

S/M No. : G37671S001

# Service Manual

## Microwave Oven

Model: KOG-37671S  
KOG-39671S



**DAEWOO ELECTRONICS CO., LTD.**

[http : //svc.dwe.co.kr](http://svc.dwe.co.kr)

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DAEWOO

## 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

## 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

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

Green-and-yellow : Earth  
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

This oven is designed for counter-top use only.

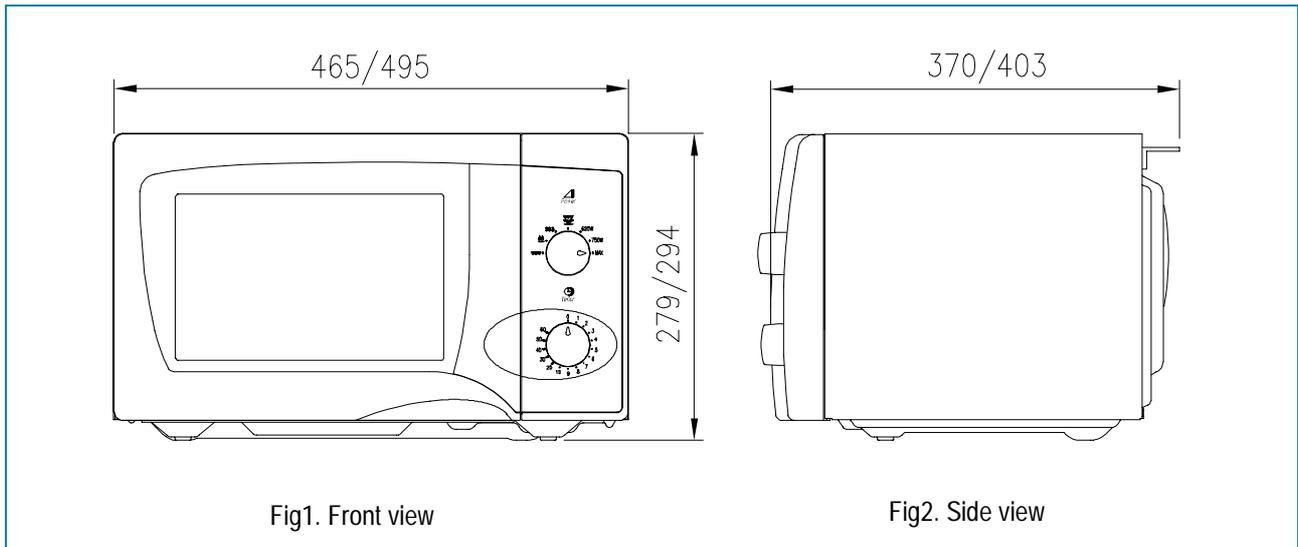
# SPECIFICATIONS

MODEL		KOG-37671S	KOG-39671S
POWER SUPPLY		230V~50Hz, SINGLE PHASE WITH EARTHING	
POWER CONSUMPTION	MICROWAVE	1200W	1350W
	GRILL	1050W	
	COMBINATION	2200W	2350W
MICROWAVE ENERGY OUTPUT		850W	950W
MICROWAVE FREQUENCY		2450MHz	
OUTSIDE DIMENSIONS (W X H X D)		465 X 279 X 370 mm (18.3 X 11.0 X 14.6 in.)	495 X 294 X 403 mm (19.5 X 11.6 X 15.9 in.)
CAVITY DIMENSIONS (W X H X D)		290 X 220 X 306 mm (11.4 X 8.7 X 12.0 in.)	320 X 244 X 338 mm (12.6 X 9.6 X 13.3 in.)
NET WEIGHT		APPROX. 14 Kg (30.9lbs)	APPROX. 15.5 Kg (34.2lbs)
TIMER		60 min. DUAL SPEED	
FUNCTION SELECTIONS		MICROWAVE/GRILL/COMBINATION	
POWER SELECTIONS		5 LEVELS	
CAVITY VOLUME		0.7 Cu.Ft.	0.9 Cu.Ft.

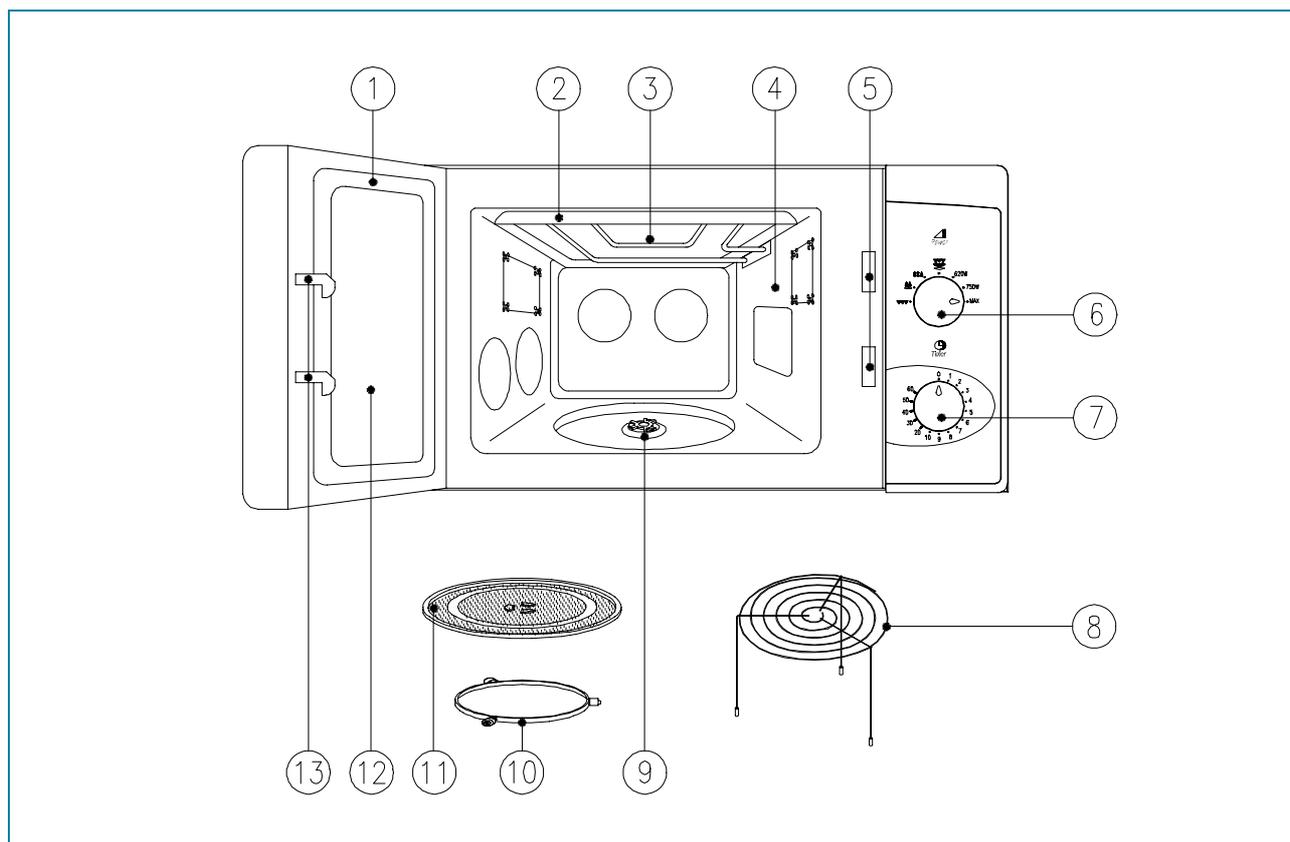
\*SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

# EXTERNAL VIEW

## 1. OUTER DIMENSION (KOG-3767/KOG-3967)



## 2. FEATURE DIAGRAM



- 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) **Safety interlock system**
- 6) **Knob V.P.C** - Used to select a microwave power level.
- 7) **Knob timer** - Used in setting cooking time for all functions.
- 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.
- 10) **Roller guide** - This must always be used for cooking together with the glass cooking tray.
- 11) **Glass cooking tray** - Made of special heat resistant glass.  
Food in a proper receptacle is placed on this tray for cooking.
- 12) **Door viewing screen** - Allows viewing of food.  
The screen is designed so that light can pass through, but not the microwave.
- 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.

# 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 1.2 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 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 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.

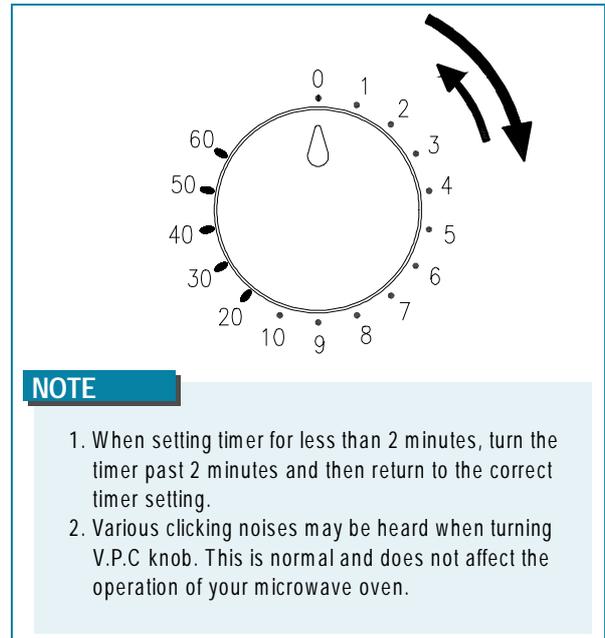
### WARNING

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.

# OPERATIONS 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. Choose cooking power level by setting V.P.C knob to the desired position.  
Refer to cookbook for recommended power levels.
5. Determine cooking time. Consult cookbook for recipe timing.  
Oven light turns on and cooling fan starts to operate.  
Microwave cooking starts.
6. You may open the door while the oven is operating.  
As soon as the door is opened, the safety mechanisms stop the generation of microwave power and the operation of cooking timer.  
If you wish to change the time during cooking, simply adjust the timer to the desired time.
7. When the timer reaches zero, a bell will ring and the unit will turn off.  
Oven light turns off. If additional cooking time is needed and the door is closed, the oven will automatically start when the timer is reset.



**NOTE**

1. When setting timer for less than 2 minutes, turn the timer past 2 minutes and then return to the correct timer setting.
2. Various clicking noises may be heard when turning V.P.C knob. This is normal and does not affect the operation of your microwave oven.

- To set MICROWAVE cooking  
Set the variable power selector to the desired power level.

POWER LEVEL	SYMBOL		APPROXIMATE PERCENTAGE OF POWER
	KOG-3767	KOG-3967	
HIGH	MAX	MAX	100 %
MED-HIGH	750W	840W	88 %
MEDIUM	620W	690W	73 %
DEFORST	☼☼	☼☼	41 %
HEAT	☼☼	☼☼	26 %

- To set GRILL cooking  
Set the POWER SELECTOR to the ▼▼▼ (grill) position.
- To set COMBI cooking  
Set the POWER SELECTOR to the ☼☼☼ (combi) position.

## 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 earthed.

Do not operate on a two-wire extension cord.

The microwave oven is designed to be used while earthed.

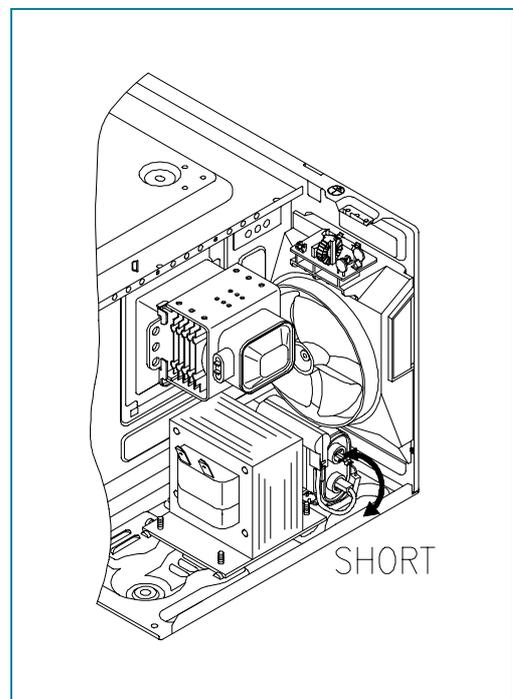
It is imperative, therefore, to make sure it is earthed properly before beginning repair work.

(2) Warning about the electric charge in the high voltage capacitor.

For about 30 seconds after the operation has stopped an 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 15A fuse is blown 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

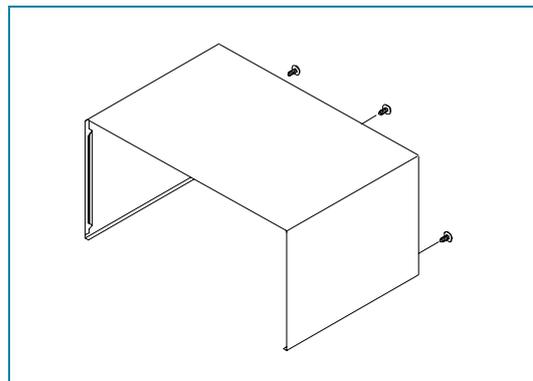
Service personnel should remove their watches whenever working close to or replacing the magnetron.

## WARNING

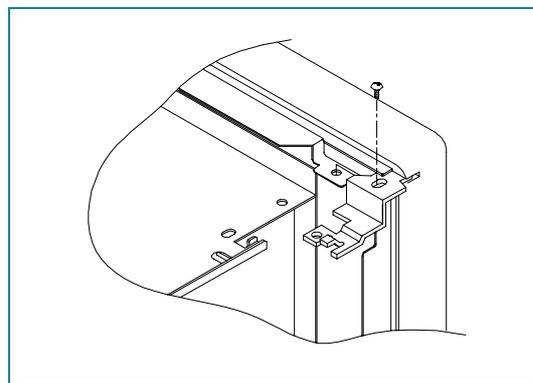
When servicing the appliance, take care when touching or replacing high potential parts because of electrical shock or exposing microwave. These parts are as follows - HV Transformer, Magnetron, HV Capacitor, HV Diode, HV Fuse.

**1. To remove cabinet**

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

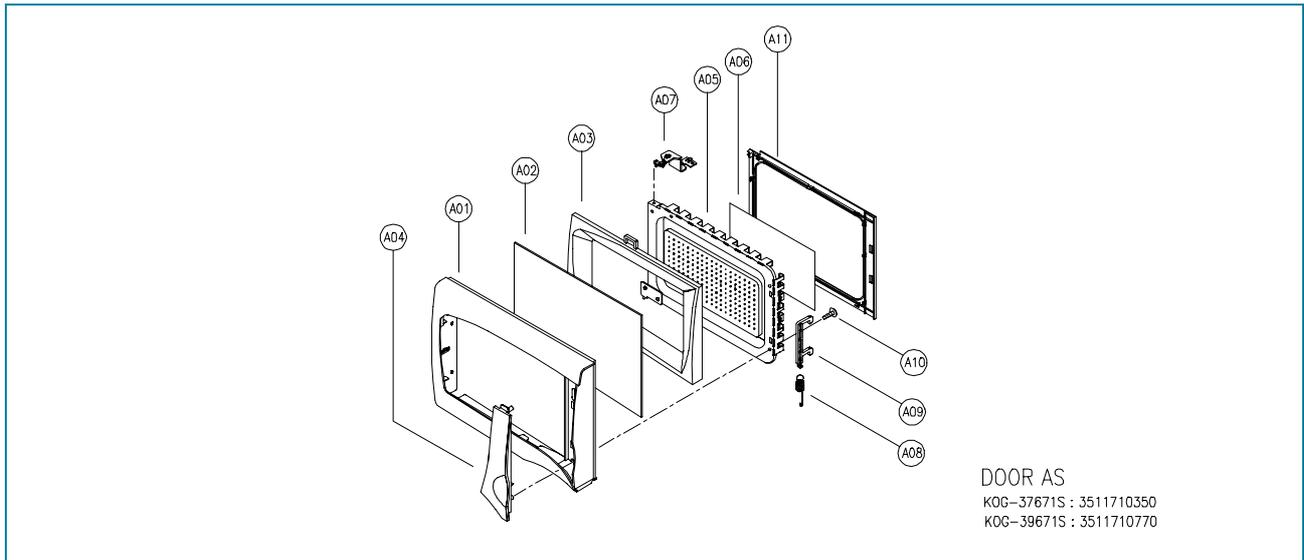
**2. To remove door assembly**

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

**CAUTION**

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-37671S

REF.NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
A01	3512203830	FRAME DOOR	ABS	1	
A02	3517005610	BARRIER-SCREEN*O	PMMA 1.5t	1	
A03	3515306500	SUPPOTER BARR-S*O	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	
A10	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1	
A11	3512300200	GASKET DOOR	KOR-61150S PP	1	

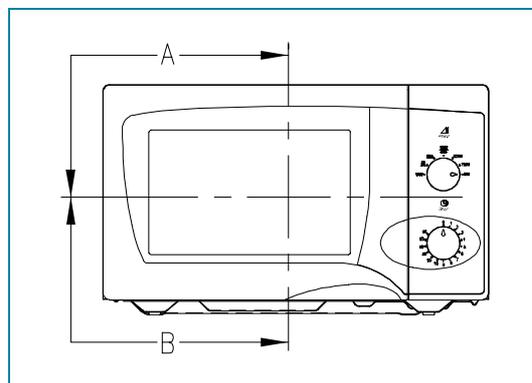
2) KOG-39671S

REF.NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
A01	3512204130	FRAME DOOR	ABS	1	
A02	3517005710	BARRIER-SCREEN*O	PMMA 1.5t	1	
A03	3515306600	SUPPOTER BARR-S*O	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	
A10	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1	
A11	3512302000	GASKET DOOR	KOR-86671S 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 decorator door from door frame.
- (9) Reverse the above steps for reassembly.

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

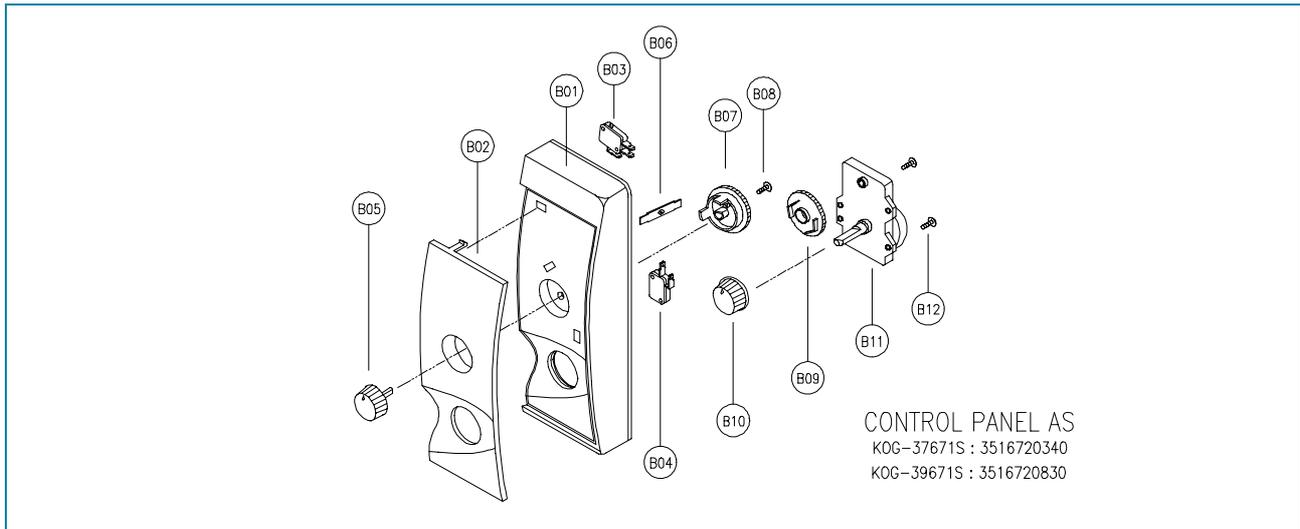
- (1) To reduce gap located on part A.  
Loosen a screw on stopper hinge top, and then push the door to contact the door seal to oven front surface.  
Tighten a screw.
- (2) To reduce gap located on part B.  
Loosen two screws on stopper hinge under, and then push the door to contact the door seal to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



#### NOTE

A small gap may be acceptable if the microwave leakage does not exceed  $4\text{mW}/\text{cm}^2$ .

## 5. To remove control panel parts.

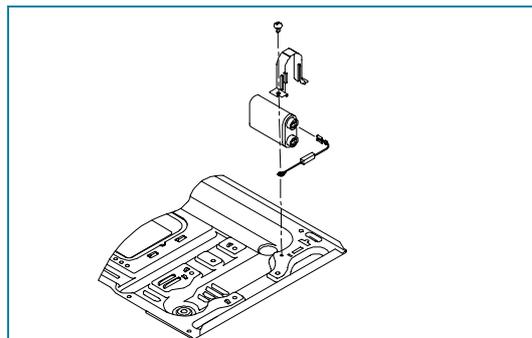


REF.NO	PART CODE	PART NAME	DESCRIPTION	QTY	REMARK
B01	3516719030	CONTROL-PANEL	ABS	1	KOG-3767
	3516719330				KOG-3967
B02	3511603910	DECORATOR C-PANEL	ABS	1	KOG-3767
	3511604110				KOG-3967
B03	4415A17352	SW MICRO	VP-533A-OF	1	
B04	4415A66910	SW MICRO	VP-531A-OF	1	
B05	3513405540	KNOB VPC	ABS	1	
B06	3515101600	SPRING FLAT	SUS 301 T0.5	1	
B07	3517400510	COUPLER VPC KNOB	POM	1	
B08	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	1	
B09	3517400400	COUPLER VPC KNOB	POM	1	
B10	3513405430	KNOB	ABS	1	
B11	3518205100	TIMER	KN60MKD 12E-P	1	
B12	7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	2	

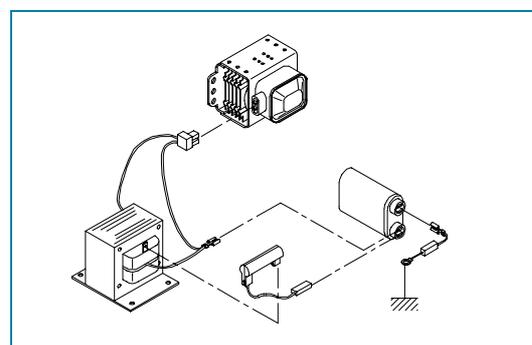
- (1) Remove the screw which secure the control panel, push up two snap fits and draw forward the control panel assembly.
- (2) Remove two screws which secure the timer assembly.
- (3) Remove the timer assembly.
- (4) Pull out the timer knob from the timer.
- (5) Pull out the timer coupler from the timer.
- (6) Remove the screw which secure the V.P.C coupler.
- (7) Pull out the V.P.C coupler, V.P.C knob and flat spring from the control panel.
- (8) Remove two switches from the control panel.
- (9) Remove the decorator c-panel from the control panel.
- (10) 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.

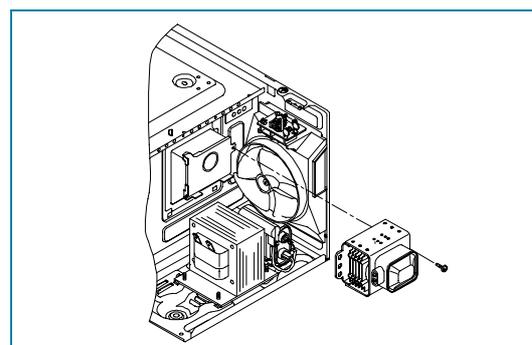


### ◆ High voltage circuit wiring



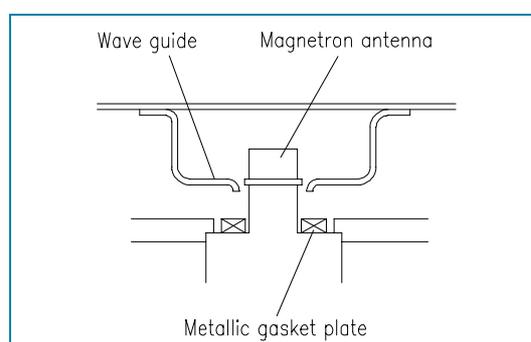
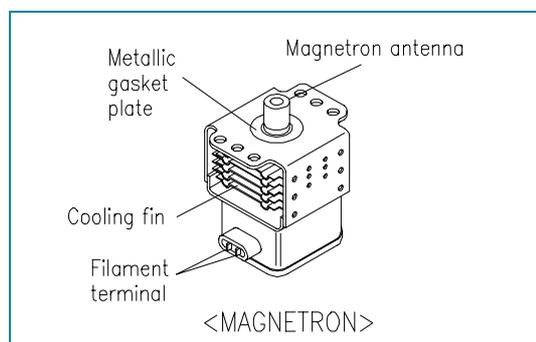
## 7. To remove magnetron.

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

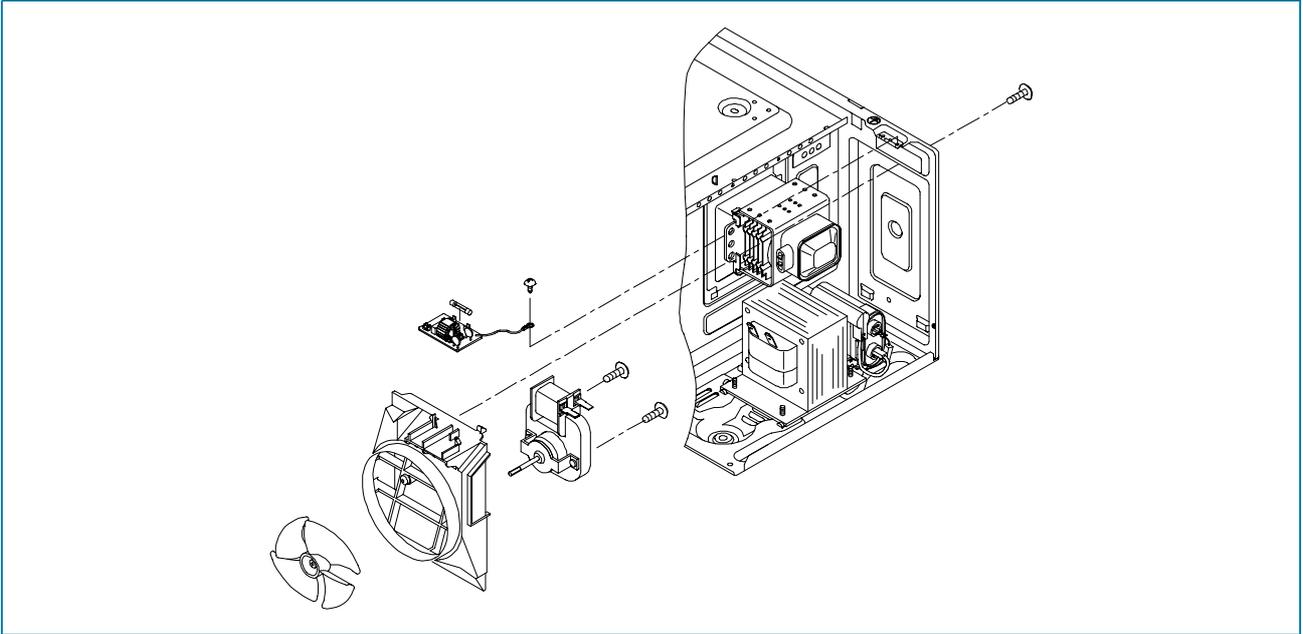


### CAUTION

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.



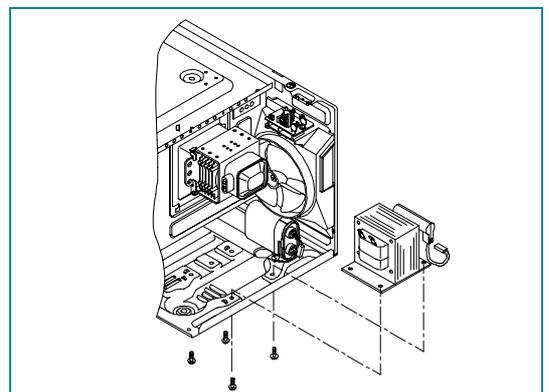
**8. To remove wind guide assembly.**



- (1) Remove 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.

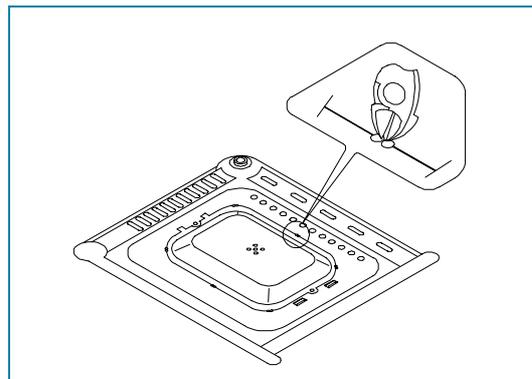
**9. To remove H.V.transformer.**

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

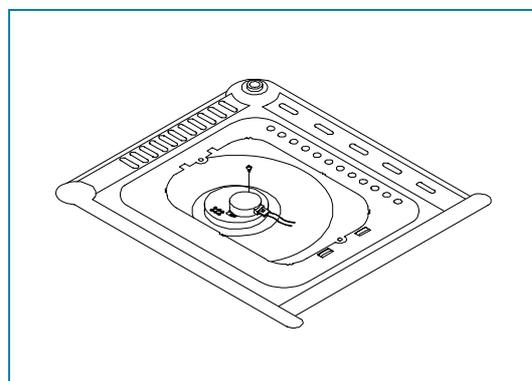


**10. To remove tray motor.**

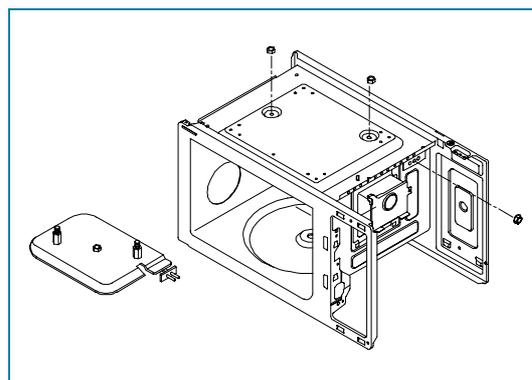
- (1) Remove the coupler in the cavity.
- (2) Turn the set upside down.
- (3) Cut the tray motor cover part from the base plate.
- (4) Remove the tray motor cover.



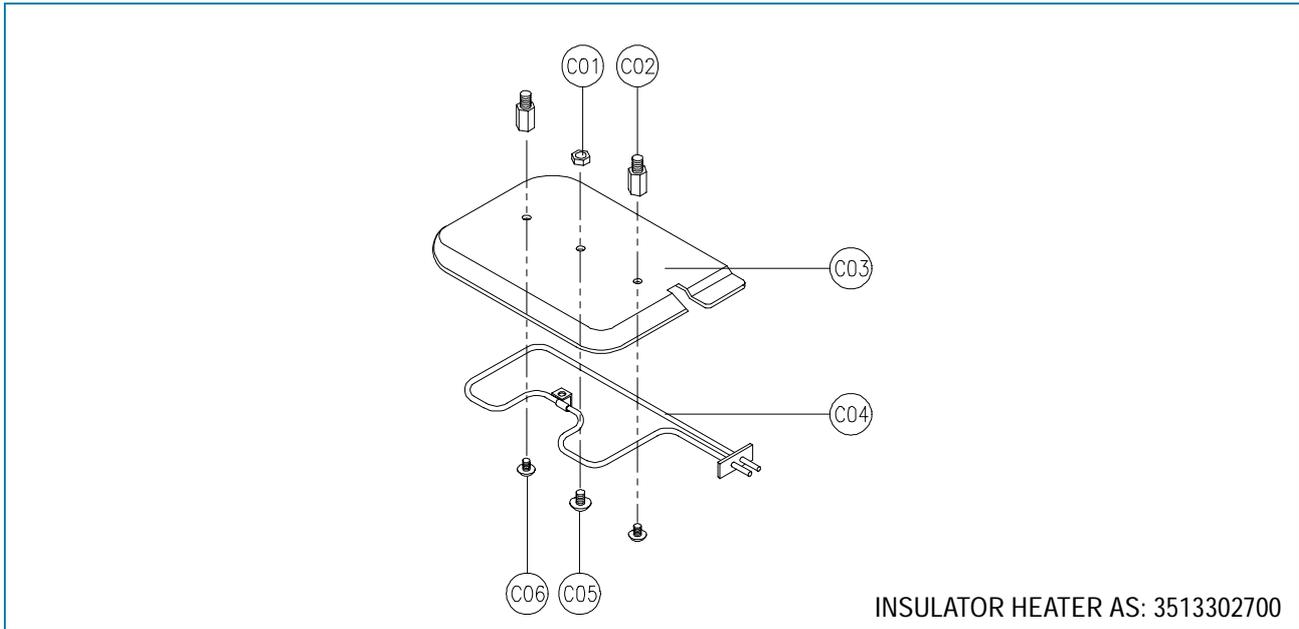
- (5) Remove a screw which secure the tray motor.
- (6) Remove the tray motor.
- (7) Reverse the above steps for reassembly except for securing the tray motor cover with screw.

**11. To remove heater assembly.**

- (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	C3771BD	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

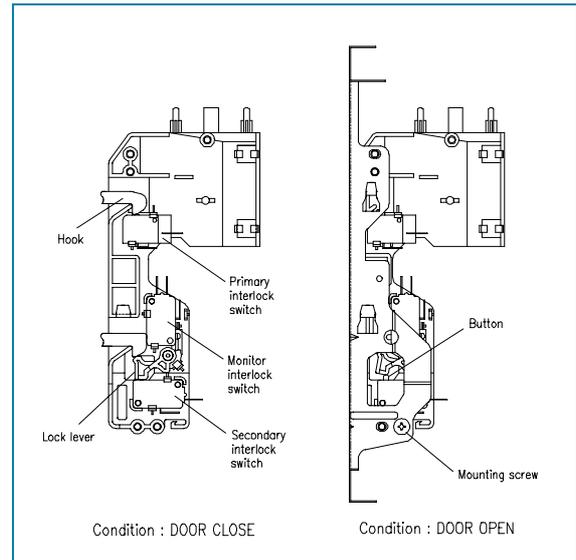
The door lock mechanism is a device which has been specially designed to completely eliminate microwave radiation when the door is opened during operation, and thus to perfectly prevent the danger resulting from the leakage of microwave.

## 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 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 opened before other switches are closed.

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

## 3. Adjustment steps

- (1) Loosen the one mounting screw.
- (2) Adjust interlock switch assembly position.
- (3) Make sure that lock lever moves smoothly after adjustment is completed.
- (4) Tighten completely one mounting screw.

## NOTE

Microwave emission test should be performed after adjusting interlock mechanism.

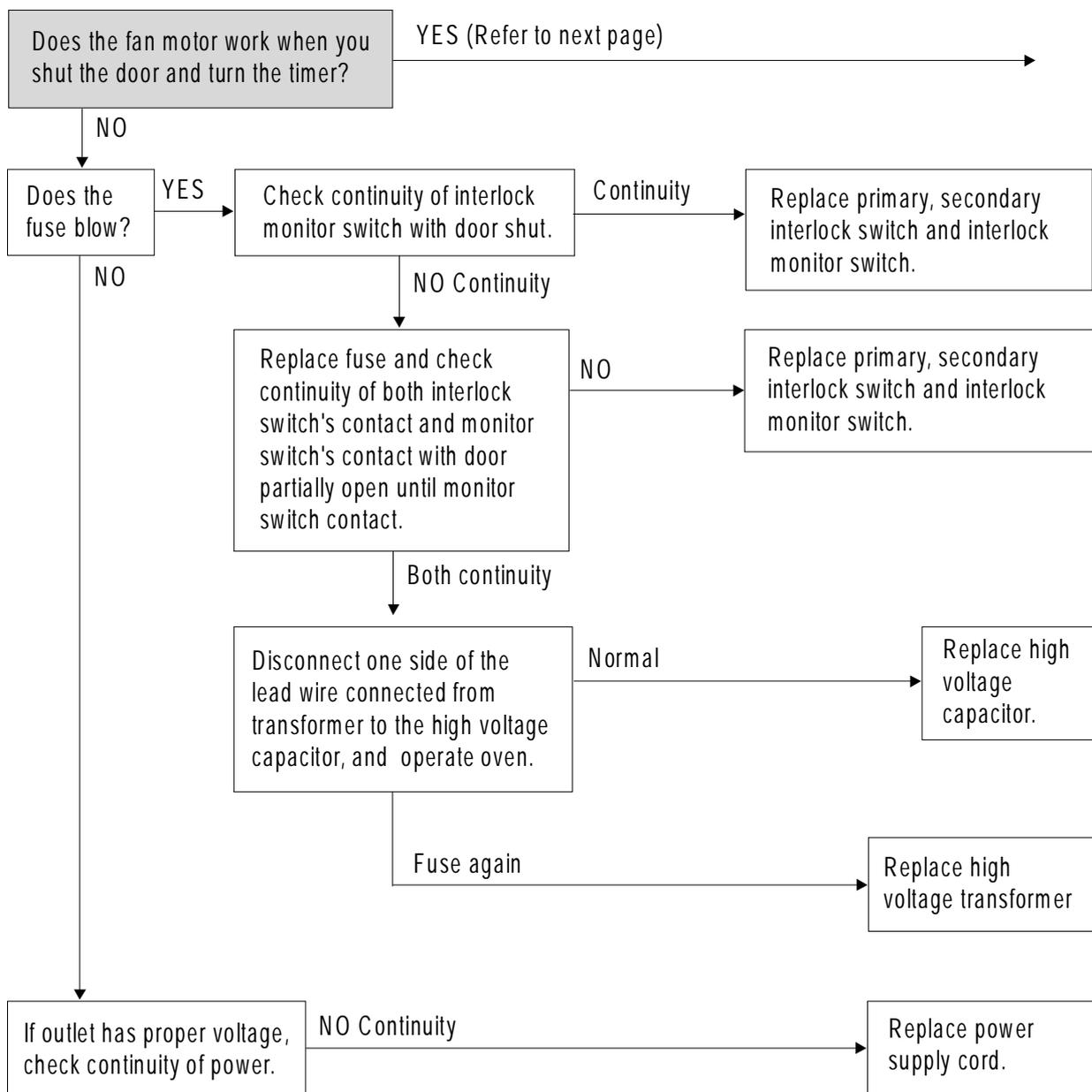
If the microwave emission exceed  $4\text{mW}/\text{cm}^2$ , readjust interlock mechanism.

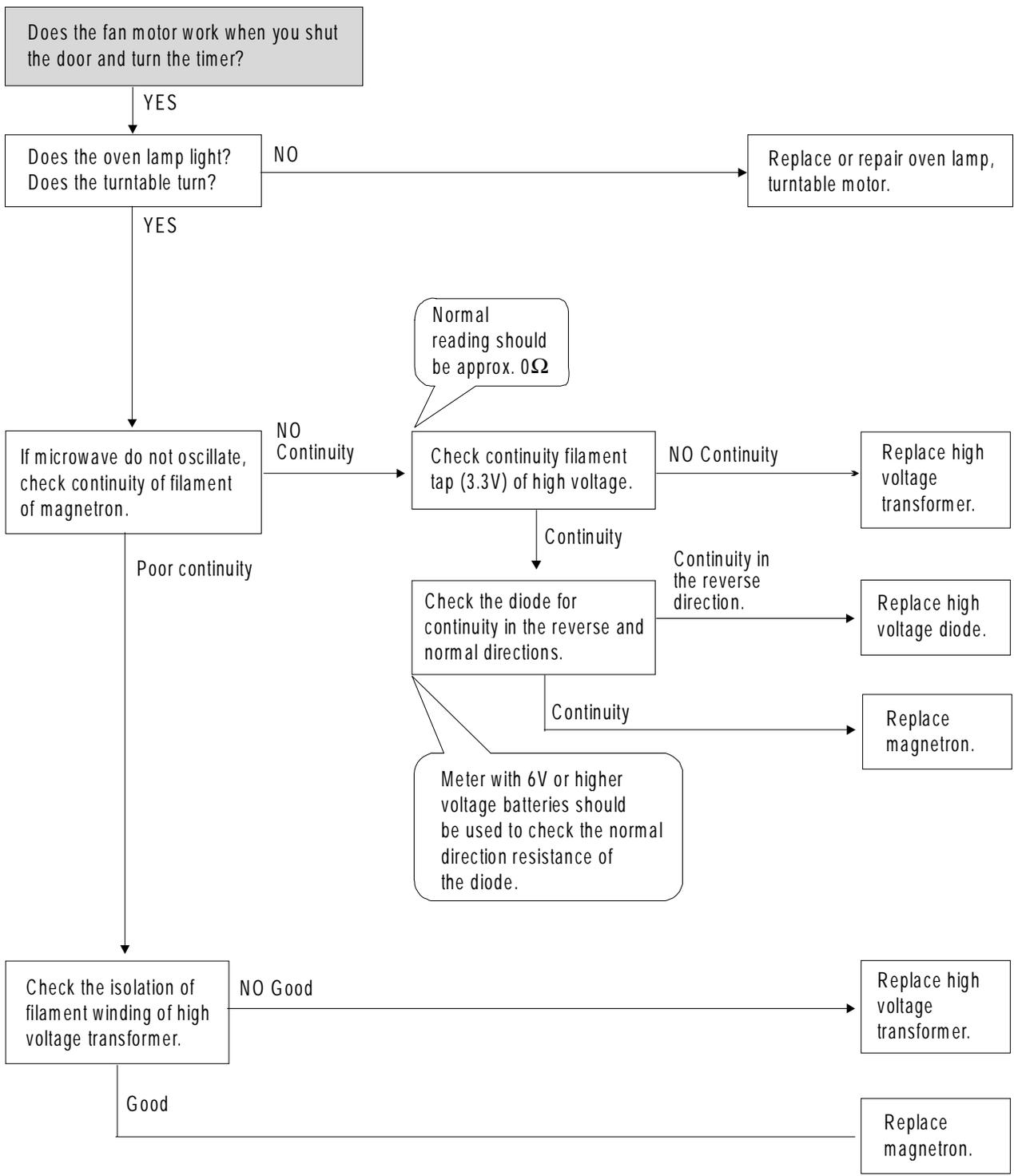
# TROUBLE SHOOTING GUIDE

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

1. Check grounding before checking trouble.
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 then 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. 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  $1000 \pm 5$ cc 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  $10 \pm 2^\circ\text{C}$  ( $50 \pm 3.6^\circ\text{F}$ ). It 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.

5. 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 heat-up time for magnetron is not included.

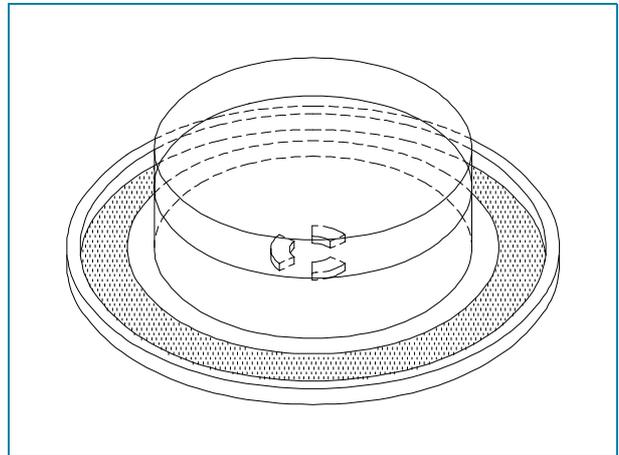
6. The initial and final temperature of water is selected so that the maximum difference between the ambient and final water temperature is 5K.

7. The microwave power output P in watts is calculated from the following formula:

$$P = 4187 \times \Delta T/t$$

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

The power measured should be B (Refer to 2. SPECIFICATIONS) W  $\pm$  10.0 %.



### caution

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

### NOTE

Microwave emission test should be performed after adjusting interlock mechanism. If the microwave emission exceed  $4\text{mW}/\text{cm}^2$ , readjust interlock mechanism.

Heating time for power output

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

## 2. MICROWAVE RADIATION TEST

### WARNING

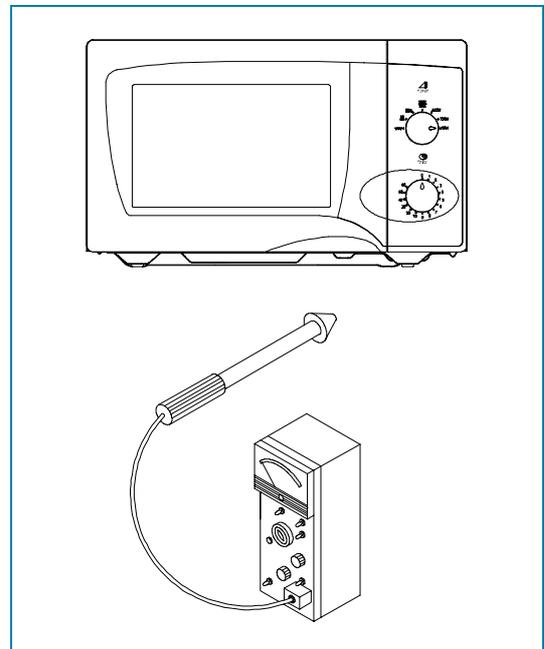
Make sure to check the microwave leakage before and after repair or adjustment.  
 Always start measuring of an unknown field to assure safety for operating personnel from microwave energy.  
 Do not place your hands into any suspected microwave radiation field unless the safe density level is known.  
 Care should be taken not to place the eyes in direct line with the source of microwave energy.  
 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).
2. 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.  $110\Omega \pm 10\%$

Filament winding .....Approx.  $0\Omega$

Primary winding ..... Approx.  $0\Omega$

#### 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 Output Power."

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) The continuity check across magnetron filament terminals should indicate  $0.1\Omega$  or less.

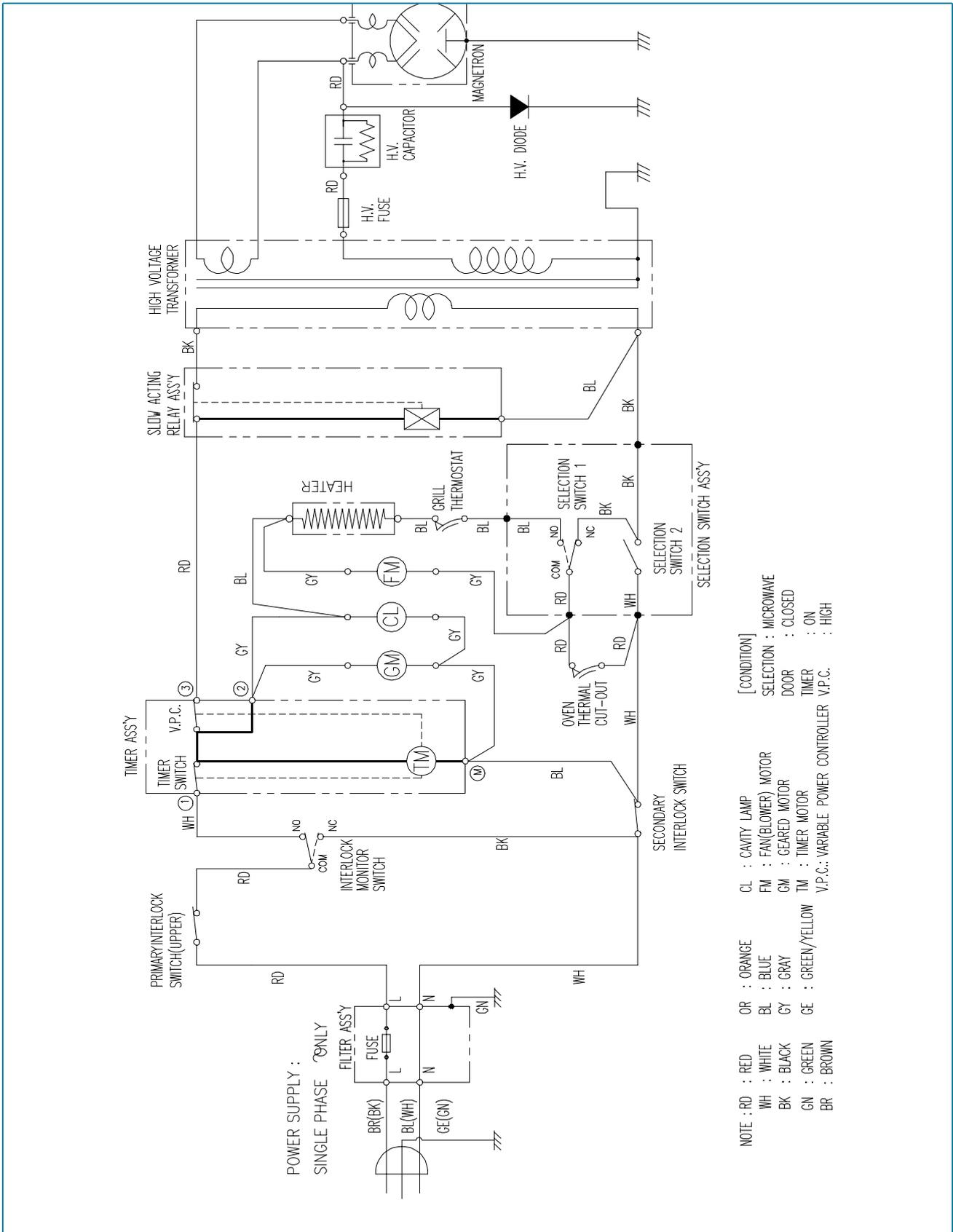
(3) The continuity check between each filament terminal and magnetron case should read open.

#### 5. Fuse

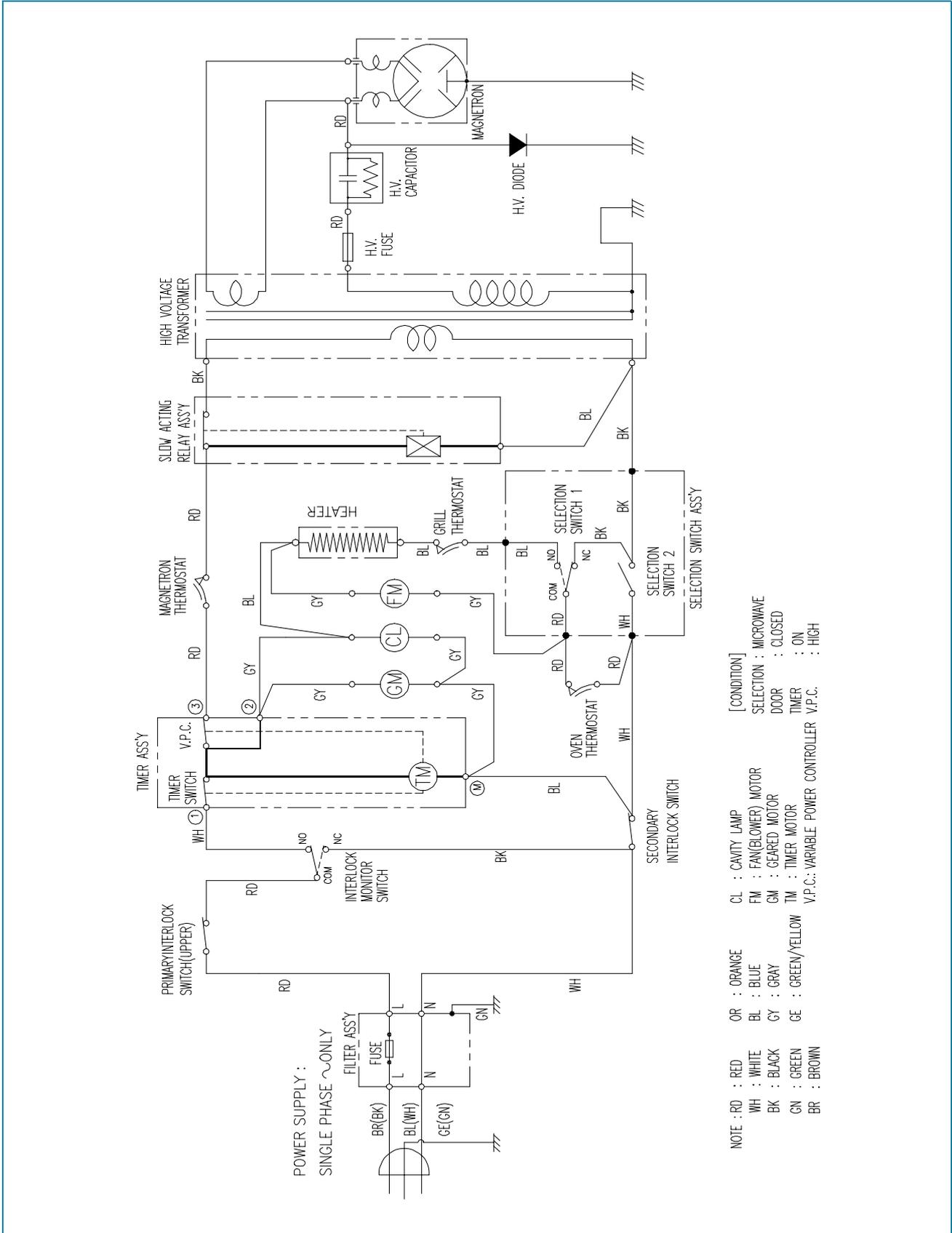
If the fuse in the primary and monitor switch circuit is blown when the door is opened, check the primary and monitor switch before replacing the blown fuse. In case the fuse is blown by an improper switch operation, replace the defective switch and fuse at the same time. Replace just the fuse if the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

# WIRING DIAGRAM

## 1. KOG-37671S



2. KOG-39671S



# EXPLODED VIEW AND PARTS LIST

## 1. DOOR ASSEMBLY

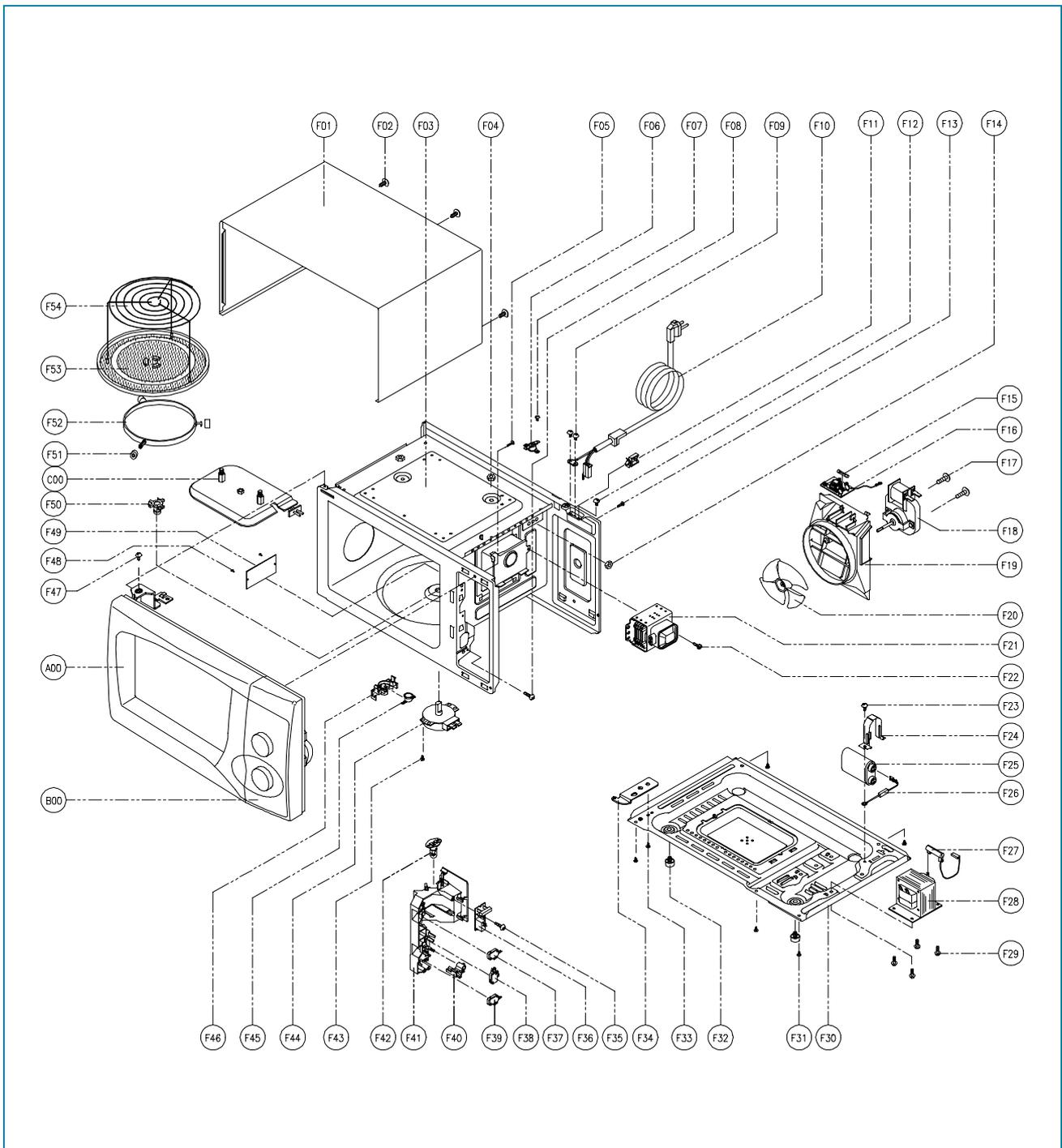
Refer to 6.Disassembly and assembly.

## 2. CONTROL PANEL ASSEMBLY

Refer to 6.Disassembly and assembly.

## 3. TOTAL ASSEMBLY

(1) KOG-37671S



## EXPLODED VIEW AND PARTS LIST

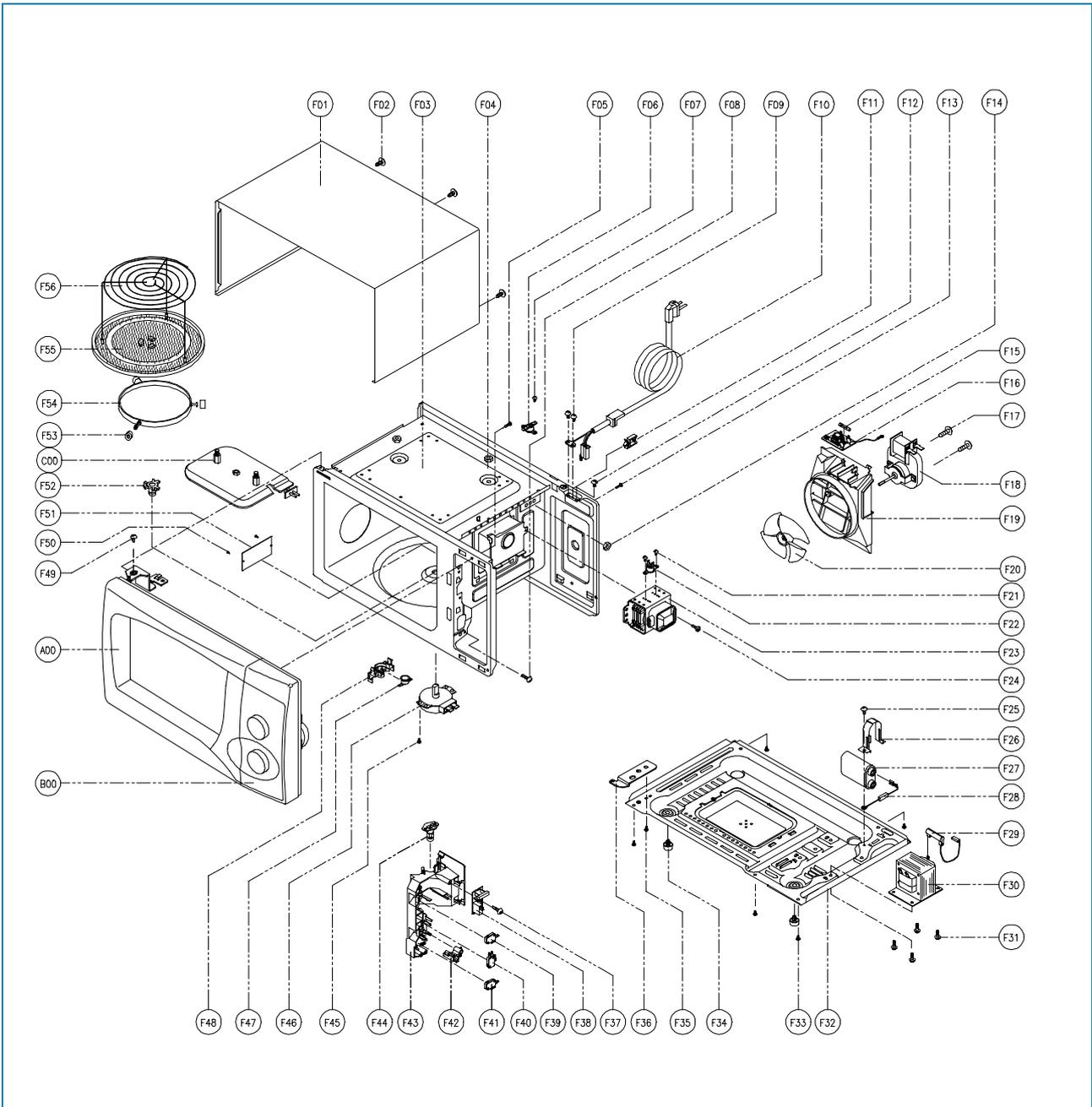
- R : PART RECOMMENDED FOR STOCK

NO.	R	PART CODE	PART NAME	DESCRIPTION	SUPPLY	REMARK
A00		3511710350	DOOR AS	KOR-63671S	0	Refer to Page 10
B00		3516720340	CONTROL-PANEL AS	KOG-37671S	0	Refer to Page 12
C00		3513302700	INSULATOR HEATER AS	KOG-37150S	0	Refer to Page 16
F01		3510801310	CABINET	PCM T0.6 GE	0	
F02		7S312X40A1	SCREW SPECIAL	T1 TRS 4X10 SE MFZN	0	
F03		3516109010	CAVITY WELD AS	KOG-37150S	0	
		3516109610	CAVITY JOINT AS	KOG-37150S		
F04		7S627W50X1	NUT HEX	NUT FLANGE M5X0.8P MFZN	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		7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	0	
F10		35113A5QJ5	CORD POWER AS	3X1.5 80X80 120-RTML	0	
F11		4413A90012	CLAMP POWER CORD	NYLON66	0	
F12		7S312X40A1	SCREW SPECIAL	T1 TRS 4X10 SE MFZN	0	
F13		7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	0	
F14		7S627W50X1	NUT HEX	NUT FL M5X0.8P MFZN	0	
F15		4414A25110	FUSE	250V 15A 65TS	0	
		4414A25100		250V 15A MDA15		
F16		3518606100	NOISE-FILTER	DWLF-M13	0	
F17		7121403011	SCREW TAPPING	T2S PAN 4X30 MFZN	0	
F18		3512517000	GUIDE WIND	PP	0	
F19		3963513100	MOTOR SHADED POLE	230V 17W OEM-10DWC2-A07	0	
F20		3511800300	FAN	PP+30%GLASS	0	
F21	R	3518002200	MAGNETRON	2M218H(MF) I	0	
F22		3516004000	SPECIAL SCREW	T2 BOLT FL 5X12 DACRO	0	
F23		7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 SE MFZN	0	
F24		3513003200	HOLDER HV CAPACITOR	SECC T0.6	0	
F25	R	3518302200	CAPACITOR HV	2100VAC 0.98 $\mu$ F #187	0	
F26	R	3518400400	DIODE HV	HVR-1X-3AB 12KV #187	0	
F27	R	3518701100	FUSE HV	5KV 0.55A HV-41A55-02 #187	0	
F28	R	3518115300	TRANS HV	DW-N85S0-63T	0	
F29		3516003700	SPECIAL SCREW	TT3 HEX 4X8 FLG MFZN	0	
F30		3510311700	BASE	SBHG T0.8	0	
F31		7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	0	
F32		3512100900	FOOT	PP DASF-130	0	
F33		7S422X4081	SCREW SPECIAL	TT2 TRS 4X8 SE MFZN	0	
F34		3515201101	STOPPER HINGE*U	SCP-1 T2.5	0	

NO.	R	PART CODE	PART NAME	DESCRIPTION	SUPPLY	REMARK
F35		7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	0	
F36	R	3518570400	SWITCH S/A RELAY	DWSR-1	0	
F37	R	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	0	PRIMARY
F38	R	4415A66910	SW MICRO	VP-531A-OF/SZM-V16-FA-61	0	MONITOR
F39	R	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	0	SECONDARY
F40		3513702600	LEVER LOCK	POM	0	
F41		3513811710	LOCK	POM	0	
F42		3513601600	LAMP	BL 240V 25W T25 C7A H187	0	
F43		7121400611	SCREW TAPPING	T2S PAN 4X6 MFZN	0	
F44	R	3966310100	MOTOR SYNCRO	220V 2.5W GM-16-24FD12	0	
F45		3518905300	THERMOSTAT	OFF:75 ON:65 H #187 NB	0	
F46		3513003400	HOLDER THERMOSTAT	PBT	0	
F47		3516003700	SCREW SPECIAL	TT3 HEX 4X8 FLG MFZN	0	
F48		4078502031	BUTTON LOCKING	PP HONAM A353	0	
F49		3511405100	COVER WAVE GUIDE	MICA T0.35	0	
F50		3517400620	COUPLER	XAREC	0	
F51		3514700710	ROLLER	TEFLON	X	
F52		3512517300	GUIDE ROLLER	PP 5113MF6 A353B	X	
		3512517500	GUIDE ROLLER AS	KOR-63150S	0	
F53		3517203600	TRAY	GLASS	0	
F54		3517206900	TRAY RACK AS	KOG-37150S 110MM	0	

EXPLODED VIEW AND PARTS LIST

(2) KOG-39671S



## - R : PART RECOMMENDED FOR STOCK

NO.	R	PART CODE	PART NAME	DESCRIPTION	SUPPLY	REMARK
A00		3511710770	DOOR AS	KOR-86671S	0	Refer to Page 10
B00		3516720830	CONTROL-PANEL AS	KOG-39671S	0	Refer to Page 12
C00		3513302700	INSULATOR HEATER AS	KOG-37150S	0	Refer to Page 16
F01		3510801400	CABINET	PCM T0.6 GE	0	
F02		7S312X40A1	SCREW SPECIAL	T1 TRS 4X10 SE MFZN	0	
F03		3516109210	CAVITY WELD AS	KOG-39150S	0	
		3516109710	CAVITY JOINT AS	KOG-39150S		
F04		7S627W50X1	NUT HEX	NUT FLANGE M5X0.8P MFZN	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		7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	0	
F10		35113A5QJ5	CORD POWER AS	3X1.5 80X80 120-RTML	0	
F11		4413A90012	CLAMP POWER CORD	NYLON66	0	
F12		7S312X40A1	SCREW SPECIAL	T1 TRS 4X10 SE MFZN	0	
F13		7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	0	
F14		7S627W50X1	NUT HEX	NUT FL M5X0.8P MFZN	0	
F15		4414A25110	FUSE	250V 15A 65TS	0	
		4414A25100		250V 15A MDA15		
F16		3518606100	NOISE-FILTER	DWLF-M13	0	
F17		7121403011	SCREW TAPPING	T2S PAN 4X30 MFZN	0	
F18		3512517000	GUIDE WIND	PP	0	
F19		3963513100	MOTOR SHADED POLE	230V 17W OEM-10DWC2-A07	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	R	3518002200	MAGNETRON	2M218H(MF) I	0	
F24		3516004000	SPECIAL SCREW	T2 BOLT FL 5X12 DACRO	0	
F25		7S422X4081	SPECIAL SCREW	TT2 TRS 4X8 SE MFZN	0	
F26		3513003200	HOLDER HV CAPACITOR	SECC T0.6	0	
F27	R	3518302200	CAPACITOR HV	2100VAC 0.98mF #187	0	
F28	R	3518400400	DIODE HV	HVR-1X-3AB 12KV #187	0	
F29	R	3518701100	FUSE HV	5KV 0.55A HV-41A55-02 #187	0	
F30	R	3518116000	TRANS HV	JY-N95S0-86TB	0	
F31		3516003700	SPECIAL SCREW	TT3 HEX 4X8 FLG MFZN	0	
F32		3510311900	BASE	SBHG T0.8	0	
F33		7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	0	

EXPLODED VIEW AND PARTS LIST

NO.	R	PART CODE	PART NAME	DESCRIPTION	SUPPLY	REMARK
F34		3512100900	FOOT	PP DASF-130	0	
F35		7S422X4081	SCREW SPECIAL	TT2 TRS 4X8 SE MFZN	0	
F36		3515201101	STOPPER HINGE*U	SCP-1 T2.5	0	
F37		7122401211	SCREW TAPPING	T2S TRS 4X12 MFZN	0	
F38	R	3518570400	SWITCH S/A RELAY	DWSR-1	0	
F39	R	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	0	PRIMARY
F40	R	4415A66910	SW MICRO	VP-531A-OF/SZM-V16-FA-61	0	MONITOR
F41	R	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	0	SECONDARY
F42		3513702600	LEVER LOCK	POM	0	
F43		3513811710	LOCK	POM	0	
F44		3513601600	LAMP	BL 240V 25W T25 C7A H187	0	
F45		7121400611	SCREW TAPPING	T2S PAN 4X6 MFZN	0	
F46	R	3966310100	MOTOR SYNCRO	220V 2.5W GM-16-24FD12	0	
F47		3518905600	THERMOSTAT	OFF : 80 ON : 50 H #187 NB	0	
F48		3513003400	HOLDER THERMOSTAT	PBT	0	
F49		3516003700	SCREW SPECIAL	TT3 HEX 4X8 FLG MFZN	0	
F50		4078502031	BUTTON LOCKING	PP HONAM A353	0	
F51		3511405100	COVER WAVE GUIDE	MICA T0.35	0	
F52		3517400620	COUPLER	XAREC	0	
F53		3514700710	ROLLER	TEFLON	X	
F54		3512509200	GUIDE ROLLER	PP 5113MF6 A353B	X	
		3512510600	GUIDE ROLLER AS	KOR-63150S	0	
F55		3517203500	TRAY	GLASS	0	
F56		3517206900	TRAY RACK AS	KOG-37150S 110MM	0	

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