LG

MICROWAVE OVEN

SERVICE MANUAL

MODEL: MB-4342A
MH-6342A

CAUTION

BEFORE SERVICING THE UNIT, READ THE SAFETY PRECAUTIONS IN THIS MANUAL.

SAFETY PRECAUTIONS

This device is to be serviced only by properly qualified service personnel.
Consult the service manual for proper service procedures to assure continued safety operation and for precautions to be taken to avoid possible exposure to excessive microwave energy.

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.

CAUTION

MICROWAVE RADIATION

DO NOT BECOME EXPOSED TO RADIATION FROM THE MICROWAVE GENERATOR OR OTHER PARTS CONDUCTING MICROWAVE ENERGY.

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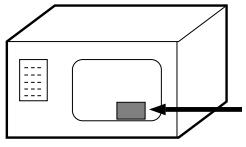
SPECIFICATIONS

ITEM	DESCRIPTION
MODEL	**MB-4342A / MH-6342A**
Power Requirement	230 Volts AC 50 Hz Single phase, 3 wire grounded Microwave 1,200W Grill 1,100W Combination 2,250W
Power Output	800 Watts full microwave power (IEC 60705)
Microwave Frequency	2,450 MHz
Magnetron	2M214 - 39F
Timer	90 min.
Outside Dimensions	485 (W) x 280 (H) x 406 (D) mm
Cavity Dimensions	332 (W) x 200 (H) x 331 (D) mm
Net Weight	13.5 kg (approx.)
Shipping weight	15.0 kg (approx.)
Control Complement	Microwave Power for Variable Cooking Power level MAX ..... Full power throughout the cooking time MED.-HIGH ..... approx. 80% of Full power MEDIUM ..... approx. 60% of Full power DEFROST ..... approx. 40% of Full power LOW/WARM ..... approx. 20% of Full power Grill, COMBI
Name Plate Location	
Accessories	Owner's manual Glass tray Rotating ring Grill rack

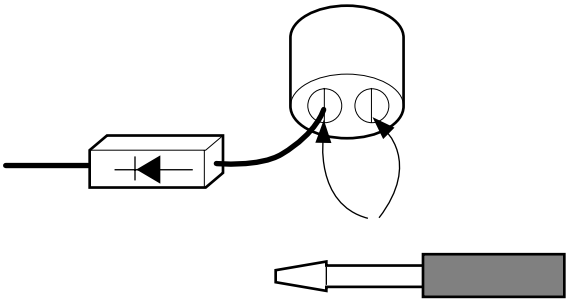
This microwave oven is designed for household use only.

It is not recommended for commercial purposes.

CAUTIONS

Unlike other appliances, the microwave oven is high-voltage and high-current equipment. Though it is free from danger in ordinary use, extreme care should be taken during repair.

- DO NOT operate on a 2-wire extension cord during repair and use.
- NEVER TOUCH any oven components or wiring during operation.
- BEFORE TOUCHING any parts of the oven, always remove the power plug from the outlet.
- For about 30 seconds after the oven stops, an electric charge remains in the high voltage capacitor. When replacing or checking, you must discharge the high voltage capacitor by shorting across the two terminals with an insulated screwdriver.

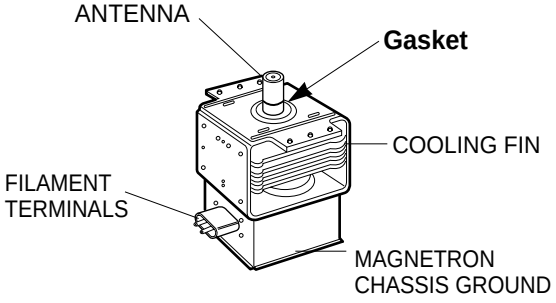


- Remove your watches whenever working close to or replacing the Magnetron.
- NEVER operate the oven with no load.
- NEVER injure the door seal and front plate of the oven cavity.
- NEVER put iron tools on the magnetron.
- NEVER put anything into the latch hole and the interlock switches area.

MICROWAVE RADIATION

Personnel should not be exposed to the microwave energy which may radiate from the magnetron or other microwave generating device if it is improperly used or connection.
All input and output microwave connections, waveguide, flange and gasket must be secure never operate the device without a microwave energy absorbing load attached.
Never look into an open waveguide or antenna while the device is energized.

- Proper operation of the microwave oven requires that the magnetron be assembled to the waveguide and cavity. Never operate the magnetron unless it is properly installed.
- **Be sure that the magnetron gasket is properly installed around the dome of the tube whenever installing the magnetron.**



MAGNETRON

THE OVEN IS TO BE SERVICED ONLY BY PROPERLY QUALIFIED SERVICE PERSONNEL.

INSTALLATIONS

BEFORE YOU BEGIN, READ THE FOLLOWING INSTRUCTIONS COMPLETELY AND CAREFULLY.

INSTALLING

1. Empty the microwave oven and clean inside it with a soft, damp cloth. Check for damage such as misaligned door, damage around the door or dents inside the cavity or on the exterior.

2. Put the oven on a counter, table, or shelf that is strong enough to hold the oven and the food and utensils you put in it. (The control panel side of the oven is the heavy side. Use care when handling.)

3. Do not block the vent and the air intake openings. Blocking vent or air intake openings can cause damage to the oven and poor cooking results. Make sure the microwave oven legs are in place to ensure proper air flow.

4. The oven should not be installed in any area where heat and steam are generated, because they may damage the electronic or mechanical parts of the unit.
   Do not install the oven next to a conventional surface unit or above a conventional wall oven.

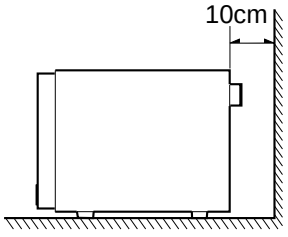
5. Use microwave oven in an ambient temperature less than 104°F(40°C).

6. Place the microwave oven on a sturdy and flat surface at least 10 cm(4 inches) from the wall.

7. Place the microwave oven as far away as possible from TV, RADIO, COMPUTER, etc., to prevent interference.

8. Do not touch the front glass during or after cooking of the Grill and Combination mode.
   This glass is very hot during heater operating.

9. Do not operate the oven at microwave and combination mode with Grill rack placed in the cavity when the oven is empty.



EARTHING INSTRUCTIONS

This microwave oven is designed to be used in a fully earthed condition.
It is imperative, therefore, to make sure it is properly earthed before servicing

WARNING-
THIS APPLIANCE
MUST BE EARTHED

IMPORTANT

The wires in this mains lead are colored in accordance with the following code:

Green-and-yellow:	**Earth**
Blue:	**Neutral**
Brown:	**Live**

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

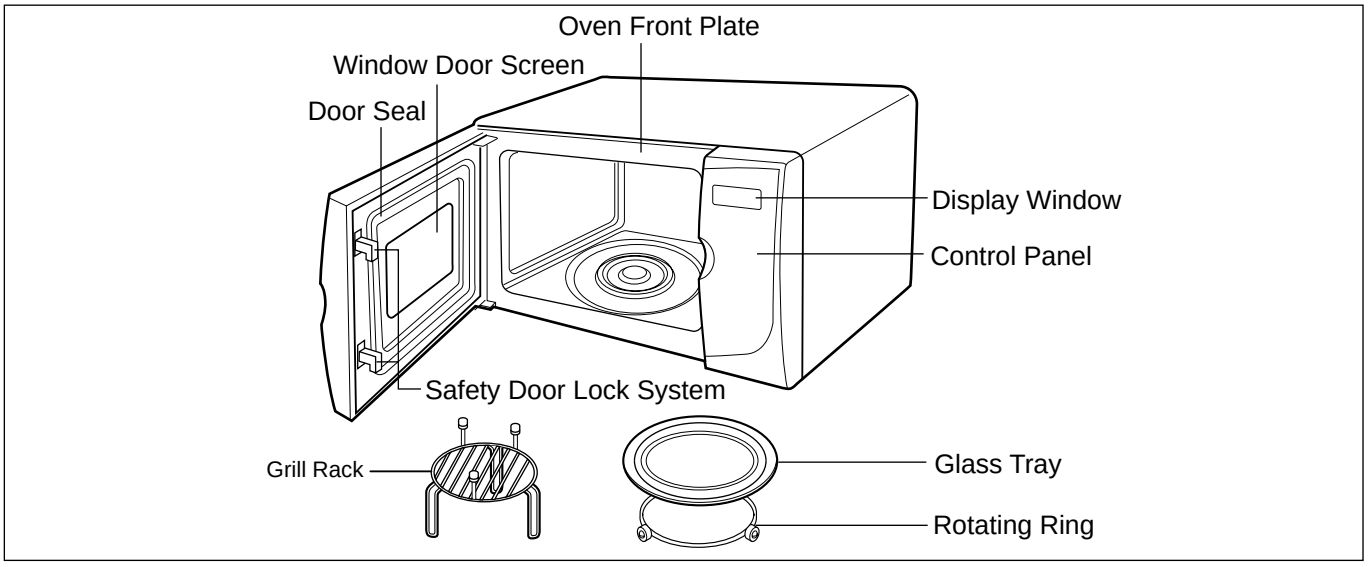
The wire which is colored **green-and-yellow** must be connected to the terminal in the plug which is marked with the letter **E** or by the **earth symbol** (⏚) or colored **green** or **green-and-yellow**.

The wire which is colored **blue** must be connected to the terminal in the plug which is marked with the letter **N** or colored **black**.

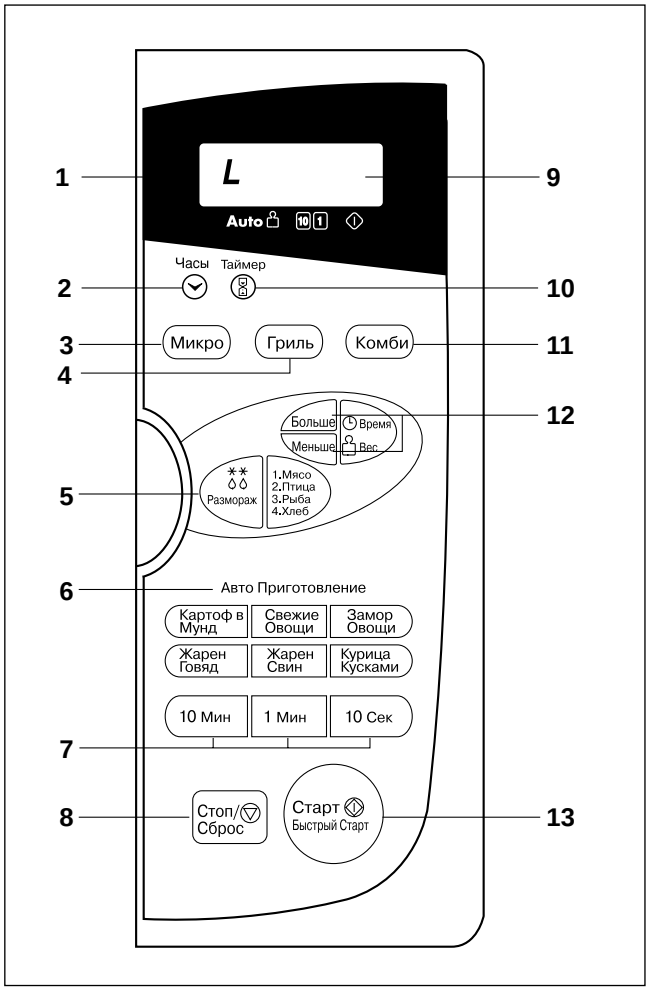
The wire which is colored **brown** must be connected to the terminal in the plug which is marked with the letter **L** or colored **red**.

OPERATING INSTRUCTIONS

FEATURES



CONTROL PANEL



1. INDICATORS

2. SET CLOCK: Used to set the time of day.

3. MICRO: Used to select the desired power level for microwave cooking.

4. GRILL: Used to select the grill cooking.

5. AUTO DEFROST: Used to select the auto weight defrost.

6. AUTO COOK: Used to cook the foods listed by one touch.

7. TIME: To set cooking times.

8. STOP/CLEAR: Used to stop oven and clear all entries except time of day.

- CHILD LOCK

9. DISPLAY WINDOW

10. KITCHEN TIMER

11. COMBI: Used to select the combination cooking.

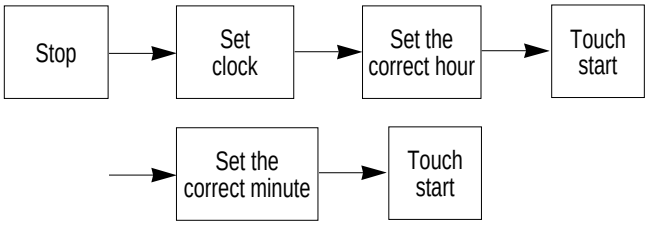
12. MORE/LESS: Used to change cooking time.

13. START: One tap allows oven to begin functioning.

OPERATING SEQUENCE

The following is a description of component functions during oven operation.

1. SETTING THE CLOCK

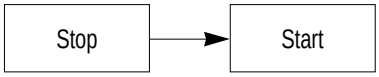


NOTE: You can set 12 hour clock or 24 hour clock optionally.

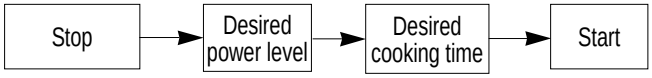
2. CANCEL FUNCTION

Touch the STOP pad whenever you need to cancel an entry or a function currently in use.
The display will either return to the last item entered or to the clock.

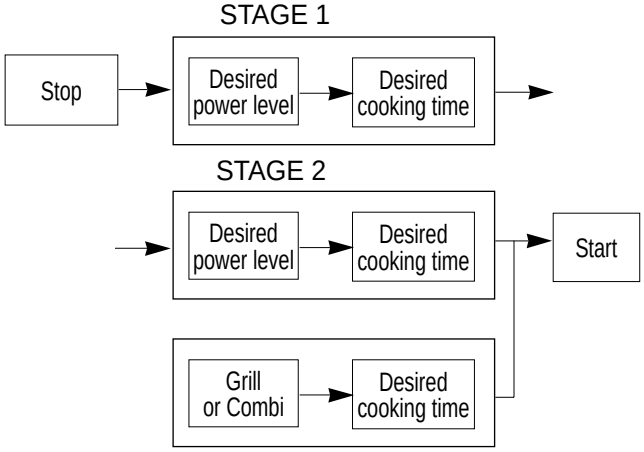
3. QUICK START



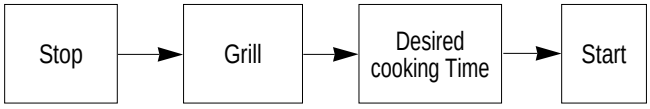
4. MICROWAVE COOKING



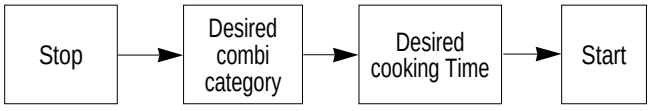
5. MULTI-STAGE MICROWAVE COOKING



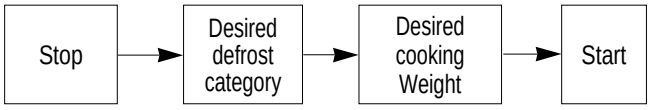
6. GRILL COOKING



7. COMBINATION COOKING



8. AUTO WEIGHT DEFROST



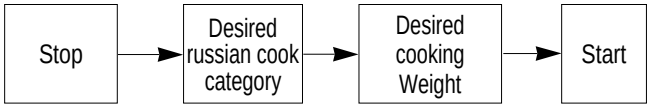
9. CHILD LOCK

This oven has a CHILD LOCK feature

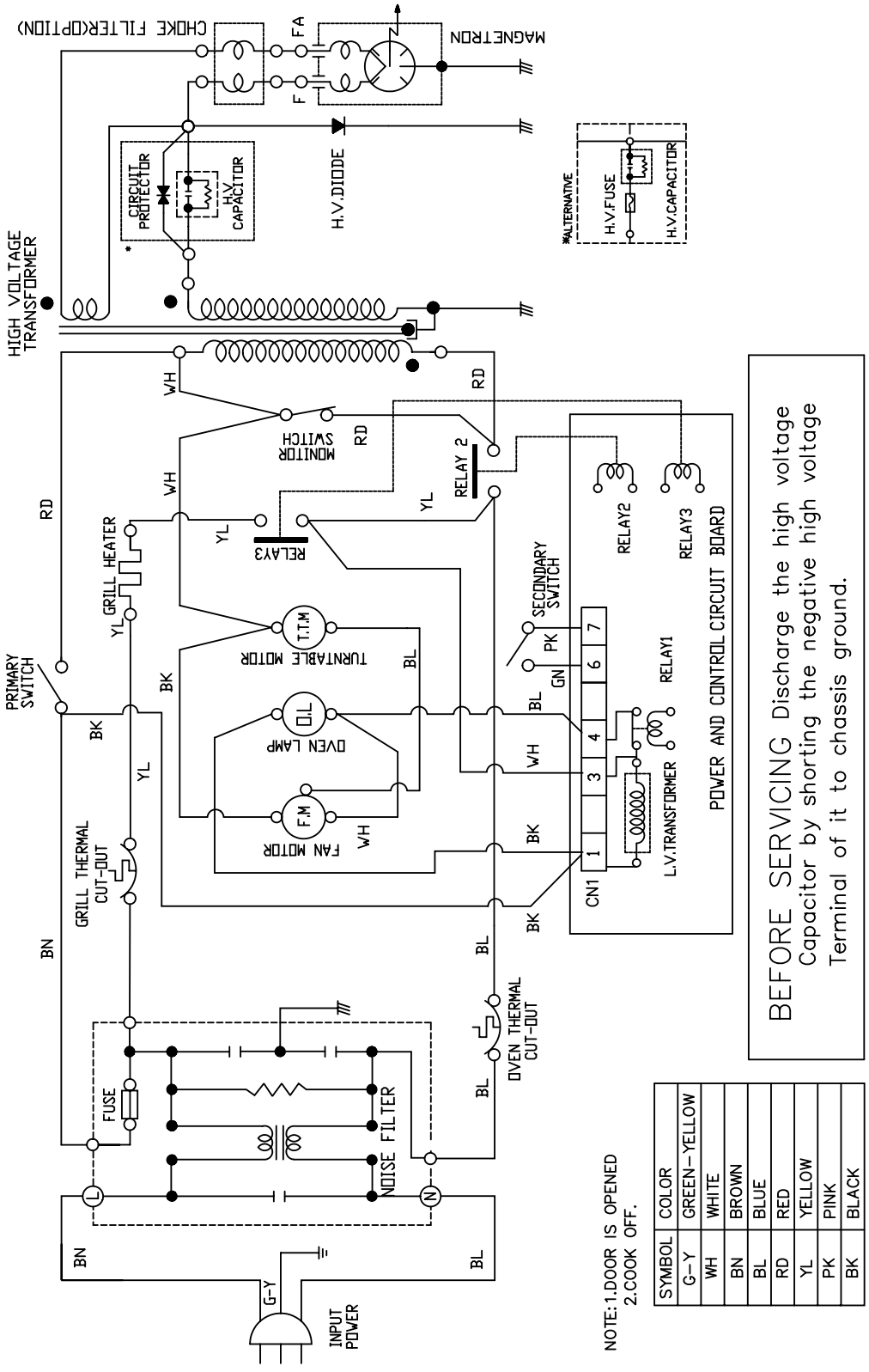
- TO SET CHILD LOCK
  - Touch the Stop pad
  - Touch STOP pad → **L** appear in the display.

- TO CANCEL CHILD LOCK
  - Touch the Stop pad
  - Touch STOP pad → **L** disappears.

10. RUSSIAN COOK



SCHEMATIC DIAGRAM



SYMBOL	COLOR
G-Y	GREEN-YELLOW
WH	WHITE
BN	BROWN
BL	BLUE
RD	RED
YL	YELLOW
PK	PINK
BK	BLACK

CIRCUIT DESCRIPTION

GENERAL DETAILS

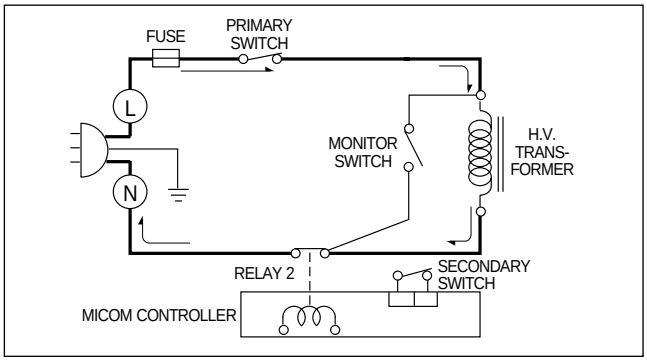
- The low voltage transformer supplies the necessary voltage to the micom controller when power cord is plugged in.
- When the door is closed, the primary switch is ON, the secondary switch is ON, and the monitor switch opens (contact COM and NO).

WHEN SELECTING COOKING POWER LEVEL AND TIME

- The micom controller memorizes the function you set.
- The time you set appears in the display window.
- Each indicator light turns on to indicate that the stage has been set.

WHEN TOUCHING THE START PAD

- The coil of the relay is energized by the micom controller.
- Power input is supplied to the high voltage transformer through the fuse to the primary switch and relay 2.
- Turntable rotates.



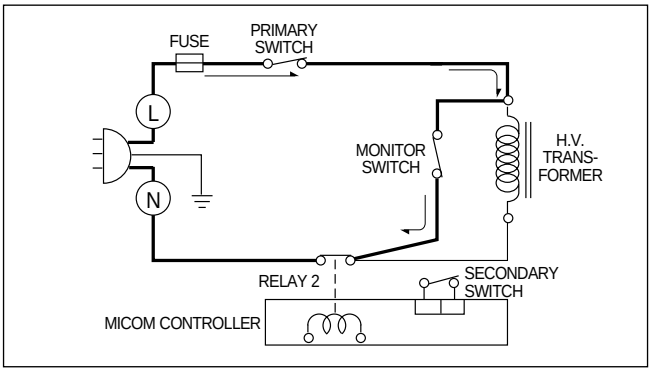
- The fan motor rotates and cools the magnetron by blowing the air (coming from the intake on the baseplate).
- The air is also directed into the oven to exhaust the vapor in the oven through the upper plate.
- Cooking time starts counting down.
- 3.2 volts AC is generated from the filament winding of the high voltage transformer. This 3.2 volts is applied to the magnetron to heat the magnetron filament through two noise-preventing choke coils.
- A high voltage of approximately 2100 volts AC is generated in the secondary of the high voltage transformer which is increased by the action of the high voltage diode and charging of the high voltage capacitor.
- The negative 4,000 Volts DC is applied to the filament of the magnetron.

WHEN THE OVEN IS SET AT ANY LEVEL EXCEPT MAXIMUM.

- The micom controller controls the ON-OFF time of relay 2 by the applied signal to vary the average output power of microwave oven as POWER LEVEL. (refer to page 1-1)

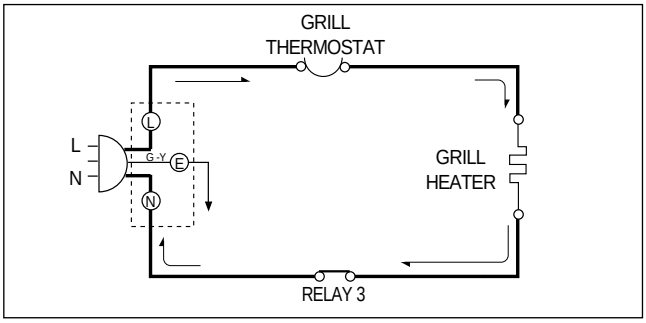
WHEN THE DOOR IS OPENED DURING COOKING

- Both the primary switch and relay 2 are cut off primary winding voltage of the high voltage transformer.
- ON-OFF of relay 2 is coupled electrically with opening and closing of the secondary switch.
- When the door is opened, the secondary switch is opened and when the door is closed, the secondary switch is closed.
- The cooking time stops counting down.
- Relay stops functioning.
- As the door is opened, if the contact of primary switch and relay 2 and/or secondary switch fails to open, the fuse opens due to the large current surge caused by the monitor switch activation, which in turn stops magnetron oscillation.



WHEN TOUCHING THE START KEY WITH THE GRILL COOKING FUNCTION SELECTED

- The contacts of the primary switch and the secondary switch close the circuit.
- A.C. voltage is applied to the grill heater through grill thermostat as shown by the solid line.



- Turntable rotates.
- The fan motor rotates.
- The air is also directed into the oven to exhaust the vapor in the oven through the base plate and upper plate.

SERVICE INFORMATION

TOOLS AND MEASURING INSTRUMENTS

NECESSARY TOOLS

Tools normally used for TV servicing are sufficient.
Standard tools are listed below.

- Diagonal pliers
- Long nose pliers
- Phillips screwdriver
- Flat blade screwdriver
- Wrench (size 5mm)
- Nutdriver (size 5mm)
- Adjustable wrench
- Soldering iron
- Solder
- Vinyl insulation tape
- Polishing cloth

NECESSARY MEASURING INSTRUMENTS

- TESTER(VOLTS-DC, AC., Ohmmeter)
- Microwave survey meter
  - Holaday HI-1500
    HI-1501
  - Narda 8100
    8200
- Inch scale
- 600 cc non conductive material beaker (glass or plastic), inside diameter: approx. 8.5 cm($3^1/_2$ in.)
- Cylindrical and made of borosilicate glass vessel.
  max. thickness: 3 mm
  outside diameter: approx. 190mm
  height: approx. 90mm
- Glass thermometer: 100°C or 212°F (1 deg scale)

MICROWAVE LEAKAGE TEST

CAUTIONS

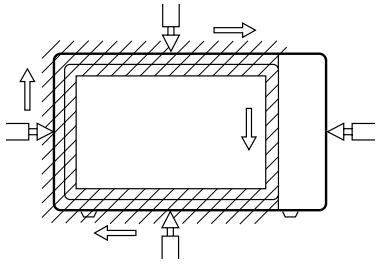
- **Be sure to check microwave leakage prior to servicing the oven if the oven is operative prior to servicing.**
- **The service personnel should inform the manufacture importer, or assembler of any certified oven unit found to have a microwave emission level in excess of 5 mW/cm²** and should repair any unit found to have excessive emission levels at no cost to the owner and should ascertain the cause of the excessive leakage. The service personnel should instruct the owner not to use the unit until the oven has been brought into compliance.
- **If the oven operates with the door open, the service personnel should:**
  - Tell the user not to operate the oven.
  - Contact the manufacturer.
- The service personnel should check all surface and vent openings for microwave leakage.
- Check for microwave leakage after every servicing. The power density of the microwave radiation leakage emitted by the microwave oven should not exceed 4 mW/cm². Always start measuring of an unknown field to assure safety for operating personnel from radiation leakage.

MEASURING MICROWAVE ENERGY LEAKAGE

- **Pour 275±15cc of 20±5°C(68±9°F) water in a beaker which is graduated to 600 cc, and place the beaker on the center of the turntable.**
- **Set the energy leakage monitor to 2,450 MHz and use it following the manufacturer's recommended test procedure to assure correct result.**
- **When measuring the leakage, always use the 2-inch (5cm) spacer supplied with the probe.**
- **Operate the oven at its maximum output.**
- **Measure the microwave radiation using and electromagnetic radiation monitor by holding the probe perpendicular to the surface being measured**

Move probe along shaded area

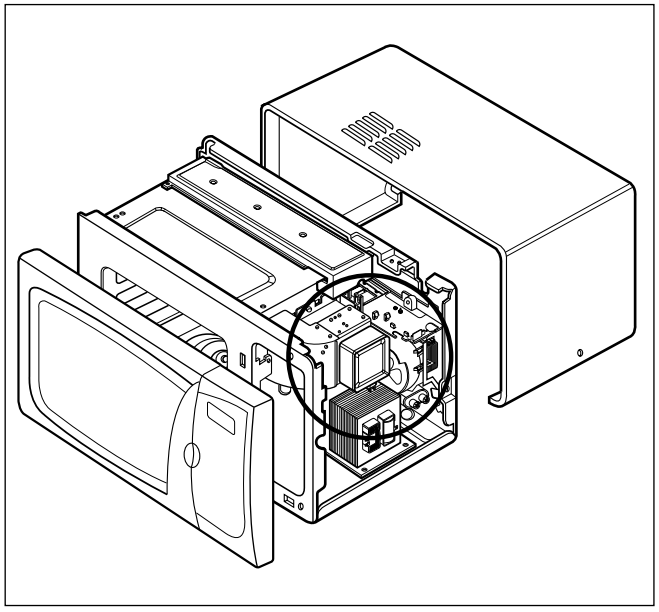
Probe scanning speed
Less than 2.5 cm/sec
(1in/sec)



MEASUREMENT WITH OUTER CASE REMOVED

- When you replace the magnetron, measure for microwave energy leakage before the outer case is installed and after all necessary components are replaced or adjusted.
  Special care should be taken in measuring the following parts. (Circled area of below Fig.)
  - Around the magnetron
  - The waveguide

WARNING : AVOID CONTACTING ANY HIGH VOLTAGE PARTS (Magnetron, H.V. Transformer, H.V. Capacitor, H.V. Cable Ass'y, H.V. Circuit Protector)



MEASUREMENT WITH A FULLY ASSEMBLED OVEN

- After all components, including the outer case, are fully assembled, measure for microwave energy leakage around the door viewing window, the exhaust opening, and air inlet openings.
- Microwave energy leakage must not exceed the values prescribed below.

NOTE: Leakage with the outer case removedless than 5 mW/cm.sq. Leakage for a fully assembled oven (Before the latch switch (primary) is interrupted) with the door in a slightly opened position-less than 2 mW/cm.sq.

NOTES WHEN MEASURING

- Do not exceed meter full scale deflection.
- The test probe must be removed no faster than 1 inch/sec (2.5 cm/sec) along the shaded area, otherwise a false reading may result.
- The test probe must be held with the grip portion of the handle.
  A false reading may result if the operator's hand is between the handle and the probe.
- When testing near a corner of the door, keep the probe perpendicular to the surface making sure the probe horizontally along the oven surface, this may possibly cause probe damage.

RECORD KEEPING AND NOTIFICATION AFTER MEASUREMENT

- After adjustment and repair of any microwave energy interruption or microwave energy blocking device, record the measured values for future reference. Also enter the information on the service invoice.
- The microwave energy leakage should not be more than 4 mW/cm.sq. after determining that all parts are in good condition, functioning properly and genuine replacement parts which are listed in this manual have been used.
- At least once a year, have the electromagnetic energy leakage monitor checked for calibration by its manufacturer.

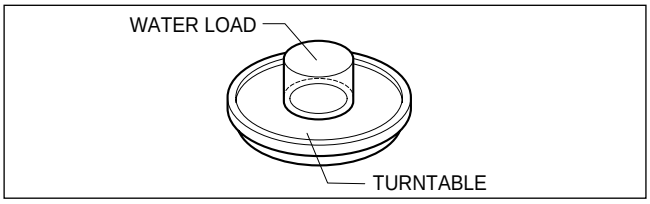
MEASUREMENT OF MICROWAVE POWER OUTPUT

- Microwave power output measurement is made with the microwave oven supplied at its rated voltage and operated at its maximum microwave power setting with a load of (1000±5) g 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.
- The oven and the empty vessel are at ambient temperature prior to the start of the test.
- The initial temperature (T1) of the water is (10±2)°C 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 turntable which is in the lowest position and the microwave power switched on.
- The time T for the temperature of the water to rise by a value Δ T of (10±2)°K is measured, where T is the time in seconds and ΔT is the temperature rise. The initial and final water temperatures are selected so that the maximum difference between the final water temperature and the ambient temperature is 5°K.
- The microwave power output P in watts is calculated from the following formula :

$$P = \frac{4187 \times (\Delta T) + 0.55 \times (T_2 - T_0) \times M}{T}$$

  - T_2: Temperature after heating
  - T_0: Temperature after bowl
  - M: Weight of bowl

  is measured while the microwave generator is operating at full power. Magnetron filament heat-up time is not included. (about 3 sec)
- The water is stirred to equalize temperature throughout the vessel, prior to measuring the final water temperature.
- Stirring devices and measuring instruments are selected in order to minimize addition or removal of heat.



DISASSEMBLY AND ADJUSTMENT

A. OUTER CASE REMOVAL

1) Disconnect the power supply cord from the outlet.
2) Remove the screws from the rear and along side edges of the case.
   The outer case must be moved backward to be lifted off.

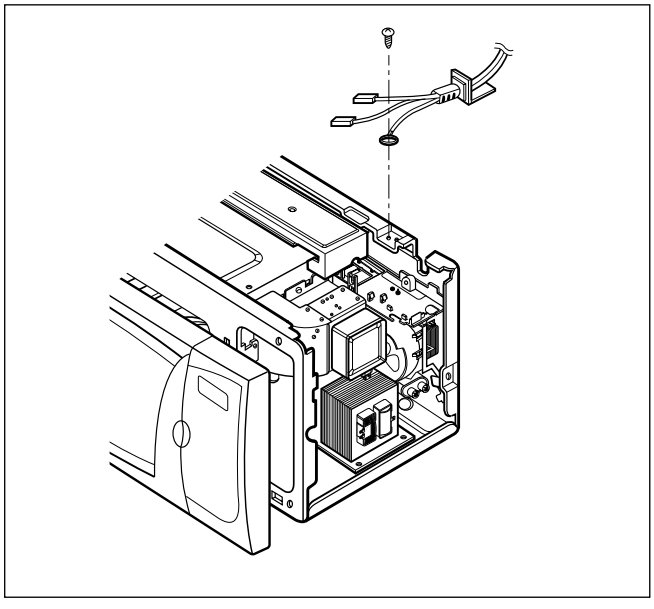
B. POWER SUPPLY CORD

1) Remove the outer case.
2) Disconnect two terminals, and remove one screw of the earth terminal.

CAUTION: DISCHARGE THE HIGH VOLTAGE CAPACITOR BEFORE SERVICING
(refer to page 2-1)

C. CONTROL PANEL ASSEMBLY

1) Disconnect the leadwire from the PCB SUB ASS'Y.
2) Remove the screws for the earth and securing the control panel.
3) Lift control panel ASS'Y from the oven by the tab unhooked.



D. DOOR GROSS ASSEMBLY REMOVAL

1) Open the door.
2) Remove the choke cover cap very carefully with a flat-blade screwdriver.

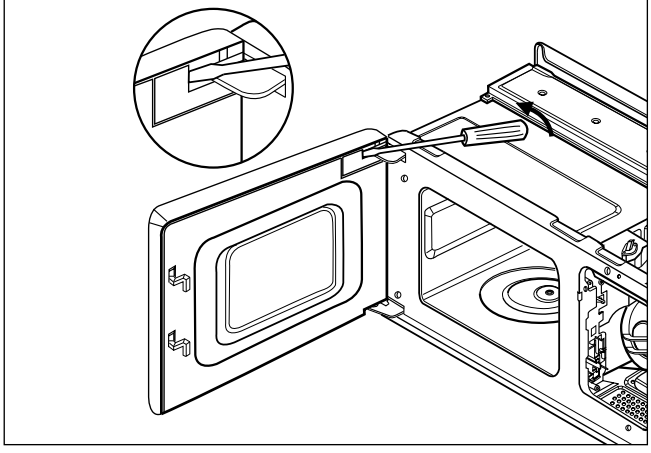
CAUTION : Be careful not to damage door seal plate by screwdriver.

3) Lift up and push the door.

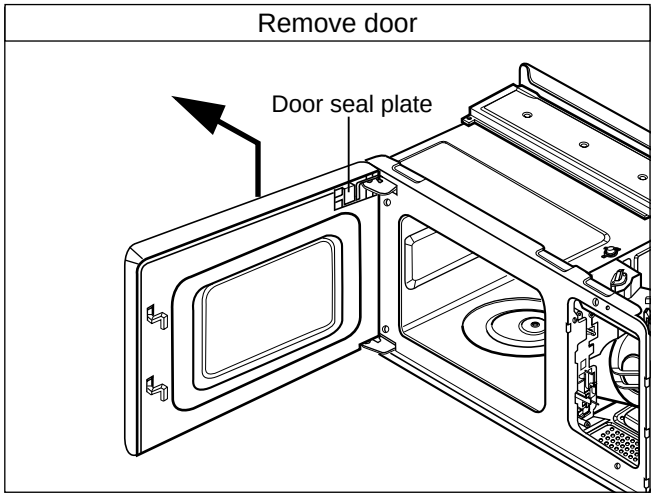
NOTE:

1. After replacing the door, be sure to check that the primary switch, monitor switch, and secondary switch operate normally.
2. After replacing the door, check for microwave energy leakage with a survey meter. Microwave energy must be below the limit of 5 mW/cm. (with a 275 ml water load)
3. When mounting the door assembly to the oven assembly, be sure to adjust the door assembly parallel to the chassis. Also adjust so the door has no play between the inner door surface and oven frame assembly. If the door assembly is not mounted properly, microwaves may leak from the clearance between the door and the oven.

Remove choke cover cap



Remove door



E. HIGH VOLTAGE TRANSFORMER REMOVAL

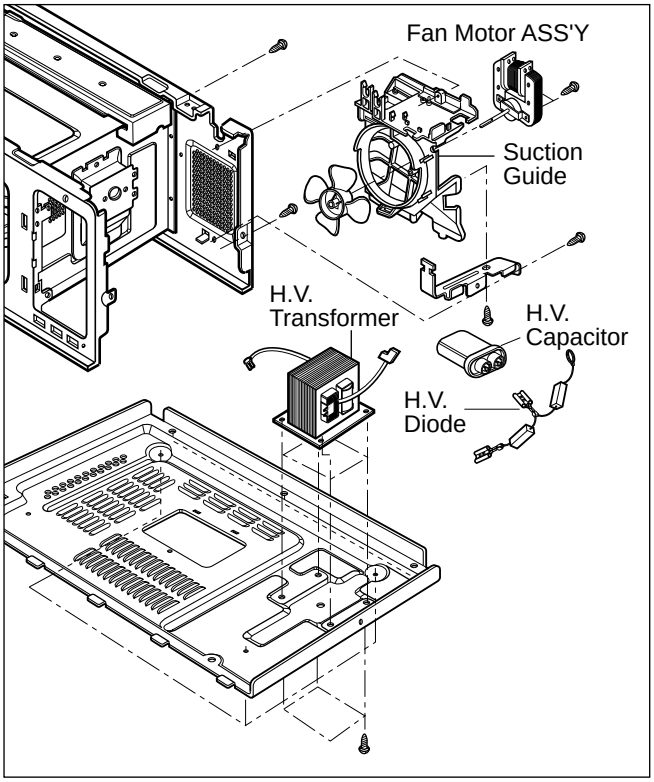
1) Discharge the high voltage capacitor.
2) Disconnect the leadwire from magnetron, high voltage transformer, and capacitor.
3) Remove the screw holding the high voltage transformer to the baseplate.

F. FAN MOTOR ASSEMBLY REMOVAL

1) Discharge the high voltage capacitor.
2) Disconnect the leadwire from fan motor, noise filter and high voltage capacitor.
3) Remove the two screws holding the the suction guide ASS'Y to the oven cavity and remove the high voltage diode earth screw.
4) Remove the screw of the capacitor bracket.
5) Remove the two screws holding the fan motor ASS'Y to the suction guide ASS'Y.

G. HIGH VOLTAGE CAPACITOR AND DIODE REMOVAL

1) Discharge the high voltage capacitor.
2) Disconnect the leadwire from fan motor, noise filter and high voltage capacitor.
3) Remove the screw holding the suction guide ASS'Y to the oven cavity and remove the high voltage diode earth screw.
4) Remove the screw holding the high voltage capacitor bracket.



H. AIR DUCT ASSEMBLY REMOVAL

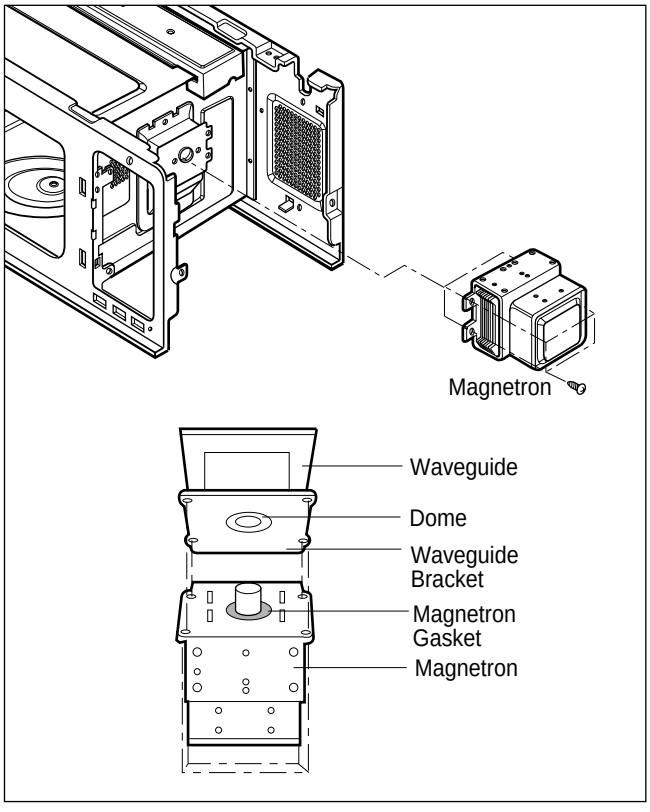
1) Disconnect the leadwire from lamp.
2) Remove the mounting screw to Latch Board.

I. MAGNETRON REMOVAL

1) Disconnect the leadwire from the high voltage transformer and high voltage capacitor.
2) Carefully remove the mounting screws holding the magnetron and the waveguide.
3) Remove the magnetron ASS'Y until the tube is clear from the waveguide.

NOTE:

1. When removing the magnetron, make sure its dome does not hit any adjacent parts, or it may be damaged.
2. When replacing the magnetron, be sure to install the magnetron gasket in the correct position and be sure that the gasket is in good condition.
3. After replacing the magnetron, check for microwave leakage with a survey meter around the magnetron. Microwave energy must be below the limit of 5 mW/cm^2. (With a 275 ml. water load).
   Make sure that gasket is rigidly attached to the magnetron. To prevent microwave leakage, tighten the mounting screws properly, making sure there is no gap between the waveguide and the magnetron.

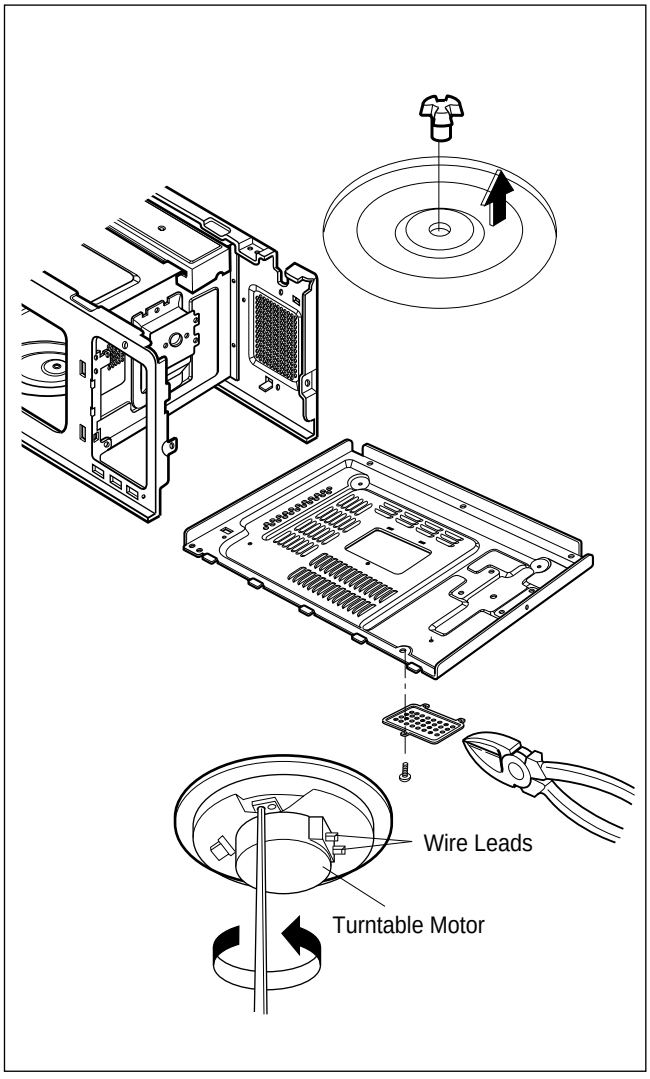


J. REMOVING THE TURNTABLE MOTOR

1) Remove the turntable.
2) Remove the Rotating Ring.
3) Lay the unit down on its back.
4) Remove the turntable motor cover.
   The turntable base cover is easily removed by pinching the six parts with a wire cutting.
5) Disconnect the leadwire from the turntable motor terminals.
6) Remove the screw securing the turntable motor to the oven cavity ASS'Y
7) After repairing the motor, rotate the removed turntable motor cover.
8) Fit the turntable motor cover's projecting part to the base plate slit.

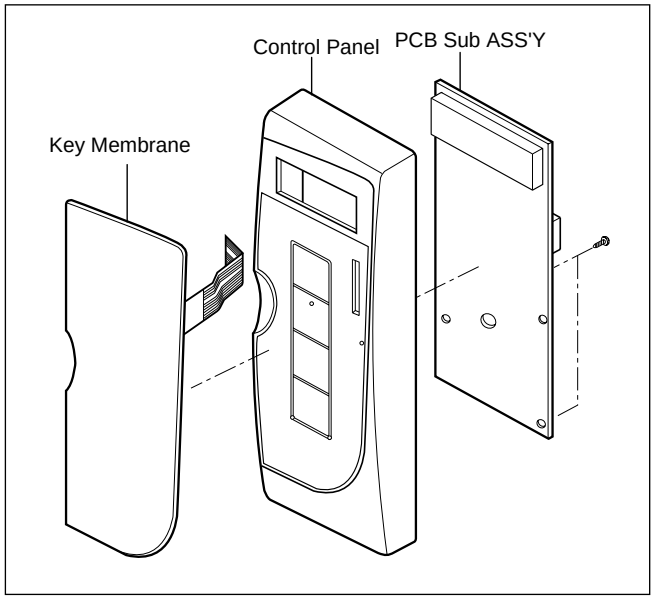
NOTE:

1. Remove the wire lead from the turntable motor VERY CAREFULLY.
2. Be sure to grasp the connector, not the wires, when removing.



K. PCB ASSEMBLY REMOVAL

1) Remove the control panel assembly from the cavity. (Refer to control panel assembly removal on previous page.)
2) Remove screws which hold the PCB SUB ASS'Y to the control panel.
3) Disconnect the flat cable from the PCB SUB ASS'Y and take off the PCB SUB ASS'Y.

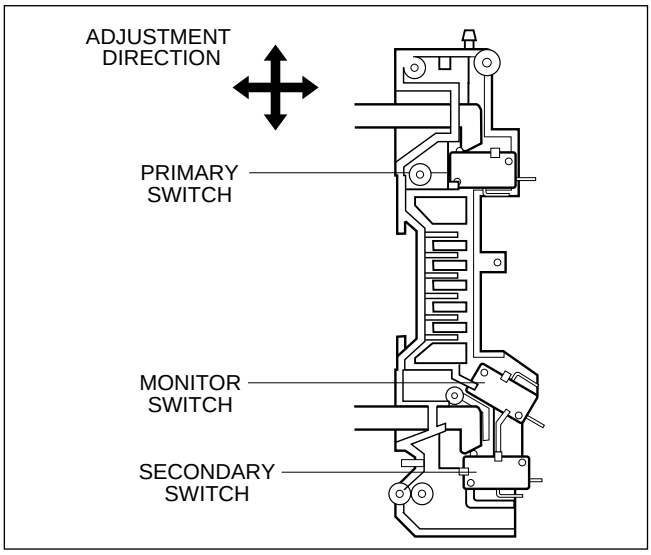


L. INTERLOCK SYSTEM

1) INTERLOCK MECHANISM

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

2) MOUNTING OF THE PRIMARY/MONITOR/ SECONDARY SWITCHES TO THE LATCH BOARD

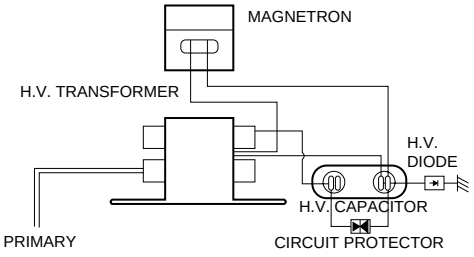


3) INSTALLATION AND ADJUSTMENT OF THE LATCH BOARD TO THE OVEN ASSEMBLY

- Mount the latch board to the oven assembly.
- Adjust the latch board in the arrow direction so that oven door will not have any play in it when the door is closed.
- Tighten the mounting screw.
- **Check for play in the door by pushing the door release button. Door movement should be less than 0.5 mm. (1/64 inch)**

  Don't push the door release button while making adjustment. Make sure that the latch moves smoothly after adjustment are completed and that the screws are tight. Make sure the primary, monitor, and secondary switches operate properly by following the continuity test procedure.

FIG. 1 **CAUTION: CHECK THE CORRECT POSITION**



INTERLOCK CONTINUITY TEST

WARNING : FOR CONTINUED PROTECTION AGAINST EXCESSIVE RADIATION EMISSION, REPLACE ONLY WITH IDENTICAL REPLACEMENT PARTS.

TYPE NO. SZM-V 16-FA-63 OR VP-533A-OF FOR PRIMARY SWITCH
TYPE NO. SZM-V 16-FA-62 OR VP-532A-OF FOR MONITOR SWITCH
TYPE NO. SZM-V 16-FA-63 OR VP-533A-OF FOR SECONDARY SWITCH

A. PRIMARY INTERLOCK SWITCH TEST

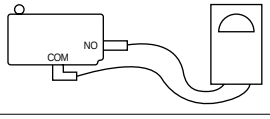
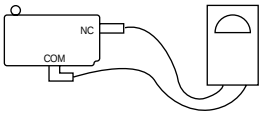
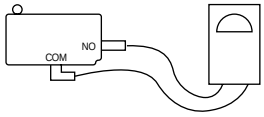
When the door release button is depressed slowly with the door closed, an audible **click** should be heard at the same time or successively at intervals. When the button is released slowly, the latches should activate the switches with an audible **click**.
If the latches do not activate the switches when the door is closed, the switches should be a adjusted in accordance with the adjustment procedure. Disconnect the wire lead from the primary switch. Connect the ohmmeter leads to the common (COM) and normally open (NO) terminal of the switch. The meter should indicate an open circuit in the door open condition.
When the door is closed, the meter should indicate a closed circuit.
When the primary switch operation is abnormal, make the necessary adjustment or replace the switch only with the same type of switch.

B. SECONDARY INTERLOCK SWITCH TEST

Disconnect the wire lead from the secondary switch.
Connect the ohmmeter leads to the common (COM) and normally open (NO) terminals of the switch. The meter should indicate a open circuit in the door open condition. When the door is closed, meter should indicate an closed circuit. When the secondary switch operation is abnormal, make the necessary adjustment or replace the switch only with the same type of switch.

C. MONITOR SWITCH TEST

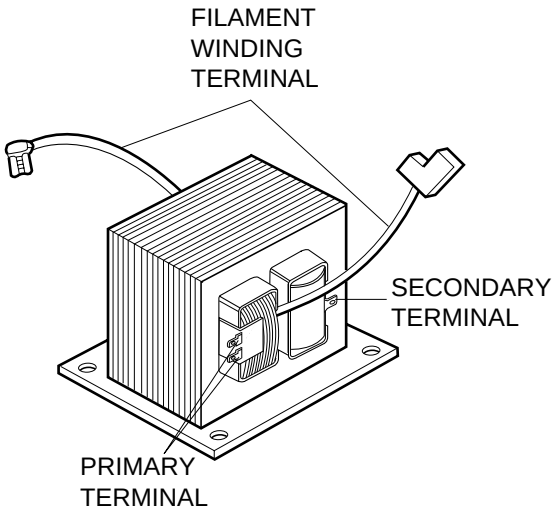
Disconnect the wire lead from the monitor switch.
Connect the ohmmeter leads to the common (COM) and normally closed (NC) terminals of the switch. The meter should indicate closed circuit in the door open condition. When the door is closed, meter should indicate an open circuit. When the monitor switch operation is abnormal, replace with the same type of switch.
NOTE: After repairing the door or the interlock system, it is necessary to do this continuity test before operating the oven.

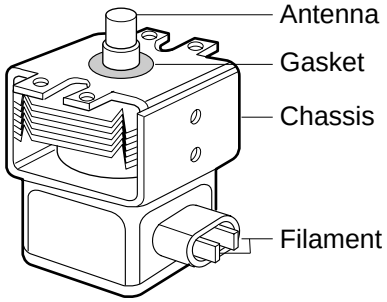
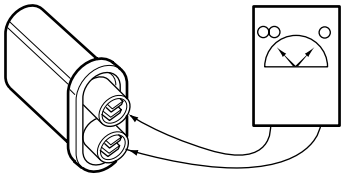
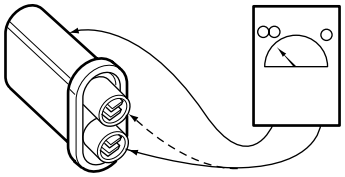
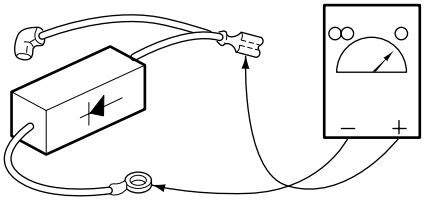
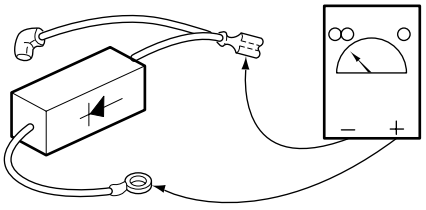
COMPONENTS	TEST PROCEDURE		RESULTS	
SWITCHES (Wire leads removed)	Check for continuity of the switch with an Ohm-meter		Door open	Door closed
	Primary Switch			
	Monitor Switch			
	Secondary Switch			
	NOTE : After checking for the continuity of switches, make sure that are connected correctly.			

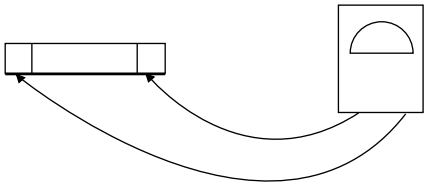
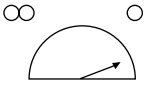
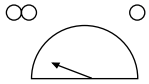
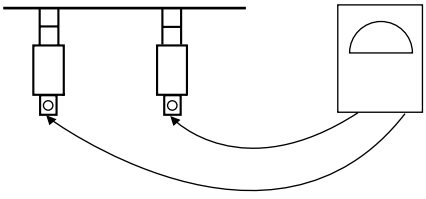
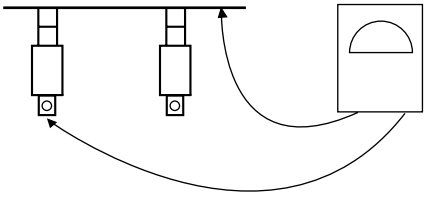
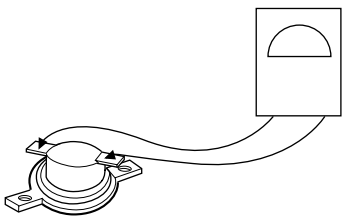
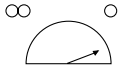
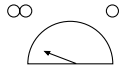
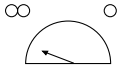
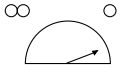
COMPONENT TEST PROCEDURE

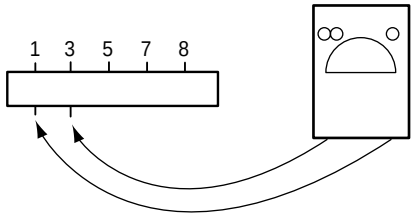
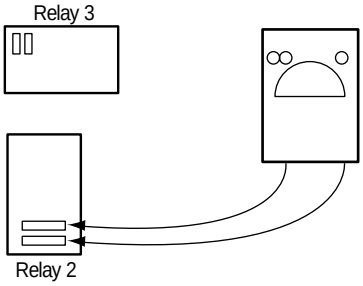
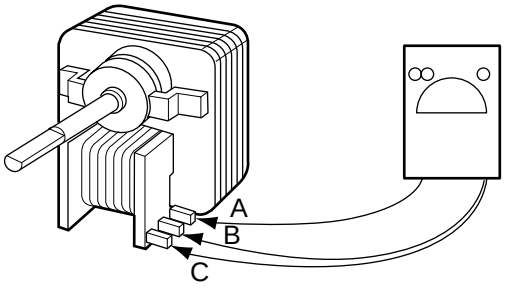
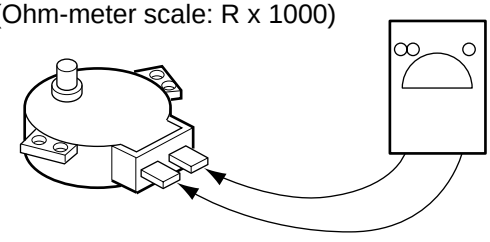
CAUTIONS

1. DISCONNECT THE POWER SUPPLY CORD FROM THE OUTLET WHENEVER REMOVING THE OUTER CASE FROM THE UNIT. PROCEED WITH THE TEST ONLY AFTER DISCHARGING THE HIGH VOLTAGE CAPACITOR AND REMOVING THE WIRE LEADS FROM THE PRIMARY WINDING OF THE HIGH VOLTAGE TRANSFORMER. (SEE PAGE 2-1)
2. ALL OPERATIONAL CHECKS WITH MICROWAVE ENERGY MUST BE DONE WITH A LOAD (1 LITER OF WATER IN CONTAINER) IN THE OVEN.

COMPONENTS	TEST PROCEDURE	RESULTS
HIGH VOLTAGE TRANSFORMER (Wire leads removed)	 1. Measure the resistance. (Ohm-meter scale: Rx1 and Rx100) • Primary winding • Secondary winding • Filament winding 2. Measure the resistance. (Ohm-meter scale: Rx1000) • Primary winding to ground • Filament winding to ground	 Approx.: 2.5 ohm Approx.: 110 ohm Less than: 0.4 ohm Normal: Infinite Normal: Infinite
MAGNETRON (Wire leads removed)	1. Measure the resistance. (Ohm-meter scale: Rx1) • Filament terminal 2. Measure the resistance. (Ohm-meter scale: Rx1000) • Filament to chassis	Normal: Less than 1 ohm Normal: Infinite

COMPONENTS	TEST PROCEDURE	RESULTS
		
	NOTE: When testing the magnetron, be sure to install the magnetron gasket in the correct position and be sure that the gasket is in good condition.	
HIGH VOLTAGE CAPACITOR	Measure the resistance. (Ohm-meter scale: Rx1000) • Terminal to terminal. 	Normal: Momentarily indicates several ohms, and then gradually returns to infinite.
	Measure the resistance. (Ohm-meter scale: Rx1000) • Terminal to case. 	Normal: Infinite.
HIGH VOLTAGE DIODE NOTE : Some inexpensive meters may indicate infinite resistance in both direction.	Measure the continuity (Forward). (Ohm-meter scale: Rx10000) 	Normal: Continuity. Abnormal: Infinite.
	Measure the continuity (Reverse). (Ohm-meter scale: Rx10000) 	Normal: Infinite. Abnormal: Continuity.

<table>
<tr><th>COMPONENTS</th><th>TEST PROCEDURE</th><th colspan="2">RESULTS</th></tr>
<tr><td rowspan="2">FUSE</td><td>Check for continuity of the fuse with an multi-meter.
  </td><td>Normal
  </td><td>Abnormal
  </td></tr>
<tr><td colspan="3">NOTE: If the fuse is blown, check the primary, the secondary, and the monitor switches, H.V.D. and H.V.C. before replacing the fuse.
If the fuse is blown by improper switch operation replace the defective switch and the fuse at the same time. Replace just the fuse if the switches operate normally.</td></tr>
<tr><td>HEATER ELEMENT
(Wire leads removed.)</td><td>Measure the resistance.
(Multi-meter scale: Rx1)
  </td><td colspan="2">Normal:
*Grill heater
Approx. 50 ohm
(at 20 ~ 30ºC)</td></tr>
<tr><td rowspan="2"></td><td>Measure the resistance with 500V-100M ohm insulation resistance meter.
  </td><td colspan="2">Normal: more than 0.5 Mohm</td></tr>
<tr><td colspan="3">NOTE: Make sure heater is fully cooled when tested.</td></tr>
<tr><td>GRILL THERMOSTAT</td><td rowspan="2">  </td><td>0°C~Approx.90°C
  </td><td>Approx.90°C
  </td></tr>
<tr><td>OVEN THERMOSTAT
MAGNETRON
THERMOSTAT</td><td>0°C~Approx.145°C
  </td><td>Approx.145°C
  </td></tr>
</table>

<table>
<tr><th>COMPONENTS</th><th>TEST PROCEDURE</th><th>RESULTS</th></tr>
<tr><td>Disconnect the 8 pin connector from P.C.B.
(Refer to schemetic diagram on page 4-3)</td><td> 
</td><td>Cooking Start: 
OFF:  </td></tr>
<tr><td>RELAY 2, RELAY 3
OF P.C.B.
(Wire leads removed.)
Note: Relay
Relay 1: Fan motor
Turntable motor
Oven lamp
Relay 2: Microwave
Relay 3: Grill</td><td> 
</td><td>Cooking Start: 
OFF:  </td></tr>
<tr><td>FAN MOTOR
(Wire leads removed)</td><td>Measure the resistance.
(Ohm-meter scale: R x 1)
 
</td><td>Normal:
<table><tr><th>A ~ B</th><th>A ~ C</th></tr><tr><td>30 ~ 50Ω</td><td>300~500Ω</td></tr></table>
Abnormal: ∞ or several Ω</td></tr>
<tr><td>TURNTABLE
MOTOR
(Wire leads removed)</td><td>Measure the resistance.
(Ohm-meter scale: R x 1000)
  </td><td>Normal: Approx. 100~200 Ω
Abnormal: ∞ or several Ω</td></tr>
<tr><td colspan="3">NOTE : • A MICROWAVE LEAKAGE TEST MUST ALWAYS BE PERFORMED WHEN THE UNIT IS SERVICED FOR ANY REASON.
• MAKE SURE THE WIRE LEADS ARE IN THE CORRECT POSITION.
• WHEN REMOVING THE WIRE LEADS FROM THE PARTS, BE SURE TO GRASP THE CONNECTOR, NOT THE WIRES.</td></tr>
</table>

TROUBLE SHOOTING

WHEN YOU GET A COMPLAINT FROM YOUR CUSTOMER, EVALUATE THE COMPLAINT CAREFULLY. IF THE FOLLOWING SYMPTOMS APPLY, PLEASE INSTRUCT THE CUSTOMER IN THE PROPER USE OF THE MICROWAVE OVEN. THIS CAN ELIMINATE AN UNNECESSARY SERVICE CALL.

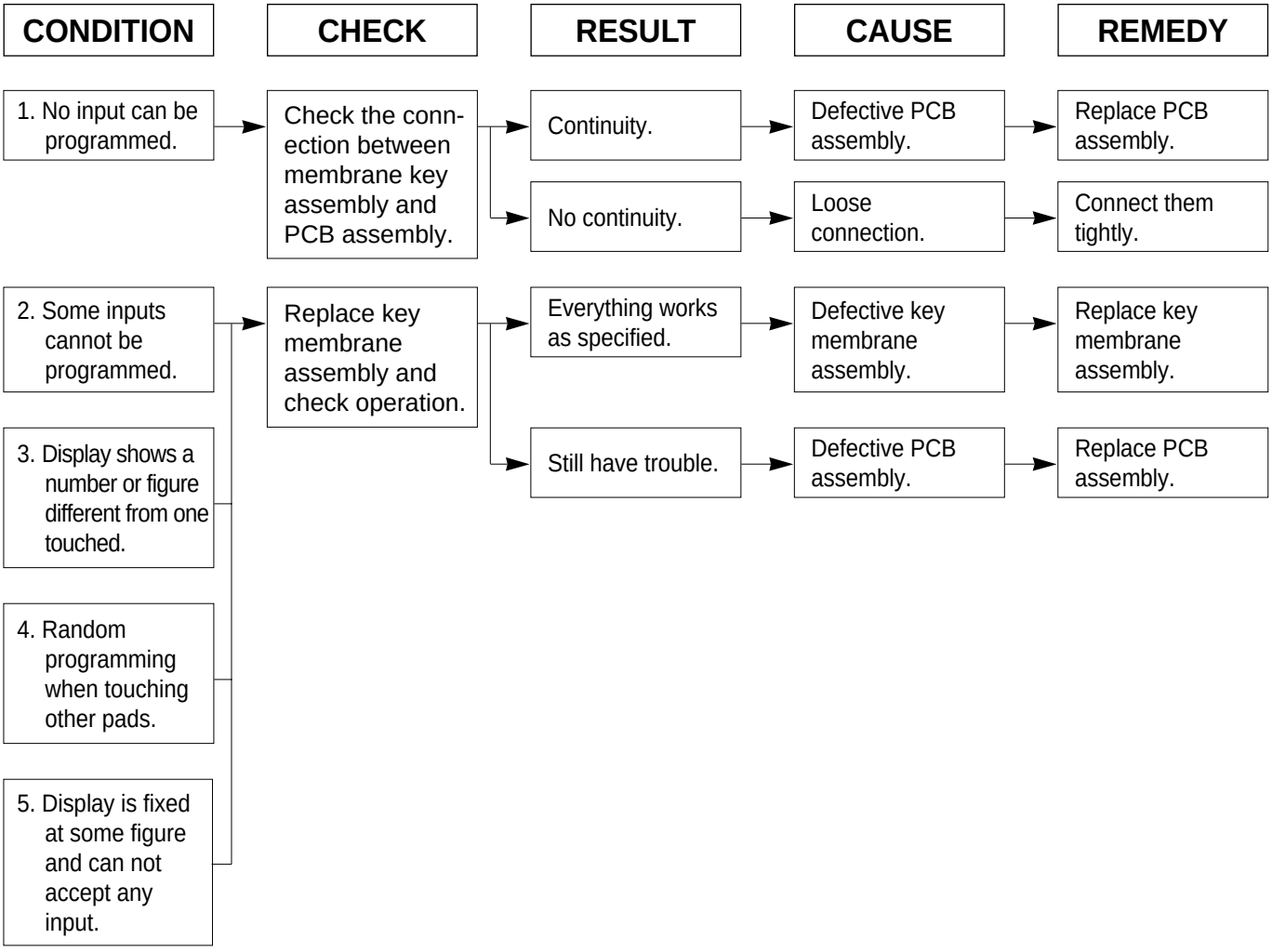
CAUTIONS

1. Check grounding before checking for trouble.
2. Be careful of the high voltage circuit.
3. Discharge the high voltage capacitor. (See page 2-1)
4. When checking the continuity of the switches or of the 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.
5. Do not touch any part of the circuitry on the digital programmer circuit since static electric discharge may damage this control panel.
   Always touch yourself ground while working on this panel to discharge any static charge built up in your body.

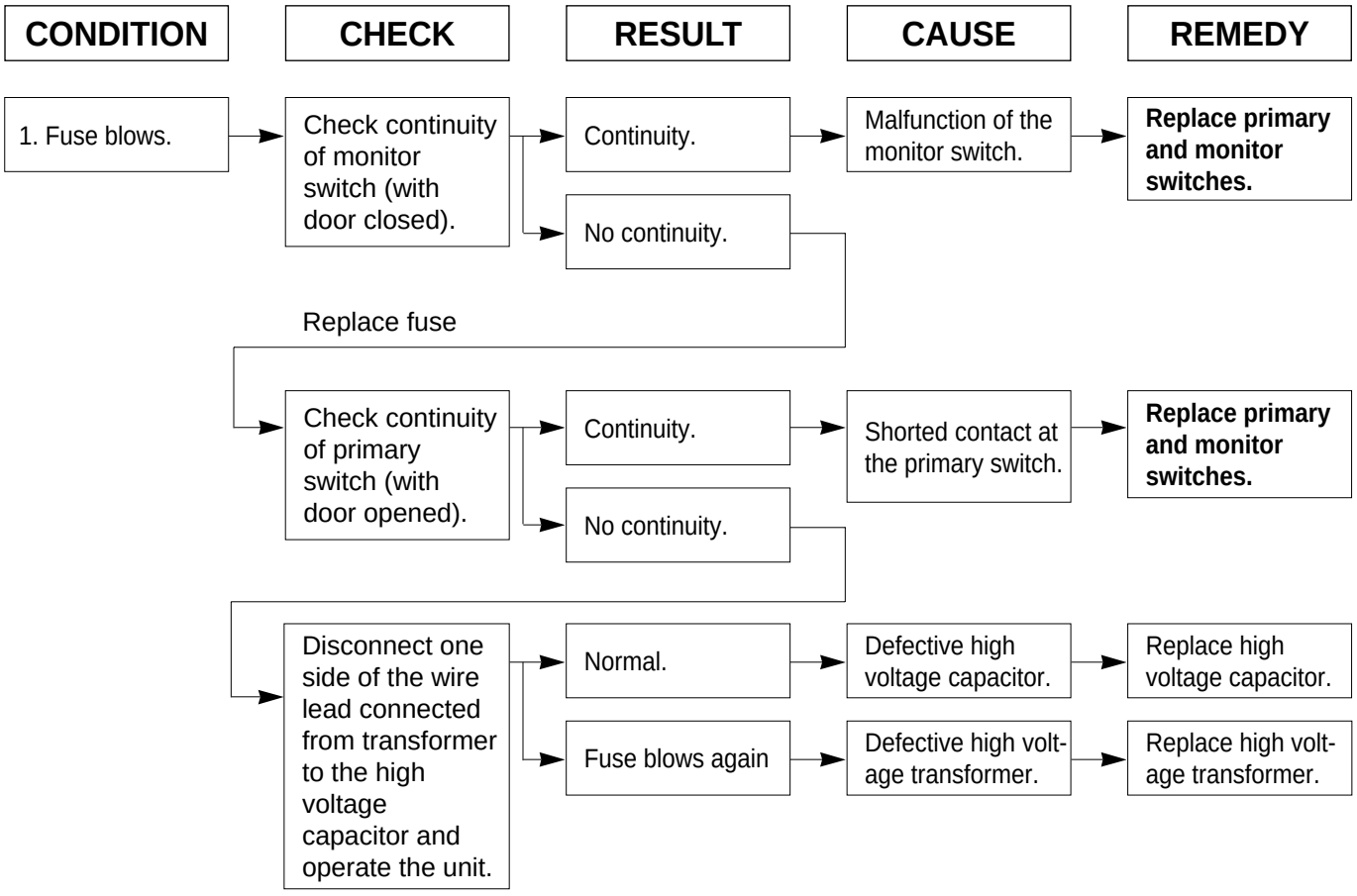
CONDITION	CAUSE	REMEDY
Microwave oven does not work.	Inserting many plug into one plug outlet and using them at the same time (causes overloading).	Avoid using other electrical appliances when you use the microwave oven.
	Microwave oven plug is not inserted tightly.	Insert microwave oven plug securely.
Output power is too low.	Low AC input voltage.	Use the microwave oven at adequate line voltage.
	Food temperature is too low.	This may not be a defect. It is possible that the food should be cooked for a longer time period.
Sparks occurring.	Using metallic ware and allowing it to touch the oven wall.	Do not use metallic ware for cooking except where noted in the cooking guide.
	Ceramic ware trimmed in gold or silver powder is used.	Do not use any type of cookware with metallic trimming.
Uneven cooking.	Inconsistent intensity of microwave by their characteristics.	1. Wrap the thinner part with aluminum foil. 2. Use plastic wrap or lid. 3. Stir once or twice while cooking soup, cocoa or milk, etc.

(TROUBLE 1) The following visual conditions indicate a probable defective control circuit.

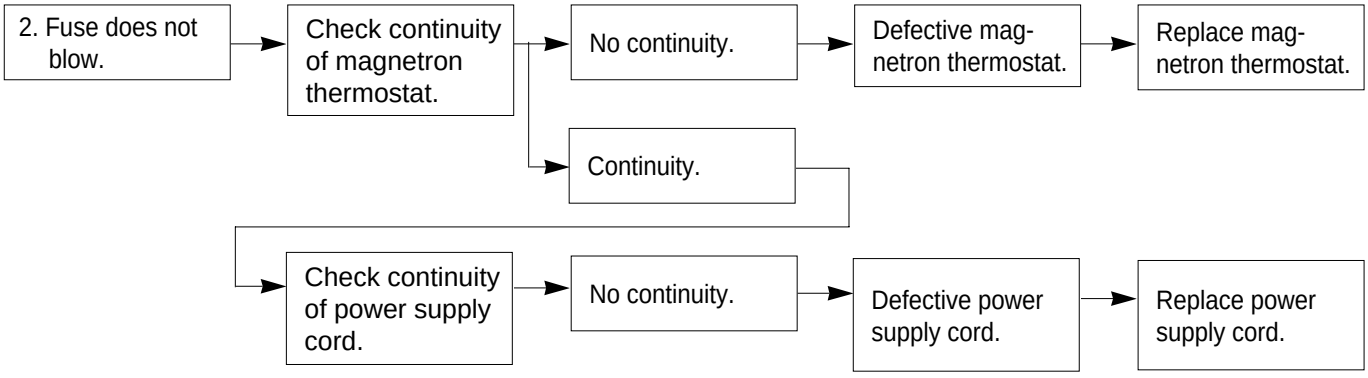
1. Incomplete segments.
   - Segment missing.
   - Partial segment missing.
   - Digit flickering (NOTE: Slight flickering is normal.)
2. Colon does not turn on or blink.
3. A distinct change in the brightness of one or more numbers in display.
4. One or more digits in the display are not lighting.
5. Display indicates a number different from one touched, for example, key in **5** and **3** appears in the display.
6. Specific numbers (for example 7 or 9) will not display when key pad is touched.
7. Display does not count down with time blinking or up with clock operation.
8. Display obviously jumps in time while counting down.
9. Display counts down too fast while cooking.
10. Each indicator light does not turn on after setting cooking cycle.
11. Display time of day does not reappear when cooking is finished.
12. Beep sound is not heard when correct key is touched.



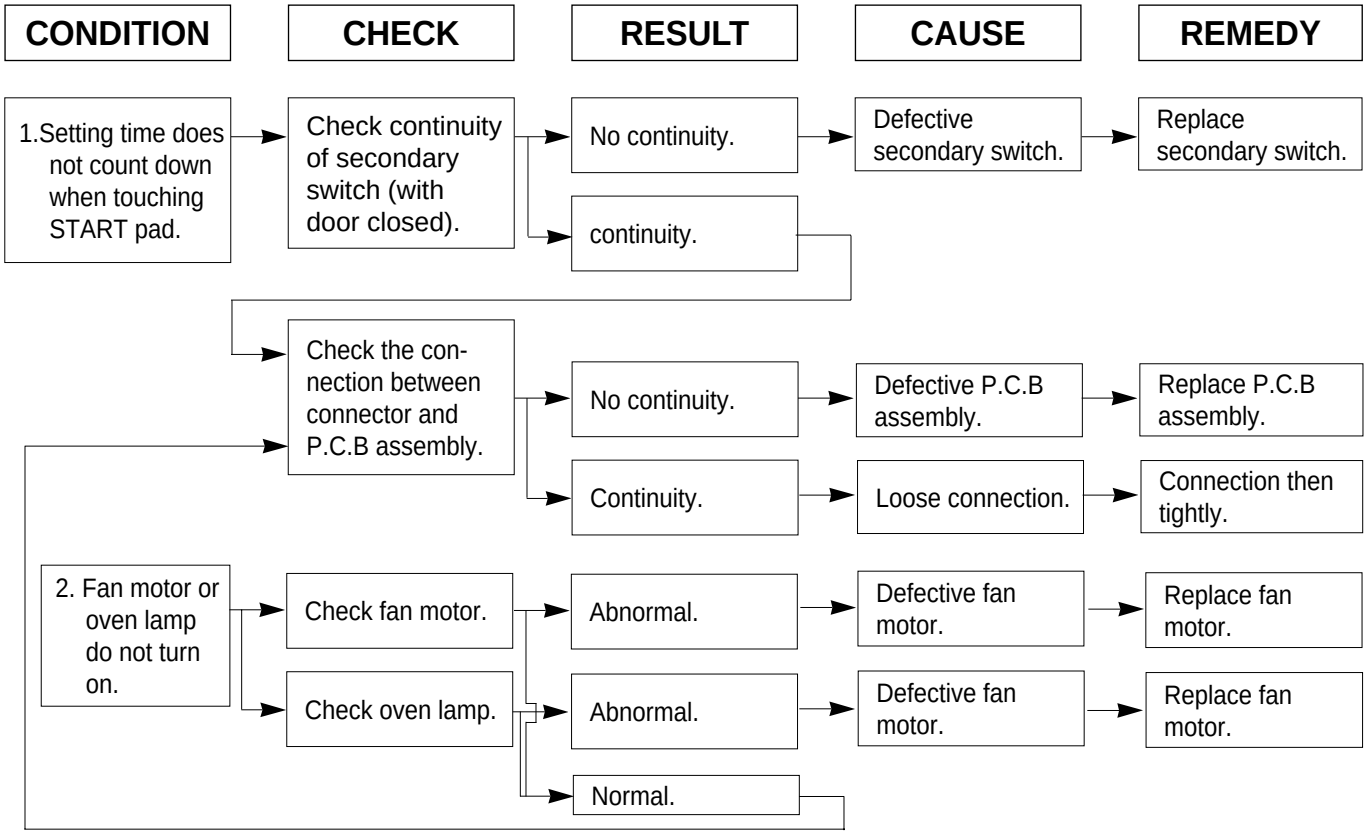
(TROUBLE 2) Oven does not operate at all ; Display window does not display any figures and no input is accepted.



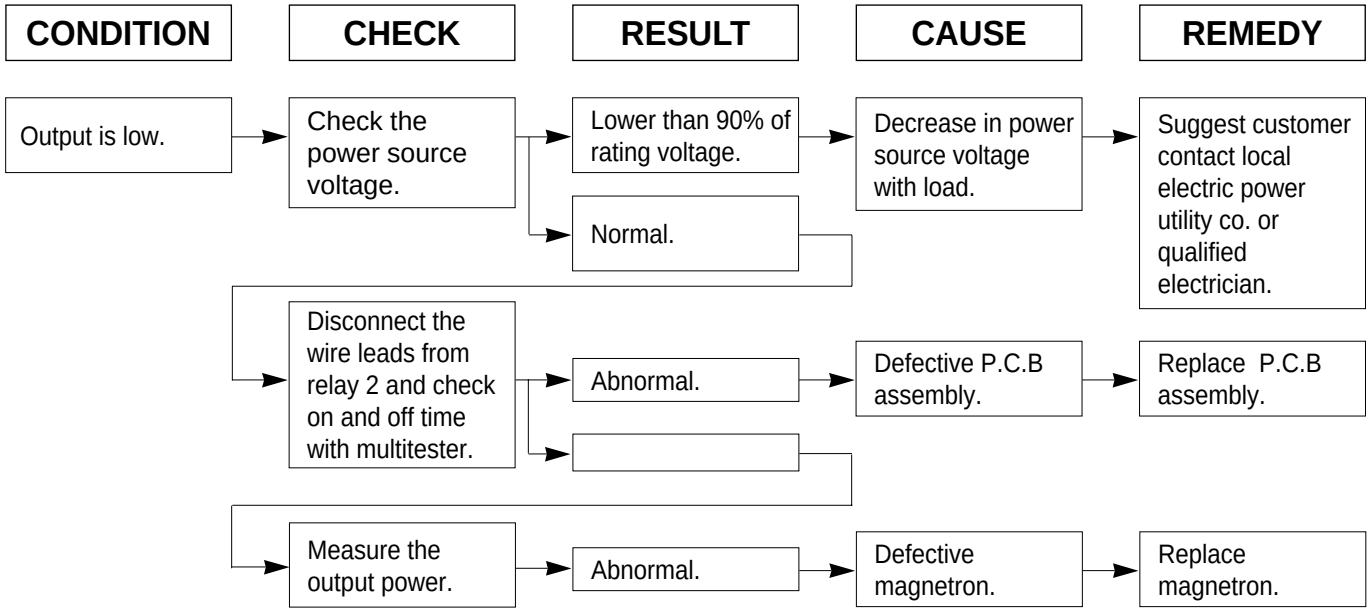
NOTE : All these switches must be replaced at the same time. Refer to page 5-6, 5-7



(TROUBLE 3) Display shows all figures set, but oven does not start cooking while desired program times are set and START pad is touched.

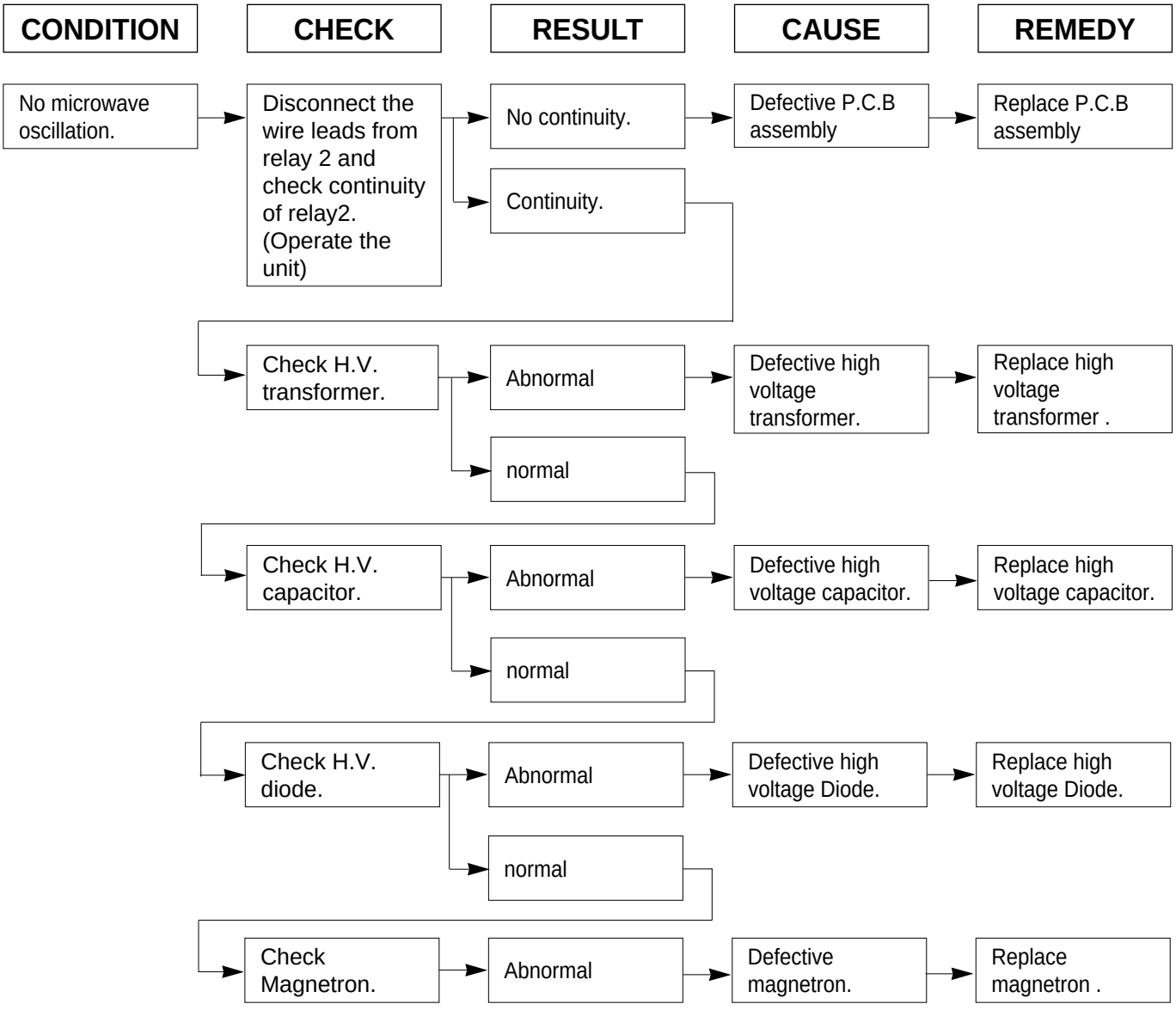


(TROUBLE 4) Oven seems to be operation but little heat is produced in oven load.



NOTE: Simple test of power output-conducted by heating one liter water for one min. if available. Minimum 8.5°C temperature rise is normal condition.

(TROUBLE 5) No microwave oscillation even though oven lamp and fan motor run (Display operates properly)



(TROUBLE 6) Oven does not cook properly when programmed for the set power level (Operates properly on HIGH)

CONDITION	CHECK	RESULT	CAUSE	REMEDY
Output is full when you set lower power level.	Disconnect the wire leads from relay 2 and check continuity relay 2. (Operate the unit)	Abnormal.	Defective P.C.B. assembly.	Replace P.C.B. assembly.

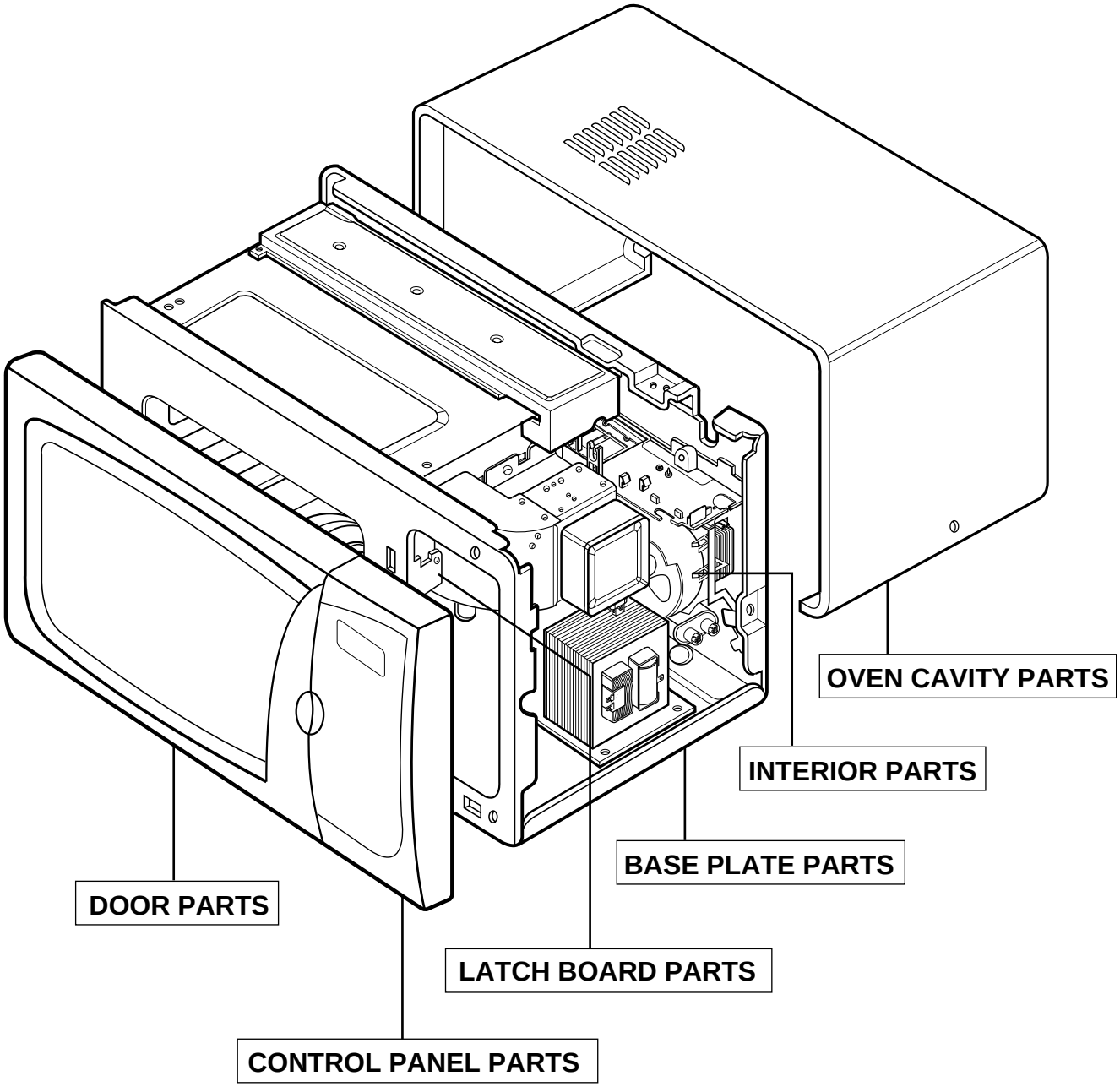
(TROUBLE 7) Grill

CONDITION	CHECK	RESULT	CAUSE	REMEDY
1. Heater is not operating.	Heater.	Abnormal.	Malfunction the heater.	Replace.
		Normal.		
	Thermostat and relay(Grill).	Abnormal.	Malfunction the thermostat.	Replace.
		Normal.		
	Wire connection.	No continuity.	Open or loosen.	Replace or connect tightly.
1. Lower temperature the oven.	Heater.	Abnormal.	Malfunction the heater.	Replace.
		Normal.		
	Thermostat and relay(Grill).	Abnormal.	Malfunction the thermostat.	Replace.

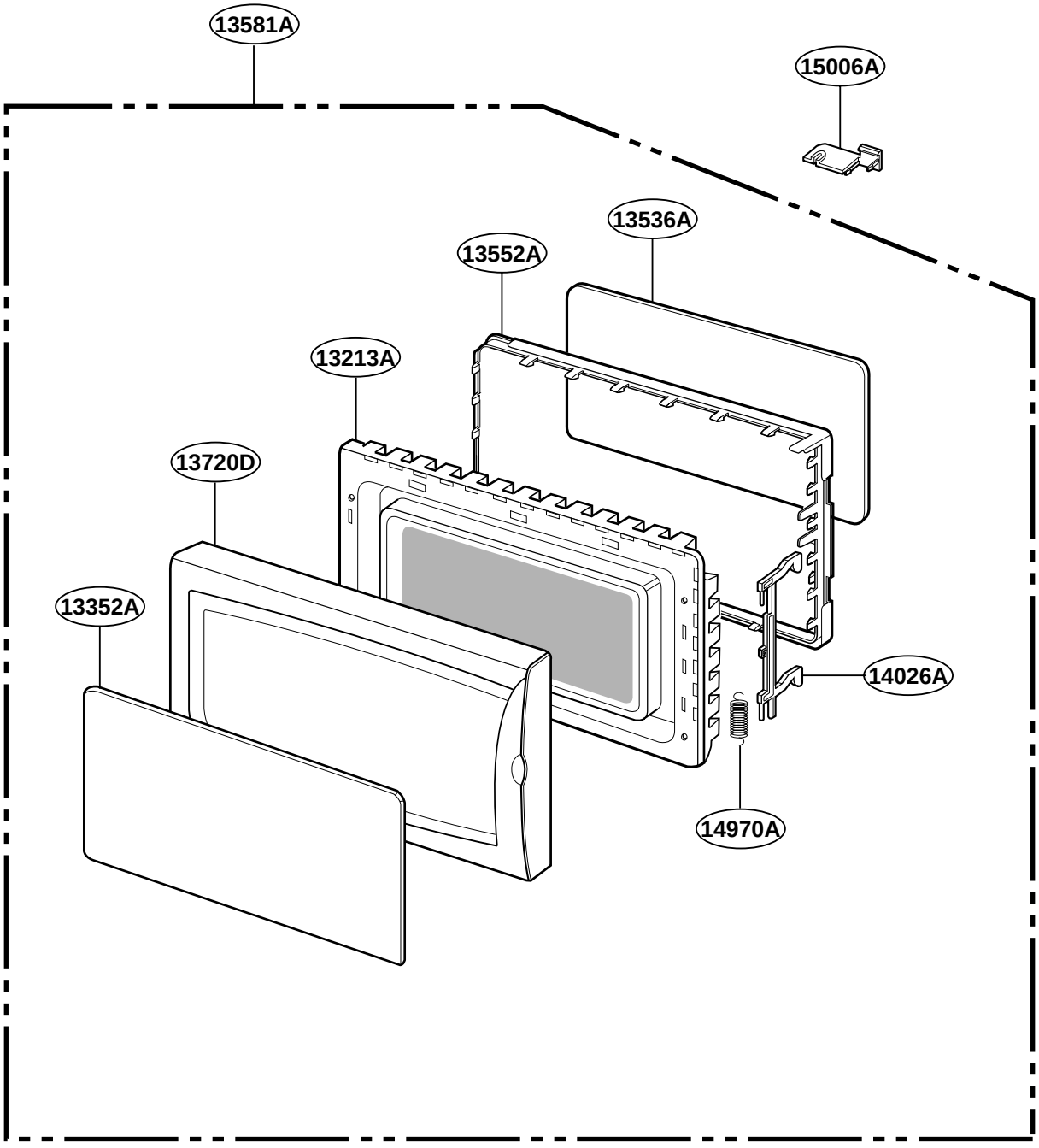
NOTE: * Make sure the wore leads correct position.
* When removing the wire leads from parts be sure to grasp the connector not the wires.
* When removing the magnetron, be sure to install the magnetron gasket in the correct position and in good condition.

EXPLODED VIEW

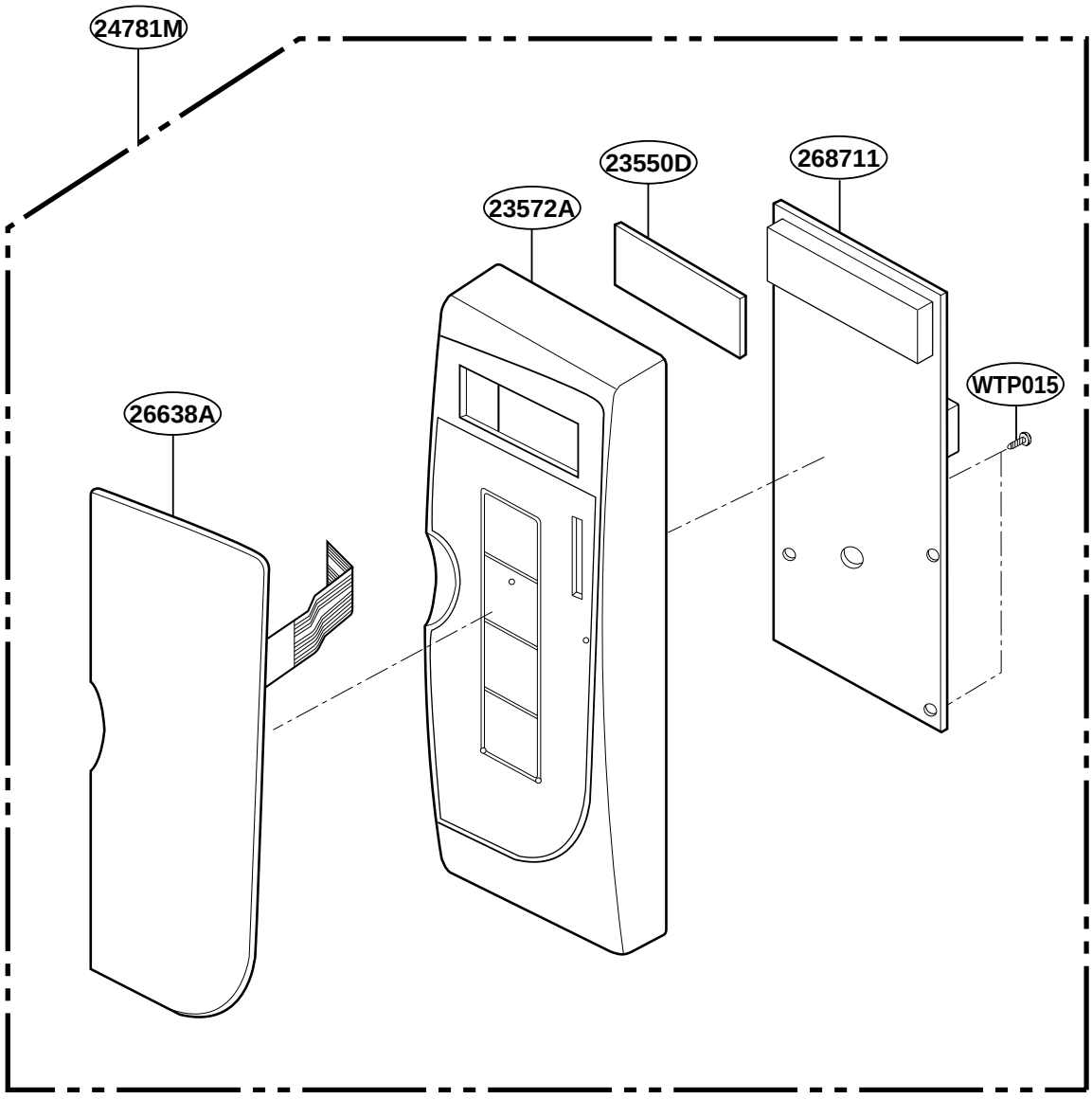
INTRODUCTION



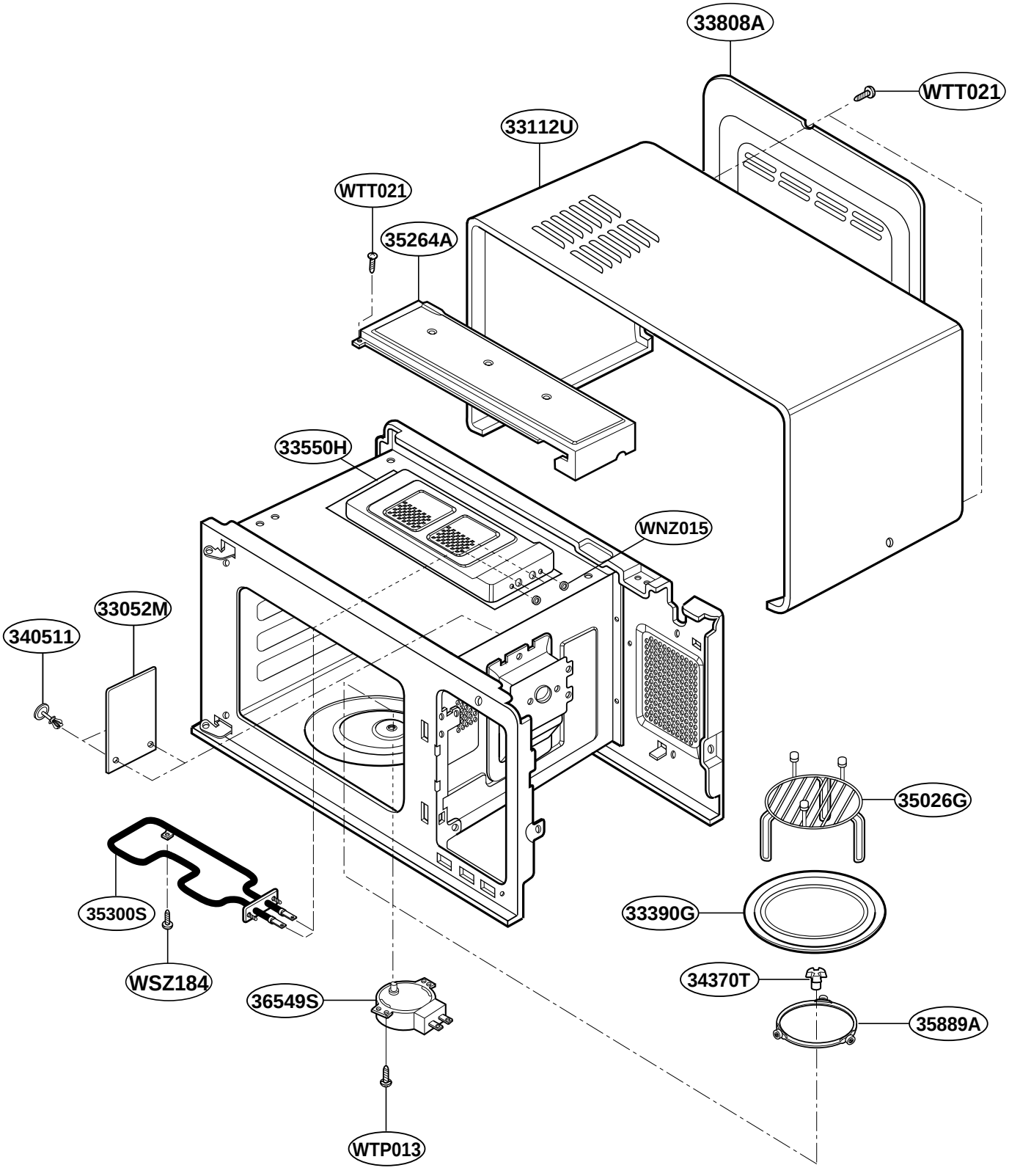
DOOR PARTS


13581A
15006A
13536A
13552A
13213A
13720D
13352A
14026A
14970A

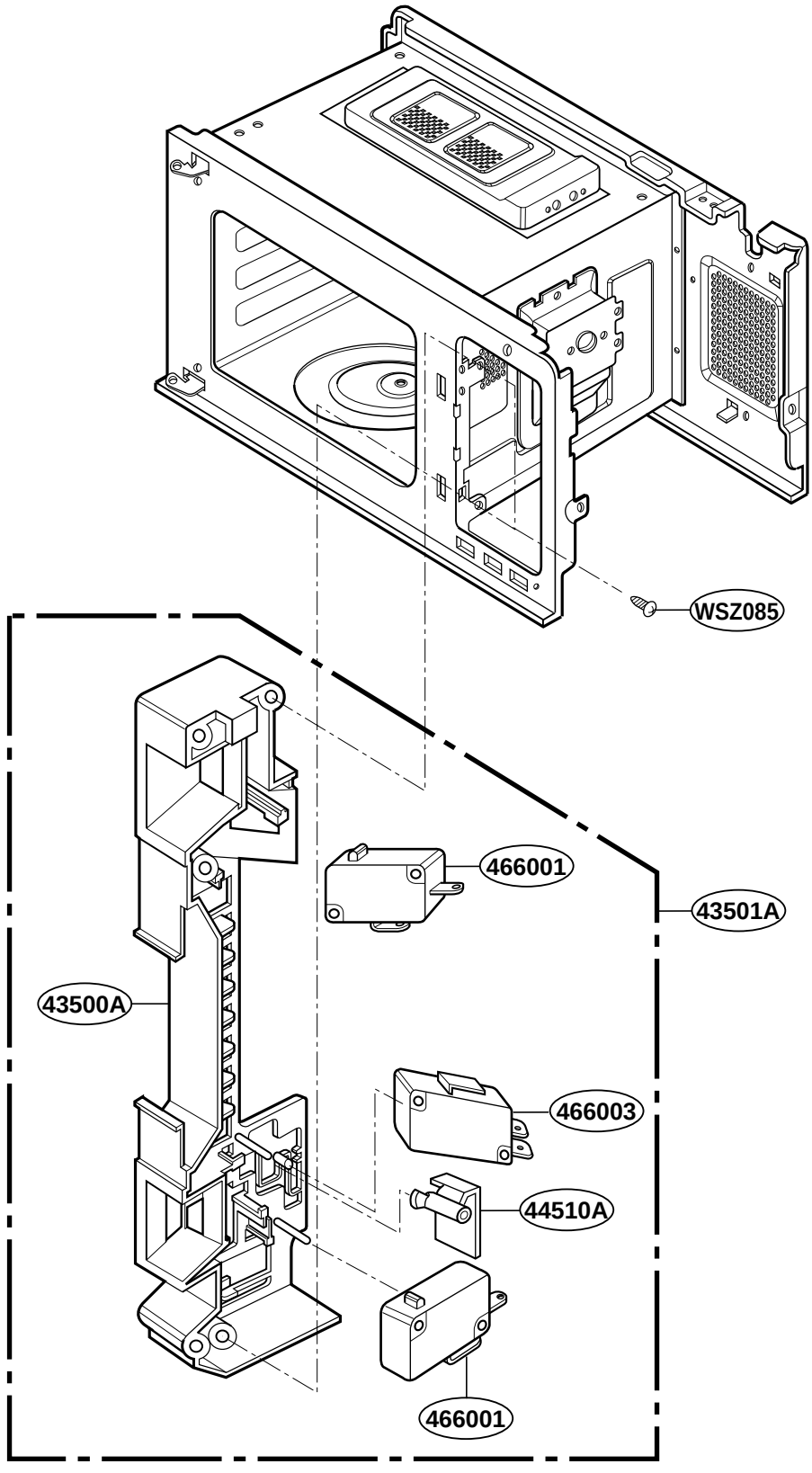
CONTROL PANEL PARTS



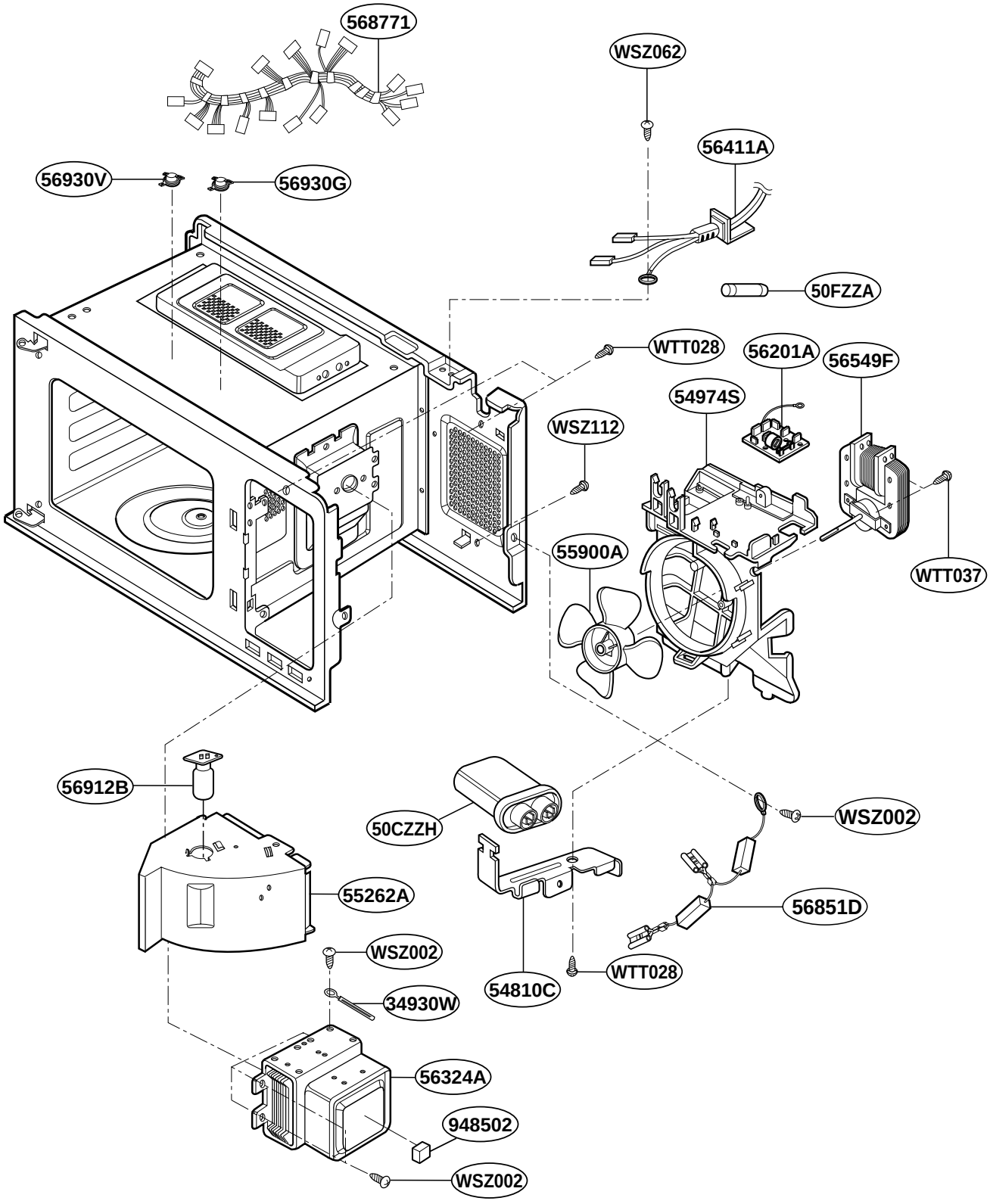
OVEN CAVITY PARTS



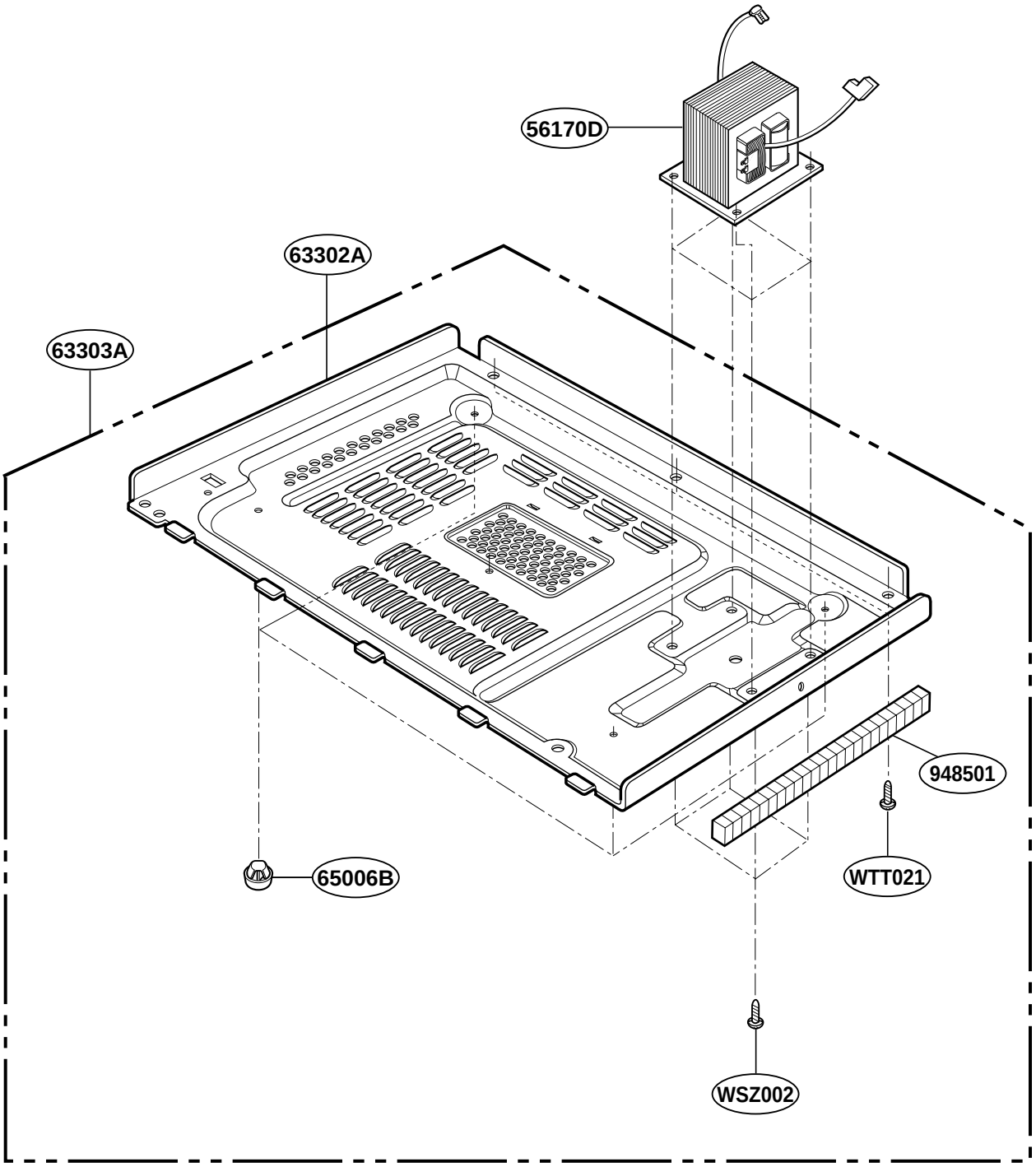
LATCH BOARD PARTS



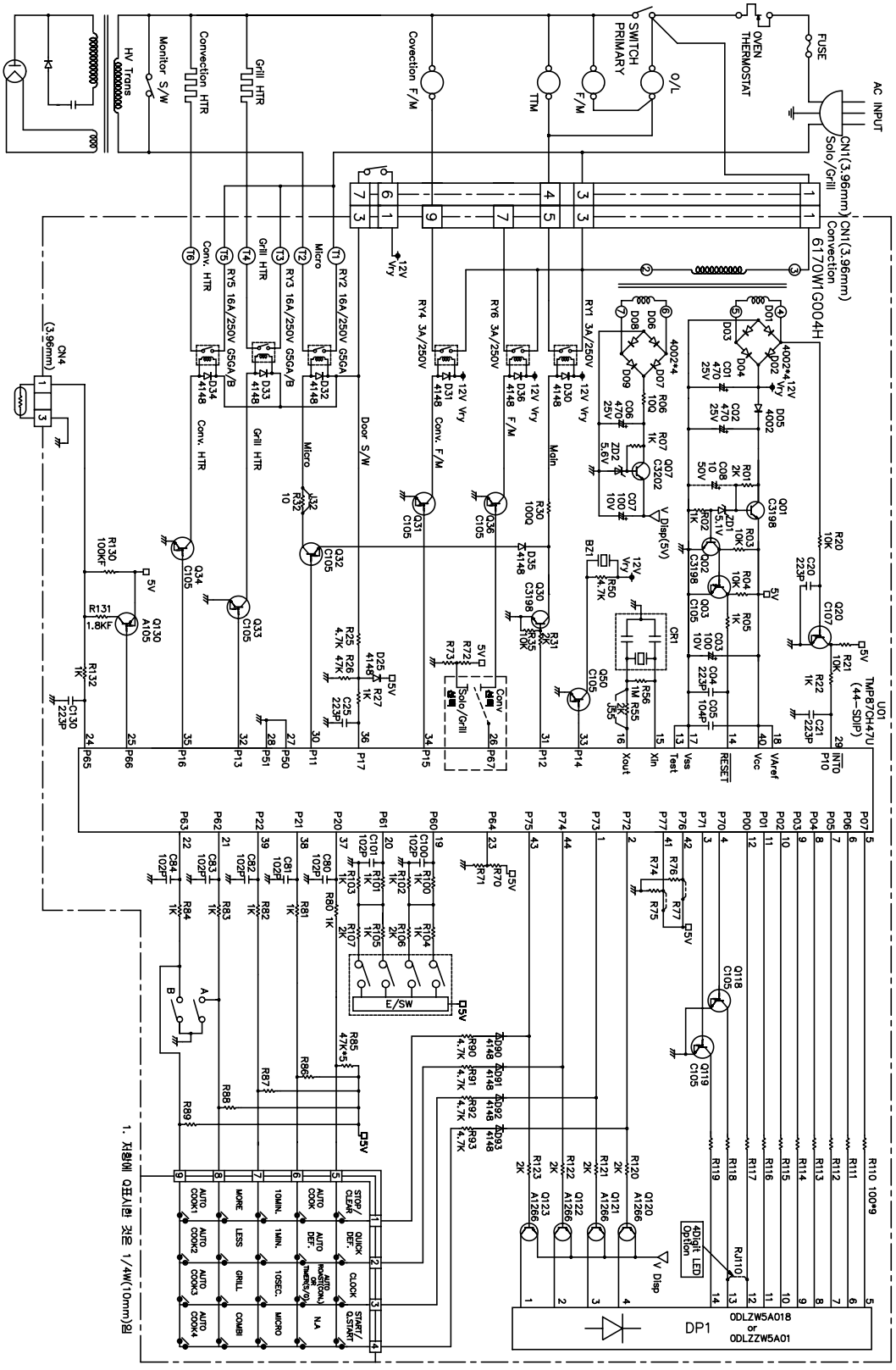
INTERIOR PARTS



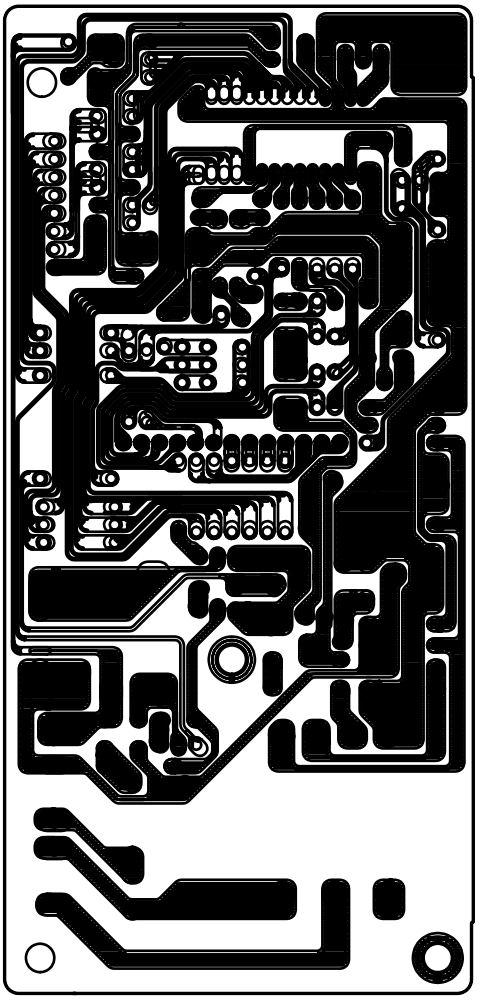
BASE PLATE PARTS

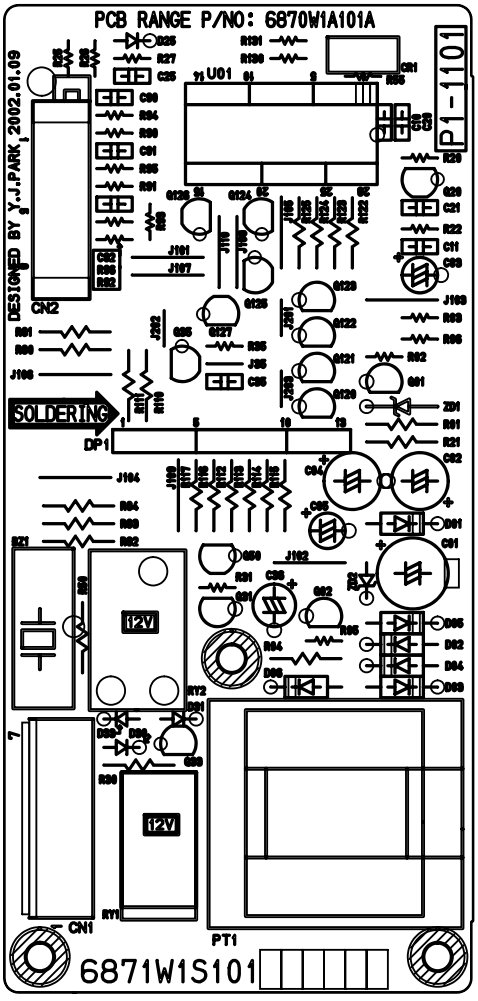


SCHEMATIC DIAGRAM OF P.C.B



PRINTED CIRCUIT BOARD



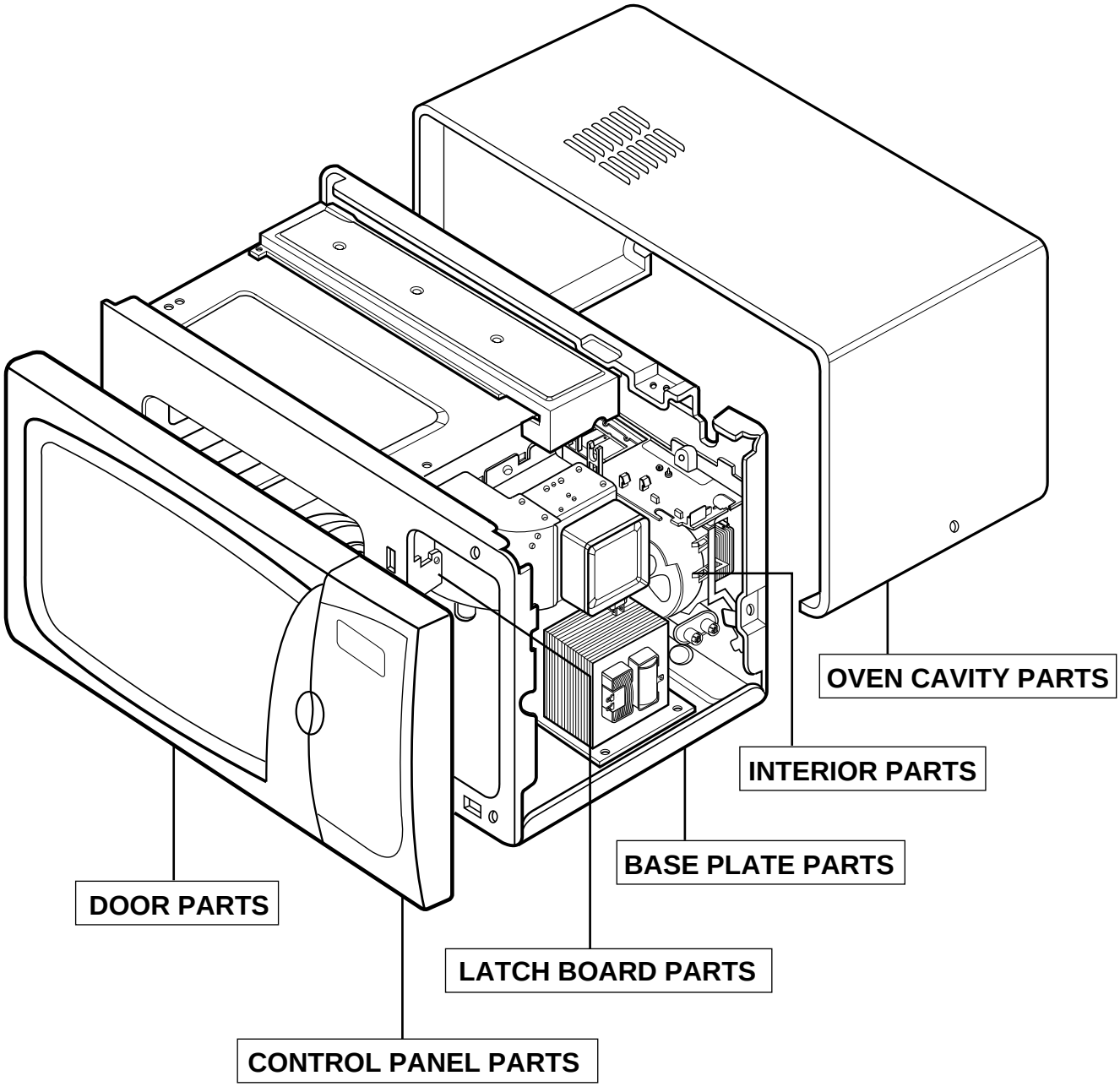


LG Electronics Inc.

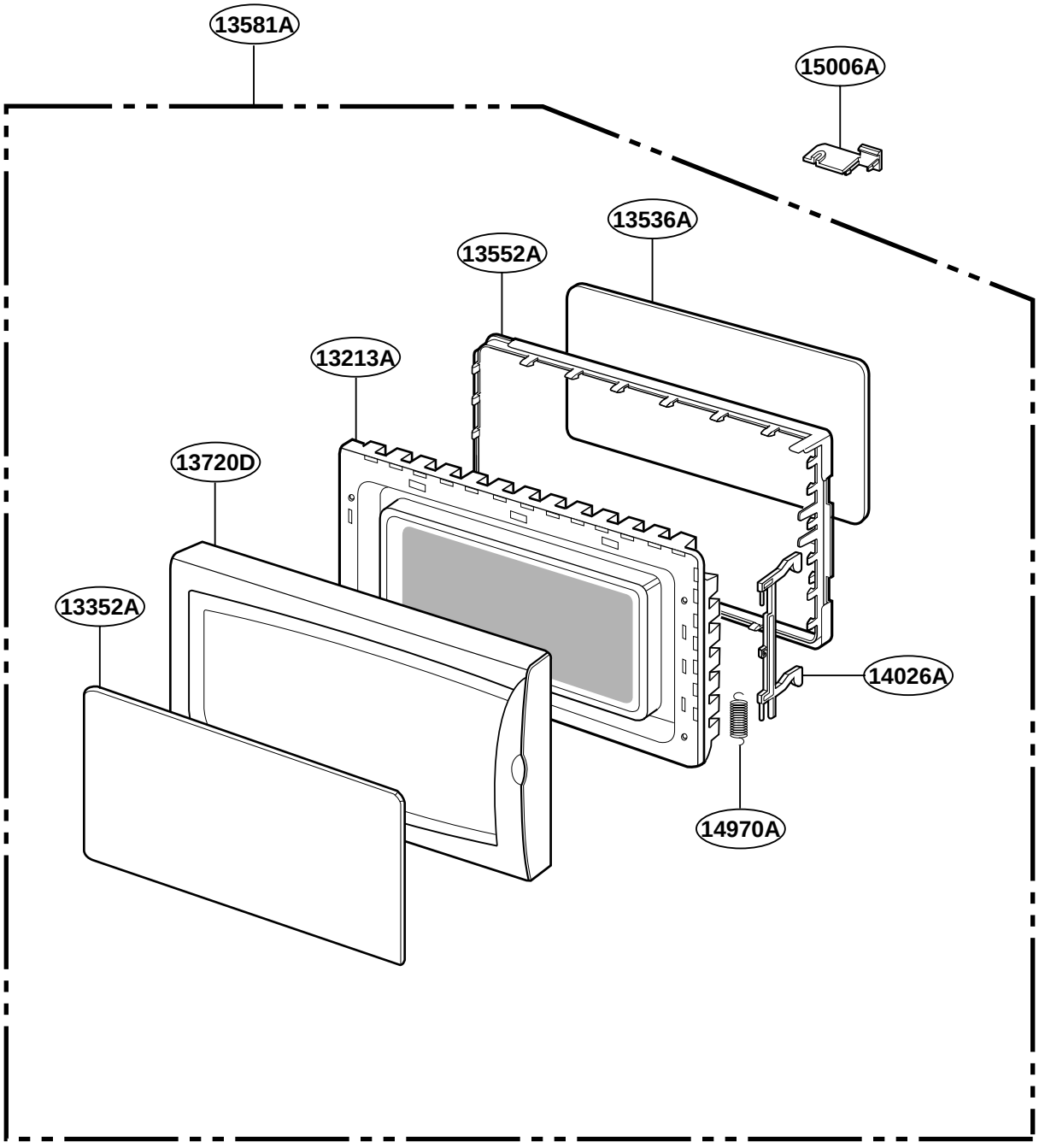
Jan., 2003
P/NO : 3828W5S2647
Printed in Korea

EXPLODED VIEW

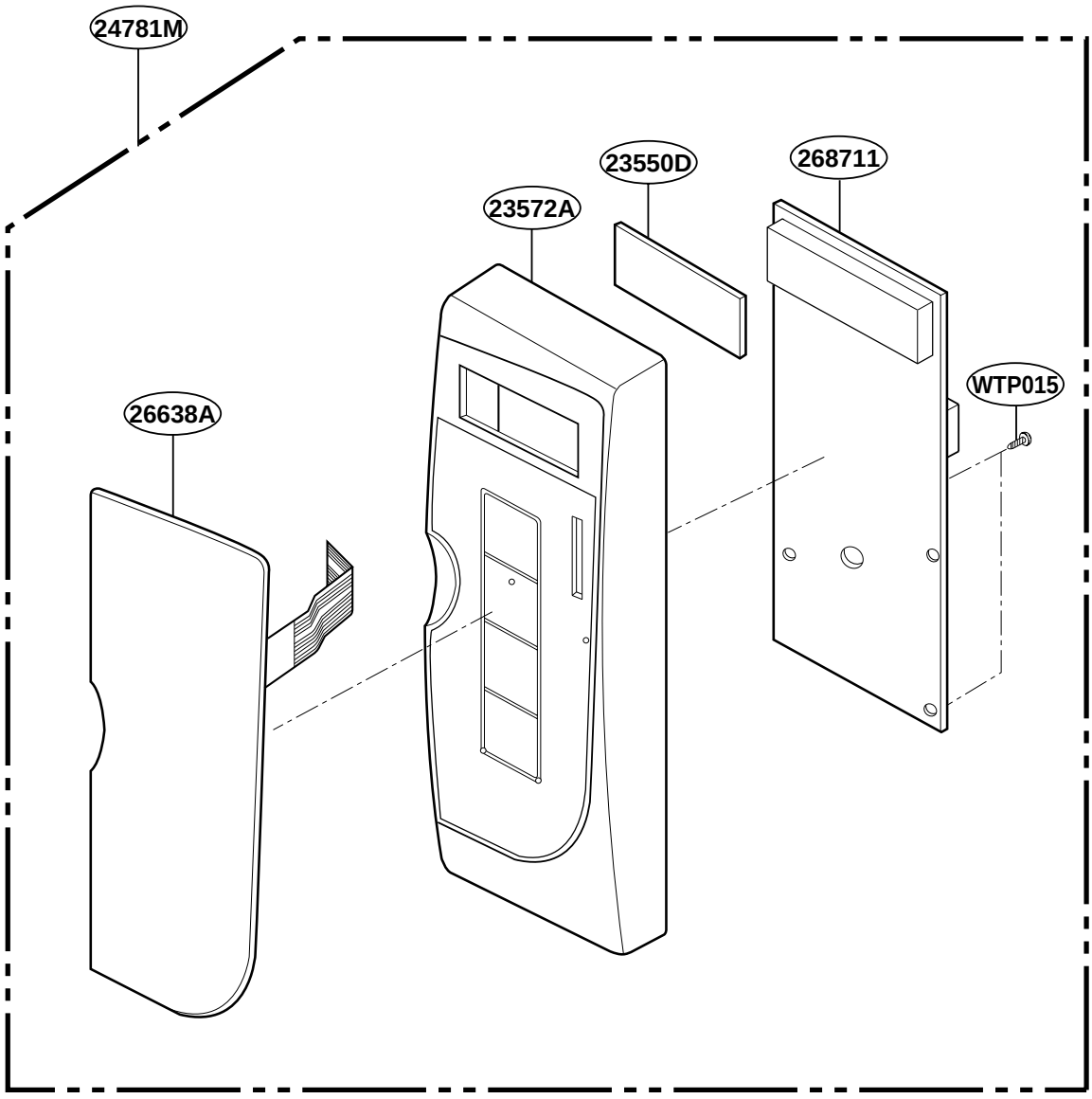
INTRODUCTION



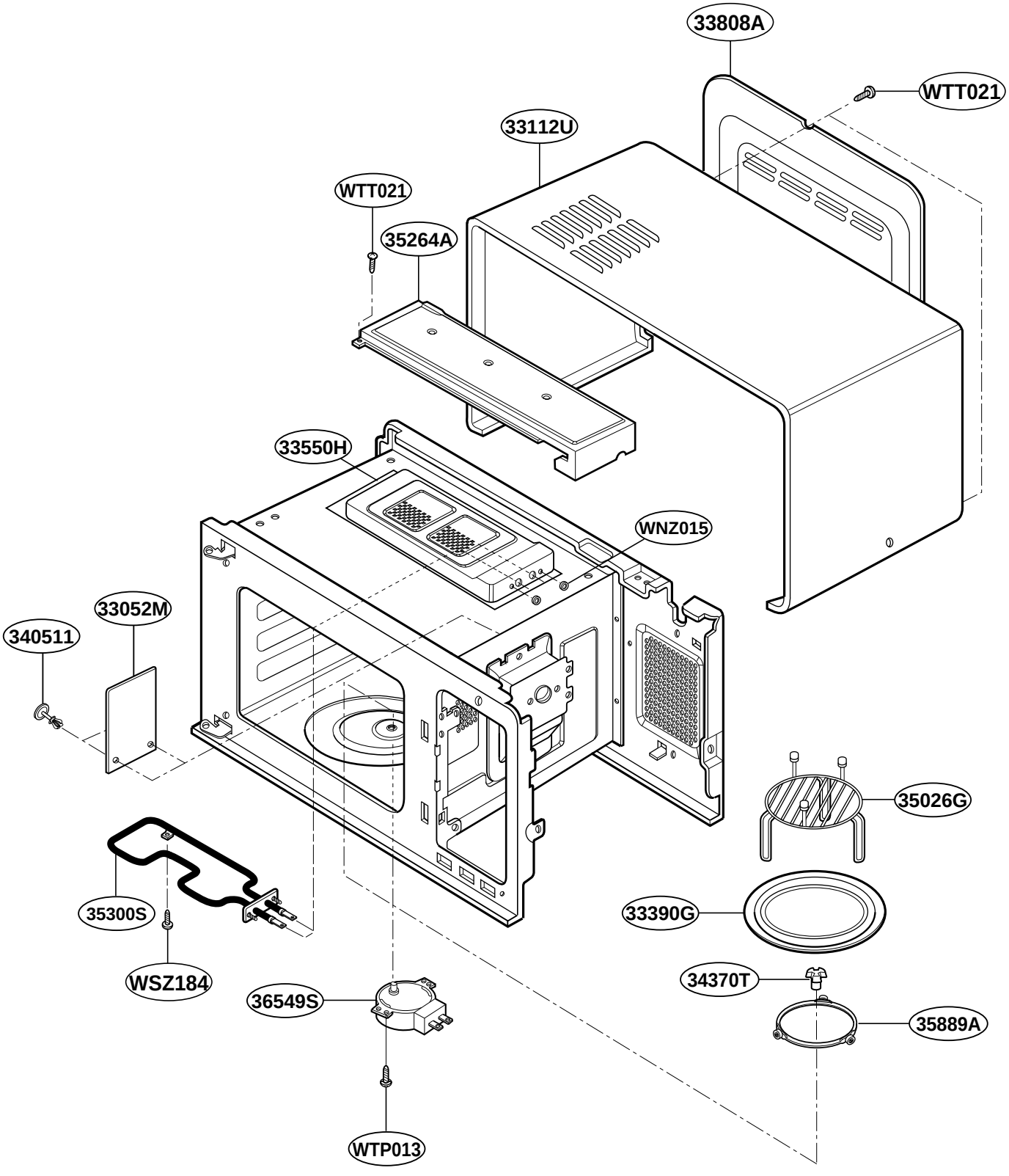
DOOR PARTS


13581A
15006A
13536A
13552A
13213A
13720D
13352A
14026A
14970A

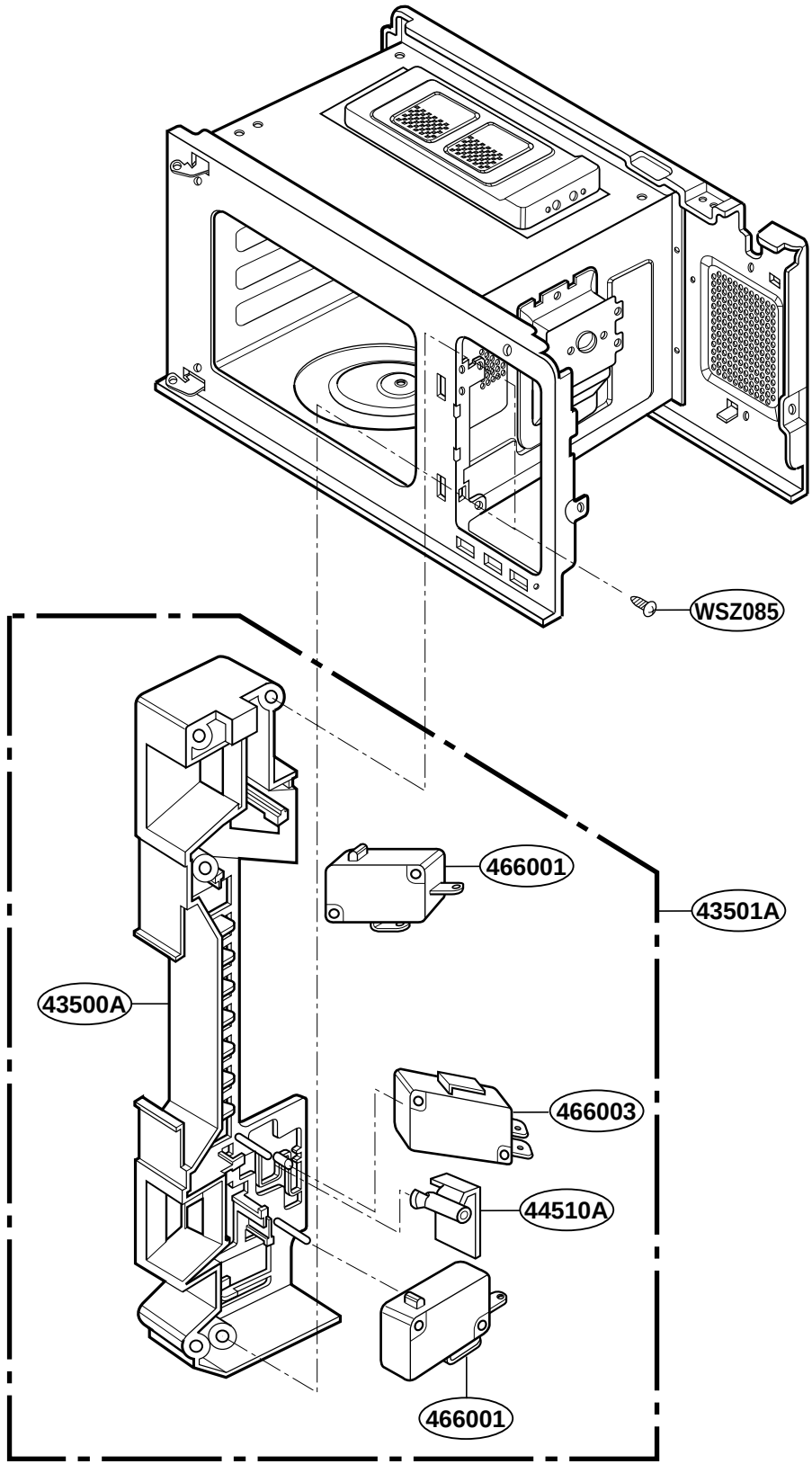
CONTROL PANEL PARTS



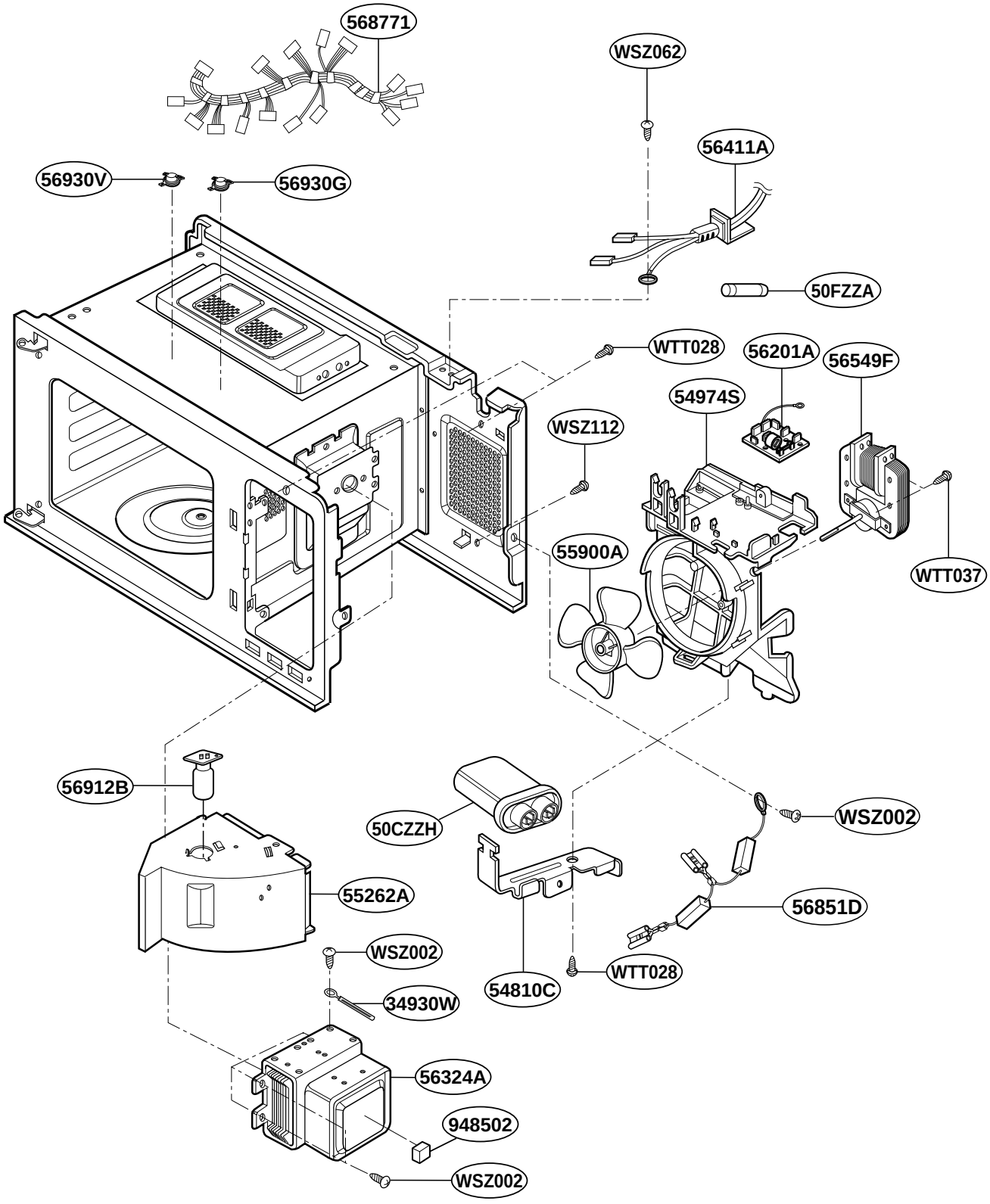
OVEN CAVITY PARTS



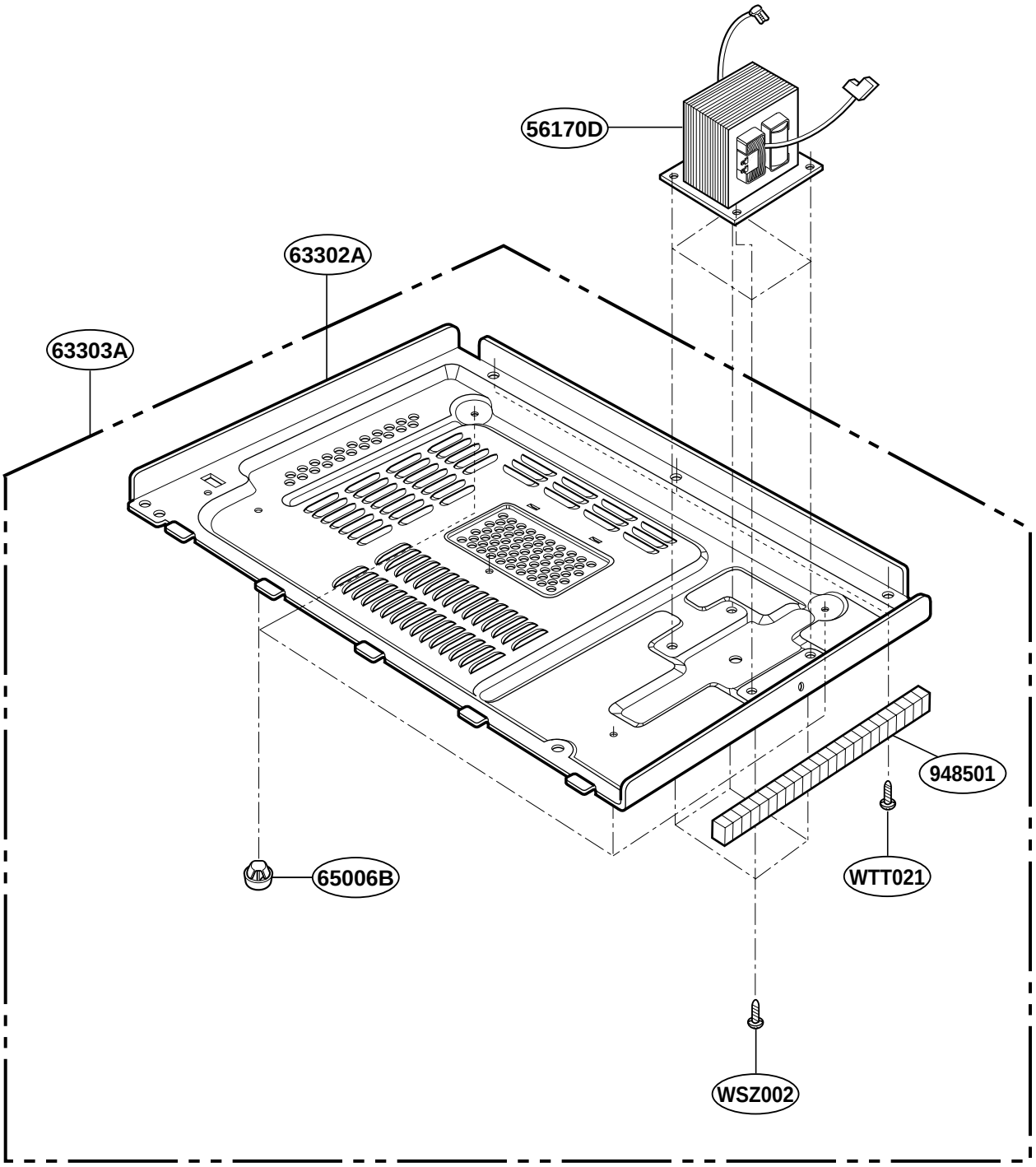
LATCH BOARD PARTS



INTERIOR PARTS



BASE PLATE PARTS



Sales Model	Loc No.	C/Part No	Description
MB-4342A	*01	3828W5A2947	MANUAL,OWNERS
MB-4342A	*02	3828W5S2647	MANUAL,SERVICE
MB-4342A	*03	3878W5B0013	COOK BOOK
MB-4342A	*10	3890W3W330A	BOX,WHITE
MB-4342A	13213A	3213W1A027G	DOOR FRAME ASSY
MB-4342A	13352A	3352W1A108N	FRONT SCREEN
MB-4342A	13536A	3536WRA001J	SEAL TAPE
MB-4342A	13536A	3536WRA001J	SEAL TAPE
MB-4342A	13552A	3552W1A040A	CHOKE COVER
MB-4342A	13581A	3581W1A299L	DOOR ASSEMBLY
MB-4342A	13720D	3720W0D118S	PANEL,[DOOR]
MB-4342A	14026A	4026W2A023A	LATCH
MB-4342A	14970A	4970WRA001C	SPRING
MB-4342A	15006A	5006W3A017A	CAP,[CHOKE COVER]
MB-4342A	23506A	3506W1A373A	KEY MEMBRANE
MB-4342A	23550D	3550W4A029B	COVER,[DIGITRON COVER]
MB-4342A	23550D	3550W4A029B	COVER,[DIGITRON COVER]
MB-4342A	23572A	3572W0A140A	CONTROL PANEL
MB-4342A	24781M	4781W1M220Z	CONTROLLER ASSEMBLY,MICOM
MB-4342A	24930D	4930W3B027B	HOLDER,[LED,LCD DIGITRON HOLDEF
MB-4342A	268711	6871W1S214C	PWB(PCB) ASSEMBLY,SUB
MB-4342A	33052M	3052W3M018A	CANOPY,[MICA]
MB-4342A	33112U	3112W1U029P	OUT CASE,U-BENDING
MB-4342A	33390G	3390W1G010A	TRAY,[GLASS]
MB-4342A	33550H	3550W2A095C	COVER,[HEATER COVER]
MB-4342A	33808A	3550W1A181A	COVER,BACK
MB-4342A	340511	4051W3A001A	RIVET ASSY
MB-4342A	34370T	3B72373D	SHAFT,[TURN TABLE SHAFT]
MB-4342A	34930W	4B72510F	HOLDER,[WIRE HOLDER]
MB-4342A	34930W	4B72510F	HOLDER,[WIRE HOLDER]
MB-4342A	35026G	3750W2A003A	SHELF
MB-4342A	35300S	5300W1S004N	HEATER,[SHEATH]
MB-4342A	35300S	5300W1S004N	HEATER,[SHEATH]
MB-4342A	35300S	5300W1S004N	HEATER,[SHEATH]
MB-4342A	35889A	5889W2A015G	ROTATING RING ASSEMBLY
MB-4342A	36549S	6549W1S011L	MOTOR(CIRC),SYNCHRONOUS
MB-4342A	43500A	3500W1A030A	BOARD,LATCH
MB-4342A	43501A	3501W2A002P	BOARD ASSEMBLY,LATCH
MB-4342A	44510A	4510W4A005A	LEVER
MB-4342A	466001	3B73362F	SWITCH,MICRO
MB-4342A	466001	3B73362F	SWITCH,MICRO
MB-4342A	466003	3B73361E	SWITCH,MICRO
MB-4342A	466003	3B73361E	SWITCH,MICRO
MB-4342A	50CZZH	0CZZW1H002H	CAPACITOR,DRAWING[HIGH VOLTAGI
MB-4342A	50CZZH	0CZZW1H002H	CAPACITOR,DRAWING[HIGH VOLTAGI
MB-4342A	50FZZA	3B70856T	FUSE,DRAWING
MB-4342A	54810C	4810W4C003A	BRACKET,[CAPACITOR]
MB-4342A	54974S	4974W1S016A	GUIDE,[SUCTION GUIDE]
MB-4342A	55262A	5262W2A042A	DUCT
MB-4342A	55900A	2B72125A	FAN
MB-4342A	55900A	2B72125A	FAN
MB-4342A	55900A	2B72125A	FAN
MB-4342A	55900A	2B72125A	FAN
MB-4342A	55900A	2B72125A	FAN
MB-4342A	56170D	6170W1D057E	TRANSFORMER,HIGH VOLTAGE
MB-4342A	56201A	6201W2A021E	FILTER ASSY,NOISE
MB-4342A	56324A	2B71732B	MAGNETRON
MB-4342A	56324A	2B71732B	MAGNETRON
MB-4342A	56324A	2B71732B	MAGNETRON
MB-4342A	56324A	2B71732B	MAGNETRON
MB-4342A	56411A	6411W2C002A	POWER CORD ASSY
MB-4342A	56549F	6549W1F005A	MOTOR(CIRC),FAN
MB-4342A	56549F	6549W1F005A	MOTOR(CIRC),FAN
MB-4342A	56549F	6549W1F005A	MOTOR(CIRC),FAN
MB-4342A	56851D	6851W1A001C	CABLE ASSEMBLY
MB-4342A	568771	6877W1A191F	HARNESS

MB-4342A	56912B	6912W3B002D	LAMP[OVEN/BASELESS]
MB-4342A	56912B	6912W3B002D	LAMP[OVEN/BASELESS]
MB-4342A	56912B	6912W3B002D	LAMP[OVEN/BASELESS]
MB-4342A	56930G	6930W1A003C	THERMOSTAT
MB-4342A	56930G	6930W1A003C	THERMOSTAT
MB-4342A	56930V	6930W1A003A	THERMOSTAT
MB-4342A	56930V	6930W1A003A	THERMOSTAT
MB-4342A	63302A	3302W0A018A	BASE PLATE
MB-4342A	63303A	3303W1A043A	BASE PLATE ASSY
MB-4342A	65006B	5006W3A016B	CAP,[BASE PLATE]
MB-4342A	948501	3B72244G	CUSHION
MB-4342A	948501	3B72244G	CUSHION
MB-4342A	BZ1	6908W3YA01C	BUZZER,PIEZO CERAMIC
MB-4342A	BZ1	6908W3YA01C	BUZZER,PIEZO CERAMIC
MB-4342A	C01	0CE4776H618	CAPACITOR,FIXED ELECTROLYTIC
MB-4342A	C01	0CE4776H618	CAPACITOR,FIXED ELECTROLYTIC
MB-4342A	C02	0CE4776H618	CAPACITOR,FIXED ELECTROLYTIC
MB-4342A	C02	0CE4776H618	CAPACITOR,FIXED ELECTROLYTIC
MB-4342A	C03	0CE1076D638	CAPACITOR,FIXED ELECTROLYTIC
MB-4342A	C03	0CE1076D638	CAPACITOR,FIXED ELECTROLYTIC
MB-4342A	C04	0CK2230K948	CAPACITOR,FIXED CERAMIC(High d
MB-4342A	C04	0CK2230K948	CAPACITOR,FIXED CERAMIC(High d
MB-4342A	C05	0CK1040K948	CAPACITOR,FIXED CERAMIC(High d
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MB-4342A	C06	0CE4776H618	CAPACITOR,FIXED ELECTROLYTIC
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MB-4342A	C07	0CE1076D638	CAPACITOR,FIXED ELECTROLYTIC
MB-4342A	C08	0CE4756K638	CAPACITOR,FIXED ELECTROLYTIC
MB-4342A	C08	0CE4756K638	CAPACITOR,FIXED ELECTROLYTIC
MB-4342A	C20	0CK2230K948	CAPACITOR,FIXED CERAMIC(High d
MB-4342A	C20	0CK2230K948	CAPACITOR,FIXED CERAMIC(High d
MB-4342A	C21	0CK2230K948	CAPACITOR,FIXED CERAMIC(High d
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MB-4342A	C82	0CK1020K518	CAPACITOR,FIXED CERAMIC(High d
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MB-4342A	C83	0CK1020K518	CAPACITOR,FIXED CERAMIC(High d
MB-4342A	C84	0CK1020K518	CAPACITOR,FIXED CERAMIC(High d
MB-4342A	C84	0CK1020K518	CAPACITOR,FIXED CERAMIC(High d
MB-4342A	CN1	6630W5V021A	CONNECTOR (CIRC),WAFER
MB-4342A	CN2	6630W5YA19F	CONNECTOR (CIRC),WAFER
MB-4342A	CR1	6212W5M002A	RESONATOR,CERAMIC
MB-4342A	CR1	6212W5M002A	RESONATOR,CERAMIC
MB-4342A	CU1	4850W4C001G	CUSHION
MB-4342A	CU1	4850W4C001G	CUSHION
MB-4342A	D01	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D01	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D02	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D02	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D03	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D03	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D04	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D04	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D05	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D05	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D06	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D06	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D07	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D07	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D08	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D08	0DD400209AA	DIODE,RECTIFIERS

MB-4342A	D09	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D09	0DD400209AA	DIODE,RECTIFIERS
MB-4342A	D25	0DD414809AA	DIODE,SWITCHING
MB-4342A	D30	0DD414809AA	DIODE,SWITCHING
MB-4342A	D32	0DD414809AA	DIODE,SWITCHING
MB-4342A	D33	0DD414809AA	DIODE,SWITCHING
MB-4342A	D35	0DD414809AA	DIODE,SWITCHING
MB-4342A	D90	0DD414809AA	DIODE,SWITCHING
MB-4342A	D91	0DD414809AA	DIODE,SWITCHING
MB-4342A	D92	0DD414809AA	DIODE,SWITCHING
MB-4342A	D93	0DD414809AA	DIODE,SWITCHING
MB-4342A	DP2	0DLZZW5A01B	LED,DRAWING
MB-4342A	DP2	0DLZZW5A01B	LED,DRAWING
MB-4342A	PT1	6170W1G010H	TRANSFORMER,POWER
MB-4342A	Q01	0TRAU90019A	TRANSISTOR,BIPOLARS
MB-4342A	Q02	0TRAU90019A	TRANSISTOR,BIPOLARS
MB-4342A	Q03	0TRAU90014A	TRANSISTOR,BIPOLARS
MB-4342A	Q07	0TRAU90017A	TRANSISTOR,BIPOLARS
MB-4342A	Q120	0TRAU90018A	TRANSISTOR,BIPOLARS
MB-4342A	Q121	0TRAU90018A	TRANSISTOR,BIPOLARS
MB-4342A	Q122	0TRAU90018A	TRANSISTOR,BIPOLARS
MB-4342A	Q123	0TRAU90018A	TRANSISTOR,BIPOLARS
MB-4342A	Q20	0TRAU90015A	TRANSISTOR,BIPOLARS
MB-4342A	Q30	0TRAU90019A	TRANSISTOR,BIPOLARS
MB-4342A	Q32	0TRAU90013A	TRANSISTOR,BIPOLARS
MB-4342A	Q33	0TRAU90013A	TRANSISTOR,BIPOLARS
MB-4342A	Q50	0TRAU90013A	TRANSISTOR,BIPOLARS
MB-4342A	R01	0RD2001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R01	0RD2001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R01	0RD2001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R02	0RD1001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R02	0RD1001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R02	0RD1001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R03	0RD1002F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R03	0RD1002F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R03	0RD1002F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R04	0RD1002F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R04	0RD1002F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R04	0RD1002F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R05	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R05	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R05	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R06	0RD0102G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R06	0RD0102G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R07	0RD1001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R07	0RD1001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R07	0RD1001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R110	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R110	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R110	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R111	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R111	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R111	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R112	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R112	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R112	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R113	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R113	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R113	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R114	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R114	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R114	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R115	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R115	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R115	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R116	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R116	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R116	0RD1000F608	RESISTOR,FIXED CARBON FILM

MB-4342A	R117	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R117	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R117	0RD1000F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R120	0RD2001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R120	0RD2001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R120	0RD2001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R121	0RD2001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R121	0RD2001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R121	0RD2001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R122	0RD2001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R122	0RD2001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R122	0RD2001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R123	0RD2001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R123	0RD2001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R123	0RD2001F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R20	0RD1002G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R20	0RD1002G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R21	0RD1002F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R21	0RD1002F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R21	0RD1002F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R22	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R22	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R22	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R25	0RD4701G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R25	0RD4701G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R25	0RD4701G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R26	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R26	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R26	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R27	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R27	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R27	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R31	0RD2001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R31	0RD2001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R31	0RD2001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R50	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R50	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R50	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R70	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R70	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R70	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R71	0RD1002F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R71	0RD1002F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R71	0RD1002F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R72	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R72	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R72	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R73	0RD1002F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R73	0RD1002F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R73	0RD1002F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R75	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R75	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R75	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R76	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R76	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R76	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R80	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R80	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R80	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R81	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R81	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R81	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R82	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R82	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R82	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R83	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R83	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R83	0RD1001G608	RESISTOR,FIXED CARBON FILM

MB-4342A	R84	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R84	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R84	0RD1001G608	RESISTOR,FIXED CARBON FILM
MB-4342A	R85	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R85	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R85	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R86	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R86	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R86	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R87	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R87	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R87	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R88	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R88	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R88	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R89	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R89	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R89	0RD4702F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R90	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R90	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R90	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R91	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R91	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R91	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R92	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R92	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R92	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R93	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R93	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	R93	0RD4701F608	RESISTOR,FIXED CARBON FILM
MB-4342A	RY1	6920WRD008A	RELAY
MB-4342A	RY2	6920W5A012A	RELAY
MB-4342A	RY2	6920W5A012A	RELAY
MB-4342A	RY3	6920W5A012A	RELAY
MB-4342A	RY3	6920W5A012A	RELAY
MB-4342A	U01	0IZZW5A201B	IC,DRAWING
MB-4342A	WNZ015	4B71028B	NUT,DRAWING
MB-4342A	WNZ015	4B71028B	NUT,DRAWING
MB-4342A	WNZ015	4B71028B	NUT,DRAWING
MB-4342A	WSZ002	1SBF0402418	SCREW TAP TITE(S),BINDING HEAD
MB-4342A	WSZ002	1SBF0402418	SCREW TAP TITE(S),BINDING HEAD
MB-4342A	WSZ002	1SBF0402418	SCREW TAP TITE(S),BINDING HEAD
MB-4342A	WSZ062	4000W4A003A	SCREW,DRAWING
MB-4342A	WSZ062	4000W4A003A	SCREW,DRAWING
MB-4342A	WSZ062	4000W4A003A	SCREW,DRAWING
MB-4342A	WSZ085	4B70188C	SCREW,DRAWING
MB-4342A	WSZ085	4B70188C	SCREW,DRAWING
MB-4342A	WSZ085	4B70188C	SCREW,DRAWING
MB-4342A	WSZ131	4B72393B	SCREW,DRAWING
MB-4342A	WSZ131	4B72393B	SCREW,DRAWING
MB-4342A	WSZ184	1SZZW2Z001E	SCREW,DRAWING
MB-4342A	WSZ184	1SZZW2Z001E	SCREW,DRAWING
MB-4342A	WSZ184	1SZZW2Z001E	SCREW,DRAWING
MB-4342A	WTP013	1TPL0402418	SCREW TAPPING,PAN HEAD
MB-4342A	WTP013	1TPL0402418	SCREW TAPPING,PAN HEAD
MB-4342A	WTP013	1TPL0402418	SCREW TAPPING,PAN HEAD
MB-4342A	WTP015	1TPL0402618	SCREW TAPPING,PAN HEAD
MB-4342A	WTP015	1TPL0402618	SCREW TAPPING,PAN HEAD
MB-4342A	WTP015	1TPL0402618	SCREW TAPPING,PAN HEAD
MB-4342A	WTT021	1TTL0402418	SCREW TAPPING,TRUSS HEAD
MB-4342A	WTT021	1TTL0402418	SCREW TAPPING,TRUSS HEAD
MB-4342A	WTT021	1TTL0402418	SCREW TAPPING,TRUSS HEAD
MB-4342A	WTT028	1TTL0402818	SCREW TAPPING,TRUSS HEAD
MB-4342A	WTT028	1TTL0402818	SCREW TAPPING,TRUSS HEAD
MB-4342A	WTT028	1TTL0402818	SCREW TAPPING,TRUSS HEAD
MB-4342A	WTT028	1TTL0402818	SCREW TAPPING,TRUSS HEAD
MB-4342A	WTT028	1TTL0402818	SCREW TAPPING,TRUSS HEAD
MB-4342A	WTT028	1TTL0402818	SCREW TAPPING,TRUSS HEAD

MB-4342A	WTT028	1TTL0402818	SCREW TAPPING,TRUSS HEAD
MB-4342A	WTT028	1TTL0402818	SCREW TAPPING,TRUSS HEAD
MB-4342A	WTT028	1TTL0402818	SCREW TAPPING,TRUSS HEAD
MB-4342A	WTT037	1TTL0403818	SCREW TAPPING,TRUSS HEAD
MB-4342A	WTT037	1TTL0403818	SCREW TAPPING,TRUSS HEAD
MB-4342A	WTT037	1TTL0403818	SCREW TAPPING,TRUSS HEAD
MB-4342A	ZD1	0DZ510009AE	DIODE,ZENERS
MB-4342A	ZD1	0DZ510009AE	DIODE,ZENERS
MB-4342A	ZD2	0DZ560009AC	DIODE,ZENERS

Spec	Level
MB-4342A BWT-RUSSIA RUSSIAN	1
MB-4342A BWT-RUSSIA ENGLISH A4 MB-394AA	1
MC-783RC CIS RUSSIAN	1
MB-4342A MB-4342A BWT-RUSSIA LG RUSSIA W	2
0.7CU.FT BLACK PAINT(E.D) SCP	2
PC CLEAR HMB-392A_LGEES LGENE	2
150*259	2
150*259	2
0.7CU.FT MS-194 PP LGECW BLACK(CAP ONLY)	2
WHITE BWT-RUSSIA MB-4342A LGECW	1
ABS HG-173 03587 BLUE WHITE HMS-392A STARCO LGE	2
POM BLACK 100 MM PULL	2
MS-71MC	2
MH-684GS,PP,NEW TYPE	1
BWT-RUSSIA MB-4342A WHITE MB-4342A CIS W	2
MS-101,121,151	2
MS-101,121,151	2
ABS HG-173 03587 BLUE WHITE HMB-394A GSF LGECW	2
MB-4342A BWT-RUSSIA WHITE CIS LGECW	1
MS-71CM LGEUS NONE LCD,LED HOLDER	3
P1-2186 MH-6342A 1ST DIMPLE CIS	2
MICA T0.4 115MM 130MM LGECW	1
PCM WHITE 0.8CU.FT LGECW MB-3922A RUSSIA	1
DIA. 284MM 770G 5T HKG LGECW	1
KMG-5019,STS 304 0.4T(C/SKD LGETA)	1
SBHG T0.5 MH-6352 39.5	1
MV-1320,PP	1
TEFLON WHITE T7.5 13.0MM	1
MB-307MC LGEPS LGETA HOLDER	1
MB-307MC LGEPS LGETA HOLDER	1
MB-390S, COATED, H100	1
230V 50HZ 1030W [CHINA]KAWAI	1
230V 50HZ 1030W [CHINA]KAWAI	1
230V 50HZ 1030W [CHINA]KAWAI	1
D 180.6 H14 SPS(WA212) BROWN LGETA	1
21V 50/60HZ SHINIL FREE 5/6RPM E PLASTIC	1
PBT PULL 100 MM NA LGECW NEW	3
LGECW MB-392A PULL 100 MM PBT EUROPE	2
MV-1120	3
SZM-V16-FA-63 LG UL/CSA 125V 16A VERTICAL 200G	3
SZM-V16-FA-63 LG UL/CSA 125V 16A VERTICAL 200G	3
SZM-V16-FA-62 LG UL/CSA 125/250V 16A VERTICAL 200G	3
SZM-V16-FA-62 LG UL/CSA 125/250V 16A VERTICAL 200G	3
2100VAC 1.00UF VDE 75 SAMHWA LGECW	2
2100VAC 1.00UF VDE 75 SAMHWA LGECW	2
12A 250V CERAMIC 65TS UL/CSA SAMJOO	2
MA-690M	2
A1,A2 PJT.	2
MS194GM,PP	2
DIA.110 CCW 4 WING	2
DIA.110 CCW 4 WING	2
DIA.110 CCW 4 WING	2
DIA.110 CCW 4 WING	2
DIA.110 CCW 4 WING	2
230V 50HZ 800W 2110V 3.43V R AL/CU [CHIN	1
250V 12A LGECW #187 GRILL/CONV	2
850W 2M214-39F LG 350MA 2.85-3.75V FTZ LGECW	1
850W 2M214-39F LG 350MA 2.85-3.75V FTZ LGECW	1
850W 2M214-39F LG 350MA 2.85-3.75V FTZ LGECW	1
850W 2M214-39F LG 350MA 2.85-3.75V FTZ LGECW	1
LGECW C-4-1 1.5MM	1
220-240V 50/60HZ 10.5MM 2800RPM 47.0MM - LEFT OH S	2
220-240V 50/60HZ 10.5MM 2800RPM 47.0MM - LEFT OH S	2
220-240V 50/60HZ 10.5MM 2800RPM 47.0MM - LEFT OH S	2
H.V.D+CIRCUIT PROTECTOR CL01-12 HVR-2X-	2
MAIN LGECW LGERU 23L GRILL 3RD EGG	2

24025W-25 DUKWOO/KYUNGJUN 240V 25W CLEAR	2
24025W-25 DUKWOO/KYUNGJUN 240V 25W CLEAR	2
24025W-25 DUKWOO/KYUNGJUN 240V 25W CLEAR	2
145 /60 KSD-WI HORIZONTAL 125V/15A, 250V/10A [CHIN	3
145 /60 KSD-WI HORIZONTAL 125V/15A, 250V/10A [CHIN	3
90 /75 KSD-WI HORIZONTAL 125V/15A, 250V/10A [CHINA	3
90 /75 KSD-WI HORIZONTAL 125V/15A, 250V/10A [CHINA	3
MS-192A,SBHG1-R,0.7T,CW	2
MS-192A,LGECW	1
MS-193XD,XR-401-9001,LEG,BK	2
5.0T 8W 120L SPONGE	2
5.0T 8W 120L SPONGE	2
TFM-57 CW EAST 2048HZ 70DB 3V 0.0012A 0 OHM	3
TFM-57 CW EAST 2048HZ 70DB 3V 0.0012A 0 OHM	3
470UF SMS,SG 25V 20% FL TP 5	3
470UF SMS,SG 25V 20% FL TP 5	3
470UF SMS,SG 25V 20% FL TP 5	3
470UF SMS,SG 25V 20% FL TP 5	3
100UF SMS,SG 10V 20% FM5 TP 5	4
100UF SMS,SG 10V 20% FM5 TP 5	4
22NF D 50V 80%,-20% TA26 F(Y5V)	4
22NF D 50V 80%,-20% TA26 F(Y5V)	4
0.1UF D 50V 80%,-20% F(Y5V) TA26	4
0.1UF D 50V 80%,-20% F(Y5V) TA26	4
470UF SMS,SG 25V 20% FL TP 5	3
470UF SMS,SG 25V 20% FL TP 5	3
100UF SMS,SG 10V 20% FM5 TP 5	4
100UF SMS,SG 10V 20% FM5 TP 5	4
4.7UF SMS,SG 50V 20% FM5 TP 5	4
4.7UF SMS,SG 50V 20% FM5 TP 5	4
22NF D 50V 80%,-20% TA26 F(Y5V)	4
22NF D 50V 80%,-20% TA26 F(Y5V)	4
22NF D 50V 80%,-20% TA26 F(Y5V)	4
22NF D 50V 80%,-20% TA26 F(Y5V)	4
22NF D 50V 80%,-20% TA26 F(Y5V)	4
22NF D 50V 80%,-20% TA26 F(Y5V)	4
10KPF 50V K B TA26	4
10KPF 50V K B TA26	4
10KPF 50V K B TA26	4
10KPF 50V K B TA26	4
10KPF 50V K B TA26	4
10KPF 50V K B TA26	4
10KPF 50V K B TA26	4
10KPF 50V K B TA26	4
10KPF 50V K B TA26	4
10KPF 50V K B TA26	4
YW396-08AV(2,4,6V) - - STRAIGHT SN	3
FCZ254-8D	3
CSTS0400MG06-T2 MURATA 4.0MHZHZ TP MWO	3
CSTS0400MG06-T2 MURATA 4.0MHZHZ TP MWO	3
7.0T 10W 35L SPONGE	3
7.0T 10W 35L SPONGE	3
1N4002 TP KEC - - - - - -	4
1N4002 TP KEC - - - - - -	4
1N4002 TP KEC - - - - - -	4
1N4002 TP KEC - - - - - -	4
1N4002 TP KEC - - - - - -	4
1N4002 TP KEC - - - - - -	4
1N4002 TP KEC - - - - - -	4
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1N4002 TP KEC - - - - - -	4
1N4002 TP KEC - - - - - -	4
1N4002 TP KEC - - - - - -	4
1N4002 TP KEC - - - - - -	4
1N4002 TP KEC - - - - - -	4
1N4002 TP KEC - - - - - -	4

1N4002 TP KEC - - - - - -	4
1N4002 TP KEC - - - - - -	4
1N4148 TP GRANDE - - - - - -	4
1N4148 TP GRANDE - - - - - -	4
1N4148 TP GRANDE - - - - - -	4
1N4148 TP GRANDE - - - - - -	4
1N4148 TP GRANDE - - - - - -	4
1N4148 TP GRANDE - - - - - -	4
1N4148 TP GRANDE - - - - - -	4
1N4148 TP GRANDE - - - - - -	4
1N4148 TP GRANDE - - - - - -	4
TOF-3491HG-B BK OASIS GREEN TOF-3491HG-B 2 40 X 14	3
TOF-3491HG-B BK OASIS GREEN TOF-3491HG-B 2 40 X 14	3
220-240V 50/60HZ 12V LGECW MS-197W,COMMO	3
AUK KOREA 2SC5343G-AT TP TO92M 50V 150MA	4
AUK KOREA 2SC5343G-AT TP TO92M 50V 150MA	4
AUK KOREA SRA2207M-AT TP TO92M 50V 100MA	4
AUK KOREA 2SC5342G-AT TP TO92M 32V 500MA	4
AUK KOREA 2SA1980G-AT TP TO92M 50V 150MA	4
AUK KOREA 2SA1980G-AT TP TO92M 50V 150MA	4
AUK KOREA 2SA1980G-AT TP TO92M 50V 150MA	4
AUK KOREA 2SA1980G-AT TP TO92M 50V 150MA	4
AUK KOREA SRC1207M-AT TP TO92M 50V 100MA	4
AUK KOREA 2SC5343G-AT TP TO92M 50V 150MA	4
AUK KOREA SRC1205M-AT TP TO92M 50V 100MA	4
AUK KOREA SRC1205M-AT TP TO92M 50V 100MA	4
AUK KOREA SRC1205M-AT TP TO92M 50V 100MA	4
2K OHM 1/6 W 5.00% TA26	4
2K OHM 1/6 W 5.00% TA26	4
2K OHM 1/6 W 5.00% TA26	4
1K OHM 1/6 W 5.00% TA26	4
1K OHM 1/6 W 5.00% TA26	4
1K OHM 1/6 W 5.00% TA26	4
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1K OHM 1/4 W 5.00% TA26	4
10 OHM 1/4 W 5.00% TA26	4
10 OHM 1/4 W 5.00% TA26	4
1K OHM 1/6 W 5.00% TA26	4
1K OHM 1/6 W 5.00% TA26	4
1K OHM 1/6 W 5.00% TA26	4
100 OHM 1/6 W 5.00% TA26	4
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10K OHM 1/4 W 5.00% TA26	4
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47K OHM 1/6 W 5.00% TA26	4
47K OHM 1/6 W 5.00% TA26	4
47K OHM 1/6 W 5.00% TA26	4
1K OHM 1/4 W 5.00% TA26	4
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4.7K OHM 1/6 W 5.00% TA26	4
4.7K OHM 1/6 W 5.00% TA26	4
JQ1A-12V,MATSUSHITA	3
G5G-1A-DT1-LG OMRON DC12V 41.7MA 250V 16A 288 OHM	3
G5G-1A-DT1-LG OMRON DC12V 41.7MA 250V 16A 288 OHM	3
G5G-1A-DT1-LG OMRON DC12V 41.7MA 250V 16A 288 OHM	3
G5G-1A-DT1-LG OMRON DC12V 41.7MA 250V 16A 288 OHM	3
TMP87CH47U 44PIN,QFP BK CIS 23L SOLO/GRI	3
M4	1
M4	1
M4	1
#NAME?	1
#NAME?	1
#NAME?	1
EARTH D4 L10 BSP/BN,BSW/BN LK-0526CH EARTH	1
EARTH D4 L10 BSP/BN,BSW/BN LK-0526CH EARTH	1
EARTH D4 L10 BSP/BN,BSW/BN LK-0526CH EARTH	1
SCREW	1
SCREW	1
SCREW	1
MH-1251'S	1
MH-1251'S	1
+ D4.0 L8.0 MSWR3 / FN 1 PITCH NO NO TRUSS	1
+ D4.0 L8.0 MSWR3 / FN 1 PITCH NO NO TRUSS	1
+ D4.0 L8.0 MSWR3 / FN 1 PITCH NO NO TRUSS	1
+ 2 CUT D4.0 L8.0 MSWR3/FZY	1
+ 2 CUT D4.0 L8.0 MSWR3/FZY	1
+ 2 CUT D4.0 L8.0 MSWR3/FZY	1
+ 2 CUT D4.0 L10.0 MSWR3/FZY	2
+ 2 CUT D4.0 L10.0 MSWR3/FZY	2
+ 2 CUT D4.0 L10.0 MSWR3/FZY	2
+ 2 CUT D4.0 L8.0 MSWR3/FZY	1
+ 2 CUT D4.0 L8.0 MSWR3/FZY	1
+ 2 CUT D4.0 L8.0 MSWR3/FZY	1
+ 2 CUT D4.0 L12.0 MSWR3/FZY	2
+ 2 CUT D4.0 L12.0 MSWR3/FZY	2
+ 2 CUT D4.0 L12.0 MSWR3/FZY	2
+ 2 CUT D4.0 L12.0 MSWR3/FZY	2
+ 2 CUT D4.0 L12.0 MSWR3/FZY	2
+ 2 CUT D4.0 L12.0 MSWR3/FZY	2

+ 2 CUT D4.0 L12.0 MSWR3/FZY	1
+ 2 CUT D4.0 L12.0 MSWR3/FZY	1
+ 2 CUT D4.0 L12.0 MSWR3/FZY	1
+ 2 CUT D4.0 L28.0 MSWR3/FZY	2
+ 2 CUT D4.0 L28.0 MSWR3/FZY	2
+ 2 CUT D4.0 L28.0 MSWR3/FZY	2
UZ5.1BS TP26 SM 0.5W	4
UZ5.1BS TP26 SM 0.5W	4
5.6V 0.5W SMALL(0.5PITCH) TP PYUNG CHANG - - - - -	4