



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 Dual Fuel Range

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

VDSC530
VDSC536
VDSC548



SMC-0003B
December 2009

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.

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 DUAL FUEL RANGES WARRANTY

ONE YEAR FULL WARRANTY

Freestanding dual fuel ranges and all of their component parts, except as detailed below*, 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. Products must be purchased in the country where service is requested. 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. This warranty does not apply to commercial usage. Warrantor is not responsible for consequential or incidental damage whether arising out of breach of warranty, breach of contract, or otherwise. Some jurisdictions DO NOT allow the exclusion or limitation of incidental or 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 part or 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. Some jurisdictions DO NOT allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. 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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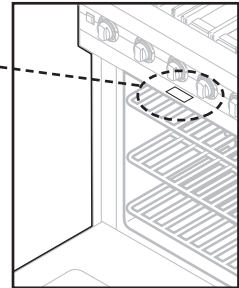
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Serial Number

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.

Serial Number 011808C0000000001

Month Day Year of Manufacture Serial Number



Model Number

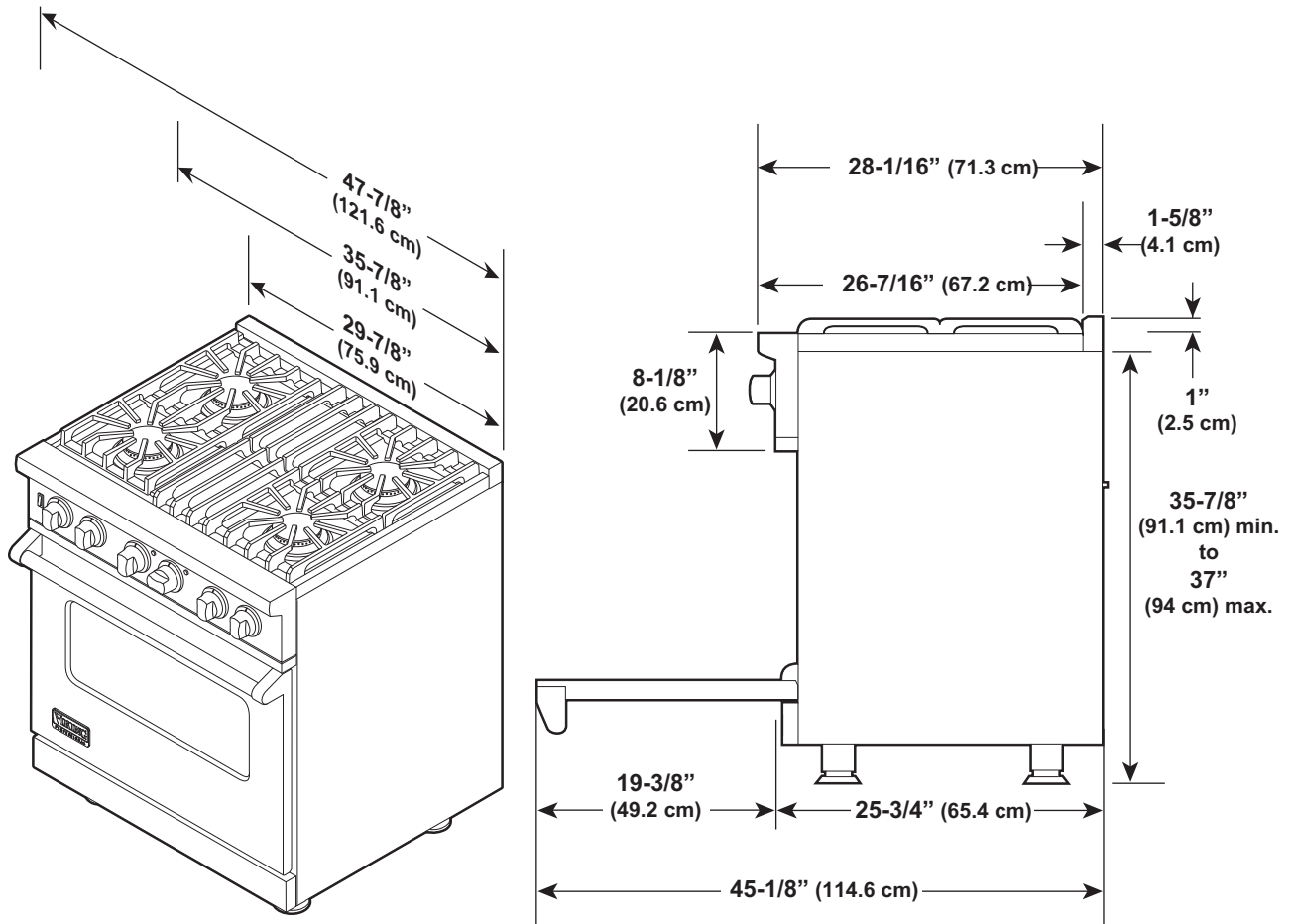
V D S C 5 3 0 4 B G Q

V = Professional
D = Dual Fuel
G = Gas
C = Custom
S = Self-Cleaning
C = Convection
5 = Series

30 = 30" Wide
36 = 36" Wide
48 = 48" Wide

G = Griddle
Q = Grille
4B = 4 Burners
6B = 6 Burners
8B = 8 Burners

Dimensions



General Information



Specifications

Dual Fuel 30", 36", & 48" Ranges				
Description	VDSC530	VDSC536	VDSC548	
Overall width	29 ⁷ / ₈ " (75.9 cm)	35 ⁷ / ₈ " (91.1 cm)	47 ⁷ / ₈ " (121.6 cm)	
Overall height	To top of side trim — 35 ⁷ / ₈ " (91.1 cm) min. 37" (94 cm) max. Legs adjust 1 ¹ / ₈ " (2.9 cm)			
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 / ₄ " (1.9 cm) to overall depth for 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 23 ¹ / ₂ " (59.7 cm)			
Gas requirements	Shipped natural or LP/Propane; field convertible with conversion kit (purchased separately); accepts standard residential ¹ / ₂ " (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	240-208 VAC, 60 Hz electrical connection box on product, connect with locally supplied 3-wire, flexible cord or "pigtail" rated 40 amp 125-250 VAC minimum. Cord must be agency approved for use with household electric ranges.			
Maximum amp usage	240V—25.4 amps 208V—22.9 amps	240V—28.5 amps 208V—24.7 amps	240V—37 amps 208V—32 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)	15,000 BTU (4.4 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)	18,000 BTU (5.3 kW) 16,000 BTU (4.7 kW)	
Oven(s) interior width	25 ⁵ / ₁₆ " (64.3 cm)	30 ⁵ / ₁₆ " (78.6 cm)	Right — 25 ⁵ / ₁₆ " (64.3 cm) Left — 13 ³ / ₄ " (34.9 cm)	
Oven(s) interior height	16 ¹ / ₂ " (41.9 cm)			
Oven(s) interior depth: Overall AHAM	19 ¹ / ₂ " (49.5 cm) 16 ¹³ / ₁₆ " (42.7 cm)			
Oven(s) volume: Overall AHAM	4.7 cu. ft. 4.1 cu. ft.	5.6 cu. ft. 4.9 cu. ft.	Left 2.6 cu. ft. 2.2 cu. ft.	Right 4.7 cu. ft. 3.1 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 noncombustible rear wall;
- 6" (15.2 cm) with island trim and combustible rear wall

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 heating elements, areas near elements, or interior surfaces of oven.
- Heating elements may be hot even though they are dark in color. Areas near elements 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.

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.

Electrical & Gas Requirements**Electrical Requirements**

Check your national and local codes regarding this unit. This range requires 3 wire or 4 wire, 240-208 VAC/60 Hz. See “Appendix A” for grounding instructions. 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**⚠ 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 electrical. 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.
- 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 1/2" PSI (14.0" W.C.P.). If the line pressure is in excess of that amount, a step down regulator will be required.
- The appliance must be disconnected from the gas supply piping system during any pressure testing of that system.

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 1/2" (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.

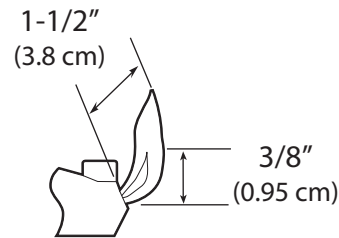
In Massachusetts

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

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 element on full power, center and outside broil elements at partial power.
- Convection bake function—bake and broil elements the same with the convection fan on.
- Check TruConvec™ function—TruConvec element (behind convection fan cover) on and convection fan on.
- Check HI broil function—both broil elements at full power.
- Check LOW broil function—inner broil element only.
- Check convection broil function—both broil elements at full power with convection fan on.
- Check self-clean function—door will lock in approximately 30 seconds, the center and outside broil elements will turn on and the bake element will turn on at partial power. Check broil elements through window to make sure they are on, then abort self-clean cycle to unlock door.

CAUTION

When conducting performance test, DO NOT run self-clean cycle for more than 10 minutes with oven racks inside oven. This could cause them to discolor due to the high temperature required for self-cleaning.

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

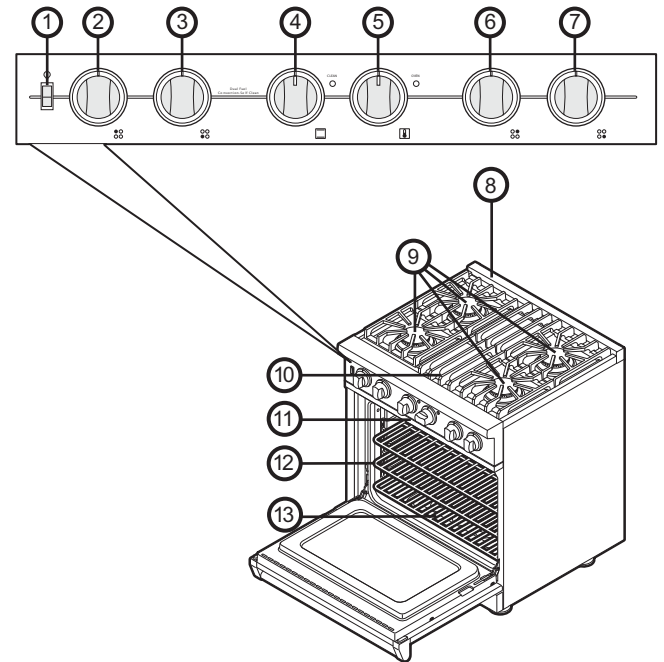
Important: Before first use, wipe interior with soapy water and dry thoroughly. Then, set the oven selector to bake, the thermostat to 450°F, and operate for an hour.

All models include:

- A broad range of baking and broiling modes—up to eight cooking modes in all—to make even your most challenging baking projects a success.
- Exclusive VSH™ Pro Sealed Burner System (VariSimmer™ 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.
- Split baking and broiling elements—which reduces preheating time and provides greater control and more even heating.
- A reversing fan which is two times larger than most on the market—this allows you to cook foods more thoroughly and evenly—even when baking large quantities.
- Four convection modes offering greater air circulation to shorten cooking times and cook foods more evenly.
- Three broiling modes, including a new low-broil mode for delicate broiling and top-browning.
- A profiled, concealed bake element for easier cleaning.
- This appliance is certified by Star-K to meet strict regulations in conjunction with specific instructions found on www.star-k.org.

Range Features

30 Inch Model

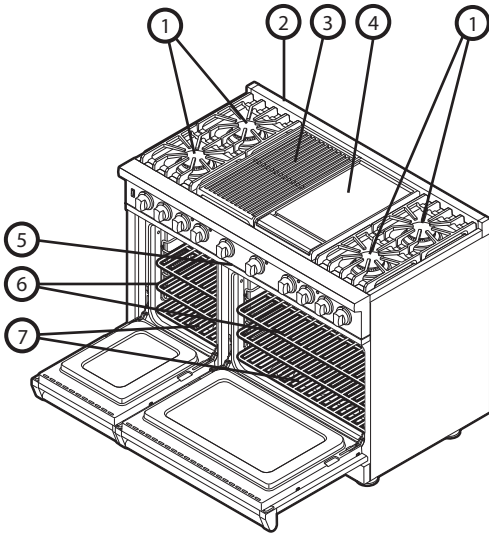
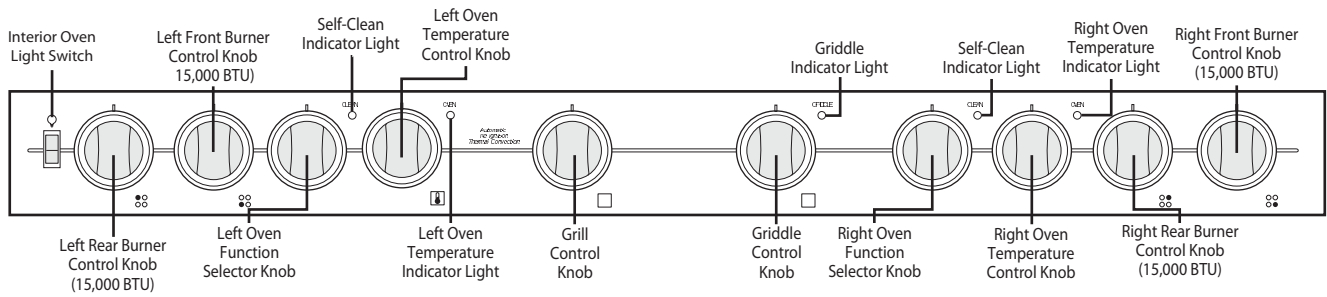


1. Interior oven light switch
2. Left rear burner control knob
3. Left front burner control knob
4. Oven function selector knob
5. Oven temperature control knob
6. Right rear burner control knob
7. Right front burner control knob
8. Island trim
9. Four 15,000 BTU sealed burners with porcelain/cast iron caps and automatic ignition/re-ignition
10. Center grate
11. Identification plate
12. Two standard heavy-duty tilt-proof racks/One heavy-duty TruGlide rack. Six rack positions
13. Broiler pan—located inside oven

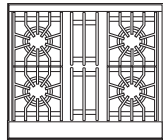
General Information



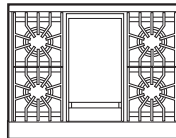
48 Inch Model



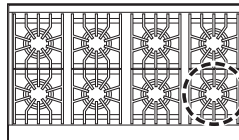
1. Four 15,000 BTU sealed burners with porcelain/cast iron caps and automatic ignition/re-ignition
2. Island trim
3. Grill (Optional)
4. Griddle (Optional)
5. Identification plate
6. Three standard heavy-duty tilt-proof racks. Six rack positions
7. Broiler pan—located inside oven



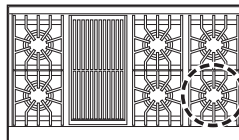
30" Four-Burner




36" Four-Burner/Griddle

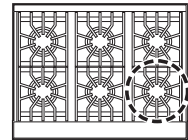


48" Eight Burner

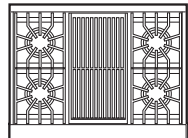


48" Six-Burner/Grill

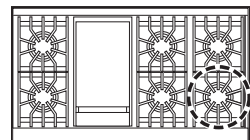
 Denotes models which have a Power Plus™ 18,500 BTU Burner



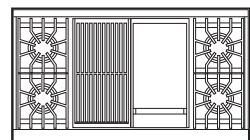
36" Six-Burner



36" Four-Burner/Grill



48" Six-Burner/Griddle



48" Four-Burner/Grill/Griddle

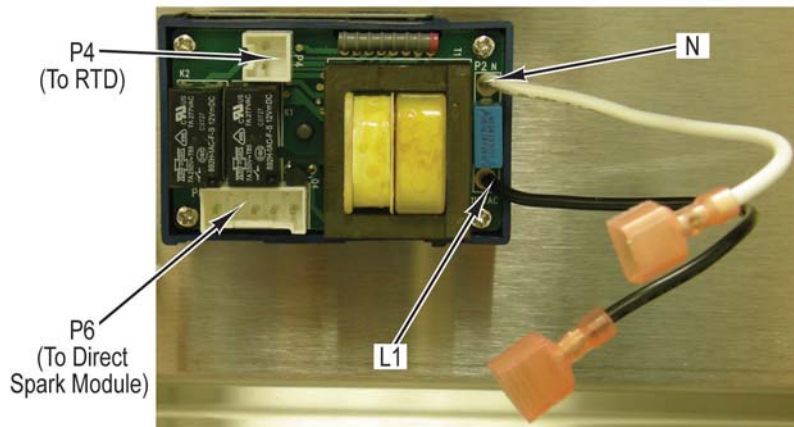
LED Error Codes

The LED error codes are displayed on the control panel using the griddle cycle light. Refer to the chart below to determine the type of error that is being displayed.

LED Error Codes	
Type of error	Cycle Light
RTD (Griddle Probe)	2 flashes, then 4 seconds OFF

Griddle Control Connections

The griddle control is only on the following models: VDSC536-4G, VDSC548-6G, and VDSC548-4GQ.

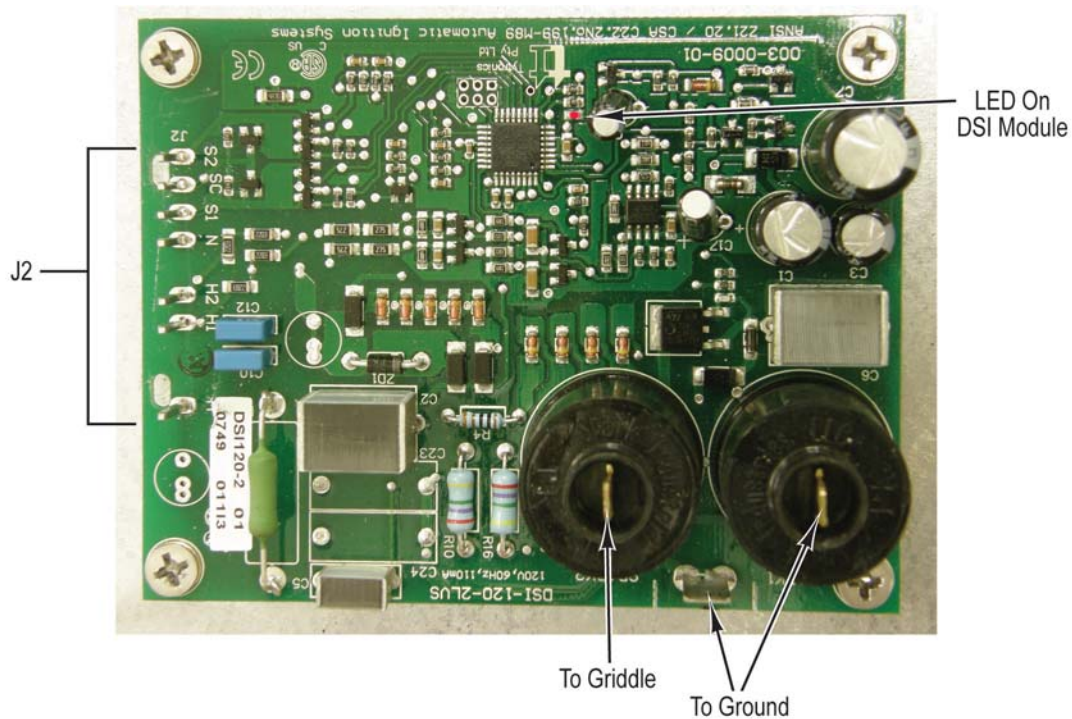


Fault Codes For DSI Boards

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. The DSI board is only on the following models: VDSC536-4G, VDSC548-6G, and VDSC548-4GQ.

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

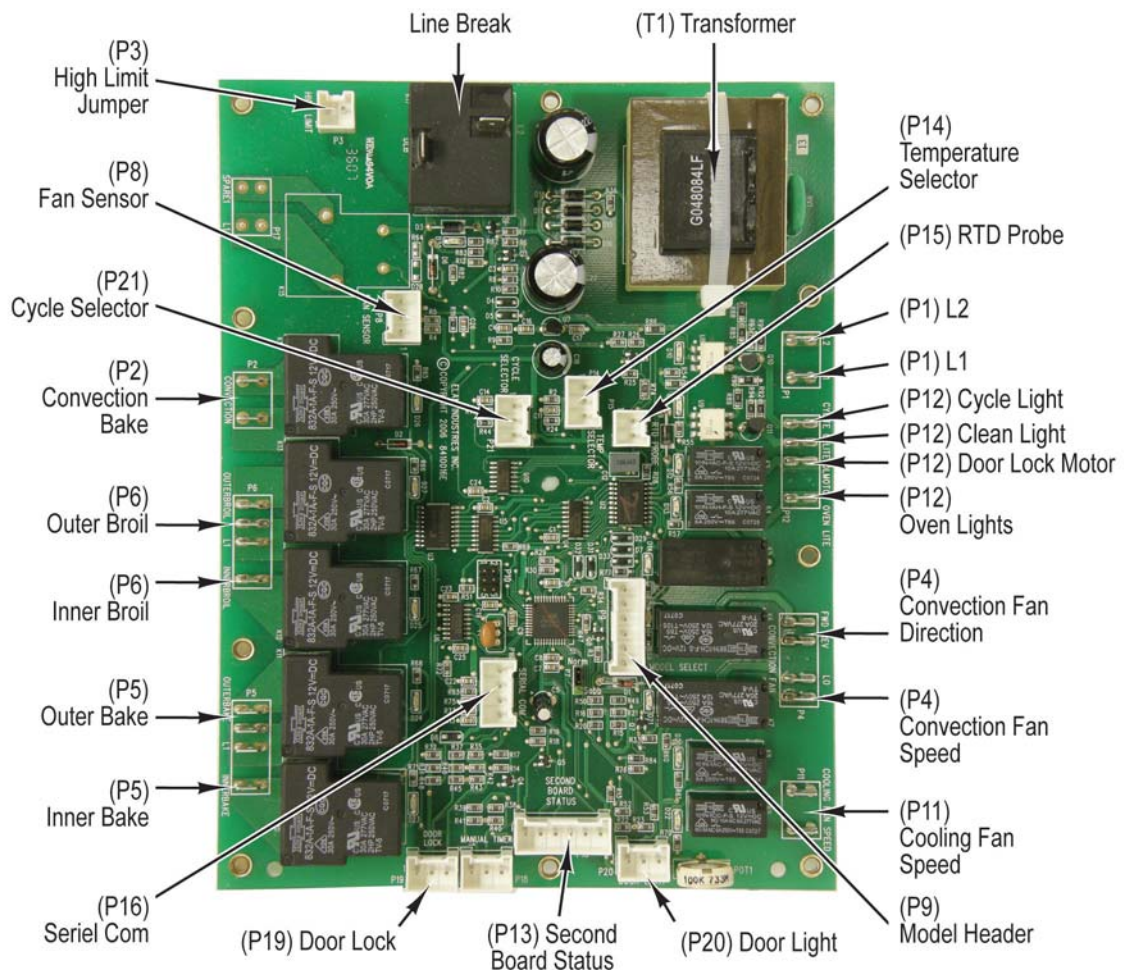


LED Error Codes

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.

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	1 second ON, 1 second OFF, 1 second ON, 4 seconds OFF	ON
Cooling Fan	3 flashes	ON
High Limit	4 flashes	ON

Oven Control Board Connections



Oven Components

Symptom	Possible Cause	Corrective Action
No bake, no broil, no oven lights, no power to P1 red to P1 black	House breaker or fuse open	Reset breaker or replace fuse
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
No bake, no broil, no oven lights. 240VAC P1 red to P1 black	Open control board	Replace control board (Check operation of blower motor)
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
No bake, oven lights operate	Open bake element	Replace bake element
	Open or out of calibration selector	Replace selector
	Open or out of calibration thermostat	Replace thermostat
	Open relay K10 or K11	Replace control board
	Open control board	Replace control board
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
No broil, oven lights operate	Open broil element	Replace broil element
	Open or out of calibration selector	Replace selector
	Open or out of calibration thermostat	Replace thermostat
	Open relay K12 or K13	Replace control board
	Open control board	Replace control board
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
No convection bake, oven lights operate	Open bake element	Replace bake element
	Open broil element	Replace broil element
	Open convection fan motor	Replace convection fan motor
	Open or out of calibration selector	Replace selector
	Open or out of calibration thermostat	Replace thermostat
	Open relay K10, K11, K12, K13, K5, or K7	Replace control board
	Open control board	Replace control board
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
No convection roast, oven lights operate	Open broil element	Replace broil element
	Open convection element	Replace convection element
	Open convection fan motor	Replace convection fan motor
	Open or out of calibration selector	Replace selector
	Open or out of calibration thermostat	Replace thermostat
	Open relay K12, K13, K14, K5, K6, or K7	Replace control board
	Open control board	Replace control board
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring

Symptom	Possible Cause	Corrective Action
No convection broil, oven lights operate	Open broil element	Replace broil element
	Open or out of calibration selector	Replace selector
	Open or out of calibration thermostat	Replace thermostat
	Open convection fan motor	Replace convection fan motor
	Open relay K12, K13, K5, K6, or K7	Replace control board
	Open control board	Replace control board
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
No TruConvection, oven lights operate	Open convection element	Replace convection element
	Open convection fan motor	Replace convection fan motor
	Open or out of calibration selector	Replace selector
	Open or out of calibration thermostat	Replace thermostat
	Open relay K14, K5, K6, or K7	Replace control board
	Open control board	Replace control board
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
No self-clean, bake and broil operate normally, oven lights operate, door won't lock, no clean indicator light	Open door latch motor	Replace door latch motor
	Out of calibration selector	Replace selector
	Out of calibration thermostat	Replace thermostat
	Open relay K3	Replace control board
	Open control board	Replace control board
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
No self-clean, bake and broil operate normally, oven lights operate, door will lock, no clean indicator light	Open door latch switch	Replace door latch assembly
	Open control board	Replace control board
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
Oven in self-clean mode, oven heats, no door lock indicator light (oven not reaching elevated clean temperatures)	Open door latch switch	Replace door latch assembly
	Oven sensor out of calibration	Replace selector
	Faulty control board	Replace control board
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
Oven door won't unlock (oven below elevated clean temperatures)	Open door latch motor	Replace door latch motor
	Oven sensor out of calibration	Replace oven sensor
	Faulty control board	Replace control board
	Open relay K3	Replace control board
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
Oven lights inoperable (bulbs OK)	Open control board	Replace control board
	Open relay K4	Replace control board
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring

Troubleshooting



Symptom	Possible Cause	Corrective Action
Blower motor inoperable	Open blower motor	Replace blower motor
	Oven sensor out of calibration	Replace oven sensor
	Open relay K8 or K9	Replace control board
	Open control board	Replace control board
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring
Range will not function	Range is not connected to electrical power	Have electrician check power circuit breaker, wiring, and fuses
Oven does not operate in self-clean	Door is not shut tight enough for automatic door latch to lock	Check for obstructions, close door
Oven is not clean after self-clean cycle	Temperature control knob not rotated all the way past clean until it stops	Check knob position
Broil does not work	Temperature control knob is rotated too far past broil position	Check knob position
Door will not open	Oven is still in self-clean mode	If oven is hot, door latch will release when safe temperature is reached
Oven light will not work	Light bulb is burned out.	Replace bulb
	Range is not connected to power	Check power source
Igniters will not work	Circuit is tripped	Check power source
	Fuse is blown	Check power source
	Range is not connected to power	Check power source
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 ignitors
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
Griddle inoperable - RH oven, LH oven, surface burner and grill igniters operate	Foreign objects/soil on igniter	Clean igniter and surrounding area
	Open griddle solenoid	Replace griddle solenoid
	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 oven, LH oven, surface burner, grill, and griddle igniters operate	Defective cycle light (neon)	Replace cycle light
	Open griddle control	Replace griddle control
	Defective oven wiring (shorted, open, or burned)	Repair or replace defective wiring

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 - Voltage red to black		Resistance - Voltage red to white		Resistance - Voltage black to white	
	Resistance	Voltage	Resistance	Voltage	Resistance	Voltage
Off	10.0 kΩ	5 VDC	∞	5 VDC	∞	0
Bake	10.0 kΩ	5 VDC	443 Ω	0.42 VDC	9.56 kΩ	4.58 VDC
Convection Bake	10.0 kΩ	5 VDC	1.58 kΩ	1.29 VDC	8.42 kΩ	3.71 VDC
Tru Convection	10.0 kΩ	5 VDC	2.72 kΩ	1.96 VDC	7.28 kΩ	3.04 VDC
Convection Roast	10.0 kΩ	5 VDC	3.86 kΩ	2.52 VDC	6.14 kΩ	2.48 VDC
Convection Broil	10.0 kΩ	5 VDC	5.00 kΩ	3.00 VDC	5.00 kΩ	2.00 VDC
Hi Broil	10.0 kΩ	5 VDC	6.14 kΩ	3.44 VDC	3.86 kΩ	1.56 VDC
Med Broil	10.0 kΩ	5 VDC	7.28 kΩ	3.86 VDC	2.72 kΩ	1.14 VDC
Low Broil	10.0 kΩ	5 VDC	8.42 kΩ	4.30 VDC	1.58 kΩ	0.70 VDC
Self Clean	10.0 kΩ	5 VDC	9.56 kΩ	4.79 VDC	443 Ω	0.21 VDC

Resistance checks are made on the selector wire harness with the selector wire harness disconnected from the board at location P21. The harness is connected to P21 for voltage checks.

Thermostat Position	Resistance - Voltage orange to blue		Resistance - Voltage orange to yellow		Resistance - Voltage blue to yellow	
	Resistance	Voltage	Resistance	Voltage	Resistance	Voltage
Off	10.0 kΩ	5 VDC	∞	5 VDC	∞	0
200°F	10.0 kΩ	5 VDC	8.75 kΩ	4.44 VDC	1.25 kΩ	0.56 VDC
300°F	10.0 kΩ	5 VDC	6.88 kΩ	3.71 VDC	3.13 kΩ	1.29 VDC
400°F	10.0 kΩ	5 VDC	5.00 kΩ	3.00 VDC	5.00 kΩ	2.00 VDC
500°F	10.0 kΩ	5 VDC	4.03 kΩ	2.61 VDC	5.94 kΩ	2.39 VDC
Broil	10.0 kΩ	5 VDC	2.19 kΩ	1.66 VDC	7.81 kΩ	3.34 VDC
Clean	10.0 kΩ	5 VDC	780 Ω	0.70 VDC	9.22 kΩ	4.30 VDC

Resistance checks are made on the thermostat wire harness with the thermostat wire harness disconnected from the board at location P15. The harness is connected to P15 for voltage checks.

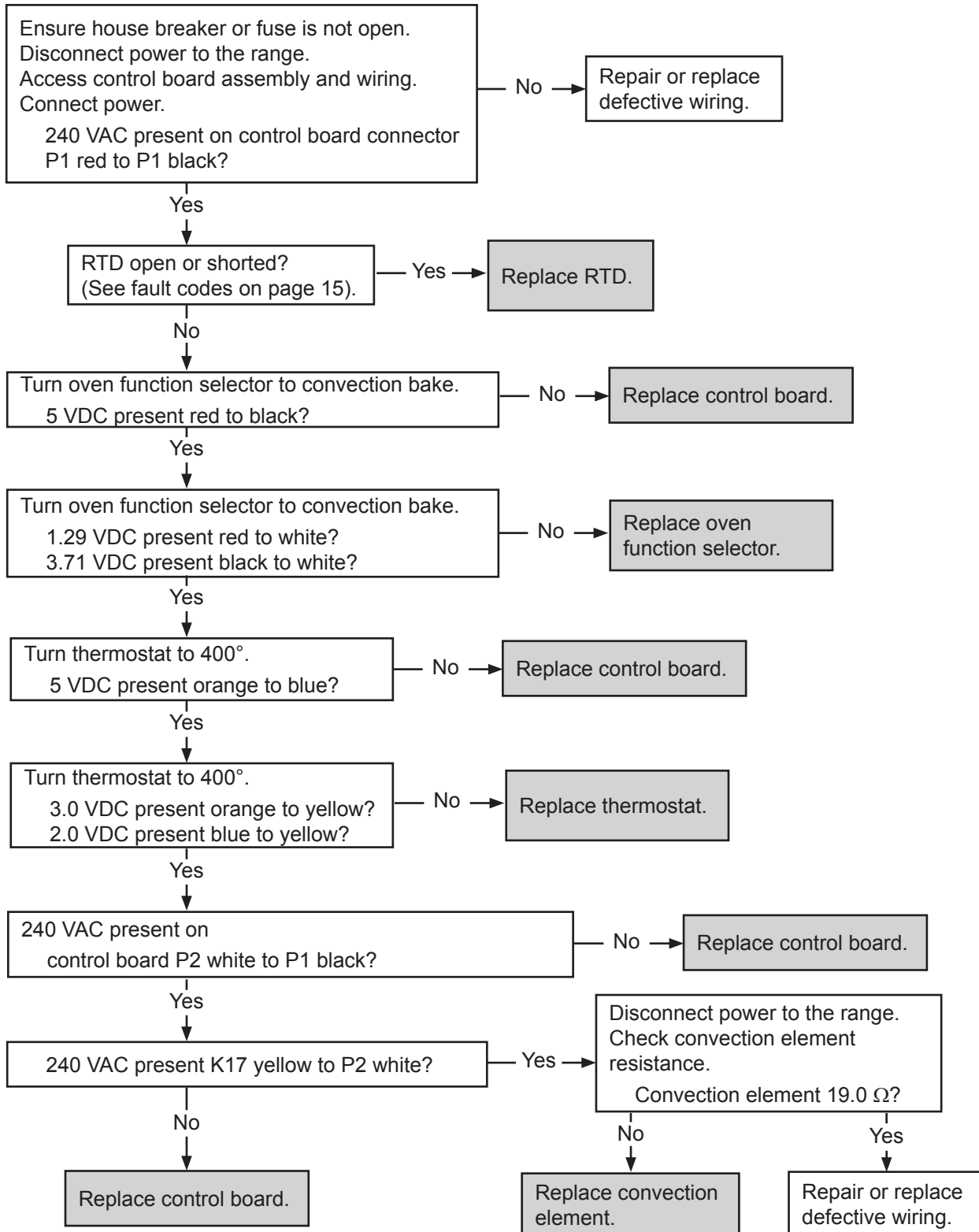
Component Characteristics

Component Testing			
Component	Operating Voltage (Approximate)	Resistance (Approximate)	Test Location
Convection Element	240 VAC	30", 36", & 48" RH Oven = 19.0 Ω 48" LH Oven = 18.5 Ω	K17 yellow - P2 white
Outer Broil Element	240 VAC	30", 36", & 48" RH Oven = 33.0 Ω 48" LH Oven = 43.7 Ω	K17 yellow - P6 grey
Inner Broil Element	240 VAC	30", 36", & 48" RH Oven = 29.3 Ω 48" LH Oven = 39.3 Ω	K17 yellow - P6 purple
Outer Bake Element	240 VAC	30", 36", & 48" RH Oven = 38.0 Ω 48" LH Oven = NOT EQUIPPED	K17 yellow - P5 blue
Inner Bake Element	240 VAC	30", 36", & 48" RH Oven = 39.0 Ω 48" LH Oven = 32.4 Ω	K17 yellow - P5 orange
Griddle Solenoid	10.5 VAC	210 Ω	On DSI Module S1 brown - SC blue
Oven RTD (Resistive Thermal Device)	5 VDC	1090 Ω at 75°F	P15 pin 1 - pin 2
Griddle RTD (Resistive Thermal Device)	5 VDC	1090 Ω at 75°F	On Griddle Control Thermostat P4 yellow - black
Convection Motor	240 VAC	100.0 Ω	P1 black - P4 blue (CCW) P1 black - P4 grey (CW)
Blower Motor	120 VAC	18.2 Ω	N - P11 white
Door Latch Motor	240 VAC	12.1 k Ω	P1 black - P12 white
Door Latch Switch (Door Unlocked)	5 VDC	∞ (Open)	P19 green - orange
	0 VDC	Closed	P19 green - blue
Door Latch Switch (Door Locked)	0 VDC	Closed	P19 green - orange
	5 VDC	Open (P19 disconnected)	P19 green - blue
Cycle Light	240 VAC	Open (Neon Light)	P1 black - P12 grey
Clean Light	240 VAC	Open (Neon Light)	P1 black - P12 purple
Oven Light Switch - OFF (Door Closed)	16 VDC	Open (P20 brown - grey)	P20 grey - purple
Oven Light Switch - ON (Door Closed)	0 VDC	0 Ω (P20 brown - grey)	P20 grey - purple
Oven Door Switch (Door Open)	0 VDC	Open (P20 brown - purple)	P20 brown - purple
Oven Door Switch (Door Closed)	16 VDC	Open (P20 brown - purple) (P20 disconnected)	P20 brown - purple

⚠ 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.

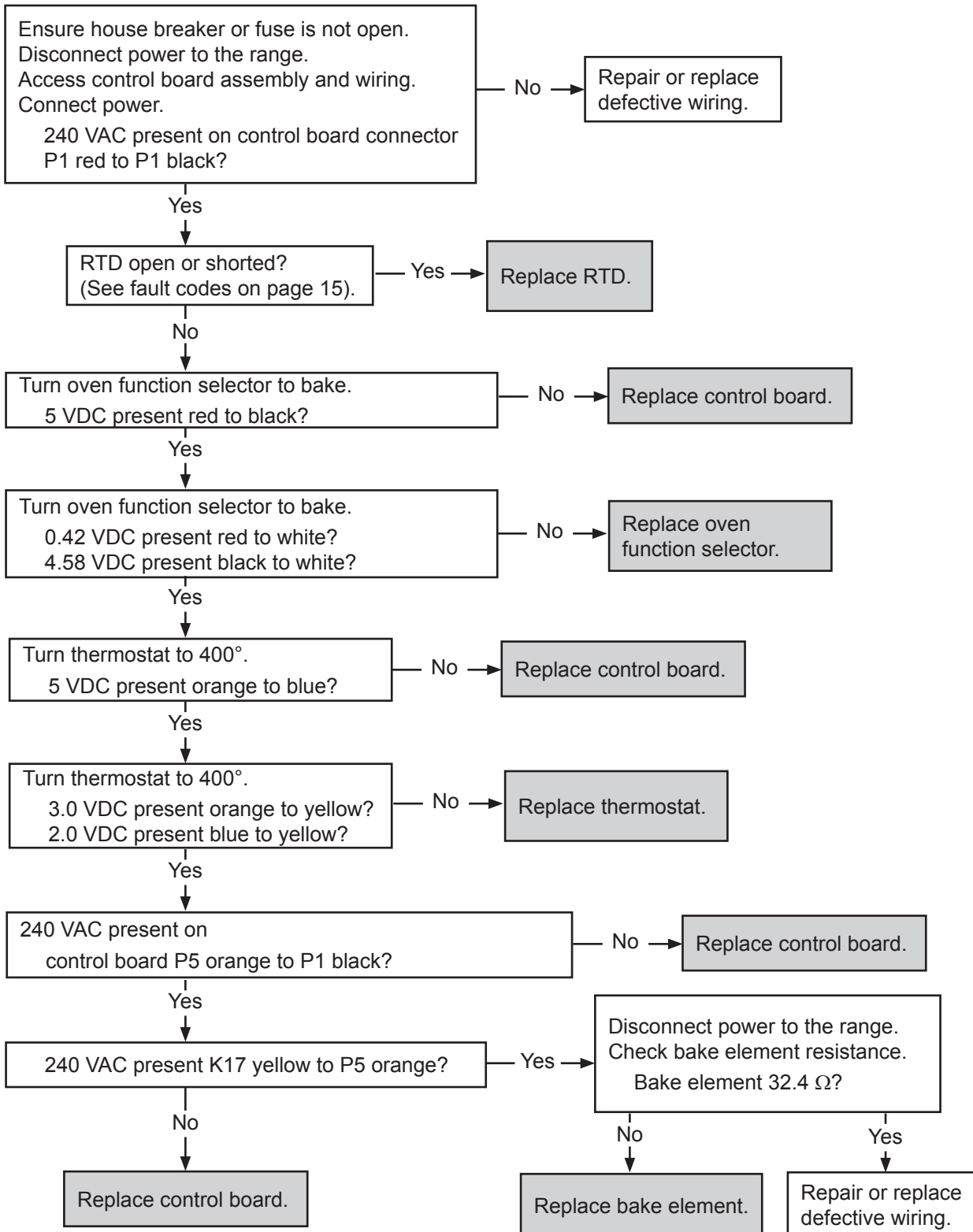
Checking Convection Element Operation



⚠ 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.

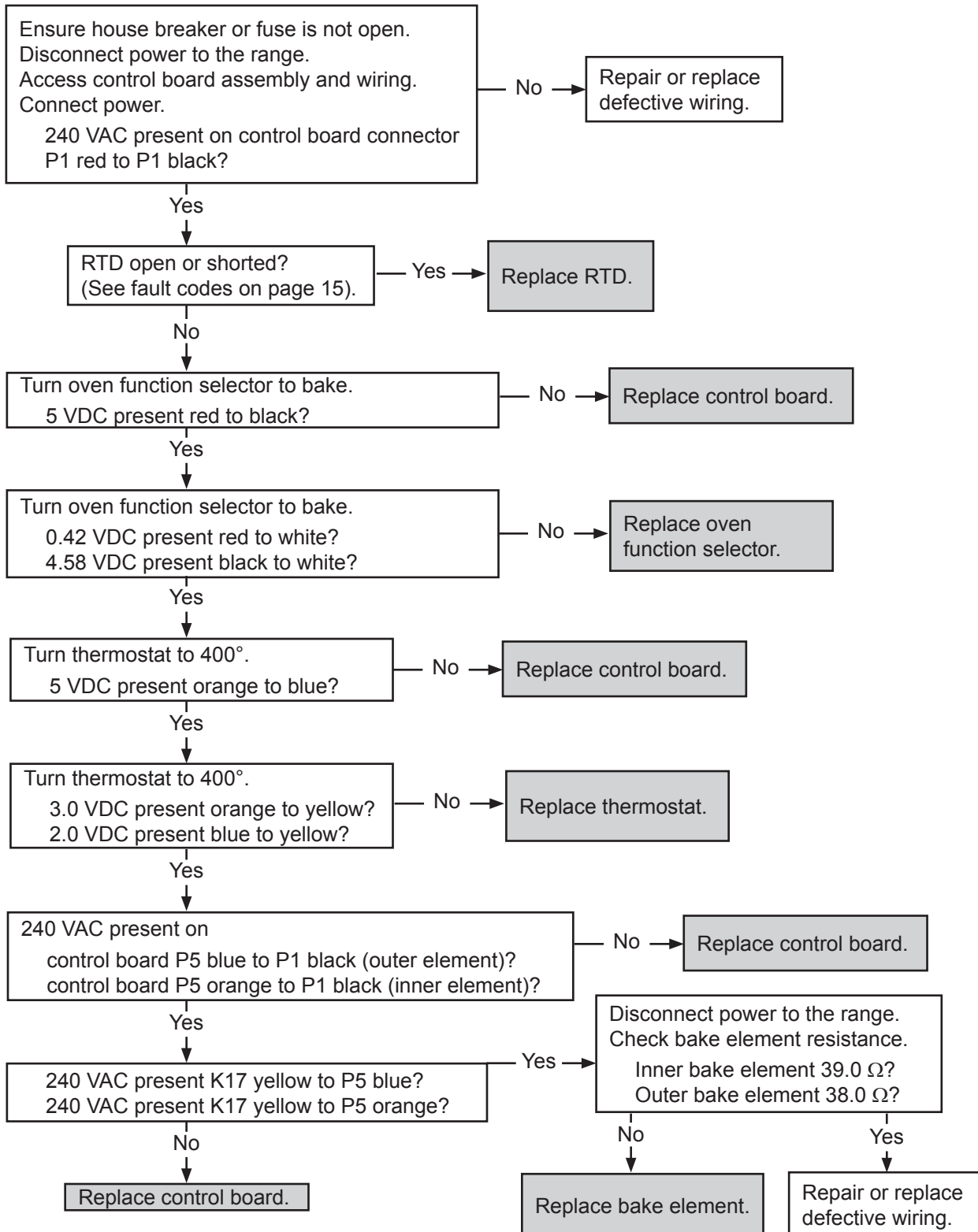
Checking LH Oven Bake Element Operation



⚠ 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.

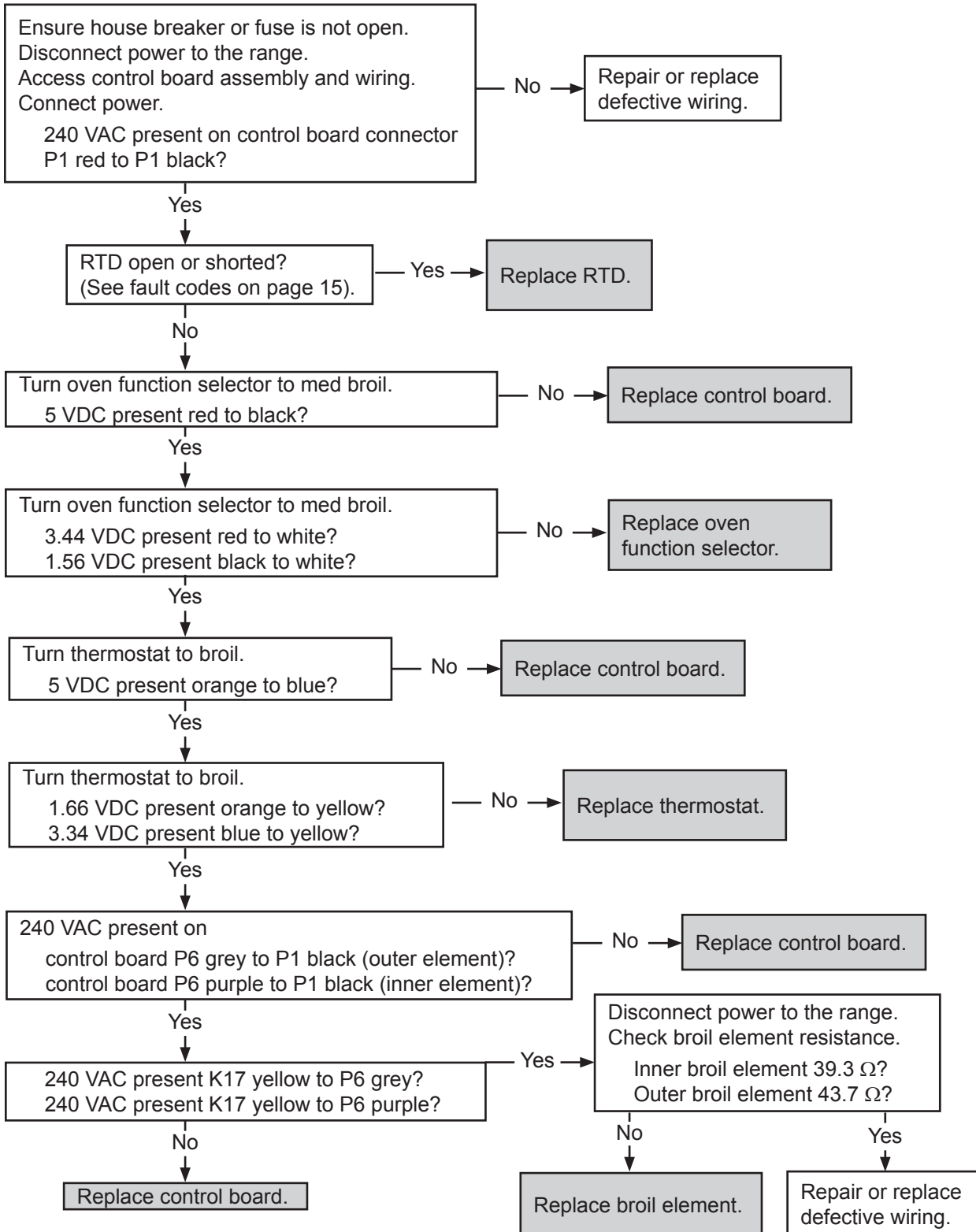
Checking RH Oven Bake Element Operation



⚠ 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.

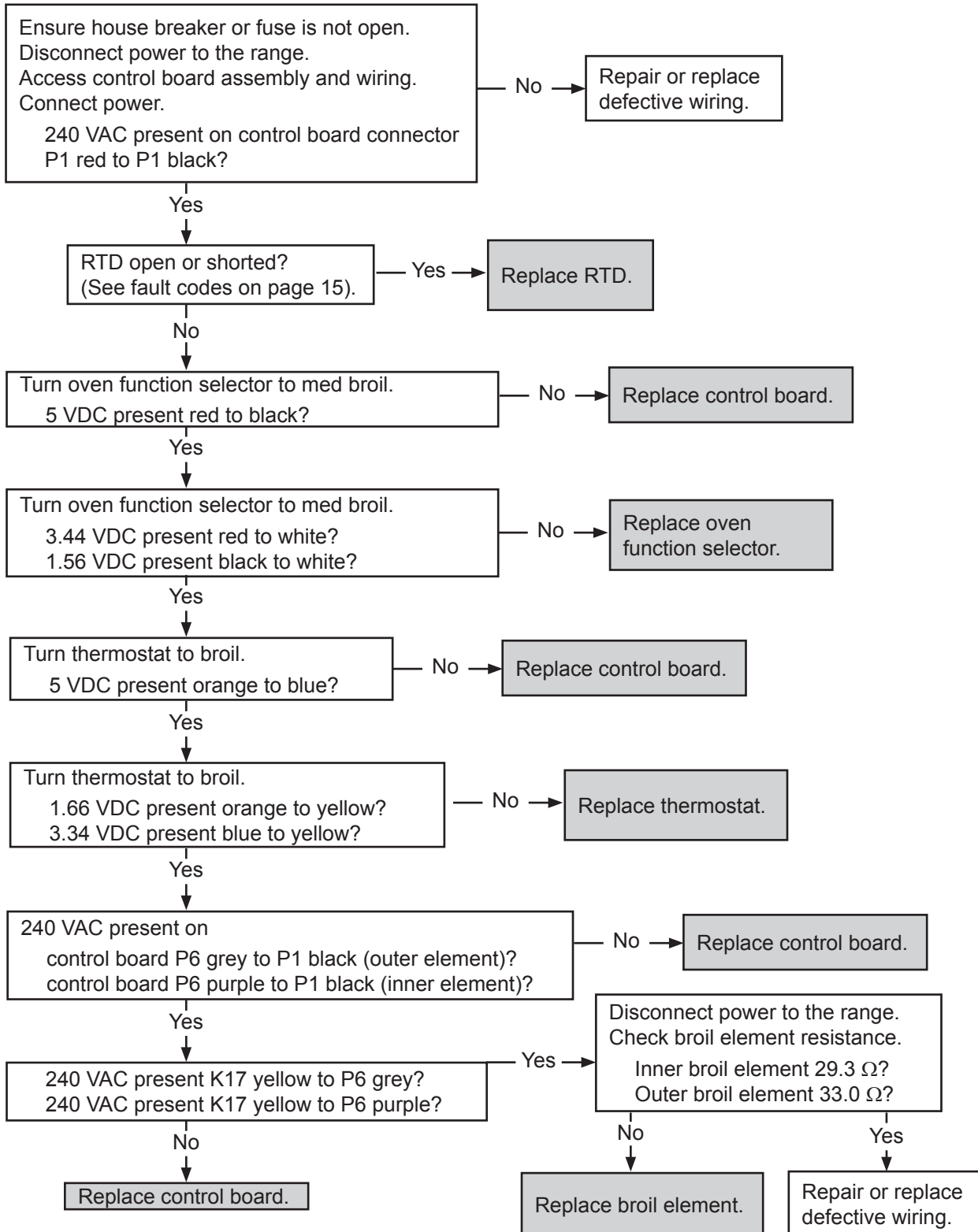
Checking LH Oven Broil Element Operation



⚠ 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.

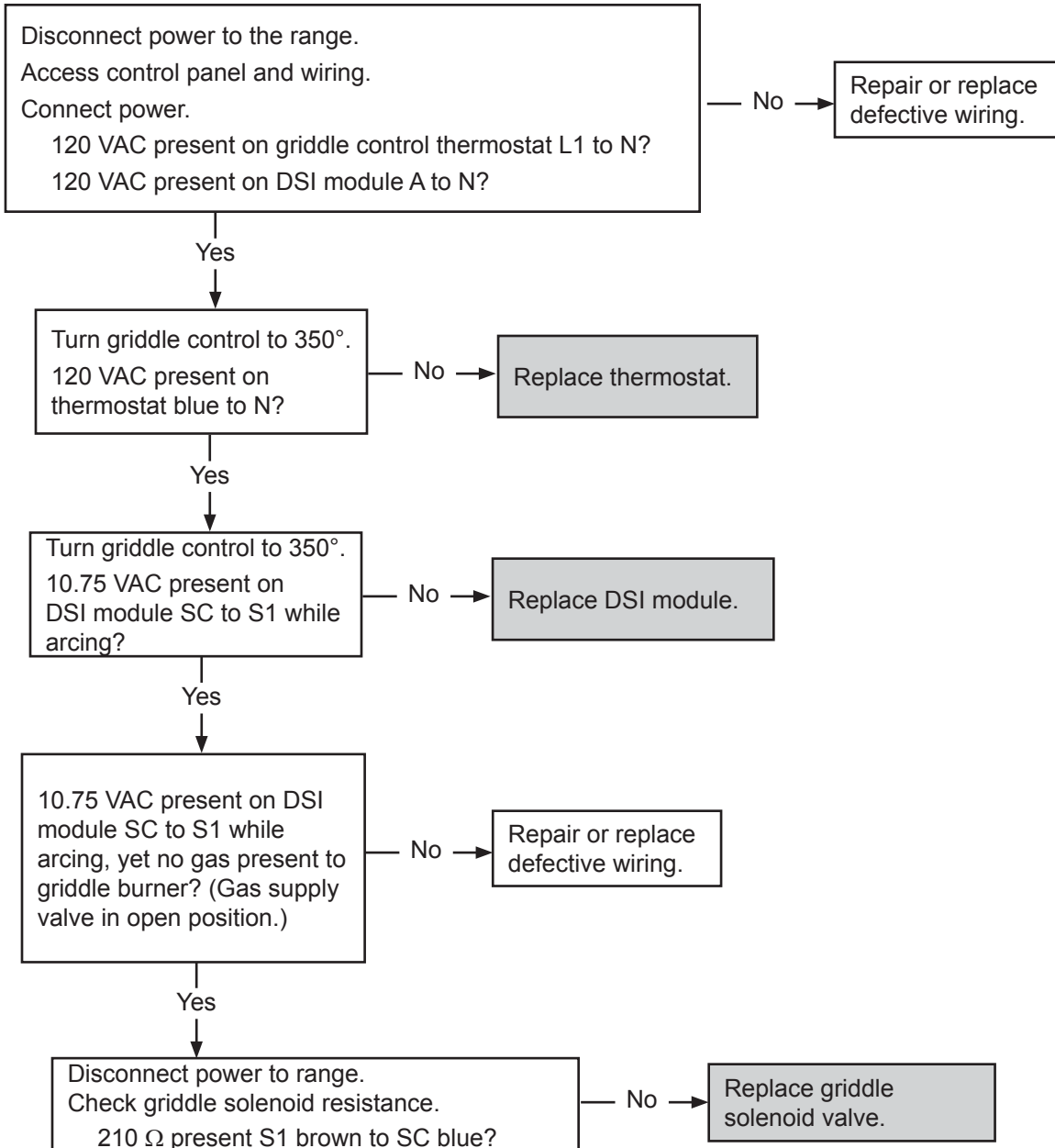
Checking RH Oven Broil Element Operation



⚠ 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



⚠ 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.

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 Ω.

To test the RTD, locate the 2-Pin Molex connector. For the oven(s), the connector is located on the control board. For the griddle, the connector is located on the griddle control.

Unplug the connector and check between the yellow and black wire. At ambient temperature you should read around 1090 ohms (±10%). An open reading (∞) 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

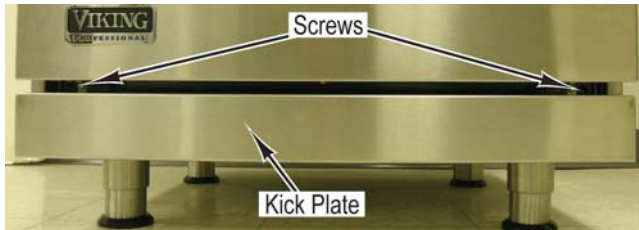
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

Access Control Board Assembly

Condition Requirements:

None

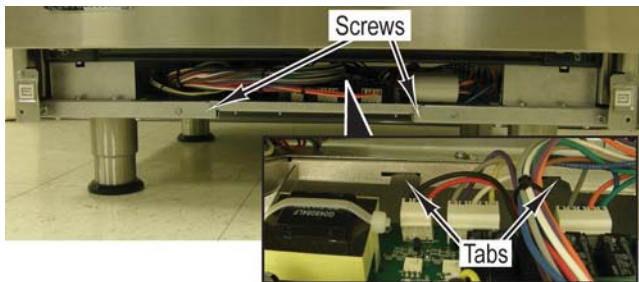
1. Remove two screws and lift kick plate from keyhole screws.



2. Remove two keyhole screws and lower access grill from range.



3. Remove two screws and slide control panel assembly from range.



Note: During installation, make sure the tabs on the control panel are aligned with the slots on the range.

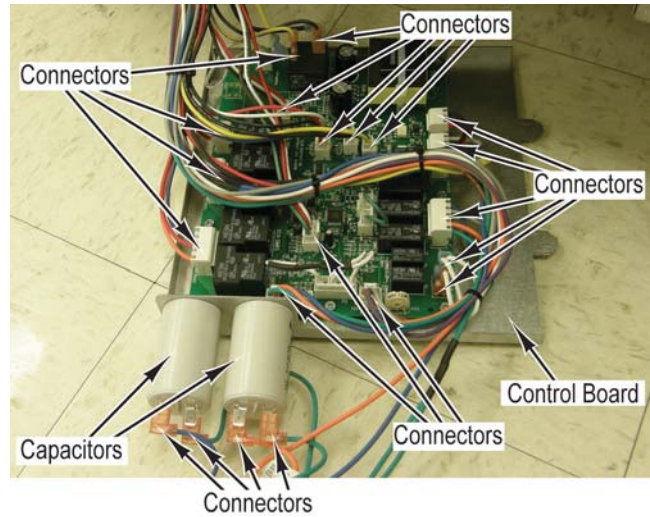
4. Reverse procedure for installation.

Control Board Removal

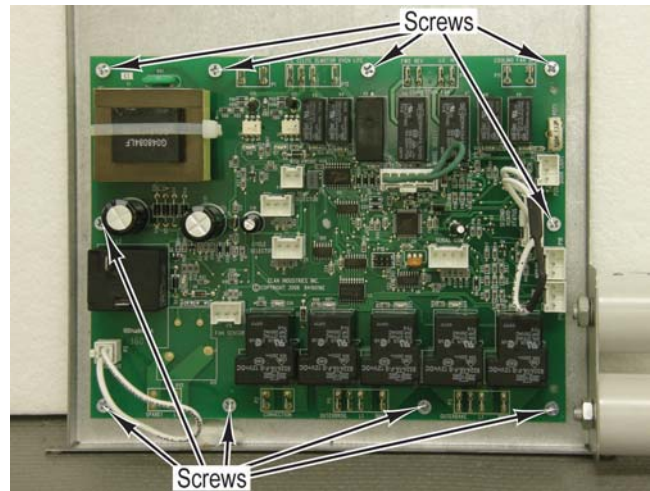
Condition Requirements:

Control Board Accessed

1. Mark and disconnect all connectors from control board and capacitors.



2. Place control board panel assembly on suitable work surface.
3. Remove ten screws and control board from lower mounting plate.



4. Reverse procedure for installation.

⚠ WARNING

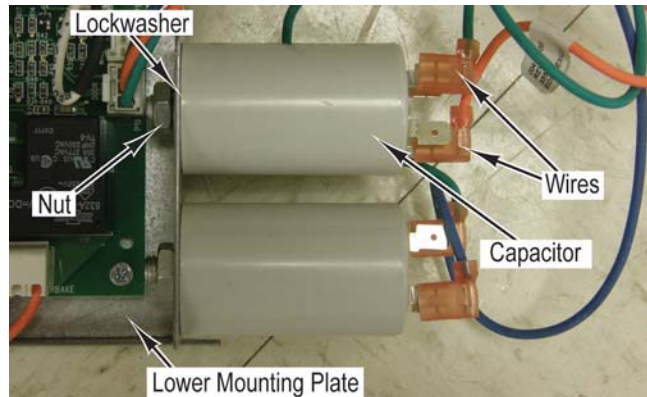
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

Motor Capacitor Removal

Condition Requirements:

Control Board Accessed

1. Mark and disconnect wires from capacitor.
2. Remove nut, lockwasher, and capacitor from lower mounting plate.



3. Reverse procedure for installation.

Door Assembly Removal

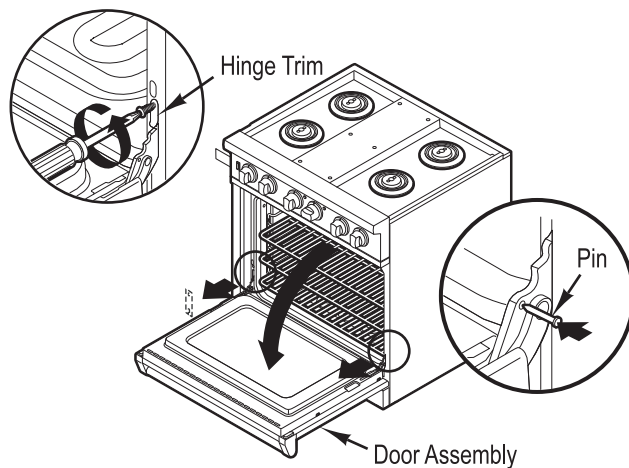
Condition Requirements:

Door Lowered

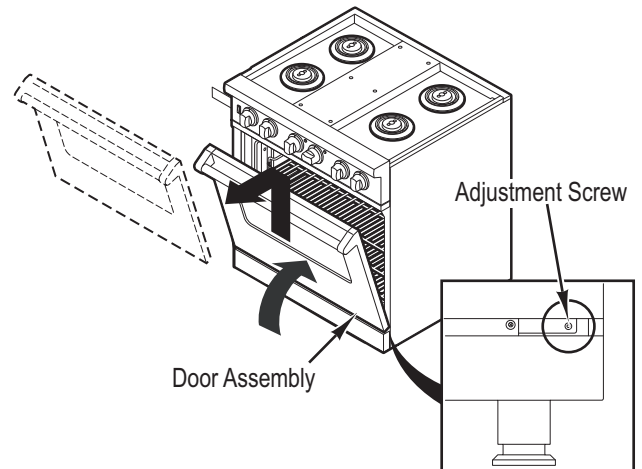
1. Place pins supplied with unit in pin holes.

Note: For personal safety, only use pins supplied with unit.

2. Remove screws and hinge trim from range.
3. 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.

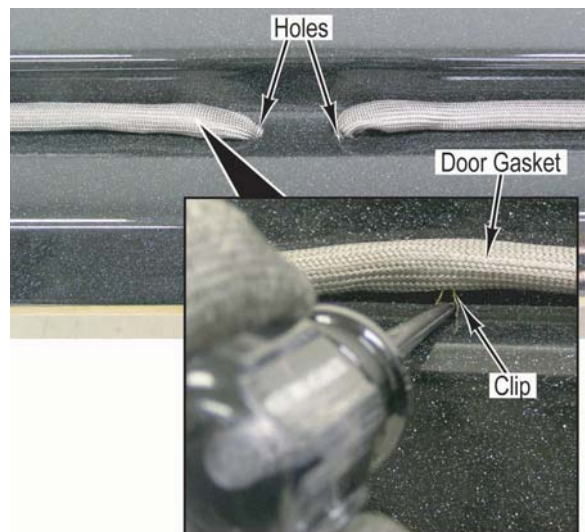
5. Reverse procedure for installation.

Door Gasket Removal

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.



3. Reverse procedure for installation.

⚠ WARNING

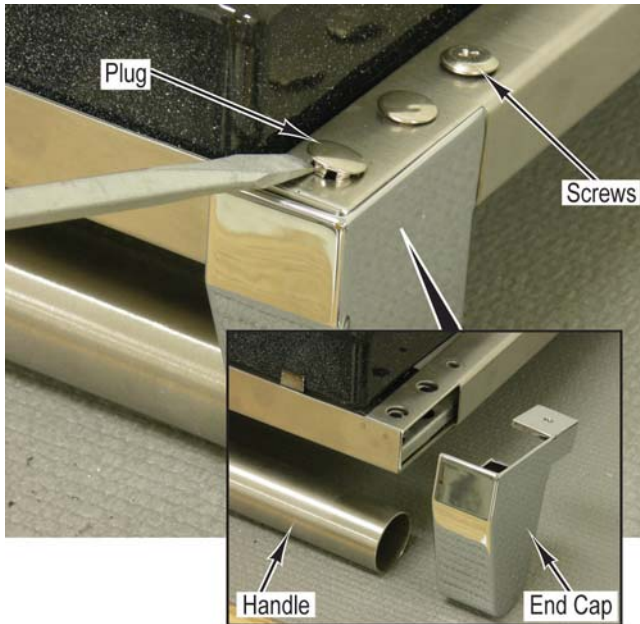
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

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.
3. Pull end cap up then out to remove from handle.



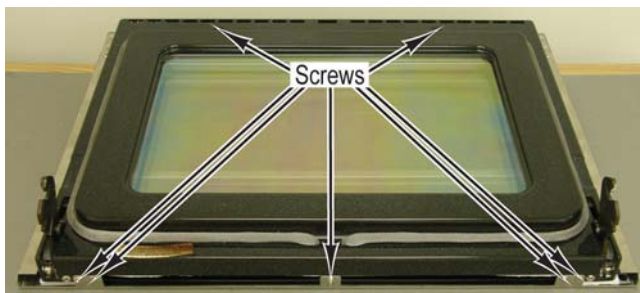
4. Reverse procedure for installation.

Outer Door Panel Assembly Removal

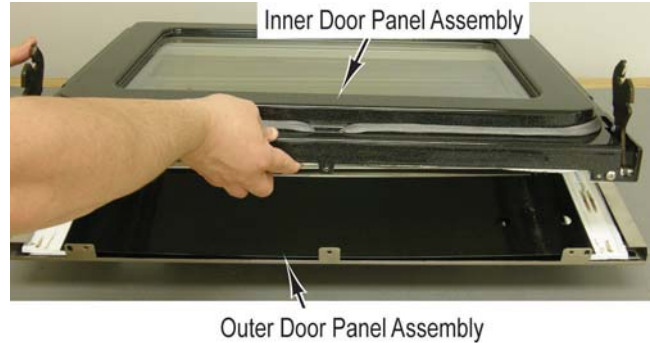
Condition Requirements:

Door Assembly Removed

1. Place the door handle side down on a protected surface.
2. Remove seven 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.

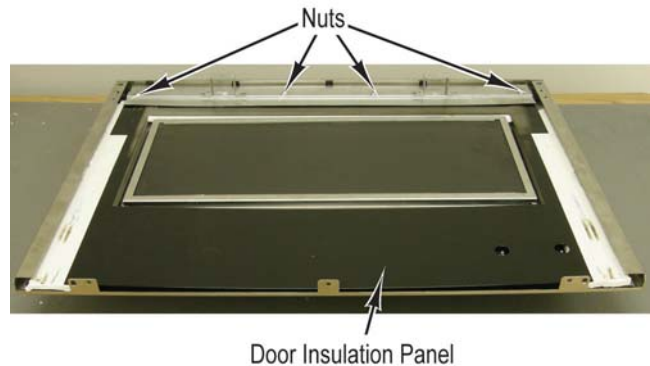
Outer Door Glass Removal

Condition Requirements:

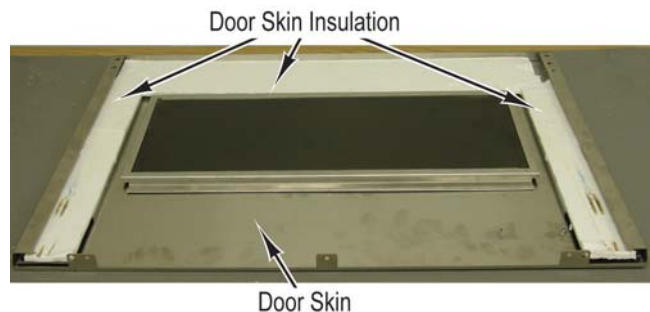
Outer Door Panel Assembly Removed

Door Handle Removed

1. Remove four locknuts and door insulation bracket from door insulation panel.
2. Remove door insulation panel by sliding toward the bottom of the door skin.



3. Remove door skin insulation from door skin.



WARNING

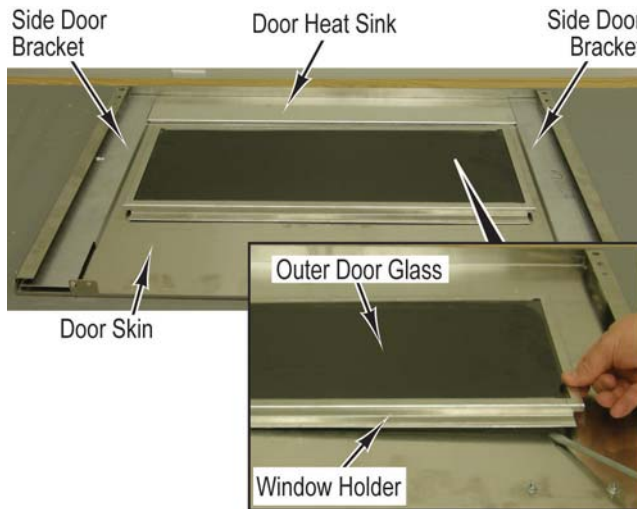
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

4. Remove side door brackets and door heat sink from door skin.
5. 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.

6. Remove outer door glass from window holder.

Note: The outer door glass is secured with double-sided tape. Use care when removing from window holder.



7. Remove J mold from door skin.



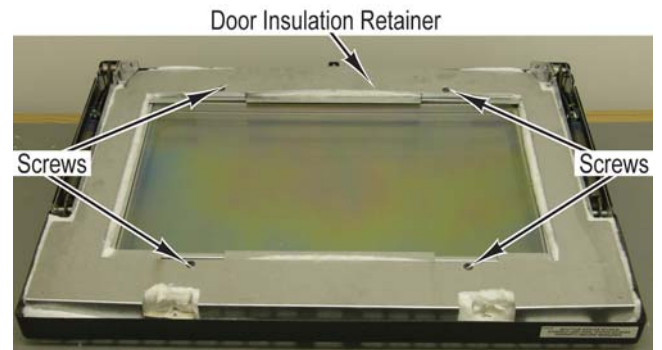
8. Reverse procedure for installation.

Inner Door Glass Removal

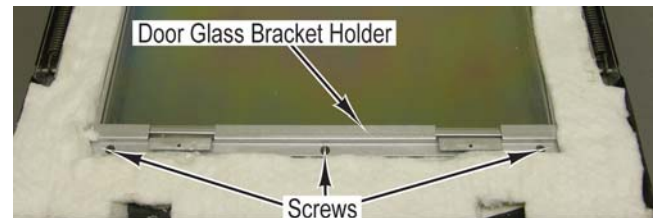
Condition Requirements:

Outer Door Panel Assembly Removed

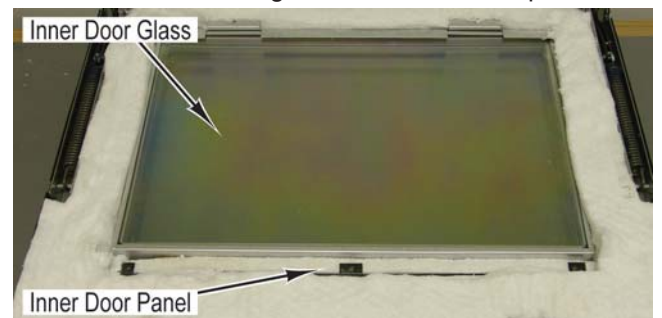
1. Remove four screws and door insulation retainer from door glass bracket holders.



2. Remove three screws and door glass bracket holder from inner door panel.



3. Remove inner door glass from inner door panel.



4. Remove black fiberglass rope from inner door panel.



Note: Use care with insulation, make sure to replace any damaged or missing insulation. Keep vent on inner door panel clear of insulation.

5. Reverse procedure for installation.

⚠ WARNING

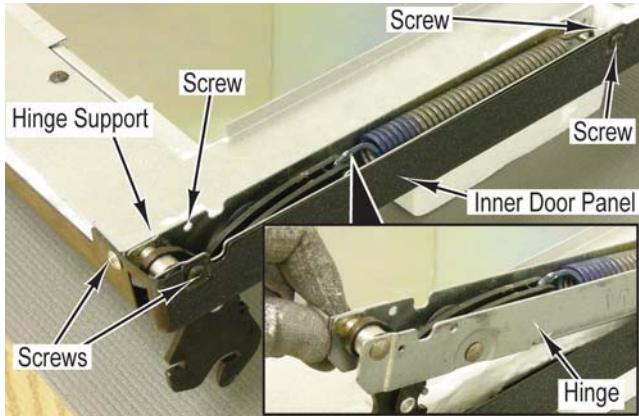
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

Door Hinge Removal

Condition Requirements:

Outer Door Panel Assembly Removed

1. Remove four screws and hinge from inner door panel.
2. Remove screw and hinge support from hinge.



Note: Use care with insulation, make sure to replace any damaged or missing insulation. Keep vent on inner door panel clear of insulation.

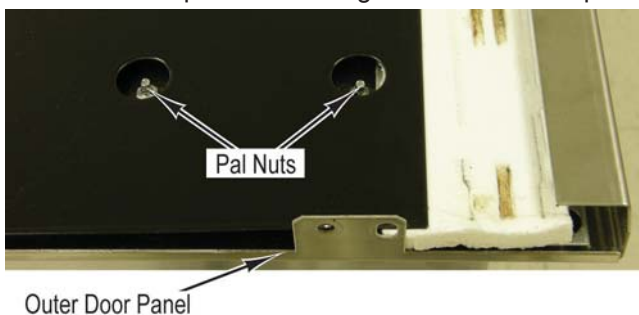
3. Reverse procedure for installation.

Door Logo Removal

Condition Requirements:

Outer Door Panel Assembly Removed

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



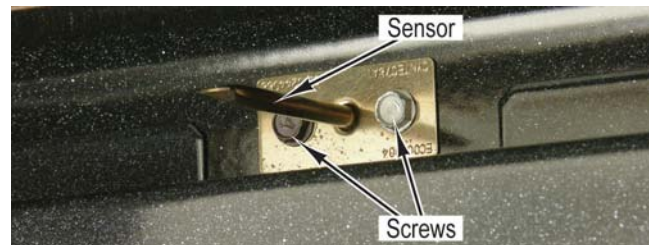
2. Reverse procedure for installation.

Temperature Sensor (RTD) Removal

Condition Requirements:

Door Assembly Removed

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

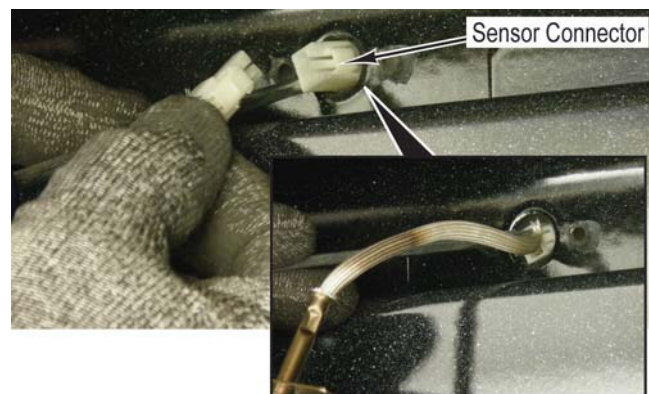


2. Pull the sensor from the liner until the sensor connector protrudes into the oven cavity.

Note: The connector will not come through the hole in the oven liner.

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 reinstalling 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

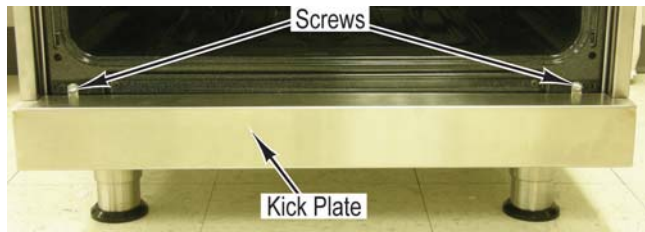
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

Bake Element Removal

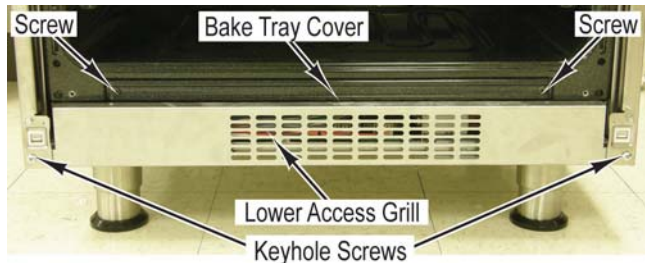
Condition Requirements:

Door Assembly Removed

1. Remove two screws and lift kick plate from keyhole screws.



2. Remove two keyhole screws and lower access grill from range.
3. Remove two screws and bake tray cover from range.

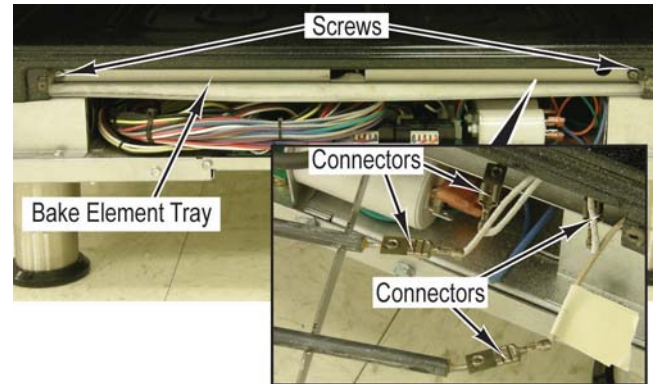


4. Remove bake element insulation from range.



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

5. Remove two screws and slide bake element tray forward to gain access to connectors.
6. Mark and disconnect four connectors from bake element.
7. Remove bake element from range.



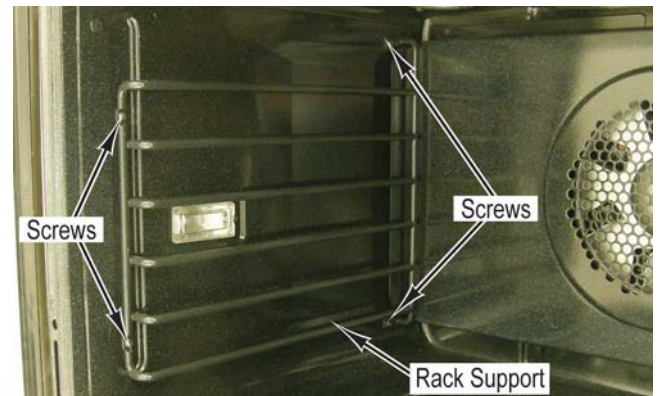
8. Reverse procedure for installation.

Rack Support Removal

Condition Requirements:

Door Assembly Removed

1. Remove screws and rack support from each side of oven cavity.



2. Reverse procedure for installation.

⚠ WARNING

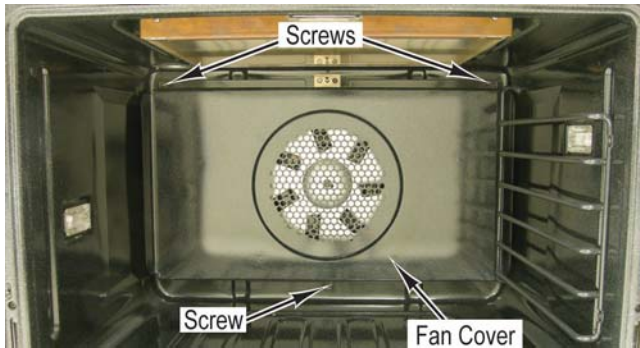
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

Convection Fan Cover Removal

Condition Requirements:

One Rack Support Removed

1. Remove three screws and fan cover from oven cavity.



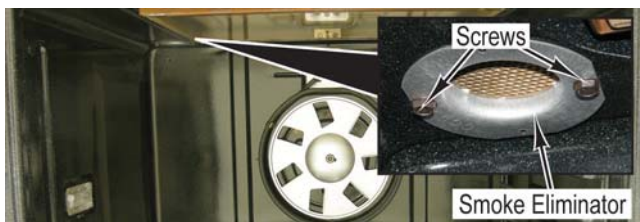
2. Reverse procedure for installation.

Smoke Eliminator Removal

Condition Requirements:

Convection Fan Cover Removed

1. Remove the two screws that hold the smoke eliminator to the top, left, rear corner of the oven liner.
2. Pull down the smoke eliminator to remove from oven liner.



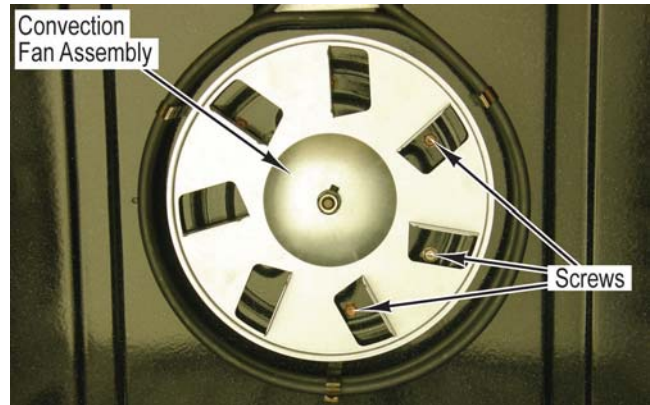
3. Reverse procedure for installation.

Convection Fan Assembly Removal

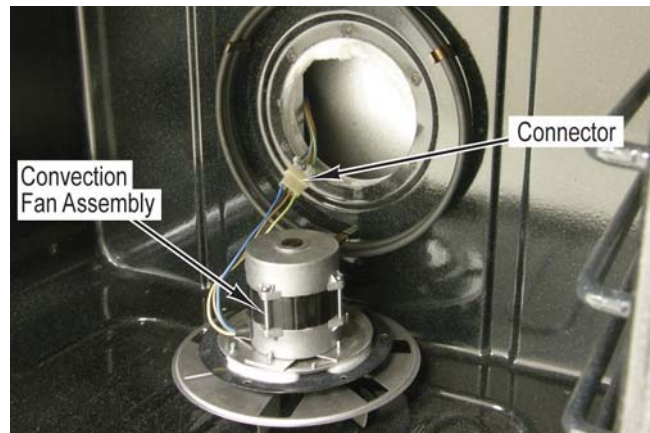
Condition Requirements:

Convection Fan Cover Removed

1. Remove six screws and set convection fan assembly on oven liner.



2. Disconnect connector and lift convection fan assembly from oven cavity.



Note: The mounting hole pattern for the convection fan assembly is NOT symmetrical. Line up holes before installing.

3. Reverse procedure for installation.

WARNING

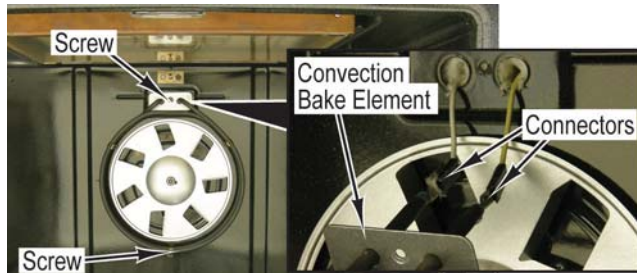
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

Convection Bake Element Removal

Condition Requirements:

Convection Fan Cover Removed

1. Remove two screws that attach the convection bake element to the oven liner.
2. Mark and disconnect two wires from convection element.



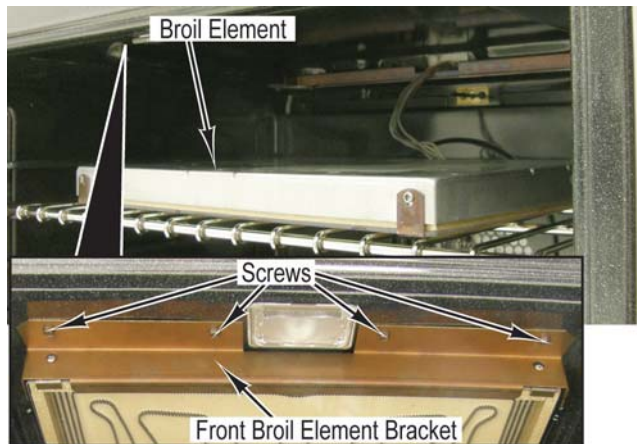
3. Reverse procedure for installation.

Broil Element Removal

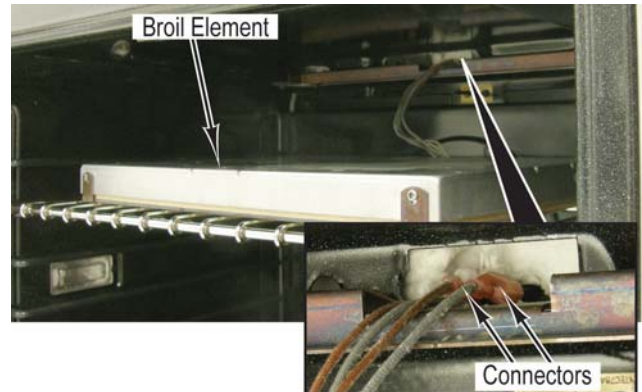
Condition Requirements:

Door Assembly Removed

1. Place oven rack in second position from top.
2. Remove four screws and front broil element bracket from oven cavity.



3. Remove broil element from back broil element bracket and lower broil element to the oven rack.
4. Pull connectors into the oven cavity.
5. Mark and disconnect four connectors from broil element.



Note: During installation, make sure broil connectors go back through the oven liner.

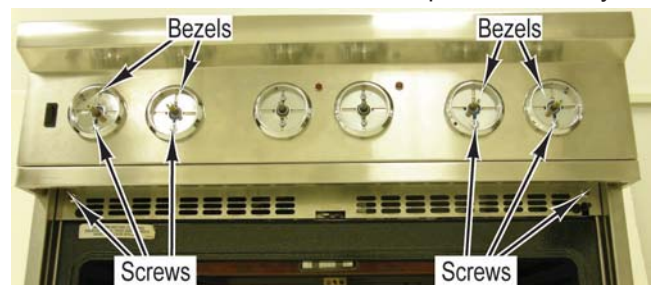
6. Reverse procedure for installation.

Control Panel Assembly Removal

Condition Requirements:

Door Lowered

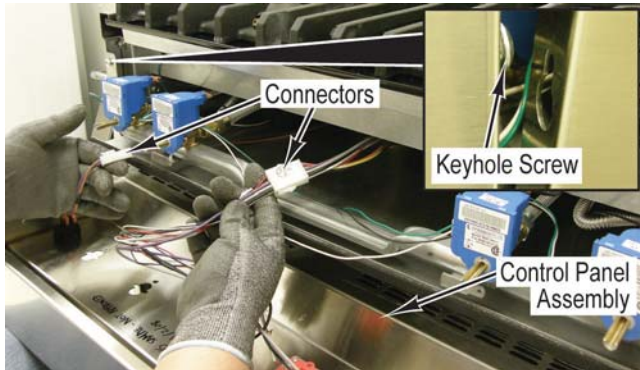
1. Remove all knobs.
2. Remove four screws and bezels from control panel assembly.
3. Remove two screws from control panel assembly.



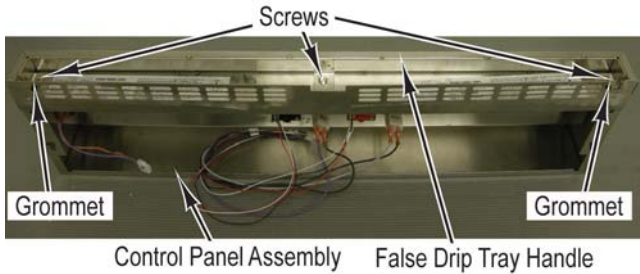
⚠ WARNING

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.

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



6. Remove grommets from control panel assembly.
7. Remove three screws and false drip tray handle from control panel assembly.



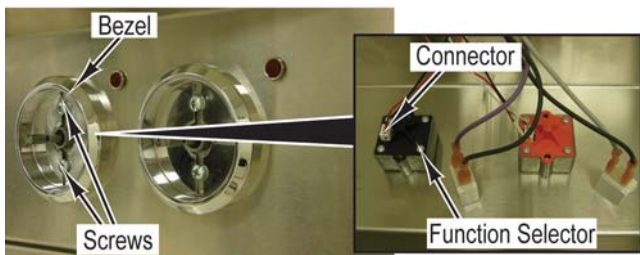
8. Reverse procedure for installation.

Oven Function Selector Removal

Condition Requirements:

Control Panel Assembly Removed

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



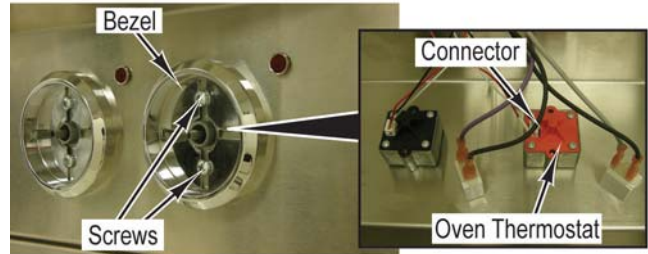
3. Reverse procedure for installation.

Oven Thermostat Removal

Condition Requirements:

Control Panel Assembly Removed

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



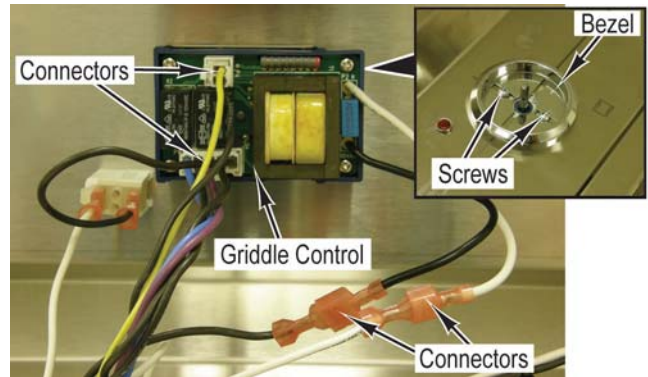
3. Reverse procedure for installation.

Griddle Control Thermostat Removal (VDSC536-4G, VDSC548-6G, & VDSC548-4GQ)

Condition Requirements:

Control Panel Assembly Removed

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



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.

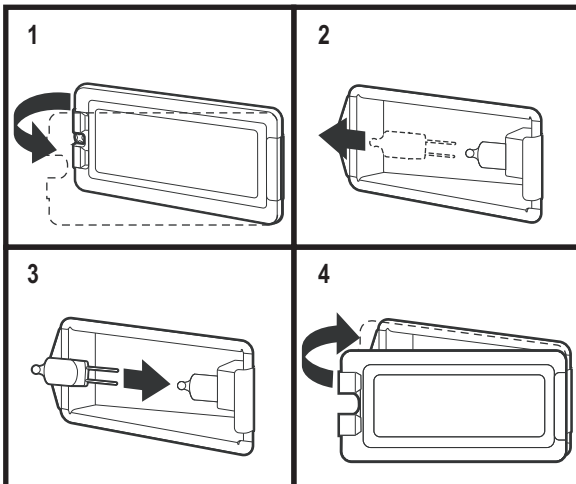
Oven Light Bulb Removal

Condition Requirements:
Door Lowered

⚠ CAUTION

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

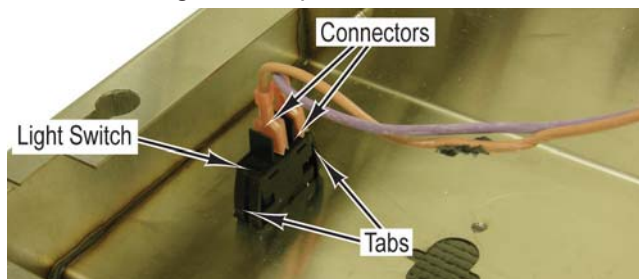
1. Unsnap glass light cover using a screwdriver in the access groove.
2. Firmly grasp light bulb and pull out.
3. Replace with halogen bulb using volt and wattage requirements listed on glass cover.
4. Replace the light cover by snapping glass cover onto metal box.



Oven Light Switch Removal

Condition Requirements:
Control Panel Assembly Removed

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

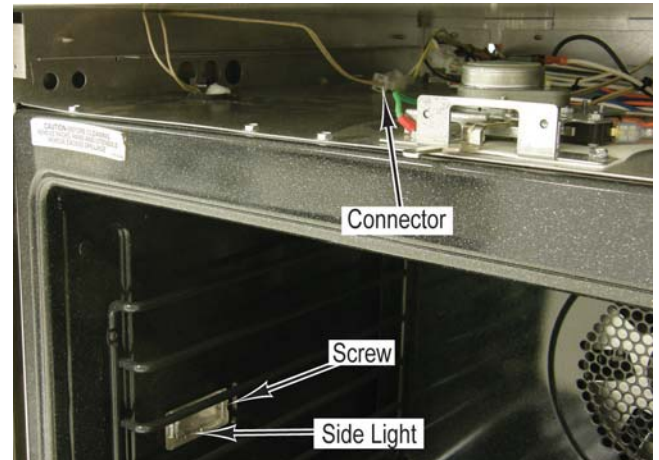


3. Reverse procedure for installation.

Side Light Housing Removal

Condition Requirements:
Door Assembly Removed
Control Panel Assembly Removed

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



3. Reverse procedure for installation.

Top Light Housing Removal

Condition Requirements:
Door Assembly Removed
Control Panel Assembly Removed

1. Remove lens and bulb.
2. Disconnect connector for top light.
3. Use a screw driver to depress two tabs in top light housing and tilt front of housing down to remove.



4. Reverse procedure for installation.

⚠ WARNING

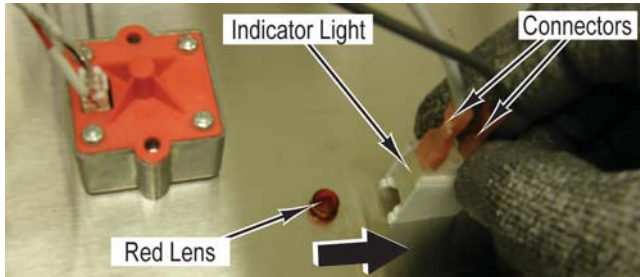
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

Indicator Lights Removal

Condition Requirements:

Control Panel Assembly Removed

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.



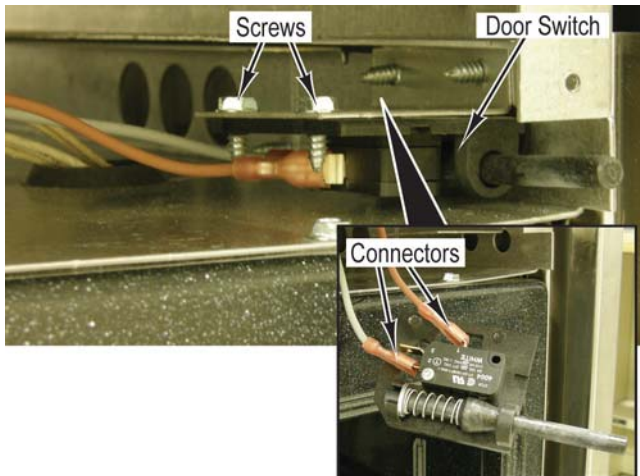
3. Reverse procedure for installation.

Door Switch Removal

Condition Requirements:

Control Panel Assembly Removed

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



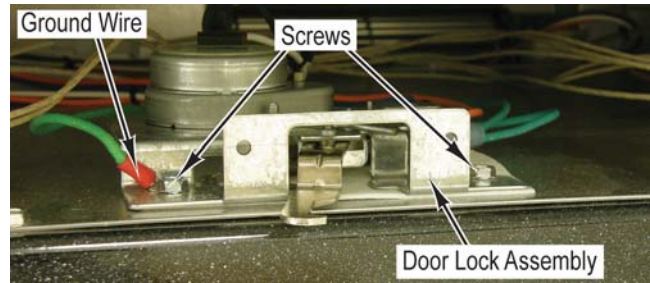
3. Reverse procedure for installation.

Door Lock Assembly Removal

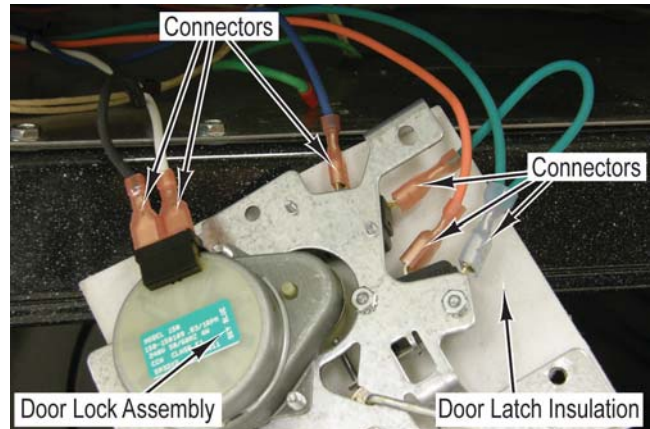
Condition Requirements:

Control Panel Assembly Removed

1. Remove two screws and ground wire from door lock assembly.



2. Mark and disconnect six connectors from door lock assembly.
3. Remove door lock assembly and lower latch insulation from range.



4. Reverse procedure for installation.

WARNING

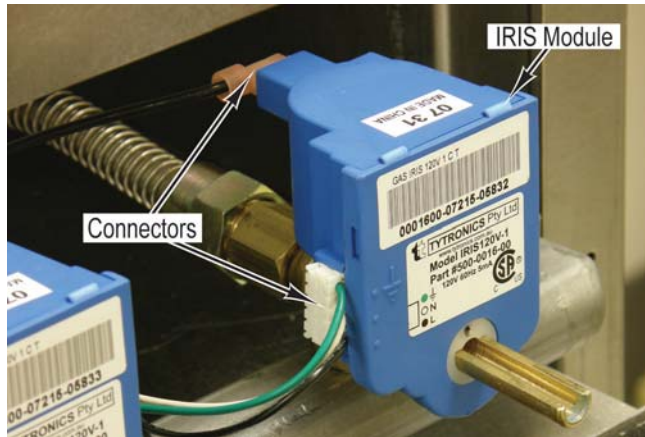
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

IRIS Module Removal

Condition Requirements:

Control Panel Assembly Removed

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



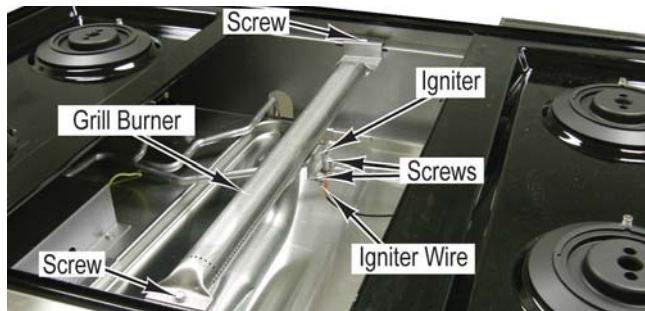
3. Reverse procedure for installation.

Char-Grill Burner and Igniter Removal (VDSC536-4Q, VDSC548-6Q, & VDSC548-4GQ)

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.



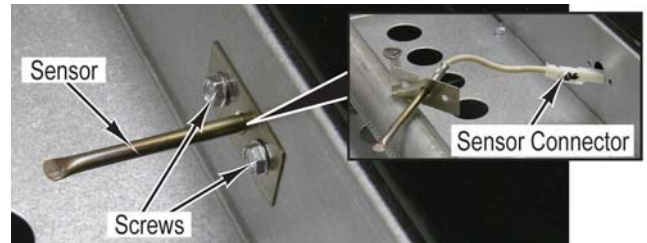
4. Reverse procedure for installation.

Griddle Temperature Sensor (RTD) Removal (VDSC536-4G, VDSC548-6G, & VDSC548-4GQ)

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.



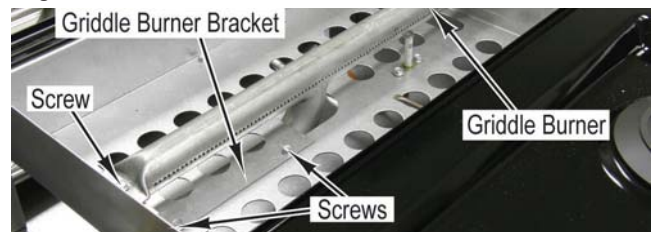
4. Reverse procedure for installation.

Griddle Burner Removal (VDSC536-4G, VDSC548-6G, & VDSC548-4GQ)

Condition Requirements:

Griddle Plate and Drip Pan Removed

1. Remove four 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 (VDSC536-4G, VDSC548-6G, & VDSC548-4GQ)

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.

⚠ WARNING

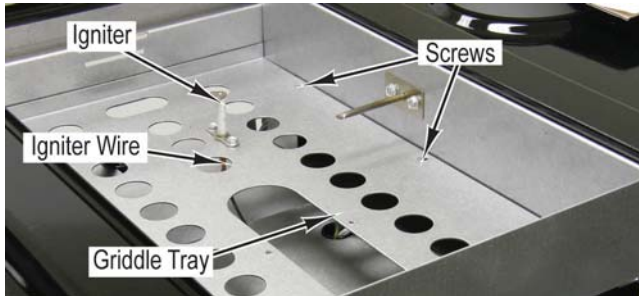
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

Direct Spark Module Removal (VDSC536-4G, VDSC548-6G, & VDSC548-4GQ)

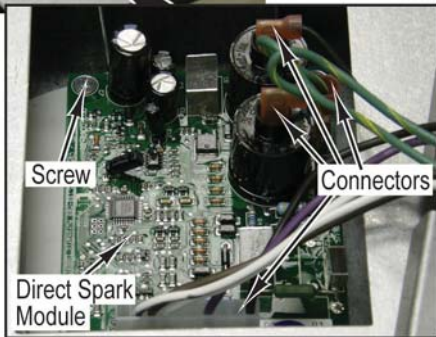
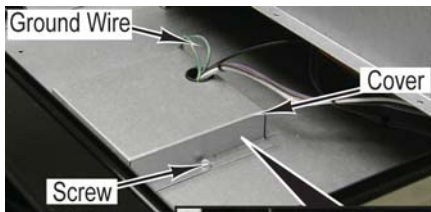
Condition Requirements:

Griddle Burner Removed

1. Remove six screws and griddle tray from range.
2. Disconnect igniter wire from griddle igniter.



3. Remove three screws, ground wire and cover from range.
4. Mark and disconnect four connectors from direct spark module.
5. Remove four screws and direct spark module from range.



4. Reverse procedure for installation.

Burner Valve Removal

Condition Requirements:

Control Panel Assembly Removed

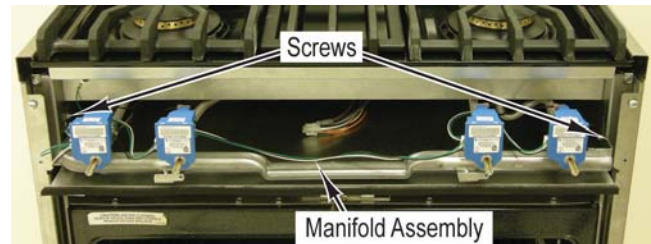
Gas Shut Off

⚠ DANGER

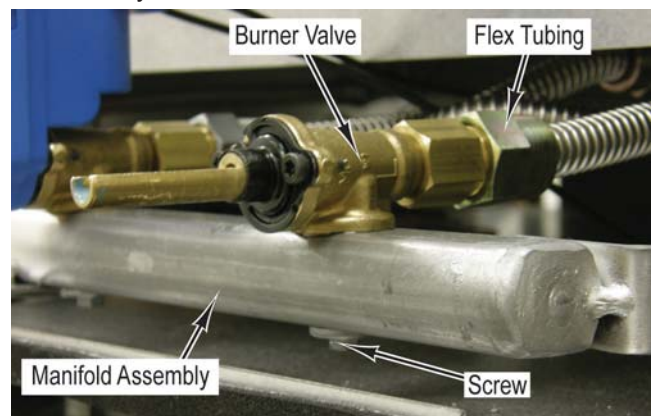
Gas leak hazard. To avoid risk of personal injury or death, leak testing of the appliance must be conducted according to the manufacturer's instructions. Before placing appliance in operation, always check for gas leaks with soapy water solution.

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

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



2. Pull to remove module from burner valve.
3. Remove flex tubing from 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.

Island Trim Removal

Condition Requirements:

Rear of Range Accessed

1. Remove four screws and island trim from range.



2. Reverse procedure for installation.

Backguard Assembly Removal

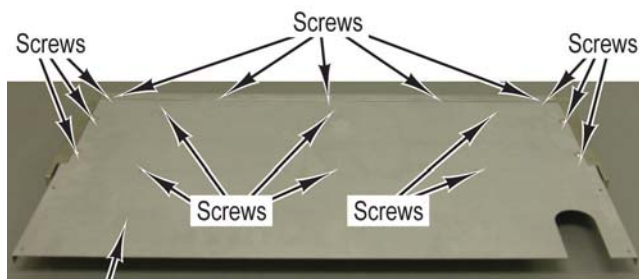
Condition Requirements:

Rear of Range Accessed

1. Remove four screws and backguard assembly from range.



2. Place backguard assembly on suitable work surface.
3. Remove 17 screws and back.



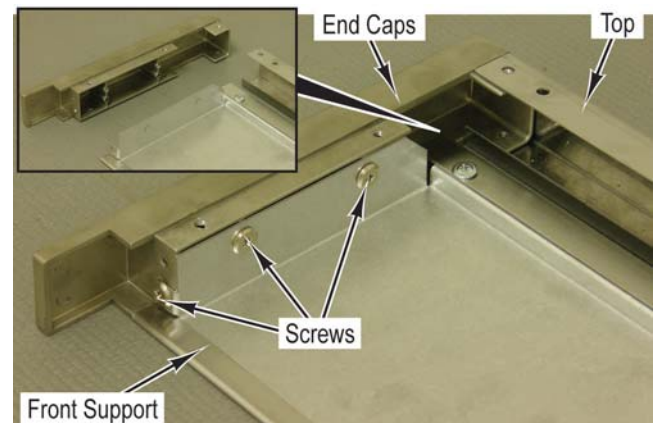
Backguard Back

4. Remove inner diverter.

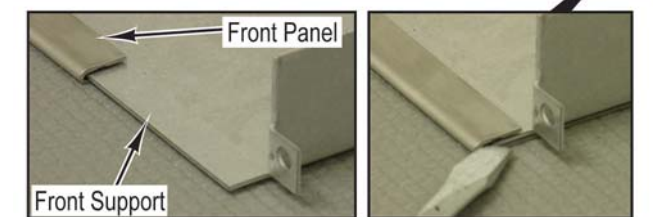
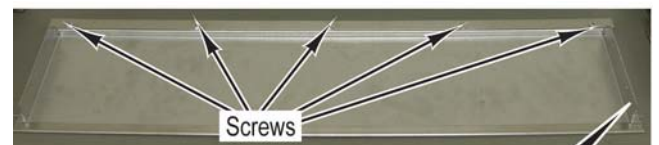


Inner Diverter

5. Remove six screws, end caps, and top from front support.



6. Remove five screws and slide front support from front panel.



Note: Pry corner of front panel slightly to allow front support to slide from the front panel.

7. Reverse procedure for installation.

⚠ WARNING

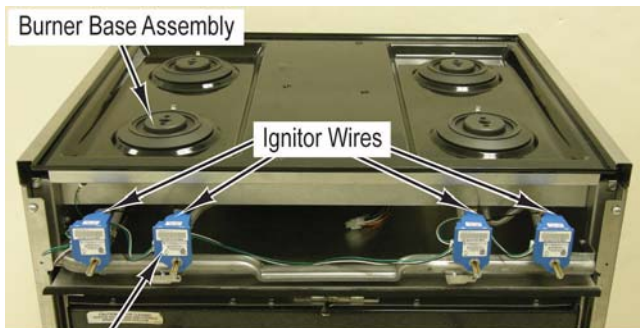
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

Main Top Removal

Condition Requirements:

Control Panel Assembly Removed
Island Trim or Backguard Assembly Removed

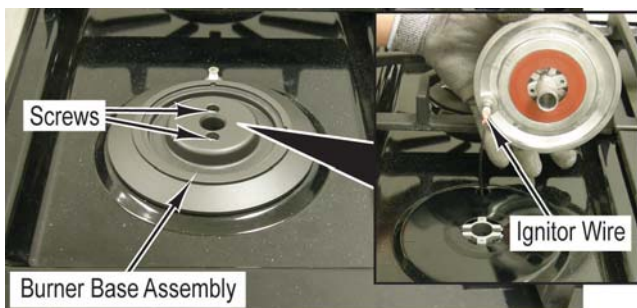
1. Remove grates, burner caps, and burner heads from each burner base assembly.
2. Mark and disconnect ignition wire from each IRIS module.



IRIS Module

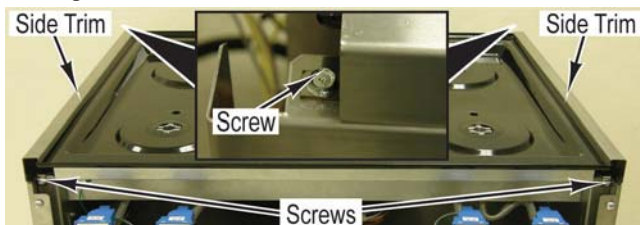
3. Remove two screws from each burner base assembly.
4. Lift each burner base assembly up to remove from range.

Note: Keep igniter wires attached to each burner base assembly.



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:

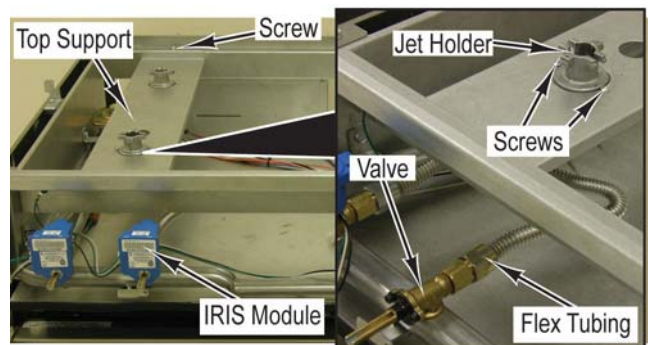
Main Top Removed
Gas Shut Off

⚠ 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 IRIS module from valve.
2. Disconnect flex tubing from valve.
3. Remove two screws and jet holder from top support.
4. Remove flex tubing from jet holder.
5. Remove screw and top support from range.



6. Reverse procedure for installation.
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.

Manifold Assembly Removal

Condition Requirements:

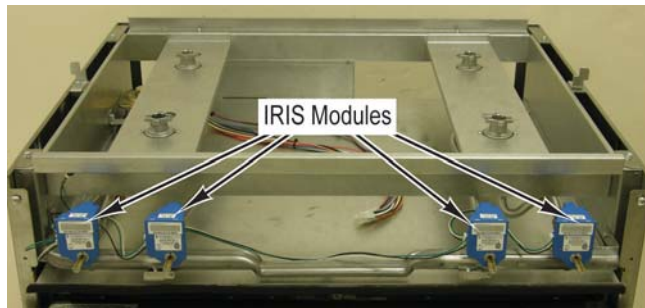
- Main Top Removed
- Gas Supply Disconnected

⚠ DANGER

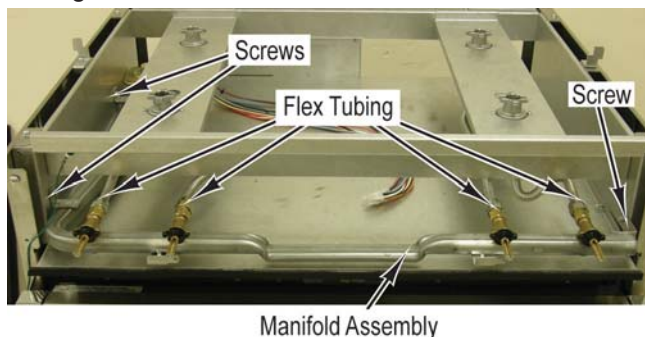
Gas leak hazard. To avoid risk of personal injury or death, leak testing of the appliance must be conducted according to the manufacturer's instructions. Before placing appliance in operation, always check for gas leaks with soapy water solution.

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

1. Remove all IRIS modules from valves.



2. Disconnect flex tubing from each valve.
3. Remove three screws and manifold assembly from range.



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

Pressure Regulator Removal

Condition Requirements:

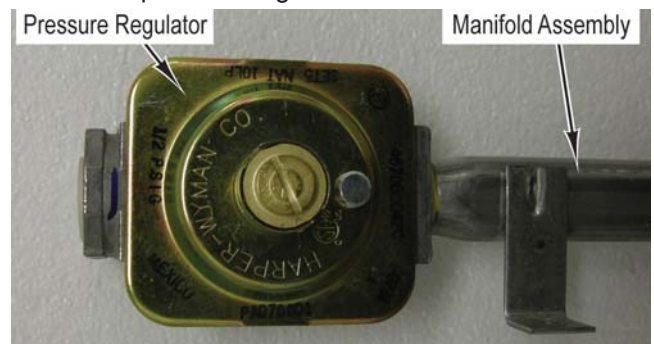
- Manifold Assembly Removed

⚠ 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 pressure regulator from manifold.



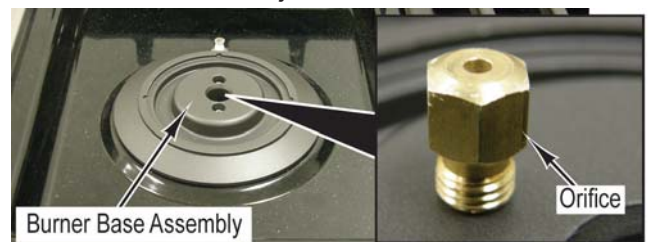
2. Reverse procedure for installation.
3. Perform gas leak test.

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.

⚠ WARNING

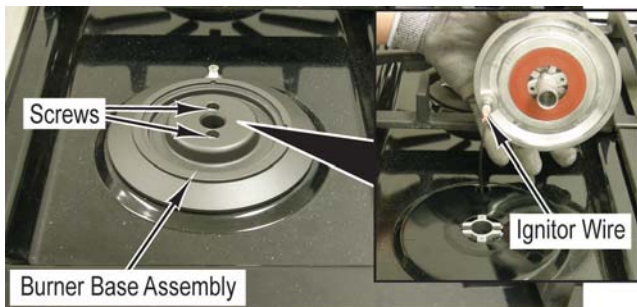
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

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.

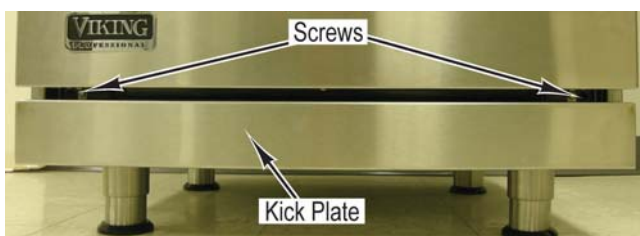
Side Trim and Side Panel Removal

Condition Requirements:

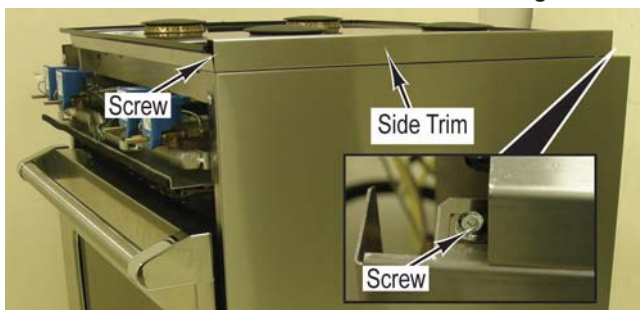
Control Panel Assembly Removed

Island Trim or Backguard Assembly Removed

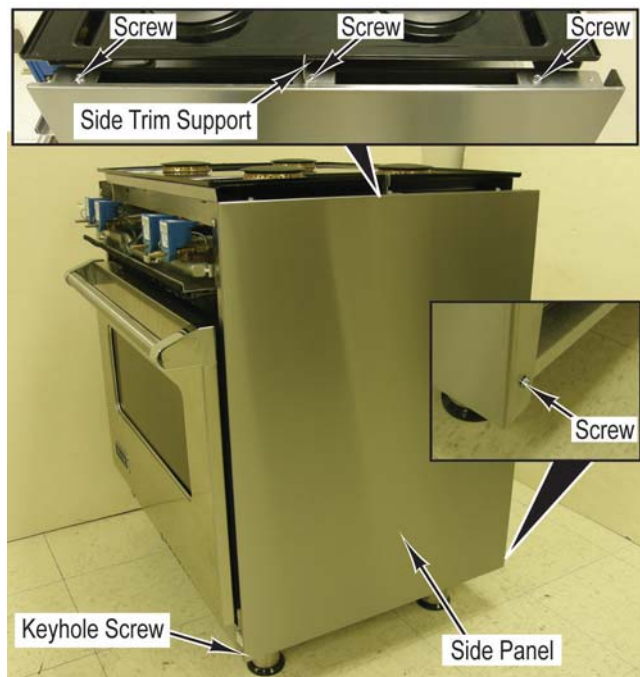
1. Remove two screws and lift kick plate from keyhole screws.



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.

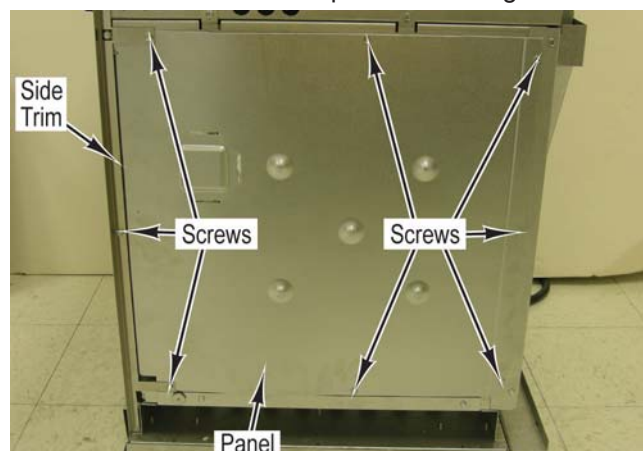
Hinge Receiver Removal

Condition Requirements:

Door Assembly Removed

Side Panel Removed

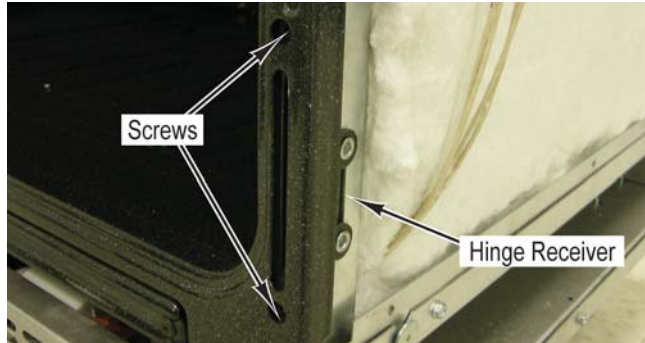
1. Remove three screws and side trim from range.
2. Remove five screws and panel from range.



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.

3. Remove two screws and hinge receiver from range.



4. Reverse procedure for installation.

Back Panel Removal

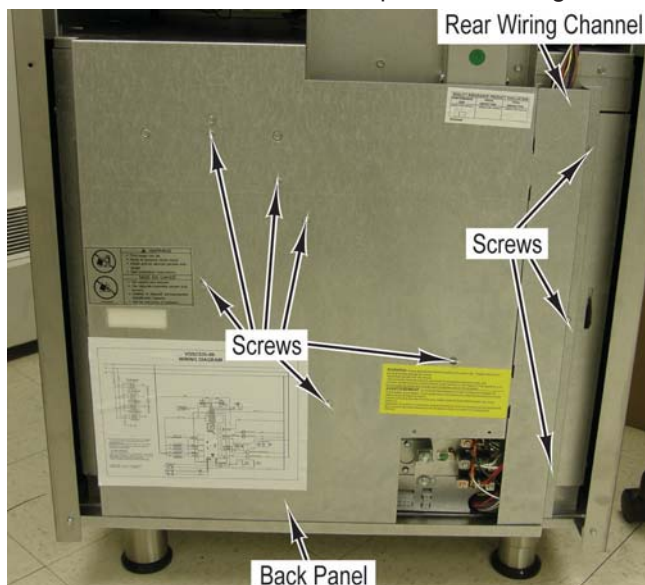
Condition Requirements:

Island Trim or Backguard Assembly Removed

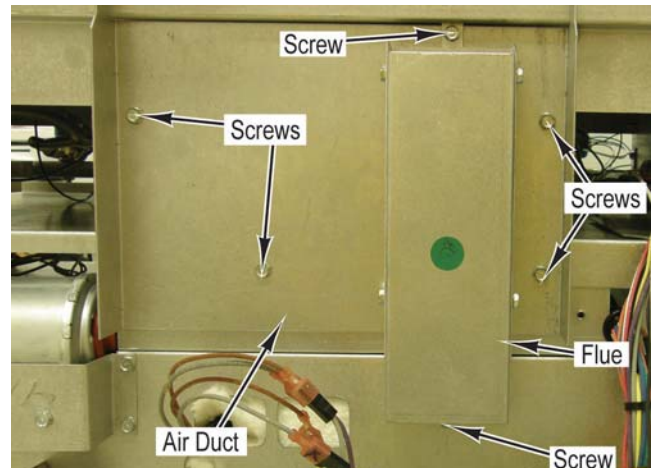
1. Remove two screws and access door from back cover.



2. Remove three screws and rear wiring channel from range.
3. Remove 12 screws and back panel from range.



4. Remove two screws and flue from air duct.
5. Remove four screws and air duct from range.



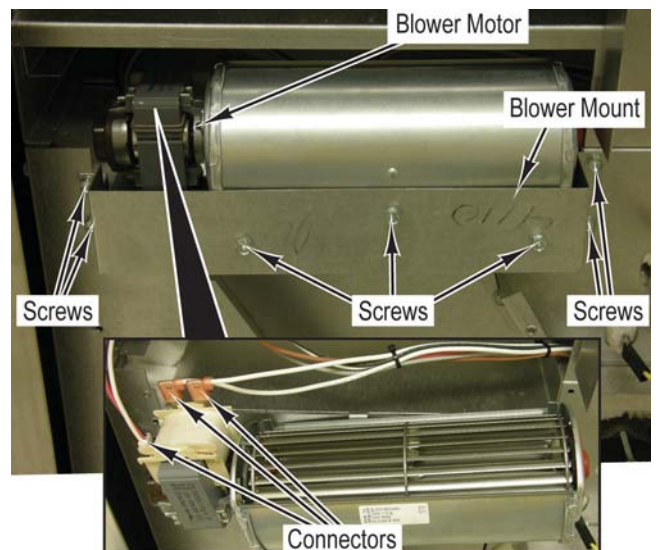
6. Reverse procedure for installation.

Cooling Blower Motor Removal

Condition Requirements:

Back Panel Removed

1. Remove three screws from blower motor.
2. Remove four screws and blower mount from range.
3. Mark and disconnect three connectors and remove blower motor.



4. Reverse procedure for installation.

⚠ WARNING

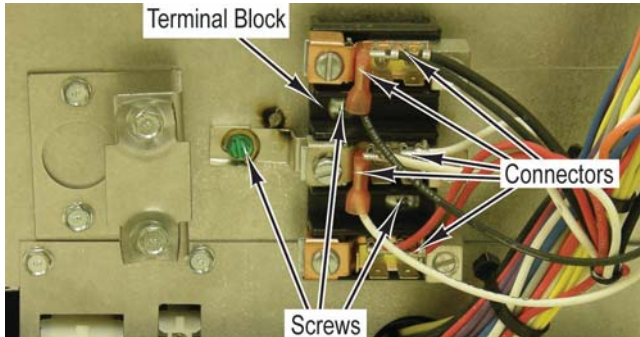
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

Terminal Block Removal

Condition Requirements:

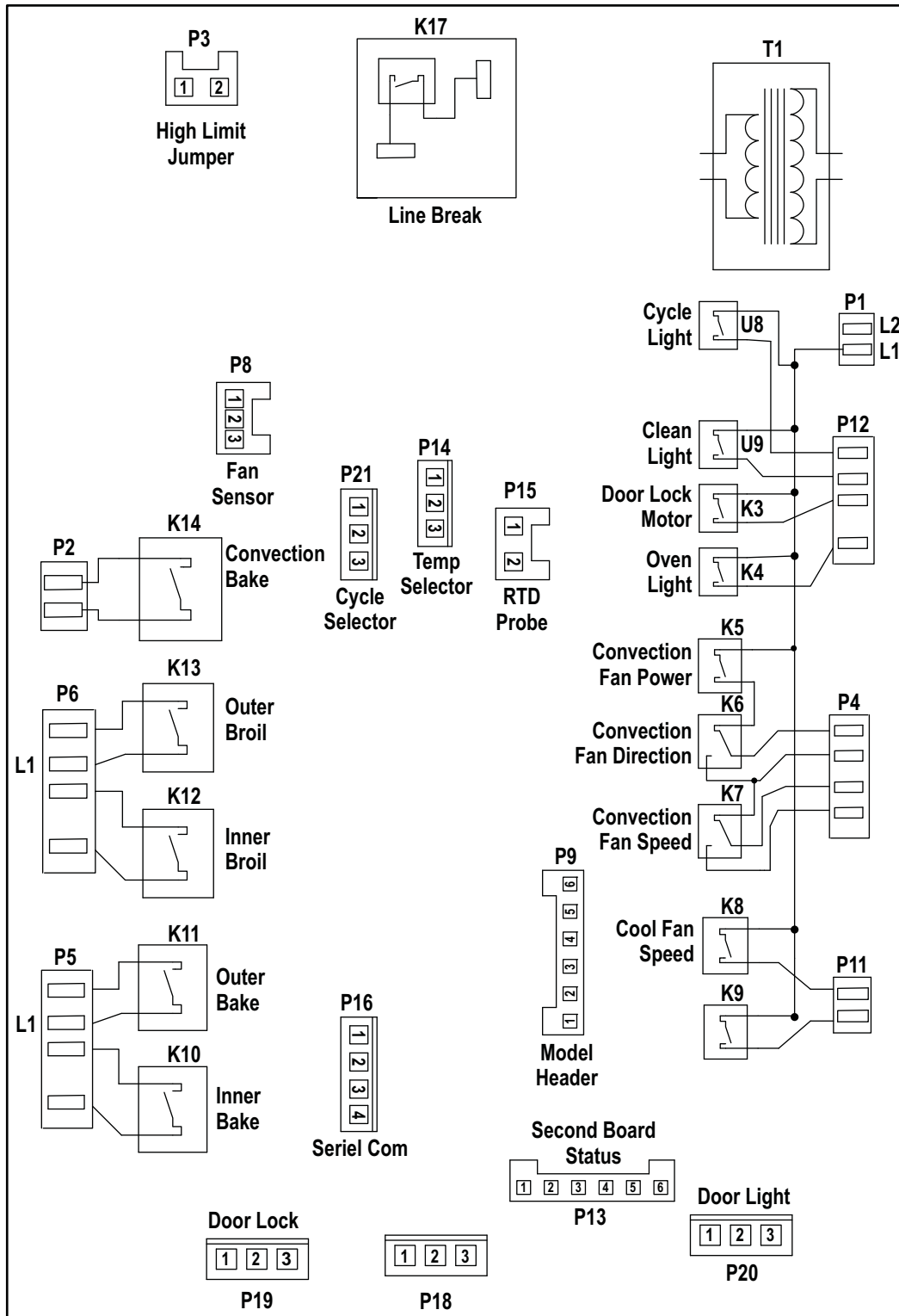
Back Panel Removed

1. Mark and disconnect all connectors from terminal block.
2. Remove three screws and terminal block from range.



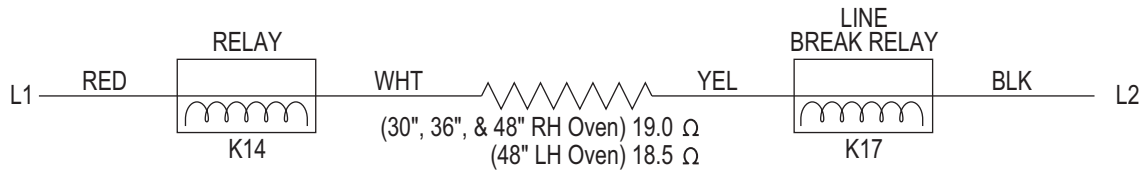
3. Reverse procedure for installation.

Oven Control Board Schematic

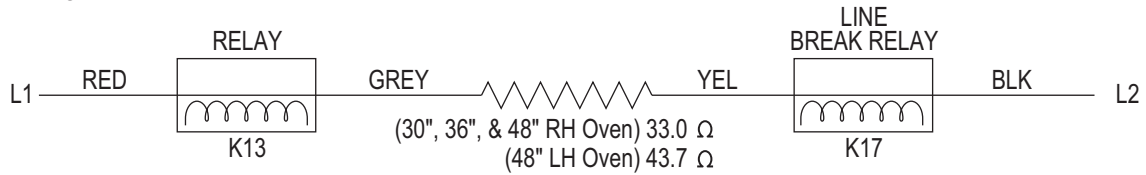


Strip Circuits

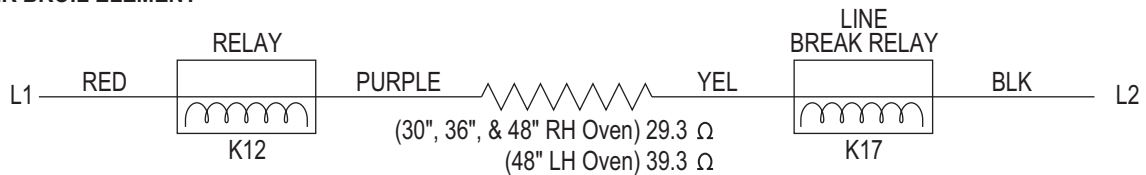
CONVECTION ELEMENT



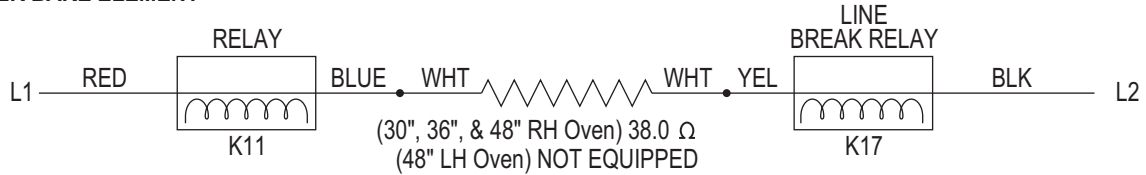
OUTER BROIL ELEMENT



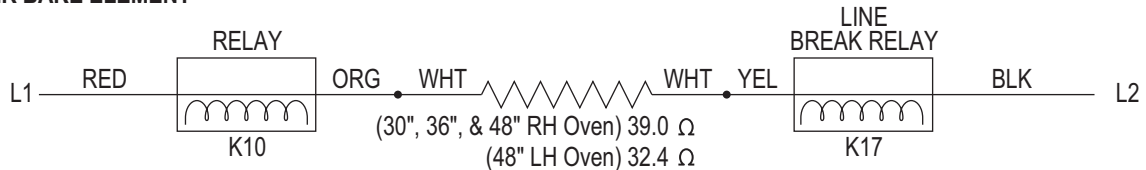
INNER BROIL ELEMENT

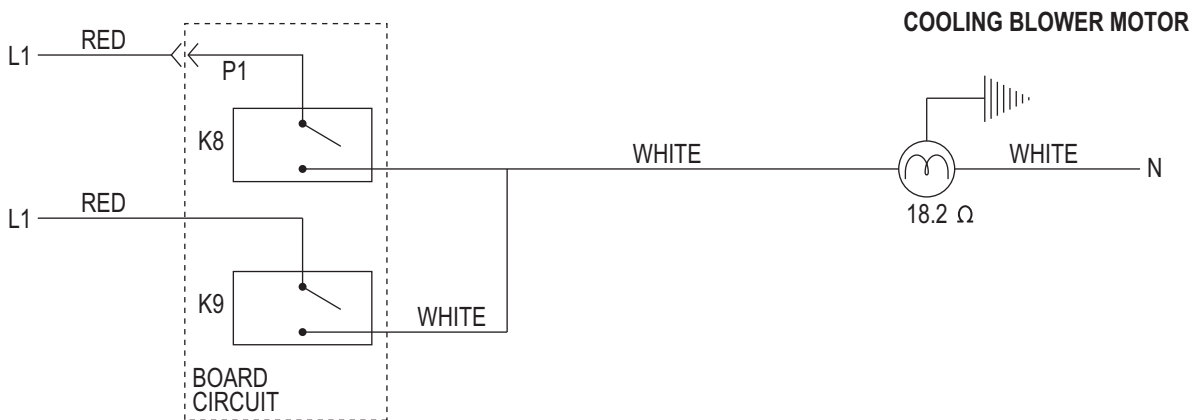
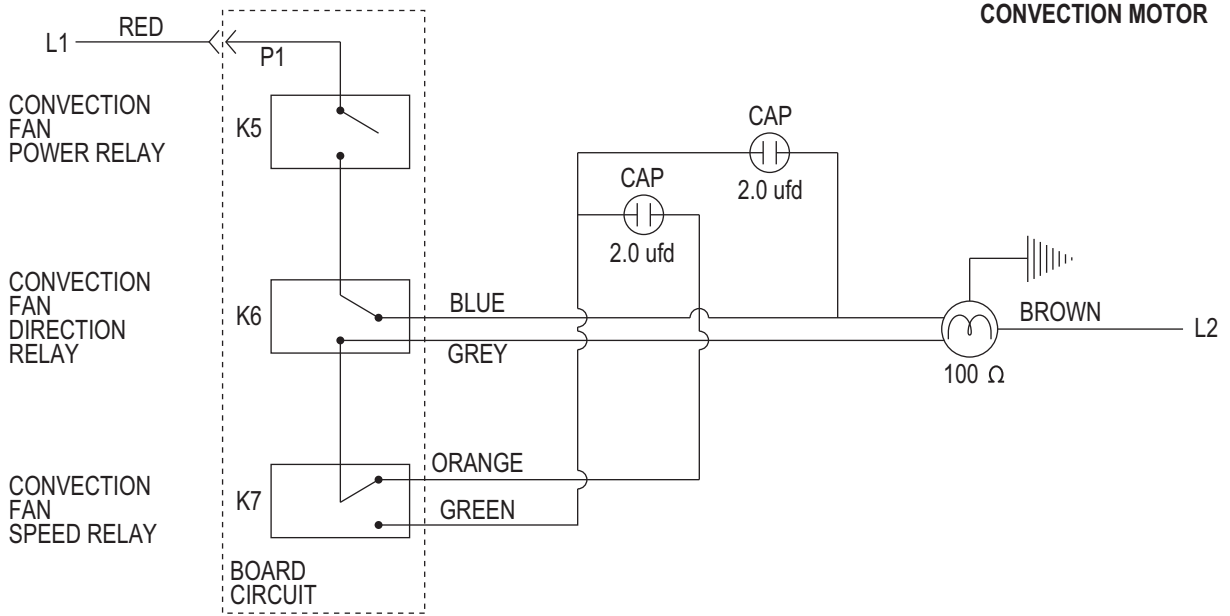


OUTER BAKE ELEMENT



INNER BAKE ELEMENT

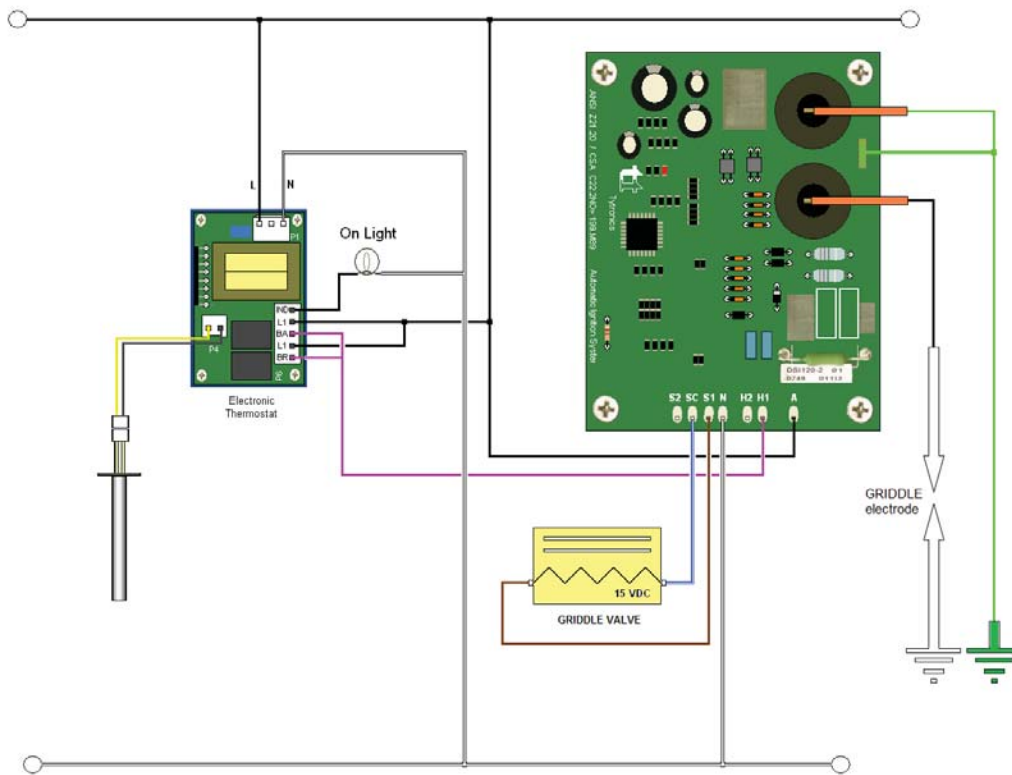




DOOR LATCH MOTOR

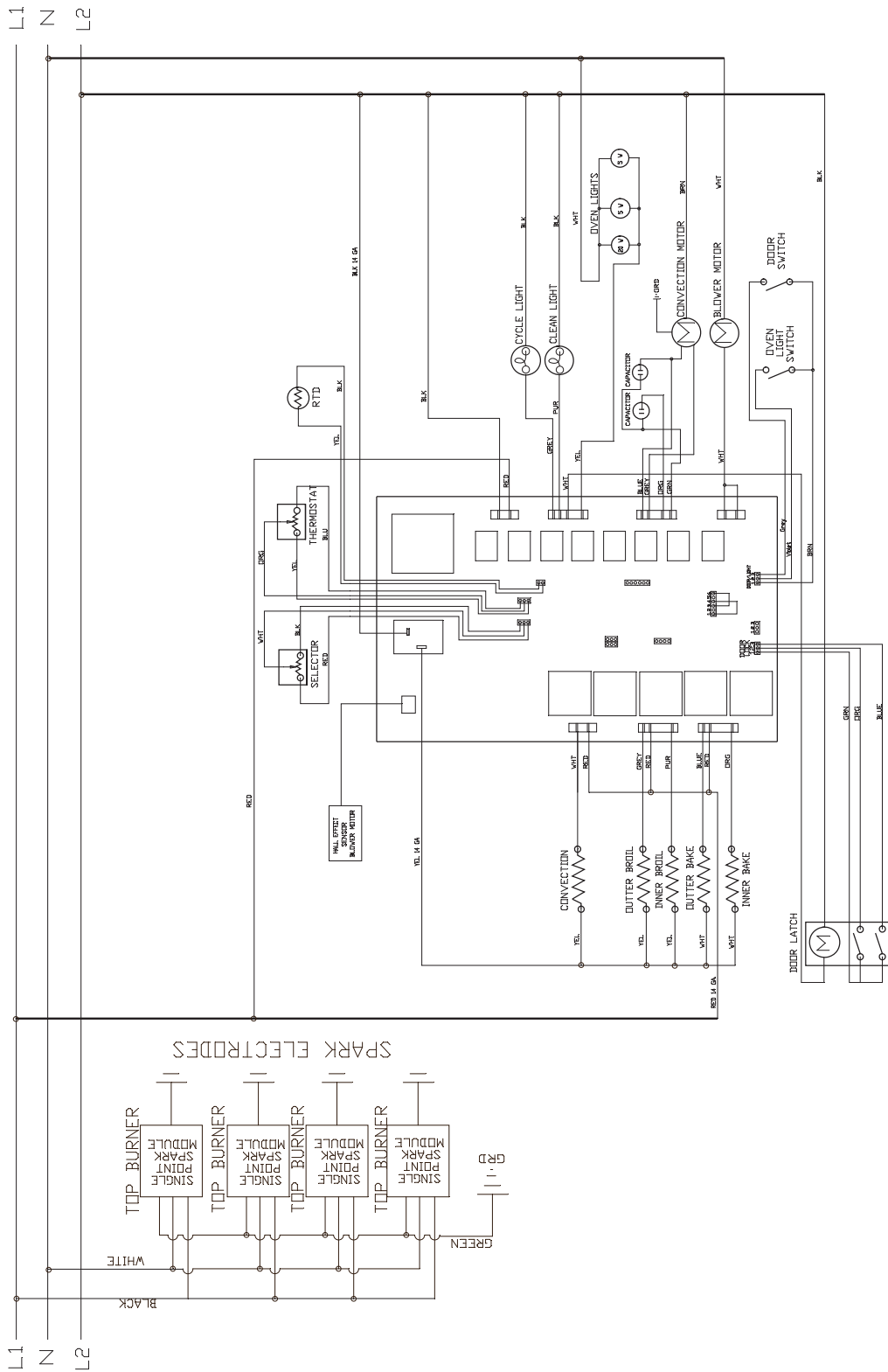


Electronic Thermostat - DSI System (VDSC536-4G, VDSC548-6G, & VDSC548-4GQ)



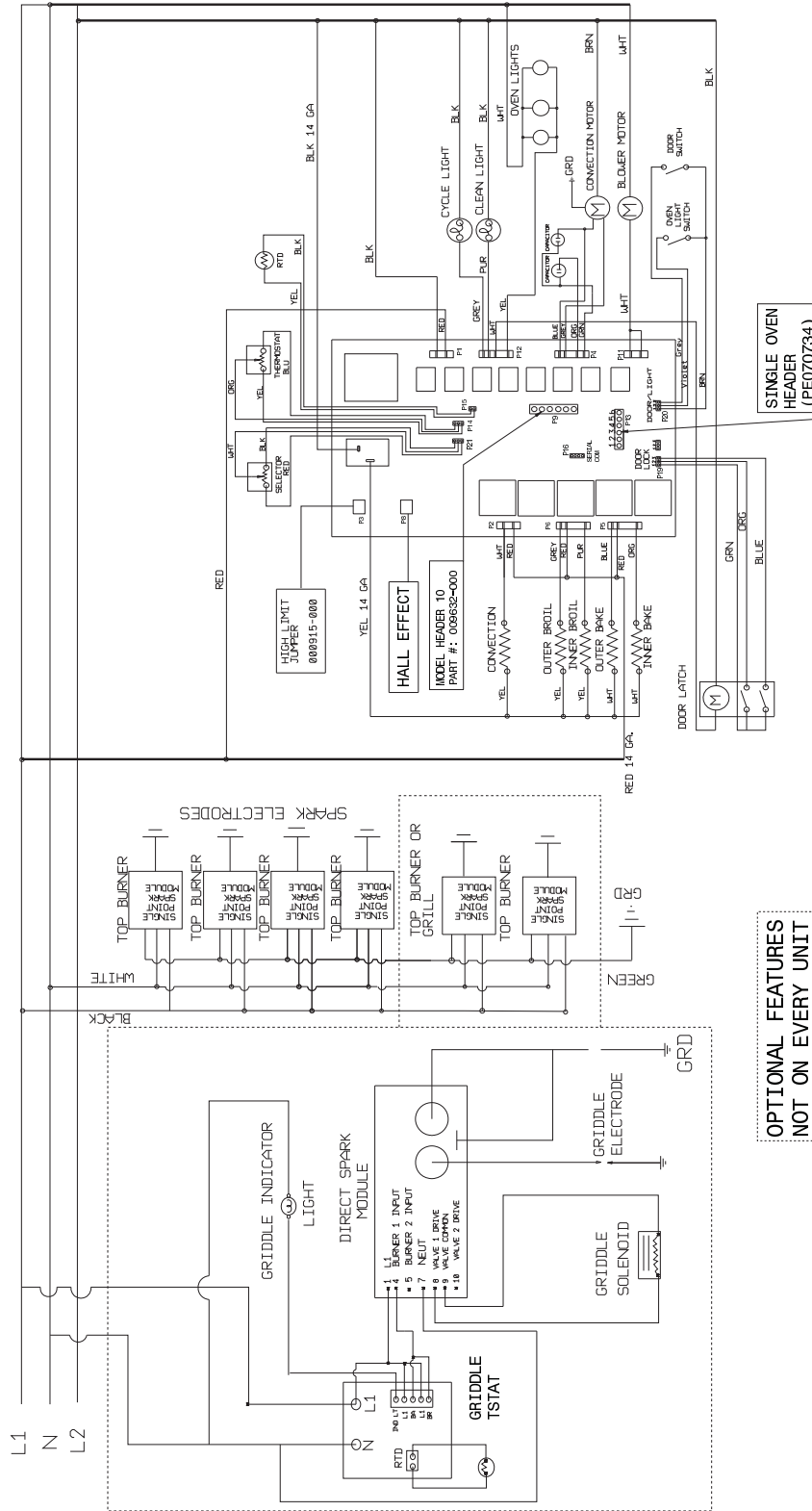
Griddle Control Thermostat and DSI Module System

Wiring Diagrams



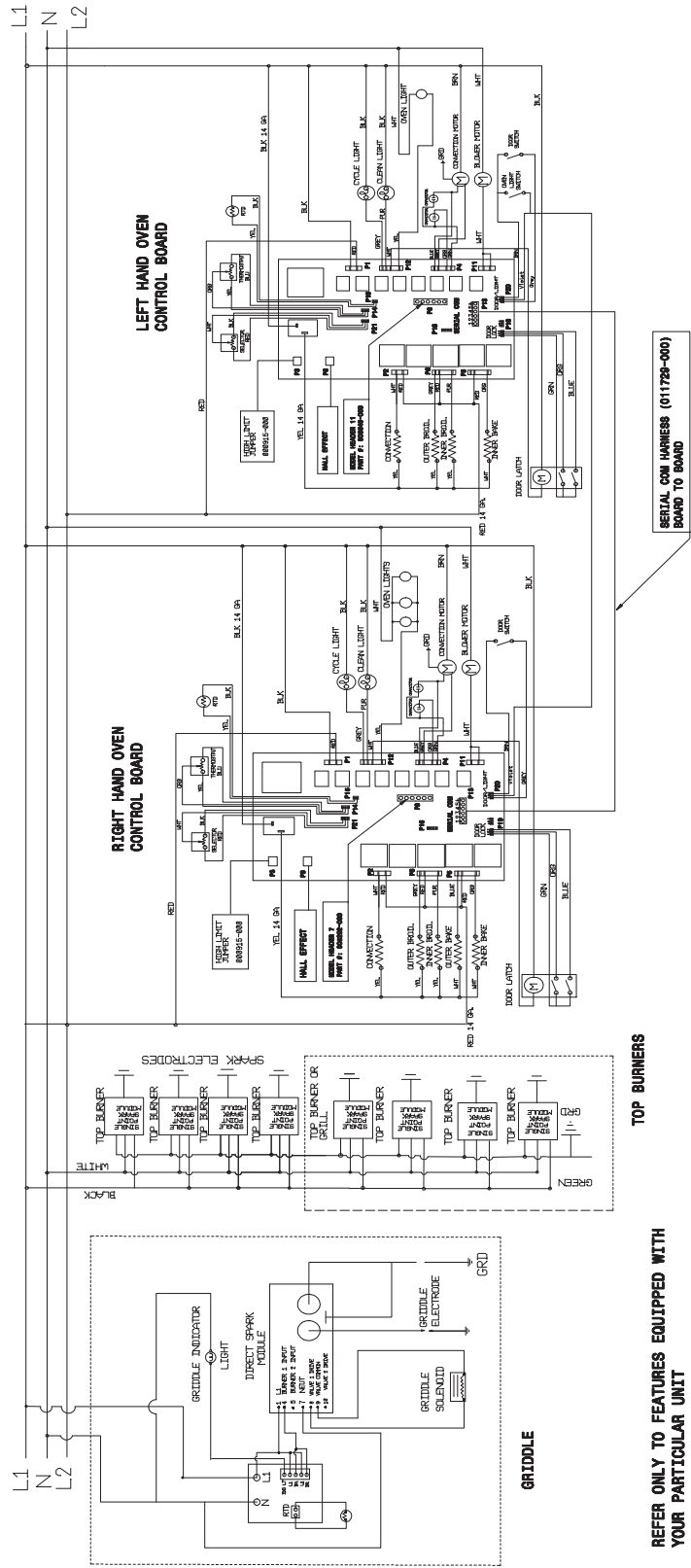
VDSC530 Dual Fuel Range

L1 N L2



OPTIONAL FEATURES
NOT ON EVERY UNIT

VDSC536 Dual Fuel Range



TOP BURNERS

REFER ONLY TO FEATURES EQUIPPED WITH YOUR PARTICULAR UNIT GRIDDLE / GRILL AND # OF BURNERS ALL VARY ACCORDING TO RANGE MODEL NUMBER

VDS548 Dual Fuel Range