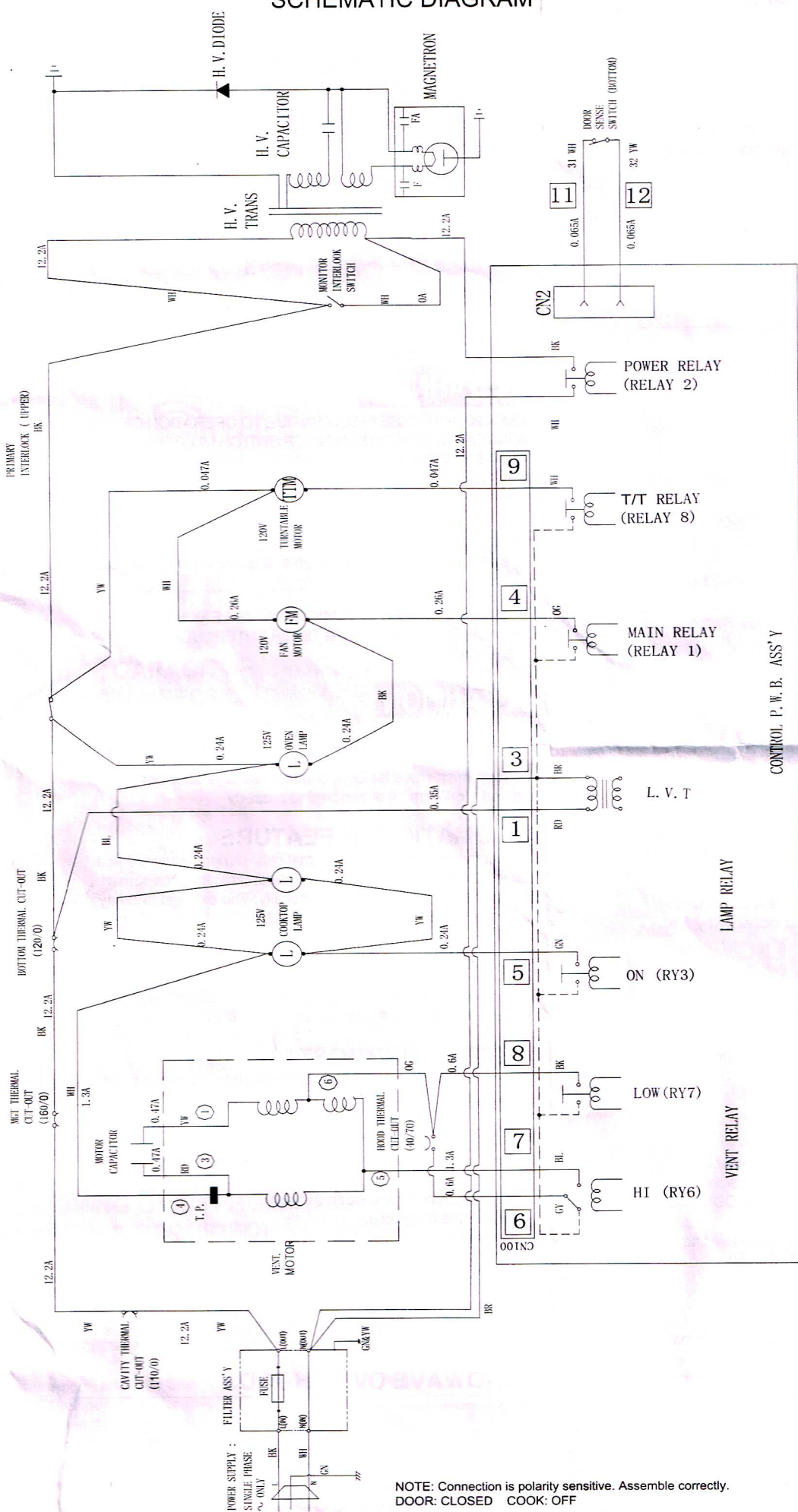


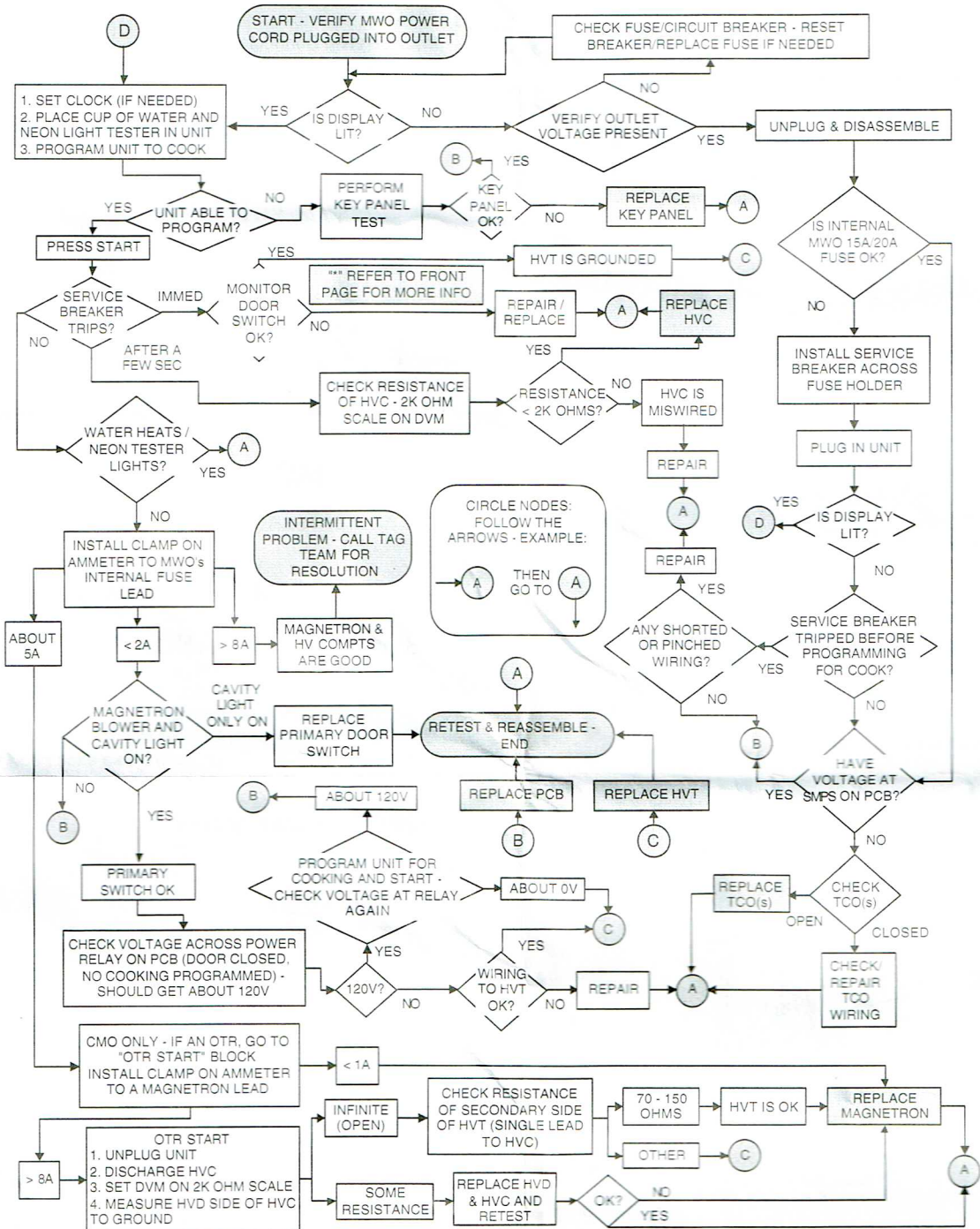
SCHEMATIC DIAGRAM



COLOR	SYMBOL
PINK	PK
WHITE	WH
BLACK	BK
RED	RD
YELLOW	YW
GREEN	GN
GRAY	GY
BLUE	BL
ORANGE	OG
BROWN	BR

NOTE: Connection is polarity sensitive. Assemble correctly.
 DOOR: CLOSED COOK: OFF

MWO TROUBLESHOOTING FLOW CHART



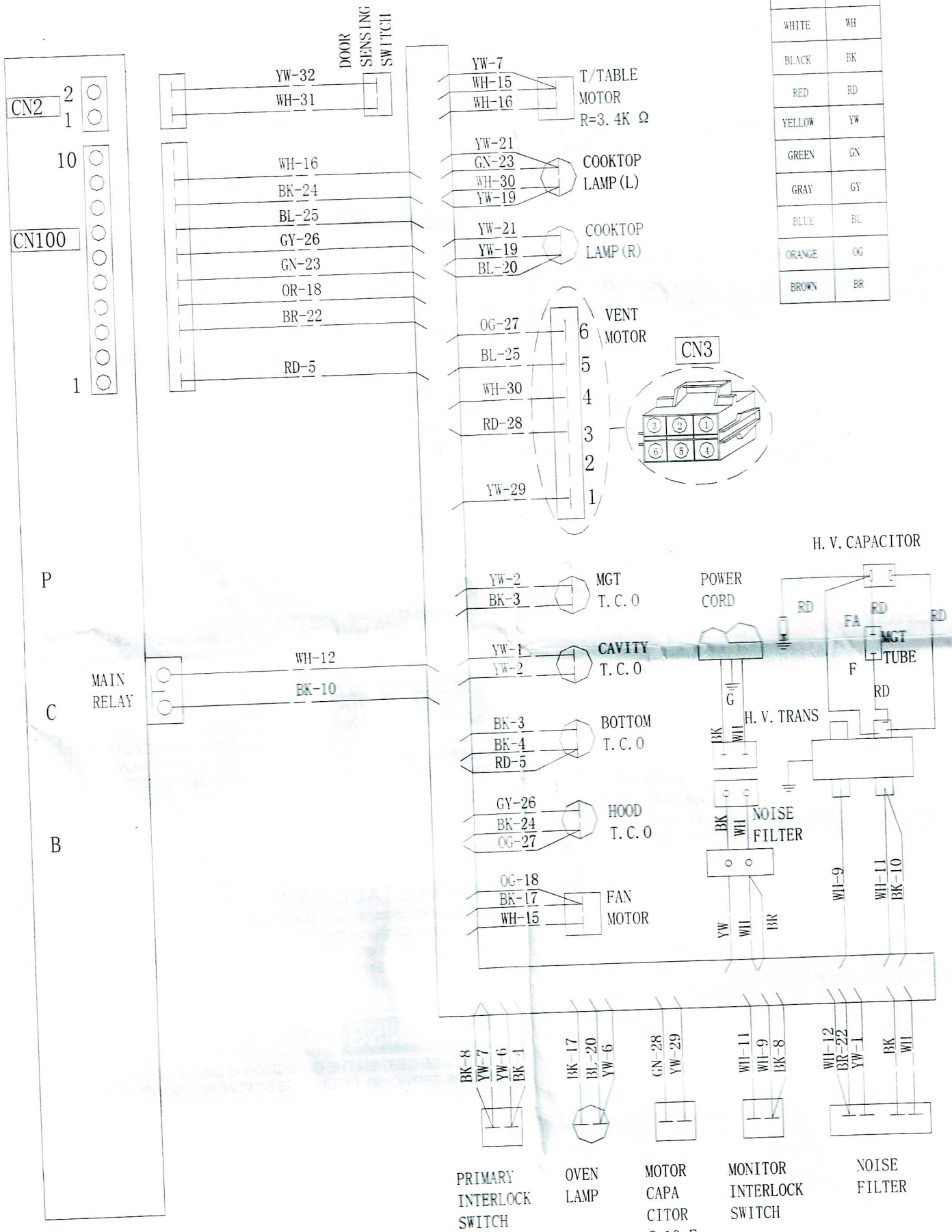
- DVM - DIGITAL VOLT METER
- HVC - HIGH VOLTAGE CAPACITOR
- HVD - HIGH VOLTAGE DIODE
- HVT - HIGH VOLTAGE TRANSFORMER
- SMPS - SWITCHING MODE POWER SUPPLY
- TCO - THERMAL CUT OUT (TEMPERATURE SENSOR)
- PCB - PRINTED CIRCUIT BOARD

A → RETEST & REASSEMBLE - END
B → REPLACE PCB
C → REPLACE HVT
D → 1. SET CLOCK (IF NEEDED)
 2. PLACE CUP OF WATER AND NEON LIGHT TESTER IN UNIT
 3. PROGRAM UNIT TO COOK

THIS IS A LEGEND - FIND THESE ON MAIN CHART

WIRING DIAGRAM

COLOR	SYMBOL
WHITE	WH
BLACK	BK
RED	RD
YELLOW	YW
GREEN	GN
GRAY	GY
BLUE	BL
ORANGE	OG
BROWN	BR



JVM3160

JNM3161

AVM4160

DVM5160

MICROWAVE OVEN HOODS

IMPORTANT SAFETY NOTICE

THIS INFORMATION IS INTENDED FOR USE BY INDIVIDUALS POSSESSING ADEQUATE BACKGROUNDS IN 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. IF OVEN IS OPERABLE, PERFORM MICROWAVE EMISSION CHECK PRIOR TO EXAMINING THE UNIT.
- B. DO NOT OPERATE OR ALLOW THE OVEN TO BE OPERATED WITH THE 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 RADIOLOGICAL HEALTH IMMEDIATELY.
- D. CHECK THE FOLLOWING SAFETY ITEMS ON ALL MICROWAVE OVENS (MWOs) BEFORE ACTIVATING THE MAGNETRON.
 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 SERVICE TEST OR INSPECTION WITHIN THE MICROWAVE GENERATING COMPARTMENTS, CHECK THE MAGNETRON, WAVE GUIDE 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

Leakage Current 0.5 mA. (Max.)
Ground Path Resistance 0.14 ohm (Max.)

INSTALLATION REQUIREMENTS

ELECTRICAL	
MWO Power	1000 Watts
Power Source	120 VAC, 60 Hz.
Line Current	14.5 Amps. (1700 Watts)
Over Current Protection	20 Amps*
* Requires 120 volt, 20 Amp. parallel, grounded separate circuit.	
Working Voltage	108-132 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.

Test the following areas:

- Entire perimeter of door and control panel
- Viewing surface of door window
- Exhaust vents

6. Maximum leakage 4 mW/cm²

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.

WARNING

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, HAVE THE POTENTIAL WITH RESPECT TO GROUND TO REACH 4000 VOLTS!

HIGH VOLTAGE CAPACITOR

The high voltage capacitor has an internal shunt resistor to automatically discharge the capacitor when the oven turns "off". Under normal operation the capacitor should fully discharge within 30 seconds.

WARNING

ALWAYS BE CERTAIN THE CAPACITOR IS DISCHARGED BEFORE SERVICING. DISCHARGE BY PLACING AN INSULATED HANDLE SCREW DRIVER BETWEEN THE DIODE CONNECTION AND OVEN CHASSIS GROUND.

PERFORMANCE TEST

1. Measure line voltage (loaded). This test is based on normal voltage variations of 108V to 132V. Low voltage will cause low output power and temperature rise.
2. Place WB64 X0073 beaker containing one liter of water (1000ml, 55°F~75°F) on turntable and record the starting water temperature with an accurate thermometer.

• TECHNICAL DATA SHEET •

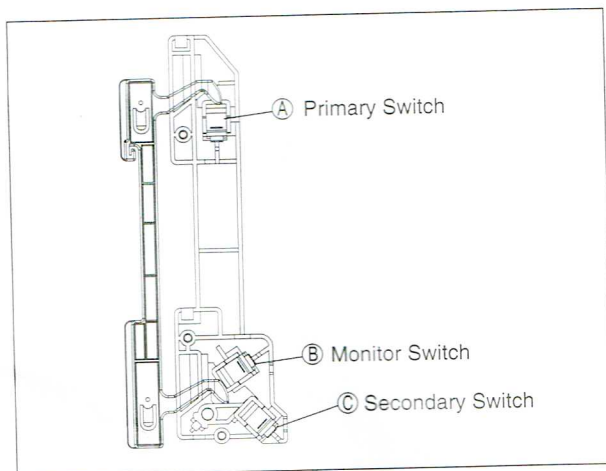
(DO NOT USE ANY OTHER LOAD OR DISH AS RESULT WILL VARY FROM STANDARD !)

3. Set at HIGH power for 2 minutes, and 3 sec.
4. Turn on the oven.
5. Record end water temperature. The minimum difference between the initial and ending temperature should be: 30°F @ 120 V.

INTERLOCKS (DOOR Latch Switches)

Interlocks are designed as follows:

Primary - Top switch operated by top latch pawl connected to line (L) leg.



HOW TO TEST INTERLOCKS

1. Disconnect power, open control panel, and discharge capacitor.
2. Check Continuity of Com and N.O.:
 - Door Closed - 0 Ω
 - Door Open - ∞ Ω

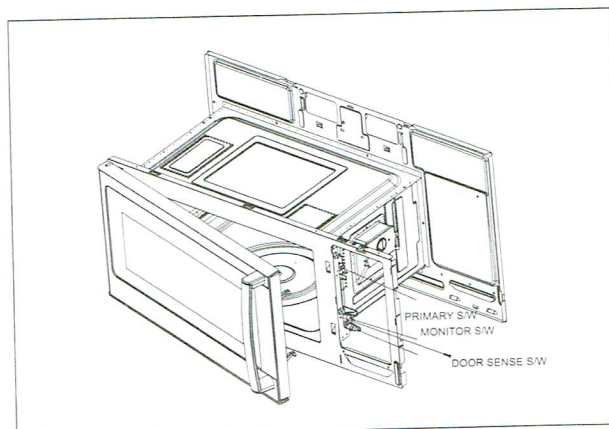
MONITOR SWITCH

The monitor switch B is located between the top and bottom interlocks. The monitor switch is operated indirectly by the bottom latch pawl.

HOW TO TEST MONITOR

1. Disconnect power, open control panel, and discharge capacitor.
2. Disconnect monitor switch leads, and test at terminals:
 - Door Closed - ∞ Ω
 - Door Open - 0 Ω
3. Reconnect switch wiring.
4. Test Circuit Operation:
 - A) Connect temporary jumper across relay contacts and primary switch to simulate shorted switch contacts. Locate convenient connections in circuit to be certain COM and N.O. terminals are used.
 - B) Connect Ohm meter (low scale) across the two line terminals of appliance power cord. Continuity must show:
 - Door Closed - Some Ω
 - Door Open - 0 Ω
 - C) Remove 20 Amp. Fuse - Circuit must open (∞ Ohms). If not, check wiring of monitor and interlock circuits.
 - D) **WARNING** After test remove temporary jumper leads! from interlocks and relay. Reconnect monitor switch leads, replace fuse.
 - E) Replacement of any parts in monitor circuit requires repeating this entire test procedure.

IMPORTANT: Check for microwave leakage after replacing interlocks with new brackets.



MAIN FUSE

⚠ WARNING

WHEN 20 AMP. FUSE IS BLOWN DUE TO OPERATION OF THE MONITOR SWITCH, THE MONITOR SWITCH MUST BE REPLACED. RELAYS AND/OR INTERLOCK SWITCHES WHEN CONTINUITY CHECK SHOWS CONTACTS SHORTED.

INTERLOCK REPLACEMENT:

The switch housing is not adjustable. It is fixed on the front cavity with 2 screws.

IMPORTANT: CHECK FOR MICROWAVE LEAKAGE AFTER REPLACING OR ADJUSTING DOOR, INTERLOCK SWITCHES OR BRACKETS.

⚠ CAUTION

When safety interlocks and monitor switches are repaired or replaced, check microwave leakage

- Perform microwave leakage check, if leakage does not exceed 4 mW/cm², it is performing properly.

AUTOMATIC FAN FEATURE

Exhaust fan may turn "ON" automatically during heavy surface heat loads. In this condition, the exhaust fan cannot be turned off manually, it will turn off automatically. The exhaust fan may stay on up to 15 mins after range and lower oven controls are turned off.

HOOD THERMOSTAT

Single pole thermostat mounted on R.H. side duct in control compartment. Contacts close at approx. 158°F.

BOTTOM THERMOSTAT

Single pole thermostat mounted on base plate. Contacts open at approx. 248°F.

DOOR ASSEMBLY

The door assembly is serviceable as an assembly or with parts.

1. Disconnect power and open the door.
2. Remove the hinge clip.
3. Remove the door.

H.V. TRANS FUSE

WARNING! When 20 Amp. fuse is blown due to operation of the H.V. Trans failure mode, the H.V. Trans fuse must be replaced.

MICROWAVE OVEN HOODS

⚠ WARNING

TO AVOID POSSIBLE ELECTRICAL SHOCK, NEVER TOUCH OR SERVICE THE HIGH VOLTAGE CIRCUIT WITHOUT DISCHARGING CAPACITOR BY SHORTING

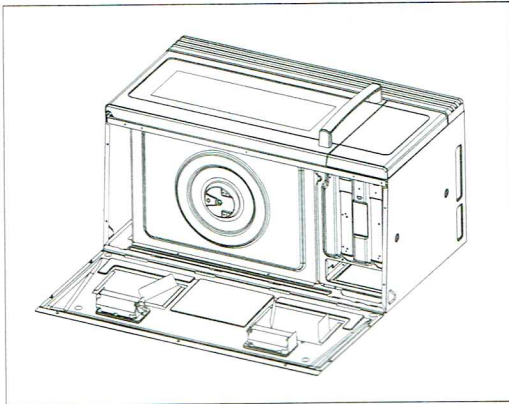
CAVITY THERMOSTAT CUTOUT (FLAME SENSOR)

The Cavity Thermal Cutout is located on the top side of the Oven Cavity beside exhaust duct with a temperature rating of 230°F (110°C). The cutout is tightly held to the top of the oven cavity by a spring clip.

NOTE: if cutout cannot be removed from clip, oven will have to be removed from installation and outer case removed.

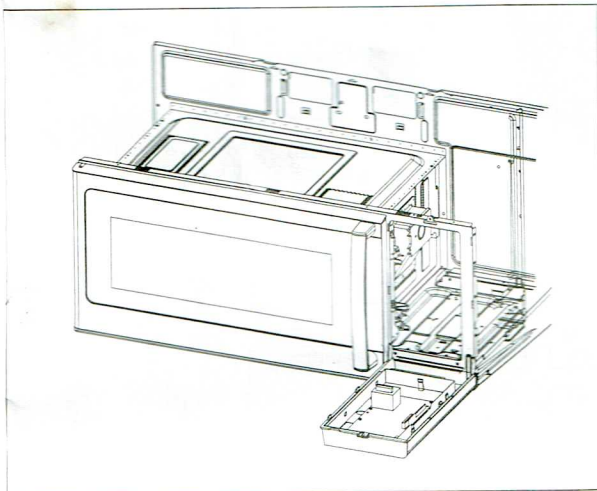
To Service Turntable (on/off) Motor

1. Disconnect power and remove bottom plate screws(6).
2. Remove bottom plate and disconnect the turntable motor wire.
3. Remove the turntable screws(2) and pull the turntable motor.



MAGNETRON, MAGNETRON FAN, VENT BLOWER, CAPACITOR, DIODE AND POWER TRANSFORMER

Oven must be removed from the wall to service.



REMOVING OVEN FROM WALL (2 PEOPLE REQUIRED)

Oven hooked on metal tabs at bottom of wall mounting plate and fastened to cabinet by top cabinet bolts (3).

CAUTION

Oven weighs about 63 lbs.

Requires 2 people for removal.

1. Disconnect Power Cord.
2. Remove top cabinet bolts (3).
3. Pull unit forward slowly, providing adequate support to prevent dropping units
4. Disconnect duct and remove damper assembly.
5. Drop unit during removal of last top cabinet bolt.

SMART BOARD:

The SMART BOARD contains the power relay, vent blower triac surface, light relays, and other components to perform the proper switching circuits. Several disconnect plugs are also located on the SMART BOARD:

- CN3 - Ribbon Connector
- CN2 - Door Sensing Connector
- CN100 - Main Relay, Vent Relay, Turntable Relay, Cooktop

Connector	Pin	Voltage	Connector	Pin	Voltage
CN3	1	5V	CN2	1	5V
	3			2	
	4		CN100	1	120V
	5			3	
	6			4	
	7			5	
	8			6	
	9			7	
	10			8	
	11			9	

ERROR MESSAGE

Display Signal:

- KEYPAD SHORTED--SERVICE MAY BE NEEDED

• Description

Keypanel shorted continuously for 60 seconds.

CONTROL PERFORMANCE TEST

- Set Clock-Touch clock pad one time, enter time of day.
- Alternately, touch each function pad and enter time, power level or selection for the selected function.
- Touch CANCEL/OFF after each function test to clear that function.
- Repeat procedure for each function to exercise each pad.
- Control and display should respond to each entry.
- Display should revert to Time-Of-Day after each CANCEL/OFF. Refer results to Diagnostic Flow Chart.

KEY PANEL TEST

If necessary the key panel pads can be verified by a continuity test. For ease of handling the key panel should be removed and placed on a flat surface. Check continuity between connections at end of ribbon (Use high Ω scale).

PAD	CONN	PAD	CONN
POPCORN	1-8	1	1-9
BEVERAGE	2-8	2	2-9
REHEAT	3-8	3	3-9
POTATO	4-8	4	4-9
COOK TIME	5-8	5	5-9
DEFROST W/T	6-8	6	6-9
TIMER ON-OFF	7-8	7	7-9
ADD 30 SEC	3-10	8	7-10
POWER LEVEL	1-11	9	6-10
CLOCK	3-11	0	5-10
SURFACE LIGHT	4-11	START/PAUSE	2-11
VENT FAN	5-11	CANCEL/OFF	7-11
TURNTABLE	6-11		