

**GE Consumer & Industrial** 

# **TECHNICAL SERVICE GUIDE**

**Over the Range Microwave Oven** 





PUB # 31-9111



#### **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.

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#### 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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## Nomenclature

**Model Number** 



The nomenclature plate is located on the microwave cabinet inside the door. In addition to model and serial number, this plate also shows power ratings.

The Mini-manual is located behind the hidden vent.



## **Serial Number**

The first two n	numbers of th	e serial number
identify the mo	onth and yea	r of manufacture.
<i>Example:</i>	<b>AG</b> 1234563	S = <i>January, 2004</i>
<b>A</b> - JAN D - FEB F - MAR G - APR H - MAY L - JUN M - JUL R - AUG S - SEP T - OCT V - NOV Z - DEC	2005 - H 2004 - <b>G</b> 2003 - F 2002 - D 2001 - A 2000 - Z 1999 - V 1998 - T 1997 - S 1996 - R 1995 - M 1994 - L	The letter designating the year repeats every 12 years. <i>Example:</i> <i>T</i> - 1974 <i>T</i> - 1986 <i>T</i> - 1998

# **Control Features**

## **Touchscreen Display**

The touchscreen display provides the access to all cook and defrost controls. If the touchscreen is dark, press the HOME button, the touchscreen, or open the door to access the menu.



For diagnostics displays, see page 20.

## HELP

Pressing HELP from the HOME screen allows you to locate feature information and helpful hints.



After pressing HELP:

- Press PRODUCT DETAILS to find information concerning your model and serial number.
- Press FEATURE HELP to find help locating information on the microwave features.
- Press SAFETY GUIDE to find help locating microwave safety information.



- Press TROUBLESHOOTER to find troubleshooting tips for common microwave problems.
- Press SPACEMAKER 2.0 OVERVIEW to find an overview of the features of your microwave.

## OFF

**WARNING:** Pressing OFF does not disconnect the appliance from the power supply.

Pressing OFF while on the HOME screen will put the touchscreen into standby mode, and the display will be dark. Press the touchscreen or HOME, or open the door to "wake up" the display.

Pressing OFF while on any other screen will cancel the current screen and return the display to the HOME screen.

## HOME

HOME returns the display to the HOME screen (displayed) at any time. The HOME screen is the starting point for setting any cooking or defrost program, or for setting microwave options. If the touchscreen is dark, press the HOME button to activate the screen.

## VENT

Press VENT once for high fan speed. Press a second time for medium fan speed, a third time for low fan speed, and a fourth time to turn the fan off. Press BOOST for extra fan speed.



## BOOST

The BOOST button turns the vent fan on HIGH.

## LIGHT

Press LIGHT once for bright light. Press a second time for the night light. Press a third time to turn the light off.

# **Component Locator Views**

## **Top View**



- 1 Interior Light
- 2 Main and HV Transformer Fuses
- 3 Hidden Vent Switch and Motor
- 4 Vent Fan and Motor
- 5 Top Stirrer Motor
- 6 Cavity Thermal Cutout (TCO)
- 7 Side Stirrer Motor
- 8 Magnetron Antenna Waveguide
- 9 Vent Tunnel
- 10 Gas Sensor



- 1 Magnetron
- 2 Magnetron Thermal Cutout (TCO)
- 3 High Voltage Transformer
- 4 Magnetron Cooling Fan Motor and Blade
- 5 High Voltage Capacitor
- 6 Door Sensing Switch (Primary Interlock and Monitor Switch in plastic mount not shown)
- 7 Bottom Thermal Cutout (TCO)
- 8 Hood Thermal Cutout (TCO)

## Components

# Microwave Removal and Component Access

**Note:** Some components can be accessed without removing the microwave. If the 2 end screws on top of the outer cover are accessible (*see illustration below*), the hidden vent can be removed without removing the microwave from its installation.

**Note:** For easier removal and personal safety, it is recommended that 2 people remove the microwave.

Unplug the microwave and remove it from the wall by removing three screws in the cabinet above the microwave.



Tilt the microwave forward and lift it off the lower tabs of the rear mounting plate. Route the power cord through the hole.



Place the microwave on a protected counter or table.

To remove the cover, remove 2 screws from the left side, 3 screws from the right side, 5 screws from the top, 5 screws from the rear, and 2 screws from the bottom of the outer cover.

Open the microwave oven door. Slide the hidden vent to the left and remove the hidden vent.

## **Exhaust Fan**

Resistance through the exhaust fan from the power cord (N) to CN03 pin 7 is approximately 28.7 ohms.

#### Removal

Remove the microwave (see *Microwave Removal* and *Component Access*). Remove the screw on top of the microwave holding the exhaust adapter in place, then slide the exhaust adapter to the rear and remove.



Remove the screw holding the fan in place.



Lift the fan out of the microwave and disconnect the electrical connector.



## **Side Stirrer Motor**

The side stirrer motor is located on the left side of the microwave oven.

Resistance through the side stirrer motor from the power cord (L) to CN04 pin 5 is approximately 6.7 ohms. Isolated, the side stirrer motor is approximately 7.0 ohms. The door (primary interlock) must be closed to complete circuit. Check motor circuit for 21 VAC when operating.

#### Removal

Remove the microwave (see *Microwave Removal* and *Component Access*).

Disconnect the wire connector to the side stirrer motor. Remove the screw and turn the motor  $^{1}\!/_{8}$  turn CCW.

**Note:** When installing stirrer motor, be sure the locating pin is inserted in the motor mounting tab and the side stirrer is resting on the support in the cover prior to installing the screw.



## Side Stirrer

#### Removal

Open the oven door. Pull the plastic rivet out of the stirrer cover. Rotate the stirrer cover CCW until it stops and remove the stirrer cover.



Remove the stirrer.



**Note:** When assembling, assure that the stirrer rides on the support in the cover.

## **Top Stirrer Motor**

Resistance through the top stirrer motor from the power cord (L) to CN04 pin 5 is approximately 6.7 ohms. Isolated, the top stirrer motor is approximately 7.0 ohms. The door (primary interlock) must be closed to complete circuit. Check motor circuit for 21 VAC when operating.

#### Removal

Remove the microwave (see *Microwave Removal* and *Component Access*).

Disconnect the side stirrer motor electrical connector. Remove 2 screws and ground wire from the duct and move the duct out of the way.



Disconnect the electrical connector from the motor. Remove 2 screws that hold the motor in place and remove the motor.



## **Top Stirrer**

#### Removal

Open the oven door. Pull the plastic rivet out of the stirrer cover. Rotate the stirrer cover CCW until it stops and remove the stirrer cover.



Remove the stirrer.



**Note:** When assembling, assure that the stirrer rides on the support in the cover.

## **Cooling Fan and Motor**

Resistance through the cooling fan motor from the power cord (L) to CN04 pin 7 is approximately 24.7 ohms. The door (primary interlock) must be closed to complete circuit.

The cooling fan motor, in series with the drive motors, provides voltage reduction to 21 VAC.

## Removal

Remove the microwave (see *Microwave Removal and Component Access*). Remove the screw at the top of the control panel.



Slide the control panel up and remove it. Disconnect 8 electrical connectors and the ground wire from the control panel.



Move the TCO out of the way. Disconnect the power transformer.



Remove 3 screws from the fan motor mounting plate. Slide the mounting plate forward to allow access to the fan blade. Slide the fan blade off of the fan motor shaft.



Remove 2 screws from the fan motor.



Remove the fan motor from the fan mounting plate and remove the 2 wires.

## **Cavity Thermal Cutout (TCO)**

The cavity TCO is located on the top of the microwave oven on the left side of the forward vent duct. The microwave oven shuts off when the temperature of the cavityTCO reaches 212°F (100°C).

The cavity TCO is a normally closed switch. An open reading across the TCO indicates an overtemperature condition or failed TCO. The cavity TCO is not resettable.

#### Removal

Remove the microwave (see *Microwave Removal* and *Component Access*).

Slide the cavity TCO from the two tabs and remove the 2 connectors.



## Magnetron Thermal Cutout (TCO)

The magnetron TCO is located on the magnetron and shuts off when the magnetron temperature reaches  $150^{\circ}F$  ( $65.5^{\circ}C$ ).

The magnetron TCO is a normally closed switch. An open reading across the TCO indicates a failed TCO. The magnetron TCO is resetable

#### Removal

Remove the microwave (see *Microwave Removal and Component Access*). Disconnect the 2 wires and remove the screws from the magnetron TCO.



#### **Fuses**

The main and high voltage transformer fuses are located behind the hidden vent, above the control panel.

#### Removal

Remove the hidden vent (see *Microwave Removal* and *Component Access*).

Remove the grille to access the fuses.



## Magnetron

The magnetron is located behind the fan mounting plate.

#### Removal

**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.

Remove the microwave (see *Microwave Removal and Component Access*). Remove the TCO and the magnetron electrical connectors. Remove 4 nuts from the top of the magnetron and remove the screw and brace. Remove the magnetron.



## **Gas Sensor**

The gas sensor detects humidity changes during sensor cook functions and transmits this information to the main board.

The gas sensor is located in the air exhaust duct, behind the grille on the left side.

To check, run diagnostics (see *Diagnostics Test*).

#### Removal

Remove the hidden vent (see *Microwave Removal and Component Access*). Slide white plastic retainer forward and pull the gas sensor down.



## Transformer

The transformer is located behind the fan mounting plate below the magnetron.

Resistance through the transformer from the power cord (L) to the high-power secondary interlock (blue wire) is approximately 0.32 ohms. The door (primary and monitor interlock) must be closed.

Resistance through the transformer from the high-power secondary interlock (blue wire) to the low-power secondary interlock (single white wire) is approximately 28.7 ohms. The door (monitor interlock) must be closed.

#### Removal

**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.

Remove the microwave (see *Microwave Removal and Component Access*). Remove the screws and the bottom panel. Disconnect electrical connectors. Remove the white and red wires from the capacitor and the red wires from the magnetron.

Caution: The transformer is heavy.

Remove 4 screws from the bottom that hold the transformer in place.





## **Hidden Vent Motor**

The hidden vent motor is located behind the hidden vent on the right side.

Resistance through the hidden vent motor from the CN03 pin 1 to the power cord (N) is approximately 28.8 ohms.

#### Removal

**Note:** This component may be able to be accessed without removing the microwave. If the 2 end screws on top of the outer cover are accessible, the hidden vent can be removed without removing the microwave from its installation.

Remove the hidden vent (see *Microwave Removal and Component Access*). Remove 2 screws and the motor.



## **Interior Light**

Resistance through the interior light from the CN02 pin 7 to the power cord (L) is approximately 24.9 ohms.

#### Removal

**Note:** This component may be able to be accessed without removing the microwave. If the 2 end screws on top of the outer cover are accessible, the hidden vent can be removed without removing the microwave from its installation.

Remove the hidden vent (see *Microwave Removal and Component Access*). Press the tab with a small screwdriver and lift the interior light cover up and out.



Squeeze the 2 tabs of the light socket and remove the light assembly.

**Note:** When installing a new halogen bulb, be sure to handle the bulb with a clean, dry cloth.

Replace the halogen lamp with a 120VAC, 20W GE halogen lamp bulb (WB36X10213).



## **Control Panel**

The control panel contains the smart board, the touchscreen panel, and a three-button circuit board. Run the test for the control panel (see *Control Performance Test*). The control panel is replaced as an assembly.

## Removal

Remove the hidden vent (see *Microwave Removal and Component Access*). Remove the grille. Lift up on the control panel and remove.



Disconnect 8 electrical connectors and the ground wire from the control panel.



## **Door Interlock Switches**

The oven has 3 interlock switches. All switches are removed the same.

### **Door Sensing and Primary Interlock Switches**

The primary interlock and monitor switches are located on the bottom of the plastic switch bracket. The power relay is mounted on the smart board. They 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. 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, primary interlock switch, and 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 door is opened.

## Functions

When the door is opened, the monitor switch contact closes. At this time, the primary interlock switch and power relay are in the closed position.

As the door goes to a closed position, the monitor switch contacts are first opened and then the door sensing switch and the primary interlock switch contacts close. The oven has 3 interlock switches. All switches are removed the same.

## Removal

Remove the hidden vent (see *Microwave Removal and Component Access*). Remove the grill. Lift up the control panel and remove.

Remove the 2 T20 Torx screws from the front of the frame and remove the door switch bracket.



Using a small screwdriver, release the tab and remove the door interlock switch from the door switch bracket. Disconnect the electrical connector.



#### **Primary Interlock System Test**

**WARNING**: Disconnect the oven from the power supply.

#### **Door Sensing Switch**

Isolate the switch and connect the ohmmeter to the common (COM.) and normally open (NO) terminal of the switch. The meter should indicate an open circuit with the door open and a closed circuit with the door closed.

#### **Power Relay**

Disconnect 2 wires from the tab terminals on the circuit board provided in the control panel assembly. The tab terminals are located in the area of the circuit board on the component side, and are connected to the contacts of the power relay. Check the state of the relay contacts using an ohmmeter. The relay contacts should be open. If the relay contacts are closed, replace the circuit board.

#### **Primary Interlock Switch Test**

Isolate the switch and connect the ohmmeter to the common (COM.) and normally open (NO) terminal of the switch. The meter should indicate an open circuit with the door open and a closed circuit with the door closed. If improper operation is indicated, replace the primary interlock switch.

**Note:** The primary interlock switches are not adjustable and must be replaced if test is failed.

### Interlocks (Door Latch Switches)

Interlocks are designed as follows:



#### **Door Sensing Switch:**

- Door Closed 0 ohms
- Door Open Infinite ohms

#### Monitor Interlock Switch:

- Door Closed Infinite ohms
- Door Open 0 ohms

#### **Primary Interlock Switch:**

- Door Closed 0 ohms
- Door Open Infinite ohms

**Note:** Remove the wires from the switches before checking continuity.

## **High Voltage Capacitor**

#### **Removal and Replacement**

**WARNING:** Prior to servicing, 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.

Remove the hidden vent (see *Microwave Removal and Component Access*). Remove the screw and grill. Lift the control panel up and remove.

Remove the screw from the capacitor brace. Disconnect 3 wires from the capacitor. Remove the capacitor and brace from the oven.



Remove the capacitor from the capacitor brace.

## **Bottom and Hood Thermal Cutout (TCO)**

The bottom TCO will interrupt the operation of the oven when it reaches 248°F (120°C).

The hood TCO is a normally open switch. When it reaches 158°F (70°C), the vent motor turns on.

Removal procedures are the same for both TCOs.

#### **Removal and Replacement**

Remove the hidden vent (see *Microwave Removal and Component Access*). Remove the screw and the grill (see *Hidden Vent Motor*). Lift the control panel up and remove.

Remove 2 wires from the TCO. Remove the screw that holds the TCO in place and slide the tab of the TCO out of the oven frame.



#### **Turntable Motor**

Resistance through the turntable motor from the CN02 pin 4 to the power cord (L) is approximately 158.5 ohms. The door (primary and monitor interlock) must be closed.

#### Removal

Remove 5 screws from the bottom of the microwave oven cabinet and remove the bottom plate.



Remove the screw, then rotate the motor CCW 1/ 8 turn. Remove the turntable motor. Disconnect 2 wires from the motor.



## **Surface Lamp Assemblies**

Resistance through the surface lamps from the CN04 pin 3 to the power cord (N) is approximately 62 ohms.

#### Removal

Remove 5 screws from the bottom of the microwave oven cabinet and remove the bottom plate.



Remove the screw from each lamp socket and remove the lamp assembly from the oven. Disconnect the electrical connector.



## Surface Lamps

#### Removal

Remove the screw on the surface lens panel and open the panel.



Pull the light out of the socket.

**Note:** When installing a new halogen bulb, be sure to handle the bulb with a clean, dry cloth.

Replace the halogen lamp with a 120VAC, 20W GE halogen lamp bulb (WB36X10213).



# Troubleshooting

## **Control Performance Test**

Set Time:

- 1. Touch OPTIONS on the HOME display.
- 2. Touch SET CLOCK on the OPTIONS display.
- 3. Using the numbers on the touchscreen, enter the time of day. Press ENTER when finished or CLEAR to erase the time you entered.
- 4. Select AM or PM from the touchscreen. Press ENTER when finished or BACK to enter a new time.
  - Alternately touch each function pad and enter time, temperature, and power level selection for the function.
  - Touch CLEAR after each function test to clear that function.
  - Repeat the 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 CLEAR.





## Sensor Test (Quick Test)

Press and hold the OFF and LIGHT buttons for 3 seconds. Note diagnostic number displayed.

15 to 185 = Normal

213 or higher = Sensor failed to open, sensor unplugged, wiring, or smart board.

Less than 6 = Shorted sensor or smart board.

**Caution:** Do **NOT** check the white and orange sensor leads. Checking could damage sensor.

Note: Black and red heater terminal leads should read 30  $\Omega$ .

## **Diagnostics Test**

Simultaneously press the LIGHT and OFF keys for 3 seconds. The diagnostics screen will appear in the LCD display.

MODEL	: JVM20	70	3
LILLAND		-	
CUR	DET	MIN	MAX
109	0	108	110

#### Sample Diagnostics Screen

#### **Displayed Information**

- MODEL Identified at power-up by the keytail ID option.
- CODE VERSION The date the code file was sent to GEA for testing (MM-DD-YY).
- HUMIDITY SENSOR The CUR (current), DET (detection point), MIN (minimum), MAX (maximum) humidity sensor data will update continuously.

The CUR value is the present A/D value of the sensor. DET is the value at the moment the humidity detection point was reached. MIN is the lowest humidity point measured during entire feature's run. MAX is the highest humidity value measured during the feature's run. **These data points are the dynamic measurements of the sensor, not the calculated values.** 

Pressing the DONE key terminates the diagnostic screen. The screen returns to the previous or HOME screen. The diagnostic screen will timeout and return to the previous screen after receiving no input for 5 minutes.

## Error Message

F1 Convection - Open thermal sensor

F2 Convection - Shorted thermal sensor

F3 - Keypanel shorted for more than 60 seconds

F4 - Open humidity sensor

F5 - Shorted humidity sensor

F10 - Shorted touch panel

**Note:** Any "F" code will cause an error sound to beep for 3 cycles. One cycle will sound 2 seconds on, 1 second off.

#### Sample "F" Code page

NITE PH
CONTROL FAULT
SENSOR FAILURE - F4
THE CONTROL HAS DETECTED AN OPEN HUMIDITY SENSOR AND HAS SHUT OFF THE OVEN. YOU MAY STILL USE THE OVEN, BUT SENSOR FEATURES MAY NOT WORK PROPERLY, YOUR OVEN MAY REQUIRE SERVICE.
ок

#### **Demonstration Mode**

In demonstration mode, everything will operate on the unit except the high voltage section.

To enter the demonstration mode, disconnect the power for 30 seconds then reapply power. Simultaneously press the HELP screen pad and the BOOST button for 3 seconds. The word DEMO will appear in the LCD display.

To exit the demonstration mode, disconnect the power for 30 seconds then reapply power.

## **Microwave Leakage Test**

- 1. Place 275 ml. of water in a 600 ml beaker (WB64X5010).
- 2. Place the beaker in the center of the oven shelf.
- 3. Set the meter to the 2450 MHz scale.
- 4. Turn the oven on for 5 minutes.
- 5. Hold the probe perpendicular to the surface being tested and scan the surfaces at a rate of 1 inch/sec.

Test the following areas:

- The entire perimeter of the door and control panel.
- The viewing surface of the door window.
- The exhaust vents.
- 6. The maximum leakage is 4 MW/CM<sup>2</sup>.
- 7. Record data on the service invoice and microwave leakage report.

**Note:** The maximum allowable leakage is 5 MW/ CM<sup>2</sup>. 4 MW/CM<sup>2</sup> is used to allow for measurement and meter accuracy.

Inform the manufacturer of any oven found to have emission in excess of 5 MW/CM<sup>2</sup>. Make repairs to bring the unit into compliance at no cost to the owner and try to determine the cause. Instruct the owner not to use the oven if it has not been brought into compliance.

#### **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.

## **Performance Test**

- Measure the line voltage (loaded). This test is based on normal voltage variations of 108V to 132V. Low voltage will lower output power and temperature rise.
- Place a beaker (WB64X0073) containing 1 liter of water (1000ml, 59°F - 75°F) on the turntable and record the starting water temperature with a thermometer. (Do not use any other load or dish as results will very from standard).
- 3. Set the microwave oven at HIGH power for 2 minutes and 3 seconds.
- 4. Turn on the oven.
- 5. Record the water temperature.

The minimum difference between the initial and ending temperature should be 40°F at 120V.

## **Smart Board**

The smart board contains the power relay, LVT, 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.

#### CN01 - Ribbon connector.

Interfaces the smart board and the touch pad.

# CN02 - Primary LTV, Main Relay, Inrush Relay, and Turntable.

Interfaces the smart board and the key module.

#### **CN03 - Vent Blower Connector**

Pin 1 AZU-1	Hood TCO
Pin 3 VIL-1	Hood TCO
Pin 5 GRA-1	Main Fuse
Pin 7 BRN-1	Louver Motor

#### CN04 - Cooktop Lamp Relay Connector

Pin 4 ORG-1	Turntable Motor
Pin 5 PIN-1	Fan Motor
Pin 7 WHT-9	Fan Motor
Pin 9 BLK-7	Oven Lamp

#### **CN05**

Pin 1 BLU-2	Cooktop Lamps
Pin 3 YEL-1	Cooktop Lamps

#### **CN06 - Door Sensing Connector**

Pin 1 ORG	Door Sense Switch	
Pin 2 ORG	Door Sense Switch	
CN07 - Louver Motor Switches Connector		

Pin 1 YEL	Louver Switch
Pin 2 BLU	Louver Switch
Pin 3 RED	Louver Switch

#### **CN08 - Gas Sensing Connector**

Pin 1 ORG	Gas Sensor
Pin 2 WHT	Gas Sensor
Pin 3 BLK	Gas Sensor
Pin 4 RED	Gas Sensor

#### Low-Power Secondary Interlock

WHT/WHT	To High Power Interlock
WHT/WHT	Cooktop Lamps
WHT	HV Transformer

#### **High-Power Secondary Interlock**

WHT/WHT	To Low Power Interlock
WHT/WHT	Power Cord N
WHT	HV Transformer Fuse



#### Louver Motor Does Not Work



#### Vent Motor Does Not Work



Fan Motor Does Not Work



#### Top Stirrer, Side Stirrer, or Drive Motor Does Not Work







**Note:** The Magnetron Tube TCO automatically resets when the conditions return to normal. The Cavity TCO is not resetable. It must be replaced.

#### **Dead Unit - Bottom TCO Does Not Work**



**Note:** The Bottom TCO is not resetable. It must be replaced.



## Surface Lamps Do Not Work





# Wiring Diagram

WARNING: Power must be disconnected before servicing this appliance.





Note: For servicing replacement use 16GA. 105°C thermoplastic covered leads or as noted on special leads.

## Schematic



# Illustrated Parts Catalog



VIEW NUMBER	CATALOG NUMBER	DESCRIPTION	QUANTITY
1	WB15X10135	HANDLE WH	1
5	WB55X10673	DOOR-A ASM	1
6	WB55X10668	DOOR MAIN ASM	1
7	WB05X10012	DOOR-KEY	2
8	WB05X10006	SPRING-KEY	2
9	WB06X10060	PIN-HINGE	2
10	WB06X10516	FILM-DOOR	1
11	WB55X10669	CHOKE COVER	1
12	WB56X10461	DOOR ASM WH	1
17	WB27X10725	KEY-MODULE	1
20	WB18X10140	WIRE LEAD-F	1
21	WB27X10726	SMART BOARD	1
25	WB07X10730	GRILLE COVER ASM WHT	1
26	WB01X10246	SPRING-LOUVER	1
27	WB02X10970	EARTH-GRILLE "A"	1
28	WB02X10967	HINGE-GRILLE "R"	1
29	WB02X10968	HINGE-GRILLE "M"	1
30	WB02X10969	HINGE-GRILLE "L"	1
31	WB07X10724	GRILLE WH	1
32	WB36X10273	GRILLE ASM WHT	1
33	WB06X10450	BRACKET-BOTTOM LAMP	1
34	WB36X10213	BULB HALOGEN (120V 20W)	2
35	WB06X10517	BRACKET-ENCLOSURE	1
36	WB08X10026	SOCKET LAMP	1
37	WB56X10450	BASE BOTTOM SUB ASM	1
38	WB36X10071	GLASS-COOKTOP LAMP	1
39	WB36X10217	COVER-GLASS	1
41	WB06X10126	BUTTON-LOCK	2
42	WB06X10518	COVER-STIRRER(TOP)	1
48	WB06X10519	STIRRER(TOP) ASM	1
49	WB06X10520	COUPLER-TT	1
50	WB06X10521	HOLDER-RACK	8
51	WB06X10522	COVER-STIRRER(SIDE)	1
54	WB06X10523	STIRRER(SIDE) ASM	1
55	WB26X10136	MOTOR TURNTABLE	1
56	WB06X10524	COVER-FRONT	1
57	WB01X10065	NUT MAGNETRON	4
58	WB26X10037	MOTOR STIRRER	1
59	WB27X10195	TCO CAVITY	1
60	WB26X10137	MOTOR-DRIVE(SIDE)	1
62	WB27X10170	CAPACITOR-MOTOR	1
63	WB24X10070	SWITCH-MICRO	1
64	WB24X10069	SWITCH-MICRO	1
65	WB06X10283	BRACKET-CAM PLATE	1
66	WB38X10057	CAM-LOUVER	1
67	WB26X10112	MOTOR-DRIVE	1
69	WB07X10442	CAM LOUVER ASS'Y	1
70	WB18X10122	WIRE GRND PCB	1
71	WB06X10525	COVER-HALOGEN LAMP	1
72	WB08X10027	SOCKET HAL/LAMP ASM	1
74	WB36X10260	FRAME GLASS HOLDER	1
75	WB02X10955	BKT-BARRIER	1
76	WB18X10241	WIRE HARNESS-S	1
77	WB27X1170	GAS SENSOR	1
78	WB06X0549	HOLDER-SENSOR	1
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VIEW NUMBER	CATALOG NUMBER	DESCRIPTION	QUANTITY
81	WB06X10436	HOOD DAMPER ASM	1
82	WB06X10165	BRACKET-V/T MOTOR	1
83	WB26X10138	MOTOR-VENTILATION	1
84	WB56X10446	PLATE MOUNTING ASM	1
85	WB01X10071	NUT TOP MOUNTING	1
86	WB06X10122	BRACKET-POWER CORD	1
87	WB56X10462	CASE OUTER WH	1
88	WB27X10735	MAGNETRON ASM	1
90	WB27X10166	TCO - MAGNETRON	1
91	WB06X10526	BRACKET-MGT	1
92	WB18X10200	POWER CORD ASM	1
93	WB01X10119	SCREW-TAPPING	2
94	WB06X10289	LATCH-BODY	1
95	WB24X0829	SWITCH-MICRO	2
96	WB24X0830	SWITCH-MICRO	1
97	WB06X10128	LEVER-SWITCH LOWER	1
98	WB18X10055	WIRE HARNESS-B	1
99	WB06X10527	COVER MOTOR SUB ASM	1
100	WB06X10463	FUSE-HOLDER	2
101	WB27X10474	FUSE	2
102	WB06X10528	SUPPORTER-CAVITY	1
103	WB26X10090	BLADE-FAN	1
104	WB27X10194	TCO HOOD	1
105	WB26X10089	MOTOR-FAN	1
106	WB27X10011	CAPACITOR	1
107	WB06X10287	BRACKET-HVC	1
108	WB27X1160	H V DIODE	1
109	WB26X10139	DUCT REAR ASM	1
110	WB27X10724	TRANS-H V	1
111	WB27X1127	TCO -BOTTOM	1
112	WB56X10448	BASE-PLATE	1
113	WB01X10084	SCREW-WASHER HVT	4
114	WB06X10529	ROLLER GUIDE RING	1
115	WB49X10063	TRAY-COOKING	1
116	WB01X10181		1
122	WB02X10956		1
122	WB48X10038		2
120	WB01X10183		1
125	49-40335		1
126	WB18X10235	WIRE HARNESS-A	1
120	WB18X10232	WIRE HARNESS-C	1
127	WB06X10288		2
120	W/B01X0861		2
120	W/R07¥1073/		1
0000	31_10025		1
0000	31-40020 10_10127 1		1
9999	40-10720-1		1
3333	43-40233-1		1
9999	43-40323		1
সমসম	49-40000		

## Warranty

## OTR MICROWAVE OVEN WARRANTY

For the period of:	GE will replace:
Full one-year	Entire oven
From the date of the original purchase	<i>Any part</i> of the oven which fails due to a defect in materials or workmanship. During this <i>full one-year warranty</i> , GE will also provide, <i>free of charge</i> , all labor and in-home service to replace the defective part.

Limited ten-year	Magnetron tube
From the second through the tenth year from the date of the original purchase	<i>The magnetron tube</i> , if the magnetron tube fails due to a defect in materials or workmanship. During the additional limited <i>nine-year warranty</i> , you will be responsible for any labor or in-home service costs.

#### What GE will not cover

- Service trips to your home to teach you how to use the product.
- Replacement of home fuses or resetting of circuit breakers.
- Incidental or consequential damage caused by possible defects with this appliance.
- Damage to the product caused by accident, fire, floods, or acts of God.
- Failure of the product if it is used for other than its intended purpose or used commercially.
- Improper installation.

This warranty is extended to the original purchaser and any succeeding owner for products purchased for home use within the USA. In Alaska, the warranty excludes the cost of shipping or service calls to your home.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. 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 in your state, consult your local or state consumer affairs office or your state's Attorney General.

#### Warrantor: General Electric Company, Louisville, KY 40225