



**TECHNICAL FLASH**

Department 731A Toronto

**T.F. 22-480**



**BASIC SERVICE MANUAL**

**FOR**

**MICROWAVE OVEN**

**MODEL 767.8541000 / 767.8541001**

**767.8541300 / 767.8541301**

**767.8541900 / 767.8541901**

**MARCH, 2005**

# **CAUTION**

## **SAFETY PRECAUTIONS**

### **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 CSA Standard should be performed on each oven prior to release to the owner.**
- Proper operation of the microwave ovens requires that the magnetron be assembled to the wave guide 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.
  - Routine service safety procedures should be exercised at all times.
  - Untrained personnel should not attempt service without a thorough review of the test procedures and safety information contained in this manual.

# FOREWORD

Read this Manual carefully. Failure to adhere to or observe the information in this Manual may result in exposing yourself to the Microwave Energy normally contained within the oven cavity.

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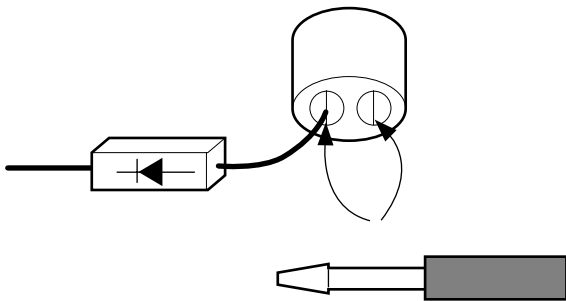
# SPECIFICATIONS

Rated Power Consumption .....	1500W maximum (Microwave oven+Cook top lamps+Ventilation fan)
Microwave Output .....	1000W (IEC60705)
	Adjustable 100W through 1000W, 10 steps
Frequency .....	2450 MHz $\pm$ 50 MHz
Power Supply .....	120 VAC, 60 Hz
Rated Current .....	13 Amp. (Microwave oven+Cook top lamp+Ventilation fan)
Magnetron Cooling .....	Forced Air Cooling
Rectification .....	Rectification Voltage Double Half-Wave
Door Sealing .....	Choke System
Safety Devices .....	Oven Cavity Thermostat: Open at 90°C $\pm$ 5°C Fuse(20A) Primary Interlock Switch Secondary Interlock Switch Interlock Monitor
Magnetron .....	2M214-161GP
High Voltage Capacitor .....	Capacitor: 1.0 $\mu$ F, 2.1 KV AC
High Voltage Diode .....	Diode; 350mA, 9.0 KV
Cook top Lamp .....	125 V, 30 W
Cavity Lamp .....	125 V, 30 W
Timer .....	Digital, up to 99 mim. 99 sec. (in each cooking stage)
Tray .....	Tempered Safety Glass
Overall Dimensions .....	29 <sup>15</sup> / <sub>16</sub> "(W)x16 <sup>7</sup> / <sub>16</sub> "(D)x15 <sup>3</sup> / <sub>8</sub> "(H)
Oven Cavity Size .....	19 <sup>7</sup> / <sub>8</sub> "(W)x14 <sup>3</sup> / <sub>16</sub> "(D)x8 <sup>5</sup> / <sub>16</sub> "(H)
Effective Capacity of Oven Cavity .....	1.6 Cu.ft.
Accessories .....	Owner's Manual & Cooking Guide, Installation Manual, Exhaust Adapter, Exhaust Damper, Mounting Kit and Two Filters, Rotating Ring Assembly.

# 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.

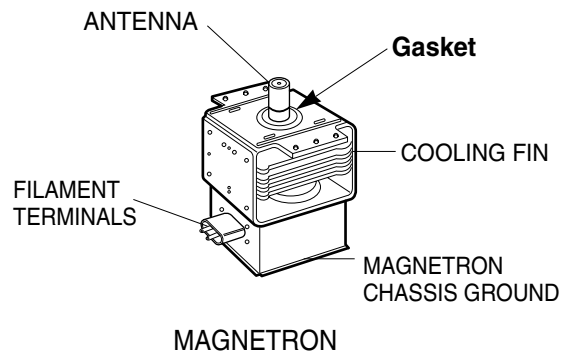


- Remove your watches whenever working close to or replacing the Magnetron.
- DO NOT touch any parts of the control panel circuit. A resulting static electric discharge may damage this P.C.B.
- NEVER operate the oven with no load.
- NEVER injure the door seal and front plate of the oven cavity.
- NEVER 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.**



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

# INSTALLATIONS

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

## PRECAUTIONS ON INSTALLATION

- A. Plug the power supply cord into a 120V AC, 60Hz, single-phase power source with a capacity of 15A or 20A.
- B. Avoid placing the unit in a location where there is direct heat or splashing water.
- C. Install the unit on the mounting plate firmly.
- D. Place the unit as far away as possible from TV, radio, etc. to prevent interference.

## GROUNDING INSTRUCTIONS

For personal safety, this appliance must be fully grounded at all times.

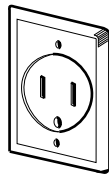
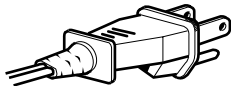
In the event of an electrical short circuit, grounding reduces the risk of electrical shock.

The plug must be plugged into an outlet that is properly installed and grounded.

## CAUTION

This unit is equipped with a 3-prong plug for your safety. If the wall outlet is a grounded 3-hole type, the unit will be grounded automatically.

**Plug with Ground Prong**



**Properly Polarized and Grounded Outlet**

## WARNING

Improper use of the grounding plug can result in a risk of electric shock.

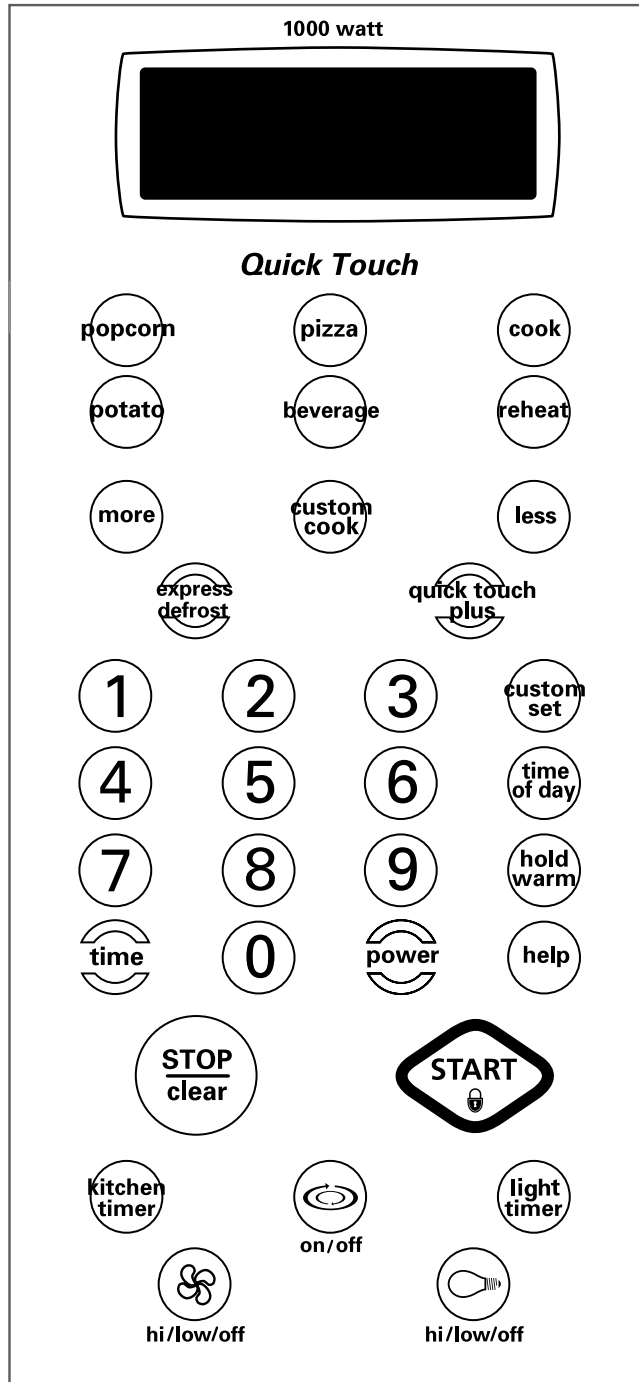
Do not, under any circumstances, cut or remove the third ground prong from the power cord plug.

# OPERATING INSTRUCTIONS

## CONTROL PANEL




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For Model 85410



## CONTROL PANEL INSTRUCTIONS

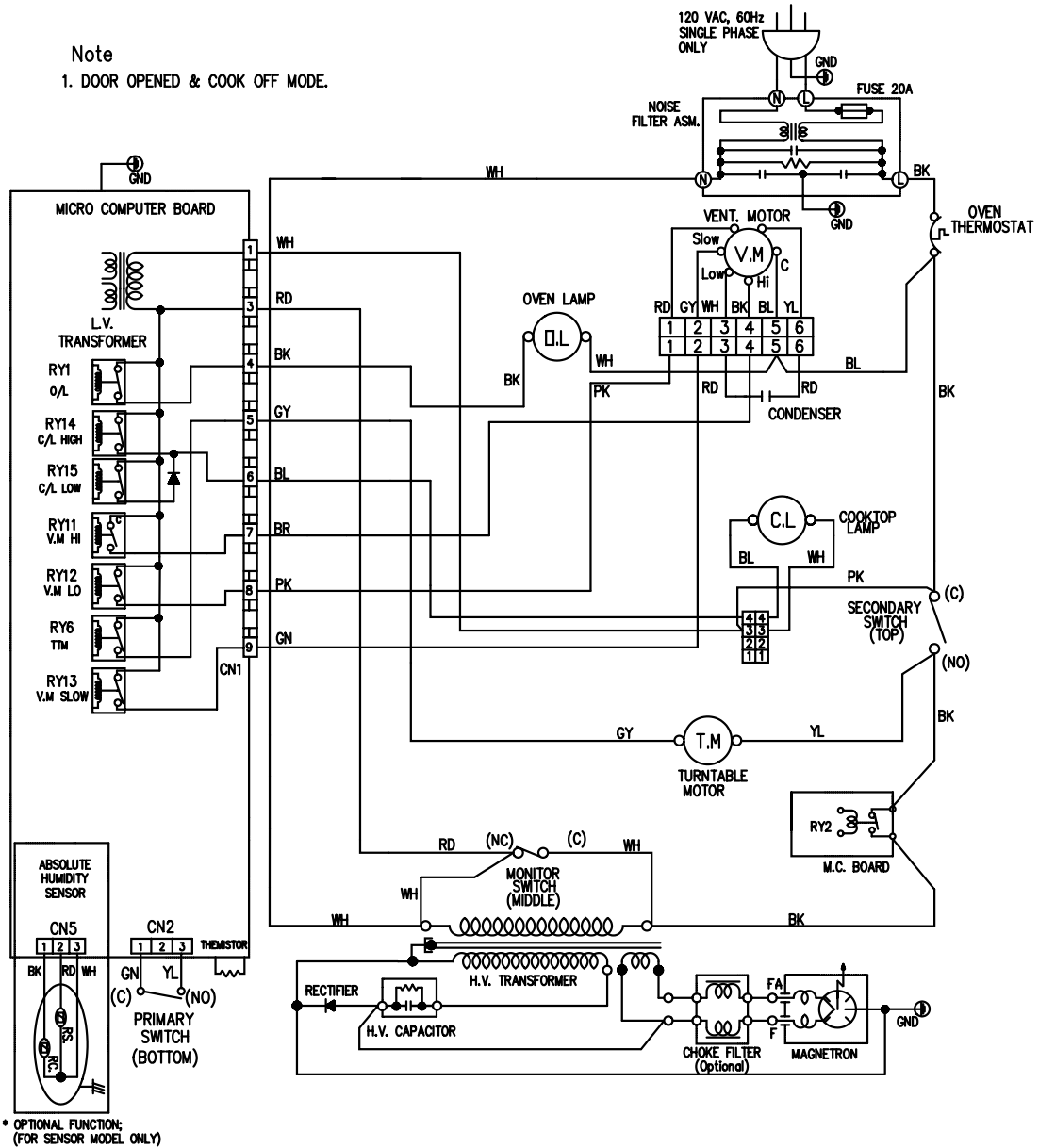
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1. **DISPLAY:** The Display includes a clock and indicators to tell you time of day, cooking time settings and cooking functions selected.
2. **POPCORN:** Touch this pad when popping popcorn in your microwave oven.
3. **PIZZA:** Touch this pad to reheat 1 to 3 slices.
4. **COOK:** Touch this pad to cook vegetables, rice, or casseroles.
5. **POTATO:** Touch this pad to cook potatoes from 1 to 4.
6. **BEVERAGE:** Touch this pad to reheat one cup or two cups a beverage.
7. **REHEAT:** Touch this pad to reheat dinner plate, soup/sauce, casserole, roll/muffin.
8. **MORE:** Touch this pad to add ten seconds of cooking time each time you press it.
9. **CUSTOM COOK:** Touch this pad to recall one cooking instruction previously programmed into memory.
10. **LESS:** Touch this pad to subtract ten seconds of cooking time each time you press.
11. **EXPRESS DEFROST:** Meat, poultry, fish. Touch on pad to select food type and defrost food by weight.
12. **QUICK TOUCH PLUS:** Touch this pad to set and start quickly at 100% power level.
13. **NUMBER:** Touch number pads to enter cooking time, power level, quantities or weights.
14. **TIME:** Touch this pad to set a cooking time.
15. **POWER:** Touch this pad to select a cooking power level.
16. **CUSTOM SET:** Touch this pad to change the oven's default settings for sound, clock, display speed and defrost weight.
17. **TIME OF DAY:** Touch this pad to enter the time of day.
18. **HOLD WARM:** Touch this pad to keep hot, cooked foods safety warm in your microwave oven for up to 99 minutes 99 seconds.
19. **HELP:** Touch this pad to learn how to use each oven function.
20. **STOP/CLEAR:** Touch this pad to stop the oven or clear all entries.
21. **START:** Touch this pad to start a function. If you open the door after oven begins to cook, retouch START.
22. **KITCHEN TIMER:** Touch this pad to set the kitchen timer.
23.  **ON/OFF:** Touch this pad to turn off the turntable. "OFF" will appear in the display.
24. **LIGHT TIMER:** Touch this pad to set the light timer.
25.  **HI/LOW/OFF:** Touch this pad to turn the fan on or off.
26.  **HI/LOW/OFF:** Touch this pad to turn on the cooktop/countertop light.

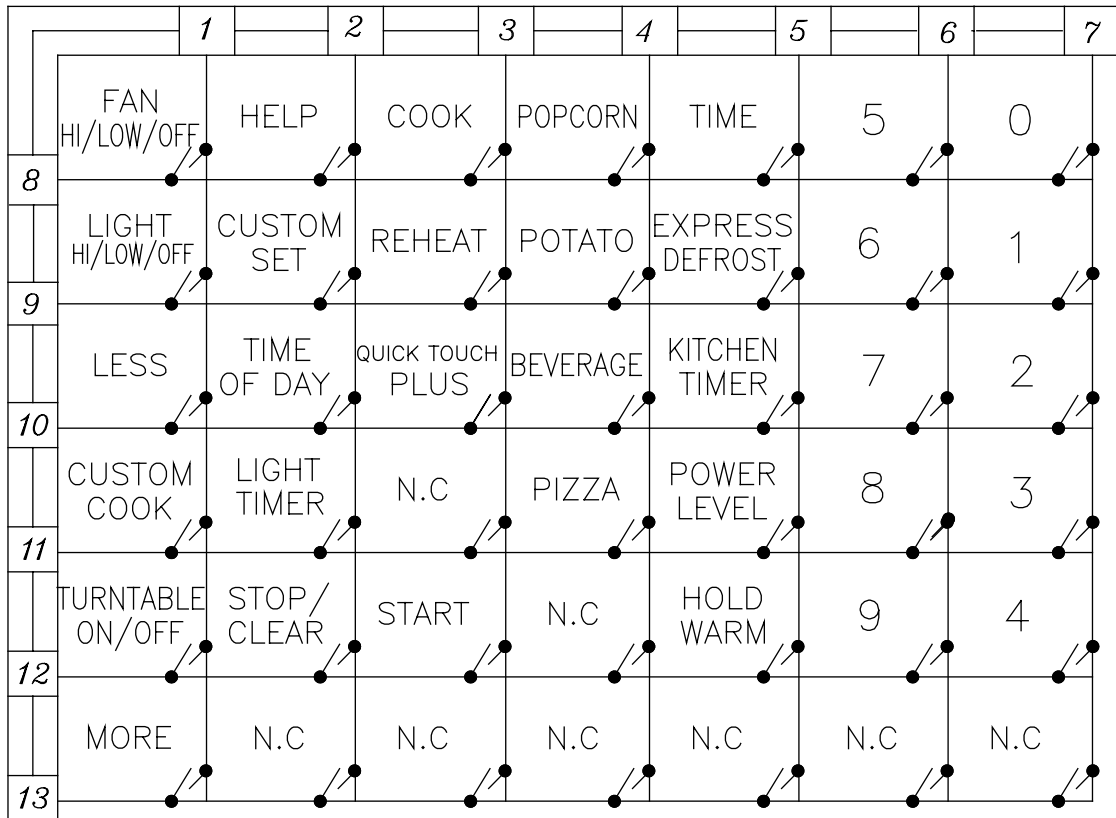


# OVERALL CIRCUIT DIAGRAM

## SCHEMATIC DIAGRAM



# MATRIX CIRCUIT FOR TOUCH KEY BOARD



# GENERAL INFORMATION FOR SERVICE

## GENERAL PRECAUTIONS IN USE

### A. Never operate the unit when it is empty.

Operating the oven with no load may shorten the life of the magnetron. Whenever cooking dry foods (dried fish, bread, etc.) or a small amount of food, be sure to put a glass of water into the cooking compartment. The glass turntable may become hot after operating, be careful when touching it.

B. Aluminum foil should be avoided because it will disrupt cooking and may cause arcing. However, small pieces may be used to cover some parts of food to slow the cooking. Any aluminum foil used should never be closer than 2.5 cm to any side wall of the oven.

## TRIAL OPERATION

After installation, the following sequences and results should be checked carefully.

- A. Put a container filled with water (about 1 liter) into the oven, and close the door tightly.
- B. Set cooking time for 10 minutes by touching "1" and then "0" three times. "1, 0, 0, 0" appears in the display window.
- C. Touch the START key.  
Make sure the cavity light comes on. The unit will begin cooking and the display window will show the time counting down by seconds.
- D. After about 5 minutes, make sure the primary interlock switch, the secondary interlock switch and the interlock monitor switch operate properly by opening and closing the door several times. Touch the START key each time the door is closed.
- E. Continue operating the unit. Four long beep sound signal is heard when the time is up. The unit will shut off automatically.
- F. Confirm the water is hot.
- G. Finally, measure the output power according to "POWER OUTPUT MEASUREMENT" on page 7-3.

## FEATURES AND SPECIFICATIONS FEATURES

- A. The safety systems incorporated in this model are:
- (1) Primary interlock switch
  - (2) Secondary interlock switch
  - (3) Interlock monitor switch
  - (4) Choke system
  - (5) Magnetron thermal fuse
  - (6) Oven cavity thermostat
- (Note:** This thermostat located on the oven cavity will open and stop the unit from operation only if a high temperature is reached, such as, a fire created by overcooking food.)
- B. Any one of 10 power output levels ranging 100W to 1000W can be selected by the touch control and electronic computer system.

# SERVICE INFORMATION

## PRECAUTIONS AND REPAIR SERVICE TIPS

### PRELIMINARY

#### **A. SINCE NEARLY 2,100 VOLTS EXISTS IN SOME CIRCUITS OF THIS UNIT REPAIRS SHOULD BE CARRIED OUT WITH GREAT CARE.**

The filament leads of magnetron carry High Voltage with respect to ground. Extreme caution must be exercised. Never plug the unit into a power source to determine which component is defective in high voltage section.

#### **B. TO AVOID POSSIBLE EXPOSURE TO MICROWAVE ENERGY LEAKAGE, THE FOLLOWING PRECAUTIONS MUST BE TAKEN BEFORE SERVICING.**

- (1) Before the power is applied:
  - (a) Make sure the primary interlock switch, the secondary interlock switch and the interlock monitor switch operate properly by opening and closing the door several by opening and closing the door several times.
  - (b) Make sure the perforated screen and the dielectric choke of the door are correctly and firmly mounted.
- (2) After power is applied:
  - (a) Make sure the interlock switch mechanism is operating properly by opening and closing the door.
  - (b) Check microwave energy leakage must be below the limit of 5 mW/cm<sup>2</sup>.  
(All service adjustments should be made for minimum microwave energy leakage readings).
- (3) Do not operate the unit until it is completely repaired, if any of the following conditions exist. The unit must not be operated.
  - (a) The door does not close firmly.
  - (b) The hinge is broken.
  - (c) The door seal is damaged.
  - (d) The door is bent or warped, or there is any other visible damage on the unit that may cause microwave energy leakage.

**NOTE:** Always keep the seal clean.

  - (e) Make sure that there are no defective parts in the interlock mechanism.
  - (f) Make sure that there are no defective parts in the microwave generating and transmission assembly (especially waveguide).
- (4) The following items should be checked after the unit is repaired:
  - (a) The interlock monitor switch is connected correctly and firmly.
  - (b) The magnetron gasket is properly positioned and mounted.
  - (c) The waveguide and the oven cavity are intact. (no microwave energy leakage)
  - (d) The door can be properly closed and the safety switches work properly.
  - (e) The unit must stop when the door is opened or the time is up.

The unit must not be operated with any of the above components removed or by-passed.

# MICROWAVE LEAKAGE TEST

## CAUTIONS

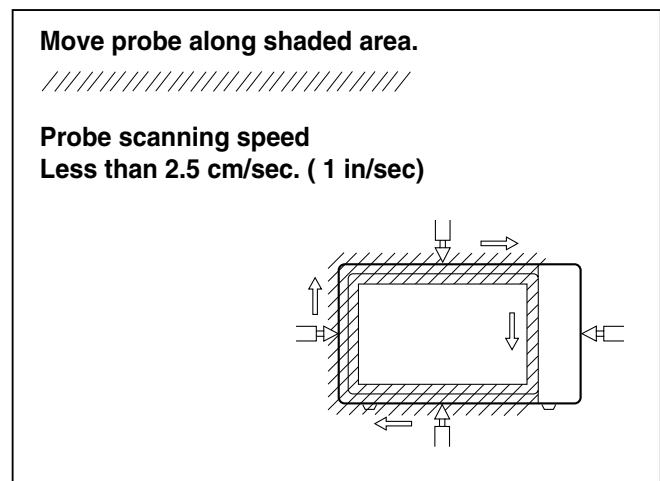
- Be sure to check microwave leakage prior to servicing the oven if the oven is operative prior to servicing.
- The service personnel should inform the manufacture importer, or assembler of any certified oven unit found to have a microwave emission level in excess of 5 mW/cm<sup>2</sup> and should repair 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.
- 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/cm<sup>2</sup>. Always start measuring of an unknown field to assure safety for operating personnel from radiation leakage.

## EQUIPMENT

- TESTER (VOLTS-DC, AC, Ohmmeter)
- Microwave survey meter
  - Holaday HI-1500  
HI-1501
  - Narda 8100  
8200
- 600 cc non conductive material beaker (glass or plastic), inside diameter: approx. 8.5 cm (3½ in.)
- Glass thermometer: 100°C or 212°F (1 deg scale)

## 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 an electromagnetic radiation monitor by holding the probe perpendicular to the surface being measured.



## MEASUREMENT WITH THE OUTER CASE REMOVED

- (1) 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.

- Around the magnetron
- The waveguide

**WARNING:** AVOID CONTACTING ANY HIGH VOLTAGE PARTS.

## MEASUREMENT WITH A FULLY ASSEMBLED OVEN

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

### NOTES:

Leakage with the outer panels removed less than 5 mW/cm<sup>2</sup>. 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<sup>2</sup>.

## NOTE WHEN MEASURING

- (1) Do not exceed meter full scale deflection.
- (2) The test probe must be removed no faster than 1 inch/sec (2.5cm/sec) along the shaded area, otherwise a false reading may result.
- (3) 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.
- (4) When testing near a corner of the door, keep the probe perpendicular to the surface being tested. (Hold vertically when testing the top and bottom, and horizontally along the side.)

## RECORD KEEPING AND NOTIFICATION AFTER MEASUREMENT

- (1) 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.
- (2) Should the microwave energy leakage not be more than 2 mW/cm<sup>2</sup> after determining that all parts are in good condition, functioning properly and genuine replacement parts which are listed in this manual have been used.
- (3) At least once a year, have the electromagnetic energy leakage monitor checked for calibration by its manufacturer.

## POWER OUTPUT MEASUREMENT

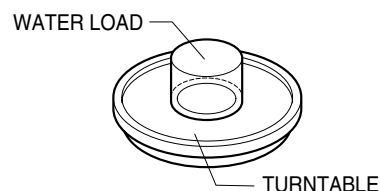
- (1) Microwave power output measurement is made with the microwave oven supplied at its rated voltage and operated at its maximum microwave power setting with a load of (1000±5) g of potable water.
- (2) The water is contained in a cylindrical borosilicate glass vessel having a maximum material thickness of 1/8" (3 mm) and an outside diameter of approximately 7.6" (190mm).
- (3) The oven and the empty vessel are at ambient temperature prior to the start of the test.
- (4) The initial temperature (T1) of the water is (10±2)°C (50°F) It is measured immediately before the water is added to the vessel. After addition of the water to the vessel, the load is immediately placed on the center of the turntable which is in the lowest position and the microwave power switched on.
- (5) The time T for the temperature of the water to rise by a value ΔT 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.

- (6) The microwave power output P in watts is calculated from the following formula :

$$P = \frac{4.187Mw(T2 - T1) + 0.55Mc(T2 - T0)}{t}$$

is measured while the microwave generator is operating at full power. Magnetron filament heat-up time is not included. (about 3 sec)

- (7) The water is stirred to equalize temperature throughout the vessel, prior to measuring the final water temperature.
- (8) Stirring devices and measuring instruments are selected in order to minimize addition or removal of heat.



# DISASSEMBLY INSTRUCTIONS

## IMPORTANT NOTES:

UNIT MUST BE DISCONNECTED FROM ELECTRICAL OUTLET WHEN MAKING REPAIRS, REPLACEMENTS, ADJUSTMENTS AND CONTINUITY CHECKS. WAIT AT LEAST ONE MINUTE, UNTIL THE HIGH VOLTAGE CAPACITOR IN THE HIGH VOLTAGE POWER SUPPLY HAS FULLY DISCHARGED.

THE CAPACITOR SHOULD BE DISCHARGED BY USING INSULATED WIRE - I.E. TEST PROBE CONNECTED TO 10K-OHM RESISTOR IN SERIES TO GROUND.

WHEN RECONNECTING THE WIRE LEADS TO ANY PART, MAKE SURE THE WIRING CONNECTIONS AND LEAD COLORS ARE CORRECTLY MATCHED ACCORDING TO THE OVERALL CIRCUIT DIAGRAM. (ESPECIALLY SWITCHES AND HIGH VOLTAGE CIRCUIT.)

## A. REMOVING POWER AND CONTROL CIRCUIT BOARD (Figures 1, 2 and 3)

- (1) Remove a screw securing the control panel assembly to the oven cavity.
- (2) Remove the control panel with pushing it upward.
- (3) Remove the connector (CN1) and wire leads (Relay6) from the circuit board.

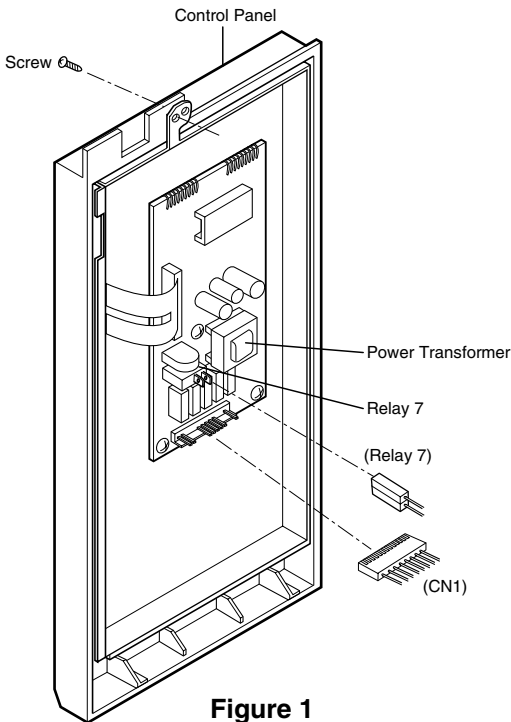


Figure 1

- (4) Remove 3 screws securing the circuit board.

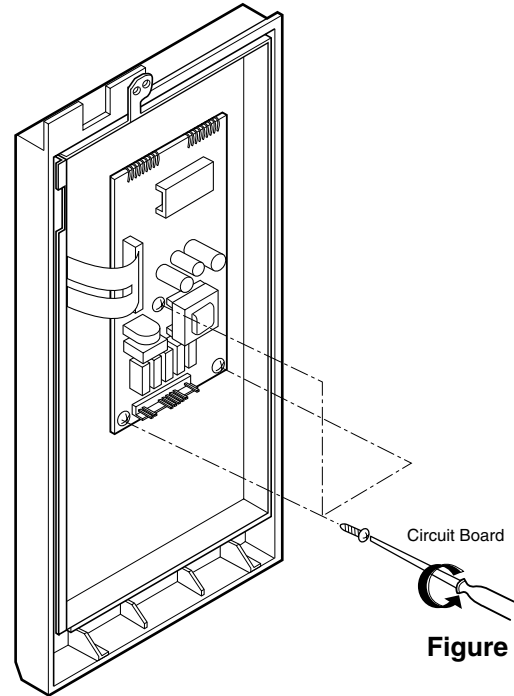


Figure 2

- (5) Remove the FPC connector from the terminal socket following "HOW TO REMOVE THE FPC CONNECTOR" on the next page.
- (6) Remove the circuit board from the control bracket carefully.

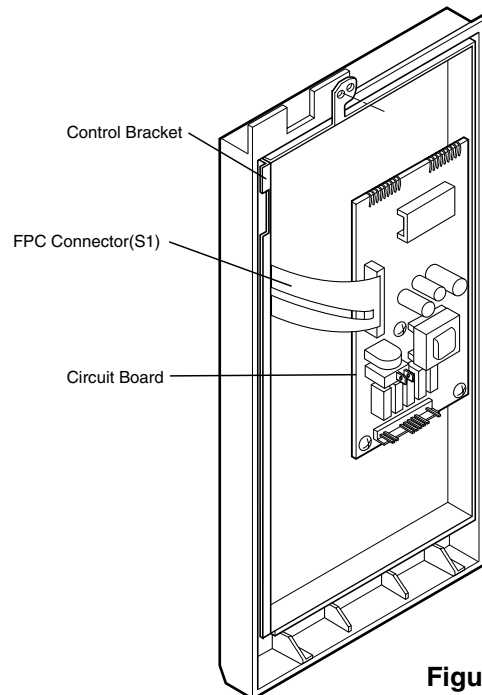


Figure 3

## HOW TO REMOVE THE F.P.C. CONNECTOR

Follow the steps below as illustrated in Figures 4 and 5 to remove the F.P.C. connector.

- (1) Hold the edges of the plastic fastener with thumb and forefinger.  
(Figure 4)
- (2) Lift up the lever of the plastic fastener from the terminal socket by lightly pressing the lever end with forefinger.  
(Figure 5)
- (3) Remove the F.P.C. connector from the terminal socket.

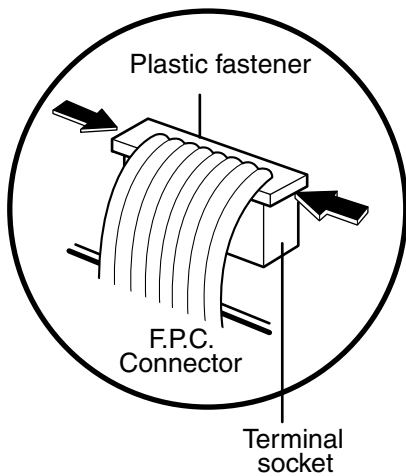


Figure 4

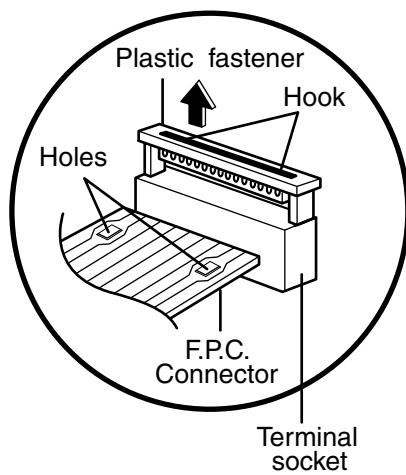


Figure 5

## HOW TO INSERT THE F.P.C. CONNECTOR

Follow the steps below as illustrated in Figures 6 and 7 to insert the F.P.C. connector.

- (1) Insert the F.P.C. connector into the terminal socket securely with the fingers.
- (2) Hold the plastic fastener with thumb and forefinger of the other hand, and push it slowly into the terminal socket. (Figure 6)  
**NOTE:** When reconnecting the F.P.C. connector make sure that the holes on the F.P.C. connector are properly engaged with the hooks on the plastic fastener
- (3) Lock the level of the plastic fastener into the hook of the terminal socket securely by releasing the fingers.  
(Figure 7)

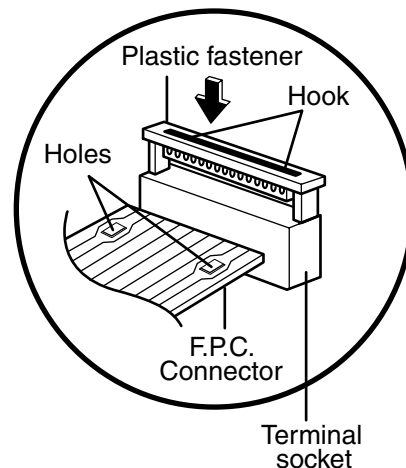


Figure 6

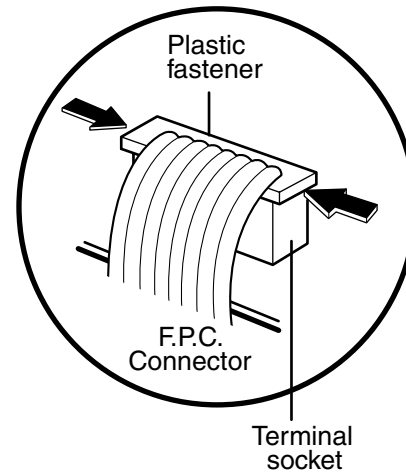


Figure 7



## B. REMOVING THE OUT CASE(Figure 8)

- (1) Remove the vent grille by removing two screws securing it to the out case.
- (2) Remove two screws securing it to the front bracket.
- (3) Remove two screws securing it to the air duct.
- (4) Remove the mounting plate by turning the two screws securing it to the out case.
- (5) Remove the base plate by removing six screws securing it to the out case. Remove the Mount, All from the out case by removing two screws securing it to the out case and one screw securing it to the ventilation motor ASS'Y and cavity.
- (6) Remove the power cord cover from outcase by removing a screw.
- (7) Remove the power cord to the inner of the out case with turning power cord and remove the out case with pushing it back.

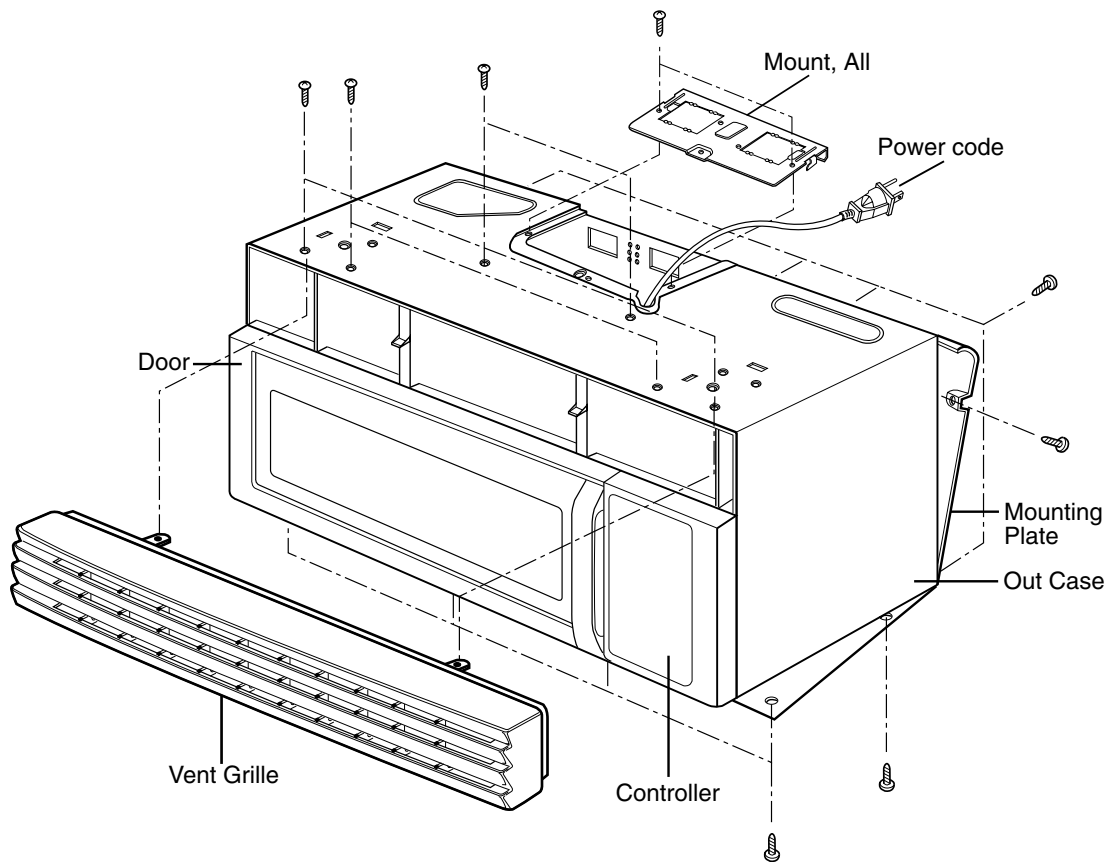
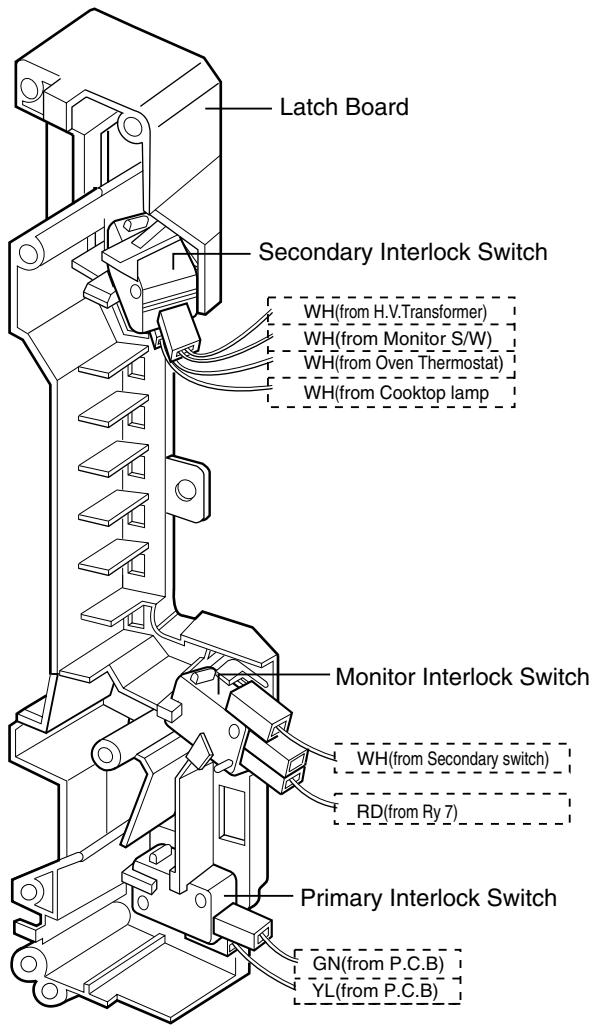


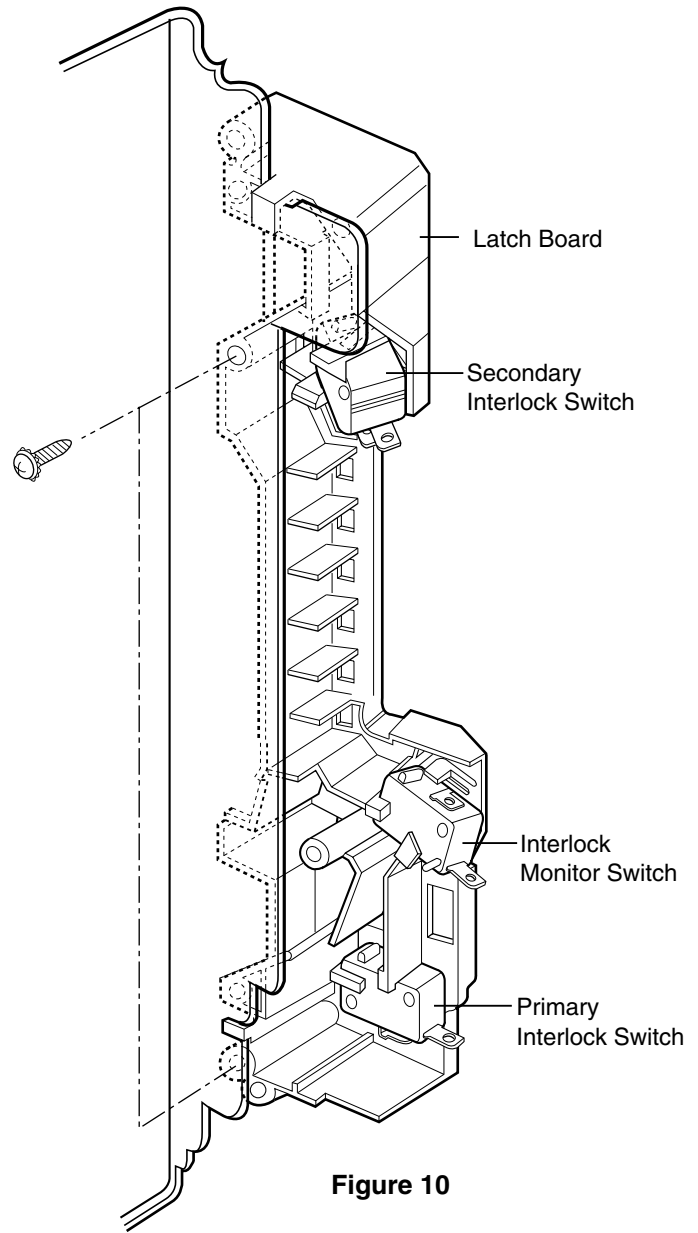
Figure 8

### C. REMOVING THE DOOR INTERLOCK SWITCHES (Figures 9,10)

- (1) Disconnect the wire leads from the interlock switches.
- (2) Remove two screws securing the Latch Board.
- (3) Make necessary replacements and check microwave energy leakage according to "ADJUSTMENT PROCEDURE" on page 7-12.



**Figure 9**



**Figure 10**

#### WIRE COLOR

SYMBOL	COLOR
WH	WHITE
BK	BLACK
BR	BROWN
RD	RED
BL	BLUE
PK	PINK
GY	GREY
GN	GREEN
N.P.	Not Provided

## D. REMOVING MAGNETRON

(Figures 11 Through 13)

- (1) Remove vertgrille.
- (2) Remove mount all.
- (3) Remove outcase.
- (4) Disconnect the wireleads.
- (5) Remove the 3 screws and Magnetron very carefully.

### NOTES:

- When removing the magnetron, make sure that its dome does not hit any adjacent parts, or it may be damaged.
- 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.
- After replacing the magnetron, check for microwave energy leakage with a survey meter. Check microwave energy leakage must be below the limit of  $5 \text{ mW/cm}^2$ . (All service adjustments should be made for minimum microwave energy leakage readings.)

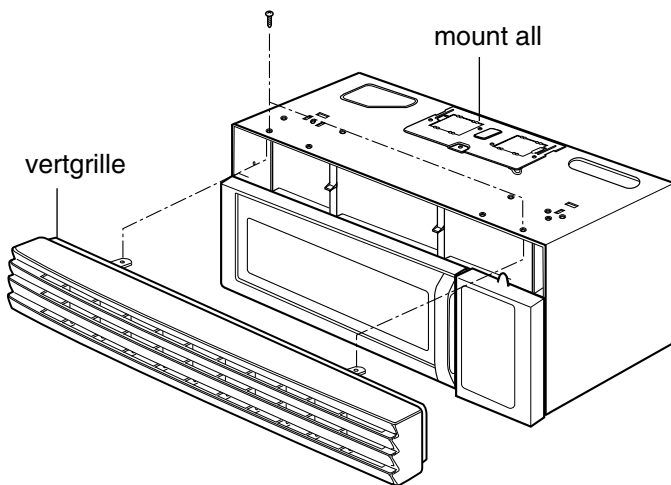


Figure 11

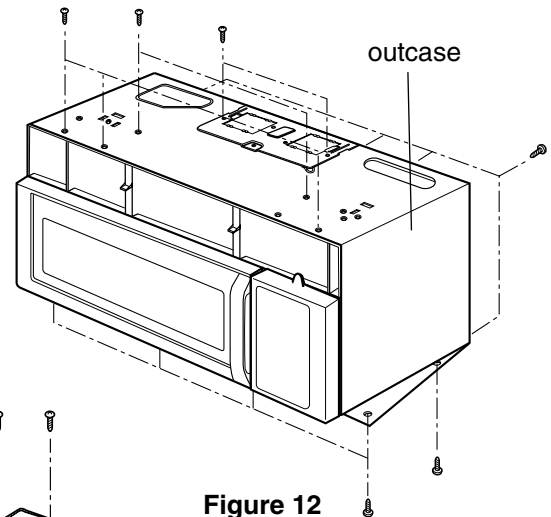


Figure 12

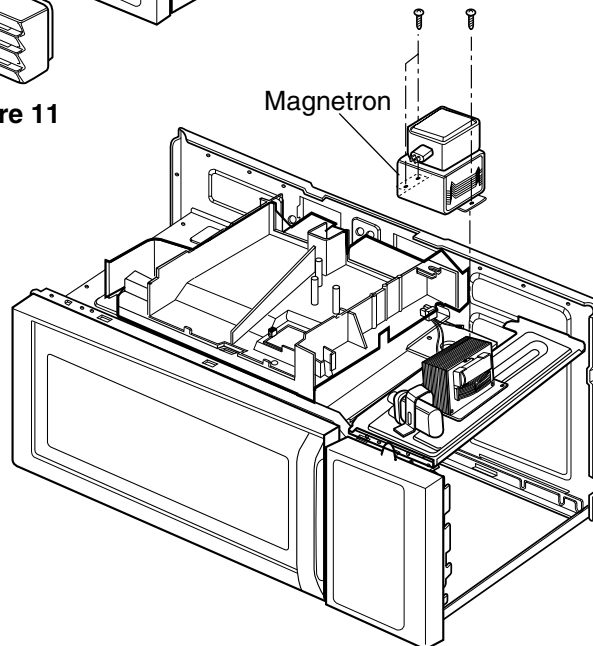


Figure 13

## E. REMOVING STIRRER FAN

(Figures 14 and 15)

- (1) Remove one rivet ASS'Y securing it to the oven upper plate by using knife blade.
- (2) Rotate slightly and pull out the stirrer fan cover.
- (3) Remove the stirrer fan.

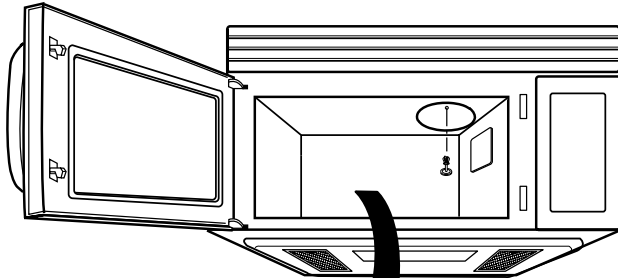


Figure 14

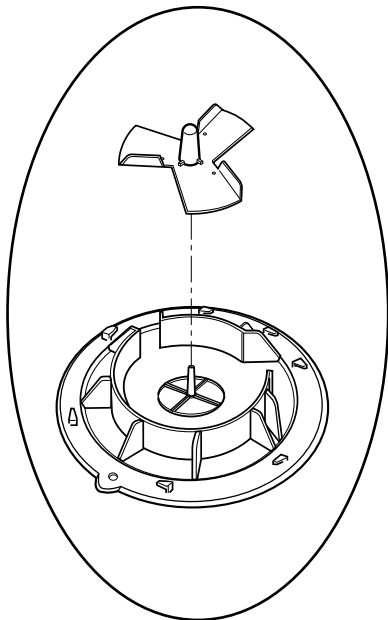


Figure 15

## F. REMOVING DOOR (Figure 16)

- (1) Remove the vent grille by two screws securing it to the outcase loosening.
- (2) Lift up and draw the door.

### NOTES:

- After replacing the door, be sure to check that the primary interlock switch, the secondary interlock switch and the interlock monitor switch is in good operating normally.
- After replacing the door, check for microwave energy leakage with a survey meter. Microwave energy leakage must be below the limit of  $5\text{mW}/\text{cm}^2$ . (With a 275 ml water load)

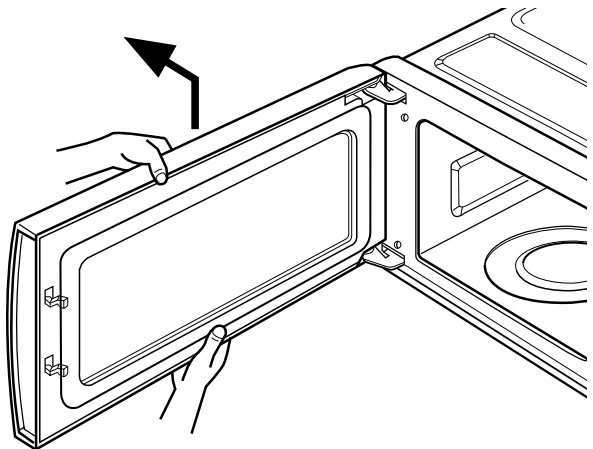


Figure 16

## G. DISASSEMBLING DOOR (Figure 17)

- (1) Remove the dielectric choke by using knife blade or small screw driver, etc.
- (2) Remove two screws securing it to the door handle.

**CAUTION: Be careful not to damage door seal plate with the screwdriver.**

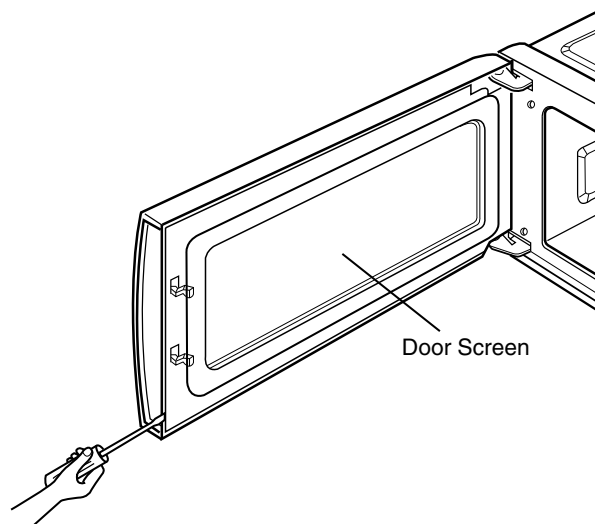
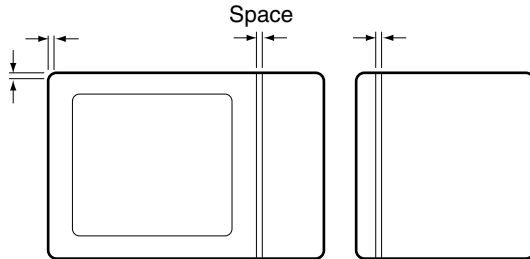


Figure 17

## H. ASSEMBLING DOOR

- (1) 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.



- (3) Carefully pull the ventilation motor ASS'Y out of the microwave oven. (See Figure 20)

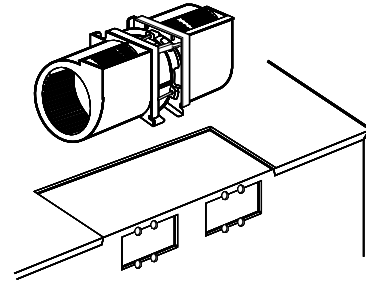


Figure 20

## I. REMOVING THE VENTILATION FAN ASS'Y

- (1) Remove the mounting plate by removing two screws securing it to the back plate. (See Figure 18)
- (2) Remove the two screws securing the MOUNT, ALL and one screw securing the ventilation fan ASS'Y. (See Figure 19)

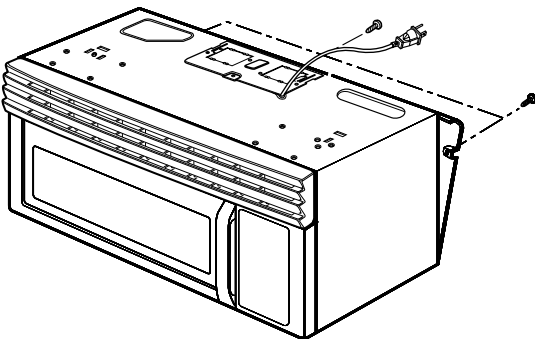


Figure 18

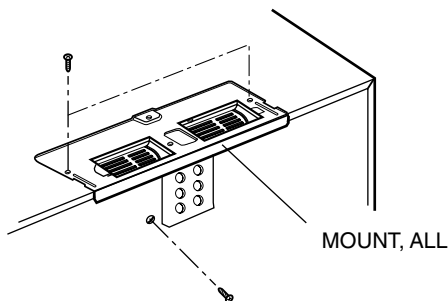


Figure 19

## J. REMOVING THE TURNTABLE MOTOR

- (1) Remove the turntable.
- (2) Remove the turntable shaft VERY CAREFULLY with a slotted screwdriver. (Figure 21)
- (3) Remove the base plate by removing 6 screws securing it to the oven cavity. (Figure 22)
- (4) Disconnect the leadwire from the turntable motor terminals.
- (5) Remove the 2 screws securing the turntable motor to the oven cavity ASS'Y. (Figure 23)

### NOTES:

- Remove the leadwire from the turntable motor VERY CAREFULLY.
- Be sure to grasp the connector not the wires when removing.

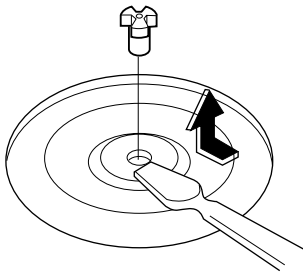


Figure 21

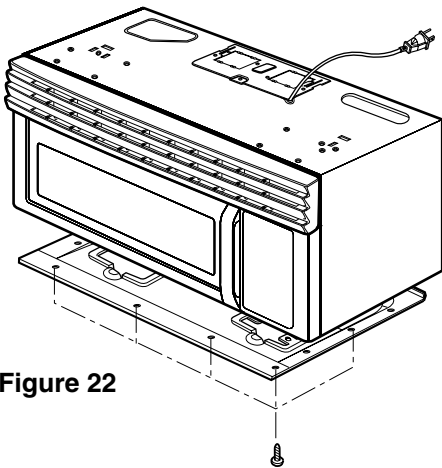


Figure 22

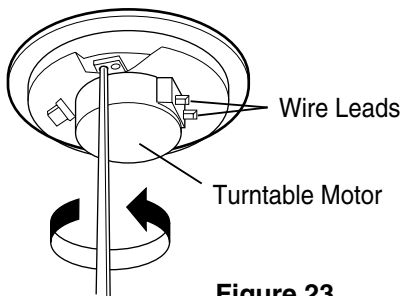


Figure 23

# INTERLOCK SYSTEM

## 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.

## ADJUSTMENT PROCEDURES

To avoid possible exposure to microwave energy leakage, adjust the door latches and interlock switches, using the following procedure.

The Interlock Monitor and Primary Interlock Switch act as the final safety switch protecting the user from microwave energy. The terminals between "COM" and "NC" of the Interlock Monitor must close when the door is opened. After adjusting the Interlock Monitor Switch, make sure that it is correctly connected.

Mounting of the primary/monitor/secondary switches to the latch board.

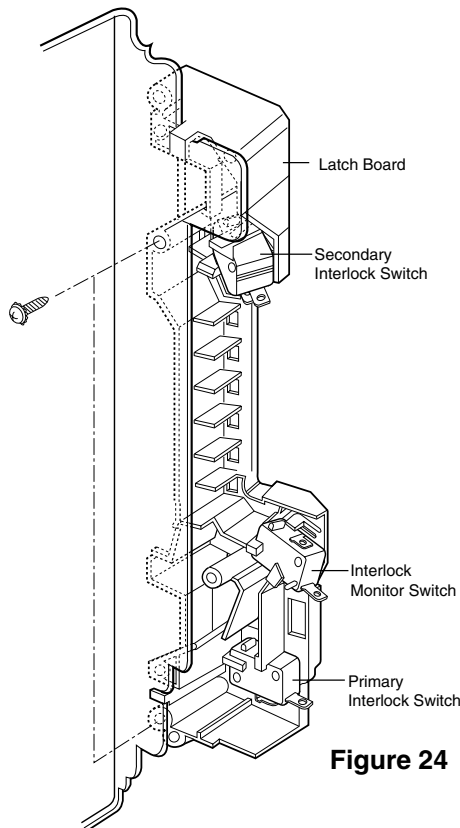


Figure 24

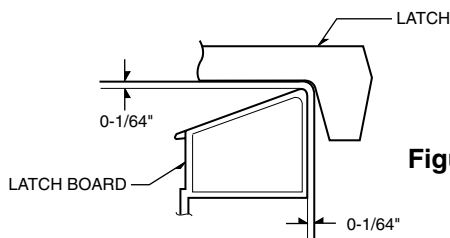


Figure 25

## CHECK THE DOOR LATCH AND SWITCH CLOSING.

### NOTE:

The outer cover of the microwave oven is removed.

- (1) Set the microwave oven on its side so that you can see the latch board and the switches, as shown in Figure 24.
- (2) Close the door tightly and check gaps A and B to be sure they are no more than 1/64" (0.5 mm). See Figure 25 for close-up view of gaps A and B (door latches). If all gaps are less than 1/64" (0.5 mm), adjustment of the latch board may not be necessary. Go to Steps 5 and 6 to check the sequence of the switches.

### NOTE:

To correct sequence of the Primary Interlock Switch, Secondary Interlock Switch and the Interlock Monitor Switch is very important.

**If any gap is larger than 1/64" (0.5 mm), you will need to adjust the latch board". Go to step 3 and follow all steps in order.**

## ADJUST THE LATCH AND SWITCH CLOSING

- (3) Loosen the two screws holding the plastic latch board as shown.
- (4) With the oven door closed tightly, move the latch board upward toward the top of the oven and/or away from the door latch until the gaps are less than 1/64" (0.5 mm). Hold the latch board tightly in this position until you check the sequence of the switches in steps 5 and 6.

## TEST THE LATCH AND SWITCH SEQUENCE

(5) Open the oven door slowly. Watch the door latch, the Secondary Switch. Release Rod and Lever on the switches to make sure they are zero to the body of the switches in the following sequence:

- Primary Interlock Switch
- Secondary Interlock Switch
- Interlock Monitor Switch

Adjust the latch board until the switches operate in this sequence. See Steps 3 and 4.

(6) Close the oven door slowly and be sure it is tightly closed. Watch the three switches to make sure they are zero to the body of the switches in the following sequence:

- Interlock Monitor Switch
- Primary Interlock Switch
- Secondary Interlock Switch

**NOTE:** The Interlock Monitor Switch is an added safety check on the Primary and Secondary Interlock Switches. If the Primary and Secondary Interlock Switches allow the oven to operate with the door open, the Monitor Switch will blow the fuse.

(7) When you achieve the proper sequence of switches in Steps 5 and 6, tighten the latch board screws at that point.

## TEST THE MICROWAVE ENERGY LEAKAGE

Make sure the microwave energy leakage is below the limit of  $1\text{mW}/\text{cm}^2$  (with a 275 ml water load) and  $5\text{mW}/\text{cm}^2$  (with a 275 ml water load without the cabinet) when measured with a survey meter.



# INTERLOCK CONTINUITY TEST

## A. PRIMARY INTERLOCK SWITCH TEST

When the door is opened slowly, an audible **click** should be heard at the same time or successively at intervals and 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 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

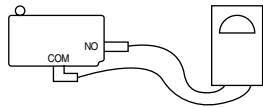


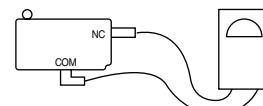


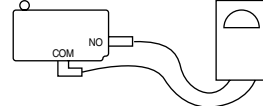


Disconnect the wire lead from the secondary switch.

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

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

TYPE NO. SZM-V16-FA-63 OR VP-533A-OF OR V-5230Q FOR PRIMARY SWITCH

TYPE NO. SZM-V16-FA-62 OR VP-532A-OF OR V-5220Q FOR MONITOR SWITCH

TYPE NO. SZM-V16-FA-63 OR VP-533A-OF OR V-5230Q FOR SECONDARY SWITCH

# TEST AND CHECKOUT PROCEDURES, AND TROUBLE SHOOTING

## - CAUTIONS -

- DISCONNECT THE POWER SUPPLY CORD FROM THE WALL OUTLET WHENEVER REMOVING THE CABINET FROM THE UNIT. PROCEED WITH THE TESTS ONLY AFTER DISCHARGING THE HIGH VOLTAGE CAPACITOR AND REMOVING THE WIRE LEADS FROM THE PRIMARY WINDING OF THE HIGH VOLTAGE TRANSFORMER. (SEE FIGURE 26)
- ALL OPERATIONAL CHECKS WITH MICROWAVE ENERGY MUST BE DONE WITH A LOAD (1 LITER OF WATER IN CONTAINER) IN THE OVEN.

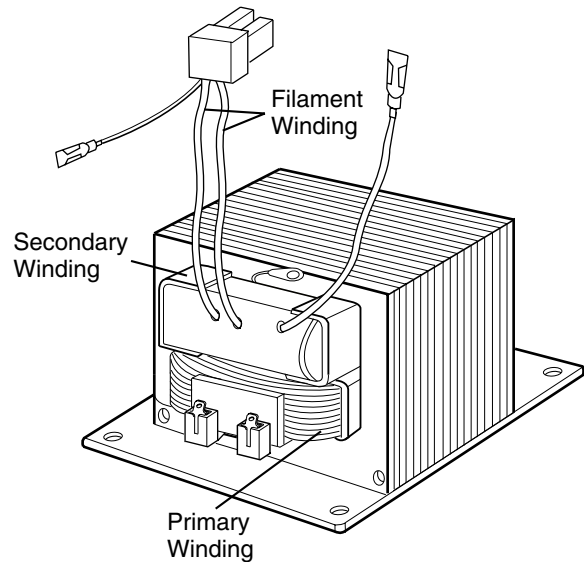
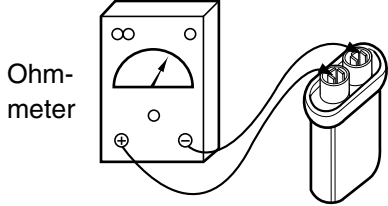
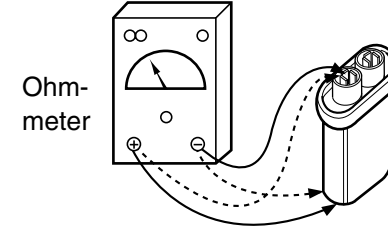
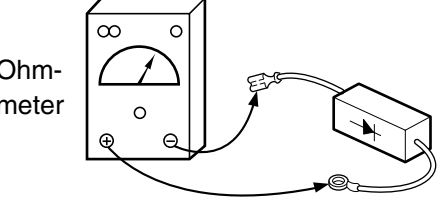
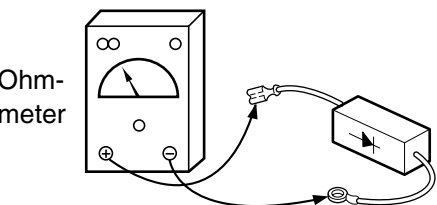


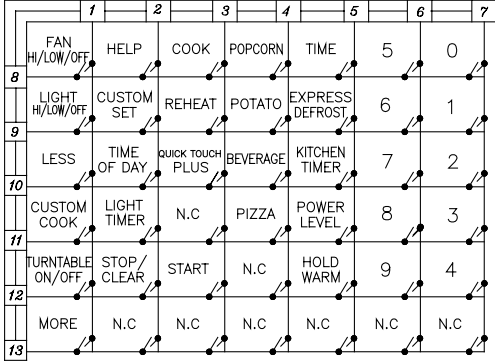
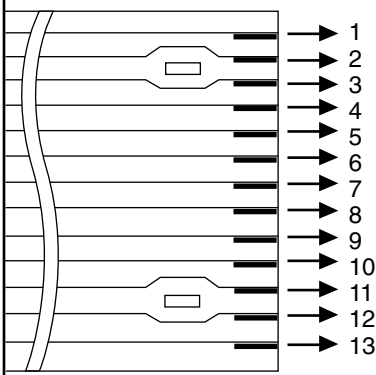
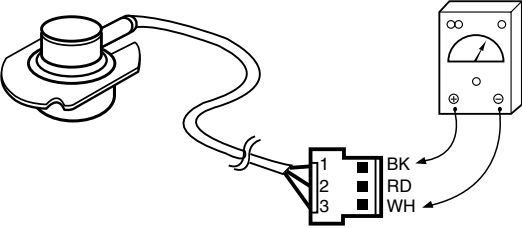
Figure 26

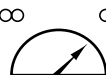

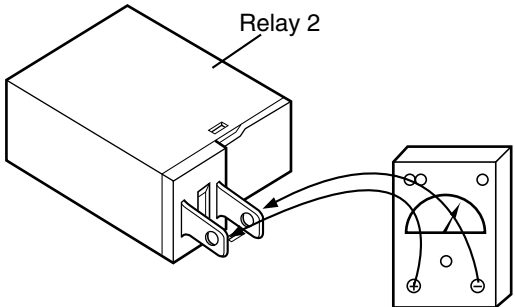
## A. TEST PROCEDURES

COMPONENTS	TEST PROCEDURES	RESULTS
MAGNETRON (Wire leads are removed)	<ol style="list-style-type: none"> <li>1) Measure the resistance: Across the filament terminals of the magnetron with an ohm-meter on Rx1 scale.</li> <li>2) Measure the resistance: Between each filament terminal of the magnetron and the chassis ground with an ohm-meter on high test scale.</li> </ol>	<p>Normal reading: Less than 1 ohm.</p> <p>Normal reading: Infinite ohms.</p> <p><b>NOTE:</b> Replace the magnetron, if the magnetron checks and all of the high voltage component tests are good, but the unit still does not heat a load.</p>
HIGH-VOLTAGE TRANSFORMER (Wire leads are removed)	<ol style="list-style-type: none"> <li>1) Measure the resistance: With an ohm-meter on Rx1 scale.                             <ol style="list-style-type: none"> <li>a. Primary winding;</li> <li>b. Filament winding;</li> <li>c. Secondary winding;</li> </ol> </li> <li>2) Measure the resistance: With an ohm-meter on highest scale.                             <ol style="list-style-type: none"> <li>a. Primary winding to ground;</li> <li>b. Filament winding to ground;</li> </ol> </li> </ol>	<p>Normal readings: Approx. 0.3 to 0.5 ohm. Less than 0.1 ohm. Approx. 65 to 120 ohms.</p> <p>Normal readings: Infinite ohms. Infinite ohms.</p>

**NOTE:** A MICROWAVE ENERGY LEAKAGE TEST MUST ALWAYS BE PERFORMED WHEN THE UNIT IS SERVICED FOR ANY REASON.

COMPONENTS	TEST PROCEDURES	RESULTS
HIGH-VOLTAGE CAPACITOR	Measure the resistance: (1) Terminal to terminal   <b>Figure 27-a</b>	Normal reading: Momentarily indicates several ohms, and then gradually returns to infinite ohms.  Abnormal reading: Indicates continuity or infinite ohms from the beginning.
	(2) Terminal to case   <b>Figure 27-b</b>	Normal readings: Infinite.  Abnormal reading: Indicates continuity.
HIGH-VOLTAGE DIODE	Measure the continuity: (1) Forward   <b>Figure 28-a</b>	Normal readings: continuity.  Abnormal reading: Infinite.
	(1) Reverse   <b>Figure 28-b</b>	Normal readings: Infinite.  Abnormal reading: continuity.

COMPONENTS	TEST PROCEDURES	RESULTS						
<p style="text-align: center;"><b>TOUCH KEY BOARD</b></p>	<p>Measure the resistance between terminal pins of connector KEY CONNECTOR.</p> <p><b>NOTE:</b> When reconnecting the FPC connector, make sure that the holes on the FPC connector are properly engaged with hooks on the plastic fastener.</p> <p style="text-align: center;"><b>MATRIX CIRCUIT FOR TOUCH KEY BOARD CONNECTOR(KEY CON)</b> (For detail matrix circuit of each model, refer to page 5-2.)</p>  <p style="text-align: center;"><b>Figure 29</b></p>	<table border="1" data-bbox="992 187 1474 363"> <thead> <tr> <th data-bbox="992 187 1159 272" rowspan="2">Resistance value</th> <th data-bbox="1159 187 1295 272">When touched</th> <th data-bbox="1295 187 1474 272">When not touched</th> </tr> </thead> <tbody> <tr> <td data-bbox="992 272 1159 363"></td> <td data-bbox="1159 272 1295 363">Less than 400 ohms</td> <td data-bbox="1295 272 1474 363">More than 1 mega ohm</td> </tr> </tbody> </table> <p style="text-align: center;"><b>FPC CONNECTOR Top</b></p>  <p style="text-align: center;"><b>Figure 30</b></p>	Resistance value	When touched	When not touched		Less than 400 ohms	More than 1 mega ohm
Resistance value	When touched	When not touched						
		Less than 400 ohms	More than 1 mega ohm					
<p style="text-align: center;"><b>SENSOR (For sensor model only)</b></p>	 <p style="text-align: center;"><b>Figure 31</b></p>	<p>Normal: Approximately BK~RD: 4.5~6.2 Kohm RD~WH: 2.0~3.5 Kohm BK~WH: 2.0~3.5 Kohm</p> <p>Abnormal: Infinite or several.</p>						

COMPONENTS	TEST PROCEDURES	RESULTS		
		POWER LEVEL	$\infty$  $\circ$	$\infty$  $\circ$
RELAY2	<p>Check for continuity of relay 2 with an ohm-meter. (Remove wire leads from relay 2 and operate the unit.)</p>  <p><b>Figure 32</b></p> <p><b>⚠ CAUTION: The relay connector 2(White) and 5(Red) must be correctly connected Relay 6. These two connectors are not Inter-changeable.</b></p>	1	4 sec	18 sec
		2	6 sec	16 sec
		3	8 sec	14 sec
		4	10 sec	12 sec
		5	12 sec	10 sec
		6	14 sec	8 sec
		7	16 sec	6 sec
		8	18 sec	4 sec
		9	20 sec	2 sec
		10	22 sec	0

**NOTES:**

- A MICROWAVE ENERGY 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.

**B. CHECKOUT PROCEDURES**

(1) CHECKOUT PROCEDURES FOR FUSE BLOWING

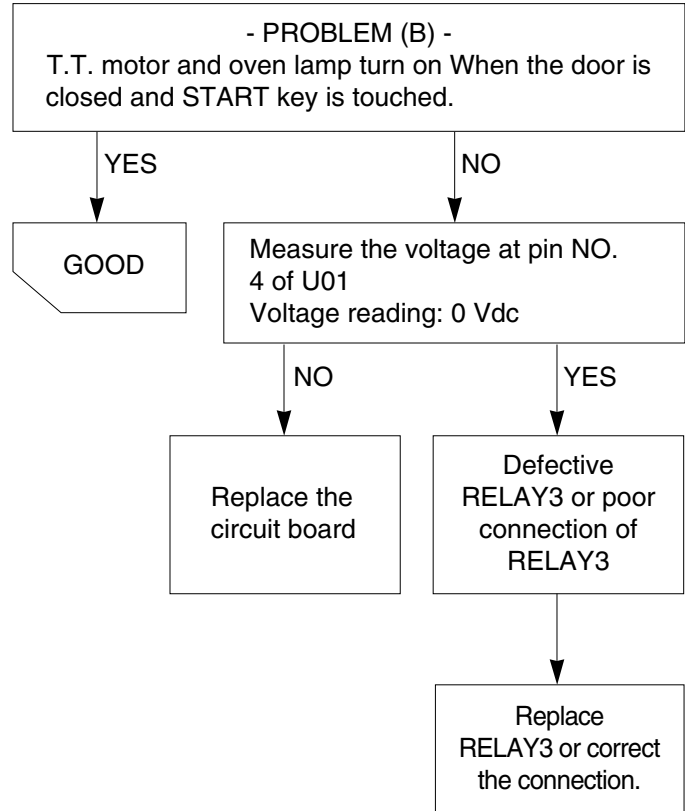
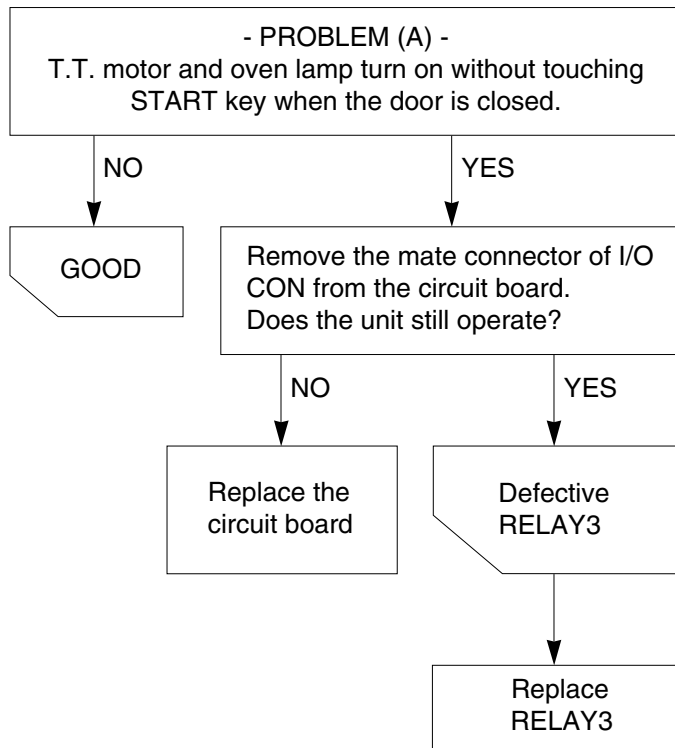
**CAUTION:** REPLACE BLOWN FUSE WITH 20 AMPERE FUSE.

PROBLEMS	CAUSES
Fuse blows immediately after the door is closed.	Improper operation of the primary interlock, secondary interlock switches and/or the interlock monitor switch.
Fuse blows immediately after the door is opened.	
Fuse blows when the door is closed and START key is touched.	Malfunction of the high voltage transformer; the high voltage capacitor including the diode, the magnetron, the blower motor or the circuit board.

**NOTES:**

- If the fuse is blown by an improper switch operation, replace the all Interlock switches, PCB Ass'y and the fuse at the same time. After replacing the the all Interlock switches, PCB Ass'y, Fuse with new ones, make sure that they are correctly connected.
- Check for microwave energy leakage according to INTERLOCK ADJUSTMENT PROCEDURES on page 7- 12 when the primary interlock, secondary interlock switches and/or the interlock monitor switches are adjusted or replaced.

(2) CHECKOUT PROCEDURES FOR RELAY.



(3) CHECKOUT PROCEDURES FOR CIRCUIT BOARD

The following symptoms indicate a defective circuit board.

- 1) The start function fails to operate but the high voltage Systems, the interlock switches, the door sensing and the relay check good.
- 2) The unit with a normal relay continuously operates.
- 3) Proper temperature measurement is not obtained.
- 4) The buzzer does not sound or continues to sound.
- 5) Some segments of one or more digits do not light up, or they continue to light up, or segments light when they should not.
- 6) Wrong figures appear.
- 7) The figures of all digits.
- 8) Some of the indicators do no flicker light up.
- 9) The clock does not keep time properly.

**NOTE:** A MICROWAVE ENERGY LEAKAGE TEST MUST ALWAYS BE PERFORMED WHEN THE UNIT IS SERVICED FOR ANY REASON.

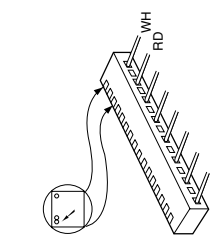
**C. TROUBLE SHOOTING**

Before following this troubleshooting read "TRIAL OPERATION" on page 6- 1.

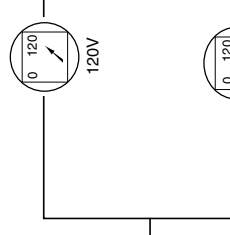
- "DISPLAY" Problems, "A" thru "C"
- "HELP UP" Problems, "D" thru "E"
- "BUZZER Problems, "F"

**PROBLEM - A:** "PLEASE SET TIME OF DAY" does not appear in display window when power supply cord is plugged into wall outlet.

- 1**
- Check: 1. POWER SUPPLY
  2. FUSE (See "CHECKOUT PROCEDURES FOR FUSE BLOWING: on page 7- 18)
  3. OVEN CAVITY THERMOSTAT

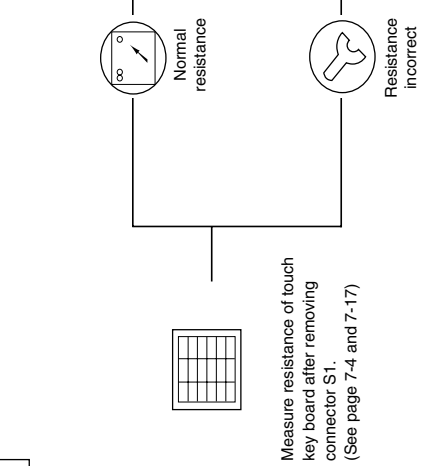


Measure voltage between pin 1 and pin 3 of connector CN1.



**PROBLEM - B:** Display does not show correct numbers and/or correct indications when programmed.

**1**



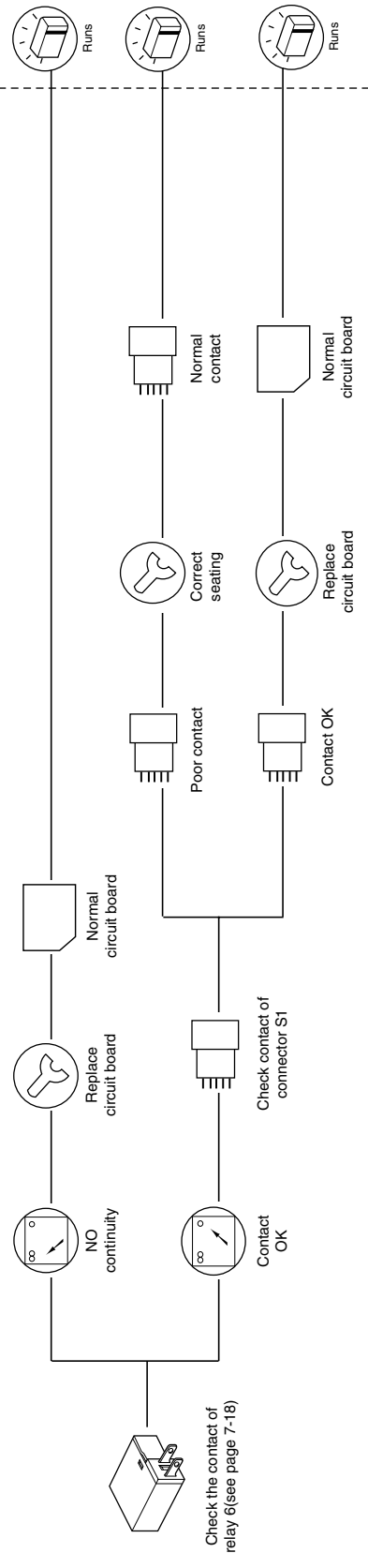
Measure resistance of touch key board after removing connector S1. (See page 7-4 and 7-17)



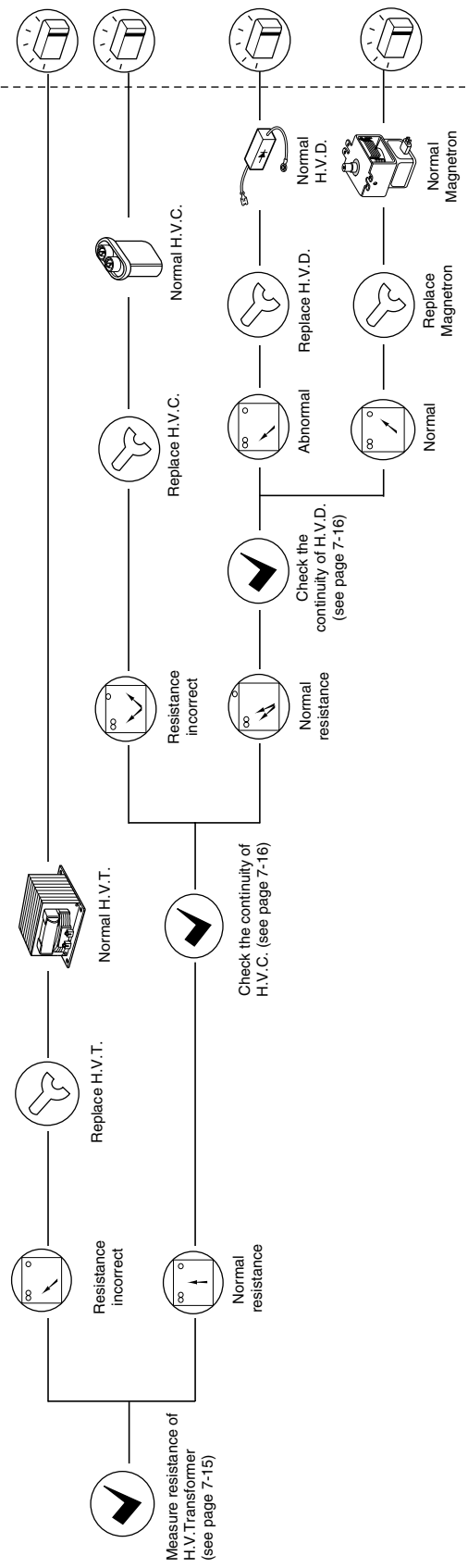


**PROBLEM - C:** Unit does not heat up even if display counts down when START key is touched for "HIGH POWER" cooking.

- 1 Check: 1. PRIMARY AND SECONDARY INTERLOCK SWITCHES
- 2. THERMOSTAT



2



**PROBLEM - D:** No buzzing when touching the key, between stages or at end of cooking

1



Check normal operation circuit board



Replace circuit board



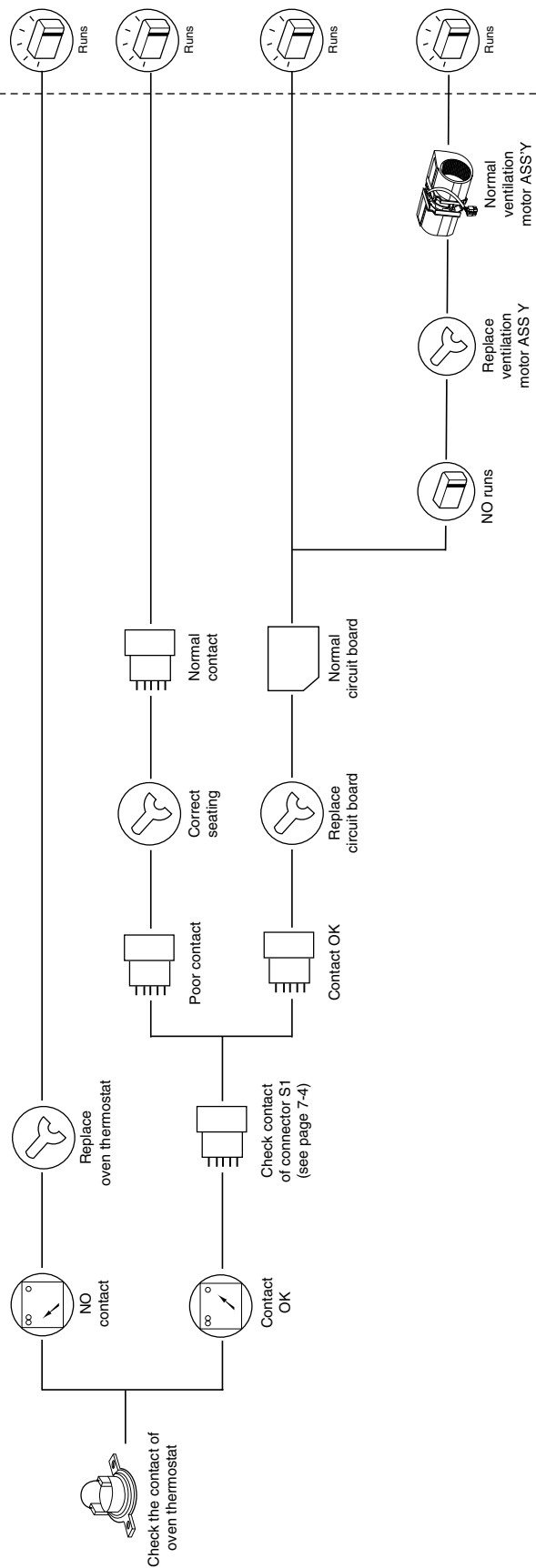
Normal circuit board



Runs

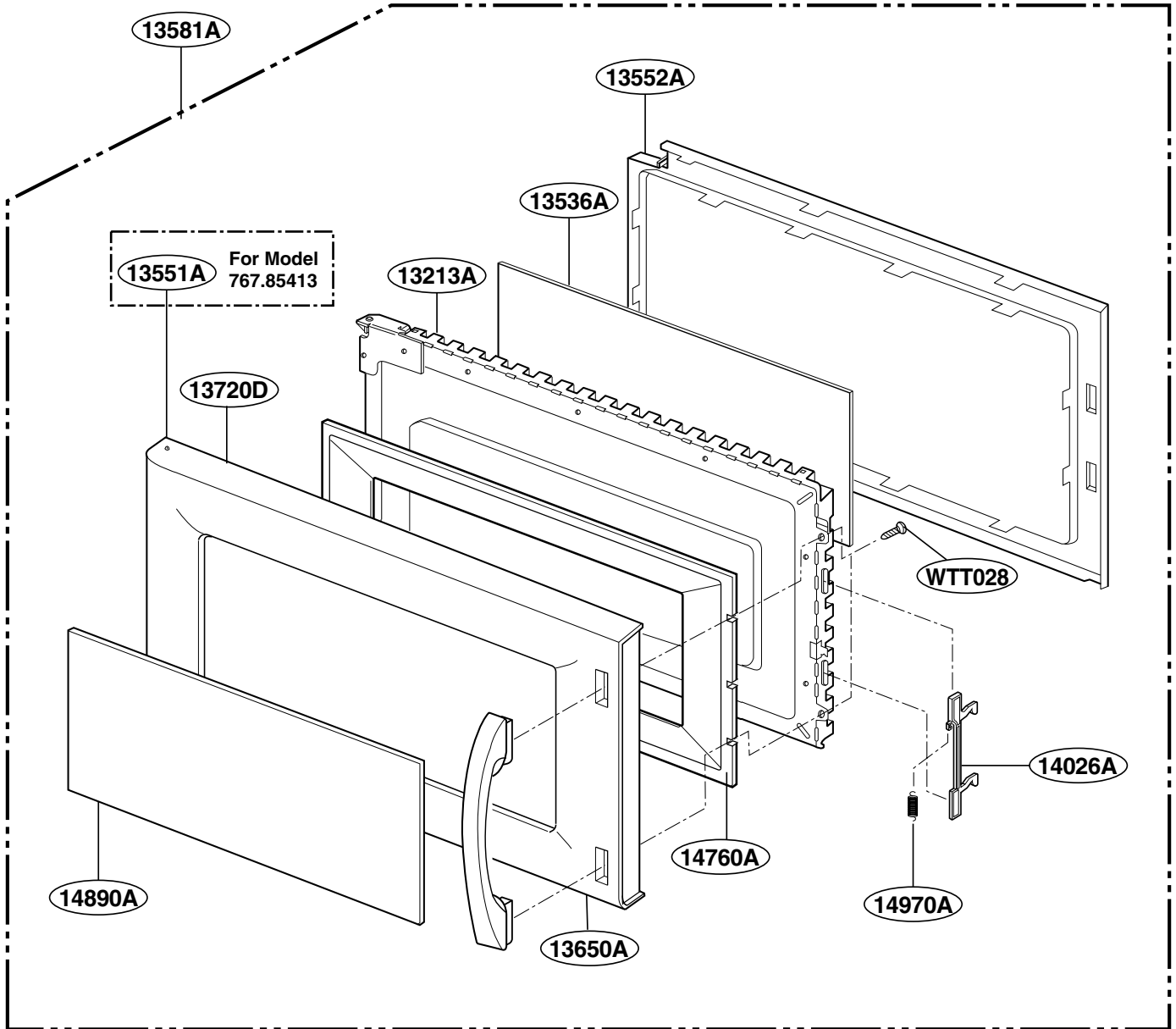
**PROBLEM - G:** Ventilation fan does not operate when "FAN HIGH/LOW" key is touched.

- 1 Check: 1. POWER SUPPLY
- 2. FUSE



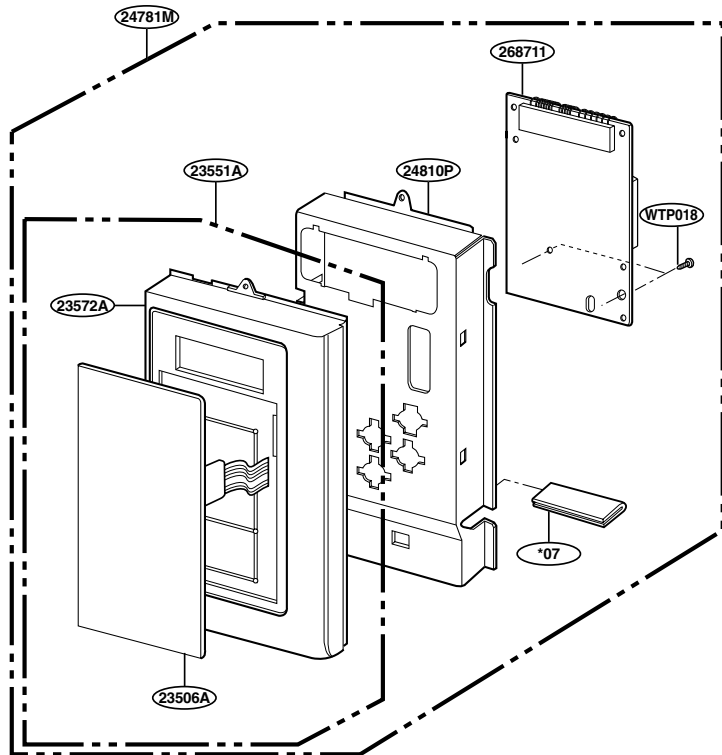
# EXPLODED VIEW

## DOOR PARTS

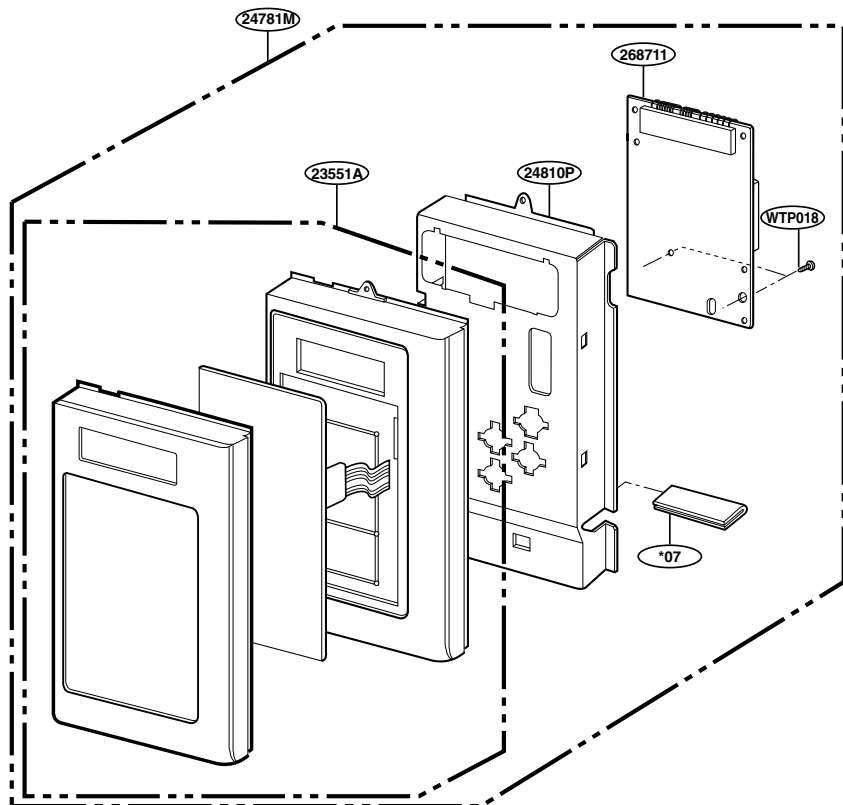


# CONTROLLER PARTS

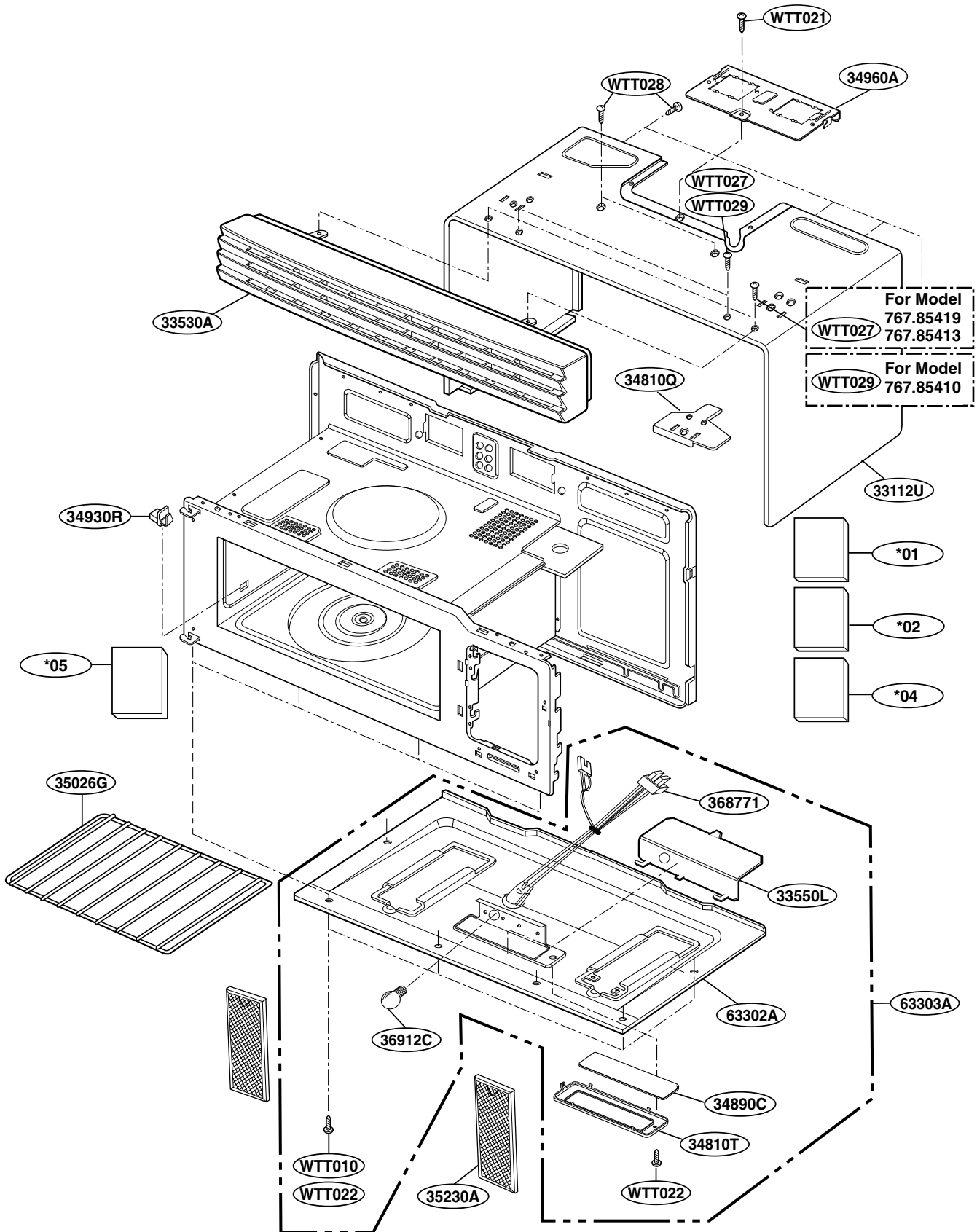
For Model: 767.85410  
767.85419



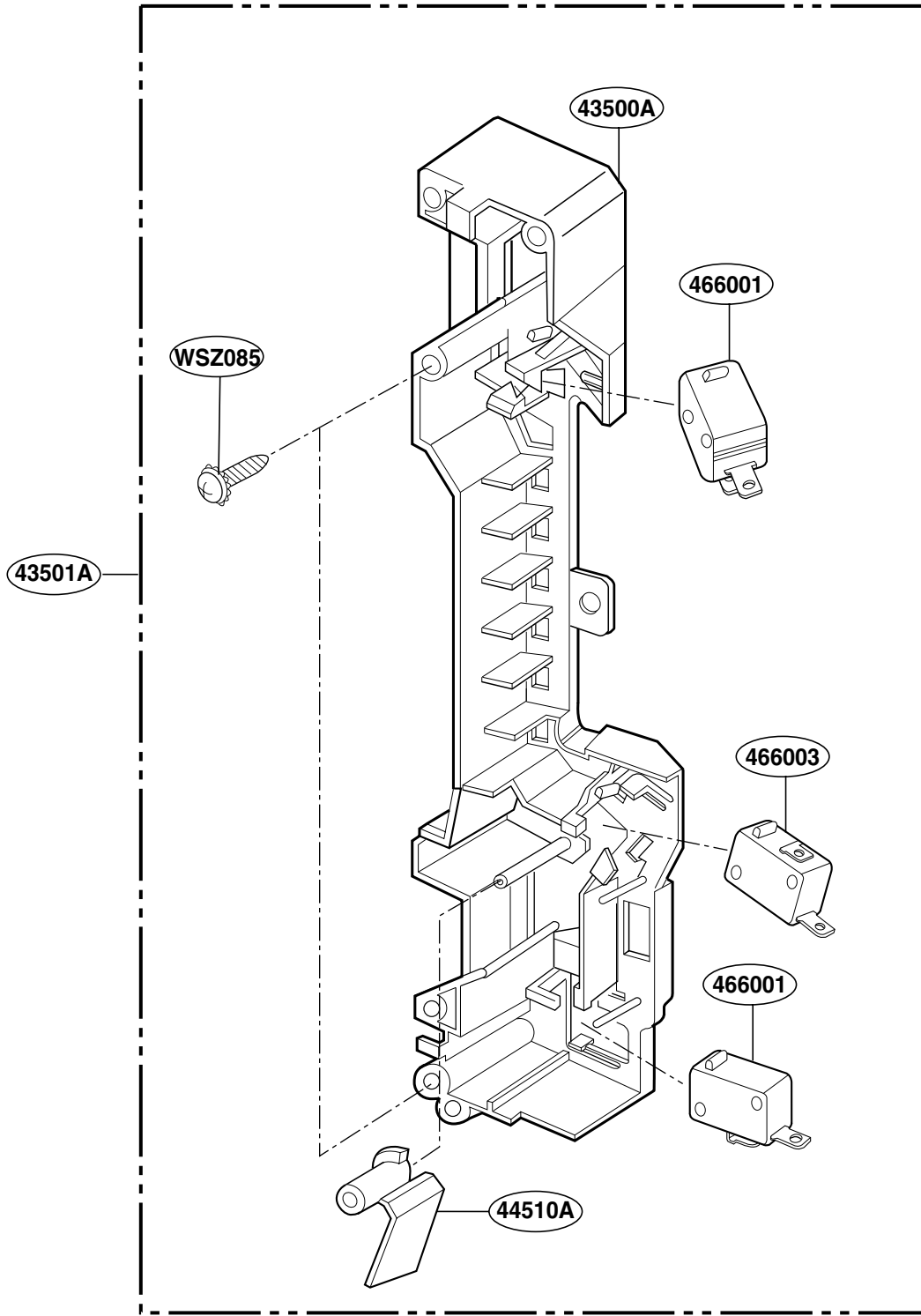
For Model: 767.85413



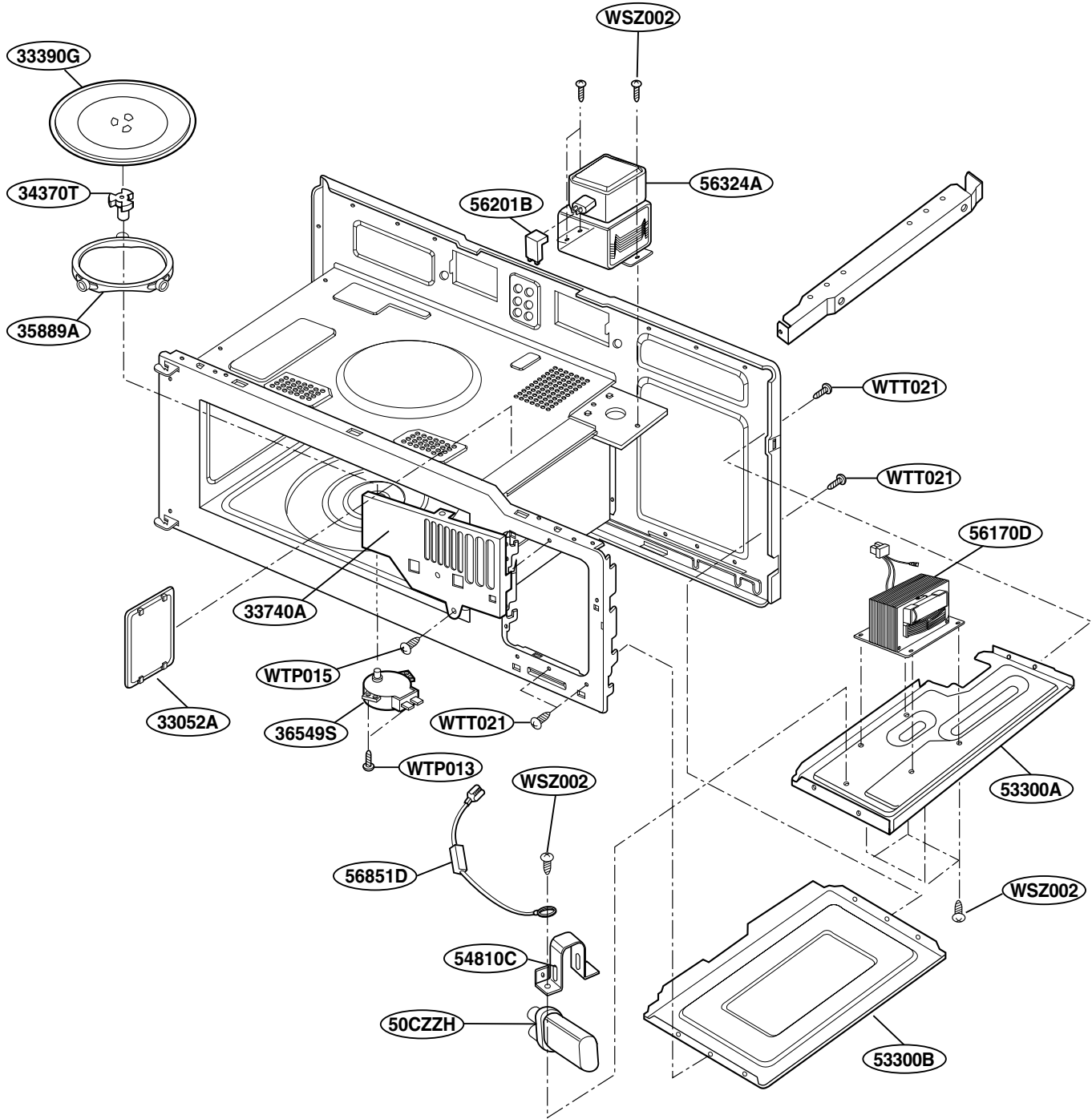
# OVEN CAVITY PARTS



# LATCH BOARD PARTS

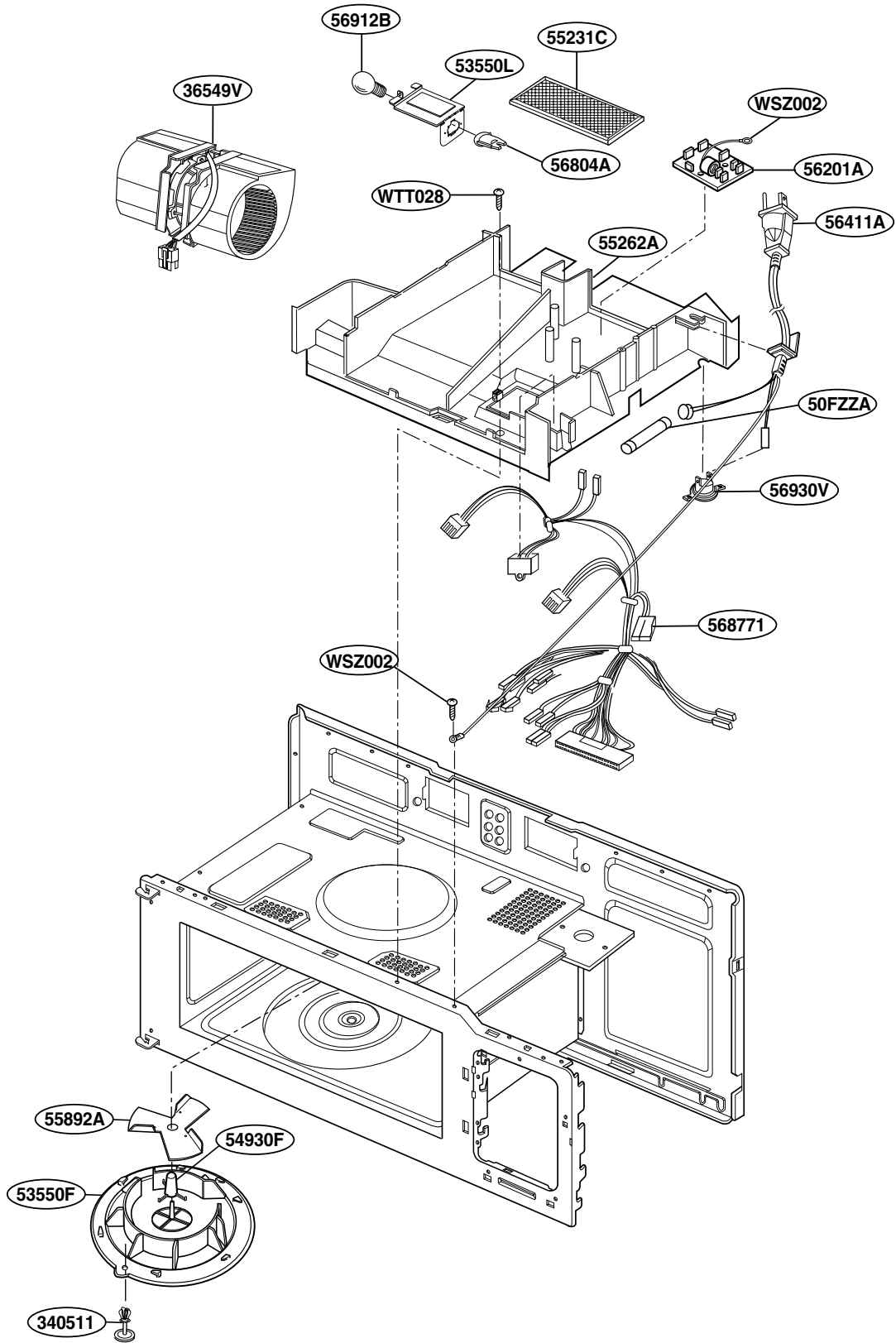


# INTERIOR PARTS(I)

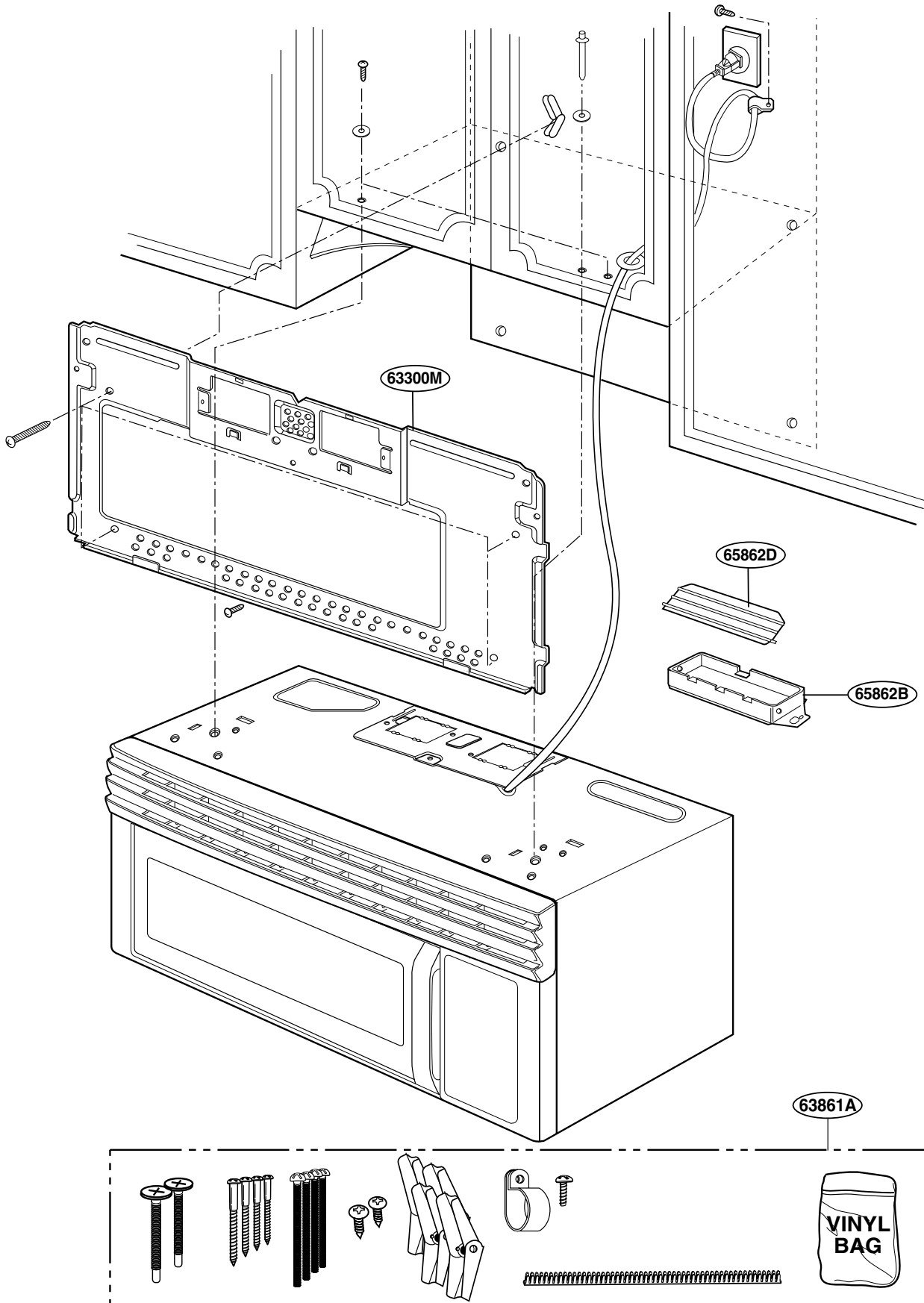




# INTERIOR PARTS(II)



# INSTALLATION PARTS



# REPLACEMENT PARTS LIST

For Model: 767.85410

I/C : INTERCHANGEABILITY CODE

Mar. 29. 2005

Location No.	Part Name	Difference Chart (Part No)			SVC	Alternate
		767.8541000	I/C	767.8541001		
*01	MANUAL,OWNERS	3828W5A4048	→	3828W5A8142	R	
*02	MANUAL,SERVICE	3828W5S3674	→	3828W5S5159	R	
*04	MANUAL,INSTALLATION	3828W5U0348	→	3828W5U0438	R	
*05	LABEL,COOKING GUIDE	3850W2A233D	→	3850W2A233G	R	
*06	TEMPLATE	4922W5A027A	→	4922W1A021C	R	
*07	CARD,TECHNICAL	3840W1T004C	→	3840W1T004F	R	
*10	BOX,YELLOW	3890W3Y819H	→	3890W3Y927B	R	
13213A	DOOR FRAME ASSEMBLY	3213W1A035C	→	3213W1A049G	R	
13536A	SEAL TAPE	3536WRA001R	→	3536W1A012B	R	
13552A	CHOKE COVER	3552W1A032B	→	3552W1A032E	R	
13581A	DOOR ASSEMBLY	3581W1A352A	→	3581W1A352H	R	
13650A	HANDLE,DOOR	3650W1A075A	→	3650W1A075E	R	3650W1A075A
13720D	PANEL,DOOR	3720W0D259A	→	3720W0D259D	R	3720W0D259A
14026A	LATCH	4026W2A015A	→	4026W2A019A	R	
14760A	BAFFLE	4890W1A021X	→	4760W0A002D	R	4760W0A002A
14890A	GLASS	4970WRA001E	→	4890W1A066C	R	4890W1A054D
14970A	SPRING	4760W0A002A	→	4970WRA001G	R	
23506A	KEY MEMBRANE	3506W1A600A		3506W1A600A	R	
23551A	SERVICE PARTS(CONTROL PANEL+KEY PAD)		→	383EW5A204E	R	
23572A	PANEL,CONTROL	3720W0C058A	→	3720W0C058D	R	
24781M	CONTROLLER ASSEMBLY,MICOM	4781W1M307G	→	4781W1M307U	R	
24810P	BRACKET,CONTROL PANEL	4810W1G061B	→	4810W1G061E	R	4810W1G061B
268711	PWB(PCB) ASSEMBLY,SUB	6871W1S106D	→	6871W1S106F	R	
33052A	CANOPY,RESIN	3052WRA002A	→	3052W1A002A	R	
33112U	OUT CASE,U-BENDING	3112W1U026H	→	3112W0U052H	R	
33390G	TRAY,GLASS	1B71961E	→	1B71961H	R	
33530A	GRILLE,VENT	3530W0A030A	→	3530W0A030E	R	
33550L	COVER,LAMP	3550W3A095A	→	3550W3A095C	R	3550W3A095A
33740A	PROTECTOR (MECH)	3740W1A005A	→	3740W1A005E	R	3740W1A005A
340511	RIVET ASSEMBLY	4051W3A001A		4051W3A001A	R	
34370T	SHAFT,TURN TABLE	3B72373A	→	4370W1A006B	R	
34810Q	BRACKET,MOUNT	4810W3G062A	→	4810W1A149A	R	
34810T	BRACKET,LAMP	4810W3G100A	→	4810W1A150C	R	
34890C	GLASS	4890W4A001G	→	4890W1A045A	R	4890W4A001G
34930R	HOLDER,COOK AUXILIARY	4890W4A001G	→	4930W1A069A	R	
34960A	MOUNT	4930W1A026A	→	4960W1A021B	R	
35026G	SHELF	4960W1A004B	→	5026W1A048C	R	
35230A	FILTER(MECH),GREASE	5026W1A048C	→	5230W1A012A	R	2B72705C
35230A	FILTER(MECH),GREASE	2B72705B	→	5230W1A012A	R	5230W1A012B
35889A	ROTATING RING ASSEMBLY	5889W2A012D	→	5889W2A012F	R	
36549S	MOTOR(CIRC),SYNCHRONOUS	6549W1S013C	→	6549W1S011M	R	6549W1S015C
36549V	MOTOR(CIRC),VENTILATION	6549W1V006F		6549W1V006F	R	
368771	HARNESS	6877W1A340A	→	6877W1A002A	R	
36912C	LAMP,DRAWING	6912W3Q001A	→	6912W1Z004B	R	
43500A	BOARD,LATCH	3500W1A013A	→	3500W1A028B	R	
43501A	BOARD ASSEMBLY,LATCH	3501W1A019C	→	3501W1A019D	R	
44510A	LEVER	4510W4A005A	→	4510W3A012C	R	
466001	SWITCH,MICRO	3B73362F	→	6600W1K001D	R	6600W1K004C
466001	SWITCH,MICRO	3B73362F	→	6600W1K001D	R	6600W1K003D

Location No.	Part Name	Difference Chart (Part No)			SVC	Alternate
		767.8541000	I/C	767.8541001		
466003	SWITCH,MICRO	3B73361E	→	6600W1K001C	R	6600W1K003C
466003	SWITCH,MICRO	3B73361E	→	6600W1K001C	R	6600W1K004B
50CZZH	CAPACITOR,DRAWING[HIGH VOLTAGE]	0CZZW1H004B		0CZZW1H004B	R	0CZZW1H004G
50CZZH	CAPACITOR,DRAWING[HIGH VOLTAGE]	0CZZW1H004B		0CZZW1H004B	R	0CZZW1H002H
50CZZH	CAPACITOR,DRAWING[HIGH VOLTAGE]	0CZZW1H004B		0CZZW1H004B	R	0CZZW1H001Q
50FZZA	FUSE,DRAWING	3B74133K	→	3B74133Q	R	3B74133K
53300A	PLATE,BOTTOM	3300W1A052A	→	3300W1A052B	R	3300W1A052A
53300B	PLATE,BOTTOM	3300W1A003A	→	3300W1A003D	R	3300W1A003A
53550F	COVER,STIRRER FAN	3550W1A126A	→	3550W1A126B	R	3550W1A126A
53550L	COVER,LAMP	3550W3A082A	→	3550W1A189A	R	
54810C	BRACKET,CAPACITOR	4810W3C002A	→	4810W1A141A	R	
54930F	HOLDER,STIRRER FAN	4930W3A013A	→	4930W1A068A	R	
55231C	FILTER(MECH),CHARCOAL	2B72706D	→	5230W1A011A	R	5230W1A011B
55262A	DUCT	5208W0A006A	→	5208W0A006B	R	
55892A	FAN	5892W1A003A		5892W1A003A	R	
56170D	TRANSFORMER,HIGH VOLTAGE	6170W1D052B		6170W1D052B	R	
56201A	FILTER ASSEMBLY(CIRC)	2B72130F		2B72130F	R	
56201B	FILTER ASSEMBLY(CIRC)	2B71165P	→	6201W2A019D	R	
56324A	MAGNETRON	6411W1A010L	→	2B71165R	R	
56411A	POWER CORD ASSEMBLY	6201W2A019D	→	6411W1A010Z	R	
56804A	SOCKET(CIRC),LAMP	6804W3A001A		6804W3A001A	R	
56851D	CABLE ASSEMBLY	6021W3B001A	→	6021W3B001V	R	6021W3B001G
56851D	CABLE ASSEMBLY	6021W3B001A	→	6021W3B001V	R	6851W1A002B
568771	HARNESS	6877W1A409C	→	6877W1A004B	R	
56912B	LAMP,DRAWING	3B70067A	→	6912W1Z004A	R	
56930V	THERMOSTAT	6930W1A003E		6930W1A003E	R	6930W3A001S
63300M	PLATE,MOUNTING	3300W0M003A	→	3300W0A018A	R	
63302A	BASE PLATE	3302W0A013H	→	3302W0A047A	R	
63303A	BASE PLATE ASSEMBLY	3303W1A041N	→	3303W1A072G	R	
63861A	KIT ASSEMBLY	2B72771A	→	3861W1A043A	R	
65862B	BRACKET,MISC	3B72144A	→	4810W1A151A	R	
65862D	DAMPER	3B71432A	→	4900W1A001B	R	
WSZ002	SCREW TAP TITE(S),BINDING HEAD	1SBF0402418		1SBF0402418	R	
WSZ085	SCREW,DRAWING	4B70188B	→	4B70188C	R	
WTP013	SCREW TAPPING,PAN HEAD	1TPL0402418		1TPL0402418	R	
WTP015	SCREW TAPPING,PAN HEAD	1TPL0402618		1TPL0402618	R	
WTP018	SCREW TAPPING,PAN HEAD	1TPL0402818		1TPL0402818	R	
WTT010	SCREW TAPPING,TRUSS HEAD	1TTG0402422		1TTG0402422	R	
WTT021	SCREW TAPPING,TRUSS HEAD	1TTL0402418		1TTL0402418	R	
WTT022	SCREW TAPPING,TRUSS HEAD	1TTL0402422		1TTL0402422	R	
WTT028	SCREW TAPPING,TRUSS HEAD	1TTL0402818		1TTL0402818	R	
WTT029	SCREW TAPPING,TRUSS HEAD	1TTL0402822		1TTL0402822	R	

# REPLACEMENT PARTS LIST

For Model: 767.85413

I/C : INTERCHANGEABILITY CODE

Mar. 29. 2005

Location No.	Part Name	Difference Chart (Part No)			SVC	Alternate
		767.8541300	I/C	767.8541301		
*01	MANUAL,OWNERS	3828W5A4048	→	3828W5A8142	R	
*02	MANUAL,SERVICE	3828W5S3674	→	3828W5S5159	R	
*04	MANUAL,INSTALLATION	3828W5U0348	→	3828W5U0438	R	
*05	LABEL,COOKING GUIDE	3850W2A233D	→	3850W2A233G	R	
*06	TEMPLATE	4922W5A027A	→	4922W1A021C	R	
*07	CARD,TECHNICAL	3840W1T004C	→	3840W1T004F	R	
*10	BOX,YELLOW	3890W3Y819J	→	3890W3Y927C	R	
13213A	DOOR FRAME ASSEMBLY	3213W1A035D	→	3213W1A049F	R	
13536A	SEAL TAPE	3536WRA001R	→	3536W1A012B	R	
13551A	SERVICE PARTS(DOOR PANEL+GLASS+COVER)	383EW5A204A	→	383EW5A204C	R	
13552A	CHOKE COVER	3552W1A032B	→	3552W1A032E	R	
13581A	DOOR ASSEMBLY	3581W1A355A	→	3581W1A355E	R	
13650A	HANDLE,DOOR	3650W1A075D	→	3650W1A075H	R	3650W1A075D
14026A	LATCH	4026W2A015A	→	4026W2A019C	R	
14760A	BAFFLE	4760W0A002B	→	4760W0A002E	R	4760W0A002B
14890A	GLASS	4890W1A021Y	→	4890W1A066D	R	4890W1A054E
14970A	SPRING	4970WRA001E	→	4970WRA001G	R	
23551A	CONTROLLER ASSEMBLY,SUB	383EW5A205A	→	4781W1A299B	R	
24781M	CONTROLLER ASSEMBLY,MICOM	4781W1M311B	→	4781W1M311F	R	
24810P	BRACKET,CONTROL PANEL	4810W1G061B	→	4810W1G061E	R	4810W1G061B
268711	PWB(PCB) ASSEMBLY,SUB	6871W1S106D	→	6871W1S106F	R	
33052A	CANOPY,RESIN	3052WRA002A	→	3052W1A002A	R	
33112U	OUT CASE,U-BENDING	3112W1U026J	→	3112W0U052J	R	
33390G	TRAY,GLASS	1B71961E	→	1B71961H	R	
33530A	GRILLE,VENT	3530W0A030D	→	3530W0A030H	R	
33550L	COVER,LAMP	3550W3A095A	→	3550W3A095C	R	3550W3A095A
33740A	PROTECTOR (MECH)	3740W1A005A	→	3740W1A005E	R	3740W1A005A
340511	RIVET ASSEMBLY	4051W3A001A		4051W3A001A	R	
34370T	SHAFT,TURN TABLE	3B72373A	→	4370W1A006B	R	
34810Q	BRACKET,MOUNT	4810W3G062A	→	4810W1A149A	R	
34810T	BRACKET,LAMP	4810W3G100A	→	4810W1A150C	R	
34890C	GLASS	4890W4A001G	→	4890W1A045A	R	4890W4A001G
34930R	HOLDER,COOK AUXILIARY	4930W1A026A	→	4930W1A069A	R	
34960A	MOUNT	4960W1A004B	→	4960W1A021B	R	
35026G	SHELF	5026W1A048C		5026W1A048C	R	
35230A	FILTER(MECH),GREASE	2B72705B	→	5230W1A012A	R	2B72705C
35230A	FILTER(MECH),GREASE	2B72705B	→	5230W1A012A	R	5230W1A012B
35889A	ROTATING RING ASSEMBLY	5889W2A012D	→	5889W2A012F	R	
36549S	MOTOR(CIRC),SYNCHRONOUS	6549W1S013C	→	6549W1S011M	R	6549W1S015C
36549V	MOTOR(CIRC),VENTILATION	6549W1V006F		6549W1V006F	R	
368771	HARNESS	6877W1A340A	→	6877W1A002A	R	
36912C	LAMP,DRAWING	6912W3Q001A	→	6912W1Z004B	R	
43500A	BOARD,LATCH	3500W1A013A	→	3500W1A028B	R	
43501A	BOARD ASSEMBLY,LATCH	3501W1A019C	→	3501W1A019D	R	
44510A	LEVER	4510W4A005A	→	4510W3A012C	R	
466001	SWITCH,MICRO	3B73362F	→	6600W1K001D	R	6600W1K004C
466001	SWITCH,MICRO	3B73362F	→	6600W1K001D	R	6600W1K003D
466003	SWITCH,MICRO	3B73361E	→	6600W1K001C	R	6600W1K003C
466003	SWITCH,MICRO	3B73361E	→	6600W1K001C	R	6600W1K004B

Location No.	Part Name	Difference Chart (Part No)			SVC	Alternate
		767.8541300	I/C	767.8541301		
50CZZH	CAPACITOR,DRAWING[HIGH VOLTAGE]	0CZZW1H004B		0CZZW1H004B	R	0CZZW1H004G
50CZZH	CAPACITOR,DRAWING[HIGH VOLTAGE]	0CZZW1H004B		0CZZW1H004B	R	0CZZW1H002H
50CZZH	CAPACITOR,DRAWING[HIGH VOLTAGE]	0CZZW1H004B		0CZZW1H004B	R	0CZZW1H001Q
50FZZA	FUSE,DRAWING	3B74133K	→	3B74133Q	R	3B74133K
53300A	PLATE,BOTTOM	3300W1A052A	→	3300W1A052B	R	3300W1A052A
53300B	PLATE,BOTTOM	3300W1A003A	→	3300W1A003D	R	3300W1A003A
53550F	COVER,STIRRER FAN	3550W1A126A	→	3550W1A126B	R	3550W1A126A
53550L	COVER,LAMP	3550W3A082A	→	3550W1A189A	R	
54810C	BRACKET,CAPACITOR	4810W3C002A	→	4810W1A141A	R	
54930F	HOLDER,STIRRER FAN	4930W3A013A	→	4930W1A068A	R	
55231C	FILTER(MECH),CHARCOAL	2B72706D	→	5230W1A011A	R	5230W1A011B
55262A	DUCT	5208W0A006A	→	5208W0A006B	R	
55892A	FAN	5892W1A003A		5892W1A003A	R	
56170D	TRANSFORMER,HIGH VOLTAGE	6170W1D052B		6170W1D052B	R	
56201A	FILTER ASSEMBLY(CIRC)	2B72130F		2B72130F	R	
56201B	FILTER ASSEMBLY(CIRC)	6201W2A019D		6201W2A019D	R	
56324A	MAGNETRON	2B71165P	→	2B71165R	R	
56411A	POWER CORD ASSEMBLY	6411W1A010L	→	6411W1A010Z	R	
56804A	SOCKET(CIRC),LAMP	6804W3A001A		6804W3A001A	R	
56851D	CABLE ASSEMBLY	6804W3A001A	→	6021W3B001V	R	6021W3B001G
56851D	CABLE ASSEMBLY	6021W3B001A	→	6021W3B001V	R	6851W1A002B
568771	HARNESS	6877W1A409C	→	6877W1A004B	R	
56912B	LAMP,DRAWING	3B70067A	→	6912W1Z004A	R	
56930V	THERMOSTAT	6930W1A003E		6930W1A003E	R	6930W3A001S
63300M	PLATE,MOUNTING	3300W0M003A	→	3300W0A018A	R	
63302A	BASE PLATE	3302W0A013H	→	3302W0A047A	R	
63303A	BASE PLATE ASSEMBLY	3303W1A041N	→	3303W1A072G	R	
63861A	KIT ASSEMBLY	2B72771A	→	3861W1A043A	R	
65862B	BRACKET,MISC	3B72144A	→	4810W1A151A	R	
65862D	DAMPER	3B71432A	→	4900W1A001B	R	
WSZ002	SCREW TAP TITE(S),BINDING HEAD	1SBF0402418		1SBF0402418	R	
WSZ085	SCREW,DRAWING	4B70188B	→	4B70188C	R	
WTP013	SCREW TAPPING,PAN HEAD	1TPL0402418		1TPL0402418	R	
WTP015	SCREW TAPPING,PAN HEAD	1TPL0402618		1TPL0402618	R	
WTP018	SCREW TAPPING,PAN HEAD	1TPL0402818		1TPL0402818	R	
WTT010	SCREW TAPPING,TRUSS HEAD	1TTG0402422		1TTG0402422	R	
WTT021	SCREW TAPPING,TRUSS HEAD	1TTL0402418		1TTL0402418	R	
WTT022	SCREW TAPPING,TRUSS HEAD	1TTL0402422		1TTL0402422	R	
WTT027	SCREW TAPPING,TRUSS HEAD	1TTL0402816		1TTL0402816	R	
WTT028	SCREW TAPPING,TRUSS HEAD	1TTL0402818		1TTL0402818	R	

# REPLACEMENT PARTS LIST

For Model: 767.85419

I/C : INTERCHANGEABILITY CODE

Mar. 29. 2005

Location No.	Part Name	Difference Chart (Part No)			SVC	Alternate
		767.8541900	I/C	767.8541901		
*01	MANUAL,OWNERS	3828W5A4048	→	3828W5A8142	R	
*02	MANUAL,SERVICE	3828W5S3674	→	3828W5S5159	R	
*04	MANUAL,INSTALLATION	3828W5U0348	→	3828W5U0438	R	
*05	LABEL,COOKING GUIDE	3850W2A233D	→	3850W2A233G	R	
*06	TEMPLATE	4922W5A027A	→	4922W1A021C	R	
*07	CARD,TECHNICAL	3840W1T004C	→	3840W1T004F	R	
*10	BOX,YELLOW	3890W3Y819G	→	3890W3Y927A	R	
13213A	DOOR FRAME ASSEMBLY	3213W1A035D	→	3213W1A049F	R	
13536A	SEAL TAPE	3536WRA001R	→	3536W1A012B	R	
13552A	CHOKE COVER	3552W1A032B	→	3552W1A032E	R	
13581A	DOOR ASSEMBLY	3581W1A352B	→	3581W1A352J	R	
13650A	HANDLE,DOOR	3650W1A075B	→	3650W1A075F	R	
13720D	PANEL,DOOR	3720W0D259B	→	3720W0D259E	R	
14026A	LATCH	4026W2A015A	→	4026W2A019A	R	
14760A	BAFFLE	4760W0A002B	→	4760W0A002E	R	
14890A	GLASS	4890W1A021Y	→	4890W1A066D	R	4890W1A054E
14970A	SPRING	4970WRA001E	→	4970WRA001G	R	
23506A	KEY MEMBRANE	3506W1A600B		3506W1A600B	R	
23551A	SERVICE PARTS(CONTROL PANEL+KEY PAD)		→	383EW5A204D	R	
23572A	PANEL,CONTROL	3720W0C058B	→	3720W0C058E	R	
24781M	CONTROLLER ASSEMBLY,MICOM	4781W1M307H	→	4781W1M307V	R	
24810P	BRACKET,CONTROL PANEL	4810W1G061B	→	4810W1G061E	R	4810W1G061B
268711	PWB(PCB) ASSEMBLY,SUB	6871W1S106D	→	6871W1S106F	R	
33052A	CANOPY,RESIN	3052WRA002A	→	3052W1A002A	R	
33112U	OUT CASE,U-BENDING	3112W1U026J	→	3112W0U052J	R	
33390G	TRAY,GLASS	1B71961E	→	1B71961H	R	
33530A	GRILLE,VENT	3530W0A030B	→	3530W0A030F	R	3530W0A030B
33550L	COVER,LAMP	3550W3A095A	→	3550W3A095C	R	3550W3A095A
33740A	PROTECTOR (MECH)	3740W1A005A	→	3740W1A005E	R	3740W1A005A
340511	RIVET ASSEMBLY	4051W3A001A		4051W3A001A	R	
34370T	SHAFT,TURN TABLE	3B72373A	→	4370W1A006B	R	
34810Q	BRACKET,MOUNT	4810W3G062A	→	4810W1A149A	R	
34810T	BRACKET,LAMP	4810W3G100A	→	4810W1A150C	R	
34890C	GLASS	4890W4A001G	→	4890W1A045A	R	4890W4A001G
34930R	HOLDER,COOK AUXILIARY	4930W1A026A	→	4930W1A069A	R	
34960A	MOUNT	4960W1A004B	→	4960W1A021B	R	
35026G	SHELF	5026W1A048C		5026W1A048C	R	
35230A	FILTER(MECH),GREASE	2B72705B	→	5230W1A012A	R	2B72705C
35230A	FILTER(MECH),GREASE	2B72705B	→	5230W1A012A	R	5230W1A012B
35889A	ROTATING RING ASSEMBLY	5889W2A012D	→	5889W2A012F	R	
36549S	MOTOR(CIRC),SYNCHRONOUS	6549W1S013C	→	6549W1S011M	R	6549W1S015C
36549V	MOTOR(CIRC),VENTILATION	6549W1V006F		6549W1V006F	R	
368771	HARNES	6877W1A340A	→	6877W1A002A	R	
36912C	LAMP,DRAWING	6912W3Q001A	→	6912W1Z004B	R	
43500A	BOARD,LATCH	3500W1A013A	→	3500W1A028B	R	
43501A	BOARD ASSEMBLY,LATCH	3501W1A019C	→	3501W1A019D	R	
44510A	LEVER	4510W4A005A	→	4510W3A012C	R	
466001	SWITCH,MICRO	3B73362F	→	6600W1K001D	R	6600W1K004C
466001	SWITCH,MICRO	3B73362F	→	6600W1K001D	R	6600W1K003D

Location No.	Part Name	Difference Chart (Part No)			SVC	Alternate
		767.8541900	I/C	767.8541901		
466003	SWITCH,MICRO	3B73361E	→	6600W1K001C	R	6600W1K003C
466003	SWITCH,MICRO	3B73361E	→	6600W1K001C	R	6600W1K004B
50CZZH	CAPACITOR,DRAWING[HIGH VOLTAGE]	0CZZW1H004B		0CZZW1H004B	R	0CZZW1H004G
50CZZH	CAPACITOR,DRAWING[HIGH VOLTAGE]	0CZZW1H004B		0CZZW1H004B	R	0CZZW1H002H
50CZZH	CAPACITOR,DRAWING[HIGH VOLTAGE]	0CZZW1H004B		0CZZW1H004B	R	0CZZW1H001Q
50FZZA	FUSE,DRAWING	3B74133K	→	3B74133Q	R	3B74133K
53300A	PLATE,BOTTOM	3300W1A052A	→	3300W1A052B	R	3300W1A052A
53300B	PLATE,BOTTOM	3300W1A003A	→	3300W1A003D	R	3300W1A003A
53550F	COVER,STIRRER FAN	3550W1A126A	→	3550W1A126B	R	3550W1A126A
53550L	COVER,LAMP	3550W3A082A	→	3550W1A189A	R	
54810C	BRACKET,CAPACITOR	4810W3C002A	→	4810W1A141A	R	
54930F	HOLDER,STIRRER FAN	4930W3A013A	→	4930W1A068A	R	
55231C	FILTER(MECH),CHARCOAL	2B72706D	→	5230W1A011A	R	5230W1A011B
55262A	DUCT	5208W0A006A	→	5208W0A006B	R	
55892A	FAN	5892W1A003A		5892W1A003A	R	
56170D	TRANSFORMER,HIGH VOLTAGE	6170W1D052B		6170W1D052B	R	
56201A	FILTER ASSEMBLY(CIRC)	2B72130F		2B72130F	R	
56201B	FILTER ASSEMBLY(CIRC)	6201W2A019D		6201W2A019D	R	
56324A	MAGNETRON	2B71165P	→	2B71165R	R	
56411A	POWER CORD ASSEMBLY	6411W1A010L	→	6411W1A010Z	R	
56804A	SOCKET(CIRC),LAMP	6804W3A001A		6804W3A001A	R	
56851D	CABLE ASSEMBLY	6021W3B001A	→	6021W3B001V	R	6021W3B001G
56851D	CABLE ASSEMBLY	6021W3B001A	→	6021W3B001V	R	6851W1A002B
568771	HARNESS	6877W1A409C	→	6877W1A004B	R	
56912B	LAMP,DRAWING	3B70067A	→	6912W1Z004A	R	
56930V	THERMOSTAT	6930W1A003E		6930W1A003E	R	6930W3A001S
63300M	PLATE,MOUNTING	3300W0M003A	→	3300W0A018A	R	
63302A	BASE PLATE	3302W0A013H	→	3302W0A047A	R	
63303A	BASE PLATE ASSEMBLY	3303W1A041N	→	3303W1A072G	R	
63861A	KIT ASSEMBLY	2B72771A	→	3861W1A043A	R	
65862B	BRACKET,MISC	3B72144A	→	4810W1A151A	R	
65862D	DAMPER	3B71432A	→	4900W1A001B	R	
WSZ002	SCREW TAP TITE(S),BINDING HEAD	1SBF0402418		1SBF0402418	R	
WSZ085	SCREW,DRAWING	4B70188B	→	4B70188C	R	
WTP013	SCREW TAPPING,PAN HEAD	1TPL0402418		1TPL0402418	R	
WTP015	SCREW TAPPING,PAN HEAD	1TPL0402618		1TPL0402618	R	
WTP018	SCREW TAPPING,PAN HEAD	1TPL0402818		1TPL0402818	R	
WTT010	SCREW TAPPING,TRUSS HEAD	1TTG0402422		1TTG0402422	R	
WTT021	SCREW TAPPING,TRUSS HEAD	1TTL0402418		1TTL0402418	R	
WTT022	SCREW TAPPING,TRUSS HEAD	1TTL0402422		1TTL0402422	R	
WTT027	SCREW TAPPING,TRUSS HEAD	1TTL0402816		1TTL0402816	R	
WTT028	SCREW TAPPING,TRUSS HEAD	1TTL0402818		1TTL0402818	R	



