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## **IMPORTANT SAFETY NOTICE**

The information in this training manual is intended for use by persons possessing an adequate background in electrical equipment, electronic devices, and mechanical systems. In any attempt to repair a major appliance, personal injury and property damage can result. The manufacturer or seller maintains no liability for the interpretation of this information, nor can it assume any liability in conjunction with its use. When servicing this product, under no circumstances should the original design be modified or altered without permission from LG Electronics. Unauthorized modifications will not only void the warranty, but may lead to property damage or user injury. If wires, screws, clips, straps, nuts, or washers used to complete a ground path are removed for service, they must be returned to their original positions and properly fastened.

## **CAUTION**

To avoid personal injury, disconnect the power before servicing this product. If electrical power is required for diagnosis or test purposes, disconnect the power immediately after performing the necessary checks. Also be aware that many household appliances present a weight hazard. At least two people should be involved in the installation or servicing of such devices. Failure to consider the weight of an appliance could result in physical injury.

## **ESD NOTICE**

Some of the electronics in appliances are electrostatic discharge (ESD) sensitive. ESD can weaken or damage the electronics in these appliances in a manner that renders them inoperative or reduces the time until their next failure. Connect an ESD wrist strap to a ground connection point or unpainted metal in the appliance. Alternatively, you can touch your finger repeatedly to a ground connection point or unpainted metal in the appliance. Before removing a replacement part from its package, touch the anti-static bag to a ground connection point or unpainted metal in the appliance. Handle the electronic control assembly by its edges only. When repackaging a failed electronic control assembly in an anti-static bag, observe these same precautions.

## **REGULATORY INFORMATION**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorient or relocate the receiving antenna; Increase the separation between the equipment and the receiver; Connect the equipment to an outlet on a different circuit than that to which the receiver is connected; or consult the dealer or an experienced radio/TV technician for help.

## **DISCLAIMER**

The information in this training manual was accurate at the time of publication. Every effort has been made to ensure accuracy. Updates, changes, etc. are available via GCSC and LGCSacademy.

## **COMPLIANCE**

The responsible party for this device's compliance is LG Electronics Alabama, Inc.; 201 James Record Road, Huntsville, AL, 35813.

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## LRG30855\*\* (GAS RANGE)

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## GENERAL INFORMATION

### IMPORTANT SAFETY NOTICES

The information in this training manual is intended for use by persons who have adequate backgrounds of electrical, electronic, and mechanical experience. Any attempt to repair a major appliance may result in personal injury or property damage. The manufacturer claims no responsibility for the interpretation of this information not can it assume any liability in connection with its use.

If the information in this manual is not followed exactly, fire or explosion may result, causing property damage, injury, or death. Gas (natural gas or propane) is explosive.

If you smell gas:

- Do not try to light any appliance.
- Do not touch or operate any electrical switch.
- Do not use any phone (wired, portable, or cellular) in the building.
- Immediately call the gas supplier from a neighbor's phone.  
Follow the gas supplier's instructions.
- If you can not contact the gas supplier, call the fire department.

To avoid personal injury, disconnect the power before servicing the appliance. If electrical power is required diagnosis or testing, disconnect it immediately after performing the necessary checks.

If grounding devices, wires, screws, straps, clips, nuts, or washers used to complete a path to ground are removed for service, they must be replaced in their original positions and properly secured.

This oven is not designed for open-door cooking.

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## INTRODUCTION

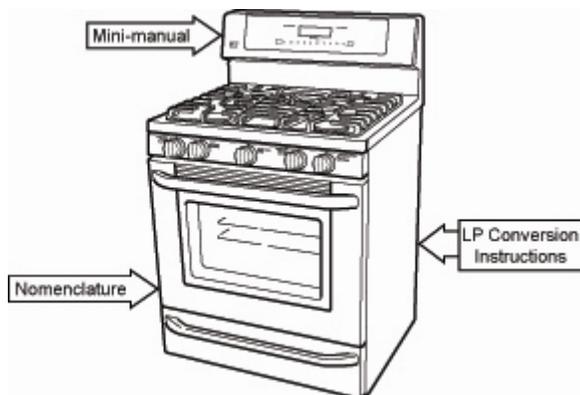


The self-cleaning gas oven has a tactile, electronic touchpad control. It is user-friendly and easy to operate.

The surface burners are controlled by manually operated valves.

The convection baking and roasting cycles provide even cooking and superior baking results.

The nomenclature plate, with model and serial numbers, is on the oven frame above the warming drawer. This plate also shows the burner ratings, fuel type, and pressure settings from the factory.



The mini-manual is in an envelope taped behind the back panel.



The propane (LP Gas) instructions are attached to the back of the range. Inside, near the gas valve, is a set of LP orifices for the conversion.

We recommend re-using this bracket to save the natural gas orifices in the event the range must be restored to burn natural gas in the future.

The gas conversion should be performed **ONLY** by a certified gasfitter who has the proper training and tools to accomplish the job.

# WARRANTY

## LG ELECTRONICS, INC. LG GAS RANGE LIMITED WARRANTY — USA



LG Electronics Inc. will repair or replace your product, at LG's option, if it proves to be defective in material or workmanship under normal use, during the warranty period set forth below, effective from the date of original consumer purchase of the product. This limited warranty is good only to the original purchaser of the product and effective only when used in U.S.A.

|   |   |
|---|---|
| <b>WARRANTY PERIOD:</b><br><b>LABOR:</b> One year from date of original purchase<br><b>PARTS:</b> One year from date of original purchase<br><b>WHAT IS COVERED:</b><br>Any part of the range which fails due to a defect in materials or workmanship. During this full one-year warranty, LG will also provide, free of charge, all labor and in-home service to replace the defective part. | <b>HOW SERVICE IS HANDLED:</b><br><b>In-Home Service:</b><br>Please retain dealer's dated bill of sale as evidence of the Date of Purchase for proof of warranty, and submit a copy of the bill of sale to the service person at the time warranty service is provided.<br>Please call 1-800-243-0000 and choose the appropriate option to locate your nearest LG Authorized Service Center.<br>Or visit our Web site at <a href="http://www.lgservice.com">www.lgservice.com</a> . |
|---|---|

**THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT ANY IMPLIED WARRANTY IS REQUIRED BY LAW, IT IS LIMITED IN DURATION TO THE EXPRESS WARRANTY PERIOD ABOVE. LG WILL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INDIRECT, OR INCIDENTAL DAMAGES OF ANY KIND, INCLUDING LOST REVENUES OR PROFITS, IN CONNECTION WITH THE PRODUCT. SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.**

**THIS LIMITED WARRANTY DOES NOT APPLY TO:**

1. Service calls to correct the installation of your appliance, to instruct you how to use your appliance, to replace house fuses or correct house wiring, or to replace owner-accessible light bulbs.
2. Repairs when your appliance is used in other than normal, single-family household use.
3. Pickup and delivery. Your appliance is designed to be repairable in the home.
4. Damage resulting from accident, alteration, misuse, abuse, fire, flood, improper installation, acts of God, or use of products not approved by LG Corporation.
5. Repairs to parts or systems resulting from unauthorized modifications made to the appliance.
6. Replacement parts or repair labor costs for units operated outside the United States.
7. Any labor costs during the limited warranty period.

This warranty is extended to the original purchaser and any subsequent owner for products purchased for home use within the USA. In Alaska, the warranty excludes the cost of shipping or service calls to your home. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion or limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. To know what your legal rights are, consult your local or state consumer affairs or your state's Attorney General.

**TO CONTACT LG ELECTRONICS BY MAIL:**

LG Customer Interactive Center  
P. O. Box 240007  
201 James Record Road  
Huntsville, Alabama 35824  
ATTN: CIC

***Product Registration Information***

Model: \_\_\_\_\_  
Serial Number: \_\_\_\_\_  
Date of Purchase: \_\_\_\_\_



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## INSTALLATION

### POWER SUPPLY

This appliance must be connected to 120 VAC, 60Ø current on a 20-amp, dedicated circuit. Do not use an adapter or an ungrounded outlet.

### GROUNDING SPECIFICATIONS

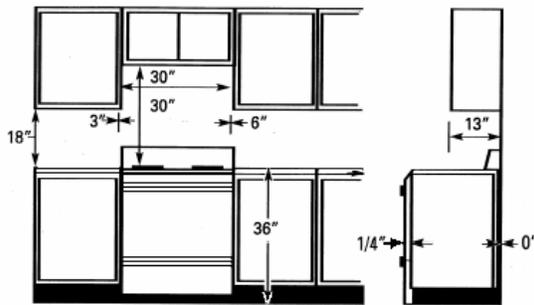
This appliance must be properly grounded. Wiring must conform to the National Electrical Code (NEC) and all local codes.

|                        |        |      |
|------------------------|--------|------|
| Ground path resistance | 0.10 W | Max. |
| Insulation resistance  | 250 KW | Min. |

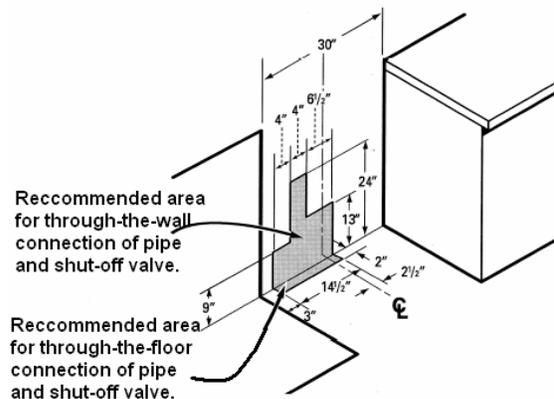
### GAS SUPPLY

This range is designed to operate at a pressure of 5 inches of water column on natural gas or 10 inches on LP (propane or butane).

### MINIMUM CLEARANCES



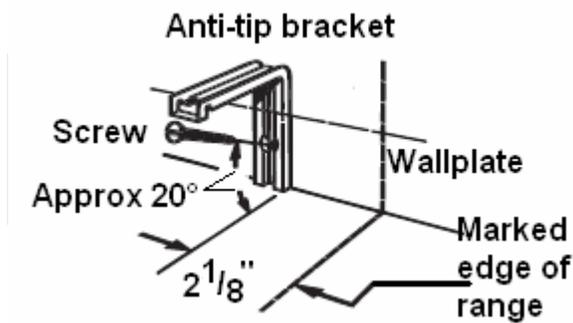
This drawing shows the minimum clearances for the gas range. The 30" requirement between stovetop and cabinet bottom allows sufficient space to the installation of a standard over-the-range microwave oven.



This drawing shows the dimensions and suggested placement of the electrical and gas connections behind the range. The template makes it easy to locate all items properly.

(See the larger drawing on page 64.)

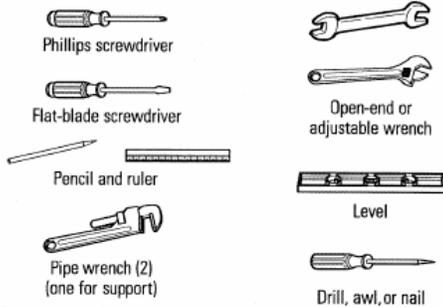
## ANTI-TIP DEVICE



Be sure to install the anti-tip bracket. This prevents tipping the range in the event someone stands on the door or otherwise puts the range off balance. Use the installation template to locate the wall bracket; then, attach the bracket to the wall with a large wood screw.

When the range is pushed back into place, the bracket attached to the range will be positioned under the wall bracket and it will keep the range from tipping.

## TOOLS



For the most part, ordinary hand tools are sufficient for installing the range. It will be necessary to check the incoming gas pressure and to regulate it if it is out of specification.



A manometer is essential for proper regulation of gas pressure and diagnosis of supply and combustion problems. You can use either a digital manometer or the older style slack-tube manometer.

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## OPERATION

We include brief operating instructions for the technician to allow a thorough check-out of the appliance and to use during diagnosis and repair.

### SURFACE ELEMENTS

There are five surface elements, each of which is a different output. The controls are all the same, though. Press the knob that corresponds to the element you wish to operate and turn it counterclockwise (to the left) to the light position. You will hear the tik-tik-tik of the igniter as it sparks to ignite the gas.



When the burner is lit, turn the knob to the desired setting. Turn it clockwise to the OFF position to extinguish the flame. When one burner control is in the IGNITE position, the igniters on all the surface elements will fire. The surface burners are controlled by manual valves. These valves have a low flame or simmer adjustment, which will be covered later in this manual.

### OVEN VENT

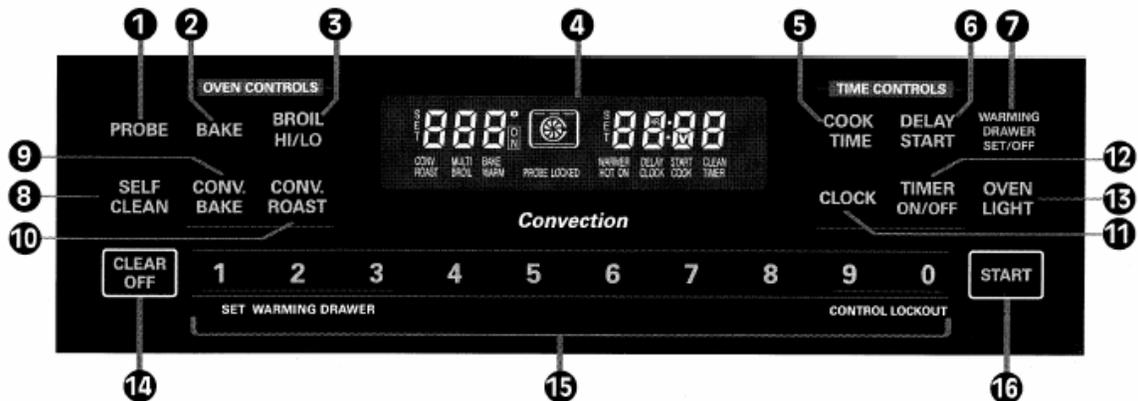
The oven is vented through ducts at the rear of the range top. Do not block these vents while cooking in the oven. Because of the heat, do not leave closed containers on the cooktop due to the burst hazard. Do not leave plastic or flammable items on the cooktop; they may melt or ignite. Pot handles and utensils will become very hot if left on the cooktop near the vent and could cause burns.

### OTHER CONTROLS



The gas oven, electric warming drawer, convection, and self-cleaning functions are operated from the electronic touchpad control on the back of the range.

## TOUCHPAD CONTROLS



1. **PROBE** – Press to select the probe function.
2. **BAKE** – Press to select the bake function.
3. **BROIL HI/LO** – Press to select the broil function.
4. **DISPLAY** – Shows the time of day, oven temperature, mode (bake, broil, convection or clean), warming drawer, and others.
5. **COOK TIME** – Press, then enter the cooking time. The oven will stop when the time has elapsed.
6. **DELAY START** – Use with COOK TIME or SELF CLEAN to set a start time to cook or clean.
7. **WARMING DRAWER** – Press this and number pads 1, 2, or 3 to turn on the warming drawer.
8. **SELF CLEAN** – Press to start a self-cleaning cycle.
9. **CONV BAKE** – Press to select convection baking.
10. **CONV ROAST** – Press to select convection roasting.
11. **CLOCK** – Press, then use the number pads to set the time.
12. **TIMER ON/OFF** – Press to use the timer feature.
13. **OVEN LIGHT** – Turns the oven light ON or OFF.
14. **CLEAR/OFF** – Press to cancel any oven setting. It does not affect the warming drawer, clock, or timer.
15. **NUMBER PADS** – Press to enter a number to a setting.
16. **START** – Press to start a cooking, warming drawer, or cleaning function.

A brief description of the controls and cycles follows to enable the technician to test all the cycles and to verify that the repairs have been accomplished and the range is now working to specification.

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## OVEN – BAKING or ROASTING

This oven is not designed for open-door cooking. To operate the oven for regular (non-convection) baking or roasting:

1. Touch **BAKE**
2. Touch the **number pads** to enter the desired temperature.
3. Touch **START**.  
The display will show **ON** and **100°** (or **40°** if set for Celsius.) As the oven heats, the display will show the changing temperature. When the set point is reached, the buzzer will sound.
4. Touch **CLEAR/OFF** when cooking is complete.

## OVEN – BROILING

This oven is not designed for open-door cooking. To operate the oven for regular broiling:

1. Place the meat or fish on the broiler grid in the broiler pan.
2. Follow the suggestions for shelf positions in the Broiling Guide (owner's manual, page 15).
3. The oven door must be closed during broiling.
4. Touch **BROIL HI/LO** once for high or twice for low.
5. Touch **START**.
6. Touch **CLEAR/OFF** when broiling is complete.

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## CONVECTION BAKING or ROASTING

The oven fan is turned off when the oven door is opened. Do not leave the door open for long periods of time while using convection cooking. Since the oven is not designed for any sort of open-door cooking, we recommend leaving the door shut all the time other than when placing items in the oven or removing them.

1. Touch **CONV BAKE** or **CONV ROAST**.
2. Touch the number pads to set the desired temperature.
3. Touch **START**.  
The display will show **ON** and **100°** (or **40°** if set for Celsius.) As the oven heats, the display will show the changing temperature. When the set point is reached, the buzzer will sound.
4. To change the oven temperature, touch **CONV BAKE** or **CONV ROAST** and then touch the number pads to set the new desired temperature.
5. Touch **CLEAR/OFF** when broiling is complete.

## AUTO RECIPE CONVERSION™

When using the convection oven, it will automatically convert the temperatures from regular baking to convection baking. No user intervention is necessary.

## CLOCK and TIMER

1. Touch **CLOCK**.
2. Touch the **number pads** to enter the time. You must touch them in the order they are read; for example, to enter a time of 10:54, you must touch **1**, **0**, **5**, and **4**.
3. Touch and hold **START** until the time shows in the display.
4. To check the time while something else is showing on the display, simply touch **CLOCK**.

---

## PROBE

The probe allows a reading of the internal temperature of the food during cooking. Insert the probe into the food (typically a large roast or portion of meat) and plug it in to the socket in the oven.

1. Insert the probe into the food.
2. Plug the probe into the socket inside the oven.
3. Touch **PROBE**.
4. Touch the **number pads** to set the desired internal temperature of the food between 100° F (38° C) and 200° F (93° C).
5. Touch **BAKE**.
6. Touch the **number pads** to set the desired oven temperature.
7. Touch **START**.
8. When the internal temperature of the food reaches the setpoint, the oven turns off and the buzzer sounds. To stop the buzzer, touch **CLEAR/OFF**.

If the probe is removed from the food before the setpoint is reached, the buzzer sounds and the display flashes until the probe is removed from the socket. You can use the timer even though you cannot use timed oven functions while using the probe.

To avoid damaging the probe, be certain the food is defrosted before inserting the probe. It should not touch bone, fat, or gristle. When removing the probe, use a hot pad rather than tongs to avoid damage. Never leave the probe in the oven during a self-clean cycle.

## WARMING DRAWER

The warming drawer uses a 500-watt, 110 V<sub>AC</sub> electric element.

Always start with hot food. Do not use the warming drawer to heat cold food. Allow approximate 25 minutes for the warming drawer to preheat. Do not put liquids, water, or aluminum foil in the warming drawer. The warming drawer cannot be used during a self-cleaning cycle.

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To use the warming drawer:

1. Touch **WARMING DRAWER**.
2. Touch **1**, **2**, or **3** on the number pad to select low, medium, or high.
3. Touch **START**.
4. To turn it off, touch **WARMING DRAWER**. Touching **CLEAR/OFF** does nothing to the warming drawer.

## **SELF-CLEANING CYCLE**

Before using the self-cleaning cycle, especially for the first time, we recommend ventilating the kitchen with an open window or ventilation fan or hood. Remove the broiler pan and grid, all cookware, all shelving and racking, and any trace of aluminum foil.

Soils on the sealing surfaces of the door and the oven frame must be cleaned by hand. Use hot water, a soap-filled scouring pad, or a cleanser like SoftScrub<sup>®</sup>. Rinse well and dry thoroughly.

Do not attempt to clean the gasket. The fiberglass material cannot withstand abrasion. It is essential for the gasket to remain intact. If you detect fraying or wear, have the gasket replaced.

To set the oven for self cleaning:

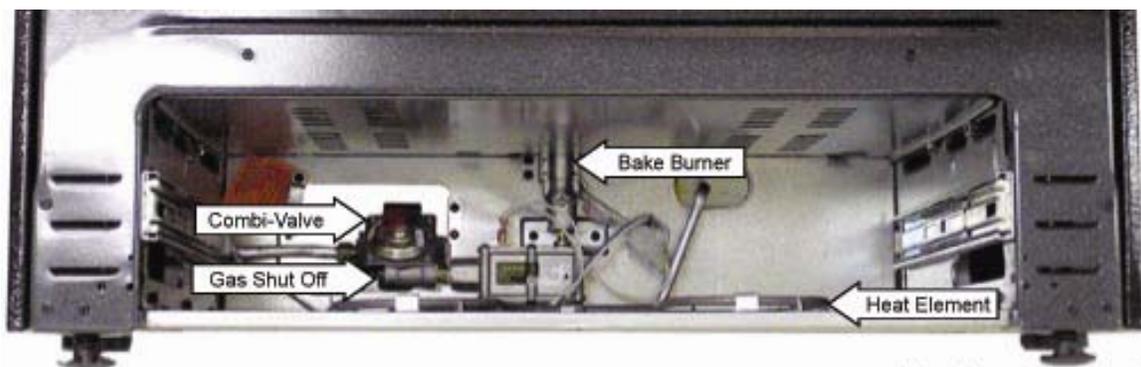
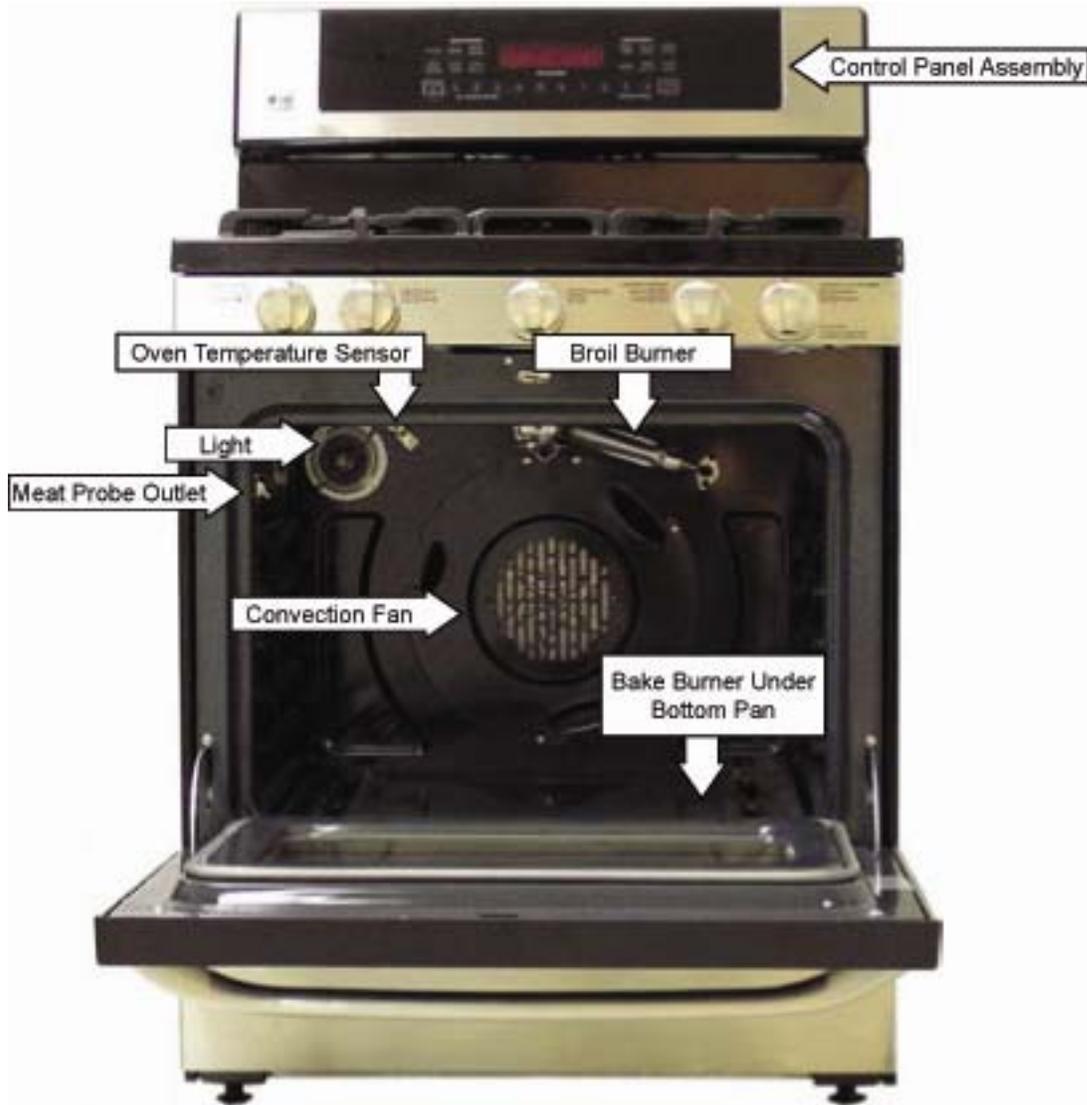
1. Touch **SELF CLEAN**.
2. Use the **number pads** to set a clean time or go with the default of **420** (four hours and twenty minutes.)
3. Touch **START**.
4. When the cycle is complete, the **LOCKED** light will extinguish and the door will be unlocked.

If you set a self-clean cycle and forget to close the oven door, the display will flash **LOCKED**. To stop a self-clean cycle, touch **CLEAR/OFF**. The **LOCKED** light will extinguish and the door will unlock when the temperature has dropped to a safe level.

After a self-clean cycle, there may be some white ash in the oven. This may be wiped away with a damp cloth after the oven cools.

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## COMPONENT LOCATION VIEWS



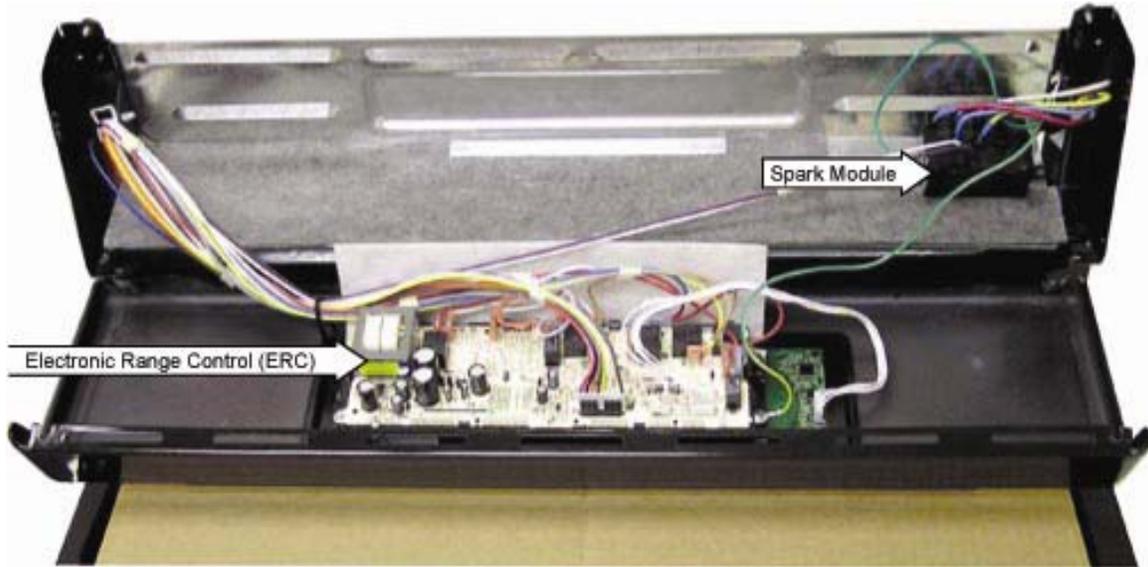
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## COMPONENT LOCATION VIEWS

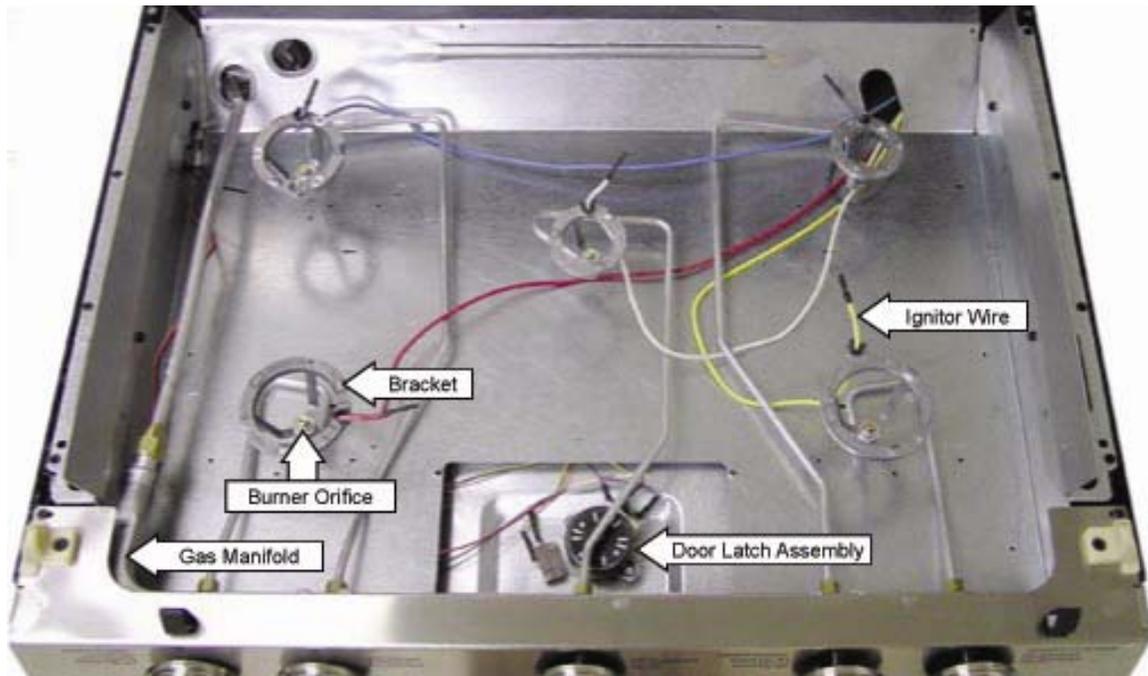


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## COMPONENT LOCATION VIEWS



Control panel in service position



Cooktop removed, with heat shield and latch assembly cover removed

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## OVEN DOOR REMOVAL



### WARNING!

Sharp edges are exposed when servicing the oven. Wear Kevlar® gloves or an equivalent protective hand cover.



### OVEN DOOR REMOVAL

To remove the door, open it to the first stop near the vertical (closed) position. Lift the door and pull it straight up.



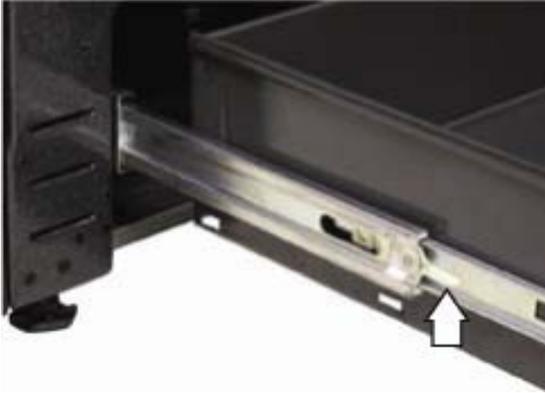
### OVEN DOOR REPLACEMENT

Hold the door by the top corners in a nearly vertical position (similar to removal in the previous step.) Guide the hinge arms into the door slots and push the door onto the arms firmly. Close the door and check for alignment. Operate the door a couple of times to make sure it opens and closed properly and without binding.

If the door cannot be closed properly, it is not seated on the hinge arms.

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## WARMING DRAWER AND GASKET REPAIR

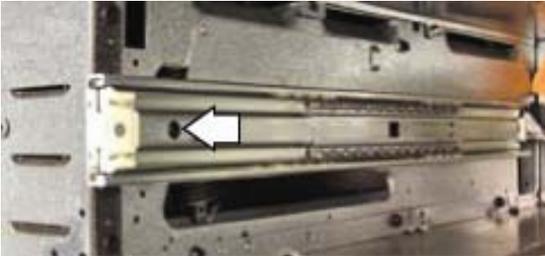


### DRAWER REMOVAL

Pull the drawer out all the way to the stop. There are tabs in the drawer rails. Lift the left tab and push down the right tab to pull the drawer off the rail.

### DRAWER REPLACEMENT

To replace the drawer, place the rails into the slides and push the drawer into the range.



### WARMING DRAWER TRACKS

Each track is attached to the range with a Phillips screw and two tabs. To remove the track, remove the screw from the front of the track and pull the slide out. Lift the track slightly and twist it toward the center of the range to disengage the front tab. Then pull the track forward to release it.



### WARMING DRAWER ELEMENT

Reminder! Unplug the range before servicing the element! You'll need to remove the warming drawer to service the heating element. Remove the two T-15 Torx® screws that hold the terminal cover. The element is attached to the bottom of the range with six clips held by 1/4" hex-head screws.



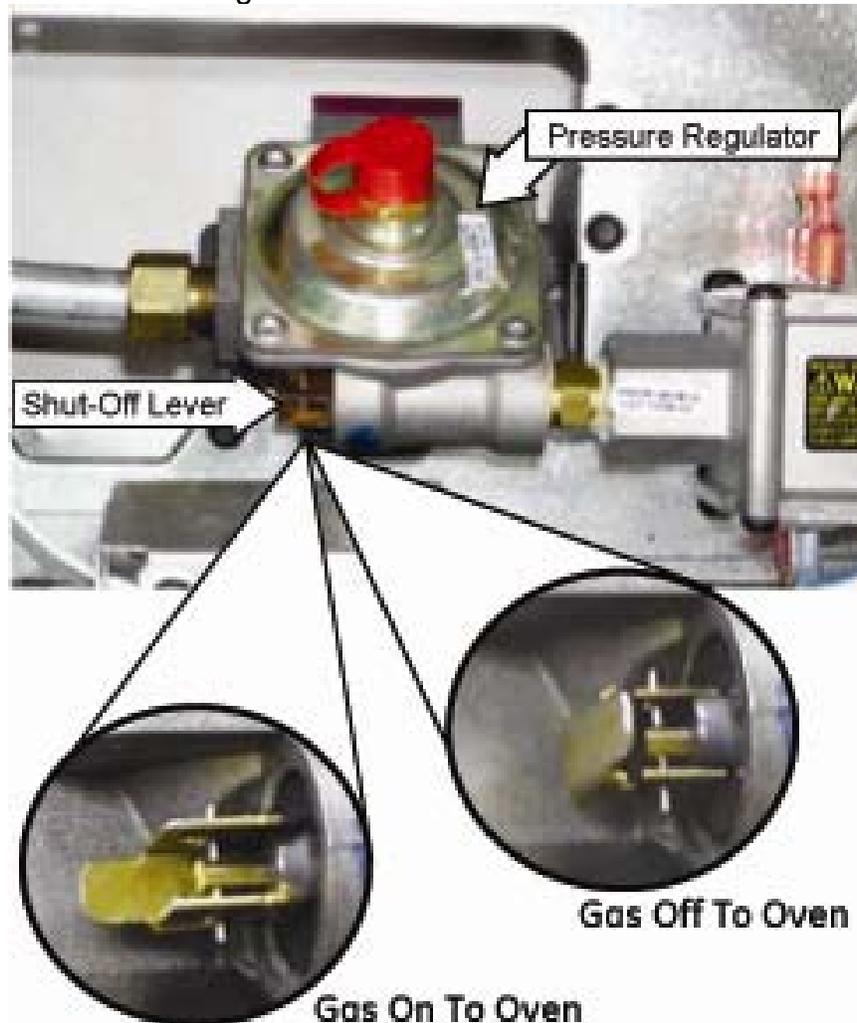
### WARMING DRAWER GASKET

The gasket is held by several small, wire clips that are supplied already formed into the gasket. Use needle-nosed pliers to remove the clips. This gasket forms a seal around the top and sides of the drawer.

---

## GAS SHUTOFF VALVE (OVEN ONLY)

**NOTE:** The gas shutoff valve shuts off the gas to the oven **ONLY** and has no effect on the surface burners. This shutoff valve is accessible from the inside of the range after the warming drawer is removed.



The shutoff valve allows servicing the oven burners without having to pull the range out and shut off the gas main.

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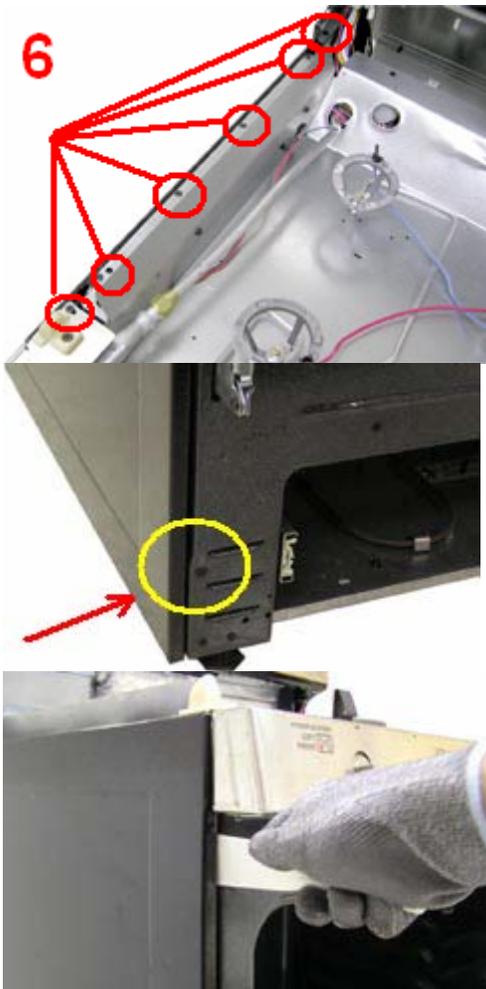
## MAIN TOP REMOVAL



Remove the grates, burner caps, burner heads, igniters, and the T-15 Torx® screws from the cooktop.

Insert a putty knife under the edge of the main top press the clips and allow removal of the main top.

## SIDE PANEL REMOVAL



1. Remove the range from its installation.
2. Remove the door. (Page 18.)
3. Remove the warming drawer. (Page 19.)
4. Remove the main top. (Page 21, above.)
5. Remove six Phillips screws from the top of the side panel.
6. Remove the Phillips screw from the front panel under the hinge.
7. Remove four ¼" hex head screws from the back edge of the side panel.
8. Slide a putty knife into the side panel under the manifold panel and gently pry the side panel off the snap fastener.

---

## OVEN HINGE REMOVAL



1. Remove the range from its installation.
2. Remove the door. (Page 18.)
3. Remove the warming drawer. (Page 19.)
4. Remove the side panel. (Page 21.)
5. Note the position of the hinge spring and the paint indicator.

Remove the hinge spring.



6. Remove the E-clips from the hinge pin and remove the pin.



7. Remove the two  $\frac{1}{4}$ " hex head screws that attach the hinge to the frame.



8. Position the top of the hinge body into the notch in the hinge arm (see photo) and rotate the hinge body clockwise to remove.

---

## DOOR

The doors can be separated into two assemblies: (1) the outer assembly, consisting of the handle, vent trim, outer glass, and frame; and (2) the inner assembly, consisting of the inner panel, gasket, glass panels, and insulation. The inner and outer assemblies are held together by two T-20 Torx® screws in the top corners and four ¼" hex head screws across the bottom edge.

The gasket is held in place between the inner and outer sections of the inner door panel.



1. Remove the oven door. (Page 18.)
2. Place the door inside up on a padded surface.
3. Remove the two Torx T-20® screws from the top corners of the inner panel. Remove the four ¼" hex head screws from the bottom of the door and remove the inner assembly.



4. Place the inner assembly inside up on a padded surface.
5. Remove the four ¼" hex head screws, the inner door panel, and the insulation.
6. Remove the four ¼" hex head screws from the outer frame and carefully lift off the outer frame.

### NOTE!

When replacing the gasket, be sure the gasket bead is positioned evenly and uniformly between the outer and inner sections of the inner door panel.

---

## OVEN LIGHT

### CAUTION!

Before replacing the light bulb, unplug the range.

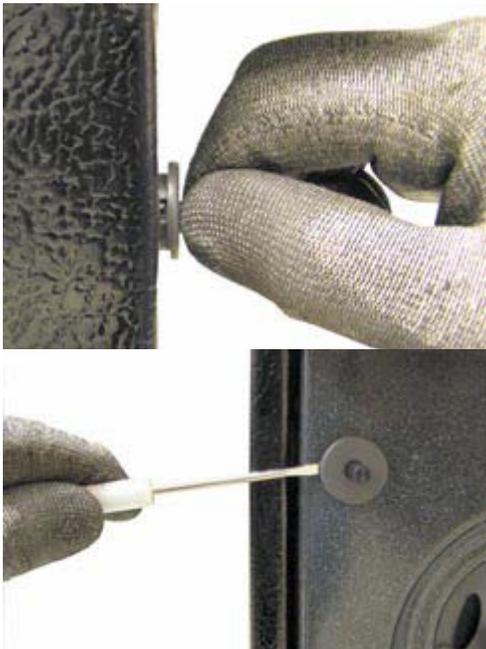
The glass cover should be removed only when cold. Be sure to let the cover and bulb cool completely. Do not touch a hot bulb with bare hands or a damp cloth. Replace the bulb with an appliance type bulb, 120 V<sub>AC</sub> and no more than 40 watts. If the bulb is not working, replace the bulb with a new one. The bulb should come on when the oven door is open. If that doesn't resolve the issue, check for 120 V<sub>AC</sub> across the terminals. If 0 volts, check the door switch and wiring.



1. Unplug the oven.
2. Push the wire clip to the side and remove the glass cover.
3. Remove and replace the bulb.
4. Clean the glass cover using a wet cloth. Be sure the cover is completely cool.

## OVEN DOOR SWITCH

The switch is on the left side of the door frame and is accessible from the front.

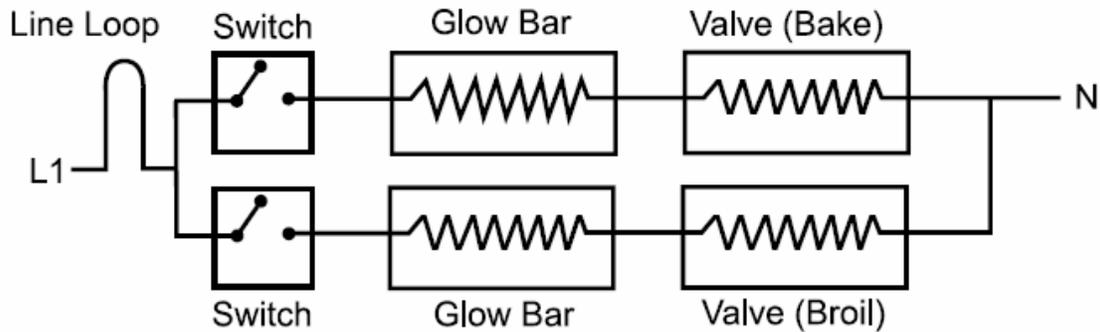


1. Unplug the oven.
2. Pull the switch forward to reveal the spring clips on each side.
3. Depress one of the clips with a small screwdriver while pulling the switch out.
4. Depress the other clip and pull the switch free of the door frame.
5. Disconnect the switch wiring harness. Secure it so it doesn't fall back into the hole.

---

## OVEN BURNER IGNITION

The oven BAKE and BROIL burners are ignited by Norton style glow bar ignitors. The ignition circuits consist of the electronic control (main board), the ignitor, and the gas valve. The gas valve and the pressure regulator are supplied as a complete assembly. It is sometimes called a combination valve.



As shown in the schematic, the valve is in series with the ignitor (glow bar). When 120 V<sub>AC</sub> is applied, the ignitor requires a minimum of 116, leaving only about 4 volts to operate the valve. The ignitor will remain energized at all times the burner is operating.

From a cold start, the ignitor requires 30 to 60 seconds with a minimum of 116 V<sub>AC</sub> to reduce its electrical resistance sufficiently to provide a minimum of 2.9 amps of current flow in the series circuit. This is the required current flow necessary for the valve to open. The ignitor should provide a steady current flow of 3.3 to 3.6 amps (3.03 to 3.30 V<sub>AC</sub>) in the circuit, which keeps the gas valve open. If the ignitor ages and its resistance increases significantly, the current flow will decrease respectively, and the gas valve will no longer open.

If the ignitor glows red but does not draw a minimum of 2.9 amps, the failure is usually with the ignitor rather than the valve. ALWAYS check the gas valve on the pressure regulator to be sure it is not in the OFF position.

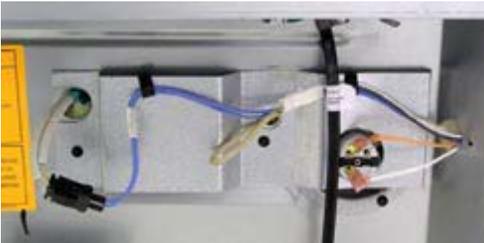
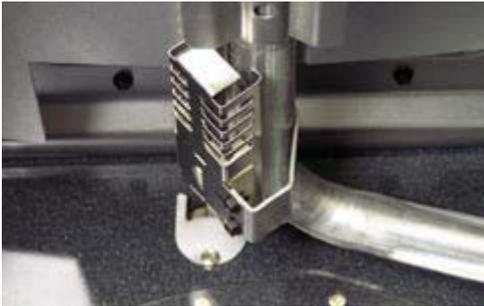
### WARNING!

This range uses rectangular Norton glow bar ignitors. These are NOT interchangeable with cylindrical carborundum glow bars. They operate at different amperages and work in conjunction with different gas valves.

If the ignitor glows but ignition does not occur, be sure the regulator valve is not in the OFF position. Slow ignition can be caused by the following conditions: blockage of the primary air intake, improper alignment of the orifice hood and burner, improper air/gas adjustment, blockage of the crossover slots on the burner, improper installation (drafts in installation area), or a faulty gas valve.

---

## BROIL BURNER AND IGNITOR



1. Remove the oven door. (Page 18.)
  2. Remove the screw that holds the burner in place.
  3. Lower the burner.
  4. Remove the two hex head screws that hold the ignitor to the burner.
  5. Remove the burner.
- NOTE:** When reinstalling the burner, be sure the tab on the burner is inserted into the slot on the rear wall of the oven. Make sure the orifice hood is inserted into the burner inlet opening.
6. Remove the access cover from the back of the range and disconnect the ignitor connector.
  7. Remove the wire retainer and gently pull the connector through the oven wall and remove the ignitor.

### IMPORTANT!

When replacing the ignitor, the connector end must be positioned **OUTSIDE** the range insulation. Do not allow the connector to be inside or next to the insulation. Allow the rigid over-sleeve to position the connector away from the insulation.

The insulation should be allowed to surround the ignitor lead wires, protecting the connector from any heat loss at the insulation opening.

---

## BAKE BURNER AND IGNITOR



1. To remove the bake burner ignitor, remove the oven door. (Page 18.)
2. Remove the warming drawer. (Page 19.)
3. Remove the bottom pan by removing two screws, lifting the back of the pan, and sliding the pan back until it can be removed from the oven.



4. Remove the two hex head screws that hold the ignitor to the bake burner.



5. Disconnect the ignitor wires located behind the warming drawer. Gently pull the connector through the oven floor and remove the ignitor.



6. Remove the hex head screw that holds the front of the burner in place.



7. Remove the two hex head screws, located behind the warming drawer, that hold the burner in place and then remove the burner.

### NOTE!

When replacing the bake burner, be sure the orifice hood is inserted correctly into the burner inlet opening.

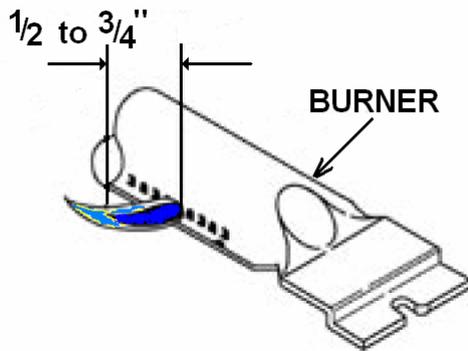
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## BAKE AND BROIL BURNER FLAME ADJUSTMENTS

**WARNING!** Adjustments require disassembly of the burner section. To avoid handling hot parts, the oven should be cool.

**NOTE!** A small amount of odor is normal and will be present when the range is first turned on. If there is a strong odor, the bake and broil assemblies should be inspected.

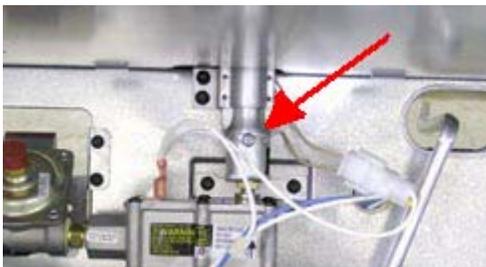
### BAKE and BROIL BURNER TEST



1. Remove the oven door. (Page 18.)
2. Remove the bottom pan. (Page 27.)
3. Replace the oven door.
4. Close the oven door and set the oven to **BAKE** at 350° F. Observe the bake burner flame.
5. Set the control to **BROIL** and observe the broil burner flame.
6. Allow the oven to cool and reassemble it.

**NOTE!** The oven door must remain closed when testing the bake and broil flames. The window should be clean before starting.

When testing the bake and broil elements, observe the flames for a minimum of two minutes. Give the burners time to reach operating temperature. The flame should not lift or blow off the burner during any period of operation. It should be blue with an inner cone between  $\frac{1}{2}$ " and  $\frac{3}{4}$ " (12 to 19 mm).



To correct a BAKE flame problem, remove the warming drawer, loosen the air shutter, and adjust the opening to  $\frac{11}{16}$ ". Run the flame test. If the flames are yellow, open the shutter an additional  $\frac{1}{32}$ ". If they lift off or flutter, close it by  $\frac{1}{32}$ ". Repeat the flame test until the flame is acceptable.

---

## REGULATING GAS PRESSURE

Correct gas pressure is essential for quick burner ignition, correct burner BTUH input, and to minimize the byproducts of combustions, such as carbon monoxide. The recommended regulated pressure for natural gas is 3.5 to 4 inches of water column. Likewise, for LP the recommended pressure is 10.5 to 11 inches of water column.



To measure the gas pressure, you'll need either a digital or water (slack tube) manometer.



Measuring gas pressure can be easily accomplished at any of the 5 surface burners.

Remove a burner grate and one of the sealed burners. Then place the gas pressure measuring tube over the orifice.

With the pressure fitting over the orifice and the range unplugged, turn the surface valve to an open position and record the gas pressure.

If the gas pressure measured is incorrect, check the gas regulator cap position. If it is properly installed for the gas type (natural or LP), replace the regulator and retest pressure.

(See the LP Conversion section for gas regulator cap positioning on page 43.)

---

## SAFETY VALVE and PRESSURE REGULATOR

**WARNING!** Before servicing the range, disconnect the power and the gas supply. Be sure the oven is absolutely cool.

**NOTE!** The pressure regulator and the safety valve are a combination unit (combi-valve) and must be replaced as an assembly.

**NOTE!** The combi-valve is front serviceable. The amperage should be between 3.3 and 3.6 amps at 3.0 to 3.3 V<sub>AC</sub>.



1. Remove the oven door. (Page 18.)
2. Remove the warming drawer. (Page 19.)
3. Remove the bake burner. (Page 27.)
4. Remove the gas line connections at the valve. (The line by the regulator is  $1\frac{1}{16}$ " and the line by the oven shutoff safety valve is  $\frac{9}{16}$ ".)
5. Remove the 5 hex head screws that secure the combi-valve.
6. Remove the valve.



The regulator has an adjustment for converting the range from natural gas to propane (LP). The adjustment screw is marked to show which way is up for natural gas or propane (LP).

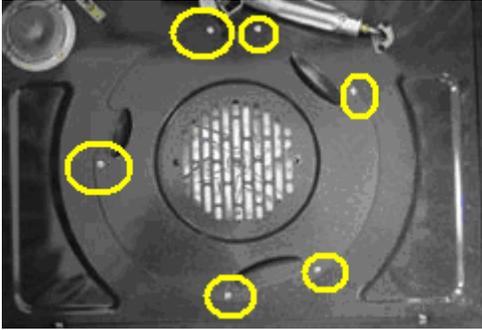


Note the marking that shows the short end to be installed for natural gas. On the other side, the arrow points toward the longer end for propane (LP).

Conversion includes changing or adjusting the orifices as well. (See page 43.)

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## CONVECTION FAN MOTOR

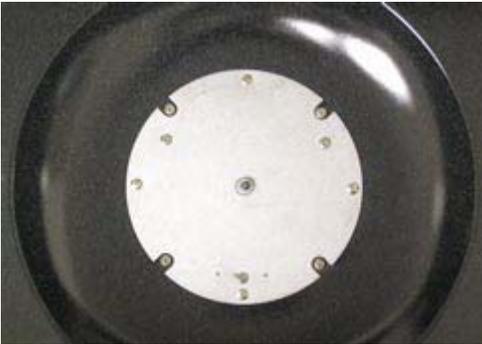


1. Remove the oven door.  
(Page 18.)
2. Remove six Phillips screws that secure the convection fan guard to the back wall of the oven. Then remove the fan guard.



3. Use a 1/2" wrench to remove the nut from the convection fan blade. Hold the blade securely and turn the nut clockwise.

**NOTE!** This nut has a left handed thread.



4. Remove the fan blade and washer from the motor shaft.
5. Remove the four Phillips screws that attach the motor to the back of the range and remove the motor.



6. Disconnect the 3-wire connector from the motor.
7. Remove the six Phillips screws that mount the motor frame to the range. Then remove the motor.

---

## PROBE OUTLET

The probe outlet is near the top left corner of the oven.



1. Remove the two Phillips screws that attach the probe outlet to the oven.



2. The outlet and wiring can be pulled out approximately 1½”.

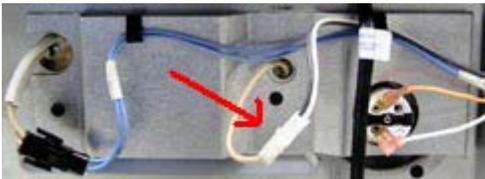
**NOTE!** When replacing the probe outlet, cut the wires as close to the end as possible. Then splice them to the new outlet using heat-resistant connectors.

---

## OVEN TEMPERATURE SENSOR



1. Remove the oven door. (Page 18.)
2. Remove the two ¼" hex head screws that secure the wiring cover on the back of the range.



3. Disconnect the sensor wire harness.



4. Remove the two ¼" hex head screws that attach the sensor to the oven wall.



5. Gently pull the sensor wire in to the oven cavity.

**NOTE!** When replacing the sensor, use a small flat-blade screwdriver to push and guide the sensor wire harness into the oven liner.



**NOTE!** When replacing the oven temperature sensor, the connector end must be positioned OUTSIDE the range insulation. The insulation should be allowed to fill around the lead wires to protect the sensor from any heat loss at the opening.

---

## CONTROL PANEL



1. Loosen but do not remove the two ¼" hex head screws at the top corners of the back panel.



2. From the front, remove the two T-15 Torx® screws that attach the bottom of the control panel to the back guard.

**NOTE!** To prevent damage to the control panel, put a piece of cardboard or a towel or blanket over the grates.



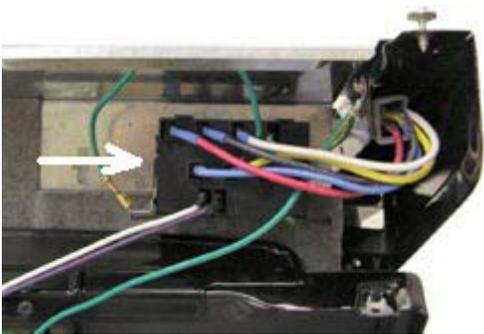
3. Grasp and pull the bottom of the control panel out about one inch and lift it off the top rear corner screws.



4. Carefully fold the control panel over the grates into the service position.

**NOTE!** To avoid damage to the porcelain components, do not overtighten the screws.

## SPARK MODULE



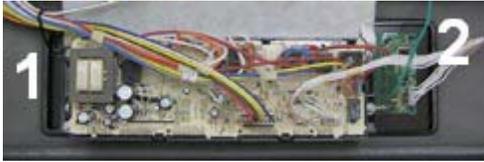
The spark module is in the back guard and held in place by two plastic tabs, one on each side. Put the control panel into service position, and press either tab to remove the module.

**NOTE!** Make a note of the wire positions before disconnecting the module.

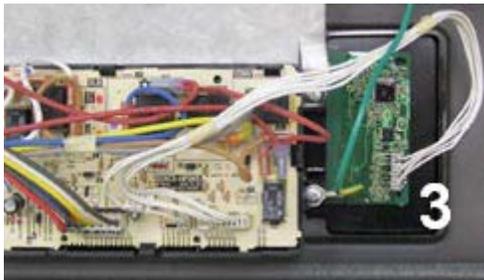
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## ELECTRONIC RANGE CONTROL (ERC)

To access the electronic range control (ERC or main board), put the control panel into the service position. Remove the four Phillips screws (two on each side). Mark and label the wire locations before disconnecting the ERC.



1. Wire tie holding wire harness to ERC.
2. Ground wire to ERC board.



3. Wiring harness to touch panel.

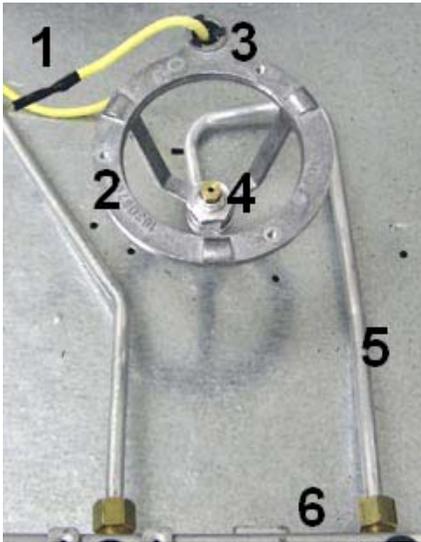
## CONTROL PANEL AND TOUCH BOARD

The control panel and touch board are supplied as an assembly. If the touch board is damaged, the entire control assembly must be replaced.

To replace the control panel and touch board, put the control panel into service position. The ERC must be removed and the wiring harness must be disconnected from the touch board before it can be removed.

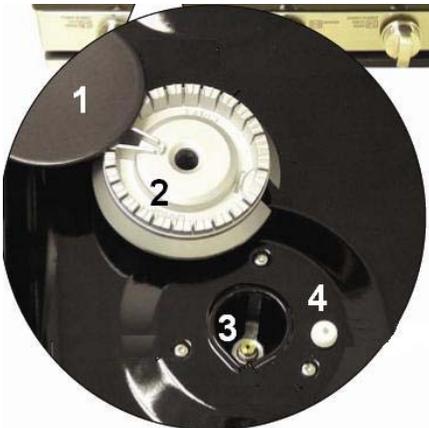
---

## SURFACE BURNER ASSEMBLY



1. Ignitor wire
2. Bracket
3. Wire inlet
4. Orifice
5. Inlet tube
6. ½" fitting

**WARNING!** Shut off the gas to the range before proceeding!



Each main top burner consists of:

1. Burner cap
2. Burner head
3. Orifice
4. Ignitor
5. Inlet tube (not visible, see photo above)

## BURNER REMOVAL

1. Remove the maintop. (See page 21.)
2. Remove the two ¼" hex head screws that attach the shield to the top right side of the manifold panel. (Omit this step if servicing the left front or left rear burner.)
3. Pull the ignitor wire out of the wire inlet bracket.
4. Use a 5/8" socket and extension to remove the nut that holds the bracket to the inlet tube and lift the bracket away.
5. Remove the ½" nut that secures the inlet tube to the valve.

---

## MAIN BURNER ALIGNMENT

For proper operation of the burner, alignment of the orifice holder, orifice, and air/gas mixer tube must be correct. The alignment can be checked by placing 7 mm or  $\frac{9}{32}$  in. nut driver over the orifice to exaggerate the angle. The nut driver should stand straight, indicating the alignment and gas injection angle is correct. A slight downward pressure may be necessary to seat the nut-driver over the orifice-retainer ring. If an angle adjustment is necessary remove the burner cap, head, and bowl to inspect the orifice holder and the brackets that hold them in place. Adjust as necessary by carefully bending the supply tube. A misaligned burner may result in uneven flames around the burner head.

## MAINTOP BURNER FLAME ADJUSTMENTS

The top burners do not have air shutters and fixed, non adjustable orifices are used. If the flames blow off the burner or have yellow tips, check the following:

- Gas pressure - 5" Natural gas 10" LP gas.
- Inspect orifice to be sure it is drilled on center and free of debris or burrs.
- Be sure the correct size orifice is in the proper location
- Make sure the range was properly converted if on LP gas.

## LOW FLAME SIMMER ADJUSTMENTS



Remove the surface control knob and locate the adjustment screw in the center of the control valve shaft. A thin flat-blade screwdriver, approximately  $\frac{3}{32}$ " across, is needed to access the screw. Turn the adjustment screw until the flame reaches the desired size.

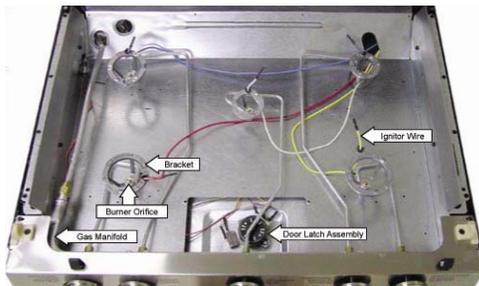
**Note!** Low setting adjustments must be made with 2 other burners in operation on a medium setting. This procedure prevents the low flame from being set too low, resulting in the flame's being extinguished when other burners are turned on.

---

## TESTING BURNER FLAME STABILITY

- Test 1** Turn the knob from **HI** to **LOW** quickly. If the low flame goes out, increase the flame size and test again.
- Test 2** With the burner on **LOW** setting, open and close the oven door quickly. If the flame is extinguished by the air currents created by the door movement, increase the flame height and test again.
- Test 3** With 2 burners on **HIGH** setting, set a third adjusted burner on **LOW**. Turn the first knob from **HI** to **LOW** quickly. The third burner should stay lit.

## MANIFOLD PANEL



1. Remove the oven door.  
(See page 18.)
2. Remove the main top.  
(See page 21.)
3. Remove the surface burner valve knobs by pulling each knob straight out.
4. Remove the two 1/4" hex head screws that attach the shield to the top right side of the manifold panel.
5. Remove the 2 Phillips-head screws and the 2 guides from the main top.
6. Remove the 4 Phillips-head screws that hold the front of the manifold panel to the gas manifold.
7. Remove the three 1/4" hex head screws from the bottom of the manifold panel.
8. Pull the manifold panel straight out from the range.

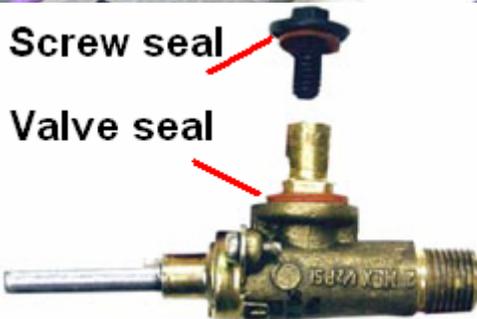
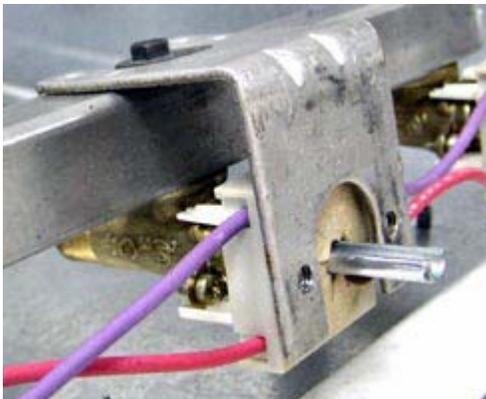
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## MANIFOLD BURNER VALVES

The manifold burner valves are located behind the manifold panel. Each valve is attached to the manifold by a single screw.



1. Turn off the gas supply.
2. Remove the manifold panel.  
(See page 38.)
3. Using a ½-in. open end wrench, disconnect the burner inlet tube from the valve.
4. Remove the ¼-in. hex-head screw that holds the valve to the manifold.
5. Lower the valve from the manifold.
6. Remove the protective cover from the valve stem.
7. Remove the ignitor switch from the valve. (See page 40.)



### WARNING!

Ensure the valve seal and the screw seal are carefully positioned before installing the valve.

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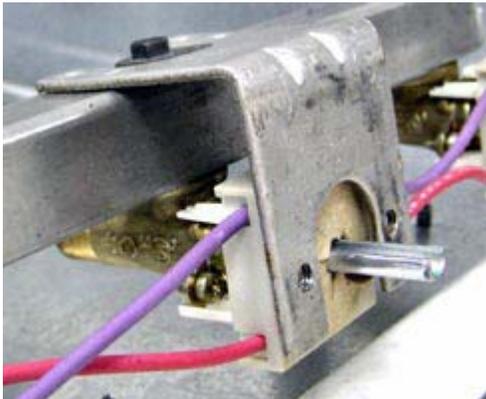
## IGNITOR SWITCHES

The ignitor switches are located inside the manifold panel and are attached to each maintop burner valve. The back of each switch is molded to conform to the front of the burner valve and is locked in place by 2 tabs. All switches are wired to a single harness and can be replaced separately.

**Note!** To replace the ignitor switch for the left or right rear burner, it is necessary to remove the left or right rear burner valve from the gas manifold.

**Caution!** The 2 lock tabs on each ignitor switch are fragile. Tab breakage can occur if excessive release pressure is applied.

When replacing the ignitor switch for the left or right rear burner, remove the valve from the gas manifold.



1. Be sure the range is unplugged.
2. Remove the manifold panel. (See page 39.)
3. Remove the protective cover from the valve stem.
4. Using a small flat blade screwdriver, carefully pry on the two release tabs and slide the switch off the valve stem.

**NOTE!** When replacing an ignitor switch, cut the switch wires and splice the new switch using approved connectors and heat shrink tubing.

---

## GAS MANIFOLD

**WARNING!** Shut off the gas before proceeding.

To remove the gas manifold:

1. Remove the maintop. (See page 21.)
2. Remove the two ¼" hex head screws that attach the shield to the top right side of the manifold panel.
3. Remove the ½" nut that holds the inlet tube to each valve.
4. Using a  $\frac{13}{16}$ " open-end or adjustable wrench, disconnect the gas inlet tube from the gas manifold.
5. Remove the left and right rear burner knobs then remove the four Phillips head screws from the front of the manifold panel.
6. Remove the two ¼-in. hex-head screws that attach the gas manifold to the range.



7. Remove the five burner valves from the gas manifold.

---

## DOOR LATCH ASSEMBLY

The door latch assembly consists of a lock motor, cam and switch assembly, lock hook, and mounting plate. It will be supplied as a complete assembly. The door latch assembly is located under the main top in a recess that is concealed by a metal cover.

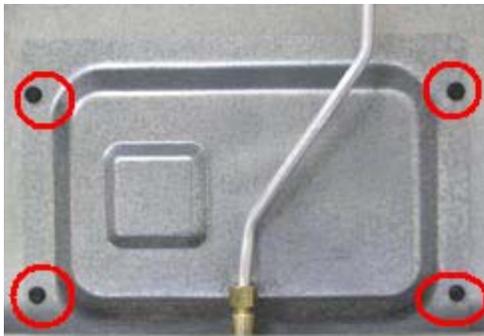
To replace the door latch assembly:

1. Remove the oven door.  
(See page 18.)



2. Remove the main top.  
(See page 21.)

3. Remove the two 1/4" hex screws that attach the shield to the top right side of the manifold panel.

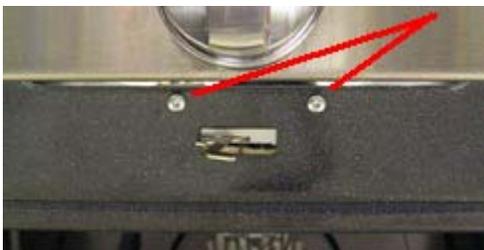


4. Remove the four 1/4" hex screws that hold the latch assembly cover in place.

5. Remove the cover.



6. Mark and disconnect the wiring from the latch assembly.



7. Remove the two T-15 Torx® screws that attach the latch assembly to the frame and slide the assembly out of the recess.

---

## **GAS CONVERSION (NATURAL GAS vs. PROPANE or LP)**

The range comes with the parts necessary to convert it to LP. Conversion includes the regulator and the surface burner orifices, or spuds.

### **CONVERT THE REGULATOR**

The regulator is located in the lower, left hand, rear corner of the range, as viewed from the front.

To access the regulator, remove the warming drawer. (See page 19.)

Remove the large hex-nut which is located in the center of the regulator. Remove the plastic pin from the bottom side of the cap, turn the pin 180 degrees, and snap the pin back into the cap.

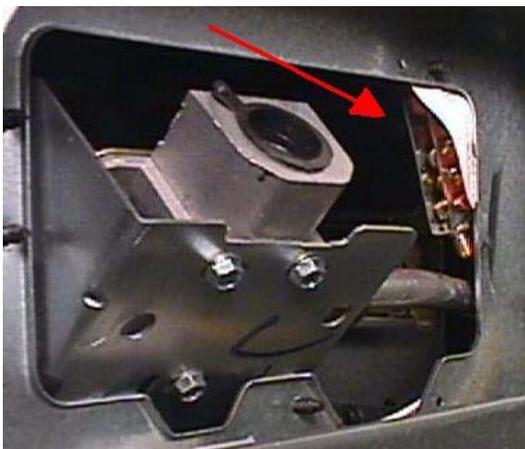


The hex nut is marked with NG for natural gas and LP for propane. There is an arrow showing which way to install the nut.

The nut pictured at the left is marked to install with the bottom end screwed into the regulator to set it for natural gas.

If you turn it over, you will see the LP marking. The long end goes into the regulator to set it for LP.

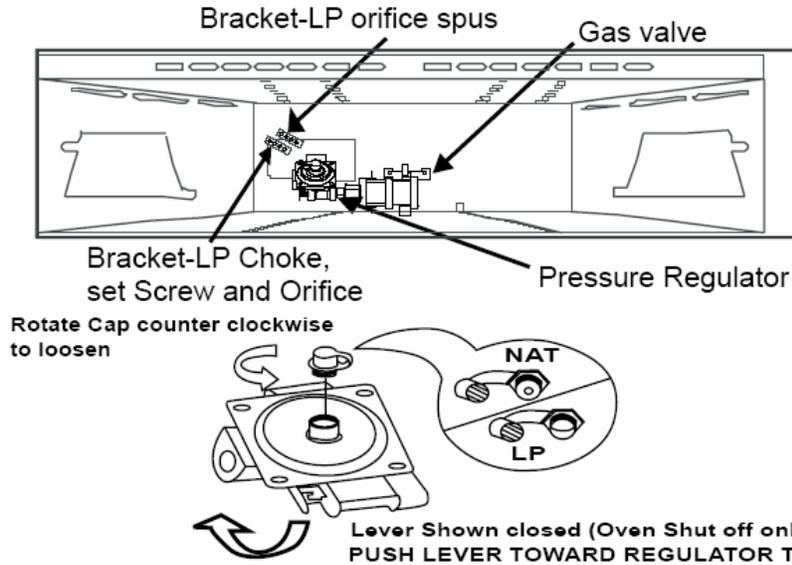
### **CONVERT THE SURFACE ORIFICES (SPUDS)**



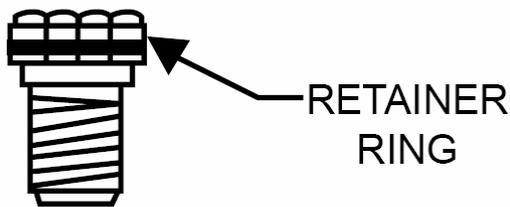
LP orifice spuds are located at the back of the warming drawer compartment. The spuds are in a metal bracket next to the pressure regulator and are attached to the back wall of the compartment by a 1/4" hex head screw.

An LP conversion instruction sheet is also located in this area.

(See drawing, next page.)

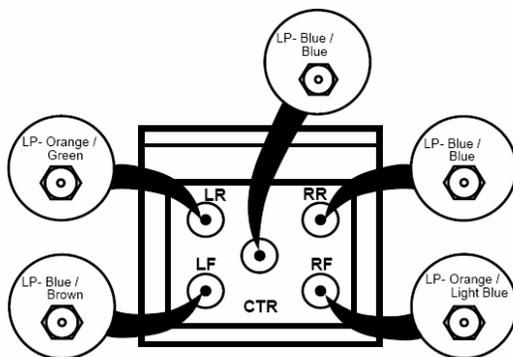


Remove the grates, burner caps, and burner heads. Then remove the brass orifice (spud) in the chimney of each burner using a  $\frac{9}{32}$ " (7 mm) wrench or nut driver.



**NOTE:**

The orifices have spring-loaded retaining rings around the hex head to hold the orifice in the nut driver during installation and removal. A slight amount of force is required to push the nut driver down over the ring.



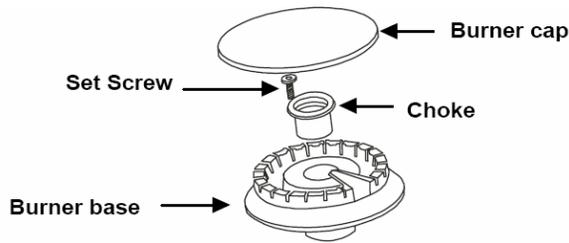
Install the LP orifice spuds into their correct positions as described as follows. A mark (I, II, or III) is engraved on the top of the orifice to denote the location of the orifice as shown in the illustration.

The marks appear on both the LP and Natural Gas orifices. The locations indicated by the marks are the same for both gasses.

The LP orifices are color coded as well as marked with an L and the orifice size.

|             |            |                    |
|-------------|------------|--------------------|
| RIGHT FRONT | 10,000 BTU | Orange/Light Brown |
| LEFT FRONT  | 9,500 BTU  | Blue/Brown         |
| LEFT REAR   | 9,100 BTU  | Orange/Green       |
| RIGHT REAR  | 5,000 BTU  | Blue/Blue          |
| CENTER      | 5,000 BTU  | Blue/Blue          |

To prevent leakage, make sure the orifices (spuds) are securely screwed into the gas supply tubes.



For the extra large burner (right front), the choke and self threading screw will be needed. Insert the choke into the burner base, then insert the set screw into the burner base and tighten securely. Make sure the screw head is against the shoulder (within the choke notch), so it does not have any rotational movement.

Replace the old natural gas spuds in the bracket and replace it on the back of the range in the event the range must be reverted to natural gas in the future.

### CONVERT THE BAKE and BROIL ORIFICES

Remove oven door, warming drawer and oven bottom. The oven burner orifice hood is located behind the warming drawer. The broil burner orifice hood is located on the right upper corner of the oven cavity.

To convert to LP, use a ½” wrench to turn the orifice hoods clockwise until it is snug with the base, approximately 2 ½ turns. To prevent damage when converting back to Natural Gas, do not over tighten the hood.

Open the air shutter on the burners to the full open position and adjust as needed. (See page 28.)

### CHECK THE FLAME QUALITY

|  |   |
|--|---|
|  | <p><b>(A) Yellow Flames</b><br/>Further Adjustment Required</p>   |
|  | <p><b>B) Yellow tips on outer cones</b><br/>Normal for LP Gas</p> |
|  | <p><b>(C) Soft Blue flames</b><br/>Normal for Natural Gas.</p>    |

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## Note!

If burner flames look like **A**. Further air shutter adjustment is required. Normal burner flames should look like **B** or **C**, depending on the type of gas you use. With LP gas, some yellow tipping on the outer cones is normal.

The broil burner will cycle off when the sensor temperature reaches 460°F (238°C) set on Lo Broil, and at 570°F (299°C) set on Hi Broil.

Upon completion of the conversion, fill out the LP sticker located with the instructions. Once complete, apply the sticker to the back of the range near the regulator. If converting back to natural gas from LP, remove the LP sticker from the back of the range.

## OVEN CALIBRATION

Testing has shown that this oven has the best cooking performance at a control setting of 350°F (177°C) when the average center oven temperature is between 350°F and 390°F (177°C and 199°C). Customers may change the average center oven temperature by ± 35°F (± 2°C) to satisfy their own cooking needs.

To recalibrate the oven:

Touch the **BAKE** and **BROIL HI/LO** pads simultaneously and hold for 3 seconds until the display shows **SF**. Touch the **BAKE** pad. A number shows in the display. Touch **BAKE** once to decrease (–) the oven temperature, or twice to increase (+). The oven temperature can be adjusted up or down as much as 35°F (2°C). Touch the number pads the same way you read them. For example, to change the oven temperature 15°F, touch **1** and **5**. When you have made the adjustment, touch the **START** pad to go back to the time of day display.

## Note!

The thermostat adjustment for baking will also affect Convection Baking or Convection Roasting. This adjustment will not affect the broiling or the self-cleaning temperatures. The adjustment will be retained in memory after a power failure.

---

## LOCK MOTOR and LATCH SWITCH CIRCUIT

The lock motor circuit and the door latch switch circuit control the locking and unlocking of the door.

The lock motor is energized when the **SELF CLEAN** cycle is initiated with the door closed. The lock motor circuit applies voltage (120 V<sub>AC</sub>) to the lock motor. This circuit is from the motor door lock relay (MDL location on ERC), to the lock motor, through the door switch to neutral.

For this circuit to be complete, the lock motor circuit must be energized by the ERC and the door must be closed. An open oven door results in **LOCKED** flashing in the display and alarm sounding after the control has been programmed for clean and **START** has been selected.

The door latch switch circuit signals the control if the lock motor is in the unlocked or locked position or somewhere in between (transition). There are two latch switches operated by the cam located below the lock motor.

The door latch switch circuit is from the ERC, through one of the latch switches (switch 1 for unlocked or switch 2 for locked) back to the ERC. If neither switch is closed, and the oven temperature is below 450°F (232°C) the ERC will energize the lock motor circuit until the correct switch closes to complete the circuit. (If circuit to the correct switch is open, the lock motor will run continuously with the oven below 450°F (232°C).

The cam on the motor performs two functions:

- Positions the lock hook in the door to prevent opening during the **CLEAN** operation.
- Operates the latch switches which tell the control if the door is unlocked or locked and ready for **CLEAN** operation.

**Note!** When the door is either being locked or unlocked, both latch switches will be in the open position.

The movement of the cam has also closed lock switch 2 which signals the control that the door is locked. The control then removes power from the lock motor circuit by de-energizing the lock relay. The lock motor stops and lock switch 2 is held closed by the cam through the clean cycle. The word **LOCKED** stops flashing and remains illuminated in the display. The word **ON** remains illuminated in the display. During the Clean Cycle, the oven will cycle to maintain an average clean temperature of 815° F (435° C).

---

## CLEAN and LOCK SEQUENCE

Programming the Clean Cycle:

Press **SELF-CLEAN** pad. 4 hours and 20 minutes (**4:20**) appears on the time display. (Cleaning time can be changed from the 4 hour and 20 minute starting point by pressing the **SELF-CLEAN** pad a second time.)

After **START** has been pressed, the word **ON** illuminates in red and the word **LOCKED** flashes to indicate the cycle has begun.

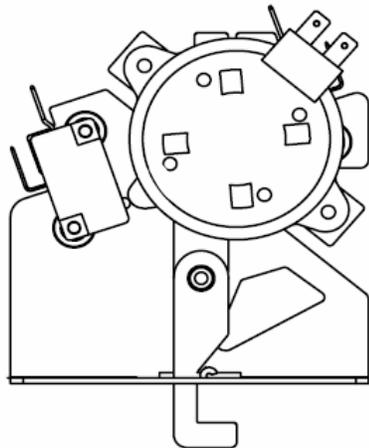
Locking the Door:

After programming the clean cycle and pressing **START** pad, the control energizes the lock relay. Voltage (120 VAC) is applied to the lock motor circuit. Oven door must be closed before lock motor can run. **LOCKED** will flash and control will beep until the door is closed.

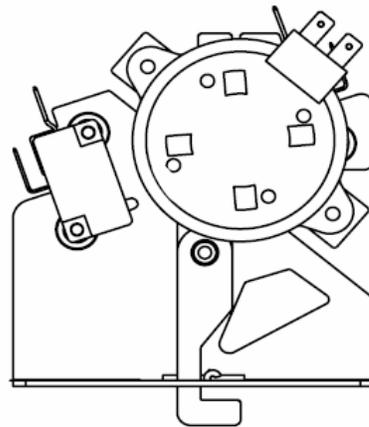
The lock motor begins to revolve and turns a cam mounted to the motor shaft.

The word **LOCKED** will flash on and off on the display while the lock motor is in motion.

**Door Unlocked**



**Door Locked**



As the cam revolves about  $\frac{1}{2}$  revolution (approximately 12 seconds), it has moved the lock hook into a corresponding slot in the oven door which secures the door.

The words **LOCKED** and **ON** with the clean cycle time remaining will be displayed.

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## SERVICE TEST MODE

The sealed burner 30" gas range has a service test mode that can be utilized by the service technician in order to test certain oven components or functions. The selected components or functions will help the service technician to quickly identify failed or improper operation of the range.

**Caution!** Testing is accomplished through built-in test procedures. Unplugging components for testing can damage component connections.  
The range must be powered down (unplugged) before entering the test mode.

Test Mode Entry:

1. Unplug the range for a minimum of **15** seconds.
2. Power up the range (all segments in the display and the control panel selections illuminate), and wait until the time of day is flashing.
3. Touch **COOK TIME**, **DELAY START**, and **8** simultaneously. The display will show the **TEST** on the convection model or **SAVE** on the non-convection model.

**Note!** The test will time out in approximately 4½ minutes. Repeat the test mode entry sequence to continue.

See **TEST MODE CHART**, next page.

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## TEST MODE CHART

| Component/Function            | Action  |
|-------------------------------|---|
| <b>SENSOR</b>                 | Touch <b>COOK TIME</b> . The display will show the sensor temperature in the temperature digits.  |
| <b>BAKE</b>                   | Touch <b>BAKE</b> then hold <b>START</b> . The <b>START</b> key will initiate the bake cycle as long as it is held.   |
| <b>BROIL</b>                  | Touch <b>BROIL HI/LO</b> then hold <b>START</b> . The <b>START</b> key will initiate the broil cycle as long it is held.  |
| <b>CONV. FAN<br/>LO SPEED</b> | Hold the <b>CONV. ROAST</b> key. The fan will operate at low speed in a clockwise direction with door shut as long as the <b>CONV. ROAST</b> key is held.   |
| <b>CONV. FAN<br/>HI SPEED</b> | Hold the <b>CONV. BAKE</b> key. The fan will operate at high speed in a clockwise direction with door shut as long as <b>CONV. BAKE</b> key is held.  |
| <b>SELF-CLEAN</b>             | Hold the <b>SELF-CLEAN</b> key. This action will energize the Door Motor relay, and display the door inputs in select decimal format in the temperature center digit.<br><b>0</b> = Transition - Locked icon blinks<br><b>1</b> = Unlocked - No icon<br><b>2</b> = Locked - Locked icon solid |
| <b>WARMING DRAWER</b>         | Touch <b>WARMING DRAWER SET/OFF</b> then hold <b>START</b> . The <b>START</b> key will initiate the warming drawer cycle as long as it is held.   |
| <b>PROBE</b>                  | Touch <b>PROBE</b> . The display will show 99°F with the probe out (or the actual probe temperature with the probe plugged in), and the word <b>PROBE</b> .   |
| <b>CLOCK</b>                  | Touch <b>CLOCK</b> . The display will show a defined pattern.   |
| <b>START</b>                  | Touch <b>START</b> . The display will show <b>ON</b> and flash <b>SET</b> word (unless a relay type has been previously touched)  |
| <b>DIGITS</b>                 | Touch any number. That number will be displayed.  |

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## FAILURE CODES

The oven may stop operating but not give an **F-code** on the display immediately. Generally, a fault must exist continuously for 5 minutes before an F code is recorded (**F2** is sooner). **F-codes** are stored in non-volatile EEPROM memory until the same fault occurs twice consecutively. After that, the **F-code** will be displayed. F codes can be recalled by pressing together **TIMER, CLOCK, 9**.

| <b>F-CODE</b> | <b>MEANING</b>   | <b>RESOLUTION</b>  |
|---------------|--|--|
| <b>F0</b>     | CLEAR/OFF key input failure                                    | Short for approximately 100 seconds  |
| <b>F1</b>     | Control failure  | Loss of element relay redundant driver protection                                  |
| <b>F2</b>     | Oven temperature condition due to sensor input to control      | Oven above 615°F with lock input untrue.<br>Oven above 915°F with lock input true. |
| <b>F3</b>     | Open sensor  | Sensor is 2900 to infinite ohms while in a heating mode.                           |
| <b>F4</b>     | Shorted sensor   | Sensor is 0 to 950 ohms maximum while in a heating mode.                           |
| <b>F6</b>     | START key input failure  | Shorted START key detection  |
| <b>F7</b>     | Shorted key detection except for slew entry and CLEAR/OFF keys | Short for approximately 40 seconds   |
| <b>FC</b>     | Door latch error   | Unlock home and lock home are true simultaneously                                  |
| <b>FD</b>     | Probe failure  | Shorted probe  |
| <b>FF</b>     | Control failure  | Loss of door motor redundant driver protection                                     |

Multiple fault codes may be displayed. The latest fault code will appear on the right of the display. While **F-codes** are displayed, pressing **8** and **6** simultaneously will clear the codes from the memory. Clear the fault code after the failure has been corrected.

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## KEY PANEL TEST

The key panel and ERC are separate components but must be tested together. Press each pad on the key panel followed by the **START** pad. If the key panel is functioning properly, the following should occur:

**BAKE, CONV. BAKE, CONV. ROAST, BROIL HI/LO, COOK TIME, DELAY START, WARMING DRAWER SET/OFF, SELF CLEAN, CLOCK, TIMER ON/OFF, and CONTROL LOCKOUT Modes –**

- Audible tone plus display showing mode of operation selected.

**CLEAR/OFF** - Audible tone and display shows time of day.

**PROBE** - Audible tone and response if meat probe is plugged in

**NUMBERS** - Audible tone.  
(Can be used only after another function has been selected.)

## WARMING DRAWER PERFORMANCE

The operation of the warming element is controlled by user settings and the ERC. One of three warming drawer heat settings can be selected. After a pre-determined timed preheat period, cycling of the element is controlled by the ERC with a four-minute duty cycle.

| Setting  | Preheat Time On | Duty Cycle On Time | Duty Cycle Off Time | Target Temp     |
|----------|-----------------|--------------------|---------------------|-----------------|
| 1 (LOW)  | 900 seconds     | 144 seconds        | 96 seconds          | 200° F (93° C)  |
| 2 (MED)  | 1,200 seconds   | 192 seconds        | 48 seconds          | 250° F (121° C) |
| 3 (HIGH) | 60 seconds      | Constant ON        | 0 seconds           | 284° F (140° C) |

## OVEN SELF-CLEAN OPERATION

The broil burner heats the oven to approximately 775°F (413°C). After 775°F (413°C) is reached, only the bake burner maintains clean temperature of approximately 815°F (435°C) center temperature. The convection fan does not operate in the clean cycle.

## CONVECTION FAN OPERATION

The convection fan is operated by a 2-speed non-reversing motor. The fan motor operates on **low** speed during convection bake and on **high** speed during convection roast.

The convection fan does not operate during preheat or self-clean.

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## PARTS LIST

| Loc # | Part No     | Description              |
|-------|-------------|--------------------------|
| 1     | EBZ37171902 | USE & CARE MANUAL        |
| 1     | EBZ37171903 | CONVERSION KIT ASM       |
| 1     | EBZ37171904 | INTALLATION INSTRUCTIONS |
| 1     | EBZ37171905 | PM MINI MANUAL/ELEC. DIA |
| 2     | EBZ37189603 | LG KNOB ASSEMBLY         |
| 3     | EBZ37188201 | ORIFICE-LP MED .89MM LF  |
| 3     | EBZ37188202 | ORIFICE-LP SM RR/CENTER  |
| 3     | EBZ37188203 | ORIFICE SPUD (VIS) LR    |
| 3     | EBZ37188204 | ORIFICE SPUD LP RF       |
| 4     | EBZ37170505 | ECONOMIC NUT             |
| 5     | EBZ37169819 | PANEL MANIFOLD SLD       |
| 8     | EBZ37170506 | SCREW 8-32               |
| 9     | EBZ37169801 | BOX BURNER SP            |
| 10    | EBZ37184501 | CKT BRACKET SM           |
| 11    | EBZ37184502 | CKT BRACKET MID          |
| 12    | EBZ37170001 | SW VALVE SERVICE 270 2WI |
| 12    | EBZ37170002 | SW VALVE SERVICE 270 1WI |
| 13    | EBZ37184503 | CKT BRACKET LG           |
| 14    | EBZ37170201 | MANIFOLD PIPE            |
| 15    | EBZ37170601 | VALVE BURNER 270 9100    |
| 15    | EBZ37170603 | VALVE BURNER 270 HI-CAP  |
| 15    | EBZ37170604 | VALVE BURNER 270 11000   |
| 15    | EBZ37170605 | VALVE BURNER 2700        |
| 16    | EBZ37184504 | BRACKET COOKTOP XL       |
| 18    | EBZ37170602 | COVER VALVE              |
| 20    | EBZ37186401 | ORIFICE HOLDER ASM       |
| 21    | EBZ37170501 | SCR 8 HD 10-32           |
| 21    | EBZ37170502 | SCR 12-24 UNC            |
| 22    | EBZ37186402 | ORIFICE HOLDER ASM       |
| 23    | EBZ37186403 | ORIFICE HOLDER ASM       |
| 24    | EBZ37186404 | ORIFICE HOLDER ASM       |

| <b>Loc #</b> | <b>Part No</b> | <b>Description</b>    |
|--------------|----------------|-----------------------|
| 25           | EBZ37186405    | ORIFICE HOLDER ASM    |
| 26           | EBZ37170204    | BURNER BAKE           |
| 27           | EBZ37171702    | TUBE BURNER SUPPLY    |
| 28           | EBZ37170503    | SCREW MTG IGNITER     |
| 28           | EBZ37170504    | SCREW MTG IGNITER     |
| 29           | EBZ37171101    | ELBOW HI BROIL        |
| 30           | EBZ37170202    | BURNER BROIL          |
| 32           | EBZ37170203    | INSULATION BURNER BOX |
| 37           | EBZ37169807    | COVER IGNITER         |
| 42           | EBZ37169802    | COVER BURNER BOX      |
| 43           | EBZ37191706    | TEMPERATURE SENSOR    |
| 88           | EBZ37170805    | PAD FELT (WH)         |
| 92           | EBZ37170514    | SCREW GROUND          |
| 100          | EBZ37191510    | END SUPPORT RT        |
| 100          | EBZ37191511    | END SUPPORT LF        |
| 104          | EBZ37191508    | GLASS AND TRIM ASM    |
| 105          | EBZ37191708    | CONTROL GLASS TOUCH   |
| 106          | EBZ37191502    | COVER BACK UPPER      |
| 107          | EBZ37191503    | COVER BACK LOWER      |
| 108          | EBZ37170516    | SCR 8-18 AB HXW 5/8 S |
| 108          | EBZ37170517    | SCREW (CR)            |
| 108          | EBZ37170518    | SCR 8-18 AB PHR 1/2 S |
| 108          | EBZ37170519    | SCR 8-18 AB PHR 1/2 S |
| 110          | EBZ37191705    | SPARK MODULE 5 0      |
| 111          | EBZ37191702    | HARNES MODULE         |
| 111          | EBZ37191703    | HARNES HV             |
| 112          | EBZ37170804    | HINGE RANGE TOP       |
| 113          | EBZ37191905    | GRATE LF              |
| 114          | EBZ37169820    | RANGETOP & BRKT ASM   |
| 115          | EBZ37191909    | GRATE                 |
| 116          | EBZ37191908    | GRATE RT              |
| 117          | EBZ37170802    | PIN LOCATOR           |

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| <b>Loc #</b> | <b>Part No</b> | <b>Description</b>      |
|--------------|----------------|-------------------------|
| 118          | EBZ37170801    | PIN LOCATOR             |
| 121          | EBZ37170520    | SCREW                   |
| 121          | EBZ37170521    | SCREW                   |
| 122          | EBZ37170522    | SCREW CKTP              |
| 146          | EBZ37169809    | CLIP RANGETOP           |
| 150          | EBZ37192709    | CAP-BURNER MED (GRAY)   |
| 151          | EBZ37192710    | CAP-BURNER SMALL (GRAY) |
| 152          | EBZ37192711    | CAP-BURNER LARGE (GRAY) |
| 153          | EBZ37192712    | CAP BURNER ASM (15K)    |
| 154          | EBZ37170523    | ELECTRODE TOP           |
| 155          | EBZ37192705    | BURNER-SMALL            |
| 156          | EBZ37192706    | BURNER LARGE (12000)    |
| 157          | EBZ37192707    | VISION BURNER XL        |
| 159          | EBZ37192708    | BURNER MEDIUM (9500)    |
| 168          | EBZ37169813    | CLIP-ELECTRODE          |
| 169          | EBZ37169814    | VENTURI 15K LP          |
| 170          | EBZ37170524    | SCREW WH                |
| 170          | EBZ37170525    | SCREW WH                |
| 171          | EBZ37191709    | HARNESS INTERFACE       |
| 200          | EBZ37193001    | RACK OVEN               |
| 201          | EBZ37193002    | RACK BROILER PAN        |
| 202          | EBZ37193003    | PAN BROILER             |
| 203          | EBZ37191707    | LINE CORD               |
| 204          | EBZ37170509    | SCREW (BLK)             |
| 204          | EBZ37170510    | SCREW 8-18X5/8 HXW      |
| 204          | EBZ37170513    | SCREW 8-18X5/8 HXW      |
| 205          | EBZ37170511    | COVER BACK PANEL        |
| 206          | EBZ37170507    | SCREW                   |
| 207          | EBZ37170512    | CLAMP CABLE             |
| 208          | EBZ37197005    | RANGE BACK              |
| 209          | EBZ37197006    | PANEL SIDE (WH)         |
| 210          | EBZ37197004    | BOTTOM OVEN ASM         |

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| <b>Loc #</b> | <b>Part No</b> | <b>Description</b>   |
|--------------|----------------|----------------------|
| 211          | EBZ37170515    | BOTTOM OVEN SCREW    |
| 212          | EBZ37169815    | SPEEDNUT             |
| 213          | EBZ37169816    | NUT SPEED            |
| 214          | EBZ37171801    | DUAL COMBI ASSY      |
| 218          | EBZ37171601    | IGNITER GLOWBAR      |
| 218          | EBZ37171602    | IGNITER GLOWBAR      |
| 219          | EBZ37169806    | FLAME SPREADER       |
| 220          | EBZ37169817    | GROMMET              |
| 221          | EBZ37171603    | HEATING ELEMENT      |
| 222          | EBZ37197401    | HINGE ASM GUIDE      |
| 223          | EBZ37197402    | PIN HINGE DOOR       |
| 224          | EBZ37197403    | RING RETAINING       |
| 226          | EBZ37197404    | HOOK DOOR SPRING     |
| 227          | EBZ37197405    | SPRING DOOR          |
| 228          | EBZ37197501    | CLIP WIRE            |
| 229          | EBZ37198002    | HOUSING RECEPTACLE   |
| 230          | EBZ37198001    | PUSH-IN RECEPTICLE   |
| 231          | EBZ37213201    | ARM ANTI TIP         |
| 232          | EBZ37213202    | BRACKET ASM ANTI-TIP |
| 233          | EBZ37198003    | SWITCH PLUNGER       |
| 235          | EBZ37198004    | OVEN LAMP            |
| 235          | EBZ37213207    | OVEN LAMP            |
| 236          | EBZ37213203    | SPACER BASE          |
| 237          | EBZ37171701    | TUBE MANIFOLD SUPPLY |
| 238          | EBZ37213204    | SPACER BASE          |
| 238          | EBZ37213205    | SPACER BASE          |
| 239          | EBZ37213206    | PANEL REAR BROIL     |
| 240          | EBZ37213208    | PANEL SIDE BROIL RT  |
| 240          | EBZ37213209    | PANEL SIDE BROIL LFT |
| 241          | EBZ37213210    | BOTTOM RANGE         |
| 242          | EBZ37213211    | BRACE BOTTOM         |

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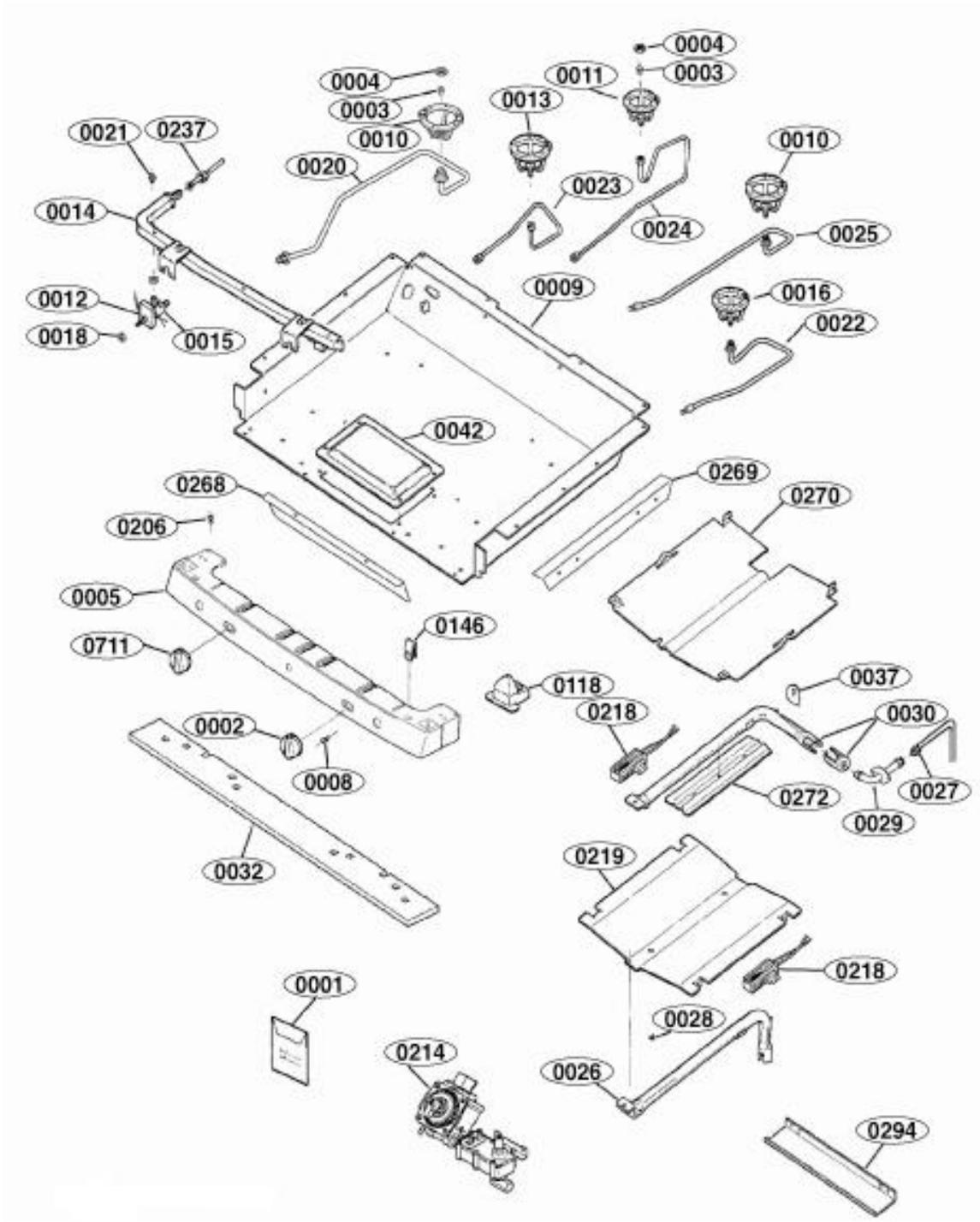
| <b>Loc #</b> | <b>Part No</b> | <b>Description</b>      |
|--------------|----------------|-------------------------|
| 243          | EBZ37213212    | BASE SUPPORT RT         |
| 243          | EBZ37213213    | BASE SUPPORT LF         |
| 245          | EBZ37213214    | LEG LEVELER             |
| 246          | EBZ37213215    | FRONT FRAME ASM         |
| 247          | EBZ37213216    | OVEN TOP                |
| 248          | EBZ37213217    | OVEN SIDE RIGHT         |
| 249          | EBZ37213222    | OVEN SIDE LEFT          |
| 250          | EBZ37213223    | OVEN BACK               |
| 251          | EBZ37213220    | CLAMP-HEAT ELEMENT      |
| 253          | EBZ37213221    | COVER ACCESS SPRING     |
| 254          | EBZ37197406    | SCREW MTG HINGE (TORX)  |
| 254          | EBZ37197407    | SUPPORT RIVET LFT       |
| 254          | EBZ37197408    | SUPPORT RIVET RT        |
| 256          | EBZ37214101    | GASKET VENT             |
| 257          | EBZ37214102    | VENT ASSEMBLY           |
| 258          | EBZ37214103    | BRACE VENT              |
| 259          | EBZ37197701    | SLIDE & BEARING ASM RT  |
| 259          | EBZ37197702    | SLIDE & BEARING ASM LF  |
| 260          | EBZ37214104    | GASKET OVEN SEAL LG     |
| 261          | EBZ37214105    | INSULATION OVEN WRAP    |
| 262          | EBZ37214122    | INSULATION OVEN BACK    |
| 268          | EBZ37169810    | DEFLECTOR THERMOSTAT    |
| 269          | EBZ37169803    | DEFLECTOR SIDE          |
| 270          | EBZ37169804    | OVEN DEFLECTOR          |
| 272          | EBZ37169805    | SHIELD BROIL            |
| 273          | EBZ37214107    | GUARD INSUL. OVEN RIGHT |
| 273          | EBZ37214108    | GUARD INSULATION LEFT   |
| 274          | EBZ37214109    | SCREW LATCH             |
| 275          | EBZ37192904    | GLASS OVEN LAMP         |
| 275          | EBZ37198005    | GLASS OVEN LAMP         |
| 276          | EBZ37198006    | BAIL                    |

| <b>Loc #</b> | <b>Part No</b> | <b>Description</b>       |
|--------------|----------------|--------------------------|
| 277          | EBZ37198007    | GASKET OVEN LIGHT        |
| 278          | EBZ37214110    | GUARD TOP INSULATION     |
| 279          | EBZ37171802    | ONE SWITCH MOTOR LACTH   |
| 283          | EBZ37214111    | CLIP CABLE               |
| 284          | EBZ37214112    | BOTTOM OVEN BRACKT SUPPO |
| 287          | EBZ37214113    | BAFLE                    |
| 288          | EBZ37214114    | BRACE BOTTOM             |
| 289          | EBZ37214115    | LOWER HEAT SHIELD        |
| 290          | EBZ37214116    | SHIELD RADIATION         |
| 291          | EBZ37214117    | GUARD BOTTOM             |
| 292          | EBZ37214118    | BOTTOM INNER GUARD       |
| 293          | EBZ37214119    | GUARD BOTTOM MIDDLE      |
| 294          | EBZ37169808    | COVER TERMINALS          |
| 295          | EBZ37192902    | INSULATION VENT          |
| 296          | EBZ37214120    | SHIELD HEAT INNER        |
| 299          | EBZ37214121    | CLIP WIRE                |
| 300          | EBZ37215101    | BODY-DRAWER              |
| 306          | EBZ37215126    | PANEL DRAWER             |
| 312          | EBZ37215103    | WASHER CONTOURED         |
| 312          | EBZ37215113    | WASHER CONTOURED         |
| 314          | EBZ37215127    | GLASS DOOR               |
| 315          | EBZ37215105    | LINER ASM WELD DOOR      |
| 317          | EBZ37215129    | VENT TRIM                |
| 318          | EBZ37215107    | GASKET ASM DOOR          |
| 322          | EBZ37215131    | TRIM DOOR RIGHT (WH)     |
| 322          | EBZ37215132    | TRIM DOOR LEFT (WH)      |
| 323          | EBZ37215119    | SUPPORT HANDLE           |
| 327          | EBZ37215110    | SPEEDNUT                 |
| 329          | EBZ37215111    | SCREW NAIL POINT         |
| 329          | EBZ37215123    | SCREW NAIL POINT         |

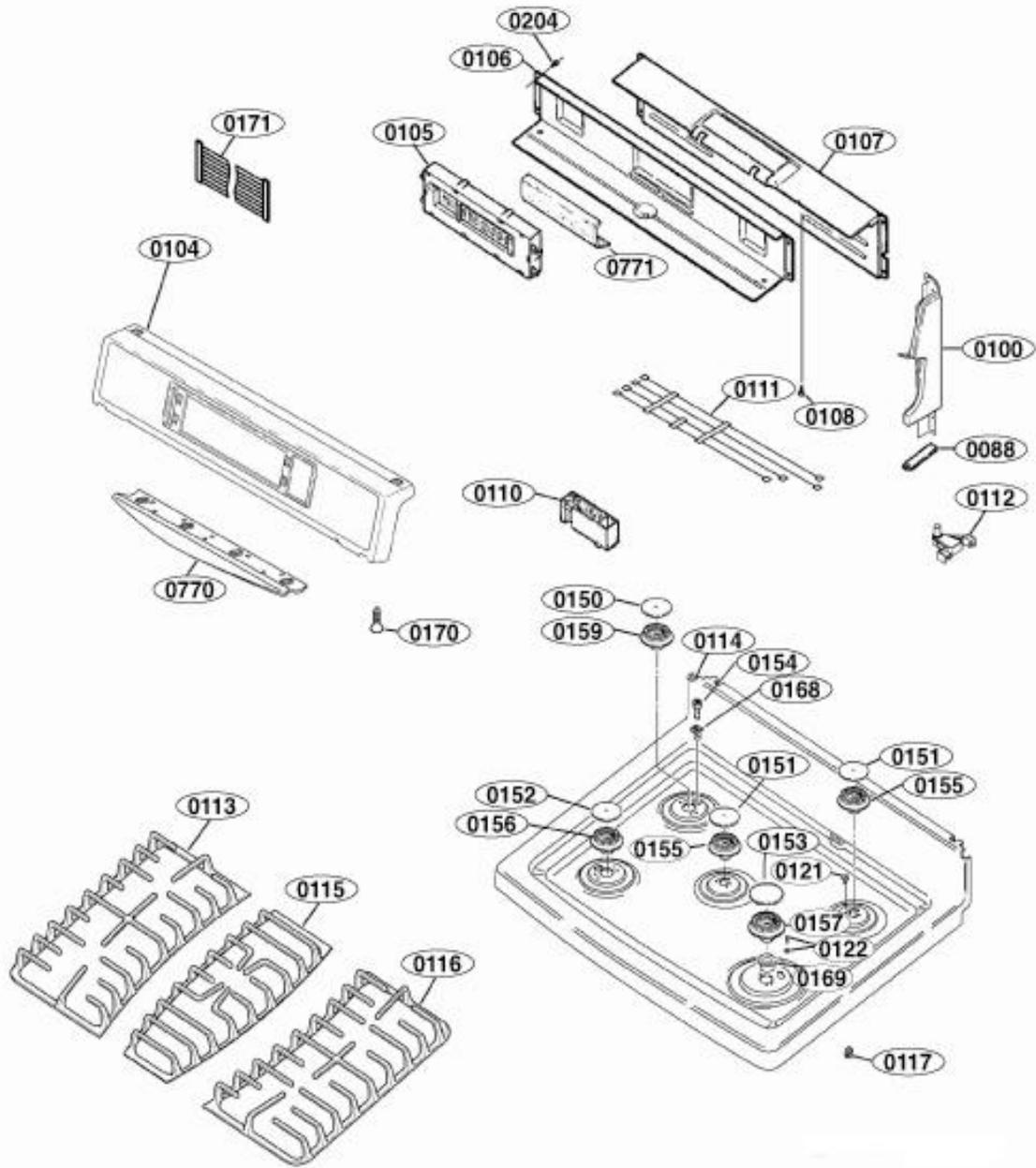
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| <b>Loc #</b> | <b>Part No</b> | <b>Description</b>       |
|--------------|----------------|--------------------------|
| 330          | EBZ37215112    | REFLECTOR 9.5 INCH       |
| 330          | EBZ37215124    | REFLECTOR 9.5 INCH       |
| 332          | EBZ37215114    | INSULATION SIDE DOOR     |
| 332          | EBZ37215115    | INSULATION BOTTOM DOOR   |
| 338          | EBZ37215116    | WINDOW PACK KIT LG       |
| 339          | EBZ37215117    | GUARD INSULATION         |
| 340          | EBZ37215118    | PANEL ASM WELD INNER     |
| 343          | EBZ37215120    | SLIDE INTERNAL           |
| 344          | EBZ37215121    | BRACKET MOUNTING DRAWER  |
| 345          | EBZ37215122    | LINER DRAWER             |
| 354          | EBZ37215601    | SCREW 10-32 MTG HNDL     |
| 359          | EBZ37215611    | TRIM BOTTOM DOOR (WH)    |
| 360          | EBZ37215602    | SEAL DRAWER              |
| 361          | EBZ37215603    | SCREW                    |
| 365          | EBZ37215614    | HANDLE                   |
| 366          | EBZ37215605    | SCREW - DOOR ASM (4 PER) |
| 375          | EBZ37215606    | PANEL DRAWER SPACER      |
| 375          | EBZ37215607    | BRACKET DOOR             |
| 400          | EBZ37215608    | WINDOW SPACER ASM        |
| 461          | EBZ37215701    | SCREW                    |
| 700          | EBZ37214901    | RETAINER-INSULATION VENT |
| 703          | EBZ37214902    | BRACKET OVEN CORNER      |
| 709          | EBZ37214903    | RETAINER INSULATION LAMP |
| 711          | EBZ37189605    | LG KNOB ASSEMBLY         |
| 770          | EBZ37191512    | EYEBROW                  |
| 771          | EBZ37192901    | CONTROL INSULATION       |
| 780          | EBZ37192903    | DIFFUSER VENT            |

# EXPLODED VIEW



# EXPLODED VIEW

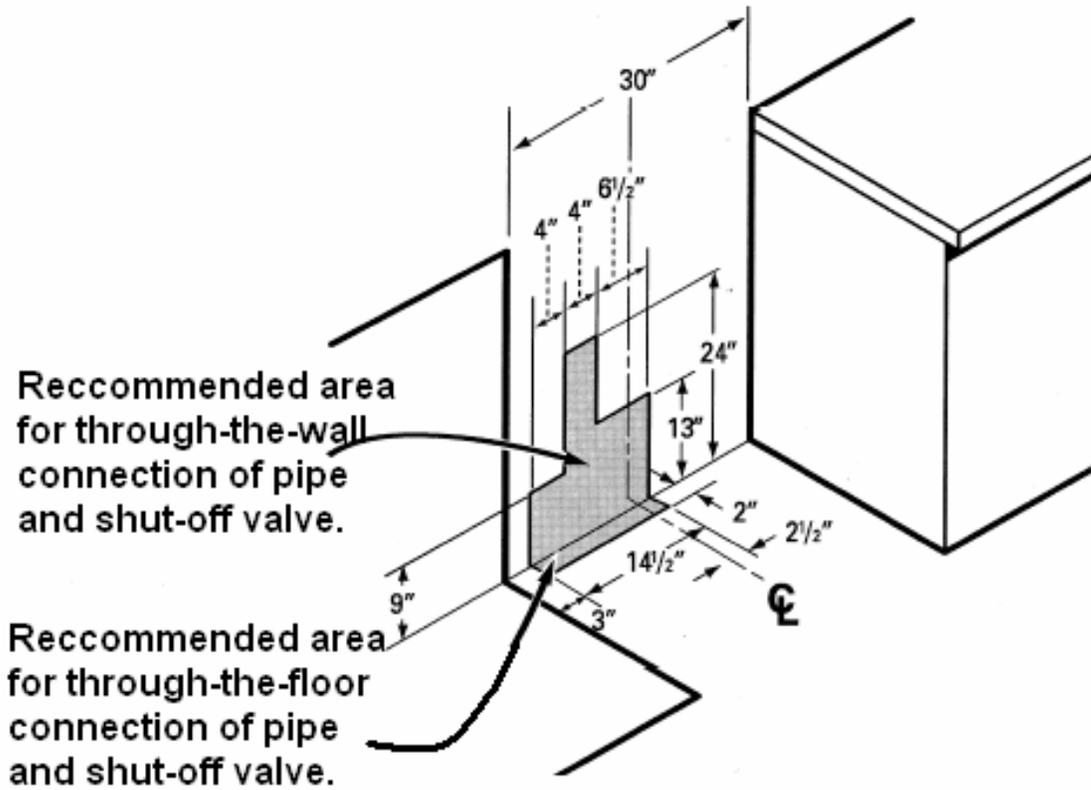






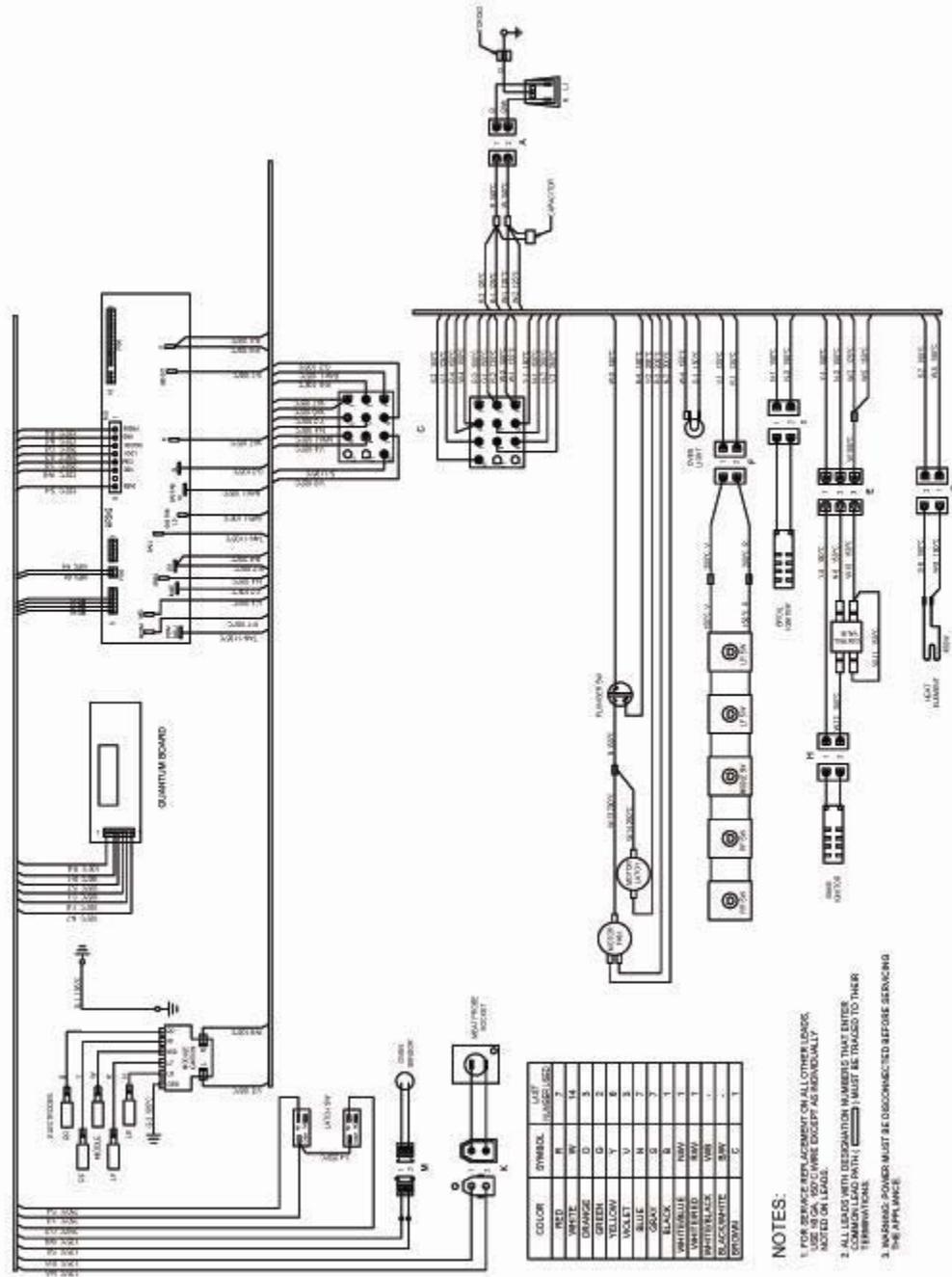
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## INSTALLATION DIMENSIONS



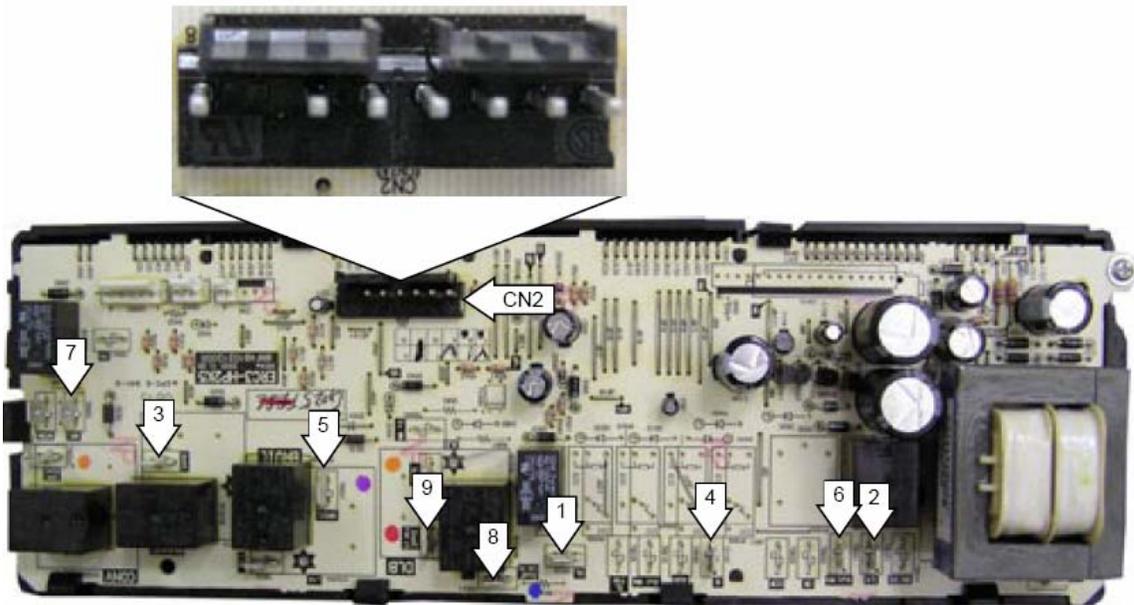


# SCHEMATICS AND WIRING DIAGRAMS



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## ERC TEST LOCATIONS



### TEST POINTS

1. Oven light
2. Line
3. Bake
4. Neutral
5. Broil
6. Warming drawer
7. Lock motor
8. Convection Fan High
9. Convection Fan

### CONNECTOR 2

- |       |                          |
|-------|--------------------------|
| Pin 1 | Probe                    |
| Pin 2 | Ground                   |
| Pin 3 | Unlock (Latch switch #1) |
| Pin 4 | Lock (Latch switch #2)   |
| Pin 5 | Common                   |
| Pin 6 | VDD (Sensor)             |
| Pin 7 | Blank                    |
| Pin 8 | Oven (Sensor)            |

## COMPONENT RESISTANCE TEST MEASUREMENTS

| COMPONENT            | TEST LOCATION   | CONDITIONS                           | RESISTANCE        |
|----------------------|---|--------------------------------------|-------------------|
| Oven light           | OL to L1  | None                                 | 25Ω               |
| Bake ignitor         | Bake to N   | None                                 | 124Ω*             |
| Broil ignitor        | Broil to N  | None                                 | 164Ω*             |
| Warming element      | WD OUT to N   | None                                 | 32Ω               |
| Latch motor          | MDL to N  | Door Closed                          | 1.97KΩ            |
| Fan motor high speed | GAS F Fan HI to N                                     | Door Closed                          | 19Ω               |
| Fan motor low speed  | GAS S Fan LO to N                                     | Door Closed                          | 25Ω               |
| Oven sensor          | CN2-6 to CN2-8  | CN2 disconnected**                   | 1.1KΩ @ room temp |
| Latch switch 1       | CN2-3 to CN2-5  | Door unlocked                        | 0Ω                |
|                      |   | Door locked, CN2 disconnected        | open              |
| Latch switch 2       | CN2-4 to CN2-5  | Door locked                          | 0Ω                |
|                      |   | Door unlocked, CN2 disconnected**    | open              |
| Door switch***       | OL to N   | Door open                            | open              |
|                      |   | Door closed                          | 130Ω              |
|                      | N to blue wire terminal on switch                     | Door open                            | open              |
|                      |   | Door closed                          | 0Ω                |
| Probe                | CN2-1 to CN2-1  | Probe plugged in, CN2 disconnected** | 56KΩ @ room temp  |
|                      | CN2-1 to Ground                                       | CN2 disconnected**                   | open              |
|                      | CN2-2 to Ground                                       | CN2 disconnected**                   | 0Ω                |
| Surface ignitor      | Violet wire (disconnected from module) to L1 on board | Knob in LITE position                | 0Ω                |
|                      |   | Knob NOT in LITE position            | open              |
| Oven safety valve    | Bake terminals  | Wires disconnected from valve        | 1Ω                |
|                      | Broil terminals                                       | Wires disconnected from valve        | 1Ω                |

\* Resistance will vary widely with the temperature of the ignitor. If the circuit tests open, repair the wiring or replace the ignitor.

\*\* CN2 connector must be physically separated from the board

\*\*\* Alternate method - Remove door switch (See page 24.) Leave the wire harness connected to the switch.

Check white to red wire:

Switch plunger out = 0 Ω, switch plunger in = approximately 130 Ω.

Check white to blue wire:

Switch plunger out = open, switch plunger in = 0 Ω.

## COMPONENT VOLTAGE TEST MEASUREMENTS

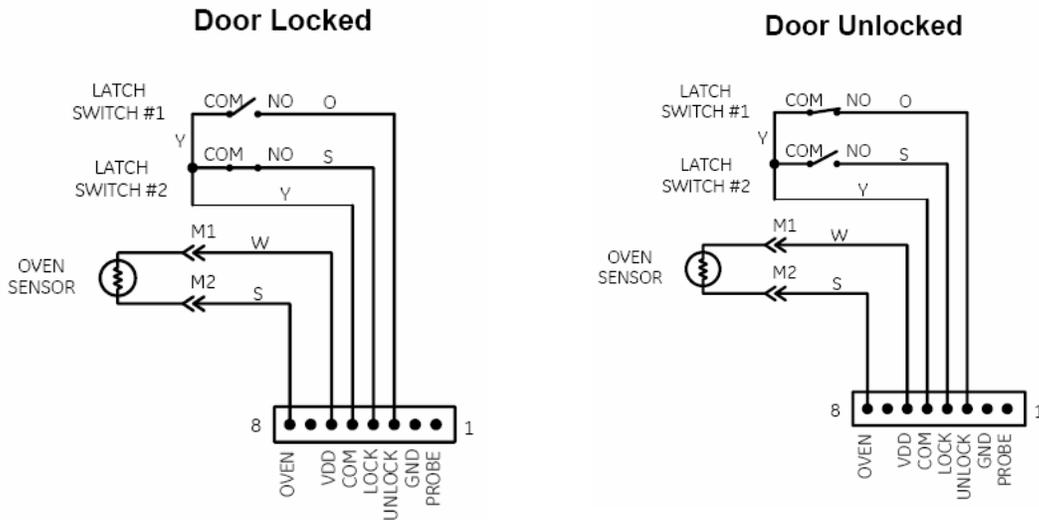
| COMPONENT                | TEST LOCATION                               | CONDITIONS   | VOLTAGE   |
|--------------------------|---|--|---|
| Oven light               | OL to N                                     | Door closed and oven light not selected ON from control panel            | 120 V <sub>AC</sub>   |
|                          |   | Door open  | 0 V <sub>AC</sub>   |
|                          |   | Door closed and oven light selected ON from control panel (relay clicks) | 120 V <sub>AC</sub>   |
| Bake ignitor             | Bake to N                                   | Bake operation initiated (relay clicks)                                  | 120 V <sub>AC</sub>   |
|                          |   | Bake not initiated or burner in cycle OFF status                         | 0 V <sub>AC</sub>   |
| Broil ignitor            | Broil to N                                  | Broil operation initiated (relay clicks)                                 | 120 V <sub>AC</sub>   |
|                          |   | Broil not initiated or burner in cycle OFF status                        | 0 V <sub>AC</sub>   |
| Warming drawer element   | WD OUT to N                                 | Warming drawer operation initiated (relay clicks)                        | 120 V <sub>AC</sub>   |
|                          |   | Warming drawer not initiated or burner in cycle OFF status               | 0 V <sub>AC</sub>   |
| Latch motor              | MDL to N                                    | Door closed and clean cycle initiated (relay clicks)                     | 120 V <sub>AC</sub> for 10 seconds (lock door)                              |
|                          |   | Door closed and clean cycle cancelled (relay clicks)                     | 120 V <sub>AC</sub> for 10 seconds (unlock door)                            |
|                          |   | Door open and clean cycle initiated (relay clicks)                       | 120 V <sub>AC</sub> until alarm stops (25 seconds, then 0 V <sub>AC</sub> ) |
| Fan motor high speed     | GAS F Fan HI to N                           | Door closed and CONV BAKE or CONV BROIL initiated                        | 120 V <sub>AC</sub> (0 V <sub>AC</sub> during pre-heat)                     |
| Fan motor low speed      | GAS S Fan LO to N                           | Door closed and CONV BAKE or CONV BROIL initiated                        | 120 V <sub>AC</sub> (0 V <sub>AC</sub> during pre-heat)                     |
| Surface ignitor switches | Violet wire (disconnected from module) to N | Rotate knob to LITE position   | 120 V <sub>AC</sub>   |

## OVEN SENSOR and DOOR SWITCH TEST

**Note!** See *Lock Motor and Door Latch Switch Circuit Information* for door switch function explanation.

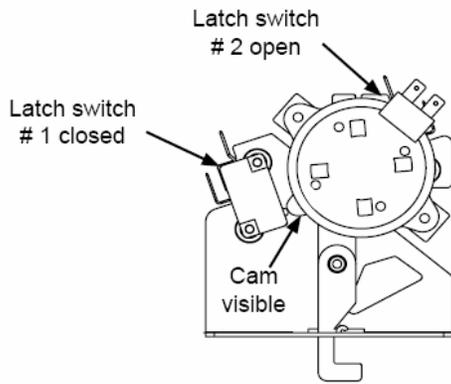
1. Unplug the oven.
2. Locate and disconnect the wire harness from the CN2 location on the ERC (main board).
3. Make resistance measurement from the side of the wire harness connector with exposed terminals.
4. If abnormal reading is observed, check leads in the wire harness connector. If any variation, repair or replace wire harness.

| Circuit        | Terminals | Ohms ( $\Omega$ )                           |
|----------------|-----------|---|
| Oven sensor    | 6 to 8    | 1,100 $\Omega$ (approx.) @ room temperature |
|                |           | 2,545 $\Omega$ (approx.) @ 815° F (435° C)  |
| Door unlatched | 3 to 5    | 0 $\Omega$                                  |
|                | 2 to 5    | open  |
| Door latched   | 3 to 5    | open  |
|                | 4 to 5    | 0 $\Omega$                                  |

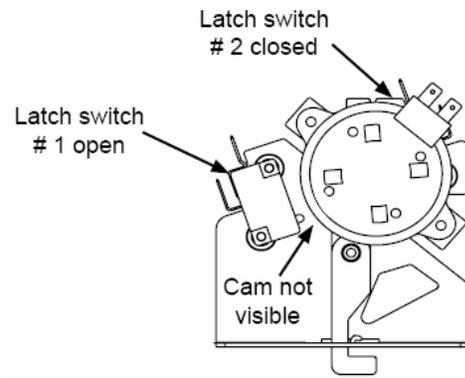




### Door Unlocked



### Door Locked







**Life's  
Good**



**LG**