

30" Freestanding Gas Range SERVICE MANUAL

MODEL: LRG3081ST LRG3081BD

CAUTION

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

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FORWARD

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

SAFETY PRECAUTIONS

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

WARNING

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death. If you smell gas:

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

WARNING

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

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

TABLE OF CONTENTS

(PAGE)

GENERAL	
Important safety instructions	
Model & Serial number label and tech sheet locations	1-4
Specifications	1-5
USING YOUR RANGE ·····	
General information	
Control panel features	2-2 ~ 2-4
- To turn on on the surface burners	
- Setting the Clock	
- Start, Clear/Off	
- To turn On/Off the oven light	
- Timer On/Off	
- Oven Temperature Adjustment	
- Preheating Alarm Light ON/Off	
- Beeper Volume	
- Temperature Unit(°F or °C)	
- Bake, Timed Bake	
- Broil	
- Time cook with warm	
- Oven lockout	
- Changing hour mode on clock (12HR, 24HR)	
- Self-Clean - Auto Conversion	
COMPONENT ACCESS ······	3-1 ~ 3-21
Component Locations	3-1
Removing the Back, Control cover and Key pad assembly	
Removiing Power Control Board (PCB)	
Removiing the Cooktop Plate and the Spark Module	
Removing the Case assembly(Cooktop Burner assembly)	
Removing the Cooktop Parts	
Removing the Door Latch and the Door Switch	
Removing the BROIL Burner assembly	
Oven Bottom, the Frame guide and the Burner assembly	
Removing the convection an blade and fan motor	
Removing the Oven light & Socket assembly	
Removing the latch drive assembly	
- Door locking mechanism	
Removing the Oven temperature Sensor	
Removing & Replacing the drawer	
Removing & Replacing the Lift-off Oven Door	
Removing the Oven Door Handle & Glass	
Removing the Oven Door Gasket ·····	
Removing a Side Panel	
Removing the Oven Valve (Safety Valve) & Gas Regulator	

(Page)

COMPONENT TEST • Convection Motor • Door locking Motor • Micro Switch (normally open type) • Oven Sensor • Door switch • Oven lamp • Broil or bake igniter • Oven (safety) valve • Ignition switch	4-1 4-2 4-2 4-2 4-2 4-3 4-3 4-3 4-3 4-3 4-3 4-4
CONVERSION TO LP GAS	······ 5-1 ~ 5-5
COMPOSITION OF CONTROL Main PCB Power PCB	
DIAGNOSIS THROUGH SCHEMATIC	7-1
CHECK THE FAILURE CODE (F-code)	8-1
FAILURE CODE SUMMARY	
CHECKING FLOW CHART BY FAILURE • No display (No power) • No heating (including F9 error) • Door lock system failure (including F10 error) • Sensing fail (including F1, F2 error) • Oven hot (including F6 error) • No Key input • Oven lamp does not operate	10-1 ~ 10-4 10-5 ~ 10-8 10-9 ~ 10-12 10-13 ~ 10-16 10-17 ~ 10-19 10-20
TROUBLE SHOOTING	······ 11-1 ~ 11-4
EXPLODED VIEW	······ 12-1 ~ 12-6

IMPORTANT SAFETY INSTRUCTIONS

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



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

WARNING

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

A CAUTION

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

WARNING

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

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

Device is properly reengaged when the range is pushed back against the wall.

- DISCONNECT power supply cord from the outlet before servicing.
- Replace all panels and parts before operating.
- RECONNECT all grounding devices.

- Failure to do so can result in severe personal injury, death or electrical shock.

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

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

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

IMPORTANT SAFETY INSTRUCTIONS

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

A WARNING

- ALL RANGES CAN TIP
- INJURY TO PERSONS COULD RESULT
- INSTALL ANTI-TIP DEVICES PACKED WITH RANGE
- SEE INSTALLATION
- DO NOT step or sit on the door and install the Anti-Tip Bracket packed with range.
- The range could be tipped and injury might result from spilled hot liquid, food, or the range itself.
- If the range is pulled away from the wall for cleaning, service, or any other reason, ensure that the Anti-Tip Device is properly reengaged when the range is pushed back against the wall.

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

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

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

WARNING

- DO NOT touch burners, grates or interior surfaces of oven.
- Burners, grates may be hot even though they are off.
- Interior surfaces of an oven become hot enough to cause burns.
- During and after use, do not touch, or let clothing or other flammable materials contact burners, grates or interior surfaces of oven until they have had sufficient time to cool.
- Other surfaces of the appliance may become hot enough to cause burns among these surfaces are oven vent openings and surfaces near these openings, oven doors, and windows of oven doors.

A WARNING

- DO NOT store items of interest to children in cabinets above a range or on the back guard of a range.
- Children climbing on the range to reach items could be seriously injured.
- **Do Not Leave Children Alone** Children should not be left alone or unattended in area where appliance is in use. They should never be allowed to sit or stand on any part of the appliance.
- Never Use Your Appliance for Warming or Heating the Room.
- Storage in or on Appliance Flammable materials should not be stored in an oven or near surface units. Be sure all packing materials are removed from the appliance before operating it. Keep plastics, clothes and paper away from parts of the appliance that may become hot
- Wear Proper Apparel Loose-fitting or hanging garments should never be worn while using the appliance.
- Do Not Use Water on Grease Fires Turn off oven to avoid spreading the flame. Smother the fire or flame by closing the door or use dry chemical, baking soda or foam- type extinguisher.
- Make sure your range is properly adjusted by a qualified service technician or installer for the type of gas (natural or LP) that is to be used. Your range can be converted for use with either type of gas.
- NEVER block the vents (air holes) of the range. They provide the air inlet and outlet that are necessary for the range to operate properly with correct combustion. Air openings are located at the rear of the cooktop, at the top and bottom of the oven door, and at the bottom of the range under the warming drawer.

A WARNING

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

GENERAL

IMPORTANT SAFETY INSTRUCTIONS

SURFACE COOKING UNITS

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

SELF-CLEAN OVENS

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

VENTILATING HOODS:

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

OVEN

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

DEEP FAT FRYERS:

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

GENERAL

MODEL & SERIAL NUMBER LABEL AND TECH SHEET LOCATIONS

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



GENERAL

SPECIFICATIONS

	Model Number	LRG3081ST	LRG3081BD	
	Category	Non C	convection	
Overall	Width	30"		
	Installation type	Freestanding		
	Color availability	STS	Black Diamond STS	
Control	Oven	Tact S	Switch	
	Cooktop	Knob		
	Display	LED Green		
	Electronic clock & timer	Yes		
	Control lock capability	Yes		
	Audible preheat signal	Yes		
	Special function	Setting (6 categories)		
		1. Convection auto conversion On/Of	f	
		2. Thermostat Adjustment		
		3. Preheating alarm Light On/Off		
		5. Temperature unit (°F / °C)		
Cooktop	Material	Enai	mel	
	# of element	5	5	
Input Rate	LR	9.1k/	9.1k	
NAT / LP	RR	5k / 5k		
[BTU/hr]	[BTU/hr] CR 9.1k/9.1k		9.1k	
LF 12k / 9.5k		9.5k		
	RF	17k / 10k		
Oven	Capacity(cu.fe)	5.4		
	Broil (NAT/ LP)[BTU/hr]	14.5k / 13.5k		
	Bake (BTU/hr)	19k / 18k		
	Convection system	Yes		
	# of Racks	2 (stan	ndard)	
	Interior oven light	auto / n	nanual	
	Proof	N	0	
	Cook & warm	N	0	
	Favorites	No		
	Door lock out	Yes		
Drawer	Broiler pan	No		
Dimensions	Туре	Stora		
	Oven Interior(W x H x D)	24 1/2 x 19 1/2 x 19 3/8		
	Exterior - Width	30		
	Exterior - Height	36 (cooktop), 47 7/16 (backguard top)		
	Exterior - Depth	26 ¹ / ₂ (Door), 28	· · · · · · · · · · · · · · · · · · ·	
Power	Net weight: lbs (kg) 269 lbs (122kg)			
	Rating	120V	4.5A	

USING YOUR RANGE

GENERAL INFORMATION

Rating Label

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

Functional Operation

Bake Mode

Bake burner operates during bake mode. Bake can be used to cook foods which are normally baked. Oven must be preheated.



Broil Mode

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



Convection Bake / Roast Mode

During a convection bake the fan and the burner run opposite of each other, however on a convection roast the fan and burner operate at the same time after preheat has been completed. Convection bake should be used for cooking casseroles and roasting meats. Oven should be preheated for best results when using convection bake. Pans do not need to be staggered.



Cooking Guide

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

USING YOUR RANGE

CONTROL PANEL FEATURES



- **1. CONVECTION BAKE PAD** : Touch the pad to select baking with the Convection function.
- **2. BAKE PAD :** Touch the pad to enter the normal bake function.
- **3. Display :** Shows the time of day, oven temperature, whether the oven is in the bake, broil or self-cleaning mode, and the times set for the timer or automatic oven operation

4. COOK TIME PAD / CLOCK

: Touch this pad and then touch the +/- pad to set the amount of time you want your food to cook.

: The oven will shut off when the cooking times as run out.

: Touch and hold the pad for 3 seconds to activate clock setting.

5. TIMER ON/OFF PAD : Touch the pad to set or cancel the timer function.

6. START PAD / OVEN LOCK

- : Touch the pad to start all oven features.: Touch and hold the pad for 3 seconds to activate/deactivate the Oven Lockout function.
- 7. BROIL PAD : Touch the pad to select broil function.
- 8. OVEN LIGHT PAD : Touch the pad to turn the oven light on or off.
- **9. +/- Pad :** Enters or changes time, oven temperature. Sets HI or LO broil.

- **10. EASY-CLEAN :** Touch the pad to select easy cleaning function.
- **11. SELF CLEAN PAD**: Touch the pad to select self cleaning function.
- **12. CLEAR OFF PAD :** Touch this pad to cancel ALL oven operations except the clock, timer and warming drawer settings.

NOTE:

If F- and a number appear in the display and the oven control signals, this indicates a function error code.

Press the **CLEAR OFF** pad. Allow the oven to cool for one hour. Put the oven back into operation.

If the function error code repeats, disconnect the power to the oven and call for service.

If your oven was set for a timed oven operation and a power outage occurred, the clock and all programmed functions must be reset.

The time of day will flash in the display when there has been a power outage.

1. TO TURN ON THE SURFACE BURNER

- 1. Be sure all the surface burners are placed in their respective positions.
- 2. Push the control knob in and turn it to the "LITE" positions.
- 3. You can hear a little CLICKING noise the sound of the electric spark igniting the burners.
- 4. To control the flame size, turn the knob. If the knob stays at "LITE", it will continue to click.

NOTE:

- When turning a burner to LITE, all the burners spark. Do not attempt to disassemble or clean around any burner while another burner is on. An electric shock may result, which could cause you to knock over hot cookware.
- The medium (left rear) and the large (left front) burners are the primary burners for most cooking. These general-purpose burners can be turned down from "HI" to "LO" suit a wide range of cooking needs.
- The extra large burner (right front) is the maximum output burner. Like the other four burners, it can be turned down from "HI" to "LO" for a wide range of cooking applications.
- This burner is also designed to quickly bring large amounts of liquid to a boil. It has a special "Ultra Heat" setting designed to be used with cookware 10 inches or larger in diameter.
- The oval burner (center) is for large pots/pans or for use with the griddle.
- The extra large burner (dual) can be also turned down to "LO" for a low simmer setting almost like the small burner.

2. SETTING THE CLOCK



3. START, CLEAR/OFF

- 1. Touch **START** pad to start oven.
- 2. Touch **CLEAR/OFF** pad to cancel a program during cooking or Erase during programming.

4. TO TURN ON/OFF THE OVEN LIGHT

The oven light automatically turns ON when the door is opened. The oven light may also be manually turned ON or OFF by press the **OVEN LIGHT** pad

NOTE: The oven light cannot be turned on if self-clean feature is active.

5. TIMER ON/OFF



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

NOTE:

1. If you press **TIMER ON/OFF** pad once, this allows you to select "seconds"

(for example: if you press "5" and "6", it means 56 seconds)

 If you press TIMER ON/OFF pad twice, this allows you to select "minutes" (for example: if you press "5" and "6", it means 56 minutes)

6. OVEN TEMPERATURE ADJUSTMENT

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

NOTE: The oven temperature adjustments made with this feature will just change Bake, temperature.

To increase the oven temperature:

- 1. Press and hold BAKE for 3 Seconds.
- 2. Press the desired temperature
- 3. Press START pad.

To decrease the oven temperature:

- 1. Press and hold BAKE for 3 Seconds.
- 2. Press the desired temperature
- 3. Press START pad

USING YOUR RANGE

7. PREHEATING ALARM LIGHT ON/OFF

- 1. Press and hold TIMER ON/OFF for 3 seconds. The display will show Opt.
- 2. Press OVEN LIGHT to switch between On and OFF.
- 3. Press START pad.

8. BEEPER VOLUME

- 1. Press and hold TIMER ON/OFF for 3 seconds. The display will show Opt.
- 2. Press to switch beeper volume (Hi, Lo, and OFF.)
- 3. Press START pad.

9. TEMPERATURE UNIT(°F or °C)

- 1. Press and hold TIMER ON/OFF for 3 seconds. The display will show Opt.
- 2. Press + to switch between the F and C.
- 3. Press START pad.

10. BAKE, TIMED BAKE



11. BROIL



12. TIMED COOK WITH WARM



13. OVEN LOCKOUT

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

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



15. SELF-CLEAN



16. AUTO CONVERSION



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

COMPONENT LOCATIONS



REMOVING THE BACK, CONTROL COVER AND KEY PAD ASSEMBLY

WARNING

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

- Be careful when you work on the gas range handling the sheet metal part.
- Sharp edge may be present and you can cut yourself.
- 1. Turn off the electrical supply and gas supply going to the range.
- 2. Pull the range away from the wall so that you can access the rear panel.
- 3. Remove two wire covers by removing the screw.
- 4. Remove the 3 screws from the rear control cover and remove the cover.
- 5. Remove the 3 screws from the fan motor cover and remove the cover.
- 6. Remove the 10 screws from the rear back cover and remove the cover.



7. Remove the 2 screws of PCB assembly and separate PCB assembly after unpluging the connectors.



7. Remove the 6 screws of PCB assembly and separate PCB assembly after unpluging the connectors.



8. Remove the 2 screws of the eyebrow from the controller sub assembly and remove the eyebrow.



9. Remove the 4 screws of controller sub assembly.



10. Pull the controller sub assembly and lift it up from the supporters.



11. Remove the 3 screws of controller sub assembly.



12. Replace the key pad assembly.



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REMOVING POWER CONTROL BOARD (PCB)

WARNING

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

- Be careful when you work on the gas range handling the sheet metal part.
- Sharp edge may be present and you can cut yourself.
- 1. Turn off the electrical supply and gas supply going to the range.
- 2. Pull the range away from the wall so that you can access the rear panel.
- 3. Remove wire cover & control cover (See step 3~4 on page 3-2)

- 4. When you check PCB, check the proper pcb in default mode and check main pcb.
- NOTE: Refer to the page 6-1~6-2 for composition of control board

Main&Power PCB



REMOVING THE COOKTOP PLATE AND THE SPARK MODULE

WARNING

- DISCONNECT power supply cord from the outlet before servicing.
- Replace all panels and parts before operating.
- RECONNECT all grounding devices.
- Failure to do so can result in severe personal injury, death or electrical shock.
- 1. Turn off the electrical supply and gas supply going to the range.
- 2. Remove the griddle, grates, burner caps and burner heads.
- 3. Remove all 15 screws from cooktop burner housings.
- 4. Disengage 2 front clips using a flat blade screwdriver.



5. Life top up at front.



NOTE : Before lowering the top onto the front clips, line up the burner body and with the cooktop to replace screws.

6. 5 connectors of the electrode and a connector of the harness.

- a) Disconnect 6 connectors.
- b) Remove the 2 screws.
- c) Remove the 2 tabs by using long nose pliers.





REMOVING THE CASE ASSEMBLY (COOKTOP BURNER ASSEMBLY)

WARNING

- DISCONNECT power supply cord from the outlet before servicing.
- Replace all panels and parts before operating.
- RECONNECT all grounding devices.
- Failure to do so can result in severe personal injury, death or electrical shock.
- 1. Turn off the electrical supply and gas supply going to the range.
- 2. Remove the cooktop plate (See "REMOVING THE COOKTOP PLATE" on page 3-4).
- 3. Remove the manifold panel by unfastening the 8 phillips head screws.



- 4. Remove the tubing fitting (5/8-inch).
- 5. Remove 2 phillips head screws



REMOVING THE COOKTOP PARTS

WARNING

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

- The 2 lock tabs on each igniter switch are fragile. Tab breakage can occur if excessive release pressure is applied.
- Check that the gas seal gasket on the screw and the gas valve remain in place before installing the new gas valve.

NOTE: When servicing the burner housing or the valve, it is necessary to service also the pipe which is designated.

- 1. Turn off the electrical supply and gas supply going to the range.
- 2. Remove the cooktop plate (See "REMOVING THE COOKTOP PLATE" on page 3-4).



- 3. To remove the valve:
 - a) Remove the manifold panel (See the step 3 on page 3-5).
 - b) Remove the fitting that you need to remove.
 - c) Remove the ignition switch by prying on the 2 release tabs and slide the switch off the valve stem.
 - d) Remove the valve screw and remove the valve.







- 4. To remove the ignition switch:
 - a) Remove the manifold panel (See the step 3 on page 3-5).
 - b) Pry on the 2 release tabs and slide the switch off the valve stem.
 - c) Remove the 2 connectors and remove the ignition switch.



- 5. To remove the electrode (spark plug):
 - a) Remove the connector from the spark module.
 - b) Stretch the electrode bracket.
 - c) Remove the electrode from the burner housing.



REMOVING THE DOOR LATCH & DOOR SWITCH

WARNING

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

- Be careful when you work on the gas range handling the sheet metal part.
- Sharp edge may be present and you can cut yourself.
- 1. Turn off the electrical supply and gas supply going to the range.
- 2. Open the oven door.
- 3. Remove the cooktop plate, manifold and the case assembly (see page 3-4 ~ 3-7 for the procedure).
- 4. To remove the door latch:
 - a) Remove the two screws from the door latch and remove the latch.



2 Screws

b) Remove the door latch.

- 5. To remove the door switch:
 - a) Remove the door switch from the range. To do this, squeeze tabs and use a ratchet extension or a small socket, and tap it out of the hole with a hammer.



b) Disconnect the wires from the terminals.



REMOVING THE BROIL BURNER ASSEMBLY

WARNING

- DISCONNECT power supply cord from the outlet before servicing.
- Replace all panels and parts before operating.
- RECONNECT all grounding devices.
- Failure to do so can result in severe personal injury, death or electrical shock.
- Make sure the igniter connecter is completely outside when reinstalling the broil burner assembly.

- Be careful when you work on the gas range handling the sheet metal part.
- Sharp edge may be present and you can cut yourself.
- 1. Turn off the electrical supply and gas supply going to the range.
- 2. Remove the oven door and remove the racks from inside the oven.
- 3. To remove the broil Burner assembly:
 - a) Remove the wire cover by removing the screw.
 - b) Remove the 5 screws in the order for easily removing.
 - c) Remove the broil burner assembly.



a) Wire cover screw

- d) Remove the igniter connecter in the cavity (To get the connecter, pull the wire toward the cavity).
- e) Remove the broil burner assembly.

NOTE : When removing the screws, make sure holding the Broil burner assembly.



- 4. To remove the igniter:
 - a) Perform step 1-3 on this page.
 - b) Remove the 2 screws and then remove the igniter.



OVEN BOTTOM, THE FRAME GUIDE AND THE BURNER ASSEMBLY

- 1. Turn off the electrical supply and gas supply going to the range.
- 2. Remove the drawer and then disconnect the igniter plug.



Igniter plug

- 3. Remove the oven door and racks from inside of the oven.
- 4. To remove the oven bottom:
 - Remove the 2 screws and then remove oven bottom.



- 5. To remove the flame guide:
 - Remove the 4 screws and then remove flame guide.



- 6. To remove the nozzle case:
 - Remove the screw and then remove nozzle case.



- 7. To remove the bake burner assembly.
 - Remove the 2 screws and then remove the burner assembly.



- 8. To remove the igniter.
 - Remove the 2 screws and then remove the igniter.



REMOVING THE CONVECTION AN BLADE AND FAN MOTOR

- 1. Turn off the electrical supply and gas supply going to the range and remove the oven racks.
- 2. Remove the four Fan cover screws and set the fan cover aside.



- 3. To remove the fan blade :
 - Remove the nut by screwing clockwise. The fan blade can be replaced from inside oven.



• Be careful not to bend the fan blade

- Failure to do so can result in vibration, noise, and poor performance of convection when operating.
- 4. To remove the fan motor assembly :
 - a) Pull the range out of its mounting location so that you can access the rear of the unit.
 - b) Remove the rear panel from the unit (See step 5~6 on page 3-2 for procedure).
 - c) Disconnect the wire connection and remove the 4 screws.





REMOVING THE OVEN LIGHT & SOCKET ASSEMBLY

WARNING

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

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

To replace:

- 1. Turn off the electrical supply and gas supply going to the range.
- 2. Turn the glass bulb cover in the back of the oven counterclockwise to remove.
- 3. Turn bulb counterclockwise to remove from socket.
- 4. Replace bulb and bulb cover by turning clockwise.



- Be careful not to scratch or chip the oven liner paint when you remove the oven light socket in the next step.
- 5. Use a screwdriver and bend the clips on the oven light socket away from the edges of the liner hole, and pull the socket out of the liner.
 NOTE: If it is too difficult to remove the socket from the front of the oven, you will have to push the socket out from the back of the unit.



6. Disconnect the wires from the socket terminals.



<Viewed From Rear Panel>

REMOVING THE LATCH DRIVE ASSEMBLY

WARNING

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

- Be careful when you work on the gas range handling the sheet metal part.
- Sharp edge may be present and you can cut yourself.
- 1. Turn off the electrical supply and gas supply going to the range.
- 2. Pull the range away from the wall so that you can access the rear panel.
- 3. Remove the back cover (See step 5~6 on page 3-2 for procedure).
- 4. Disconnect the wires from the latch drive motor and switch.
- 5. Remove the 3 mounting screws from the latch drive.



DOOR LOCKING MECHANISM

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

The structural elements are as below.

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



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

Latch drive motor

6. Unhook the Latch rod from the cam.

REMOVING THE OVEN TEMPERATURE SENSORS

WARNING

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

- Be careful when you work on the gas range handling the sheet metal part.
- Sharp edge may be present and you can cut yourself.
- 1. Turn off the electrical supply and gas supply going to the range.
- 2. Open the oven door and remove the racks from the oven.
- 3. To remove an oven temperature sensor :
 - a) Remove the 2 screws.
 - b) Remove the connecter in the cavity (To get the connecter, pull the wire toward the cavity).
 - c) Remove the oven sensor.



Oven temperature sensor

REMOVIING & REPLACING THE DRAWER

CAUTION

• Disconnect the electrical power to the range at the main fuse or circuit breaker panel. Failure to do so can result in severe personal injury, death, or electrical shock.

Most cleaning can be done with the drawer in place;

however, the drawer may be removed if further cleaning is needed. Use warm water to thoroughly clean.

- 1. Fully open the drawer.
- 2. Remove the two screws.



3. Locate the glide lever on each side of the drawer. Push down on the left glide lever and pull up on the right glide lever.





Push down with finger

Pull up with finger

4. Pull the storage drawer away from the range.



Pull the drawer

Replacing the Drawer

Pull the bearing glides to the front of the chassis glide.

Align the glide on each side of the drawer with the glide slots on the range.

Push the drawer into the range until levers "click" (approximately 2 inch).

Pull the drawer open again to seat bearing glides into position.

Replace the two screws.

- DO NOT touch interior surfaces of oven between door and drawer.
- During and after use, do not touch interior surfaces of oven between door and drawer until they have had sufficient time to cool.
- Failure to follow this warning result in severe personal injury.



Lift the front

REMOVING & REPLACING THE LIFT-OFF OVEN DOOR

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

To remove the door:

- 1. Fully open the door.
- 2. Pull the hinge locks up toward (Fig.1) the door frame, to the unlocked position.



<Fig.1>

- 3. Firmly grasp both sides of the door at the top.
- 4. Close door to the door removal position, which is approximately 5 degrees. (refer to the Fig.2)



<Fig.2>

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

To replace the door:

1. Firmly grasp both sides of the door at the top. Hinge arm 2. With the door at the same angle as the removal Bottom position. seat edge of the indentation slot of the hinge arm Indentation into the bottom edge of the

hinge slot. The notch in the hinge arm must be fully seated into the bottom of the slot.

- 3. Fully open the door. If the door will not fully open, the indentation is not seated correctly in the bottom edge of the slot.
- 4. Push the hinge locks down against the front frame of the oven cavity to the locked position.



5. Close the oven door.

REMOVING THE OVEN DOOR HANDLE & GLASS

WARNING

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

- Be careful when you work on the gas range handling the sheet metal part.
- Sharp edge may be present and you can cut yourself.
- 1. Remove the oven door from the range (see page 3-15 for the procedure).
- 2. Place the oven door on a padded work surface with the front glass facing down.
- 3. Remove the 4 top door screws.



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



3 bottom liner screws

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

6. To remove the door handle & trim

a) Remove the 2 door handle screws and lift the door handle off door trim and slide up the door trim.



Door handle screw



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

a) Remove the handle and glass trim screws



b) Lift the door handle off door trim



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

8. To remove a hinge hanger assembly:

- a) Remove the 2 top liner screws (See step 3 on page 3-16)
- b) Place the door liner assembly on a padded work surface with the hinge hangers over the edge.
- c) Remove the two bottom screws.
- d) Lift the hinge hanger out of the door liner slot.



9. To remove the oven door glass assembly:

- a) Remove the 8 screws.
- b) Lift the insulation cover off the door liner.



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



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

REMOVING THE OVEN DOOR GASKET

WARNING

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

- Be careful when you work on the gas range handling the sheet metal part.
- Sharp edge may be present and you can cut yourself.
- 1. Open the oven door to its fully down position.
- 2. Pull the oven door gasket clips out of the liner holes until all of the clips are removed.





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

Liner Hole



REMOVING A SIDE PANEL

A WARNING

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

- Be careful when you work on the gas range handling the sheet metal part.
- Sharp edge may be present and you can cut yourself.
- 1. Turn off the electrical supply and gas supply going to the range.
- 2. Remove the oven door from the range (see page 3-16 for the procedure).
- 3. Pull the range away from the wall so you can access the back of the unit.
- 4. Remove the rear panel (see page 3-2).
- 5. Raise the cooktop plate (see the page 3-4 for the procedure).
- 6. Remove the two screws from the top rear of the side panel.



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



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



9. Push forward and remove the side panel.

REMOVE THE OVEN VALVE (SAFETY VALVE) & GAS REGULATOR

WARNING

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

- Be careful when you work on the gas range handling the sheet metal part.
- Sharp edge may be present and you can cut yourself.
- 1. Turn off the electrical supply and gas supply going to the range.
- 2. Pull the range away from the wall so you can access the pipe of the unit.
- 3. To remove the oven valve:
 - a) Remove the 3 fittings.
 - b) Remove the 4 connectors.
 - c) Remove the 4 screws and than lift the oven valve.



- 4. To remove the gas regulator:
 - a) Remove the 2 fittings and a gas supplier fitting.



COMPONENT TEST

Before testing any of components, perform the following checks:

NOTE:

- 1. The most common cause for control failure is corrosion on connectors.
- Therefore, disconnecting and reconnecting wires will be necessary throughout test procedures
- 2. ALL units in the first few days of use should be checked for mis-wiring or loose connections
- 1. All/tests/checks should be made with a VOM or DVM having a sensitivity of 20,000 ohms per-volt DC, or greater.
- 2. Check all connections before replacing components, looking for broken or loose wires, Failed terminals, or wires not pressed into connectors far enough.
- 3. Resistance checks must be made with power cord unplugged from outlet, and with wiring harness or connectors disconnected.

WARNING

- Turn off the electrical supply and gas supply going to the range.
- Replace all panels and parts before operating
- Reconnect all grounding devices after servicing
- Failure to do so can result in death or electrical shock

NOTE: Below Ω value were tested at room temperature (77F/25°C)

Components	Test procedures	Results
Convection Motor	 Refer to page 3-11 for the servicing procedure Measure the resistance (Multiple meter scale: R x 1) 	Normal: Approximately $62.0 \ \Omega \pm 10\%$ If not replace Abnormal: Infinite (open) below 5 Ω (shorted)

Components	Test procedures	Res	Results	
Door locking Motor	 1. Refer to page 3-13 for the servicing procedure 2. Measure the resistance (Multiple meter scale: R x 1000) 	Normal: Approximately 2.6 kΩ ± 10% If not replace Abnormal: Infinite(open) below 5Ω (shorted)		
Micro Switch (normally open type)	 Refer to page 3-13 for the servicing procedure Measure the resistance (Multiple meter scale: R x 1000) 	Door latch open	Door latch Locked	
		Continuity	°⊂⊂° Infinite	
	NOTE: After checking for the continuity of switch, make sure that they are connected correctly			
Oven Sensor	 Refer to page 3-14 for the servicing procedure Measure the resistance after cooling down (Multiple meter scale: R x 1000) 	Normal: Approximately $1.09 \text{ k}\Omega \pm 10\%$ If not replace		
		NOTE: Ω Value was tested at room temperature (77F/25°C)		
	NOTE: Oven sensor is so sensitive to temperature Do test after cooling down sufficiently			
Components	Test procedures	Re	sults	
-----------------------	--	-------------------------------------	---------------	
Door switch	 Refer to page 3-8 for the servicing procedure Measure the resistance after cooling down (Multiple meter scale: R x 1) 	Door open	Door closed	
		Continuity	Infinite	
Oven lamp	1. Measure the resistance after cooling down (Multiple meter scale: R x1)	Normal: Approx 5 Ω ± If not r		
Broil or bake igniter	 1. Refer to page 3-9-3-10 for servicing procedure. 2. Measure the resistance after cooling down. (Multiple meter scale : R x 1) 	Resist	n Temperature	

Components	Test procedures	Res	sults
Oven (safety) valve	 1. Refer to page 3-21 for servicing procedure. 2. Measure the resistance after cooling down. (Multiple meter scale : R x 1) Upside Downside 	Normal: Approx 1 ~ 3 Ω If not re	2
Ignition switch	 Refer to page 3-6~3-7 for servicing procedure. Measure the resistance by rotating the cam of each switch slowly. (Multiple meter scale : R x 1) 	approximately $40^{\circ} \sim 80^{\circ}$	other $\sim \sim \sim$
		Continuity	Infinite

A WARNING

- Turn off the electrical supply and gas supply going to the range.
- Replace all panels and parts before operating.
- RECONNECT all grounding devices.
- Failure to do so can result in severe personal injury, death or electrical shock.

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

Tools required

- Adjustable wrench
- 13/32" or 10mm open-end wrench
- Phillips head screwdriver
- Flat bladed screwdriver(blade width approximately 3/32" across)
- Nut drivers : 13/32" or 10mm

1. PREPARE RANGE FOR CONVERSION

- 1) Turn off gas supply to the range.
- 2) Turn off the electrical power to the range.

• If the gas supply to the range is disconnected for any reason see the installation instructions for proper connection and safety precautions.

2. CONVERT THE PRESSURE REGULATOR

A WARNING

• Do not remove the pressure regulator from the range.

Pull the range away from the wall and the pressure regulator is located at the rear of the range.



Pressure regulator

3. CONVERTING YOUR REGULATOR

- 1) Unscrew the hex-nut cap by using an adjustable wrench.
- 2) Separate plastic cap and hex-nut cap by turning the plastic cap to 90°.
- 3) Assemble plastic cap in the opposite side.
- 4) Screw the hex-nut cap back into the regulator. Do not over tighten.







WARNING

- Turn off the electrical supply and gas supply going to the range.
- Replace all panels and parts before operating.
- RECONNECT all grounding devices.
- Failure to do so can result in severe personal injury, death or electrical shock.

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

4. CONVERTING THE SURFACE BURNERS

Remove the conversion kit (see illustration below).

LP orifice spuds have a orifice code on the top or the side, denoting the location on the range where it is to be installed.



Top burner orifices

Broil and Bake burner orifices

- 1) Remove grates, burner caps and burner heads.
- 2) Remove the brass orifice spud in the chimney of each burner using a 13/32" or 10 mm nut driver.
- 3) Install the LP orifice spuds into their correct positions as described previously.

BURNER OUTPUT RATINGS; BTU/HR			
L	LP (Propane) Gas, 10" W.C.P		
MODEL	BTU RATE	ORIFICE CODE	
BURNER	LRG3081ST / SB / SW / BD	LRG3081ST / SB / SW / BD	
LF	9,500	L	
LR	9,100	М	
RR	5,000	Р	
RF	10,000	Q	
CTR	9,100	М	
BROIL	13,500	F	
BAKE	18,000	D	





Orifice Locations for LP Gas



WARNING

- Turn off the electrical supply and gas supply going to the range.
- Replace all panels and parts before operating.
- RECONNECT all grounding devices.
- Failure to do so can result in severe personal injury, death or electrical shock.

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

BURNER OUTPUT RATINGS; BTU/HR			
	Natural Gas, 5" W.C.P		
MODEL	BTU RATE	ORIFICE CODE	
BURNER	LRG3081ST / SB / SW / BD	LRG3081ST / SB / SW / BD	
LF	12,000	C	
LR	9,100	D	
RR	5,000	G	
RF	17,000	Н	
CTR	9,100	D	
BROIL	14,500	Α	
BAKE	19,000	В	





Top burner orifices



Orifice Locations for LP Gas



- 4) To prevent leakage, make sure the orifice spuds are securely screwed into the gas supply tubes.
- 5) For the right front burner the choke and self threading screw will be needed as shown Fig 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 choke notch), so it does not have any rotational movement.



Self threading screw Choke

17k burner base

<Fig>

- 6) Put the old orifice spuds into conversion kits and place back on the range for possible future conversion.
- NOTE: If an orifice spud is accidentally dropped, the cooktop plate can be raised (see the page 3-7)

WARNING

- Turn off the electrical supply and gas supply going to the range.
- Replace all panels and parts before operating.
- RECONNECT all grounding devices.
- Failure to do so can result in severe personal injury, death or electrical shock.

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

5. CONVERT THE OVEN BURNER ORIFICES

- 1) OVEN LOWER BURNER(BAKE)
 - a) Remove oven door, oven bottom, frame guide, nozzle case and oven burner assembly.
 - b) Remove the orifice spud from nozzle holder using a 13/32" or 10mm wrench.
 - c) Install the LP orifce spud(D) to the nozzle holder. To prevent leakage, make sure the orifice spud is securely screwed into the nozzle holder.



2) OVEN UPPER BURNER(BROIL)

- 1) Remove oven door and Broil burner assembly. Then remove the wire cover using a phillips head screwdriver.
- 2) Release the connector of the Igniter.

- 3) Remove the orifice spud from nozzle holder using a 13/32" or 10mm wrench.
- Install the LP orifce spud(F) to the nozzle holder. To prevent leakage, make sure the orifice spud is securely screwed into the nozzle holder.



6. Turn on the Electrical and Gas Supply to continue with flame adjustment.

7. ADJUSTING THE AIR SHUTTER

For bake burner, adjust the Air Shutter for LP gas, loosen the Philips head screw and rotate the shutter to the fully open position as shown Fig.1. NOTE: When converting the unit back to natural gas the bake burners air shutter should be also in fully open position.

For broil burner, adjust the Air Shutter for LP gas, loosen the Philips head screw and rotate the air shutter to the fully open position as shown Fig.1 (Refer to Fig.1)

NOTE: When converting the unit back to natural gas the broil buners air shutter should be in 0.4inch (10mm) open position. (Refer to Fig.2)



Check the flame size. The flame should have approximately 1-inch blue cones.

After 30 seconds of the burner operation, check for flame stability.

If the flame is lifting off of the burner ports gradually reduce the air shutter opening until flames have stabilized. Some yellow tipping may be normal when used on LP.



A WARNING

- Turn off the electrical supply and gas supply going to the range.
- Replace all panels and parts before operating.
- RECONNECT all grounding devices.
- Failure to do so can result in severe personal injury, death or electrical shock.

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

8. CHECK QUALITY OF THE FLAMES

The combustion quality of the burner flames needs to be determined visually.



A. Yellow Flames: Further Adjustment Required

B. Yellow tips on outer cones: Normal for LP Gas

C. Soft Blue flames: Normal for Natural Gas.

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

9. ADJUST THE SURFACE BURNER LOW FLAME(SIMMER) SETTING.

- 1) Light all surface burners.
- Turn the knob on the burner being adjusted to "LO"
- 3) Remove knob.

- 4) Insert a small, flat bladed screwdriver into the valve shaft as shown in Fig. 1. Turn the adjustment screw until the flame reaches the desired size.
- 5) Replace the knob.



6) Test the flame stability.

Test 1: Turn the knob from "HI" to "LOW" quickly. If the flame goes out, increase the flame size and test again.

Test 2: With the burner on a "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.

7) Repeat steps 1-5 for each surface burner.

10. CONVERSION STICKER

Upon completion of the conversion, fill out the LP sticker located with the instructions. Once complete, attach the sticker to the back of the range near the regulator.

Place all orifice's that were removed for natural gas back into the plastic bag along with the instructions. Place the kit back into its original location.

CONVERSION IS FINISHED

To convert to the original gas.

Follow conversion process with original orifices to convert the appliance to the original gas.

NOTE: The choke for the 17k top burner must be removed when converting the range back to natural gas.

COMPOSITION OF CONTROL



Controller assembly

Main PCB (Loc No.: 2006)



Power PCB (Loc No.: 2029)



COMPOSITION OF CONTROL

Main PCB



Power PCB



DIAGNOSIS THROUGH SCHEMATIC



CHECK THE FAILURE CODE (F-code)

When the oven has some failure on cooking,

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

Check the failure code as below steps.

- 1. press the "clear" key
- 2. press the "BAKE" and "BROIL" key at the same time for 1 second.

If the oven has some failure, the oven will show the failure code, like FIG. 1

It shows the type of F-code and times of occurred failure alternately for each two seconds



Times of the occurred failure



2 second



If the oven does not have any failure, the oven will display like FIG. 2



NOTE:

After checking the failure code, press the "CLEAR" key

FAILURE CODE SUMMARY

Code	Description	How to detect	Check point
F-1	Opened Sensor	Oven sensor(thermistor) remains open for over 1 min during cooking.	1. Wiring 2. Oven Sensor
F-2	Shorted Sensor	Oven sensor (thermistor) is short for over 1 min during cooking.	1. Wiring 2. Oven Sensor
F-3	Key shorted Error	When some keys are continuously short for over 60 seconds.	Key malfunction
F-6	Oven hot	The oven temperature is over 650°F continuously during 2 minutes on cooking except self cleaning.	1. Oven Sensor 2. Relay
F-9	No heating	If starting oven temperature does not exceed 150°F and oven temperature is less Than or equal to starting temperature over 5 minutes during preheating, while door is closed.	 Electric Wiring Gas Valve Ignitor Oven Sensor
F-10	Door Lock Fail	In case of Door Lock Failure in operating Lock motor.	 Electric Wiring Motor's Resistance Micro Switch

Symptom	Check Point
1. Power Failure (Dead) 2. No Display	 Check Electric Wiring Check the Power PCB and Main PCB Voltage







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Symptom	Check Point
1. No heating 2. F9	 Check Electric Wiring Check Heater's Resistance. Check the Sensor (thermistor).





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Check the looseness of bake, broil heater connection



Broil globar ignitor

Bake globar ignitor

Gas Valve







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









Door lock system error \rightarrow F-10 error



Symptom	Check Point	
1. Sensing Fail 2. F-1 3. F-2	 Check the electric wiring Check the test Mode Check the sensor(thermistor) resistance (approximately 1.06 kΩ at 65F ~ 1.12 kΩ at 85F.) 	





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Main oven sensing error \rightarrow F-1, F-2 error Main oven sensing failed Disconnect the power Check the looseness of oven sensor connector No Normal? Yes Reconnect Disconnect the main oven sensor and END check the main oven sensor value (measure the resistance after cooling down) Normal:approximately 1.06 kΩ at 65F ~ 1.12 kΩ at 85F. No Normal? Replace the main oven sensor Yes END

Main oven sensing error \rightarrow F-1, F-2 error



Main oven sensing error \rightarrow F-1, F-2 error



Symptom	Check Point
1. Oven hot 2. F-6	1. Check the Resistance of the Relay.













Oven lamp does not operate



BEFORE CALLING FOR SERVICE

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

POSSIBLE CAUSES	SOLUTIONS
Poor installation.	 Place oven rack in center of oven. Place a level on the oven rack. Adjust leveling legs at base of range until the oven rack is level.
• Poor floor.	 Be sure floor is level and is strong and stable enough to adequately support range.
 Floor is sagging or sloping. Kitchen cabinet alignment may make range appear unlevel. 	 Contact a carpenter to correct the situation. Be sure cabinets are square and have sufficient room for range clearance.
The plug on range is not completely inserted in the electrical outlet.	Make sure the electrical plug is inserted into a live, properly grounded outlet.
 Burner slits on the side of the burner may be clogged. 	 Remove the burners and clean them. Check the electrode area for burned-on food or grease. See the "CARE AND CLEANING OF THE RANGE" section in user's guide.
Improper burner assembly.	• Make sure the burner parts are installed correctly. See the "CARE AND CLEANING OF THE RANGE" section in user's guide.
 Improper air to gas proportion. 	 If range is connected to LP gas, contact the technician who installed your range or made the conversion.
The oven gas shut-off valve may have accidentally been moved during cleaning or moving.	Make sure that the oven gas shut-off valve is fully open.
	 Poor installation. Poor floor. Floor is sagging or sloping. Kitchen cabinet alignment may make range appear unlevel. The plug on range is not completely inserted in the electrical outlet. Burner slits on the side of the burner may be clogged. Improper burner assembly. Improper air to gas proportion. The oven gas shut-off valve may have accidentally been moved

TROUBLE SHOOTING

PROBLEMS	POSSIBLE CAUSES	SOLUTIONS
Food does not bake or roast properly	 Improper oven controls setting. Incorrect rack position. Incorrect cookware or cookware of improper size being used. Oven thermostat needs adjustment. Clock not set correctly. Aluminum foil used improperly in the oven. 	 See the "USING THE OVEN" section in user's guide. See the "USING THE OVEN" section in user's guide. See the "USING THE OVEN" section in user's guide. See the "HOW TO ADJUST THE OVEN THERMOSTAT" section in user's guide. See the "USING THE CLOCK AND TIMER" section in user's guide. See the "CARE AND CLEANING OF THE RANGE" section in user's guide.
Food does not broil properly in the oven	 Improper oven controls setting. Oven door not closed. Incorrect rack position. Food being cooked in a hot pan. Cookware not suited for broiling. Aluminum foil used on the broiling pan and grid has not been fitted properly and slit as recommended. 	 Make sure you touch the "BROIL HI/LO" pad. See the "USING THE OVEN" section in user's guide. See the "BROILING GUIDE" in user's guide. Use the broiling pan and grid that came with your range. Make sure it is cool. Use the broiling pan and grid that came with your range. See the "USING THE OVEN" section in user's guide.
Moisture collects on oven window or steam comes from oven vent	 When cooking foods high in moisture. Excessive moisture was used when cleaning the window. 	• This is normal
Oven temperature too hot or too cold	 Oven thermostat needs adjustment. 	• See the "HOW TO ADJUST THE OVEN THERMOSTAT" section in user's guide.
Clock and timer does not work	 The plug on range is not completely inserted in the electrical outlet. A fuse in your home may be blown or the circuit breaker tripped. Improper oven controls setting. 	 Make sure the electrical plug is inserted into a live, properly grounded outlet. Replace the fuse or reset the circuit breaker. See the "USING THE CLOCK AND TIMER" section in user's guide.
Oven light does not work	 The light bulb is loose or defective. The plug on range is not completely inserted in the electrical outlet. 	 Tighten or replace the bulb. Make sure the electrical plug is inserted into a live, properly grounded outlet.

TROUBLE SHOOTING

PROBLEMS	POSSIBLE CAUSES	SOLUTIONS	
Oven will not selfclean	 The oven temperature is too high to set a self-clean operation. Improper oven controls setting. 	 Allow the range to cool to room temperature and reset the controls. See the "USING THE SELF-CLEANING OVEN" section in user's guide. 	
"Crackling" or "popping" sound	• This is the sound of the metal heating and cooling during both the cooking and cleaning functions.	• This is normal.	
Too much smoking during a self clean cycle.	• Too much soil.	• Touch the "CLEAR OFF" pad. Open the windows to get rid of smoke from the room. Wait until the DOOR LOCKED light goes off. Wipe up the excess soil and reset the clean cycle.	
Oven door will not open after a self-clean cycle	• The oven temperature is too high.	 Allow the oven to cool below locking temperature. This can take up to 1 hr after the cycle is complete. 	
Oven not clean after a self- clean cycle	 Improper oven controls setting. The oven was heavily soiled. 	 See the Using the "USING THE SELF- CLEANING OVEN" section in user's guide. Clean up heavy spillovers before beginning the self- clean cycle. Heavily soiled ovens may need to self-clean again or for a longer period of time. 	
"CLOSE DOOR TO CONTINUE BROILING" or "DOOR OPENED" appears in the display	• The broil or self-clean cycle has been selected but the door is not closed.	Close the oven door.	
"DOOR LOCKED" light is on when you want to cook	• The oven door is locked because the temperature inside the oven has not dropped below the locking temperature.	• Touch the "CLEAR OFF" pad. Allow the oven to cool.	
Oven control beeps and displays any F code error.	CODECAUSEF-1Open oven sensorF-2Shorted oven sensorF-6Oven is too hotF-9No heatingF-10Door locking system don't operate	See the page 9-1 in this manual	

TROUBLE SHOOTING

PROBLEMS	POSSIBLE CAUSES	SOLUTIONS	
Oven racks are difficult to slide	• The oven racks were cleaned in a self-clean cycle.	• Apply a small amount of vegetable oil to a paper towel and wipe the edges of the oven racks with the paper towel. Do not use lubricant sprays.	
Power outage, clock flashes	 Power outage or surge. 	 Reset the clock. If the oven was in use, you must reset it by touching the "CLEAR OFF" pad, setting the clock and resetting any cooking function. 	
"Burning" or "oily" odor emitting from the vent	• This is normal in a new oven and will disappear in time.	• To speed the process, set a self-clean cycle for a minimum of 3 hours. See the "USING THE SELFCLEANING OVEN" section.	
Strong odor	• An odor from the insulation around the inside of the oven is normal for the first few times the oven is used.	• This is temporary.	
Drawer does not slide smoothly or drags	 The drawer is out of alignment. Drawer is over-loaded or load is unbalanced. 	 Fully extend the drawer and push it all the way in. See "CARE AND CLEANING OF THE RANGE" section in user's guide. Reduce weight. Redistribute drawer contents. 	

INTRODUCTION

MODEL:	Customer Model	Product Code	SVC Model
	LRG3081ST	FG4322ES.FSTELGA	LRG3081ST /00
	LRG3081ST	FG4322ES.FS1ELGA	LRG3081ST /01
	LRG3081BD	FG4322ES.FBDELGA	LRG3081BD /00
	LRG3081BD	FG4322ES.FB1ELGA	LRG3081BD /01



DOOR PARTS



CONTROLLER PARTS



COOKTOP PARTS





CAVITY PARTS



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