MICROWAVE OVEN

BASIC: C100R-5U/BWT
MODEL: C100R-5D
MODEL CODE: C100R-5D/BWT

SERVICE Manual

MICROWAVE OVEN

FEATURES

1. 1.0 cu.ft convection
2. LED - Bar

Refer to the service manual in http://itself.sec.samsung.co.kr for more information.

• Contents

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 microwave power 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.

1. Precaution

Follow these special safety precautions. Although the microwave oven is completely safe during ordinary use, repair work can be extremely hazardous due to possible exposure to microwave radiation, as well as potentially lethal high voltages and currents.

1-1 Safety precautions (⚠)

1. All repairs should be done in accordance with the procedures described in this manual. This product complies with Federal Performance Standard 21 CFR
2. Microwave emission check should be performed to prior to servicing if the oven is operative.
3. If the oven operates with the door open :Instruct the user not to operate the oven and contact the manufacturer and the center for devices and radiological health immediately.
4. Notify the Central Service Center if the microwave leakage exceeds 5 mW/cm2.
5. Check all grounds.
6. Do not power the MWO from a “2-prong” AC cord. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.
7. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including: nonmetallic control knobs and compartment covers.
8. Make sure that there are no cabinet openings through which people --particularly children--might insert objects and contact dangerous voltages. Examples: Lamp hole,ventilation slots.
9. Inform the manufacturer of any oven foundto have emission in excess of 5 mW/cm2 ,Make repairs to bring the unit into compliance at no cost to owner and try to determine cause. Instruct owner not to use oven until it has been brought into compliance.

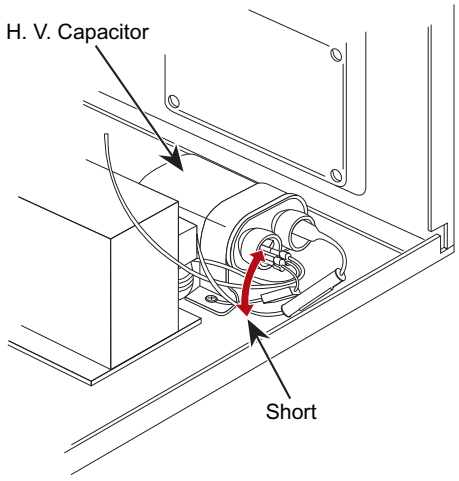
   CENTRAL SERVICE CENTER
10. Service technicians should remove their watches while repairing an MWO.
11. To avoid any possible radiation hazard,replace parts in accordance with the wiring diagram. Also, use only the exact replacements for the following parts: Primary and secondary interlock switches, interlock monitor switch.
12. If the fuse is blown by the Interlock Monitor Switch: Replace all of the following at the same time: Primary, door sensing switch and power relay, as well as the Interlock Monitor Switch. The correct adjustment of these switches is described elsewhere in this manual. Make sure that the fuse has the correct rating for the particular model being repaired.
13. Design Alteration Warning: Use exact replacement parts only, i.e.,only those that are specified in thedrawings and parts lists of this manual. This is especially important for the Interlock switches, described above. Never alter or add to the mechanical or electrical design of the MWO. Any design changes or additions will void the manufacturer’s warranty. Always unplug the unit’s AC power cord from the AC power source before attempting to remove or reinstall any component or assembly.
14. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
15. Some semiconductor (“solid state”) devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs). Examples include integrated circuits and field-effect transistors. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground.
16. Always connect a test instrument’s ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument’s ground lead last.
17. When checking the continuity of the witches or transformer, always make sure that the power is OFF, and one of the lead wires is disconnected.
18. Components that are critical for safety are indicated in the circuit diagram by shading, ⚠ or ⚠ .
19. Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

    NOTE : Connect the oven to a 20A. When connecting the oven to a 15A,make sure that circuit breaker can operate.

1-2 Special High Voltage Precautions

1. High Voltage Warning Do not attempt to measure any of the high voltages --this includes the filament voltage of the magnetron. High voltage is present during any cook cycle. Before touching any components or wiring, always unplug the oven and discharge the high voltage capacitor (See Figure 1-1)
2. The high-voltage capacitor remains charged about 30 seconds after disconnection. Short the negative terminal of the high-voltage capacitor to to the oven chassis. (Use a screwdriver.)
3. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.

Fig. 1-1 Discharging High Voltage Capacitor



Touch chassis ground first then short to the high voltage capacitor terminal by using screwdriver or jumper wire.

PRECAUTION

There exists HIGH VOLTAGE ELECTRICITY with high current capabilities in the circuits of the HIGH VOLTAGE TRANSFORMER secondary and filament terminals. It is extremely dangerous to work on or near these circuits with the oven energized.

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

PRECAUTION

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

PRECAUTION

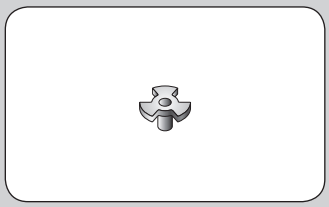
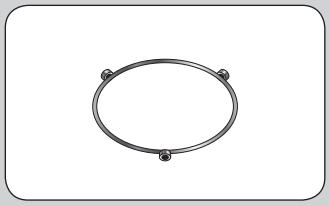
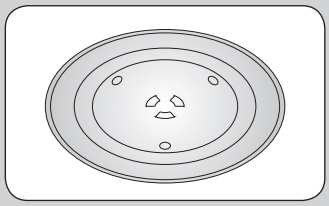
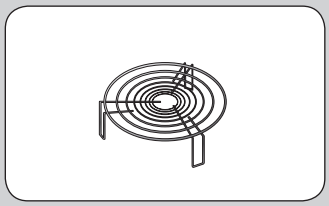
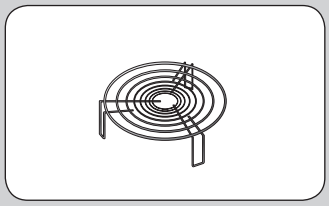
Servicemen should remove their watches whenever working close to or replacing the magnetron.

2. Specifications

2-1 Table of Specifications

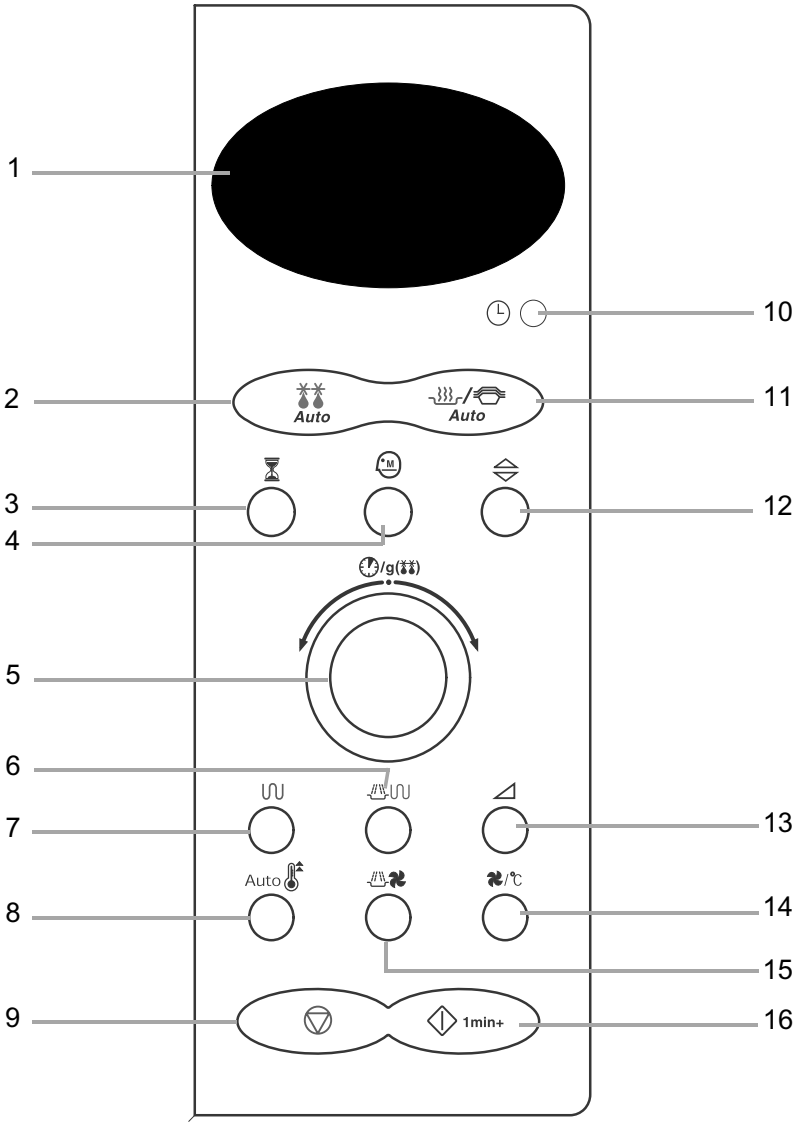
Items	Sub Items	Model	
		C100R-5D	C100R-5U
Power source		230 V ~ 50 Hz AC	230 V ~ 50 Hz AC
Power comsumption	Maximum Power	3100 W	3100 W
	Microwave	1400 W	1400 W
	Grill	1300 W	1300 W
	Convection	1700 W	1700 W
Output Power		100 W / 900 W	100 W / 900 W
Operating Frequency		2450 MHz	2450 MHz
Dimension (W x D x H)	Outside	517 x 511 x 310 mm	517 x 516 x 310 mm
	Oven cavity	336 x 346 x 222 mm	352 x 348 x 235 mm
Volume		1.0 CU. FT	1.0 CU. FT
Weight	Shipping	24.5 Kg approx	22.5 Kg approx
	Net	22.5 Kg approx	19 Kg approx

2-2 Accessory

Item	Description	Code No.	Q'ty
	Coupler	DE67-00182A	1
	ASSY-GUIDE ROLLER	DE97-00222A	1
	TRAY-COOKING	DE74-20015G	1
	ASSY-WIRE RACK	DE97-00216E	1
	ASSY-WIRE RACK	DE97-00136B	1

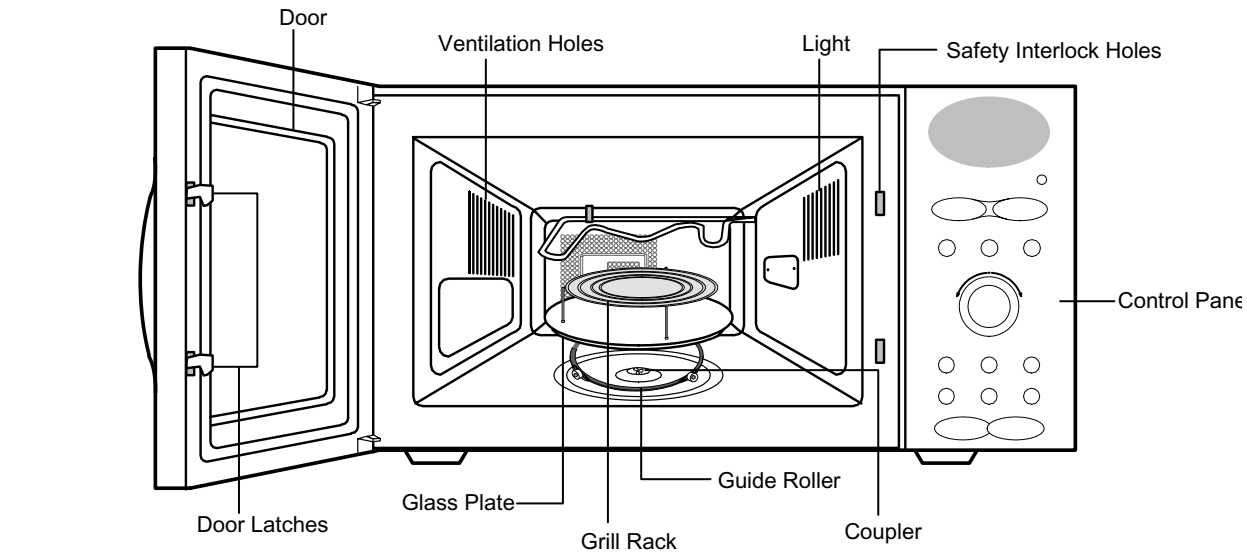
3. Operating Instructions

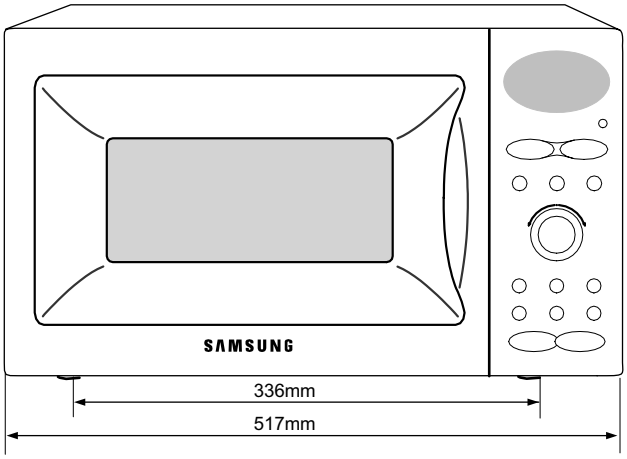
3-1 Control Panel

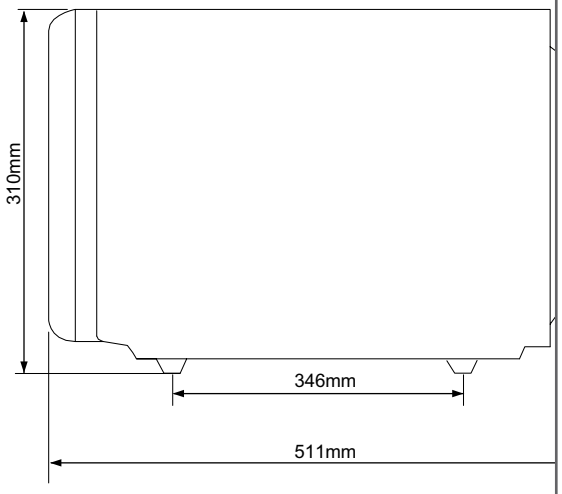


1. Display
2. Auto defrost feature selection
3. Standing time setting
4. Memory cook feature selection
5. Time setting weight selection and recipe selection
6. Combined mode selection (microwave + grill)
7. Grill mode selection
8. preheat mode selection
9. Stop / cabcel button
10. Clock setting
11. Auto reheat & Cook feature selection
12. Cooking time adjustment
13. Microwave / Power level mode selection
14. Convection mode / Temperature selection
15. Combined mode selection (microwave + convection)
16. Start / cooking time adjustment button

3-2 Features & External Views







4. Disassembly and Reassembly

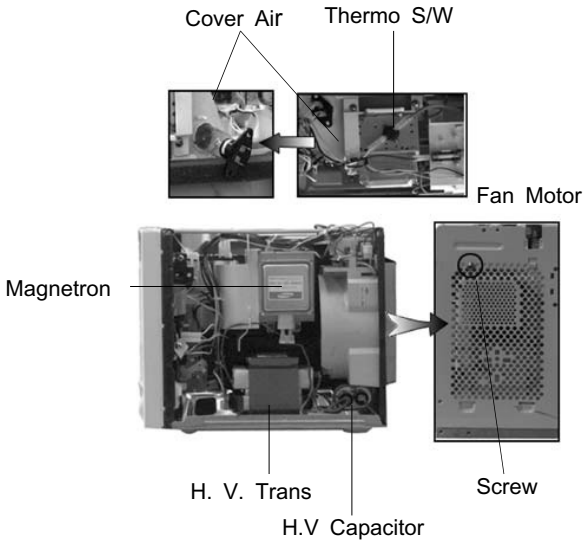
4-1 Replacement of Magnetron, Motor Assembly and Lamp

Remove the magnetron including the shield case, permanent magnet, choke coils and capacitors (all of which are contained in one assembly).

1. Disconnect all lead wires from the magnetron and lamp.
2. Remove a screw securing air cover.
3. Remove the air cover.
4. Remove screws securing the magnetron to the wave guide.
5. Take out the magnetron very carefully.
6. Remove tow from the back panel of fan motor assembly.
7. Take out the fan motor assembly.
8. Remove the oven lamp by rotating to pull out from hole of air cover.

   NOTE1: When removing the magnetron, make sure that its antenna does not hit any adjacent parts, or it may be damaged.

   NOTE2: When replacing the magnetron, be sure to remount the magnetron gasket in the correct position and make sure the gasket is in good condition.



4-2 Replacement of High Voltage Transformer

1. Discharge the high voltage capacitor.
2. Disconnect all the leads.
3. Remove the mounting bolts.
4. Reconnect the leads correctly and firmly.

PRECAUTION

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

PRECAUTION

There exists HIGH VOLTAGE ELECTRICITY with high current capabilities in the circuits of the HIGHVOLTAGE TRANSFORMER secondary and filament terminals. It is extremely dangerous to work on or near these circuits with the oven energized.

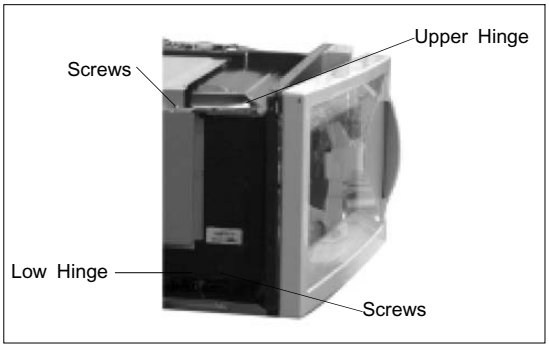
DO NOT measure the voltage in the high voltage circuit including filament voltage of magnetron.

4-3 Replacement of Door Assembly

4-3-1 Removal of Door Assembly

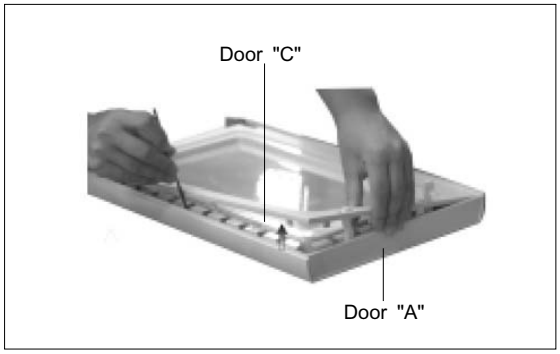
Securing the upper hinge and lower hinge.

The remove door assembly



4-3-2 Removal of Door “C”

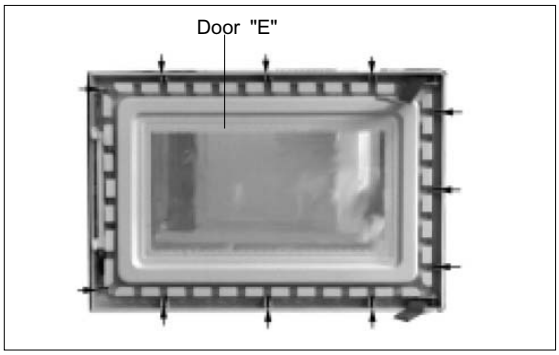
Insert flat screwdriver into the gap between Door “A” and Door “C” to remove Door “C” Be caful when handing Door “C” because it is fragile



4-3-3 Removal of Door “E”

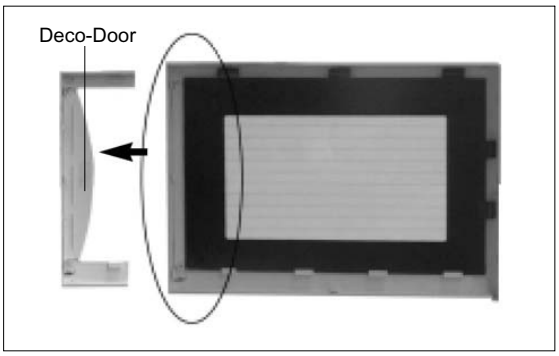
Following the procedure as shown in the figure, insert and bend a thin metal plate between Door “E” and Door “A” until you hear the ‘tick’ sound.

- Insertion depth of the thin metal plate should be



4-3-4 Removal of Key Door & Spring

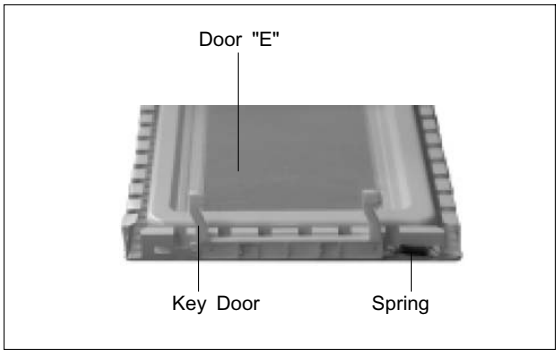
Remove pin hinge grom Door “E” Datach spring from Door “E” and key door



4-3-5 Removal of Screen-Door & Deco-door

1. Remove Door “E” from Door “A”

2. Remove Door-screen “B”



4-3 Replacement of Door Assembly (Continued)

4-3-6 Reassembly Test

After replacement of the defective component parts of the door, reassemble it and follow the instructions below for proper installation and adjustment so as to prevent an excessive microwave leakage.

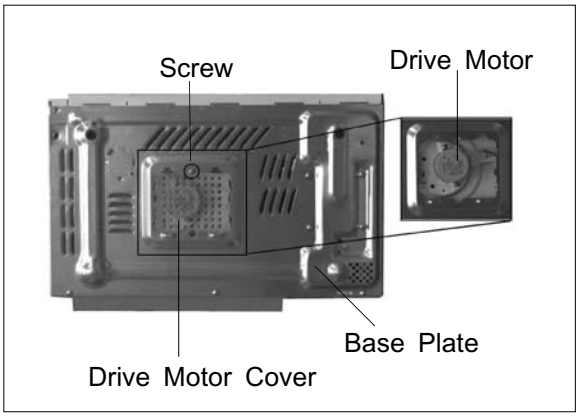
1. When mounting the door to the oven, be sure to adjust the door parallel to the bottom line of the oven face plate by moving the upper hinge and lower hinge in the direction necessary for proper alignment.
2. Adjust so that the door has no play between the inner door surface and oven front surface. If the door assembly is not mounted properly, microwave energy may leak from the space between the door and oven.
3. Do the microwave leakage test.

4-4 Replacement of Fuse

1. Disconnect the oven from the power source.
2. When 12A fuse blows out by the operation of interlock monitor switch failure, replace the primary interlock switch, door sensing switch, monitor switch and power relay.
3. When the above three switches operate properly, check if any other part such as the control circuit board, blower motor or high voltage transformer is defective.

4-5 Replacement of Drive Motor

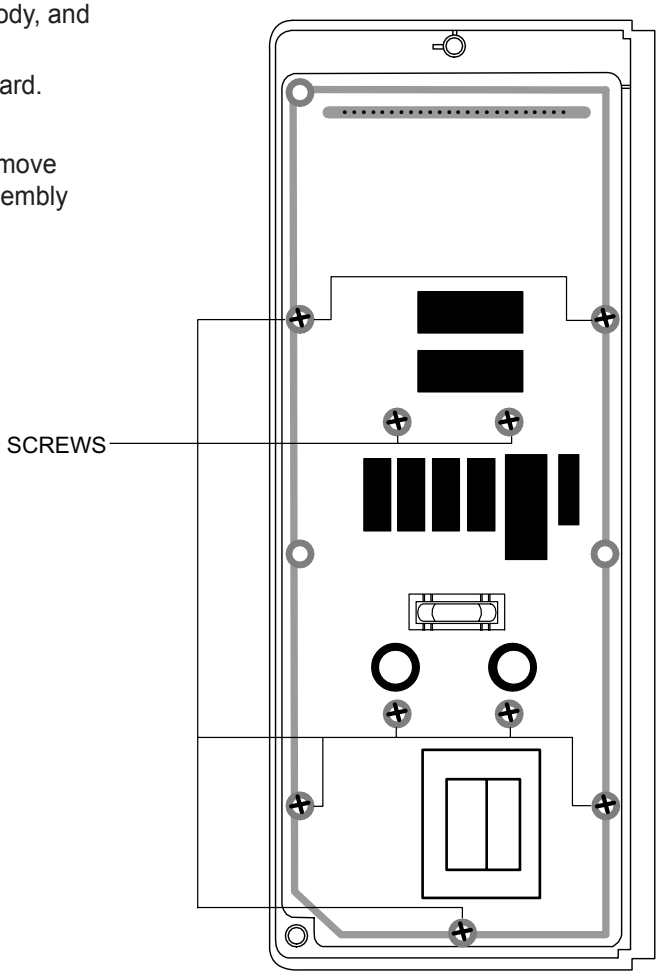
1. Take out the glass tray, guide roller from oven cavity, disconnect power.
2. Remove turn table motor cover from case bottom.
   CAUTION : Remove sharp edge after cover removal.
3. Disconnect leads from motor.
4. Remove the screws securing motor to bottom of over cavity and lift out the motor.
5. When replacing the motor, be sure to remount it in the correct position.
   NOTE : The shaft of motor should fit tip coupler.
6. Screw the motor to bottom of oven cavity.
7. Connect leads to the drive motor.
8. Screw the drive motor cover to the base plate with a screw driver.
   NOTE : Bring the spare screw from service center.



COVER FIXING SCREW : MATCHINE SCREW(6006-001170)

4-6 Replacement of Control Circuit Board

1. Be sure to dislyarge any static electricity from your body, and avoid touching the “touch control” circuitry
2. Disconnect the connectors from the control circuit board.
3. Remove screws securing the control box assembly.
4. Lift up the control circuit board from right side and remove the hooks holding the control circuit board to box assembly



5. Alignment and Adjustments

PRECAUTION

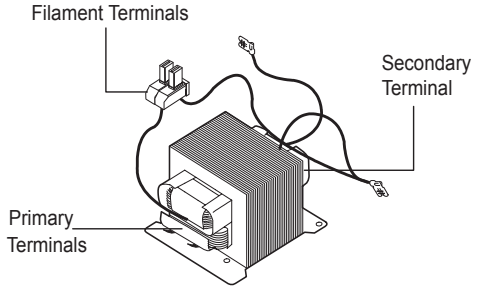
1. High voltage is present at the high voltage terminals during any cook cycle.
2. It is neither necessary nor advisable to attempt measurement of the high voltage.
3. Before touching any oven components or wiring, always unplug the oven from its power source and discharge the high voltage capacitor.

5-1 High Voltage Transformer

1. Remove connectors from the transformer terminals and check continuity.
2. Normal resistance readings are as follows:

Secondary	Approx. 162Ω
Filament	Approx. 0Ω
Primary	Approx. 2.14Ω

(Room temperature = 20°C)



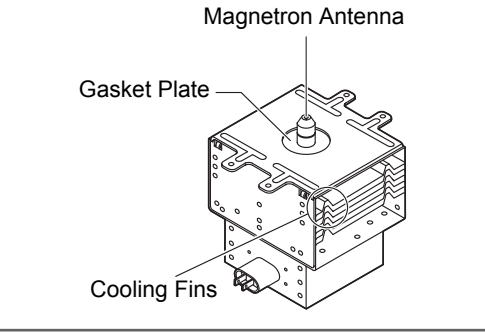
5-2 Low Voltage Transformer

1. The low voltage transformer is located on the control circuit board.
2. Remove the low voltage transformer from the PCB Ass'y and check continuity.
3. Normal resistor reading is shown in the table.

Terminals	Resistance
1~2(Input)	290Ω.
3~4(Output)	4.0Ω.
5~6(Output)	1.0Ω.

5-3 Magnetron

1. Continuity checks can indicate only an open filament or a shorted magnetron. To diagnose an open filament or shorted magnetron.
2. Isolate the magnetron from the circuit by disconnecting its leads.
3. A continuity check across the magnetron filament terminals should indicate one ohm or less.
4. A continuity check between each filament terminal and magnetron case should read open.



5-4 High Voltage Capacitor

1. Check continuity of the capacitor with the meter set at the highest resistance scale.
2. Once the capacitor is charged, a normal capacitor shows continuity for a short time, and then indicates 9MΩ.
3. A shorted capacitor will show continuous continuity.
4. An open capacitor will show constant 9MΩ.
5. Resistance between each terminal and chassis should read infinite.

5-5 High Voltage Diode

1. Isolate the diode from the circuit by disconnecting its leads.
2. With the ohm-meter set at the highest resistance scale, measure across the diode terminals. Reverse the meter leads and read the resistance. A meter with 6V, 9V or higher voltage batteries should be used to check the front-to back resistance of the diode (otherwise an infinite resistance may be read in both directions). The resistance of a normal diode will be infinite in one direction and several hundred KΩ in the other direction.

5-6 Main Relay and Power Control RelayA

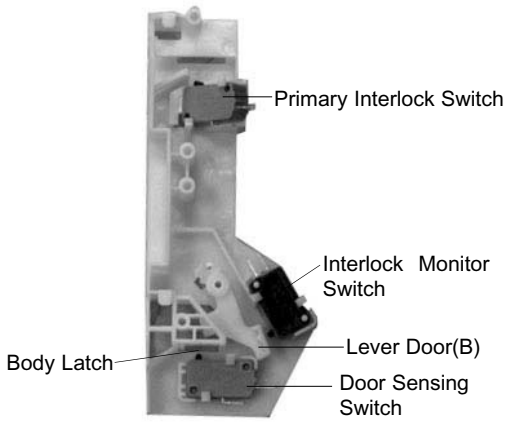
1. The relays are located on the PCB Ass'y. Isolate them from the main circuit by disconnecting the leads.
2. Operate the microwave oven with a water load in the oven. Set the power level set to high.
3. Check continuity between terminals of the relays after the start pad is pressed.

5-7 Adjustment of Primary Switch, Door Sensing Switch and Monitor Switch

PRECAUTION

For continued protection against radiation hazard, replace parts in accordance with the wiring diagram and be sure to use the correct part number for the following switches: Primary and secondary interlock switches, and the interlock monitor switch (replace all together). Then follow the adjustment procedures below. After repair and adjustment, be sure to check the continuity of all interlock switches and the interlock monitor switch.

1. When mounting Primary switch and Interlock Monitor switch to Latch Body, consult the figure.
2. No specific adjustment during installation of Primary switch and Monitor switch to the latch body is necessary.
3. When mounting the Latch Body to the oven assembly, adjust the Latch Body by moving it so that the oven door will not have any play in it. Check for play in the door by pulling the door assembly. Make sure that the latch keys move smoothly after adjustment is completed. Completely tighten the screws holding the Latch Body to the oven assembly.
4. Reconnect to Monitor switch and check the continuity of the monitor circuit and all latch switches again by following the components test procedures.
5. Confirm that the gap between the switch housing and the switch actuator is no more than 0.5mm when door is closed.
6. Interlock Switch Replacement - When replacing faulty switches, be sure switch mounting tabs are not bent, broken or otherwise deficient in their ability to secure the switches in place.



	Door Open	Door Closed
Primary Interlock switch	∞	0
Monitor switch(COM-NC)	0	∞
Door Sensing S/W	∞	0
(Secondary interlock)	∞	0

5-8 Output Power of Magnetron

CAUTION

MICROWAVE RADIATION

PERSONNEL SHOULD NOT ALLOW EXPOSURE TO MICROWAVE RADIATION FROM MICROWAVE GENERATOR OR OTHER PARTS CONDUCTING MICROWAVE ENERGY.

The output power of the magnetron can be measured by performing a water temperature rise test.

Equipment needed :

- Two 1-liter cylindrical borosilicate glass vessel (Outside diameter 190 mm)
- One glass thermometer with mercury column

  NOTE: Check line voltage under load. Low voltage will lower the magnetron output. Make all temperature and time tests with accurate equipment.

1. Fill the one liter glass vessel with water.
2. Stir water in glass vessel with thermometer, and record glass vessel's temperature ("T1", 10±1°C).
3. After moving the water into another glass vessel, place it in the center of the cooking tray. Set the oven to high power and operate for 50 seconds exactly. (3 seconds included as a holding time of magnetron oscillation:)
4. When heating is finished, stir the water again with the thermometer and measure the temperature ("T2").
5. Subtract T1 from T2. This will give you the water temperature rise. (ΔT)
6. The output power is obtained by the following formula;

$$\text{Output Power} = \frac{4.187 \times 1000 \times \Delta T + 0.55 \times Mcx(T2 - T1)}{47}$$

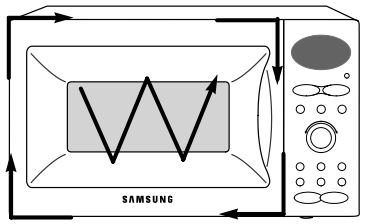
50	: Heating Time (sec)
47	: Counting Time (sec)
4.187	: Coefficient for Water
1000	: Water (cc)
ΔT	: Temperature Rise (T2-T1)
To	: Room Temperature
Mc	: Cylindrical borosilicate glass weight

7. Normal temperature rise for this model is 9°C to 11°C at 'HIGH'.

   NOTE 1: Variations or errors in the test procedure will cause a variance in the temperature rise. Additional power test should be made if temperature rise is marginal.

   NOTE 2: Output power in watts is computed by multiplying the temperature rise (step 5) by a factor of 91 times the of centigrade temperature.

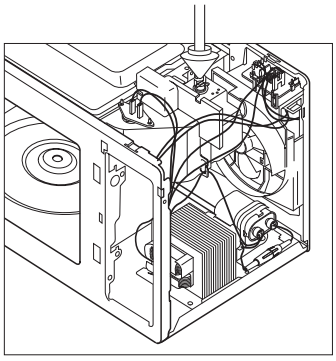
5-9 Procedure for Measurement of Microwave Energy Leakage



1. Pour 275±15cc of 20±5°C(68±9°F) water in a beaker which is graduated to 600cc, and place the beaker in the center of the oven.
2. Start to operate the oven and measure the leakage by using a microwave energy survey meter.
3. Set survey meter with dual ranges to 2,450MHz.
4. When measuring the leakage, always use the 2 inch spacer cone with the probe. Hold the probe perpendicular to the cabinet door. Place the spacer cone of the probe on the door and/or cabinet door seam and move along the seam, the door viewing window and the exhaust openings moving the probe in a clockwise direction at a rate of 1 inch/sec. If the leakage testing of the cabinet door seam is taken near a corner of the door, keep the probe perpendicular to the areas making sure that the probe end at the base of the cone does not get closer than 5cm to any metal. If it gets closer than 5cm, erroneous readings may result.
5. Measured leakage must be less than 4mW/cm2 , after repair or adjustment.

Maximum allowable leakage is 5mW/cm2 .
4mW/cm2 is used to allow for measurement and meter accuracy

5-10 Check for Microwave Leakage



1. Remove the outer panel.
2. Pour 275±15cc of 20±5°C(68±9°F) water in a beaker which is graduated to 600cc, and place the beaker in the center of the oven.
3. Start the oven at the highest power level.
4. Set survey meter dual ranges to 2,450MHz.
5. Using the survey meter and spacer cone as described above, measure near the opening of magnetron, the surface of the air guide and the surface of the wave guide as shown in the following photo.(but avoid the high voltage components.) The reading should be less than 4mW/cm2 .

5-11 Note on Measurement

1. Do not exceed the limited scale.
2. The test probe must be held on the grip of the handle, otherwise a false reading may result when the operator's hand is between the handle and the probe.
3. When high leakage is suspected, do not move the probe horizontally along the oven surface; this may cause damage to the probe.
4. Follow the recommendation of the manufacturer of the microwave energy survey meter.

5-12 Leakage Measuring Procedure

5-12-1 Record keeping and notification after measurement

1) After adjustment and repair of a radiation preventing device, make a repair record for the measured values, and keep the data.
2) If the radiation leakage is more than 4mW/cm2 after determining that all parts are in good condition, functioning properly and the identical parts are replaced as listed in this manual notify that fact to ;

CENTRAL SERVICE CENTER

5-12-2 At least once a year have the microwave energy survey meter checked for accuracy by its manufacturer.

WARNING FOR HIGH VOLTAGE

4000 VOLTS EXIST AT THE HIGH VOLTAGE AREA. DO NOT OPERATE THE OVEN WITH CABINET PARTS REMOVED. DO NOT REMOVE THE CABINET PARTS IF THE POWER SUPPLY CORD IS PLUGGED IN THE WALL OUTLET. UNPLUG THE POWER CORD BEFORE SERVICING.

6-1 Electrical Malfunction

Parts	Cause	Diagnosis	Remedy
Fuse blows out when door is opened.	Defective primary interlock switch are winding.	Check continuity of the primary switch terminals with wire removed using a multimeter. If there is continuity inter between switch terminals when door is opened,the switch is defective.	Replace the primary interlock switch
	Defective in terlock monitor switch	Check continuity of the monitor switch terminals with wire removed by using a multimeter. If there is continuity between switch terminals the door is closed, the switch is defective.	Replace the interlock monitor switch
Fuse is Open	Layer short of the secondary coil of H. V. Transformer	The fuse will not blow right away, but if it blows in a few seconds, then there is a layer short If the fuse blows with H. V. Trans secondary open, the transformer may be faulty.	Replace H.V.Transformer
Oven lamp does not light.	1) Fuse blown out	Check fuse.	Replace the fuse.
	2) Poor contact of power cord.	Check continuity of power supply cord. Also check whether the power cord is securely wired.	Adjust or replace the power supply cord
	3) Defective lamp	The fan motor rotates, but lamp does not light.	Replace the lamp.
	4) Defective timer contacts	Check the terminals of timer for continuity, turning the timer knob ON and OFF repeatedly.	Replace the timer.
	5) Thermal cutout S/W open	In this case the oven lamp and fan do not turn on	Replace the thermal cutout S/W
Fan does not operate.	1) Defective fan motor.	If 230V is found at motor terminals, the motor should be replaced.	Replace the motor.
	2) Defective con tacts of timer	The oven lamp does not light and fan motor does not operate.	Replace the timer.

NOTE: Interlock monitor switch must be replaced when the fuse is blown out.

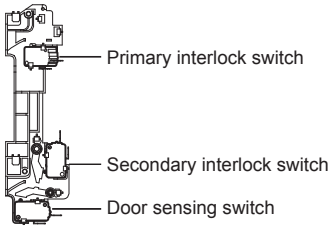
6. Troubleshooting

part	Cause	Diagnosis	Remedy
Microwave turns off during cooking cycle.	1) Too small a load	If a small amount of food is heated for a long time, period of microwave may turn off during operation.	To increase the oven water into water into the oven.
	2) Defective magnetron thermal cutout S/W	Check to see if the magnetron thermal cutout switch is activated at a temperature higher than 150 ºC.	Replace thermal cutout switch.
properly shock is felt.	Incomplete grounding	Make sure that qrounding of the power supply cord has been done properly.	Rewire.
Door doe not operate properly	1) Broken door hinges	Remove the cabinet for inspection. Check the door hinge.	Replace door hinges.
	2) Missing or loose screw	Check if the screws are secured well to the door hinge.	Fasten or tighten.
Cooking tray does not rotate.	1) Defective drive motor	Check to see if 21V exists at the motor terminals.If so, motor will be defective.	Replace drive motor.
	1) Blocking of the ventilatior	Check if the air inlet or outlet ventilation is blocked by the wall or other objects.	Keep a distance of 100mm from the wall or the objects.
Magnetron thermal cutout switch OFF	2) Defective fan motor	If the fan motor does not operate with 230V applied to the terminal, the motor may be faulty.	Replace fan motor.
	3) Too small a load or no load	If a small amount of food is heated repeatedly over a long period of time, microwave turns off during operation.	To increase the oven load, place a glass of water into the oven.

Oven does not operate.

***Inspection method**

Is Fuse OK? — NO → Is Primary interlock switch normal? — NO → Make sure to inspect the power relay after replacing primary interlock switch, secondary interlock switch and door sensing switch.



*Latch switch assembly

YES

YES

Is Power Relay normal? — Replace Relay

Is the magnetron temperature switch normal? — NO → Replace switch — NO → Check a fan motor after replacing switch

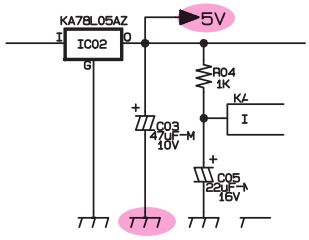
YES

Is L.V.T normal? — NO → Replace L.V.T. — Check PCB after replacing L.V.T.

YES

Is the IC01 output of PCB normal? — NO → Replace PCB.

Power Point Check Point



YES

Checking high voltagecircuits — Is high voltage diode normal? — NO →

YES

Is high voltage capacitor normal? — NO → In case any of high voltage parts is damaged, check all parts related to high votlage.

YES

Is magnetron normal? — NO →

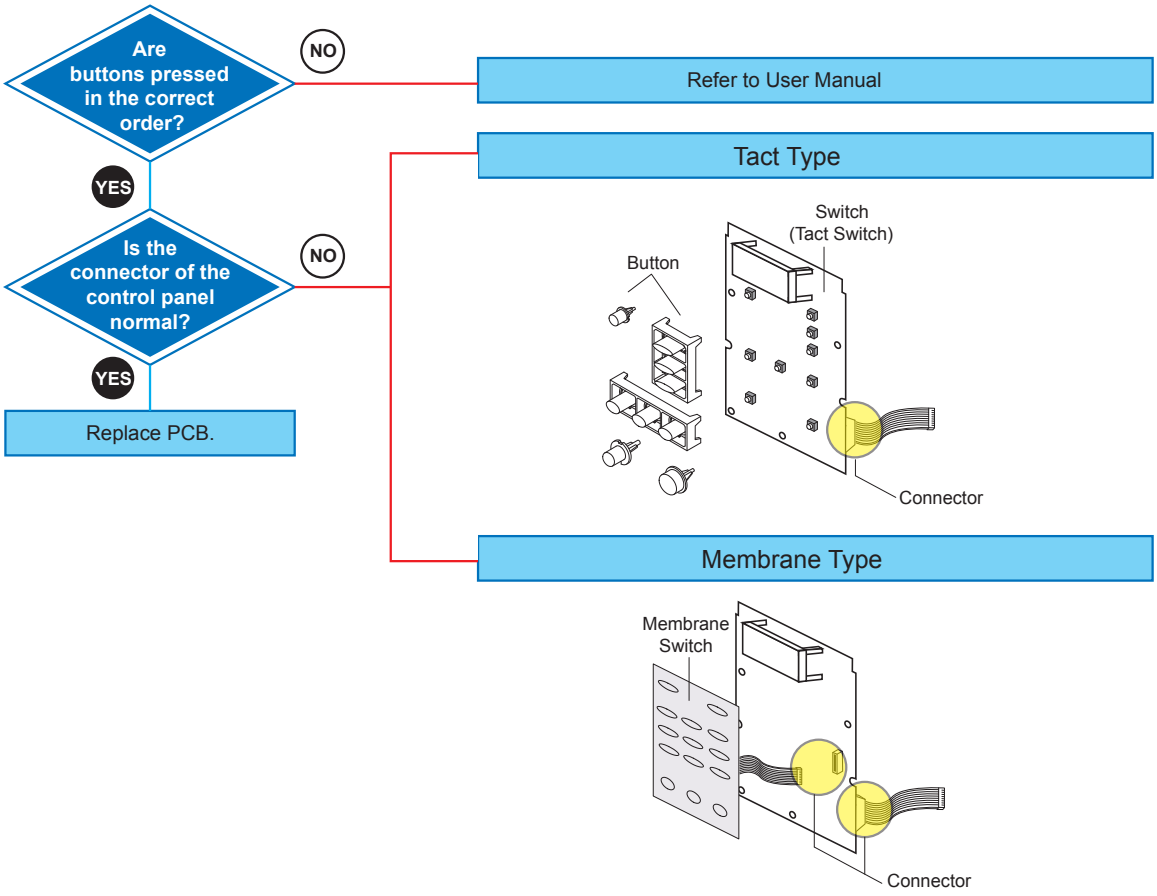
Caution

1.Be careful of high voltage circuits.

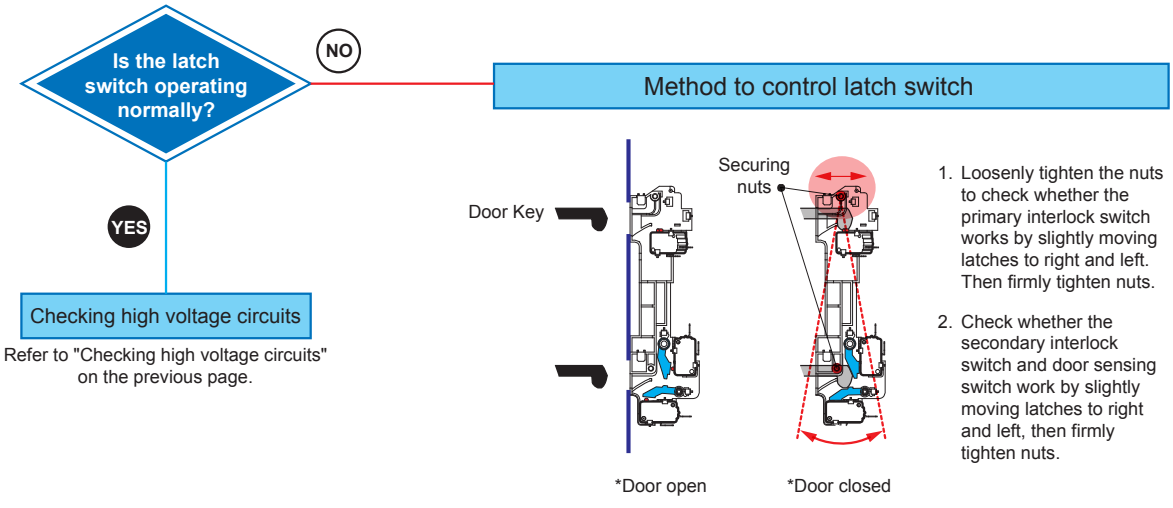
2. Discharge high voltage capacitor.

Buttons of the control panel do not work.

*Inspection method



Food is not heated even though an oven works.



1. Loosenly tighten the nuts to check whether the primary interlock switch works by slightly moving latches to right and left. Then firmly tighten nuts.
2. Check whether the secondary interlock switch and door sensing switch work by slightly moving latches to right and left, then firmly tighten nuts.

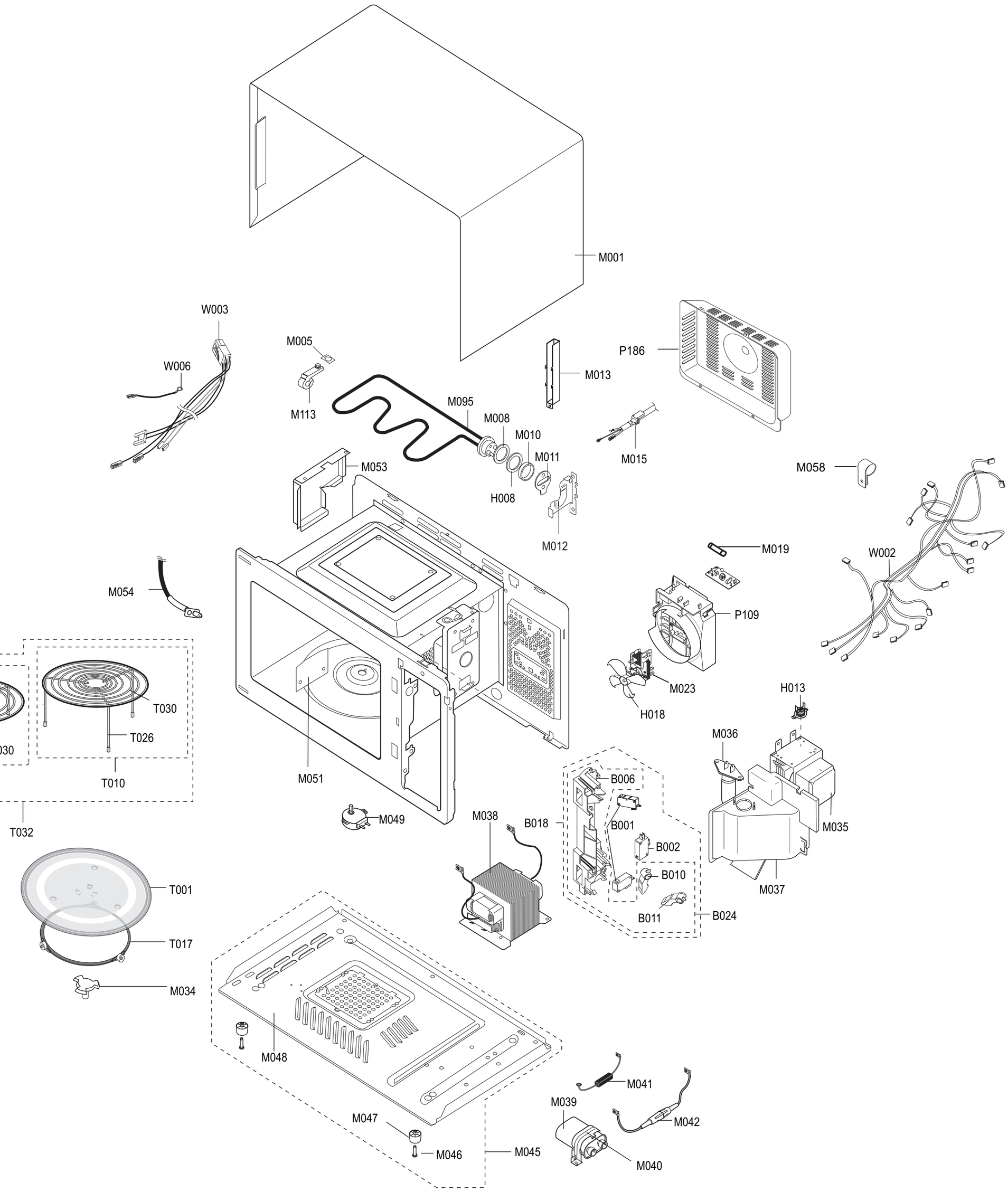
6-2 Unsatisfactory Cooking

Parts	Cause	Diagnosis	Remedy
Food is not heated.	1) Open cathode of magnetron	Check the terminals with a multimeter to see if the heater circuit is open.	Replace magnetron.
	2) Defective H. V. Diode	Check the H. V. Diode for continuity in the reverse and normal directions using meter. If there is continuity in the reverse direction, the H. V. Diode may be faulty. (In this event H. V. Capacitor will be hot)	Replace H. V. Diode.
	3) Shorted magnetron	Connect megger leads to quick-connect terminal & body of the magnetron if there is continuity, the magnetron may be fuse will be blown) faulty. (In this case the main fuse will be blown)	Replace magnetron.
	4) Defective magnetron	If there is a crack in the magnetron antenna (dome), the magnetron is defective.	Replace magnetron.
	5) Poor contact of primary interlock switch	Check if the screws are secured well to the door hinge. and pressing it ON and OFF repeatedly.	Replace or adjust.
	6) Open coil of H. V. Transformer	Check the continuity of primary coil and secondary coil. If there is no continuity, H. V. Transformer is defective.	Replace the H. V. Transformer.
	7) Shorted H. V. capacitor	Check the continuity of capacitor. If the capacitor shorts, the fuse blows	Replace the H. V. Capacitor.
	8) Monitor Fuse out	Check the monitor fuse (on the PCB)	Replace the Monitor fuse

6-3 Part Check List

Symptom	Related Parts	Check Points	Remedy
Microwave cooking does not work.	H.V.Transformer	1) Check if the primary and secondary coil is open or shorted. * Resistance of primary coil: . 1.7Ω Approx. Resistance of secondary coil: Approx. 142Ω 2) Check if the MGT Heater Voltage is approx. 3.3V AC. **Caution : High voltage !**	Replace.
	H.V.Capacitor	Check continuity of capacitor between two terminals with H.V.wire lead removed. The resistance should be approx. 10MW, it's failure..	Replace.
	H.V.Diode	1) If there is no continuity in forward, direction the H.V.Diode is open. 2) If there is continuity in reverse direction, it's shorted.	Replace.
Fan motor does not rotate.	Fan motor	Check if the motor coil is open.	Replace.

7-1 Exploded Views



7-2 Main Parts List

(S.N.A : SERVICE NOT AVAILABLE)

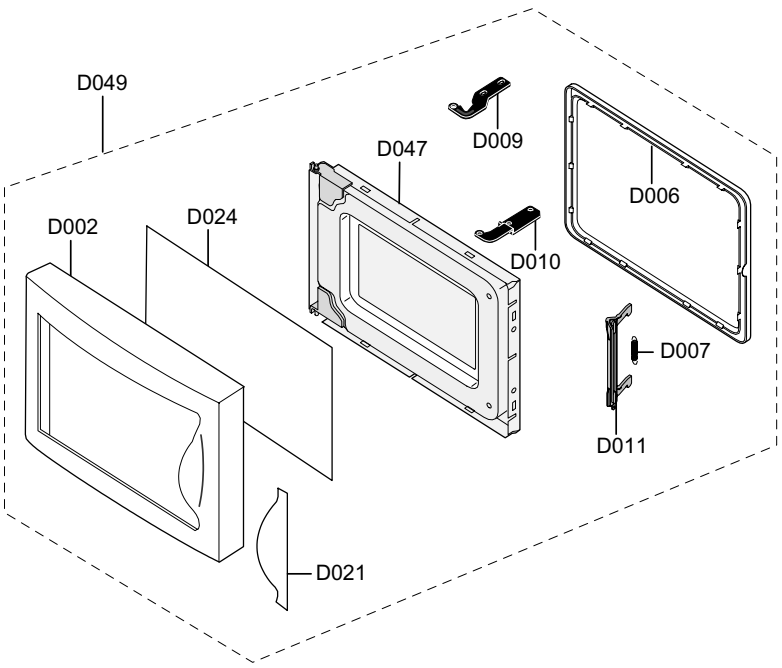
Level	No.	Code No.	Description	Specification	Q'ty	SA/SNA	Remark
1-1	M041	0402-001554	DIODE-RECTIFIER	HV03-12T01,12000V,0.4A,D	1	SNA	P--B/PLATE
1-1	M039	2501-001015	C-OIL	1.0uF,2100V,BK,35X54X80,20mm	1	SA	P--B/PLATE
1-1	M019	3601-001197	FUSE-CARTRIDGE	250V,15A,SLOW-BLOW,CERAMI	1	SA	P--N/F
1-1	M036	4713-001046	LAMP-INCANDESCENT	240V,104mA,25W,ORG,-,-	1	SA	M--CV/AIR
1-1	H008	6031-001424	WASHER-PLAIN	PTFE,-,ID22.2,OD28,T1.7,WHT	1	SNA	M--
1-1	M038	DE26-00096A	TRANS H.V	SHV-EURO2-1,230V,50Hz,2350V,3.	1	SA	P--
1-1	M023	DE31-10155R	MOTOR FAN	-,230V50HZ,-,SMF-745EA1,2320RP	1	SA	P--M/FAN
1-1	M049	DE31-10170A	MOTOR SYNCHRONOUS	M2LJ24Z702,ST-16F,220/	1	SA	M--
1-1	H018	DE31-90051A	BLADE-FAN	P.P,T,D130,-,-,-,-	1	SA	P--M/FAN
1-1	M054	DE32-10013A	SENSOR THERMISTOR	PT-312-K2,-,-,-,-,-,-	1	SA	M--
1-1	M095	DE47-00001A	HEATER	SHG-2933E,-,-,1300W(1250W),-,2	1	SA	M--
1-1	H013	DE47-20009A	THERMOSTAT	PW2N-520PB,160/60,250V/7.5A,H	1	SA	P--MGT
1-1	M053	DE61-00623A	GUIDE-AIR	-,SECC(PHOSPHATE),T0.5,-,-,-,E	1	SA	M--
1-1	P109	DE61-10006B	COVER-MOTOR	M1D33CE/XSA.RAD,PP(FB53),-,-	1	SA	P--
1-1	M113	DE61-30006A	SUPPORT-HEATER	-,ALUMINA,5G,2ND-W/P,-,-,	1	SNA	M--
1-1	M010	DE61-50021A	BRACKET-FLANGE	-,SECC1,T0.8,32,32,-,-	1	SA	M--
1-1	M012	DE61-50027B	BRACKET-HEATER	-,SECC,T1.0,W51,L55,CE945	1	SA	M--
1-1	M040	DE61-50106A	BRACKET-HVC	-,SECC,T0.8,W31,L125.8,-,-	1	SNA	P--B/PLATE
1-1	M013	DE61-50570C	BRACKET-AIR GUIDE	CK95,SECC,T0.8,-,-,-,D	1	SA	M--
1-1	M005	DE61-70060A	SPRING-PLATE	-,SK-5,T0.5,-,-,-,-,-,-,-	1	SA	M--
1-1	M051	DE63-00237A	COVER-CEILING	CE297DN-5,MICA-SHEET,T0.3,	1	SA	M--
1-1	P186	DE63-00240A	COVER-BACK	EU-1.0 CONV,SECC/PHOSPHATE,T0	1	SA	M--
1-1	M037	DE63-00248A	COVER-AIR	5TH/1.0 CONVECTION,NYLON #66(T	1	SA	M--
1-1	M008	DE63-20017A	GASKET-HEATER	-,BRASS,T1.5,OD30.5,ID22.5	1	SA	M--
1-1	M001	DE64-01161G	PANEL-OUTER	5TH/1.0 CONVECTION,SECC,T0.6	1	SA	M--
1-1	M058	DE65-20014A	CABLE CLAMP	-,-,-,NY-66,-,DA-6N	1	SNA	P--P/CORD
1-1	M034	DE67-00182A	COUPLER	5TH-1.0,PPS,-,-,-,-	1	SA	M--
1-1	M042	DE91-70061A	ASSY-H.V.FUSE	THV060T-0800-H,5KV/0.80A,W	1	SA	P--
1-1	B018	DE96-00120Q	ASSY BODY LATCH	PG117R(TBMO/SIDE),NYLON	1	SA	M--
1-2	B002	3405-001032	SWITCH-MICRO	125/250VAC,16A,200GF,SPDT	1	SA	MONITOR S/W
1-2	B001	3405-001034	SWITCH-MICRO	125/250VAC,16A,200GF,SPST-N	2	SA	DOOR S/W,PRIMARY S/W
1-2	B024	DE96-00120T	ASSY BODY LATCH-SUB	PG117R(TBMO/SIDE),NY	1	SA	
1-3	B010	DE66-00093B	LEVER-SWITCH(A)	PG113R,NYLON,NTR,HANDLE,	1	SA	
1-3	B011	DE66-00094B	LEVER-SWITCH(B)	PG113R,NYLON,NTR,HANDLE,	1	SA	
1-3	B006	DE72-00137B	LATCH-BODY	PG113R,NYLON,WHT,-,-,-,-,-	1	SA	
1-1	M045	DE96-00295E	ASSY BASE PLATE-SUB	5TH/1.0 CONVECTION,-	1	SA	M--
1-2	M046	DE60-60025A	PIN-FOOT	PP-JI350,BLK,-,-,-,-,-,-	1	SA	
1-2	M048	DE61-00557F	BASE-PLATE	5TH/1.0 CONVECTION,SGCC,T0.6,	1	SNA	
1-2	M047	DE61-40065A	FOOT	-,PP,T2x22x17mm,BLK,-,-,-	1	SA	
1-1	W003	DE96-00296A	ASSY-WIRE HARNESS B	CE1100/XEF,CONVECTIO	1	SA	M--
1-1	W002	DE96-00359A	ASSY-WIRE HARNESS A	C100-5TH,CONVECTION	1	SA	M--
1-1	M015	DE96-00385A	ASSY POWER CORD	EU(ST),EURO,230V/50HZ,TL	1	SA	P--

7-2 Main Parts List (Continued)

(S.N.A : SERVICE NOT AVAILABLE)

Level	No.	Code No.	Description	Specification	Q'ty	SA/SNA	Remark
1-2	W006	DE39-40409A	WIRE HARNESS-E	230V50HZ,M9G45,CTW,-,-,-	1	SA	
1-2	M011	DE61-50347A	BRACKET-EARTH	-,BSS2-A,T1.0,W35,L43,MBGF	1	SA	
1-2	T001	DE74-20015G	TRAY-COOKING	3RD-1.0,T6,1115G,HKS,-,-,-,	1	SA	
1-2	T032	DE97-00216E	ASSY-WIRE RACK	C100,HIGH-RACK/LOW-RACKAS	1	SA	
1-3	T009	DE97-00136B	ASSY-WIRE RACK	CK95,LOW-RACK,-,-,-,-	1	SA	
1-4	T030	DE74-00018B	RACK-WIRE	MSWR10,D268,CK95,-,H35,SNC2,LO	1	SNA	
1-4	T026	DE61-40022B	FOOT-RACK	-,SILICONE,1G,DARKVIOLET,-,-,-	1	SA	
1-3	T010	DE97-00136E	ASSY-WIRE RACK	MG104WA,114,FOOT,VE-TYPE	1	SNA	
1-4	T030	DE74-00018D	RACK-WIRE	MSWR10,PI3.0,3RD-1.0,-,110,SNC	1	SNA	
1-4	T026	DE61-40022B	FOOT-RACK	-,SILICONE,1G,DARKVIOLET,-,-,-	1	SA	
1-2	T017	DE97-00222A	ASSY-GUIDE ROLLER	NC-1.2CUFT,SPS(C832) B	1	SA	
1-1	M035	OM75P(31)MTMN	ASSY-MGT		1	SA	P--

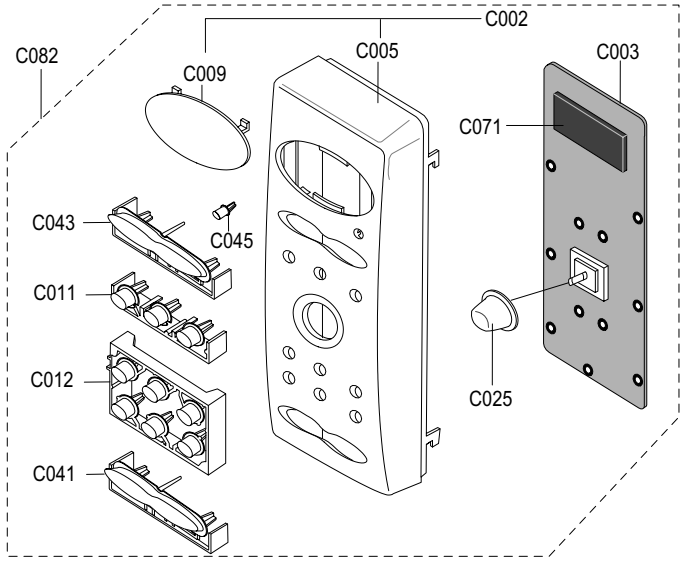
7-3 Door Parts List



(S.N.A : SERVICE NOT AVAILABLE)

Level	No.	Code No.	Description	Specification	Q'ty	SA/SNA	Remark
1-1	D049	DE94-00644M	ASSY DOOR	C100-5,WHT,5th. 1.0 Convection	1	SA	M--
1-2	D006	DE64-40012C	DOOR-C	CK95,PBT,-,-,-,-,BLK,-	1	SA	
1-2	D002	DE64-40319A	DOOR-A	CK95,PC,-,-,-,-,WHT,-	1	SA	
1-2	D021	DE64-90160A	DECORATION-DOOR	-,Y745STC,S7A77,-,-,-,-,	1	SA	
1-2	D024	DE67-20184K	SCREEN-DOOR(B)	-,CK920T,TEMP GLASS,T3.2,	1	SA	
1-2	D047	DE94-01031A	ASSY DOOR-E(SEALANT)	5TH/1.0 CONVECTION,	1	SA	
1-2	D011	DE64-00264B	KEY-DOOR	1.0 CONV,NYLON#66,-,-,BLK,-,-	1	SA	
1-2	D043	DE63-00205A	CUSHION-SCREEN	C115,PC,T2.0,W12,L150,-,-	1	SNA	
1-2	D007	DE61-00198A	SPRING-KEY	M1877,HSWR,PI0.7,-,D6,23 1/4,	1	SA	

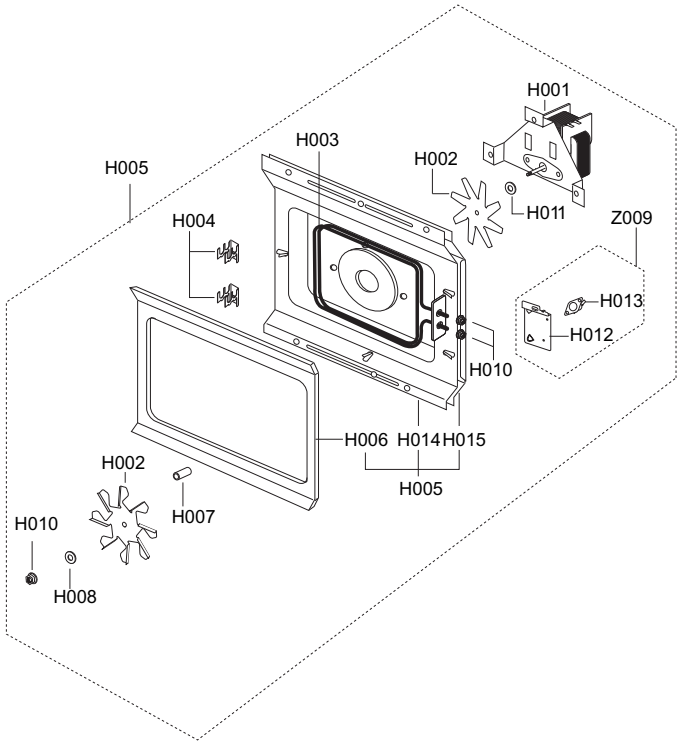
7-4 Control Parts List



(S.N.A : SERVICE NOT AVAILABLE)

Level	No.	Code No.	Description	Specification	Q'ty	SA/SNA	Remark
1-1	C082	DE94-00646V	ASSY CONTROL-BOX	-,C100-5R/BWT,PC/WHT,5t	1	SNA	M--
1-2	C071	DE63-00088A	COVER-LED	C100,PUT-FORM,-,-,-,-,-,-,CK95	1	SA	
1-2	C025	DE64-00370A	KNOB	CK95(VI),PC,-,-,-,-,PURE-WHT,-	1	SA	
1-2	C045	DE64-00371A	BUTTON-MORE	CK95(VI),PC,-,-,PURE-WHT,1 B	1	SA	
1-2	C043	DE64-00372B	BUTTON-DEFROST	C100-R/BWT,PC,-,-,PURE-WH	1	SA	
1-2	C011	DE64-00373A	BUTTON-SELECT(A)	CK95(VI),PC,-,-,PURE-WH	1	SA	
1-2	C041	DE64-00374B	BUTTON-CANCEL	C100-R/BWT,PC,-,-,PURE-WHT	1	SA	
1-2	C012	DE64-00375A	BUTTON-SELECT(B)	CK95(VI),PC,-,-,PURE-WH	1	SA	
1-2	C001	DE94-00647B	ASSY CONTROL-PANEL	-,C100-R/BWT,-,RUSSIA	1	SA	
1-3	C005	DE64-00369B	CONTROL-PANEL	C100-R/BWT,PC,-,-,-,-,PURE	1	SA	
1-3	C009	DE67-40173B	WINDOW-DISPLAY	RE-MF70,SAN-20%(CR5381G01	1	SA	
1-2	C003	RCS-C100-04	ASSY PCB PARTS	C100-5/XEE,230V50HZ	1	SA	

7-5 Casing Parts List



(S.N.A : SERVICE NOT AVAILABLE)

Level	No.	Code No.	Description	Specification	Q'ty	SA/SNA	Remark
1-1	H005	DE97-00472A	ASSY-COVER CASING	-,5TH/1.0 CONVECTION,2	1	SA	M--
1-2	H001	DE31-10171A	MOTOR CONVECTION	SMC-105EA,230V/50HZ,280	1	SA	
1-2	H002	DE31-90019A	BLADE-FAN	SECC,T0.6,-,-,-,-,-	1	SA	
1-2	H002	DE31-90020A	BLADE-FAN	ALSTAR,T0.6,W250,L250,-,-,-	1	SNA	
1-2	H003	DE47-70077A	HEATER-CONVECTION	SHC-118E1,-,-,1680W,-,	1	SA	
1-2	H010	DE60-30016B	NUT-FLANGE	M4,MSWR10,FEFN,-,-,-,-,-,-	2	SA	MOTOR-CONV,HEATER-CONV
1-2	H011	DE60-40014B	WASHER-C MOTOR	M16,T1.0,SECC,ZNC3,-,-,-,	1	SA	
1-2	H008	DE60-40026B	WASHER-PLAIN	ID5.5,OD12,T1.0,SBC1,ZNC3,-	1	SNA	
1-2	H004	DE61-50484A	BRACKET-HEATER	-,STS430,T0.8,W27.2,L26,C	1	SA	
1-2	H007	DE72-30016B	BUSH-MOTOR	-,MSWR3,L15.7,D5.6,CE115K,-,-	1	SA	
1-2	H005	DE97-00491A	ASSY-COVER CASING	1.0 CONVECTION,5TH/TSE	1	SA	
1-3	H014	DE61-00624A	BRACKET-CASING	-,ALCOAT-2,T0.6,-,-,-,EUR	1	SA	
1-3	H006	DE62-00029A	ADIABATIC-CASING	C115,FINE GLASS WOOL,T0	1	SNA	
1-3	H015	DE63-00239A	COVER-CASING	SECC,-,T0.5,-,-,-,-,-,EU 1.	1	SA	
1-2	Z009	DE91-70101C	ASSY-THERMOSTAT	MW5574W,160/60,187-HORIZ	1	SNA	
1-3	H013	DE47-20009A	THERMOSTAT	PW2N-520PB,160/60,250V/7.5A,H	1	SA	
1-3	H012	DE61-50490A	BRACKET-TCO	-,SECC1,T0.6,34,58,-,-	1	SNA	

7-6 Standard Parts List

(S.N.A : SERVICE NOT AVAILABLE)

Level	Code No.	Description	Specification	Q'ty	SA/SNA	Remark
1-1	6001-000033	SCREW-MACHINE	TH,M4X10,STS304	1	SNA	M--SENSOR
1-1	6002-001079	SCREW-TAPPING	TH,+,-,2S,M4,L10,PASS,STS3	1	SNA	M--C/CEILING
1-1	6002-001320	SCREW-TAPPING	TH,+,2S,M4,L8,PASS,STS304,	1	SNA	M--B/HEATER
1-1	6002-001321	SCREW-TAPPING	PWH,+,2S,M5,L10,ZPC(YEL)	2	SNA	M--HVT,P--MGT
1-1	6002-001325	SCREW-TAPPING	TH,TORX,2S,M4,L12,ZPC(YEL)	2	SNA	P--P/CORD,M--BKT A/GUIDE
1-1	6006-001170	SCREW-ASSY TAPP	WS,TH,+,M4,L10,ZPC(YEL)	4	SNA	P--P/CORD,P--O/PANEL SIDE,P--N/F,M--W
1-1	6006-001171	SCREW-ASSY MACH	WS,PH,+,M4,L8,NI PLT	1	SNA	M--B/EARTH
1-1	6006-001174	SCREW-ASSY TAPP	WE,TH,+,M4,L12,ZPC(YEL)	9	SA	M--COVER CASING,M--GUIDE-AIR,M--PN/OU
1-1	6006-001176	SCREW-ASSY TAPT	WT,PH,+,M4,L8,ZPC(YEL)	3	SNA	P--TCO,P--HVD,M--M/DRIVE
1-1	DE60-10193A	SCREW-TAPPING	-,YEL,MSWR18,FEFZY,TH,M4,-	1	SNA	P--M/FAN
1-1	DE60-30016A	NUT-FLANGE	M4,MSWR10,-,-,-,-,-,-,-	1	SNA	M--SENSOR
1-2	6002-001320	SCREW-TAPPING	TH,+,2S,M4,L8,PASS,STS304,	2	SNA	BKT-HEA-CONV,TCO-CONV
1-2	DE60-30016B	NUT-FLANGE	M4,MSWR10,FEFN,-,-,-,-,-,-	2	SA	MOTOR-CONV,HEATER-CONV
1-3	6002-001320	SCREW-TAPPING	TH,+,2S,M4,L8,PASS,STS304,	1	SNA	
1-2	6002-001079	SCREW-TAPPING	TH,+,-,2S,M4,L10,PASS,STS3	1	SNA	C/MOTOR CONV
1-2	6002-000170	SCREW-TAPPING	PH,+,2S,M3,L6,ZPC(YEL),SWR	1	SNA	BKT-TCO
1-2	6002-000630	SCREW-TAPPING	PH,+,2S,M3,L8,ZPC(YEL),SWR	1	SA	

8-1. Schematic Diagrams

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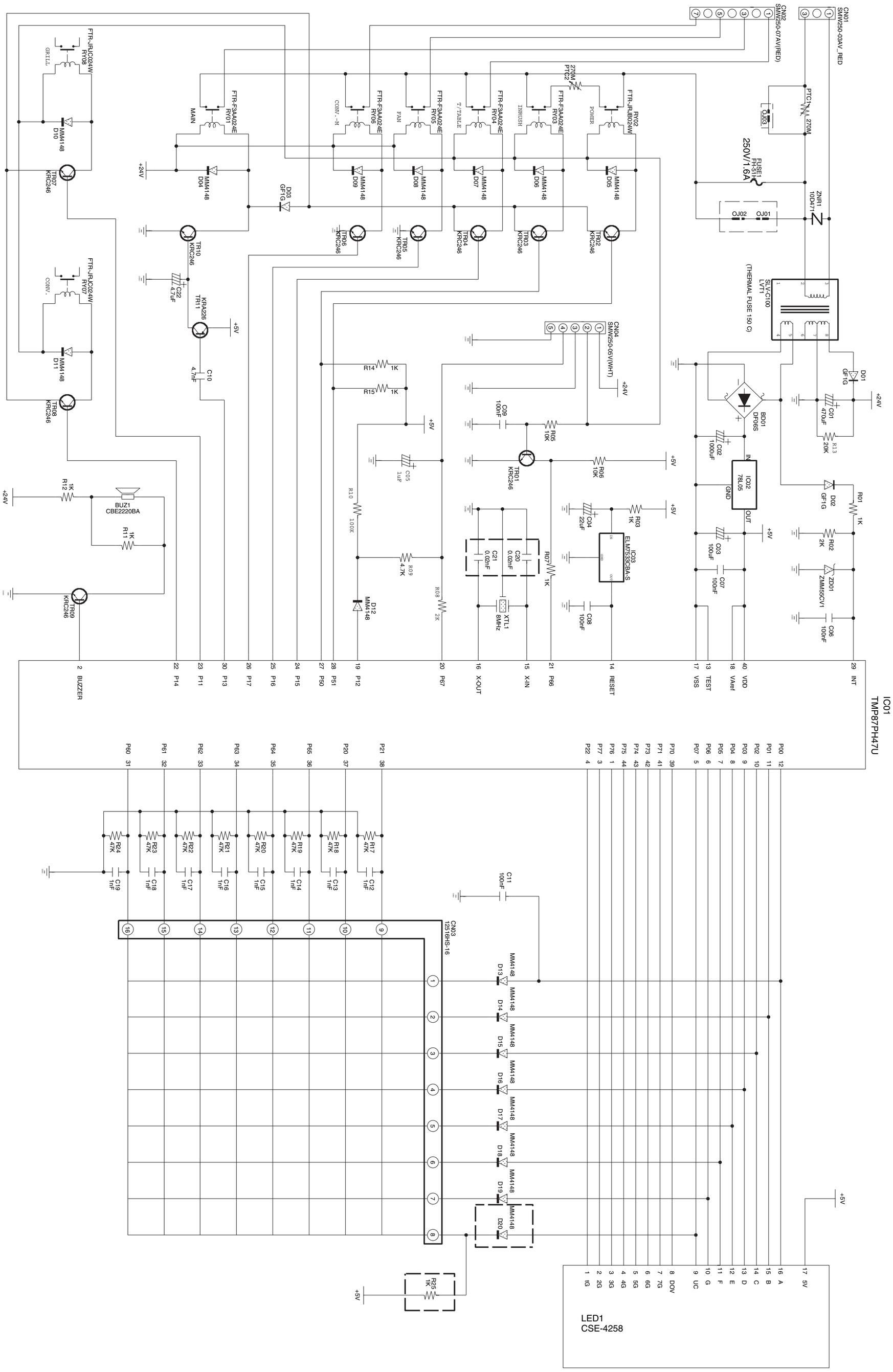

9. Electrical Parts List

9-1. Electrical Parts List

(S.N.A : SERVICE NOT AVAILABLE)

Level	Code No.	Description	Specification	Q'ty	SA/SNA	Remark
1-2	RCS-C100-04	ASSY PCB PARTS	C100-5/XEE,230V50HZ	1	SA	
1-3	3501-001155	RELAY-MINIATURE	24VDC,200MW,3000MA,1FORM	4	SA	RY07,RY06,RY03,RY01
1-3	3601-001126	FUSE-CARTRIDGE	250V,1.6A,FAST-ACTING,CER	1	SA	FUSE
1-3	DE07-00031B	LED DISPLAY	CSE-4258ESM1,C130,-,56SEG,8D	1	SA	LED1
1-3	DE26-00078A	TRANS L.V	SLV-C100,230V,50HZ,AC17.0V/6.8	1	SA	LVT1
1-3	DE30-20016A	BUZZER	CBE2220BA,STICK,-,-,-,-,-,-,-	1	SNA	BUZ1
1-3	DE34-00041A	SWITCH-ENCODER	28VDC,10mA,ENDLESS,-,JES1	1	SNA	ECD1
1-3	DE47-40024A	HOLDER-FUSE	FH-51H,7.5A,-,-,-,-,-	1	SNA	FUSE
1-3	DE92-01267A	ASSY PCB AUTO	230V50HZ,LED-MODULE,RC-C10	1	SNA	
1-4	0401-001083	DIODE-SWITCHING	MM4148,100V,150MA,LL-34,	15	SNA	D09,D10,D11,D04,D05,D06,D07,D08,D12,D
1-4	0402-001080	DIODE-RECTIFIER	GF1G,400V,1A,DO,TP	3	SNA	D02,D03,D01
1-4	0402-001298	DIODE-BRIDGE	DF06S,600V,1A,SMD-4,TP	1	SNA	BD01
1-4	0403-001288	DIODE-ZENER	ZMM55C5V1,4.8-5.4V,500MW,LL-	1	SNA	ZD01
1-4	0501-000465	TR-SMALL SIGNAL	MMBT3904,NPN,350MW,SOT-2	1	SNA	TR01
1-4	0504-001080	TR-DIGITAL	KRC246S,NPN,200mW,2.2K/10K,SO	8	SNA	TR02,TR03,TR04,TR05,TR06,TR07,TR08,TR
1-4	1202-000141	IC-VOLTAGE COMP.	7033,SOT-89,3P,-,SINGLE	1	SNA	IC03
1-4	1203-001037	IC-POSI.FIXED REG.	78L05,SOT-89,3P,185MI	1	SNA	IC02
1-4	1404-000230	THERMISTOR-PTC	27ohm,20%,-,265V,1.5A,360	2	SNA	PTC2,PTC1
1-4	2007-000033	R-CHIP	0ohm,5%,1/4W,TP,3216	14	SNA	J06,J07,J08,J09,J10,J01,J02,J03,J04,J
1-4	2007-000277	R-CHIP	100Kohm,1%,1/8W,TP,2012	1	SNA	R13
1-4	2007-000300	R-CHIP	10Kohm,5%,1/8W,TP,2012	5	SNA	R17,R16,R09,R08,R07
1-4	2007-000468	R-CHIP	1Kohm,5%,1/8W,TP,2012	7	SNA	R15,R14,R10,R05,R04,R03,R01
1-4	2007-000671	R-CHIP	2Kohm,5%,1/8W,TP,2012	2	SNA	R11,R02
1-4	2007-000868	R-CHIP	4.7Kohm,1%,1/8W,TP,2012	1	SNA	R12
1-4	2007-000931	R-CHIP	470ohm,5%,1/8W,TP,2012	1	SNA	R06
1-4	2007-000941	R-CHIP	47Kohm,5%,1/8W,TP,2012	4	SNA	R21,R18,R19,R20
1-4	2203-000192	C-CER,CHIP	100nF,+80-20%,50V,Y5V,TP,2012	4	SNA	C08,C09,C10,C11
1-4	2203-000260	C-CER,CHIP	10nF,10%,50V,X7R,2012	2	SNA	C12,C13
1-4	2203-000444	C-CER,CHIP	1nF,10%,50V,X7R,2012	4	SNA	C17,C16,C15,C14
1-4	2203-000555	C-CER,CHIP	0.02NF,5%,50V,C0G,TP,2012	2	SNA	C18,C19
1-4	2401-000151	C-AL	1000uF,20%,25V,GP,TP,10x20,5	1	SNA	C02
1-4	2401-000244	C-AL	100uF,20%,10V,GP,TP,6.3x7,5	1	SNA	C03
1-4	2401-000598	C-AL	1uF,20%,50V,GP,TP,4x7,5	1	SNA	C07
1-4	2401-000911	C-AL	22uF,20%,16V,GP,TP,5x7,5	2	SNA	C04,C06
1-4	2401-001428	C-AL	470uF,20%,50V,GP,TP,10x20,5	1	SNA	C01
1-4	2401-002075	C-AL	4.7uF,20%,50V,GP,TP,5x11,5	1	SNA	C05
1-4	2801-003933	CRYSTAL-UNIT	8MHz,50ppm,28-AAA,12pF,70oh	1	SNA	XTL1
1-4	3404-001128	SWITCH-TACT	12VDC,50mA,160gf,6.6x6.6x6.8	14	SNA	SW09,SW08,SW07,SW06,SW05,SW04,SW03,SW
1-4	3711-001038	HEADER-BOARD TO CABLE	BOX,6P,1R,2.5mm,ST	1	SNA	CN04
1-4	3711-004143	CONNECTOR-HEADER	BOX,2P,1R,5MM,STRAIGHT,	1	SNA	CN02

9. Electrical Parts List

(S.N.A : SERVICE NOT AVAILABLE)

Level	Code No.	Description	Specification	Q'ty	SA/SNA	Remark
1-4	3711-004200	CONNECTOR-HEADER	BOX,4P/7P,1R,2.5MM,STRA	1	SNA	CN01
1-4	DE41-00227A	PCB-MAIN	RC-C100-**,FR-1,1,-,-,T1.6*W19	1	SNA	
1-4	DE60-60012A	PIN-EYELET	ID2.1,OD2.5,L3.0,SN,BSP,T0.25	1	SNA	
1-3	DE09-00378A	IC MICOM	TMP87CH47U-5CD6,C100 - 5/XEF,4	1	SNA	IC01
1-3	3501-001188	RELAY-POWER	24V DC,0.53W,-,1FORMA,9.3MS,	1	SA	RY02
1-3	3501-001209	RELAY-POWER	24V DC,0.53W,-,1FORMA,9.3MS,	2	SA	RY05,RY04
1-3	0202-000176	SOLDER-BAR	VACULOY,-,22X337X16,96.5SN/3A	1	SNA	
1-3	0201-001822	ADHESIVE-STR	3629(LID4417),Pink,2500mPa.	1	SNA	

10-1 Wiring Diagrams

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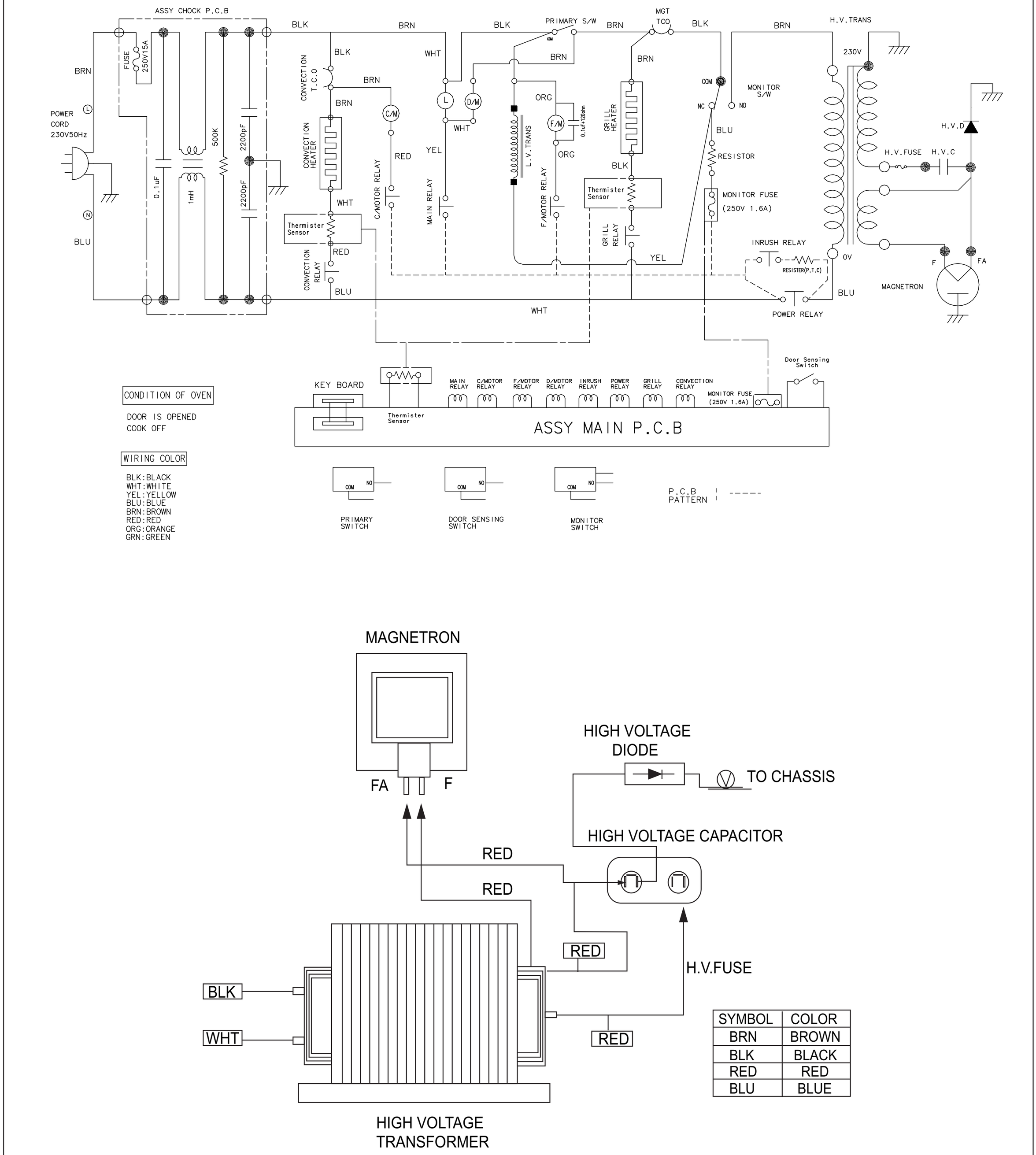

11-1 Model name standard

Baoad Classification	Distinguisher	Middle Classfication	Distinguisher	Product Code	Full Nane
USA CMO	M	CMO (Counter-top MWO)	W	MW	USA CMO (EPOXY CAVITY)
		UTC (Under The Cabinet)	U	MU	USA UTC
		Browner, Grill	G	MG	USA GRILL
		Convection	C	MC	USA CONVECTION
		Sensor	S	MS	USA CMO SENSOR
		DC MWO	D	MD	USA DC MWO
		Hospital MWO	H	MH	USA Hospital MWO
		Ceramic Enamel	E	ME	USA CMO (CERAMIC ENAMEL)
USA RV	R	SOLO	M	RM	USA RV SOLO
		CONVECTION	C	RC	USA RV CONVECTION
		BUILT-IN	B	RB	USA RV BUILT-IN
USA Junior	SJ			SJ	USA Junior MWO
USA OTR	SM	SOLO	H	SMH	USA OTR SOLO
		CONVECTION	V	SMV	USA OTR CONVECTION
EUROPE Epoxy Cavity	M	SOLO	1	M1	EUROPE SOLO (EPOXY CAVITY)
		GRILL	2	M2	EUROPE GRILL (EPOXY CAVITY)
EUROPE Ceramic Enamel	CE	SOLO	1	CE1	EUROPE SOLO (CERAMIC ENAMEL)
		GRILL	2	CE2	EUROPE GRILL (CERAMIC ENAMEL)
EUROPE Quartz GRILL	G2			G2	EUROPE Quartz GRILL
EUROPE Power Grill	PG			PG	POWER GRILL
EUROPE Convection	CK			CK	EUROPE CONVECTION
	C			C	EUROPE CONVECTION
EUROPE Fully Built-In	F	SOLO	W	FW	EUROPE SOLO FULLY BUILT-IN
		GRILL	G	FG	EUROPE GRILL FULLY BUILT-IN
		CONVECTION	C	FC	EUROPE CONVECTION FULLY BUILT-IN

11-2 Customer inquiry cases and countermeasures

Symptom	Cause	Countermeasures
Air is evacuated from the oven.	• The vent of the oven is designed to be placed on the bottom of the product, and air is evacuated from the oven.	• In the past, the vent was placed on the back panel of the oven. Since the oven was placed near the wall of a kitchen, the wall behind the oven was discolored. Thus, the vent of a new oven is placed on the bottom of the product, and air is evacuated from the oven.
The oven works automatically whenever the power is turned on.	• It may happen due to power failure or abnormal voltage. • It may happen when the door does not close completely.	• Connect the power plug three seconds after disconnecting the power plug. • Close the door completely => Press the Cancel button => Press the Start button.
Heating	• In many cases, it may happen when the power level is incorrectly set. • It may happen when the door does not close completely. • It may happen when the oven is out of order.	• Select HIGH by rotating the Cooking Power Control knob. - KEEP WARM: This function is used to warm the cooked food for a certain time period, not to heat the food. - MEDIUM/LOW: This function is used to cook the food slowly. • Close the door completely. => Press the Cancel button. => Press the Start button. • Contact the nearest Samsung after-sales service center.
Ground	• Ground problem may happen when the oven is placed in a humid area and the over is not grounded. • Ground is not provided by an extended electric outlet.	• If the oven is placed in a humid area, buy an electric wire in a store selling electrical products. (Electric wires for home use are also allowed) Ground the oven through the electric wire. • Buy an electric wire in a store selling electrical products. (Electric wires for home use are also allowed) Ground the oven through the electric wire.
Turn table occasionally rotates in reverse order.	• Turntable has been designed to rotate in either direction since 1994.	• In the past, the gear of the turntable was easily worn by turning it during cleaning. Now, the turntable of the oven is designed to rotate in both directions to prevent damage during cleaning. (Rotation direction is set when the oven initially operates.)
The oven sometimes beeps.	• The oven beeps every minute unless the food is in the oven after the food is cooked completely. • The oven occasionally beeps during cooking.	• Open and close the door again. (Beeping sounds indicate that the food is ready to be removed from the oven after cooking is complete.)

11-2 Customer inquiry cases and countermeasures (Continued)

Symptom	Cause	Countermeasures
Strange popping sounds are produced while fish is cooked.	• Since fish is salty and maintains its moisture, it is cooked while making a series of soft popping sounds. (The liquid may come out of the fish when the fish is cooked.)	• Food with bones such as fish (e.g. mackerel) and pork (e.g. pork chops) is cooked while making a series of soft popping sounds. Wrap the food completely so that food particles or spattered oils do not stick to the oven walls or floor.
Strange smell is produced in the oven.	• It may happen when food particles stuck to oven walls or floor.	• Clean the inside of the oven. => Remove strange smell through the Deodorant button => If the strange smell still remains, place a piece of lemon on the turntable and operate the oven for 5 minutes by pressing the Deodorant button.(However, the smells produced from the food exposed such as herbal remedies are not removed.)
Error	• Errors are classified with Failure and Non-failure.	• Refer to the section of ERROR in User Manual.
Accessory		• Visit the nearest Samsung Service Center or local dealer to buy accessories. Before visiting, check the model name printed on the lower right side of the front panel of the oven.
Number does not appear on the display screen.	• It happens when the power saving function is activated.	• Since the government recommends the reduction of electricity, the power saving function is performed for number display like that power cord is unplugged when the oven is not used. (Numbers are displayed when another button is pressed or when the door opens.)

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