

# **Service Manual**

**Microwave Oven** 

MODEL: KOG-5747



# DAEWOO ELECTRONICS CO., LTD

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**

# **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 gasked plate and oven surface should be kept clean.

No greas, 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 micrwave oven has concealead switch 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 t he 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 manafacterer and CDRH innediately.

#### IMPORTANT

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

Green-and-yellow : Earth

Blue : Neartral

Brown. : live

As the colords of the wires in the manins lead of this appliance may not correspond with the coloured makings

identifying the terminals in your plug, proced 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 terminals which is marked with the letter 'N' or coloured black.

he wire which is coloured brown must be with the letter 'L' or coloured red.

### NOTE:

The oven is desigend for counter-top use only.

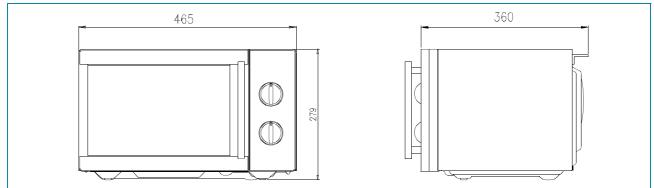
# **SPECIFICATIONS**

MODEL		KOG-5747	
POWER SUPPLY		230V ~ 50Hz, SINGLE PHASE WITH EARTHING	
POWER CON-	MICROWAVE	1,200 W	
SUMPTION	GRILL	1,050 W	
	COMBINATION	2,200 W	
MICROWAVE ENE	ERGY OUTPUT	800 W	
MICROWAVE FRE	EQUENCY	2,450 MHz	
OUTSIDE DIMENS	SIONS(W X H X D)	465 x 279 x 360 mm (18.3 x 11.0 x 14.2 in)	
CAVITY DIMENSI	ONS (W X H X D)	290 x 208 x 306 mm (11.4 x 8.2 x 12.0 in)	
NET WEIGHT		Approx. 14kg (30.9 lbs.)	
TIMER		60 min. Dual Speed	
FUNCTION SELEC	CTIONS	MICROWAVE /GRILL / COMBINATION	
POWER SELECTI	ONS	7 LEVELS	
CAVITY VOLUME		0.7 Cu. Ft.	

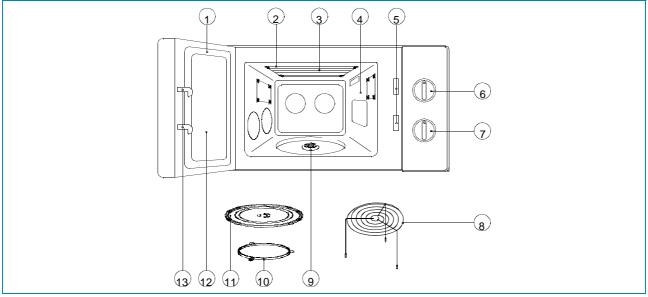
\* SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

# **EXTERNAL VIEW**

# 1. OUTER DIMENSION



# 2. FEATURE DIAGRAM



1) Door seal - Door seal maintains the microwave energy within the oven cavity and prevents microwave leakage.

- 2) Cover Heater
- 3) Heating Element
- 4) Oven cavity
- 5) Safety interlock system
- 6) Knob V.P.C Used to select microwave poer 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 oven failure.

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

Poor television reception and radio interference may result if the oven is located closed 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 11 amperes, 230Volts, 50Hz grounded outlet.

- ➤ 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 amprer 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 applicance is equipped with a cord having a reathing wire with a earthing plug. The plug must be plugged into an outlet that is properly installed ant earthed.

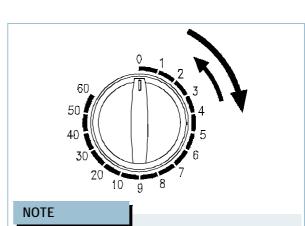
# WARNING

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 accpt 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.
- 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.
- 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 adujst 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.
  - To set MICROWAVE cooking

Set the variable power selector to the desired power level.



- 1. When setting timer for less than 2 minutes, turn the timer pass 2 minutes and then return to the correct timer setting.
- 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.

POWER LEVEL	SYMBOL	APPROXIMATE PERCENTAGE OF POWER
HIGH	MAX	100%
MED-HIGH	700W	88%
MEDIUM	580W	73%
DEFROST	***	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 open, the temperature inside the oven decrese 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 mides, be careful as the tray will be hot to touch, use oven gloves or pot holders while handling tray.

### Cautions to be observed when trouble shooting.

Unlike many other appliances, the microwave oven is 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.

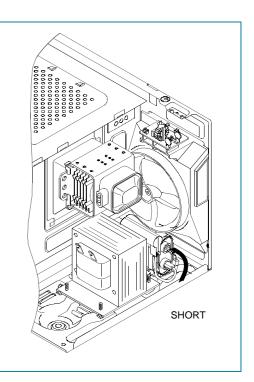
- 1. Always remove the power plug from the outlet before servicing.
- 2. Use an insulated scredriver and ware rubber gloves when servicing the high voltage side.
- 3. Discahrge the high voltage capacitor before touching any oven components or wiring.
  - (1) Check the grounding.

Do not operate on a 2-wire extension cord. The microwave oven is designed to be used with grounded. It is imperative, therefore, to make sure it is grounded 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 15A fuse is blown out due to the operation of the monitor switch; replace primary interlock switch, secondary interlock switch and interlock monitor switch.
- 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.
CAUTION : When servicing th 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

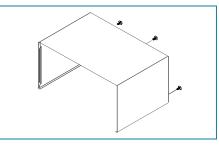
- 1) Remove three screws on cabinet back.
- 2) Push the cabinet backward.

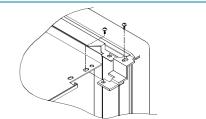
#### 2. To remove door assembly

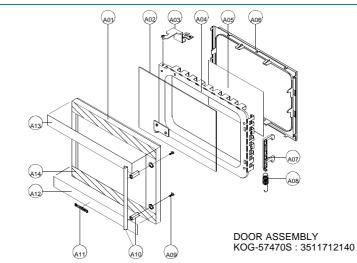
- 1) Remove two screws which secure the stopper hinge top.
- 2) Remove the door assembly from top plate of cavity.
- 3) Reverse the above for reassembly.

**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	QTY	REMARK
A01	3512203850	FRAME DOOR	ABS XR-401, H-2938	1	
A02	3517005620	BARRIER-SCREEN*O	TEMP GLASS T3.2 MIRROR	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	НООК	POM BLACK	1	
A08	3515101310	SPRING HOOK	HSW-3	1	
A09	7001503310	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	SI-161 T0.15 27MM	1	

- (1) Remove the gasket door from door weld as.
- (2) Remove the barrier screen inner from door 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.

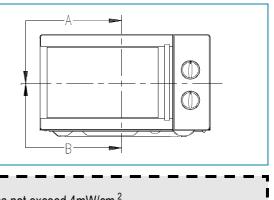
#### 4. Method to reduce the gap between the door seal and the oven front surface.

(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.

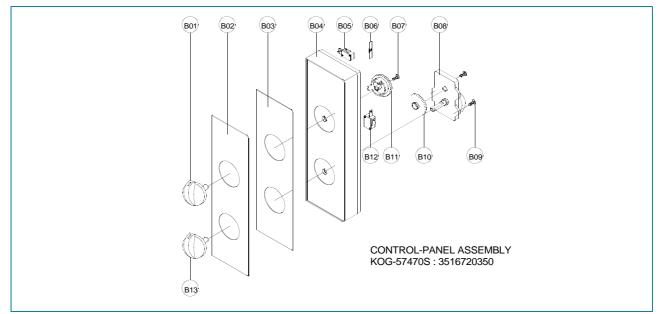
(2) To reduce gap located on part 'B'

Loosen two screws on stopper hinge under, and then push the door to contact the door seal to oven front surface.



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.



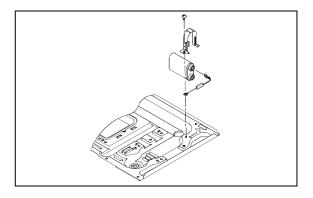
REF NO.	PART CODE	PART NAME	DESCRIPTION	Q'TY	REMARK
B01	3513402650	KNOB VPC	ABS XR-401, H-2938	1	KOG-57470S
B02	3511603930	DECORATOR C-PANEL	STS T0.6	1	
B03	3516003950	SPEICAL DOUBLE TAPE	SI-161 T0.15	1	
B04	3516719070	CONTROL-PANEL	ABS XR-401, H-2938	1	
B05	4415A66910	SW MICRO	VP-531A-OF/SZM-V16-FA-61	1	
B06	3515101600	SPRING FLAT	SUS 301 T0.5	1	
B07	7122401211	SCREW TAPPING	T2S TRS 4*12 MFZN	1	
B08	3518205100	TIMER	KN60MKD 12E-P	1	
B09	7122401211	SCREW TAPPING	T2S TRS 4*12 MFZN	2	
B10	3517400400	COUPLER TIMER	POM	1	
B11	3517400510	COUPLER VPC KNOB	POM	1	
B12	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	1	
B13	3513402550	KNOB	ABS XR-401, H-2938	1	KOG-57470S

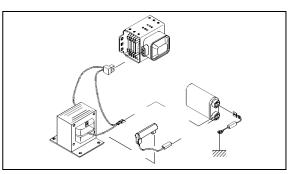
1) Remove the screw which secure the control panel, push up two snap fits and draw forward the control panel assembly.

- 2) Remove two screws which secure the timer assembly.
- 3) Remove the timer assembly.
- 4) Pull out the timer knob from the control panel.
- 5) Pull out the timer couple 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.



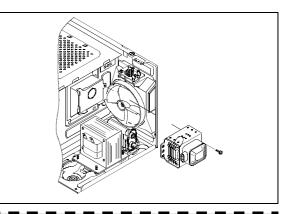


#### 7. To remove magnetron.

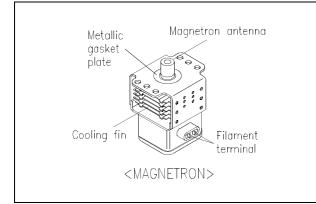
- 1) Remove a screw which secure the magnetron.
- 2) Remove the magnetron.

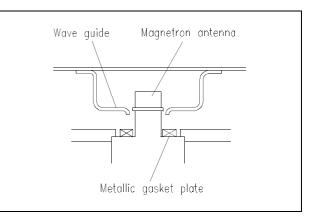
High voltage circuit wiring

3) Reverse the above steps for reassembly.



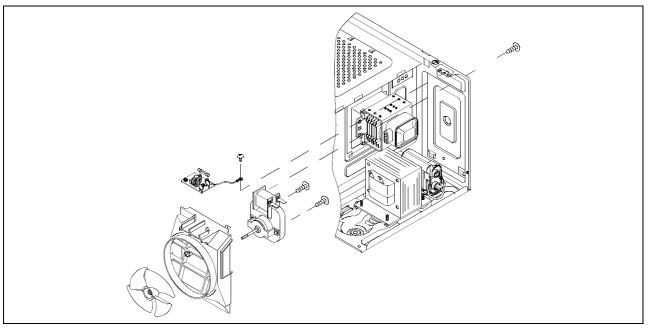
NOTE : Never install the magnetron without the metallic gasket plate which is packed with each magnetron to prevent microwave leakage. Whenever repair work is carried out on magnetron, check the microwave leakage. It shall not exceed 4mW/ cm<sup>2</sup> for a fully assembled oven with door normally closed.





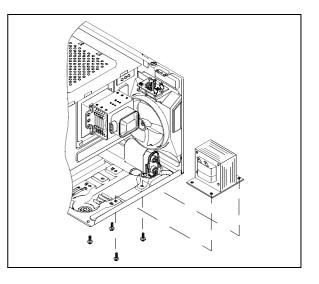
# 8. To remove wind guide assembly.

- 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 reasembly.



#### 9. To remove H.V. transformert.

- 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.

(6) Remove the tray motor.

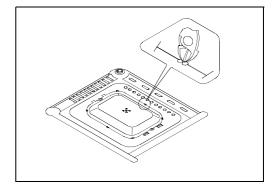
(3) Cut the tray motor cover part from the base plate.

(5) Remove a screw which secure the tray motor.

securing the tray motor cover with screw.

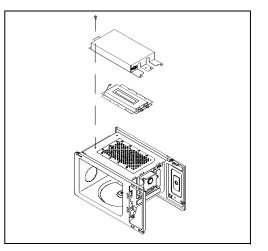
(7) Reverse the above steps for reassembly except for

(4) Remove the tray motor cover.

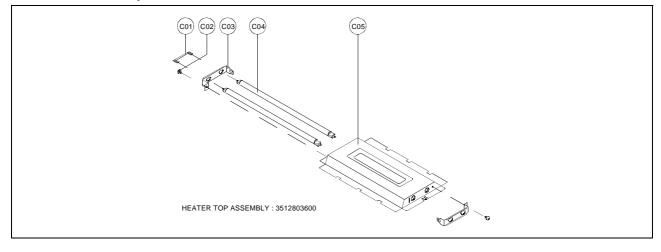


#### 11. To remove heater top assembly.

- (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.



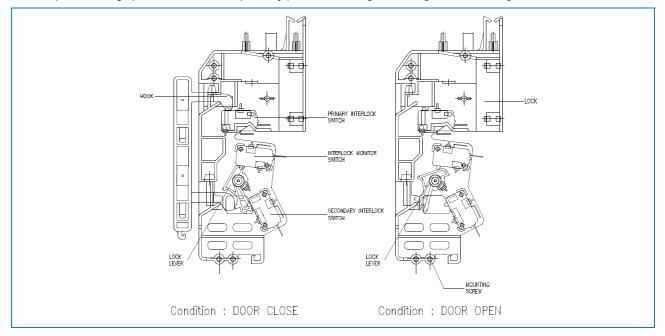
# 12. To remove heater parts.



REF NO.	PART CODE	PART NAME	DESCRIPTION	Q'TY	REMARK
C01	3512765100	HARNESS HEATER	KOC-970T1S TEFLON	1	
C02	7112401011	SCREW TAPPING	T1 TRS 4X10 MFZN	2	
C03	3510607800	BRACKET HEATER *T	SBHG T0.5	2	
C04	3512803700	HEATER MIRACLON	115V AC 500W	2	
C05	3511408100	COVER HEATER *T	STS430 T0.5	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 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 assembly position.
- c) Make sure that lock lever moves smothly after adjustment is completed.
- d) Tighten completely two mounting screws.

#### NOTE :

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

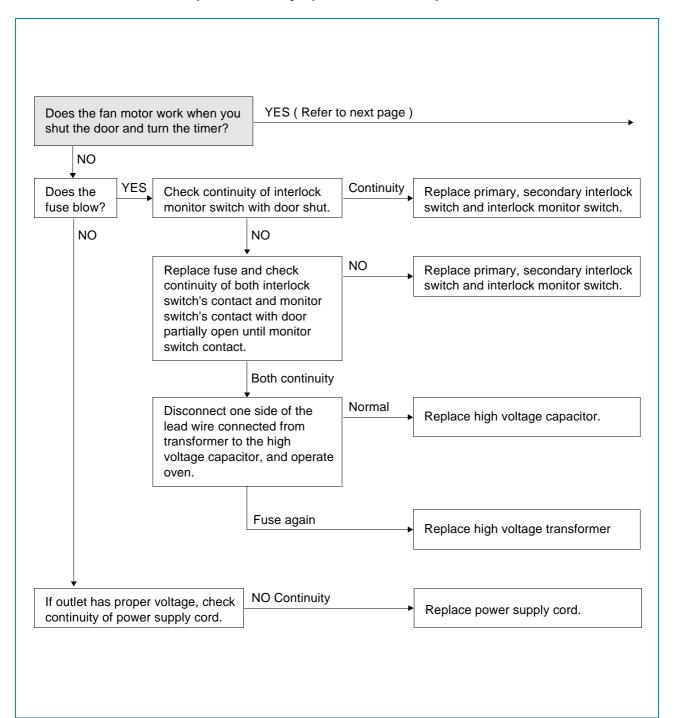
# **TROUBLE SHOOTING GUIDE**

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

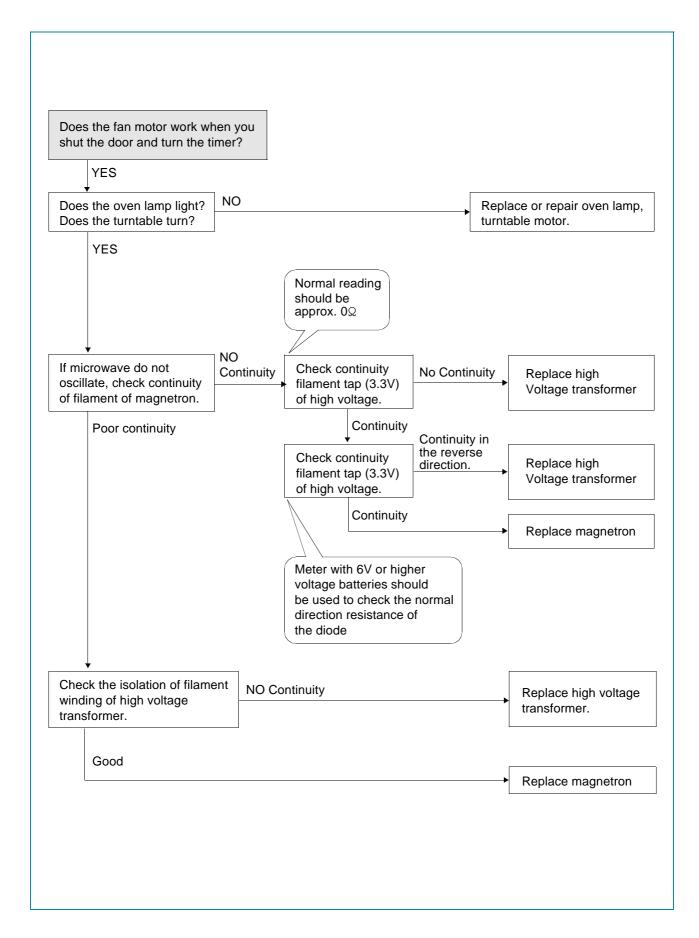
- 1. Check grounding before trouble checking.
- 2. Be careful of the high voltage circuit.
- 3. Discharge the high voltage capacitor.

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) Oven does not operate at all ; any inputs can not be accepted.



#### **TROUBLE SHOOTING GUIDE**



# **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

- 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±5cc of potable water.
- The water is contained in a cylindrical borosilicate glass vessel having a maximum material thickness of 3 mm and an outside diameter of approximately 190mm.
- 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  $10 \pm 2^{\circ}C$  ( $50 \pm 3.6^{\circ}F$ )

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.
- 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 X ∆T/t

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

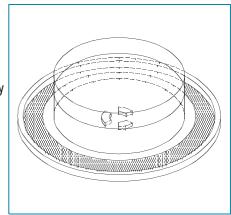
The power measured should be **B** (Refer to SPECIFICATIONS)  $W \pm 10.0\%$ .

### 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 ± 3.6 °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



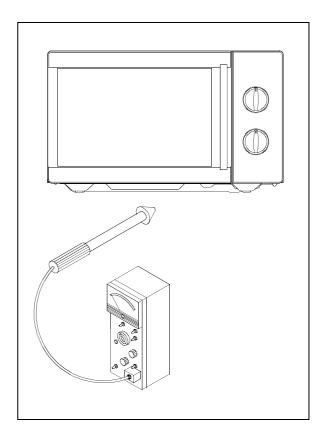
#### 2. MICROWAVE RADIATION TEST

#### **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 approch the unit under test until the radiometer readds an appreciable microwave leakage from the unit under the test.

# PROCEDURES

- 1. Prepare Microwave Energy Survey, 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 600cc glass breaker with an inside diameter of approx. 95mm(3.5in.).
- 3. Place it at the center of the tray and set in a cavity.
- 4. Close the door and operate the oven.
- 5. Measure the leakage by using Microwave Energy Survey Meter with dual ranes, set to 2450MHz.
  - 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 5cm(2in.) space cone with probe. Hold the probe perpendicular to the cabinet and door. Place the space cone of the prove on the door, cabinet, door seem, door viewing screen, the exhaust air vents and the suction air vents.
  - 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 Ω ± 10%
Filament winding	<b>Αpprox</b> . <b>0</b> Ω
Primary winding	Approx. 0 Ω

#### 2. High voltage capacitor

(1) Check continuity of capacitor with meter on the hightest 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  $10 M \Omega$  .
- (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 amy 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.

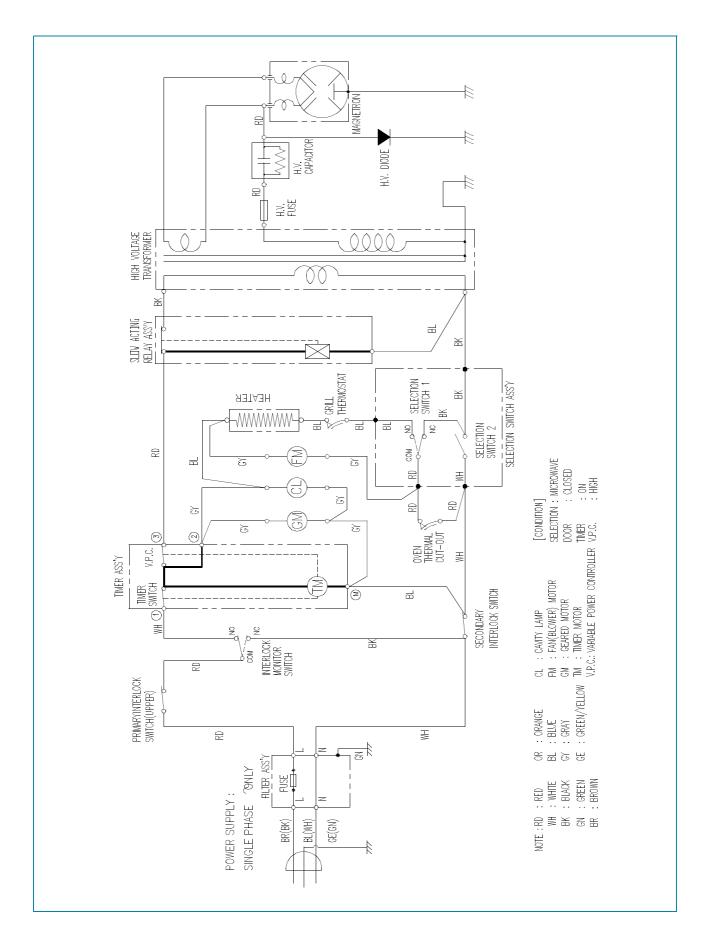
- To diagnose for an open filament or a shorted magnetron.
- (1) Isolate magnetron from the circuit by disconnecting the leads.
- (2) A continuity check across magnetron filament terminals should indicate  $0.1\Omega$  or less.
- (3) A continuity check between each filament terminal and magnetron case 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**



# **EXPLODED VIEW AND PARTS LIST**

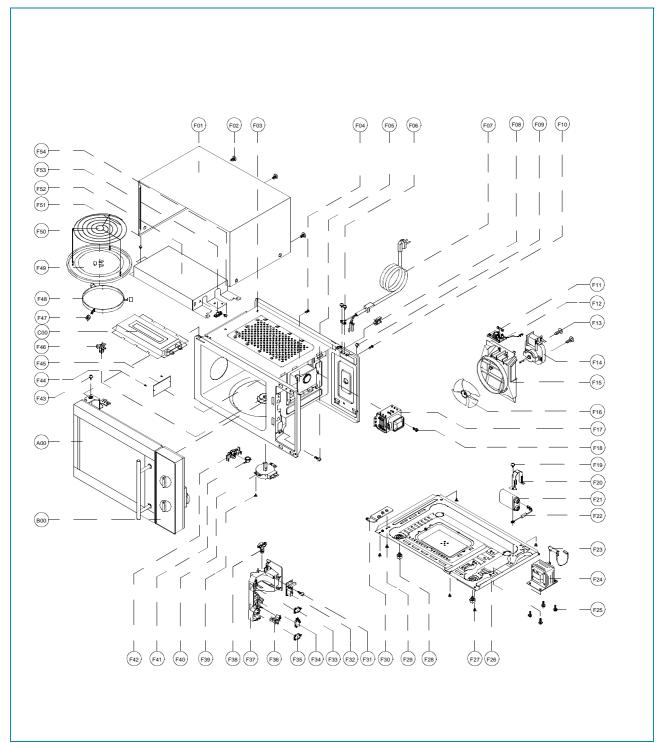
# **1. DOOR ASSEMBLY**

Refer to Disassembly and assembly.

# 2. CONTROL PANEL ASSEMBLY

Refer to Disassembly and assembly.

# 3. TOTAL ASSEMBLY



# EXPLODED VIEW AND PARTS LIST

REF NO.	R	PART CODE	PART NAME	DESCRIPTION	SUPPLY	REMARK
A00			DOOR AS	Refer to Disassembly and Assembly	0	
B00			CONTROL-PANEL AS		0	
C00		3512803600	HEATER *T AS	KOG-57350S	0	
F01		3510801310	CABINET	PCM	0	
F02		7112401011	SCREW TAPPING	T1 TRS 4*10 MFZN	0	
F03		3516111900	CAVITY AS	KOG-57350S	0	
F04		7122401211	SCREW TAPPING	T2S TRS 4*12 MFZN	0	
F05		7122401211	SCREW TAPPING	T2S TRS 4*12 MFZN	0	
F06		7112401011	SCREW TAPPING	T1 TRS 4*10 MFZN	0	
F07		35113A5QJ5	CORD POWER AS	3X1.5 80X80 120-RTML 1.4M	0	
F08		4413A90012	CLAMP POWER CORD	NYLON 66	0	
F09		7112401011	SCREW TAPPING	T1 TRS 4*10 MFZN	0	
F10		7122401211	SCREW TAPPING	T2S TRS 4*12 MFZN	0	
F11		4414A25110	FUSE	250V 15A 65TS	0	
		4414A25100	1 03E	250V 15A MDA15	0	
F12		3518606100	NOISE-FILTER	DWLF-M13	0	
F13		7121403011	SCREW TAPPING	T2S PAN 4X30 MFZN	0	
F14		3963513100	MOTOR SHADED POLE	230V 17W OEM-10DWC2-A07	0	
F15		3512517000	GUIDE WIND	PP	0	
F16		3511800300	FAN	PP+30%GLASS	0	
F17	R	3518002200	MAGNETRON	2M218H(F)	0	
F18		3516004000	SPECIAL SCREW	T2 BOLT FLANGE 5X12 DACRO	0	
F19		7272400811	SCREW TAPTITE	TT3 TRS 4X8 MFZN	0	
F20		3513003200	HOLDER HV CAPACITOR	SECC T0.6	0	
F21	R	3518302200	CAPACITOR HV	2100VAC 0.98UF #187	0	
F22	R	3518400400	DIODE HV	HVR-1X-3AB 12KV #187	0	
F23	R	3518701100	FUSE HV	5KV 0.55A HV-41A55-02	0	
F24	R	3518116800	TRANS HV	DY-N80S0-63T Q	0	
F25		3516003700	SPECIAL SCREW	TT3 HEX 4X8 FLG MFZN	0	
F26		3510311700	BASE	SBHG T0.8	0	
F27		7112401011	SCREW TAPPING	T1 TRS 4*10 MFZN	0	
F28		3512100900	FOOT	PP DASF-130	0	
F29		7272400811	SCREW TAPTITE	TT3 TRS 4X8 MFZN	0	
F30		3515201101	STOPPER HINGE *U	SCP-1 T2.5	0	
F31		7122401211	SCREW TAPPING	T2S TRS 4*12 MFZN	0	
F32	R	3518570400	SWITCH S/A RELAY	DWSR-1	0	
F33	R	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	0	PRIMARY
F34	R	4415A66910	SW MICRO	VP-531A-OF/SZM-V16-FA-61	0	MONITORY
F35	R	4415A17352	SW MICRO	VP-533A-OF SPNO #187 200G	0	SECONDARY
F36		3513702600	LEVER LOCK	РОМ	0	
F37	1	3513811710	LOCK	POM BLACK	0	

# EXPLODED VIEW AND PARTS LIST

REF NO.	R	PART CODE	PART NAME	DESCRIPTION	SUPPLY	REMARK
F38		3513601600	LAMP	BL 240V 25W T25 C7A H187	0	
F39		7121400611	SCREW TAPPING	T2S PAN 4X6 MFZN	0	
F40	R	3966310100	MOTOR SYNCRO	220V 2.5W GM-16-24FD12	0	
F41		3518905300	THERMOSTAT	OFF:75 ON:65 H #187 NB	0	
F42		3513003400	HOLDER THERMOSTAT	РВТ	0	
F43		7272400811	SCREW TAPTITE	TT3 TRS 4X8 MFZN	0	
F44		4078502031	BUTTON LOCKING	PP HONAM A353	0	
F45		3511405100	COVER WAVE GUIDE	MICA T0.35	0	
F46		3517400620	COUPLER	XAREC	0	
*		3512517500	GUIDE ROLLER AS	KOR-63150S	0	
F47		3514700710	ROLLER	TEFLON	Х	
F48		3512517300	GUIDE ROLLER	PP 5113MF6 A353B	Х	
F49		3517203600	TRAY	GLASS	0	
F50		3517206900	TRAY RACK AS	KOG-37150S 110MM	0	
F51		7112401011	SCREW TAPPING	T1 TRS 4*10 MFZN	0	
F52		3511408200	COVER INSULATOR *T	SBHG T0.5	0	
F53		3518905900	THERMOSTAT	OFF:75 ON:65 V #187	0	
F54		7121300611	SCREW TAPPING	T2S PAN 3X6 MFZN	0	