

# Service Manual

## **Microwave Oven**

**Model: KQG-6L653S**

### ? **Caution**

: In this Manual, some parts can be changed for improving, their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List) in Service Information Center (<http://svc.dwe.co.kr>).

## ***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 guide 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

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## 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 and the dealer immediately.

### IMPORTANT

The wire in this mains lead coloured in accordance with the following code.

Green-and-yellow	: Each
Blue	: Neutral
Brown	: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.

The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked with the letter 'E', earth symbol or coloured green-and-yellow.

The wire which is coloured blue must be connected to the terminal which is marked with the letter 'N' or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter 'L' or coloured red.

### NOTE :

The oven is designed for counter-top use only.

# SPECIFICATIONS

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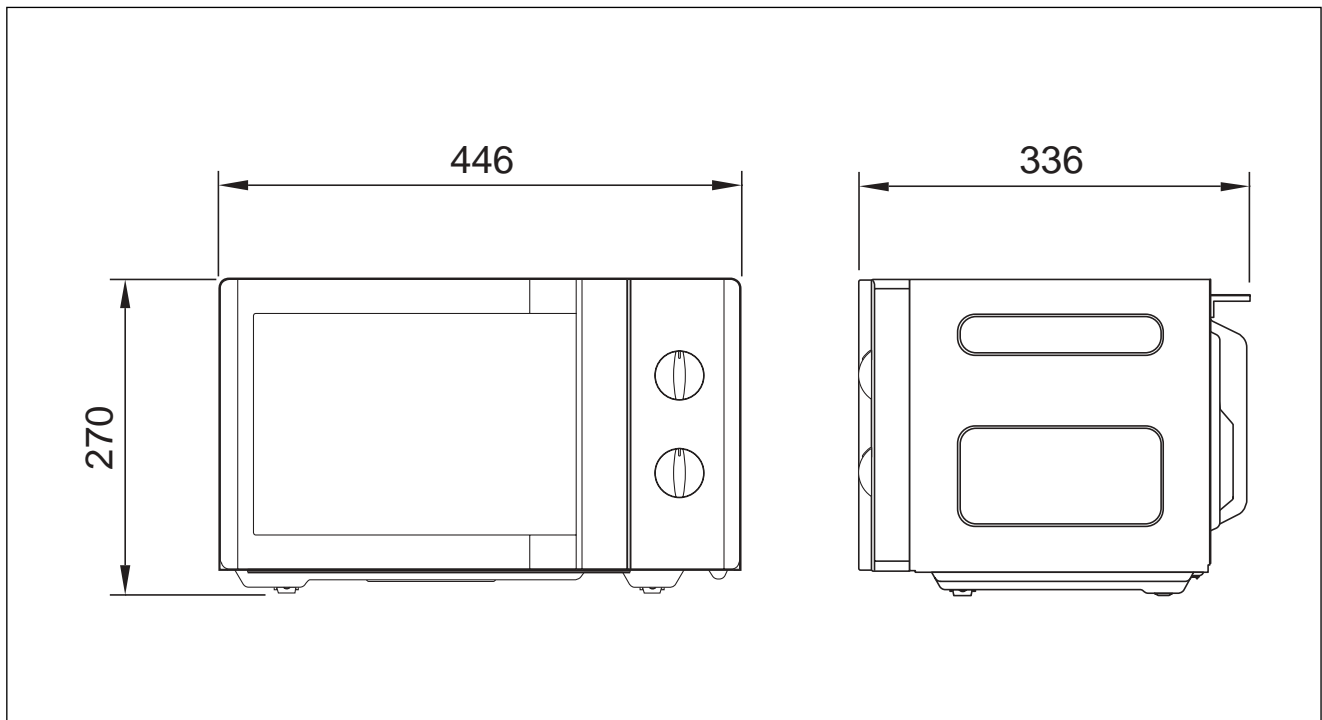
POWER SUPPLY		230V AC, 50Hz SINGLE PHASE WITH EARTHING
POWER CONSUMPTION	MICROWAVE	1100 W
	GRILL	1050 W
	COMBINATION	2200 W
MICROWAVE ENERGY OUTPUT		700W
MICROWAVE FREQUENCY		2,450MHz
OUTSIDE DIMENSIONS (WXHxD)		446 X 270 X 336mm
CAVITY DIMENSIONS (WXHxD)		295 X 194 X 303mm
NET WEIGHT		APPROX. 11.2Kg
TIMER		35 min. DUAL SPEED
POWER SELECTIONS		5 Levels

*\* Specifications are subject to change without notice.*

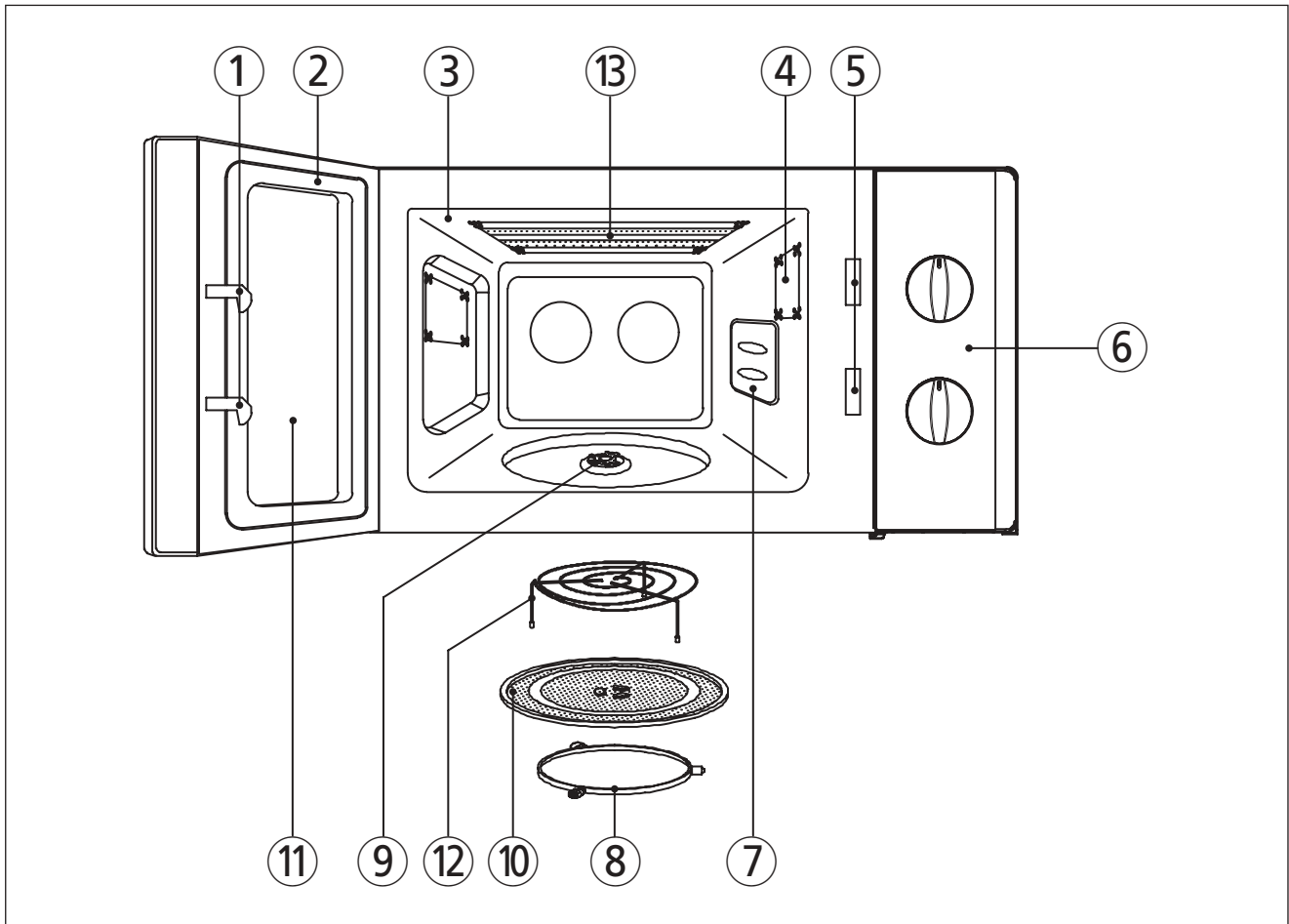
# EXTERNAL VIEW

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## 1. OUTER DIMENSION



## 2. FEATURES DIAGRAM



- ① **Door latch** - 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.
- ② **Door seal** - Door seal maintains the microwave energy within the oven cavity and prevents microwave leakage.
- ③ **Oven cavity**
- ④ **Oven lamp**
- ⑤ **Safety interlock system**
- ⑥ **Control panel**
- ⑦ **Waveguide cover** - Protects the microwave outlet from splashes of cooking foods.
- ⑧ **Roller guide** - This must always be used for cooking together with the glass cooking tray.
- ⑨ **Coupler** - This fits over the shaft in the centre of the oven's cavity floor. This is to remain in the oven for all cooking.
- 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 **Metal rack**
- ⑬ **Heating Element**

# INSTALLATION

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## 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 oven 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.

## 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 10 amperes, 230Volts, 50Hz grounded outlet.

- Power supply cord is about 1.0 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 samaged, must be repaired with cable of same type. Such a cable can be purchased from DAEWOO and must be installed by a 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 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

This section includes useful information about oven operation.

1. Connect the mains 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 and roller guide must always be in place during cooking.
3. Close the door. Make sure that it is firmly closed.

The oven door can be opened at any time during operation by pulling the door. The oven will automatically shut off.

4. Set the variable power control to the desired power level.

SYMBOL	POWER LEVEL	OUTPUT POWER
 Grill	Grill	Grill: 1000W
 ***	Defrost	MW: 230W
 Combi	Combi	Grill: 1000W / MW: 385W
	Medium high	MW: 540W
	High	MW: 700W

\* The above % can be changed within  $\pm 6\%$ .

## To set GRILL Cooking

- Set the POWER SELECTOR to the  (grill) position.

## To set COMBI Cooking

- Set the POWER SELECTOR to the  (combi) position.

5. Set the operating time by turning the timer knob to the desired cook time and the microwave cooking starts.
  - If setting the timer control for less than 2 minutes, turn it past 2 minutes and then back to the desired time.
6. Microwave energy will be turned off automatically when the timer knob reaches "OFF". Then food can be taken out of the oven.
  - To prevent the oven from operating with the door open, your microwave oven is fitted with safety door interlock switches.
  - If you wish to inspect the food while it is cooking simply open the door. The oven will automatically stop cooking. To continue cooking, you simply close the door.
  - If you wish to stop cooking, simply turn the timer knob to the "OFF" position. Cooking can be reset at any time during the cooking cycle by turning the timer control.
  - Do not let the timer continue to operate after removing or when there is no food.
7. **NOTE :** When using the GRILL or COMBI mode;
  - Do not open the door so often, the temperature inside the oven decrease 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.



# DISASSEMBLY AND ASSEMBLY

## Cautions to be observed when trouble shooting.

Unlike many other appliances, the microwave oven is high-voltage, high-current equipment.

It is completely safe 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 wear rubber gloves when servicing the high voltage side.
3. Discharge the high voltage capacitor before touching any oven components or wiring.

(1) Check the grounding.

Do not operate on a two-wire extension cord.

The microwave oven is designed to be used while earthed.

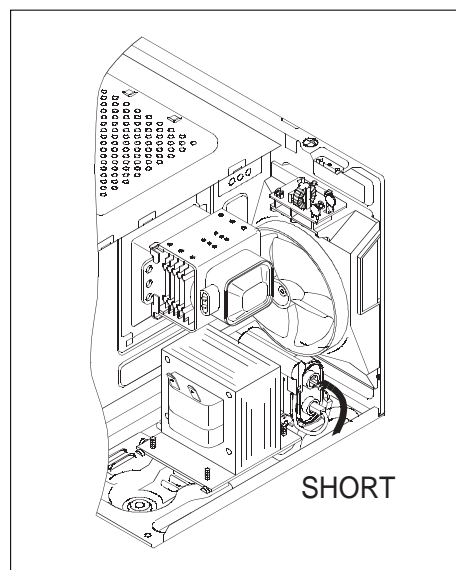
It is imperative, therefore, to make sure it is earthed properly before beginning repair work.

(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 insulated screwdriver to discharge.

4. When the fuse is blown out due to the operation of the monitor switch; replace primary interlock switch, secondary interlock switch and interlock monitor switch.
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.

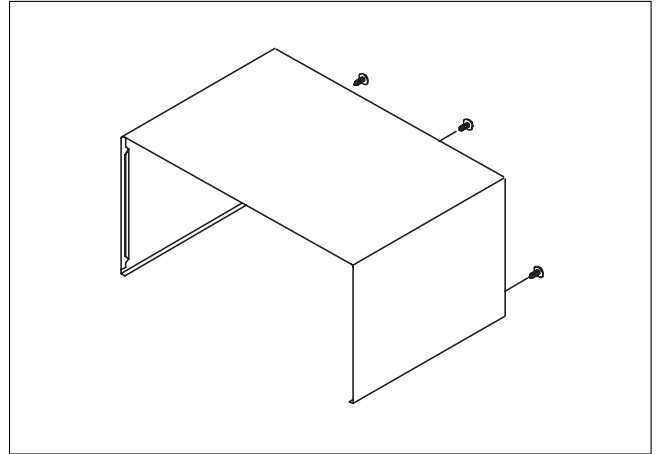


**CAUTION** : Service personnel should remove their watches whenever working close to or replacing the magnetron.

**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.

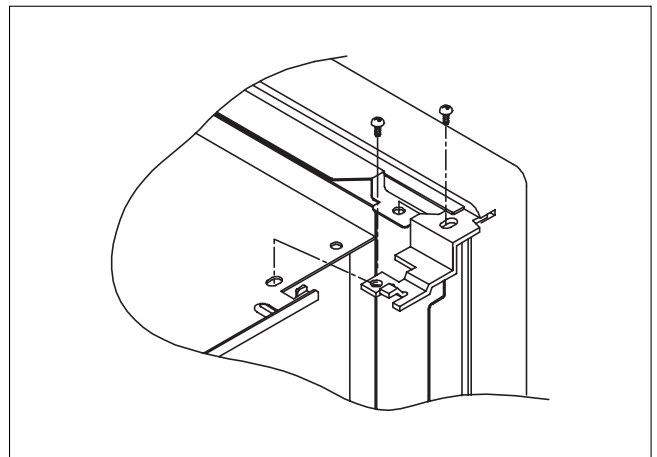
## 1. To remove cabinet

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



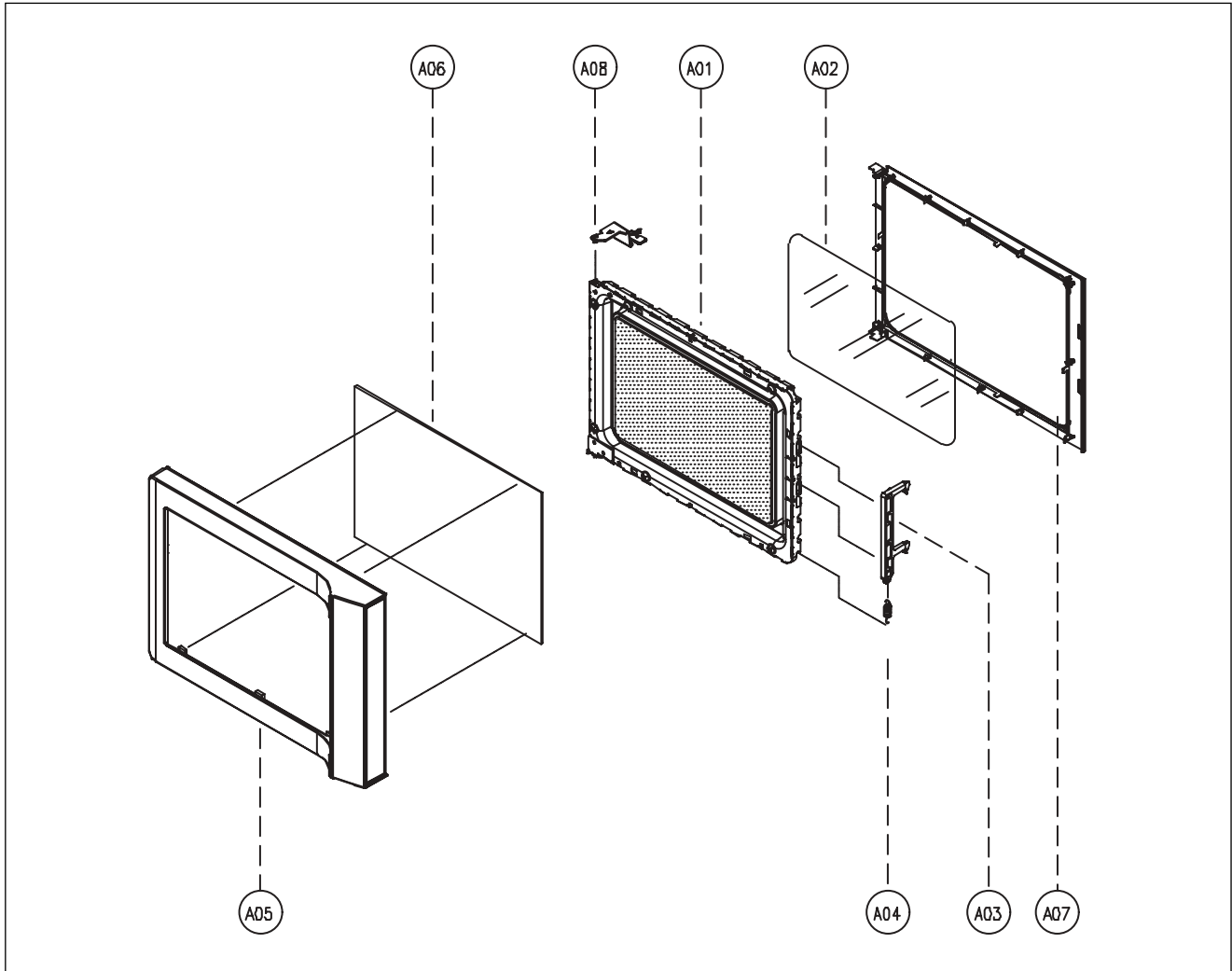
## 2. To remove door assembly

- 1) Remove two screws 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.

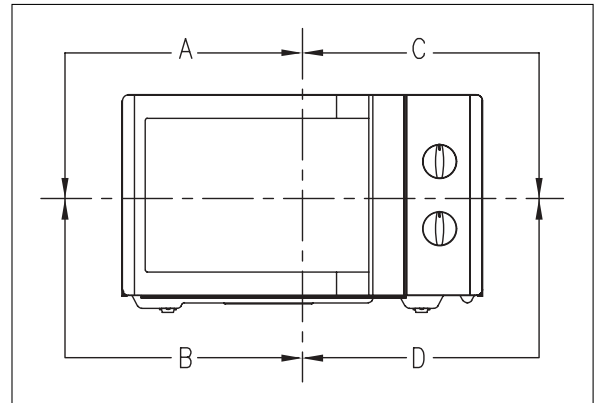


REF. NO	PART CODE	PART NAME	DESCRIPTION	Q'TY	REMARK
A01	3511706130	DOOR PAINTING AS	KOR-6L0B1A	1	
A02	3517003700	BARRIER-SCREEN *I	PE T0.1	1	
A03	3513100750	HOOK	POM	1	
A04	3515102000	SPRING HOOK	PW1	1	
A05	3512210430	FRAME DOOR	ABS SG-0760D SG-175	1	
A06	3517011020	BARRIER-SCREEN *O	TEMP GLASS T3.2	1	
A07	3512302700	GASKET DOOR	PP	1	
A08	3515204120	STOPPER HINGE *T AS	KOR-6L0B1A	1	

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

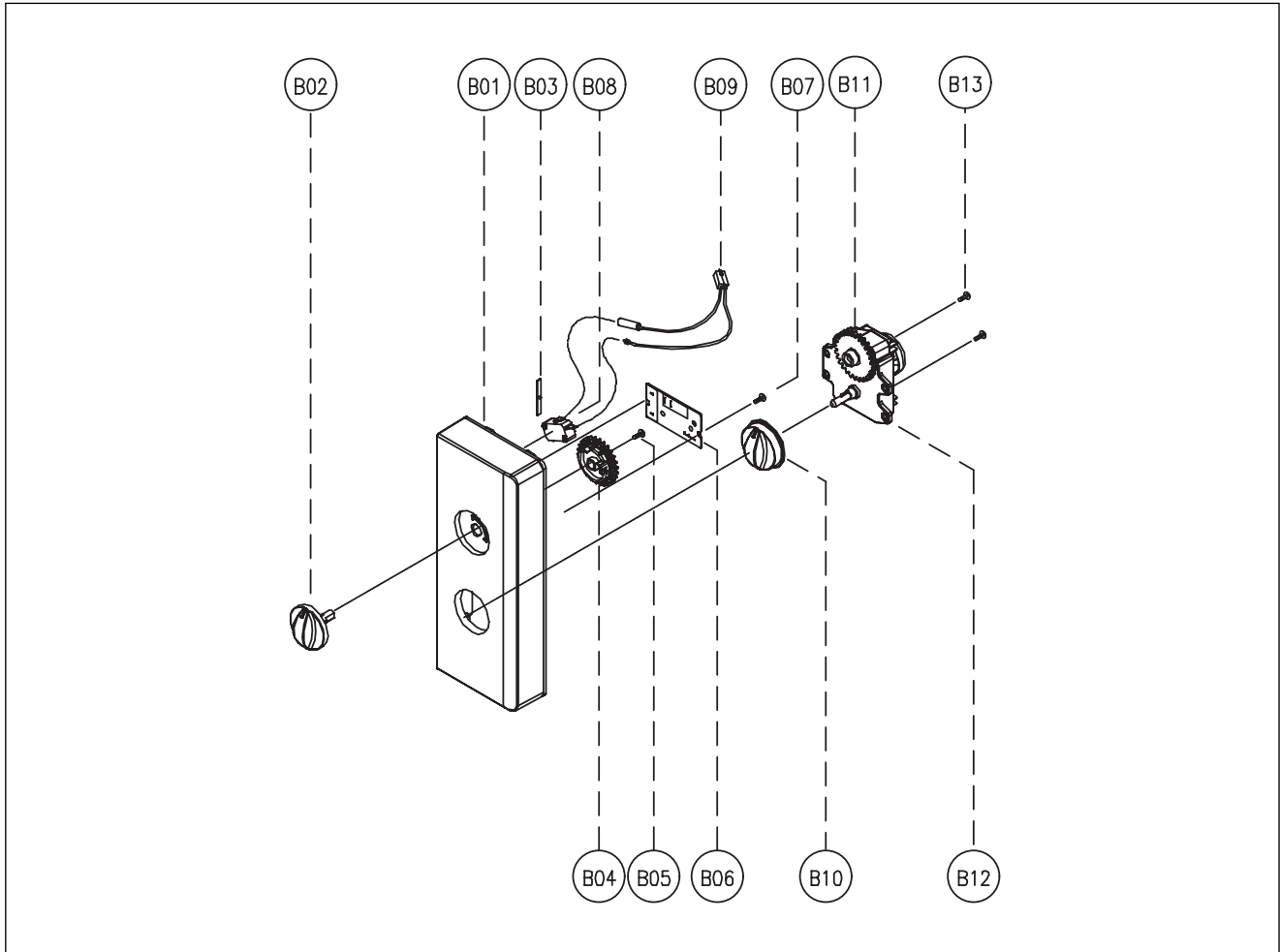
#### 4. Method to reduce the gap between the door seal and the oven front surface.

- (1) To reduce gap located on part 'A'
  - Loosen two screws on the stopper hinge top, and then push the door to contact the door seal to the oven front surface.
  - Tighten two screws.
- (2) To reduce gap located on part 'B'
  - Loosen two screws on the stopper hinge under, and then push the door to contact the door seal to the oven front surface.
  - Tighten two screws.
- (3) To reduce gap located on part 'C'
  - Loosen the screw on the interlock switch assembly located the top of the oven body.
  - Draw the interlock switch assembly inward as possible to engage with the hook on the door bottom.
  - Tighten a screw.
- (4) To reduce gap located on part 'D'
  - Loosen the screw on the interlock switch assembly located the bottom of the oven body.



**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.

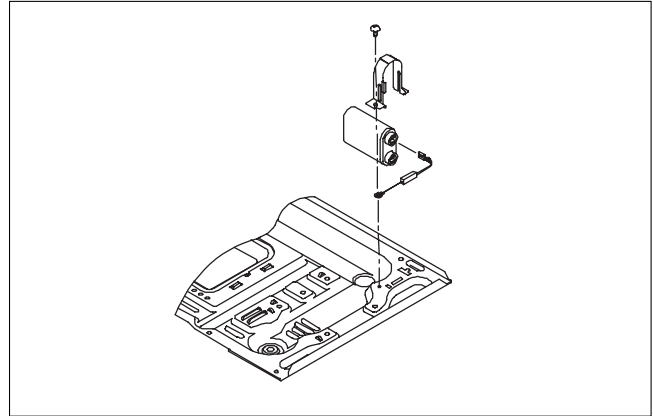


REF. NO	PART CODE	PART NAME	DESCRIPTION	Q'TY	REMARK
B01	3516736020	CONTROL-PANEL	ABS SG-0760D SG-175	1	
B02	3513409570	KNOB VPC	ABS SG-0760D SG-175	1	
B03	3515101600	SPRING FLAT	SUS 301 T0.5	1	
B04	3517400510	COUPLER VPC KNOB	POM	1	
B05	7122401211	SCREW TAPPING	T2S TRS 4*12 MFZN	1	
B06	3518570400	SWITCH S/A RELAY	DWSR-1	1	
B07	7122401211	SCREW TAPPING	T2S TRS 4*12 MFZN	1	
B08	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	1	
B09	3512766301	HARNESS TIMER	KOG-37150S	1	
B10	3513409560	KNOB	ABS SG-0760D SG-175	1	
B11	3517400400	COUPLER TIMER	POM	1	
B12	3518205500	TIMER	NT35MKD27E-P BROWNER ONLY	1	
B13	7122401211	SCREW TAPPING	T2S TRS 4*12 MFZN	2	

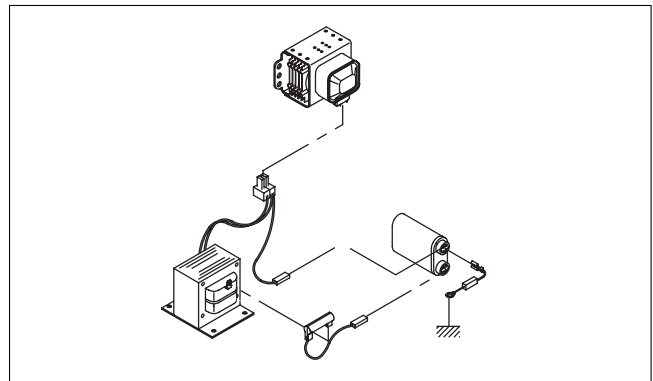
- (1) Remove the screw which secure the control panel, push up two snap fits and draw forward the control panel assembly.
- (2) Remove two screws which secure the timer assembly.
- (3) Remove the timer assembly.
- (4) Pull out the timer knob from the timer.
- (5) Remove the screw which secure the coupler.
- (6) Pull out the coupler, V.P.C knob and flat 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.

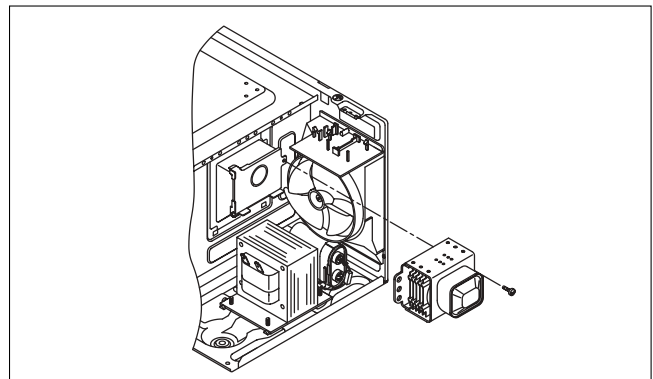


## ◆ High voltage circuit wiring

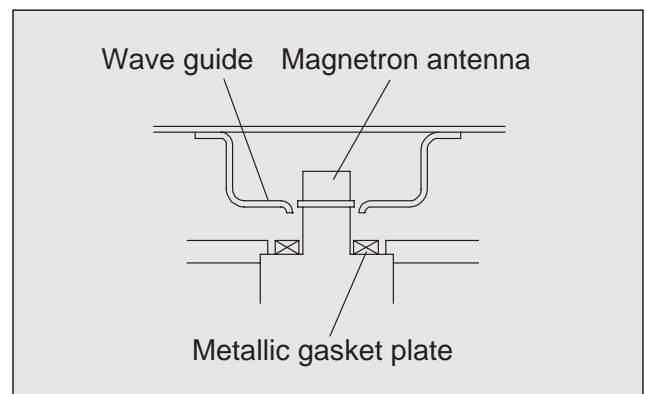
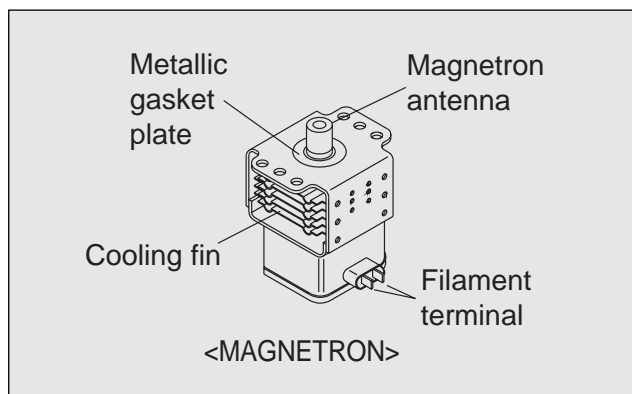


## 7. To remove magnetron.

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

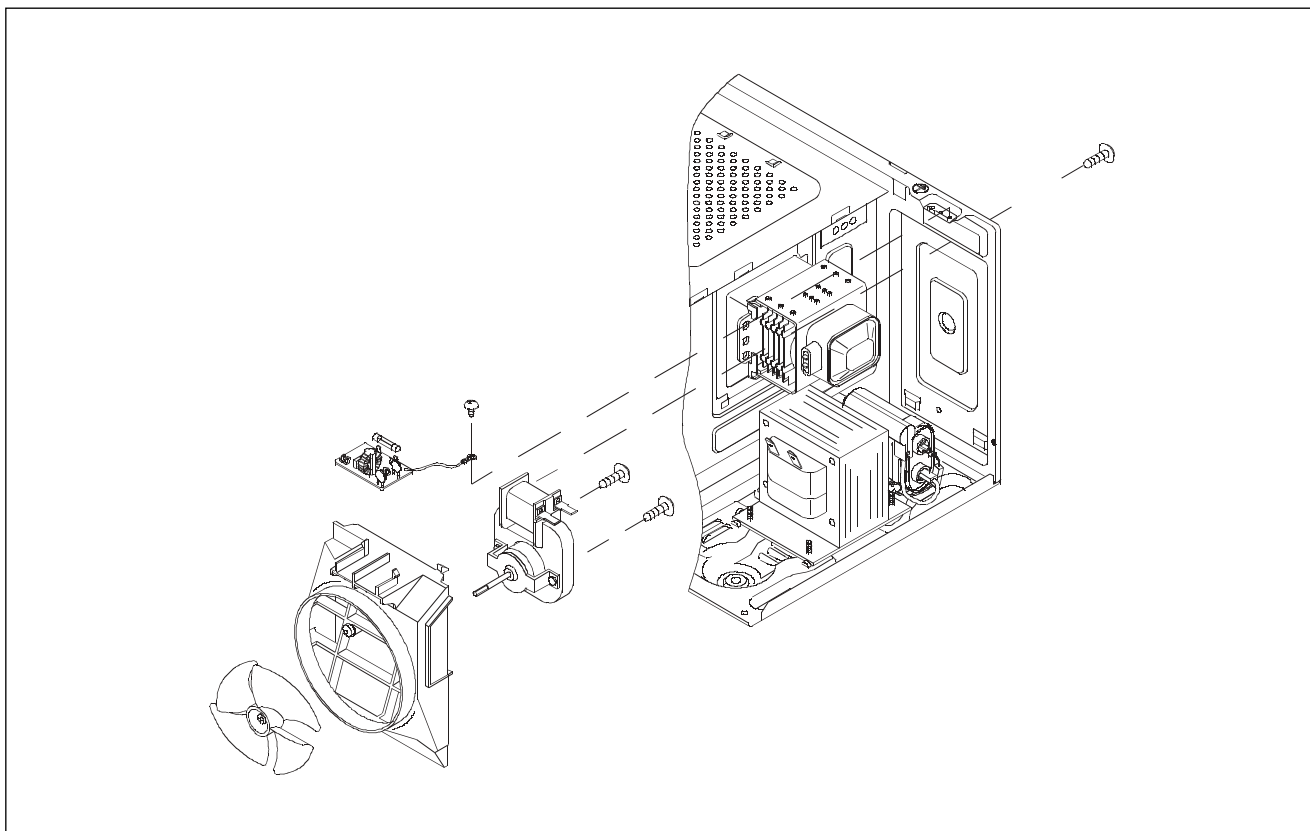


**NOTE :** Never install the magnetron without the metallic gasket plate which is packed with each magnetron to prevent microwave leakage. Whenever repair work is carried out on magnetron, check the microwave leakage. It shall not exceed  $4\text{mW}/\text{cm}^2$  for a fully assembled oven with door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



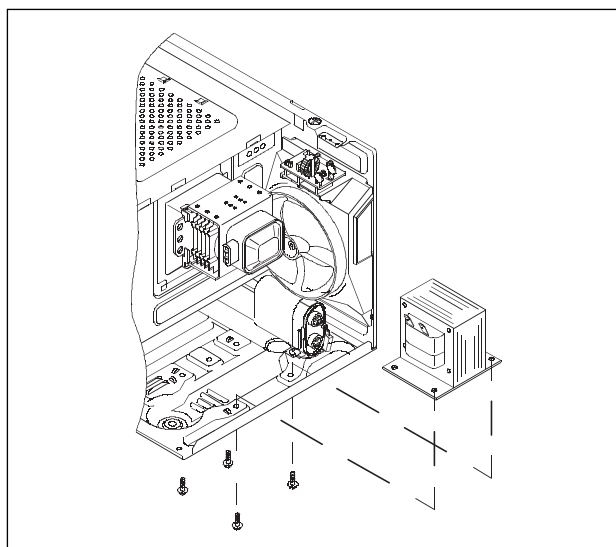
## 8. To remove wind guide assembly.

- 1) Remove the screw for earthing.
- 2) Remove the noise filter from the wind guide.
- 3) Remove the 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.



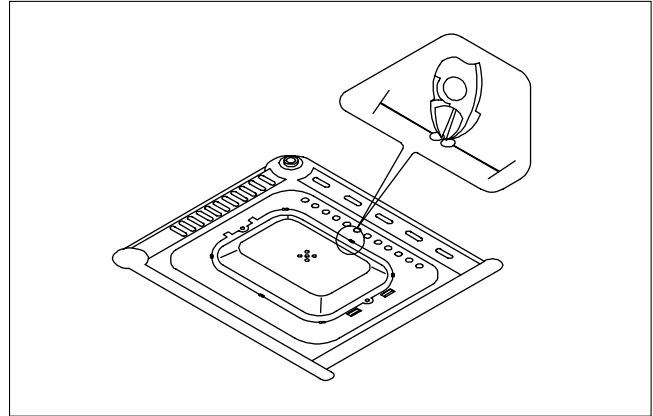
## 9. To remove H.V.transformer.

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

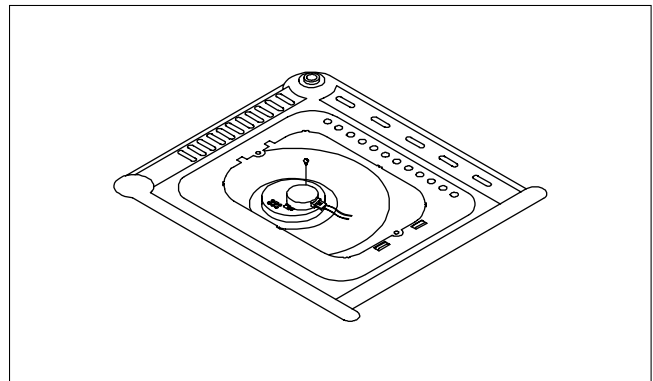


## 10. To remove tray motor.

- 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.

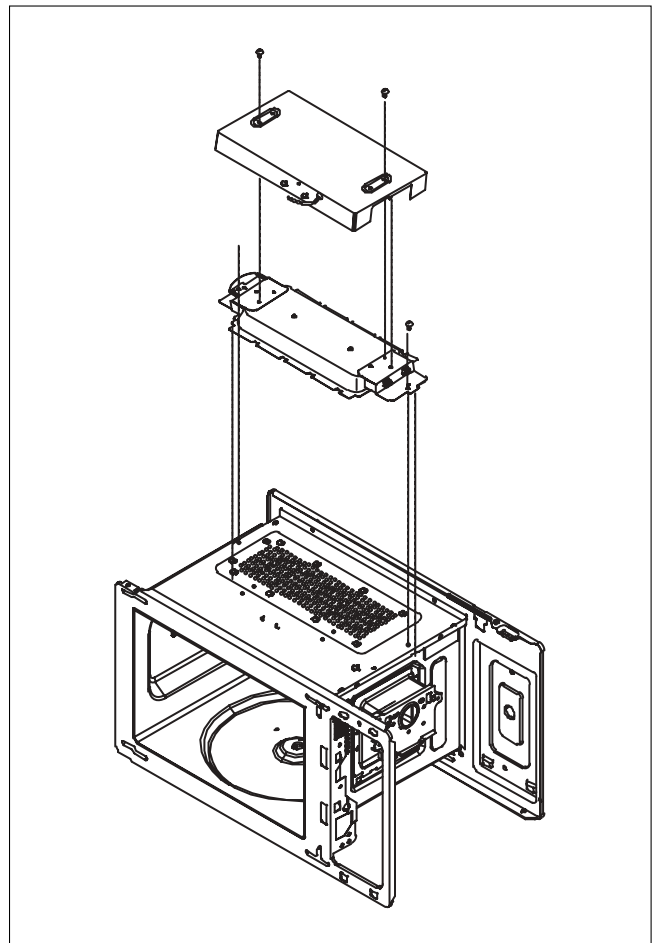


- 5) Remove a screw which secure the tray motor.
- 6) Remove the tray motor.
- 7) Reverse the above steps for reassembly except for securing the tray motor cover with screw.



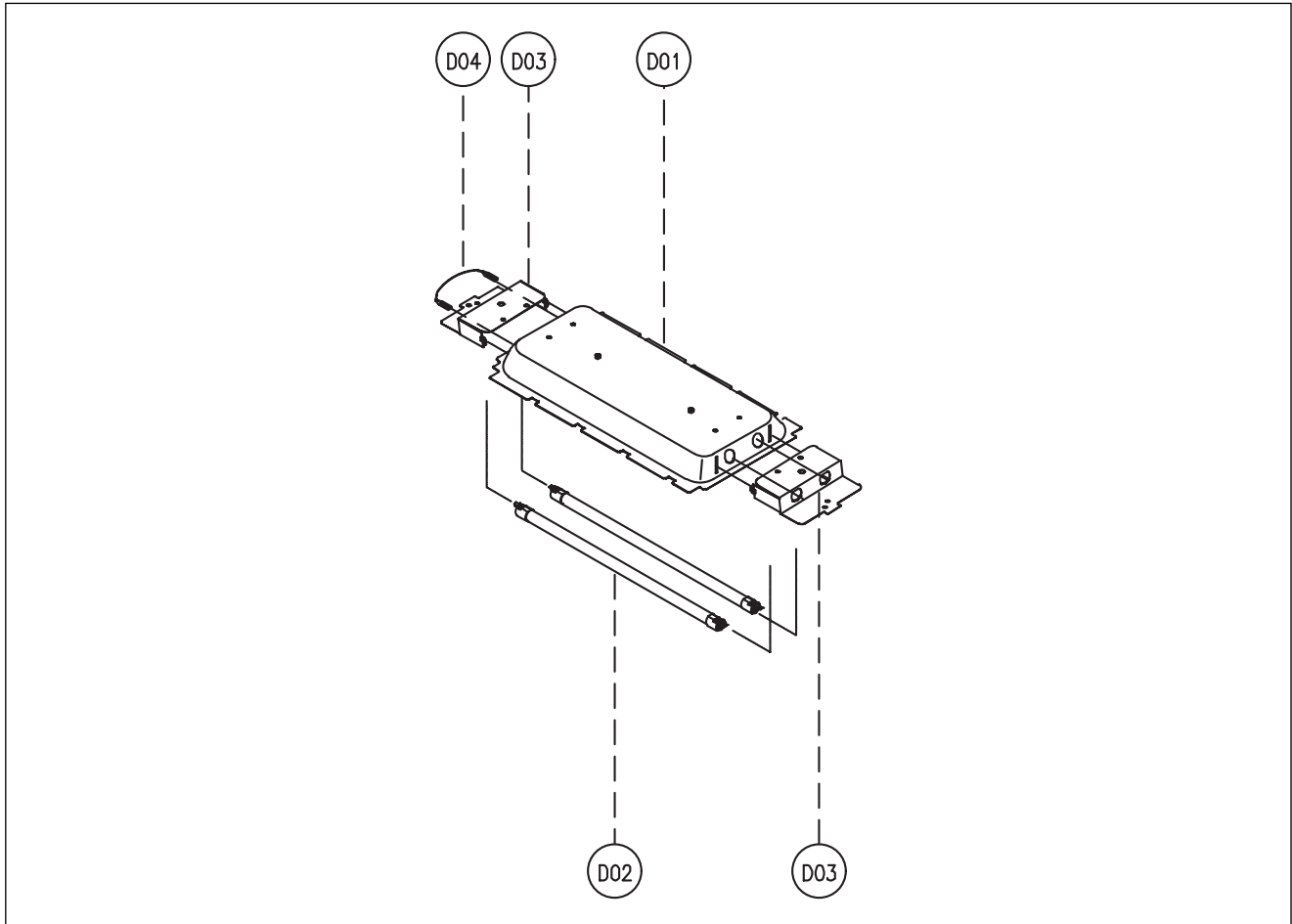
## 11. To remove heater assembly.

- 1) Remove one side of the heater harness.
- 2) Remove a screw which secure the cover insulator top.
- 3) Remove the cover insulator top.
- 4) Remove the heater top assembly.
- 5) Reverse the above steps for reassembly.





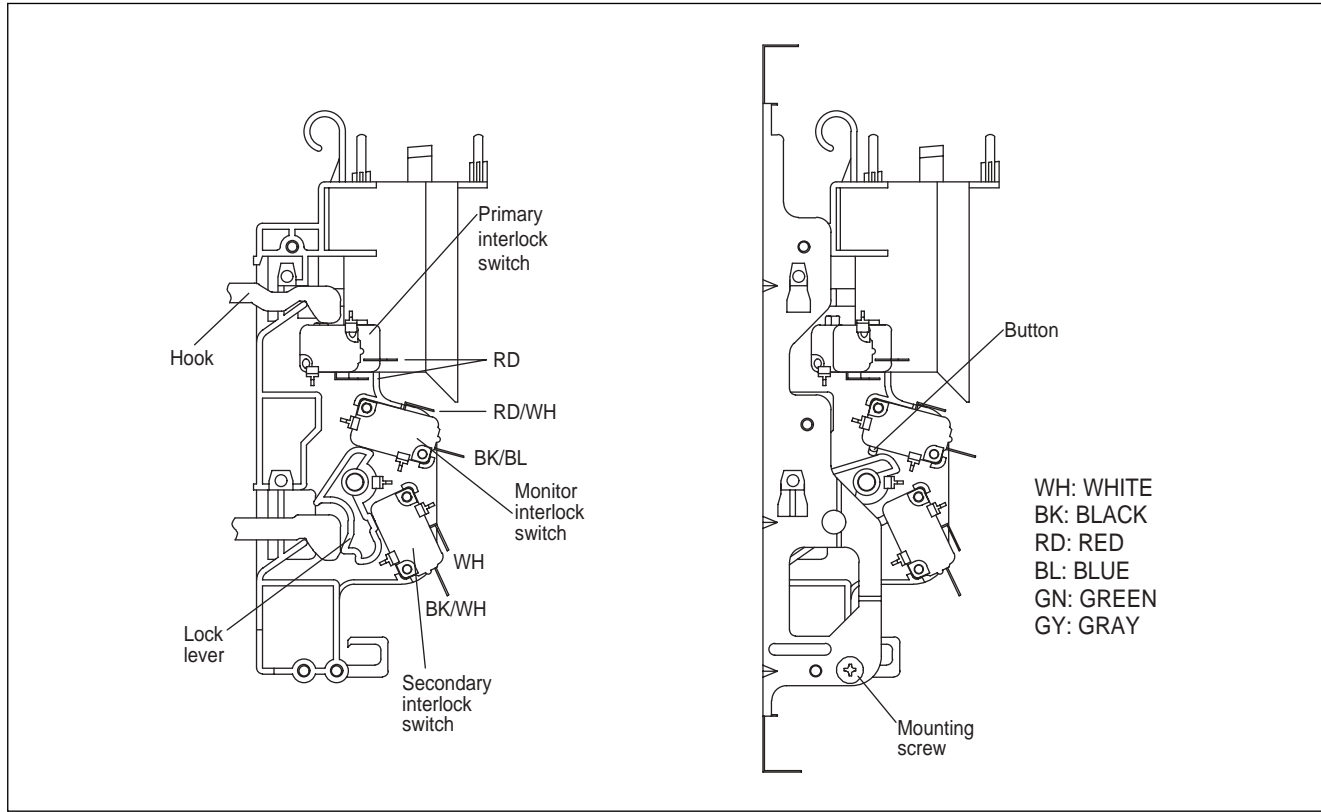
## 12. To remove heater parts.



REF. NO	PART CODE	PART NAME	DESCRIPTION	Q'TY	REMARK
D01	3511415510	COVER HEATER *T	STS 430 T0.5	1	
D02	3512807330	HEATER QUARTZ	115V 500W 240MM B WADEN	2	
D03	3510613100	BRACKET HEATER *T	SBHG T0.5	2	
D04	3512765100	HARNESS HEATER	KOC-970T1S TEFLON	1	

# 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 monitor switch to bring it under "OFF" 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 "OFF" condition before other switches are closed.

When the door is opened, the interlock monitor switch should be "ON" condition after other switches are opened.

## (3) Adjustment steps

a) Loosen the mounting screw.

b) Adjust interlock switch assembly position.

Actuation distance of primary and secondary interlock switch shall be adjusted almost 0.7mm.

c) Make sure that lock lever moves smoothly after adjustment is completed.

d) Tighten completely a mounting screw.

### NOTE :

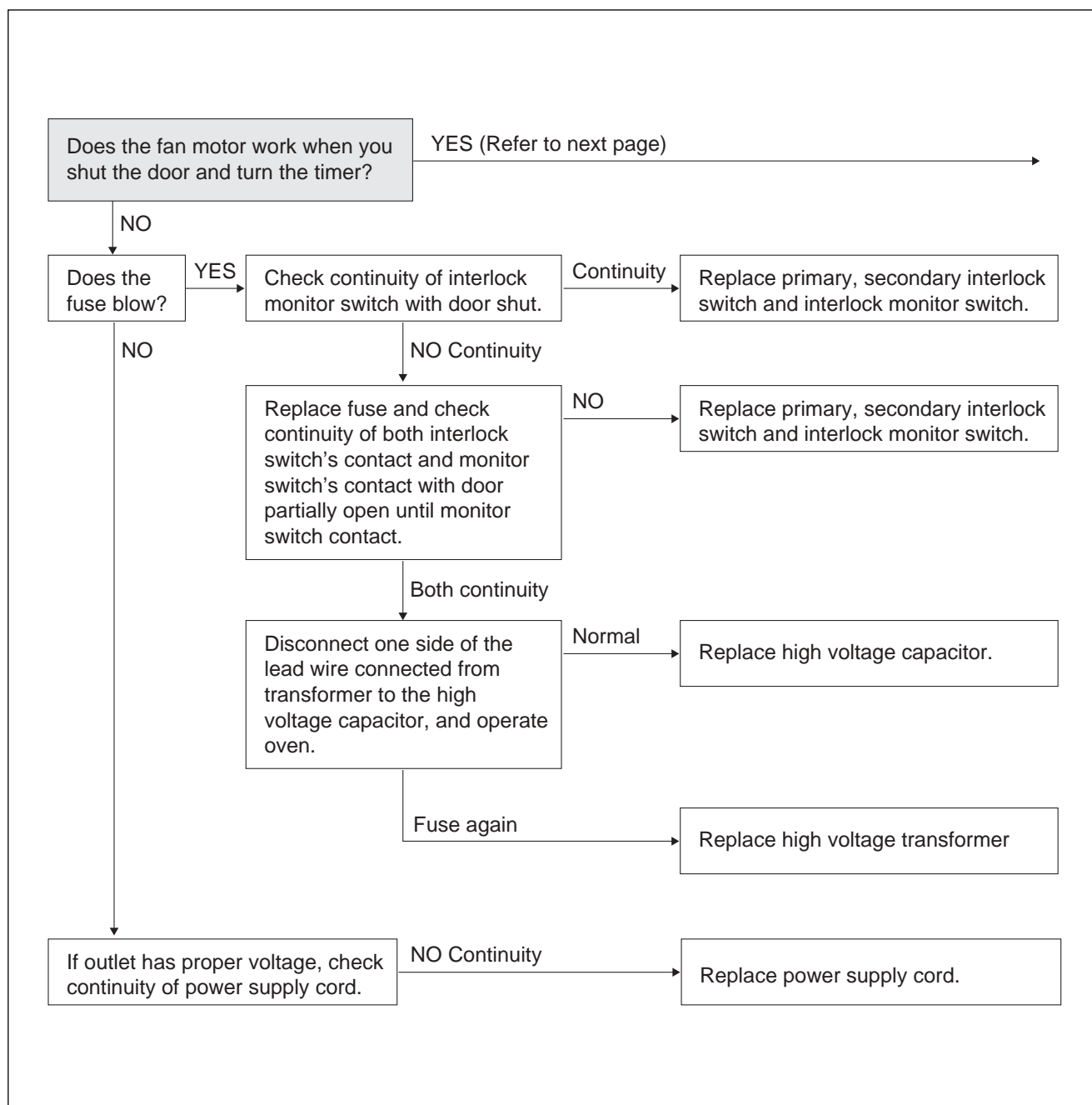
Microwave emission test should be performed after adjusting interlock mechanism. If the microwave emission exceed 4mW/cm<sup>2</sup>, readjust interlock mechanism.

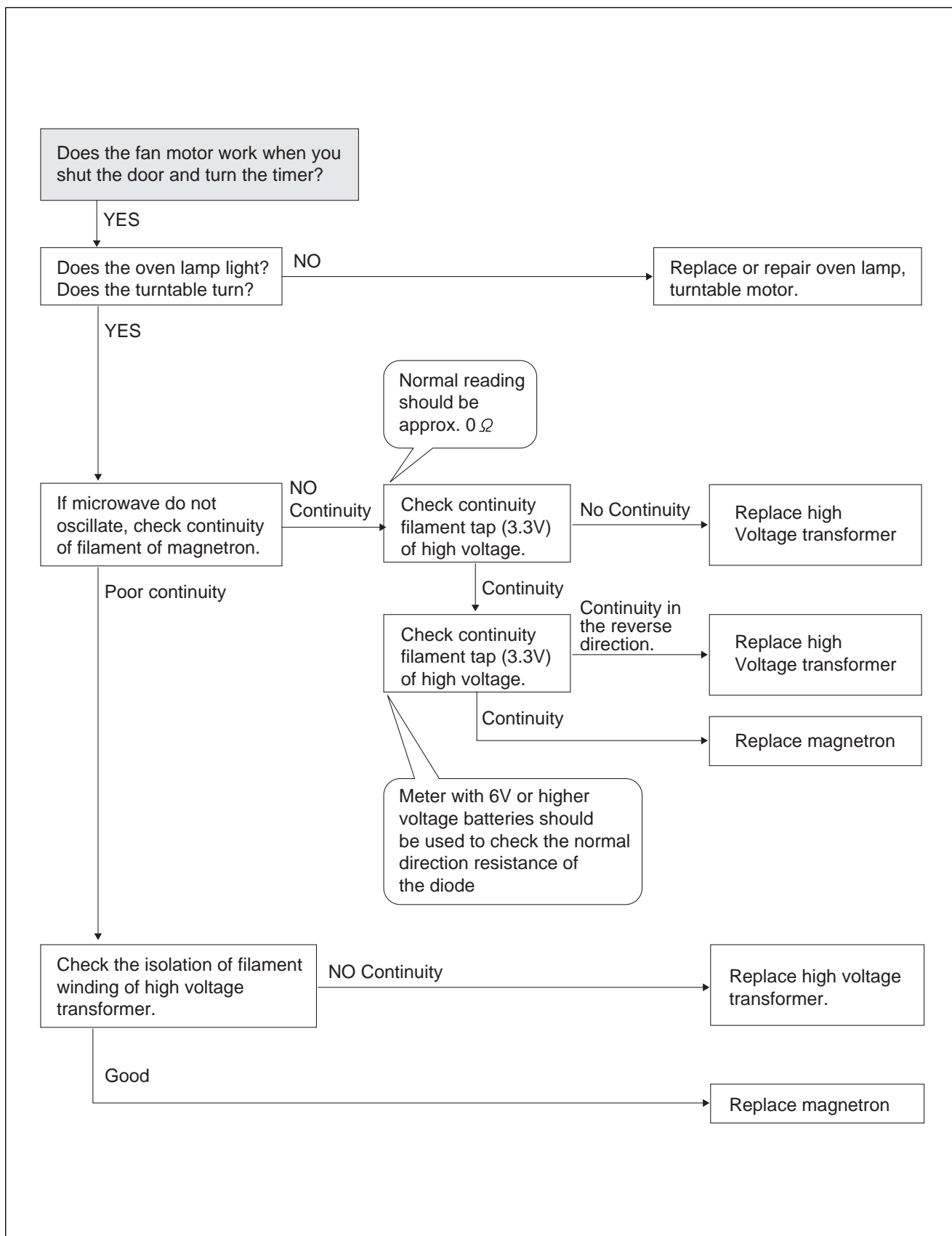
# TROUBLESHOOTING GUIDE

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

1. Check grounding 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 transformer, disconnect one lead 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.

**(TROUBLE 1)** Door shut, timer set, but no cooking takes place.





# MEASUREMENT AND TEST

## 1. MEASUREMENT OF THE MICROWAVE POWER OUTPUT

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

### PROCEDURE

1. A cylindrical container of borosilicate glass is used for the test. It has a maximum thickness of 3mm, an external diameter of approximately 190mm and a height of approximately 90mm.  
The mass of the container is determined.
2. At the start of the test, the oven and the empty container are at ambient temperature. Water having an initial temperature of  $10^{\circ}\text{C} \pm 1^{\circ}\text{C}$  is used for the test. The water temperature is measured immediately before it is poured into the container.
3. A quantity of  $1000\text{g} \pm 5\text{g}$  of water is added to the container and its actual mass obtained.  
The container is then immediately placed in the centre of the oven shelf, which is in its lowest normal position.  
The oven is operated and the time for the water temperature to attain  $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$  is measured. The oven is then switched off and the final water temperature is measured within 60s.

NOTE 1 - The water stirred is before its temperature is measured.

NOTE 2 - Stirring and measuring devices are to have a low heat capacity.

4. The microwave power output is calculated from the formula

$$P = 4,187 \cdot m_w(T_2 - T_1)/t + 0.55 \cdot m_c(T_2 - T_0)/t$$

where

P is the microwave power output, in watts ;

$m_w$  is the mass of the water, in grams ;

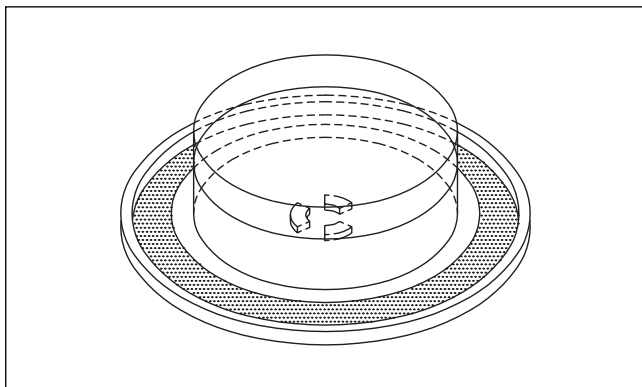
$m_c$  is the mass of the container, in grams ;

$T_0$  is ambient temperature, in degrees Celsius ;

$T_1$  is the initial temperature of the water, in degree Celsius ;

$T_2$  is the final temperature of the water, in degrees Celsius ;

t is the heating time, in seconds, excluding the magnetron filament heating-up time.



\* The microwave power output is stated in watts, rounded off to the nearest 50W

### CAUTION

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

\* Heating time for power output: ( $T_2 = T_0$ )

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

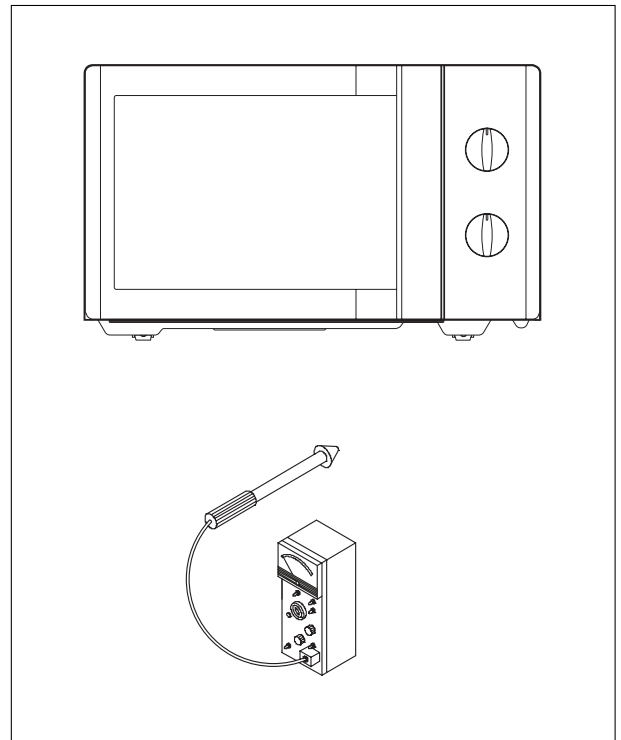
## 2. MICROWAVE RADIATION TEST

### 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.

### PROCEDURES

1. Prepare Microwave Energy Survey Meter, 600cc glass beaker, and glass thermometer  $100^{\circ}\text{C}(212^{\circ}\text{F})$ .
2. Pour  $275\text{cc}\pm 15\text{cc}$  of tap water initially at  $20\pm 5^{\circ}\text{C}(68\pm 9^{\circ}\text{F})$  in the 600cc glass beaker with an inside diameter of approx. 95mm(3.5in.).
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  $4\text{mW}/\text{cm}^2$ .
  - 2) When measuring the leakage, always use the 5cm(2in.) 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 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.



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### 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.  $214\ \Omega \pm 10\%$
  - Filament winding.....Approx.  $0\ \Omega$
  - Primary winding .....Approx.  $2.4\ \Omega$

#### 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 is 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 an 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.

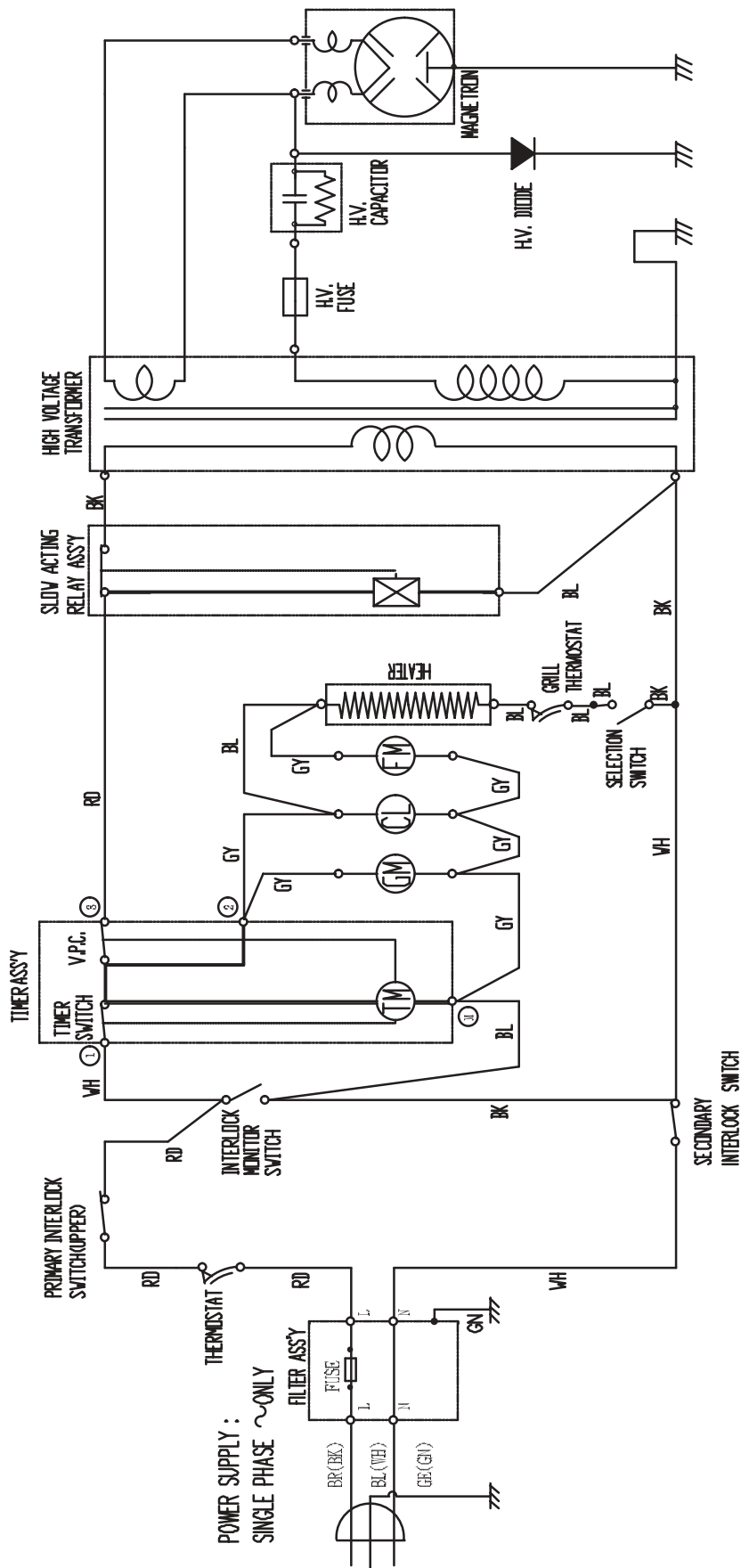
#### 5. Fuse

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



NOTE : RD : RED  
 VH : WHITE  
 BK : BLACK  
 GN : GREEN  
 BR : BROWN

DR : ORANGE  
 BL : BLUE  
 GY : GRAY  
 GE : GREEN/YELLOW

CL : CAVITY LAMP  
 FM : FAN(OVER) MOTOR  
 GN : GEARED MOTOR  
 TM : TIMER MOTOR  
 V.P.C.: VARIABLE POWER CONTROLLER

[ CONDITION ]  
 SELECTION : MICROWAVE  
 DOOR : CLOSED  
 TIMER : ON  
 V.P.C. : HIGH

S/N : 3513511830



# EXPLODED VIEW AND PARTS LIST

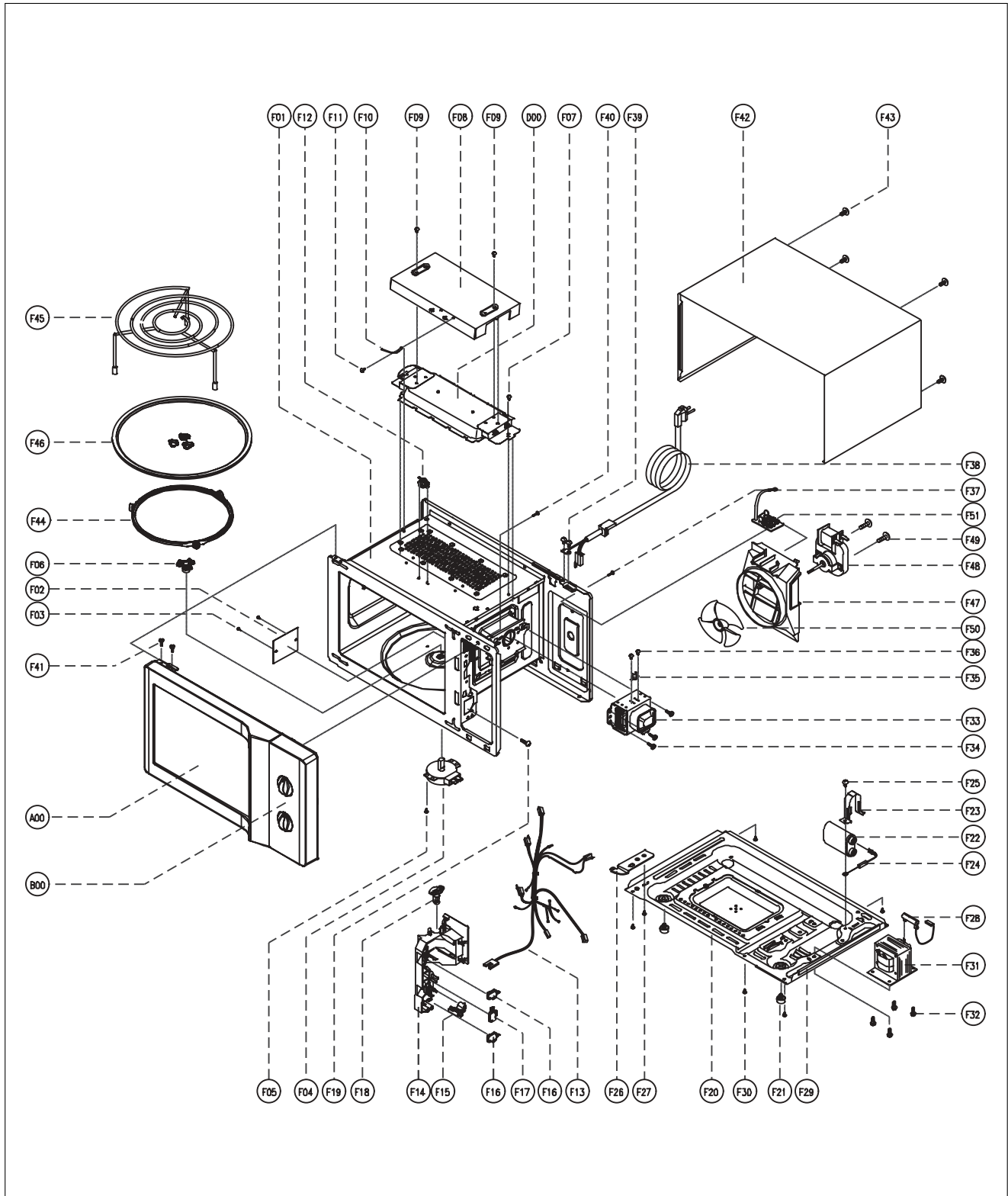
## 1. DOOR ASSEMBLY

Refer to Disassembly and assembly

## 2. CONTROL PANEL ASSEMBLY

Refer to Disassembly and assembly

## 3. TOTAL ASSEMBLY



✓ **Caution** : In this Manual, some parts can be changed for improving, their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List) in Service Information Center (<http://svc.dwe.co.kr>).

REF NO.	PART CODE	PART NAME	DESCRIPTION	Q'TY	REMARK
F01	3516121200	CAVITY AS	KQG-6L353S	1	
F02	3511405100	COVER WAVE GUIDE	MICA T0.35	1	
F03	4078502031	BUTTON LOCKING	PP HONAM A353	2	
F04	3966031600	MOTOR SYNCRO	220/240V 50/60HZ ST-16 MN73MQAD A	1	
F05	7121400611	SCREW TAPPING	T2S PAN 4X6 MFZN	1	
F06	3517400620	COUPLER	XAREC	1	
D00	3512808900	HEATER *T AS	KQG-6L353S	1	
F07	7S312X40A1	SCREW SPECIAL	T1 TRS 4X10 SE MFZN	1	
F08	3513304800	INSULATOR HEATER	SECC T 0.4	1	
F09	7S312X40A1	SCREW SPECIAL	T1 TRS 4X10 SE MFZN	2	
F10	3511200400	CLAMP WIRE	SBHG	1	
F11	7S312X40A1	SCREW SPECIAL	T1 TRS 4X10 SE MFZN	1	
F12	3518904900	THERMOSTAT	OFF:90 ON:80 H #187	1	
F13	3512784010	HARNESS MAIN	KQG-6L353S	1	
F14	3513819800	LOCK	PP GP-3152F FH44D	1	
F15	3513702620	LEVER LOCK	POM	1	
F16	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	2	
F17	4415A66600	SW MICRO	VP-532A-OF SPNC #187 200G	1	
F18	3513601600	LAMP	BL 240V 25W T25 C7A H187	1	
F19	7122401211	SCREW TAPPING	T2S TRS 4*12 MFZN	1	
F20	3510317500	BASE	SBHG T0.5	1	
F21	3512100900	FOOT	PP DASF-130	2	
F22	3518302201	CAPACITOR HV	2100VAC 0.98UF #187 75MM	1	
F23	3513003200	HOLDER HV CAPACITOR	SECC T0.5	1	
F24	3518400900	DIODE HV AS	HVR-1X-30B #187	1	
F25	7S432X4081	SPECIAL SCREW	TT3 TRS 4X8 SE MFZN	1	
F26	3515201101	STOPPER HINGE *U	SCP-1 T2.5	1	
F27	7S432X4081	SPECIAL SCREW	TT3 TRS 4X8 SE MFZN	1	
F28	3518701100	FUSE HV	5KV 0.55A HV-41A55-02	1	
F29	3517305800	FOAM	CR 5TX10X155	1	
F30	7S312X40A1	SCREW SPECIAL	T1 TRS 4X10 SE MFZN	5	
F31	3518122950	TRANS HV	R1S57A (DA30)	1	
F32	3516003700	SPECIAL SCREW	TT3 HEX 4X8 FLG MFZN	4	
F33	3518003710	MAGNETRON	2M218HFL 6CF	1	
F34	7272400811	SCREW TAPTITE	TT3 TRS 4X8 MFZN	3	
F35	3518903800	THERMOSTAT	OFF:160 ON:115 V #187	1	
F36	7121300611	SCREW TAPPING	T2S PAN 3X6 MFZN	2	

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REF NO.	PART CODE	PART NAME	DESCRIPTION	Q'TY	REMARK
F37	7S312X40A1	SCREW SPECIAL	T1 TRS 4X10 SE MFZN	1	
F38	35113A5QJ5	CORD POWER AS	3X1.5 80X80 120-RTML 1.4M	1	
F39	7S312X40A1	SCREW SPECIAL	T1 TRS 4X10 SE MFZN	2	
B00	3516738950	CONTROL-PANEL AS	KQG-6L653S	1	
F40	7112401211	SCREW TAPPING	T1 TRS 4*12 MFZN	1	
A00	3511729910	DOOR AS	KQG-6L653S	1	
F41	7272400811	SCREW TAPTITE	TT3 TRS 4X8 MFZN	2	
F42	3510808410	CABINET AS	KOR-6L0B1A	1	
F43	7S312X40A1	SCREW SPECIAL	T1 TRS 4X10 SE MFZN	4	
F44	3512517500	GUIDE ROLLER AS	KOR-63150S	1	
F45	3517204410	TRAY RACK AS	KOG-361Q0S 97MM	1	
F46	3517202400	TRAY GLASS	GLASS 610 (VE-YONGXIN)	1	
F47	3512527600	GUIDE WIND	PP	1	
F48	3963514350	MOTOR SHADED POLE	230V 50HZ MW10CA-M04	1	
F49	7121402511	SCREW TAPPING	T2S PAN 4X25 MFZN	2	
F50	3511800300	FAN	PP+30%GLASS	1	
F51	3518608300	NOISE-FILTER	DWLF-M12 B	1	



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