

# Service Manual

This manual is to be used by qualified appliance technicians only. Viking does not assume any responsibility for property damage or personal injury for improper service procedures done by an unqualified person.

## 30, 36, & 48 Inch Self-Clean Gas Ranges

This Base Manual covers general and specific information including, but not limited to the following models:

VGSC530 VGSC536 VGSC548



SMC-0010 April 2010



### SAVE THESE INSTRUCTIONS

#### REVIEW ALL SERVICE INFORMATION IN THE APPROPRIATE SERVICE MANUAL AND TECHNICAL SHEETS BEFORE BEGINNING REPAIRS.

Pride and workmanship go into every product to provide our customers with quality products. It is possible, however, that during its lifetime, a product may require service. Products should be serviced only by a qualified service technician that is familiar with the safety procedures required in the repair and who is equipped with the proper tools, parts, testing instruments, and the appropriate service manual.

#### Safety Information

We have provided many important safety messages in this manual and on the appliance. Always read and obey all safety messages. This is the safety alert symbol.



This symbol alerts you to hazards that can kill or hurt you and others. All safety messages will be preceded by the safety alert symbol and the word "DANGER", "WARNING", or "CAUTION". These words mean:

### A DANGER

IMMEDIATE HAZARDS WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.

### A WARNING

Hazards or unsafe practices which COULD result in severe personal injury or death.

### A CAUTION

Hazards or unsafe practices which COULD result in minor personal injury or product or property damage.

All safety messages will identify the hazard, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

### A WARNING

To avoid risk of serious injury or death, repairs should not be attempted by unauthorized personnel.

### **A**CAUTION

VIKING will not be responsible for any injury or property damage from improper service procedures. If performing service on your own product, you must assume responsibility for any personal injury or property damage which may result.

To locate an authorized servicer, call:

Viking Customer Service Phone No. 1-888-845-4641

Address your written correspondence to:

Viking Preferred Service 1803 HWY 82 West Greenwood, MS 38930



#### **PROFESSIONAL SERIES FREESTANDING GAS SELF-CLEAN RANGES WARRANTY**

#### ONE YEAR FULL WARRANTY

Freestanding gas ranges and all of their component parts, <u>except as detailed below</u>\*, are warranted to be free from defective materials or workmanship in normal household use for a period of twelve (12) months from the date of original retail purchase. Viking Range Corporation, warrantor, agrees to repair or replace, at its option, any part which fails or is found to be defective during the warranty period.

\*Glass (including light bulbs), painted and decorative items are warranted to be free from defective materials or workmanship for a period of ninety (90) days from the date of original retail purchase. ANY DEFECTS MUST BE REPORTED TO THE SELLING DEALER WITHIN NINETY (90) DAYS FROM DATE OF ORIGINAL RETAIL PURCHASE.

Viking Range Corporation uses the most up-to-date processes and best materials available to produce all color finishes. However, slight color variation may be noticed because of the inherent differences in painted parts and porcelain parts as well as differences in kitchen lighting, product locations, and other factors.

#### FIVE YEAR LIMITED WARRANTY

Any surface burner, griddle burner, grill burner, or oven burner which fails due to defective materials or workmanship in normal household use during the second through fifth year from the date of original retail purchase will be repaired or replaced, free of charge for the part itself, with the owner paying all other costs, including labor.

#### TEN YEAR LIMITED WARRANTY

Any porcelain oven or porcelain inner door panel which rusts through due to defective materials or workmanship in normal household use during the second through the tenth year from the date of original retail purchase will be repaired or replaced, free of charge for the part itself, with the owner paying all other costs, including labor.

#### NINETY (90) DAY RESIDENTIAL PLUS WARRANTY

This warranty applies to applications where use of the product extends beyond normal residential use. Examples are, but not limited to, bed and breakfasts, fire stations, private clubs, churches, etc. This warranty excludes all commercial locations such as restaurants, food service locations and institutional food service locations.

This warranty extends to the original purchaser of the product warranted hereunder and to each transferee owner of the product during the term of the warranty.

This warranty shall apply to products purchased and located in the United States and Canada. <u>Products must be purchased in the country</u> <u>where service is requested</u>. Warranty labor shall be performed by an authorized Viking Range Corporation service agency or representative. Warranty shall not apply to damage resulting from abuse, accident, natural disaster, loss of electrical power to the product for any reason, alteration, outdoor use, improper installation, improper operation, or repair or service of the product by anyone other than an authorized Viking Range Corporation service agency or representative. <u>This warranty does not apply to commercial usage</u>. Warrantor is not responsible for consequential or incidental damage whether arising out of breach of warranty, breach of contract, or otherwise. <u>Some jurisdictions DO NOT allow</u> the exclusion or limitation of incidental of consequential damages, so the above limitation or exclusion may not apply to you.

Owner shall be responsible for proper installation, providing normal care and maintenance, providing proof of purchase upon request, and making the appliance reasonably accessible for service. If the product or one of its component parts contains a defect or malfunction during the warranty period, after a reasonable number of attempts by the warrantor to remedy the defects or malfunctions, the owner is entitled to either a refund or replacement of the product or its component parts. Warrantor's liability on any claim of any kind, with respect to the goods or services covered hereunder, shall in no case exceed the price of the goods or service or part thereof which gives rise to the claim.

#### WARRANTY SERVICE

Under the terms of this warranty, service must be performed by a factory authorized Viking Range Corporation service agent or representative. Service will be provided during normal business hours, and labor performed at overtime or premium rates shall not be covered by this warranty. To obtain warranty service, contact the dealer from whom the product was purchased, an authorized Viking Range Corporation service agent, or Viking Range Corporation. Provide model and serial number and date of original purchase. For the name of your nearest authorized Viking Range Corporation service agency, call the dealer from whom the product was purchased or Viking Range Corporation. **IMPORTANT:** Retain proof of original purchase to establish warranty period.

The return of the Owner Registration Card is not a condition of warranty coverage. You should, however, return the Owner Registration Card so that Viking Range Corporation can contact you should any question of safety arise which could affect you.

Any implied warranties of merchantability and fitness applicable to the above described surface burner, griddle burner, grill burner, oven burner, porcelain oven, or porcelain inner door panel are limited in duration to the period of coverage of the applicable express written limited warranties set forth above. <u>Some jurisdictions DO NOT allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.</u> This warranty gives you specific legal rights, and you may also have other rights which may vary from jurisdiction to jurisdiction.

Specifications subject to change without notice. For more product information, call 1-888-VIKING1 (845-4641), or visit our web site at http://www.vikingrange.com

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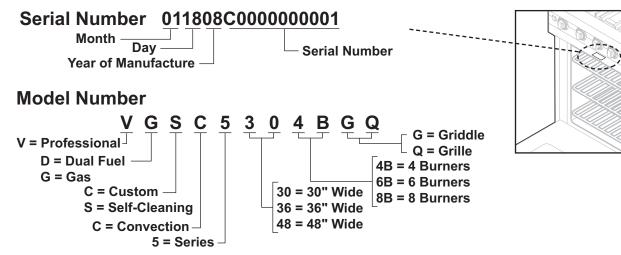
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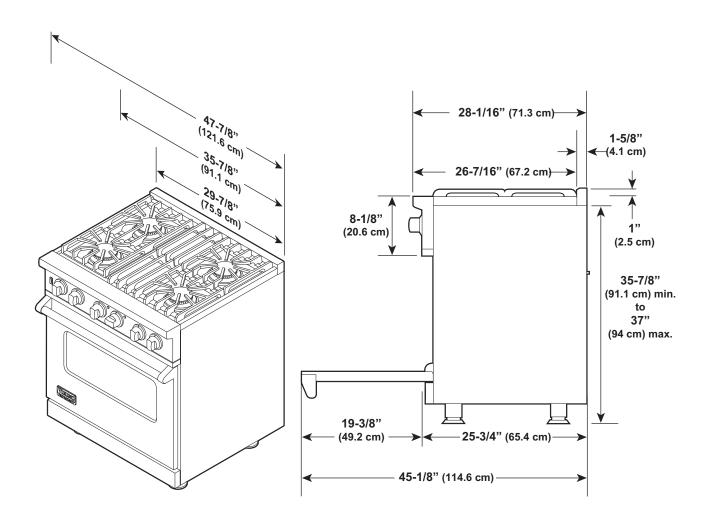


#### **Serial Number**

The serial number and model number for your appliance can be found by opening the door and looking under the control panel. It may also be under the base.



**Dimensions** 





#### **Specifications**

Gas 30", 36", & 48" Self-Clean Ranges				
Description	VGSC530	VGSC536	VGS	C548
Overall width	29 <sup>7</sup> /8" (75.9 cm)	35 <sup>7</sup> /8" (91.1 cm)	47 <sup>7</sup> /8" (12	21.6 cm)
Overall height	To top of side tr	im — 35 <sup>7</sup> /8" (91.1 cm) min. 3 Legs adjust 1 <sup>1</sup> /8" (2.9 cm)	7" (94 cm) ma	х.
Overall depth from rear*	To end of side panel — $24^{5/16}$ " (61.8 cm) To front of door — $25^{3/4}$ " (65.4 cm) To end of landing edge — $28^{1/16}$ " (71.2 cm) To end of door handle — $28^{11/16}$ " (72.9 cm) *Add $^{3/8}$ " (1 cm) to overall depth for 30" models and $^{3/4}$ " (1.9 cm) for 36" and 48" models installed against a combustible wall.			
Additions to base height	To top of island trim — add 1" (2.5 cm) To top of backguard — add 8" (20.3 cm) To top of high shelf — add 231/2" (59.7 cm)			
Gas requirements	Shipped natural or LP/Propane; field convertible with conversion kit (purchased separately); accepts standard residential <sup>1</sup> / <sub>2</sub> " (1.3 cm) ID gas service line.			
Gas manifold pressure	Natural 5.0"	W.C.P. / Liquid propane LP	10.0" W.C.P.	
Electrical requirements	120 VAC, 60 Hz; 4 Ft. (121.9 cm), 3-wire cord with grounded 3-prong plug attached to unit.			
Maximum amp usage	0.83 amps	1.5 amps	1.89	amps
Surface burner rating Natural gas/LP	18,500 BTU (5.4 kW)/16,600 BTU (4.9 kW) 15,000 BTU (4.4 kW)/12,500 BTU (3.7 kW)			
Griddle burner rating: Natural gas LP	N/A 15,000 BTU (4.4 kW) 12,500 BTU (3.7 kW) 12,500 BTU (3.7 kW)		` /	
Grill burner rating: Natural gas LP	N/A	18,000 BTU (5.3 kW) 16,000 BTU (4.7 kW)		U (5.3 kW) U (4.7 kW)
Oven(s) interior width	23" (58.4 cm)	29" (73.7 cm)		5" (58.4 cm) ⊪" (30.8 cm)
Oven(s) interior height	16 <sup>1</sup> /8" (40.9 cm)			
Oven(s) interior depth: Overall AHAM	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$			
Oven(s) volume: Overall AHAM	4.0 cu. ft. 3.3 cu. ft.	5.1 cu. ft. 4.2 cu. ft.	Left 2.1 cu. ft. 2.0 cu. ft.	Right 4.0 cu. ft. 3.3 cu. ft.
Approximate shipping weight	410 lbs. (184.5 kg)	500 lbs. (225 kg)	575 lbs. (	258.8 kg)

Minimum clearances from adjacent combustible construction:

Below cooking surface (36" [91.4 cm] and below)

• Sides - 0"

• Top grate support - 36" (91.4 cm)

Above cooking surface (above 36" [91.4 cm])

- Sides 6" (15.2 cm)
- Within 6" (15.2 cm) side clearance, wall cabinets no deeper than 13" (33.0 cm) must be minimum 18" (45.7 cm) above cooking surface
- Wall cabinets directly above product must be a minimum of 42" (106.7 cm) above cooking surface
- Rear 0" with 8" backguard or high shelf; 0" with island trim and non-combustible rear wall
- 6" (15.2 cm) with island trim and combustible rear wall

### **General Information**



#### Warnings

Read and follow all instructions before using this appliance to prevent the potential risk of fire, electric shock, personal injury, or damage to the appliance as a result of improper usage of the appliance. Use appliance only for its intended purpose as described in this manual.

To ensure proper and safe operation: Appliance must be properly installed and grounded by a qualified technician. DO NOT attempt to adjust, repair, service, or replace any part of your appliance unless it is specifically recommended in this manual. All other servicing should be referred to a qualified servicer. Have the installer show you the location of the gas shutoff valve and how to shut it off in an emergency.

### A WARNING

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death. DO NOT store or use gasoline or other flammable vapors and liquids in the vicinity of this or any appliance.

WHAT TO DO 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.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

### **WARNING**

- THIS RANGE CAN TIP
- INJURIES TO PERSONS CAN RESULT
- INSTALL ANTI-TIP DEVICE PACKED WITH RANGE

### **WARNING**

To avoid risk of property damage, personal injury or death; follow information in this manual exactly to prevent a fire or explosion.

#### To Prevent Fire or Smoke Damage

• Be sure all packing materials are removed from the appliance before operating it.

- Keep area around appliance clear and free from combustible materials, gasoline, and other flammable vapors and materials.
- If appliance is installed near a window, proper precautions should be taken to prevent curtains from blowing over burners.
- **NEVER** leave any items on the rangetop. The hot air from the vent may ignite flammable items and may increase pressure in closed containers, which may cause them to burst.
- Many aerosol-type spray cans are EXPLOSIVE when exposed to heat and may be highly flammable. Avoid their use or storage near an appliance.
- Many plastics are vulnerable to heat. Keep plastics away from parts of the appliance that may become warm or hot. **DO NOT** leave plastic items on the rangetop as they may melt or soften if left too close to the vent or a lighted surface burner.
- Combustible items (paper, plastic, etc.) may ignite and metallic items may become hot and cause burns. DO NOT pour spirits over hot foods. DO NOT leave oven unsupervised when drying herbs, breads, mushrooms, etc; fire hazard.

#### In Case of Fire

Turn off appliance and ventilating hood to avoid spreading the flame. Extinguish flame, then turn on hood to remove smoke and odor.

- **Cooktop**: Smother fire or flame in a pan with a lid or cookie sheet.
- **NEVER** pick up or move a flaming pan.
- Oven: Smother fire or flame by closing the oven door. DO NOT use water on grease fires. Use baking soda, a dry chemical, or foam-type extinguisher to smother fire or flame.
- GREASE–Grease is flammable and should be handled carefully. DO NOT use water on grease fires. Flaming grease can be extinguished with baking soda or, if available, a multipurpose dry chemical or foam type extinguisher. Let fat cool before attempting to handle it. DO NOT allow grease to collect around the oven or in vents. Wipe up spillovers immediately.

#### **Heating Elements**

- **NEVER** touch oven bake and broil burner area or interior surfaces of oven.
- Bake and broil burners may be hot even though they are dark in color. Areas near burners and interior surfaces of an oven may become hot enough to cause burns.
- During and after use, DO NOT touch or let clothing or other flammable materials contact heating elements, areas near elements, or interior surfaces of oven until they have had sufficient time to cool. Other surfaces of the oven may become hot enough to cause burns, such as the oven vent opening, the surface near the vent opening, and the oven door window.

### **General Information**

#### **Cleaning Safety**

- Turn off all controls and wait for appliance parts to cool before touching or cleaning them. **DO NOT** touch the burner grates or surrounding areas until they have had sufficient time to cool.
- Clean appliance with caution. Use care to avoid steam burns if a wet sponge or cloth is used to wipe spills on a hot surface. Some cleaners can produce noxious fumes if applied to a hot surface.
- **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.
- No commercial oven cleaner or oven liner protective coating such as aluminum foil should be used in or around any part of the oven. Improper oven liners may result in a risk of electric shock or fire. Keep oven free from grease buildup.

#### Self-Clean Oven

- Clean only parts listed in this guide. 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 of any kind in or around any part of the self-clean oven.
- Before self-cleaning the oven, remove broiler pan, oven racks and other utensils and wipe up excessive spillovers to prevent excessive smoke, flareups or flaming.
- This range features a cooling fan which operates automatically during a clean cycle. If the fan does not turn on, cancel the clean operation and contact an authorized servicer.
- It is normal for the rangetop cooking surface of the range to become hot during a self-clean cycle. Therefore, touching the rangetop cooking surface during a clean cycle should be avoided.

#### About Your Appliance

### **A**CAUTION

**NEVER** use appliance as a space heater to heat or warm a room to prevent potential hazard to the user and damage to the appliance. **DO NOT** use the rangetop or oven as a storage area for food or cooking utensils.

- For proper oven performance and operation, DO NOT block or obstruct the oven vent duct located on the right side of the air grille.
- Avoid touching oven vent area while oven is on and for several minutes after oven is turned off. When the oven is in use, the vent and surrounding area become hot enough to cause burns. After oven is turned off, DO NOT touch the oven vent or surrounding areas until they have had sufficient time to cool.

- Other potentially hot surfaces include rangetop, areas facing the rangetop, oven vent, surfaces near the vent opening, oven door, areas around the oven door and oven window.
- The misuse of oven doors (e.g., stepping, sitting, or leaning on them) can result in potential hazards and/or injuries.

### **WARNING**

**ELECTRICAL SHOCK HAZARD. DO NOT** touch a hot oven light bulb with a damp cloth as the bulb could break. Should the bulb break, disconnect power to the appliance before removing bulb to avoid electrical shock.

### **A** WARNING

**ELECTRICAL SHOCK HAZARD.** Disconnect the electric power at the main fuse or circuit breaker before replacing bulb.

### **WARNING**

**BURN OR ELECTRICAL SHOCK HAZARD.** Make sure all controls are OFF and oven is COOL before cleaning. Failure to do so can result in burns or electrical shock.

### **A**CAUTION

**DO NOT** turn the temperature control on during defrosting. Turning the convection fan on will accelerate the natural defrosting of the food without the heat.

### **A**CAUTION

**BURN HAZARD.** The oven door, especially the glass, can get hot. Danger of burning: **DO NOT touch the glass!** 

### **A**CAUTION

**DO NOT** store items of interest to children over the unit. Children climbing to reach items could be seriously injured.



#### **Electrical & Gas Requirements**

#### **Electrical Requirements**

Check your national and local codes regarding this unit. This range requires 120 VAC/60 Hz; 4 ft. (121.9 cm), 3-wire cord with grounded 3-prong plug attached to unit. Unit must be fused separately from any other circuit.

### **WARNING**

**Electrical shock hazard.** To avoid the risk of electrical shock, personal injury or death; verify electrical power is turned off at the breaker box and gas supply is turned off until the range is installed and ready to operate, installation by an authorized installer only.

#### **Gas Connection**

The gas supply (service) line must be the same size or greater than the inlet line of the appliance. This range uses a 1/2" (1.3 cm) ID NPT (Sch40) inlet. Sealant on all pipe joints must be resistive to LP gas.

The range is designed specifically for natural gas or liquid propane (LP) gas. Before beginning installation, verify that the model is compatible with the intended gas supply.

#### Manual Shut-off Valve

This installer-supplied valve must be installed in the gas service line before the appliance in the gas stream and in a location where it can be reached quickly in the event of an emergency.

#### **Connecting Gas & Electric**

### A DANGER

**Gas leak hazard.** To avoid risk of personal injury or death; leak testing of the appliance must be conducted according to the manufacturer's instructions. Before placing appliance in operation, always check for gas leaks with soapy water solution.

### DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS.

Connect gas and electric. Before placing appliance in operation, always check for gas leaks. This must be performed by your dealer, a qualified licensed plumber, or gas service company.

#### In Massachusetts

A "T" handle type manual valve must be installed in the gas supply line to the appliance.

**IMPORTANT:** Any conversion required must be performed by your dealer or a qualified licensed plumber or gas service company. Please provide the service person with this manual before work begins.

#### **Pressure Regulator**

- All heavy-duty, commercial type cooking equipment must have a pressure regulator on the incoming service line for safe and efficient operation, since service pressure may fluctuate with local demand. External regulators are not required on this range since a regulator is built into each unit at the factory. Under no condition bypass this built-in regulator.
- The appliance must be disconnected from the gas supply piping system during any pressure testing of that system.
- Manifold pressure should be checked with a manometer, natural gas requires 5.0" W.C.P. and LP gas requires 10.0" W.C.P. Incoming line pressure upstream from the regulator must be 1" W.C.P. higher than the manifold pressure in order to check the regulator. The regulator used on this range can withstand a maximum input pressure of <sup>1</sup>/<sub>2</sub>" PSI (14.0" W.C.P.). If the line pressure is in excess of that amount, a step down regulator will be required.

#### **Flexible Connections**

If the unit is to be installed with flexible couplings and/ or quick-disconnect fittings, the installer must use a heavy-duty AGA design-certified flexible connector of at least <sup>1</sup>/<sub>2</sub>" (1.3 cm) ID NPT (with suitable strain reliefs) in compliance with ANSI Z21.41 and Z21.69.

#### In Canada

CAN 1-6, 10-88 metal connectors for gas appliances and CAN 1-6.9 M79 quick disconnect devices for use with gas fuel.

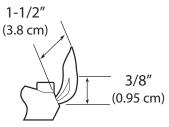
#### In Massachusetts

This appliance must be installed with a 36" (3-foot) long flexible gas connector.

### **General Information**

#### **Performance Checklist**

- A qualified installer should carry out the following checks:
- Check top burner ignition. See drawing for proper flame height on HI. The low flame should light at every port.



- Check oven bake function—bake burner on full power.
- Check oven broil function—broil burner on full power.
- Check convection fan function—convection fan comes on when switch is turned on.

#### **Before Using Range**

All products are wiped clean with solvents at the factory to remove any visible signs of dirt, oil, and grease, which may have remained from the manufacturing process. Before starting to cook, clean the range thoroughly with hot, soapy water. There may be some burn off and odors on first use of the appliance—this is normal.

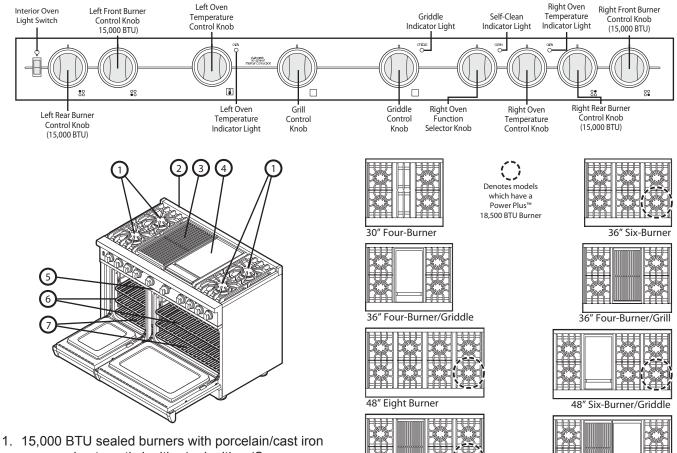
#### Oven

**Important:** Before first use, wipe interior with soapy water and dry thoroughly. Then, set the oven selector to bake, the thermostat to 450°F, and operate for an hour.

#### All models include

- Five performance modes—including convection baking and convection broiling—providing air circulation for shorter cooking times with even results.
- Exclusive VSH<sup>™</sup> Pro Sealed Burner System (VariSimmer<sup>™</sup> to High)—combination of patented burner and top design provide cleanability plus superior performance at simmer and high.
- Exclusive one-piece tooled and porcelainized cooking surface contains spills for easy cleaning.
- Convection baking with a hidden 30,000 BTU burner provides a fast, even baking for all your casserole dishes as well as easy cleanup.
- The 1500°F closed door, infrared broiler allows intense heat to sear delicate cuts of meat providing that restaurant taste.
- Four lights illuminate the oven cavity with less glare.
- Six rack positions and three racks provide ample space for your baking needs.
- This appliance is certified by Star-K to meet strict regulations in conjunction with specific instructions found on www.star-k.org.

#### **Range Features**



- caps and automatic ignition/re-ignition (Some ranges equipped with 18,500 BTU Power Plus<sup>™</sup> burner.)
- 2. Island trim
- 3. Grill (Optional)
- 4. Griddle (Optional)
- 5. Identification plate (or located under base)
- 6. Three standard heavy-duty tilt-proof racks. Six rack positions
- 7. Broiler pan-located inside oven



48" Six-Burner/Grill

36" Four-Burner/Grill		
48" Six-Burner/Griddle		

|--|

48" Four-Burner/Grill/Griddle



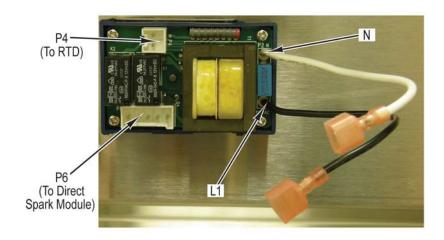
#### **LED Error Codes**

The LED error codes are displayed on the control panel using the cycle lights. Refer to the chart below to determine the type of error that is being displayed. These error codes are for the 48" left oven and for the griddle.

LED Error Codes			
Type of error Cycle Light			
RTD (Oven Probe)	2 flashes, then 4 seconds OFF		
Model Header	3 flashes, then 4 seconds OFF		

#### **Thermostat Control Connections**

This controller is used for the 48" left oven and for the griddle.



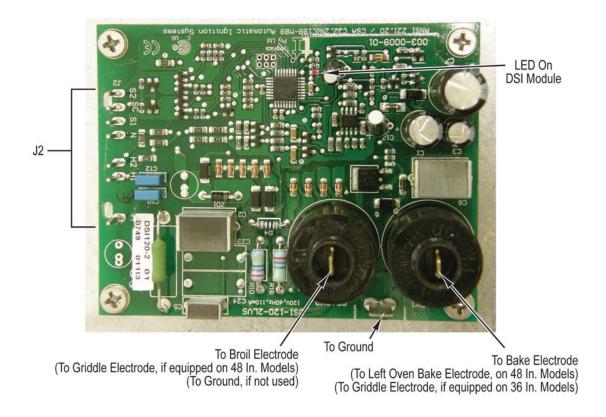
(Part may vary)

#### Fault Codes For DSI Boards

The Direct Spark Module (DSI Board) will display faults using an LED on the board. It may be necessary to gain access to the DSI board to view the LED on the board. Refer to the chart below to determine the type of fault that is being displayed.

LED Fault Codes		
LED Display	Meaning	
No LED display	No power to the DSI. Check wiring.	
LED on continuously	Control fault. Cycle power and retry. If fault remains, replace DSI.	
1 flash every 4 seconds	Normal operation (idle and active states).	
2 flashes every 4 seconds	Control fault. Cycle power and retry. If fault remains, replace DSI.	
3 flashes every 4 seconds	Ignition lockout. Control has attempted to ignite but no flame detected after allowing time and number of tries. Check gas flow, spark leads, position of electrode and gas solenoid.	
4 flashes every 4 seconds	Gas solenoid fault. Check wiring and gas solenoid.	
5 flashes every 4 seconds	Control fault. Cycle power and retry. If fault remains, replace DSI.	
6 flashes every 4 seconds	Gas solenoid fault. Check wiring and gas solenoid.	
7 flashes every 4 seconds	Power up with channel on. Switch channel off and retry.	
8 flashes every 4 seconds	Gas solenoid fault. Check wiring and gas solenoid.	

#### **Direct Spark Module Connections**



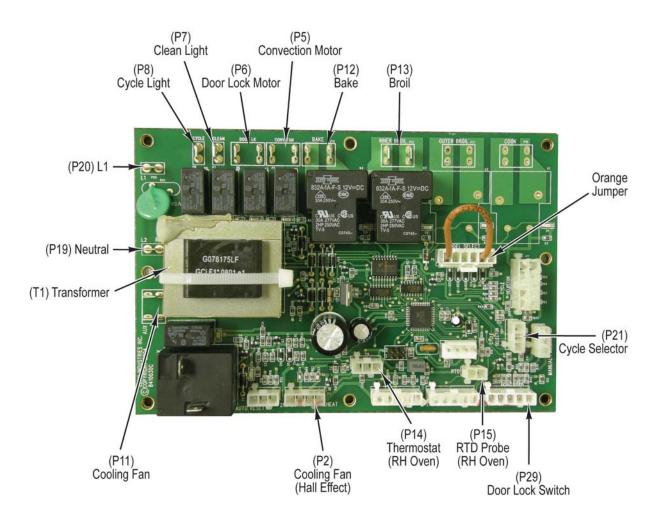


#### **LED Error Codes**

The LED error codes are displayed on the control panel using the cycle and clean lights. Refer to the chart below to determine the type of error that is being displayed. These error codes are for the 30", 36" and 48" RH oven.

LED Error Codes			
Type of error Cycle Light Clea		Clean Light	
Latch	OFF	1 second ON, 1 second OFF	
RTD (Oven Probe)	1 second ON, 1 second OFF	OFF	
Model	2 flashes, then 4 seconds OFF	ON	
A/D Stuck	3 flashes, then 4 seconds OFF	ON	
Fan Hall	4 flashes, then 4 seconds OFF	ON	

#### Self-Cleaning Oven Control Board Connections



#### Oven Components – RH Oven

Symptom	Possible Cause	Corrective Action
LH oven, RH oven, oven lights, surface	House breaker or fuse open	Reset breaker or replace fuse
burner, grill, and griddle igniters inoper-	Open high limit	Replace high limit
able	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
RH oven inoperable - LH oven, oven	Open or shorted RTD	Replace RTD
lights, surface burner, grill, and griddle	Open thermostat	Replace thermostat
igniters operate	Open selector switch	Replace selector switch
	Open oven control board	Replace oven control board
	Open direct spark module	Replace direct spark module
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
RH oven bake inoperable - RH oven	Foreign objects/soil on igniter	Clean igniter and surrounding area
broil, LH oven, oven lights, surface	Open bake solenoid	Replace bake solenoid
burner, grill, and griddle igniters operate	Open thermostat	Replace thermostat
	Open selector switch	Replace selector switch
	Open oven control board	Replace oven control board
	Open direct spark module	Replace direct spark module
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
RH oven broil inoperable - RH oven	Foreign objects/soil on igniter	Clean igniter and surrounding area
bake, LH oven, oven lights, surface	Open broil solenoid	Replace broil solenoid
burner, grill, and griddle igniters operate	Open thermostat	Replace thermostat
	Open selector switch	Replace selector switch
	Open oven control board	Replace oven control board
	Open direct spark module	Replace direct spark module
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
Convection fan inoperable - RH bake,	Open convection fan motor	Replace convection fan motor
broil, LH oven, oven lights, surface	Open oven control board	Replace oven control board
burner, grill, and griddle igniters operate	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
Oven lights inoperable - RH oven, LH	Open oven bulbs	Replace oven bulbs
oven, surface burner, grill, and griddle	Open light switch	Replace light switch
igniters operate	Open door light switch	Replace door light switch
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
Oven cycle or clean light inoperable - RH oven, LH oven, surface burner, grill, and	Defective cycle or clean light (neon)	Replace light
griddle igniters operate	Open oven control board	Replace oven control board
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring



### Oven Components - LH Oven

Symptom	Possible Cause	Corrective Action
LH oven, RH oven, oven lights, sur-	House breaker or fuse open	Reset breaker or replace fuse
face burner, grill, and griddle igniters	Open high limit	Replace high limit
inoperable	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
LH oven inoperable - RH oven,	Foreign objects/soil on igniter	Clean igniter and surrounding area
oven lights, surface burner, grill, and griddle igniters operate	Open bake solenoid valve	Replace bake solenoid valve or dual solenoid valve
	Open thermostat	Replace thermostat
	Open direct spark module	Replace direct spark module
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
Oven lights inoperable - LH oven,	Open oven bulbs	Replace oven bulbs
RH oven, surface burner, grill, and	Open light switch	Replace light switch
griddle igniters operate	Open door light switch	Replace door light switch
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
Oven cycle light inoperable - RH oven, LH oven, surface burner, grill,	Defective cycle light (neon)	Replace cycle light
and griddle igniters operate	Open thermostat	Replace thermostat
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring

#### Surface Burners, Grill, and Griddle

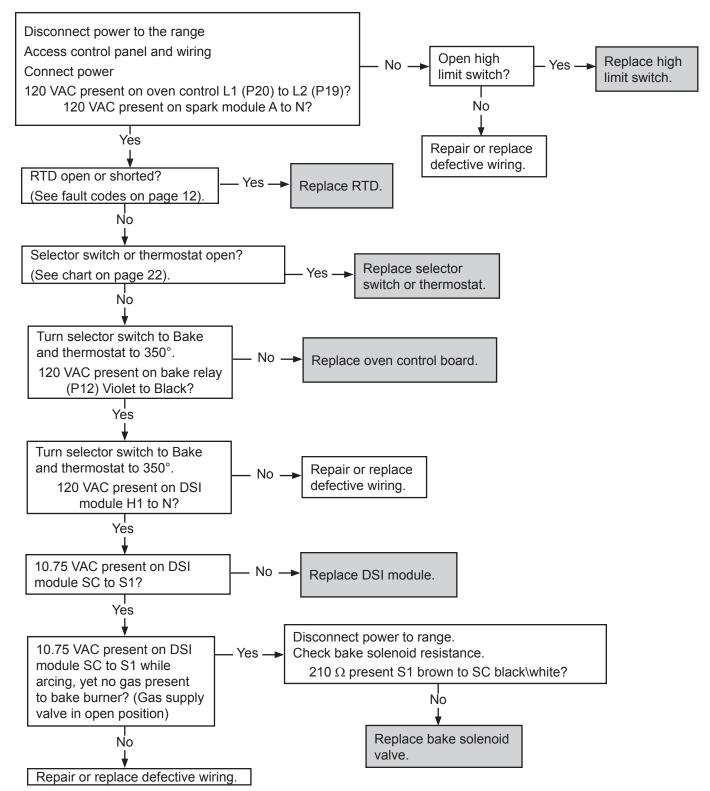
Symptom	Possible Cause	Corrective Action
Surface burner igniter inoperable - RH oven, LH oven, oth-	Foreign objects/soil on igniter	Clean igniter and surrounding area
er surface burner, grill, and griddle igniters operate	Open single point spark module	Replace single point spark module
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
Igniters sparking but no flame igni-	Gas supply valve is in "OFF" position	Turn gas on
tion	Gas supply is interrupted	Check regulator
Igniters sparking continuously after	Power supply is not grounded	Check grounding
flame ignition	Power supply polarity is reversed	Check power source
	Igniters are wet or dirty	Clean ignitors
Burner ignites, but flame is large,	Burner ports are clogged	Clean burner head
distorted, or yellow	Unit is being operated on wrong type of gas	Check gas type
Griddle inoperable - RH oven, LH	Foreign objects/soil on igniter	Clean igniter and surrounding area
oven, surface burner and grill ignit-	Open griddle solenoid	Replace griddle solenoid
ers operate	Open griddle control	Replace griddle control
	Open direct spark module	Replace direct spark module
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
Griddle cycle light inoperable - RH	Defective cycle light (neon)	Replace cycle light
oven, LH oven, surface burner, grill,	Open griddle control	Replace griddle control
and griddle igniters operate	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring



### **WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.



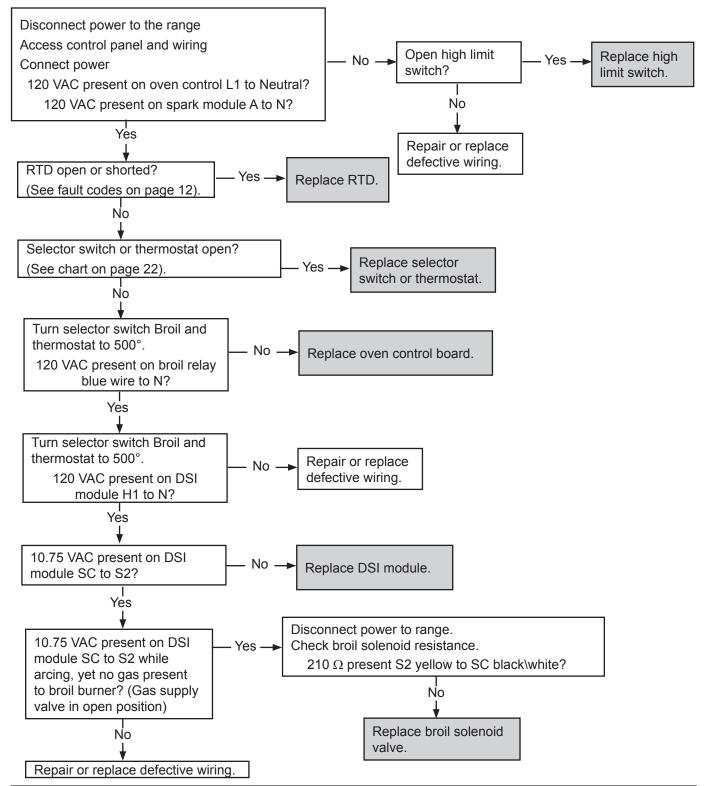




### **WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### **Checking Oven Broil Operation**



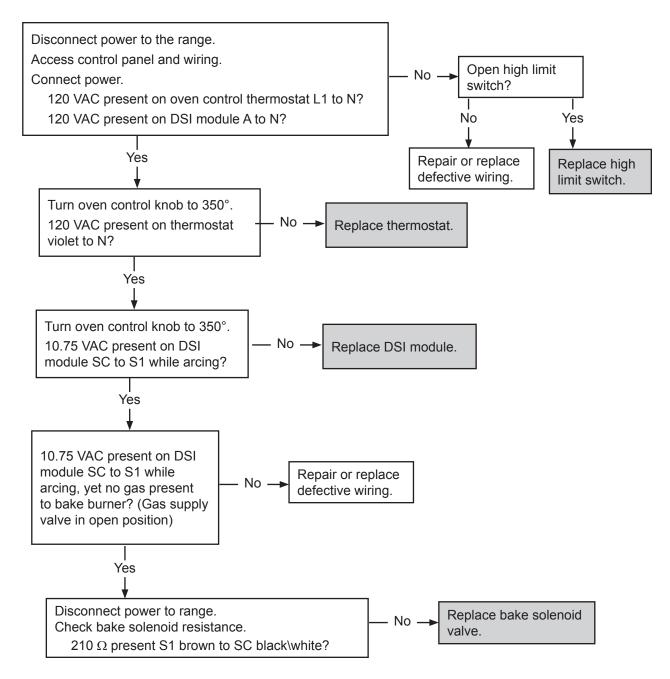
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### **WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### Checking 48" LH Oven Operation

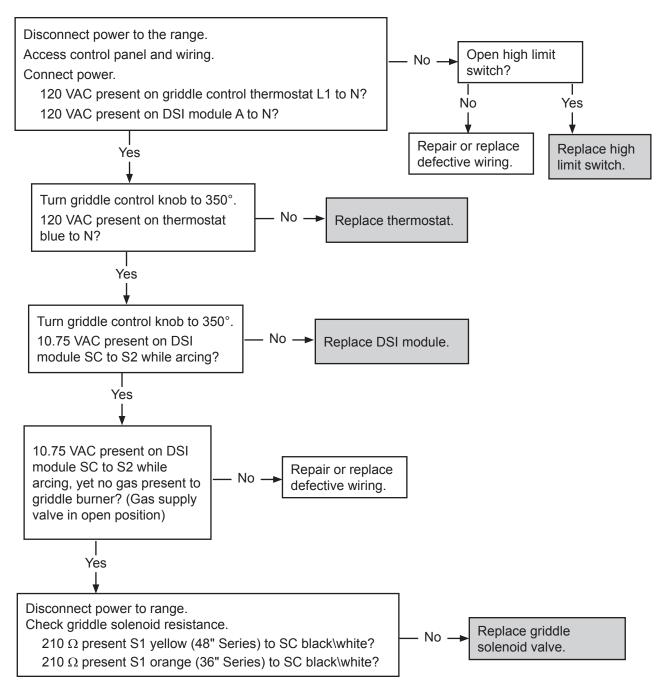




### **WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### **Checking Griddle Operation**





#### **Selector and Thermostat Characteristics**

The tables show the operating characteristics of the selector and thermostat positions. The selector and thermostat are potentiometers (variable resistors) whose resistance varies per user selections. The selected resistance informs the board of the user's selections. All values are approximate.

Selector Position	Resistance red to black	Resistance red to white	Resistance black to white
Off	9.10 kΩ	∞	∞
Bake	9.10 kΩ	1.13 kΩ	8.07 kΩ
Convection Bake	9.10 kΩ	2.82 kΩ	6.38 kΩ
Broil	9.10 kΩ	4.64 kΩ	4.56 kΩ
Convection Broil	9.10 kΩ	6.47 kΩ	2.74 kΩ
Clean	9.10 kΩ	7.94 kΩ	1.24 kΩ

Resistance checks are made on the selector wire harness with the selector wire harness disconnected from the board at location P21.

Thermostat Position	Resistance orange to blue	Resistance orange to yellow	Resistance blue to yellow
Off	880 kΩ	×	∞
200°F	8.79 kΩ	7.85 kΩ	1.09 kΩ
250°F	8.79 kΩ	7.02 kΩ	1.88 kΩ
300°F	8.79 kΩ	6.30 kΩ	2.58 kΩ
350°F	8.79 kΩ	5.42 kΩ	3.46 kΩ
400°F	8.79 kΩ	4.57 kΩ	4.29 kΩ
450°F	8.79 kΩ	3.74 kΩ	5.18 kΩ
500°F	8.79 kΩ	2.83 kΩ	6.06 kΩ
Broil	8.79 kΩ	1.91 kΩ	6.95 kΩ
Clean	8.79 kΩ	680 Ω	8.20 kΩ

Resistance checks are made on the thermostat wire harness with the thermostat wire harness disconnected from the board at location P14.

#### **Component Characteristics**

Component Testing				
Component	Operating Voltage (Approximate)	*Resistance (Approximate)	Test Location	
48" LH Oven Thermostat	120 VAC	750 Κ Ω	L1 black - N white	
30", 36", & 48" RH Oven Control Board	120 VAC	72.6 Ω	L1 black - N white	
Direct Spark Module - Bake selected	120 VAC	Not Applicable	H1 violet - N white	
Direct Spark Module - Broil selected	120 VAC	Not Applicable	H2 blue - N white	
Bake Solenoid Valve	10.5 VAC	210 Ω	S1 brown - SC white/black	
Broil Solenoid Valve	10.5 VAC	210 Ω	S2 yellow - SC white/black	
Griddle Solenoid Valve	10.5 VAC	210 Ω	S1 yellow - SC black/white (48" Series) S1 orange - SC black/white (36" Series)	
RTD (Resistive Thermal Device)	0 VAC	1090 Ω at 75°F	48"LH Oven, P4 yellow - black 30", 36", & 48" RH Oven, P15 (RTD) red - black	
Convection Motor	120 VAC	38.0 Ω	Convection Relay white/red - white	
Lock Motor	120 VAC	6.47 K Ω	Lock Motor Relay - white/black to N	
High Limit - open contacts	120 VAC	Open	Power cord black - disconnect black wire	
High Limit - closed contacts	0 VAC	0 Ω	Power cord black - disconnect black wire	
Cycle Light 48" LH Oven	120 VAC	Open (neon light)	Cycle light terminals - black to white	
Cycle Light 30", 36", & 48" RH Oven	120 VAC	Open (neon light)	Cycle light terminals - black to gray	
Clean Light	120 VAC	Open (neon light)	Clean light terminals - white to violet	
Oven Door Light Switch - OFF (Door Closed)	120 VAC	Open	Oven light switch terminals - black to red	
Oven Door Light Switch - ON (Door Closed)	0 VAC	0 Ω	Oven light switch terminals - black to red	
Oven Light Switch - Light Switch Open	120 VAC	Open	Oven light switch terminals - black to red	
Oven Light Switch - Light Switch Closed	0 VAC	0 Ω	Oven light switch terminals - black to red	
Single Point Spark Module	120 VAC	Not Applicable	Single Point Spark Module - black to white	

\*Resistance checks made with power off.



### **WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### **Spark Module Test**

#### Surface Burner Igniter Will Not Spark

- 1. Check for and remove any foreign objects/soil buildup around the igniter and operate burner again.
- 2. If still inoperative, disconnect power to the range.
- 3. Remove the control panel from the range.
- 4. Disconnect the wire harness from the inoperative spark module.
- 5. Reconnect power and test for 120 VAC from the black to the white wire.
- If 120 VAC is present, disconnect power and reconnect wire harness. (If no 120 VAC, check wiring.)



- 7. Remove the grate, burner cap, and burner head.
- 8. Disconnect the black wire from the back of the spark module.
- 9. Check for 0 ohms between the black wire and the metal top of the igniter. (If open, replace wire.)



10. If 120 VAC is present in step 5 and the black igniter wire has continuity, replace the spark module.

#### **RTD Characteristics**

Proper diagnostics of the RTD (Resistance Temperature Detector) will eliminate unnecessary replacement. The RTD is designed to change resistance as the temperature in the oven cavity changes. As the temperature increases, so does the resistance. At 75°F, the resistance should be approximately 1090  $\Omega$ .

To test the RTD, locate the 2-Pin Molex connector. For the RH oven, the connector is located on the control board. For the LH oven and griddle, the connector is located on the LH oven or griddle control.

Unplug the connector and check between the yellow and black wire. At ambient temperature you should read around 1090 ohms ( $\pm$ 10%). An open reading ( $\infty$ ) indicates either a broken wire or open RTD. Finally, test each wire to ground to check for a pinched wire to the oven frame.

If the RTD resistance is within the specifications given it is not necessary to replace the RTD. If the RTD test resistance is within specifications and the consumer is having erratic oven temperatures, please call Viking Technical support (1-800-914-4799) for assistance.

RTD (Resistance Temperature Detector)			
Temperature (°F)	Resistance (Approximate)		
50	1038		
75	1090		
100	1143		
200	1350		
300	1553		
350	1654		
400	1754		
450	1852		
500	1950		
550	2047		
600	2153		
650	2238		
700	2332		
750	2425		
800	2518		
850	2609		
900	2700		



### **WARNING**

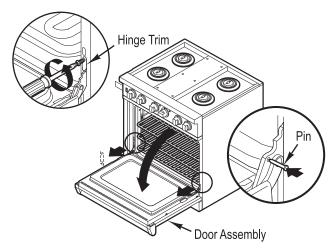
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### **Door Assembly Removal**

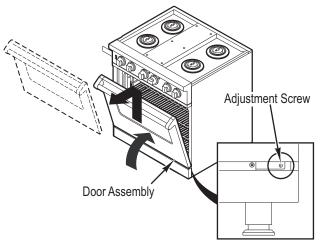
#### Condition Requirements:

Door Lowered

- 1. Place pins supplied with unit in pin holes.
- **Note:** For personal safety, only use pins supplied with unit.
- 2. Remove screws and hinge trim from range.
- 3. Gently close door until pins stop door.



4. Lift door up and out.

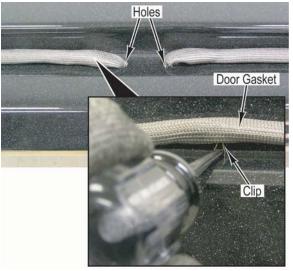


- 5. Reverse procedure for installation.
- **Note:** If the door needs to be adjusted, loosen hinge trim screws. Adjust the screws located between the door and kick plate using a <sup>5</sup>/<sub>32</sub>" hex head allen wrench. Tighten hinge trim screws after adjustment is made.

#### Door Gasket Removal Condition Requirements:

Door Lowered

- 1. Insert a narrow tool or small flat-blade screwdriver into the center of each clip and pry upward.
- 2. Remove the door gasket from two holes in the bottom of the door liner.





### **WARNING**

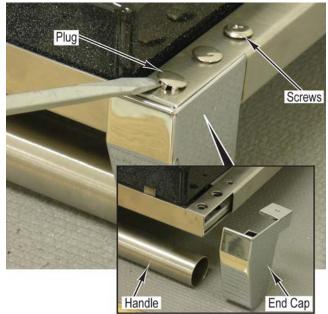
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### Door Handle Removal

#### **Condition Requirements:**

Door Lowered

- 1. Remove two plugs from each side of door assembly.
- 2. Remove three screws from each door handle end cap.
- **Note:** There are set screws that prevent the handle from spinning in the end caps. It may be necessary to loosen the set screws before removing the end caps from the handle. The set screw is located in the hole that the screws use to secure the end cap to the door assembly.
- 3. Pull end cap up then out to remove from handle.



4. Reverse procedure for installation.

### Outer Door Panel Assembly Removal Condition Requirements:

Door Assembly Removed

- 1. Place the door, handle side down, on a protected surface.
- Remove screws that attach the outer door panel assembly to the inner door panel assembly. Inner Door Panel Assembly



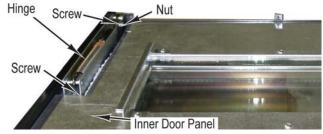
Outer Door Panel Assembly

- 3. Lift the inner door panel assembly from the outer door panel assembly.
- 4. Reverse procedure for installation.

#### Door Hinge Removal Condition Requirements:

Outer Door Panel Assembly Removed

1. Remove screws, nut and hinge from inner door panel.



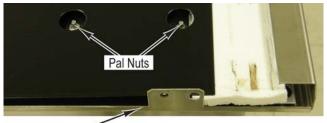
2. Reverse procedure for installation.

#### **Door Logo Removal**

**Condition Requirements:** 

Outer Door Panel Assembly Removed

1. Remove two pal nuts and logo from outer door panel.



Outer Door Panel



### A WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### Outer Door Glass Removal Condition Requirements:

Outer Door Panel Assembly Removed Door Handle Removed

1. Remove door insulation panel by sliding and turning the panel until it clears the door skin.

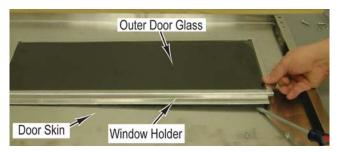


Door Insulation Panel

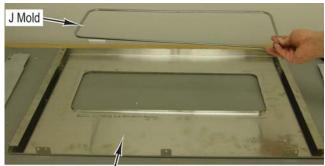
2. Remove door skin insulation from door skin.



- 3. Remove window holder and outer door glass from door skin.
- **Note:** The window holder is secured with double-sided tape. Use care when removing from door skin.
- 4. Remove outer door glass from window holder.
- **Note:** The outer door glass is secured with doublesided tape. Use care when removing from window holder.



5. Remove J mold from door skin.



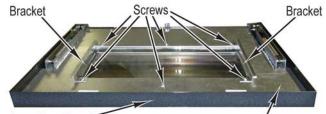
Door Skin

6. Reverse procedure for installation.

#### Inner Door Glass Removal Condition Requirements:

Outer Door Panel Assembly Removed

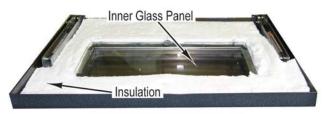
1. Remove screws, brackets and door insulation retainer from inner door panel.



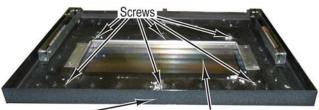
Inner Door Panel

Door Insulation Retainer

- 2. Remove inner glass panel and door insulation from inner door panel.
- **Note:** Use care with insulation; make sure to replace any damaged or missing insulation.



3. Remove screws and inner door panel from inner door glass assembly.



Inner Door Panel

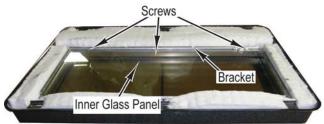
Inner Door Glass Assembly



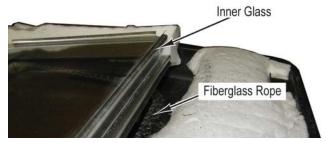
### **WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

4. Remove screws and bracket that secure inner glass panel.



- 5. Lift inner glass from inner glass panel.
- 6. Remove black fiberglass rope from inner glass panel.



**Note:** Use care with insulation; make sure to replace any damaged or missing insulation.

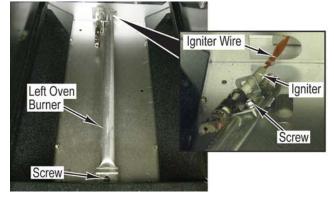
7. Reverse procedure for installation.

### Left Oven Bake Burner and Igniter Removal (VGSC548 Series)

#### Condition Requirements:

Left Oven Door Assembly Removed

- 1. Lift to remove oven cavity bottom panel from range.
- 2. Remove screw and burner from range.
- 3. Disconnect wire from igniter.
- 4. Remove screw and igniter from burner.



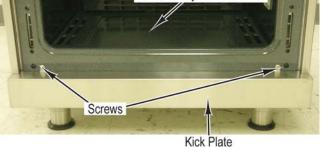
5. Reverse procedure for installation.

#### Bake Burner Igniter Removal Condition Requirements:

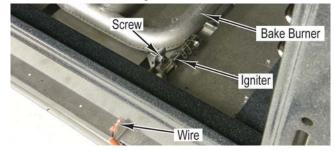
Door Assembly Removed

- 1. Remove two screws and lift kick plate from keyhole screws.
- 2. Lift to remove oven cavity bottom panel from range.

Oven Cavity Bottom Panel



- 3. Disconnect wire from igniter.
- 4. Remove screw and igniter from bake burner.

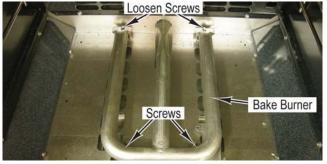


5. Reverse procedure for installation.

#### Bake Burner Removal Condition Requirements:

Bake Burner Igniter Removed

- 1. Loosen two screws that secure bake burner in rear of cavity.
- 2. Remove two screws and bake burner from range.





### **WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### Bake Burner Orifice Removal Condition Requirements:

Bake Burner Removed

- **Note:** Before removing orifice, secure gas tubing to avoid bending or twisting of gas tubing.
- 1. Remove orifice from manifold.

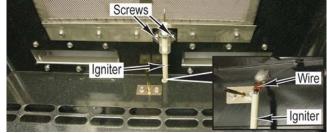


2. Reverse procedure for installation.

#### Broil Burner Igniter Removal Condition Requirements:

Door Assembly Removed

- 1. Remove two screws and pull igniter wire into oven cavity.
- 2. Disconnect wire to remove igniter from range.



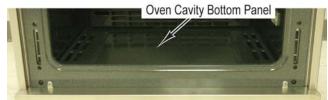
(View of top of oven cavity)

3. Reverse procedure for installation.

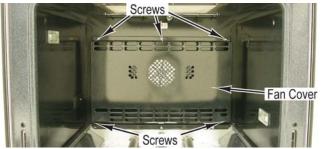
#### Convection Fan Assembly Removal Condition Requirements:

Rack Supports Removed

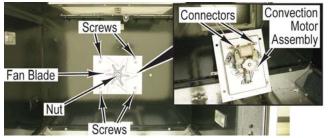
1. Lift to remove oven cavity bottom panel from range.



2. Remove five screws and fan cover from oven cavity.



- 2. Remove four outer screws and convection motor assembly from oven cavity.
- 3. Mark and disconnect two connectors from convection motor assembly.
- 4. Remove left hand nut and fan blade from convection fan.





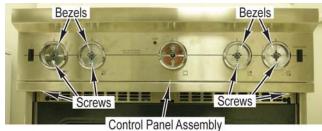
### **A WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

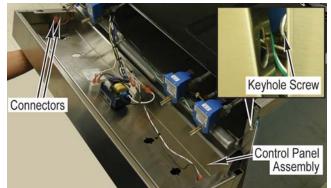
#### **Control Components Accessed** Condition Requirements:

#### Door Lowered

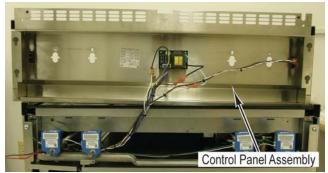
- 1. Remove all surface burner and grill knobs.
- 2. Remove screws and bezels from control panel assembly where knobs have been removed.
- 3. Remove two screws from below control panel assembly.



- 4. Lift up to remove control panel assembly from two keyhole screws.
- 5. Tilt control panel assembly forward.
- 6. Mark and disconnect connectors from the light switch.



7. Place control panel assembly on protective surface on the top of range.

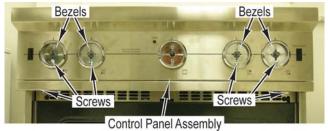


8. Reverse procedure for installation.

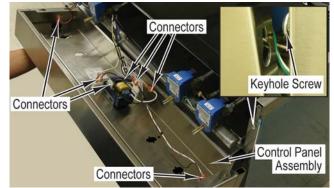
#### **Control Panel Assembly Removal Condition Requirements:**

Door Lowered

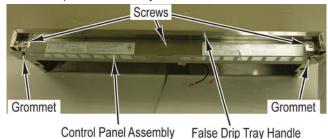
- 1. Remove all surface burner and grill knobs.
- 2. Remove screws and bezels from control panel assembly where knobs have been removed.
- 3. Remove two screws from below control panel assembly.



- 4. Lift up to remove control panel assembly from two keyhole screws.
- 5. Tilt control panel assembly forward.
- 6. Mark and disconnect all connectors to remove control panel from range.



- 7. Remove grommets from control panel assembly.
- 8. Remove screws and false drip tray handle from control panel assembly.





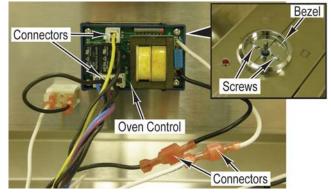
### **WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### 48" LH Oven/Griddle Control Removal Condition Requirements:

Control Components Accessed

- 1. Mark and disconnect connectors from the oven control.
- 2. Remove two screws, bezel, and the oven control from the control panel assembly.



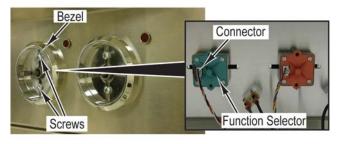
3. Reverse procedure for installation.

### 30", 36" and 48" RH Oven Function Selector Removal

Condition Requirements:

**Control Components Accessed** 

- 1. Disconnect connector from the oven function selector.
- 2. Remove two screws, bezel, and the oven function selector from the control panel assembly.

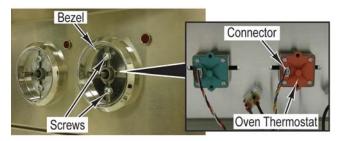


3. Reverse procedure for installation.

#### 30", 36" and 48" RH Oven Thermostat Removal *Condition Requirements:*

Control Components Accessed

- 1. Disconnect connector from the oven thermostat.
- 2. Remove two screws, bezel, and the oven thermostat from the control panel assembly.

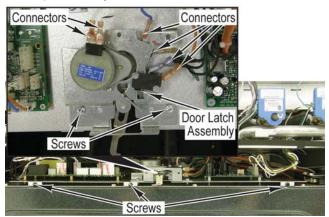


3. Reverse procedure for installation.

#### Door Latch Assembly Removal Condition Requirements:

Control Components Accessed

- 1. Remove screws and slide component tray forward.
- **Note:** VGSC530 shown. Other component tray configurations may be different on other models.
- 2. Mark and disconnect wires from door latch assembly.
- 3. Remove two screws and door latch assembly from component tray.





### **WARNING**

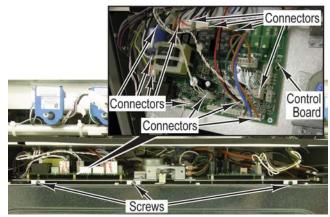
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### **Control Board Removal**

#### Condition Requirements:

Control Components Accessed

- 1. Remove screws and slide component tray forward.
- **Note:** VGSC530 shown. Other component tray configurations may be different on other models.
- 2. Mark and disconnect wires and connectors from control board. (See page 14)
- 3. Remove four screws and control board from component tray.

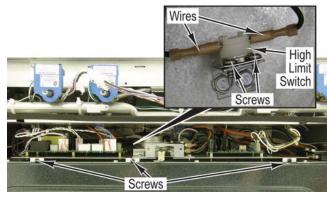


4. Reverse procedure for installation.

#### High Limit Switch Removal Condition Requirements:

Control Components Accessed

- 1. Remove screws and slide component tray forward.
- **Note:** VGSC530 shown. Other component tray configurations may be different on other models.
- 2. Mark and disconnect wires from high limit switch.
- 3. Remove two screws and high limit switch from component tray.

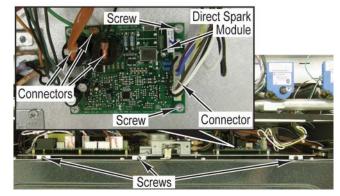


4. Reverse procedure for installation.

#### Direct Spark Module Removal Condition Requirements:

Control Components Accessed

- 1. Remove screws and slide component tray forward.
- **Note:** VGSC530 shown. Other component tray configurations may be different on other models.
- 2. Mark and disconnect connectors from direct spark module.
- 3. Remove four screws and direct spark module from component tray.

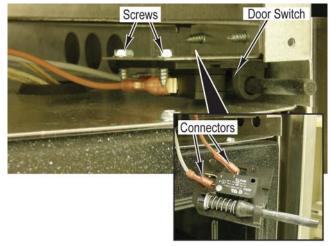


4. Reverse procedure for installation.

#### Door Switch Removal Condition Requirements:

Control Components Accessed

- 1. Remove two screws and door switch from range.
- 2. Mark and disconnect two connectors from door switch.





### A WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

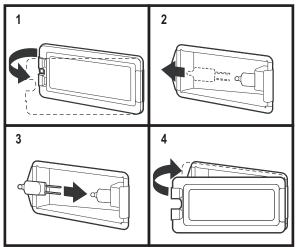
#### **Oven Light Bulb Removal**

Condition Requirements: Door Lowered

### **A**CAUTION

DO NOT touch bulb with bare hands. Clean off any signs of oil from the bulb and handle with a soft cloth.

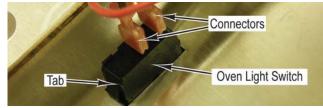
- 1. Unsnap glass light cover using a screwdriver in the access groove.
- 2. Firmly grasp light bulb and pull out.
- 3. Replace with halogen bulb using volt and wattage requirements listed on glass cover.
- 4. Replace the light cover by snapping glass cover onto metal box.



#### **Oven Light Switch Removal** *Condition Requirements:*

Control Components Accessed

- 1. Mark and disconnect two connectors from light switch.
- 2. Press tabs on both ends of the switch and push switch through control panel.

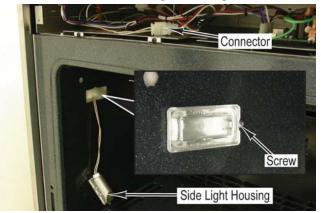


3. Reverse procedure for installation.

#### Side Light Housing Removal Condition Requirements:

Door Assembly Removed Control Components Accessed

- 1. Disconnect connector for side light housing.
- 2. Remove screw and side light housing from oven liner.

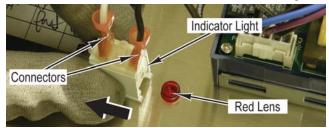


3. Reverse procedure for installation.

#### Indicator Light Removal Condition Requirements:

Control Components Accessed

- 1. Hold the red lens and slide off the indicator light. The indicator light will only slide in one direction.
- 2. Disconnect two connectors from the indicator light.





### **WARNING**

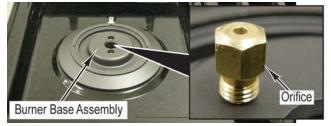
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### **Orifice Removal**

#### **Condition Requirements:**

None

- 1. Remove grates, burner cap, and burner head from burner base assembly.
- 2. Remove orifice from jet holder.



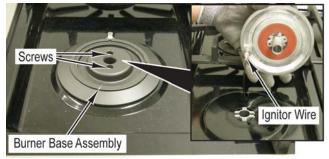
3. Reverse procedure for installation.

#### **Burner Base Assembly Removal**

Condition Requirements:

None

- 1. Remove grates, burner cap, and burner head from burner base assembly.
- 2. Remove two screws and lift burner base assembly from range.
- 3. Disconnect wire from burner base assembly.



4. Reverse procedure for installation.

#### Surface Burner Valve Removal Condition Requirements:

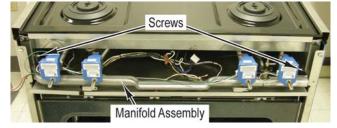
Control Panel Assembly Removed Gas Shut Off

### A DANGER

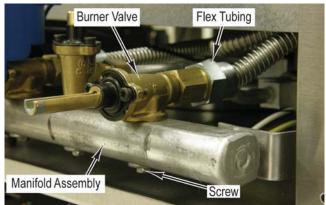
**Gas leak hazard.** To avoid risk of personal injury or death, leak testing of the appliance must be conducted according to the manufacturer's instructions. Before placing appliance in operation, always check for gas leaks with soapy water solution.

### DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS.

1. Remove two of the screws that secure manifold assembly to range.



- 2. Pull to remove spark module from burner valve.
- 3. Remove flex tubing from back of burner valve.
- 4. Remove screw and burner valve from manifold assembly.



- 5. Reverse procedure for installation.
- 6. Perform gas leak test.



### **WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

### Bake/Broil Gas Shutoff Valve Removal

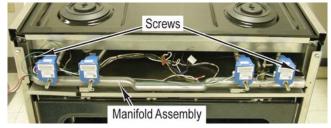
**Condition Requirements:** Control Panel Assembly Removed Gas Shut Off

### A DANGER

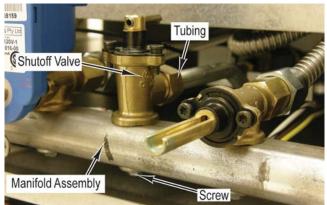
**Gas leak hazard.** To avoid risk of personal injury or death, leak testing of the appliance must be conducted according to the manufacturer's instructions. Before placing appliance in operation, always check for gas leaks with soapy water solution.

### DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS.

1. Remove two of the screws that secure manifold assembly to range.



- 2. Pull to remove spark module from burner valve.
- 3. Remove tubing from back of shutoff valve.
- 4. Remove screw and shutoff valve from manifold assembly.

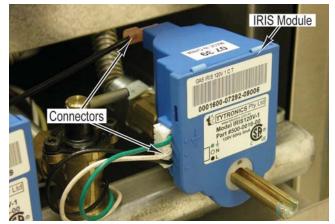


- 5. Reverse procedure for installation.
- 6. Perform gas leak test.

#### IRIS Module Removal Condition Requirements:

Control Components Accessed

- 1. Disconnect connectors from module.
- 2. Pull to remove module from burner valve.

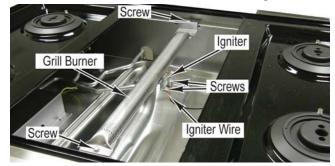


3. Reverse procedure for installation.

#### Char-Grill Burner and Igniter Removal (VGSC536-4Q, VGSC548-6Q, & VGSC548-4GQ) *Condition Requirements:*

Grill, Plate, and Drip Pans Removed

- 1. Disconnect wire from igniter.
- 2. Remove two screws and igniter from burner.
- 3. Remove two screws and burner from range.





### **WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### Griddle Temperature Sensor (RTD) Removal (VGSC536-4G, VGSC548-6G, & VGSC548-4GQ) *Condition Requirements:*

Griddle Plate and Drip Pan Removed

- 1. Remove two screws that attach the sensor to the range.
- 2. Pull the sensor until the sensor connector is visible.
- 3. Disconnect sensor connector.

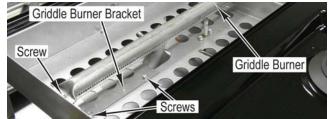


4. Reverse procedure for installation.

#### Griddle Burner Removal (VGSC536-4G, VGSC548-6G, & VGSC548-4GQ) *Condition Requirements:*

Griddle Plate and Drip Pan Removed

- 1. Remove screws, griddle burner bracket, and griddle burner from range.
- 2. Remove screw and griddle burner bracket from griddle burner.



3. Reverse procedure for installation.

#### Griddle Burner Igniter Removal (VGSC536-4G, VGSC548-6G, & VGSC548-4GQ) *Condition Requirements:*

Griddle Plate and Drip Pan Removed

- 1. Remove two screws and igniter from range.
- 2. Disconnect wire from igniter.



3. Reverse procedure for installation.

#### **Island Trim Removal**

#### **Condition Requirements:**

Rear of Range Accessed

- 1. Remove four screws and island trim from range.
- Screws Island Trim
- 2. Reverse procedure for installation.

#### Backguard Assembly Removal Condition Requirements:

Rear of Range Accessed

1. Remove four screws and backguard assembly from range.





### **WARNING**

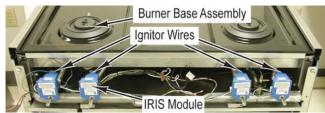
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### Main Top Removal

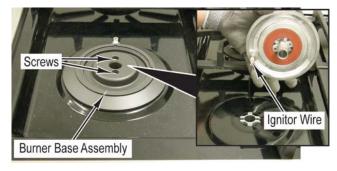
#### Condition Requirements:

Control Panel Assembly Removed Island Trim or Backguard Assembly Removed

- **Note:** Remove grill and griddle parts on models equipped with surface grills and/or griddles.
- 1. Remove grates, burner caps, and burner heads from each burner base assembly.
- 2. Mark and disconnect ignition wire from each IRIS module.



- 3. Remove two screws from each burner base assembly.
- 4. Lift each burner base assembly up to remove from range.
- **Note:** Keep igniter wires attached to each burner base assembly.



5. Remove two screws and side trim from each side of range.



6. Lift main top from range.



7. Reverse procedure for installation.

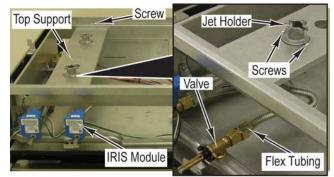
Jet Holder Removal Condition Requirements: Main Top Removed Gas Shut Off

# A DANGER

**Gas leak hazard.** To avoid risk of personal injury or death, leak testing of the appliance must be conducted according to the manufacturer's instructions. Before placing appliance in operation, always check for gas leaks with soapy water solution.

# DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS.

- 1. Remove screw and top support from range to access flex tubing.
- 2. Remove flex tubing from jet holder.
- 3. Remove two screws and jet holder from top support.



- 4. Reverse procedure for installation.
- 5. Perform gas leak test.



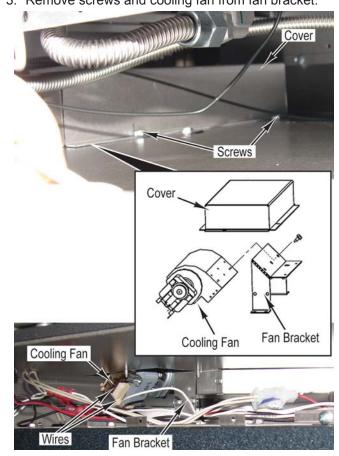
## **WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### Cooling Fan Removal (VGSC536 Only) Condition Requirements:

#### Main Top Removed

- 1. Remove screws and cover from range.
- Mark and disconnect wires from cooling fan.
- Remove screws and cooling fan from fan bracket.

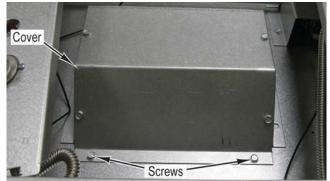


- 4. Reverse procedure for installation.
- **Note:** Before installing main top and control panel, verify that no unusual noise is present while cooling fan is running.

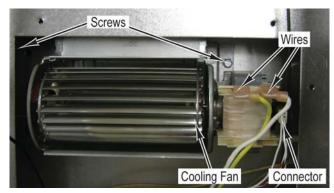
#### Cooling Fan Removal (VGSC530 and VGSC548) Condition Requirements:

Main Top Removed

1. Remove six screws and cover from range.



- 2. Mark and disconnect wires and connector from cooling fan.
- 3. Remove two screws and cooling fan from range.
- **Note:** Component tray may need to be removed in order to access one of the screws that secure cooling fan to range.



- 4. Reverse procedure for installation.
- **Note:** Before installing main top and control panel, verify that no unusual noise is present while cooling fan is running. The cooling fan can be forced on by disconnecting the oven RTD connector (P15) on the control board.



### **WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### Gas Solenoid Valve Removal Condition Requirements:

Main Top Removed Gas Supply Disconnected

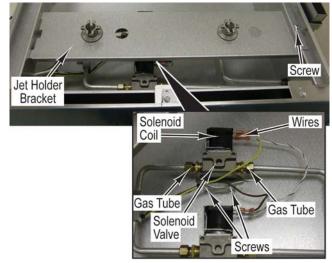
- **Note:** Gas solenoid valve may be accessible without removing main top on some 36" and 48" models equipped with a surface grill.
- **Note:** Some solenoid valves may be protected by a heat shield. Remove to access solenoid.

## A DANGER

**Gas leak hazard.** To avoid risk of personal injury or death, leak testing of the appliance must be conducted according to the manufacturer's instructions. Before placing appliance in operation, always check for gas leaks with soapy water solution.

# DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS.

- 1. Remove screw and position jet holder bracket out of way.
- 2. Mark and disconnect two wires from solenoid coil.
- 3. Remove two gas tubes from solenoid valve.
- 4. Remove two screws and solenoid valve from range.



- 5. Reverse procedure for installation.
- 6. Perform gas leak test.

#### Pressure Regulator Removal Condition Requirements:

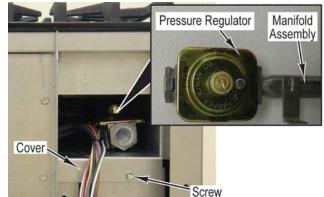
Island Trim or Backguard Assembly Removed Gas Supply Disconnected

### A DANGER

**Gas leak hazard.** To avoid risk of personal injury or death, leak testing of the appliance must be conducted according to the manufacturer's instructions. Before placing appliance in operation, always check for gas leaks with soapy water solution.

# DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS.

- 1. Remove screw and cover from range.
- 2. Remove pressure regulator from manifold.



- 3. Reverse procedure for installation.
- **Note:** Use approved sealant when installing pressure regulator.
- 4. Perform gas leak test.



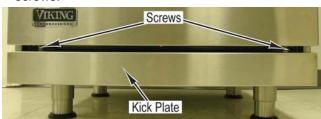
# **WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

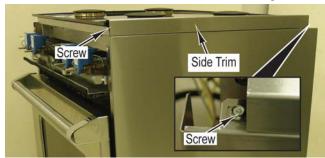
#### Side Trim and Side Panel Removal Condition Requirements:

Control Panel Assembly Removed

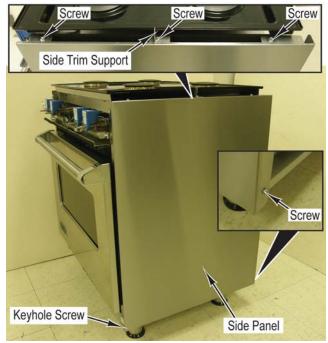
- Island Trim or Backguard Assembly Removed
- 1. Remove two screws and lift kick plate from keyhole screws.



2. Remove two screws and side trim from range.



- 3. Remove screw and side trim support from range.
- 4. Remove four screws and side panel from range.

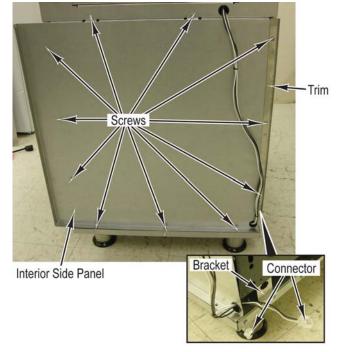


5. Reverse procedure for installation.

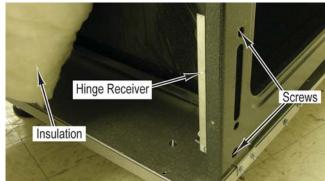
#### Hinge Receiver Removal (Left Side Shown) Condition Requirements:

Door Assembly Removed

- Side Panel Removed
- 1. Disconnect connector from bracket.
- 2. Remove screws, trim, and interior side panel from range.



- 3. Pull back insulation to access hinge receiver.
- 4. Remove two screws, hinge trim and hinge receiver from range.



5. Reverse procedure for installation.



### **WARNING**

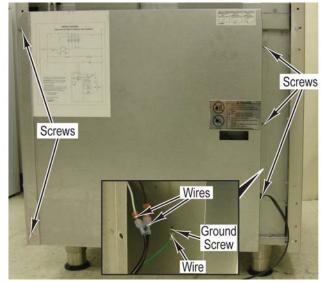
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### **Back Panel Removal**

#### **Condition Requirements:**

Island Trim or Backguard Assembly Removed

- **Note:** VGSC530 shown. Other models will have different back panels.
- 1. Remove screws and back panel from range.
- 2. Mark and disconnect two wires.
- 3. Remove ground screw and wire from range.

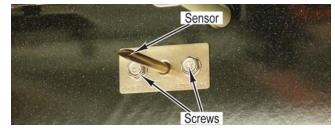


4. Reverse procedure for installation.

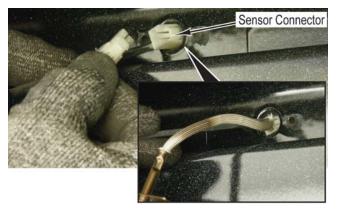
#### Temperature Sensor (RTD) Removal (VGSC548 Left Oven) Condition Requirements:

Door Assembly Removed

1. Remove two screws that attach the sensor to the back of the oven liner.



- 2. Pull the sensor from the liner until the sensor connector protrudes into the oven cavity.
- **Note:** On some early production models, the opening in the oven cavity that the RTD attaches had a smaller diameter, causing the Molex plug to restrict while pulling the wires forward. The options would be to either pull the range to replace the RTD or pull the RTD forward and cut the two wires and splice in the replacement with the use of two (2) ceramic wire nut connectors.
- 3. Apply side pressure to the sensor connector to secure the connector against the opening in the oven liner.
- 4. While maintaining side pressure on the connector, disconnect the old sensor and connect the new sensor.
- **Note:** When installing the oven sensor, it may be helpful to insert a small screwdriver or awl into the connector and push the wiring and connector into place.



5. Install two screws that attach the sensor to the back of the oven liner.



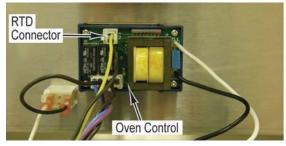
## **WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

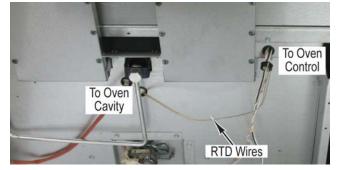
#### Temperature Sensor (RTD) Removal (VGSC530 and VGSC548 Right Oven) Condition Requirements:

Door Assembly Removed Control Components Accessed Back Panel Removed

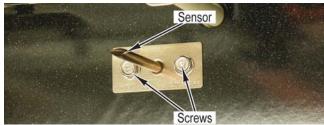
- **Note:** The RTD on the VGSC530 and VGSC548 right oven does not have a connector between the sensor and the oven control.
- 1. Disconnect RTD connector from oven control.



- 2. Route RTD wires through burner box area and out back of range.
- 3. Remove any wire ties as required.



4. Remove two screws and sensor from the oven liner.

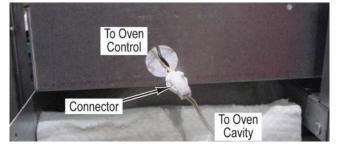


5. Reverse procedure for installation.

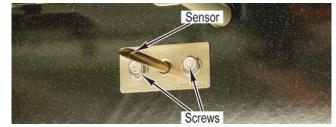
#### Temperature Sensor (RTD) Removal (VGSC536 Oven) Condition Requirements:

Door Assembly Removed Back Panel Removed

- **Note:** The RTD on the VGSC536 has a connector between the sensor and the oven control.
- 1. Find the RTD connector in the burner box area and disconnect connector.
- 2. Remove any wire ties as required.



3. Remove two screws and sensor from the oven liner.



4. Reverse procedure for installation.



### **WARNING**

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### Gas Tubing For Bake Burner Removal

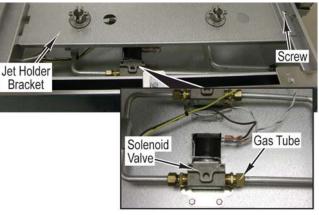
**Condition Requirements:** Main Top Removed Back Panel Removed Gas Supply Disconnected

## **A DANGER**

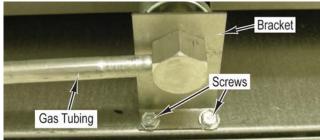
**Gas leak hazard.** To avoid risk of personal injury or death, leak testing of the appliance must be conducted according to the manufacturer's instructions. Before placing appliance in operation, always check for gas leaks with soapy water solution.

# DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS.

- 1. Remove screw and position jet holder bracket out of way.
- 2. Remove gas tube from solenoid valve.



3. Remove two screws, bracket and gas tubing from range.



- 4. Remove nut and bracket from gas tubing.
- 5. Reverse procedure for installation.
- 6. Perform gas leak test.

#### Gas Tubing For Broil Burner Removal

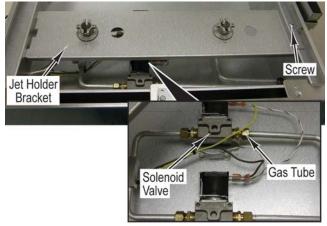
**Condition Requirements:** Main Top Removed Back Panel Removed Gas Supply Disconnected

# A DANGER

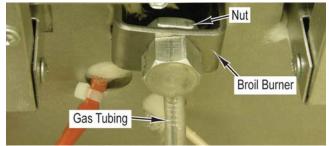
**Gas leak hazard.** To avoid risk of personal injury or death, leak testing of the appliance must be conducted according to the manufacturer's instructions. Before placing appliance in operation, always check for gas leaks with soapy water solution.

# DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS.

- 1. Remove screw and position jet holder bracket out of way.
- 2. Remove gas tube from solenoid valve.



3. Remove nut from broil burner and gas tubing from range.



- 4. Reverse procedure for installation.
- 5. Perform gas leak test.



## **WARNING**

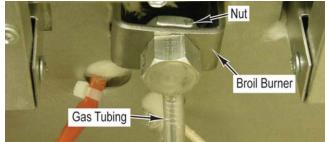
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired and/or operational.

#### **Broil Burner Removal**

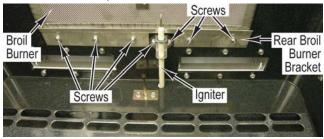
**Condition Requirements:** Door Assembly Removed

Back Panel Removed

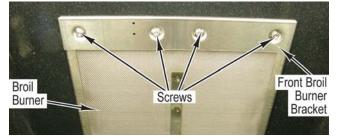
1. Remove nut from broil burner and gas tubing.



- 2. Remove two screws that secure igniter to oven cavity.
- 3. Remove five screws and rear broil burner bracket from oven cavity.

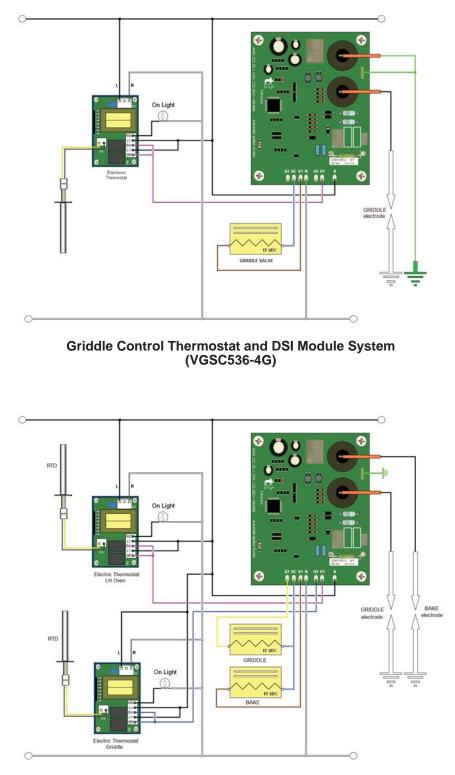


- 4. Remove four screws and front broil burner bracket from oven cavity.
- 5. Pull broil burner from range.

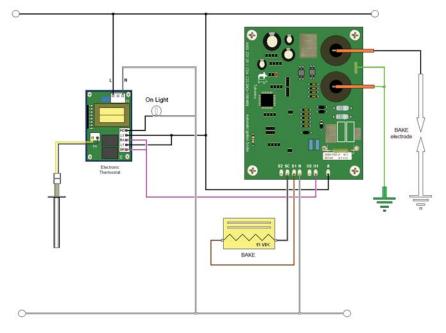


6. Reverse procedure for installation.

#### **Electronic Thermostat - DSI System**



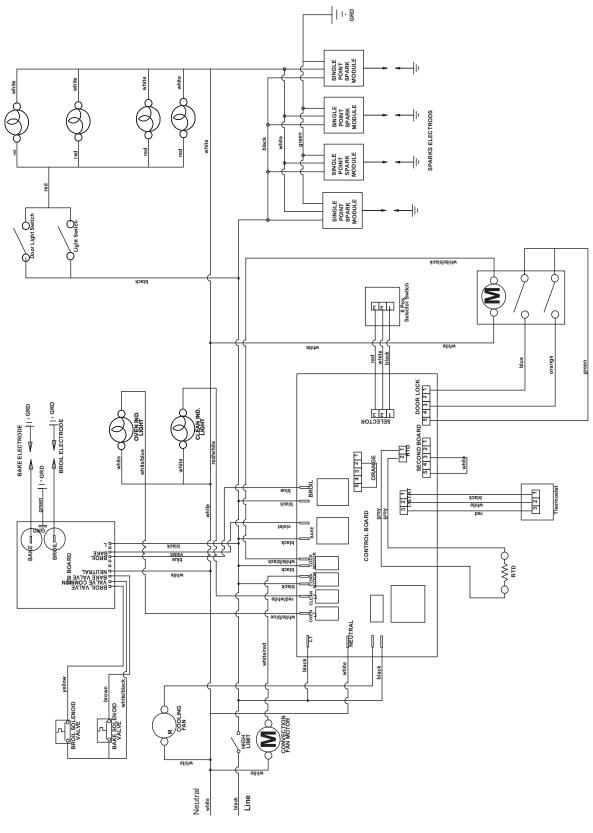




Oven Control Thermostat and DSI Module System (VGSC548-8B/6Q LH Oven)

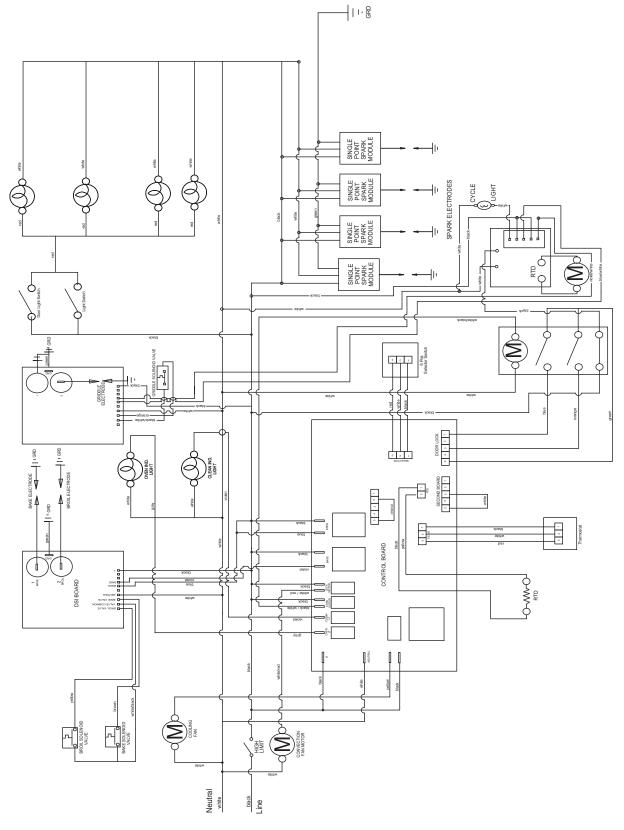


#### Wiring Diagrams

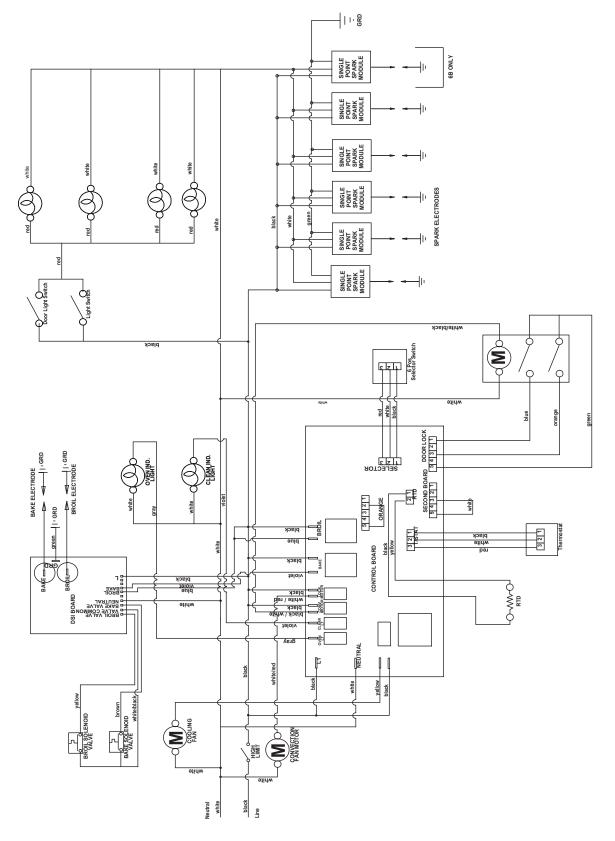


VGSC530 Gas Self-Clean Range

VIKING

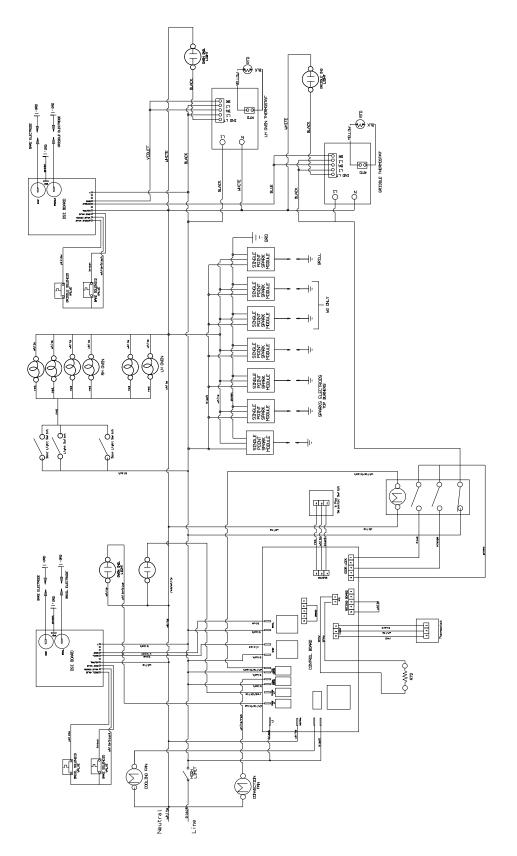


VGSC536-4G Gas Self-Clean Range

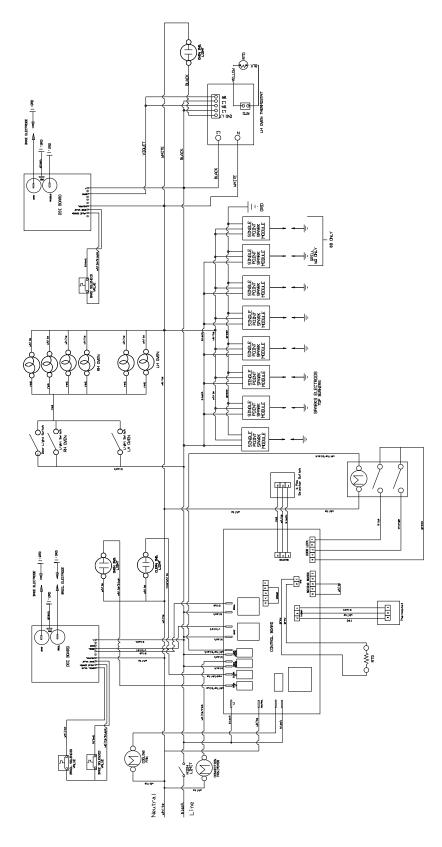


VGSC536-6B/4Q Gas Self-Clean Range









VGSC548-6Q/8B Gas Self-Clean Range

