

MICROWAVE OVEN HOODS

IMPORTANT SAFETY NOTICE

THIS INFORMATION IS INTENDED FOR USE BY INDIVIDUALS POSSESSING ADEQUATE BACKGROUNDS OF ELECTRICAL, ELECTRONIC AND MECHANICAL EXPERIENCE. ANY ATTEMPT TO REPAIR A MAJOR APPLIANCE MAY RESULT IN PERSONAL INJURY AND PROPERTY DAMAGE. THE MANUFACTURER OR SELLER CANNOT BE RESPONSIBLE FOR THE INTERPRETATION OF THIS INFORMATION, NOR CAN IT ASSUME ANY LIABILITY IN CONNECTION WITH ITS USE.

DISCONNECT POWER BEFORE SERVICING
IMPORTANT-RECONNECT ALL
GROUNDING DEVICES

ALL PARTS OF THIS APPLIANCE CAPABLE OF CONDUCTING ELECTRICAL CURRENT ARE GROUNDED. IF GROUNDING WIRES, SCREWS, STRAPS, CLIPS, NUTS OR WASHERS USED TO COMPLETE A PATH TO GROUND ARE REMOVED FOR SERVICE, THEY MUST BE RETURNED TO THEIR ORIGINAL POSITION AND PROPERLY FASTENED.

PRECAUTIONS TO BE
OBSERVED BEFORE AND
DURING SERVICING
TO AVOID POSSIBLE
EXPOSURE TO EXCESSIVE
MICROWAVE ENERGY

- A. MICROWAVE EMISSION CHECK SHOULD BE PERFORMED PRIOR TO SERVICING IF OVEN OPERATIVE.
- B. DO NOT OPERATE OR ALLOW THE OVEN TO BE OPERATED WITH DOOR OPEN.
- C. IF THE OVEN OPERATES WITH THE DOOR OPEN:
- 1) INSTRUCT THE USER NOT TO OPERATE THE OVEN.
 - 2) CONTACT THE MANUFACTURER AND THE CENTER FOR DEVICES AND RADIOLOGICAL HEALTH IMMEDIATELY.
- D. 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
- E. BEFORE TURNING ON MICROWAVE POWER FOR ANY TEST OR INSPECTION WITHIN THE MICROWAVE GENERATING COMPARTMENTS, CHECK THE MAGNETRON, WAVE GUIDE OR TRANSMISSION LINE, AND CAVITY FOR PROPER ALIGNMENT, INTEGRITY, AND CONNECTIONS.

- F. ANY DEFECTIVE OR MISADJUSTED COMPONENTS IN THE INTERLOCK, MONITOR, DOOR SEAL AND MICROWAVE GENERATION AND TRANSMISSION SYSTEMS SHALL BE REPAIRED, REPLACED, OR ADJUSTED BY PROCEDURE DESCRIBED IN THIS MANUAL BEFORE THE OVEN IS RELEASED TO THE OWNER.
- G. A MICROWAVE LEAKAGE CHECK TO VERIFY COMPLIANCE WITH THE FEDERAL PERFORMANCE STANDARD SHOULD BE PERFORMED ON EACH OVEN PRIOR TO RELEASE TO THE OWNER.

GROUNDING SPECIFICATIONS

Ground Path Resistance 0.14 Ω (Max.)

INSTALLATION REQUIREMENTS

ELECTRICAL

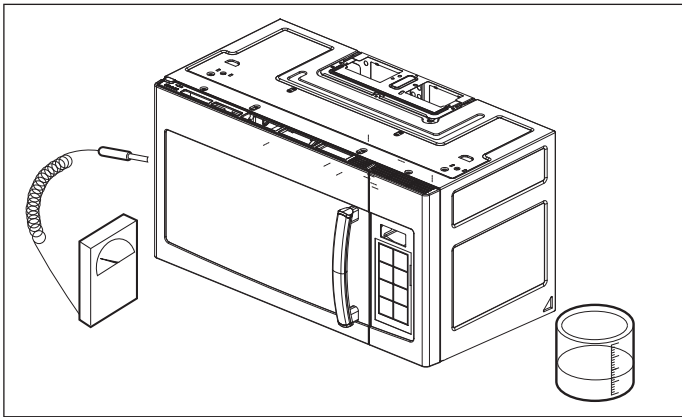
Power source	120VAC, 60Hz,
Line Current	14. 0Amps. (1600Watts)
Over Current Protection	15-20Amps*

* Requires 120 volt, 15-20 amp parallel, grounded separate circuit.

Working voltage 105 ~ 130 VAC

MICROWAVE LEAKAGE TEST

1. Place 275 ml. water in 600 ml. beaker (WB64 x 5010).
2. Place beaker in center of oven glass.
3. Set meter to 2450 MHz scale.
4. Turn "ON" for 5 minute test.
5. Hold probe perpendicular to surface being tested and scan surfaces at rate of one inch/sec.
 - Entire perimeter of door and control panel
 - Viewing surface of door window
 - Exhaust vents
6. Maximum leakage 4 MW/CM².
7. Record data on surface invoice and microwave leakage report.



NOTE: Maximum allowable leakage is 5 MW/CM². 4 MW/CM² is used to allow for measurement and meter accuracy.

Inform the manufacturer of any oven found to have emission in excess of 5 MW/CM². Make repairs to bring the unit into compliance at no cost to owner and try to determine cause. Instruct owner not to use oven until it has been brought into compliance.

• TECHNICAL DATA SHEET •

STANDARD TEST LOAD

The standard test load is one liter (1000ml.) water with starting temperature of 59°F ~ 75°F in a 1000ml beaker. (DO NOT USE ANY OTHER LOAD OR DISH AS RESULTS WILL VARY FROM STANDARD.)

PERFORMANCE TEST

1. Use Glass Tray and the beaker WB64 x 0073.
 2. Record initial water temperature.
 3. Run at high power for 2:03.
 4. Record end water temperature.
- The minimum difference between the initial and ending temperature should be: 29°F @ 120V

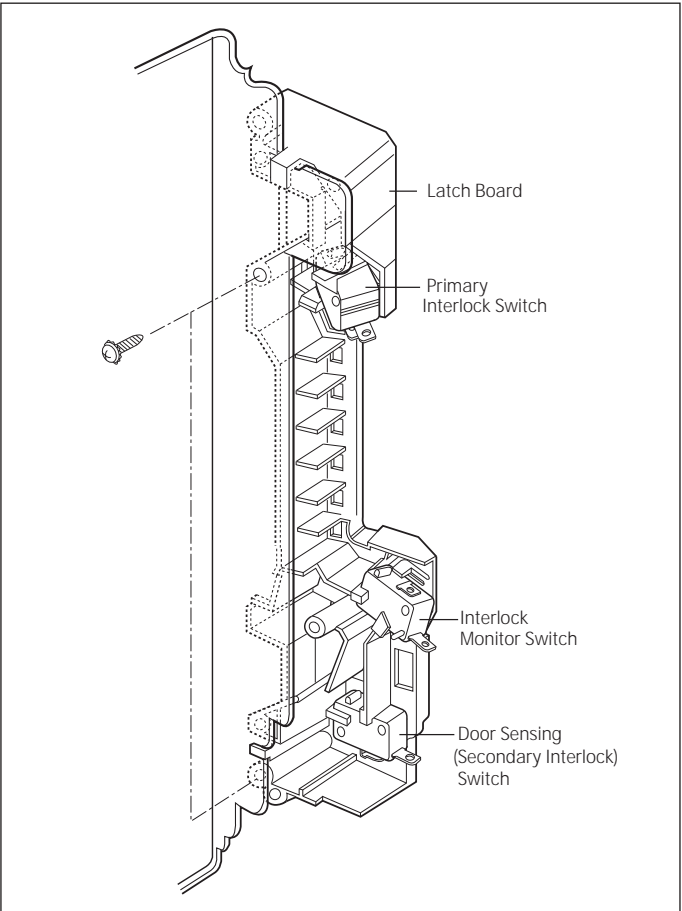
CAUTION

4000V, RISK OF DEATH
To prevent electrical shock. Use extreme caution when diagnosing oven with outer case removed and power "ON". The high voltage section of the power supply including filament leads is 4000 volts potential with respect to ground.

INTERLOCKS AND MONITOR

The primary interlock, Door sensing & Monitor switches are mounted to a plastic latch board: on the right side of the cavity. From top to bottom the switches are as follows:

- Prim ary Interlock
- Monitor
- Door Sensing



HOW TO TEST PRIMARY INTERLOCK

1. Disconnect power, remove vent grille, and discharge capacitor.
2. Check continuity of switch:
 - Door Closed: 0 Ω
 - Door Open: ∞ Ω

HOW TO TEST DOOR SENSING

Make continuity check between switch terminals. Normal reading are as follows:

- Door closed : 0 Ω
- Door open : ∞ Ω

MONITOR SWITCH

The bottom latch pawl pushes horizontally and actuates the lever of the monitor interlock opening the switch.

HOW TO TEST INTERLOCK SYSTEM

1. Disconnect power, remove vent grille, and discharge capacitor.
2. Check 20 Amp. Fuse for continuity and proper size. Do not use any other fuse or size except 20 Amp.
3. Remove monitor switch leads to isolate switch. Check continuity of switch with door open and door closed.
 - Door Closed: ∞ Ω
 - Door Open: 0 Ω
4. Reconnect switch wiring.
5. Test Circuit Operation.
 - A) Connect temporary jumper across relay contacts, secondary interlock and door sensing switches to simulate shorted switch contacts. Locate convenient connections in circuit to be certain COM and NO terminals are used.
 - B) Connect ohm meter (Rx1) across the line terminals of the appliance cord. Continuity must show
 - Door Closed : Some Ω
 - Door Open : 0 Ω
 - C) Remove 20 Amp. Fuse – Circuit must open (∞ Ω). If not, check wiring of monitor and interlock circuits.
6. WARNING! After test, remove temporary jumper leads from interlocks and relay, and reconnect monitor switch leads.

NOTE: Perform microwave leakage test when replacing or adjusting interlock switches or latch board.

WARNING

Primary interlock, door sensing switch, monitor switch and relay (RY-2) must be replaced when 20 Amp. fuse is blown due to operation of monitor switch.

HOW TO ADJUST INTERLOCKS

- The Latch-Board is adjustable for door fit and switch operation.
1. Disconnect power, remove outer case, and discharge capacitor.
 2. Loosen Latch-Board mounting screw at enlarged hole in vertical flange.
 3. Adjust each Latch-Board for proper switch operation, and door fit, retighten screws.

NOTE: Perform microwave leakage test when replacing or adjusting interlock switches or brackets.

AUTOMATIC FAN FEATURE

Exhaust fan turns "ON" (High speed) automatically during some surface unit heavy use conditions. (Can be turned off manually, will turn off automatically.) May stay on up to 15 mins. after range and lower oven controls are turned off.

HIGH VOLTAGE CAPACITOR

The high voltage capacitor has an internal discharge resister to automatically discharge the capacitor when the oven turns "OFF". Under normal operation, the capacitor should fully discharge witin 30 seconds.

CAPACITOR AND DIODE

The high voltage capacitor and diode can be serviced after removing grille, control panel and protector bracket.

WARNING

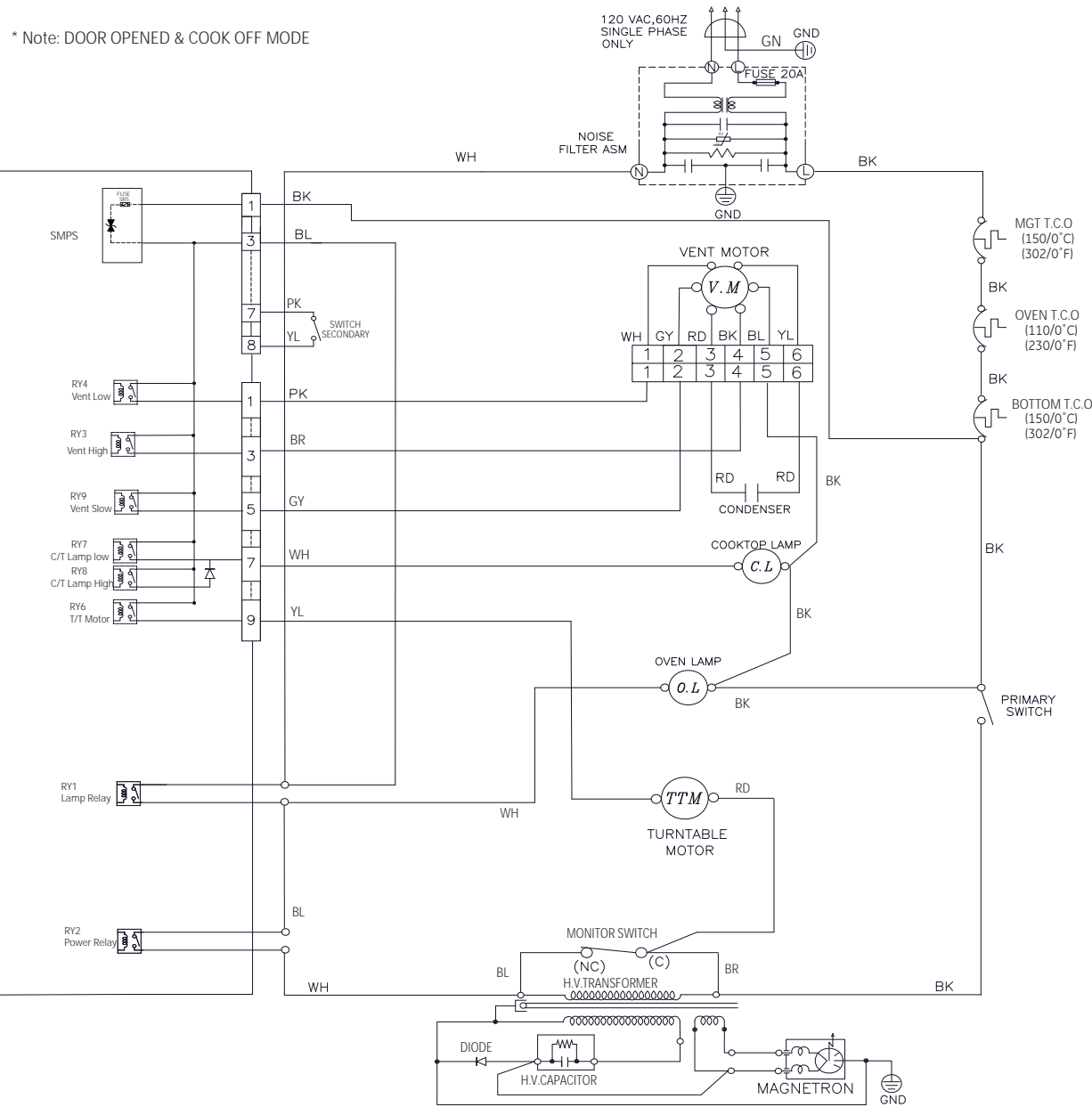
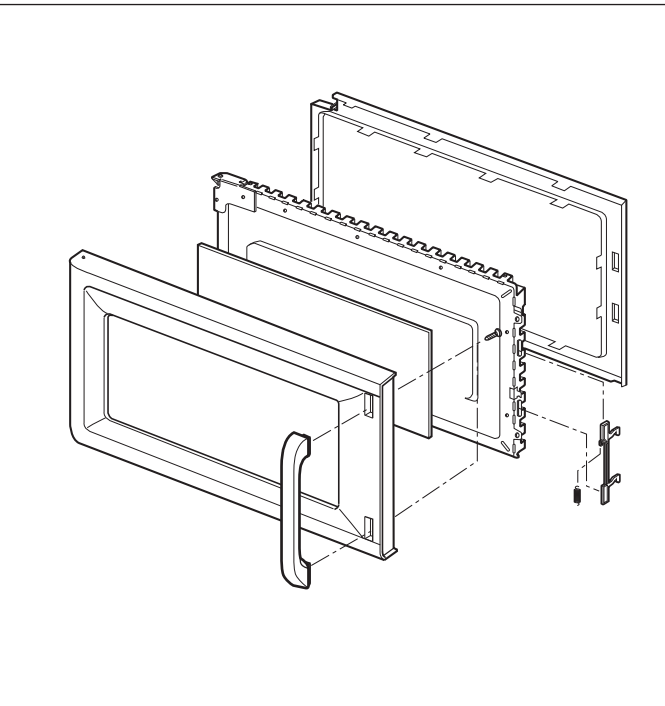
4000V, RISK OF DEATH

Always be certain the capacitor is discharged before servicing. Mechanically discharge by placing an insulated handle screw driver between the diode connection of the capacitor and oven chassis ground.

NOTE: use screw head close to capacitor to insure ground metal contact.

DOOR

The oven door consists of door panel with door glass, door frame, choke cover, latch, and spring.



WIRE COLORS	
SYMBOL	COLOR
WH	WHITE
BK	BLACK
RD	RED
YL	YELLOW
PK	PINK
BL	BLUE
BR	BROWN
GN	GREEN
GY	GREY

PK	RD	BR	GY	WH	YL
1	3	5	7	9	11
11 PIN CONNECTOR(CN4)					

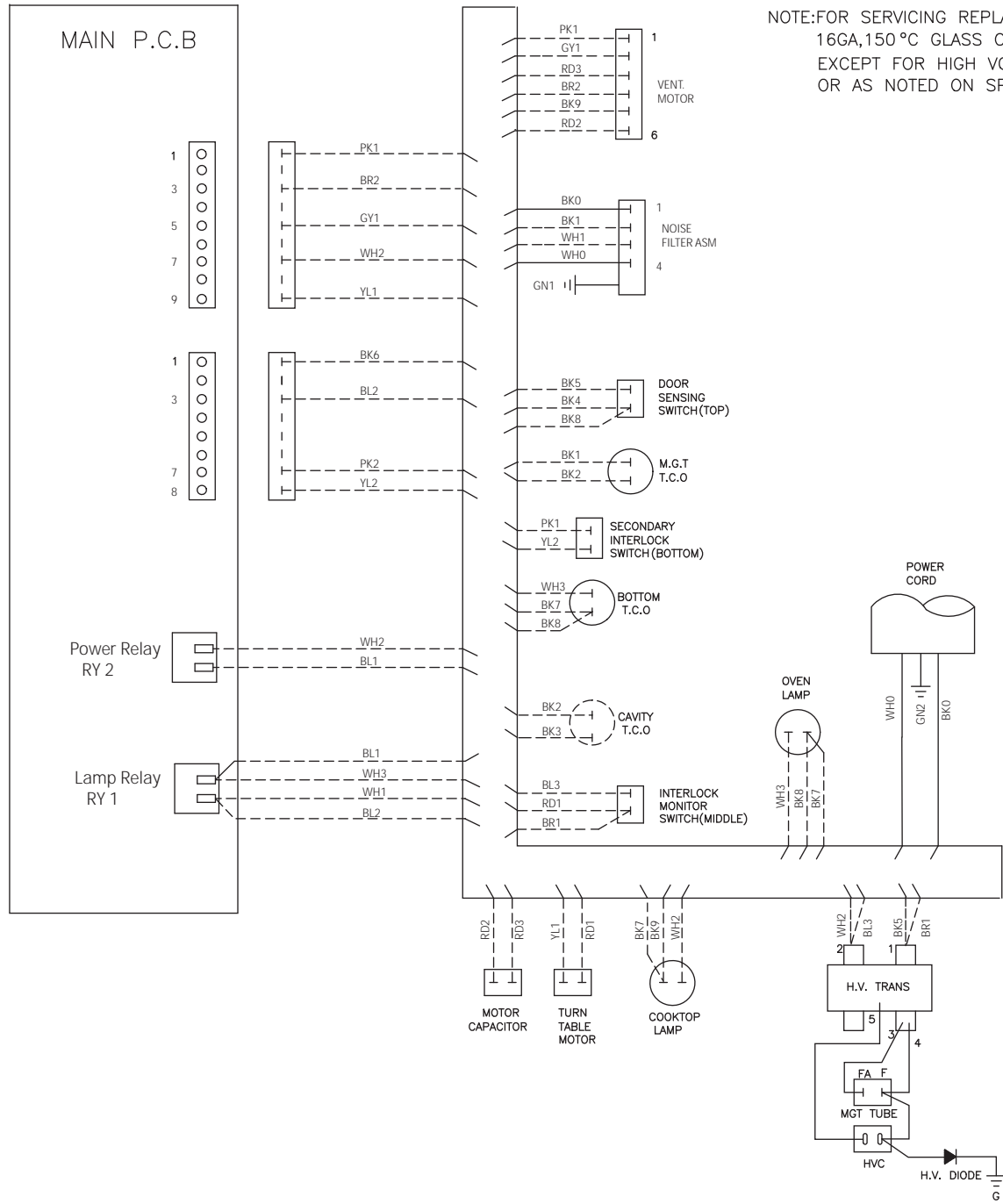
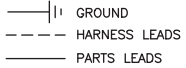
BK	BL	PK	YL
1	3	7	8
8 PIN CONNECTOR(CN1)			

WIRING DIAGRAM



4000V, RISK OF ELECTRICAL SHOCK
Never touch or service the high voltage circuit without discharging capacitor by shorting across its terminals.

SYMBOL	WIRE COLORS	COLOR
WH	WHITE	WHITE
BK	BLACK	BLACK
RD	RED	RED
YL	YELLOW	YELLOW
PK	PINK	PINK
BL	BLUE	BLUE
BR	BROWN	BROWN
GN	GREEN	GREEN
GY	GREY	GREY



NOTE:FOR SERVICING REPLACEMENT USE 16GA,150 °C GLASS COVERED WIRE EXCEPT FOR HIGH VOLTAGE LEADS OR AS NOTED ON SPECIAL LEADS.

MICROWAVE OVEN HOODS



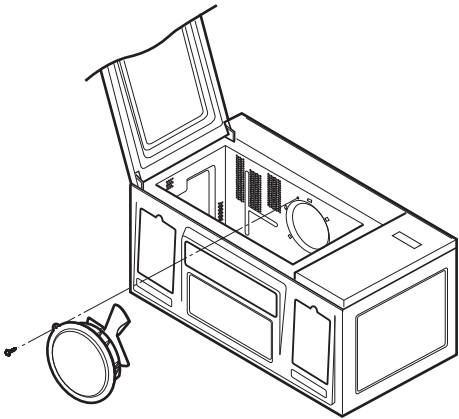
4000V, RISK OF ELECTRICAL SHOCK.
Never touch or service the high voltage circuit without discharging capacitor by shorting across its terminals.

ANTENNA

The antenna and antenna blade is located on the upper side of the cavity. The antenna blade is located on the upper plate.

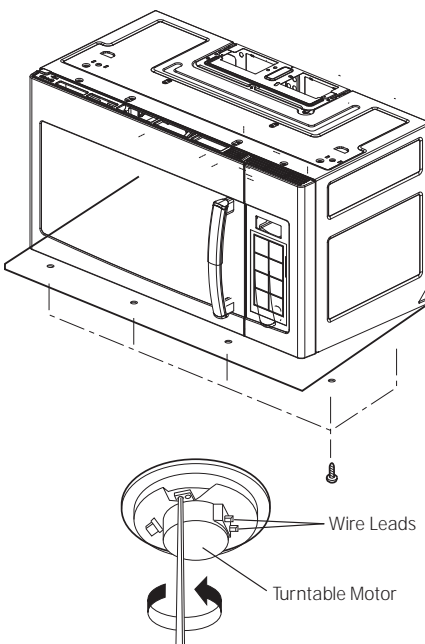
To Service Antenna Blade

1. Disconnect power and open the door.
2. Remove the clip and turn the antenna cover right.
3. Remove antenna cover and the antenna will come with it.



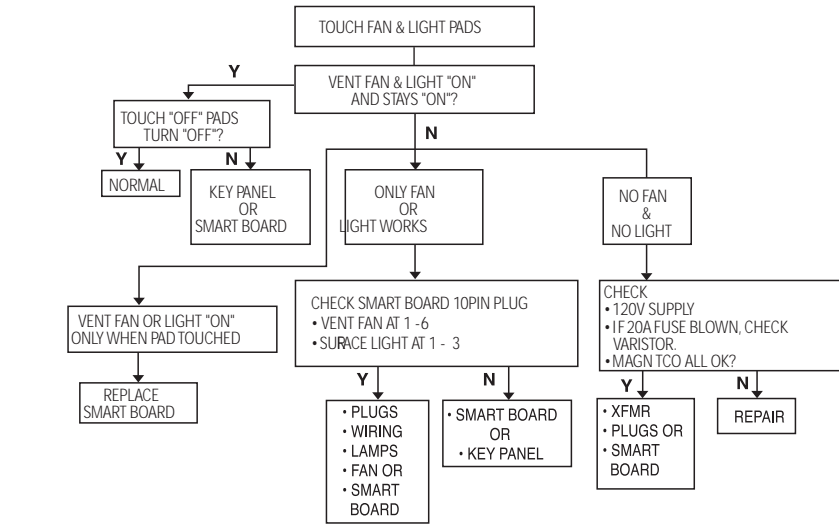
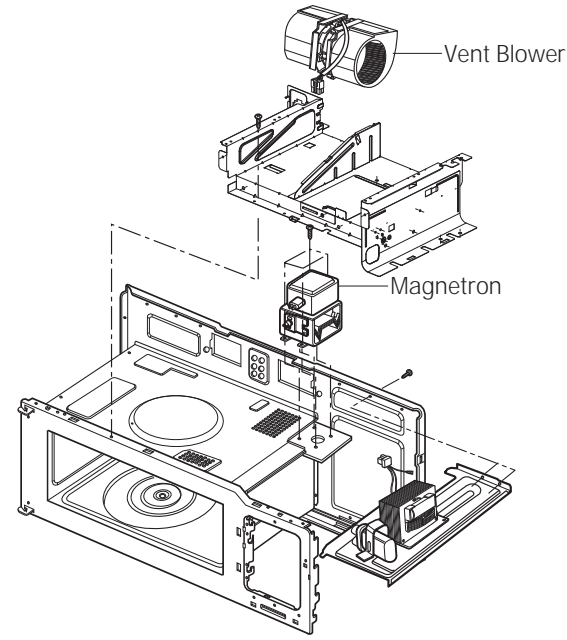
To Service Turntable Motor

1. Disconnect power and remove bottom plate screws (8).
2. Remove bottom plate and disconnect the turntable motor wire.
3. Remove turntable motor screws (2) and pull the turntable motor.



MAGNETRON, VENT BLOWER

Oven must be removed from wall.



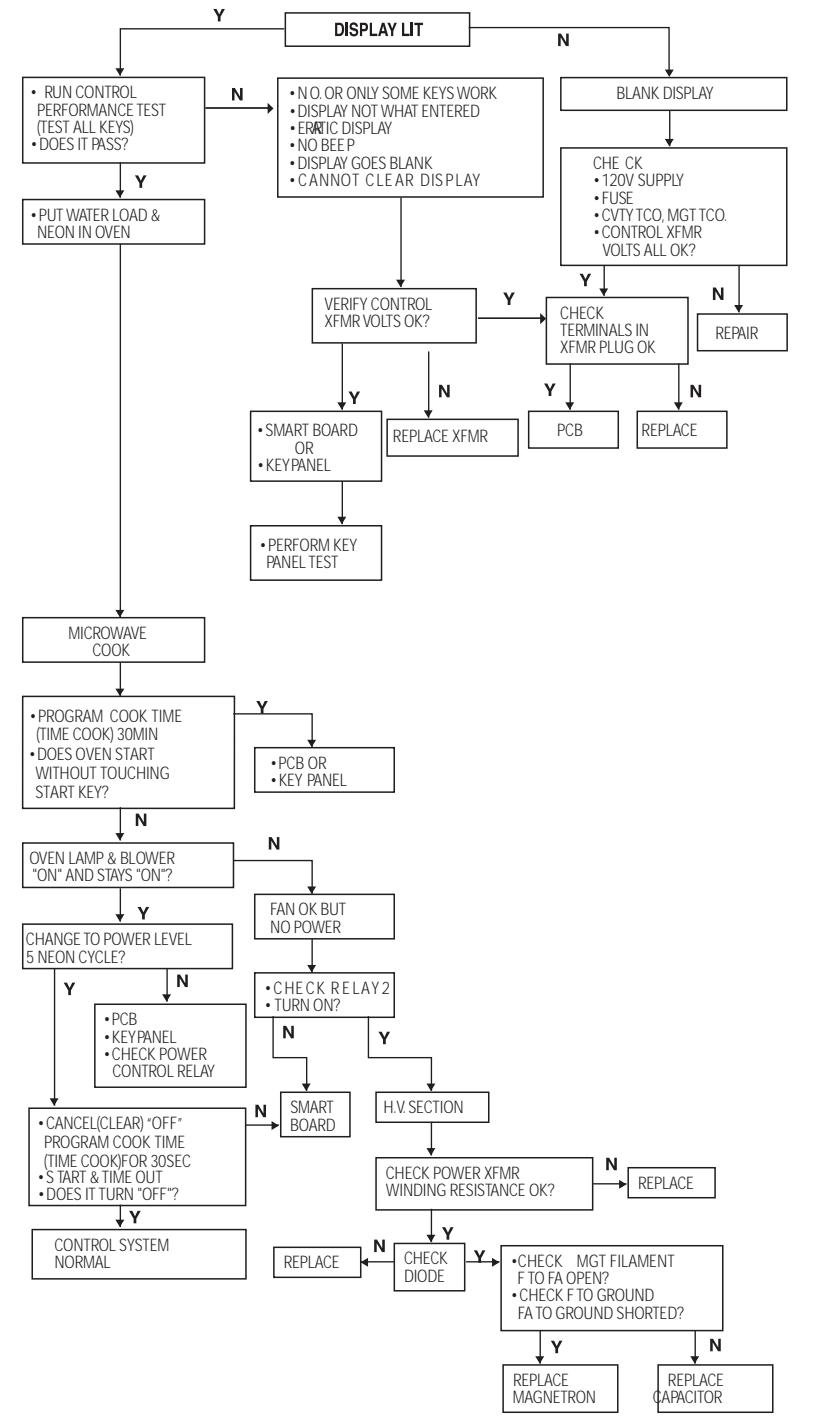
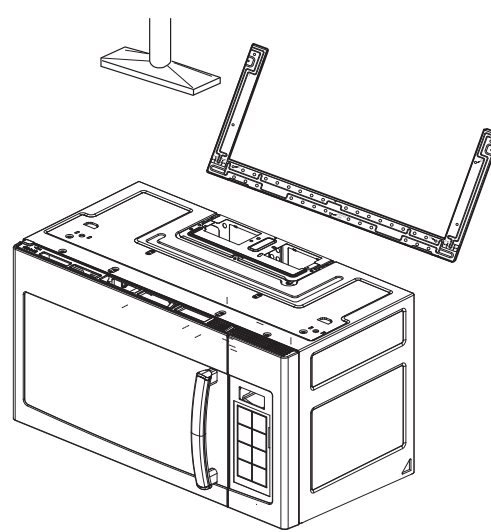
REMOVING OVEN FROM WALL (2 PEOPLE REQUIRED)

Oven is hooked on metal tabs at bottom of wall mounting plate and fastened to cabinet by (2) top cabinet bolts.



Oven weighs 52lbs.a
Requires 2 people for removal

1. Disconnect Power Cord, Top vented models-disconnect duct and remove damper assembly.
2. Remove (2) top cabinet bolts.
3. Pull unit forward slowly providing adequate support to prevent dropping unit during removal of last top cabinet bolt.



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Always be certain the capacitor is discharged before servicing. Mechanically discharge by placing an insulated handle screw driver between the diode connection of the capacitor and oven chassis ground.

NOTE: Use screw head close to capacitor to insure ground metal contact.

