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# LG LRE3091SB Owner's Manual

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# 30" Freestanding Electric Range **SERVICE MANUAL**

**MODEL: LRE3091SW  
LRE3091SB  
LRE3091ST**

**CAUTION**

BEFORE SERVICING THE UNIT, READ THE SAFETY PRECAUTIONS IN THIS MANUAL.

P/NO : MFL37118306

June, 2009  
Printed in Korea

# FORWARD

This LG Service Manual, “30” Freestanding Self-Cleaning Electric Range,” provides the technician with information on the operation and service of the Freestanding Self-Cleaning Electric Range. It is to be used as a training Service Manual. For specific information on the model being serviced, refer to the “Owner’s Manual” or “Tech Sheet” provided with the electric range.

## SAFETY PRECAUTIONS

- Repairs of the appliance should be carried out by a licensed technician only. Incorrect repairs may result in dangerous situations. If you need repairs, contact an LG Service Center or your dealer.
- If the power cord is defective, it must be replaced by a qualified service agent with a UL listed range cord.
- Electrical leads and cables should not be allowed to touch the oven.
- Rating plate is located on the left side of warming drawer.
- The power supply of the appliance should be turned off when it is being repaired.

### **WARNING**

- **DISCONNECT power supply cord from the outlet before servicing.**
- **Replace all panels and parts before operating.**
- **RECONNECT all grounding devices.**
  - Failure to do so can result in severe personal injury, death or electrical shock.
- **DO NOT Touch when the oven operates.**
  - The interior parts will be very hot.

LG Electronics assumes no responsibility for any repairs made on our products by anyone other than Authorized Service Technicians.

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# GENERAL

## IMPORTANT SAFETY INSTRUCTIONS

Read and follow all instructions before using your oven to prevent the risk of fire, electric shock, injury to person, or damage when using the range. This guide don't cover all possible conditions that may occur. For further assistance contact your service agent or manufacturer.



This is the safety alert symbol. This symbol alerts you to potential hazards that can kill or hurt you and others. All safety messages will follow the safety alert symbol and either the word "WARNING" or "CAUTION". These words mean :



### **WARNING**

This symbol will alert you to hazards or unsafe practices which could cause serious bodily harm or death.



### **CAUTION**

This symbol will alert you to hazards or unsafe practices which could cause bodily injury or property damage.



### **WARNING**

- **DO NOT step or sit on the door and install the Anti-Tip Bracket packed with range.**
  - The range could be tipped and injury might result from spilled hot liquid, food, or the range itself.
  - If the range is pulled away from the wall for cleaning, service, or any other reason, ensure that the Anti-Tip Device is properly reengaged when the range is pushed back against the wall.
- **DISCONNECT power supply cord from the outlet before servicing.**
- **Replace all panels and parts before operating.**
- **RECONNECT all grounding devices.**
  - Failure to do so can result in severe personal injury, death or electrical shock.
- **DO NOT touch heating elements or interior surfaces of oven.**
  - Heating element may be hot even though they are dark in color.
  - Interior surfaces of an oven become hot enough to cause burns.
- **During and after use, do not touch, or let clothing or other flammable materials contact heating elements or interior surfaces of oven until they have had sufficient time to cool.**
  - Other surfaces of the appliance may become hot enough to cause burns among these surfaces are oven vent openings and surfaces near these openings, oven doors, and windows of oven doors.
- **DO NOT store items of interest to children in cabinets above a range or on the back guard of a range.**
  - Children climbing on the range to reach items could be seriously injured.



### **CAUTION**

- **Always use Pot Holders or oven mitts when removing food from the Warming Drawer.**
  - You can be burned as cookware and plates will be hot.
- **Be careful when you work on the electric range handling the sheet metal part.**
  - Sharp edge may be present and you can cut yourself.
- **Be careful not to bend the fan blade**
  - Failure to do so can result in vibration, noise, and poor performance of convection when operating.
- **Be careful not to scratch or chip the oven liner paint when you remove the oven light socket in the next step.**
- **Turn power OFF before removing the Warming Drawer.**
- **Be careful when removing and lifting the door.**
- **DO NOT lift the door by the handle.**
  - Failure to do so can result in personal injury as the door is very heavy.

# GENERAL

## IMPORTANT SAFETY INSTRUCTIONS

- Be sure your appliance is properly installed and grounded by a qualified technician.
- Do not repair or replace any part of the appliance unless specifically recommended in the manual. All other servicing should be referred to a qualified technician.
- Always disconnect power to appliance before servicing by removing the fuse or switching off the circuit breaker

### **WARNING**



- **DO NOT step or sit on the door and install the Anti-Tip Bracket packed with range.**



- The range could be tipped and injury might result from spilled hot liquid, food, or the range itself.
- If the range is pulled away from the wall for cleaning, service, or any other reason, ensure that the Anti-Tip Device is properly reengaged when the range is pushed back against the wall.

To reduce the risk of tipping of the range, the range must be secured by properly installed anti-tip devices. To check if the bracket is installed properly,

- **Warming drawer** : grasp the top rear edge of the Range and carefully attempt to tilt it forward. verify that the anti-tip devices are engaged.
- **Storage drawer** : Remove drawer and verify leveling leg is inserted into and fully secured by the anti-tip devices.

Refer to the installation manual for proper anti-tip bracket installation.

### **WARNING**

- **DO NOT touch heating elements or interior surfaces of oven.**
  - Heating element may be hot even though it is dark in color.
  - Interior surfaces of an oven become hot enough to cause burns.
- **During and after use, do not touch, or let clothing or other flammable materials contact heating elements or interior surfaces of oven until they have had sufficient time to be cool.**
  - Other surfaces of the appliance may become hot enough to cause burns among these surfaces are oven vent openings and surfaces near these openings, oven doors, and windows of oven doors.

### **WARNING**

- **DO NOT store items of interest to children in cabinets above a range or on the back guard of a range.**
  - Children climbing on the range to reach items could be seriously injured.

# GENERAL

## IMPORTANT SAFETY INSTRUCTIONS

- **Do Not Leave Children Alone** - Children should not be left alone or unattended in area where appliance is in use. They should never be allowed to sit or stand on any part of the appliance.
- **Never Use Your Appliance for Warming or Heating the Room.**
- **Storage in or on Appliance** – Flammable materials should not be stored in an oven or near surface units. Be sure all packing materials are removed from the appliance before operating it. Keep plastics, clothes and paper away from parts of the appliance that may become hot
- **Wear Proper Apparel** – Loose-fitting or hanging garments should never be worn while using the appliance.
- **Do Not Use Water on Grease Fires** – Turn off oven to avoid spreading the flame. Smother the fire or flame by closing the door or use dry chemical, baking soda or foam- type extinguisher.
- **Use Only Dry Potholders** – Moist or damp potholders on hot surfaces may result in burns from steam.  
Do not let potholder touch hot heating elements. Do not use a towel or other bulky cloth.

### **WARNING**

- **DISCONNECT power supply cord from the outlet before servicing.**
- **Replace all panels and parts before operating.**
- **RECONNECT all grounding devices.**  
- Failure to do so can result in severe personal injury, death or electrical shock.

## SURFACE COOKING UNITS

- **Use Proper Pan Size** – This appliance is equipped with one or more surface units of different sizes. Select utensils having flat bottoms large enough to cover the surface unit heating element. The use of undersized utensils will expose a portion of the heating element to direct contact and may result in ignition of clothing. Proper relationship of utensil to burner will also improve efficiency.
- **Never Leave Surface Units Unattended at High Heat Settings** – Boil overs may cause smoking and greasy spillovers may ignite.
- **Make Sure Reflector Pans or Drip Bowls Are in Place** – Absence of these pans or bowls during cooking may subject wiring or components underneath to damage.
- **Protective Liners** – Do not use aluminum foil to line surface unit drip bowls or oven bottoms, except as suggested in the manual. Improper installation of these liners may result in a risk of electric shock, or fire.
- **Glazed Cooking Utensils** – Only certain types of glass, glass/ceramic, ceramic, earthenware, or other glazed utensils are suitable for range-top service without breaking due to the sudden change in temperature.
- **Utensil Handles Should Be Turned Inward and Not Extend Over Adjacent Surface Units** – To reduce the risk of burns, ignition of flammable materials, and spillage due to unintentional contact with the utensil, the handle of a utensil should be positioned so that it is turned inward, and does not extend over adjacent surface units.
- **Do Not Soak Removable Heating Elements** – Heating elements should never be immersed in water.
- Be sure you know which control pads operate each surface unit. Make sure you turned on the correct surface unit.

## SELF-CLEAN OVENS

- **Do Not Clean Door Gasket** – The door gasket is essential for a good seal. Care should be taken not to rub, damage, or move the gasket.
- **Do Not Use Oven Cleaners** – No commercial oven cleaner or oven liner protective coating of any kind should be used in or around any part of the oven.
- **Clean in the self-clean cycle only parts listed in this manual.** Before self-cleaning the oven, remove the broiler pan and any utensils from the oven.
- **Never keep pet birds in the kitchen** – the health of birds is extremely sensitive to the fumes released during an oven self-clean cycle. Fumes may be harmful or fatal to birds. Move birds to well-ventilated room.
- **Important Instruction** – In the event the self-clean mode “F” code goes on, or three long beeps sound, oven is malfunctioning in the self-clean mode. Turn off or disconnect appliance from power supply and have serviced by a qualified technician.

## VENTILATING HOODS:

- **Clean Ventilating Hoods Frequently** – Grease should not be allowed to accumulate on hood or filter.
- **When flaming foods under the hood, turn the fan on.**

## OVEN

- **Use Care When Opening Door** – Let hot air or steam escape before you remove or replace food in the oven
- **Do Not Heat Unopened Food Containers** – Build-up of pressure may cause container to burst and result in injury.
- **Keep Oven Vent Ducts Unobstructed** – the oven vent is located above the left rear surface unit. this area could become hot during oven use. Never block this vent and never place plastic or heat-sensitive items on vent
- **Placement of Oven Racks** – Always place oven racks in desired location while oven is cool. If rack must be moved while oven is hot, do not let potholder contact hot heating element in oven.
- **Do Not** allow aluminum foil or meat probe to contact heating elements.

## GLASS/CERAMIC COOKING SURFACES

- **Do Not Cook on Broken Cook-Top** – If cook-top should break, cleaning solutions and spillovers may penetrate the broken cook-top and create a risk of electric shock. Contact a qualified technician immediately.
- **Clean Cook-Top With Caution** – If a wet sponge or cloth is used to wipe spills on a hot cooking area, be careful to avoid steam burn. Some cleaners can produce noxious fumes if applied to a hot surface.

## DEEP FAT FRYERS:

- Use extreme caution when moving the grease kettle or disposing of hot grease.

# GENERAL

## MODEL & SERIAL NUMBER LABEL AND TECH SHEET LOCATIONS

The Model/Serial Number label and Tech Sheet locations are shown below.

Model & Serial  
Number Location



Tech Sheet Location  
(On Low Rear Cover)



# GENERAL

## SPECIFICATIONS

Model Number		LRE3091SW / LRE3091SB / LRE3091ST
<b>Category</b>		Thermal
<b>Overall</b>	Width	30"
	Installation type	Freestanding
	Color availability	WH, BK, STS
<b>Control</b>	Oven	Keypad(Tact switch)
	Cooktop	Knob(Mechanical type)
	Display	LED
	Electronic clock & timer	Yes
	Oven lock capability	Yes
	Audible preheat signal	Yes
	Special function	<ol style="list-style-type: none"> <li>1. Clock(12hr, 24hr)</li> <li>2. Temperature unit (F / C)</li> <li>3. Beeper Volume(High , Low, Off)</li> <li>4. Preheating Alarm Light On/Off</li> <li>5. Thermostat Adjustment</li> </ol>
<b>Cooktop</b>	Material	Ceramic glass
	# of element	4
<b>Power</b>	LR	6"-1,200
	RR	6"-1,200
	CR	No
	LF	Dual (6"/9" – 1,400/3,000)
	RF	9"-2,500W
<b>Oven</b>	Capacity(cu.ft)	<b>5.6</b>
	Broil element	3600 watts
	Bake element	2800 watts
	Convection System	No
	-Convection element	No
	# of Racks	2 standards
	Interior oven light	120V, 40Watts
	Proof	No
	Cook & warm	No
	Favorites	No
Broiler pan	No (Not included in this model)	
<b>Drawer</b>	Type	Storage drawer
	Element	-
	Warming rack	-
<b>Dimensions (inch)</b>	Oven Interior(W x H x D)	24 1/2 x 20 1/4 x 19 3/8
	Exterior - Width	29 7/8
	Exterior - Height	36 (cooktop), 46 (backguard top)
	Exterior - Depth	25 11/16 (Door), 28 (with handle)
	Net weight: Lbs (Kg)	91.8kg(202lbs)
<b>Power</b>	Rating	10.6Kw(120/240V) / 7.9Kw(120/208V)

# USING YOUR RANGE

## GENERAL INFORMATION

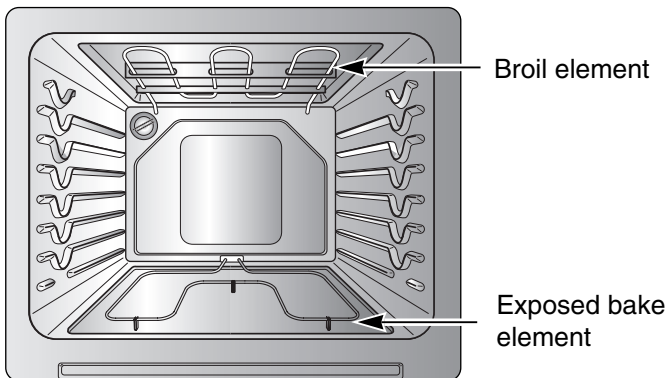
### Rating Label

Model numbers are recorded on the rating label. Rating label is located on the lower front left corner of the oven frame. It can be seen by opening the storage drawer or warming drawer. Before ordering parts, write down the correct model and serial number from rating label. This avoids incorrect shipments and delays. Please refer to parts reference material when ordering replacement parts.

### Functional Operation

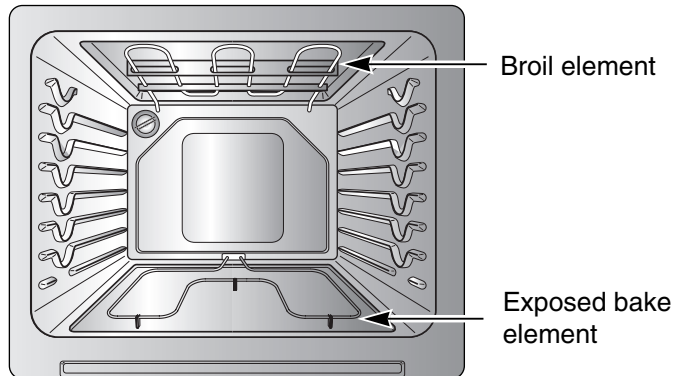
#### Bake Mode

Top and exposed bottom elements operate during bake. Bake can be used to cook foods which are normally baked. Oven must be preheated.



#### Broil Mode

Top element operates during broil. Broil can be used to cook foods which are normally broiled. Preheating is not required when using broil. All foods should be turned at least once except fish, which does not need to be turned.

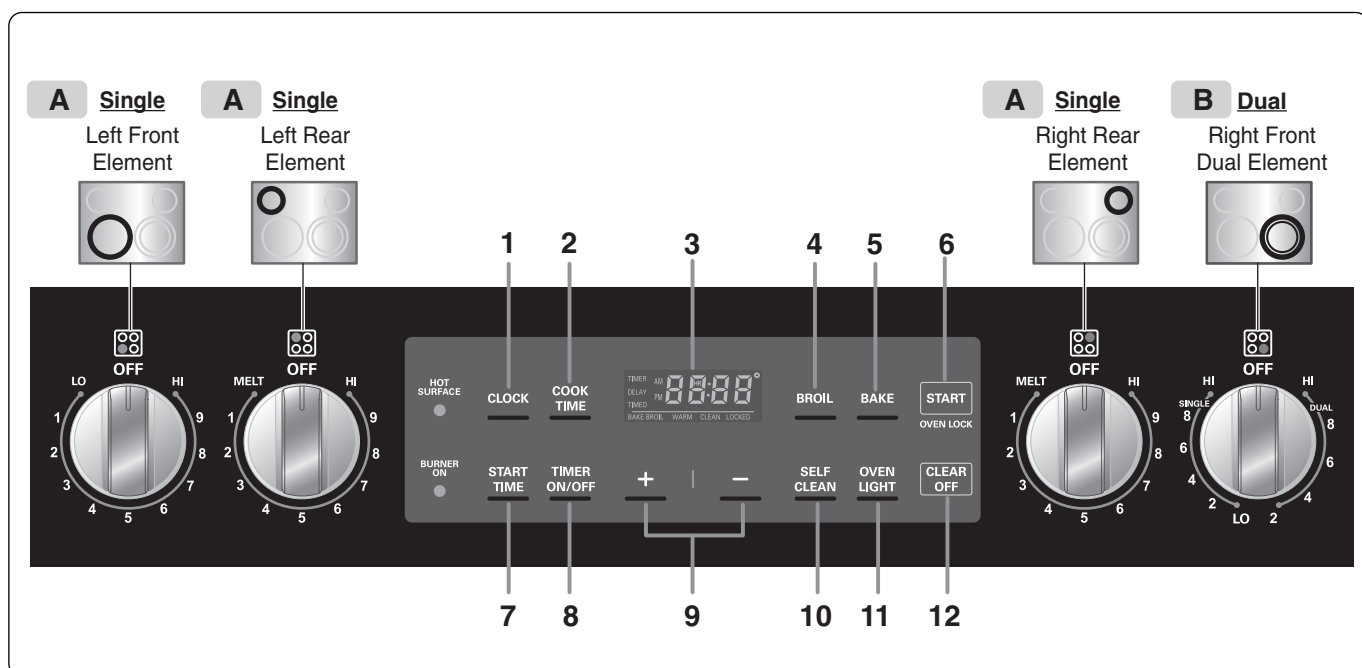


#### Cooking Guide

Refer to the owners manual for recommendations of times and temperatures, times, rack position, and temperatures may vary depending on conditions and food type. For the best results, always check food at minimum time.

# USING YOUR RANGE

## CONTROL PANEL FEATURES



1. **CLOCK Pad:** Press before setting the time of day.
2. **COOK TIME Pad:** Press and then use the number pads to set the amount of time you want your food to cook. The oven will shut off when the cooking time has run out.
3. **Display:** Shows the time of day, oven temperature, whether the oven is in the bake, broil or self-cleaning mode, and the times set for the timer or automatic oven operations.
4. **BROIL Pad:** Press to select the broil function.
5. **BAKE Pad:** Press to select the bake function.
6. **START Pad:** Must be pressed to start any cooking or cleaning function.
7. **START TIME Pad:** Use along with BAKE, CONV. BAKE, CONV. ROAST, Cook time, and Self Clean pads to set the oven to start and stop automatically at a time you set.
8. **TIMER ON/OFF Pad:** Press to select the timer feature.
9. **+/- Pad:** Enters or changes time, oven temperature. Sets HI or LO broil.
10. **SELF CLEAN Pad:** Press to select self-cleaning function. See the using the Self-Cleaning Oven section.

11. **OVEN LIGHT Pad:** Press to turn the oven light on or off.
12. **CLEAR/OFF Pad:** Press to cancel all oven operations except the clock and timer.

**A Single surface units**  
: Left Front, Left Rear, Right Rear

**B Dual surface unit** : Right Front

# USING YOUR RANGE

Use to turn on the surface elements. An infinite choice of heat settings is available from LOW to High. The Knobs can be set on or between any of the settings.

## A To turn on a single surface unit (Left Front, Left Rear, Right Rear)



- Place pan on surface element.
- Push in and turn the knob in either direction to the desired heat setting.
  - The control panel is marked to identify which element the knob control. For example, the graphic above indicates left front element.
- There is an element indicator light on the control panel. When any surface control knob is turned on, the light will turn on. The light will turn off when all the surface elements are turned off.
- After cooking, turn knob to **OFF**. Remove pan.



## B To turn on a dual surface unit (Right Front)



### Dual Element (select modes)

The cooking surface has a dual element located at the right front of the smoothtop. This allows you to change the size of the element.

The small element is operated on the left side of the knob control. To operate the entire element, use the right side of the knob control. The control for both element sizes can be set anywhere between **Low** and **High**.

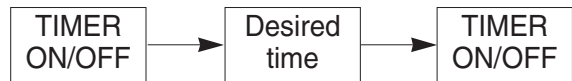
### 1. SETTING THE CLOCK



### 2. START, CLEAN/OFF AND ON/OFF PAD

- Touch **START** pad to start oven.
- Touch **CLEAR/OFF** pad to cancel a program during cooking or Erase during programming.
- Touch **ON/OFF** pad to start or cancel the surface unit.

### 3. TIMER ON/OFF



To cancel timer at any time, touch **TIMER ON/OFF** pad.

#### Note:

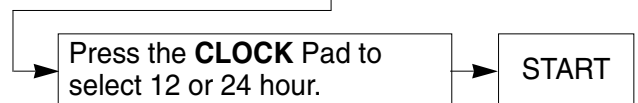
- If you press **TIMER ON/OFF** once, it allows you to set the time in seconds.  
(for example: if you press 50, it means 50 seconds)
- If you press **TIMER ON/OFF** twice, it allows you to set the time in minutes.  
(for example: if you press 5, it means 5 minutes)

### 4. OVEN LOCKOUT

Press and hold the **START** pad for 3 seconds (to activate or reactivate LOCKOUT)

### 5. CHANGING HOUR MODE ON CLOCK (12HR, 24HR)

Press and hold the **CLOCK** pad for 3 seconds



### 6. TEMPERATURE UNIT (°F or °C)

- Press and hold **TIMER ON/OFF** pad for 3 seconds
- Press **+** to switch between the F and C.
- Press **START** pad

### 7. BEEPER VOLUME

- Press and hold **TIMER ON/OFF** pad for 3 seconds
- Press **"3"** pad once for **"Beep Hi"**  
Press **"3"** pad to switch beeper volume (HI, LO, OFF)
- Press **START** pad

### 8. PREHEATING ALARM LIGHT ON/OFF

- Press and hold **TIMER ON/OFF** pad for 3 seconds
- Press **OVEN LIGHT** to switch between On and Off
- Press **START** pad

# USING YOUR RANGE

## 9. THERMOSTAT ADJUSTMENT

The oven temperature can be adjusted from -35°F (-19°C) to 35°F (19°C).

**Note:** The thermostat adjustments made with this feature will just change Bake, Convection Bake and Convection Roast temperature.

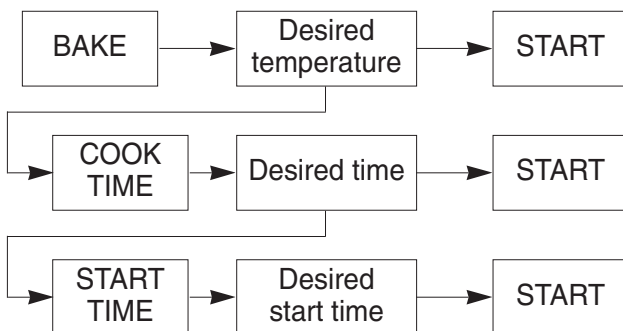
### To increase the oven temperature:

1. Press and hold **BAKE** pad for 3 seconds
2. Press the + pad to enter the desired change.
3. Press **START** pad.

### To decrease the oven temperature:

1. Press and hold **BAKE** pad for 3 seconds
2. Press the – pad to enter the desired change.
3. Press the **BAKE** pad once
4. Press **START** pad

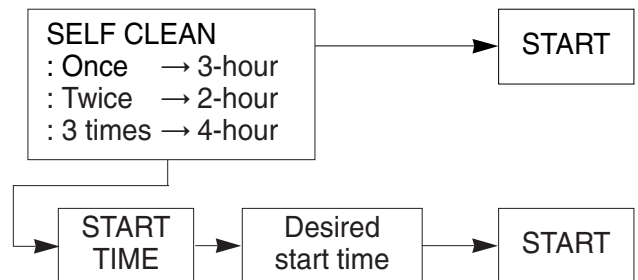
## 10. BAKE, TIMED BAKE, DELAYED TIMED BAKE



## 11. BROIL



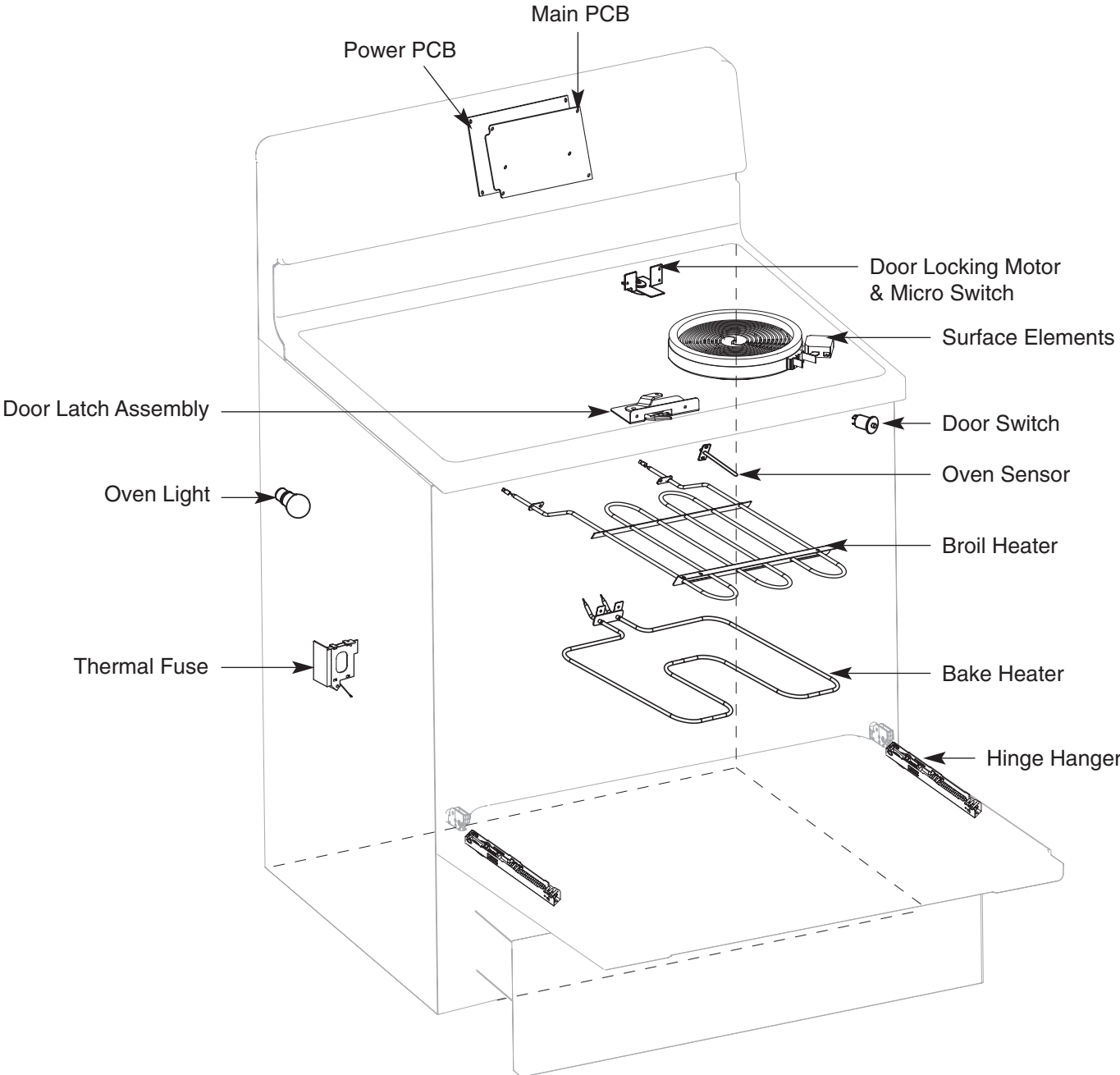
## 12. SELF-CLEAN



# COMPONENT ACCESS

This section instructs you on how to service each component inside the range. The components and their locations are shown below.

## COMPONENT LOCATIONS



# COMPONENT ACCESS

## REMOVING THE BACK, CONTROL COVER AND KEY MEMBRANE ASSEMBLY

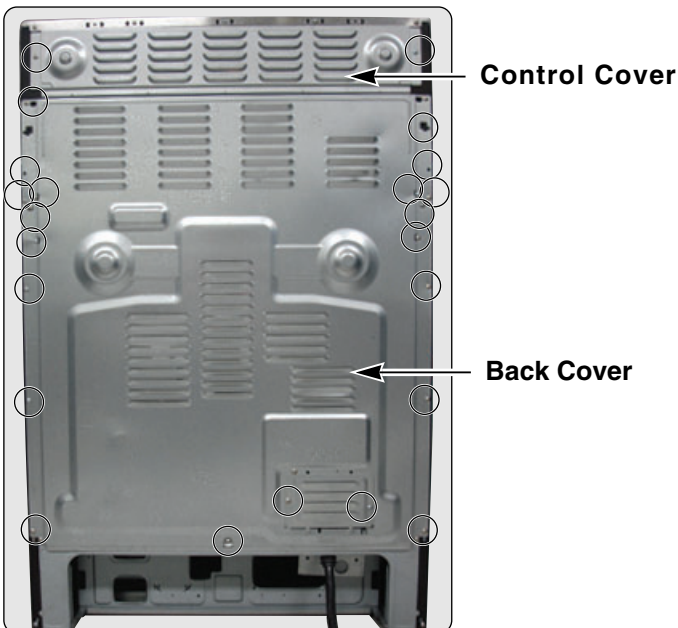
### **⚠ WARNING**

- **DISCONNECT** power supply cord from the outlet before servicing.
- **Replace** all panels and parts before operating.
- **RECONNECT** all grounding devices.
  - Failure to do so can result in severe personal injury, death or electrical shock.

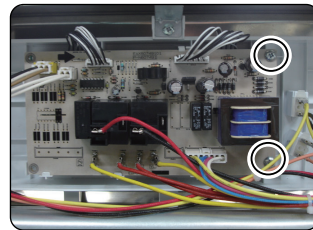
### **⚠ CAUTION**

- **Be careful** when you work on the electric range handling the sheet metal part.
  - Sharp edge may be present and you can cut yourself.

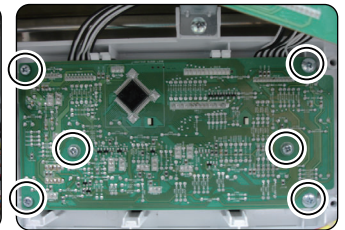
1. Turn off the electrical supply going to the range.
2. Pull the range away from the wall so that you can access the rear panel.
3. Remove the 17 screws from the rear panel and remove the panel.



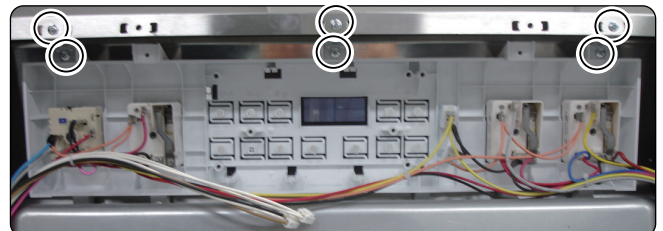
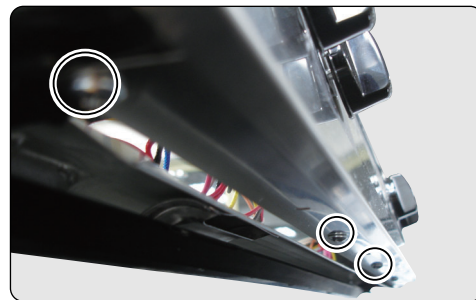
4. Remove the 2 screws from the rear control cover and remove the cover.
5. Remove 8 screws of PCB and separate PCB assembly.
6. Remove 9 screws of KEY Membrane assembly and separate PCB assembly.



Power(Relay) PCB



Main PCB



KEY MEMBRANE Assembly

# COMPONENT ACCESS

## REMOVING KNOB AND INFINIT SWITCH

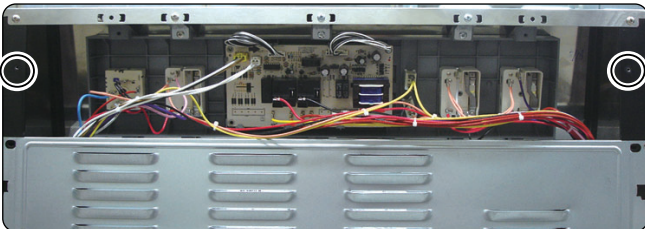
### WARNING

- **DISCONNECT** power supply cord from the outlet before servicing.
- **Replace** all panels and parts before operating.
- **RECONNECT** all grounding devices.
  - Failure to do so can result in severe personal injury, death or electrical shock.

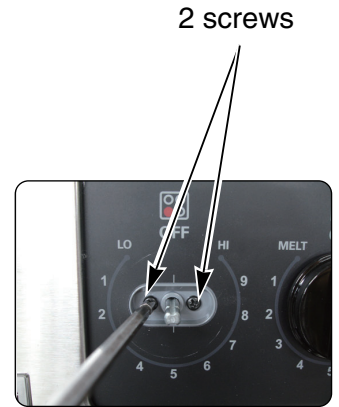
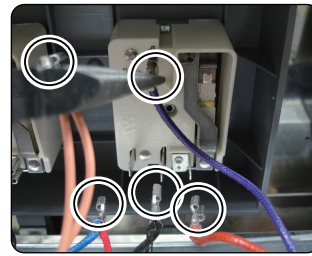
### CAUTION

- **Be careful** when you work on the electric range handling the sheet metal part.
  - Sharp edge may be present and you can cut yourself.


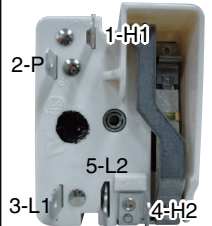

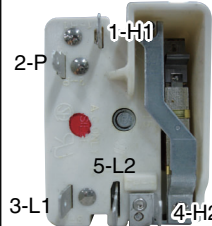

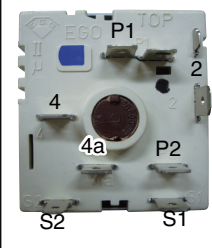


1. Turn off the electrical supply going to the range.
2. Pull the range away from the wall so that you can access the rear panel.
3. Remove the 2 screws from the rear control cover and remove the cover.



4. There are 4 Infinite switches. When you check infinite switches, firstly check the electric test each other. (refer to the page 4-2~4-4)
5. To remove the Infinite switch (ex. RF switch)
  - a) Disconnect the all wire to fault infinite switch.
  - b) Pull out a knob from the infinite switch shaft.
  - c) Remove the 2 screws.



d) After replacing the infinite switch, finally check the electric test and wiring.

<p>LR switch</p> 		<table border="1"> <thead> <tr> <th>Position(LR)</th> <th>Color</th> </tr> </thead> <tbody> <tr> <td>3-L1</td> <td>RD+RD</td> </tr> <tr> <td>5-L2</td> <td>BK+BK</td> </tr> <tr> <td>4-H2</td> <td>PK</td> </tr> <tr> <td>2-P</td> <td>OR+OR</td> </tr> <tr> <td>1-H1</td> <td>GY</td> </tr> </tbody> </table>	Position(LR)	Color	3-L1	RD+RD	5-L2	BK+BK	4-H2	PK	2-P	OR+OR	1-H1	GY				
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<p>RF switch</p> 		<table border="1"> <thead> <tr> <th>Position(RF)</th> <th>Color</th> </tr> </thead> <tbody> <tr> <td>P1</td> <td>BK+BK</td> </tr> <tr> <td>S1</td> <td>-</td> </tr> <tr> <td>P2</td> <td>RD+RD</td> </tr> <tr> <td>S2</td> <td>-</td> </tr> <tr> <td>4a</td> <td>GY</td> </tr> <tr> <td>4</td> <td>BL+OR</td> </tr> <tr> <td>2</td> <td>BN</td> </tr> </tbody> </table>	Position(RF)	Color	P1	BK+BK	S1	-	P2	RD+RD	S2	-	4a	GY	4	BL+OR	2	BN
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1-H1	PK																	

# COMPONENT ACCESS

## REMOVING THE SURFACE ELEMENTS AND THE CERAMIC GLASS COOKTOP

### **WARNING**

- **DISCONNECT** power supply cord from the outlet before servicing.
- **Replace** all panels and parts before operating.
- **RECONNECT** all grounding devices.
  - Failure to do so can result in severe personal injury, death or electrical shock.

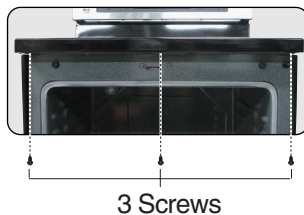
### CERAMIC GLASS COOKTOP REMOVAL

#### Step. 1

Unplug the cord or disconnect power.

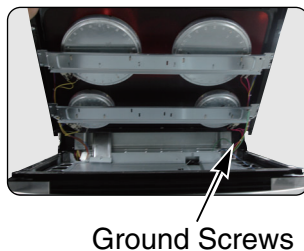
#### Step. 2

Open oven door and remove the 3 screws located at the front of the cook-top, then close the door.



#### Step. 3

Lift up the cooktop front and remove the ground screw securing ground wire.



#### Step. 4

Slightly lift up and pull up the cook-top and then unplug the 2 connectors at the back by squeezing side tabs.



#### Step. 5

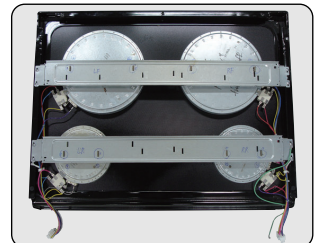
Protect the cooktop surface and turn the assembly over.



#### Step. 6

To remove the surface elements

- Remove the wires from the element and limiter terminals.
- Remove the element bracket screw (shown above) for the element you are servicing.
- Carefully lift the bottom of the bracket just far enough to remove the element.



**REASSEMBLY NOTE:** When you reinstall the element make sure that the wires are inserted into the correct tap then reinstall the bracket screw to secure it to the cooktop.

# COMPONENT ACCESS

## REMOVING THE DOOR LATCH & DOOR SWITCH

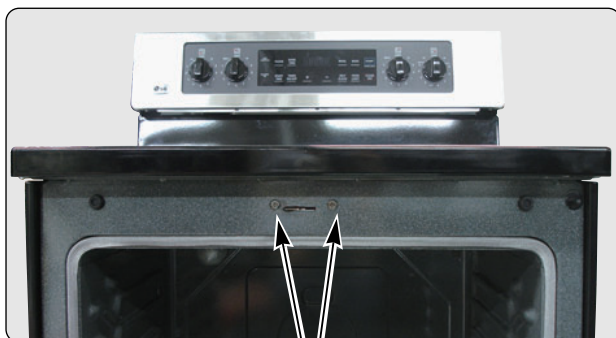
### **⚠ WARNING**

- **DISCONNECT** power supply cord from the outlet before servicing.
- **Replace** all panels and parts before operating.
- **RECONNECT** all grounding devices.
  - Failure to do so can result in severe personal injury, death or electrical shock.

### **⚠ CAUTION**

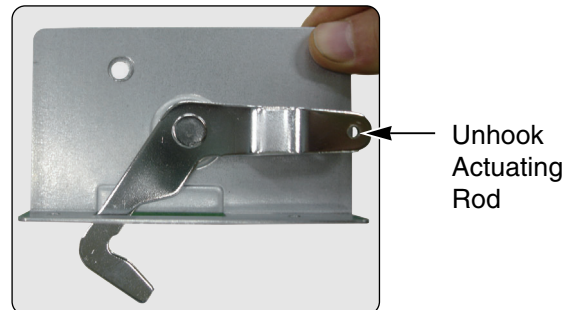
- **Be careful** when you work on the electric range handling the sheet metal part.
  - Sharp edge may be present and you can cut yourself.

1. Turn off the electrical supply going to the range.
2. Open the oven door.
3. Raise the cooktop (see page 3-4 for the procedure).
4. To remove the door latch:
  - a) Remove the two screws from the door latch and remove the latch.

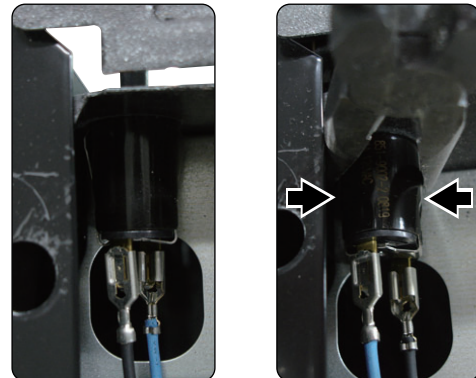


2 Screws

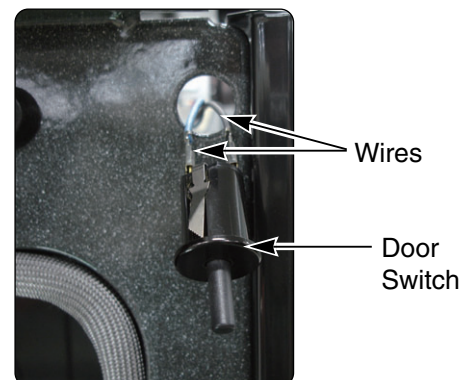
- b) Remove the door latch from the burner box and unhook the actuating rod.



5. To remove the door switch:
  - a) If not already done, raise the cooktop (see page 3-4 for the procedure).
  - b) Remove the door switch from the range. To do this, squeeze tabs and use a ratchet extension or a small socket, and tap it out of the hole with a hammer.



- c) Disconnect the wires from the terminals.



# COMPONENT ACCESS

## REMOVING THE BROIL ELEMENT

### **WARNING**

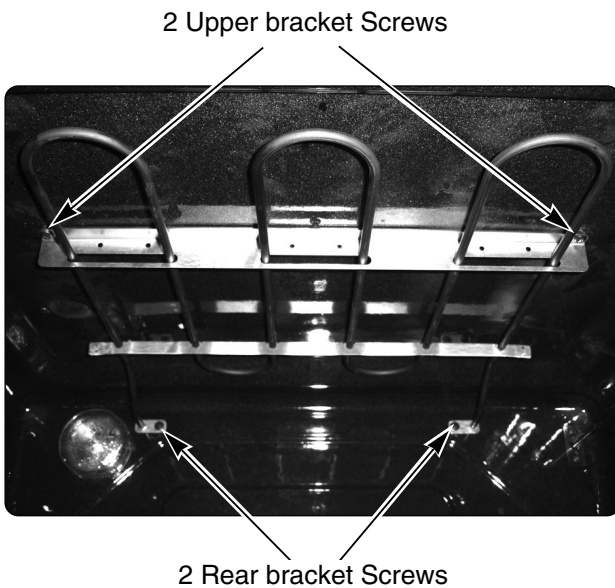
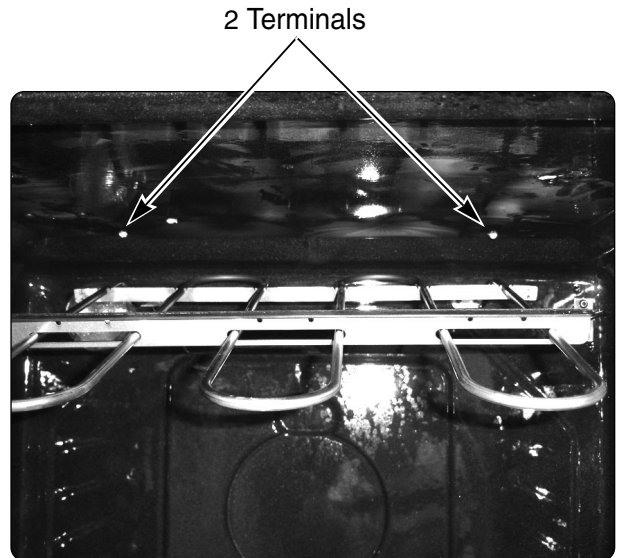
- **DISCONNECT** power supply cord from the outlet before servicing.
- **Replace** all panels and parts before operating.
- **RECONNECT** all grounding devices.
  - Failure to do so can result in severe personal injury, death or electrical shock.

### **CAUTION**

- **Be careful** when you work on the electric range handling the sheet metal part.
  - Sharp edge may be present and you can cut yourself.

1. Turn off the electrical supply going to the range.
2. Open the oven door and remove the racks from inside the oven.
3. **To remove the broil element:**
  - a) Remove the 4 screws from the front and rear brackets.

- b) Pull the element forward so that you can access the terminals and disconnect the wires.



# COMPONENT ACCESS

## REMOVING THE EXPOSED BAKE ELEMENT

### **⚠ WARNING**

- **DISCONNECT** power supply cord from the outlet before servicing.
- **Replace** all panels and parts before operating.
- **RECONNECT** all grounding devices.
  - Failure to do so can result in severe personal injury, death or electrical shock.

### **⚠ CAUTION**

- **Be careful** when you work on the electric range handling the sheet metal part.
  - Sharp edge may be present and you can cut yourself.

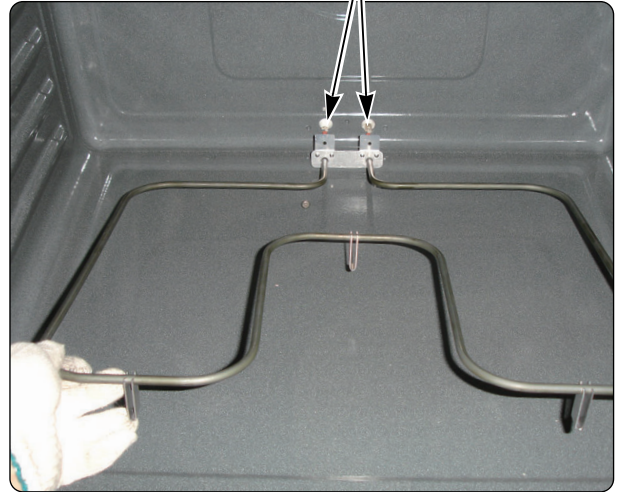
1. Turn off the electrical supply going to the range.
2. Open the oven door and remove the racks from inside the oven.
3. To remove the bake element:
  - a) Remove the 2 screws from the rear brackets.

2 Rear bracket Screws



- b) Pull the element forward so that you can access the terminals and disconnect the wires.

2 Terminals



# COMPONENT ACCESS

## REMOVING THE OVEN LIGHT & SOCKET ASSEMBLY

### ⚠ WARNING

- **DISCONNECT** power supply cord from the outlet before servicing.
- **Replace all panels and parts before operating.**
- **RECONNECT** all grounding devices.
  - Failure to do so can result in severe personal injury, death or electrical shock.

### ⚠ CAUTION

- **Be careful when you work on the electric range handling the sheet metal part.**
  - Sharp edge may be present and you can cut yourself.

#### To replace:

1. Unplug range or disconnect power.
2. Turn the glass bulb cover in the back of the oven counterclockwise to remove.
3. Turn bulb counterclockwise to remove from socket.
4. Replace bulb and bulb cover by turning clockwise.

Glass cover & Bulb



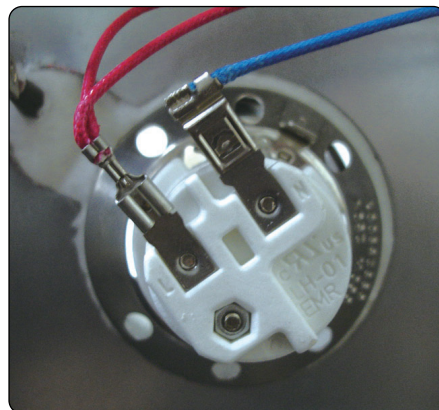
### ⚠ CAUTION

- **Be careful not to scratch or chip the oven liner paint when you remove the oven light socket in the next step.**

5. Use a screwdriver and bend the clips on the oven light socket away from the edges of the liner hole, and pull the socket out of the liner.  
NOTE: If it is too difficult to remove the socket from the front of the oven, you will have to push the socket out from the back of the unit.



5. Disconnect the wires from the socket terminals.



<Viewed From Rear Panel>

# COMPONENT ACCESS

## REMOVING THE LATCH DRIVE ASSEMBLY

### **⚠ WARNING**

- **DISCONNECT** power supply cord from the outlet before servicing.
- **Replace** all panels and parts before operating.
- **RECONNECT** all grounding devices.
  - Failure to do so can result in severe personal injury, death or electrical shock.

### **⚠ CAUTION**

- **Be careful** when you work on the electric range handling the sheet metal part.
  - Sharp edge may be present and you can cut yourself.

1. Turn off the electrical supply going to the range.
2. Pull the range away from the wall so that you can access the rear panel.
3. Remove the back cover & control cover (see step 3~4 on page 3-2).
4. Disconnect the wires from the latch drive motor and switch.
5. Remove the two mounting screws from the latch drive.



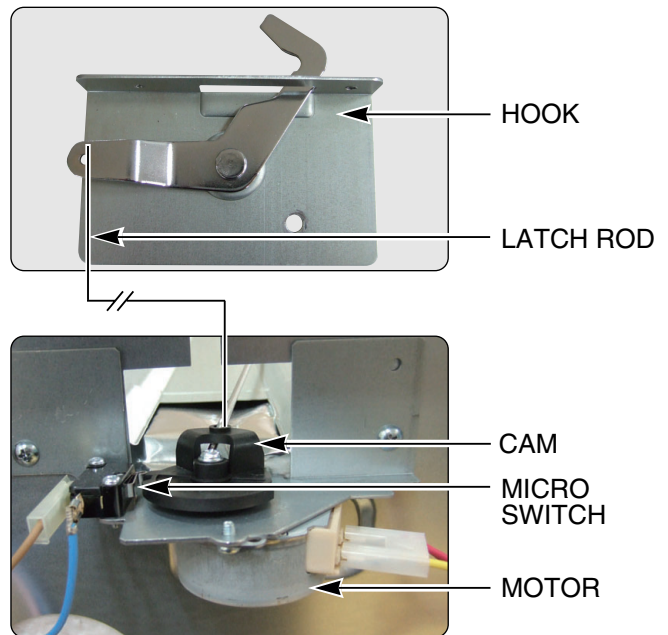
6. Unhook the Latch rod from the cam.

### DOOR LOCKING MECHANISM

The door lock assembly is located at the back side of range.

The structural elements are as below.

1. When the oven control is programmed and started for the Self clean and Lock out mode, PCB (power control board) chip operates the motor.



2. The cam moves the door hook connected to latch rod from unlocked position to locked position (from locked position to unlocked position).
3. The cam activates the micro switch that causes the motor to stop.
4. The locked status remains until the range temperature drops to approximately 500F after end of the self clean or lock out feature is reactivated. The motor operates to unlock door at that time.

# COMPONENT ACCESS

## REMOVING THE OVEN TEMPERATURE SENSORS

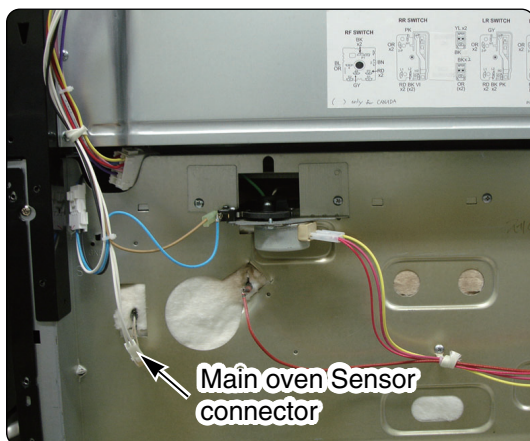
### **⚠ WARNING**

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- **Replace all panels and parts before operating.**
- **RECONNECT** all grounding devices.
  - Failure to do so can result in severe personal injury, death or electrical shock.

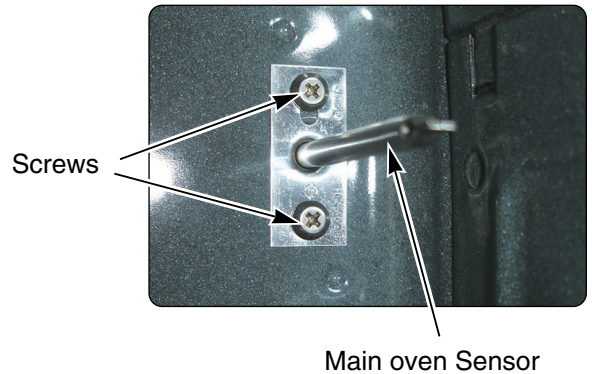
### **⚠ CAUTION**

- **Be careful when you work on the electric range handling the sheet metal part.**
  - Sharp edge may be present and you can cut yourself.

1. Turn off the electrical supply going to the range.
2. Open the oven door and remove the racks from the oven.
3. Pull the range away from the wall so that you can access the rear panel.
4. Remove the 17 screws from the rear panel and remove the panel (see step 3 on page 3-2).



5. To remove an oven temperature sensor, disconnect the connector from the main harness and remove the 2 mounting screws in oven cavity.



# COMPONENT ACCESS

## REMOVING THE SURGE FILTER ASSEMBLY

### ⚠ WARNING

- **DISCONNECT** power supply cord from the outlet before servicing.
- **Replace** all panels and parts before operating.
- **RECONNECT** all grounding devices.
  - Failure to do so can result in severe personal injury, death or electrical shock.

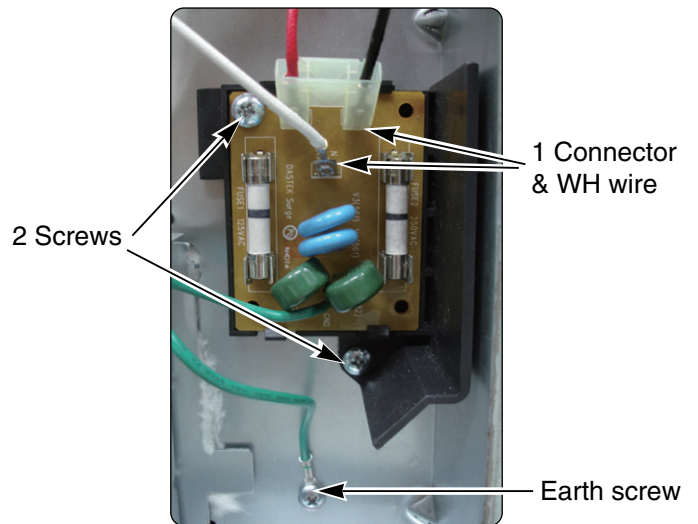
### ⚠ CAUTION

- **Be careful** when you work on the electric range handling the sheet metal part.
  - Sharp edge may be present and you can cut yourself.

1. Turn off the electrical supply going to the range.
2. Remove the 19 screws from the rear panel and remove the back cover. (see step 3~4 on page 3-2)

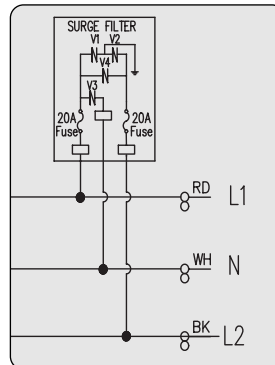
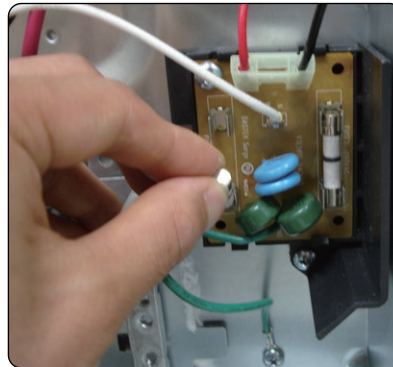


3. To remove the surge filter assembly
  - a) Disconnect 1 connector and WH wire.
  - b) Remove the earth screws.
  - c) Remove the 2 screws on the supporter.



- d) If you find out broken fuse, only replace the fuse except process a), b).

**Note : Fuse capacity 250V 20A**



# COMPONENT ACCESS

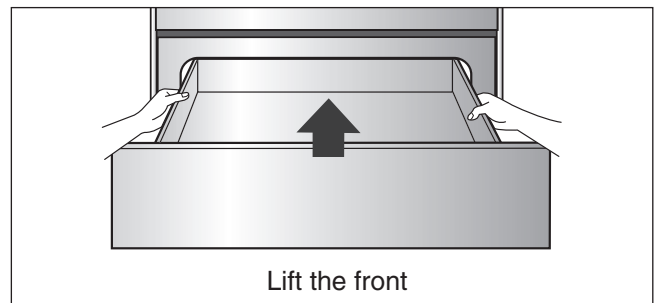
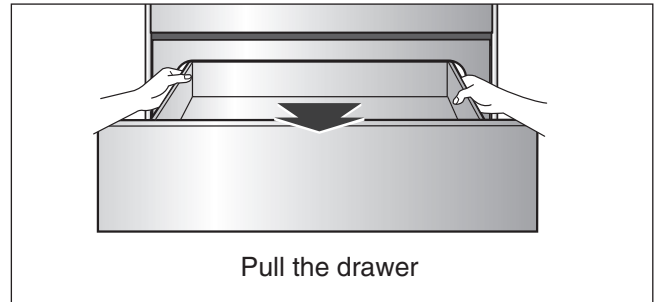
## REMOVING THE STORAGE DRAWER

### **WARNING**

- Turn **POWER OFF** before removing the **Warming Drawer**.
- Failure to do so can result in severe personal injury, death or electrical shock.

#### To Remove Storage Drawer :

1. CAUTION – Turn power OFF before removing the storage drawer.
2. Pull the drawer out until it stops.
3. Lift the front of the drawer until the stops clear the guides.
4. Remove the drawer.



#### To Remove Storage Drawer :

1. Place the drawer rails on the guides.
2. Push the drawer back until it stops.
3. Lift the front of the drawer and push back until the stops clear the guides.
4. Lower the front of the drawer and push back until it closes.

# COMPONENT ACCESS

## REMOVING & REPLACING THE LIFT-OFF OVEN DOOR

### **CAUTION**

- Be careful when removing and lifting the door.
- **DO NOT lift the door by the handle.**
  - Failure to do so can result in personal injury as the door is very heavy.

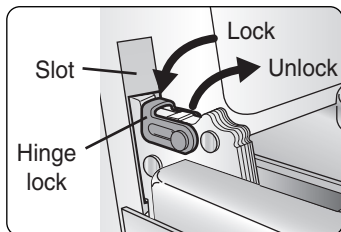
To remove the door:

#### Step. 1

Fully open the door.

#### Step. 2

Pull the hinge locks down toward the door frame (Fig.1), to the unlocked position.



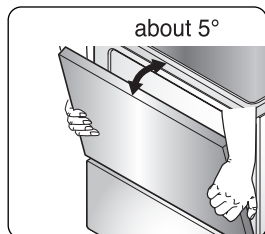
<Fig.1>

#### Step. 3

Firmly grasp both sides of the door at the top.

#### Step. 4

Close door to the door removal position, which is approximately 5 degrees (refer to the Fig.2).



<Fig.2>

#### Step. 5

Lift door up and out until the hinge arm is clear of the slot.

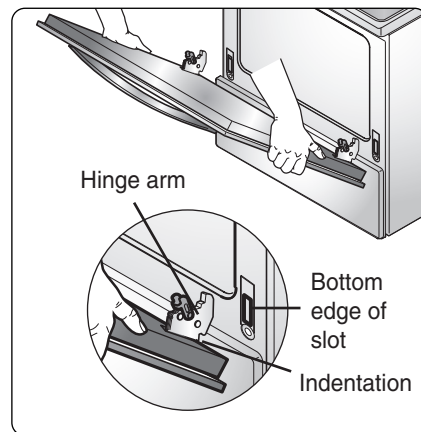
To replace the door:

#### Step. 1

Firmly grasp both sides of the door at the top.

#### Step. 2

With the door at the same angle as the removal position, seat the indentation of the hinge arm into the bottom edge of the hinge slot. The notch in the hinge arm must be fully seated into the bottom of the slot.

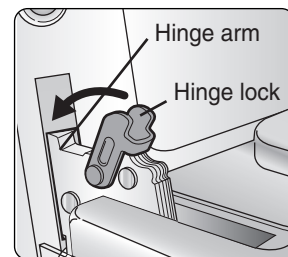


#### Step. 3

Fully open the door. If the door will not fully open, the indentation is not seated correctly in the bottom edge of the slot.

#### Step. 4

Push the hinge locks up against the front frame of the oven cavity to the locked position.



#### Step. 5

Close the oven door.

# COMPONENT ACCESS

## REMOVING THE OVEN DOOR HANDLE & GLASS

### **⚠ WARNING**

- **DISCONNECT** power supply cord from the outlet before servicing.
- **Replace all panels and parts before operating.**
- **RECONNECT** all grounding devices.
  - Failure to do so can result in severe personal injury, death or electrical shock.

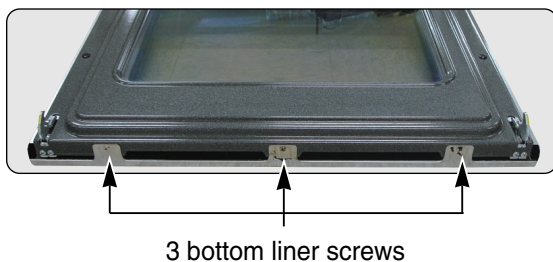
### **⚠ CAUTION**

- **Be careful when you work on the electric range handling the sheet metal part.**
  - Sharp edge may be present and you can cut yourself.

1. Remove the oven door from the range (see page 3-13 for the procedure).
2. Place the oven door on a padded work surface with the front glass facing down.
3. Remove the 4 top door screws.



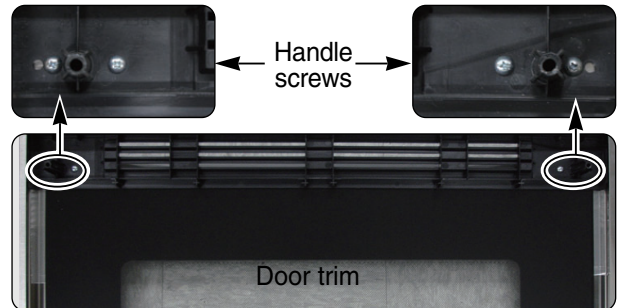
4. Remove the three bottom screws from the door liner.



5. Lift the liner assembly off the front glass and set it aside.

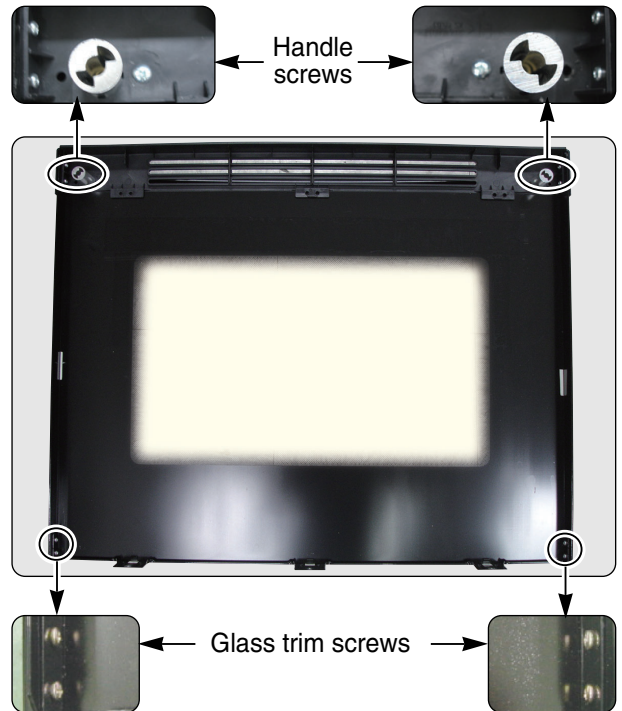
LGE Internal Use Only

6. To remove the door handle & trim (for stainless model)
  - a) Remove the 4 door handle screws and lift the door handle off door trim and slide the door handle.

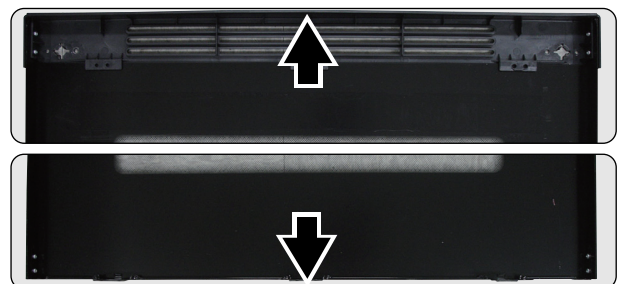


7. To remove the door handle trim & glass (for white / Black model)

- a) Remove the handle and glass trim screws



- b) Lift the door handle off door trim



- c) Slide up the door trim and pull the glass trim forward

# COMPONENT ACCESS

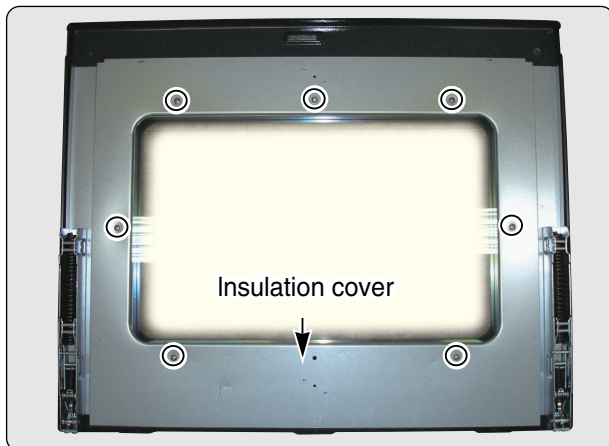
## 8. To remove a hinge hanger assembly:

- Remove the 2 top liner screws (see step 3 on page 3-14).
- Place the door liner assembly on a padded work surface with the hinge hangers over the edge.
- Remove the two bottom screws.
- Lift the hinge hanger out of the door liner slot.



## 9. To remove the oven door glass assembly:

- Remove both hinge hangers (see step 8).
- Remove the 7 screws.
- Lift the insulation cover off the door liner.



- Lift the inner oven door glass and bracket assembly out of the door liner.



**REASSEMBLY NOTE:** When you reinstall the insulation around the oven door glass, make sure that the insulation is not visible in the glass after the door is reassembled.

# COMPONENT ACCESS

## REMOVING THE OVEN DOOR GASKET

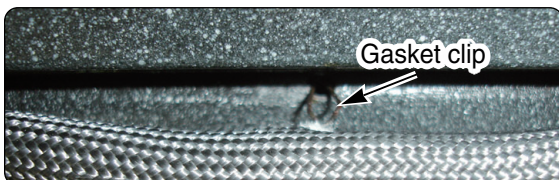
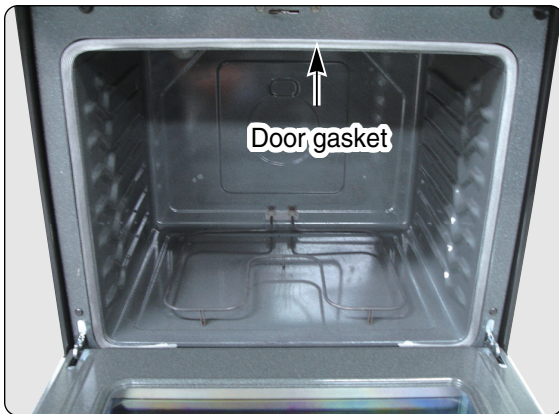
### **⚠ WARNING**

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- **RECONNECT** all grounding devices.
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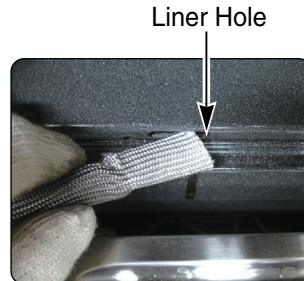
### **⚠ CAUTION**

- **Be careful when you work on the electric range handling the sheet metal part.**
  - Sharp edge may be present and you can cut yourself.

1. Open the oven door to its fully down position.
2. Pull the oven door gasket clips out of the liner holes until all of the clips are removed.



3. Pull the ends of the gasket out of the liner holes.



**REASSEMBLY NOTE:** When you install the new gasket, make sure that all of the clips are seated in their liner holes, and that the ends of the gasket are pushed fully into their holes. Use the pointed end of a pencil to push the gasket ends into the holes.

# COMPONENT ACCESS

## REMOVING A SIDE PANEL

### **⚠ WARNING**

- **DISCONNECT** power supply cord from the outlet before servicing.
- **Replace all panels and parts before operating.**
- **RECONNECT** all grounding devices.
  - Failure to do so can result in severe personal injury, death or electrical shock.

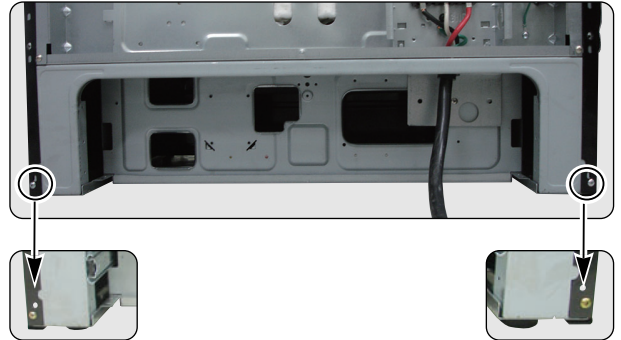
### **⚠ CAUTION**

- **Be careful when you work on the electric range handling the sheet metal part.**
  - Sharp edge may be present and you can cut yourself.

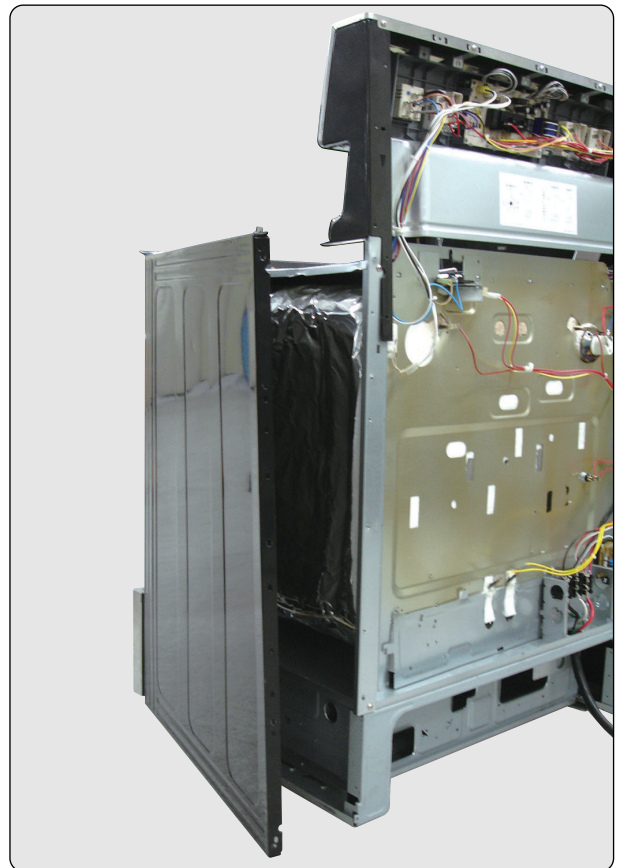
1. Turn off the electrical supply going to the range.
2. Remove the oven door from the range (see page 3-13 for the procedure).
3. Pull the range away from the wall so you can access the back of the unit.
4. Remove the 17 screws from the rear panel and remove the panel (see step 3~4 on page 3-2).
5. Raise the cooktop (see page 3-4 for the procedure). NOTE: Position the side of the cooktop so that it does not rest on the side panel that you are removing.
6. Remove the 2 screws from the top rear of the side panel.



7. Remove the 2 screws from the left or right side panel.



8. Pull the back of the side panel out from the range approximately 10°.



9. Push forward and remove the side panel.

# COMPONENT TEST

Before testing any of components, perform the following checks:

**NOTE:**

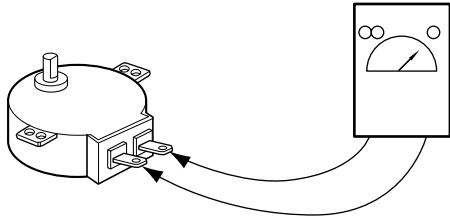
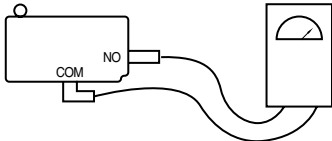


1. The most common cause for control failure is corrosion on connectors.  
Therefore, disconnecting and reconnecting wires will be necessary throughout test procedures
2. ALL units in the first few days of use should be checked for mis-wiring or loose connections

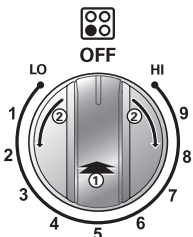
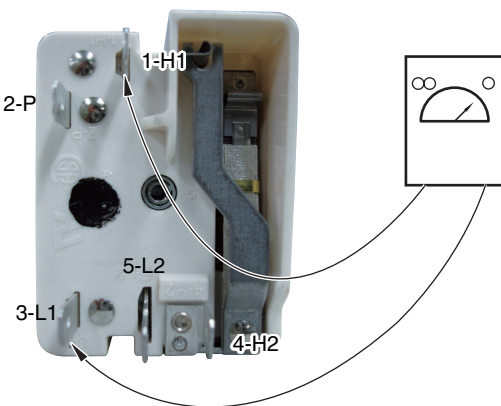
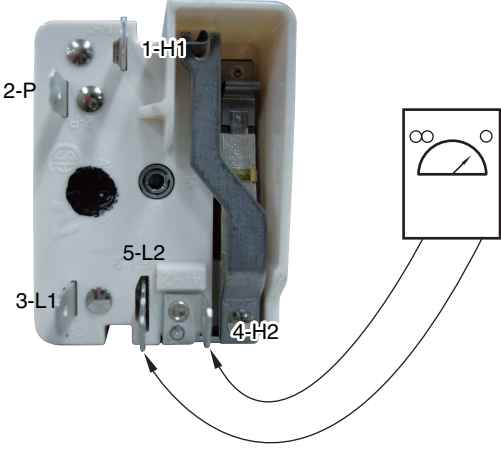
1. All/tests/checks should be made with a VOM or DVM having a sensitivity of 20,000 ohms per-volt DC, or greater.
2. Check all connections before replacing components, looking for broken or loose wires, failed terminals, or wires not pressed into connectors far enough.
3. Resistance check must be made with power cord unplugged from outlet, and with wiring harness or connectors disconnected.

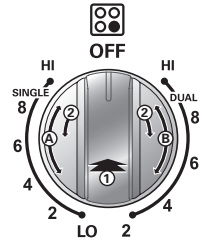
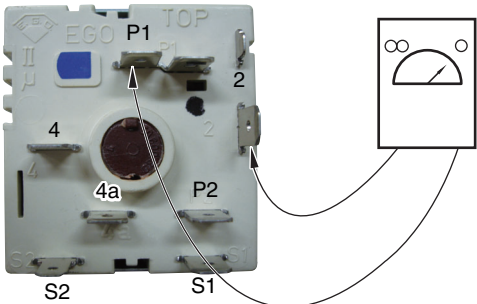
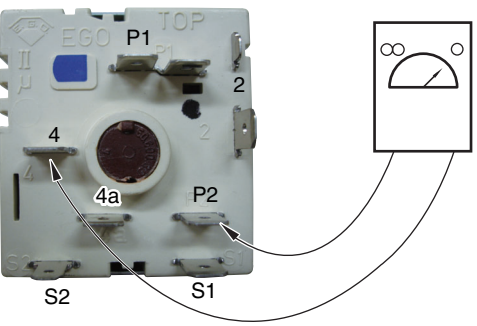
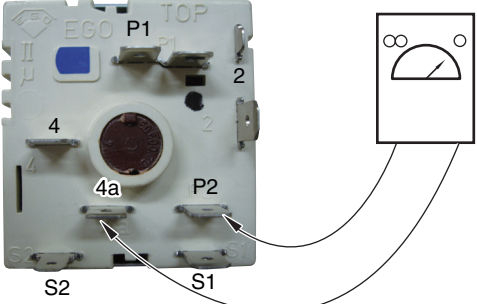
**⚠ WARNING**

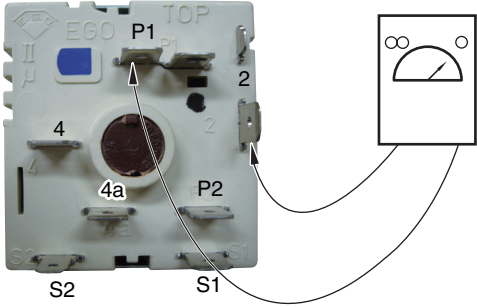
- Disconnect power supply cord from the outlet before servicing
- Replace all panels and parts before operating
- Reconnect all grounding devices after servicing
- Failure to do so can result in death or electrical shock

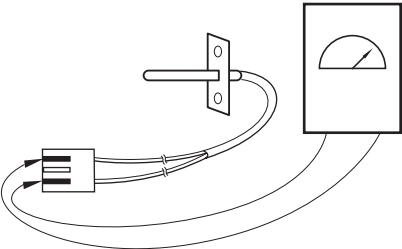
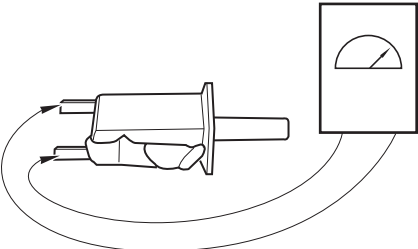


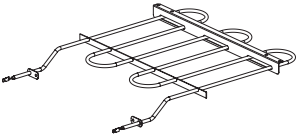
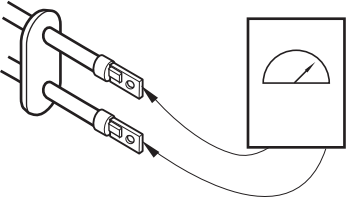
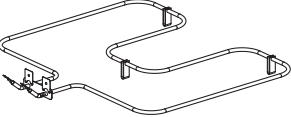
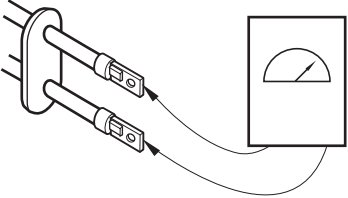
**NOTE: Below  $\Omega$  value were tested at room temperature (77F/25°C)**

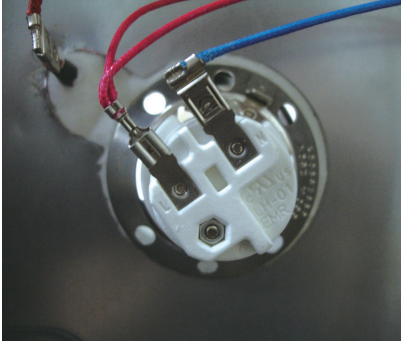
Components	Test procedures	Results	
Door locking Motor	1. Refer to page 3-9 for the servicing procedure. 2. Measure the resistance (Multiple meter scale: R x 1000). 	Normal: Approximately $2.6\text{ k}\Omega \pm 10\%$ If not replace Abnormal: Infinite(open) below $5\Omega$ (shorted)	
Micro Switch (normally open type)	1. Refer to page 3-9 for the servicing procedure. 2. Measure the resistance (Multiple meter scale: R x 1000). 	Door latch open	Door latch Locked
		 Continuity	 Infinite
<p>NOTE: After checking for the continuity of switch, make sure that they are connected correctly</p>			

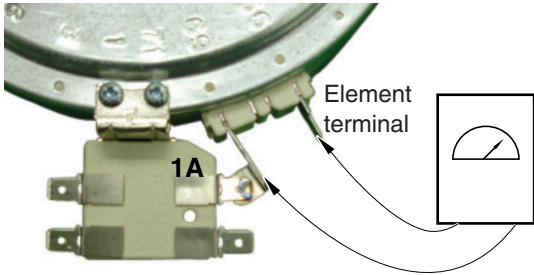
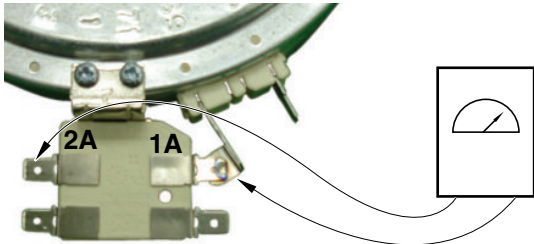
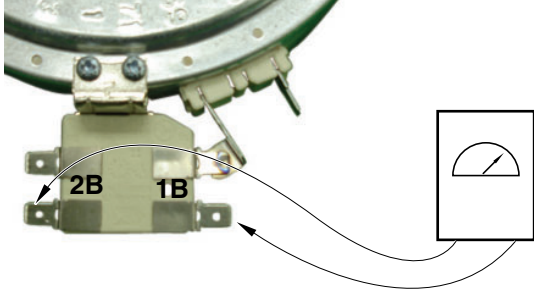
Components	Test procedures	Results																	
<p>Infinite switch (Single units): LF switch LR switch RR switch</p> 	<ol style="list-style-type: none"> <li>1. Refer to page 3-3 for the servicing procedure.</li> <li>2. Set the Multiple meter scale to the R x 1000.</li> <li>3. Disconnect all wires from infinite switch.</li> <li>4. When turn on/turn off the knob, position measure the resistance between L1 to H1.</li> </ol>  <ol style="list-style-type: none"> <li>5. When turn on/turn off the knob, position measure the resistance between L2 to H2.</li> </ol> 																		
<table border="1"> <thead> <tr> <th></th> <th>Infinite Switch</th> <th>Knob Position</th> <th>Results</th> <th></th> </tr> </thead> <tbody> <tr> <td rowspan="4">Single type</td> <td rowspan="2">LF LR RR</td> <td rowspan="2">Off</td> <td>L1 - H1</td> <td><math>\infty</math></td> </tr> <tr> <td>L2 - H2</td> <td><math>\infty</math></td> </tr> <tr> <td rowspan="2">On</td> <td>L1 - H1</td> <td>short</td> </tr> <tr> <td>L2 - H2</td> <td>short</td> </tr> </tbody> </table>		Infinite Switch	Knob Position	Results		Single type	LF LR RR	Off	L1 - H1	$\infty$	L2 - H2	$\infty$	On	L1 - H1	short	L2 - H2	short		
	Infinite Switch	Knob Position	Results																
Single type	LF LR RR	Off	L1 - H1	$\infty$															
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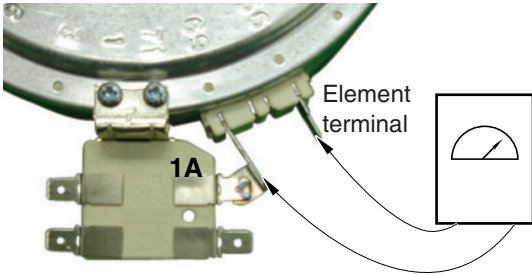
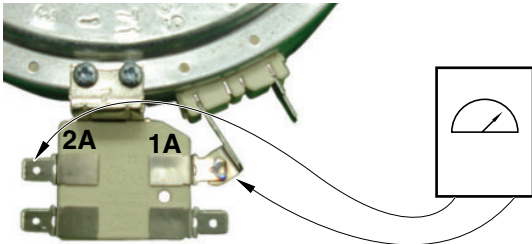
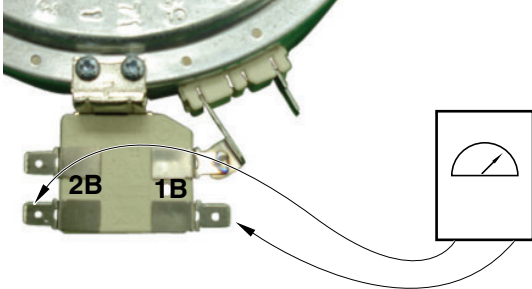
Components	Test procedures	Results
<p>Infinite switch (Double units): RF switch</p> 	<ol style="list-style-type: none"> <li>1. Refer to page 3-3 for the servicing procedure.</li> <li>2. Set the Multiple meter scale to the R x 1000.</li> <li>3. Disconnect all wires from infinite switch.</li> <li>4. Push in and turn left knob to check the single type.</li> <li>5. When turn on/turn off the knob, position measure the resistance between P1 to 2.</li> </ol>  <ol style="list-style-type: none"> <li>6. When turn on/turn off the knob, position measure the resistance between P2 to 4.</li> </ol>  	

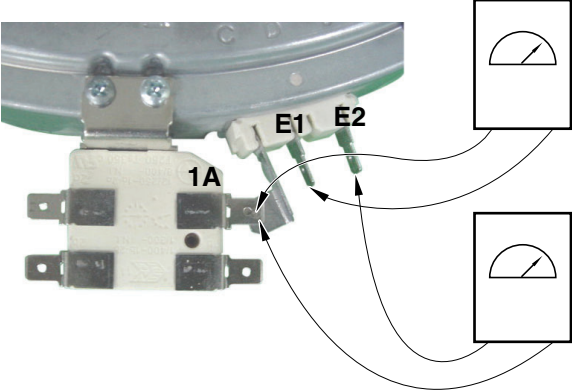
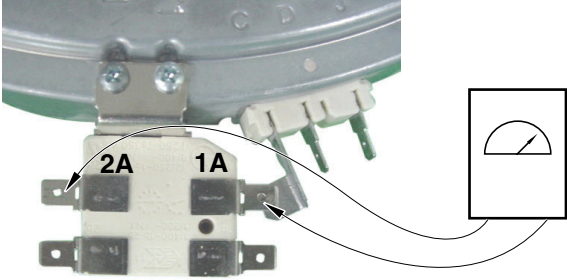
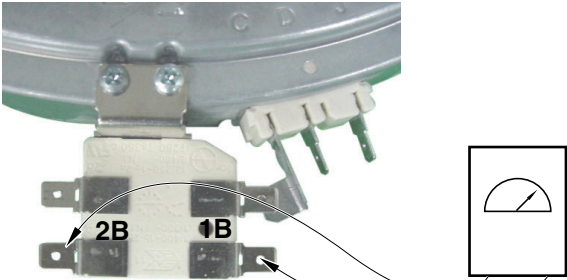
Components	Test procedures	Results																																													
Infinite switch (Double units): RF switch	<p>7. When turn on/turn off the knob, position measure the resistance between 4 to 4a.</p>  <p>8. After check the single type, check the dual type at the same procedure.</p>																																														
<table border="1"> <thead> <tr> <th data-bbox="395 1025 544 1059"></th> <th data-bbox="544 1025 703 1059">Infinite Switch</th> <th data-bbox="703 1025 884 1059">Knob Position</th> <th colspan="2" data-bbox="884 1025 1193 1059">Results</th> </tr> </thead> <tbody> <tr> <td data-bbox="395 1059 544 1346" rowspan="8">Dual type (single)</td> <td data-bbox="544 1059 703 1346" rowspan="8">RF</td> <td data-bbox="703 1059 884 1205" rowspan="4">Off</td> <td data-bbox="884 1059 1043 1099">P1 - 2</td> <td data-bbox="1043 1059 1193 1099">∞</td> </tr> <tr> <td data-bbox="884 1099 1043 1140">P2 - 4</td> <td data-bbox="1043 1099 1193 1140">∞</td> </tr> <tr> <td data-bbox="884 1140 1043 1180">P2 - 4a</td> <td data-bbox="1043 1140 1193 1180">∞</td> </tr> <tr> <td data-bbox="884 1180 1043 1220">4 - 4a</td> <td data-bbox="1043 1180 1193 1220">∞</td> </tr> <tr> <td data-bbox="703 1205 884 1346" rowspan="4">On</td> <td data-bbox="884 1220 1043 1261">P1 - 2</td> <td data-bbox="1043 1220 1193 1261">short</td> </tr> <tr> <td data-bbox="884 1261 1043 1301">P2 - 4</td> <td data-bbox="1043 1261 1193 1301">short</td> </tr> <tr> <td data-bbox="884 1301 1043 1341">P2 - 4a</td> <td data-bbox="1043 1301 1193 1341">∞</td> </tr> <tr> <td data-bbox="884 1341 1043 1382">4 - 4a</td> <td data-bbox="1043 1341 1193 1382">∞</td> </tr> <tr> <td data-bbox="395 1346 544 1630" rowspan="8">Dual type (dual)</td> <td data-bbox="544 1346 703 1630" rowspan="8">RF</td> <td data-bbox="703 1346 884 1491" rowspan="4">Off</td> <td data-bbox="884 1346 1043 1386">P1 - 2</td> <td data-bbox="1043 1346 1193 1386">∞</td> </tr> <tr> <td data-bbox="884 1386 1043 1426">P2 - 4</td> <td data-bbox="1043 1386 1193 1426">∞</td> </tr> <tr> <td data-bbox="884 1426 1043 1467">P2 - 4a</td> <td data-bbox="1043 1426 1193 1467">∞</td> </tr> <tr> <td data-bbox="884 1467 1043 1507">4 - 4a</td> <td data-bbox="1043 1467 1193 1507">∞</td> </tr> <tr> <td data-bbox="703 1491 884 1630" rowspan="4">On</td> <td data-bbox="884 1507 1043 1547">P1 - 2</td> <td data-bbox="1043 1507 1193 1547">short</td> </tr> <tr> <td data-bbox="884 1547 1043 1588">P2 - 4</td> <td data-bbox="1043 1547 1193 1588">short</td> </tr> <tr> <td data-bbox="884 1588 1043 1628">P2 - 4a</td> <td data-bbox="1043 1588 1193 1628">short</td> </tr> <tr> <td data-bbox="884 1628 1043 1668">4 - 4a</td> <td data-bbox="1043 1628 1193 1668">short</td> </tr> </tbody> </table>		Infinite Switch	Knob Position	Results		Dual type (single)	RF	Off	P1 - 2	∞	P2 - 4	∞	P2 - 4a	∞	4 - 4a	∞	On	P1 - 2	short	P2 - 4	short	P2 - 4a	∞	4 - 4a	∞	Dual type (dual)	RF	Off	P1 - 2	∞	P2 - 4	∞	P2 - 4a	∞	4 - 4a	∞	On	P1 - 2	short	P2 - 4	short	P2 - 4a	short	4 - 4a	short		
	Infinite Switch	Knob Position	Results																																												
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Dual type (dual)	RF	Off	P1 - 2	∞																																											
			P2 - 4	∞																																											
			P2 - 4a	∞																																											
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			P2 - 4	short																																											
			P2 - 4a	short																																											
			4 - 4a	short																																											

Components	Test procedures	Results	
Oven Sensor	1. Refer to page 3-10 for the servicing procedure. 2. Measure the resistance after cooling down (Multiple meter scale: R x 1000). 	Normal: Approximately $1.09\text{ k}\Omega \pm 10\%$ If not replace  <b>NOTE:</b> $\Omega$ Value was tested at room temperature (77F/25°C)	
<b>NOTE:</b> Oven sensor is so sensitive to temperature. Do test after cooling down sufficiently.			
Door switch	1. Refer to page 3-5 for the servicing procedure. 2. Measure the resistance after cooling down (Multiple meter scale: R x 1000). 	Door open	Door closed
		 Continuity	 Infinite
Broil element 	1. Refer to page 3-6 for the servicing procedure. 2. Measure the resistance after cooling down (Multiple meter scale: R x1). 	Normal: Approximately $19\ \Omega \pm 10\%$ If not replace  <b>NOTE:</b> $\Omega$ Value was tested at room temperature (77F/25°C) Be careful the element is sensitive to temperature.	
Bake element 	1. Refer to page 3-7 for the servicing procedure. 2. Measure the resistance after cooling down (Multiple meter scale: R x1). 	Normal: Approximately $24\ \Omega \pm 10\%$ If not replace  <b>NOTE:</b> $\Omega$ Value was tested at room temperature (77F/25°C) Be careful the element is sensitive to temperature.	

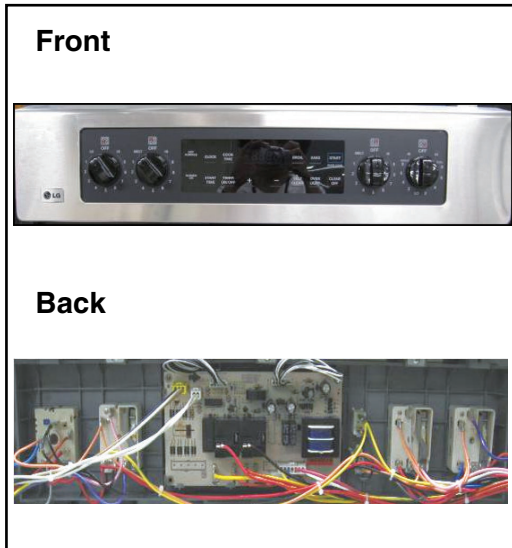
Components	Test procedures	Results
Oven lamp	<p>1. Measure the resistance after cooling down (Multiple meter scale: R x1).</p> 	<p>Normal: Below 5 Ω. If not replace</p>

Components	Test procedures	Results
<p><b>Single surface units:</b> Left Rear (LR) and Right Rear (RR) Element</p>	<p>1. Refer to page 3-4 for the servicing procedure.</p> <p>2. Set the Multiple meter scale to the R x 1.</p> <p>3. Disconnect wires from cook-top elements.</p> <p>4. Touch the ohmmeter test leads to the element terminal and 1A. The meter should indicate <math>46 \Omega \pm 10\%</math>.</p>  <p>5. Touch the ohmmeter test leads to limiter terminal 1A and 2A. The meter should indicate continuity (<math>0\Omega</math>).</p>  <p>6. Touch the ohmmeter test leads to limiter terminal 1B and 2B. With the temperature below <math>150^\circ\text{F}</math>, the meter should indicate an open circuit (infinite). With the temperature above <math>150^\circ\text{F}</math>, the meter should indicate continuity (<math>0\Omega</math>).</p> 	<p>Normal: Approximately <math>46 \Omega</math>, if not replaced</p> <p>Normal: continuity (below <math>0.5 \Omega</math>) If not replace</p> <p>Below <math>150^\circ\text{F}</math> → open circuit (infinite).</p> <p>Above <math>150^\circ\text{F}</math> → continuity (<math>0 \Omega</math>)</p>

Components	Test procedures	Results
<p><b>Single surface units:</b> Right Front (RF) Element</p>	<ol style="list-style-type: none"> <li>1. Refer to page 3-4 for the servicing procedure.</li> <li>2. Set the Multiple meter scale to the R x 1.</li> <li>3. Disconnect wires from cook-top elements.</li> <li>4. Touch the ohmmeter test leads to the element terminal and 1A. The meter should indicate <math>22\ \Omega \pm 10\%</math>.</li> </ol>  <ol style="list-style-type: none"> <li>5. Touch the ohmmeter test leads to limiter terminal 1A and 2A. The meter should indicate continuity (<math>0\ \Omega</math>).</li> </ol>  <ol style="list-style-type: none"> <li>6. Touch the ohmmeter test leads to limiter terminals 1B and 2B. With the temperature below <math>150^\circ\text{F}</math>, the meter should indicate an open circuit (infinite). With the temperature above <math>150^\circ\text{F}</math>, the meter should indicate continuity (<math>0\ \Omega</math>).</li> </ol> 	<p>Normal: Approximately <math>22\ \Omega</math>, If not replace</p> <p>Normal: continuity (below <math>0.5\ \Omega</math>) If not replace</p> <p>Below <math>150^\circ\text{F}</math> → open circuit (infinite).</p> <p>Above <math>150^\circ\text{F}</math> → continuity (<math>0\ \Omega</math>)</p>

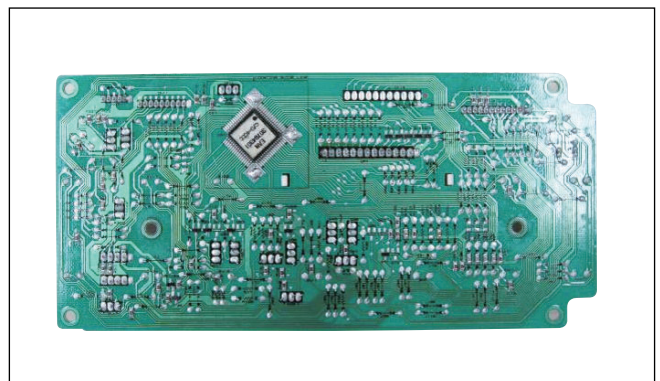
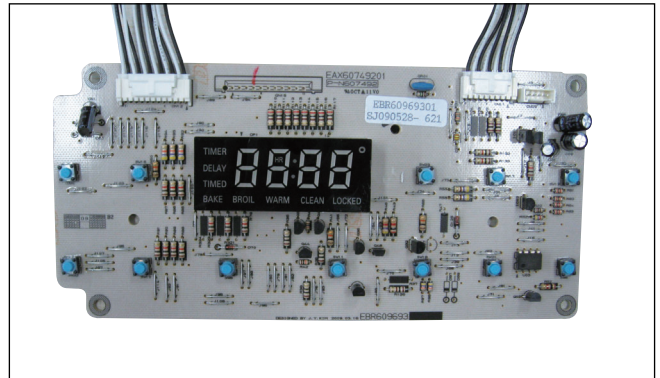
Components	Test procedures	Results
<p><b>Dual surface units:</b> Left Front (LF) Element</p>	<ol style="list-style-type: none"> <li>Refer to page 3-4 for the servicing procedure.</li> <li>Set the Multiple meter scale to the R x 1.</li> <li>Disconnect wires from cook-top elements.</li> <li>Touch the ohmmeter test leads to the (E1 &amp; 1A) and (E2 &amp; 1A) the meter should indicate : <ul style="list-style-type: none"> <li>- (E1 &amp; 1A) → 40 Ω ± 10%</li> <li>- (E2 &amp; 1A) → 35 Ω ± 10%</li> </ul>  </li> <li>Touch the ohmmeter test leads to limiter terminal 1A and 2A. The meter should indicate continuity (0 Ω).  </li> <li>Touch the ohmmeter test leads to limiter terminal 1B and 2B. <p>With the temperature below 150°F, the meter should indicate an open circuit (infinite). With the temperature above 150°F, the meter should indicate continuity (0 Ω).</p>  </li> </ol>	<p>Normal: Approximately 40 Ω</p> <p>Normal: Approximately 35 Ω</p> <p>Normal: continuity (below 0.5 Ω) If not replace</p> <p>Below 150°F → open circuit (infinite).</p> <p>Above 150°F → continuity (0 Ω)</p>

# COMPOSITION OF CONTROL

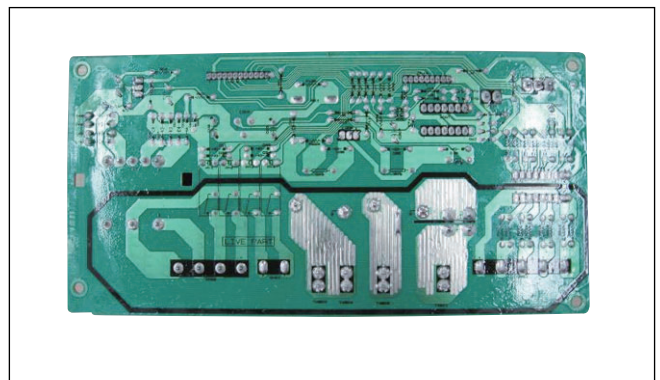
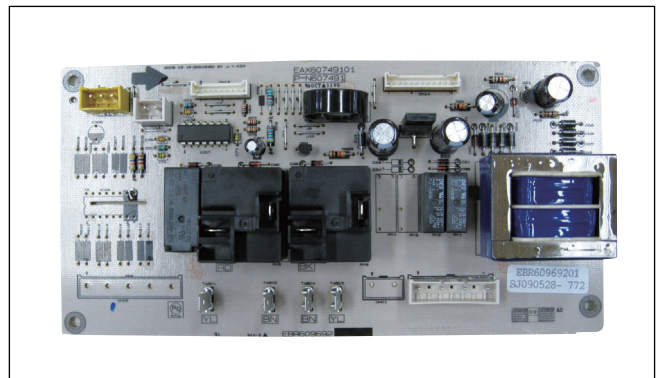


**Controller assembly**

**Main PCB ( P/N : EBR60969301 )**



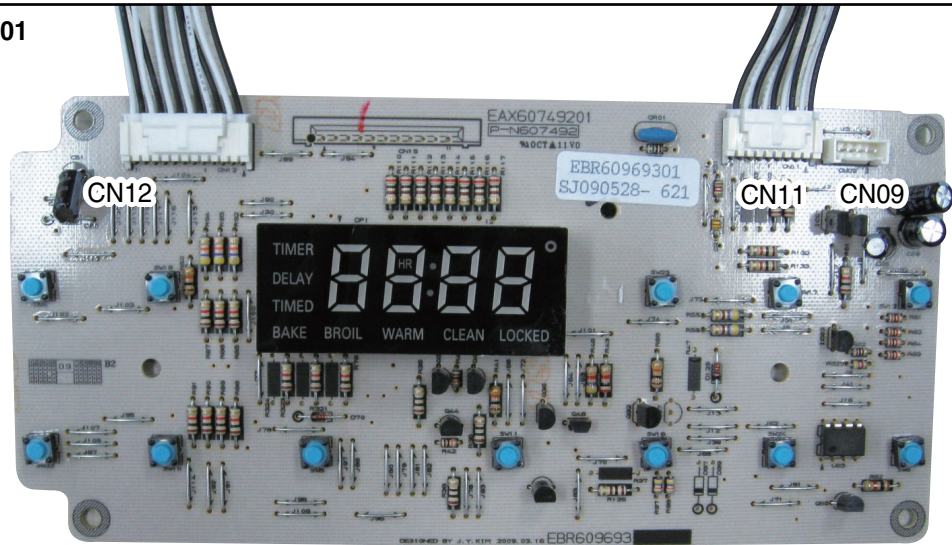
**Power PCB ( P/N : EBR60969201 )**



# COMPOSITION OF CONTROL

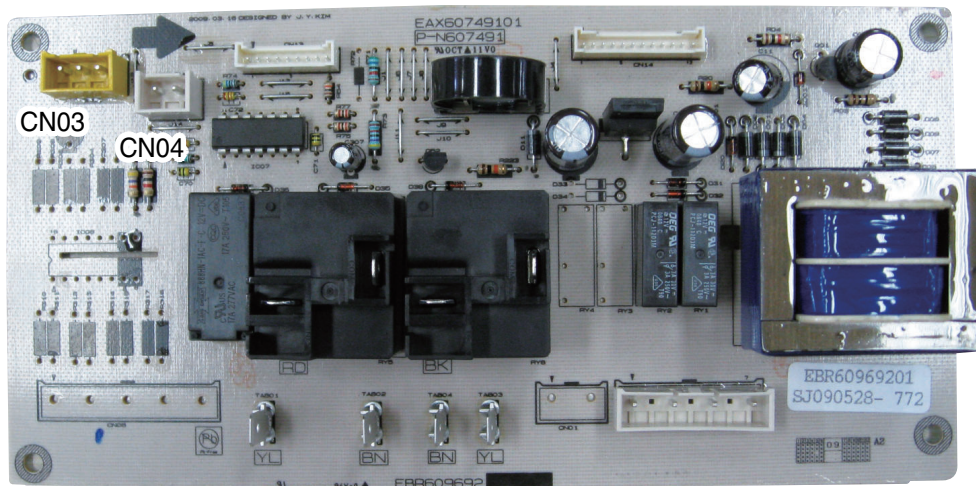
## Main PCB

P/N : EBR60969301

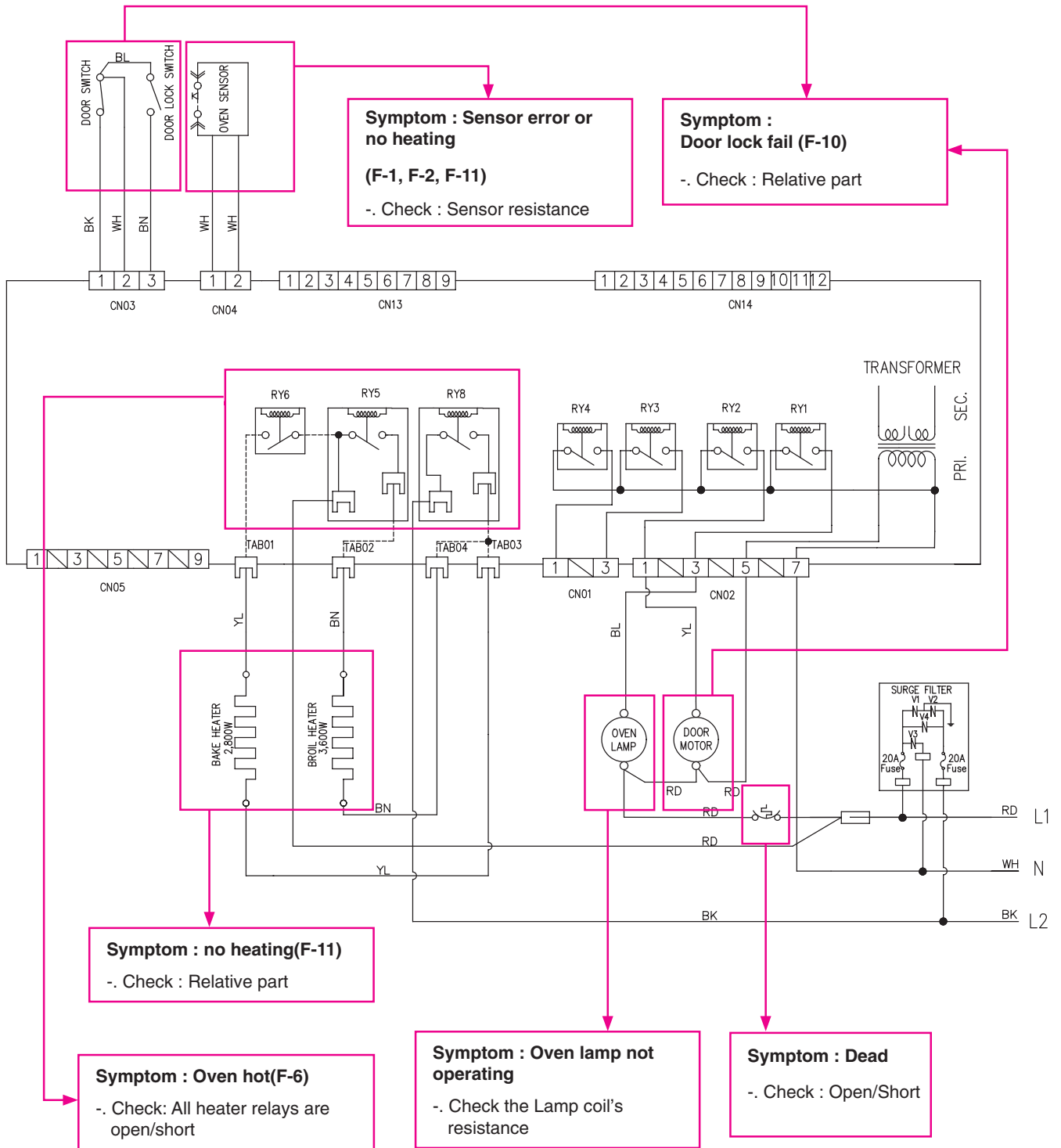


## Power PCB

P/N : EBR60969201



# DIAGNOSIS THROUGH SCHEMATIC



# CHECK THE FAILURE CODE (F-code)

## ■ When the oven has some failure on cooking

- Cancel the cook.
- In case of failure , F-code will not display.
- It memorizes F-code logs in EEPROM.

## ■ Check the failure code as follow these steps.

1. press the “clear” key.
2. press the “BAKE” and “BROIL” keys at the same time.

If the oven has some failures, the Oven will show the failure code like FIG. 1  
It shows the type of F-code and times of occurred failure alternately for two seconds each.

### Type of F-Code



2 seconds

### Times of the occurred failure



2 seconds

< FIG. 1 >

If the oven do not has any failure, the Oven will display it like FIG. 2.



< FIG. 2 >

## NOTE:

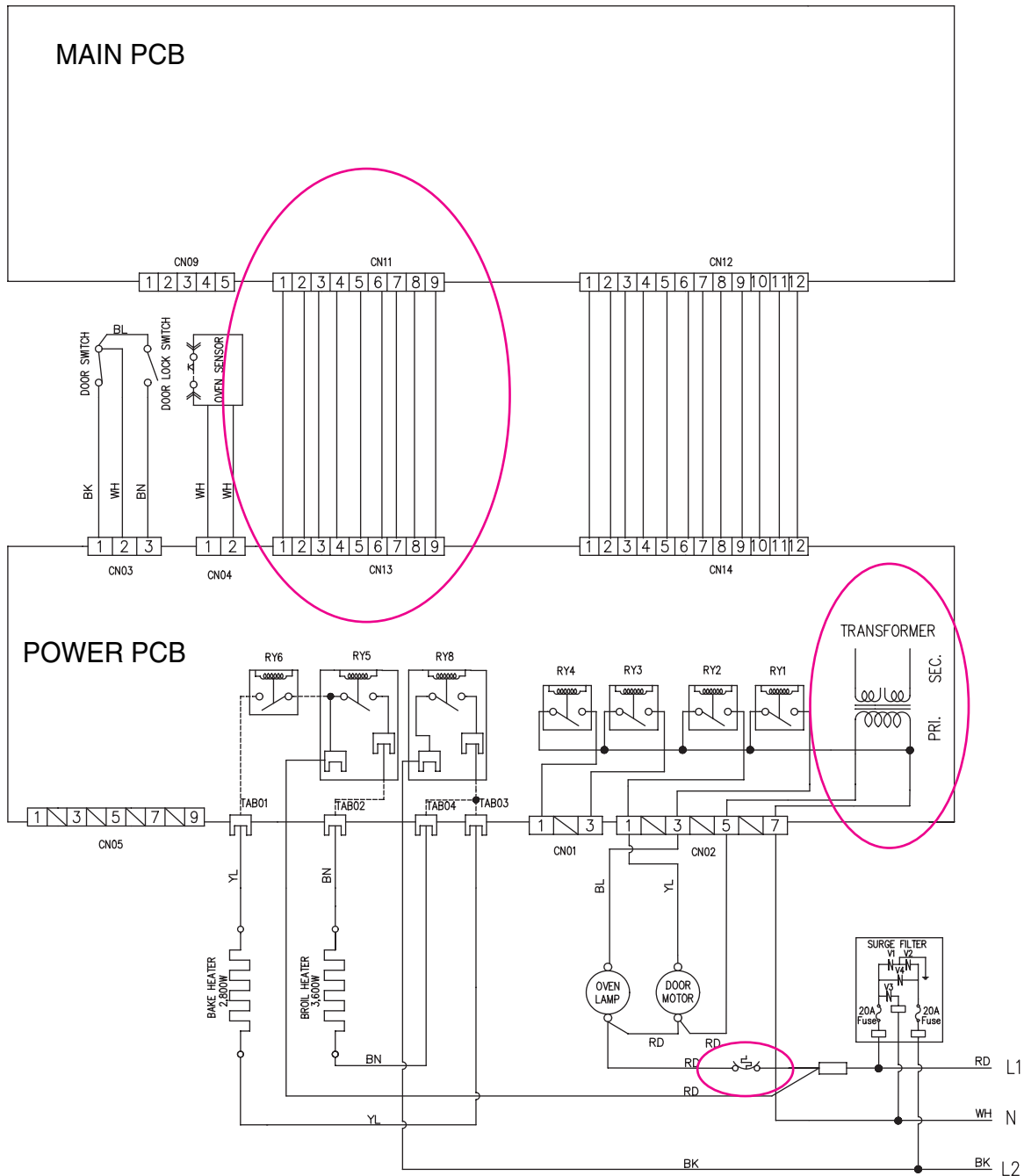
After check the failure code, press the “CLEAR” key.

## **FAILURE CODE SUMMARY**

<b>Code</b>	<b>Description</b>	<b>How to detect</b>	<b>Check point</b>
<b>F-1</b>	<b>Opened Sensor</b>	Oven sensor remains open for over 1 min during cooking.	1. Wiring 2. Oven Sensor
<b>F-2</b>	<b>Shorted Sensor</b>	Oven sensor is short for over 1 min during cooking.	1. Wiring 2. Oven Sensor
<b>F-3</b>	<b>Key shorted Error</b>	When some key are continuously short for over 60 seconds.	Physical fixation of key
<b>F-6</b>	<b>Oven hot</b>	The oven temperature is over 650°F continuously during 2 minutes on cooking except self cleaning.	Oven Sensor
<b>F-10</b>	<b>Door Lock Fail</b>	In case of Door Lock Failure in operating Lock motor.	1. Electric Wiring 2. Motor's Resistance 3. Micro Switch
<b>F-11</b>	<b>No heating</b>	If start oven temperature does not exceed 150°F and oven temperature is less equal than start temperature over 5 minutes on preheating, where door is closed.	1. Electric Wiring 2. Heater 3. Oven Sensor

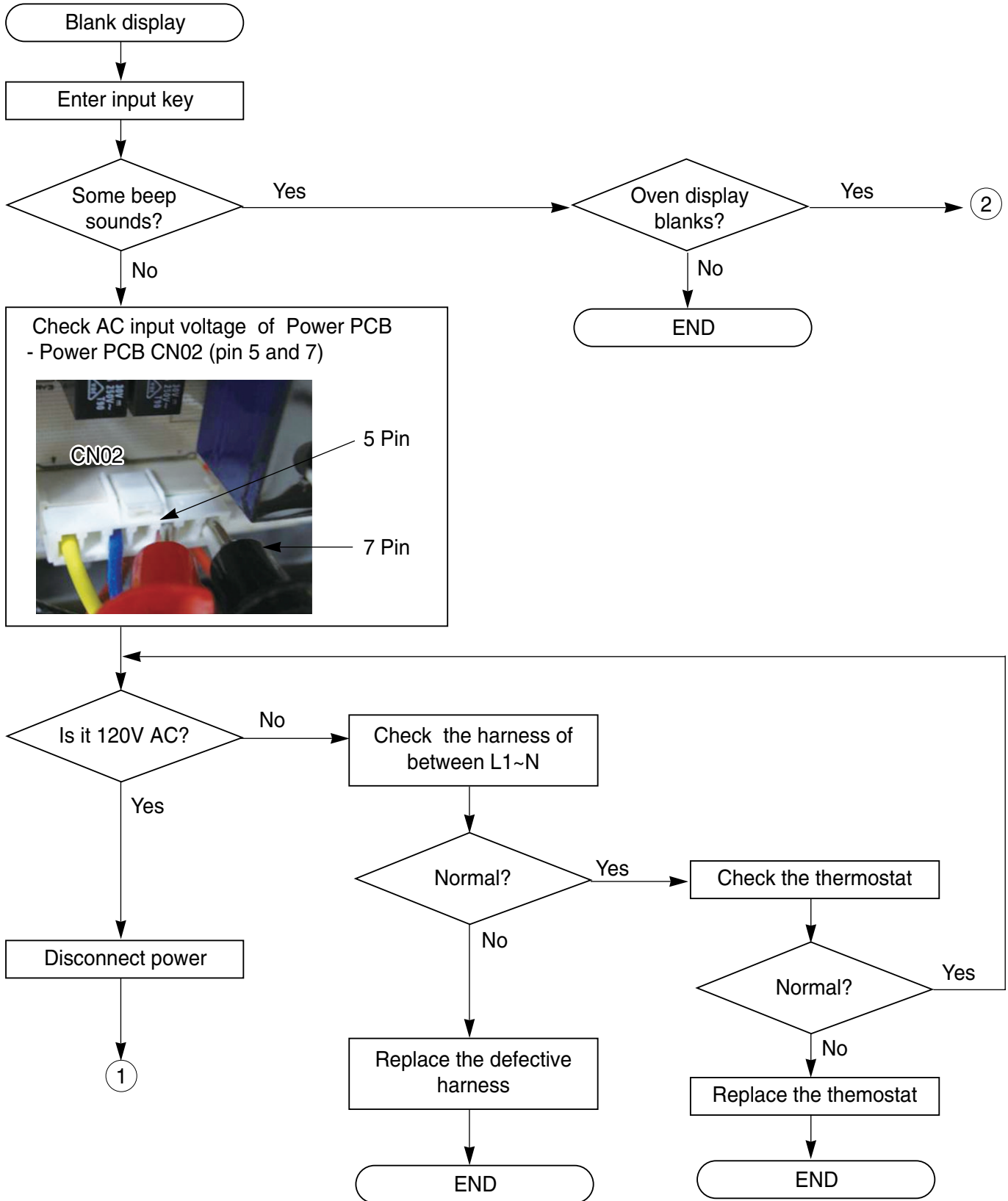
# CHECKING FLOW CHART BY FAIRURE

Symptom	Check Point
<b>1. Power Failure (Dead)</b> <b>2. No Display</b>	1. Check Electric Wiring. 2. Check the Thermostat. 3. Check the Power PCB and Main PCB Voltage.



# CHECKING FLOW CHART BY FAIRURE

## No display (No power)



# CHECKING FLOW CHART BY FAIRURE

No display (No power)

1

Check the LVT coil resistance



PIN No. of CN02	Resistance
PIN5 ~ PIN7	approximately 138 ( $\Omega$ )

Normal?

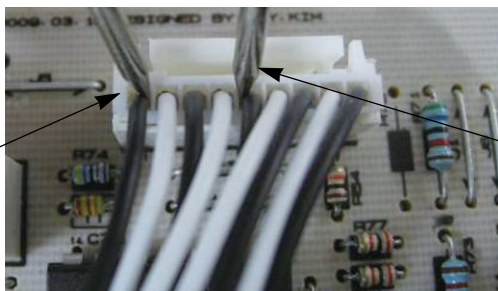
No

Yes

2

Power On

Check the voltage of Power PCB  
- CN13 (pin 1 and pin 3, pin 1 and pin 4)



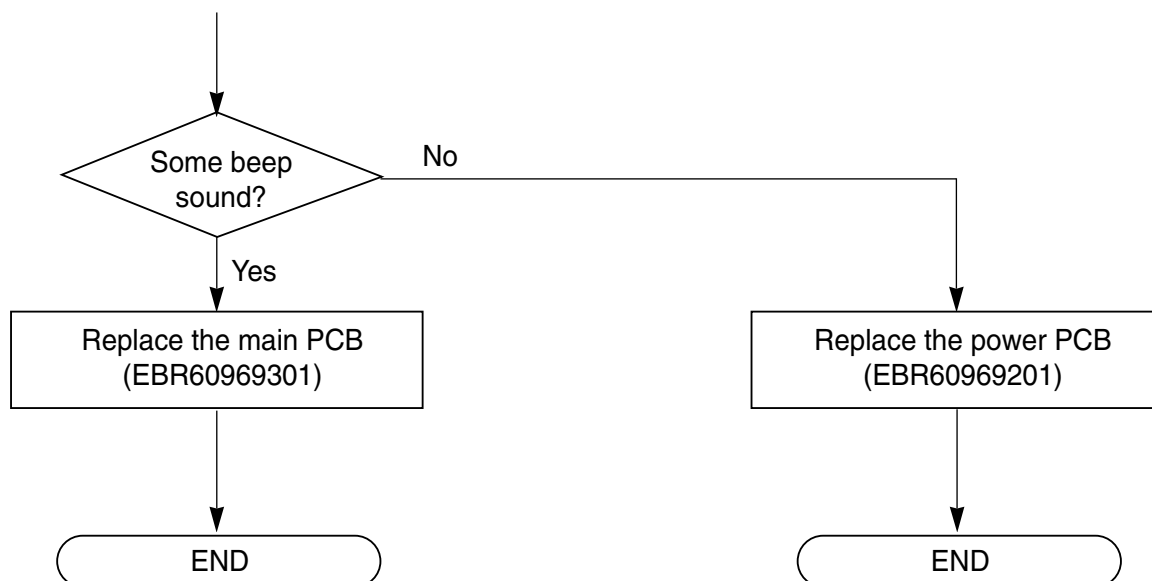
PIN No. of CN13	Voltage
PIN1(GND) ~ PIN3	approximately 9V
PIN1(GND) ~ PIN4	approximately 4.5V ~ 5.5V

Replace the power PCB (EBR60969201)

END

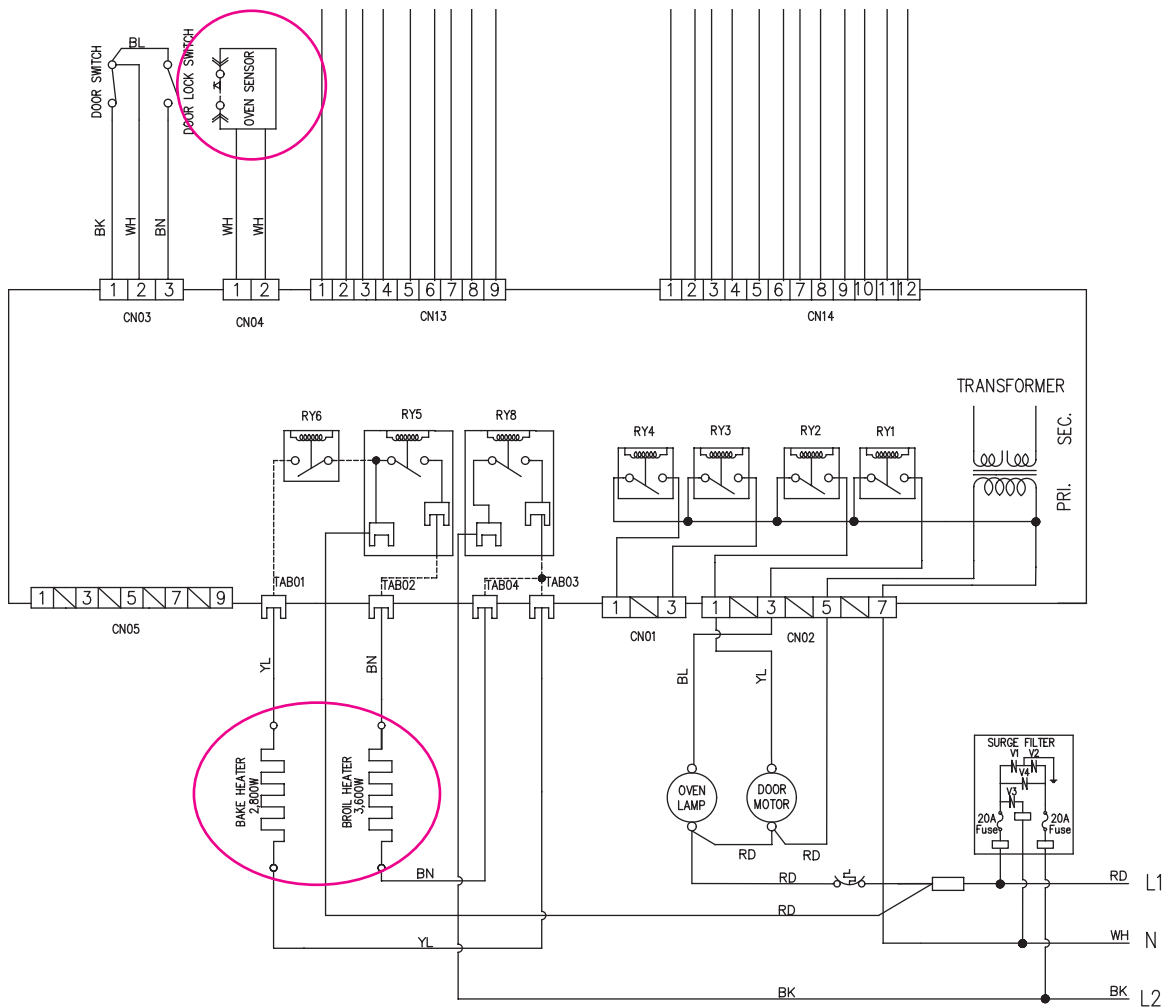
# CHECKING FLOW CHART BY FAIRURE

No display (No power)



# CHECKING FLOW CHART BY FAIRURE

Symptom	Check Point
<b>1. No heating</b> <b>2. F11</b>	1. Check Electric Wiring 2. Check Oven's Thermostat. 3. Check Heater's Resistance. 4. Check the Sensor.



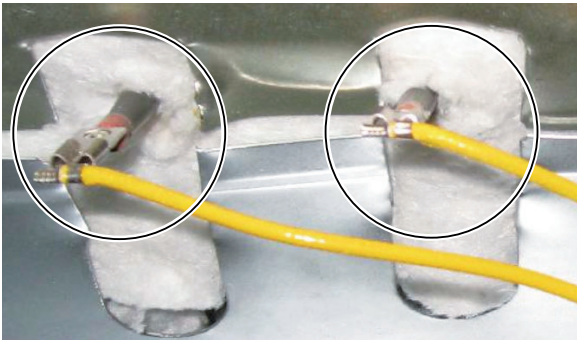
# CHECKING FLOW CHART BY FAIRURE

## Oven does not heat

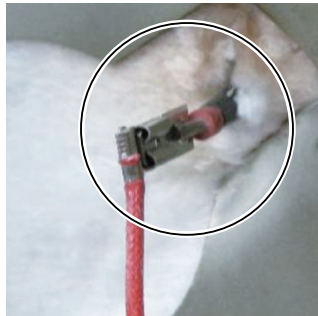
No Heating (Main Oven)

Disconnect power

Check the loose of bake, broil heater terminal and harness



Bake heater



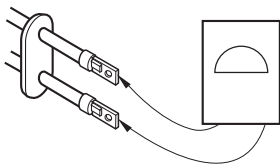
broil heater

Normal?

No

Yes

Check the bake heater  
(measure the resistance after cooling down)  
Normal: approximately  $24\Omega$

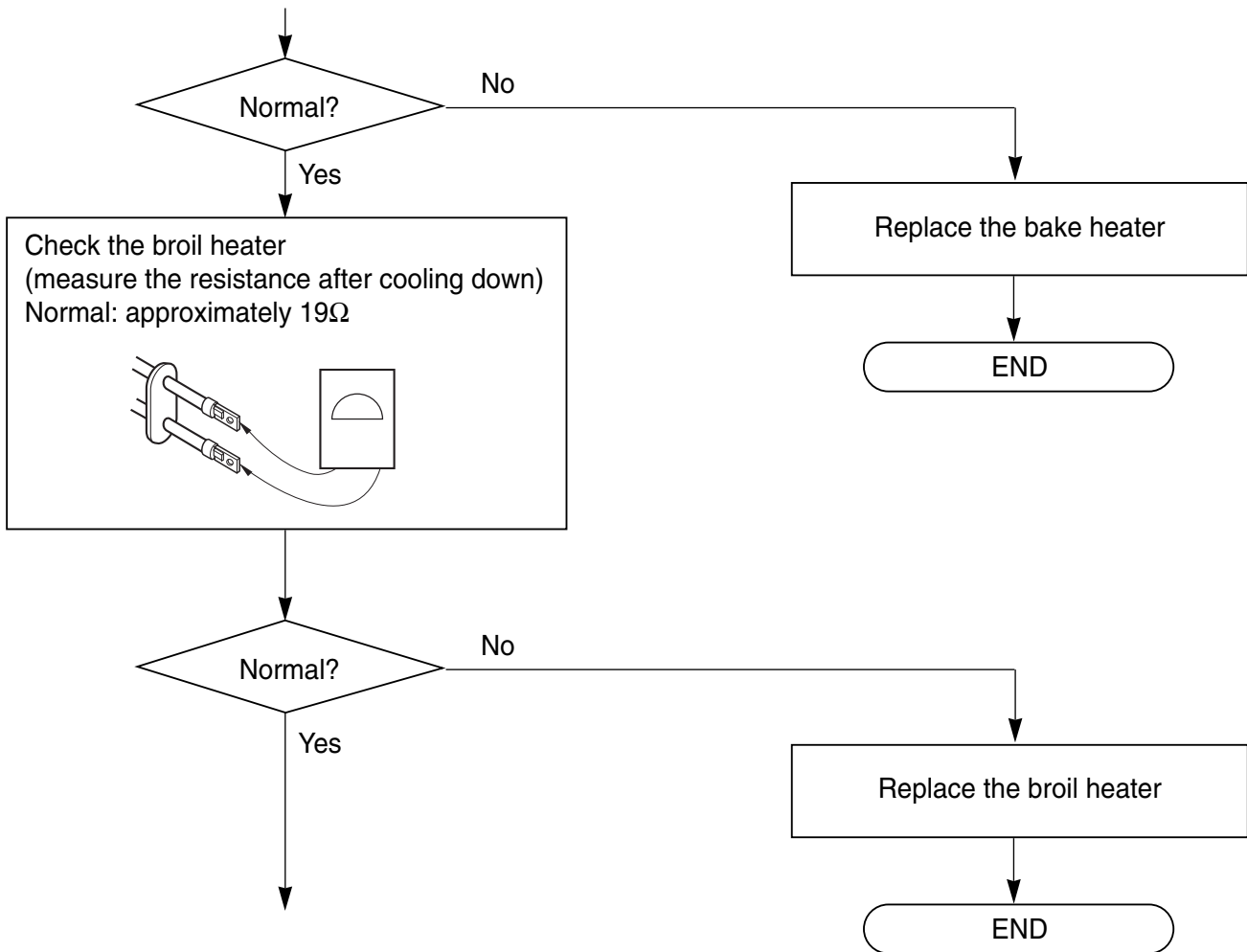


Reconnect.  
If defective harness, replace or fix

END

# CHECKING FLOW CHART BY FAIRURE

Oven does not heat



# CHECKING FLOW CHART BY FAIRURE

Oven does not heat

Check the loose oven sensor connector



Normal?

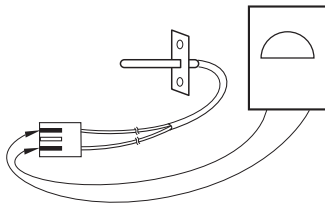
No

Yes

Reconnect

END

Check the oven sensor  
(measure the resistance after cooling down)  
Normal: approximately 1.09kΩ 25°C



Normal?

No

Yes

Replace the oven sensor

END

Replace the power  
PCB (EBR60969201)

Normal?

No

Yes

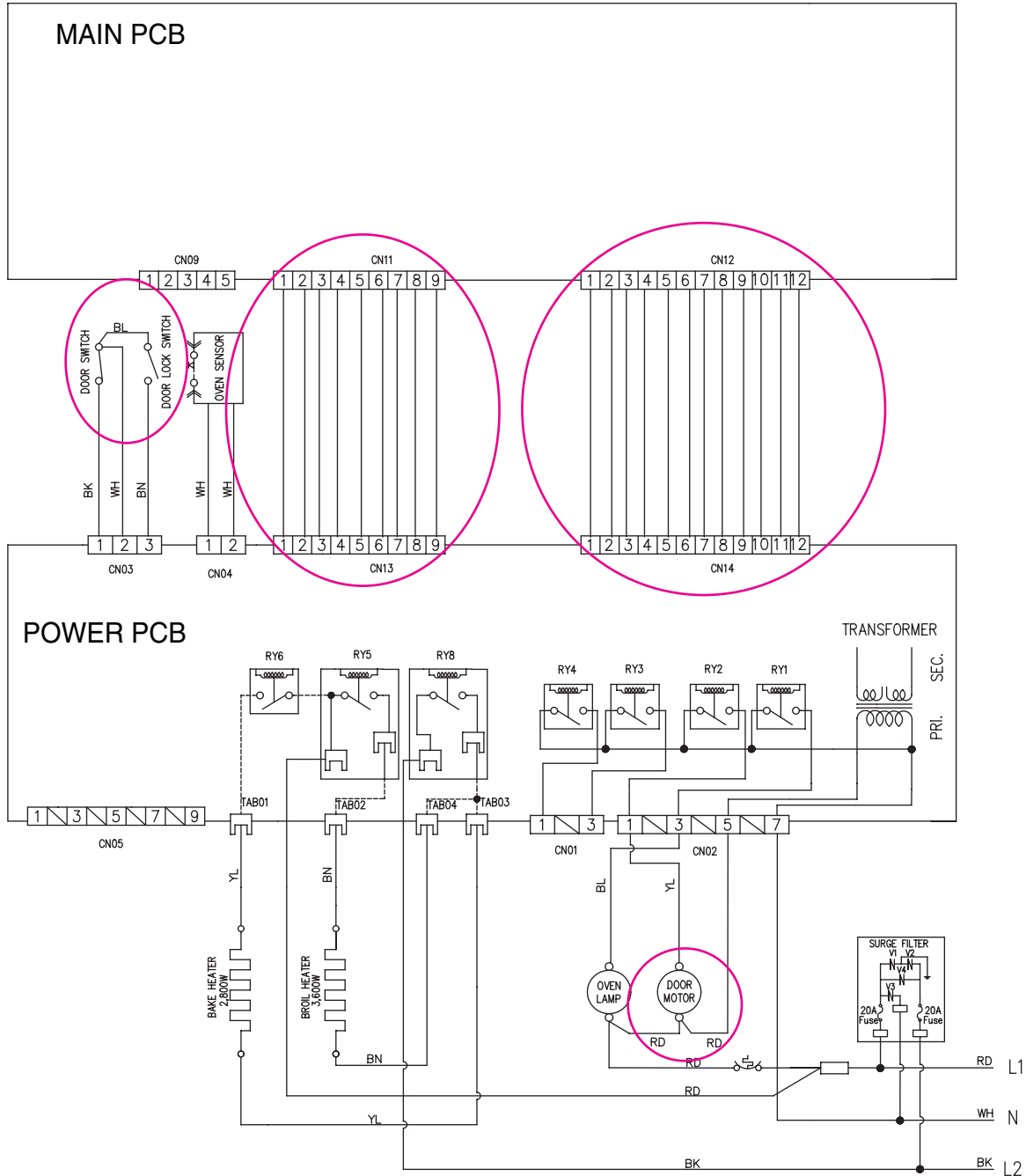
Replace the main PCB (EBR60969301)

END

END

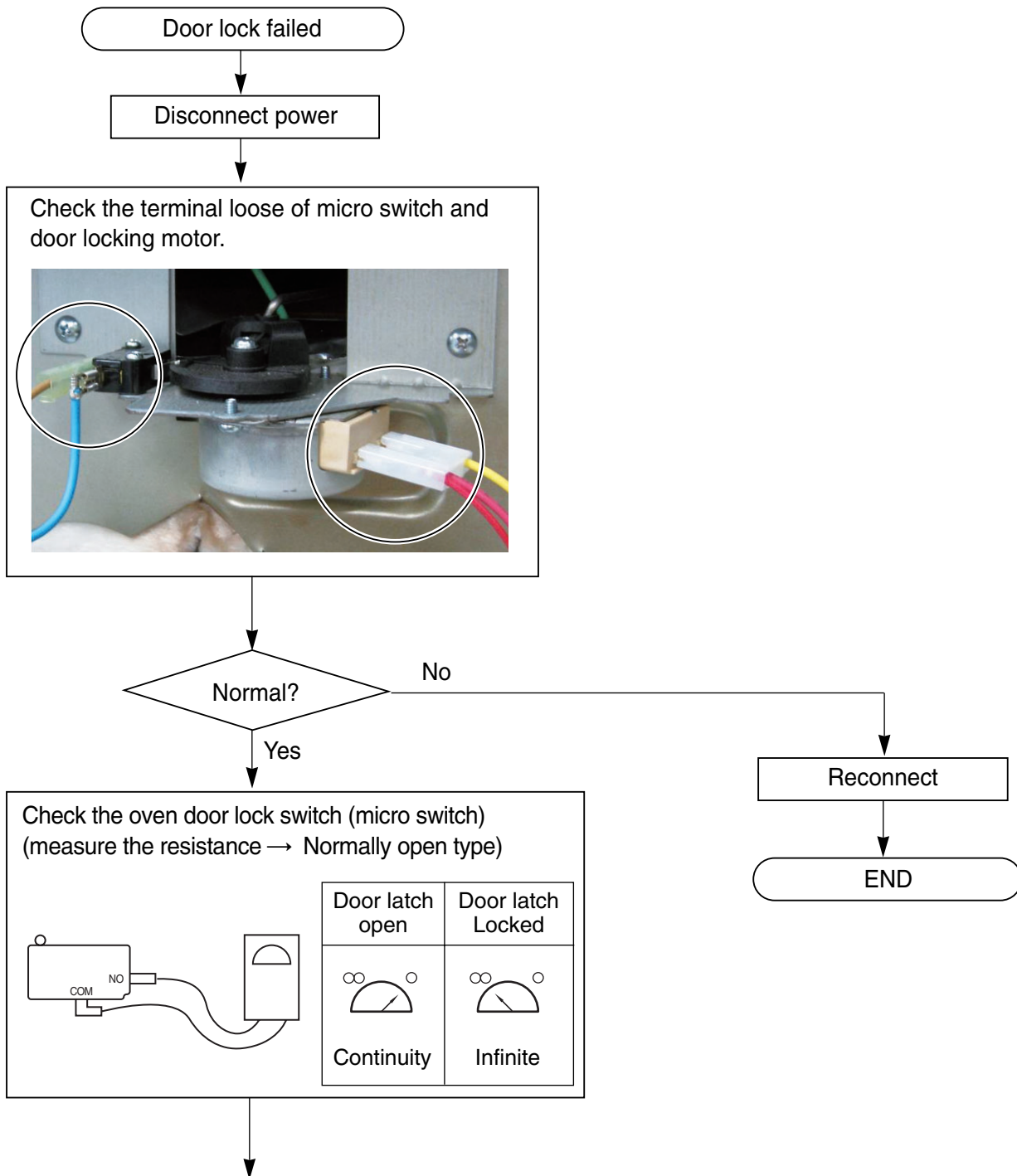
# CHECKING FLOW CHART BY FAIRURE

Symptom	Check Point
<b>1. Door Lock System Failure</b> <b>2. F-10</b>	1. Check the Electric wiring 2. Check the Motor's Resistance



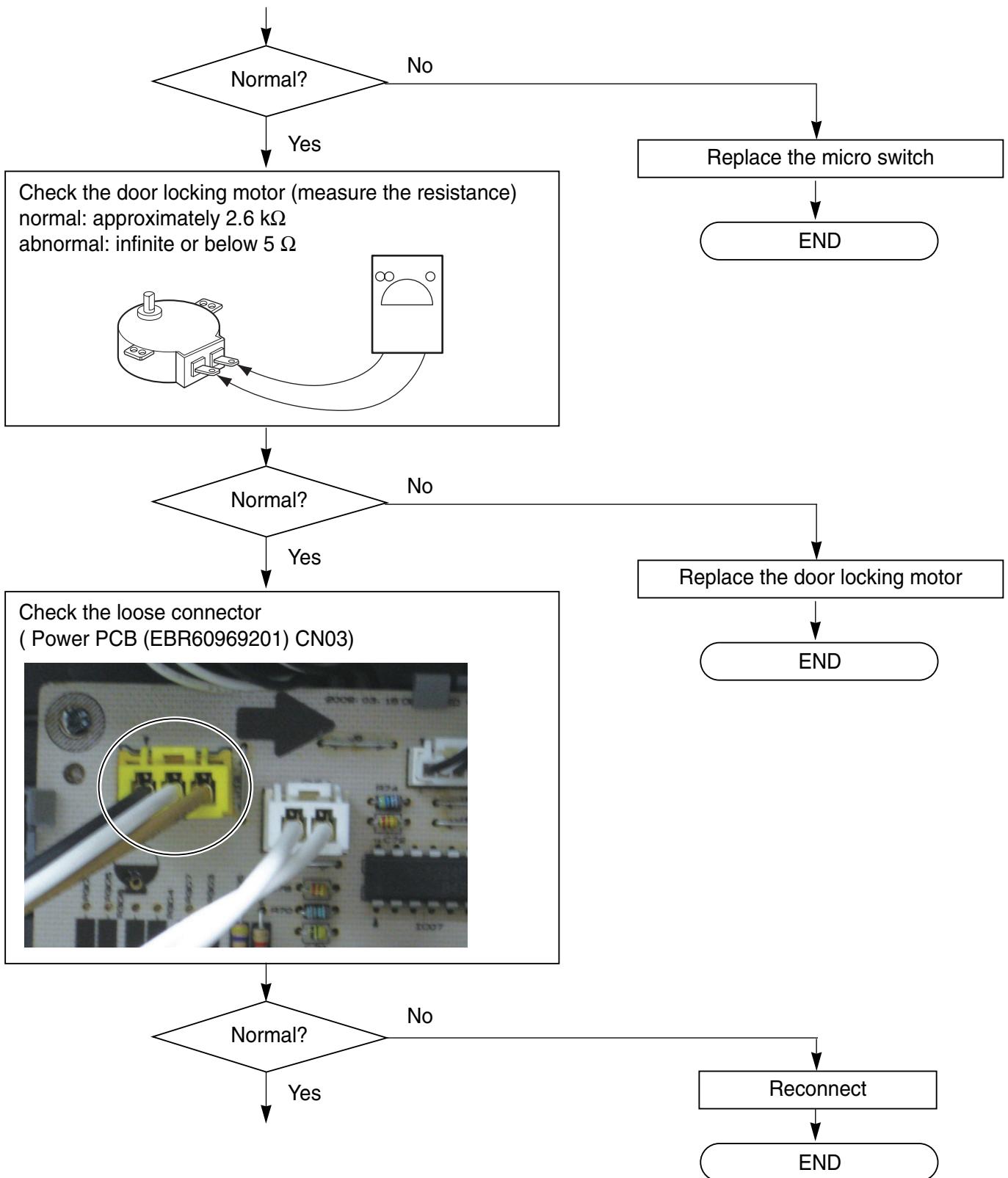
# CHECKING FLOW CHART BY FAIRURE

## Door lock system error → F-10 error



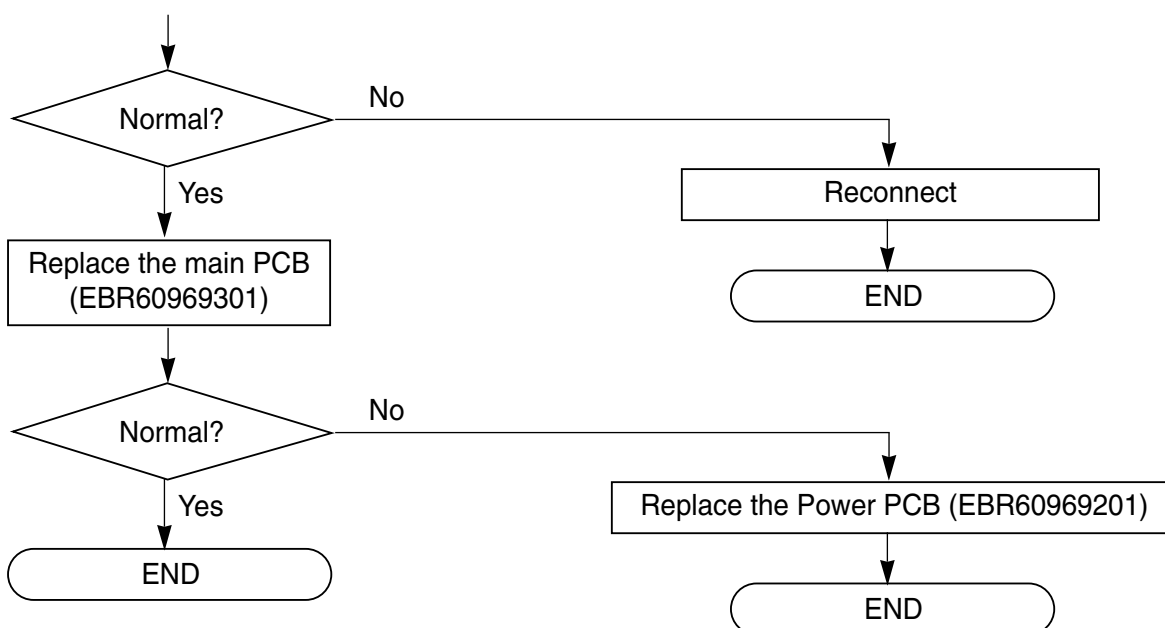
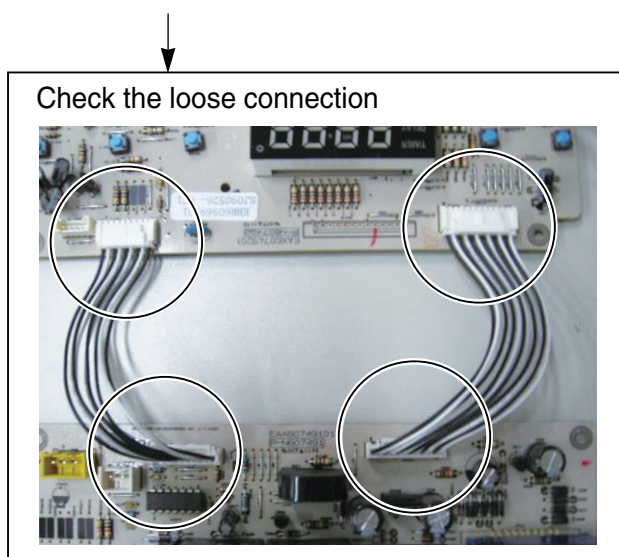
# CHECKING FLOW CHART BY FAIRURE

## Door lock system error → F-10 error



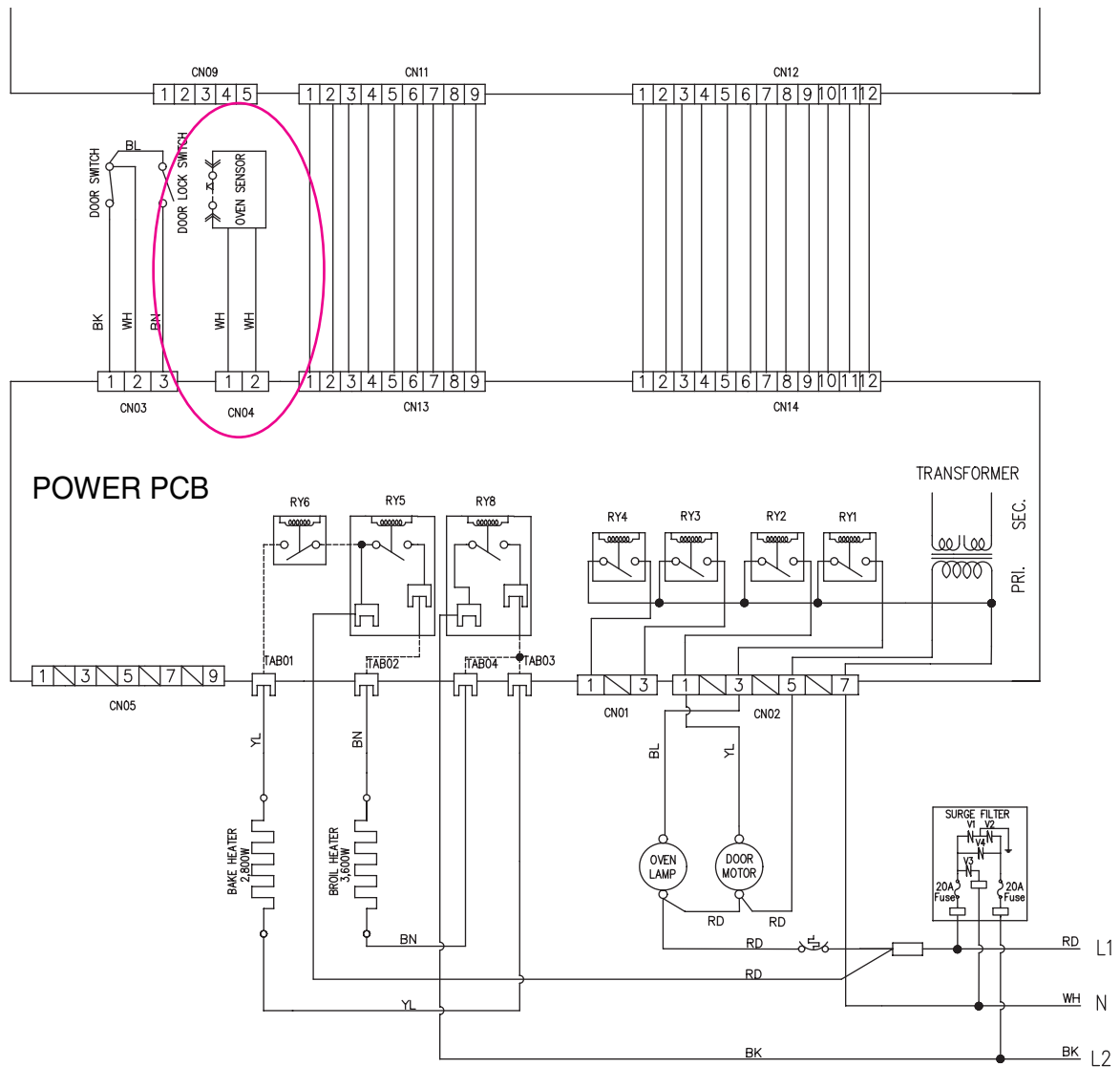
# CHECKING FLOW CHART BY FAIRURE

Door lock system error → F-10 error



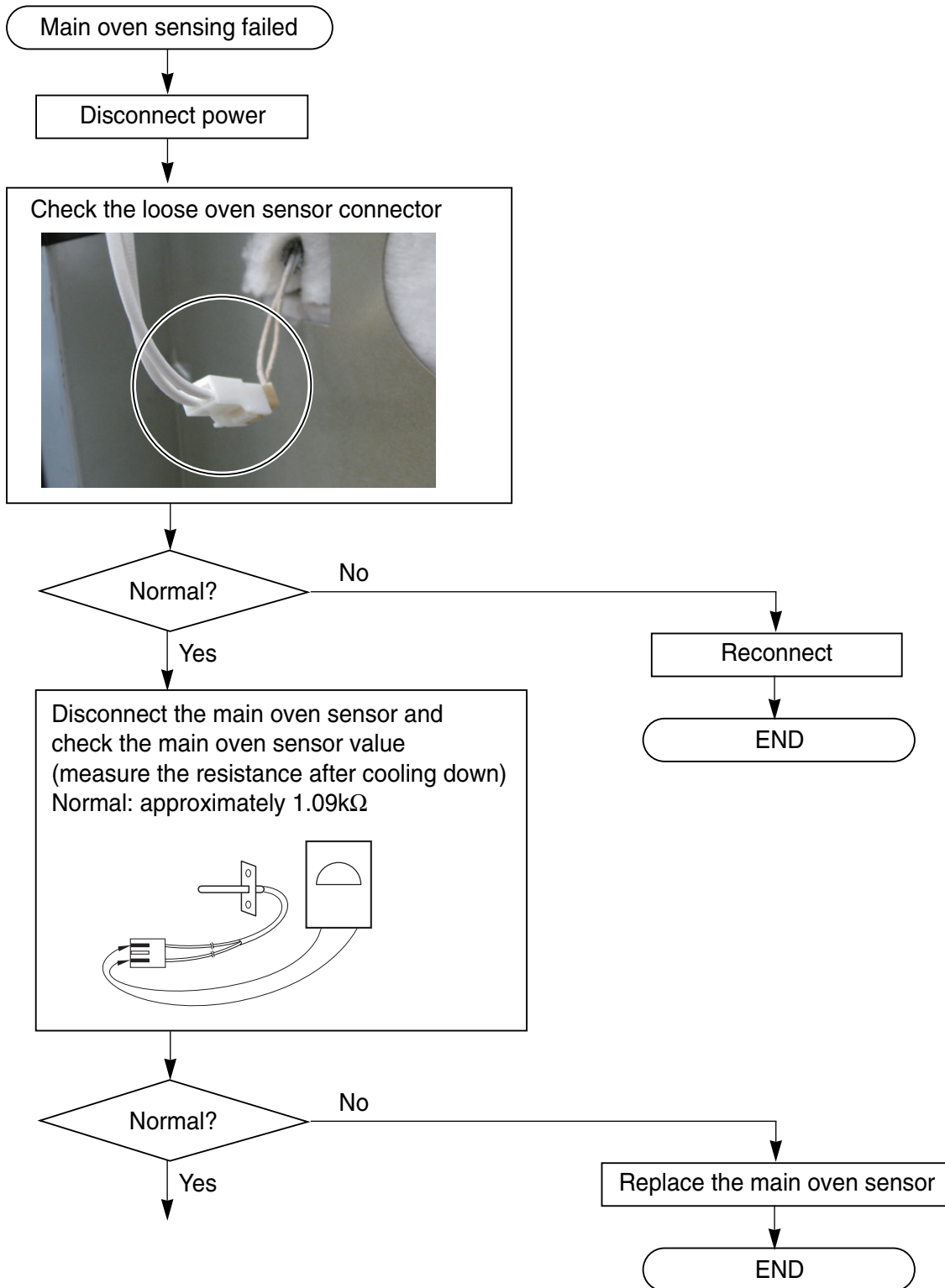
# CHECKING FLOW CHART BY FAIRURE

Symptom	Check Point
<b>1. Sensing Fail</b> <b>2. F-1</b> <b>3. F-2</b>	1. Check the Electric Wiring 2. Check the Test Mode 3. Check the Sensor's Resistance



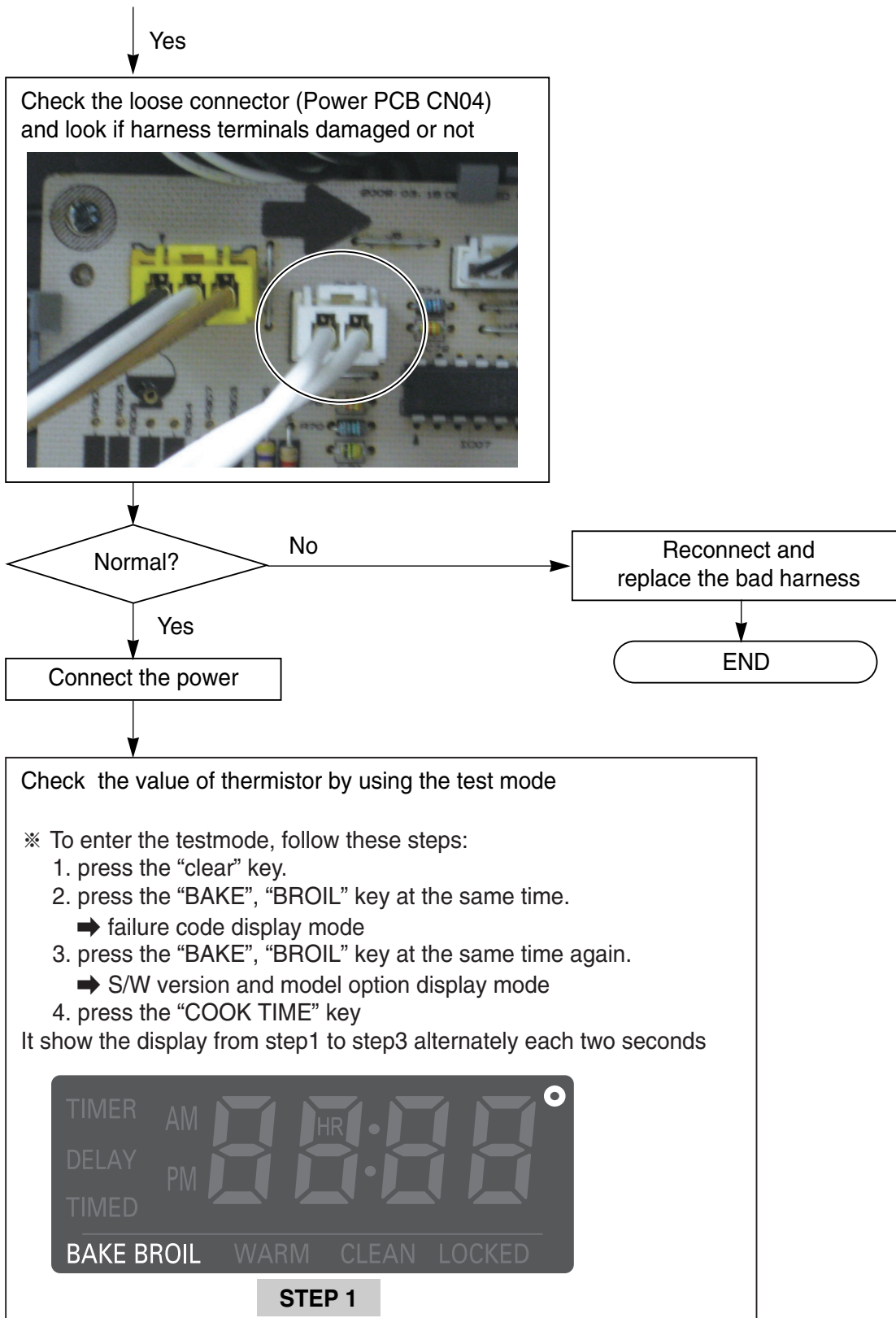
# CHECKING FLOW CHART BY FAIRURE

## Main oven sensing error → F-1, F-2 error



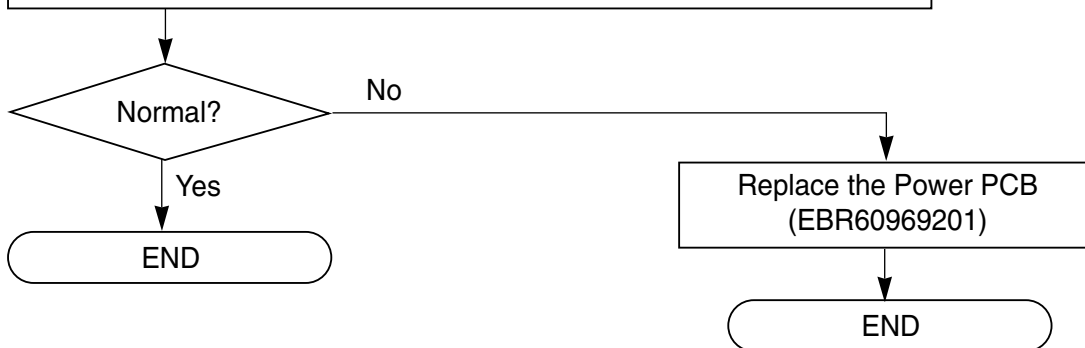
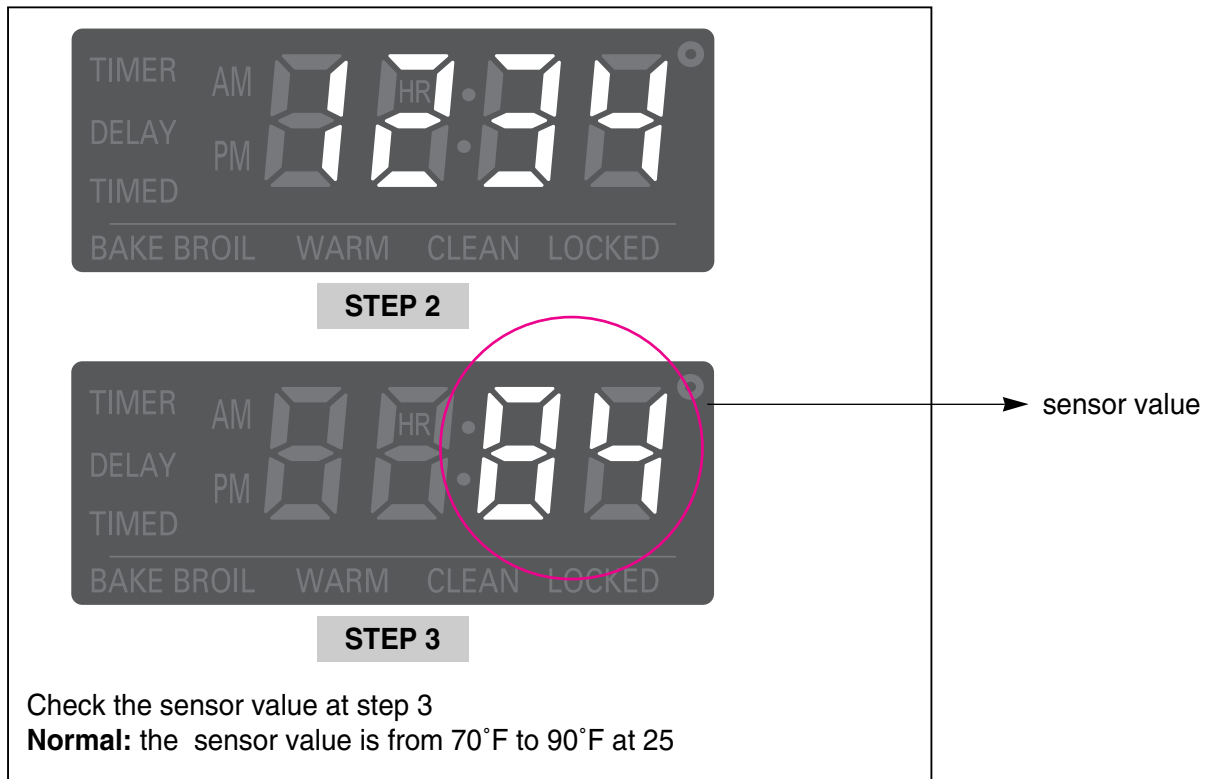
# CHECKING FLOW CHART BY FAIRURE

## Main oven sensing error → F-1, F-2 error



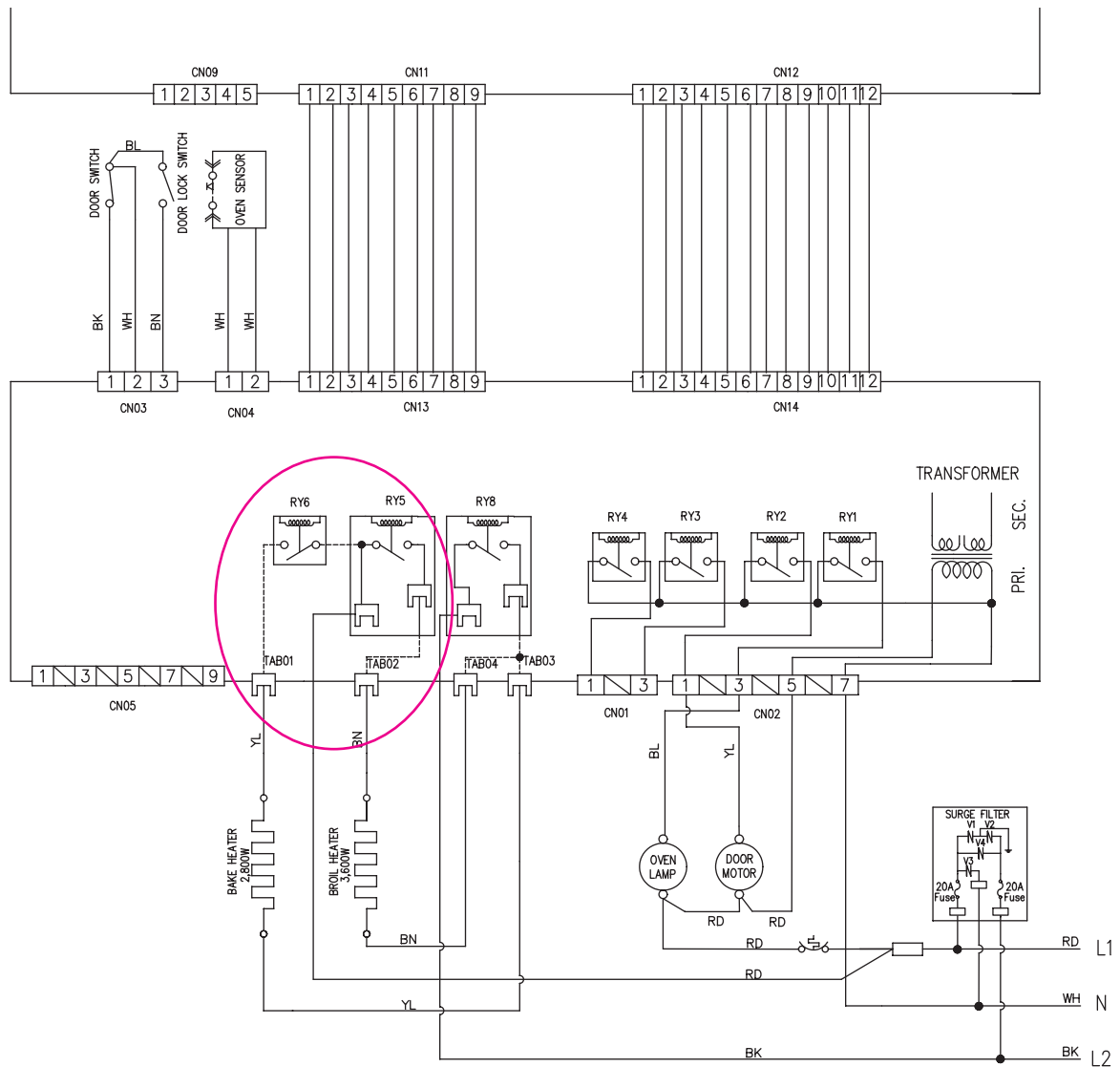
# CHECKING FLOW CHART BY FAIRURE

Main oven sensing error → F-1, F-2 error



# CHECKING FLOW CHART BY FAIRURE

Symptom	Check Point
<b>1. Oven hot</b> <b>2. F-6</b>	<b>1. Check the Resistance of the relay.</b>

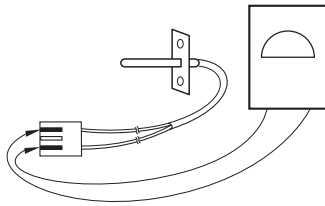


# CHECKING FLOW CHART BY FAIRURE

## Oven too hot error → F-6 error

Oven is hot (F6)

Disconnect the power and main oven sensor.  
Check the main oven sensor value  
(measure the resistance after cooling down)  
Normal: approximately 1.09kΩ



Normal?

No

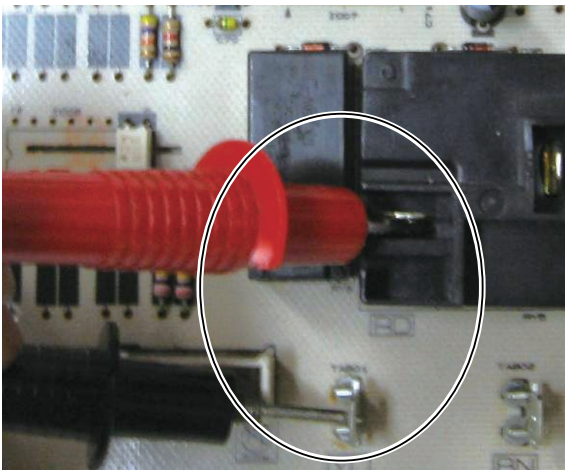
Yes

Replace the main oven sensor

Remove the Power relay  
PCB(EBR60969201) harness

END

Check the bake relay welded or not.  
(measure the resistance)



Welded

Normal

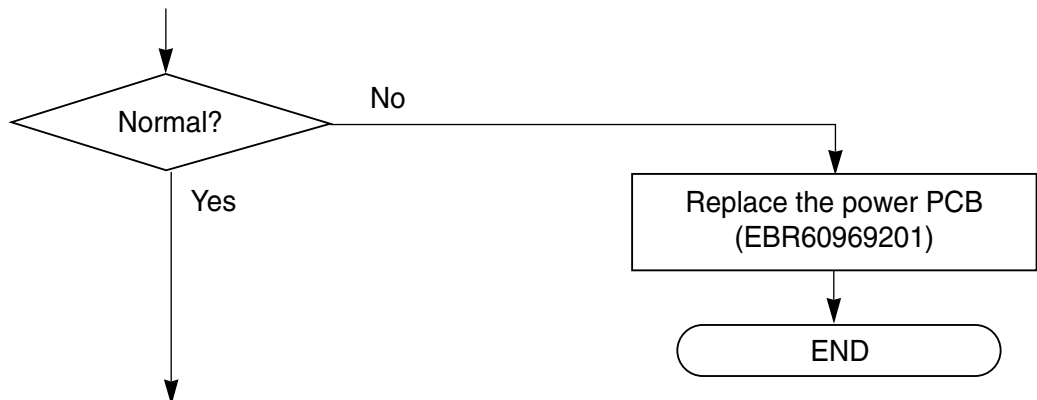


Continuity

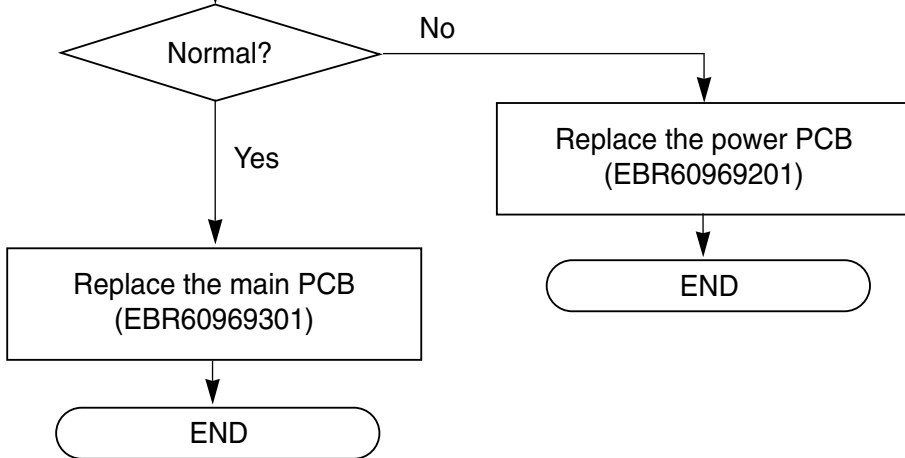
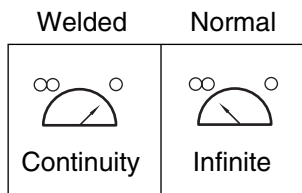
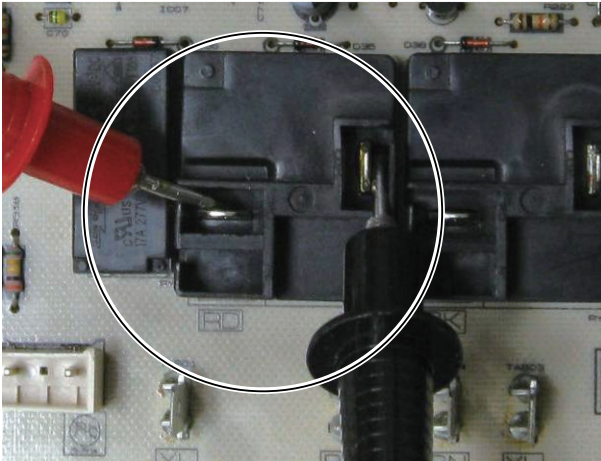
Infinite

# CHECKING FLOW CHART BY FAIRURE

Oven too hot error → F-6 error

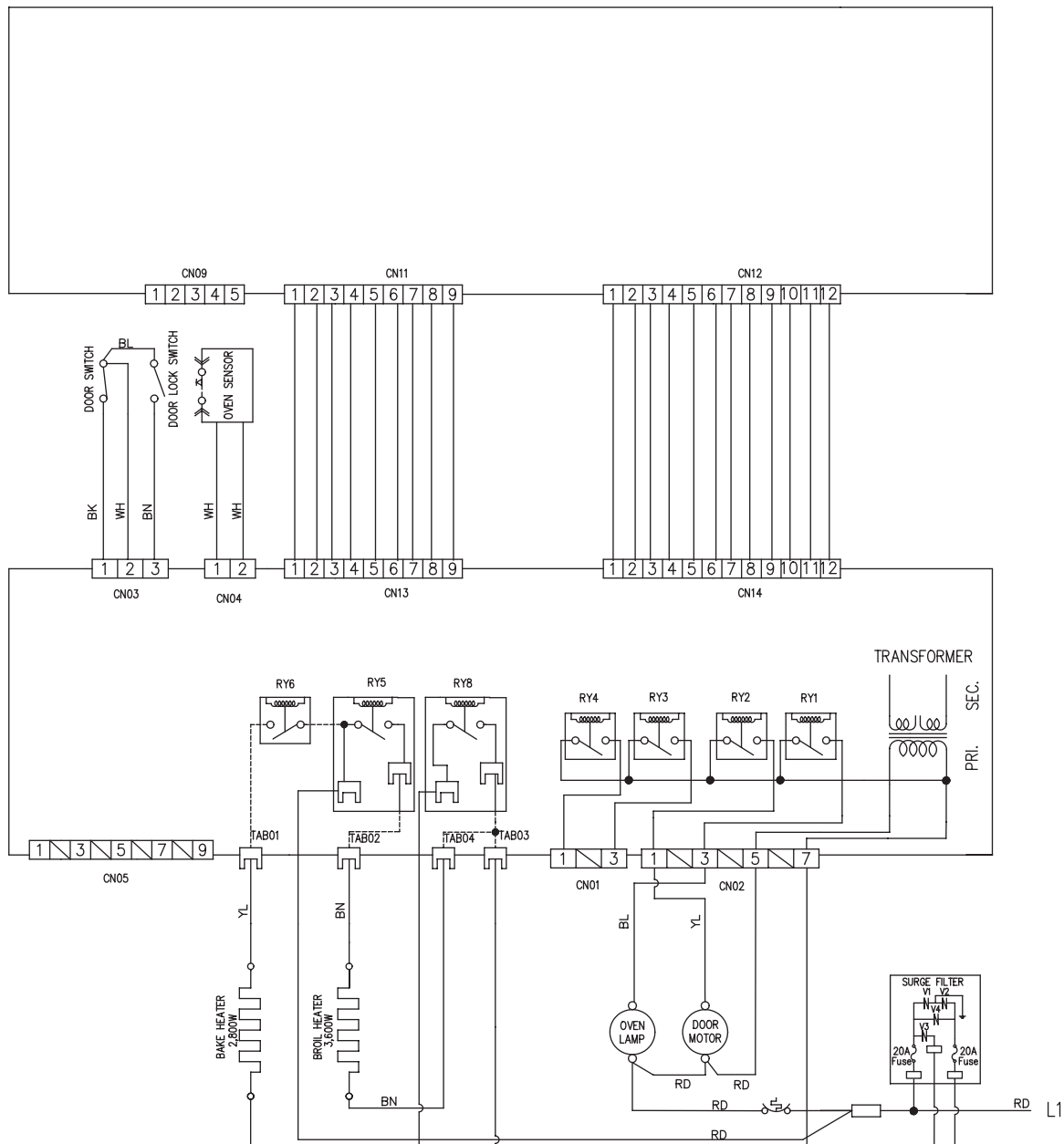


Check the broil relay welded or not.  
(measure the resistance)

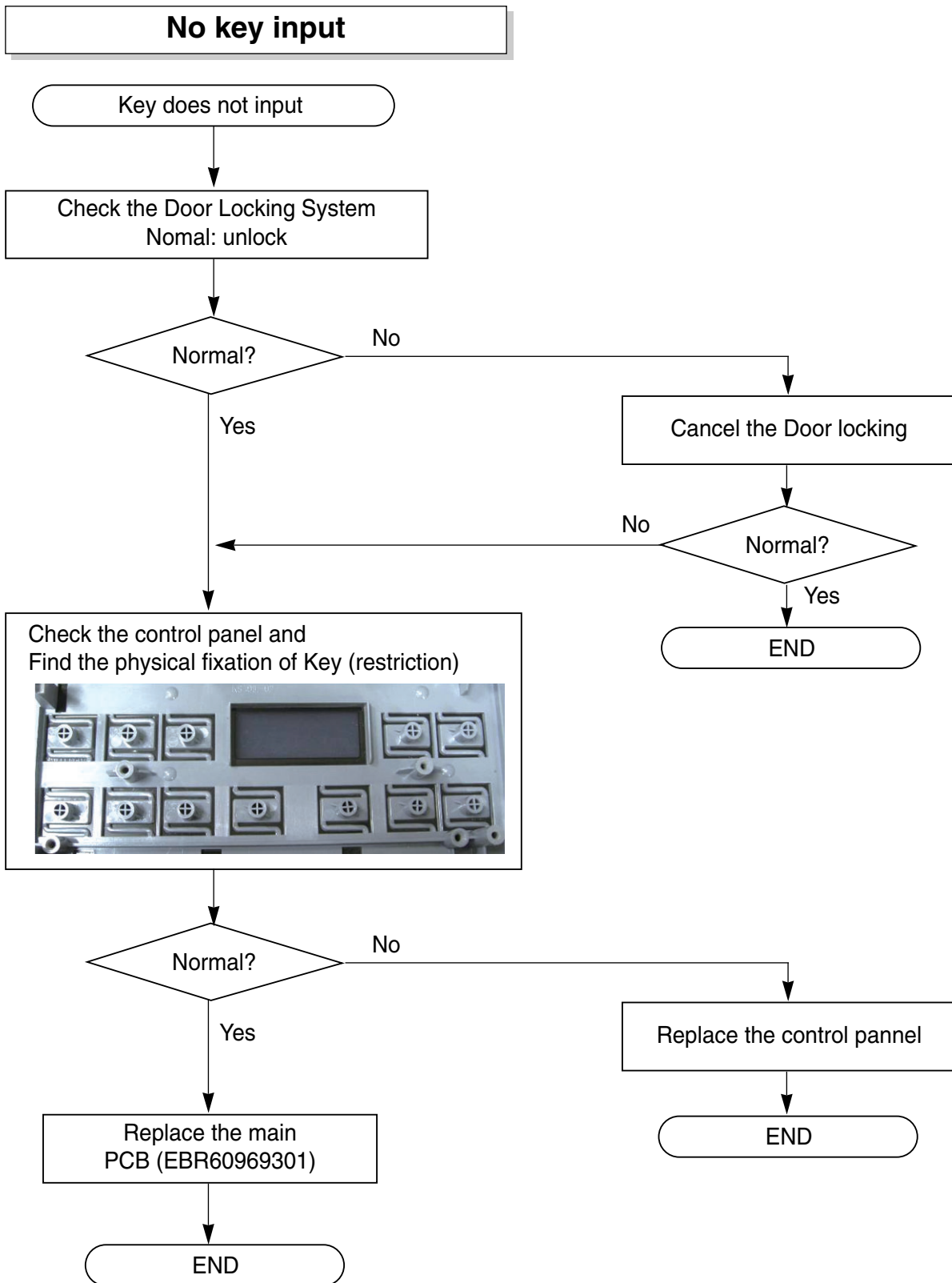


# CHECKING FLOW CHART BY FAIRURE

Symptom	Check Point
<b>1. Key pad Failure</b> <b>2. F-3 Error</b>	1. Check the Door Locking System. 2. Check the Electric Wiring. 3. Check the physical fixation of key.

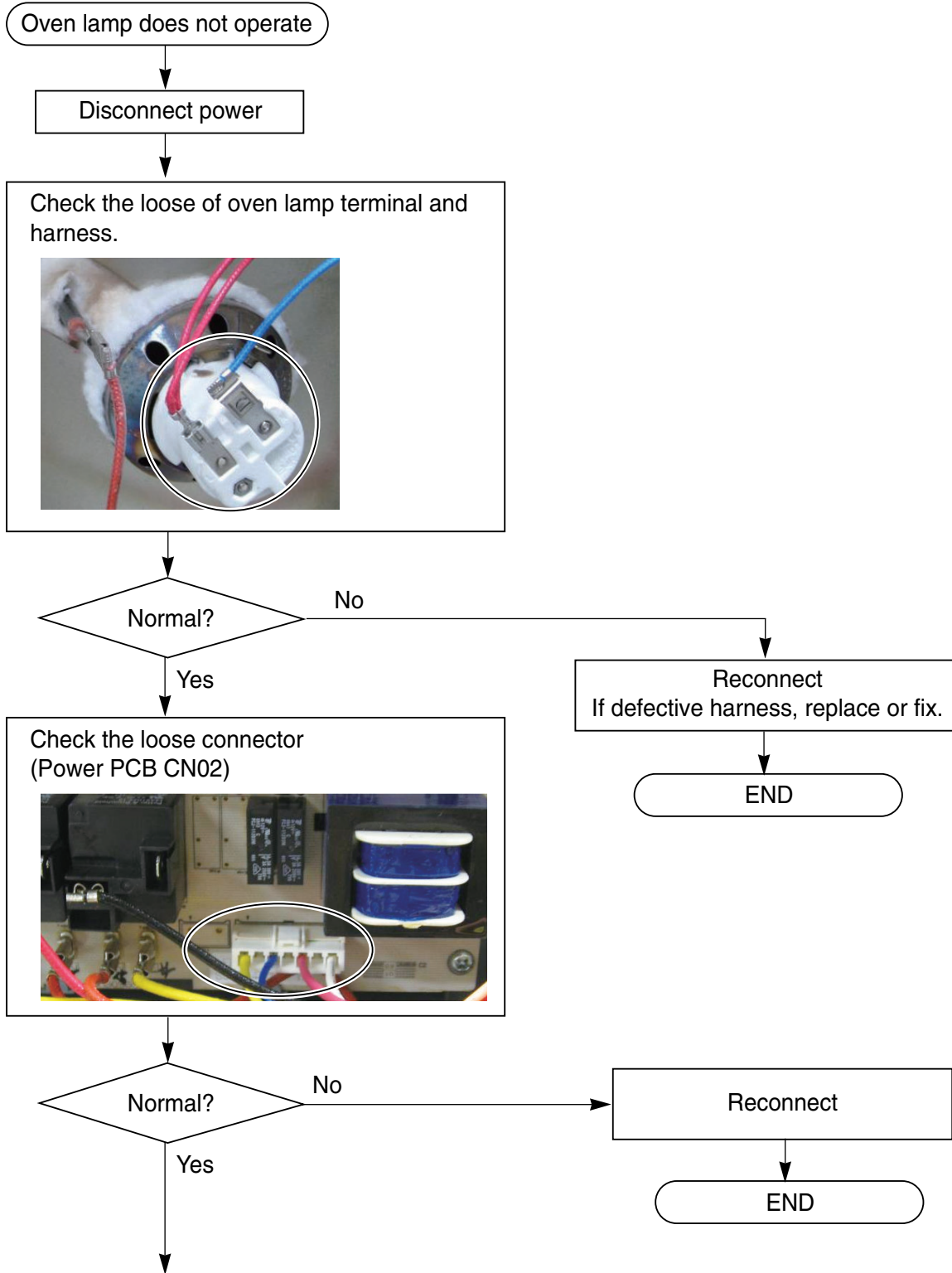


# CHECKING FLOW CHART BY FAIRURE



# CHECKING FLOW CHART BY FAIRURE

## Oven lamp does not operate



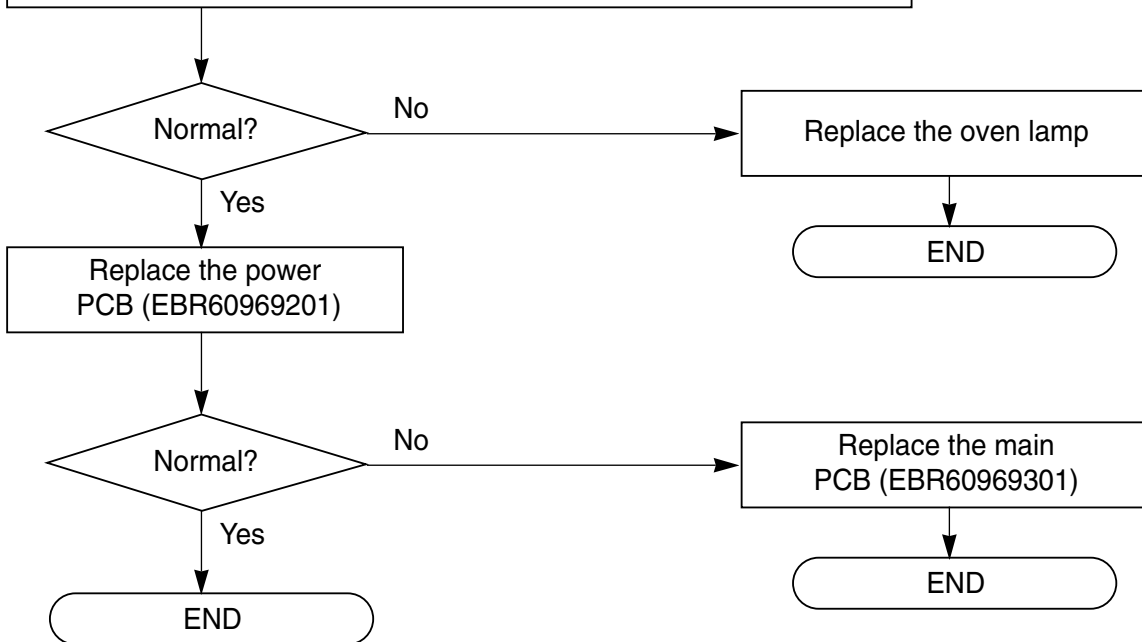
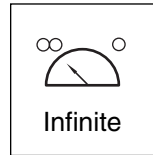
# CHECKING FLOW CHART BY FAIRURE

Oven lamp does not operate

Check the oven lamp (measure the resistance)  
Normal: approximately 20~40Ω, Abnormal: infinite



Abnormal



# TROUBLE SHOOTING

## BEFORE CALLING FOR SERVICE

Before you call for service, review this list. It may save you time and expense. The list includes common occurrences that are not the result of defective workmanship or materials in this appliance.

PROBLEMS	POSSIBLE CAUSES / SOLUTIONS																
<b>Range is not level.</b>	<ul style="list-style-type: none"> <li>• Poor installation. Place oven rack in center of oven. Place a level on the oven rack. Adjust leveling legs at base of range until the oven rack is level.</li> <li>• Be sure floor is level and is strong and stable enough to adequately support range.</li> <li>• If floor is sagging or sloping, contact a carpenter to correct the situation.</li> <li>• Kitchen cabinet alignment may make range appear unlevel. Be sure cabinets are square and have sufficient room for range clearance.</li> </ul>																
<b>Oven control beeps and displays any F code error.</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%; vertical-align: top;"> <ul style="list-style-type: none"> <li>• Electronic control has detected the fault condition. Press <b>CLEAR/OFF</b> to clear the display and stop beeping. Reprogram oven. If fault recurs, record fault number. Press <b>CLEAR/OFF</b> and contact a service agent.</li> </ul> </td> <td style="width: 30%; text-align: center;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">CODE</th> <th style="text-align: center;">CAUSE</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">F-1</td> <td style="text-align: center;">Open oven sensor</td> </tr> <tr> <td style="text-align: center;">F-2</td> <td style="text-align: center;">Shorted oven sensor</td> </tr> <tr> <td style="text-align: center;">F-3</td> <td style="text-align: center;">Shorted keypad</td> </tr> <tr> <td style="text-align: center;">F-6</td> <td style="text-align: center;">Oven is too hot</td> </tr> <tr> <td style="text-align: center;">F-10</td> <td style="text-align: center;">Door locking system don't operate</td> </tr> <tr> <td style="text-align: center;">F-11</td> <td style="text-align: center;">No heating</td> </tr> </tbody> </table> </td> </tr> </table>	<ul style="list-style-type: none"> <li>• Electronic control has detected the fault condition. Press <b>CLEAR/OFF</b> to clear the display and stop beeping. Reprogram oven. If fault recurs, record fault number. Press <b>CLEAR/OFF</b> and contact a service agent.</li> </ul>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">CODE</th> <th style="text-align: center;">CAUSE</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">F-1</td> <td style="text-align: center;">Open oven sensor</td> </tr> <tr> <td style="text-align: center;">F-2</td> <td style="text-align: center;">Shorted oven sensor</td> </tr> <tr> <td style="text-align: center;">F-3</td> <td style="text-align: center;">Shorted keypad</td> </tr> <tr> <td style="text-align: center;">F-6</td> <td style="text-align: center;">Oven is too hot</td> </tr> <tr> <td style="text-align: center;">F-10</td> <td style="text-align: center;">Door locking system don't operate</td> </tr> <tr> <td style="text-align: center;">F-11</td> <td style="text-align: center;">No heating</td> </tr> </tbody> </table>	CODE	CAUSE	F-1	Open oven sensor	F-2	Shorted oven sensor	F-3	Shorted keypad	F-6	Oven is too hot	F-10	Door locking system don't operate	F-11	No heating
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<b>Surface units will not maintain a rolling boil or cooking is not fast enough</b>	<ul style="list-style-type: none"> <li>• Improper cookware is used.                             <ul style="list-style-type: none"> <li>- Use pans which are flat and match the diameter of the surface unit selected.</li> </ul> </li> <li>• In some areas, the power (voltage) may be low.                             <ul style="list-style-type: none"> <li>- Cover pan with a lid until desired heat is obtained.</li> </ul> </li> </ul>																
<b>Surface units do not work properly</b>	<ul style="list-style-type: none"> <li>• A fuse in your home may be blown or the circuit breaker tripped.                             <ul style="list-style-type: none"> <li>- Replace the fuse or reset the circuit breaker.</li> </ul> </li> <li>• Cooktop controls improperly set.                             <ul style="list-style-type: none"> <li>- Check to see the correct control is set for the surface unit you are using.</li> </ul> </li> </ul>																
<b>Surface unit stops glowing when changed to a lower setting</b>	<ul style="list-style-type: none"> <li>• This is normal. The unit is still on and hot.</li> </ul>																
<b>Areas of discoloration on the cooktop</b>	<ul style="list-style-type: none"> <li>• Food spillovers not cleaned before next use.                             <ul style="list-style-type: none"> <li>- See <b>Cleaning the glass cooktop</b> section.</li> </ul> </li> <li>• Hot surface on a model with a light-colored cooktop.                             <ul style="list-style-type: none"> <li>- This is normal. The surface may appear discolored when it is hot. This is temporary and will disappear as the glass cools.</li> </ul> </li> </ul>																
<b>Frequent cycling on and off of surface units</b>	<ul style="list-style-type: none"> <li>• This is normal.                             <ul style="list-style-type: none"> <li>- The element will cycle on and off to maintain the heat setting.</li> </ul> </li> </ul>																
<b>Oven will not work</b>	<ul style="list-style-type: none"> <li>• Plug on range is not completely inserted in the electrical outlet.                             <ul style="list-style-type: none"> <li>- Make sure electrical plug is plugged into a live, properly grounded outlet.</li> </ul> </li> <li>• A fuse in your home may be blown or the circuit breaker tripped.                             <ul style="list-style-type: none"> <li>- Replace the fuse or reset the circuit breaker.</li> </ul> </li> <li>• Oven controls improperly set.                             <ul style="list-style-type: none"> <li>- See the using the oven section.</li> </ul> </li> <li>• Oven too hot.                             <ul style="list-style-type: none"> <li>- Allow the oven to cool to below locking temperature.</li> </ul> </li> </ul>																

# TROUBLE SHOOTING

PROBLEMS	POSSIBLE CAUSES / SOLUTIONS
<b>Oven will not work</b>	<ul style="list-style-type: none"> <li>• Plug on range is not completely inserted in the electrical outlet.                             <ul style="list-style-type: none"> <li>- Make sure electrical plug is plugged into a live, properly grounded outlet.</li> </ul> </li> <li>• A fuse in your home may be blown or the circuit breaker tripped.                             <ul style="list-style-type: none"> <li>- Replace the fuse or reset the circuit breaker.</li> </ul> </li> <li>• Oven controls improperly set.                             <ul style="list-style-type: none"> <li>- See the Using the oven section.</li> </ul> </li> <li>• Oven too hot.                             <ul style="list-style-type: none"> <li>- Allow the oven to cool to below locking temperature.</li> </ul> </li> </ul>
<b>Appliance does not operate.</b>	<ul style="list-style-type: none"> <li>• Make sure cord is plugged correctly into outlet. Check circuit breakers.</li> <li>• Service wiring is not complete. Contact your appliance Servicer for assistance.</li> <li>• Power outage. Check house lights to be sure. Call your local electric company for service.</li> </ul>
<b>The time of day flashes</b>	<ul style="list-style-type: none"> <li>• The time of day will flash whenever there has been a power interruption to the appliance. To clear press CLEAR/OFF control pad and be sure to reset the clock with the correct time of day.</li> </ul>
<b>Oven light does not work.</b>	<ul style="list-style-type: none"> <li>• Replace or tighten bulb. See <b>Changing Oven Light</b> section in this Owner's manual.</li> </ul>
<b>Oven smokes excessively during broiling.</b>	<ul style="list-style-type: none"> <li>• Control not set properly. Follow instructions under Setting Oven Controls.</li> <li>• Make sure oven door is opened to <b>broil stop position</b>.</li> <li>• Meat too close to the element. Reposition the rack to provide proper clearance between the meat and the element. Preheat broil element for searing.</li> <li>• Meat not properly prepared. Remove excess fat from meat. Cut remaining fatty edges to prevent curling, but do not cut into lean.</li> <li>• Insert on broiler pan wrong side up and grease not draining. Always place grid on the broiler pan with ribs up and slots down to allow grease to drip into pan.</li> <li>• Grease has built up on oven surfaces. Regular cleaning is necessary when broiling frequently. Old grease or food spatters cause excessive smoking.</li> </ul>
<b>Food does not bake or roast properly</b>	<ul style="list-style-type: none"> <li>• Oven controls improperly set.                             <ul style="list-style-type: none"> <li>- See the using the oven section.</li> </ul> </li> <li>• Rack position is incorrect or the rack is not level.                             <ul style="list-style-type: none"> <li>- See the using the oven section.</li> </ul> </li> <li>• Incorrect cookware or cookware of improper size being used.                             <ul style="list-style-type: none"> <li>- See the using the oven section.</li> </ul> </li> <li>• Oven sensor needs to be adjusted.                             <ul style="list-style-type: none"> <li>- See the adjusting your oven temperature in option section.</li> </ul> </li> </ul>
<b>Food does not broil properly</b>	<ul style="list-style-type: none"> <li>• Oven controls improperly set.                             <ul style="list-style-type: none"> <li>- Make sure you press the <b>BROIL</b> pad.</li> </ul> </li> <li>• Improper rack position being used.                             <ul style="list-style-type: none"> <li>- See the <b>Broiling Guide</b>, Owner's manual pages 25~26.</li> </ul> </li> <li>• Cookware not suited for broiling.                             <ul style="list-style-type: none"> <li>- For best results, use a pan designed for broiling.</li> </ul> </li> </ul>

# TROUBLE SHOOTING

PROBLEMS	POSSIBLE CAUSES / SOLUTIONS
<b>Food does not broil properly</b>	<ul style="list-style-type: none"> <li>• Aluminum foil used on the the broiling pan and grid has not been fitted properly and slit as recommended.                             <ul style="list-style-type: none"> <li>- See the using the oven section.</li> </ul> </li> <li>• In some areas the power (voltage) may be low.                             <ul style="list-style-type: none"> <li>- Preheat the broil element for 10 minutes.</li> <li>- See the <b>Broiling Guide</b>, Owner's manual page 26.</li> </ul> </li> </ul>
<b>Scratches or abrasions on cooktop surface</b>	<ul style="list-style-type: none"> <li>• Coarse particles such as salt or sand between cooktop and utensils can cause scratches. Be sure cooktop surface and bottoms of utensils are clean before usage. Small scratches do not affect cooking and will become less visible with time.</li> <li>• Cleaning materials not recommended for ceramic-glass cooktop have been used. See <b>Cleaning The Glass Cooktop</b> in the MAINTENANCE section, Owner's manual page 32.</li> </ul>
<b>Metal marks</b>	<ul style="list-style-type: none"> <li>• Cookware with rough bottom has been used. Use smooth, flat-bottomed cookware.</li> <li>• Scraping of metal utensils on cooktop surface. Do not slide metal utensils on cooktop surface. Use a ceramic-glass cooktop cleaning cream to remove the marks. See <b>Cleaning The Glass Cooktop</b> in the MAINTENANCE section, Owner's manual page 32.</li> </ul>
<b>Brown streaks or specks</b>	<ul style="list-style-type: none"> <li>• Boilovers are cooked onto surface. Use the blade scraper to remove soil. See <b>Cleaning The Glass Cooktop</b> in the MAINTENANCE section, Owner's manual page 32.</li> </ul>
<b>Areas of discoloration with metallic sheen</b>	<ul style="list-style-type: none"> <li>• Mineral deposits from water and food. Remove using a ceramic-glass cooktop cleaning cream. Use cookware with clean, dry bottoms.</li> </ul>
<b>Oven will not self-clean</b>	<ul style="list-style-type: none"> <li>• The oven temperature is too high to set a self-clean operation.                             <ul style="list-style-type: none"> <li>- Allow the range to cool and reset the controls.</li> </ul> </li> <li>• Oven controls improperly set.                             <ul style="list-style-type: none"> <li>- See the using the self-cleaning oven section.</li> </ul> </li> <li>• A self-clean cycle cannot be started if the oven lockout feature is active.</li> </ul>
<b>Excessive smoking during a self clean cycle</b>	<ul style="list-style-type: none"> <li>• Excessive soil.                             <ul style="list-style-type: none"> <li>- Press the CLEAR/OFF pad. Open the window to rid the room of smoke. Wait until the self-clean mode is cancelled. Wipe up the excess soil and reset the clean.</li> </ul> </li> </ul>
<b>Oven door do not open after a self clean cycle</b>	<ul style="list-style-type: none"> <li>• Oven is too hot.                             <ul style="list-style-type: none"> <li>- Allow the oven to cool below locking temperature.</li> </ul> </li> </ul>
<b>Oven not clean after a self clean cycle</b>	<ul style="list-style-type: none"> <li>• Oven controls not properly set.                             <ul style="list-style-type: none"> <li>- See the Self-Clean section, Owner's manual page 28.</li> </ul> </li> <li>• Oven was heavily soiled.                             <ul style="list-style-type: none"> <li>- Clean up heavy spillovers before starting the clean cycle. Heavily soiled ovens may need self-clean again or for longer period of time.</li> </ul> </li> </ul>
<b>CLEAN and door flash in the display</b>	<ul style="list-style-type: none"> <li>• The self-clean cycle has been selected but the door is not closed.                             <ul style="list-style-type: none"> <li>- Close the oven door.</li> </ul> </li> </ul>
<b>LOCKED is on in the display when you want to cook</b>	<ul style="list-style-type: none"> <li>• The oven door is locked because the temperature inside the oven has not dropped below the locking temperature.                             <ul style="list-style-type: none"> <li>- Press the CLEAR/OFF pad. Allow the oven to cool.</li> </ul> </li> </ul>

# TROUBLE SHOOTING

PROBLEMS	POSSIBLE CAUSES / SOLUTIONS
<b>Steam from the vent</b>	<ul style="list-style-type: none"> <li>• When using the convection feature, it is normal to see steam coming out of the oven vent. As the number of racks or amount of food being cooked increases, the amount of visible steam will increase.                             <ul style="list-style-type: none"> <li>- This is normal.</li> </ul> </li> </ul>
<b>Burning or oily odor emitting from the vent</b>	<ul style="list-style-type: none"> <li>• This is normal in a new oven and will disappear in time.                             <ul style="list-style-type: none"> <li>- To speed the process, set a self-clean cycle for a minimum of 3 hours. See the self-clean section, Owner's manual page 28.</li> </ul> </li> </ul>
<b>Oven racks are difficult to slide</b>	<ul style="list-style-type: none"> <li>• The shiny, silver-colored racks were cleaned in a self-clean cycle.                             <ul style="list-style-type: none"> <li>- Apply a small amount of vegetable oil to a paper towel and wipe the edges of the oven racks with the paper towel.</li> </ul> </li> </ul>
<b>Baking results are not as expected or differ from previous oven</b>	<ul style="list-style-type: none"> <li>• Make sure the oven vent has not been blocked. See owner's manual page 30 for location.</li> <li>• Check to make sure range is level.</li> <li>• 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. Owner's manual page 20 for instructions on adjusting the oven temperature. NOTE: It is not recommended to adjust the temperature if only one or two recipes are in question.</li> </ul>
<b>Oven door will not unlock after self-clean cycle</b>	<ul style="list-style-type: none"> <li>• 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 LOCK indicator word is not displayed.</li> <li>• The control and door may be locked. Owner's manual page 9 and 18 to unlock.</li> </ul>
<b>Moisture collects on oven window or steam comes from oven vent</b>	<ul style="list-style-type: none"> <li>• This is normal when cooking foods high in moisture.</li> <li>• Excessive moisture was used when cleaning the window.</li> </ul>
<b>Noises may be heard</b>	<ul style="list-style-type: none"> <li>• The oven makes several low level noises. You may hear the oven relays as they go on and off. This is normal.</li> <li>• As the oven heats and cools, you may hear sounds of metal parts expanding and contracting. This is normal and will not damage your appliance.</li> </ul>

# SCHEMATIC DIAGRAM

## ⚠ WARNING

POWER MUST BE DISCONNECTED BEFORE SERVICING THE APPLIANCE. FAILURE TO DO SO CAN RESULT IN DEATH OR ELECTRICAL SHOCK.

## NOTE:

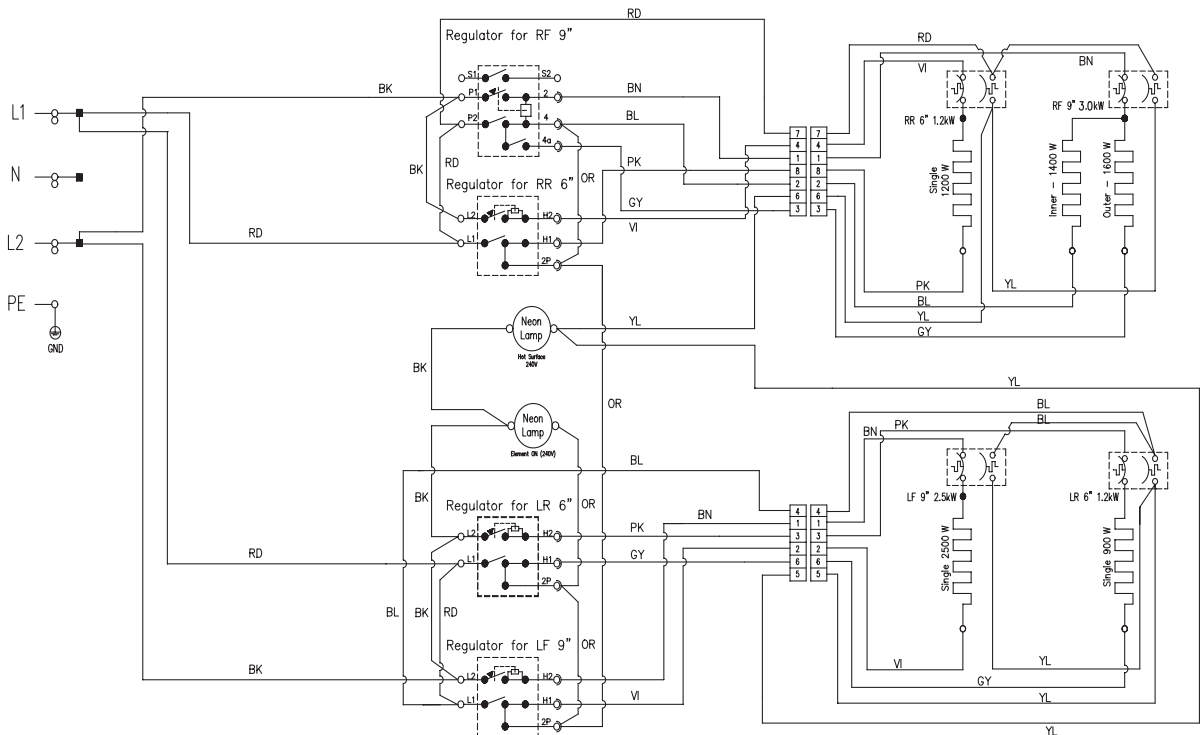
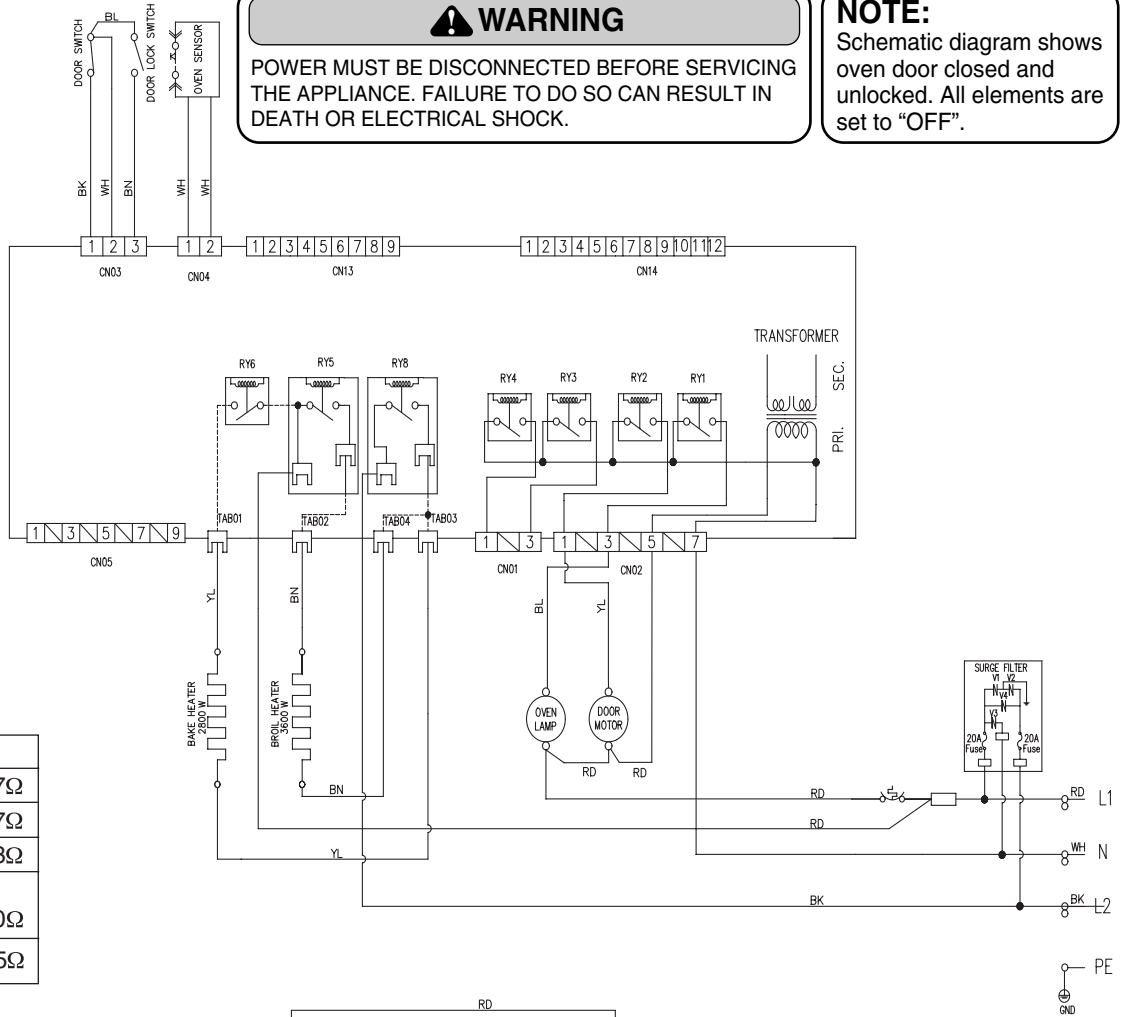
Schematic diagram shows oven door closed and unlocked. All elements are set to "OFF".

### WIRE COLORS

SYMBOL	COLOR
BK	BLACK
RD	RED
WH	WHITE
BN	BROWN
YL	YELLOW
OR	ORANGE
BL	BLUE
PK	PINK
GY	GRAY
VI	VIOLET

### ※ RADIANT COOK-TOP

Wattage	$\Omega$
RR:1200W	approx.47 $\Omega$
LR:1200W	approx.47 $\Omega$
LF:2500W	approx.23 $\Omega$
RF(Right Front) : 1400W(inner)	approx.40 $\Omega$
: 1600W(outer)	approx.35 $\Omega$



# STRIP CIRCUITS

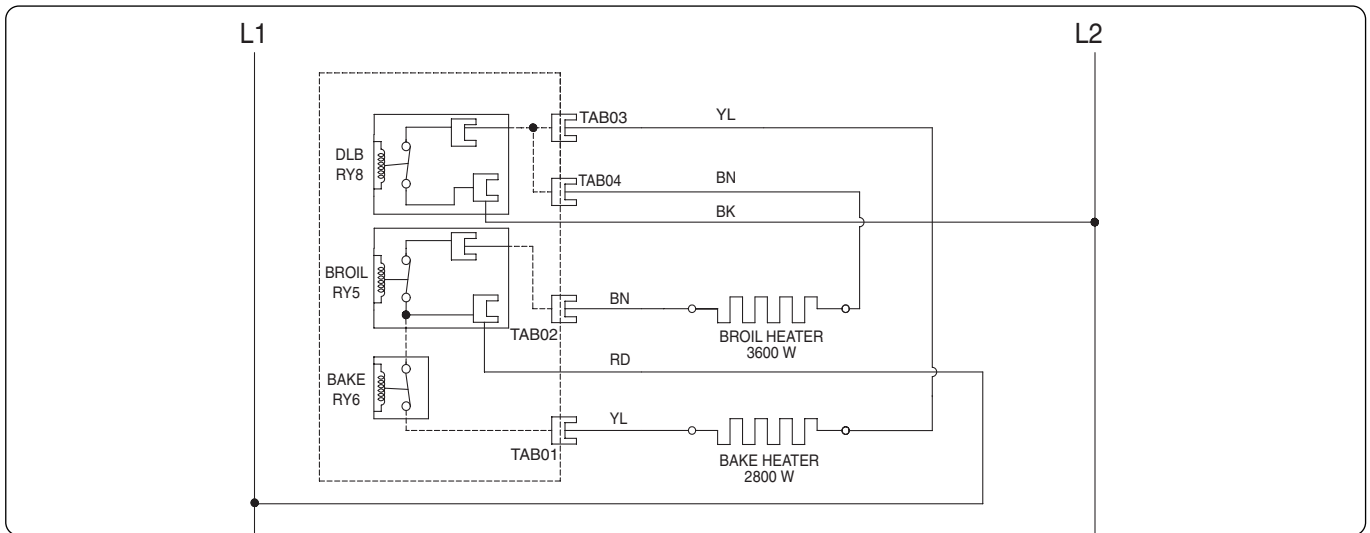
Complete the following steps before checking electric oven circuit :

1. Check the line voltage, household fuse or circuit breaker.
2. Check for loose wiring or mis-wiring within electric range.

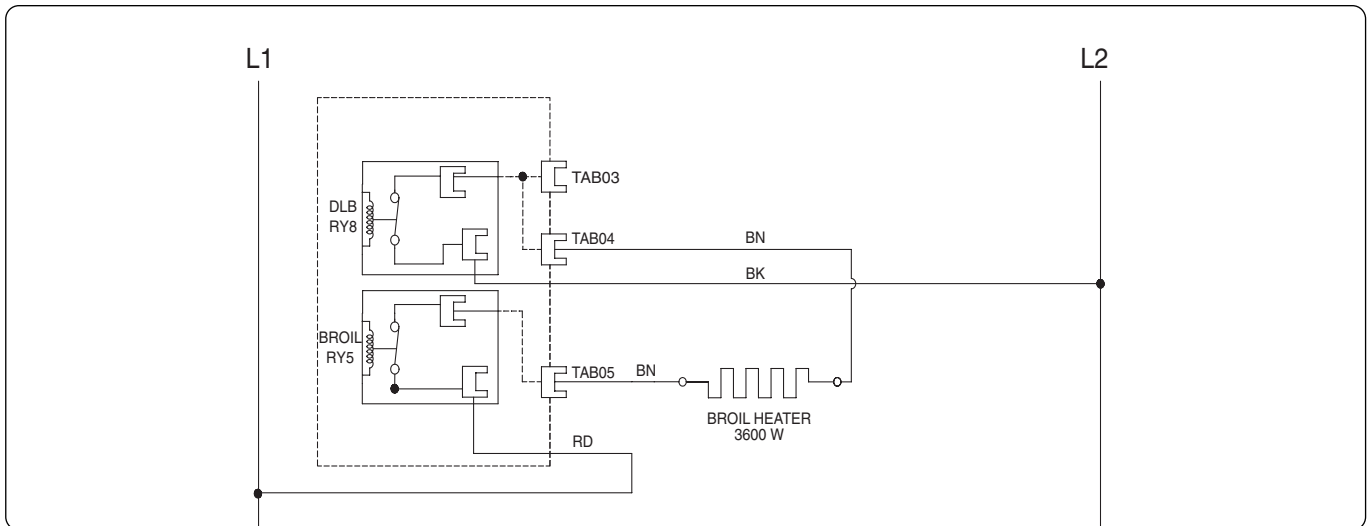
**NOTE:** The following individual circuits are for use in diagnosis, and are shown in the ON position.

**For Model: LRE3091SW / LRE3091SB / LRE3091ST**

## BAKE

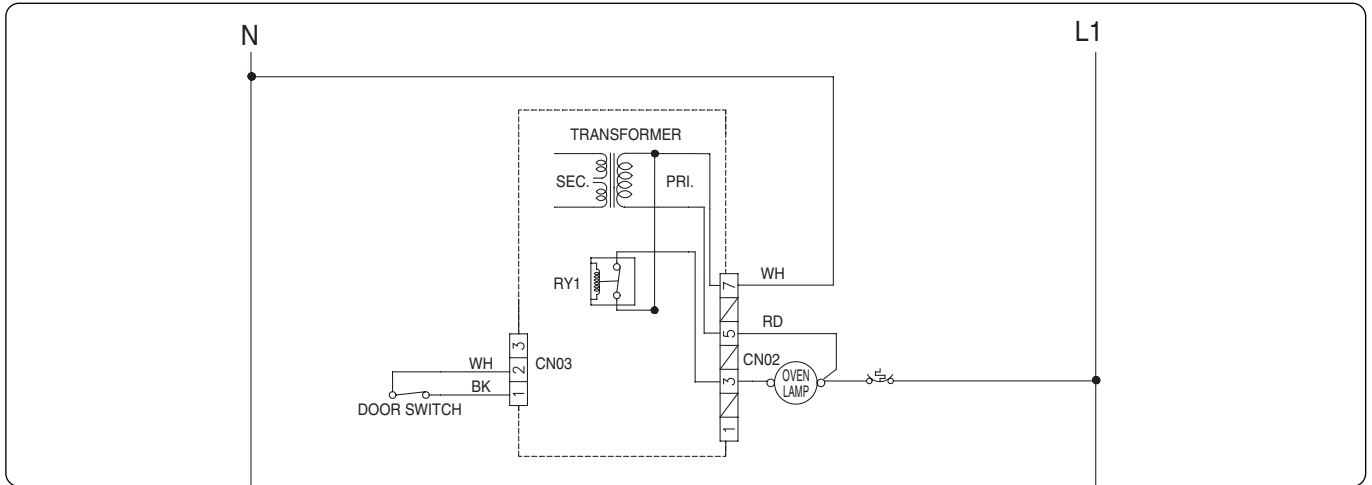


## BROIL

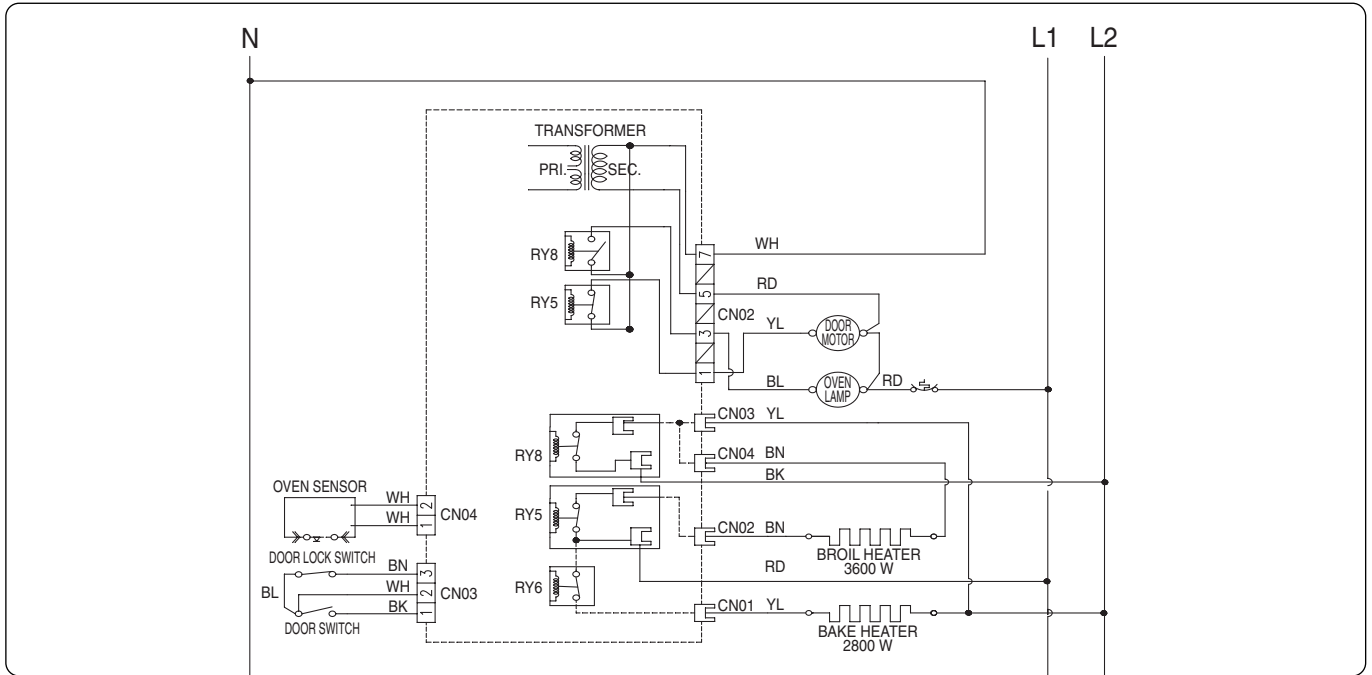


**For Model: LRE3091SW / LRE3091SB / LRE3091ST**

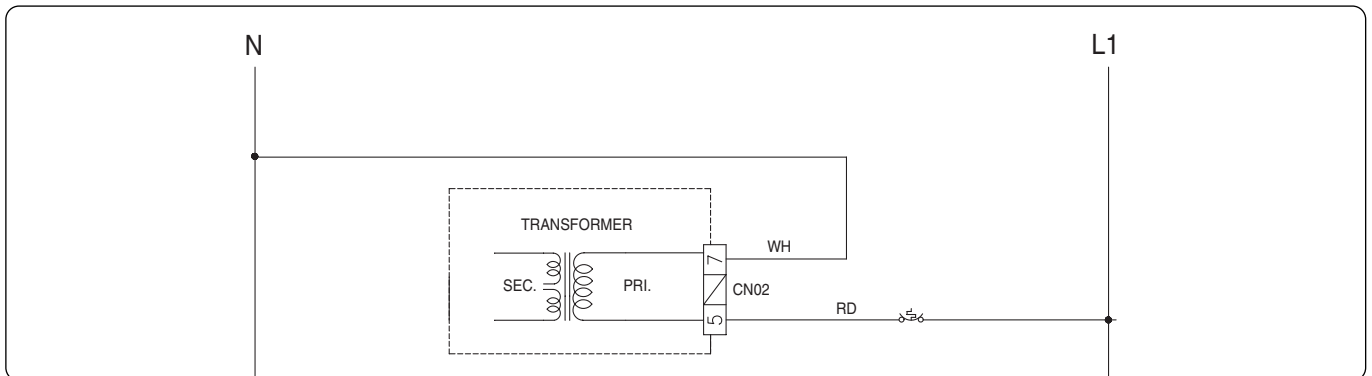
**OVEN LIGHT**



**SELF CLEANING**

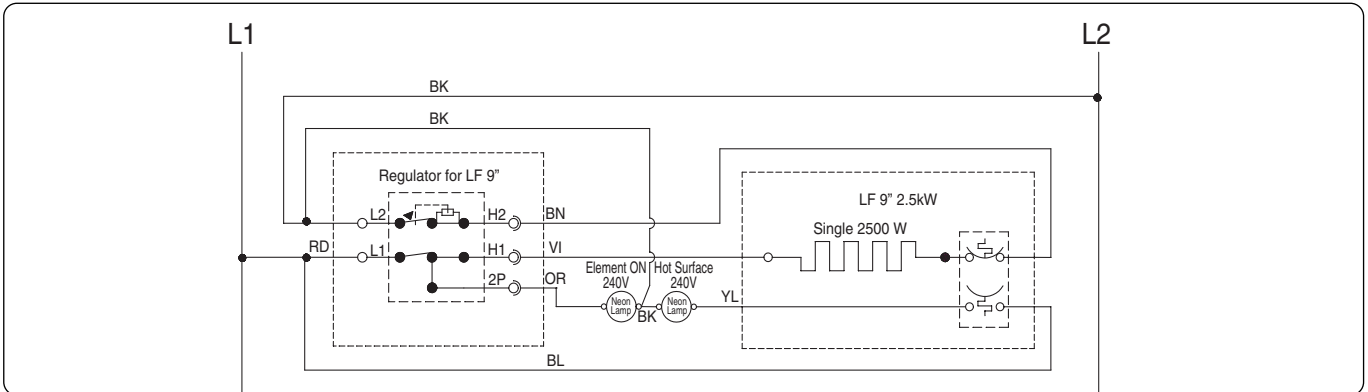


**CLOCK DISPLAY ON**

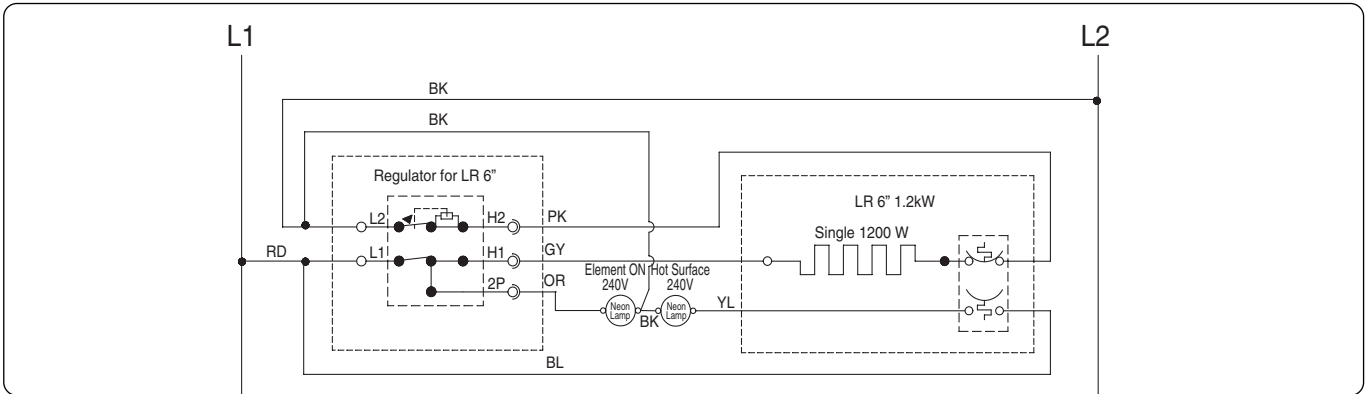


# For Model: LRE3091SW / LRE3091SB / LRE3091ST

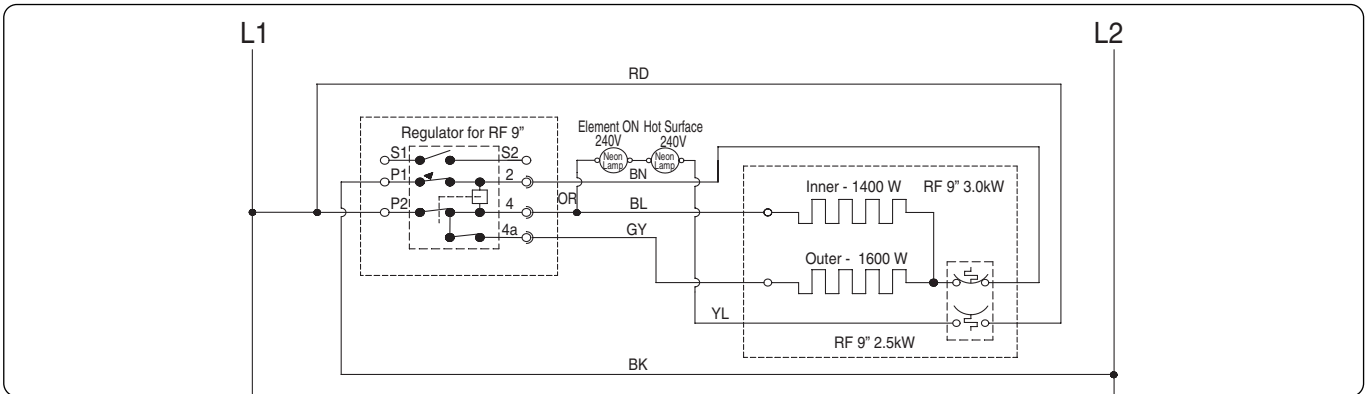
## LF Cook-top Element



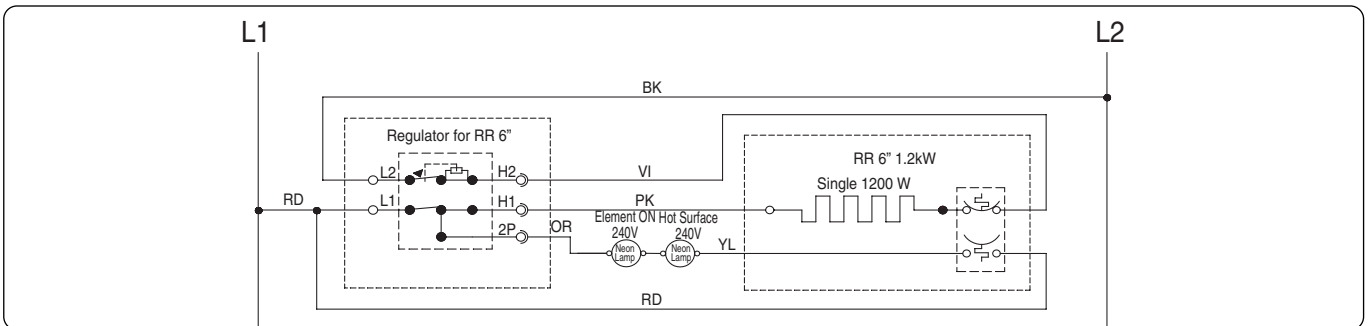
## LR Cook-top Element



## RF Cook-top Element



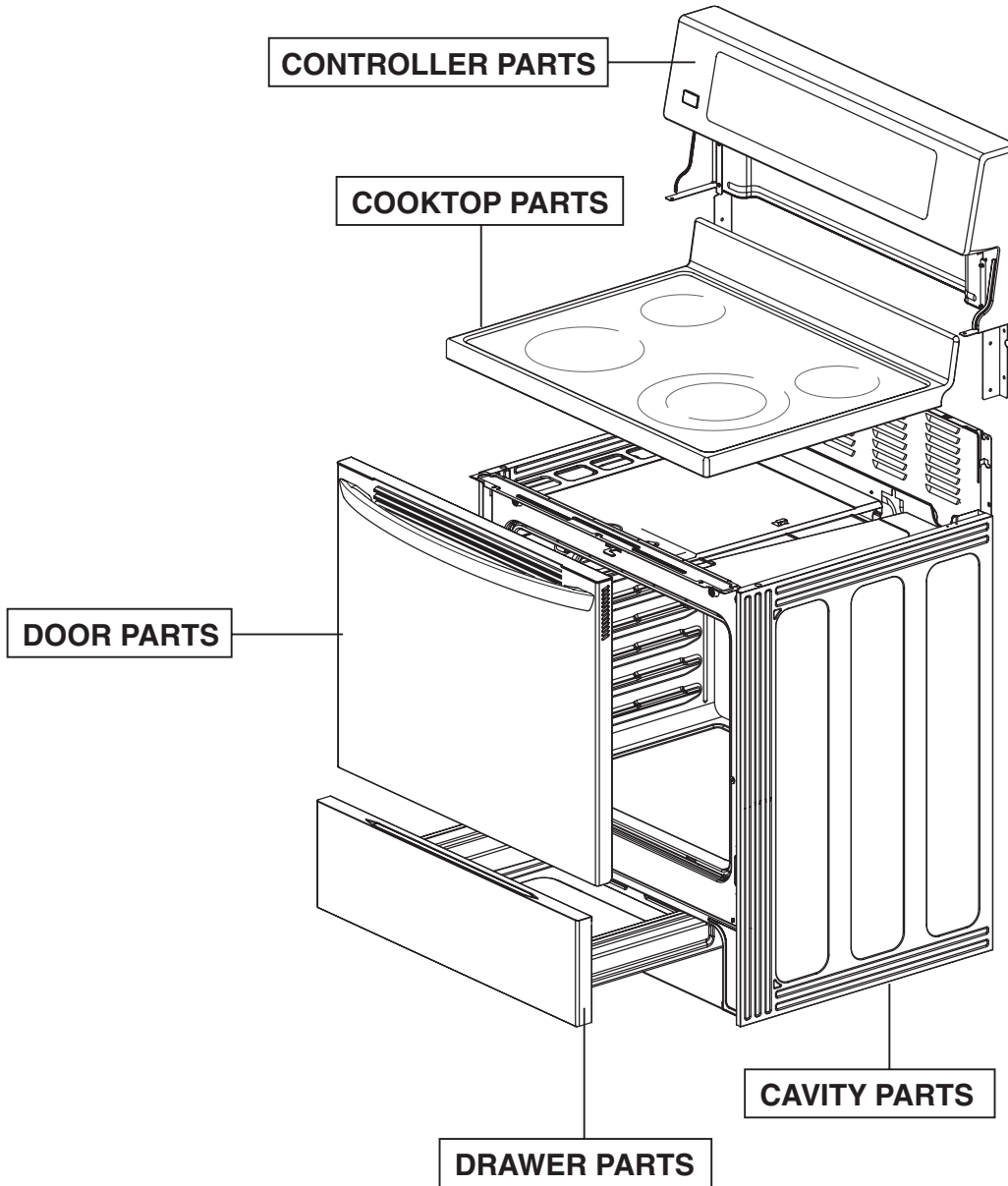
## RR Cook-top Element



# EXPLODED VIEW

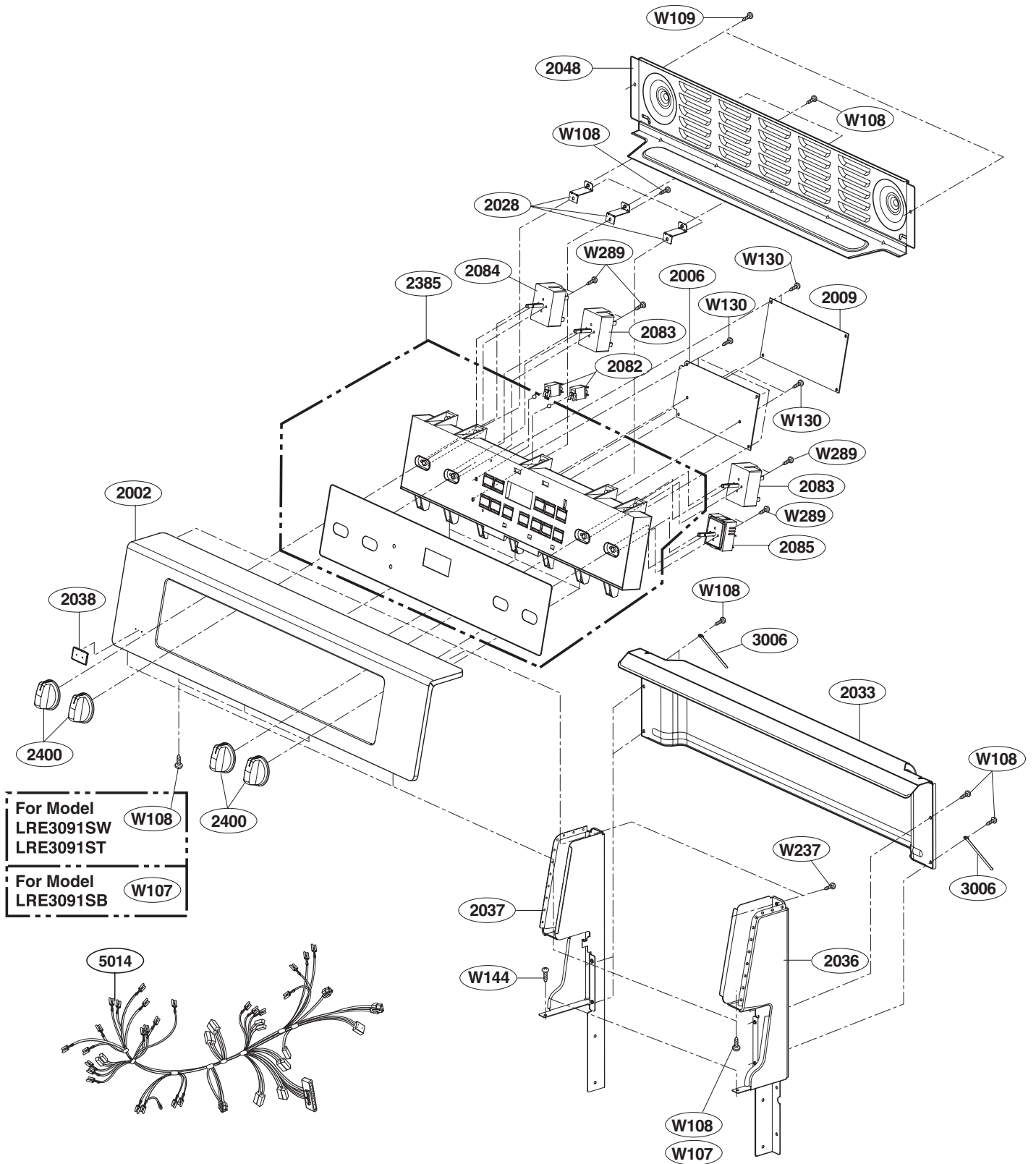
## INTRODUCTION (I)

For Model: LRE3091SW  
LRE3091SB

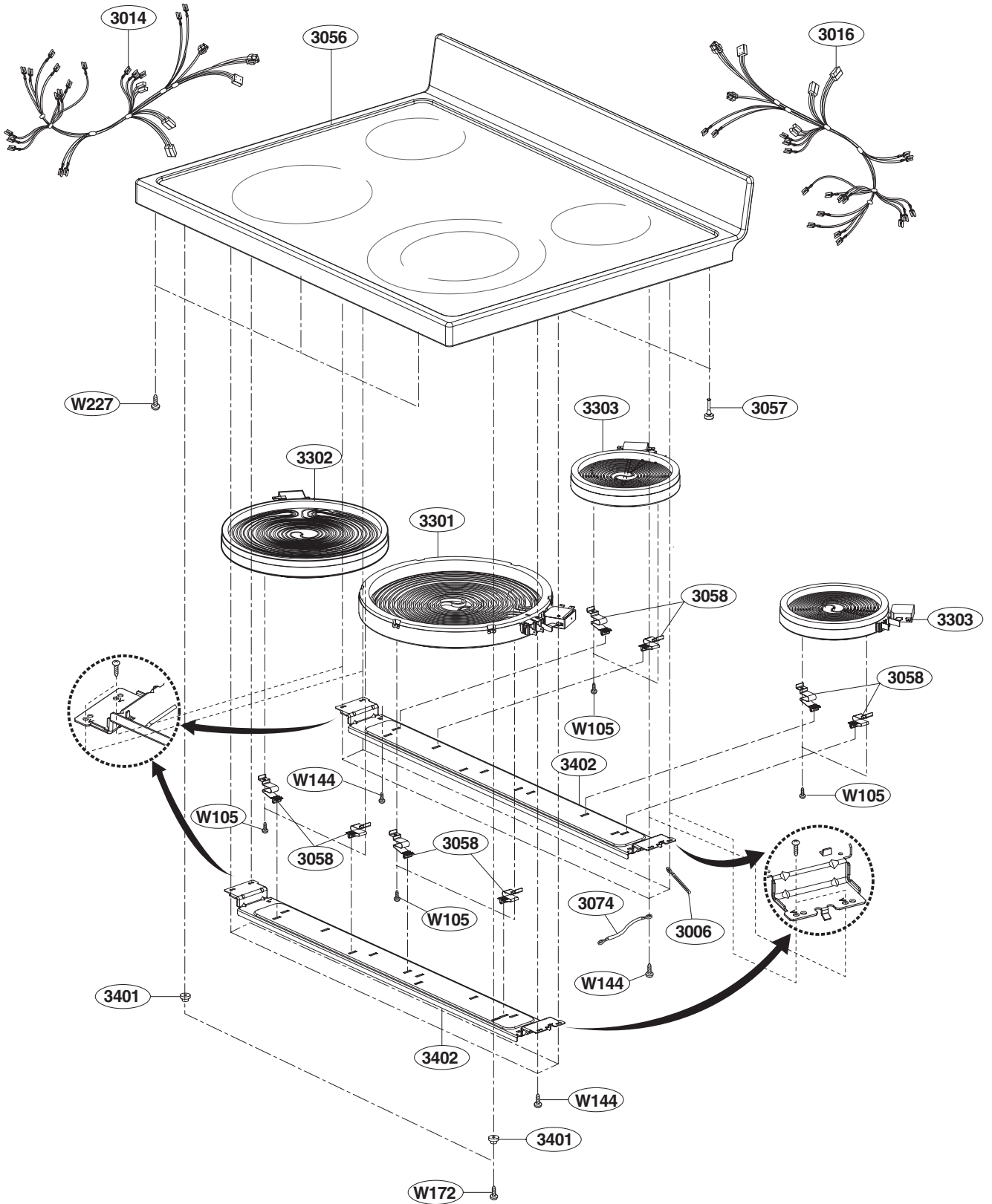




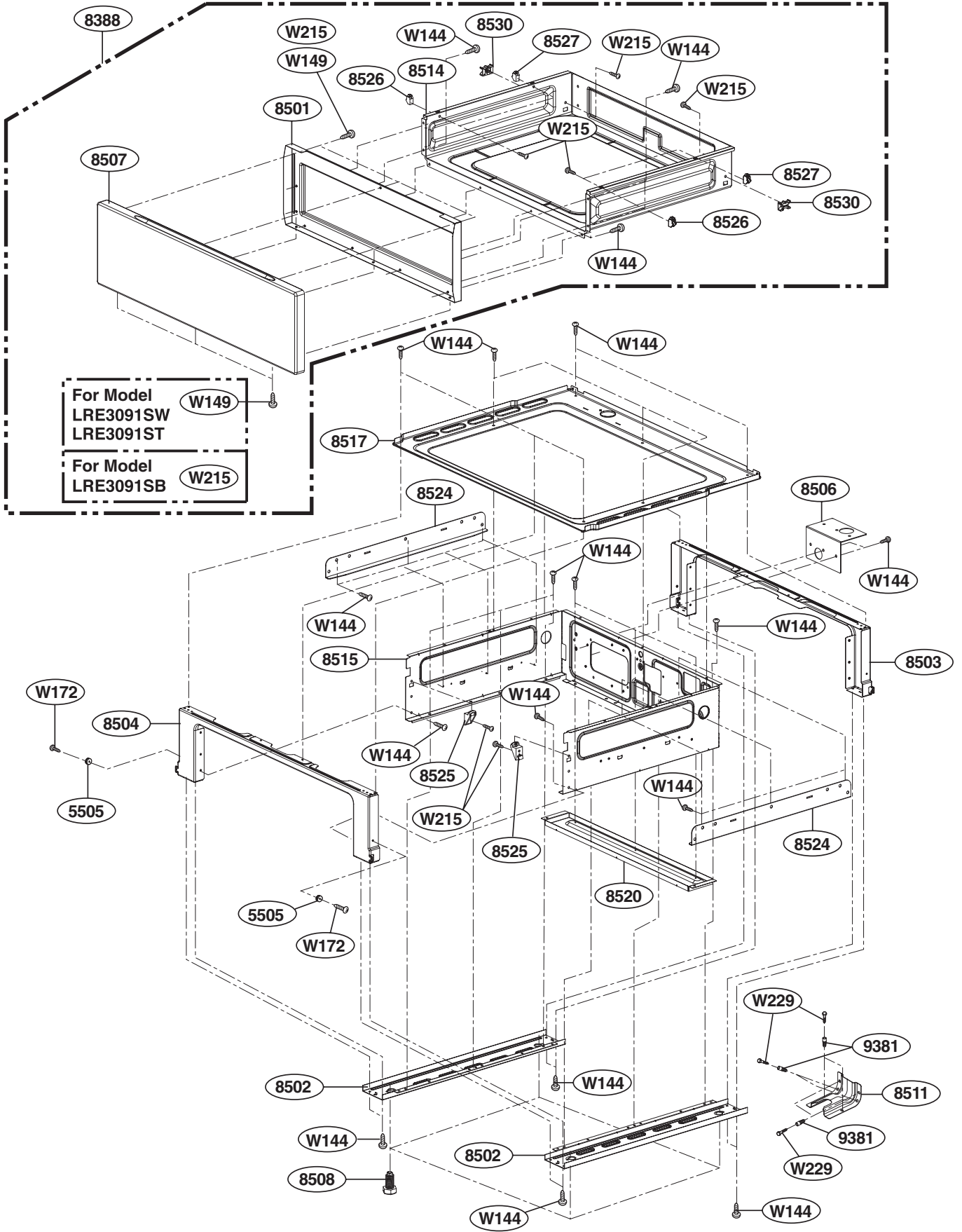
# CONTROLLER PARTS



# COOKTOP PARTS



# DRAWER PARTS







**LG Electronics Inc.**