY AS	KOG-37150S	0	
F04	7392500008	NUT HEX	6N-2-5	0	
F05	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	0	
F06	3518904500	THERMOSTAT	OFF:100 ON:90 HN #187	0	
F07	7121300611	SCREW TAPPING	T2S PAN 3X6 MFZN	0	
F08	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	0	
F09	7272400811	SCREW TAPTITE	TT3 TRS 4X8 MFZN	0	
F10	35113A5QJ5	CORD POWER AS	3X1.5 80X70 120-RTML	0	
F12	7272400811	SCREW TAPTITE	TT3 TRS 4X8 MFZN	0	
F13	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	0	
F14	7S627W50X1	NUT HEX	NUT FL M5X0.8P MFZN	0	
	4414A25110	FUSE	250V 15A 65TS	0	
F15	4414A25100	FUSE	250V 15A MDA	0	
F16	3518606100	NOISE-FILTER	DWLF-M13	0	
F17	7121402511	SCREW TAPPING	T2S PAN 4X25 MFZN	0	
F18	3512517000	GUIDE WIND	PP	0	
110	3963513100	MOTOR SHADED POLE	230V 17W OEM-10DWC2-A07	0	
F19	3963512310	MOTOR SHADED POLE	230V 20W MW10CA-M02	0	
F20	3511800300	FAN	PP+30% GLASS	0	
F21	3518002200	MAGNETRON	2M218H (MF)	0	
F21	3516004000	SPECIAL SCREW	T2 BOLT FL 5X12 DACRO	0	
F22	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 MFZN	0	
F23	3513003200	HOLDER HV CAPACITOR	SECC	0	
F24	3518302200	CAPACITOR HV	2100VAC 0.98µF #187	0	
F26	3518400400	DIODE HV	HVR-1X-3AB 112KV #187	0	
F20	3518701100	FUSE HV	5KV 0.55A HV-41A55-02 #187	0	
F27	3518113700	TRANS HV	DY-N80S0-63T	0	
F20	3516003700	SPECIAL SCREW	TT3 HEX 4X8 MFZN	0	
F30	3510003700	BASE	SBHG	0	KOG-37150S
F30	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	0	KUG-371503
F32	3512100900	FOOT	PP DASF-130	0	
F32	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 MFZN	0	
F33	3515201101	STOPPER HINGE*U	SCP-1	0	
F34		SW MICRO	VP-533A-OF SPNO #187 200G	0	PRIMARY
F35	4415A17352 4415A66910	SW MICRO	VP-533A-OF SPNO #187 200G VP-531A-OF/SZM-V16-FA-61	0	MONITOR
F37/F38	4415A66910 4415A17352	SW MICRO	VP-533A-OF/SZIVI-V16-FA-61 VP-533A-OF SPNO #187 200G	0	SECONDARY
F39	3513702610	LEVER LOCK	POM	0	JECONDART
F39 F40	3513702610	LOCK	POM	0	
F40	3513601600	LAMP	BL 240V 25W T25 C7A H187	0	
F41	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	0	
F42	3966310100	MOTOR SYNCRO	220V 2.5 GM-16-24FD12	0	
F43	3518905300	THERMOSTAT	OFF:75 ON:65 #187 NB	0	
F44	3513003400	HOLDER THERMOSTAT	PBT	0	
F45 F46	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 SE MFZN	0	
F40 F47	3511405100	COVER WAVE GUIDE	MICA	0	
F47		COUPLER	XAREC	0	
F48 F49	3517400620	ROLLER	TEFLON	X	
1749	3514700710	GUIDE ROLLER	PP 5113MF6 A353B	X	
F50	3512517300				
	3512517500	GUIDE ROLLER AS	KOR-63150S GLASS	0	
F51	3517203600				
F52	3517206900	TRAY RACK AS	KOG-37150S 110MM	0	

# EXPLODED VIEW AND PARTS LIST <KOG-373R0S, KOG-393R0S>

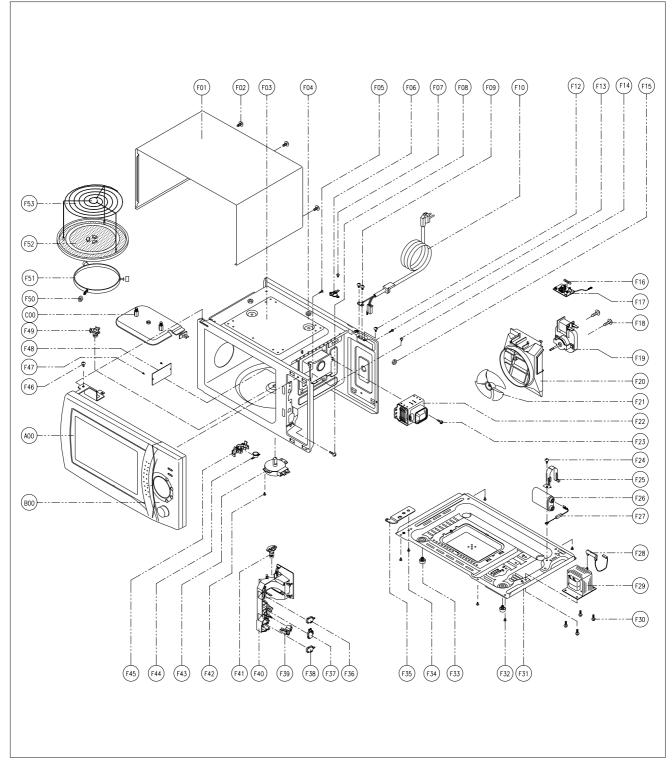
#### 1. DOOR ASSEMBLY

Refer to Disassembly and assembly

### 2. CONTROL PANEL ASSEMBLY

Refer to Disassembly and assembly

## **3. TOTAL ASSEMBLY**



### (1) KOG-373R0S

REF NO	PART CODE	PART NAME	DESCRIPTION	Q'TY
A00	3511712170	DOOR AS	KOG-63350S	1
B00	PKCPSWZ600	CONTROL PANEL AS	KOG-373R0S	1
C00	3513302700	HEATER AS	KOG-37150S	1
F01	3510801310	CABINET	SECC	1
F02	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	3
F03	3516109610	CAVITY AS	CAVITY AS	1
F04	7392500008	NUT HEX	6N-2-5	2
F05	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1
F06	3518904500	THERMOSTAT	OFF : 100 ON : 90 HN #187	1
F07	7121300611	SCREW TAPPING	T2S PAN 3X6 MFZN	1
F08	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1
F09	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	2
F10	35113A5QJ5	CORD POWER AS	3X1.5 80X80 120-RTML 1.4M	1
F12	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	1
F13	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1
F14	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	1
F15	7S627W50X1	NUT HEX	NUT FLANGE M5X0.8P MFZN	1
F16	4414A25110	FUSE	250V 15A 65TS	1
	4414A25100	FUSE	250V 15A MDA15	1
F17	3518606100	NOISE-FILTER	DWLF-M13	1
F18	7121402511	SCREW TAPPING	T2S PAN 4X25 MFZN	2
F19	3963513100	MOTOR SHADED POLE	230V 17W OEM-10DWC2-A07	1
	3963512310	MOTOR SHADED POLE	230V 20W MW10CA-M02	1
F20	3512517000	GUIDE WIND	PP	1
F21	3511800300	FAN	PP+30% GLASS	1
F22	3518002200	MAGNETRON	2M218H(MF)	1
F23	3516004000	SPECIAL SCREW	T2 BOLT FLANGE 5X12 DACRO	1
F24	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 SE MFZN	1
F25	3513003200	HOLDER HV CAPACITOR	SECC	1
F26	3518302200	CAPACITOR HV	2100VAC 0.98µF #187	1
F27	3518400400	DIODE HV	HVR-1X-3AB 12KV #187	1
F28	3518701100	FUSE HV	5KV 0.55A HV-41A55-02	1
F29	3518113700	TRANS HV	DY-N80S0-63T	1
F30	3516003700	SPECIAL SCREW	TT3 HEX 4X8 FLG MFZN	4
F31	3510311700	BASE	SBHG	1
F32	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	5

REF NO	PART CODE	PART NAME	DESCRIPTION	Q'TY
F33	3512100900	FOOT	PP DASF-130	2
F34	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 MFZN	1
F35	3515201101	STOPPER HINGE *U	SCP-1	1
F36	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	1
F37	4415A66910	SW MICRO	VP-531A-OF/SZM-V16-FA-61	1
F38	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	2
F39	3513702610	LEVER LOCK	POM	1
F40	3513811710	LOCK	POM	1
F41	3513601600	LAMP	BL 240V 25W T25 C7A H187	1
F42	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	1
F43	3966310100	MOTOR SYNCRO	220V 2.5W GM-16-24FD12	1
-	3966310110	MOTOR SYNCRO	220V 2.5W M2LJ49ZT52	1
F44	3518905300	THERMOSTAT	OFF: 75 ON: 65 H #187 NB	1
F45	3513003400	HOLDER THERMOSTAT	РВТ	1
F46	7272400811	SCREW TAPTITE	TT3 TRS 4X8 MFZN	1
F47	4078502031	BUTTON LOCKING	PP HONAM A353	2
F48	3511405100	COVER WAVE GUIDE	MICA	1
F49	3517400620	COUPLER	XAREC	1
F50	3514700710	ROLLER	TEFLON	3
F51	3512517300	GUIDE ROLLER	PP 5113MF6 A353B	1
	3512517500	GUIDE ROLLER AS	KOR-63150S	1
F52	3517203600	TRAY	GLASS	1
F53	3517206900	TRAY RACK AS	KOG-37150S 110MM	1

### (2) KOG-393R0S

REF NO	PART CODE	PART NAME	DESCRIPTION	Q'TY
A00	3511712720	DOOR AS	KOR-86350S	1
B00	PKCPSWT500	CONTROL PANEL AS	KOG-393R0S	1
	3516721710	CONTROL PANEL AS	KOG-391H0S	1
C00	3513302700	HEATER AS	KOG-37150S	1
F01	3510801400	CABINET	SECC	1
F02	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	3
F03	3516109910	CAVITY AS	CAVITY AS	1
F04	7392500008	NUT HEX	6N-2-5	2
F05	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1
F06	3518904500	THERMOSTAT	OFF : 100 ON : 90 HN #187	1
F07	7121300611	SCREW TAPPING	T2S PAN 3X6 MFZN	1
F08	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1
F09	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	2
F10	35113A5QJ5	CORD POWER AS	3X1.5 80X80 120-RTML 1.4M	1
F12	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	1
F13	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1
F14	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	1
F15	7S627W50X1	NUT HEX	NUT FLANGE M5X0.8P MFZN	1
F16	4414A25110	FUSE	250V 15A 65TS	1
	4414A25100	FUSE	250V 15A MDA15	1
F17	3518606100	NOISE-FILTER	DWLF-M13	1
F18	7121402511	SCREW TAPPING	T2S PAN 4X25 MFZN	2
F19	3963513100	MOTOR SHADED POLE	230V 17W OEM-10DWC2-A07	1
	3963512310	MOTOR SHADED POLE	230V 20W MW10CA-M02	1
F20	3512517000	GUIDE WIND	PP	1
F21	3511800300	FAN	PP+30% GLASS	1
F22	3518002200	MAGNETRON	2M218H(MF)	1
F23	3516004000	SPECIAL SCREW	T2 BOLT FLANGE 5X12 DACRO	1
F24	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 SE MFZN	1
F25	3513003200	HOLDER HV CAPACITOR	SECC	1
F26	3518302200	CAPACITOR HV	2100VAC 0.98µF #187	1
F27	3518400400	DIODE HV	HVR-1X-3AB 12KV #187	1
F28	3518701100	FUSE HV	5KV 0.55A HV-41A55-02	1
F29	3518114800	TRANS HV	DY-N90S0-86T B	1
F30	3516003700	SPECIAL SCREW	TT3 HEX 4X8 FLG MFZN	4
F31	3510311900	BASE	SBHG	1
F32	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	5

REF NO	PART CODE	PART NAME	DESCRIPTION	Q'TY
F33	3512100900	FOOT	PP DASF-130	2
F34	7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 MFZN	1
F35	3515201101	STOPPER HINGE *U	SCP-1	1
F36	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	1
F37	4415A66910	SW MICRO	VP-531A-OF/SZM-V16-FA-61	1
F38	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	2
F39	3513702610	LEVER LOCK	РОМ	1
F40	3513811710	LOCK	РОМ	1
F41	3513601600	LAMP	BL 240V 25W T25 C7A H187	1
F42	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	1
F43	3966310100	MOTOR SYNCRO	220V 2.5W GM-16-24FD12	1
-	3966310110	MOTOR SYNCRO	220V 2.5W M2LJ49ZT52	1
F44	3518905300	THERMOSTAT	OFF: 75 ON: 65 H #187 NB	1
F45	3513003400	HOLDER THERMOSTAT	PBT	1
F46	7272400811	SCREW TAPTITE	TT3 TRS 4X8 MFZN	1
F47	4078502031	BUTTON LOCKING	PP HONAM A353	2
F48	3511405100	COVER WAVE GUIDE	MICA	1
F49	3517400620	COUPLER	XAREC	1
F50	3514700900	ROLLER	TEFLON	3
F51	3512509210	GUIDE ROLLER	PP	1
	3512510620	GUIDE ROLLER AS	KOR-61150S	1
F52	3517203500	TRAY	GLASS	1
F53	3517206900	TRAY RACK AS	KOG-37150S 110MM	1