

MAYTAG

**Maytag
Gemini™**

**Range
Service Manual**

16010107
Issued 10/00

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 revised components are added or new models are introduced.

Each page of the manual will be identified in the lower, left and right-hand corners, 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 promptly and proper filing of subsequent pages as they are used.

MODELS COVERED IN THIS MANUAL:

MER6770AAW
MER6770AAB
MER6770AAC

CONTENTS

INTRODUCTION	i
CONTENTS	iii
SECTION 1. GENERAL INFORMATION	1-1
SECTION 2. ELECTRICAL COMPONENTS & TESTING	2-1
SECTION 3. COMPONENT ACCESS	3-1
EXPLODED VIEW	3-1
MAIN TOP	3-2
ELEMENTS	3-2
Ceran Element	3-2
Bake Element	3-3
Broil Element	3-3
Oven Sensor	3-3
Oven Cavity Components (Electric)	3-4
Convect Fan Motor and Blade (Electric)	3-5
ELECTRONIC CLOCK AND OVEN CONTROL	3-6
INFINITE SWITCH (Current Sensing)	3-6
Signal Lights	3-7
"Hot Surface" Light	3-7
Oven Light Replacement	3-7
HI-LIMIT THERMOSTAT	3-8
OVEN DOOR(S)	3-8
UPPER DOOR	3-9
LOWER DOOR	3-10
Lower Latch Assembly	3-10
LOWER LATCH ASSEMBLY	3-11
Oven Door Hinge	3-11
LEVELING LEGS	3-12
CONVENIENCE OUTLET (Canadian Models Only)	3-12
SPECIFICATIONS	3-12
OVEN RACKS	3-12
RACK POSITIONS	3-13
HALF RACK ACCESSORY	3-13
SECTION 4. ELECTRICAL	4-1
TOASTING CIRCUIT (Upper Oven Only)	4-1
OVEN CIRCUITS	4-1
SURFACE ELEMENTS - CERAN	4-2
DUEL ELEMENT	4-2
PROBE, SENSOR / BOTH OVENS	4-2
HOT SURFACE LIGHTS	4-3
SURFACE INDICATOR LIGHTS	4-3
TRANSFORMER, STEPDOWN (12V)	4-4

SURFACE ELEMENT SWITCH	4-4
DUAL ELEMENT SWITCH	4-4
ELECTRICAL CONNECTIONS/VOLTAGE	4-5
SECTION 5. TROUBLESHOOTING	5-1
GEMINI DOUBLE OVEN CONTROLS	5-1
FAULT CODES	5-2
RELAY BOARD	5-3
TROUBLESHOOTING GUIDE	5-4
PARTS LIST	5-6
FAULT IDENTIFICATIONS SUMMARY	5-7
SECTION 6. WIRING DIAGRAMS	6-1

SECTION 1. GENERAL INFORMATION

Bake: There will be two separate bake keys, one for each oven. When the upper oven is chosen there will be a rapid preheat activated which turns both elements on. If the lower oven is selected the elements will cycle at the normal rate. The normal rates for the bake functions in both ovens are: 6 seconds for the broil element, followed by 54 seconds for the bake element.

Broil: There will be two separate broil keys, one for each oven. The HI broil function controls the broil element at 100%, the LO broil is controlled at 80% on time of a 60 second duty cycle. HI broil will be maintained to reach a maximum temperature of 550°F, LO broil will be maintained at a maximum of 450°F.

Toasting: Available in upper oven only. Toasting has a maximum allowable time of 10 minutes and maximum temperature of 550°F. Toasting is only available when the lower oven is not in use. If chosen during lower oven operation the display will scroll an information message regarding use.

Keep Warm: The keep warm function controls only the bake element and is available in the upper oven only. Allowable temperature range is 145 to 190°F.

Clean: Only one oven is permitted to be cleaned at a time. Both ovens will lock during clean cycle. The clean cycle controls both the broil and the bake element, the broil element is on 100% for the first 40 minutes of the cycle followed by the bake element on 100% for the duration of the cycle. The bake element is cycled once the clean temperature of 865° is reached.

Motorized Door Lock: A 3 RPM motor is used on the door lock assemblies, with each assembly having a locked and unlocked switch. The motor will only run when a clean cycle is chosen and the door actuated switch is in the closed position.

SECTION 2. ELECTRICAL COMPONENTS & TESTING

ELECTRICAL TEST EQUIPMENT

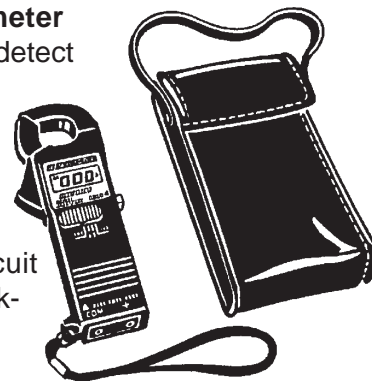
The equipment required to service Maytag products depends largely upon the condition you encounter. Locating a malfunction will often require the use of electrical testing equipment such as:

Description	Part Number
Analog Test Meter	20000005
Digital Watt/Amp/Volt/Ohm/ Temperature Meter	20000019
Clamp-On Ammeter	20000002
AC Voltage Sensor	20000081



Analog Test Meter
can be used to check for open or closed circuits, measure resistance, AC and DC volts, and temperature.

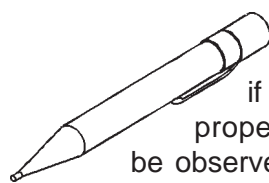
Clamp-On Ammeter
can be used to detect shorts. Overloads on the circuit breaker or fuse can be traced to either the dryer or circuit breaker by checking the dryer current draw.



Digital Watt/Amp/Volt/Ohm/Temperature Meter

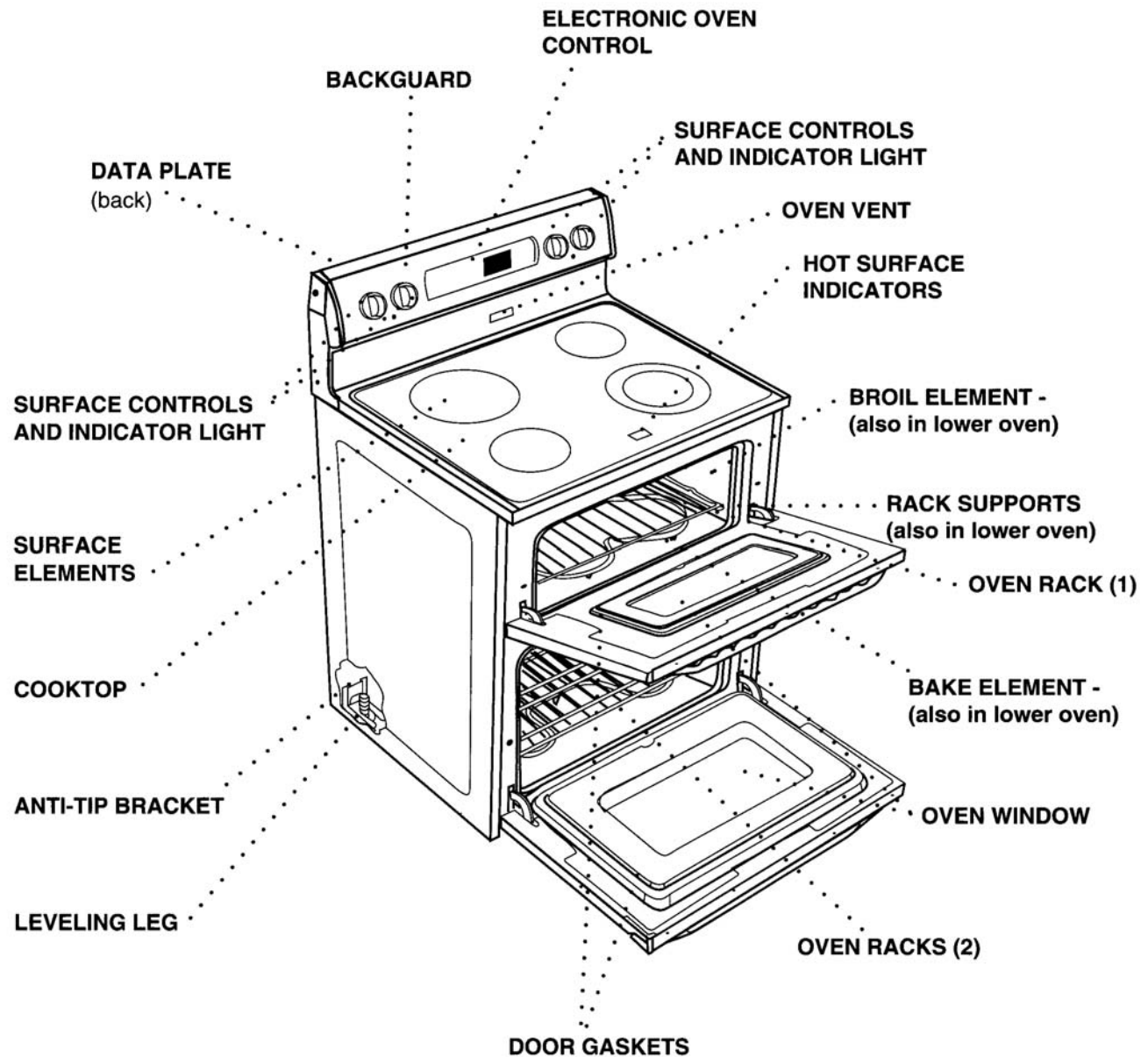
Measures power (wattage), AC/DC volts, AC/DC amps, temperature (C & F) OHMS resistance, continuity and capacitance. Features large LCD display w/backlight and analog bar graph to show tendencies. Includes: AC power adaptor for measuring wattage and meter leads.

AC Voltage Sensor
can be used to alert you if AC voltage is present so proper safety precautions can be observed. The tip of the sensor will glow bright red, if voltage is between 110-600 volts AC.



SECTION 3. COMPONENT ACCESS

EXPLODED VIEW



As a general rule, the appliance should ALWAYS be disconnected from power source before servicing appliance or replacing component parts. Failure to disconnect the power increases the likelihood that a servicing error or mistake will result in serious or fatal injuries.

MAIN TOP

To Raise Ceran Cooktop

When cool open the door and remove the two screws securing the cook top to the frame. Once the screws are removed raise cook top and slide forward slightly. With the cook top forward disconnect the wire harness and remove the cooktop.

ELEMENTS

Ceran Element Cooktop

Cooking areas are identified by patterns in the Ceran surface. The elements consist of coil(s) contained in the element housing. Power to the element (240 volts) is provided and controlled by an infinite switch. Each heating element is equipped with a temperature limiter, which prevents heat surges and ensures that the heating elements will not overheat. The element and temperature limiter is available as a complete unit or individual parts.

When a cooking area is turned ON, the coil element under the cook top will heat up and glow. The element will cycle on and off to maintain the heat setting. When the element cycles on, it is normal to see a red glow through the smooth top.

Note: It is normal for the element to cycle when set on the high setting.

To Remove Element:

1. **Disconnect the appliance from power source before servicing.**

2. Remove the two screws securing the main top to the frame.
3. Lift up slightly and slide the main top forward to access the wire harness. Disconnect the harness.
4. Lift the top off and lay aside securely with under side up.
5. Remove the screws securing element to main top.
6. Disconnect wiring to element and replace element.
7. Reverse procedure to reinstall.

To Remove Glass Top Assembly

1. **Disconnect the appliance from power source before servicing.**
2. Remove two (2) screws securing glass top to frame. The screws are located in the front left and right corners with the door open.
3. Grasp front edge of cooktop and slide out slightly. With the top moved forward disconnect the wiring harness.
4. Lift the top off the unit and lay aside securely.
5. Reverse the procedure to reinstall.

Ceran Element

- Left front and right rear element wattage: 208/240 volts @ 900/1200 watts. Approximately 48Ω.
- Left rear element wattage: 208/240 volts @ 1580/2200 watts. Approximately 27Ω
- Dual element wattage: 208/240 volts @ 1580/2200 watts. Approximately 27Ω for the outer element. 208/240 volts @ 580/750 watts. Approximately 73Ω for the inner element.

Bake Element

Element Wattage: 208/240 volts @ 2250/3000 watts. Approximately 19Ω

The bake function controls the Bake and Broil heating elements. During a Bake cycle, the Broil element will be on 6 seconds of a 60-second duty cycle, and then the Bake element will be on the remaining 54 seconds. The Bake and Broil elements will be staged with the exception of the rapid preheat. In the rapid preheat, available when the upper oven is used alone, the bake and broil elements will be on at 100% until temperature is reached. Once temperature is reached, the elements will cycle as outlined above.

Note: *The Bake element will be the first element to turn on at the beginning of any conventional bake cycle.*

To Access Bake Element:

1. **Disconnect the appliance from power source before servicing.**
2. Remove lift off door for more accessibility.
3. Remove four (4) screws securing bake element to back of oven cavity.
4. **Gently** pull element through cavity wall until terminals can be accessed.
5. Disconnect wiring.
6. Remove/replace element as necessary.
7. Reverse procedure to reinstall.

Broil Element

The broil function controls only the broil element. The bake element is inactive during a broil cycle. During a broil cycle, the control will monitor the oven temperature and cycle the broil element on and off to obtain the selected temperature.

To Access Broil Element:

1. **Disconnect the appliance from power source before servicing.**
2. Remove lift off door for more accessibility.
3. Remove broil support brackets (2) and remove screws securing broil element to back oven.
4. Gently pull element through cavity wall until terminals can be accessed.
5. Disconnect wiring.
6. Remove/Replace element as necessary.
7. Reverse procedure to reinstall.

Oven Sensor

The oven sensor is located inside the oven cavity, attached to the rear wall of the cavity. As the oven temperature increases, the resistance of the oven sensor increases. The resistance is measured by the electronic control to determine the oven temperature.

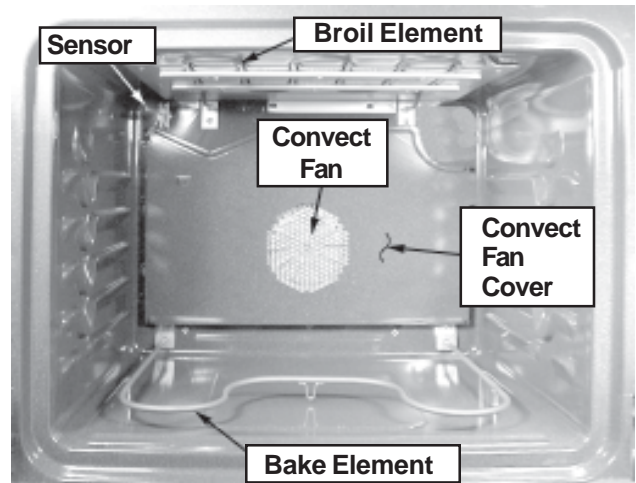
To Access Oven Sensor:

1. **Disconnect the appliance from power source before servicing.**
2. Open oven door and remove two (2) screws securing sensor to oven cavity. **Gently** pull through cavity wall.
3. Disconnect the oven sensor at the connector blocks and remove/replace as necessary.
4. Reattach the connector blocks and reassemble.

Oven Cavity Components (Electric)

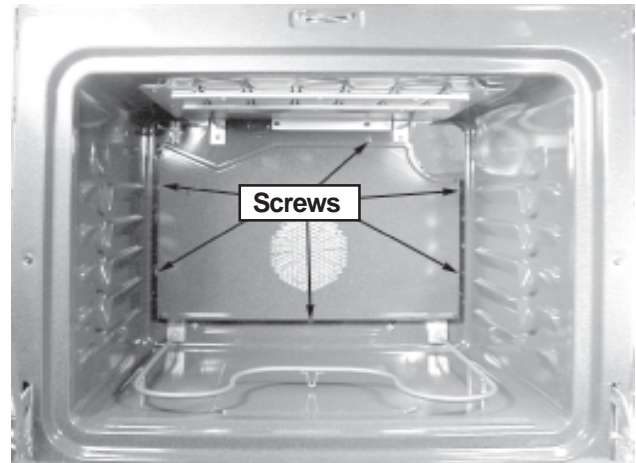
Open or remove the oven door. The following components are accessible:

- Racks
- Oven Sensor
- Broil Element
- Convection Fan Cover
- Bake Element

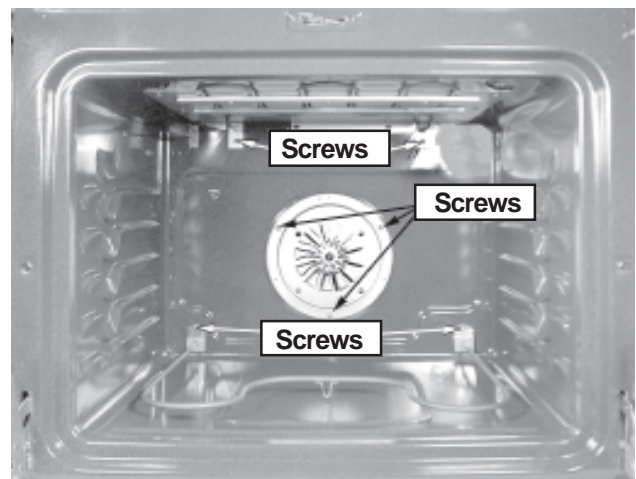


Convection Fan (Electric)

Remove six screws (as shown) from the perimeter of the convection fan cover. This will loosen the cover, but it cannot be removed easily without positioning it to clear the rack guides. Care should be used when moving parts and tools around inside the oven cavity to avoid marring or chipping the procelain surfaces.



Three screws (shown) secure the convection fan mounting plate, remove these, to allow access to the motor and connectors.

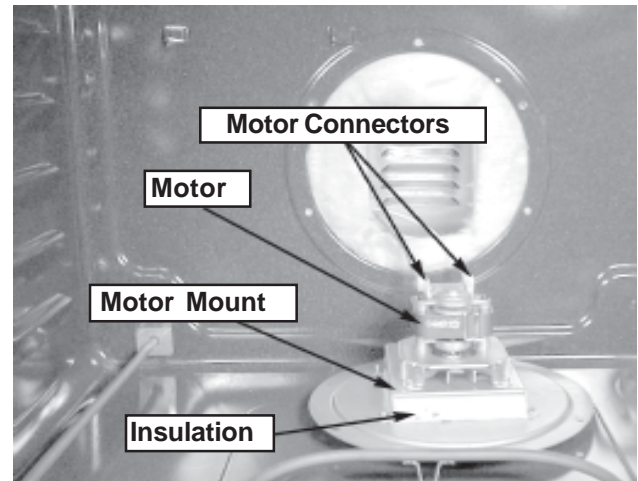


Also shown here are the screws that secure the bake and broil elements.

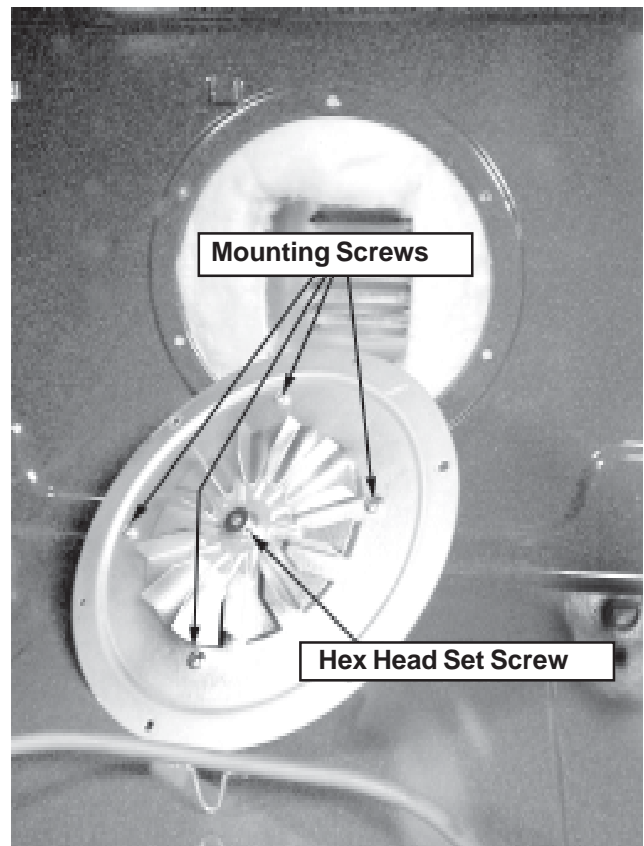
Convect Fan Motor and Blade (Electric)



After the convect fan mounting plate is removed, motor connectors, motor, motor mount and insulation is accessible. Motor connectors are also exposed by removing the back panel (see *range back removal*).



The convect fan blade is attached to the motor's "D" shaft using a hex set screw. The fan blade must be loosened and taken off the motor shaft before the motor can be removed. The motor mounting screws are found on the front side of the convect fan assembly. When reassembling, be sure to reinstall the small piece of insulation under the motor mount. The insulation provides sound dampening and prevents heat loss. When reinstalling the convect fan blade, be sure that the blade has adequate clearance at all points around the mounting plate. The blade should "stand off" approximately 1/8" with very little apparent warping.

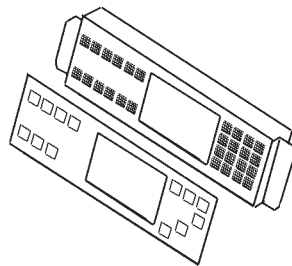


Note: When reinstalling the convect assembly, be sure to check that no loose insulation is visible in the fan area or anywhere in the oven cavity.

ELECTRONIC CLOCK AND OVEN CONTROL

To Gain Access To Electronic Oven Control

1. **Disconnect the appliance from power source before servicing.**



2. Remove two screws securing backguard panel to the end caps.

3. Remove two (2) screws securing backguard panel to backguard housing. (Screws located between control panel and main top).

4. Lift backguard panel up, tilt forward, and lay panel on protected surface of main top for servicing.

5. Remove two (2) screws securing control-mounting plate to backguard.

6. Remove four (4) screws securing control to control mounting plate.

7. Disconnect wiring and remove/replace control.

8. Reverse procedure to replace.

INFINITE SWITCH (Current Sensing)

This unit is equipped with controls that provide an infinite choice of settings from LOW to HIGH. The control can be set on any of the numbered settings. To operate, push in and turn control knob to the desired setting.

Note: *The infinite switch is a current sensing switch.*

The infinite switch is a rotary switch, which controls the power dissipated by a heating element. A heater-bimetal opens and closes the cycling contacts, which applies and

removes voltage from the heating element. Control is attained by regulating the ratio of the time between the opening and closing of the contacts. This is usually referred to as input percentage and is controlled by a cam, which can provide virtually any infinitely adjustable performance. This performance is assured when the switch is subjected to elevated ambient temperatures through automatic temperature compensation.

The infinite switch stems are color coded for identification. The silver colored stem controls the left front and right rear element, the silver colored stem with a red dot controls the left rear, and the brass colored stem controls the right front element. Amperage is rated at 3-15.5A range +/- 10%.

Note: *When replacing the infinite switch, the switch must be matched to the element.*

To Access Control:

1. **Disconnect the appliance from power source before servicing.**

2. Remove control knobs.

3. Remove two screws from backguard panel securing panel to housing.

4. Remove two screws securing backguard panel to end cap.

5. Lift backguard panel up, tilt forward, and lay panel on protected surface on main top for servicing.

6. Remove two (2) mounting screws securing infinite switch to backguard panel.

7. Disconnect wiring and remove/replace control.

8. Reverse procedure to replace.

Signal Lights

Range is equipped with two signal lights to indicate when a surface element is on. The light will remain on until the element is turned off. After a cooking operation, be sure element and signal light is off.

The signal lights are located on the backguard panel and may be accessed from the backside of the panel when removed. The red indicator lens pop in and out, and the light slides into a lock position. Reverse the procedure to remove.

"Hot Surface" Light

The Gemini Range is equipped with a Hot Surface Light. This red light will turn on to indicate that the cooking area is hot and will remain on until the area has cooled.

The switch is located in the front center of the burner box, and may be accessed by removing the main top.

To Access Hot Surface Light:

1. **Disconnect the appliance from power source before servicing.**
2. Open oven door and remove the screws securing the main top to the frame.
3. Slide the top forward and disconnect the wire harness.
4. Lift the top off and lay on a protected surface with under side up.
5. Release the tabs securing the switch to the top. Once the tabs are released the switch can be removed.
6. Reverse procedure to replace.

Oven Light Replacement

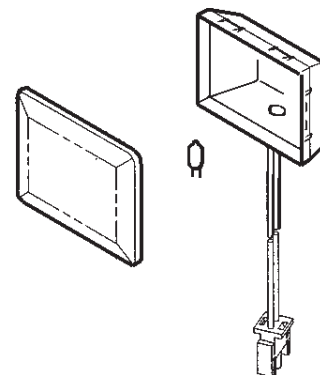
The oven light used on the Gemini is a 12 volt 10 Watt Halogen bulb. The light automatically comes on when the door is opened or activation may occur via the light pad when the door is closed. The light will not operate during a clean cycle. The oven light will automatically come on one minute before the end of a clock controlled cooking operation.

To Replace Oven Light Bulb:

1. Disconnect power to the range.
2. Open oven door and locate oven light.
3. Remove the lens cover to gain access to bulb.
4. Carefully remove the old bulb by pulling straight out of ceramic base.

NOTE: To avoid damaging the bulb and decreasing the life of the bulb, do not touch the bulb with bare hands or fingers. Hold with a cloth or paper towel.

5. Push new bulb prongs straight into small holes of ceramic base.
6. Replace bulb cover by snapping into place.
7. Reconnect power to range and reset clock.

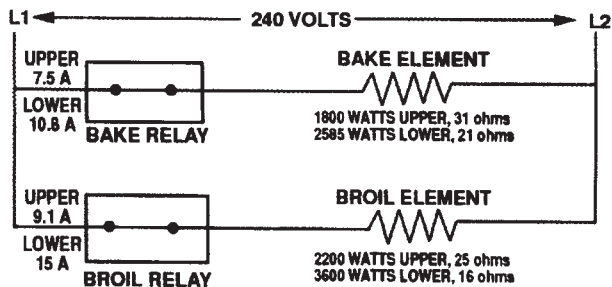


**Bulb specifications
G4 Type Halogen Bi-Pin 10 w -12V**

HI-LIMIT THERMOSTAT

The HI-Limit Thermostat is mounted to range main back. The purpose of this thermostat is to break line voltage to oven control in case of a runaway temperature. Range may be removed from cabinetry for rear serviceability.

OVEN CIRCUITS



Contacts normally closed
Close Temperature - $250 \pm 11^{\circ}\text{F}$
Open Temperature - $300 \pm 8^{\circ}\text{F}$

Thermostat Replacement

1. Disconnect the appliance from power source before servicing.
2. Slide unit out of installation.
3. Remove screws securing main back shield and remove shield.
4. Remove two (2) screws securing thermostat to range main back.
5. Disconnect wiring.
6. Replace in reverse order.

OVEN DOOR(S)

Do not place excessive weight on an open oven door or stand on an opened door as, in some cases, it could cause the range to tip over, breakage of the door, or serious injury.

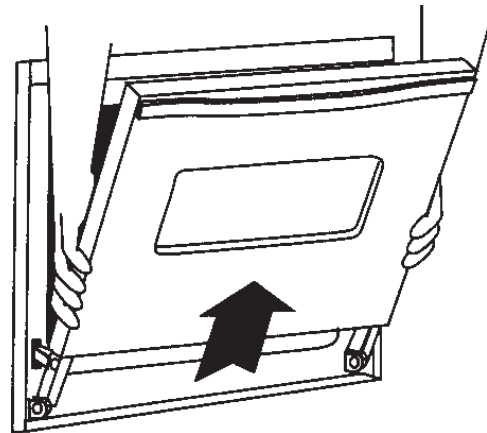
CAUTIONS:

- Do not attempt to open or close door or operate oven until door is properly replaced.
- Hinge arms are spring mounted and will slam shut if accidentally hit.
Never place hand or fingers between the hinges and the front oven frame. You could be injured if hinge snaps back.

Both the upper and lower oven doors are removable.

To Remove Lift-Off Door:

Open door to stop position. In stop position door is open approximately 4". Grasp door as illustrated. Lift up evenly until door clears the hinge arms.



DO NOT USE DOOR HANDLE TO LIFT DOOR.

To Replace:

1. Grasp door at each side.
2. Align slots in the door with the hinge arms on the range.
3. Slide the door down onto the hinge arms until the door is completely

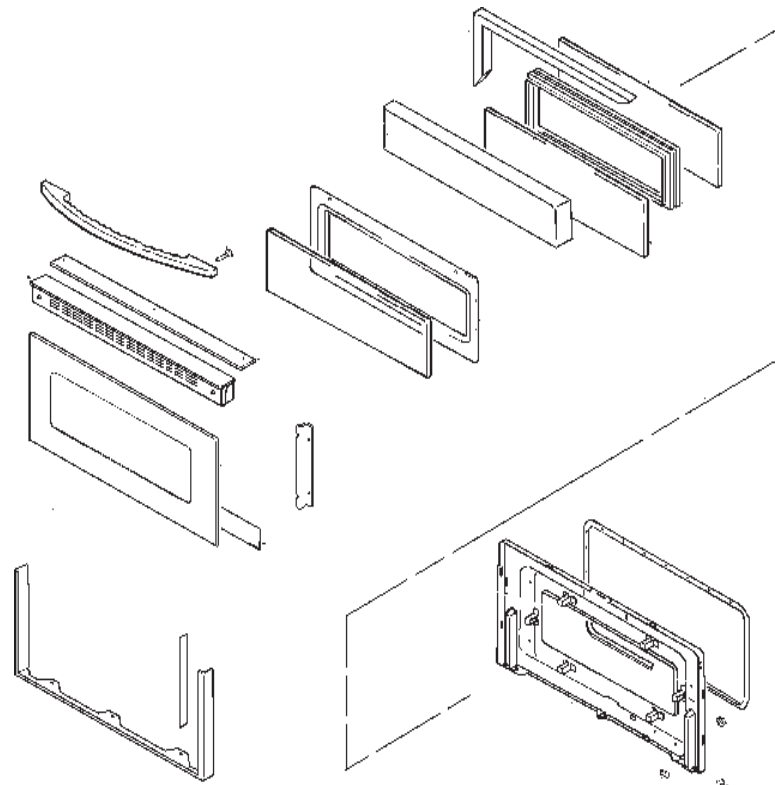
seated on the hinges. Push down on the top corners of the door to completely seat door on hinges. Door should not appear crooked.

NOTE: The oven door on a new range may feel “spongy” when it is closed. This is normal and will decrease with use.

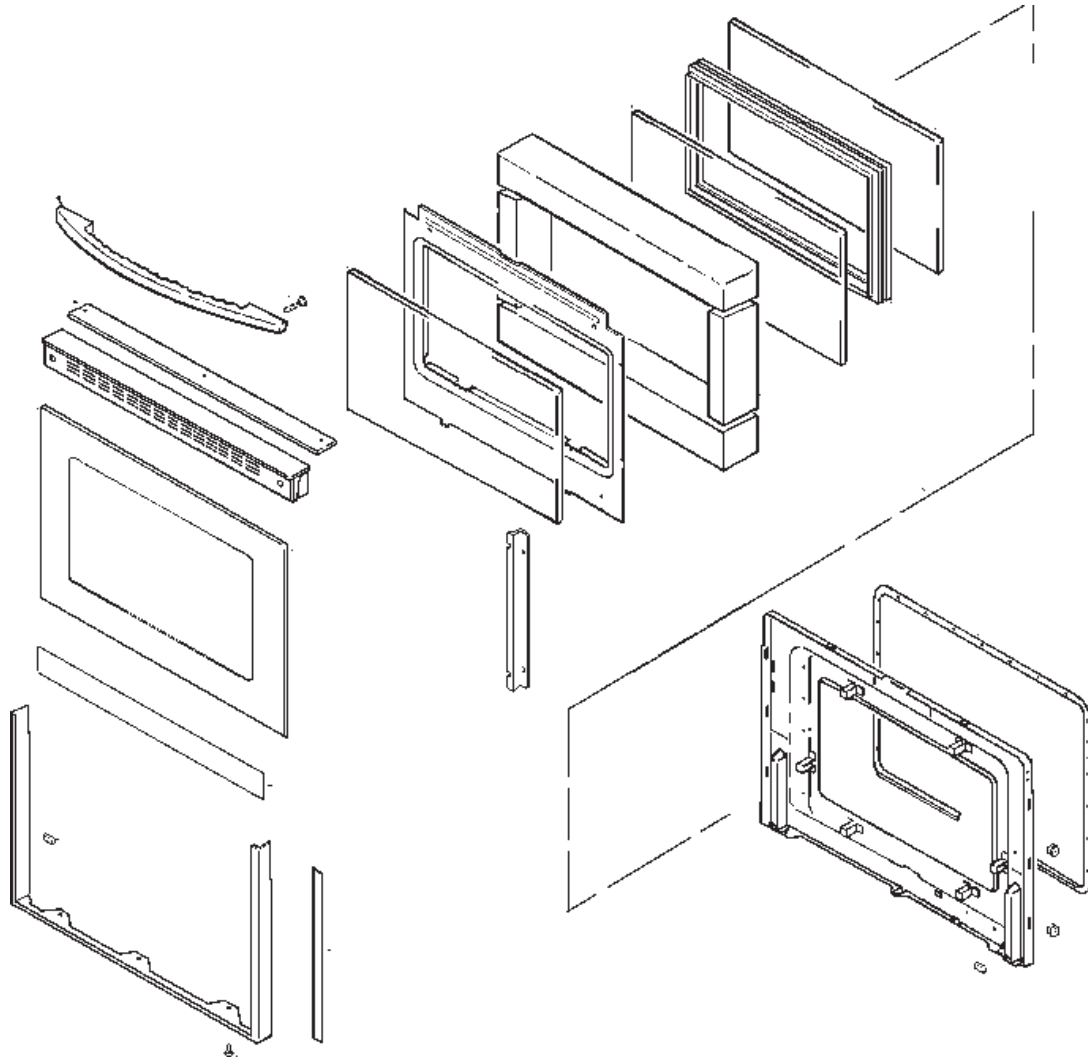
To Disassemble Door:

1. Open door to the stop position and lift door off hinges. Remove door and lay on protected surface, liner side up.
2. Remove three (3) screws securing the doorframe to the liner at the bottom.
3. Remove two (2) side screws securing doorframe to door liner.
4. Remove four (4) screws securing the door trim at the top.
5. Slide the doorframe and glass off liner from the bottom.
6. Remove four (4) screws securing the door handle to the door liner. (Two on the sides and two in front).
7. Remove two (2) screws securing door baffle to liner.
8. Remove four (4) screws securing door baffle to window pack. Remove baffle.
9. Remove insulation wrap.
10. Remove four (4) screws securing window pack to liner. Window pack comes out as an assembly.
11. Door gasket can be replaced without door being disassembled by pulling gasket out of bottom insert of door. The gasket is secured with clips inserted into door liner.

UPPER DOOR



LOWER DOOR



To Replace Lock Assembly

1. **Disconnect the appliance from power source before servicing.**
2. Open oven door or remove for convenience.
3. Remove main top and slide forward. Disconnect wire harness. (See Top Removal).
4. Lift top off and lay aside securely.
5. Remove two (2) screws securing lock assembly to oven frame in front.
6. Disconnect wiring.

7. Remove two (2) screws securing lock assembly to frame.
8. Slide assembly out.
9. Reverse procedure to reinstall.

Lower Latch Assembly

1. **Disconnect the appliance from power source before servicing.**
2. Remove main top assembly as described previously and lay aside securely.

3. Remove main top and slide forward. Disconnect wire harness. (See Top Removal).

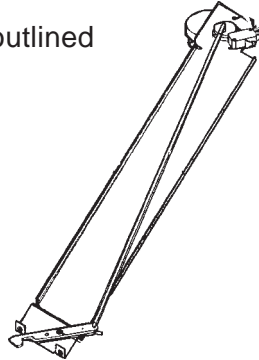
LOWER LATCH ASSEMBLY

1. **Disconnect the appliance from power source before servicing.**

2. Remove main top as outlined in main top removal.

3. Remove the screws securing the side panel at the top and back of frame.

4. Remove the screws securing the rear panel to frame. Remove rear panel.



5. Slide side panel away from the frame at rear and lift out of the slots in front. Remove side panel.

6. Release the bands, securing the insulation wrap, at the bottom.

7. Slide the insulation wrap back.

Note: *This will aid in guiding the latch assembly in and out.*

8. Disconnect the wiring from the lock switches at the rear.

9. Slide the latch assembly out from the rear.

To reinstall:

1. Slide latch assembly in from the rear.
2. Guide assembly to front using the side access.
3. Make sure the screw holes of the assembly line up with the screw holes in the frame.
4. Reinsert the screws.

Note: *Make sure the insulation is back in place when finished. Failure to do so will result in hot spots and poor baking complaints.*

5. Reattach band to the bottom of frame.

6. Reconnect wiring to the lock switches.

7. Reinstall the side panel.

8. Reinstall the rear panel.

9. Reinstall the main top.

Oven Door Hinge

The unit will have to be pulled away from the cabinetry to remove/replace door hinges.

To Access/Replace Oven Door Hinges:

1. **Disconnect the appliance from power source before servicing.**

2. Remove main top assembly as described previously and lay aside securely.

3. Remove oven door assembly as previously described and lay aside securely.

4. Remove the screws securing side panel at the top and back of frame.

5. Remove the screws securing the rear panel to frame.

6. Slide the side panel away from the frame at rear and lift out of the slots in the front. Remove panel.

7. Remove two (2) screws securing hinge to front frame flange.

8. Complete hinge assembly may be removed.

9. Reverse procedure to reinstall.



OVEN DOOR HINGE

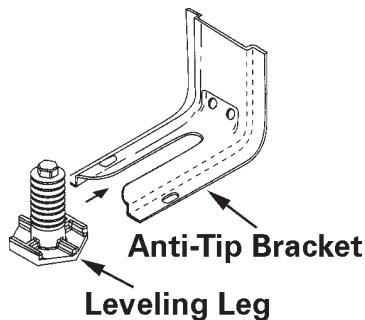
Note: *The door hinges are colored coded for ease in installation. The upper spring hook is gold and the lower spring hook is white.*

LEVELING LEGS

Some floors are not level. For proper baking, your range must be level.

Leveling legs are located on each corner of the base of the range.

Place a level horizontally on an oven rack and check front-to-back and side-to-side. Level by turning the legs.

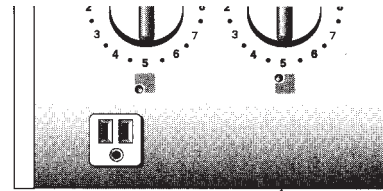


CONVENIENCE OUTLET (Canadian Models Only)

The convenience outlet is located on the lower left side of the backguard. It is useful for small appliances such as waffle irons.

When using the outlet be sure the appliance cord does not rest on or near the surface element. If the surface element is turned on, the cord and outlet will be damaged.

The convenience outlet circuit breaker may trip if the small appliance plugged into it exceeds 10 amps. To reset the circuit breaker, press the switch located on the lower edge of the backguard. (See figure below).



Circuit Breaker Switch

SPECIFICATIONS

Overall Dimensions:

Height (in./cm) 46 3/4/118.7

Width (in./cm) 29 7/8/76

Depth Excluding Handle (in./cm) 26 1/8/66

Weight (lbs./kg.) 225/102

Total Connected Load (kw @ 24V/208V)
10.4/7.8

OVEN RACKS

⚠ CAUTIONS:

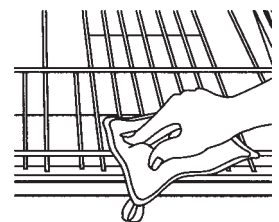
- Do not attempt to change the rack position when the oven is hot.

All racks are designed with a lock-stop edge.

Upper Oven

- Is equipped with one rack and rack position.

- When pulling the upper oven rack out to remove or check food, grasp the top edge of the rack.

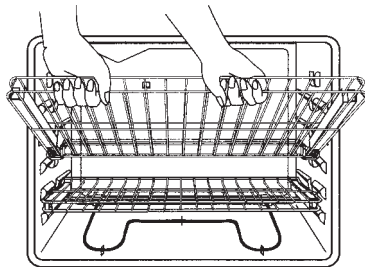


Lower Oven

- Is equipped with two RollerGlide™ racks.

To remove oven racks:

- Pull rack straight out until it stops at the lock-stop position; lift up on the front of the rack and pull out.
- For lower oven racks, pull both the rack glide and rack base out together.



To replace oven racks:

- Place rack on the rack support in the oven; tilt the front end up slightly; slide rack back until it clears the lockstop position; lower front and slide back into the oven.

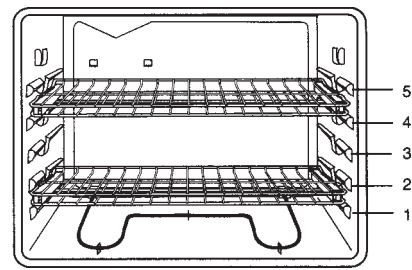
RACK POSITIONS

Rack 4: Use for two-rack baking.

Rack 3: Use for most baked goods on a cookie sheet or jelly roll pan, layer cakes, fruit pies, or frozen convenience foods, and for most broiling.

Rack 2: Use for roasting small cuts of meat, casseroles, baking loaves of bread, bundt cakes or custard pies, and two-rack baking.

Rack 1: Use for roasting large cuts of meat and poultry, frozen pies, dessert souffles or angel food cake, and two-rack baking.



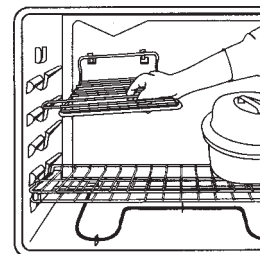
**Two-rack Baking
(Racks 1 and 4)**

Multiple Rack Cooking:

Two Rack: Use rack position 2 and 4, or 1 and 4.

HALF RACK ACCESSORY

A half rack, to increase oven capacity, is available as an accessory. It fits in the left, upper portion of the oven and provides space for a vegetable dish when a large roaster is on the lower rack. Contact your Maytag dealer for the "HALFRACK" Accessory Kit or call 1-800-688-8408.



NOTES

SECTION 4. ELECTRICAL

TOASTING CIRCUIT (Upper Oven Only)

To Access Bake Element: Upper Oven Only

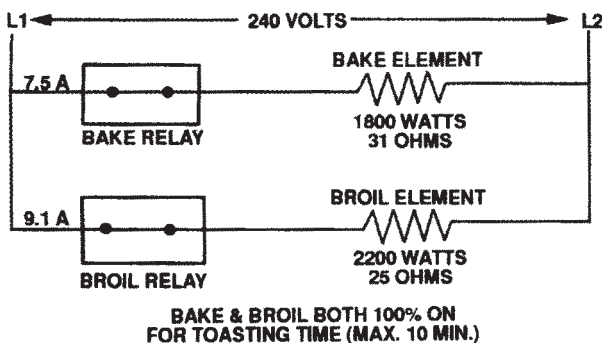
1. Disconnect power from unit before servicing.
2. Remove door for more accessibility.
3. Remove 2 screws securing bake element to back of oven cavity.
4. Gently pull element through cavity wall until terminals can be accessed. Use Caution: Space is limited.
5. Disconnect wiring.
6. Remove/replace element as necessary.
7. Reverse procedure to reinstall.

OVEN CIRCUITS

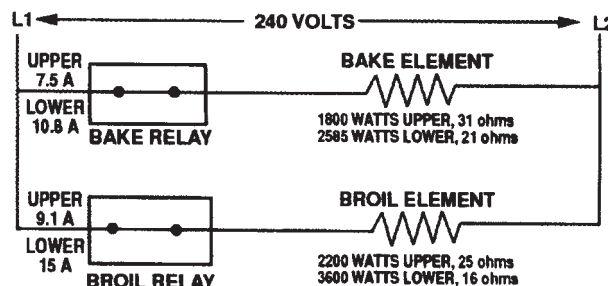
To Access Broil Element:

1. Disconnect power from unit before servicing.
2. Remove door for more accessibility.
3. Remove broil support brackets (2), and remove 2 screws securing broil element to back of oven.
4. Gently pull element through cavity wall until terminals can be accessed. Use Caution: Space is limited.
5. Disconnect wiring.
6. Remove/Replace element as necessary.
7. Reverse procedure to reinstall.

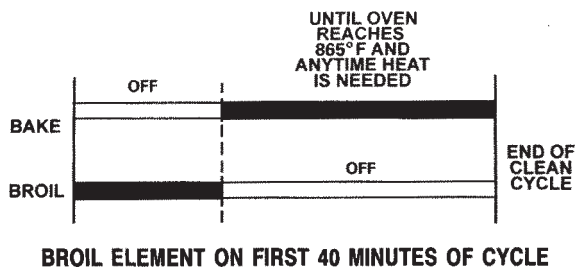
TOASTING CIRCUIT Upper Oven Only



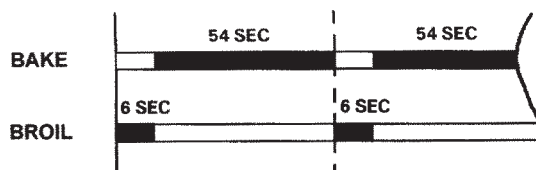
OVEN CIRCUITS



CLEAN CIRCUIT Both Ovens



BAKE CYCLE Both Ovens



SURFACE ELEMENTS - CERAN

Verify there is proper voltage applied to the oven (the range may have blown a fuse or circuit breaker). A quick check is to see if the other elements heat. If not, check the voltage at the electrical outlet and check to see that the power cord is wired correctly.

To Check Surface Element:

1. Disconnect unit from power source
2. Remove main top by removing screws securing top to burner box and lay aside securely.
3. Visually check the element for evidence of damage or shorting. Then check the element for continuity with an ohmmeter connected to the element terminals. With ohmmeter set at RX1, resistance will normally be below 28 ohms, large and 48 ohms, small. If the element shows no continuity or extremely high resistance, it should be replaced.
4. With power to the unit disconnected, set the control switch for this element on the high setting. With a voltmeter set on 250 or 300 volt scale, re-apply power and check for voltage at the surface element terminal block, then check the surface element.

Each heating element is equipped with a temperature limiter which prevents heat surges and ensures that the heating elements will not overheat.

The "Hot Surface" light will come on indicating when ceran surface is $150^{\circ}\text{F} \pm 50^{\circ}\text{F}$. The Hi-Limit which shuts burner off at $1050^{\circ}\text{F} \pm 60^{\circ}\text{F}$.

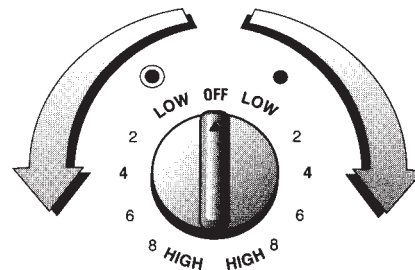
ELECTRICAL RATINGS: 240VAC 2200W TOTAL
750W INNER RING
1450 OUTER RING
COLD RESISTANCE: 74.6 Ohms (INNER) ± 5
38.6 Ohms (OUTER) ± 5

LIMITER TYPE:

ELECTRICAL RATINGS OF LIMITER CONTACTS
LIMITER CIRCUIT 10 AMP AT 250 VAC
LIMITER CIRCUIT 7.0 AMP AT 380 VAC
HOT LIGHT CIRCUIT 1.0 AMP AT 380 VAC

DUAL ELEMENT

The cooking surface is equipped with a dual element located in the right front position. To operate, push in on the control knob and turn to the left to control the large element, or push in and turn to the right to control the small element.



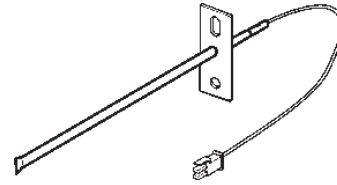
PROBE, SENSOR / BOTH OVENS

Oven Sensor

The oven sensor is located inside the oven cavity, attached to the rear wall of the cavity. As the oven temperature increases, the resistance of the oven sensor increases. The resistance is measured by the electronic control to determine the oven temperature.

To check oven sensor:

1. Access sensor wires as outlined under sensor removal.
2. Set meter to RX1000 Scale.
3. Check for the following:



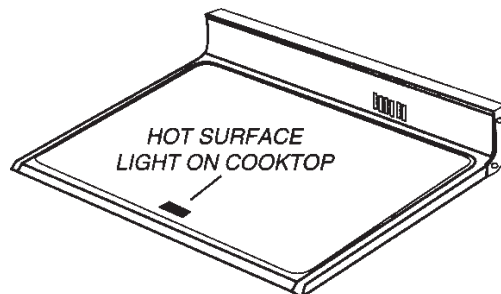
TEMPERATURE	RESISTANCE
100 Degrees F	1143 Ohms
200 Degrees F	1350 Ohms
300 Degrees F	1553 Ohms
350 Degrees F	1654 Ohms
400 Degrees F	1753 Ohms
500 Degrees F	1949 Ohms
600 Degrees F	2142 Ohms
700 Degrees F	2331 Ohms
800 Degrees F	2516 Ohms
900 Degrees F	2697 Ohms
1000 Degrees F	2874 Ohms

HOT SURFACE LIGHTS

Each element has a HOT SURFACE indicator light. A light will be illuminated when the matching cooking area is hot. It will remain on, even after the control is turned off, until the area has cooled. They are located at the front center of the cooktop.

SURFACE INDICATOR LIGHTS

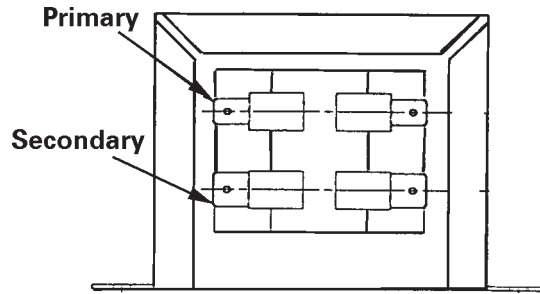
There is an indicator light by each pair of control knobs. When one or both of the surface control knobs is turned on, the light will turn on. The light will turn off when the surface element(s) is turned off.



TRANSFORMER, STEPDOWN (12V)

Electrical Ratings:

Input Voltage: 120 Volts
 Operating Frequency 60 Hz
 Output Voltage: 7-12 VAC

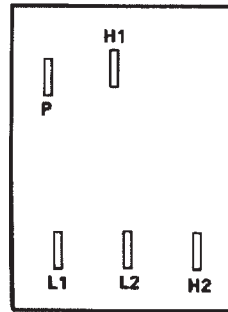


at 10W Load $11.6 \pm .2$ VAC
 at 20W Load $11.1 \pm .3$ VAC

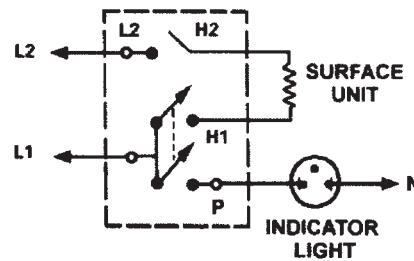
SURFACE ELEMENT SWITCH

SURFACE ELEMENT SWITCH

Current Sensitive



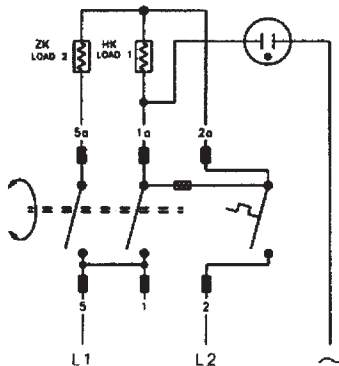
CURRENT SENSITIVE



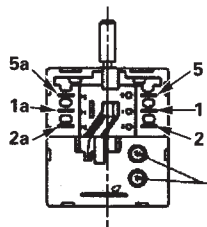
DUAL ELEMENT SWITCH

DUAL ELEMENT SWITCH

Current Sensitive

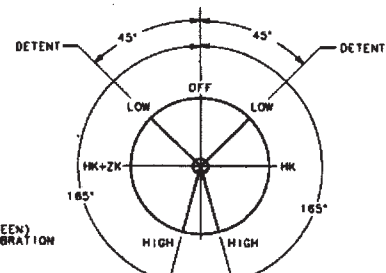


SCHEMATIC



SEALED (GREEN)
 AFTER CALIBRATION

RESISTANCE RAMP LOCATION FOR OUTER COIL HIGH POSITION (NO DETENT) WHEN TURNING COUNTER CLOCKWISE FROM OFF. INDICATES END OF DUAL COIL OPERATION.
 (SEE NOTE #1)
 RESISTANCE RAMP LOCATION FOR INNER COIL HIGH POSITION (NO DETENT) WHEN TURNING CLOCKWISE FROM OFF.



DIAL LAYOUT

FLAT ON STEM IN "OFF" POSITION

ELECTRICAL CONNECTIONS/VOLTAGE

Range Amperage:

The total range wattage is stamped on model plate in kilowatts, (kilowatt = 1,000 watts) to determine amperage for fuse or circuit breaker:

- Check incoming voltage at range main terminal block (pigtail) see illustration.
- Divide voltage into total wattage.

Example: 10. K.W. (stamped on model plate) X 1,000 = 10,000 watts. Voltage (at terminal block) is 240 VAC. $10,000 \div 240 = 41.6$ (AMPS). This indicates a fuse or circuit breaker with a rating of slightly over 41 AMPS would be needed.

The range is connected to an outlet through an approved range connector (pigtail) fastened securely to the terminal block with proper strain relief at the range and a three or four pronged plug at the opposite end.

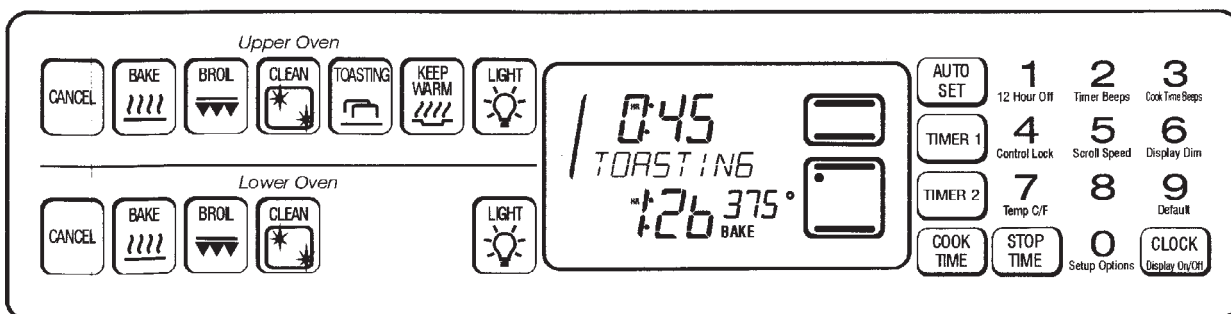
NOTE: *For cord (pigtail) replacement, only a power supply cord kit rated at 240 volts minimum, 40 amperes, with closed loop terminals and marked for use with ranges shall be used.*

With range connected to electricity by means of an approved range connector (pigtail) voltmeter reading between L1 and L2 should be approximately 240 VAC. Voltmeter reading between terminal NEUTRAL and terminal LINE 1 should be approximately 120 VAC. Voltmeter reading between NEUTRAL and LINE 2 should be approximately 120 VAC. Center terminal of main terminal block is neutral. Range frame is connected to neutral at this point by a ground strap and screw.

REMEMBER: MOBILE HOMES AND SOME LOCAL CODES DO NOT PERMIT **GROUNDING THROUGH NEUTRAL.** HENCE, 4-WIRE SERVICE **MUST** BE PROVIDED FOR SUCH INSTALLATIONS. ALL OTHERS PERMIT 3-WIRE SERVICE, USE **COPPER WIRE ONLY.** AFTER INSTALLATION, ENSURE TIGHTNESS OF ALL ELECTRICAL CONNECTIONS AND REPLACE ALL COVERS.

NOTES

SECTION 5. TROUBLESHOOTING



GEMINI DOUBLE OVEN CONROLS

The control is activated via a membrane switch which contains the function pads and 10 key digi-pad. Data can be entered either by choosing the function and entering a value or by choosing the function and using the Auto Set pad. Values for the Auto Set pad are listed below.

COOKING FUNCTION	1ST PRESS °F / °C	2ND PRESS	3RD PRESS	4TH PRESS	5TH PRESS	6TH PRESS	7TH PRESS
Bake	350/175	375/190	400/205	425/215	450/230	475/245	325/160
Broil	HI 550/290	LO 450/230					
Convect*	325/160	350/175	375/190	400/205	425/215	450/230	475/245
Clean Time	3:00 Hrs.	4:00 Hrs.	2:00 Hrs.				
Toasting **	4:00 Min.	4:10 Min.	4:20 Min.	4:30 Min.	4:40 Min.	4:50 Min.	5:00 Min. 10:00
Keep Warm	170/75						

* If equipped.
** Toasting has a maximum allowable time of 10 minutes, available in upper oven only.

FAULT CODES

Fault Codes, Displayed in Upper Time Digits: There are three major fault codes that will be displayed in the time digits of the upper clock display to the left of the colon. Minor fault codes are displayed in the time digits to the right of the display colon, these are used to direct the technician to more specific locations for diagnosis. Major fault codes are as follows:

F1: Temperature runaway. Membrane switch shorted. Alarm is continuous, if cancel key is pressed alarm will stop, if fault still present alarm will repeat. If membrane switch is disconnected the alarm will only sound for 30 seconds and stop.

Correction: Test membrane switch and oven sensor, if OK, replace control.

F3: Open or shorted sensor. The cancel key resets the control and stops the alarm. If fault is still present it will reactivate the alarm when a cook mode is chosen. Correction: Check sensor and wiring for shorted or open circuit.

F9: Door lock error. Check the status of the door lock switches. Unlocked and locked switches must be in sequence, unlocked closed during normal operation and locked open. The opposite is true during a clean or locked state.

Timer Functions: The timer operates independently of all other functions. There are two timer functions. Timer 1 and Timer 2. The countdown time in the upper VFD can be toggled by pressing the clock and timer 1 keys.

Off/Cancel: Will cancel any oven operation by pressing the appropriate cancel key for the respective oven. Cancel will not effect the timer or clock functions.

***Convection Fan Relay:** If equipped, the convection fan relay will activate the convection fan motor when the oven door is closed. In a convection mode the relay will shut off the convection fan when the door is opened.

Oven Temperature Adjust: Bake temperature can be adjusted by pressing Bake in either upper or lower oven, entering a temperature of 550°F, then hold bake key for 3 seconds. Auto set is used to adjust the temperature either + / - 35°F in 5° F increments

(+ / - 21°C, in 3°C increments).

Control Lockout: The control can be Locked Out by pressing Setup and then 4. When locked "Control Locked" will be displayed and scroll twice. Press Auto Set to toggle between Locked and Unlocked. The control lockout will not lock out the timer, clock, setup options or oven light.

Test Mode: Accessed by holding Cancel and Broil keys down for 3 seconds within 5 minutes of power up. The test mode cannot be accessed if the oven temperature is above 400°F. When test mode is activated all digits will display "-". To exit the test mode press Cancel or auto exit occurs 16 seconds after last key pressed.

KEY PRESSED	RELAY or ACTION ACTIVATED
Upper Bake	Upper Bake Element
Lower Bake	Lower Bake Element
Upper Broil	Upper Broil Element
Lower Broil	Lower Broil Element
Convection Bake*	Convection fan*
Upper Oven Light	Upper Oven Light
Lower Oven Light	Lower Oven Light
Upper Clean	Motorized Door Lock, Upper
Lower Clean	Motorized Door Lock, Lower
Stop Time	Beeper
Cook Time	Display error codes
Clock	Display all time digits

Engineering Mode: Used to view the actual oven temperature for both ovens at all times, even when an oven function is active. This mode will also display the current fault code for 5 seconds in the time digits. Enter the engineering mode by pressing the Bake Key of either oven, enter a bake temperature of 100°F, then hold Bake down for 3 seconds within 30 seconds of initial Bake press. The mode can be exited by pressing Cancel.

Oven Light: Oven light key toggles the oven light on and off. Oven light is deactivated during a clean cycle.

Dual Line Break Relay: Canadian Models Only. Relay will be a 17 amp, 240 VAC minimum contact rating. There will also be a 5.6 Ohm resistor and a connection to the normally open contact on Canadian models to allow for "Hi-Pot" testing at the factory.

50/60 Hertz Option: Control automatically senses cycle rate of supply line.

Demo Mode: The control can be placed in a sales demo mode by pressing Bake and Cancel keys for 3 seconds. The demo mode can be exited by pressing any key. This mode will activate the display as if the unit is operating without energizing the heating elements.

RELAY BOARD

Relay Board: The relay board will be equipped to operate the following outputs. Some shown can be optional. The Double Line Break (DLB) is located remotely, off board from the main control.

RELAY OUTPUTS	VOLTAGE (Volts AC)	CURRENT (Amps)	RESISTANCE VALUE
Lower Broil - 3600 Watts	240	15	16 ohms
Lower Bake - 2585 Watts	240	10.8	21 ohms
Convect*	120	0.28	430 ohms
Upper Broil - 2200 Watts	240	9.17	25 ohms
Upper Bake - 1800 Watts	240	9.17	25 ohms
Upper Oven Light	12	0.8	15 ohms
Lower Oven Light	12	0.8	15 ohms
Upper Door Lock	120	0.03	4000 ohms
Lower Door Lock	120	0.03	4000 ohms
Upper Double Line Break	240	17	
Lower Double Line Break	240	17	
SURFACE ELEMENT VALUES	VOLTS	WATTS	RESISTANCE (ohms)
Left Front/Right Rear	240	1200	46 ohms
Left Rear	240	2200	25 ohms
Right Front/Dual	240	750 inner/1450 outer	74 inner/38 outer

TROUBLESHOOTING GUIDE

Check these points if . . .

Part or all of the appliance does not work.

- Check to be sure plug is securely inserted into receptacle.
- Check or re-set circuit breaker. Check or replace fuse.
- Check power supply.
- Check if surface and/or oven controls have been properly set.
- Check if oven door is unlocked after a self-clean cycle.
- Check if oven is set for a delayed cook or clean program.

Surface or oven elements fail to operate or heat food.

- Check to be sure plug is securely inserted into receptacle.
- Check or re-set circuit breaker. Check or replace fuse.
- Check power supply.
- Check if surface and/or oven controls have been properly set.
- Check if oven is set for a delayed oven operation.
- Upper oven may be in a toasting operation. Lower oven will operate when the toasting operation is completed.

Glass-Ceramic surface shows wear.

1. Tiny screeches or abrasions.
 - Check to make sure cooktop and pan bottom are clean. Do not slide glass or metal pans across top. Make sure pan bottom is not rough. Use the recommended cleaning agents.
2. Metal marks.
 - Do not slide metal pans across top. If metal marks appear, clean when cool with Cooktop Cleaning Creme.
3. Brown streaks and specks.
 - Spills not removed promptly. Wiping with soiled cloth or sponge. Pan bottom not clean.
4. Areas with a metallic sheen.
 - Mineral deposits from water and food.
5. Pitting or flaking.
 - Sugary boilovers that were not removed promptly.

Baking results are not what you expected.

- Check the oven temperature selected. Make sure oven is preheated when recipe or directions recommended preheat.
- Check rack positions.
- Use correct pan. Dark pans produce dark browning. Shiny pans produce light browning. See "Cooking Made Simple" booklet for more information on bakeware.
- Check the use of foil in the oven. Never use foil to cover an entire oven rack. Place a small piece of foil on the rack below the pan to catch spillovers.
- Check pan placement. Stagger pans when using two racks. Allow 1-2 inches between pan and oven walls.
- Make sure the oven vent has not been blocked.
- Check to make sure range is level.

Baking results differ from previous oven.

- Temperatures often vary between a new oven and an old one. As ovens age, the oven temperature often "drifts" and may become hotter or cooler.

NOTE: It is not recommended to adjust the temperature if only one or two recipes are in question.

TROUBLESHOOTING GUIDE Continued...

Check these points if . . .

<p>Food is not broiling properly.</p>	<ul style="list-style-type: none"> • Check if oven controls have been properly set. • Check oven rack positions. • Broil element was not preheated. • Aluminum foil was incorrectly used. Never line the broiler insert with foil. • Oven door was closed during broiling. Leave the door open to the first stop position (about 4 inches).
<p>Oven smokes excessively during broiling.</p>	<ul style="list-style-type: none"> • Food too close to element. • Broiler insert covered with aluminum foil. • Trim excess fat from meat prior to broiling. • A soiled broiler pan was used.
<p>Oven will not self-clean.</p>	<ul style="list-style-type: none"> • Check if controls are set properly. • Check to make sure the cycle is not set for a delayed start. • Check if door is closed.
<p>Oven did not clean properly.</p>	<ul style="list-style-type: none"> • Longer cleaning time may be needed. • Excessive spillovers, especially sugary and/or acid foods, were not removed prior to the self-clean cycle.
<p>Oven Door will not unlock after self-clean cycle.</p>	<ul style="list-style-type: none"> • Oven interior is still hot. Allow about one hour for the oven to cool after the completion of a self-clean cycle. The door can be opened when the LOC indicator word is not displayed. • Both ovens will lock when either oven is cleaned.
<p>Moisture condensation collects on oven window.</p>	<ul style="list-style-type: none"> • This is normal when cooking food high in moisture. • Excessive moisture was used when cleaning the window.
<p>There is a strong odor or light smoke when oven is turned on.</p>	<ul style="list-style-type: none"> • This is normal for a new range and will disappear after a few uses. Initiating a clean cycle will "burn off" the smells more quickly. • Turning on a ventilation fan will help remove the smoke and/or odor. • Excessive food soils on the oven bottom. Use a self-clean cycle.
<p>Steam comes from vent area.</p>	<ul style="list-style-type: none"> • When high moisture foods are cooked in the upper oven, steam may be visible coming from the vent area. This is normal.
<p>"F" plus a number and the message.</p>	<ul style="list-style-type: none"> • This is called a fault code. If a fault code appears in the display and beeps sound, press the CANCEL pad. If the fault code and beeps continue, disconnect power to the appliance. Wait a few minutes, then reconnect power. If fault code and beeps still continue, disconnect power to the appliance and call an authorized servicer. • If the oven is heavily soiled, excessive flare-ups may result in a fault code during a clean cycle. Press CANCEL pad and allow the oven to cool for one hour, then reset the clean cycle. If the fault code and beeps still continue, disconnect power to the appliance and call an authorized servicer.

PARTS LIST

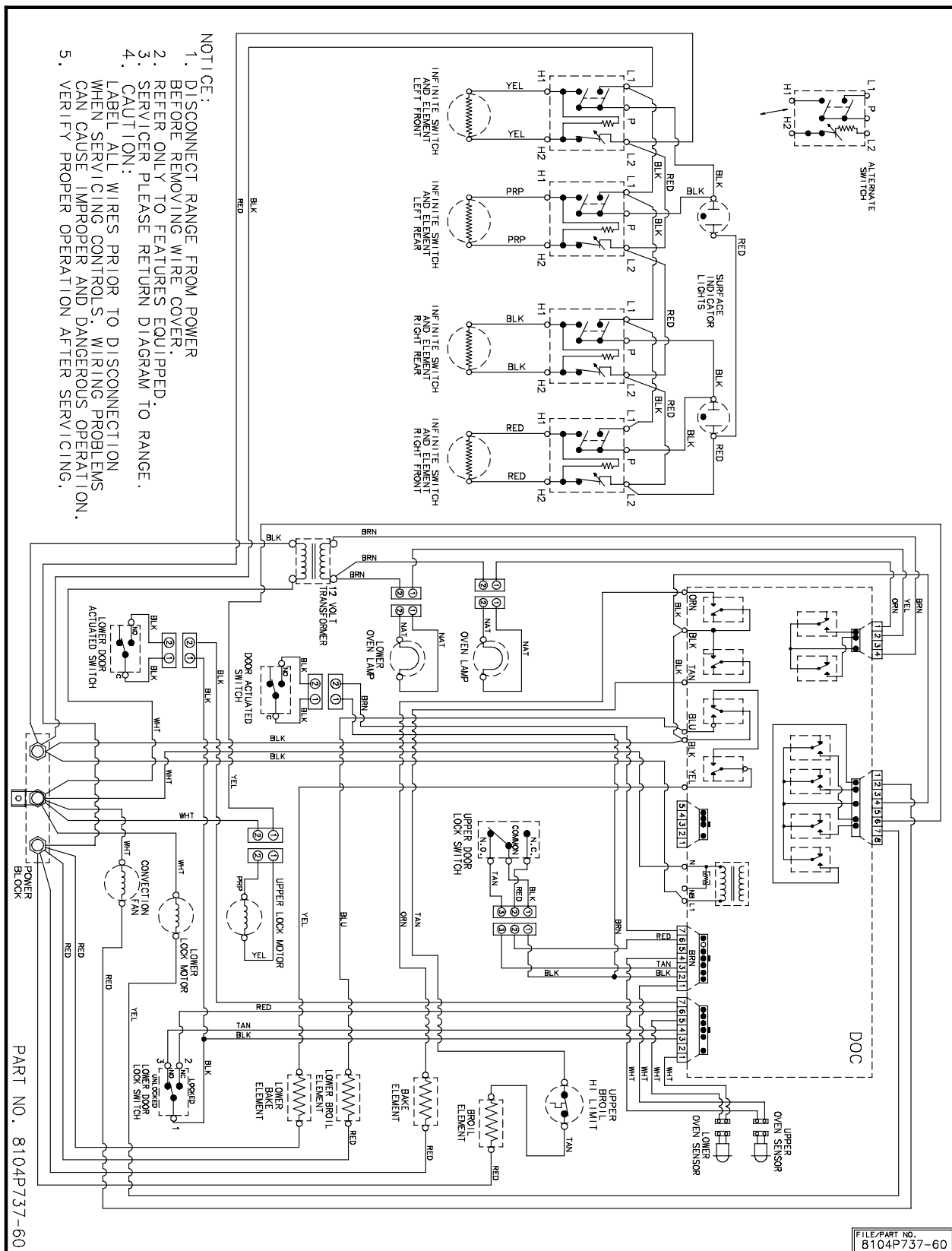
REPLACEMENT PARTS	
PART NAME	PART NUMBER
Main Top Assembly (Black)	74004515
Main Top Assembly (White)	74004516
Hinge, Oven Door (EURO)	74003968
Hinge, Oven Door Upper Gemini	74004523
Switch, Infinite 2600	7403P239-60
Switch, Dual Element	74002144
Element, Broil 3600W/6Pass	74003040
Element, Bake Upper Gemini	74004105
Element, Broil Upper Gemini	74004106
Element, Bake Lower Oven	74004107
Element, Ribbon 1200W	74001011
Element, Ribbon 2200W	74001012
Element, Ceran Dual	74004556
Lamp, Assembly Halogen	74004521
Transformer, Stepdown 12V	74004545
Probe, Sensor/Both Ovens	74003390
Clock, E-Trnc-Elc D/O M/T	74004542
Overlay, Clock Gemini White Maytag	74004544
Overlay, Clock Gemini Black Maytag	74004543
Latch, Door Lock Motor 3RPM Upper	74004528
Latch, Door Lock Motor 3RPM Lower	74004519

FAULT IDENTIFICATION SUMMARY

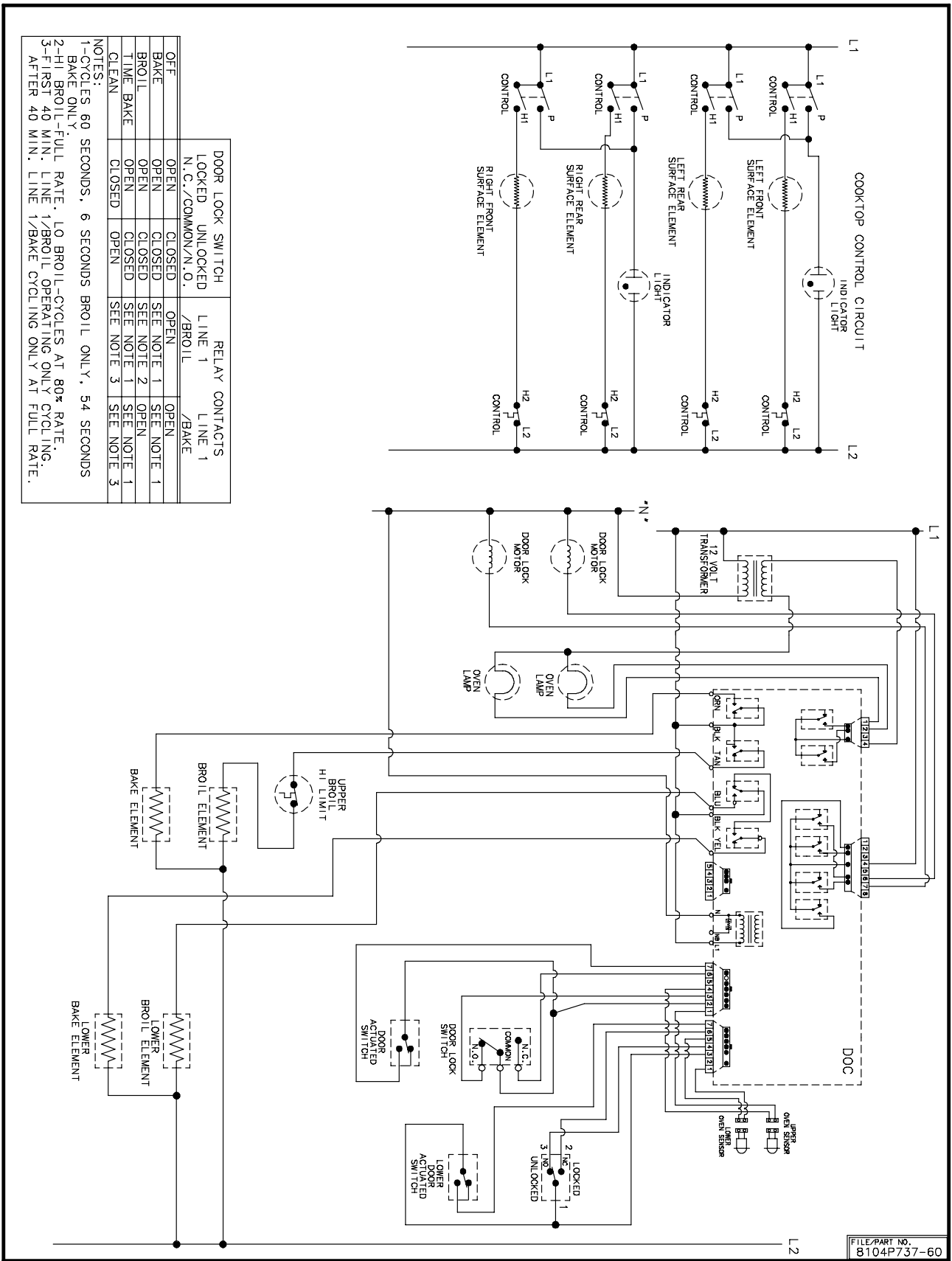
Fault	Suspect Failure Area	Correction	When Checked
F0-0	No Fault	None	Anytime
F1-1	Runaway Cook Upper Oven	Check the sensor 1050-1100 ohms, wiring, control	Every 6 seconds that the control sees the latch unlocked.
F1-2	Runaway Cook Lower Oven	Check the sensor 1050-1100 ohms, wiring, control	Every 6 seconds that the control sees the latch unlocked
F1-3	Runaway Clean Upper Oven	Temperature above 650° F. Check the sensor and control	Every 6 seconds that the control sees the latch locked
F1-4	Runaway Clean Lower Oven	Temperature above 650° F. Check the sensor and control	Every 6 seconds that the control sees the latch locked
F1-5	Cancel Keypad Upper Oven	Replace Control	Every 30 seconds
F1-6	Cancel Keypad Lower Oven	Replace Control	Every 30 seconds
F1-7	Keypad Disconnected	Replace Control	Every 30 seconds
F1-8	Keypad Shorted	Replace Control	Every 30 seconds
F1-9	Slave	Replace Control	Every 30 seconds
F1-A	Latch Switch Upper Oven	Check that upper latch switch is closed	Every 30 seconds
F1-B	Latch Switch Lower Oven	Check that lower latch switch is closed	Every 30 seconds
F1-C	Door Open Upper Oven	Check that door position switch is closed	Every 30 seconds
F1-D	Door Open Lower Oven	Check that lower door position switch is closed	Every 30 seconds
F1-E	EEPROM	Replace Control	Every 6 seconds
F1-F	Jumper	Replace Control	Every 30 seconds
F1-H	EEPROM Read Error	Replace Control	Anytime
F1-L	Sensor Wire	Ohm sensor wire end to end to ensure a closed path	Anytime at least one oven is active
<i>Continued...</i>			

Fault	Suspect Failure Area	Correction	When Checked
F3-1	Sensor Upper Oven	Ohm Sensor (1050-1100 ohms) @ room temperature	Every 6 seconds
F3-2	Sensor Lower Oven	Ohm Sensor (1050 - 11 ohms) @ room temperature	Every 6 seconds
F9-1	Latch Switch Upper Oven	Check switches and wiring to latch assembly	Every 60 seconds that the control sees the door locked
F9-2	Unlock Switch Upper Oven	Check switches and wiring to latch assembly	Every 60 seconds that the control sees the door locked
F9-3	Lock and Unlock Switch Upper Oven	Check switches and wiring to latch assembly	Every 30 seconds
F9-4	Lock Switch Lower Oven	Check switches and wiring to latch assembly	Every 60 seconds that the control sees the door locked
F9-5	Unlock Switch Lower Oven	Check switches and wiring to latch	Every 60 seconds that the control sees the door locked
F9-6	Lock and Unlock Switch Lower Oven	Check switches and wiring to latch assembly	Every 30 seconds

SECTION 6. WIRING DIAGRAMS



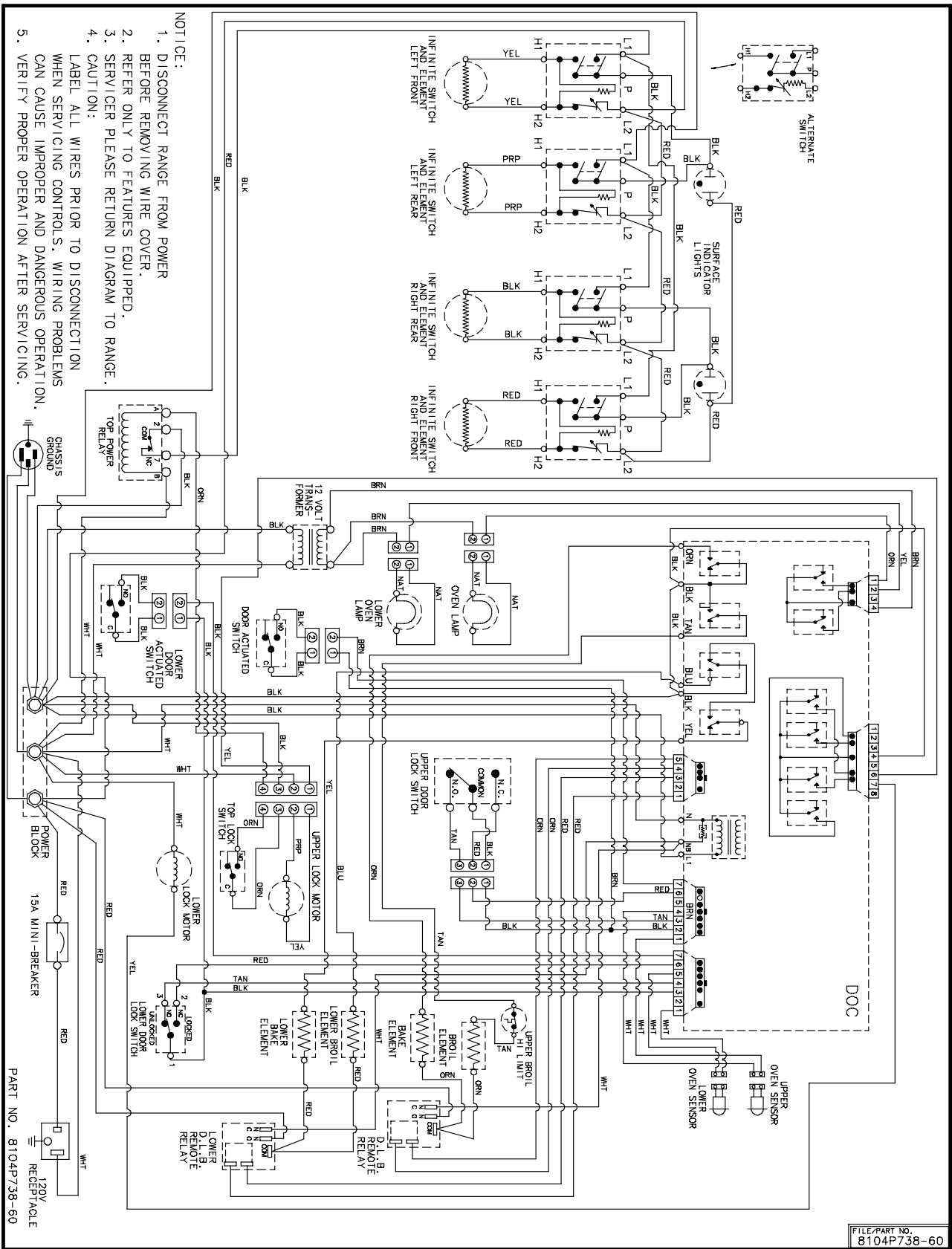
MER650AA*, MER650BA* Wiring Diagram



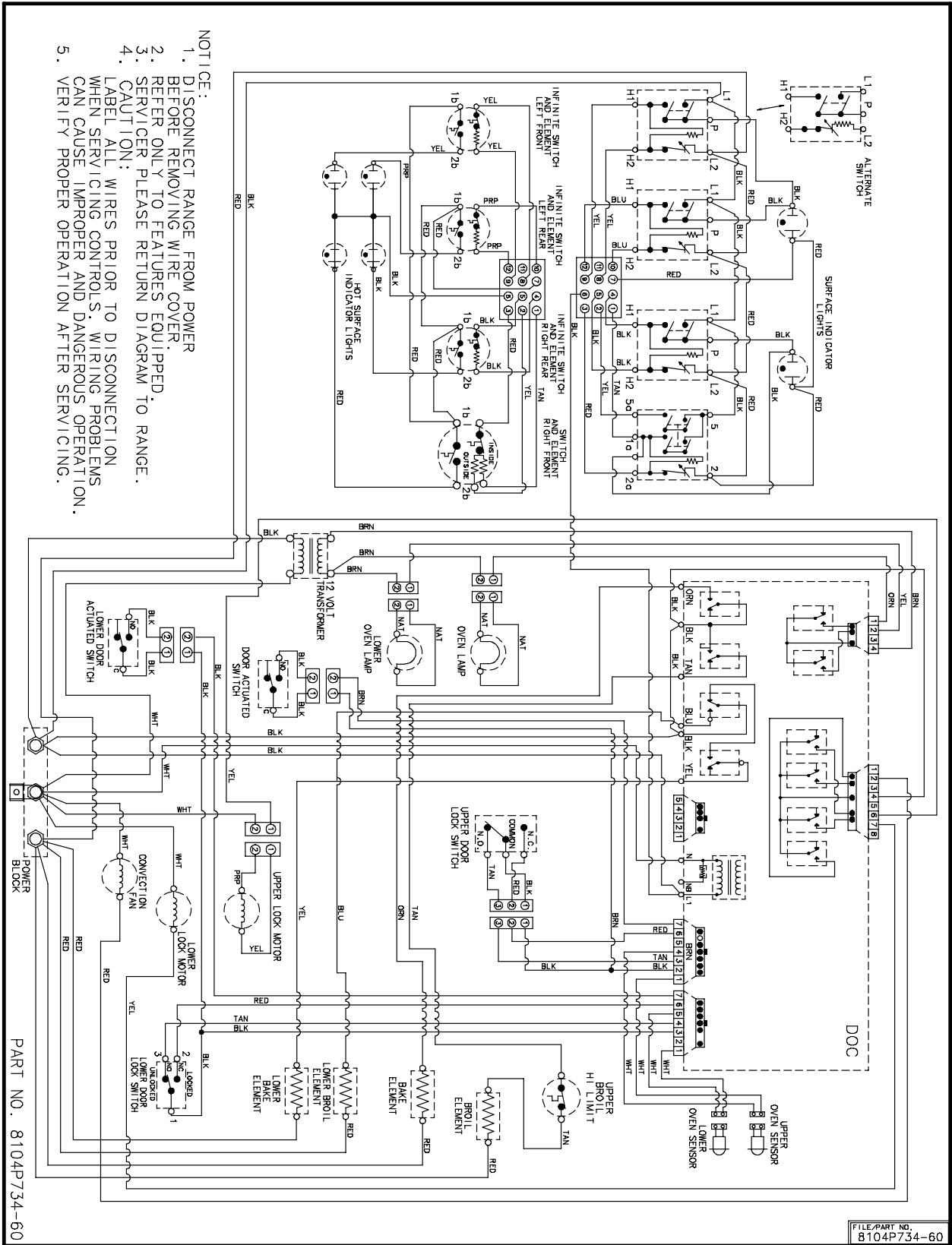
DOOR LOCK SWITCH	RELAY CONTACTS
LOCKED	LINE 1
UNLOCKED	LINE 1
N. C./COMMON/N. O.	/BROIL
	/BAKE
OFF	OPEN
BAKE	CLOSED
BROIL	OPEN
TIME/BAKE	CLOSED
CLEAN	OPEN

NOTES:
 1-CYCLES 60 SECONDS, 6 SECONDS BROIL ONLY, 54 SECONDS BAKE ONLY,
 2-HI BROIL-FULL RATE. LO BROIL-CYCLES AT 80% RATE.
 3-FIRST 40 MIN. LINE 1/BROIL OPERATING ONLY CYCLING AFTER 40 MIN. LINE 1/BAKE CYCLING ONLY AT FULL RATE.

MER650AA*, MER650BA* Schematic Diagram



MER6550AC, MER6550BC* Wiring Diagram

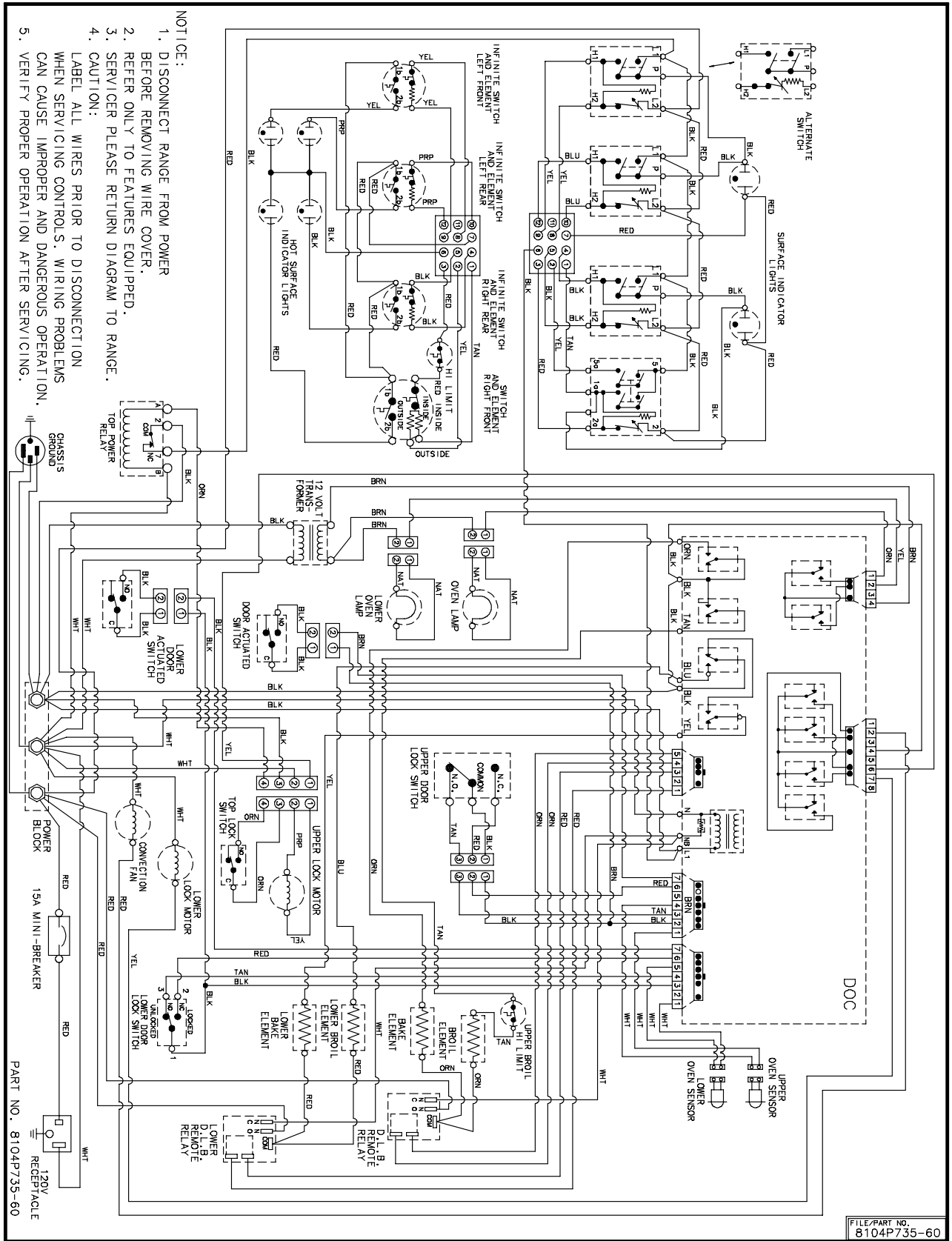


- NOTICE:
1. DISCONNECT RANGE FROM POWER BEFORE REMOVING WIRE COVER.
 2. REFER ONLY TO FEATURES EQUIPPED.
 3. SERVICER PLEASE RETURN DIAGRAM TO RANGE.
 4. CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING PROBLEMS CAN CAUSE IMPROPER AND DANGEROUS OPERATION.
 5. VERIFY PROPER OPERATION AFTER SERVICING.

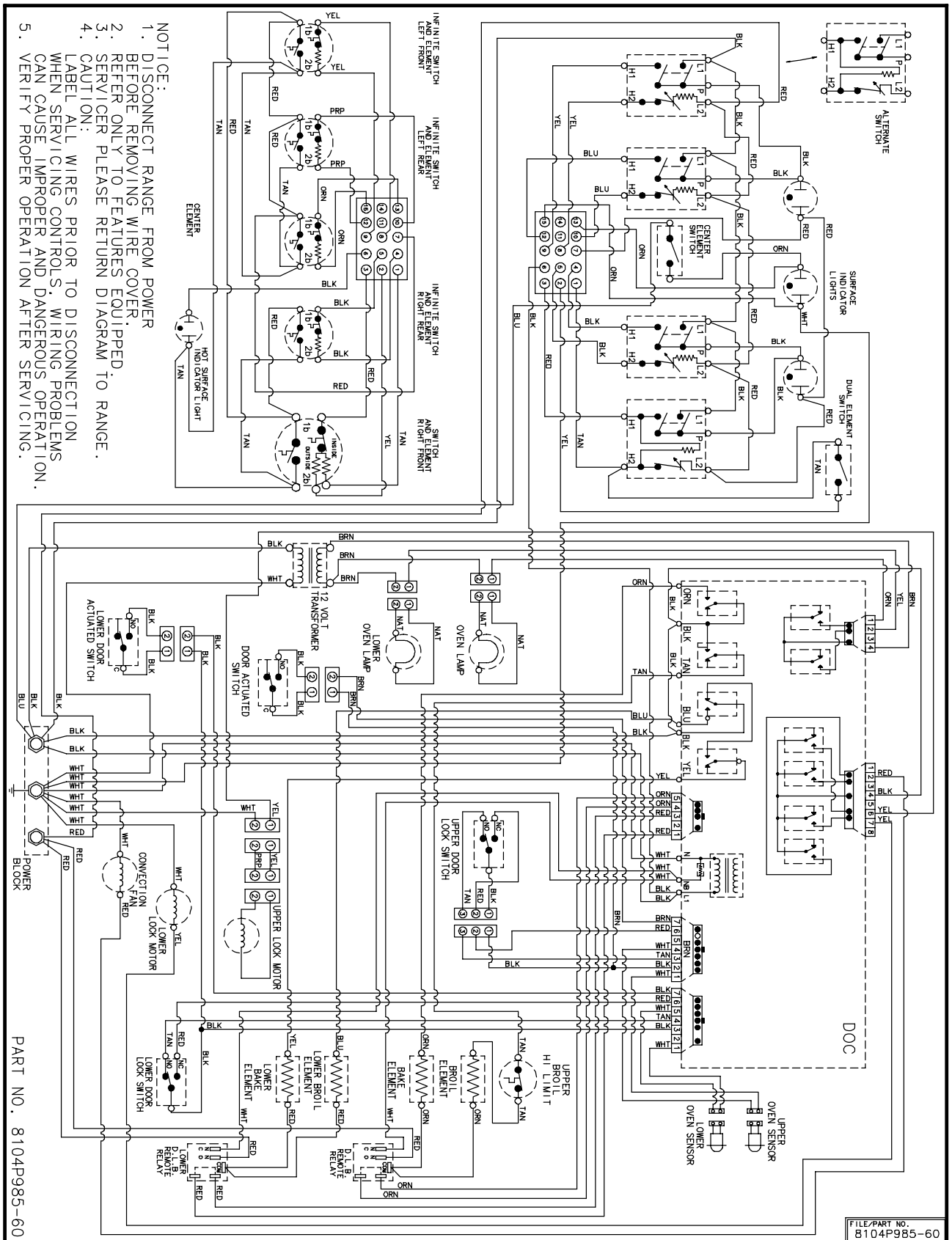
PART NO. 8104P734-60

FILE/PART NO. 8104P734-60

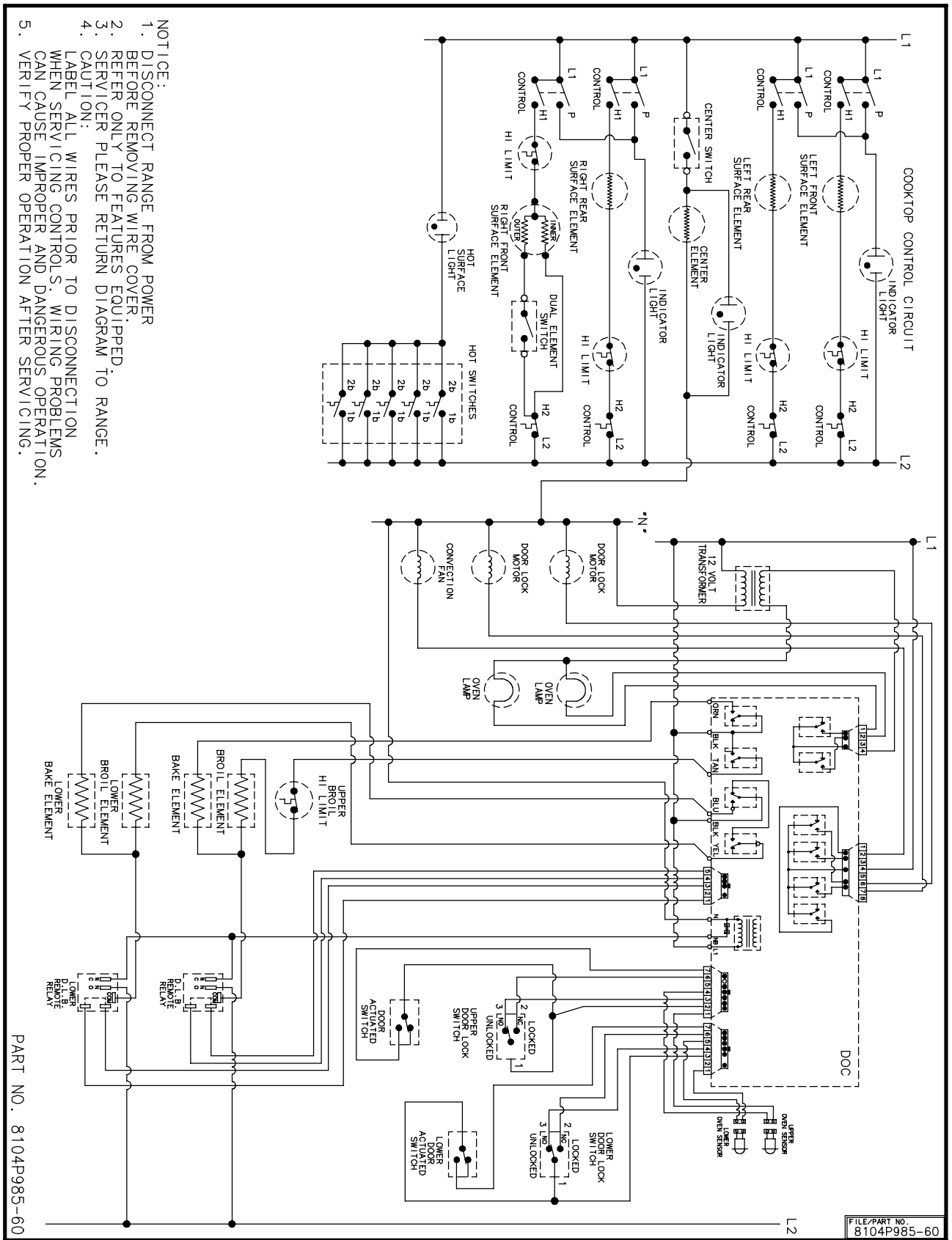
MER6770AA*, MER6771AA*, MER6870AA*, MER6871AA*, Wiring Diagram



MER6770AC*, MER6870AC* Wiring Diagram

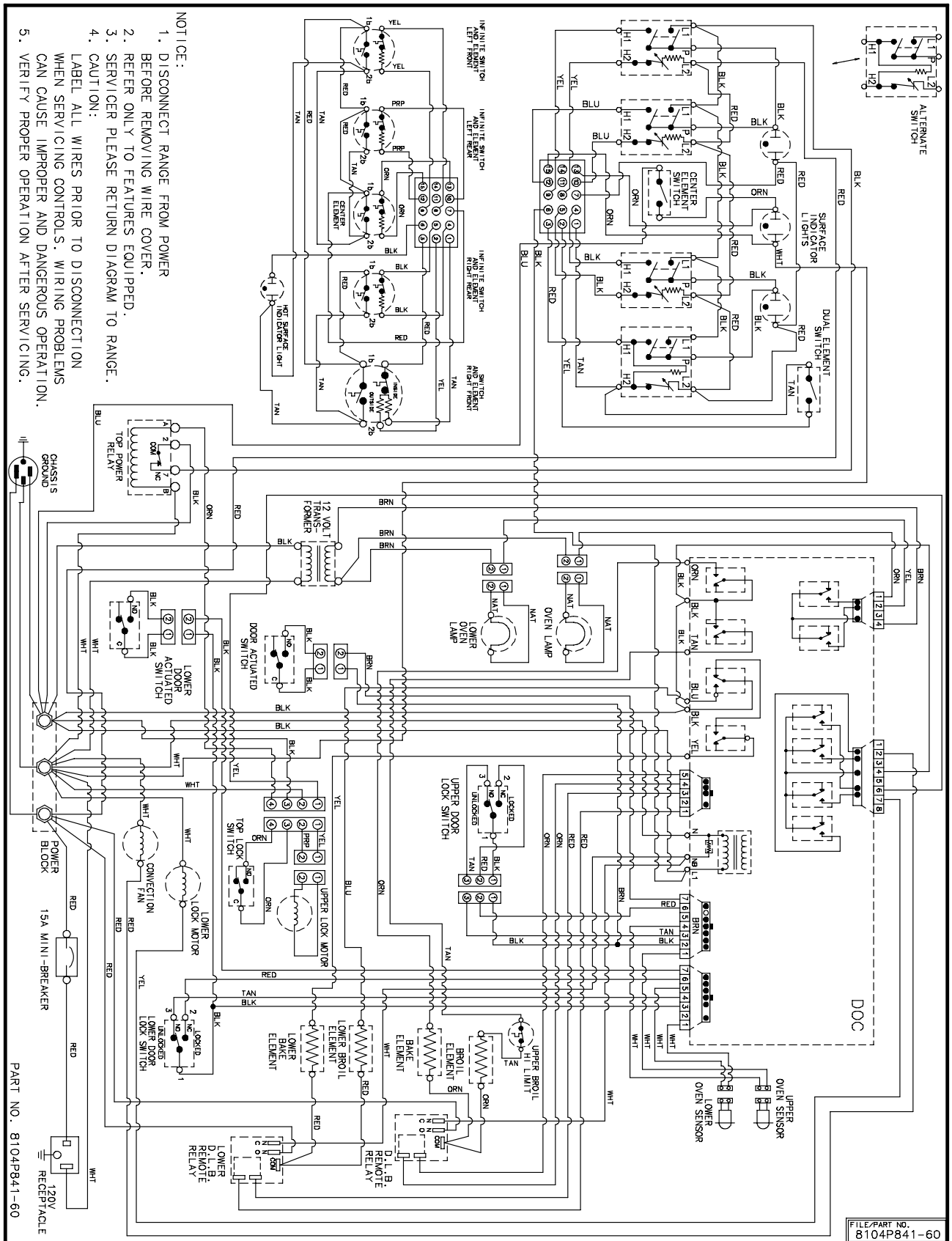


MER6772BA*, MER6872BA* Wiring Diagram



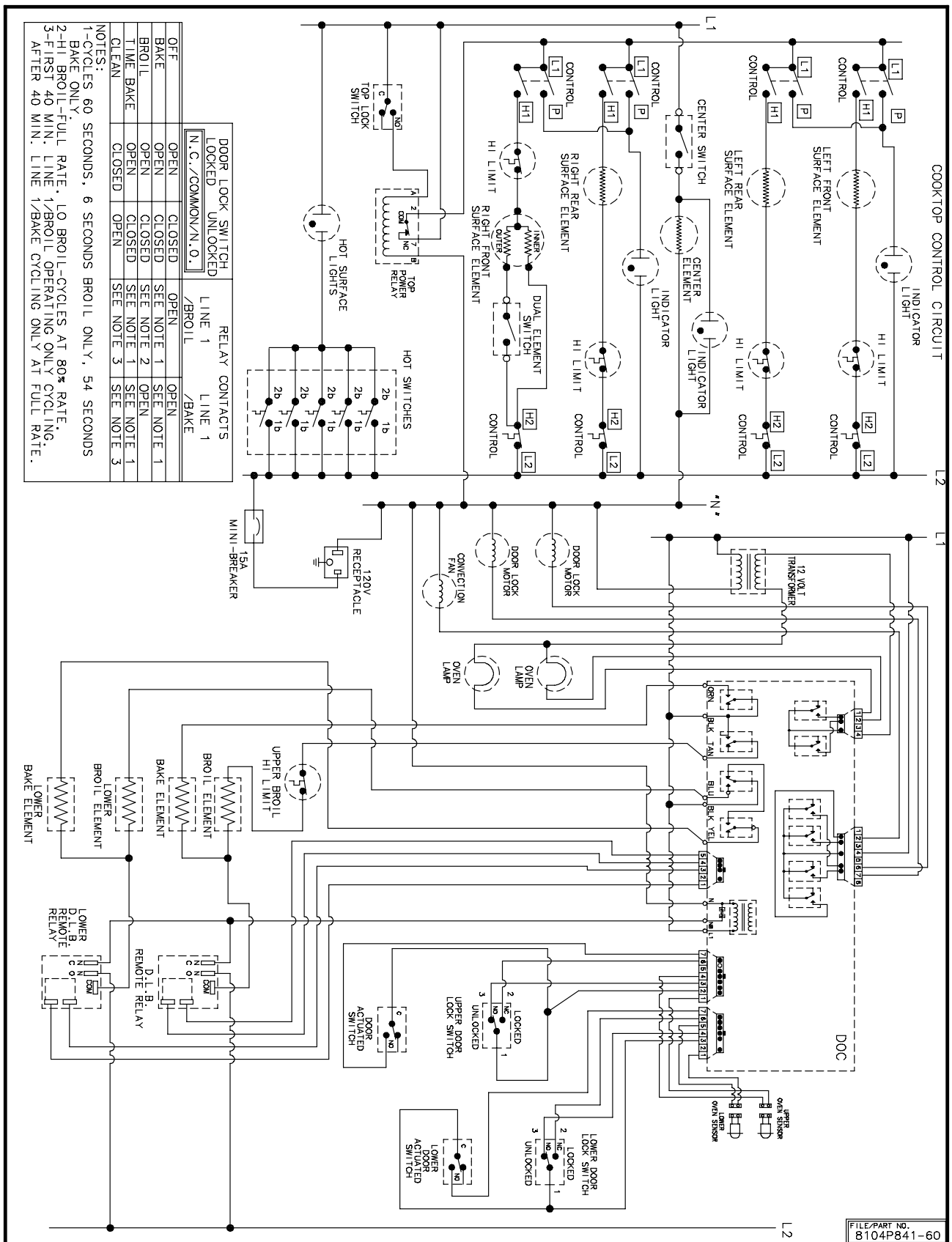
- NOTICE:
1. DISCONNECT RANGE FROM POWER BEFORE REMOVING WIRE COVER.
 2. REFER ONLY TO FEATURES EQUIPPED.
 3. SERVICER PLEASE RETURN RANGE TO RANGE.
 4. CAUTION:
 5. LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING PROBLEMS CAN CAUSE IMPROPER AND DANGEROUS OPERATION.
 6. VERIFY PROPER OPERATION AFTER SERVICING.

MER6772BA*, MER6872BA* Schematic Diagram



- NOTICE:
1. DISCONNECT RANGE FROM POWER BEFORE REMOVING WIRE COVER.
 2. REFER ONLY TO FEATURES EQUIPPED.
 3. SERVICER PLEASE RETURN DIAGRAM TO RANGE.
 4. CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING PROBLEMS CAN CAUSE IMPROPER AND DANGEROUS OPERATION.
 5. VERIFY PROPER OPERATION AFTER SERVICING.

MER6772BC*, MER6872BC* Wiring Diagram



MER6772BC*, MER6872BC* Schematic Diagram

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