

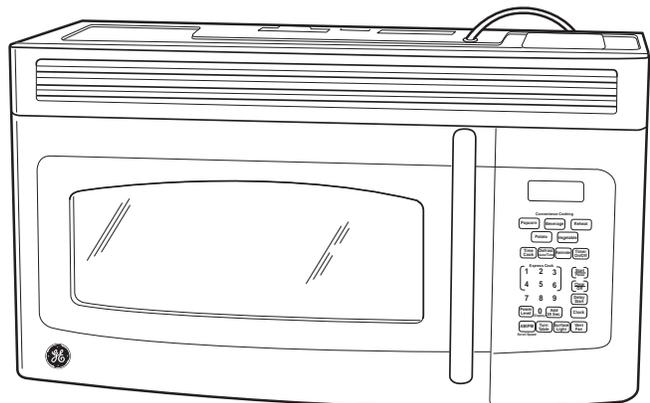
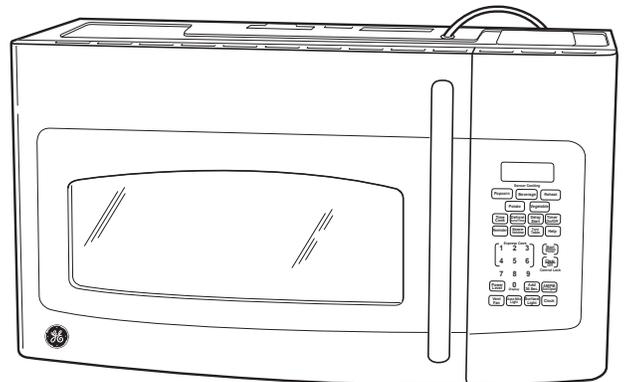
GE Consumer & Industrial

# Technical Service Guide

SEPTEMBER 2009

## GE Spacemaker® Over-the-Range Microwave Oven

JVM1750  
JVM1540



31-9190



GE Appliances  
General Electric Company  
Louisville, Kentucky 40225



### IMPORTANT SAFETY NOTICE

The information in this service guide 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.

### WARNING

To avoid personal injury, disconnect power before servicing this product. If electrical power is required for diagnosis or test purposes, disconnect the power immediately after performing the necessary checks.

### RECONNECT ALL GROUNDING DEVICES

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. DO NOT OPERATE OR ALLOW THE OVEN TO BE OPERATED WITH THE DOOR OPEN.
- B. IF THE OVEN OPERATES WITH THE DOOR OPEN, INSTRUCT THE USER NOT TO OPERATE THE OVEN AND CONTACT THE MANUFACTURER IMMEDIATELY.
- C. 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.
- D. 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.
- E. 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.
- F. A MICROWAVE LEAKAGE CHECK TO VERIFY COMPLIANCE WITH THE FEDERAL PERFORMANCE STANDARD SHOULD BE PERFORMED ON EACH OVEN PRIOR TO RELEASE TO THE OWNER.

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*Technical Service Guide*  
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# Nomenclature

## Model Number

**J V M 1 7 5 0 D P 1 B B**

### Product

J = GE Cooking Product

### Microwave Oven

V = Externally Vented  
Over-the-Range

### Installation

M = Mounts Under Cabinet/  
Built-In Capability

### Cavity Size (cu. ft.)

15 = 1.5 cu. ft

17 = 1.7 cu. ft.

### Product Color

BB = Black

WW = White

SS = Stainless Steel

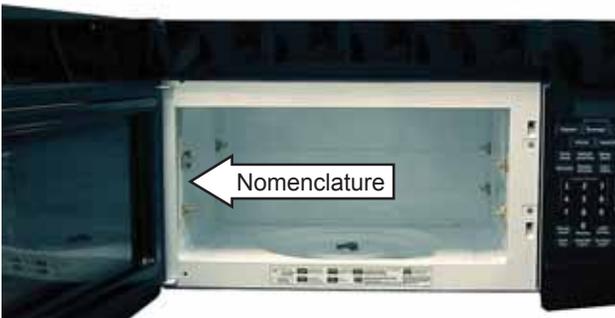
### Model Year Designator

### Model/Door Color

D = Color Matched

### Feature Pack

Designates Features - the higher the number, the more features.



The nomenclature plate is located inside the microwave on the left side.

The mini-manual is located behind the control panel on the right side of the oven.

## Serial Number

The first two numbers of the serial number identify the month and year of manufacture.

Example: **AS123456S** = January, 2009

A - JAN	2009 - S
D - FEB	2008 - R
F - MAR	2007 - M
G - APR	2006 - L
H - MAY	2005 - H
L - JUN	2004 - G
M - JUL	2003 - F
R - AUG	2002 - D
S - SEP	2001 - A
T - OCT	2000 - Z
V - NOV	1999 - V
Z - DEC	1998 - T

The letter designating the year repeats every 12 years.

Example:

T - 1974

T - 1986

T - 1998

# Introduction

The GE Spacemaker Over-the-Range Microwave Oven is a versatile appliance for any kitchen.

## Features and Benefits:

**Sensor Cook** - The microwave oven automatically adjusts the cooking time to various types and amounts of food.

**Auto and Time Defrost** - Auto defrost sets the defrosting time and power levels to deliver even defrosting results for up to 6 pounds of meats, poultry, and fish. Time defrost defrosts for the length of time you specify.

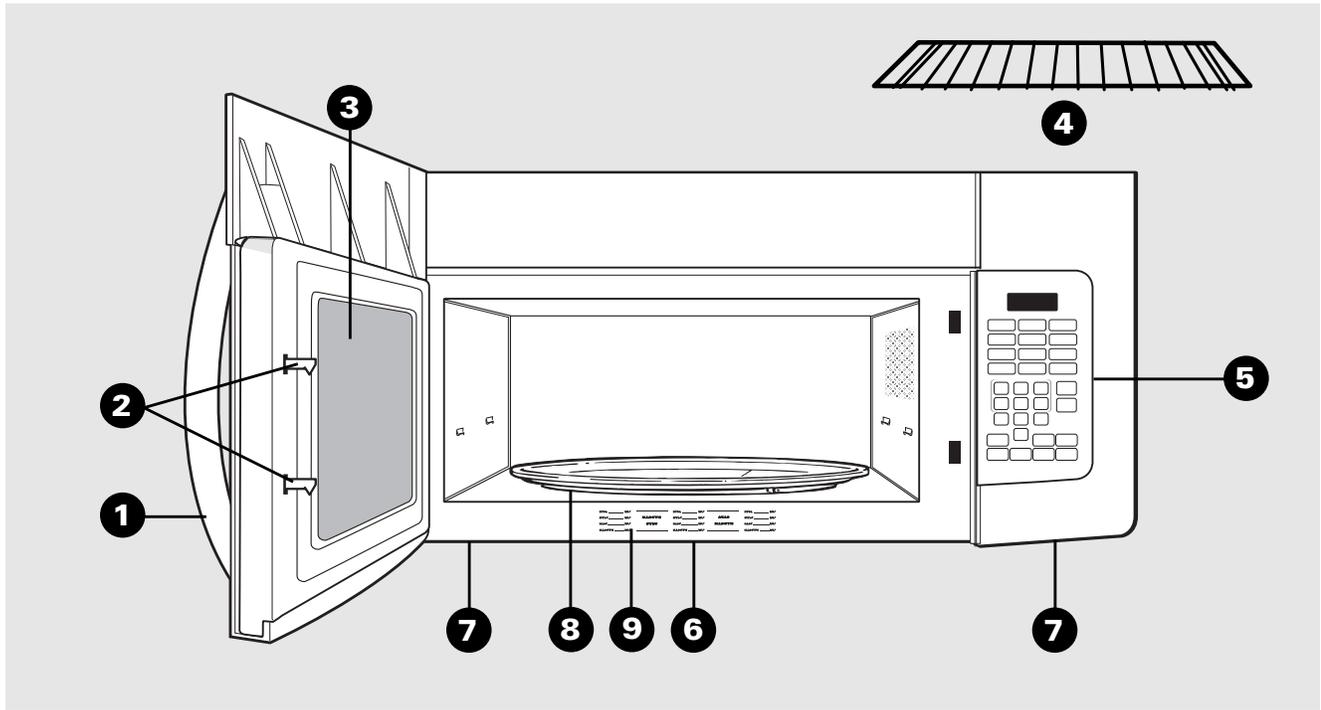
**Turntable On/Off** - Rotate food for even cooking or disable the turntable to accommodate large casserole dishes.

**Removable Two-Position Oven Rack** - The removable oven rack features two positions that allow more flexibility when cooking multiple dishes at one time.



# Control Features

## JVM1750 Features



**1 Door Handle.** Pull to open the door. The door must be securely latched for the microwave to operate.

**2 Door Latches.**

**3 Window with Metal Shield.** Screen allows cooking to be viewed while keeping microwaves confined in the oven.

**4 Shelf.** Lets you microwave several foods at once. Food microwaves best when placed directly on the oven floor or turntable.

**5 Touch Control Panel.** You **must** set the clock and calendar before using the microwave.

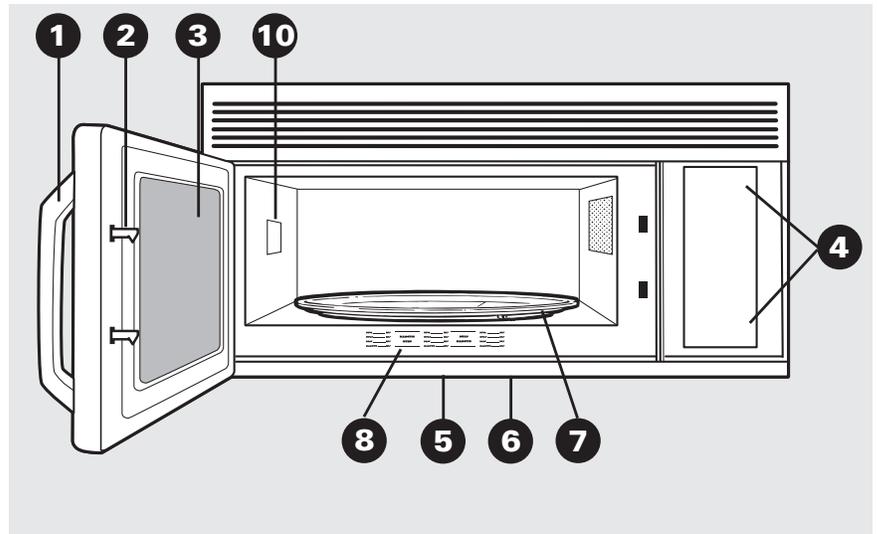
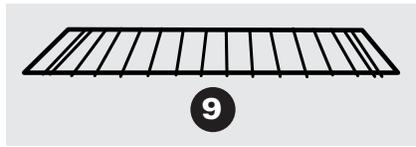
**6 Cooktop Light.**

**7 Grease Filter.**

**8 Removable Turntable.** Turntable and support **must** be in place when using the oven. The turntable may be removed for cleaning.

**9 Convenience Guide.**

**NOTE:** Rating plate, oven vent(s) and oven light are located on the inside walls of the microwave oven.



**1 Door Handle.** Pull to open the door. The door must be securely latched for the microwave to operate.

**2 Door Latches.**

**3 Window with Metal Shield.** Screen allows cooking to be viewed while keeping microwaves confined in the oven.

**4 Touch Control Panel.**

**5 Cooktop Light.**

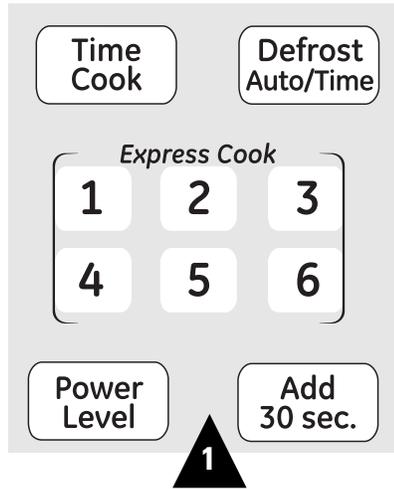
**6 Grease Filter.**

**7 Removable Turntable.** Turntable and support **must** be in place when using the oven. The turntable may be removed for cleaning.

**8 Convenience Guide.**

**9 Shelf (some models).** Lets you microwave several foods at once. Food microwaves best when placed directly on the turntable. Available at an extra cost from your GE supplier, or see GE Service Numbers.

**10 Rating Plate.** Located on the inside wall of the microwave oven.



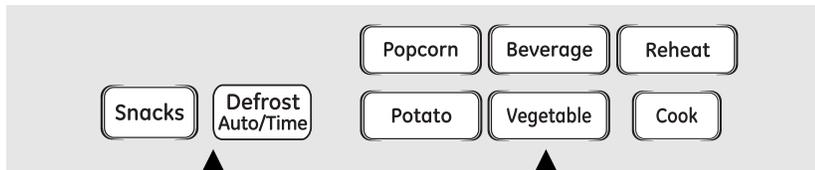
**1 Time Features**

*Time Cooking*

<i>Press</i>	<i>Enter</i>
<b>TIME COOK I &amp; II (Press once or twice)</b>	Amount of cooking time.
<b>DEFROST AUTO/TIME (Press twice)</b>	Amount of defrosting time.
<b>EXPRESS COOK</b>	Starts immediately!
<b>POWER LEVEL</b>	Power level 1–10.
<b>ADD 30 SEC</b>	Starts immediately!

*Defrosting by Weight*

<i>Press</i>	<i>Enter</i>
<b>DEFROST AUTO/TIME (Press once)</b>	Food weight



**2 Convenience Features (on some models)**

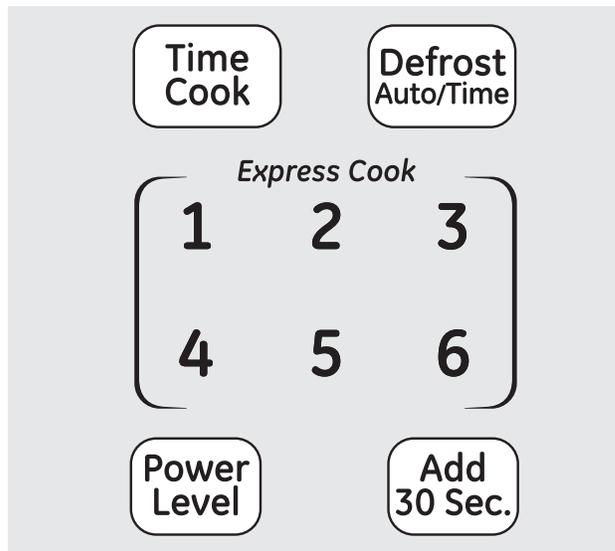
<i>Press</i>	<i>Enter</i>	<i>Option</i>
<b>SNACKS (See Snacks Guide)</b>	Snack type 1–6	number/weight
<b>DEFROST AUTO/TIME (Press once)</b>	Food weight	

**3 Sensor Features**

<i>Press</i>	<i>Enter</i>	<i>Option</i>
<b>POPCORN</b>	Starts immediately!	more/less time
<b>BEVERAGE</b>	Starts immediately!	
<b>REHEAT</b>	Starts immediately!	more/less time
<b>POTATO</b>	Starts immediately!	more/less time
<b>VEGETABLE (on some models)</b> Press once (fresh vegetables) Press twice (frozen vegetables) Press three times (canned vegetables)	Starts immediately!	more/less time more/less time more/less time (on some models)
<b>COOK (on some models)</b> Press 1 for Chicken Press 2 for Fish Press 3 for Ground Meats Press 4 for Fresh Vegetables Press 5 for Frozen Vegetables Press 6 for Canned Vegetables	Food type 1–6 Starts immediately!	

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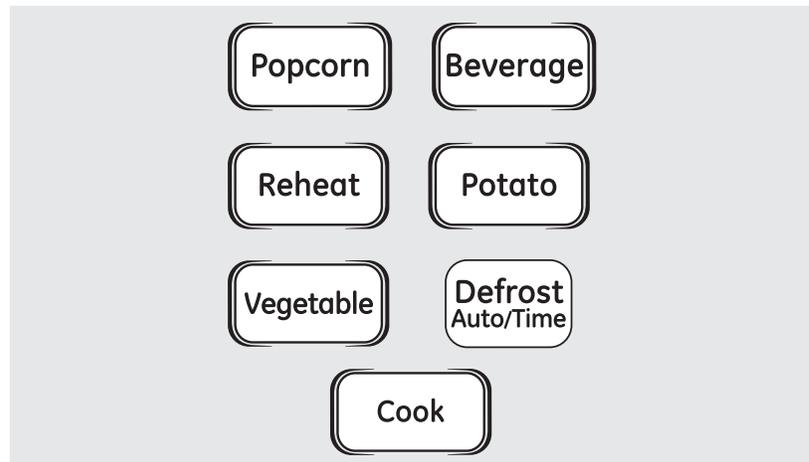
You can microwave by time, temperature or with the convenience features.



## 1 Time Features

### Time Cooking

Press	Enter
TIME COOK I & II (Press once or twice)	Amount of cooking time.
DEFROST AUTO/TIME (Press twice)	Amount of defrosting time.
EXPRESS COOK	Starts immediately!
POWER LEVEL	Power level 1-10.
ADD 30 SEC	Starts immediately!



## 2 Convenience Features

Press	Enter	Option
COOK (on some models)	Food type 1-9 + weight	
POPCORN	Starts immediately!	more/less time serving size
REHEAT	(See Reheat Guide)	serving size
BEVERAGE	Starts immediately!	serving size
POTATO	Starts immediately!	serving size
VEGETABLE (on some models)	Food type 1-3 + weight	
DEFROST AUTO/TIME (Press once)	Food weight	

## Demo Mode (JVM1750)

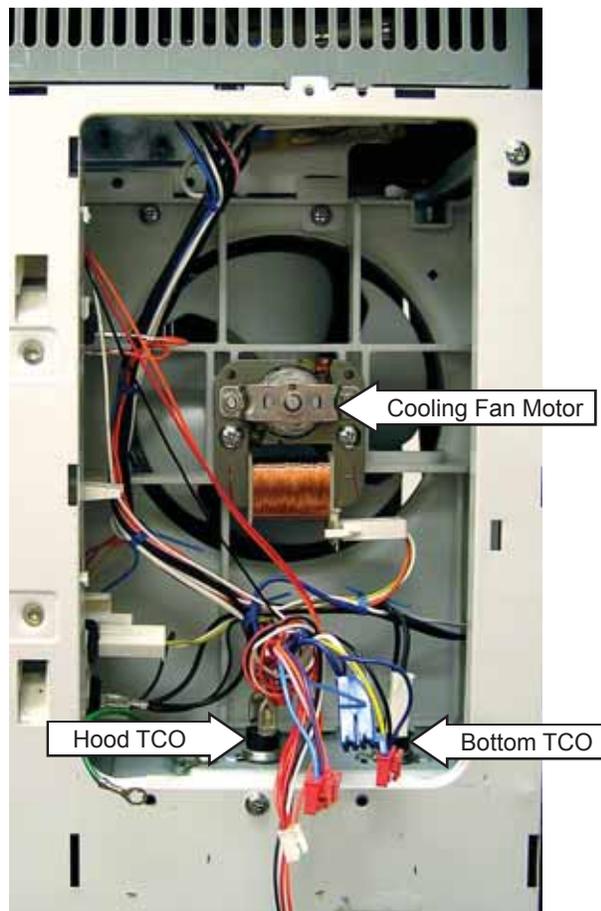
- To enter the Demo Mode, touch and hold the *HELP* pad for a full 3 seconds.
- To end the Demo Mode, touch and hold the *HELP* pad for a full 3 seconds.
- As pads are pressed in the Demo Mode, explanations of the pads' functions will be scrolled across the display screen.
- No components will actually be energized, however, during Demo Mode.

# Component Locator Views

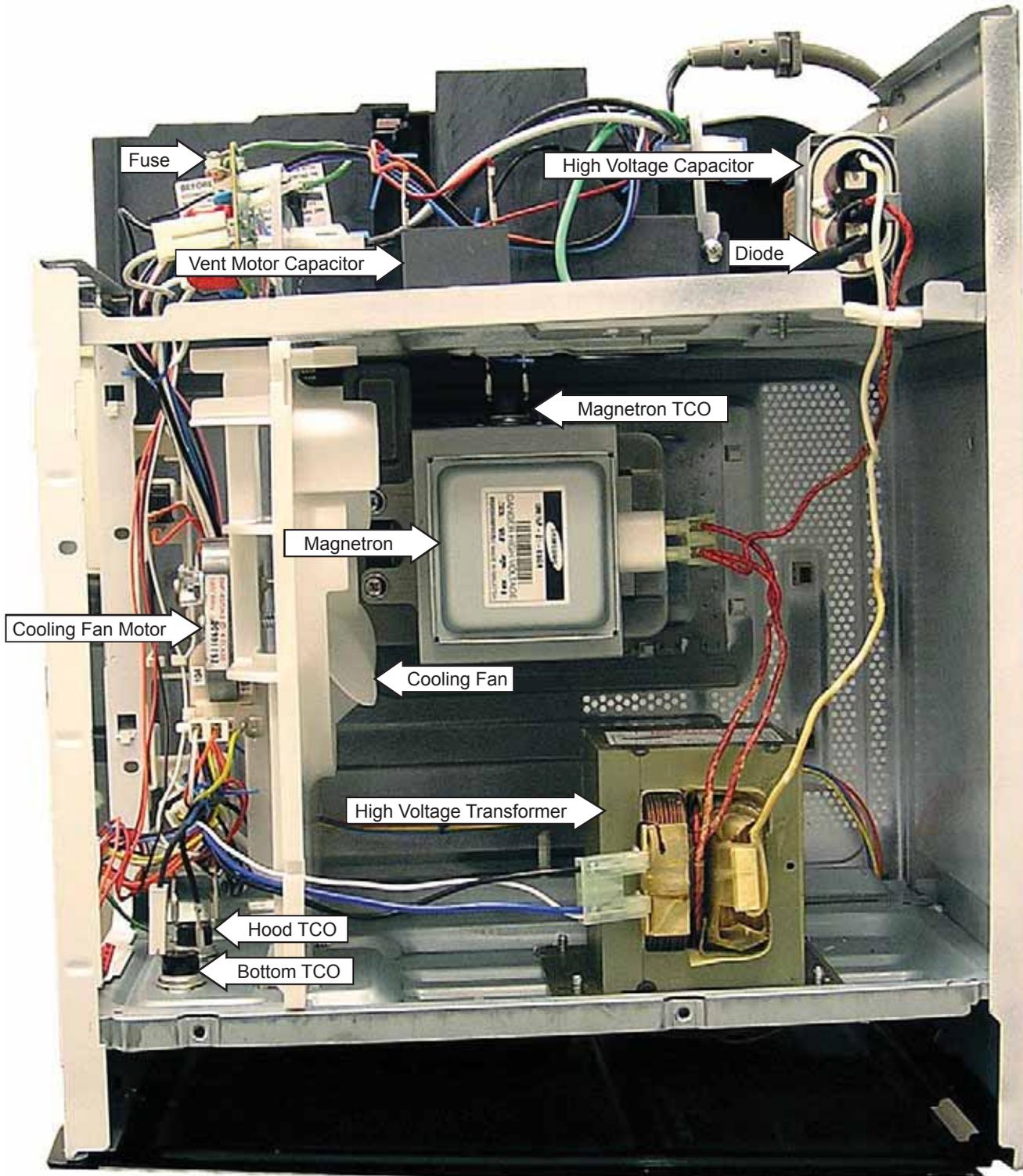
Front View



Front View - Control Panel Assembly Removed

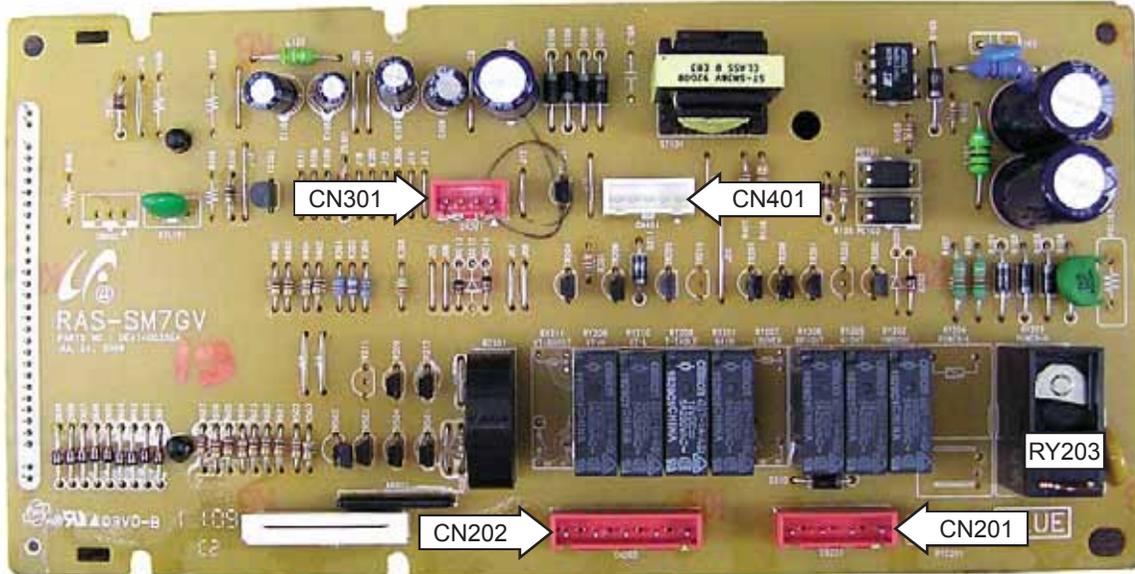


Right Side View



# Control Boards and Panel Connections

## JVM1750 Smart Board



(Back Side)

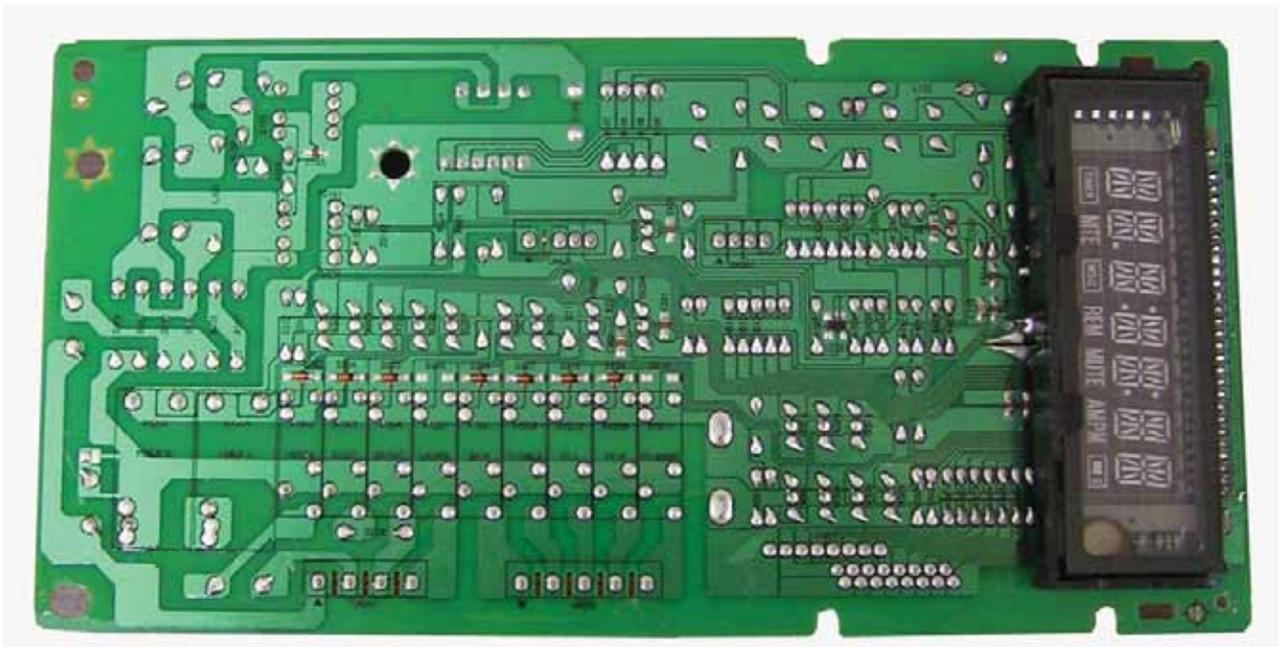
CN201 - Vent Motor

CN202 - Turntable Motor, Cooktop Lamp

CN301 - Gas Sensor

CN401 - Hood TCO & Door Sensing Switch

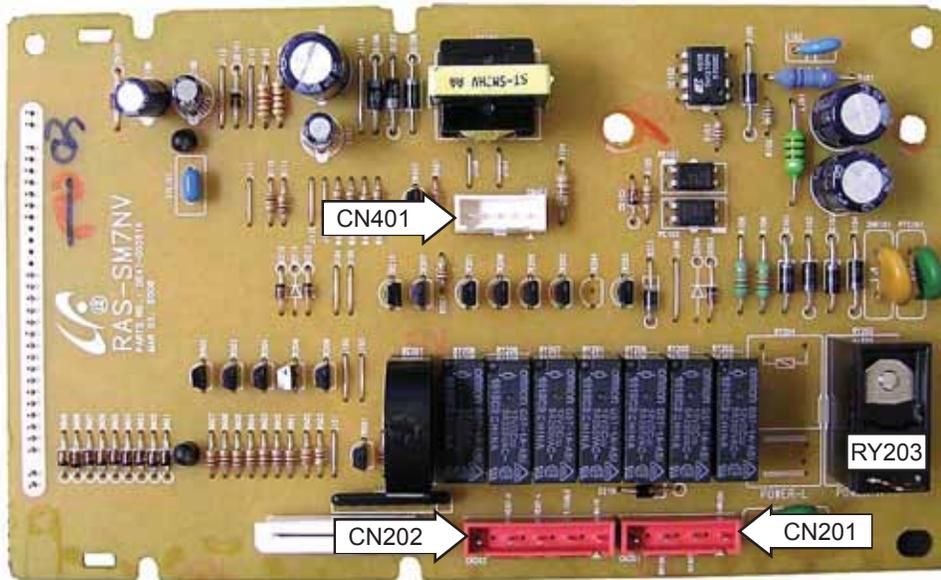
RY203 - Secondary Relay (Power Relay)



(Front Side)

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# JVM1540 Smart Board



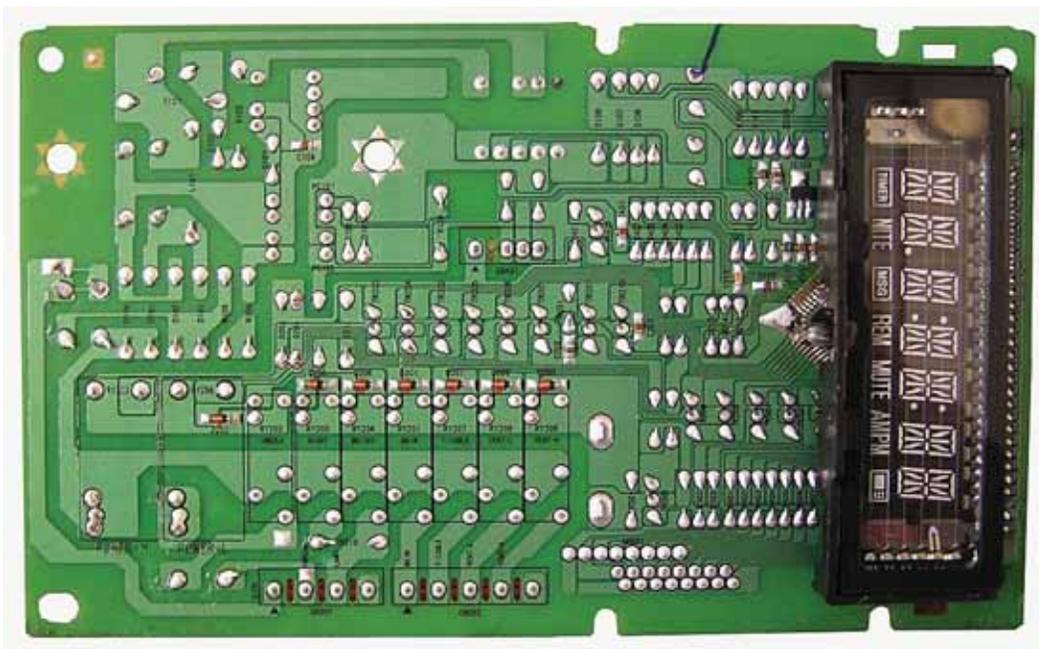
(Back Side)

CN201 - Vent Motor

CN202 - Turntable Motor, Cooktop Lamp

CN401 - Hood TCO & Door Sensing Switch

RY203 - Secondary Relay (Power Relay)



(Front Side)

# Components

## Oven Removal

The oven is hooked on metal tabs at the bottom of the wall mounting plate and fastened to the cabinet with 3 top cabinet bolts.

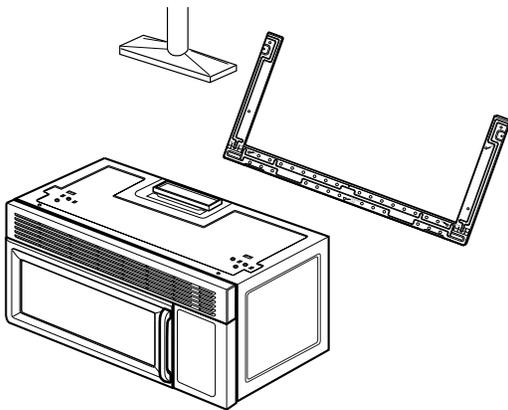
To remove the oven from the cabinet or wall opening:

**WARNING:** This oven requires 2 people for complete oven removal.

1. Disconnect power to the oven.
2. For top-vented models, disconnect the duct and remove the damper assembly.
3. Remove the 3 top cabinet bolts.

**Caution:** When removing the oven, be sure to provide adequate support to prevent dropping the unit.

4. Pull the unit forward slowly.



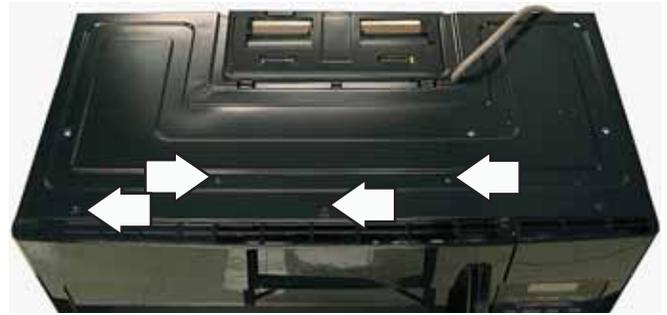
## Outer Cover

To gain access to many of the oven components, it is necessary to remove the outer cover.

To remove the outer cover:

1. Remove the oven. (See *Oven Removal*.)
2. Remove 4 Phillips-head screws from the top of the oven.

**Note:** Model JVM1540 has 5 Phillips-head screws on the top of the oven.



3. Remove 5 Phillips-head screws from the back of the oven.



4. Remove 3 Phillips-head screws from the bottom of the oven.



5. Remove 2 Phillips-head screws from the right side of the oven.



- Remove 2 Phillips-head screws from the left side of the oven.



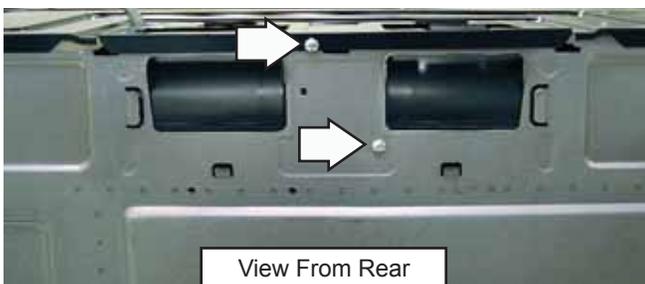
- Slide the outer cover back about 1 inch toward the rear of the oven. Lift the cover from the oven.

### Vent Blower

The vent blower is located at the top rear of the microwave oven. See installation instructions for the proper method of directing the vent fan prior to installing the unit.

To remove the vent blower:

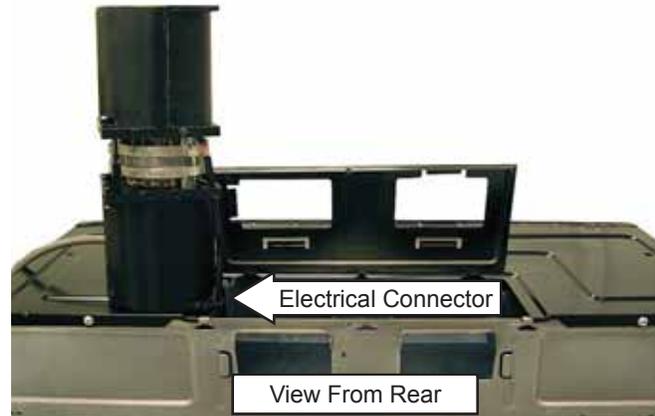
- Remove the oven. (See *Oven Removal*.)
- Remove 2 Phillips-head screws from the back of the oven.



- Lift the vent blower cover up to expose the vent blower.



- Lift out the vent blower and place it on top of the oven side as shown below and disconnect the electrical connector to the vent blower.



### Grill Assembly

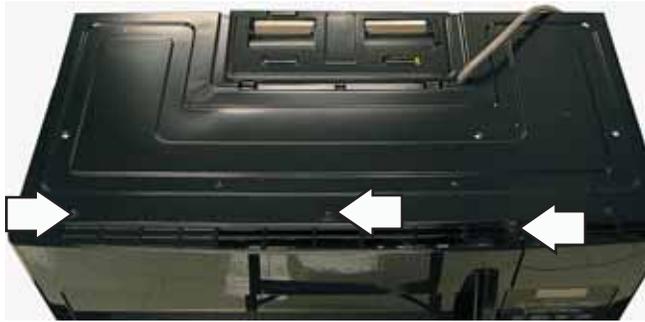
To remove the grill assembly (Model JVM1540):

- Remove 3 Phillips-head screws from the top, front of the oven cabinet.
- Slide grill to the left and remove.



To remove the grill assembly (Model JVM1750):

1. Open the door.
2. Remove 2 Phillips-head screws from the top, front of the oven cabinet.
3. Remove 1 Phillips-head screw from the right, rear corner of the grill.
4. Slide grill to the left and remove.

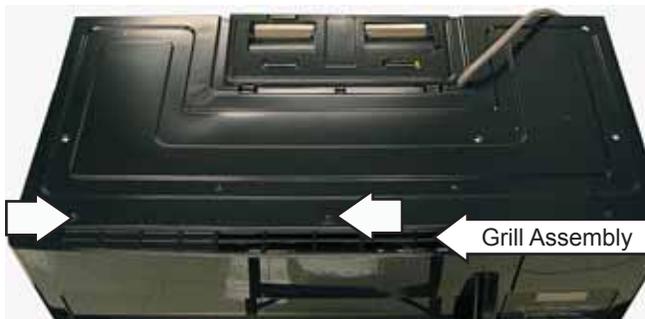


### Interior Light

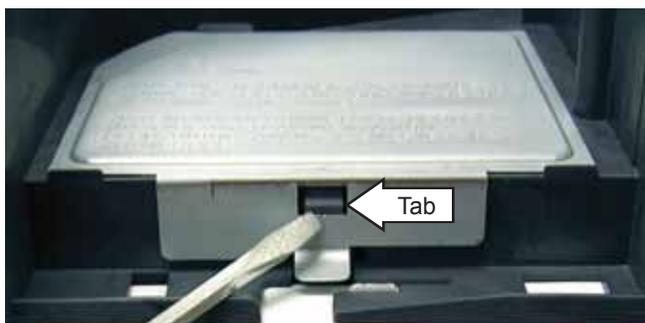
The interior light bulb is 120V, 40 watt (part number WB06X10823).

To remove the interior light:

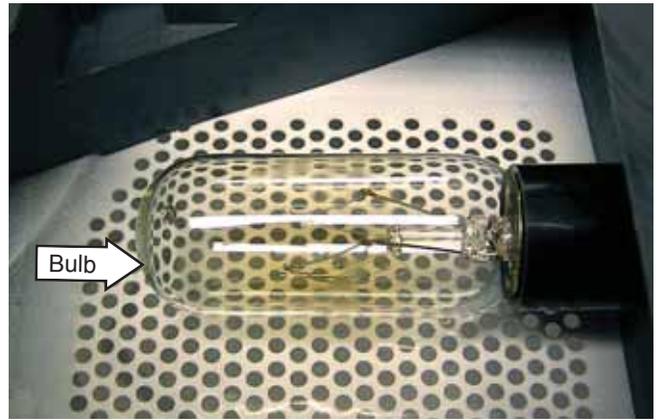
1. Open the oven door.
2. Remove the 2 Phillips-head screws from the top of the oven that attach the grill assembly to the oven and remove the grill assembly.



3. Using a small flat blade screwdriver, push in the interior light cover tab and remove the cover.



4. Gently remove the bulb.

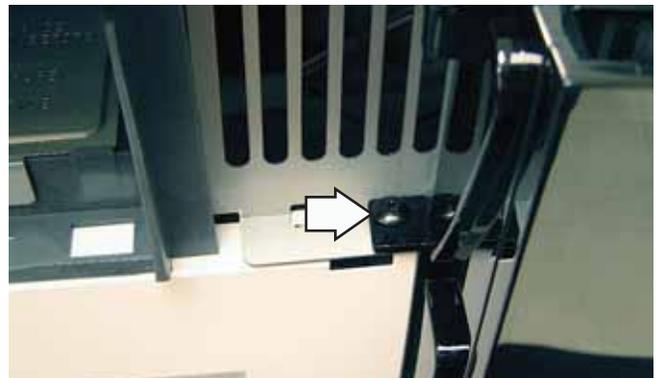


### Control Panel Assembly

The control panel assembly consists of a smart board, frame, and a touch pad/escutcheon.

To remove the control panel assembly:

1. Disconnect power to the microwave oven.
2. Open the oven door.
3. Remove the grill assembly. (See *Grill Assembly*.)
4. Remove the Phillips-head screw that attaches the control panel to the oven.



(Model JVM1750)

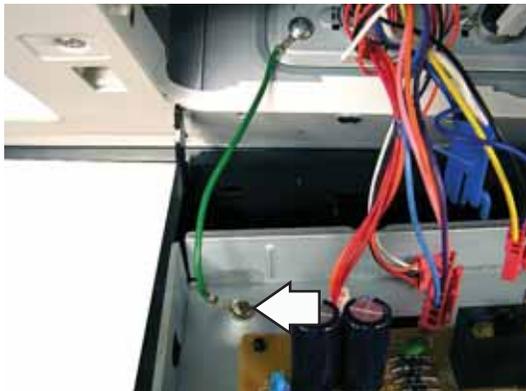


(Model JVM1540)

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5. Tilt the top of the control panel out, and mark and disconnect all the wiring harnesses connected to the smart board.
6. Remove the Phillips-head screw that attaches the ground wire to the control panel assembly.

**Note:** Model JVM1540 does not have this ground wire.

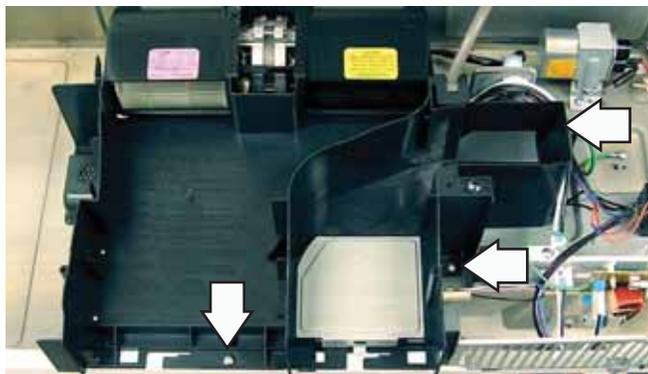


### Duct Assembly

To access the cavity TCO, the duct assembly must be removed.

To remove the duct assembly:

1. Remove the outer cover. (See *Outer Cover*.)
2. Remove the 3 Phillips-head screws that attach the duct assembly to the oven.



3. Lift the duct assembly up at the rear and pull towards the back to release the tabs securing it to the front frame.

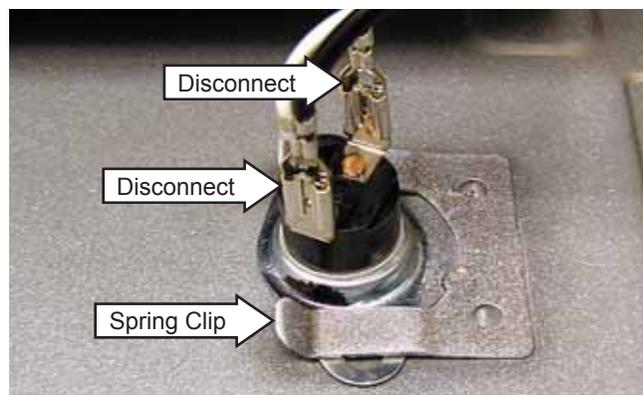
### Cavity Thermal Cutout

The cavity thermal cutout is located on the top side of the oven cavity beside the exhaust duct. The cutout has a temperature rating of 212°F.

The cavity TCO is not resettable.

To remove the oven thermal cutout:

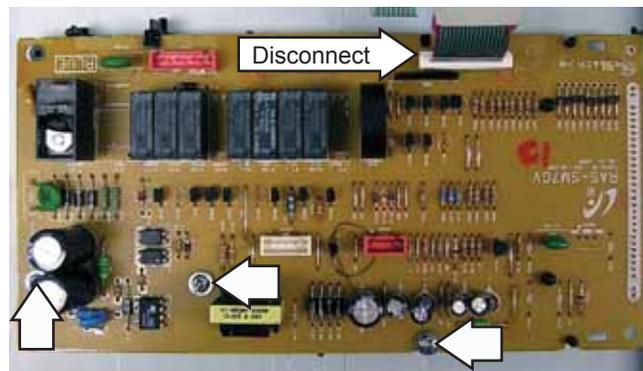
1. Remove the outer cover. (See *Outer Cover*.)
2. Remove the duct assembly. (See *Duct Assembly*.)
3. Disconnect wiring to the oven thermal cutout.
4. Slide the oven thermal cutout to the left to remove it from the spring clip attaching it to the oven cavity.



### Smart Board

To remove the smart board:

1. Remove the control panel assembly. (See *Control Panel Assembly*.)
2. Disconnect the touch panel ribbon from the smart board.
3. Remove the 3 Phillips-head screws that attach the smart board to the control board frame then lift the smart board off the frame.



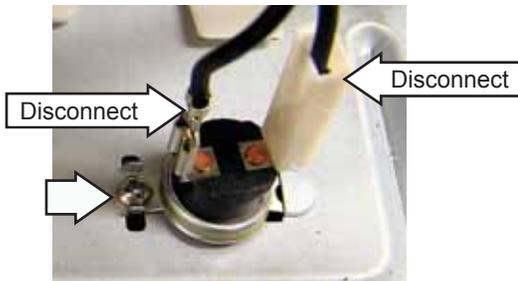
## Bottom Thermal Cutout (TCO)

The bottom TCO is located on the bottom, right side of the oven behind the control panel. The bottom TCO is not resettable.

The bottom TCO's contacts open at approximately 248°F.

To remove the bottom TCO:

1. Remove the control panel assembly. (See *Control Panel Assembly*.)
2. Disconnect wiring from the bottom TCO.
3. Remove the Phillips-head screw attaching the bottom TCO to the oven, then pull the TCO forward.



## Magnetron Thermal Cutout (TCO)

The magnetron TCO is located on the magnetron and opens when the magnetron temperature reaches 302°F.

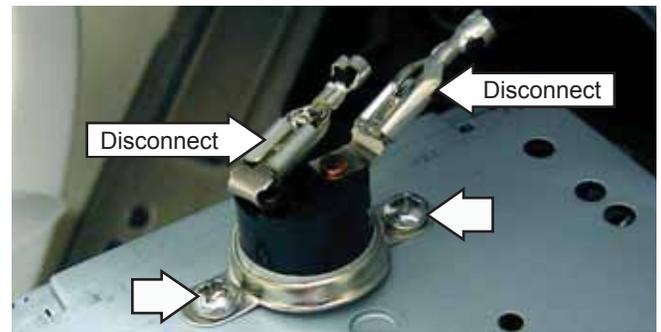
The magnetron TCO is a normally closed switch. An open reading across the TCO indicates a failed TCO. The magnetron TCO resets at 140°F.

To remove the magnetron TCO:

1. Remove the outer cover. (See *Outer Cover*.)
2. Disconnect the wiring to the magnetron.
3. Remove the 2 Phillips-head screws that attach the magnetron to the oven.



4. Disconnect wiring to the magnetron TCO.
5. Remove 2 Phillips-head screws that attach the magnetron TCO to the magnetron.

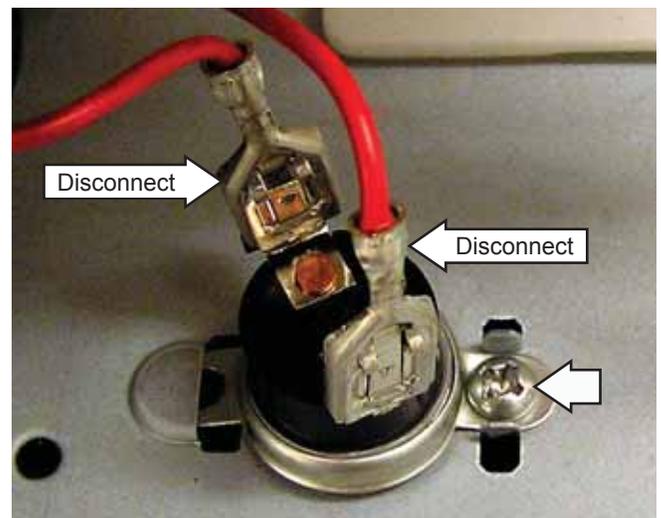


## Hood Thermal Cutout (TCO)

The hood TCO is attached to the base plate. The contacts close at approximately 158°F and open at approximately 104°F.

To remove the hood TCO:

1. Remove the control panel assembly. (See *Control Panel Assembly*.)
2. Disconnect wiring to the hood TCO.
3. Remove the Phillips-head screw attaching the hood TCO to the oven and pull the TCO forward.

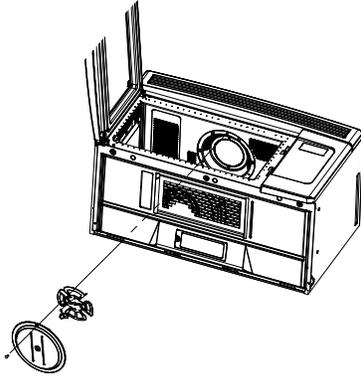


## Stirrer Assembly

The stirrer assembly consists of a blade, pin, and cover. The blade is air driven and rotates on a shaft embedded in the stirrer cover. The stirrer assembly is located at the top of the oven cavity.

### To remove the stirrer:

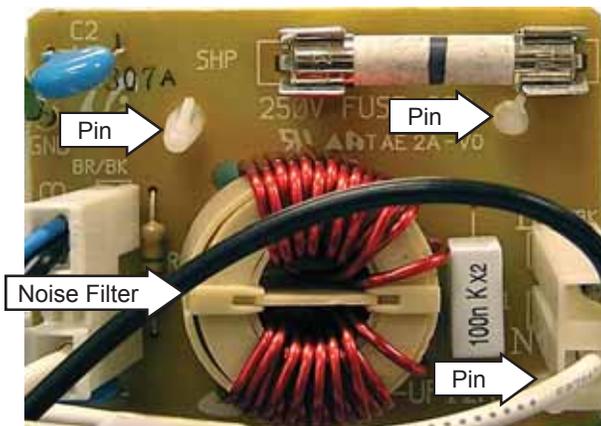
1. Disconnect power from the microwave oven and open the door.
2. Remove the plastic clip from the stirrer cover.
3. Rotate the stirrer cover to the left and remove the stirrer cover.



## Noise Filter

The noise filter helps to suppress electromagnetic interference (EMI) radiating from the operation of the oven and also protects the oven from any line noise. The noise filter is located on the right side of the oven behind the control panel. The noise filter is held in place by three compression pins.

**Note:** When installing the noise filter, ensure all filter wiring is connected to the correct terminals.



Check to make sure the fuse is not open. Check the noise filter for approximate resistance value at the following locations:

White (neutral input) to white (neutral output) - 0  $\Omega$ .

Black (line input) to black (line output) - 0  $\Omega$ .

White (neutral input) to black (line input) - 23  $\Omega$ .

## Line Fuse

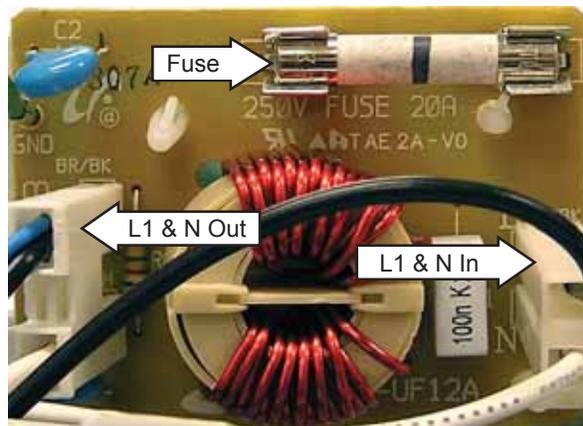
**Note:** When the 20-amp fuse is blown due to operation of the monitor switch, the monitor switch must be replaced. Also replace the relays and/or the interlock switches when the continuity check shows the contacts are shorted.

The unit is equipped with a 20-amp fuse (part number WB27X10928).

The fuse is located on a receptacle near the top of the noise filter and is common to all functions and door switches.

### To remove the fuse:

1. Disconnect power to the microwave oven.
2. Remove the control panel assembly. (See *Control Panel Assembly*.)
3. Remove the fuse.

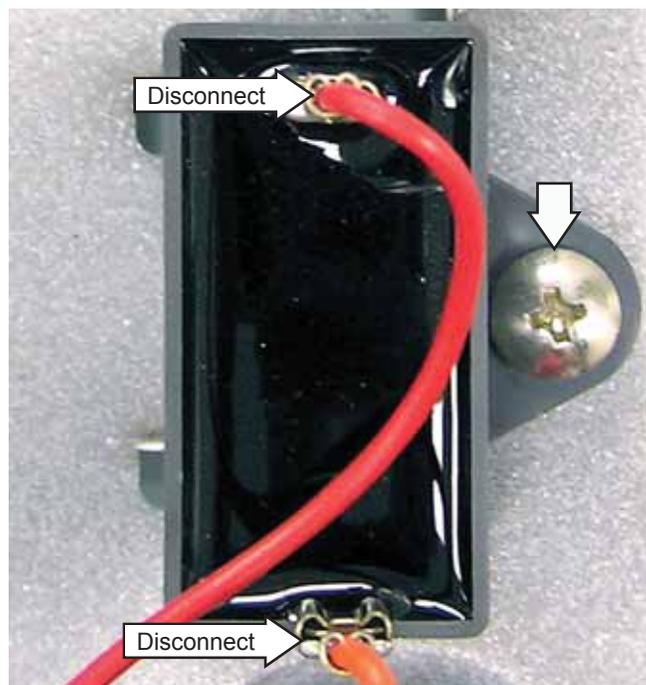
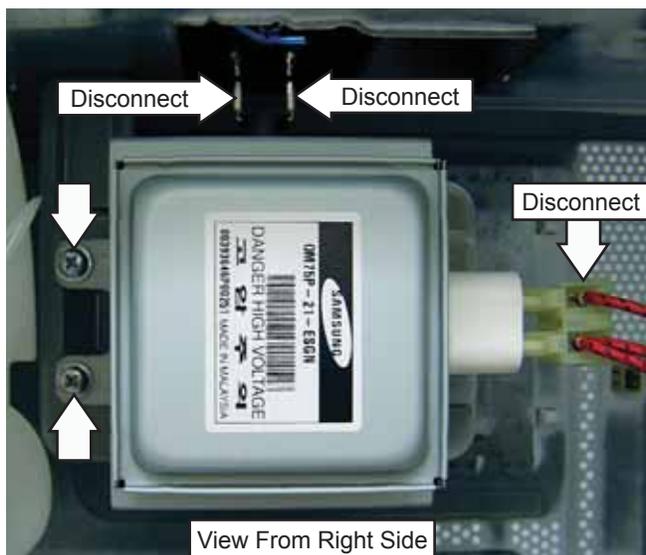


## Magnetron

**WARNING:** Prior to servicing the magnetron, be certain the capacitor is discharged. Manually discharge by placing an insulated-handle screwdriver between the diode connection of the capacitor and the oven chassis ground.

To remove the magnetron:

1. Remove the outer cover. (See *Outer Cover*.)
2. Disconnect wiring to the magnetron.
3. Remove the 2 Phillips-head screws that attach the magnetron to the oven.

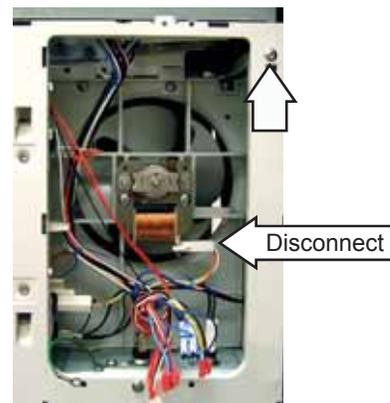


## Cooling Fan Motor

The cooling fan and motor are located on the right side of the microwave oven.

To remove the cooling fan and motor:

1. Remove the control panel assembly. (See *Control Panel Assembly*.)
2. Remove the outer cover. (See *Outer Cover*.)
3. Disconnect the wiring to the cooling fan motor.
4. Remove the Phillips-head screw from the top, right corner of the microwave.



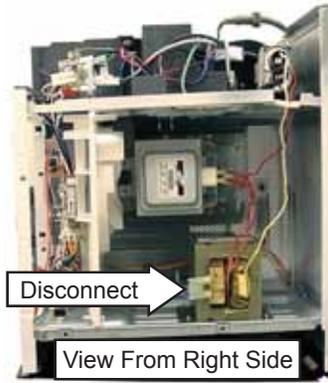
## Vent Fan Motor Capacitor

The vent fan motor capacitor is located on the top of the oven above the cooling fan.

To remove the vent fan motor capacitor:

1. Remove the outer cover. (See *Outer Cover*.)
2. Disconnect wiring to the motor capacitor.
3. Remove the Phillips-head screw that attaches the motor capacitor to the oven.

5. Disconnect wiring to the primary of the high voltage transformer.



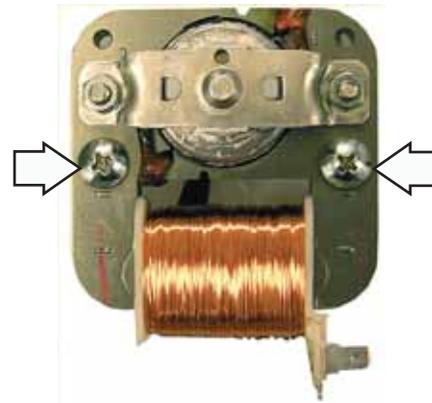
8. Using a small flat blade screwdriver, carefully remove the fan retainer.



6. Remove 3 Phillips-head screws attaching the cooling fan frame to the microwave.



9. Remove 2 Phillips-head screws that attach the fan motor to the cooling fan frame.



7. Move the cooling fan frame out of the oven, through the right side of the microwave.



## Capacitor and Diode

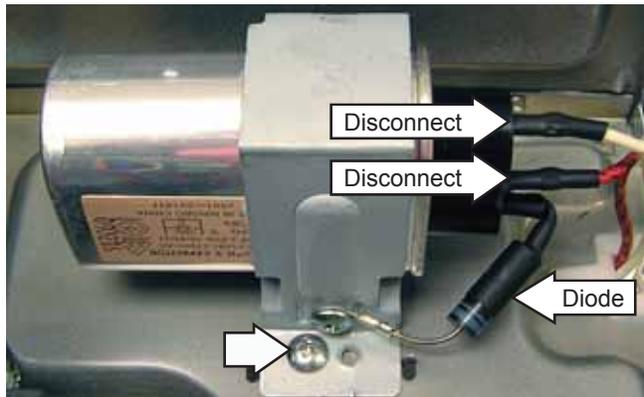
The capacitor has an internal shunt resistor to automatically discharge the capacitor when the oven turns "off". Under normal operation, the capacitor should fully discharge within 30 seconds.

**WARNING:** Always be certain the capacitor is discharged before servicing. Mechanically discharge the capacitor by placing an insulated-handle screwdriver between the diode connection of the capacitor and the oven chassis ground.

**Note:** Use the screw head close to the capacitor to ensure ground metal contact.

To remove the capacitor and diode:

1. Remove the outer cover. (See *Outer Cover*.)
2. Disconnect wiring to the high voltage capacitor.
3. Remove the Phillips-head screw that attaches the capacitor and diode to the oven and remove the high voltage capacitor.
4. Disconnect the diode from the high voltage capacitor.



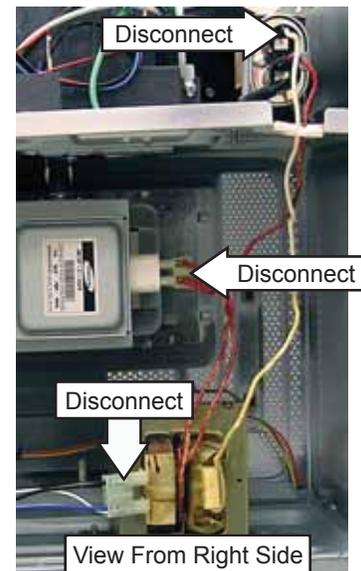
## High Voltage Transformer

The high voltage transformer is located on the right side of the microwave oven, beneath the magnetron.

**WARNING:** Prior to servicing the transformer, be certain the capacitor is discharged. Manually discharge by placing an insulated-handle screwdriver between the diode connection of the capacitor and the oven chassis ground.

To remove the high voltage transformer:

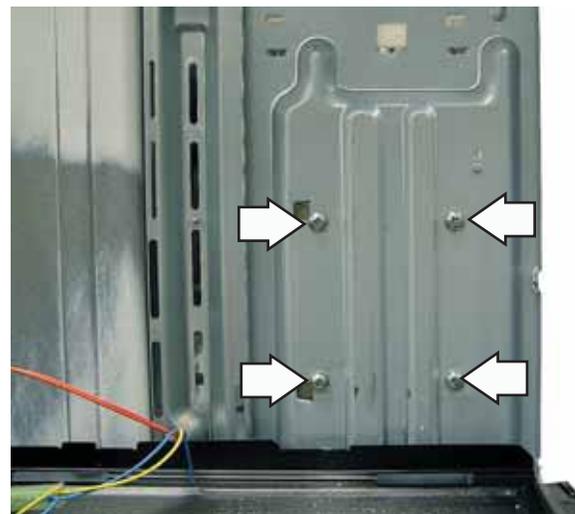
1. Remove the outer cover. (See *Outer Cover*.)
2. Disconnect wiring to the high voltage transformer.



3. Remove 6 Phillips-head screws from the bottom of the microwave oven cabinet.



4. Remove 4 Phillips-head screws that attach the high voltage transformer to the bottom plate.



## Door Interlock Switches

The door has 3 interlock switches. All switches are removed the same way.

### Door Sensing and Primary Interlock Switches

The power relay is mounted on the smart board. The primary interlock and door sensing switches are activated by the latch heads on the door. When the door is opened, the switches interrupt the circuit to all components, except the oven lamp and the control panel display. A cook cycle cannot take place until the door is firmly closed, thereby activating both interlock switches. The primary interlock system consists of the door sensing switch, the primary interlock switch, and the power relay.

### Monitor Switch

The monitor switch is operated indirectly by the bottom latch pawl. The pawl operates a cam switch, which in turn, activates the monitor switch. The switch is intended to render the oven inoperative by means of blowing the monitor fuse when the contacts of the primary interlock switch and power relay fail to open when the door is opened.

### Functions

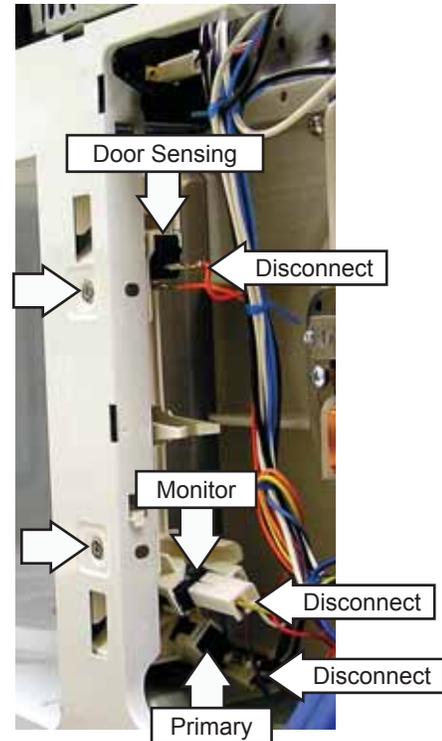
When the door is opened, the monitor switch is closed. At this time, the primary interlock switch and the power relay are open.

As the door goes to a closed position, the monitor switch is first open and then the door sensing switch and the primary interlock switch contacts close.

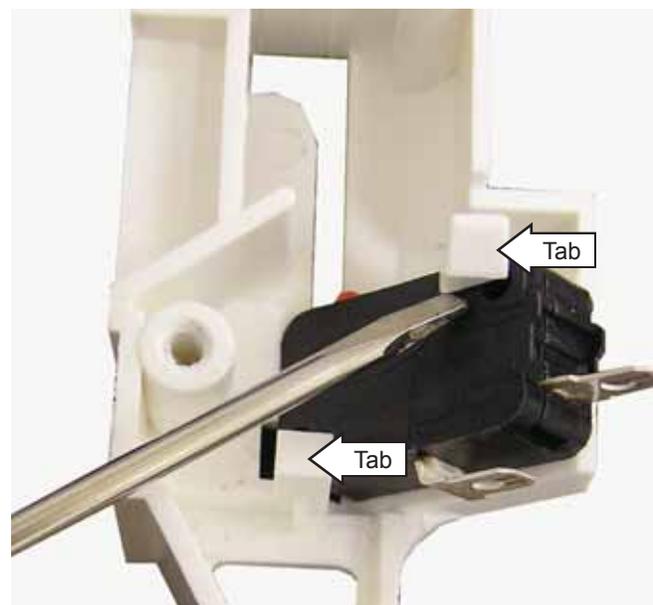
### To remove the door interlock switches:

1. Disconnect wiring to the door switches.

3. Remove the 2 Phillips-head screws that attach the door switch bracket to the microwave oven frame and remove the door switch bracket.



4. Using a small flat blade screwdriver, release the tabs and remove the door interlock switch from the door switch bracket.



## Turntable Motor

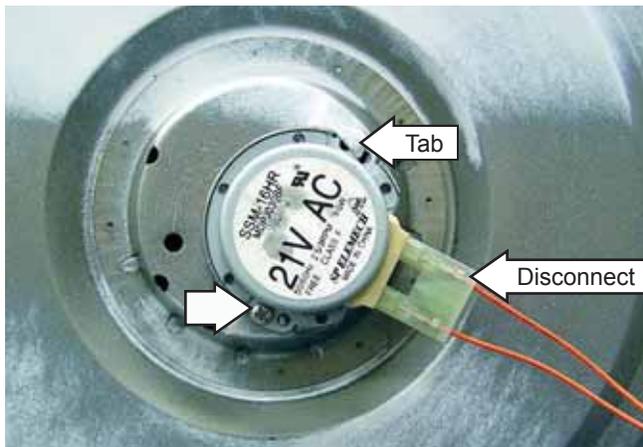
The turntable motor is located on the bottom of the microwave oven. Motor is a 21vac motor.

To remove the turntable motor:

1. Remove 6 Phillips-head screws from the bottom of the microwave oven cabinet.

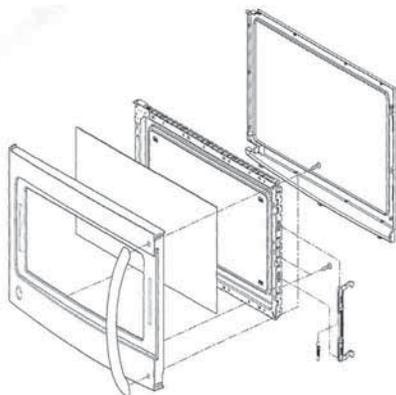


2. Disconnect the turntable motor wiring harness.
3. Remove single Phillips-head screw and twist motor slightly clockwise to release motor from the tab on the frame.



## Door Assembly

The door is available as a complete assembly or as individual parts.



A microwave leakage test must be performed any time a door is removed, replaced, disassembled, or adjusted for any reason. The maximum leakage is 4 MW/CM<sup>2</sup>.

To remove the door, first remove the grill assembly. (See *Grill Assembly*.) Then lift the door up and disengage from the hinge pins.



## Surface Lamps

The surface lamps are 120V, 40-watt incandescent bulbs (part number WB06X10823).

**Note:** Model JVM1750 has two bulbs. The JVM1540 model has a single bulb.

To remove the surface lamp assemblies:

1. Remove the Phillips-head screw from the surface lens panel, then open the panel.

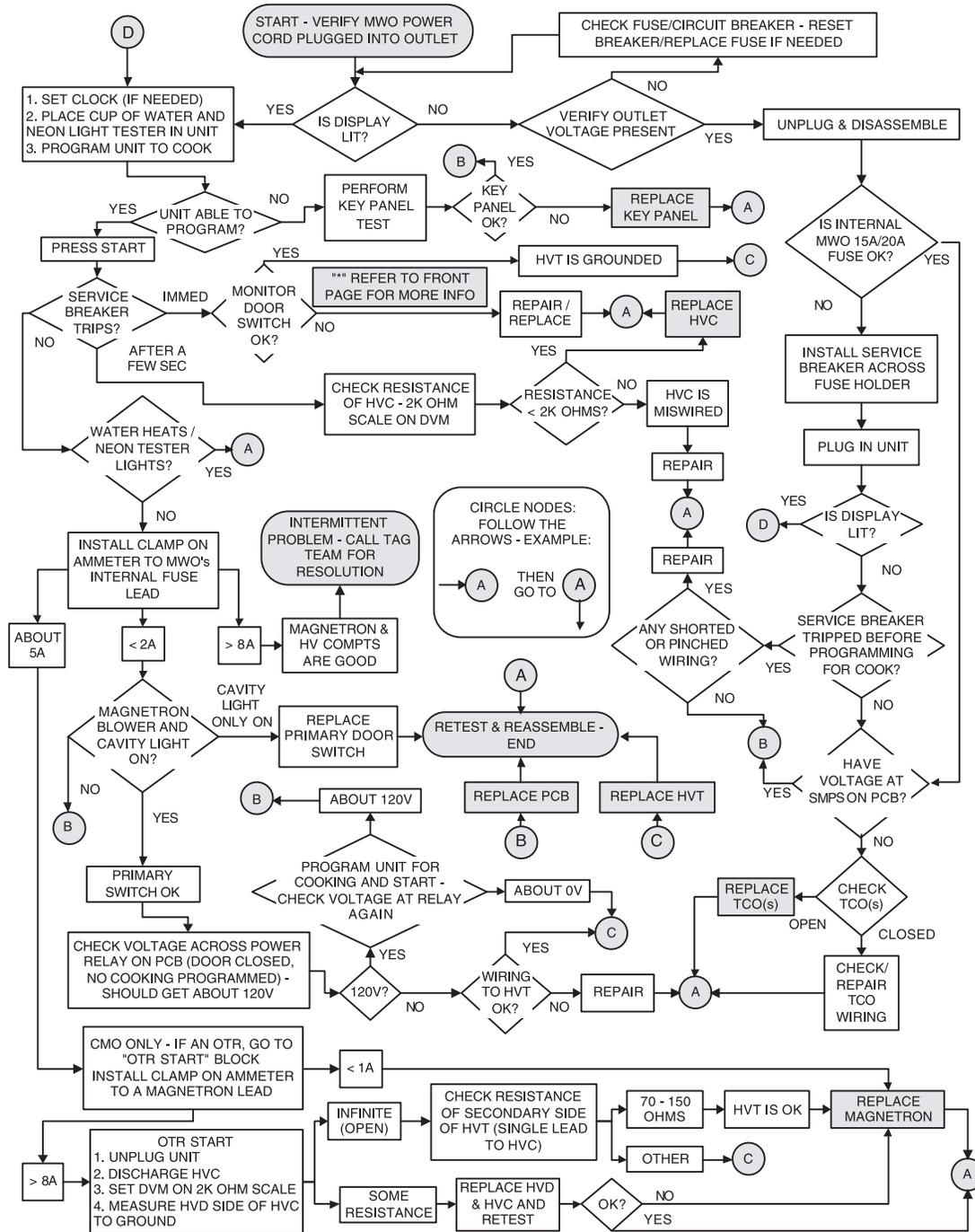


2. Carefully remove the bulbs.

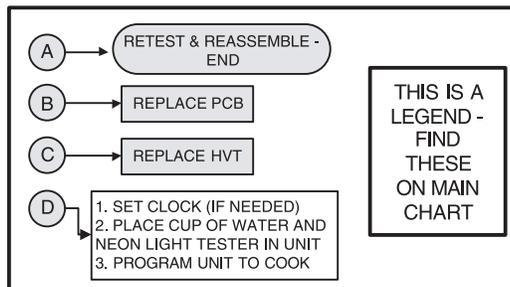


# Diagnostics and Service Information

## JVM1750 Diagnosis Flow Chart

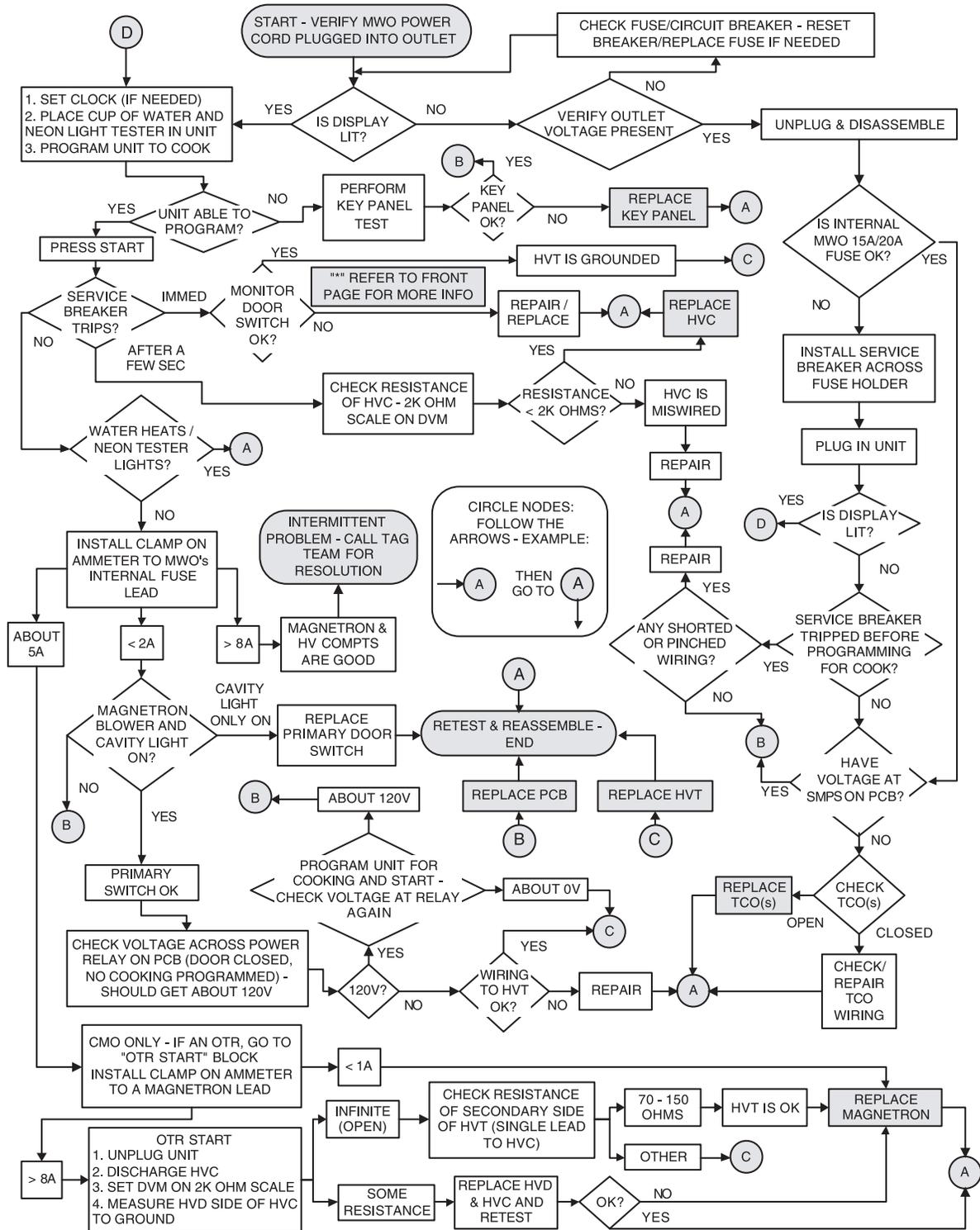


- DVM** - DIGITAL VOLT METER
- HVC** - HIGH VOLTAGE CAPACITOR
- HVD** - HIGH VOLTAGE DIODE
- HVT** - HIGH VOLTAGE TRANSFORMER
- SMPS** - SWITCHING MODE POWER SUPPLY
- TCO** - THERMAL CUT OUT (TEMPERATURE SENSOR)
- PCB** - PRINTED CIRCUIT BOARD

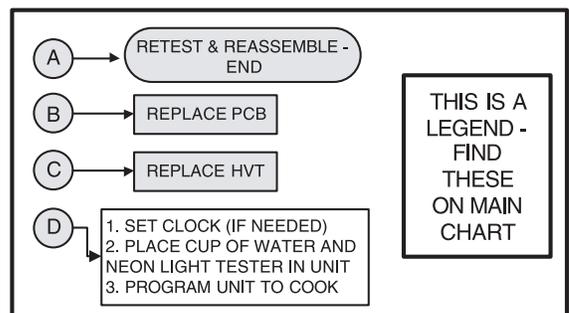


(Continued next page)

# JVM1540 Diagnosis Flow Chart



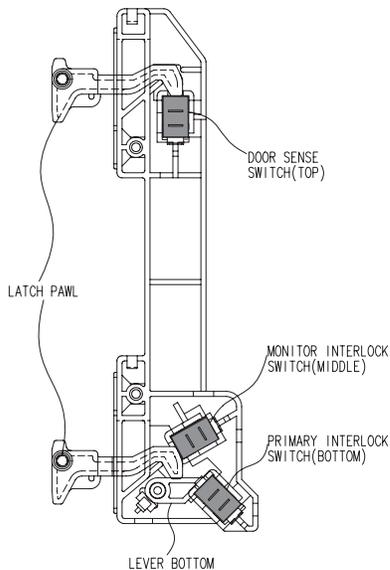
- DVM** - DIGITAL VOLT METER
- HVC** - HIGH VOLTAGE CAPACITOR
- HVD** - HIGH VOLTAGE DIODE
- HVT** - HIGH VOLTAGE TRANSFORMER
- SMPS** - SWITCHING MODE POWER SUPPLY
- TCO** - THERMAL CUT OUT (TEMPERATURE SENSOR)
- PCB** - PRINTED CIRCUIT BOARD



## Interlocks (Door Latch Switches)

The interlocks are designed as follows:

Primary - Bottom switch operated by bottom latch pawl connected to line (L) leg.



### To test the interlocks:

1. Disconnect power to the oven.
2. Open the control panel.
3. Discharge the capacitor.
4. Check continuity of COM and N.O.:
  - Door Closed -  $0 \Omega$
  - Door Open -  $\infty \Omega$

### Monitor Switch

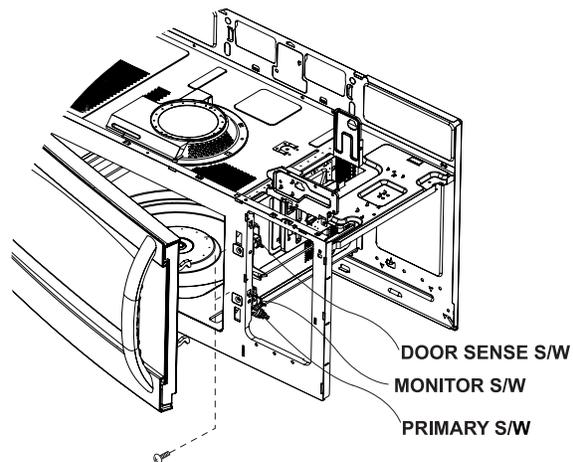
The monitor switch is located between the top and bottom interlocks. The monitor switch is operated indirectly by the bottom latch pawl.

### To test the interlock system:

1. Disconnect power to the oven.
2. Open the control panel.
3. Discharge the capacitor.
4. Disconnect the monitor switch leads and test at the terminals:
  - Door Closed -  $\infty \Omega$
  - Door Open -  $0 \Omega$
5. Reconnect the switch wiring.

### 6. Test the 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 an ohmmeter (Low Scale) across the two line terminals of the appliance power cord. Continuity must show:
    - Door Closed - Some  $\Omega$
    - Door Open -  $0 \Omega$
  - c. Remove the 20-Amp. fuse - the circuit must open ( $\infty \Omega$ ). If not, check the wiring of the monitor and interlock circuits.
7. After the test, remove temporary jumper leads from interlocks and relay. Reconnect monitor switch leads, replace fuse.
  8. Replacement of any parts in monitor circuit requires repeating this entire test procedure.

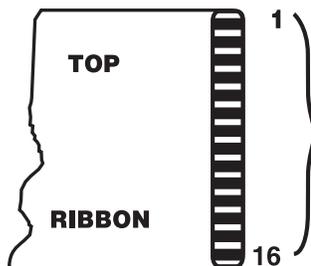


The switch housing is not adjustable. It is fixed on the front cavity with two screws.

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

## 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 the continuity between the connections at the end of the ribbon. (Use high  $\Omega$  scale.)



RIBBON (JVM1750, HVM1750, EVM1750)			
PAD	CONN.	PAD	CONN.
ADD 30 SEC	4-11	AM/PM	9-13
HELP	4-12	START	3-11
TIMER ON/OFF	4-13	CLEAR	3-12
VEGETABLE	5-10	POWER LEVEL	3-14
TURNTABLE	5-12	DEFROST	4-15
REMINDER	5-13	TIME COOK	5-15
POTATO	6-10	1	9-16
AUTO NITE LIGHT	6-12	2	8-16
DELAY START	6-13	3	7-16
POPCORN	7-11	4	6-16
SURFACE LIGHT	7-12	5	5-16
CLOCK	7-13	6	4-16
REHEAT	8-11	7	9-15
VENT FAN	8-12	8	8-15
BEVERAGE	9-11	9	7-15
BEEPER VOLUME	9-12	0	6-15

JVM1540, JNM1541, HVM1540	
PAD	CONN.
BEVERAGE	6-11
POPCORN	5-11
POTATO	5-14
REHEAT	9-14

HVM1540 ONLY	
PAD	CONN.
VEGETABLE	4-14

RIBBON			
PAD	CONN.	PAD	CONN.
ADD 30 SEC	4-11	TIMER	4-13
POWER LEVEL	3-14	START	3-11
DEFROST	4-15	1	9-16
AM/PM	9-13	2	8-16
SURFACE LIGHT	7-12	3	7-16
VENT FAN	8-12	4	6-16
TURNTABLE	5-12	5	5-16
REMINDER	5-13	6	4-16
TIME COOK	5-15	7	9-15
DELAY START	6-13	8	8-15
CLEAR	3-12	9	7-15
CLOCK	7-13	0	6-15

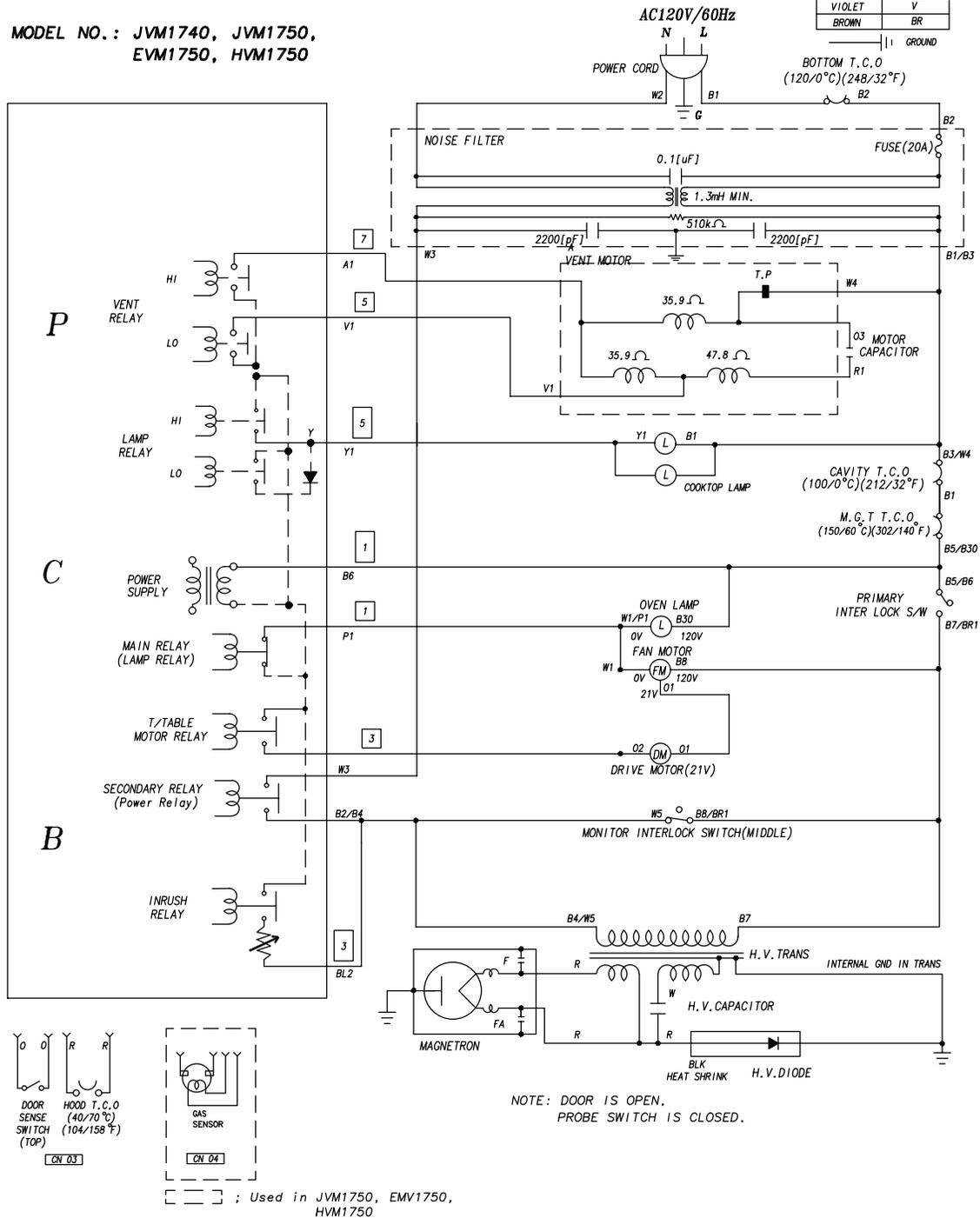
# Schematics and Wiring Diagrams

## JVM1750 Schematic Diagram

WARNING  
POWER MUST BE DISCONNECTED  
BEFORE SERVICING THIS APPLIANCE

COLOR	SYMBOL
GRAY	GR
WHITE	W
BLACK	B
RED	R
BLUE	BL
ORANGE	O
YELLOW	Y
GREEN	G
PINK	P
AZURE	A
VIOLET	V
BROWN	BR

MODEL NO.: JVM1740, JVM1750,  
EVM1750, HVM1750



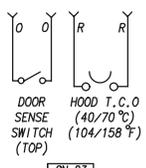
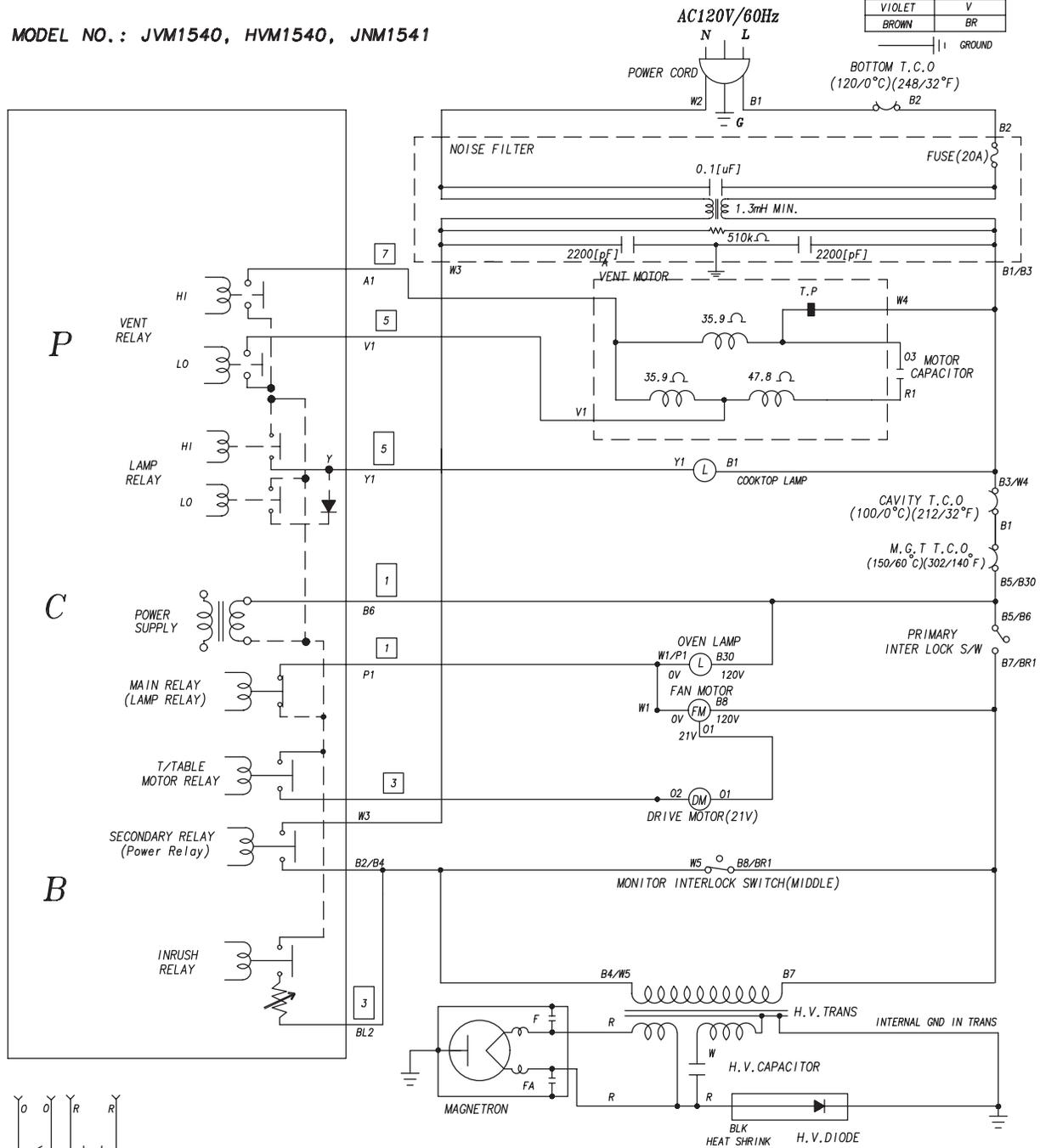


# JVM1540 Schematic Diagram

WARNING  
POWER MUST BE DISCONNECTED  
BEFORE SERVICING THIS APPLIANCE

COLOR	SYMBOL
GRAY	GR
WHITE	W
BLACK	B
RED	R
BLUE	BL
ORANGE	O
YELLOW	Y
GREEN	G
PINK	P
AZURE	A
VIOLET	V
BROWN	BR

MODEL NO.: JVM1540, HVM1540, JNM1541



NOTE: DOOR IS OPEN.  
PROBE SWITCH IS CLOSED.

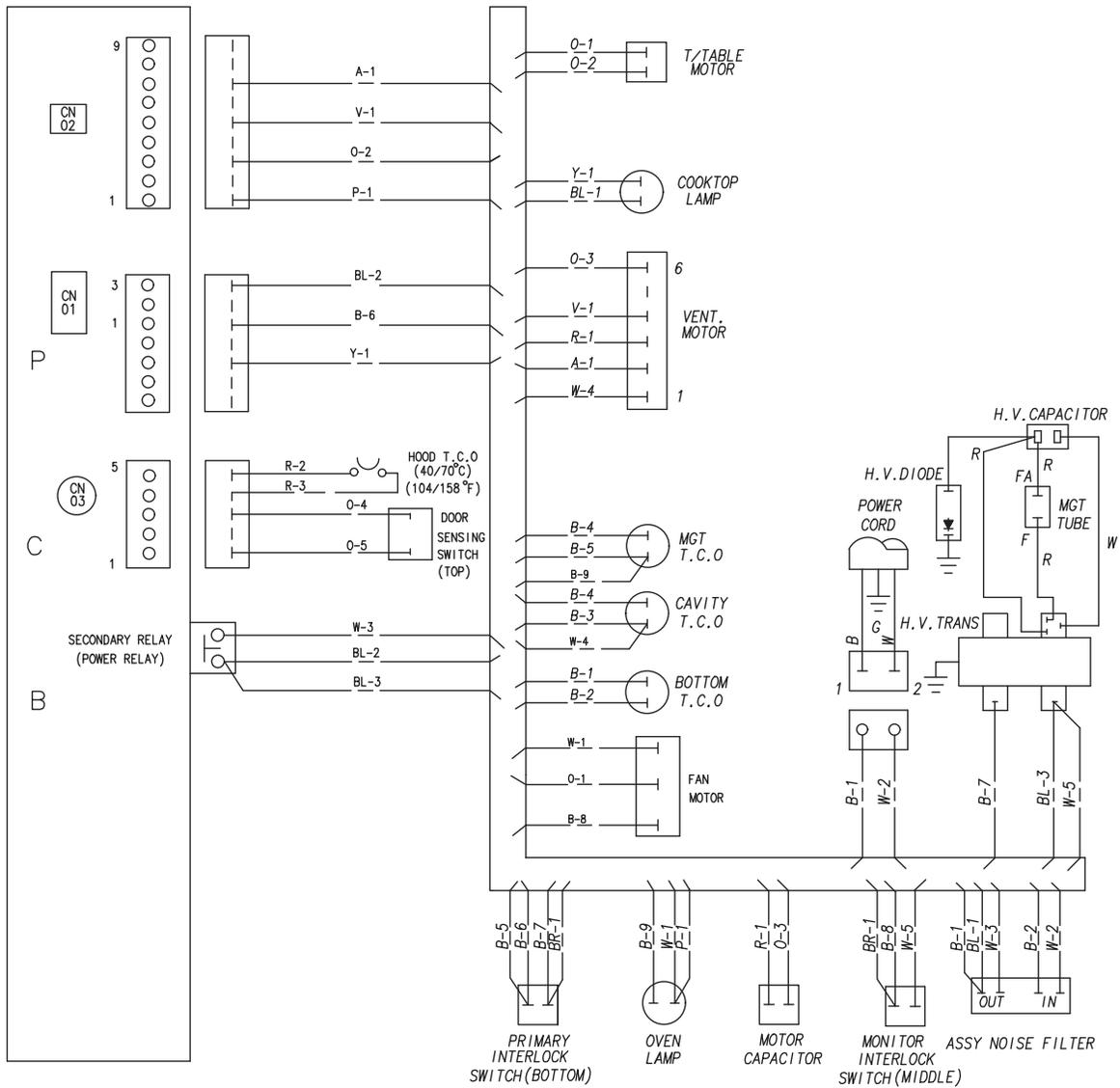
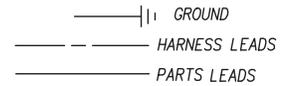
DN 03

# JVM1540 Wiring Diagram

**WARNING**  
 POWER MUST BE DISCONNECTED  
 BEFORE SERVICING THIS APPLIANCE

COLOR	SYMBOL
GRAY	GR
WHITE	W
BLACK	B
RED	R
BLUE	BL
ORANGE	O
YELLOW	Y
GREEN	G
PINK	P
AZURE	A
VIOLET	V
BROWN	BR

**MODEL NO. : JVM1540, HVM1540, JNM1541**



NOTE : FOR SERVICING REPLACEMENT USE 16GA, 105 °C THERMOPLASTIC COVERED WIRE EXCEPT FOR HIGH VOLTAGE LEADS OR AS NOTED ON SPECIAL LEADS.

# Warranty



All warranty service provided by our Factory Service Centers, or an authorized Customer Care® technician. To schedule service, on-line, visit us at [ge.com](http://ge.com), or call 800.GE.CARES (800.432.2737). Please have serial and model numbers available when calling for service.

Staple your receipt here.  
Proof of the original purchase date is needed to obtain service under the warranty.

## For The Period Of: GE Will Replace:

### One Year

From the date of the original purchase

**Any part** of the microwave oven which fails due to a defect in materials or workmanship. During this **limited one-year warranty**, GE will also provide, **free of charge**, all labor and related service to replace the defective part.

## What GE Will Not Cover:

- Service trips to your home to teach you how to use the product.
- Replacement of house fuses or resetting of circuit breakers.
- Improper installation, delivery or maintenance.
- Damage to the product caused by accident, fire, floods or acts of God.
- Product not accessible to provide required service.
- Incidental or consequential damage caused by possible defects with this appliance.
- Failure of the product or damage to the product if it is abused, misused (for example, cavity arcing from wire rack or metal/foil), or used for other than the intended purpose or used commercially.
- Damage caused after delivery.
- Replacement of the cooktop light bulbs.

**EXCLUSION OF IMPLIED WARRANTIES—Your sole and exclusive remedy is product repair as provided in this Limited Warranty. Any implied warranties, including the implied warranties of merchantability or fitness for a particular purpose, are limited to one year or the shortest period allowed by law.**

This warranty is extended to the original purchaser and any succeeding owner for products purchased for home use within the USA. If the product is located in an area where service by a GE Authorized Servicer is not available, you may be responsible for a trip charge or you may be required to bring the product to an Authorized GE Service Location for service. In Alaska, the warranty excludes the service calls to your home. Some states do not allow the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. To know what your legal rights are, consult your local or state consumer affairs office or your state's Attorney General.

Warrantor: General Electric Company, Louisville, KY 40225