



Preferred Service

# 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 Inch Self-Clean Gas Range

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

**RDSCG230-5B**



SMC-0029  
July 2012

# Table of Contents



Important Information .....	3	Oven Function Selector Removal .....	24
Safety Information .....	3	Oven Thermostat Removal .....	24
General Information .....	4	Oven Light Switch Removal .....	24
Serial Number .....	4	Indicator Light Removal .....	24
Range Features .....	4	DSI Module and Control Board Accessed .....	25
Warnings .....	5	DSI Module Removal .....	25
To Prevent Fire or Smoke Damage .....	5	Stack Valve Igniter Module Removal .....	25
In Case of Fire .....	5	Door Switch Removal .....	25
Heating Elements .....	5	High Limit Switch Removal .....	26
Cleaning Safety .....	6	Control Board Removal .....	26
Self-Clean Oven .....	6	Door Lock Assembly Removal .....	26
Important Safety Notice and Warning .....	6	IRIS Module Removal .....	26
Important Notice Regarding Pet Birds: .....	6	Stack Valve Burner Switch Removal .....	26
About Your Appliance .....	6	Surface Burner Valve Removal .....	27
Before Using Range .....	7	Backguard Removal .....	27
Oven .....	7	Rack Support Removal .....	27
Troubleshooting .....	8	Oven Light Bulb Removal .....	28
Fault Codes For DSI Boards .....	8	Orifice Removal .....	28
Direct Spark Module (DSI Board) Connections .....	8	Main Top Removal .....	28
LED Error Codes .....	9	Jet Holder Removal .....	29
Self-Cleaning Oven Control Board Connections .....	9	Side Trim and Side Panel Removal (Right side shown) .....	29
Component Characteristics .....	10	Back Panel Removal .....	30
Checking Oven Bake Operation .....	11	Side Light Housing Removal .....	30
Checking Oven Broil Operation .....	12	Hinge Receiver Removal .....	30
Checking Solenoid Operation .....	13	Gas Solenoid Valve Removal .....	31
Bake Solenoid .....	13	Pressure Regulator Removal .....	31
Broil Solenoid .....	13	Temperature Sensor (RTD) Removal .....	32
Door Lock Assembly .....	13	Cooling Blower Motor Removal .....	32
Testing Lock Motor .....	14	Wiring Diagrams .....	33
Testing Latch Switches .....	14	Wiring Diagram .....	33
Checking the door lock position switches .....	14		
RTD Sensor .....	15		
RTD Characteristics .....	15		
Spark Module Test .....	16		
Surface Burner Igniter Will Not Spark .....	16		
Spark Module Test (Stack Burner Valve) .....	16		
Surface Burner Igniter Will Not Spark .....	16		
Troubleshooting Guide .....	17		
Oven Components .....	17		
Surface Burners .....	18		
Quick Power Disconnect .....	18		
Selector and Thermostat Characteristics .....	19		
Disassembly .....	20		
Door Assembly Removal .....	20		
Door Gasket Removal .....	20		
Outer Door Panel Assembly Removal .....	20		
Door Handle Removal .....	21		
Inner Door Glass Removal .....	21		
Door Hinge Removal .....	22		
Bake Burner Igniter Removal .....	22		
Bake Burner Removal .....	22		
Broil Burner and Igniter Removal .....	22		
Bake or Broil Burner Orifice Removal .....	23		
Convection Fan Assembly Removal .....	23		
Control Components Accessed .....	23		
Control Panel Assembly Removal .....	23		

## 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:

**⚠ DANGER**

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

**⚠ WARNING**

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

**⚠ 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.

**⚠ WARNING**

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

**⚠ 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.

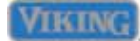
Technical support for authorized servicers:

1-800-914-4799

Address your written correspondence to:

Viking Preferred Service  
1803 HWY 82 West  
Greenwood, MS 38930

# General Information



## 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.

**Serial Number 011810C0000000001**

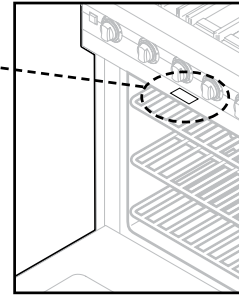
Month — Day — Year of Manufacture — Serial Number

## Model Number

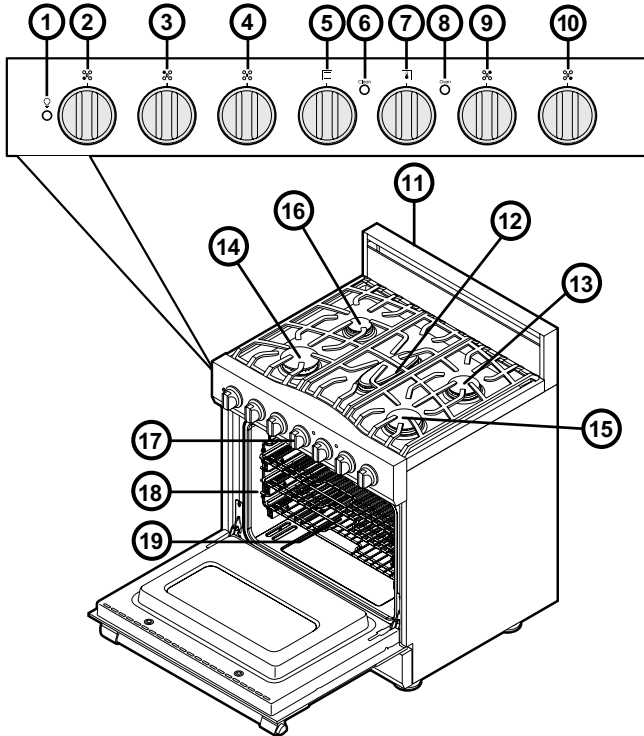
**R D S C G 2 3 0 5 B**

R = D3 Series  
 D = Designer  
 C = Custom  
 S = Self-Cleaning  
 C = Convection  
 D = Dual Fuel  
 G = Gas

2 = Series  
 30 = 30" Wide  
 5B = 5 Burners



## Range Features



1. Interior oven light switch
2. Left rear burner control knob
3. Left front burner control knob
4. Center burner control knob
5. Oven function selector knob
6. Self-Clean indicator light
7. Oven temperature control knob
8. Oven temperature indicator light
9. Right rear burner control knob
10. Right front burner control knob
11. Backguard
12. One 9,000 BTU burner
13. One 12,000 BTU burner
14. One 18,000 dual stacked BTU burner
15. One 17,000 BTU burner
16. One 8,000 BTU burner
17. Identification plate
18. Three full extension glide racks/Six rack positions
19. Broiler pan (located inside oven)

## 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.

### 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.

## 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.

## 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.

## 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, racks, and other utensils and wipe up excessive spillovers to prevent excessive smoke 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.

## Important Safety Notice and Warning

The California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) requires the Governor of California to publish a list of substances known to the State of California to cause cancer or reproductive harm and requires businesses to warn customers of potential exposures to such substances. Users of this appliance are hereby warned that when the oven is engaged in the self-clean cycle, there may be some low-level exposure to some of the listed substances, including carbon monoxide. Exposure to these substances can be minimized by properly venting the oven to the outdoors by opening the windows and/or door in the room where the appliance is located during the self-clean cycle.

## Important Notice Regarding Pet Birds:

NEVER keep pet birds in the kitchen or in rooms where the fumes from the kitchen could reach. Birds have a very sensitive respiratory system. Fumes released during an oven self-cleaning cycle may be harmful or fatal to birds. Fumes released due to overheated cooking oil, fat, margarine and overheated non-stick cookware may be equally harmful.

## About Your Appliance

### 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.

### 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.



**⚠ 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.

**⚠ CAUTION**

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

**⚠ WARNING**

This range features a self-cleaning cycle. During this cycle, the oven reaches elevated temperatures in order to burn off soil and deposits. A powder ash residue is left in the bottom of the oven after completion of the self-clean cycle.

**NOTE: DO NOT** use commercial oven cleaners inside the oven. Use of these cleaners can produce hazardous fumes or can damage the porcelain finishes. **DO NOT** line the oven with aluminum foil or other materials. These items can melt or burn during a self-clean cycle, causing permanent damage to the oven.

**⚠ CAUTION**

**DO NOT** touch the exterior portions of the oven after self-cleaning cycle has begun, since some parts become extremely hot to the touch!

During the first few times the self-cleaning feature is used, there may be some odor and smoking from the “curing” of the binder in the high-density insulation used in the oven. When the insulation is thoroughly cured, this odor will disappear. During subsequent self-cleaning cycles, you may sense an odor characteristic of high temperatures.

**KEEP THE KITCHEN WELL-VENTED DURING THE SELF-CLEAN CYCLE.**

**⚠ WARNING**

**BURN HAZARD.** When self-cleaning, surfaces may get hotter than usual, therefore, children should be kept away.

**⚠ CAUTION**

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

**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.

**Model includes:**

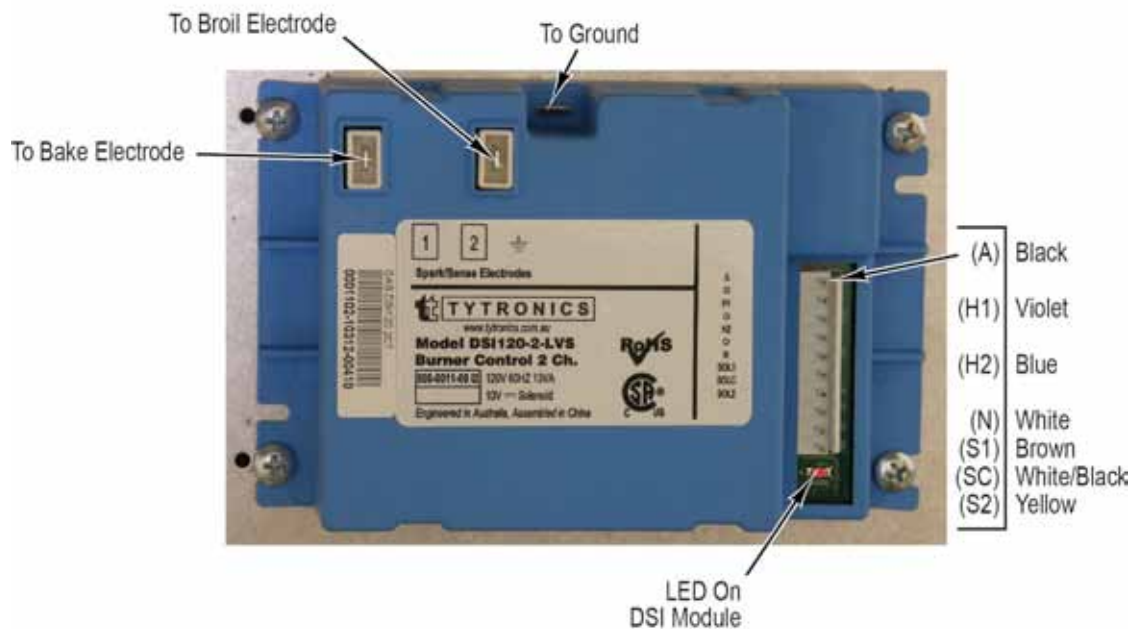
- Five performance modes—including convection baking and convection broiling—providing air circulation for shorter cooking times with even results.
- Exclusive one-piece tooled cooking surface contains spills for easy cleaning.
- Convection baking with a hidden 30,000 BTU burner provides a fast, even baking for all your casserole dishes as well as easy cleanup.
- The closed door, broiler allows intense heat to sear delicate cuts of meat providing that restaurant taste.
- Two lights illuminate the oven cavity with less glare.
- Six rack positions and three full extension glide 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](http://www.star-k.org).

## 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 (DSI Board) Connections



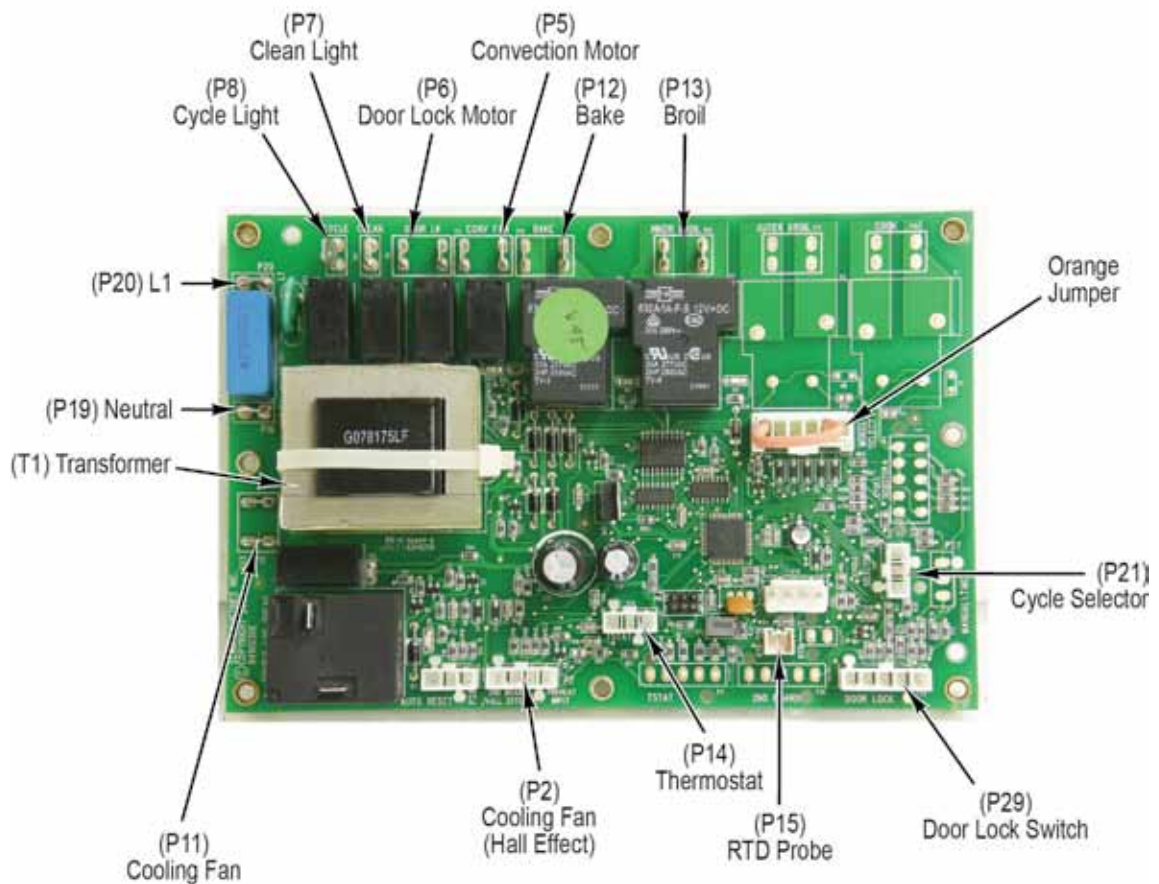


## LED Error Codes

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.

LED Error Codes		
Type of error	Cycle Light	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



## Component Characteristics

Component Testing			
Component	Operating Voltage (Approximate)	*Resistance (Approximate)	Test Location
Oven Control Board	120 VAC	93.6 $\Omega$	On Control Board - P20 (L1 black) to P19 (N white)
Direct Spark Module - Bake selected	120 VAC	Not Applicable	On DSI Module - H1 violet to N white
Direct Spark Module - Broil selected	120 VAC	Not Applicable	On DSI Module - H2 blue to N white
Bake Solenoid Valve	10.5 VAC	210 $\Omega$	On DSI Module - S1 brown to SC white/black
Broil Solenoid Valve	10.5 VAC	210 $\Omega$	On DSI Module - S2 yellow to SC white/black
RTD (Resistive Thermal Device)	-	1090 $\Omega$ at 75°F (See chart for more options)	On Control Board - P15 grey to grey on connector
Convection Motor	120 VAC	39.4 $\Omega$	Convection Relay on Control Board - P5 (white/red) to P19 (N white)
Lock Motor	120 VAC	6.82 K $\Omega$	Lock Motor Relay on Control Board - P6 (white/black) to P19 (N white)
Cooling Fan	120 VAC	18.1 $\Omega$	Cooling Fan Relay on Control Board - P11 (yellow) to P19 (N white)
**High Limit - open contacts	120 VAC	Open	Quick power disconnect black to P20 (L1 black) disconnect from Control Board
**High Limit - closed contacts	0 VAC	0 $\Omega$	Power cord black to P20 (L1 black) on Control Board
Cycle Light	120 VAC	Open 127.5 K $\Omega$ (neon light)	On cycle light terminals - grey to white
Clean Light	120 VAC	Open 127.5 K $\Omega$ (neon light)	On clean light terminals - white to violet
Oven Door Light Switch - OFF (Door Closed)	120 VAC	Open	On oven light switch terminals - black to red
Oven Door Light Switch - ON (Door Closed)	0 VAC	0 $\Omega$	On oven light switch terminals - black to red
Oven Light Switch - Light Switch Open	120 VAC	Open	On oven light switch terminals - black to red
Oven Light Switch - Light Switch Closed	0 VAC	0 $\Omega$	On oven light switch terminals - black to red
Single Point Spark Module	120 VAC	Not Applicable	On Single Point Spark Module - black to white

\*Resistance checks made with power off.

\*\*High limit switch is N.C. (normally closed) and opens at 275°F, resets at 250°F (+/- 10°F).

**⚠ WARNING**

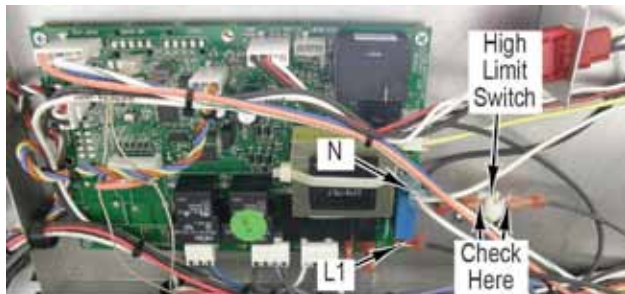
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

**Checking Oven Bake Operation**

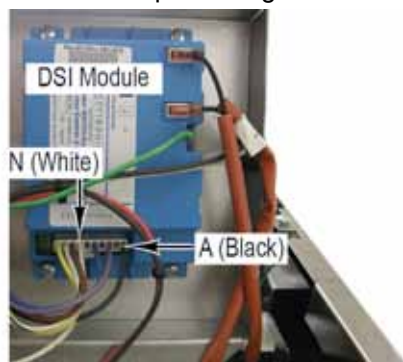
When operating properly, the range always has 120 VAC present on the control board and DSI module when power is supplied. When the range is set to a bake operation, power is sent to the DSI module to begin sparking and to the solenoid to open the valve for gas flow. The DSI module will display faults using an LED on the board (see Fault Codes for DSI Boards).

Disconnect power to the range. Access the control components and wiring (see Control Components Accessed). Connect power. Check for 120 VAC present on control board L1 to N.

If voltage is not present on the control board L1 to N, check voltage across the high limit switch. Replace high limit switch if voltage is present.



Check for 120 VAC present on DSI module A to N. If no voltage is present, check and repair wiring.

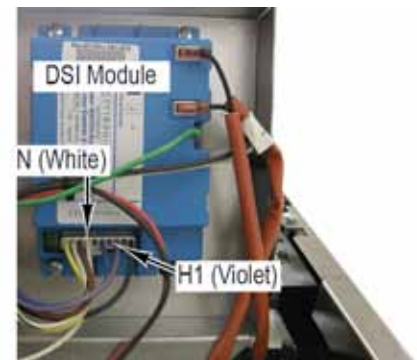


If voltage is present on control board and DSI module, disconnect power to the range.

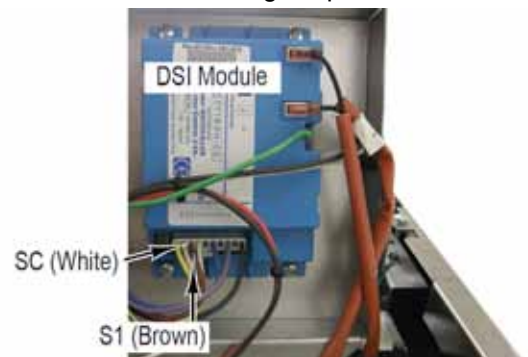
Check resistance of RTD grey to grey (see RTD Characteristics). Resistance should be between 1000 and 1650 ohms, if not replace RTD.

If resistance on the RTD is correct, check resistance of selector switch and thermostat (see Selector and Thermostat Characteristics). If resistance readings are not in line with the readings on the chart, replace selector switch or thermostat.

If resistance readings for the selector switch and thermostat are correct, connect power to the range. Turn selector switch to Bake and thermostat to 350°F. Check for 120 VAC present on DSI module H1 to N. If no voltage present, check and repair wiring. If wiring OK, replace control board.



If voltage is present, check for approximately 10.75 VAC present on DSI module SC to S1 while arcing. You will hear an audible clicking sound while the igniter is arcing. Replace DSI module if no voltage is present.



If voltage is present, check bake solenoid (see Checking Solenoid Operation).

## ⚠ WARNING

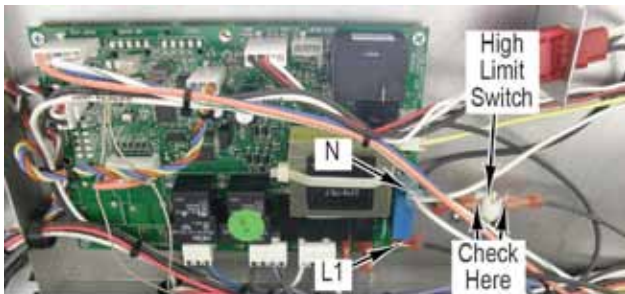
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

### Checking Oven Broil Operation

When operating properly, the range always has 120 VAC present on the control board and DSI module when power is supplied. When the range is set to broil operation, power is sent to the DSI module to begin sparking and to the solenoid to open the valve for gas flow. The DSI module will display faults using an LED on the board (see Fault Codes for DSI Boards).

Disconnect power to the range. Access the control components and wiring (see Control Components Accessed). Connect power. Check for 120 VAC present on control board L1 to N.

If voltage is not present on the control board L1 to N, check voltage on the high limit switch. Replace high limit switch if voltage is present.



Check resistance of RTD grey to grey (see RTD Characteristics). Resistance should be between 1000 and 1650 ohms, if not replace RTD.

If resistance on the RTD is correct, check resistance of selector switch and thermostat (see Selector and Thermostat Characteristics). If resistance readings are not in line with the readings on the chart, replace selector switch or thermostat.

If resistance readings for the selector switch and thermostat are correct, connect power to the range. Turn selector switch and thermostat to Broil. Check for 120 VAC present on DSI module H2 to N. If no voltage present, check and repair wiring. If wiring OK, replace control board.



Check for 120 VAC present on DSI module A to N. If no voltage is present, check and repair wiring.



If voltage is present, check for approximately 10.75 VAC present on DSI module SC to S2 while arcing. You will hear an audible clicking sound while the igniter is arcing. Replace DSI module if no voltage is present.



If voltage is present on control board and DSI module, disconnect power to the range.

If voltage is present, check broil solenoid (see Checking Solenoid Operation).



**⚠ WARNING**

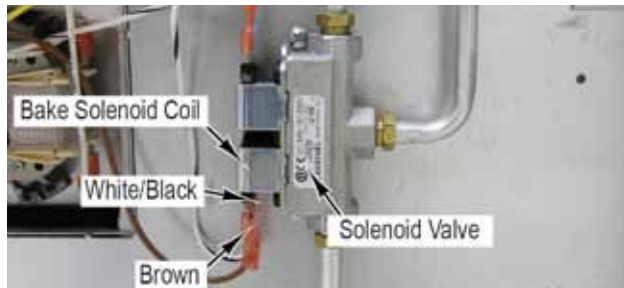
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

**Checking Solenoid Operation**

The solenoid valve is a coil-operated mechanism that opens when energized. The DSI module sends voltage to the solenoid valve to allow gas flow.

**Bake Solenoid**

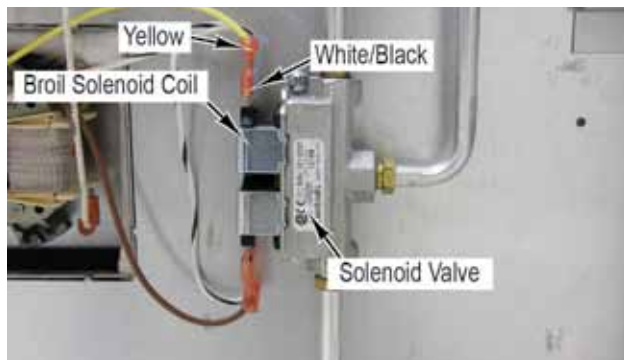
Disconnect power to the range. Verify gas supply is in open position. Access the solenoid valve (see Gas Solenoid Valve Removal). Connect power. Check for 10.75 VAC present on bake solenoid white/black to brown while arcing, yet no gas present to bake burner. If no voltage is present, check and repair wiring. If voltage is present, check resistance on bake solenoid. Disconnect power to the range. Check to see if bake solenoid resistance is approximately 210 ohms.



Replace the solenoid if the resistance is not close.

**Broil Solenoid**

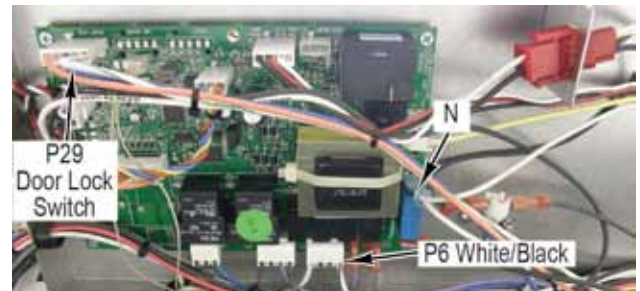
Disconnect power to the range. Verify gas supply is in open position. Access the solenoid valve (see Gas Solenoid Valve Removal). Connect power. Check for 10.75 VAC present on broil solenoid white/black to yellow while arcing, yet no gas present to broil burner. If no voltage is present, check and repair wiring. If voltage is present, check resistance on broil solenoid. Disconnect power to the range. Check to see if broil solenoid resistance is approximately 210 ohms.



Replace the solenoid if the resistance is not close.

**Door Lock Assembly**

The door lock motor is a 120 VAC motor. One side of the motor is wired directly to N (white). L1 power to the lock motor is connected on the P6 connector on the control board. When the relay energizes, L1 power is sent to the lock motor. The photo below shows the P6 connector.



There are three microswitches mounted on the door lock assembly. One switch is not used on this model.

When the door is in the unlocked position, the cam is depressing the S1 switch plunger. The N.O. switch contact is closed and a completed circuit is made at the P29 connection between the white/green and blue wires. This signals the board that the door is unlocked.

S2 is also N.O. and is open when the door is unlocked. When the lock motor is activated and begins to lock, the S1 contact opens. When the plunger catches the door liner and pulls inwards, the S2 switch plunger is actuated. The switch contact is closed and a completed circuit is made at the P29 connection between the white/green and orange wires. This signals the board that the door is locked.

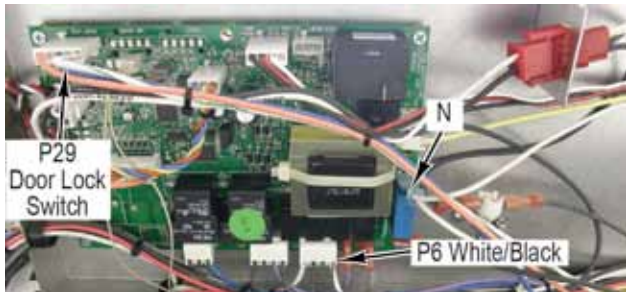
When it is time to unlock the door, power is sent to the door lock motor and it continues its rotation. The plunger releases the door liner and opens the contact on S2. When the door is fully opened, S1 is closed by the motor cam. This will signal the board that the door is unlocked.

## ⚠ 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.

### Testing Lock Motor

With the connector removed from the P6 board connection, use an ohmmeter to measure resistance between neutral and the white/black wire at P6. The resistance should be approximately 6.82K ohms. If no resistance is read, remove the latch motor to repair/replace (Follow the latch motor disassembly procedure).

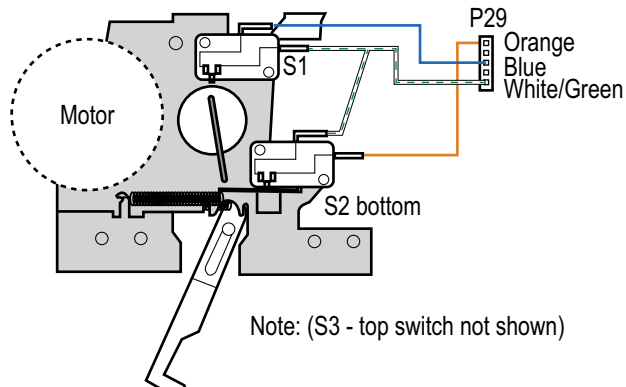


### Testing Latch Switches

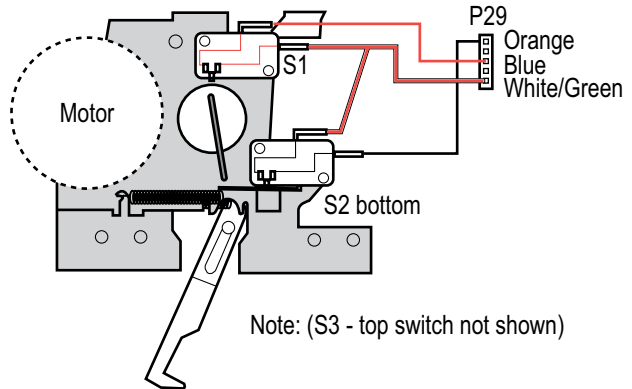
To check the latch switches, access the control board and unplug the P29 Molex plug. With the door in the unlocked position, you should read continuity (0 ohms) between the blue wire and the white/green wires, and read infinite ohms ( $\infty$ ) between the white/green and orange wires. If your readings are incorrect or reversed, remove the latch and inspect, repair/replace (follow latch motor disassembly procedure).

### Checking the door lock position switches

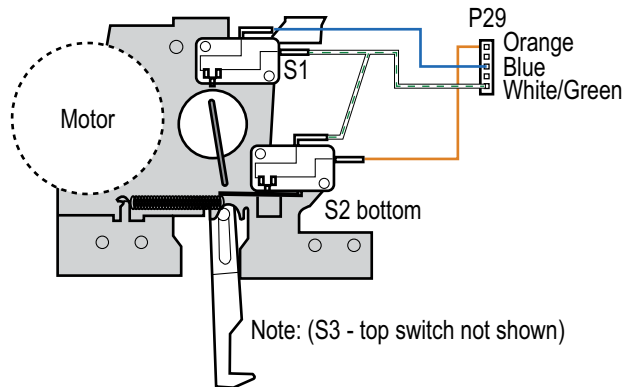
With the door in the unlocked position, the S1 switch (N.O.) is activated by the motor cam. Shown below are the switch positions and wire colors. To test, check continuity between the white/green and blue wires. The reading should be 0 ohms. The S2 switch is N.O. and will read infinite ohms ( $\infty$ ) when the door is unlocked.



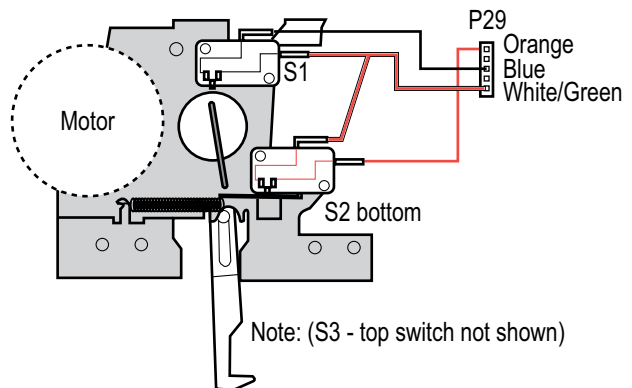
Shown below is the closed circuit in red.



When the door locks, the S1 switch (N.O.) is no longer in contact with the motor cam and will read infinite ohms ( $\infty$ ). The S2 switch is N.O. and should close when the door is locked. To test, check continuity between the orange and white/green wires. The reading should be 0 ohms when the door is locked.



Shown below is the closed circuit in red.





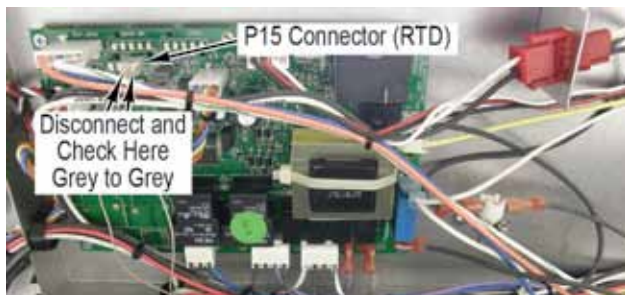
**⚠ WARNING**

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.

**RTD Sensor**

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 ohms.

Locate the P15 connector on control board. The grey wires go to the oven sensor.



With the Molex plug removed, use an ohmmeter to measure resistance between the grey wires in the Molex connector. At ambient temperature, you should read around 1090 ohms ( $\pm 10\%$ ). An open reading ( $\infty$ ) indicates either a broken wire or an open RTD. Finally, test each wire to ground to check for a pinched wire to the oven frame. If wiring is OK, replace the sensor.

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 Characteristics**

RTD (Resistance Temperature Detector)	
Temperature (°F)	Approximate Resistance ( $\Omega$ )
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

**NOTE:** Door switch must be depressed in order for the convection fan to operate when the door is opened.

## ⚠ 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.
6. 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.

### Spark Module Test (Stack Burner Valve)

#### 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. Reconnect power.
5. With the stack burner switch in the off position, test for 120 VAC across switch wires. (If no 120 VAC, check wiring.)
6. With the stack burner switch in the on position, test for 120 VAC across switch wires. (If 120 VAC present, replace switch.)



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



11. If 0 ohms present in step 10, replace the spark module.

## Troubleshooting Guide

### Oven Components

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

## Surface Burners

Symptom	Possible Cause	Corrective Action
Surface burner igniter inoperable - oven, other surface burner igniters operate	Foreign objects/soil on igniter	Clean igniter and surrounding area
	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 ignition	Gas supply valve is in "OFF" position	Turn gas on
	Gas supply is interrupted	Check regulator
Igniters sparking continuously after flame ignition	Power supply is not grounded	Check grounding
	Power supply polarity is reversed	Check power source
	Igniters are wet or dirty	Clean igniters
Burner ignites, but flame is large, distorted, or yellow	Burner ports are clogged	Clean burner head
	Unit is being operated on wrong type of gas	Check gas type

## Quick Power Disconnect

The range has a quick power disconnect located behind the control panel. Use this disconnect location instead of pulling the range from the installation and unplugging from the outlet.

1. Access control components (see Access Control Components Assembly).
2. Disconnect Molex connector to remove power to the range.



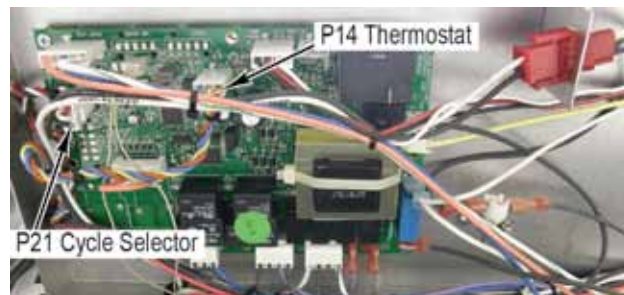
3. Reverse procedure for installation.

## 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	10.14 k $\Omega$	$\infty$	$\infty$
Bake	10.14 k $\Omega$	1.46 k $\Omega$	8.91 k $\Omega$
Convection Bake	10.14 k $\Omega$	3.46 k $\Omega$	6.83 k $\Omega$
Broil	10.14 k $\Omega$	5.22 k $\Omega$	5.02 k $\Omega$
Convection Broil	10.14 k $\Omega$	7.19 k $\Omega$	3.06 k $\Omega$
Clean	10.14 k $\Omega$	9.13 k $\Omega$	1.18 k $\Omega$

Resistance checks are made on the control panel wire harness with the control panel wire harness disconnected.



Thermostat Position	Resistance orange to blue	Resistance orange to yellow	Resistance blue to yellow
Off	9.40 k $\Omega$	$\infty$	$\infty$
200°F	9.40 k $\Omega$	8.58 k $\Omega$	1.03 k $\Omega$
250°F	9.40 k $\Omega$	7.61 k $\Omega$	1.81 k $\Omega$
300°F	9.40 k $\Omega$	6.79 k $\Omega$	2.67 k $\Omega$
350°F	9.40 k $\Omega$	5.83 k $\Omega$	3.58 k $\Omega$
400°F	9.40 k $\Omega$	5.02 k $\Omega$	4.48 k $\Omega$
450°F	9.40 k $\Omega$	3.91 k $\Omega$	5.51 k $\Omega$
500°F	9.40 k $\Omega$	2.98 k $\Omega$	6.43 k $\Omega$
Broil	9.40 k $\Omega$	1.97 k $\Omega$	7.56 k $\Omega$
Clean	9.40 k $\Omega$	722 $\Omega$	8.85 k $\Omega$

Resistance checks are made on the control panel wire harness with the control panel wire harness disconnected.



## ⚠ WARNING

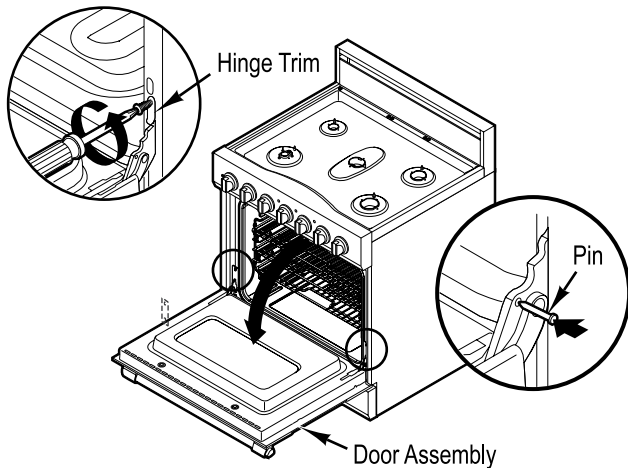
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

### Door Assembly Removal

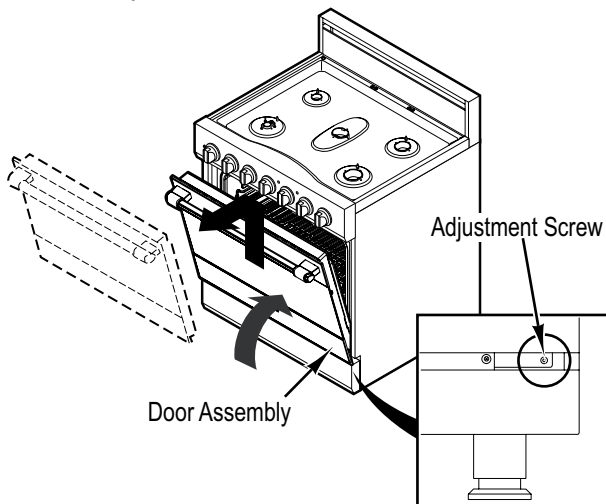
1. Open door completely. Place pins supplied with unit in pin holes.

**Important:** For personal safety, only use pins supplied with unit. Pins can be ordered if needed #005116-000.

2. Remove screws and hinge trim from range.
3. Gently close door until pins stop door.



4. Lift door up and out.

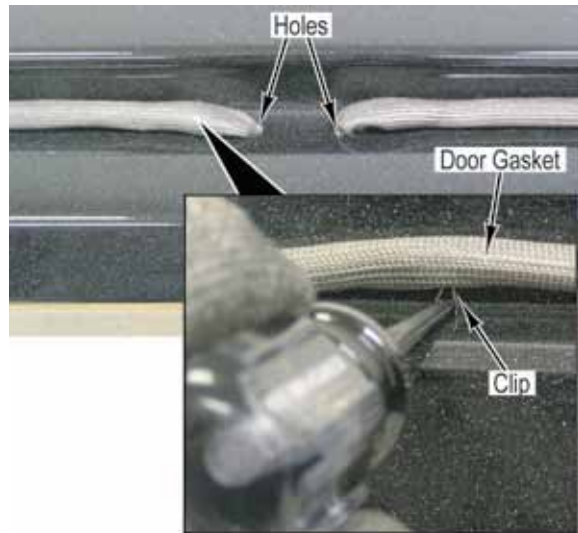


**Note:** If the door needs to be adjusted, loosen hinge trim screws. Adjust the screws located between the door and kick plate using a  $\frac{5}{32}$ " hex head Allen wrench. Tighten hinge trim screws after adjustment is made.

5. Reverse procedure for installation.

### Door Gasket Removal

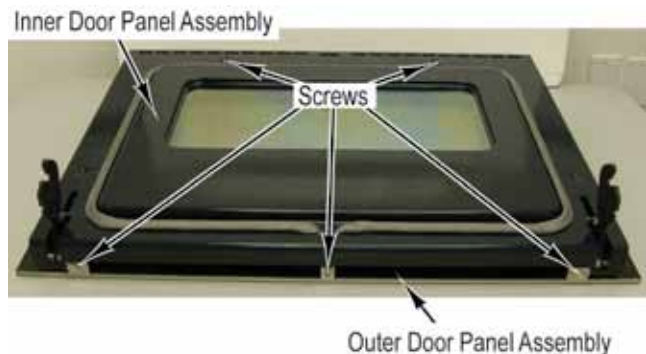
1. Open door and insert a narrow tool or small, flat-blade screwdriver into the center of each clip and pry upward.
2. Remove the door gasket from two holes in the bottom of the door liner.



3. Reverse procedure for installation.

### Outer Door Panel Assembly Removal

1. Remove oven door (see Door Assembly Removal).
2. Place the door, handle side down, on a protected surface.
3. Remove screws that attach the outer door panel assembly to the inner door panel assembly.



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

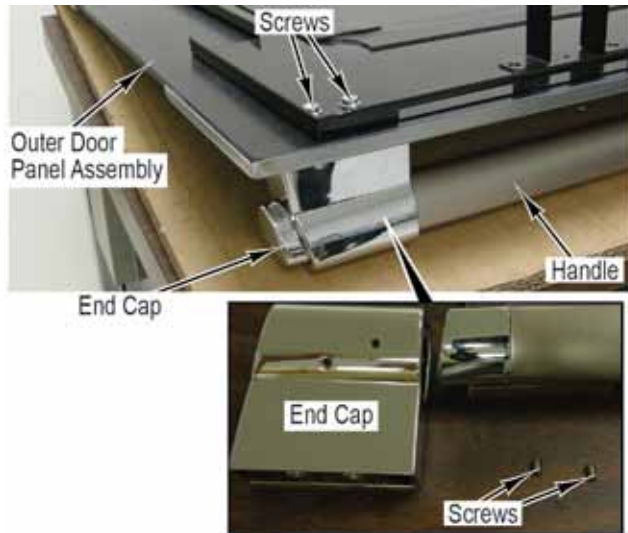


## ⚠ WARNING

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.

### Door Handle Removal

1. Remove outer door panel assembly (see Outer Door Panel Assembly Removal).
2. Remove screws and handle assembly from outer door panel assembly.
3. Remove screws and slide end caps from handle.

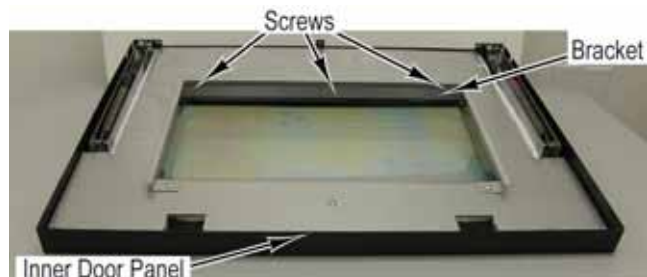


**Note:** View set screw markings thru end cap holes, then install set screws.

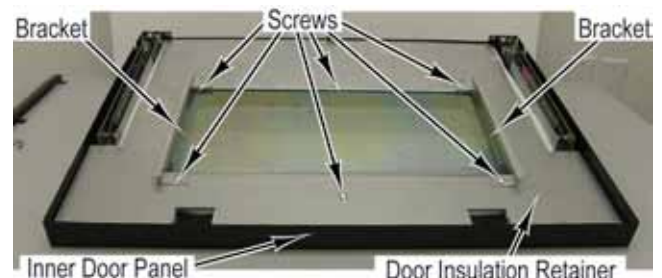
4. Reverse procedure for installation.

### Inner Door Glass Removal

1. Remove outer door panel assembly (see Outer Door Panel Assembly Removal).
2. Place the inner door panel assembly on a protected surface.
3. Remove screws and bracket from inner door panel.

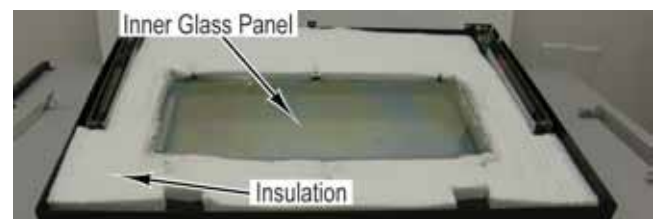


4. Remove screws, brackets and door insulation retainer from inner door panel.

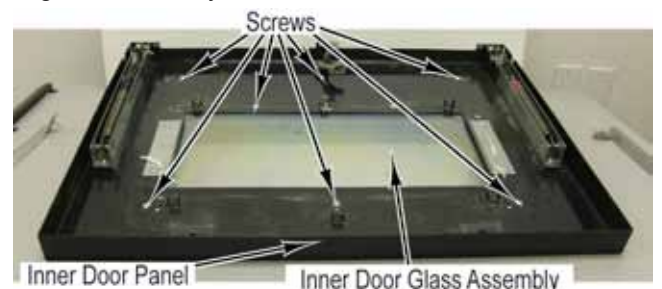


5. Remove inner glass panel and door insulation from inner door panel.

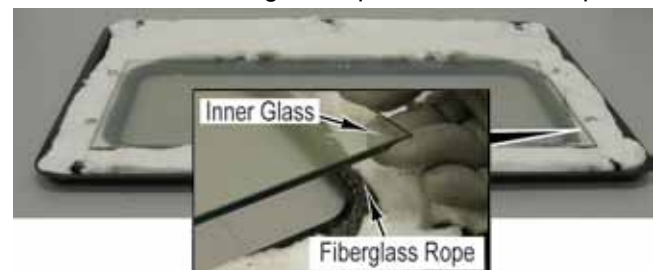
**Note:** Use care with insulation; make sure to replace any damaged or missing insulation.



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



7. Lift inner glass from inner door panel.
8. Remove black fiberglass rope from inner door panel.



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

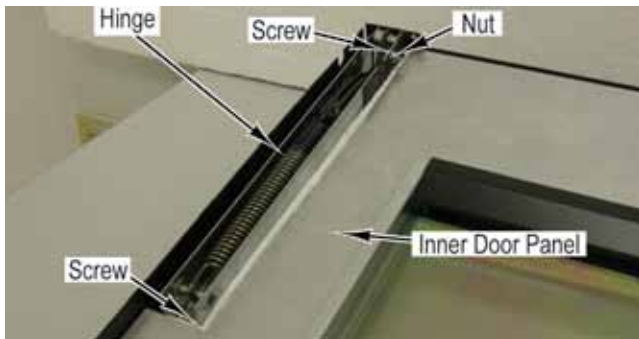
9. Reverse procedure for installation.

## ⚠ 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.

### Door Hinge Removal

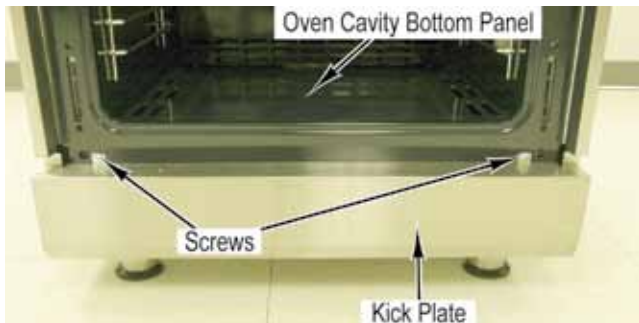
1. Remove outer door panel assembly (see Outer Door Panel Assembly Removal).
2. Place the inner door panel assembly on a protected surface.
3. Remove screws, nut, and hinge from inner door panel.



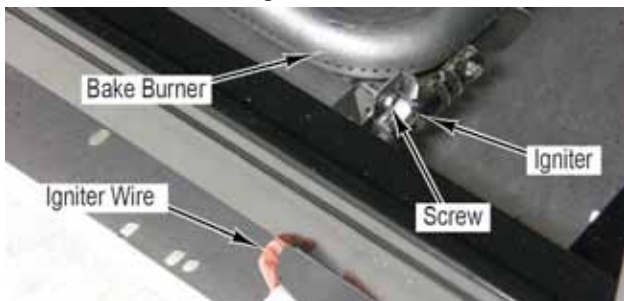
4. Reverse procedure for installation.

### Bake Burner Igniter Removal

1. Remove oven door (see Door Assembly Removal).
2. Remove screws and lift kick plate from keyhole screws.
3. Lift to remove oven cavity bottom panel from range.



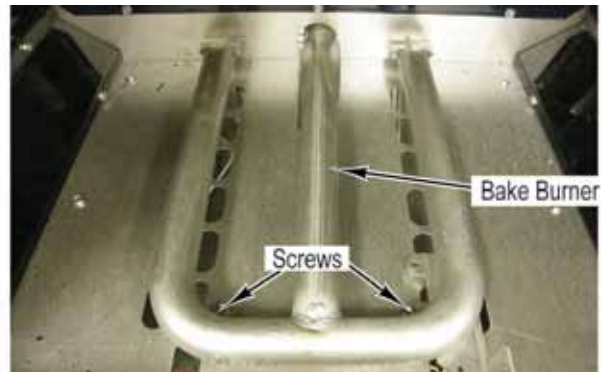
4. Disconnect wire from igniter.
5. Remove screw and igniter from bake burner.



6. Reverse procedure for installation.

### Bake Burner Removal

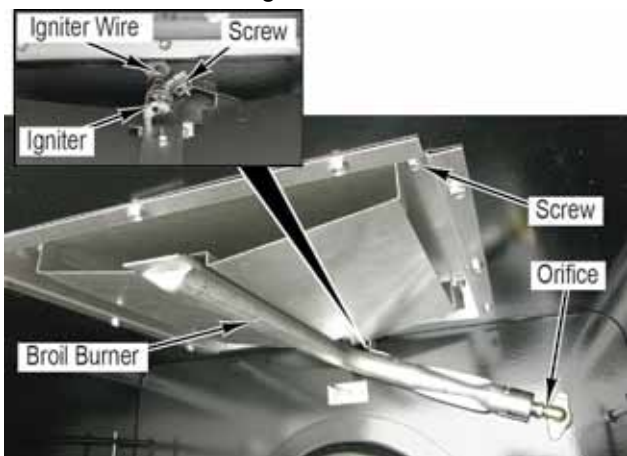
1. Remove bake burner igniter (see Bake Burner Igniter Removal).
2. Remove screws and bake burner from range.



3. Reverse procedure for installation.

### Broil Burner and Igniter Removal

1. Remove oven door (see Door Assembly Removal).
2. Remove screws that secure broil burner to top of oven cavity.
3. Carefully lower broil burner and pull igniter wire into oven cavity.
4. Disconnect wire and then remove broil burner from range.
5. Remove screw and igniter from broil burner.



(View of top of oven cavity)

6. 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.

### Bake or Broil Burner Orifice Removal

1. Remove bake or broil burner (see Bake or Broil Burner Removal).
2. Remove orifice from manifold.

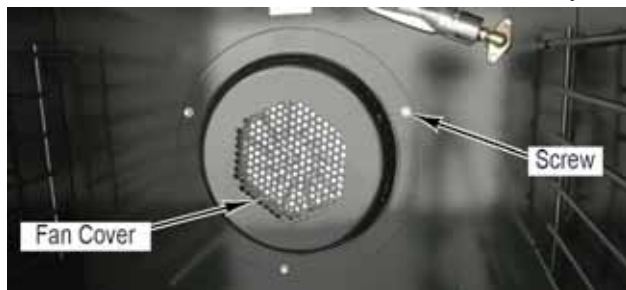


(Bake burner orifice shown)

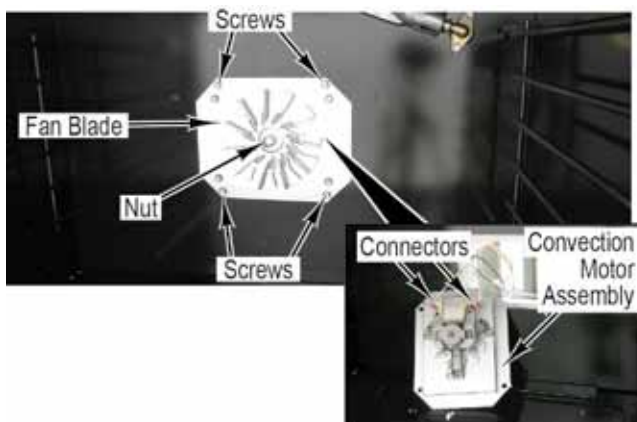
3. Reverse procedure for installation.

### Convection Fan Assembly Removal

1. Remove oven door (see Door Assembly Removal).
2. Remove screws and fan cover from oven cavity.



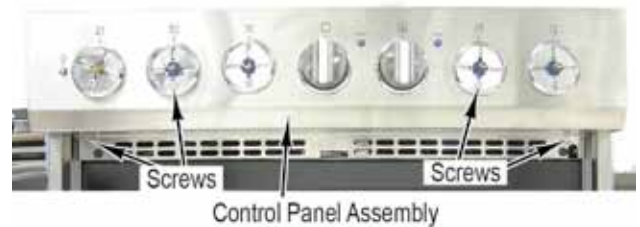
3. Remove four outer screws and convection motor assembly from oven cavity.
4. Mark and disconnect two connectors from convection motor assembly.
5. Remove left hand nut and fan blade from convection fan.



6. Reverse procedure for installation.

### Control Components Accessed

1. Remove oven door (see Door Assembly Removal).
2. Remove all surface burner knobs.
3. Remove screws and bezels from control panel assembly where knobs have been removed.
4. Remove screws from below control panel assembly.



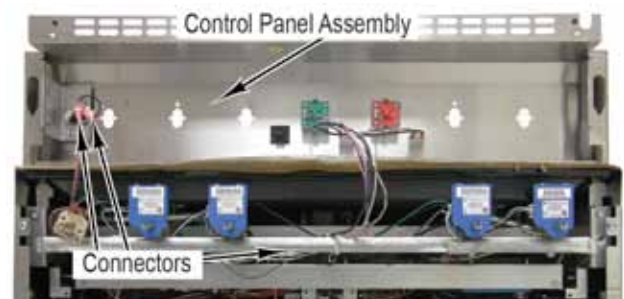
5. Lift up to remove control panel assembly from keyhole screws.
6. Place control panel assembly on protective surface on the top of range.



7. Reverse procedure for installation.

### Control Panel Assembly Removal

1. Access control components (see Control Components Accessed).
2. Mark and disconnect all connectors to remove control panel from range.



3. Reverse procedure for installation.

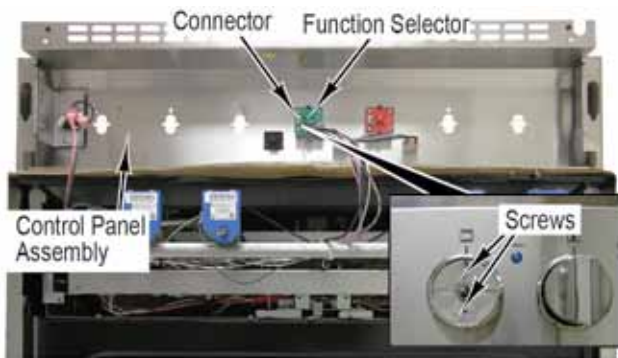


## ⚠ WARNING

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.

### Oven Function Selector Removal

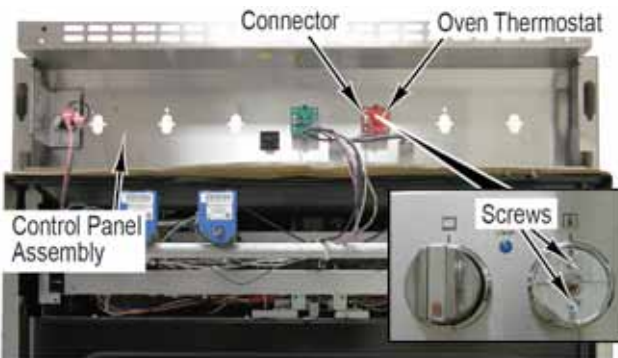
1. Access control components (see Control Components Accessed).
2. Disconnect connector from the oven function selector.
3. Remove screws, bezel, and oven function selector from control panel.



4. Reverse procedure for installation.

### Oven Thermostat Removal

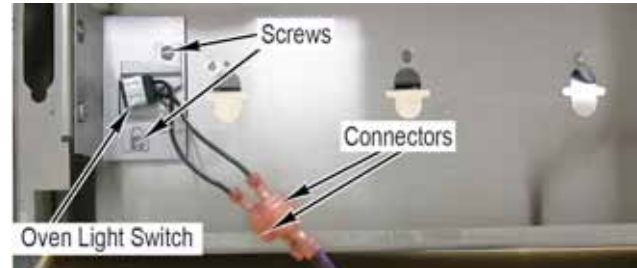
1. Access control components (see Control Components Accessed).
2. Disconnect connector from the oven thermostat.
3. Remove screws, bezel, and thermostat from control panel.



4. Reverse procedure for installation.

### Oven Light Switch Removal

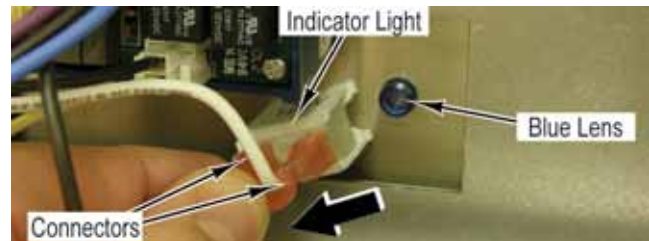
1. Access control components (see Control Components Accessed).
2. Mark and disconnect connectors from light switch.
3. Remove screws and oven light switch from control panel.



4. Reverse procedure for installation.

### Indicator Light Removal

1. Access control components (see Control Components Accessed).
2. Hold the blue lens and slide off the indicator light. The indicator light will only slide in one direction.
3. Disconnect two connectors from the indicator light.



4. Reverse procedure for installation.

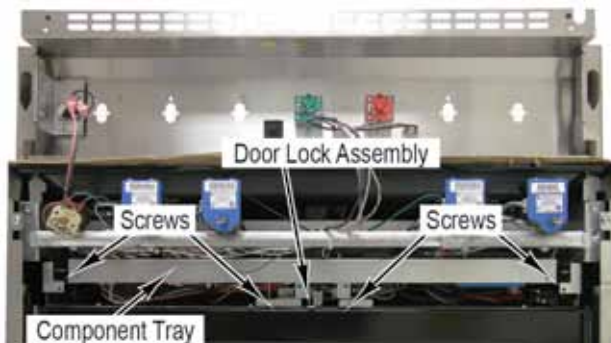
## ⚠ WARNING

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.

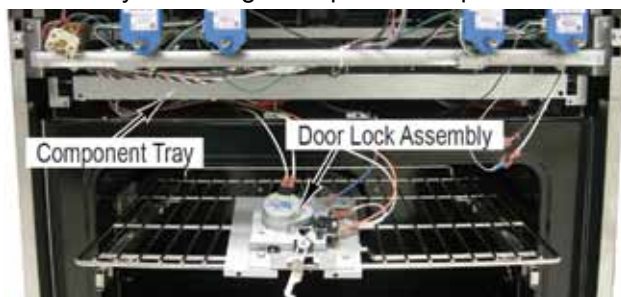
### DSI Module and Control Board Accessed

The DSI Module and Control Board are located between the rangetop and the oven cavity. Access is required in order to perform many troubleshooting procedures.

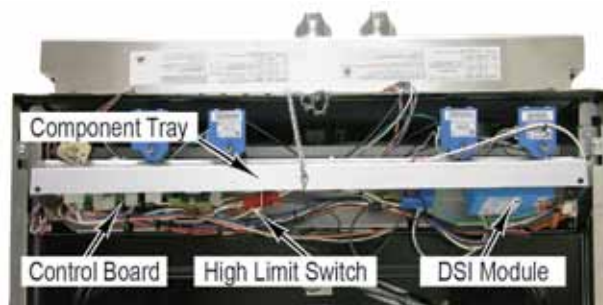
1. Access control components (see Control Components Accessed).
2. Remove screws from component tray and door lock assembly.



3. Lift component tray and carefully remove door lock assembly from range and place on top rack.



4. Carefully pull component tray forward and suspend in horizontal position.
5. Reinstall door lock assembly.

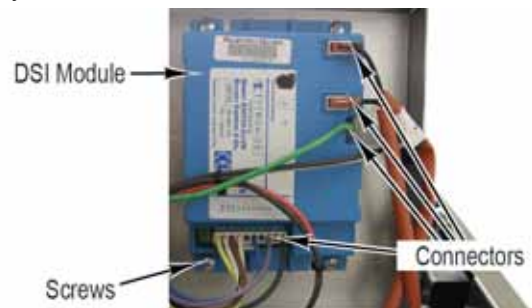


**Note:** During installation, make sure all wires are connected and are not pinched between the component tray and burner box.

6. Reverse procedure for installation.

### DSI Module Removal

1. Access DSI module (see DSI Module Accessed).
2. Mark and disconnect connectors from DSI module.
3. Remove screws and DSI module from component tray.



4. Reverse procedure for installation.

### Stack Valve Igniter Module Removal

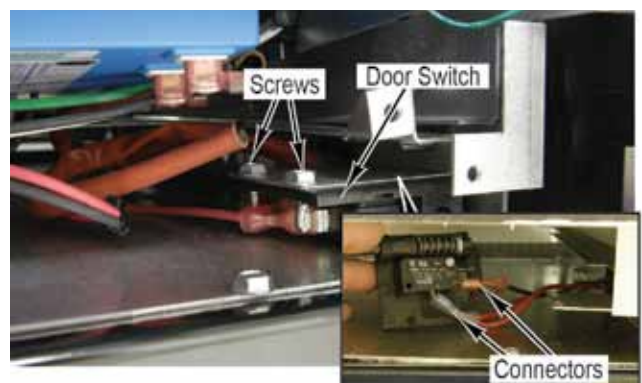
1. Access DSI module (see DSI Module Accessed).
2. Disconnect connectors from module.
3. Remove screws and module from range.



4. Reverse procedure for installation.

### Door Switch Removal

1. Access control components (see Control Components Accessed).
2. Remove component tray screws (see DSI Module and Control Board Accessed).
3. Remove screws and door switch from range.
4. Mark and disconnect connectors from door switch.



5. Reverse procedure for installation.



## ⚠ WARNING

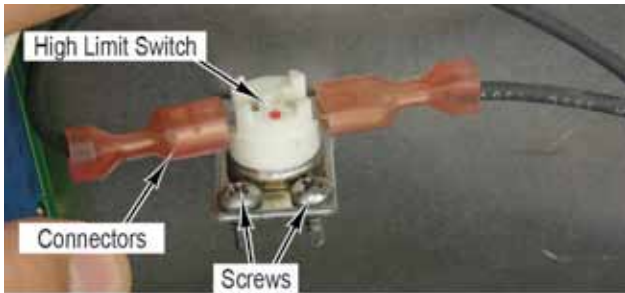
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

### High Limit Switch Removal

1. Access high limit switch (see DSI Module Accessed).

**Note:** The high limit switch is N.C. (normally closed) and opens at 275°F.

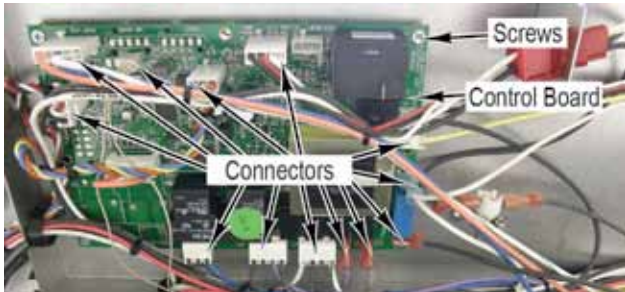
2. Mark and disconnect two wires from high limit switch.
3. Remove screws and high limit switch from component tray.



4. Reverse procedure for installation.

### Control Board Removal

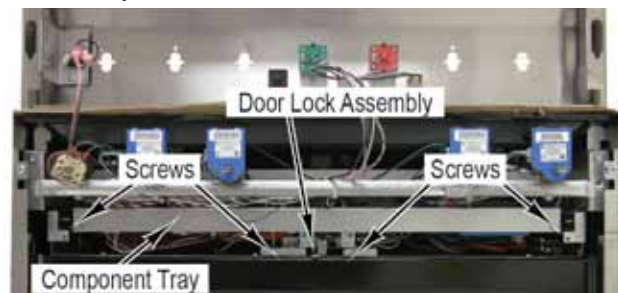
1. Access control board (see DSI Module Accessed).
2. Mark and disconnect connectors from control board.
3. Remove screws and control board from component tray.



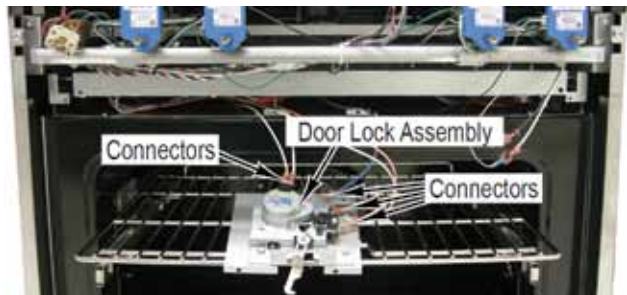
4. Reverse procedure for installation.

### Door Lock Assembly Removal

1. Access control components (see Control Components Accessed).
2. Remove screws from component tray and door lock assembly.



3. Lift component tray and carefully remove door lock assembly from range and place on top rack.
4. Mark and disconnect connectors from door lock assembly.



5. Reverse procedure for installation.

### IRIS Module Removal

1. Access control components (see Control Components Accessed).
2. Disconnect connectors from module.
3. Pull to remove module from burner valve.



4. Reverse procedure for installation.

### Stack Valve Burner Switch Removal

1. Remove the control panel assembly (see Control Panel Assembly Removal).
2. Disconnect connectors from valve switch.
3. Pull to remove valve switch from burner valve.



4. Reverse procedure for installation.



**⚠ WARNING**

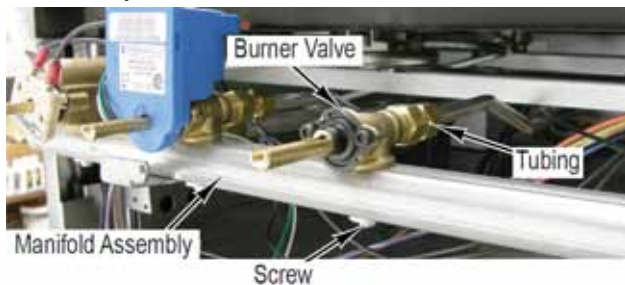
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

**Surface Burner Valve Removal****⚠ DANGER**

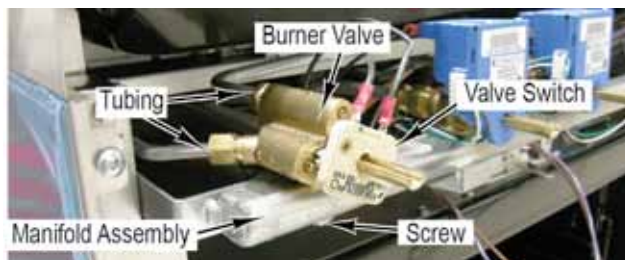
**Gas leak hazard.** To avoid risk of personal injury or death, leak testing of the appliance must be conducted according to the manufacturer's instructions. Before placing appliance in operation, always check for gas leaks with soapy water solution.

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

1. Shut off main gas supply to the range.
2. Access control components (see Control Components Accessed).
3. Pull to remove spark module from burner valve.
4. Remove tubing from back of burner valve.
5. Remove screw and burner valve from manifold assembly.



6. For the stack burner valve, pull to remove the valve switch from the valve.



7. Reverse procedure for installation.
8. Perform gas leak test.

**Backguard Removal**

1. Access the rear of the range.
2. Remove screws and backguard from range.



3. Reverse procedure for installation.

**Rack Support Removal**

1. Remove oven door (see Door Assembly Removal).
2. Remove screws and rack support from holes in back wall of oven cavity.



3. Reverse procedure for installation.

# Disassembly



## ⚠ WARNING

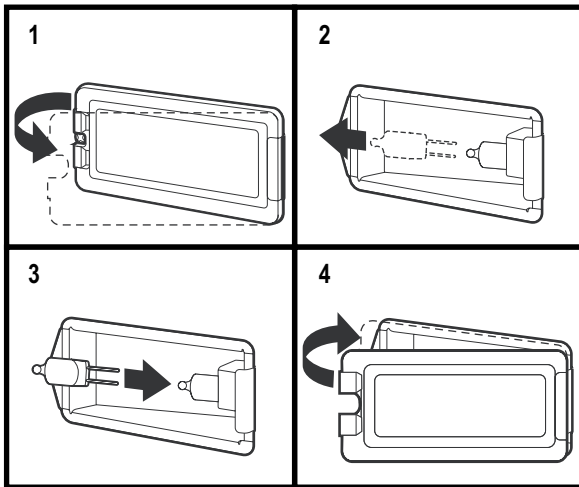
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

### Oven Light Bulb Removal

#### ⚠ CAUTION

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

1. Open oven door and 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.



### Orifice Removal

1. Remove grates, burner caps, and burner heads from burner base assembly.
2. Remove orifice from jet holder.



3. Reverse procedure for installation.

### Main Top Removal

1. Remove the control panel assembly (see Control Panel Assembly Removal).
2. Remove backguard assembly (see Backguard Assembly Removal).
3. Remove grates, burner caps, and burner heads from each burner base assembly.
4. Remove screws from each burner base assembly.



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



6. Lift main top from range.



**Note:** Make sure to return insulation to original position under each side trim.

7. 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.

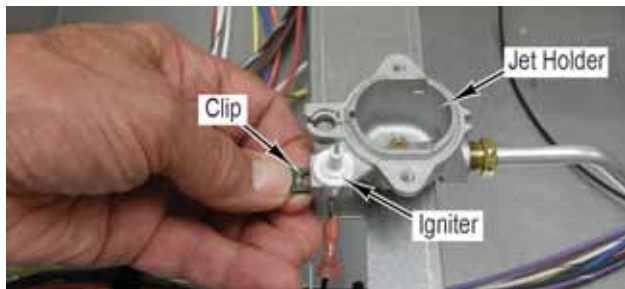
### Jet Holder Removal

## ⚠ 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. Shut off main gas supply to the range.
2. Remove main top (see Main Top Removal).
3. Remove clip and igniter from jet holder.



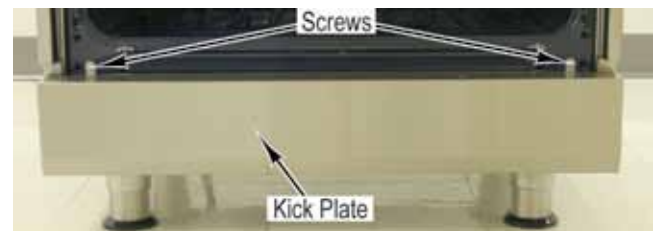
4. Loosen and slide tubing nut away from jet holder.
5. Remove inverted screws from jet holder.
6. Lift jet holder to remove from tubing.



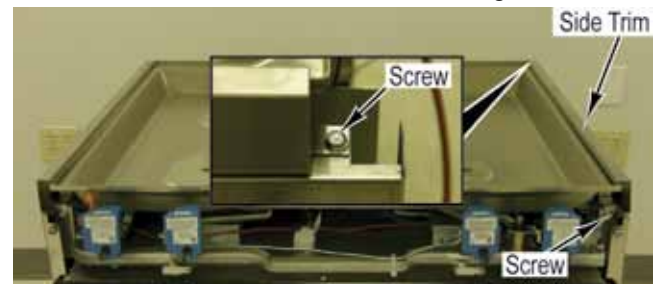
7. Reverse procedure for installation.
8. Perform gas leak test.

### Side Trim and Side Panel Removal (Right side shown)

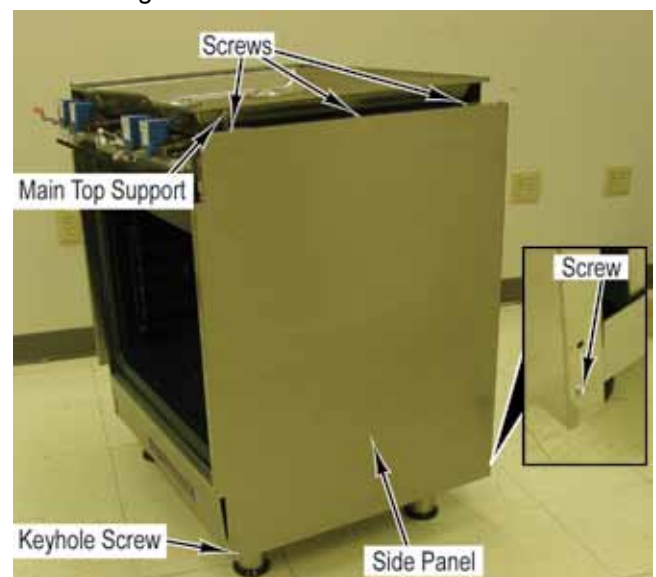
1. Remove the control panel assembly (see Control Panel Assembly Removal).
2. Remove backguard assembly (see Backguard Assembly Removal).
3. Remove screws and lift kick plate from keyhole screws.



4. Remove screws and side trim from range.



5. Remove keyhole screw from front of range.
6. Remove screw from back of range.
7. Remove screws, main top support, and side panel from range.



8. Reverse procedure for installation.

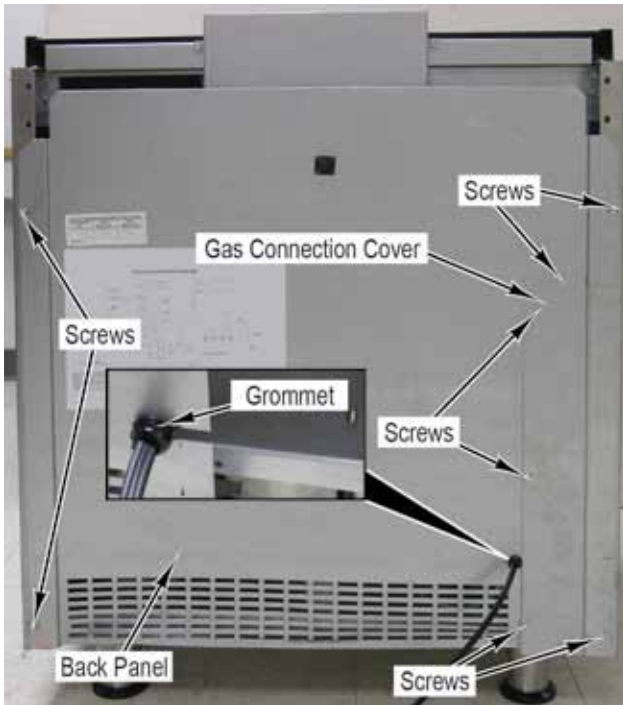


## ⚠ WARNING

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

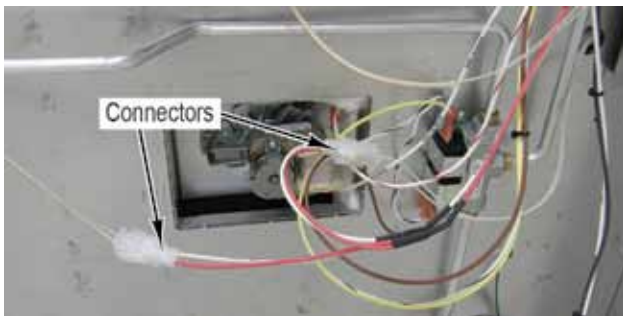
1. Remove backguard assembly (see Backguard Assembly Removal).
2. Remove screws and gas connection cover from range.
3. Slide grommet and power cord from back panel.
4. Remove screws and back panel from range.



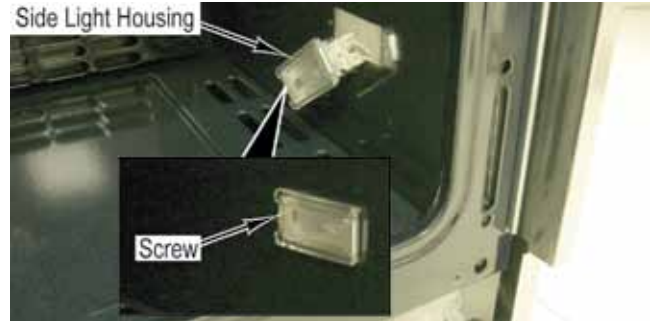
5. Reverse procedure for installation.

### Side Light Housing Removal

1. Remove back panel (see Back Panel Removal).
2. Disconnect connector for side light housing.



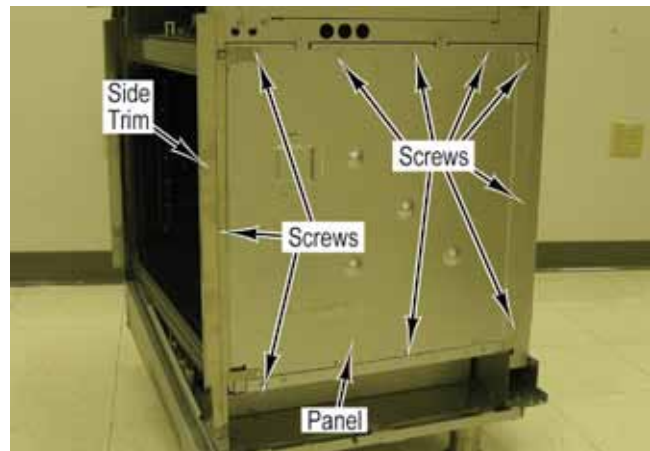
3. Remove rack support (see Rack Support Removal).
4. Remove screw and side light housing from oven liner.



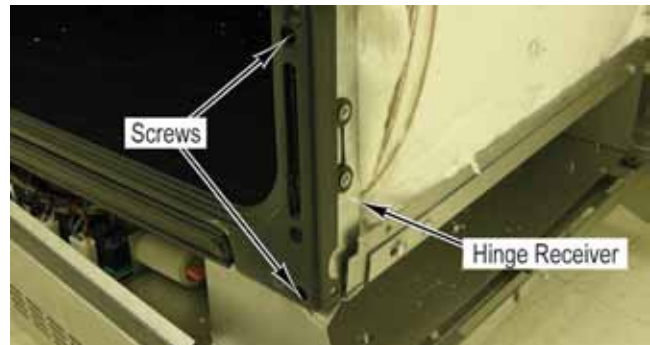
5. Reverse procedure for installation.

### Hinge Receiver Removal

1. Remove side panel (see Side Panel Removal).
2. Remove screws and side trim from range.
3. Remove screws and panel from range.



4. Remove screws 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.

**Gas Solenoid Valve Removal****⚠ DANGER**

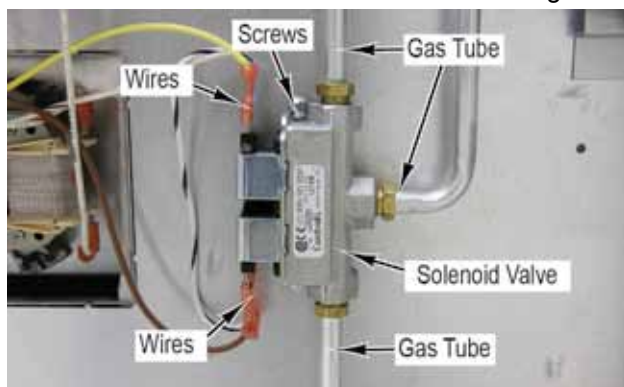
**Gas leak hazard.** To avoid risk of personal injury or death, leak testing of the appliance must be conducted according to the manufacturer's instructions. Before placing appliance in operation, always check for gas leaks with soapy water solution.

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

1. Remove back panel (see Back Panel Removal).
2. Mark and disconnect wires from solenoid valve.
3. Remove gas tubes from solenoid valve.

**Note:** Use care when removing gas tubes.

4. Remove screws and solenoid valve from range.



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

**Pressure Regulator Removal****⚠ 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. Shut off main gas supply to the range.
2. Remove back panel (see Back Panel Removal).
3. Remove tubing nut from pressure regulator.
4. Remove gas tubing from pressure regulator.
5. Remove screws and pressure regulator from range.



6. Reverse procedure for installation.

**Note:** Use approved sealant when installing pressure regulator.

7. Perform gas leak test.

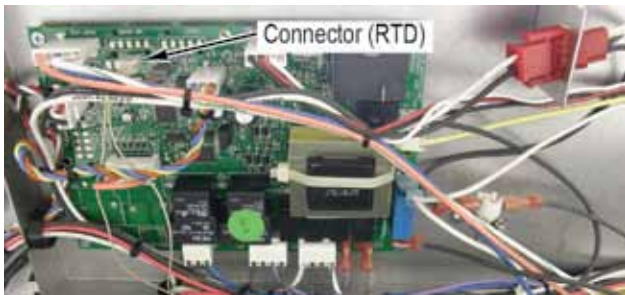
## ⚠ WARNING

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.

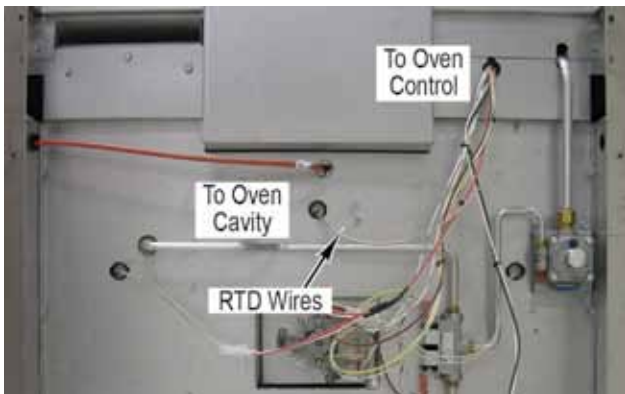
### Temperature Sensor (RTD) Removal

**Note:** The following procedure explains how to replace the RTD properly. An option to this procedure would be to pull the RTD through the oven cavity, cut the two wires, and splice in the replacement RTD with the use of two (2) ceramic wire nut connectors.

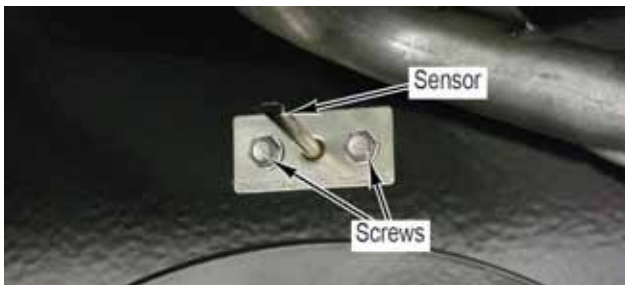
1. Remove oven door (see Door Assembly Removal).
2. Access control board (see DSI Module Accessed).
3. Disconnect RTD Molex connector from control board.



4. Remove any wire ties as required.
5. Route RTD wires through burner box area and out back of range.



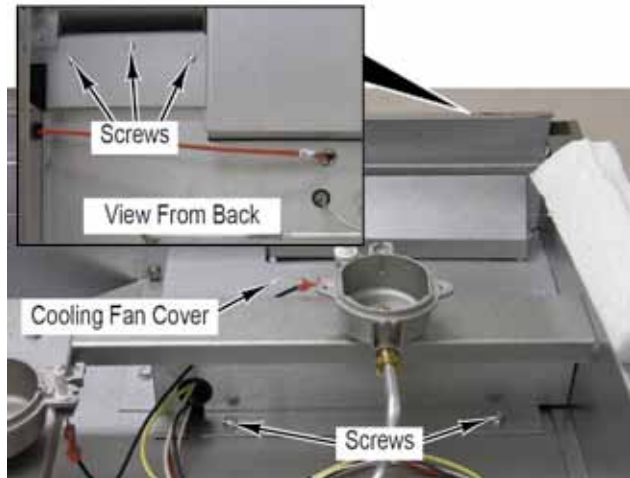
6. Remove screws and RTD sensor from the oven liner.



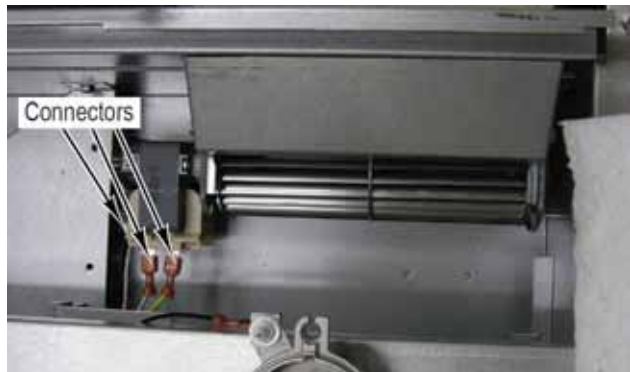
7. Reverse procedure for installation.

### Cooling Blower Motor Removal

1. Remove back panel (see Back Panel Removal).
2. Remove main top (see Main Top Removal).
3. Remove three screws from blower motor.
4. Remove four screws and slide cooling fan cover forward to access blower motor.



5. Mark and disconnect three connectors and remove blower motor.



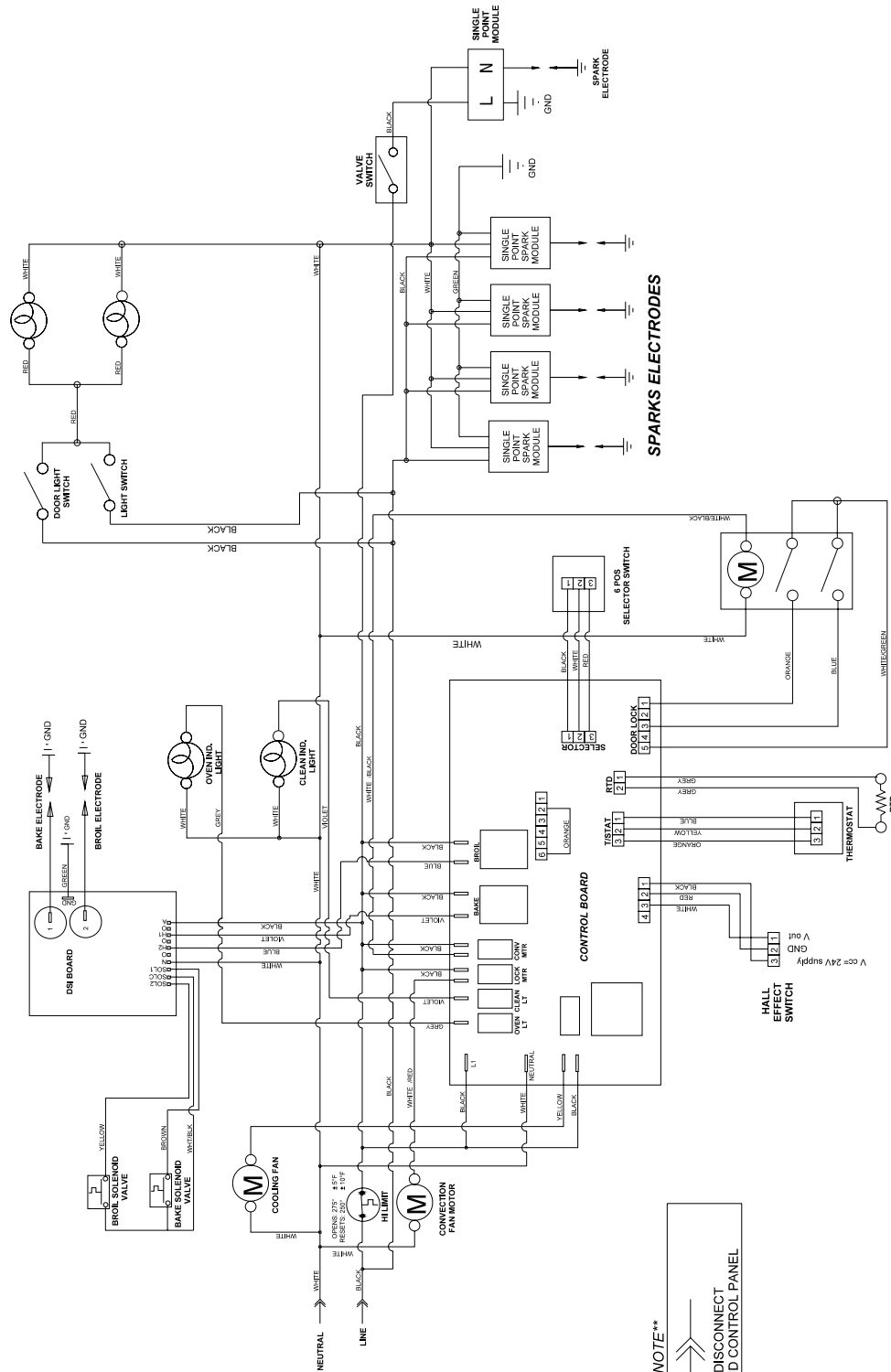
6. Reverse procedure for installation.



## Wiring Diagram

### RDSCG230-5B Self-Clean Gas Range

#### RDSCG230-5B WIRING DIAGRAM



**\*\*NOTE\*\***  
 POWER DISCONNECT LOCATED BEHIND CONTROL PANEL