

Jenn-Air

Electric Wall Oven Service Manual

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SAFETY PRECAUTIONS

This service information is intended to be used by a qualified service technician who is familiar with proper and safe procedures to be followed when repairing any electrical appliance. All tests and repairs should be performed by a qualified service technician who is equipped with proper tools and measuring devices. All replacements should be made by a qualified service technician using only Maytag Appliances Sales Company replacement parts.

Improper assembly or adjustment may occur if service or repair is attempted by persons other than qualified service technicians or if parts other than Maytag Appliances Sales Company replacement parts are used. Improper assembly or adjustment can cause hazardous conditions.

There can be risk of injury or electrical shock while performing services or repairs. Injury or electric shock can be serious or even fatal.

INTRODUCTION

The manual is printed in a loose format and is divided into sections relating to a general group of components and/or service procedures. Each section is further subdivided to describe a particular component or service procedure.

The subdividing of the subject matter, plus the loose leaf form, will facilitate the updating of the manual as new or revised components are added or new models are introduced.

Each page of the manual will be identified in the lower, right-hand corner, and as new or revised pages are published, the manual can easily be updated by following the filing instructions on the cover letter of the supplement.

This service manual is a valuable tool and care should be taken to keep it up-to-date by prompt and proper filing of subsequent pages as they are used.

MODELS COVERED IN THIS MANUAL:

W2451	WM27260
W27100	WM27460
W27200	WM30460
W27400	JJW8527
W30100	JJW8530
W30400	JJW8627
W30400P	JJW8630
WW2460	JJW9527
WW27110	JJW9530
WW27210	JJW9627
WW27430	JJW9630
WW27430P	JMW8527
WW30110	JMW8530
WW30430	JMW9527
WW30430P	JMW9530
WM27160	

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SECTION 1. COMPONENT DESCRIPTION

COMPONENTS

Meat Probe: Senses the internal temperature of products during a baking function. The meat probe is an NTC, or negative temperature coefficient, which means the resistance value decreases as the temperature increases. See meat probe chart below for resistance values.

MEAT PROBE		
Type: NTC Thermistor	Calibration: 9938 ohms (150°F.)	
PROBE RESISTANCE VS. TEMP. TABLE		
Degrees F.	Resistance	
122	18963 ohms	
150	9938 ohms	
156.2	8846 ohms	
165.2	7456 ohms	
210.1	3886 ohms	

Membrane Switch: The means to make a switch contact, thus instructing the electronic control system to perform a desired function. The membrane switch is a simple set of two contact surfaces containing conductive material, one on the back laver of MYLAR and the other on the front laver of MYLAR. There is also a center section of non-conductive MYLAR material that has a hole punched out of it at each switch contact position. The thickness of this spacer MYLAR determines the push force required to close the contacts between the front contact strip and the rear contact strip. Typically, the push force required to close a contact is 12 to 18 ounces.

Electronic Control: A programmable software component that controls oven, clock, timer and various other functions. The control maintains oven temperatures in either bake, broil, or clean. It is adjustable to maintain correct temperature offsets. It is also programmed with self-monitoring circuitry, which determines if a potential unsafe condition is present, shuts the system down and displays the appropriate fault code. Fault codes are covered in product specifications sections 3 and 4.

Touch Sensor Technology: With this new technology a positive charge and negative charge is present around each pad. This creates an electrostatic field that emanates around, below, and through the glass front. When the consumer touches a key pad, this disturbs the electrostatic field and draws capacitance energy. This input is read by the module, which in turn signals the controller to respond, and the desired function is performed. In order for a function to be performed, a conductive material must bridge the gap between the negative charge present at each pad.

Display Board: Displays time-of-day clock, oven temperatures, and any other function programmed into the electronic control system. The display board also acts as the input means from the membrane switch and sends those commands to the power relay board to process, implement, and monitor.

Power Relay Board: Contains the intelligence in the electronic control system and controls all oven functions, clock, timer, and various other consumer programmable inputs. The PRB has a relay mounted to it for each function it provides.

Oven Sensor: A device to monitor internal oven temperature. The sensor has a PTC or positive temperature coefficient, or a resistance value that increases with temperature. Allows the electronic control to maintain a temperature setting through means of resistance matching with the control-selected temperature. Example: The oven control is set at 350°F, the oven sensor resistance at room temperature is approximately 1060 ohms. As the oven heats, the

resistance of the sensor increases. The resistance of the sensor at 350°F is approximately 1654 ohms. The electronic control monitors the resistance value of the sensor and cycles the oven heating elements off. As the temperature in the oven decreases, the resistance of the sensor decreases. At a predetermined temperature setting, the electronic control will initiate another heating cycle in the oven elements. See oven sensor chart at right for resistance values.

OVEN SENSOR	
Sensor Type: Calibration: RTD 1000 ohm platinum 1654 ohms (350°F.)	
OVEN SENSOR RESIST	ANCE VS. TEMP. TABLE
Degrees F.	Resistance
100	1143 ohms
200	1350 ohms
300	1553 ohms
350	1654 ohms
400	1753 ohms
500	1949 ohms
600	2142 ohms
700	2331 ohms
800	2516 ohms
900	2697 ohms
1000	2874 ohms

FAULT CODES

There are built-in fault codes to assist the technician in diagnosis of the control system. Any time the control senses an error in the system, the control will beep at a 1 second interval until the ON/OFF key is pressed.

FAULT CODES	PROBLEM	COMPONENTS TO CHECK
F1	Oven Temperature	Ohm Test Sensor. Check connection at Sensor Wire Harness
''	Shorted Key, Keyboard Disconnected	Check control. If keyboard is not disconnected (F1-4) or key is not shorted (F1-3), replace control.
F3	Sensor Failure or Sensor Circuit Failure	Ohm sensor. See chart.
F9	Door Code	Check Latch Assembly

For Models:

WW27110, WW30110, WM27160 (Oven Sensor Chart: Please refer to chart on 1-3)

FAULT CODES	PROBLEM	COMPONENTS TO CHECK
F1	Power to element relay activated during time of day display.	J1, J2 wire harness connection to control shorted. If checks ok, change control.
F2	Over temperature sensed	Ohm TEST SENSOR. If checks ok, change control.
F3	Open sensor.	Ohm sensor.
F4	Shorted sensor.	Ohm sensor.
F5	Over temperature	Ohm sensor. Check connection of sensor wire harness.
F7	Shorted key	Stuck Function Key on control.
F9	Door Code	Check Latch Assembly.

For Models:

W27100, W27200, W30100, WW27210, WM27260 (Oven Sensor Chart: Please refer to chart below)

MEAT PROBE:		OVEN SENSOR:	
TYPE: CALIBRATION:	NTC thermistor 9938 ohms (150 F)	SENSOR TYPE: CALIBRATION:	RTD 1000 ohm platinum 1654 ohms (350 F)
PROBE RESISTANCE	VS TEMP. TABLE	OVEN SENSOR RESIST	TANCE VS TEMP. TABLE
DEGREES F 122 150 156.2 165.2 210.1	RESISTANCE 18963 ohms 9938 8846 7456 3886	DEGREES F 100 200 300 350 400 500 600 700 800 900 1000	RESISTANCE 1143 ohms 1350 1553 1654 1753 1949 2142 2331 2516 2697 2874

For Models:

W27400, W30400, W30400P, WW27430, WW27430P, WW30430, WW30430P, WM27460, WM30460, JJW8527, JJW8530, JJW8627, JJW8630, JJW9527, JJW9530, JJW9627, JJW9630, JMW8527, JMW8530, JMW9527, JMW9530

FAULT CODES	PROBLEMS	COMPONENTS TO CHECK
F1	POWER TO ELEMENT RELAY ENERGIZED DURING TIME OF DAY DISPLAY. J2 harness shorted. If ok, change (PRB) pow board. Note: For dot only, change second oboard.	
F2	Over temperature sensed; over 620 sensed by control in time of day mode, bake mode, or over 950 sensed in clean mode. Ohm sensor. If checks change power relay both mode.	
F3	Cooling fan on with no oven function selected.	Ohm sensor, wire harness to sensor.
F4	Shorted oven sensor Ohm sensor, wire harness sensor.	
F5	Power element relays disabled in cook mode. 1) Intermittent sensor of harness connection. 2) Intermittent contact of	
F7	Shorted key sensed for 32 seconds	Membrane shorted Display Board
F8	Shorted meat probe alarm.	1) Probe jack or harness to probe jack. 2) Probe sensing temp. Above 250 F. "See chart."
F9	Door lock safety circuit on power relay board sensed.	PRB
FF	Invalid temp. Reading on PRB.	Check sensor and harness, PRB.
F-	Communication error between boards.	J2 harness, ohm wires end to end. Harness ok, replace display board.
FC	Communication error between boards.	J2 harness, ok, replace PRB.
DOUBLE	OVEN ONLY	
F2	Second oven error sensed.	Check sensor and harness. Replace second oven board.

SECTION 2. COMPONENT ACCESS

The following are instructions to access, repair and replace components of the slide-in range.

The unit is more accessible if it is removed from the installed position before servicing procedures begin.

IMPORTANT -

DISCONNECT FROM POWER SOURCE BEFORE SERVICING APPLIANCE.

CONTROL PANEL ASSEMBLY

Electrical components can be accessed by removing the control panel.

To remove the control panel, open the oven door as wide as possible. Remove the three screws from the top of the control panel and the three screws at the bottom of the control panel. Grasp the control panel by placing hands on the right and left sides of the panel, pull out and down to disengage.

For JJW Models:

- To remove the control panel, open the door as wide as possible. Remove the four screws from the bottom of the control panel. Grasp the control panel by placing hands on the right and left sides of the panel, lift up and out to disengage from upper flange.
- 2. Place the panel on the top oven rack (cover with a cloth to prevent scratching) for component testing.
- With the control panel pulled forward, access is now available to the following components: Control Assembly, Clock, High Limit Thermostat, Cooling Fan, Door Latch Mechanism and Motor.

OVEN DOOR REMOVAL

- Open the oven door as wide as possible.
- 2. Place an 1/8" pin in the hole on the right and left door hinges, see Figure 2-1.
- 3. Remove the screws from each side with a Phillips screwdriver. Remove the lock plate from each side.

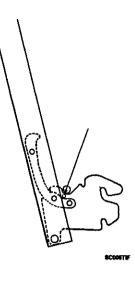


Figure 2-1

- Raise the oven door up to a broil stop position. In this position, it will be against the 1/8" pin.
- Grasp the door toward the top on both sides. Lift the door up and out to remove.

SERVICING OVEN DOOR

- Lay the oven door on a protected surface with the inner door panel facing down.
- 2. Remove three screws from lower trim. Remove trim piece.
- Slide outer-door glass down to disengage from top trim. Remove.
- 4. Remove three screws from top oven door trim. Remove the two 3/8" nuts from the door handle bracket.
- 5. Lift up and off. This will disengage the side trim as well.
- Remove the oven window pack by removing the 3/8" nuts from the insulation retainer.

For JJW Models:

- Lay oven door on a protected surface with the inner door panel facing down.
- 2. Remove the three screws at the top and the three at the bottom of the door, see Figure 2-2.
- Grasp the door assembly at the bottom and lift the assembly off the front door glass.
- 4. Remove the two center screws holding the center bracket in position.

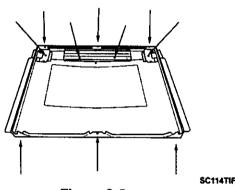


Figure 2-2

- 5. Once the center bracket is removed you will see two screws securing the trim to the glass. Remove these screws.
- 6. Remove the two screws holding the left and right side brackets in position.
- 7. Slide the front door glass out of the frame.
- 8. Reverse the procedure to reassemble.

OVEN DOOR HINGE REPLACEMENT

- Remove two screws from oven inner door panel that mount into the lower portion of oven door hinge assembly.
- Grasp and lift oven door hinge assembly upward and slide down to disengage upper tabs from the door panel.

3. To reassemble the oven door, reverse the procedures for disassembling.

COOLING FAN ACCESS

To access the cooling fan, remove two 1/4" hex screws from the bracket which the fan is mounted on. Tilt motor and bracket to allow it to pass through main back panel.

OVEN CAVITY COMPONENTS

Oven cavity components consist of: bake and broil elements, oven light assembly, convection motor, oven cavity, and oven sensor.

Oven Sensor Removal

Remove two 1/4" hex screws, pull oven sensor into oven cavity to gain access to the electrical quick connector.

To reassemble, use a probe and attach the probe to the quick connector. Guide it through the insulation to ensure the connector does not contact the oven cavity. Contact could damage the connector.

Return to the original position, reattaching with the 1/4" hex screws.

Bake Element Removal

Remove the two 1/4" screws. Pull the bake element into the oven cavity to access electrical wiring.

Broil Element Removal

Remove the four 1/4" hex screws. Pull broil element into oven cavity to gain access to the electric wiring. Reattach by returning to the original position and fastening with four hex screws.

Oven Light

Bulb can be replaced or accessed by turning the lens counterclockwise to remove the entire oven light. The socket can be removed by depressing the spring clips from the rear of the light socket and pushing it into the oven cavity.

A new oven light socket can be inserted and snapped into position by depressing the spring clips and reattaching in the original position.

Convection Motor Assembly

To access the motor assembly, remove the three 1/4" hex screws from the convect cover. Remove the cover. Remove three additional 1/4" hex screws that secure the convect motor assembly. Pull convect motor assembly into the oven cavity, disconnecting the electrical quick-connect.

Reattach by returning to original position using reverse procedures.

OVEN VENT/SMOKE ELIMINATOR

- Remove oven vent and smoke eliminator by using tabs on bottom of smoke eliminator, turning counterclockwise to disengage the locking ears from the inner insulation retainer.
- To remove the smoke eliminator, pull down and align locking ears with notches in oven cavity.

Reattach by reversing above procedures.

OVEN CAVITY

- All internal oven cavity components must be removed prior to oven cavity removal.
- 2. Remove the five 1/4" hex screws from the front flange of the oven liner. (Three screws will be on the top and two on the bottom.)

 Grasp the front flange of the oven liner and gently pull forward to remove oven liner from insulation and structure.

NOTE: When replacing oven cavity, use pieces of sheet metal on sides and top of oven liner to allow cavity installation without tearing or removing insulation.

When the cavity is within two inches of being in place, remove the sheet metal.

OVEN HINGE POCKETS

- Remove oven door following the steps previously described in section on Oven Door Removal.
- 2. Remove hex screws from the lower front closure.
- 3. From each side of the range, remove two 1/4" hex screws.
- 4. Replace components and reassemble.

SECTION 3. TROUBLESHOOTING

Test Access	The test mode can be accessed by holding the stop time key down at power up or by holding the stop time key down for 10 seconds within 5 minutes of power up mode. No other key can be pressed before the stop time key, that would block the test mode access.
Test Exit	Exit the test mode by pushing the cancel key or test will self-terminate after 16 seconds from the last key command chosen.
Test Function	Test mode is perfomed by pushing a keypad and testing for an output response. When the keypad is released, the output is terminated and the display will return to the "-" display. The following is a list of key actions and responses.

NOTE:

- 1. Each time a key is pressed a tone will sound.
- 2. If there is a red dot on the IC-chip and the display board when you touch the oven light key, the oven light will come on and a beep will occur. The beep is to let you know that there is a good circuit, in case the light is blown. Also, when you press the fan speed key on a dual speed downdraft, it will beep each time you touch the key. The first beep will be the high setting, the second beep will be the low setting, and the third beep will be off.

Bake Key	Activates bake relay on the power relay board.
Broil Key	Activates broil relay on the power relay board.
Convect Bake Key	Activates convect bake relay (CVBAK) on the power relay board.
Convect Roast Key	Activates convect roast relay (CVRST) on the power relay board.
Oven Light Key	Activates oven light (OVLT) relay on the power relay board. (See note 2 above.)
Probe Key	Activates the display on the control to display the probe temperature.
Timer Keys	Activates the display to show factory codes in the blue displayed digits and oven temperature in red.
Clean Key	Activates blue display digits which shows the state of the door lock switches and the status of the user selectable options. See charts on page 1-2. NOTE: First (left) blue displayed digit is for user selectable options code and the fourth (right) blue digit is for the door lock switch status code.

Stop Time Key	Will activate the beeper 100% as long as the key is pressed. Also, it will display the control I.D. # in the blue time digits and the power relay board I.D. # in the red temperature digits.	
Clock Key	Activates all display segments to light.	
Cook Time Key	Activates any fault codes stored in the memory. The time digits display any fault codes for the membrane and control board. The temperature digits display any fault codes for the power relay board. NOTE: If "FO" is displayed, there has not been any fault codes sensed in that portion of the system. Any stored fault code can be cleared to FO, after repairs have been made, by entering the fast test and pressing both the cook time and stop time keys for 5 seconds.	
Digital Input Keys	Activates the display to show the same digit (0-9) that is pressed.	
Temperature Offset Change	Program bake above 500°, repress bake pad and hold for 3-4 seconds, the pad must be re-pushed within 3 seconds. The digital keys can be used to set the offset between positive and negative(-). Entered values are rounded to the next 5° increment. (Example: pushing key 3 will display a 5° increment).	
Clock and Temperature Change	The clock can be set to be displayed in 24 hour form. Also, temperature can be displayed in degree "C". To access, hold either timer keys down on power up. The two left digits will display the format for the clock, the right digit will display "F" or "C." The display can be toggled by pushing the bake or upper bake key to toggle the clock. The temperature display can be toggled from F to C by pushing the broil key or upper broil key on a double oven control.	

	User Selectable Options Display Codes					
Display Code	Deg. C	24 Hour Clock	Continuous EOC	60 Hz Reference		
F	X	Х	X	Х		
E		Х	Х	Х		
D	Х		Х	Х		
С			Х	Х		
В	Х	Х		Х		
Α		Х		X		
9	Х			X		
8				X		
7	Х	Х	X			
6		Х	X			
5	Х		X	,		
4			X			
3	X	Х				
2		Х				
1	Х		1			
0						

	Door Lock Switch Codes				
Display Code	Unlocked Switch	Locked Switch	Door Closed Switch		
7	closed	closed	closed		
6	open	closed	closed		
5	closed	open	closed		
4	open	open	open		
3	closed	closed	open		
2	open	closed	open		
1	closed	open	open		
0	open	open	open		

Fault Code	Problem	Components to Check	
F1	Power to element relay energized during time of day display.	J2 harness shorted; If checks ok, change (PRB) power relay board. NOTE: For double oven only, change second oven board.	
F2	Over temperature sensed; over 620° sensed by control in time of day mode, bake mode, or over 950° sensed in clean mode.	Ohm SENSOR. If checks ok, change power relay board. "See chart for sensor value."	
F3	Cooling fan on with no oven function selected.	Ohm SENSOR, wire harness to sensor.	
F4	Shorted oven sensor	Ohm sensor, wire harness to sensor.	
F5	Power to element relays disabled in cook mode.	Intermittent sensor or wire harness connection. Intermittent contact on PRB.	
F7	Shorted key sensed for 32 seconds.	Membrane shorted. Display board.	
F8	Shorted meat probe alarm.	1) Probe jack or harness to probe jack.	
F9	Door lock safety circuit on power relay board.	PRB.	
FF	Invalid temperature reading on PRB.	Check sensor and harness, PRB.	
F-	Communication error between boards.	J2 harness, ohm wires end to end. Harness ok, replace display board.	
FC	Communication error between boards.	J2 harness, ok, replace PRB.	

Double Oven Only

FR	Second oven error sensed.	1) Check sensor and harness.
		2) Replace second oven board.

MEAT PROBE				
Type: Calibration: 9938 ohms (150°F.)				
PROBE RESISTANCE VS. TEMP. TABLE				
Degrees F. Resistance				
122	18963 ohms			
150 9938 ohms				
156.2 8846 ohms				
165.2 7456 ohn				
210.1 3886 ohms				

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TROUBLESHOOTING

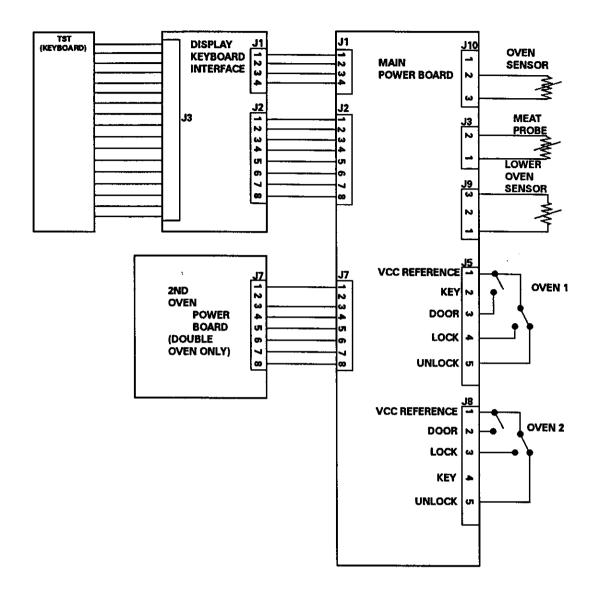
Power Board	Voltage	Resistance	Ref. Point	Comments
J1-1	0.0 Vdc	-	J1-1	Signal Ground
J1-2	13.0 Vdc	-	J1-1	+12 Vdc Source
J1-3	21.2 VAC	-	J1-4	T1 Secondary
J2-1	5.0 Vdc	-	J1-1	-
J2-1	0.0 Vdc	-	J1-1	Press Cancel 2
J2-2	5.0 Vdc	-	J1-1	•
J2-2	0.0 Vdc	-	J1-1	Press Cancel 1
J2-3	0.0 Vdc	-	J1-1	Time of Day Mode
J2-3	2.8 Vdc	-	J1-1	Cooking Mode Active Oven 1
J2-4	0.0 Vdc	-	J1-1	Time of Day Mode
J2-4	,2.8 Vdc	-	J1-1	Cooking Mode Active Oven 2
J2-5	1.2 VAC	-	J1-1	Serial Clock Line
J2-6	1.3 VAC	-	J1-1	Transmit Line
J2-7	2.5 VAC	-	J1-1	Receive Line
J2-8	-	-	-	Enable Line
J3-1	5.0 Vdc	-	J1-1	Probe Out
J3-1	<3.5 Vdc	-	J1-1	Probe In
J3-2	0.0 Vdc	-	J1-1	Signal Ground
J4-1	12.0 Vdc	•	J1-1	Down Draft OFF or High
J4-1	0.7 Vdc	-	J1-1	Down Draft ON Low
J4-2	12.0 Vdc	-	J1-1	+12 Vdc Source
J4-3	12.0 Vdc	-	J1-1	Down Draft OFF or Low
J4-3	0.7 Vdc	-	J1-1	Down Draft ON High
J5-1	12.0 Vdc	-	J1-1	+12 Vdc Source
J5-2	-	-	-	Open Pin
J5-3	12.0 Vdc	-	J1-1	Door 1 Closed
J5-3	0.0 Vdc	-	J1-1	Door 1 Open
J5-4	0.0 Vdc	_	J1-1	Door 1 Unlocked
J5-4	12.0 Vdc		J1-1	Door 1 Locked
J5-5	12.0 Vdc	-	J1-1	Door 1 Unlocked
J5-5	0.0 Vdc	-	J1-1	Door 1 Locked
J7-1	-	-	-	Enable Line
J7-2	-	-	-	Open Pin
J7-3	2.5 VAC	-	J1-1	Receive Line

Power Board	Voltage	Resistance	Ref. Point	Comments
J7-4	2.8 Vdc	-	J1-1	Door Lock Limit
J7-5	0.0 Vdc	-	J1-1	Time-of-Day Mode
J7-5	2.3 VAC	-	J1-1	Cooking Mode Active Oven 2
J7-6	1.2	-	J1-1	Serial Clock Line
J7-7	0.0 Vdc	<u>-</u>	J1-1	Time-of-Day Mode
J7-7	2.8 Vdc	-	J1-1	Cooking Mode Active Oven 2
J7-8	0.0 Vdc	- .	J1-1	Signal Ground
J8-1	12.0 Vdc	-	J1-1	+12 Vdc Source
J8-2	12.0 Vdc	-	J1-1	Door 1 Closed
J8-2	0.0 Vdc	-	J1-1	Door 1 Open
J8-3	0.0 Vdc	-	J1-1	Door 1 Unlocked
J8-3	12.0 Vdc	-	J1-1	Door 1 Locked
J8-4	-	-	-	Open Pin
J8-5	12.0 Vdc	-	J1-1	Door 1 Unlocked
J8-5	0.0 Vdc	-	J1-1	Door 1 Locked
J9-1	1.9 Vdc	-	J1-1	Oven Probe
J9-2	-	-	_	Open Pin
J9-3	<3.5 Vdc	-	-	Cool Oven
J10-1	-	-	-	Open Pin
J10-2	<3.5 Vdc	-	_	Cool Oven
J10-3	1.9 Vdc	-	J1-1	Oven Probe

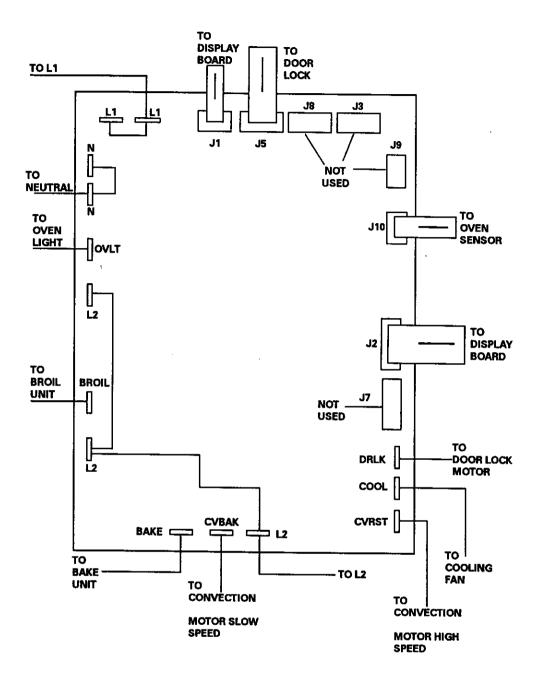
Control Head	Voltage	Resistance	Ref. Point	Comments
J1-1	0.0 Vdc	_	J1-1	Signal Ground
J1-2	13.0		J1-1	+12 Vdc Source
J1-3	21.2 VAC	-	J1-4	T1 Secondary
J2-1	5.0 Vdc	-	J1-1	-
J2-1	0.0 Vdc	-	J1-1	Press Cancel 2
J2-2	5.0 Vdc	•	J1-1	-
J2-2	0.0 Vdc	-	J1-1	Press Cancel 1
J2-3	0.0 Vdc	-	J1-1	Time-of-Day Mode
J2-3	2.8 Vdc	-	J1-1	Cooking Mode Active Oven 1
J2-4	0.0 Vdc	-	J1-1	Time-of-Day Mode
J2-4	2.8 Vdc	-	J1-1	Cooking Mode Active Oven 2
J2-5	1.2 VAC	· -	J1-1	Serial Clock Line
J2-6	1.3 VAC	-	J1-1	Transmit Line
J2-7	2.5 VAC	-	J1-1	Receive Line
J2-8	-	-	-	Enable Line

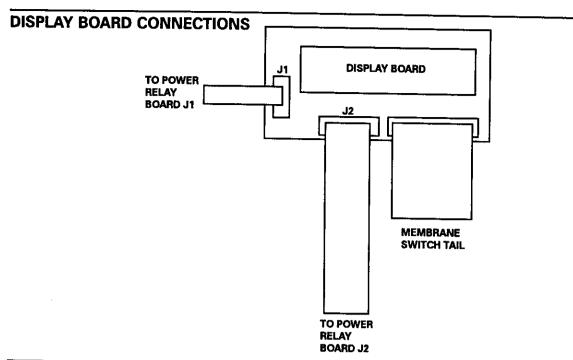
2nd Oven	Voltage	Resistance	Ref. Point	Comments
J7-1	-	-	•	Enable Line
J 7- 2	•	-	•	Open Pin
J7-3	2.5 VAC	-	J1-1	Receive Line
J7-4	2.8 Vdc	-	J1-1	Door Lock Limit
J7-5	0.0 Vdc	-	J1-1	Time of Day Mode
J 7- 5	2.3 VAC	-	J1-1	Cooking Mode Active Oven 2
J7-6	1.2 VAC	-	J1-1	Serial Clock Line
J7-7	0.0 Vdc	-	J1-1	Time-of-Day Mode
J7-7	2.8 Vdc	-	J1-1	Cooking Mode Active Oven 2
J7-8	0.0 Vdc	-	J1-1	Signal Ground

MULTIPLEXING CIRCUITRY-WALL OVENS

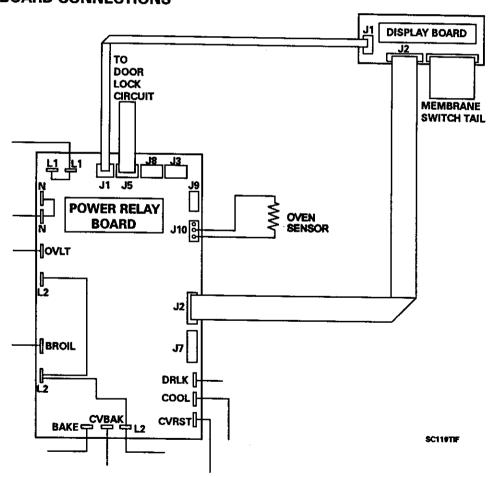


POWER RELAY BOARD CONNECTIONS

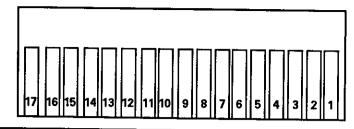




CIRCUIT BOARD CONNECTIONS



MEMBRANE CONNECTIONS



PAD	CIRCUIT		
1	15 to 4		
2	14 to 4		
3	13 to 4		
4	12 to 4		
5	11 to 4		
5	10 to 4		
7	9 to 4		
8	8 to 4		
9	7 to 4		
0	6 to 4		
LO BAKE	15 to 16		
LO BROIL	14 to 16		
LO CLEAN	13 to 16		
TIMER ONE	14 to 5		
STOP TIME	13 to 5		
CLOCK	12 to 5		
PROBE	11 to 5		
OVEN LIGHT	10 to 5		
TIMER TWO	9 to 5		
COOK TIME	8 to 5		
UPPER BAKE	10 to 3		
UPPER BROIL	9 to 3		
UPPER CLEAN	8 to 3		
UPPER CONVECTION BAKE	7 to 3		
UPPER CONVECTION ROAST	6 to 3		
UPPER CANCEL	1 to 2		
LOWER CANCEL	1 to 17		

Membrane Switch: The means to make a switch contact, instructing the electronic control system to perform a desired function. The membrane switch is a simple set of two contact surfaces containing conductive material, one on the back layer of MYLAR and the other on the front layer of MYLAR. There is also a center section of non-conduc-

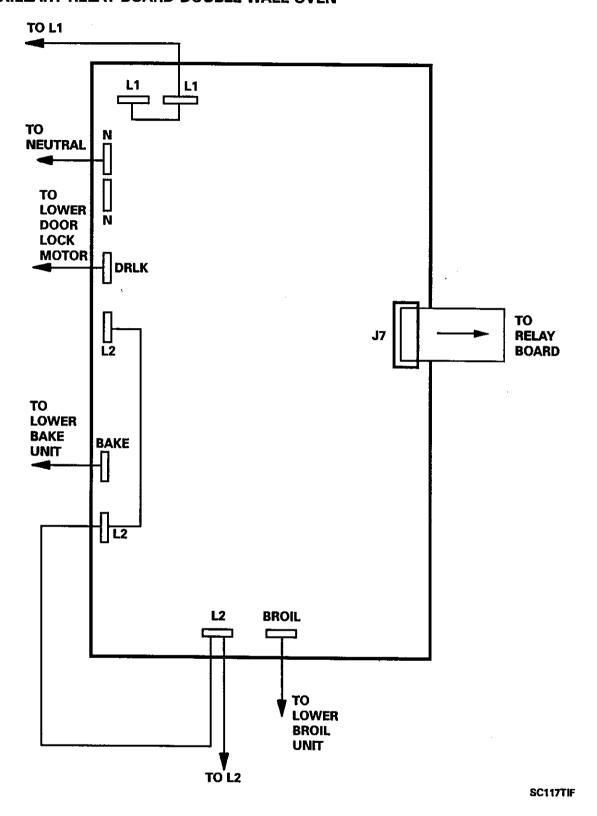
tive MYLAR material that has a hole punched out of it at each switch contact position. The thickness of the MYLAR spacer determines the push force required to close the contacts between the front contact strip and the rear contact strip. Typically, the push force required to close a contact is 12 to 18 ounces.

POWER RELAY BOARD-DOUBLE WALL OVEN TO TO TO **UPPER LOWER** DISPLAY **DOOR** DOOR **BOARD** LOCK LOCK TO L1 TO **PROBE JACK** L1 J1 J5 J8 J3 TO TO **LOWER OVEN** J9 **NEUTRAL SENSOR** TO TO **OVEN UPPER OVEN LIGHTS** SENSER OVLT L L2 TO **DISPLAY** J2 TO **BOARD UPPER BROIL** UNIT **BROIL** TO **AUXILLARY** J7 **RELAY BOARD** TO **UPPER DOOR** L2 LOCK **MOTOR CVBAK CVRST** BAKE C 1 L2 ΤŌ TO UPPER . COOLING TO L2 BAKE FAN UNIT TO TO CONVECTION CONVECTION **MOTOR MOTOR SLOW SPEED HIGH SPEED**

SC116TIF

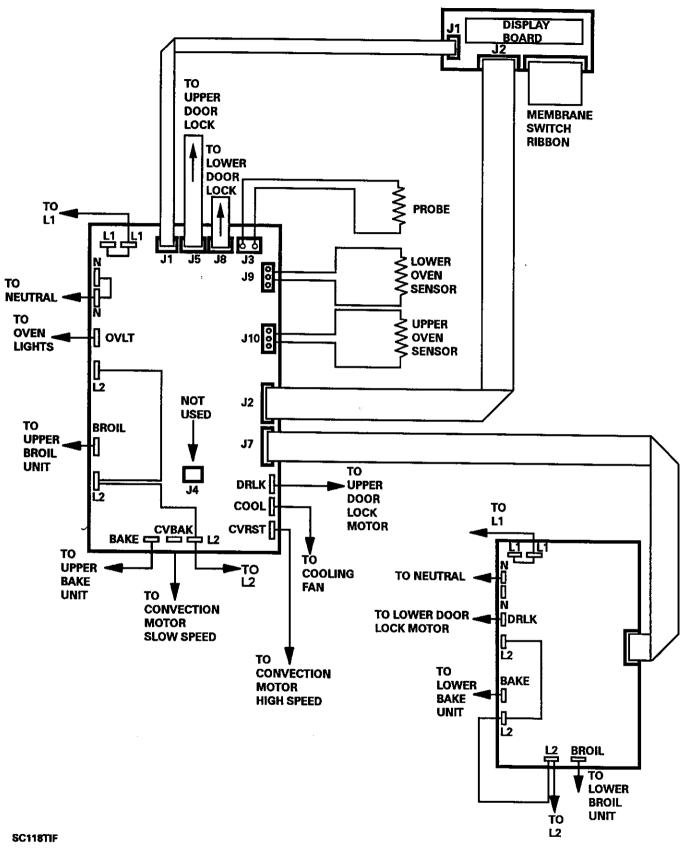
16009721

AUXILLARY RELAY BOARD-DOUBLE WALL OVEN



16009721

CIRCUIT BOARD CONNECTIONS-DOUBLE WALL OVEN



16009721

TROUBLESHOOTING

3-14

ELECTRONIC CONTROL PROGRAMMABLE CHANGES

TEMPERATURE OFFSET CHANGE:

- 1) Program bake above 500 degrees F
- 2) Repress bake pad and hold for 3 to 4 seconds
- 3) The digital keys can be used to offset between 0 to 35 degrees in increments of 5 degrees.
- 4) The broil key is used to toggle between positive and negative offsets.

CLOCK AND TEMPERATURE CHANGE:

- 1) Hold either timer pad down during power up
- 2) The two left digits will display the format of the clock
- 3) The right digit will display F or C
- 4) Pushing the bake key will toggle the clock
- 5) Pushing the broil key will toggle the temperature from F to C

ELECTRONIC CONTROL FAST TEST PROCEDURE

1) Test Function: Depressing a key pad allows for testing for an output

When the key is released, the output is terminated

2) Test Access: Hold the stop time key down at power up or for 10 seconds

within 5 minutes of power up.

3) Test Exit: Push the cancel key

Test will self terminate after 16 seconds from the last key

command chosen.

While in the test mode the following outputs may be checked:

Bake Pad- Press the pad in the test mode and the bake relay will be activated.

Broil Pad- Press the pad in the test mode and the broil relay will be activated.

Convect Bake Pad- Press the pad in the test mode and the convect bake relay will be

activated.

Convect Roast Pad-Press the pad in the test mode and the convect roast relay will be

activated.

Oven Light Pad- Press the pad in the test mode and the oven light relay will be

activated.

Probe Pad- Press the probe pad in the test mode and the probe temperature will

be displayed.

Timer- Press the timer pad in the test mode and the factory codes will

appear and the oven temp will appear in red.

Stop Time Pad- Press the stop time pad in the test mode and the beeper will be

activated and the control ID will be displayed in the blue digits and the power relay board ID will be displayed in the red

temperature digits.

Clock Pad- Press the clock pad in the test mode and all display segments will be

activated.

Clock Time Pad- Press the clock time pad in the test mode and the last fault code

sensed in the system will be displayed.

Digital Input Pads- Press the digital input pads in the test mode and the digit that has

been pressed will be displayed.

Clean Key- Press the clean key pad in the test mode and the state of the door

lock switches and the status of the user selectable options will be

displayed.

USER SELECTABLE OPTION DISPLAY CODES

DISPLAY CODE	DEG C	24 HR CLOCK	CONTINUOUS EOC	60 HZ REFERENCE
F	X	х	Х	Х
Е		X	Х	х
D .	Х		х	х
С			Х	X
В	Х	x		х
Α		X		X
9	Х			x
8				х
7	х	X	х	
	J1, J2 wire harness connection to control shorted, If checks ok, change control.	x	×	
5	X		x	
4			x	
3	X	х		
2		Х		
1	х			
0				

DOOR LOCK SWITCH CODES

DISPLAY CODES	UNLOCKED SWITCH	LOCKED SWITCH	DOOR CLOSED SWITCH
7	CLOSED	CLOSED	CLOSED
6	OPEN	CLOSED	CLOSED
5	CLOSED	OPEN	CLOSED
4	OPEN	OPEN	OPEN
3	CLOSED	CLOSED	OPEN
2	OPEN	CLOSED	OPEN
1	CLOSED	OPEN	OPEN
0	OPEN	OPEN	OPEN

For JJW Models

To test the control the following should be performed:

Bake Pad-

Touch the bake pad then touch the auto set pad within 4 seconds of each other. The bake relay should engage and the element start to heat. Listen for the relay and then check for heat from the element.

Broil Pad-

Touch the broil pad and then touch the auto set pad within 4 seconds of each other. The broil relay should engage and the element start to heat. Listen for the relay and then check for heat from the element.

Convect Bake Pad- Touch the convect broil pad and then touch the auto set pad within four seconds of each other. The convect bake relay should engage, the fan should come run on low speed, and the element start to heat. Listen for the relay, the fan, and then check for heat from the element.

Convect Roast Pad-Touch the convect roast pad and then touch the auto set pad within

four seconds of each other. The relay should engage, the fan should start on high speed, and the element should start to heat. Listen for the relay, the fan, and then check for heat from the element.

Drying Pad-

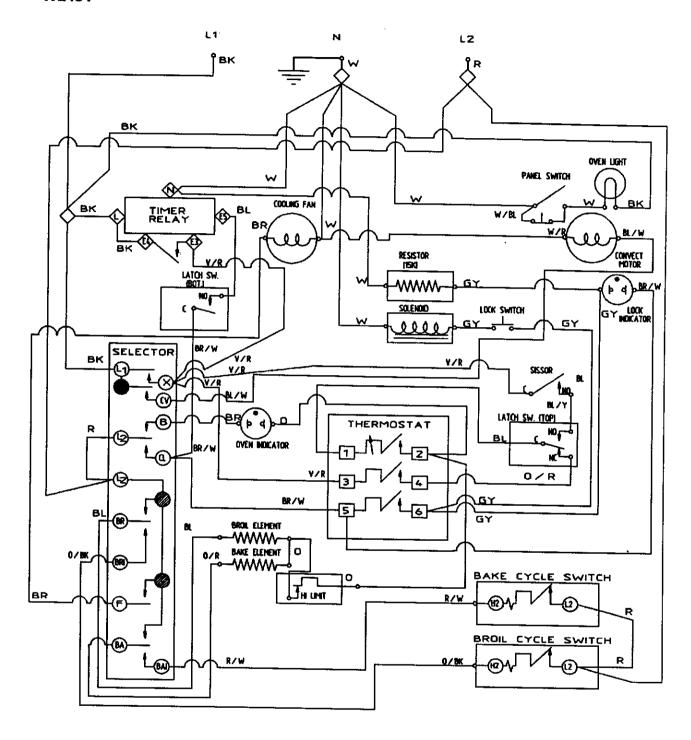
Touch the drying pad and then the auto set pad within four seconds of each other. The fan should start and the element should start to heat. Listen for the fan and check for heat from the element.

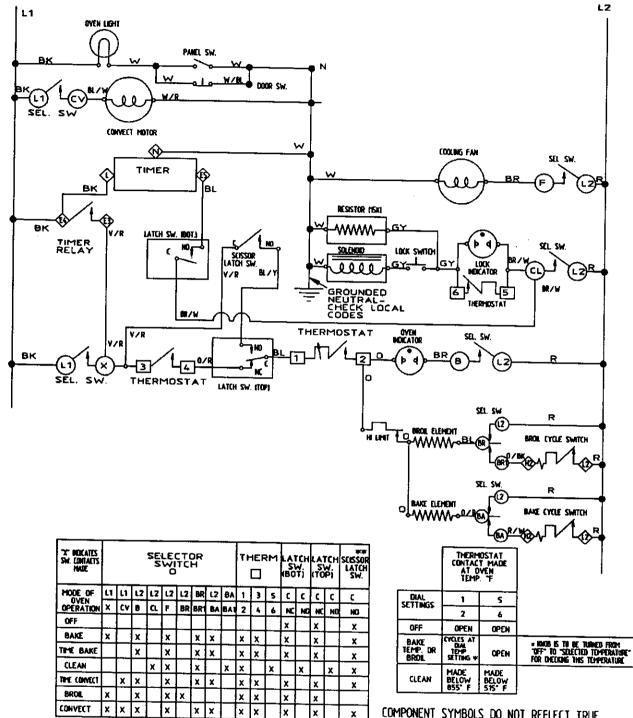
Clean Pad-

Touch the clean pad and then the auto set pad within four seconds of each other. The relay should engage, the door lock motor energize, and the door lock. Listen for the relay, the motor to energize, and check the door to make sure it locks.

SECTION 4. WIRING DIAGRAM

W2451

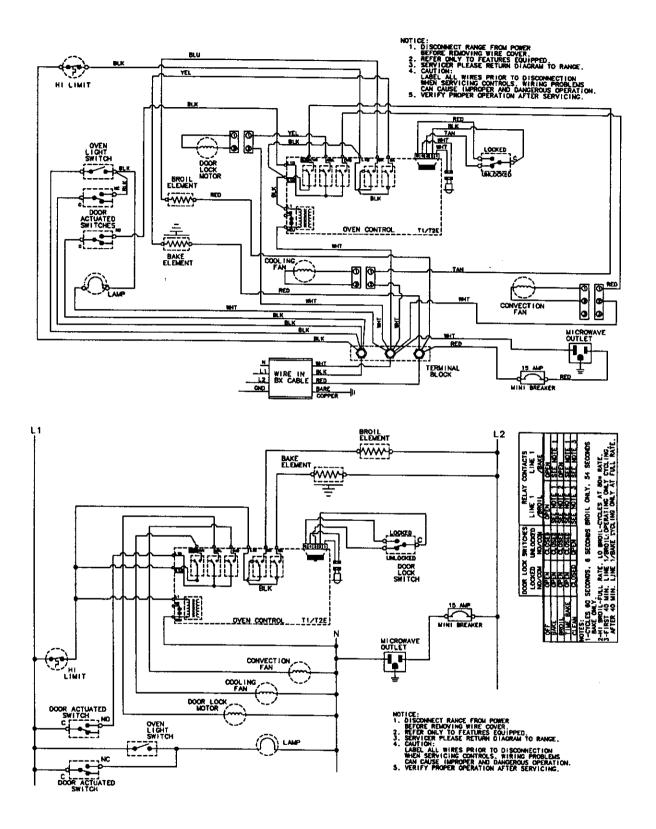




** SCISSOR LATCH SW. MAKES WITH DOOR CLOSED

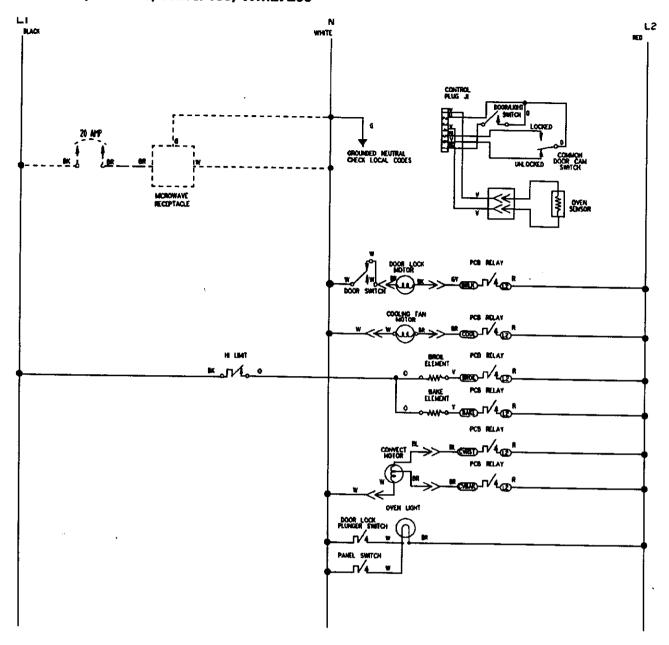
COMPONENT SYMBOLS DO NOT REFLECT TRUE CONFIGURATION ALL FEED LINE COLORS ARE NOTED (BLACK, WHITE AND RED). ALL COMPONENTS SHOWN IN "OFF" POSITION

W27100



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W27200, W30100, WM27160, WM27260

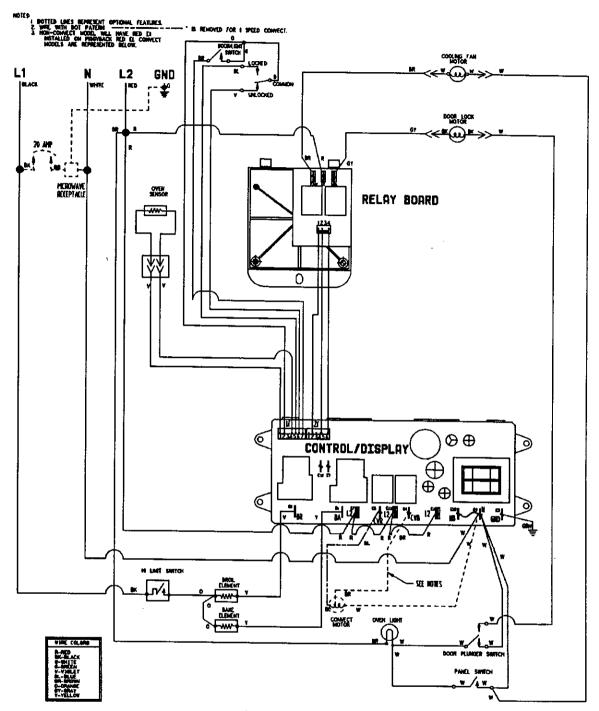


COMPONENT EMBOLS BO NOT METLETT THE CONFIDENTION. ALL FIED LINE COLORS ARE MOTED TRLACK, WHITE A MEDI. ALL COMPONENTS SHOWN IN "OFF" OR RELAKED POSITION.

VINE COLORS	7
R-APD OK-BLACK T-BITTI C-BITTI Y-YIGLT BA-BOOM G-BRANG OY-BRAY Y-YELLOR	

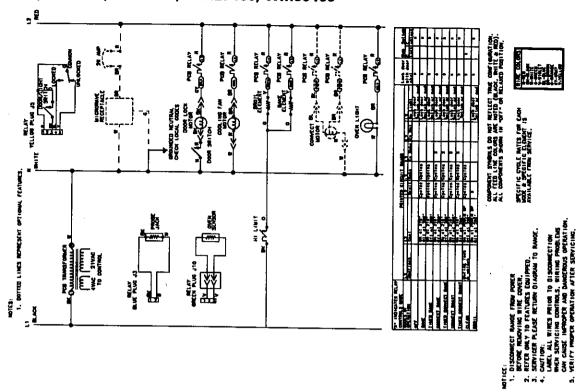
COMMOD MADE	PRINTED CIRCUIT BOARD (UPPER)						(Charles)	Kan Bel tah		
	Coor lock	lack Cool	Foli	13	13	T7	12	11 th dies		E
			- 1011	7.5.0	CA NOO		Dy LTerit	BNu7	Lock	Unlec
OFT							Syltah ar sed	i K	1	*
BAKE		044 et 200.	Çyeten	Cycles			Selfel or ped] ¥	1	~
THEO BACK		OH at 318"	Cycles	Cycles			failer ar pad	R	+	×
COMECT BACK		Strat Mar	Cycles	Cycles	× (1.56		Leck dies	K .	+	*
THEO COMECT BANE		Dit of 30.		Cycles			Sell (ch) er pod	2	┼	×
CONVECT ROAST		Off of 300.	Cycles	Cyc106		у руча	Lock Stor	R	+	× -
TIMED COMMECT GOART		00 of 318"	Cycles	Cycles		X DOOR	Ferri and	×	╁	×
CLEMI	During look	*	Cycles	Cycles		C.COMP.D			+	
RIOIL.		×	X				Cock door	×	+	×

W27200, W30100, WM27160, WM27260

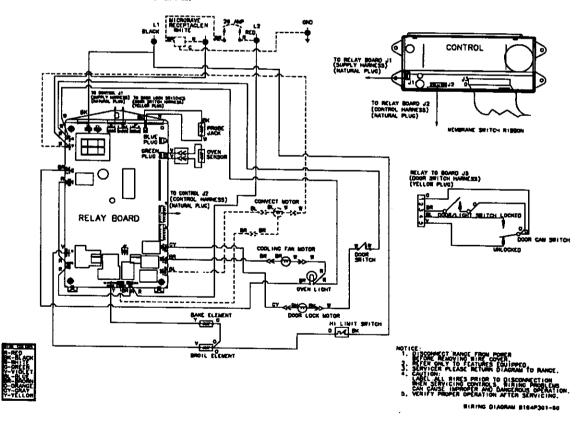


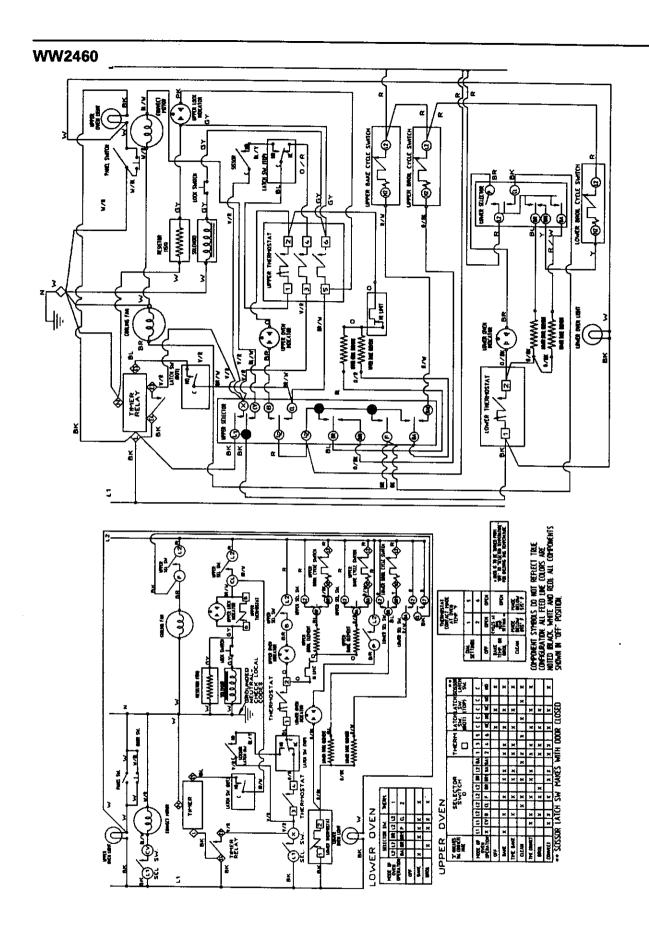
WIRING DIAGRAM P/N 208514F

W27400, W30400, W30400P, WM27460, WM30460

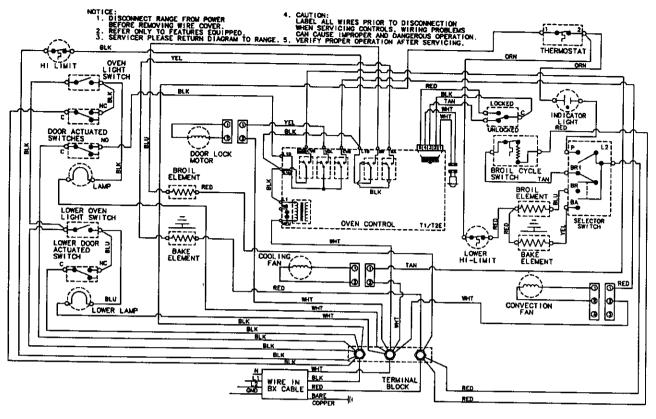


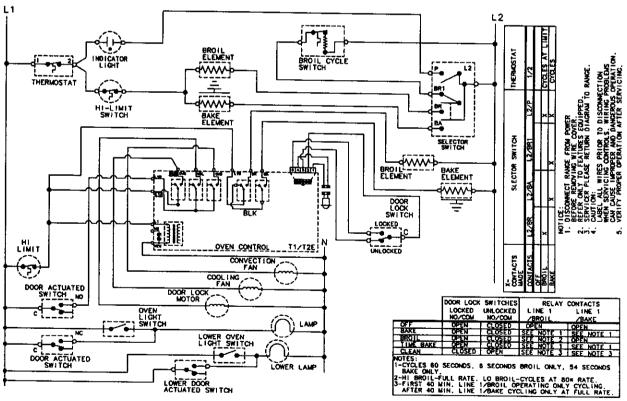
MOTES: 1. BOTTED LINES REPRESENT OFFICIAL FEATURES.



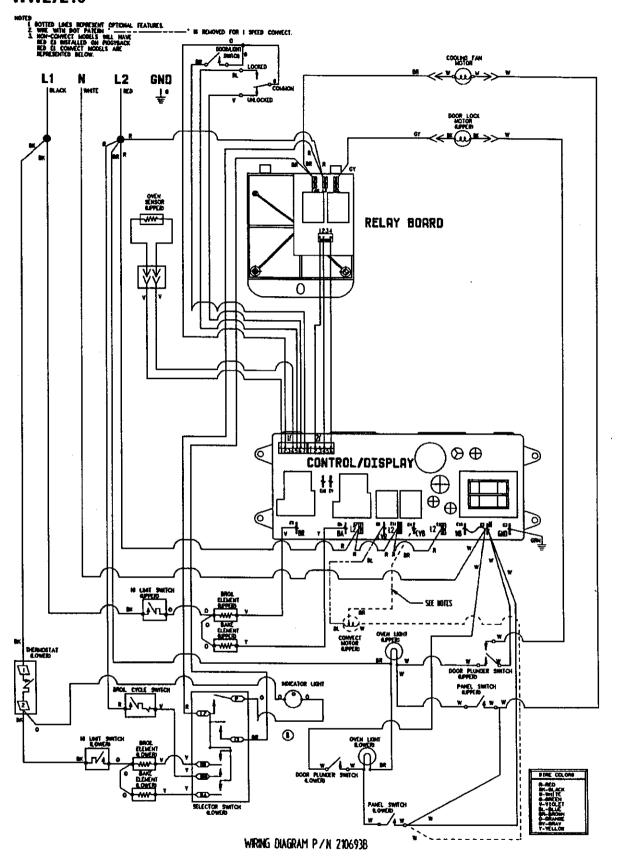


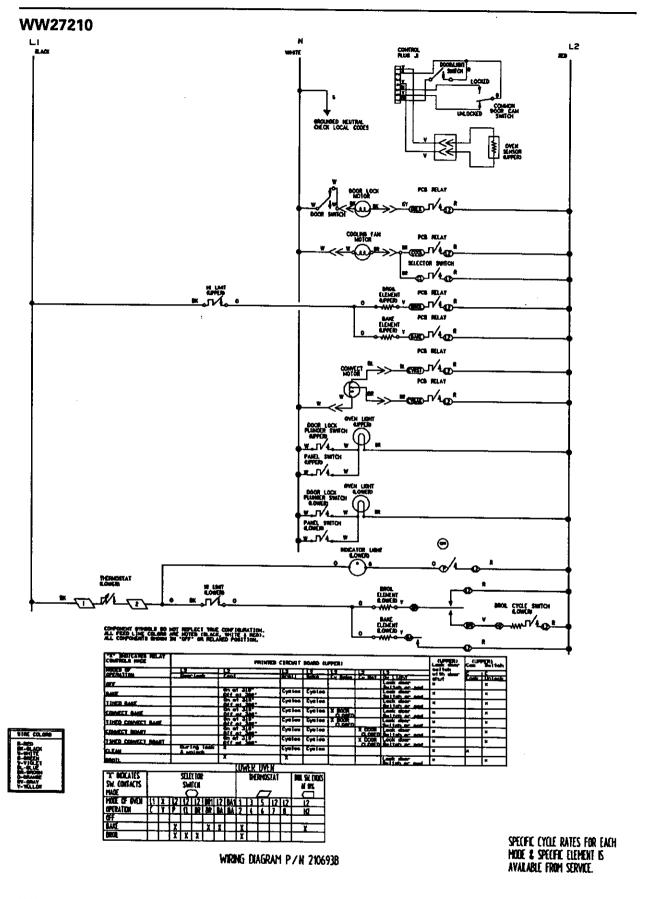
WW27110, WW30110

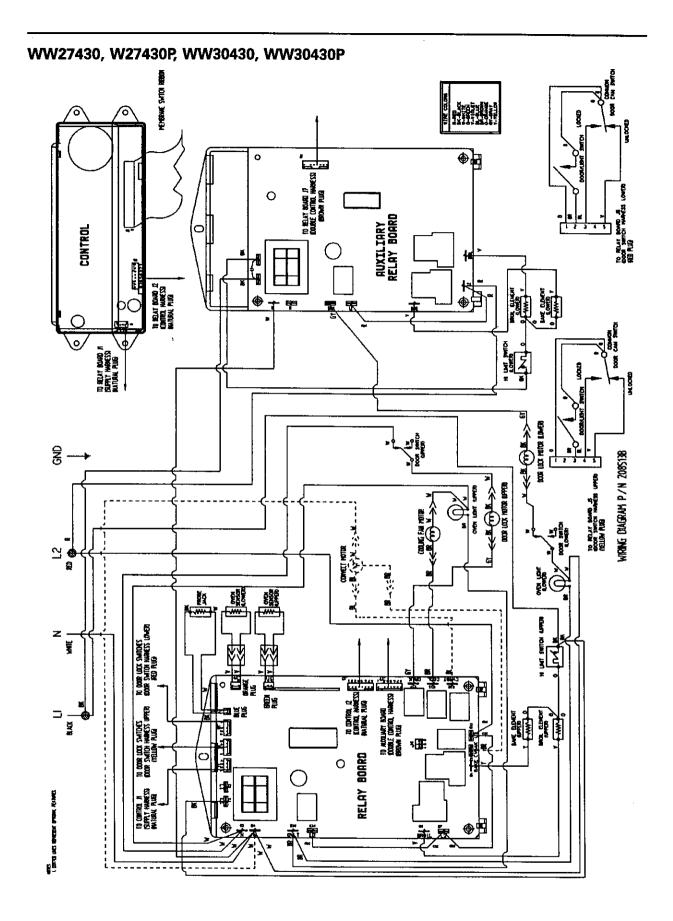




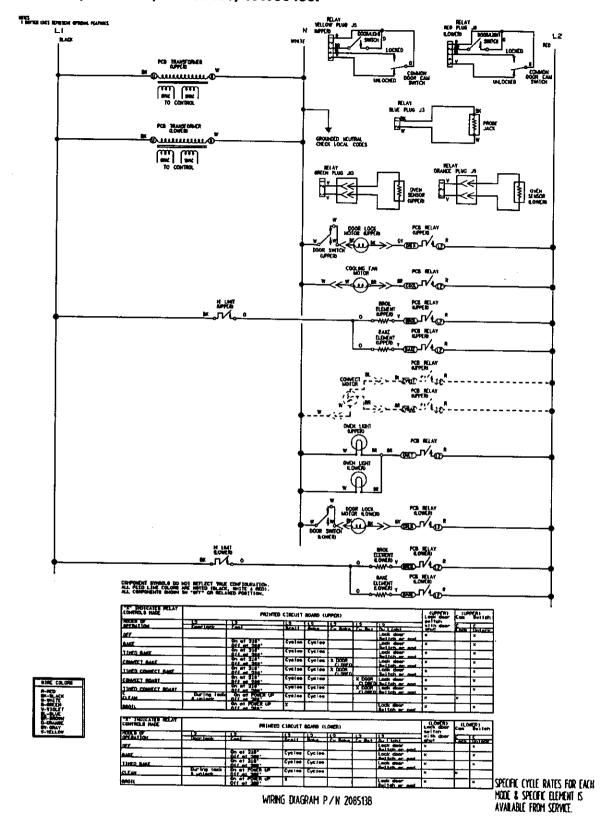
WW27210

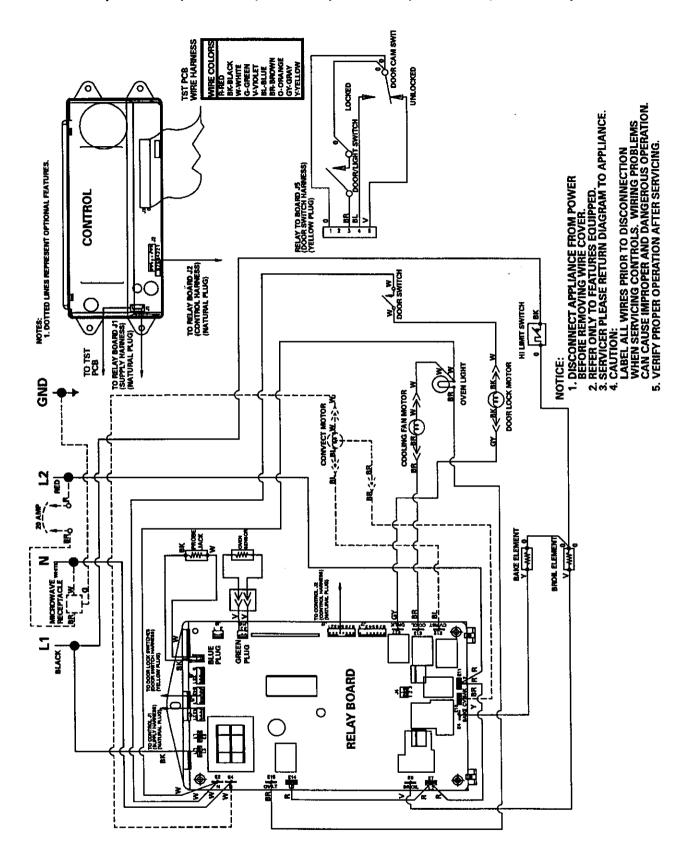


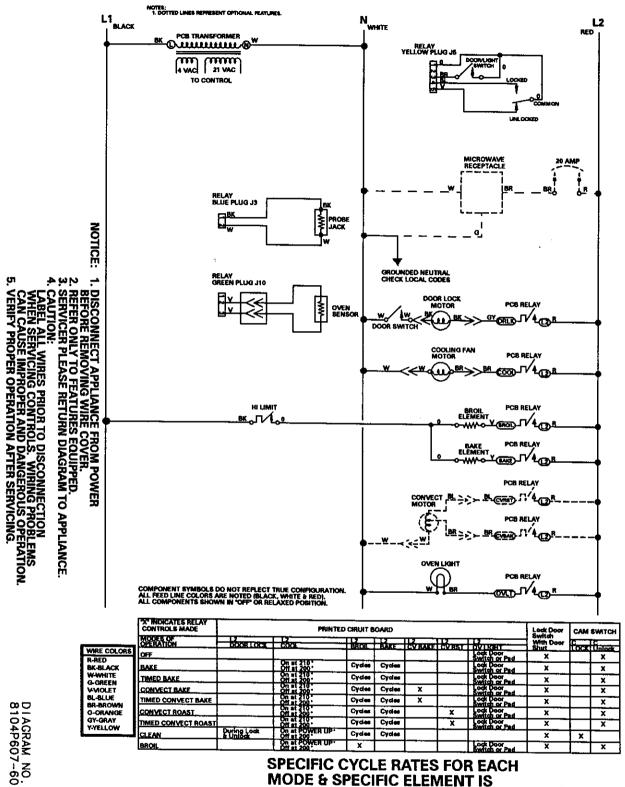




WW27430, W27430P, WW30430, WW30430P

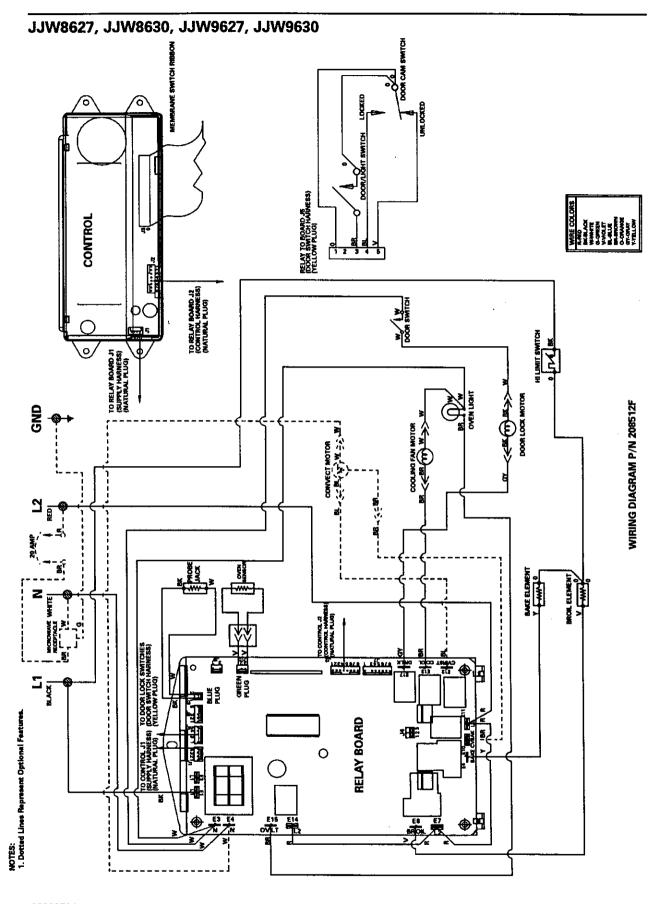




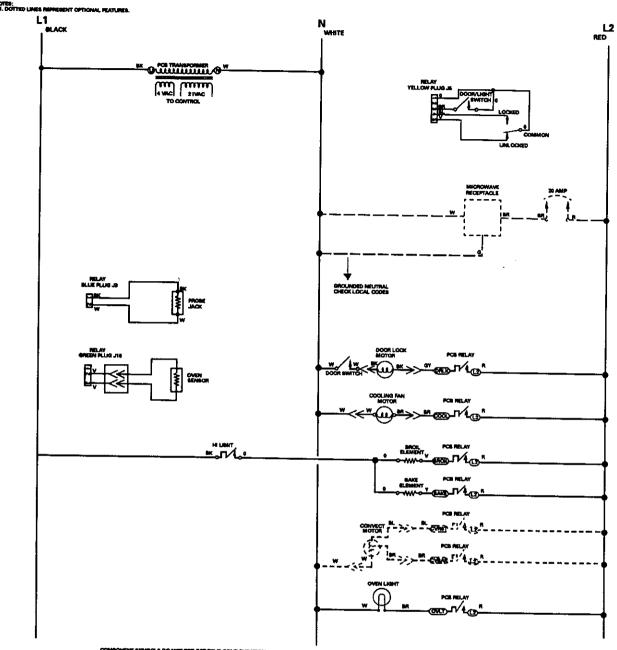


SPECIFIC CYCLE RATES FOR EACH MODE & SPECIFIC ELEMENT IS AVAILABLE FROM SERVICE.

FILE/PART NO. 8104P607-60



JJW8627, JJW8630, JJW9627, JJW9630



COMPONENT SYMBOLS DO NOT REFLECT TRUE CONFIGURA ALL RED LINE COLORS ARE NOTED (BLACK, WHITE & RED). ALL COMPONENTE SHOWN IN "OFF" OF RELAKED POSITION.

WINE COLORS	ľ
R-RED	۱
BK-BLACK	ı
AR ANDREE	t
6-GREEN	I
M-MOLET	ľ
OL-BLUE	ı
BIT-BITCHIN	ı
0-ORANGE	ı
GY-GRAY	и
A-ABITOM.	R
	i

"A" INDICATES MELAY CONTROLS MADE	PRINTED CIRCUIT SOARC						Lock Dear	Cam Switch		
MODES OF OPERATION	Door Look	žo.	12	3 ako	Viete	ev na	DV LIGHT	With Door		C
OFF				1	.1		Lock Dear	x		×
BAKE		Or at 210°	Cycles	Cycles			Lock Door	×	1	×
TIMED BAKE		On at 210"	Cretes	Cycles	1		Look Door	×	\vdash	×
CONVECT BAILE	L "	On at 200	Oydes	Cycles	×	1	Lock Door Switch or Pad	×	 	-
TIMED CONVECT BAKE	-	On et 210	Option	Cycles	×		Lock Dear	1 ×	┼	÷
CONVECT ROAST		1 St. 200	Cycles	Cycles	+	- x	COX Door	x	╌	ш.
THIED CONVECT ROAST	1	Si = 50	Cycles	Order	+	 	Look Down	 	├	X
CLEAN	During Look & Listock	On a POWER UP	Cycles	Ordes	+	 ^	Switch or Part	 ^ -	-	×
BROIL	1	On at POWER UP	X	9	┿	├ ──	1 - 2 5	×	×.	Ь.
	<u> </u>	I Off at 200°		I	1	ı	Lock Door	X	ł	X

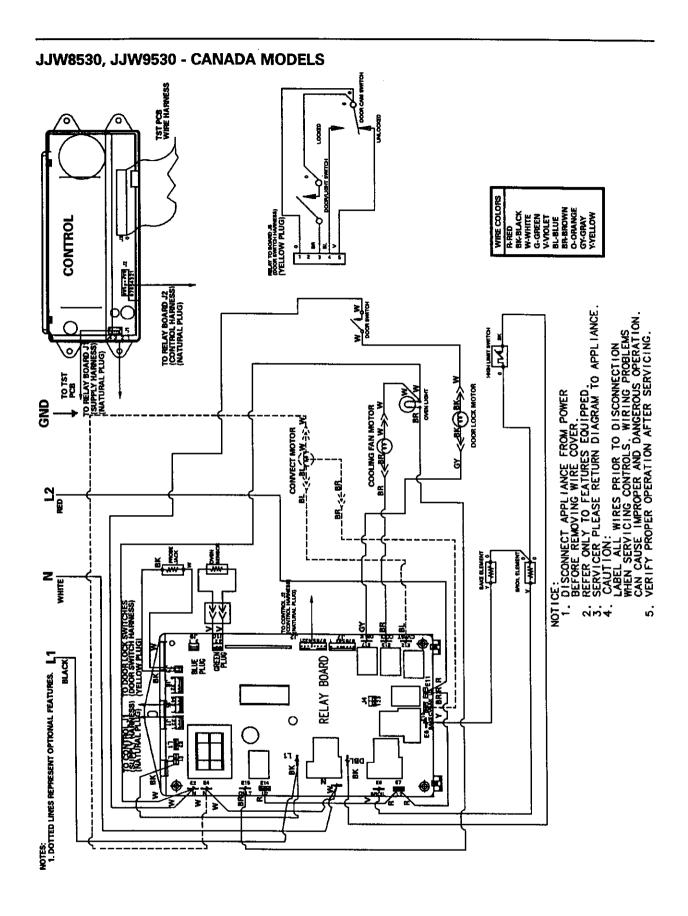
WIRING DIAGRAM P/N 208512F SPECIFIC CYCLE RATES FOR EACH MODE & SPECIFIC ELEMENT IS AVAILABLE FROM SERVICE.

16009721

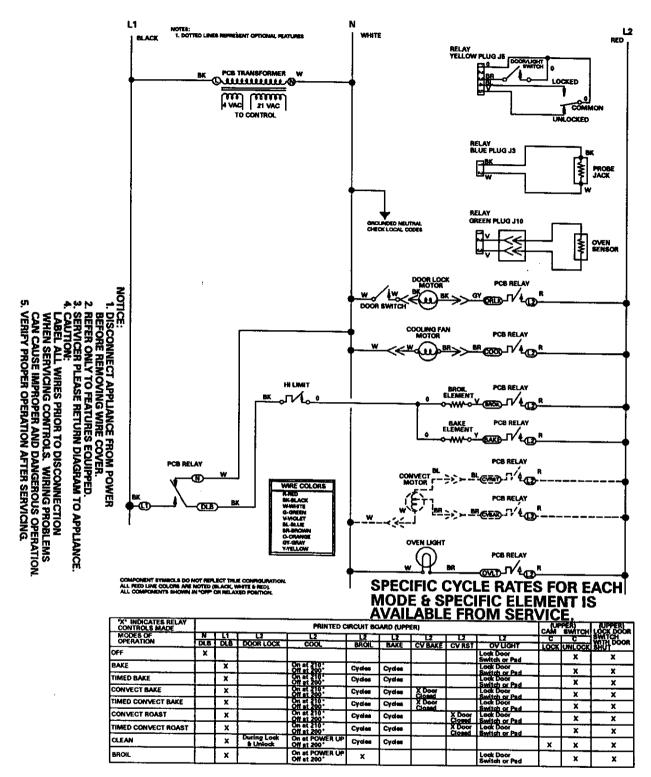
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WIRING DIAGRAM

4-16



JJW8530, JJW9530 - CANADA MODELS



MAYTAG

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