

# 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.

## Professional 30" Electric Induction Range

This manual covers general and specific information including, but not limited to the following model:

**VISC530**



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## 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 appliances. It is possible, however, that during the lifetime of a product, service may be required. Products should be serviced only by a qualified authorized service technician who is familiar with the safety procedures required to perform the repair and is equipped with the proper tools, parts, testing instruments, and the appropriate service manual.

### Safety Information

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



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

<b>DANGER</b>
<b>Immediate hazards which WILL result in severe personal injury or death.</b>
<b>WARNING</b>
<b>Hazards or unsafe practices which COULD result in severe personal injury or death.</b>
<b>CAUTION</b>
<b>Hazards or unsafe practices which COULD result in minor personal injury, product or property damage.</b>

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

<b>WARNING</b>
<b>To avoid risk of serious injury or death, repairs should not be attempted by unauthorized personnel.</b>

<b>CAUTION</b>
<b>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.</b>

To locate an authorized service agent, 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

## Induction Range Warranty

### One Year Full Warranty

Free standing electric induction 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.

\*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 halogen element, bake element, broil element, or convection cook element 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 material 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.

## VIKING RANGE CORPORATION

111 Front Street, Greenwood, Mississippi (MS) 38930 USA 662-455-1200

Specifications are 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>

### 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.

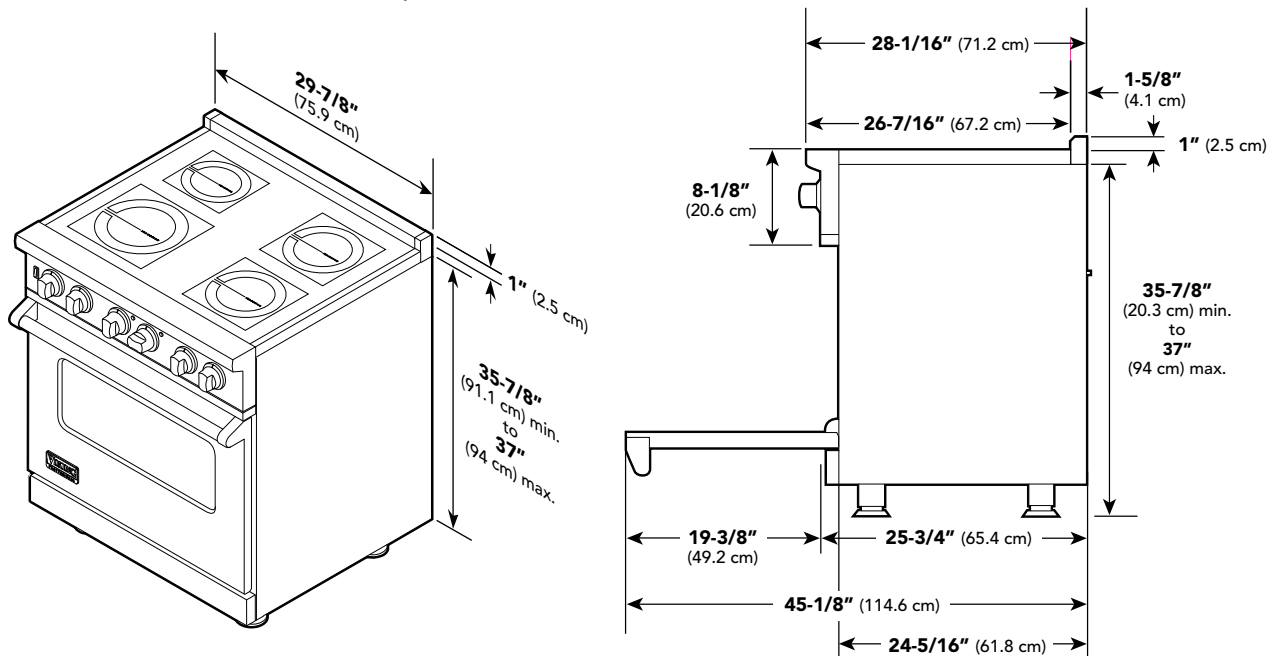
Any implied warranties of merchantability and fitness applicable to the described halogen elements are limited in duration to the period of coverage of the applicable express written limited warranties set forth above. Some jurisdictions DO NOT allow limitations on how long an implied warranty lasts, 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.

VIKING RANGE CORPORATION  
111 Front Street • Greenwood, Mississippi 38930 USA  
(662) 455-1200  
[www.vikingrange.com](http://www.vikingrange.com)  
Specification subject to change without notice

## Specifications\*

Induction Range	
Description	VISC530-4B
Overall width	29-7/8" (75.9 cm)
Overall height	To top of glass frame 35-7/8" (91.1 cm) min. 37" (94.0 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 ledge—28-1/16" (71.3 cm) To end of door handle—28-11/16" (72.9 cm)
Electrical requirements	Unit must be Hard Wired to a 208-240 VAC, 50/60 Hz electrical supply box.
Maximum amp usage	240V—54.9 amps 208V—51.7 amps
Surface element rating	
Left front	3,700 watts boost/2,300 watts
Left rear	1,400 watts
Right front	1,850 watts
Right rear	1,850 watts
Oven interior width	25-5/16" (64.6 cm)
Oven interior height	16-1/2" (41.9 cm)
Oven interior depth	AHAM 16-13/16" (42.7 cm) Overall—19-1/2" (49.5 cm)
Oven volume	Total oven capacity—4.7 cu. ft. Measure to AHAM standards 4.1 cu. ft.
Approximate shipping weight	426 lbs. (193.2 kg)

\*Go to [vikingrange.com](http://vikingrange.com) for latest specifications




## 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.

### Electrical Requirements

Check your national and local codes regarding this unit.

 **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**

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

**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 Installation Guide 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 until the range is installed and ready to operate, installation by an authorized installer only.

## Cookware

Each cook has his or her own preference for the particular cookware that is most appropriate for the type of cooking being done. This is a matter of personal choice. As with any cookware, yours should be in good condition and free from excessive dents on the bottom to provide maximum performance and convenience. When using big pots, it is recommended to use the front elements. There is more room in the front and potential cleanup of rear of appliance due to staining or discoloration will be minimized.

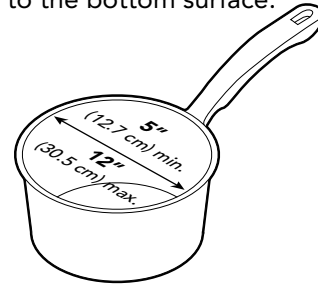
### Ceramic Glass Cooktop

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. Clean your glass top before the first time you use it. A thorough cleaning with a glass top cleaner is recommended.

### Induction Cookware

Induction cooking utilizes magnetic power which reacts with iron in the base of cookware, instantly transforming the pot or pan into the heat source. The heat stops when the cookware is removed. Your cookware **MUST** have a magnetic layer of steel for your induction cooktop to operate properly. The cookware should have a flat, heavy magnetic bottom and straight sides with a diameter of 5" (13 cm) to 12" (31 cm) to accommodate the various sized elements. The induction cookware should be in good condition and free from excessive dents on the bottom to provide maximum performance and convenience.

All Viking cookware is induction friendly, as are most other high-end brands of stainless steel and enamel cookware. Most induction cookware will be suitable for your induction cooktop if a magnet adheres to the bottom surface.



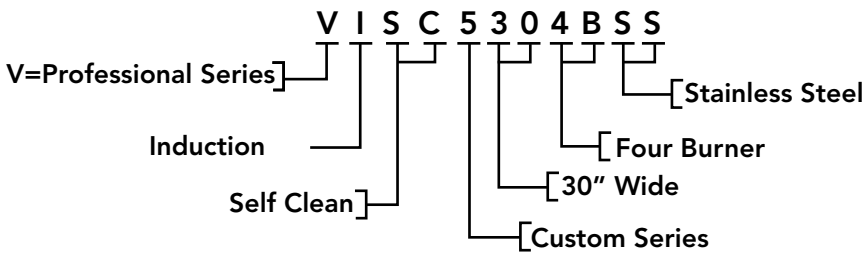
- Cookware that is NOT suitable for your induction cooktop includes pottery, glass, aluminum

## Model – Serial Number Matrix

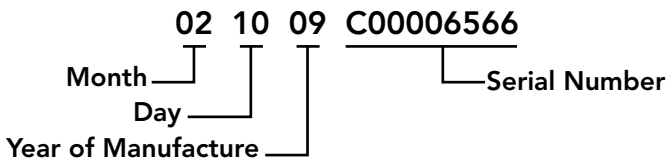
The model number and serial number for your appliance can be found by opening the door and looking under the control panel.

## Model Numbers

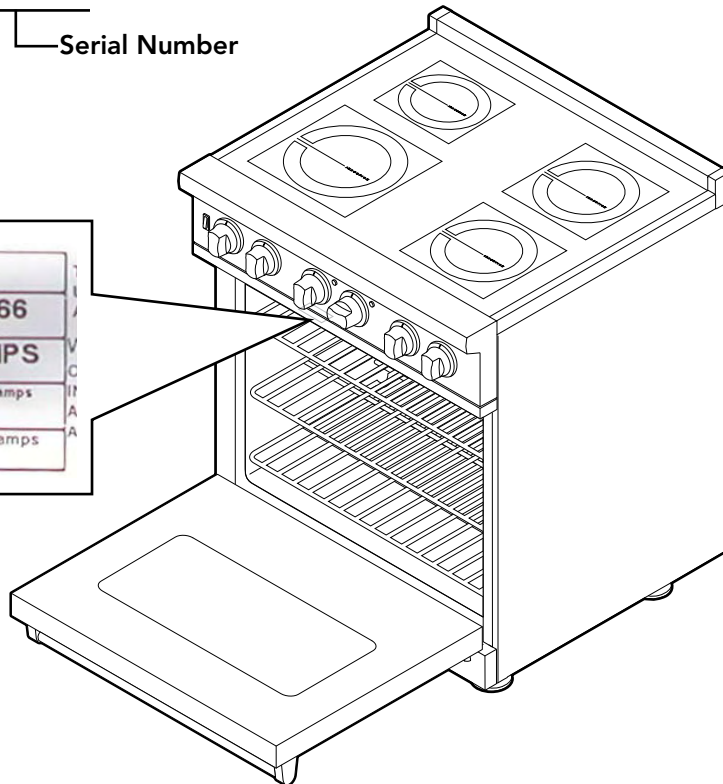
- V–Viking Professional Series,
- I–Induction
- S–Self Clean
- C–Unit
- 5–Digit change for new versions
- 30–30"
- 4B–4 Burners,



## Serial Numbers

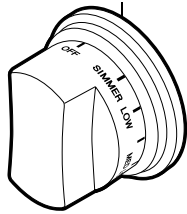


MODEL NUMBER VISC5304BSS		
SERIAL NUMBER 021009C00006566		
VOLTAGE /HZ	WATTS	AMPS
240 VAC 50/60 HZ	13.2 KW	54.9 amps
208 VAC 50/60 HZ	10.8 KW	51.7 amps



## Rear and Front Elements

Push in and turn the control knob counterclockwise to the desired setting. The element will adjust the power output to maintain the desired heat setting. Some elements have a "Boost" feature. A boost of power is provided for 10 minutes and is used for quickly boiling water when the element is turned to HI. When finished boiling, turn the control knob to Med HI to maintain the boil or to a lower setting for steaming, warming, and simmering sauces.



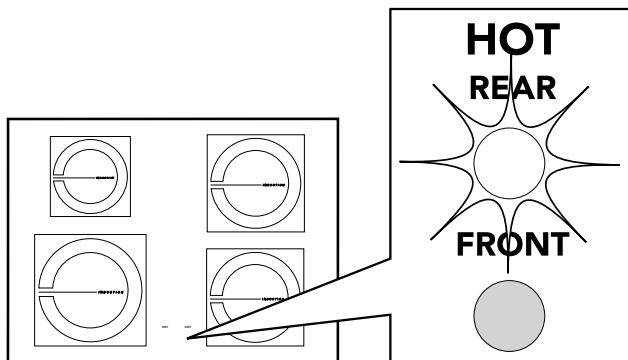
**Note:** Viking induction cooking uses high powered induction elements for faster cooking performance. Some noise may be noticed by the high powered induction elements. This is normal.

## Surface Cooking Tips

- The minimum pot or pan diameter recommended is 5" (13 cm). Use of pots or pans as small as 4" (10 cm) is possible but not recommended.
- Remember to use the proper size cookware for the size element chosen. Smaller cookware should be used for smaller elements and larger cookware should be used for larger elements.

**Note:** If flashing continues after making adjustments according to the flashing descriptions above, refer to the Built-In Error Codes section page 16.

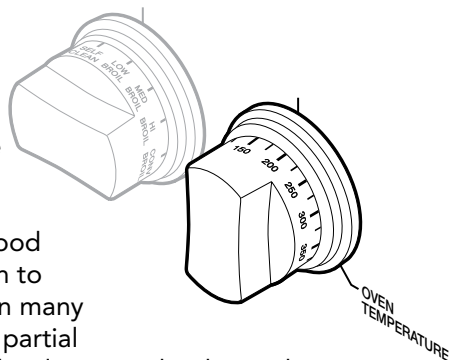
## Surface Indicator Lights



The surface indicator lights are located at the front of the glass cooktop. The indicator lights are used to indicate activation, hot surface, and warnings.

## Operation

For best results, it is extremely important that you preheat your oven to the desired cooking temperature before placing food items in the oven to begin cooking. In many cooking modes, partial power from the broiler is used to bring the oven to the preheat. Therefore, placing food items in the oven during the preheat mode is not recommended. The Viking Rapid Ready™ Preheat System is engineered so that the oven is brought to the desired set temperature in a manner which will provide the optimum cooking environment based on the selected cooking mode in the shortest possible time.



For instance, the preheat mode for TruConvec™ is designed to be brought up to the set point temperature in a different manner than the preheat mode for conventional bake. This is because TruConvec™ is designed for multi-rack baking. So it is extremely critical that all rack positions have reached the desired cooking temperature. As a result, it is normal for oven to take slightly longer for the oven to preheat to 350°F in TruConvec™ mode when compared to the amount of time it takes to preheat the oven cavity to 350°F in conventional bake mode.

Also, preheat time can vary based on room temperature and power supply. A significantly colder room temperature or a power supply less than 240 VAC can lengthen the temperature or a power supply less than 240 VAC can lengthen the time it takes to preheat.

### Conventional and Convection Cooking

Because of variations in food density, surface texture and consistency, some foods may be prepared more successfully using the conventional bake setting. For this reason, conventional baking is recommended when preparing baked goods such as custard. The user may find other foods that are also prepared more consistently in conventional bake. This is perfectly normal. Convection cooking

is a cooking technique which utilizes fan forced air to circulate heat throughout the entire oven creating the optimum cooking environment. Cooking with convection is intended when performing multi-rack baking and for baking heavier foods

### Oven Functions and Settings

#### **BAKE (Two-Element Bake)**

Use this setting for baking, roasting, and casseroles.

#### **CONV BAKE (Convection Bake)**

Use this setting to bake and roast foods at the same time with minimal taste transfer.

#### **TRU CONV (TruConvec™)**

Use this bake setting for multi-rack baking of breads, cakes, and cookies. (up to six racks of cookies at once)

#### **CONV ROAST (Convection Roast)**

Use this setting for roasting whole turkeys, whole chickens, hams, etc.

#### **CONV BROIL (Convection Broil)**

Use this setting to broil thick cuts of meat.

#### **HI BROIL**

Use this setting for broiling dark meats at 1" thickness or less when rare or medium doneness is desired.

#### **MED BROIL**

Use this setting for broiling white meats such as chicken or meats greater than 1" thick that would be over-browned in high broil.

#### **LOW BROIL**

Use this setting for delicate broiling such as meringue.

#### **SELF CLEAN**

Use this function to clean oven.

#### **Convection Dehydration (TRU CONV)**

Use this function to dehydrate fruits and vegetables.

#### **Convection Defrost (TRU CONV)**

Use this function to defrost foods.

## Cleaning and Maintenance

Any piece of equipment works better and lasts longer when maintained properly and kept clean. Cooking equipment is no exception. Your range must be kept clean. Make sure all controls are in the "OFF" position.

### Glass Ceramic Top

Cleaning of glass ceramic tops is different from cleaning a standard porcelain finish. To maintain and protect the surface of your new glass ceramic top, follow these basic steps:

#### For normal, light soil:

1. Rub a few drops of a glass ceramic cleaning cream on to the cool, soiled area using a damp paper towel.
2. Wipe until all soil and cream are removed. Frequent cleaning leaves a protective coating which is essential in preventing scratches and abrasions.

#### For heavy, burned soil:

1. Rub a few drops of glass ceramic cleaning cream on to the cool, soiled area using a damp paper towel.
2. Carefully scrape remaining soil with a single-edged razor blade. Hold the blade at a 30° angle against the ceramic surface.
3. If any soil remains, repeat the steps above. For additional protection, after all soil has been removed, polish the entire surface with the cleaning cream.
4. Buff with a dry paper towel. As the cleaning cream cleans, it leaves a protective coating on the glass surface. This coating helps to prevent build-up of mineral deposits (water spots) and will make future cleaning easier.

**Note:** Dishwashing detergents remove this protective coating and therefore, make the glass ceramic top more susceptible to staining.

### Cooktop Surfaces

Several different finishes have been used in your cooktop. Cleaning instructions for each surface are given below. NEVER USE AMMONIA, STEEL WOOL PADS OR ANY ABRASIVE CLOTHS AND MATERIALS SUCH AS CLEANSERS, OVEN CLEANERS, OR ABRASIVE POWDERS. THEY CAN PERMANENTLY DAMAGE YOUR COOKTOP.

### Oven Surfaces

Several different finishes have been used in your electric oven. Cleaning instructions for each surface are given below. The oven features a self-clean cycle for the oven interior. See the "Self-Clean Cycle" section for complete instructions. NEVER USE AMMONIA, STEEL WOOL PADS OR ABRASIVE CLOTHS, CLEANSERS, OVEN CLEANERS, OR ABRASIVE POWDERS. THEY CAN PERMANENTLY DAMAGE YOUR OVEN.

### Control Knobs

MAKE SURE ALL CONTROL KNOBS POINT TO THE "OFF" POSITION BEFORE REMOVING. Pull the knobs straight off. Wash in detergent and warm water. Dry completely and replace by pushing firmly onto stem.

### Stainless Steel Parts

All stainless steel body parts should be wiped regularly with hot soapy water at the end of each cooling period and with a liquid cleaner designed for that material when soapy water will not do the job. DO NOT use steel wool, abrasive cloths, cleansers, or powders. If necessary, scrape stainless steel to remove encrusted materials, soak the area with hot towels to loosen the material, then use a wooden or nylon spatula or scraper. DO NOT use a metal knife, spatula, or any other metal tool to scrape stainless steel. DO NOT permit citrus or tomato juice to remain on stainless steel surface, as citric acid will permanently discolor stainless steel. Wipe up any spills immediately.

### Control Panel

DO NOT use any cleaners containing ammonia, abrasives or stainless steel cleaners on any surface that contains graphics. These products could remove the graphics from the control panel. Apply hot, soapy water to a soft clean cloth. DO NOT spray liquids directly onto the control panel.

## Cleaning and Maintenance (cont)

### Broiler Pan and Grid

Clean with detergent and hot water. For stubborn spots, use a soap-filled steel wool pad.

### Oven Racks

Clean with detergent and hot water. Stubborn spots can be scoured with a soap-filled steel wool pad. **DO NOT SELF CLEAN THE OVEN RACKS.** They could sustain damage due to the extreme heat of the self-clean cycle.

### Power Failure

No attempt should be made to operate the appliance during a power failure. Make sure the oven control is in the "OFF" position.

Momentary power failure can occur unnoticed. The range is affected only when the power is interrupted. When it comes back on, the range will function properly without any adjustments. A "brown-out" may or may not affect range operation, depending on how severe the power loss is. If the range is in the self-clean cycle when the power failure occurs, wait until power is restored and allow door to unlock automatically. Turn all controls off and restart self-clean cycle again, according to instructions.

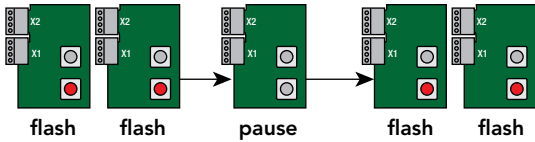
## Self-Clean Cycle

This oven features an automatic pyrolytic self-cleaning cycle. During this cycle, the oven reaches elevated temperatures in order to burn off soil and deposits. An integral smoke eliminator helps reduce odors associated with the soil burn-off. A powder ash residue is left in the bottom of the oven after completion of the self-clean cycle. The door latch is automatically activated after selecting the self-clean setting. The latch ensures that the door cannot be opened while the oven interior is at clean temperatures.

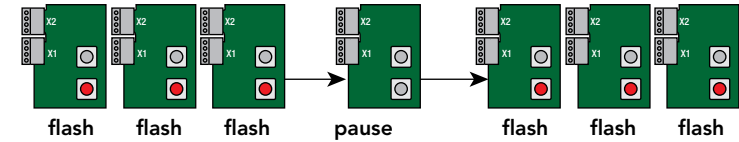
## Built-In Error Codes

The thermostat timer digital display is designed to alert you if there is an error or problem in the control.

Example of LED code 2.



Example of LED code 3.



If one of the following front burner switch cover LED codes occurs, perform the following to determine the proper repair:

**Note:** Use flashing LED for error determination. Interface display only works for 1 burner. You may have up to 10 flashes before a pause.

LED Code	Interface Display	Failure	Possible Reason	Action
1		Induction element is not recognizing a compatible cooking vessel. Residual heat flashes at 1 Hz	Pan detection has the higher priority over residual heat, also shown when Boost is selected.	Place compatible cooking vessel on induction element  The surface is hot (60° C)
2		Switch	Wiring Operation of switch	Replace or repair as necessary Replace switch
3		Flash failure	Flash failure Component failure	Replace interface board
4		Incorrect setup data Configuration error between interface board and induction generator No function or partial function	False configuration of filter board by interface board  Component error on interface or filter board	Check version of interface board Replace interface board.  If continuous error replace filter board.
5		Communication error between interface board and induction generator	Interface board Interface board cable loose or defective Filter board	Replace interface board Check connection of cable and replace cable if needed Replace filter board



## Built-In Error Codes (cont)

LED Code	Interface Display	Failure	Possible Reason	Action
6		Error on filter board EEPROM data wrong	Permanent low voltage Error on electronic device Lost data or EEPROM	Check voltage—if proper and error persists replace filter board Replace filter board Replace filter board
7		Voltage supply Cable Filter board Power board	Missing L2 Loose cable Defective board Defective board	Verify L2 Repair or replace cable as needed Replace filter board Replace power board
8		Error code received which cannot be assigned	Component failure Communication error	Cycle power—if error continues replace cable—if error continues replace filter board Replace power board
9		Temperature sensor defective Mechanical failure Electrical failure	Mechanical crack of sensor Fading resistance Power board	Change coil—if issue continues replace power board
10		Wrong terminal connected	Secondary voltage of the power supply above 400 Volts	Check the supply power
–		Temperature sensor shows overheat of induction coil or power board	Cooking zone overheated Heat opened thermal Induction generator temperature too high	Allow zone to cool down Allow to cool down Error display is canceled after cooling down
–		Display of the residual heat	No failure Temperature over 60° C in a cooking zone	Cooking zone needs to cool down

- Zone LED's flash on and off for both pan detection (Zone Switched ON) and with residual heat (Zone switched OFF).
- When a cooking Zone is turned OFF and there is residual heat present, the zone indicator LED will flash on and off until the zone has cooled.
- Pan detection has the higher priority over residual heat, also shown when Boost is selected.
- The cooking zone indicator LED's are on statically (Not flashing) during cooking operation.
- Zone LED's flash on and off rapidly in case of an overheat condition on the individual coil.
- LED's flashes in sequences in case of an error with the highest priority.

**LED Error Code–Oven Section**

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.

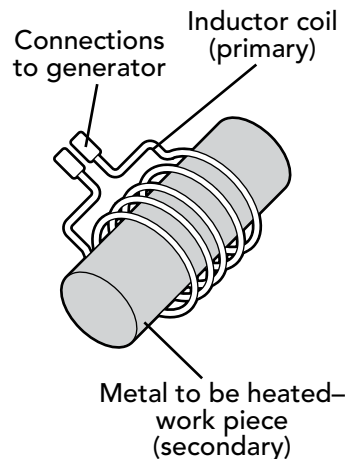
LED Error Codes		
Type of error	Cycle Light	Clean Light
Latch	Off	1 second ON, 1 second off
RTD (Oven Probe)	1 second ON, 1 second OFF	OFF
Model	1 second ON, 1 second OFF, 1 second ON, 4 seconds OFF	ON
Cooling Fan	3 flashes	ON
High Limit	4 flashes	ON

**Theory of Induction Operation**

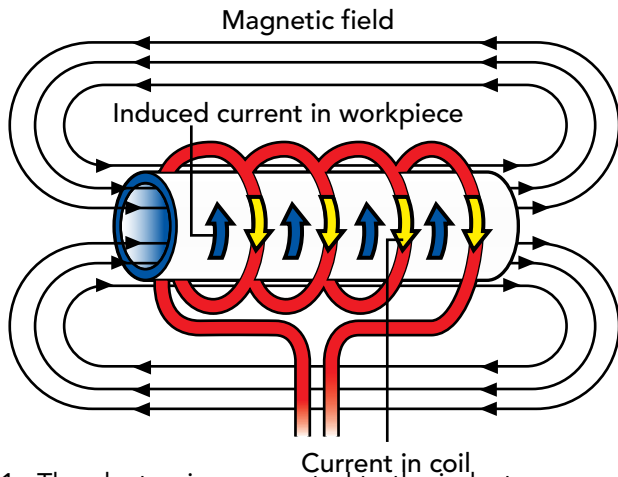
Cooking, by definition, is the application of heat to food. During surface cooking, very rarely is the food heated in anything other than a cooking vessel. In this case, the job of the cooktop becomes to heat the vessel and allow the vessel to heat the food. Cooking therefore, involves transferring heat to a strategically placed cooking vessel. Two common methods of achieving this are chemical, burning a combustible substance such as gas, and electrical, passing an electric current through a resistance element.

Induction cooking, introduces a third cooking method completely different from the other two. Induction cooking does not involve generating heat which is then transferred to the cooking vessel, but rather makes the cooking vessel the original generator of the heat source. The induction element, inductor, can be viewed as a powerful high-frequency electromagnet. The electromagnetism is generated by electronics in the inductor under the main top glass. When a good-

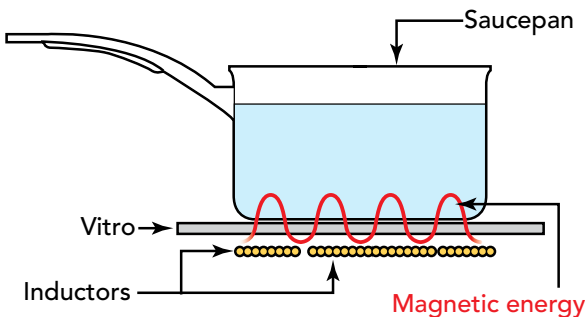
sized piece of magnetic material (cooking vessel) is placed in the magnetic field that the inductor is generating, the field induces energy into the cooking vessel. This transfer of energy causes the cooking vessel to become hot. By controlling the strength of the electromagnetic field (cooktop setting), the amount of heat being generated in the cooking vessel can be controlled instantaneously.



## How Induction Works



1. The electronics connected to the inductors powers a coil that produces a high-frequency electromagnetic field.
2. The electromagnetic field penetrates the metal of the ferrous cooking vessel and sets up a circulating electric current, which generates heat.
3. The heat generated in the cooking vessel is transferred to the vessel's food load.
4. Nothing outside the cooking vessel is affected by the field as soon as the cooking vessel is removed from the element or the element is turned off.



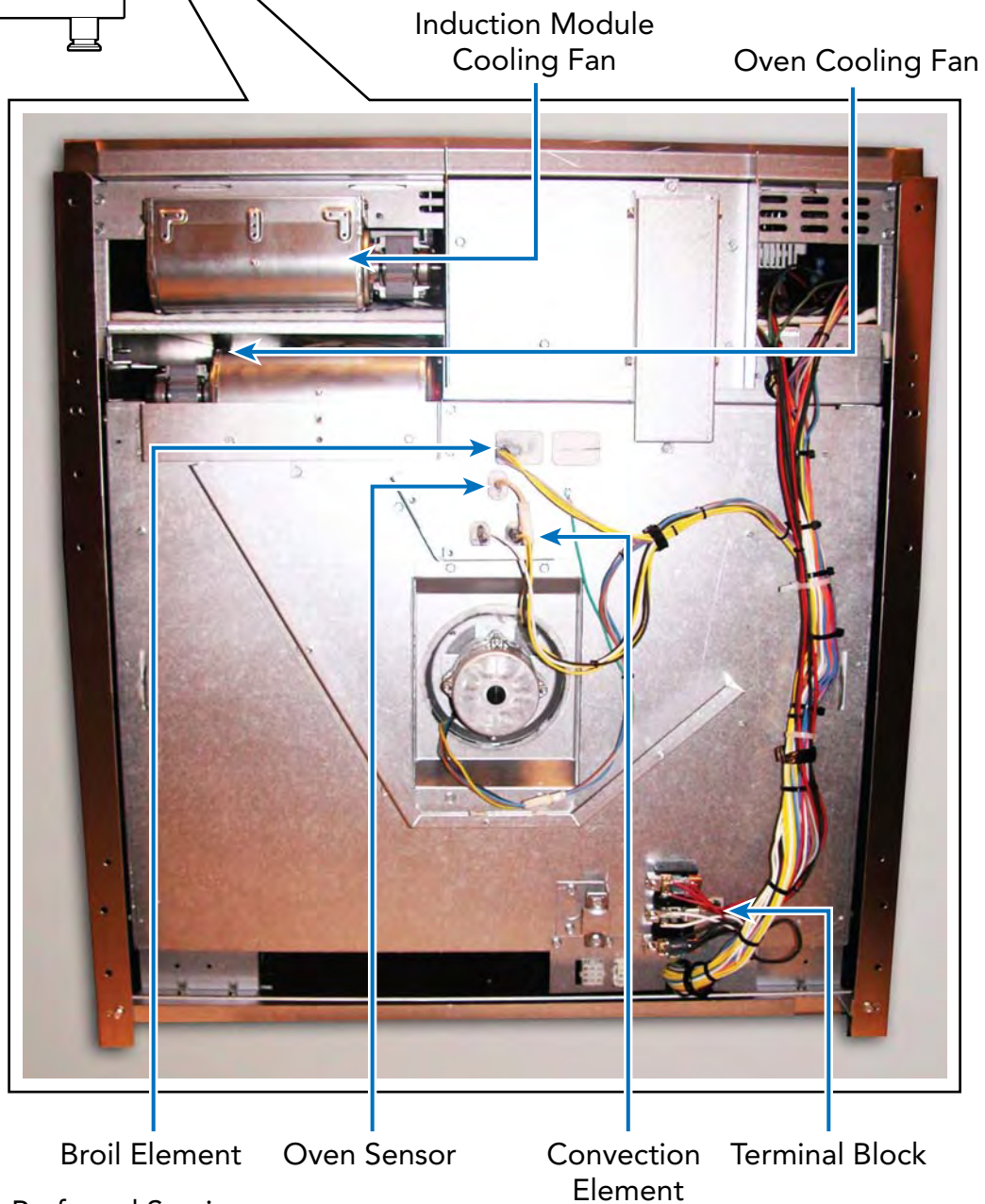
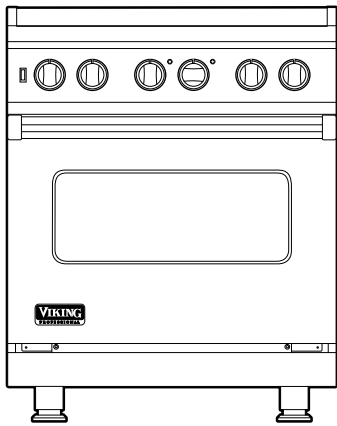
There is one point about induction cooking with current technology that needs to be made. The cooking vessel being used must be of a ferrous material, a magnet will stick to it.

The ferrous material will readily sustain a magnetic field and work with the induction system. Materials like aluminum, copper, and Pyrex are not usable with the induction system because they are not ferrous and will not readily sustain a magnetic field. As a rule of thumb, if a common refrigerator magnet will stick to the cooking vessel, it will work with the induction system.

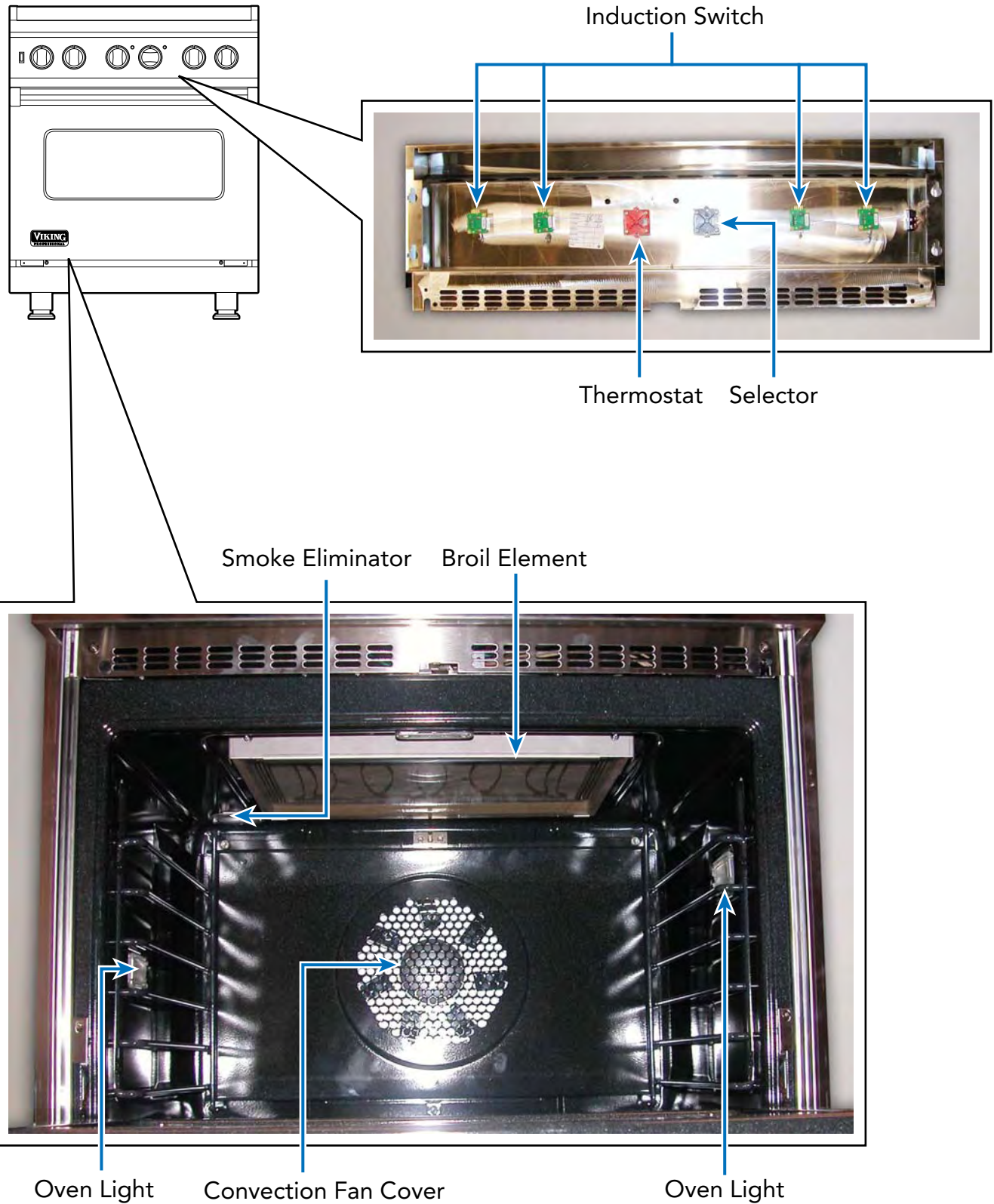
## Induction Safety

Induction cooking has built in safety features. The system features pot detection. If the cookware is not compatible, the unit will not turn on. The indicator will flash indicating the system does not recognize a pot on the cooking zone. The system also features cool surface temperatures. Since the heat is generated by the transfer of energy induced into the cooking vessel, the heat stays primarily within the cooking vessel. Once the vessel is removed, the heat is as well. The system also has thermal devices to protect the unit from overheating. The system has near instantaneous responses similar to gas units, however, utilizes energy to generate heat versus combusting gas with the potential of flame loss or carbon monoxide.

Parts Location—Range Back

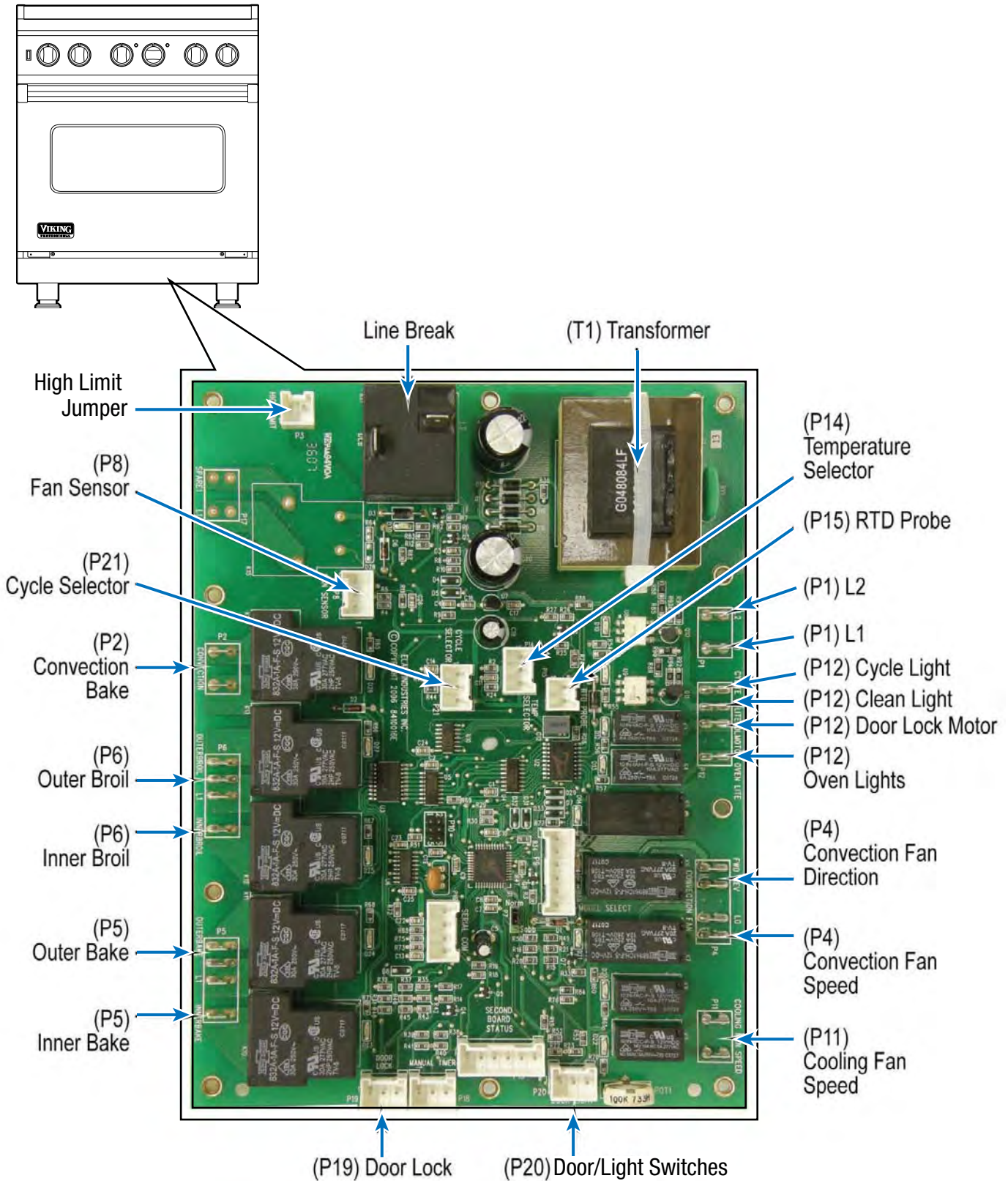


Parts Location—Control Panel and Oven Cavity





Parts Location–Oven Control Board



⚠ **WARNING**

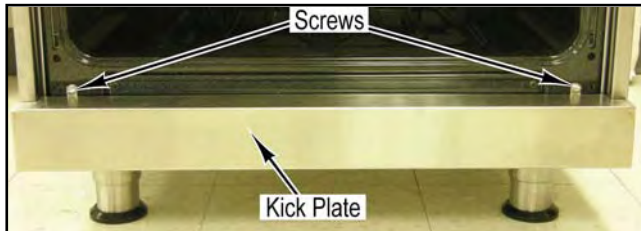
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

## Access Control Board Assembly

### Condition Requirements:

None

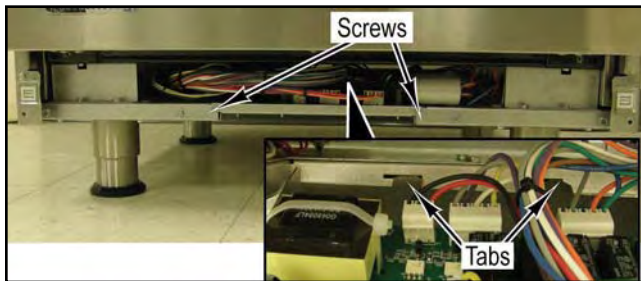
1. Remove two screws and lift kick plate from keyhole screws.



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



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



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

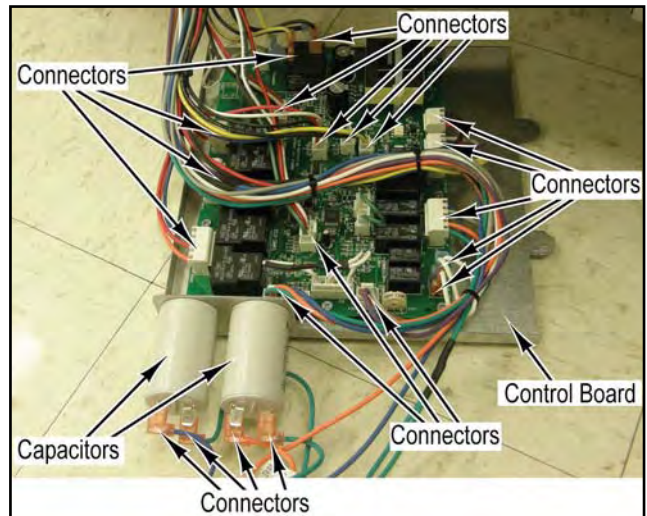
4. Reverse procedure for installation.

## Control Board Removal

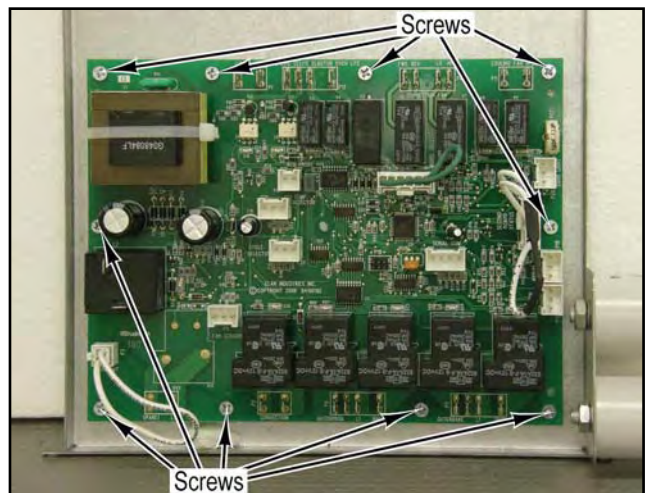
### Condition Requirements:

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.

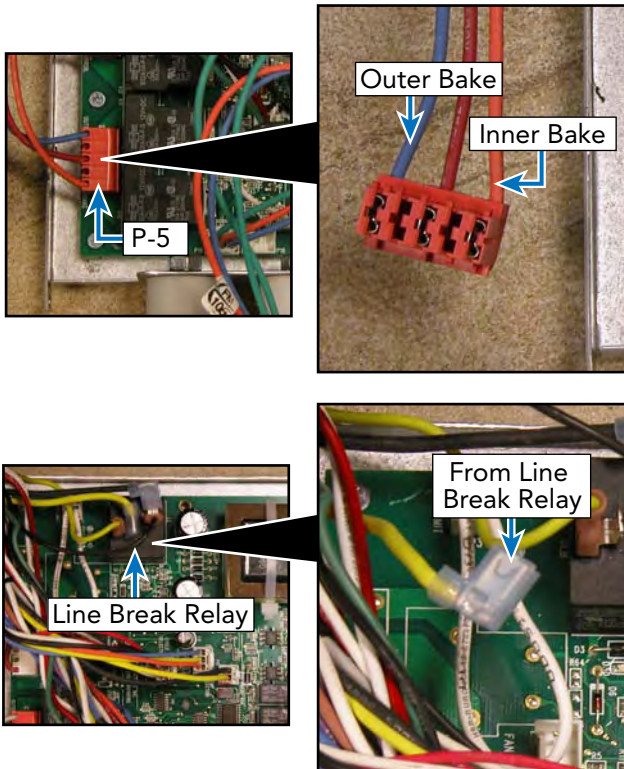


## Control Board Diagnostics

With control board assembly removed the following components can be diagnosed without removal of the components:

### Bake Element

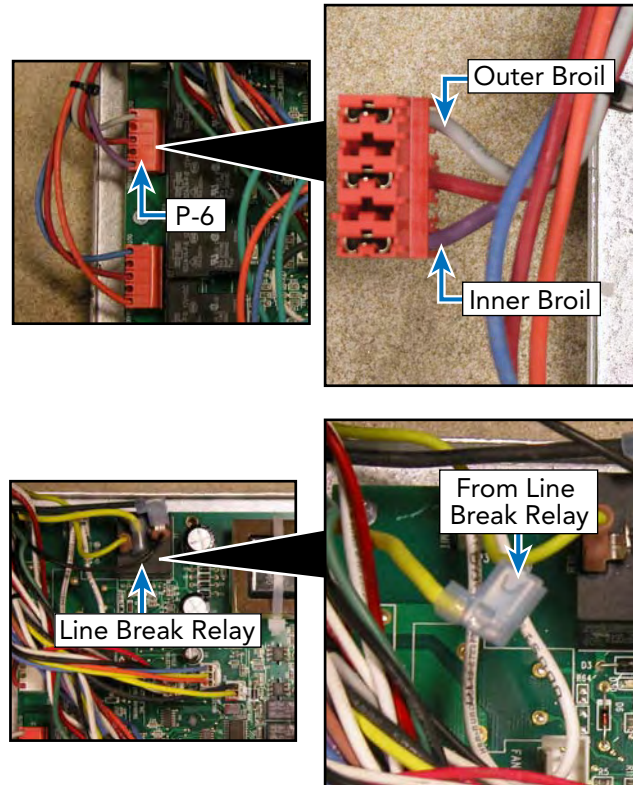
Locate the P5 connector and line break relay on the main control board. The P5 connector will have a molex plug containing a blue, red, and orange wire. The blue wire goes to the outer bake element, the red wire is input from the main power supply, and the orange wire goes to the inner bake element.



With the molex connector removed from the P5 connector, use an Ohm meter to measure the resistance between the blue wire in the molex plug and the yellow wire from the piggy back of the line break relay. This will measure the resistance of the outer bake element and should be approximately 38  $\Omega$ . Likewise, the inner bake element can be measured by reading resistance between the orange wire of the molex plug and the yellow wire from the piggy back of the line break relay. A resistance reading of approximately 38  $\Omega$  should be found. If either element fails to read resistance, remove the element to repair or replace as shown on page 34.

### Broil Element

Locate the P6 connector and line break relay on the main control board. The P6 connector will have a molex plug containing a gray, red, and purple wire. The gray wire goes to the outer broil element, the red wire is input from the main power supply, and the purple wire goes to the inner broil element.



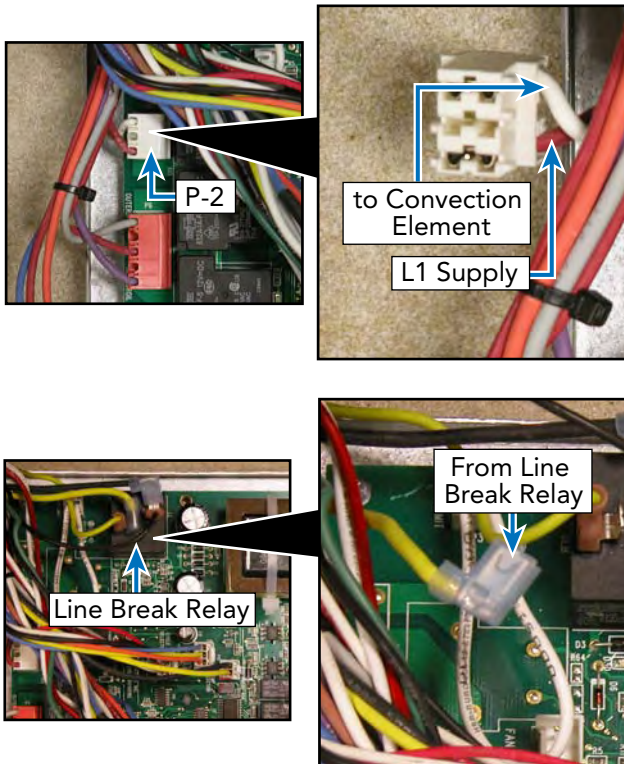
With the molex plug removed from the P6 connector, use an Ohm meter to measure the resistance between the gray wire in the molex plug and the yellow wire of the line break relay. The resistance should be approximately 32.0  $\Omega$ . Likewise, the inner broil element can be measured by reading resistance between the purple wire in the molex connector and the yellow wire of the line break relay. A resistance of approximately 30  $\Omega$  should be found. If either element fails to read resistance, remove the element to repair or replace as shown on page 35. If outer element resistance is lower than inner element resistance, the element is miswired.



## Control Board Diagnostics (continued)

### Convection Element

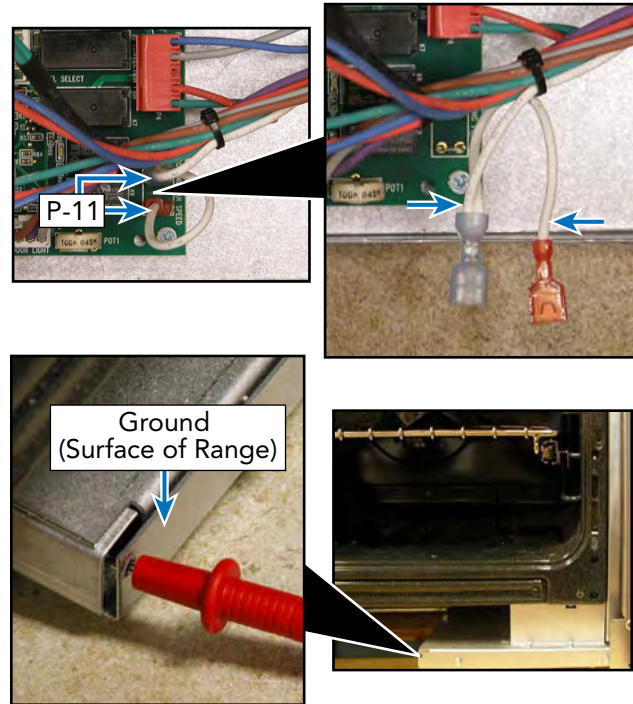
Locate the P2 connector and line break relay on the main control board. The P2 connector will have a red and white wire. The red wire comes from L1 supply and the white wire goes to the convection element.



With the white wire removed from the P2 connector, use an Ohm meter to measure the resistance between the white wire and the yellow wire of the line break relay. The resistance should be approximately 19  $\Omega$ . If the element fails to read resistance, remove the element to repair or replace as shown on page 36.

### Cooling Fan

Locate the P11 connector on the main control board. The P11 connector will have insulated 1/4" terminals containing white wires.

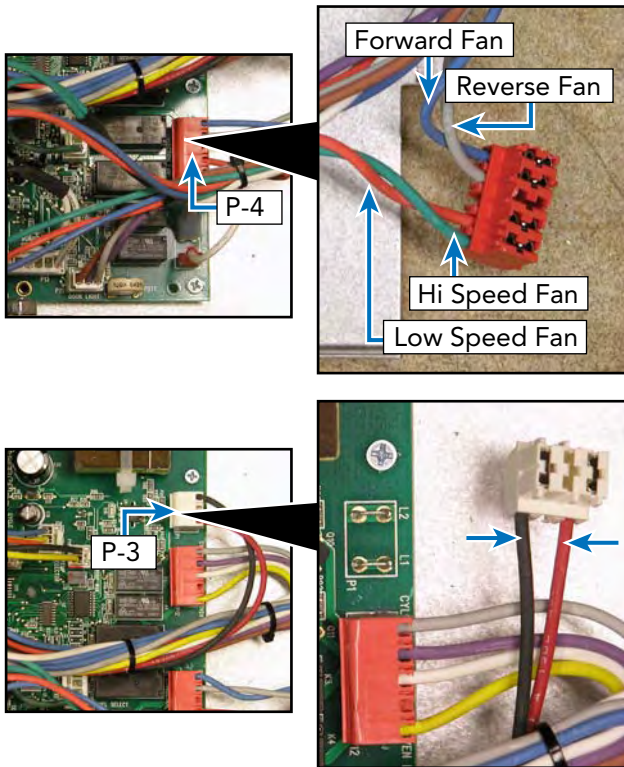


With the terminals removed from the P11 connector, use an ohm meter to measure resistance between one of the double white wires and ground. The resistance should be approximately 9.0  $\Omega$ . If 18.0  $\Omega$  is read, this indicates one fan is not working and repair or replacement is needed. If no resistance is read, remove the fan to repair or replace as shown on page 32.

## Control Board Diagnostics (continued)

### Convection Fan

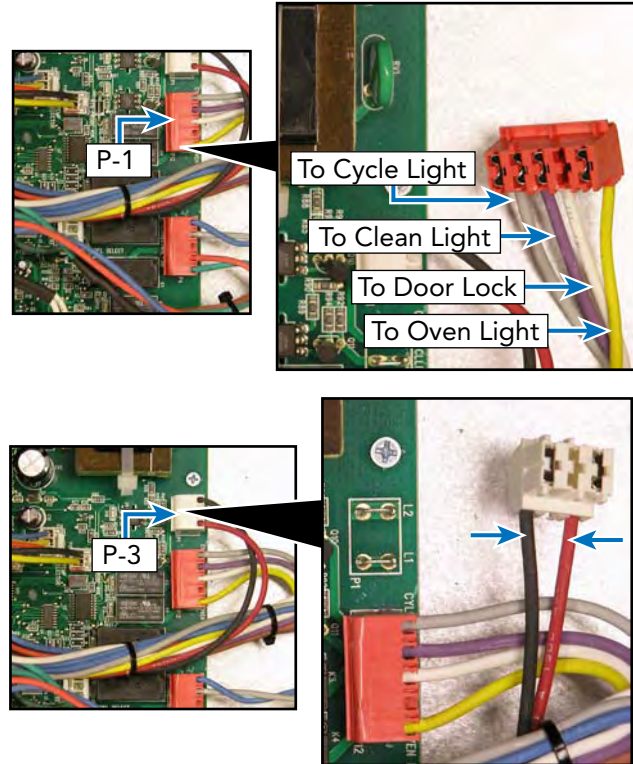
Locate the P4 connector and P1 connector on the main control board. The P4 connector will have a molex plug containing a green, orange, grey, and blue wire. The green wire goes to the hi speed winding of the fan, the orange wire goes to the low speed winding of the fan, the grey wire goes to the reverse direction of the fan and the blue wire goes to the forward direction of the fan.



With the molex plug removed from the P4 connector, use an Ohm meter to measure resistance between the grey wire in the molex connector and the black wire of the P1 connector (reverse direction) or blue wire in molex connector and black wire of the P1 connector (forward direction). The resistance should be approximately 100 Ω. If no resistance is read, remove the fan to repair or replace as shown on page 33.

### Door Lock Motor

Locate the P12 connector and P1 connector on the main control board. The P12 connector will have a molex plug containing a grey, purple, white, yellow wire. The grey wire goes to the cycle light, the purple wire goes to the clean light, the white wire does to the door lock motor, and the yellow wire goes to the oven light.

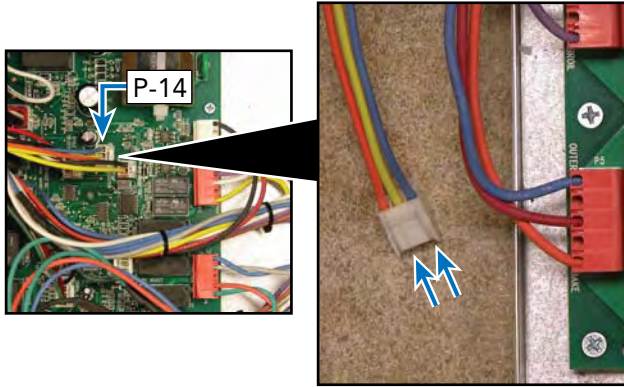


With the molex plug removed for the P12 connector, use an Ohm meter to measure resistance between the white wire in the molex connector and the black wire at the P1 connector. Resistance should be approximately 12.1 K Ω. If no resistance is read, remove the door lock motor to repair or replace as shown on page 35.

## Control Board Diagnostics (continued)

### Thermostat Switch

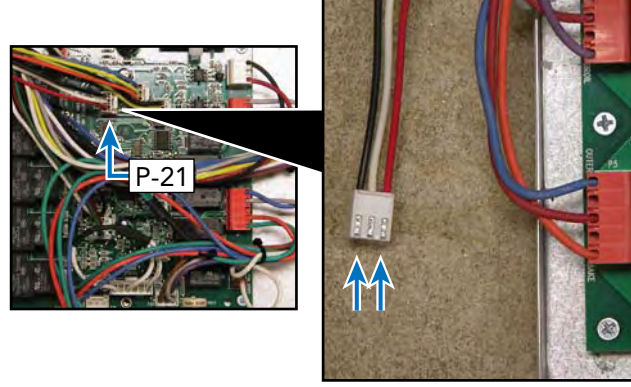
Locate the P14 connector on the main control board. The P14 connector will have insulated 1/4" terminals containing blue, yellow and orange wires.



With the terminals removed from the P14 connector, use an Volt/Ohm meter to verify the readings below.

### Selector Switch

Locate the P21 connector on the main control board. The P21 connector will have insulated 1/4" terminals containing red, black and white wires.



With the terminals removed from the P21 connector, use an Volt/Ohm meter to verify the readings below.

### Thermostat Resistance Chart

Thermostat Position	Resistance–Voltage orange to blue		Resistance–Voltage orange to yellow		Resistance–Voltage blue to yellow	
	Resistance	Voltage	Resistance	Voltage	Resistance	Voltage
Off	9.35K $\Omega$	5VDC	0 $\Omega$	5VDC	0 $\Omega$	0VDC
200° F	9.35K $\Omega$	5VDC	8.3K $\Omega$	4.51VDC	1.23K $\Omega$	0.50VDC
300° F	9.35K $\Omega$	5VDC	6.57K $\Omega$	3.83VDC	2.95K $\Omega$	1.18VDC
400° F	9.35K $\Omega$	5VDC	4.75K $\Omega$	3.17VDC	4.77K $\Omega$	1.83VDC
500° F	9.35K $\Omega$	5VDC	2.85K $\Omega$	2.32VDC	6.63K $\Omega$	2.47VDC
Broil	9.35K $\Omega$	5VDC	1.93K $\Omega$	1.75VDC	7.50K $\Omega$	3.33VDC
Clean	9.35K $\Omega$	5VDC	0.6K $\Omega$	0.078VDC	8.84K $\Omega$	4.34VDC

### Selector Resistance Chart

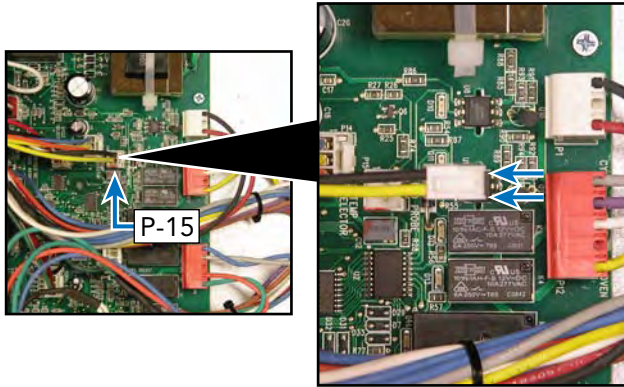
Selector Position	Resistance–Voltage red to black		Resistance–Voltage red to white		Resistance–Voltage black to white	
	Resistance	Voltage	Resistance	Voltage	Resistance	Voltage
Off	9.10K $\Omega$	5VDC	0 $\Omega$	5VDC	0 $\Omega$	0
Bake	9.10K $\Omega$	5VDC	448 $\Omega$	0.36VDC	8.83K $\Omega$	4.66VDC
Convection Bake	9.10K $\Omega$	5VDC	1.39K $\Omega$	1.18VDC	7.82K $\Omega$	3.83VDC
Tru Convection	9.10K $\Omega$	5VDC	2.43K $\Omega$	1.88VDC	6.75K $\Omega$	3.12VDC
Convection Roast	9.10K $\Omega$	5VDC	3.53K $\Omega$	2.47VDC	5.69K $\Omega$	2.54VDC
Convection Broil	9.10K $\Omega$	5VDC	4.54K $\Omega$	2.95VDC	4.66K $\Omega$	2.06VDC
Hi Broil	9.10K $\Omega$	5VDC	5.66K $\Omega$	3.42VDC	3.50K $\Omega$	1.60VDC
Medium Broil	9.10K $\Omega$	5VDC	6.71K $\Omega$	3.90VDC	2.43K $\Omega$	1.14VDC
Low Broil	9.10K $\Omega$	5VDC	7.76K $\Omega$	4.40VDC	1.38K $\Omega$	0.63VDC
Self Clean	9.10K $\Omega$	5VDC	8.85K $\Omega$	4.86VDC	0.44K $\Omega$	0.17VDC



### Control Board Diagnostics (continued)

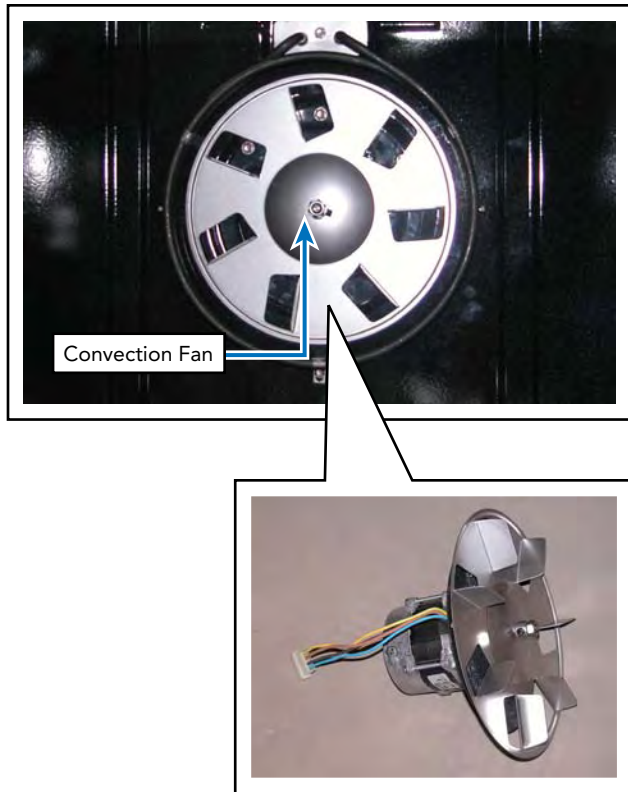
#### RTD Sensor

Locate the P15 connector on the main control board. The P15 connector will have a molex plug containing a black and yellow wire. The black and yellow wires go to the oven sensor.



With the molex plug removed, use an Ohm meter to measure resistance between the yellow and black wires in the molex connector. At room temperature the reading should be approximately 1050 – 1100  $\Omega$ . If no or infinite resistance is read, verify sensor wiring is connected completely through circuit. If wiring is OK replace sensor.

## Convection Fan Assembly

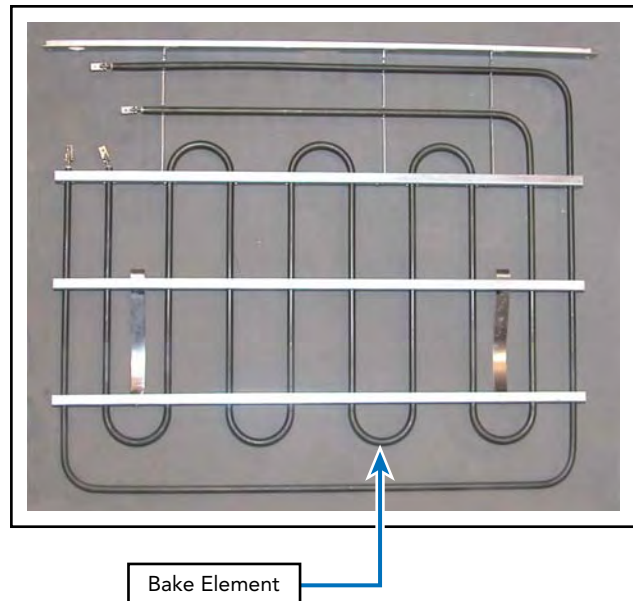


The convection fan assembly incorporates a heating element and a two direction fan to move air through the cavity ensuring even heat distribution.

With the control board removed, verify 240VAC at the convection fan element. If voltage is not present, verify the line break relay closes, L2 is supplied to the relay, and the convection bake relay closes. If voltage is present and no heat, replace the convection fan element. Verify 240VAC at the convection fan motor. If voltage is not present, check L1 and L2 supply to the board. If supply is OK and no power out, suspect a bad relay and replace the control board. If voltage is present and the fan does not energize, replace the fan. K6 relay blue to grey determines the direction of the fan and K7 relay orange to green determines the fan speed.

If component access is needed, see convection fan disassembly instructions (page 33).

## Bake Element



The unit uses a single pass outer element and 8 pass inner element to achieve the bake function.

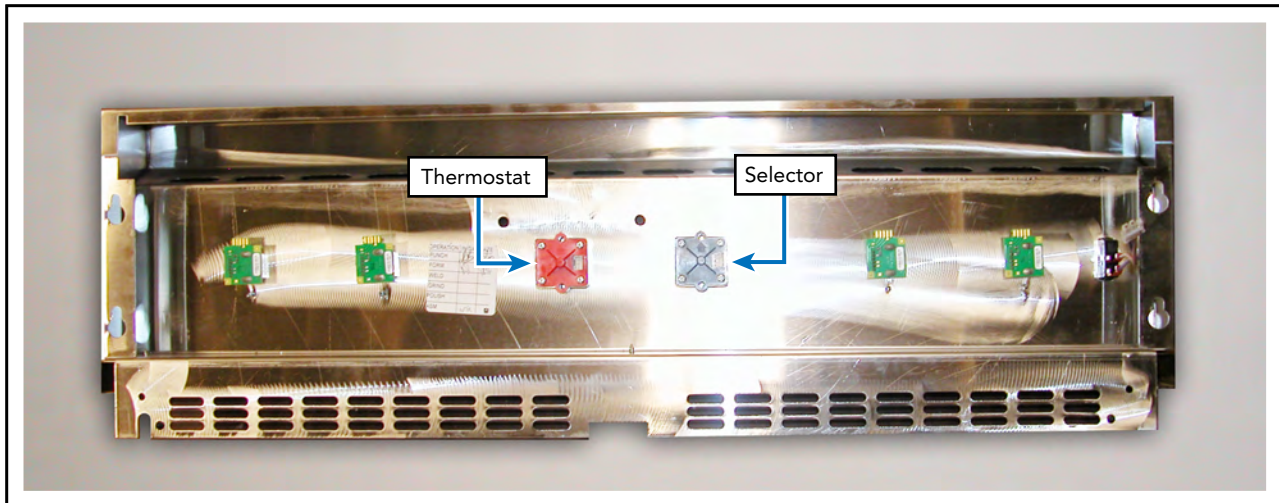
With the control board removed, verify resistance on the inner and outer portion of the element. If no or infinite resistance is found, replace the element. Verify 240VAC to the element. If voltage is not present, verify the line break relay is closed, supply voltage is available to the line break, and output from the board is supplied. If voltage is present and the bake element does not energize, replace the element.

If component access is needed, see bake element disassembly instructions (page 34).

**Note:** Door switch must always be pressed to make door latch, convection fan, oven lights and elements work when the door is open.

## Thermostat

## Selector



The thermostat is a potentiometer whose resistance varies per user selections. The selected resistance informs the control board of the user's selection. The table below on page 27 shows the characteristics of the thermostat positions. All values are approximate.

To access the thermostat, open oven door and remove the screws securing the control panel, remove control panel, the thermostat is now accessible. Check the resistance and voltage per chart on page 27, if the readings are within range check the oven sensor resistance. If the readings of the thermostat or sensor are out of range, replace that component.

The selector is a potentiometer whose resistance varies per user selections. The selected resistance informs the control board of the user's selection. The table on page 27 shows the characteristics of the selector positions. All values are approximate.

To access the selector, open oven door and remove the screws securing the control panel, remove control panel, the thermostat is now accessible. Check the resistance and voltage per the chart on page 27, if the readings are within range, check the oven sensor resistance. If the readings of the thermostat or sensor are out of range, replace that component.

**Note:** The thermostat and selector can be checked from the control board assembly.

## ⚠ WARNING

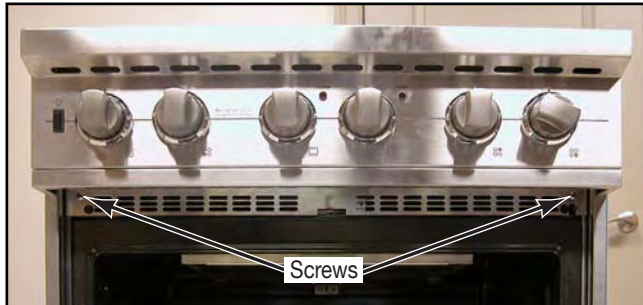
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

### Control Panel Assembly Removal

#### Condition Requirements:

Door Lowered

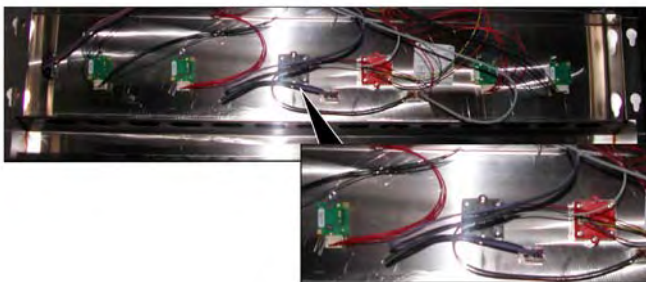
1. Open oven door and remove two screws from control panel assembly.



2. Lift up on control panel assembly to disengage from keyhole screws.
3. Rest control panel assembly on ledge.



4. Tilt control panel assembly forward and disconnect wiring to remove from range (label wiring and switch orientation before disassembly).



5. Reverse procedure for installation.

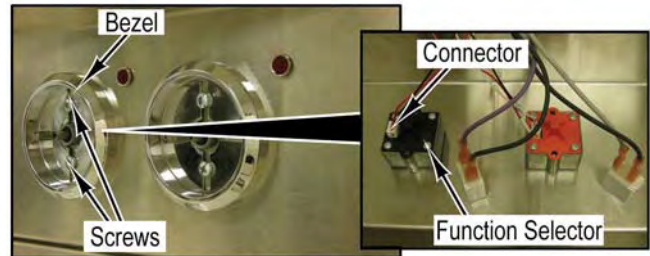
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### Oven Function Selector Removal

#### Condition Requirements:

Control Panel Assembly Removed

1. Remove oven function selector knob from control panel assembly.
2. Disconnect connector from the oven function selector.



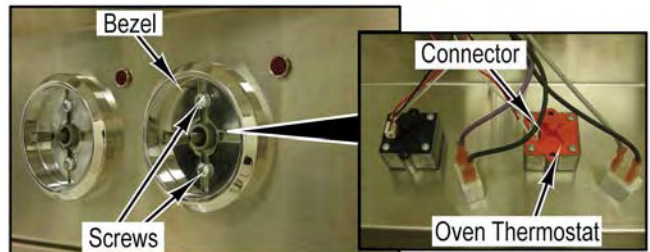
3. Remove two screws, bezel, and the oven function selector from the control panel assembly.
4. Reverse procedure for installation.

### Oven Thermostat Removal

#### Condition Requirements:

Control Panel Assembly Removed

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

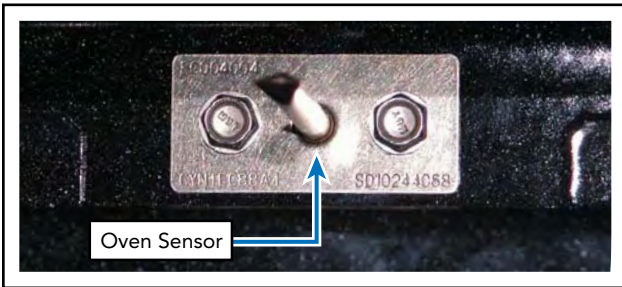


3. Reverse procedure for installation.



## Oven Sensor

The oven sensor is a resistive thermal device that has a positive temperature coefficient. The sensor measures change in resistance and communicates this to the control board. The chart below shows the characteristics of the sensor.



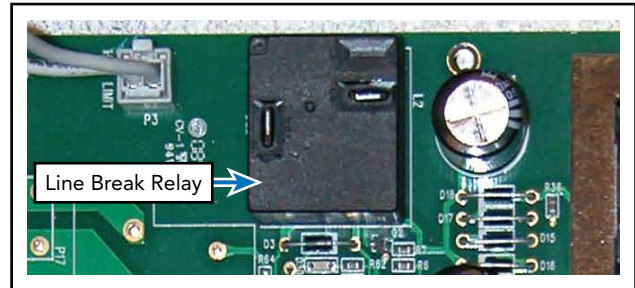
RTD Resistive Thermal Device	
Temperature (°F)	Resistance (Approximate)
50	1038
75	1090
100	1143
200	1350
300	1553
350	1654
400	1754
450	1852
500	1950
550	2047
600	2153
650	2238
700	2332
750	2425
800	2318
850	2609
900	2700

To access the oven sensor, open the oven door, remove the securing screws and guide wiring into oven cavity. Disconnect wiring and sensor is accessible. Check the oven sensor per the resistance chart above. If the sensor is out of range replace the sensor.

## Line Break Relay

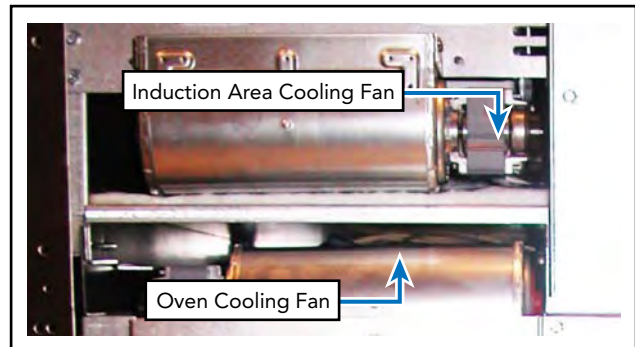
The line break relay is a device that breaks the L2 side of line voltage. As the relay is energized, the

relay closes allowing L2 to flow to the convection, broil and bake element.



To access the line break relay, remove the lower access panel, slide the control board out and the line break relay is mounted on the board. To check the relay, verify 120VAC. If power is present and no output to the elements, replace the line break relay. If 120VAC is not present, check source voltage and wiring.

## Oven and Surface Area Cooling Fans



The VISC incorporates two cooling fans. Both fans are wired in parallel to each other. The top fan is designed to circulate air around the Induction modules whenever the oven is switched on, as is the lower cooling fan. **NOTE: The hall effect sensor only monitors the lower fan, not the upper!**

To access the upper fan assembly, remove control panel, main top, screw securing right induction module and set module to side. Upper fans is now accessible at right rear. To access lower fan assembly, pull unit out of installation. Remove rear cover, remove screws securing lower fan assembly. Lower fan is now accessible.

To check fan, measure the resistance and voltage. If all checks are good and the unit still stops working, replace the control board.



## ⚠ WARNING

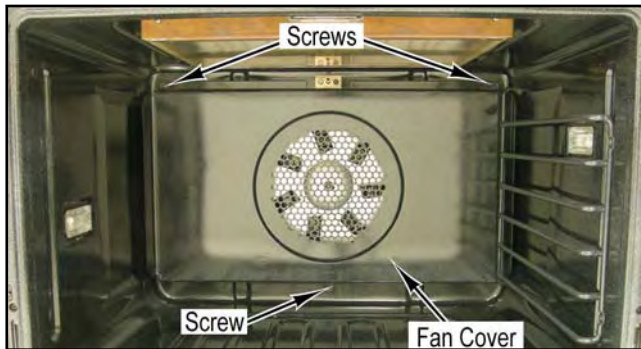
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

### 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.



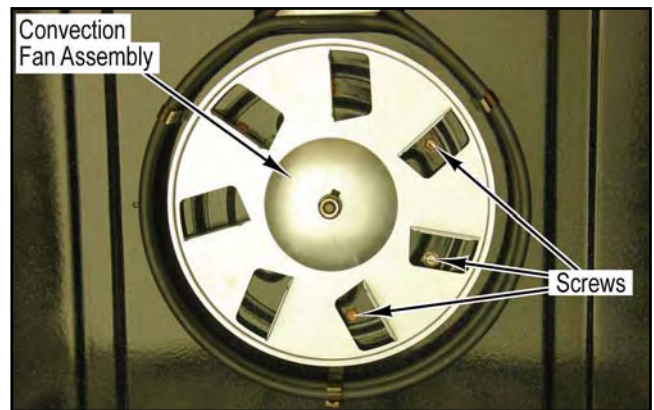
3. Reverse procedure for installation.

### Convection Fan Assembly Removal

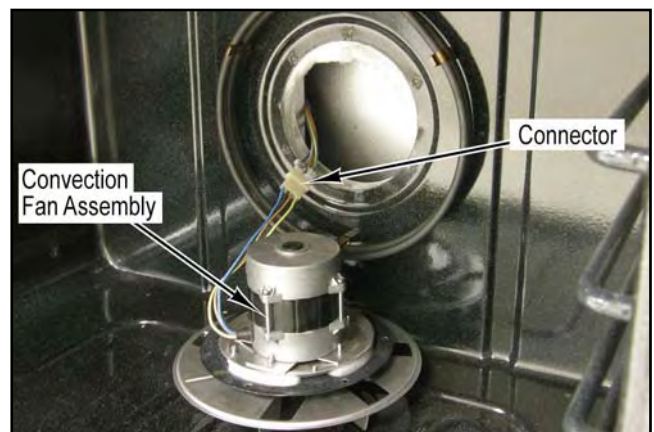
**Condition Requirements:**

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

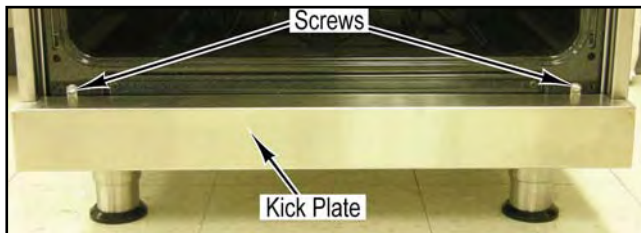
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

### Bake Element Removal

#### Condition Requirements:

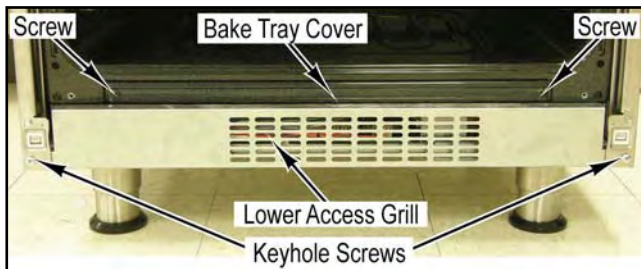
Door Assembly Removed

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.

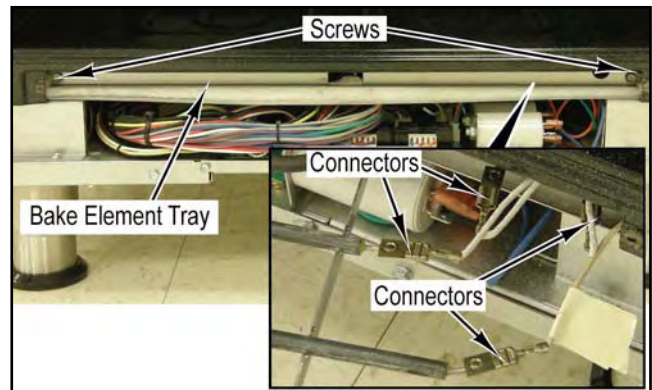


4. Remove bake element insulation from range.



**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.



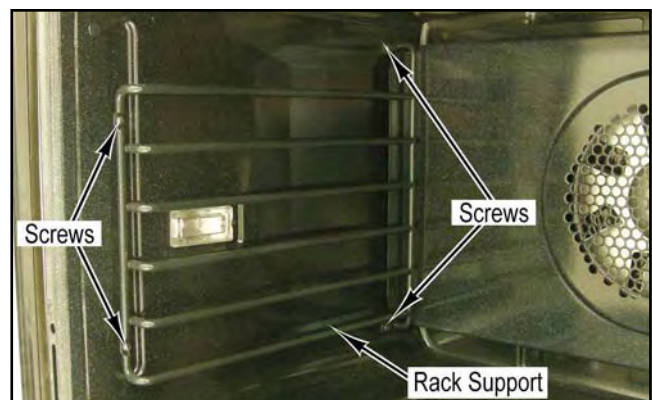
8. Reverse procedure for installation.

### Rack Support Removal

#### Condition Requirements:

Door Assembly Removed

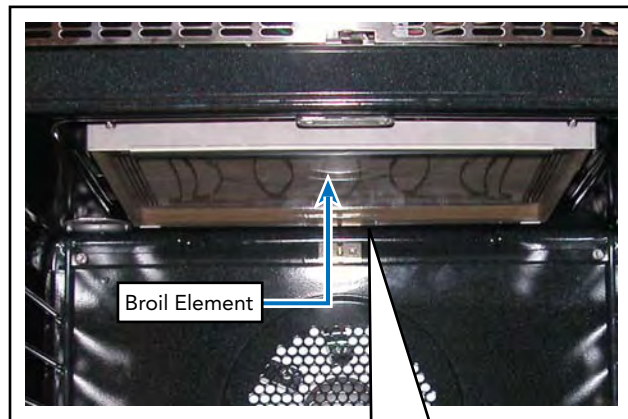
1. Remove four screws and rack support from each side of oven cavity.



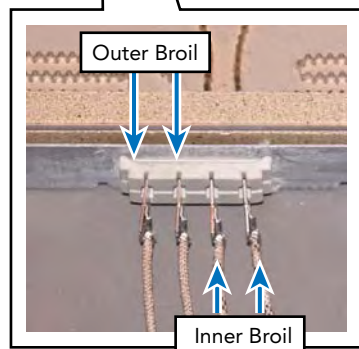
2. Reverse procedure for installation.

## Broil Element

The unit uses a dual ribbon element to achieve the broil function. The broil has four wires coming off the rear and they connect to the control board.

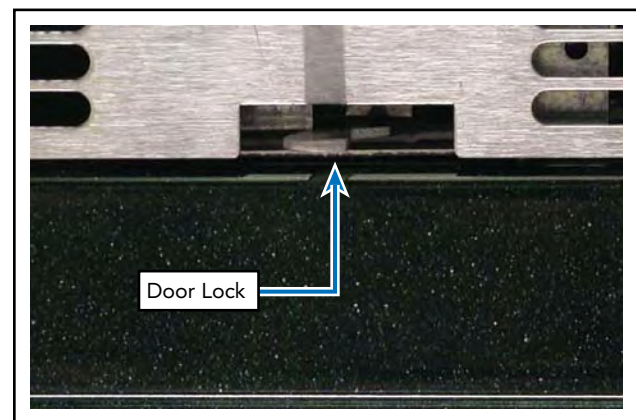


To access the broil element, remove the door, remove screws securing the element, and lower the element. Verify resistance on the inner and outer broil element. If no or infinite resistance found replace the broil element. Verify 240VAC to the element. If no voltage is present, verify the line break relay is closed, supply voltage is available to the line break relay, and output from the control board is supplied. If voltage is present and the broil element does not energize, replace the element.



## Door Lock

The unit uses a door lock switch and door latch switch to monitor if the door is open or closed and locked or unlocked. In the unlock state the door lock switch is closed and the door latch switch is open. Once the end user initiates a clean cycle, the door lock motor is energized. The motor rotates a cam that changes the state of the door latch switch from open to closed and the state of the door lock switch from closed to open. Once the signal is received that the door is closed and locked, the bake and broil elements are energized at elevated temperatures to clean food soils.



To access the door lock, remove the control panel and the door lock is accessible. In the unlock state, the door lock switch (green – blue) should be closed and should open in the lock state. In the unlock state, the door latch switch (green – orange) should be open and should close in the lock state. Verify resistance at the lock motor approximately 12.3  $\Omega$ . Apply 120 VAC to the motor and it should start to rotate.



## ⚠ WARNING

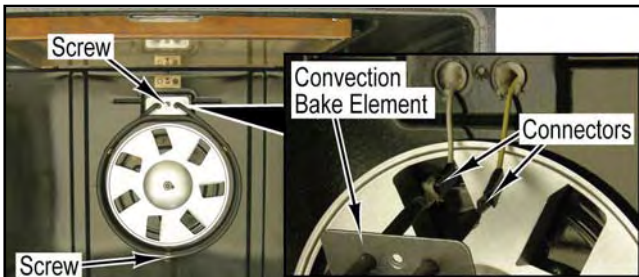
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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



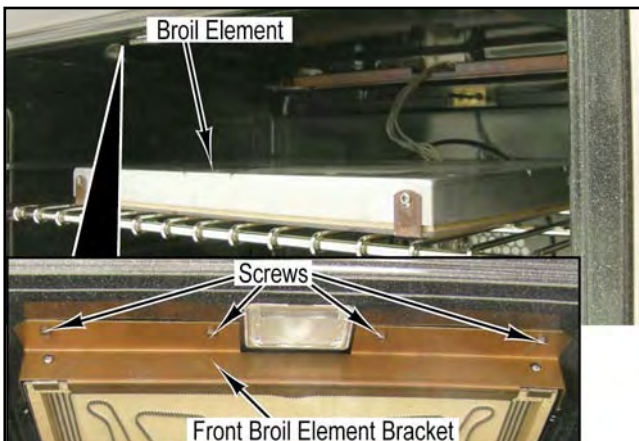
3. Reverse procedure for installation.

### Broil Element Removal

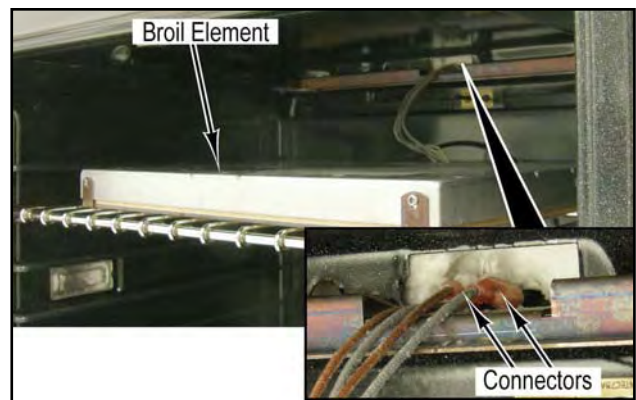
#### Condition Requirements:

Door Assembly Removed

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



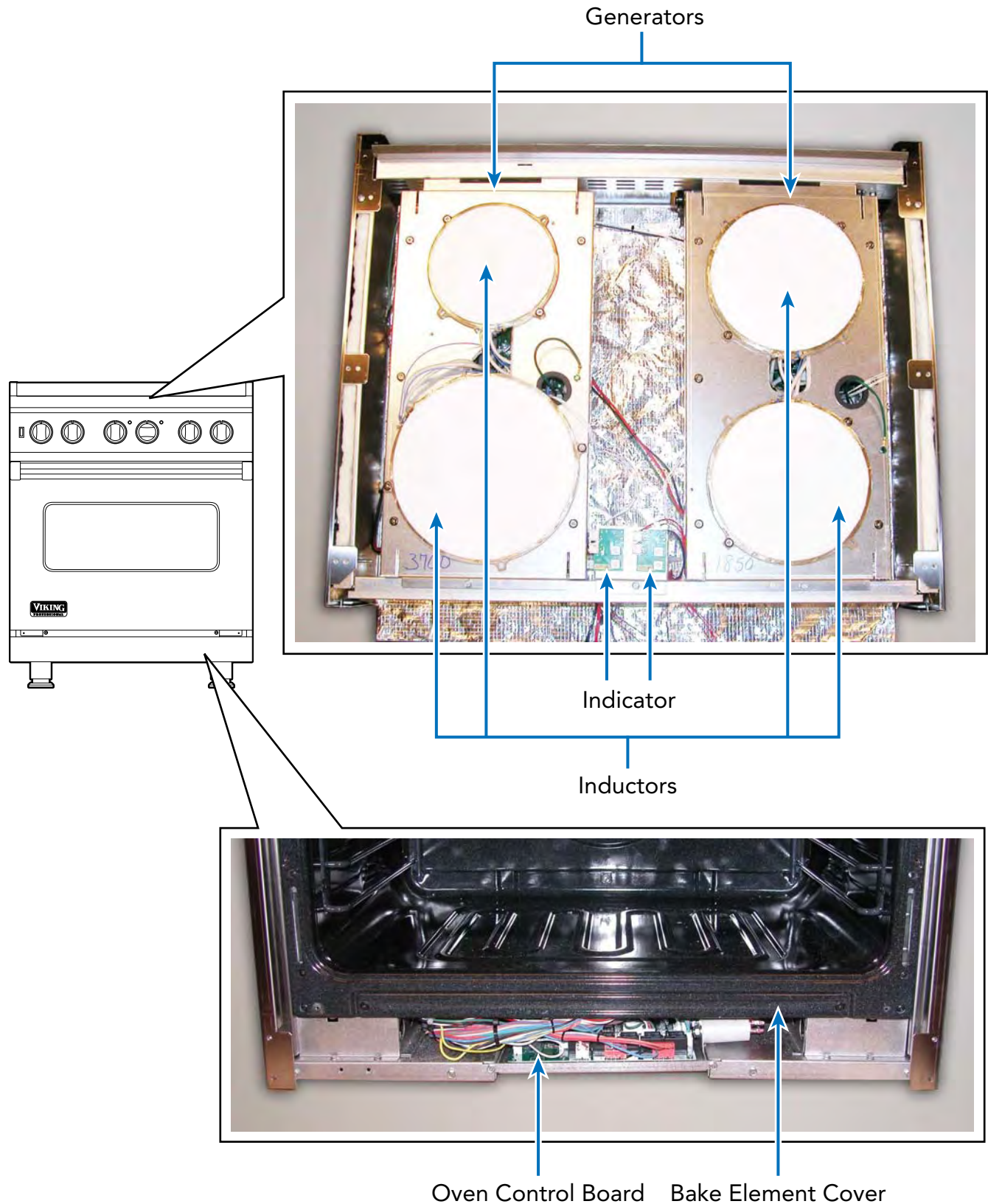
3. Remove broil element from back broil element bracket and lower broil element to the oven rack.
4. Pull connectors into the oven cavity.
5. Mark and disconnect four connectors from broil element.



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

6. Reverse procedure for installation.

Parts Location–Range Top, Bake Element, Control Board

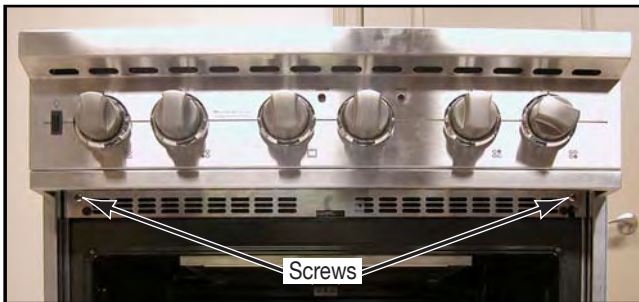


## ⚠ WARNING

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

### Interface Removal

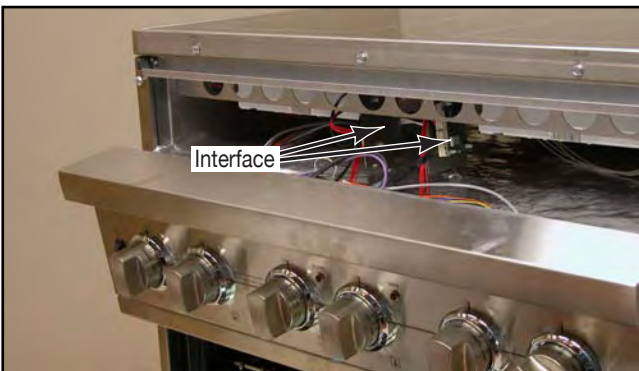
1. Open oven door and remove two screws from control panel assembly.



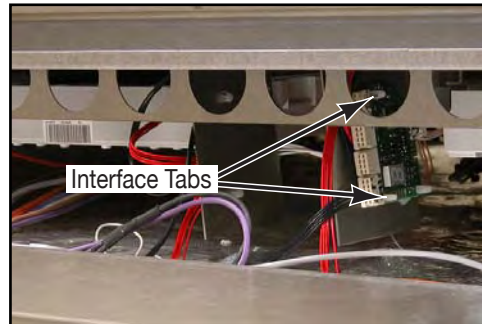
2. Lift up on control panel assembly to disengage from keyhole screws.
3. Rest control panel assembly on ledge



4. Interface boards are now accessible.



5. To remove interface press tabs.\*



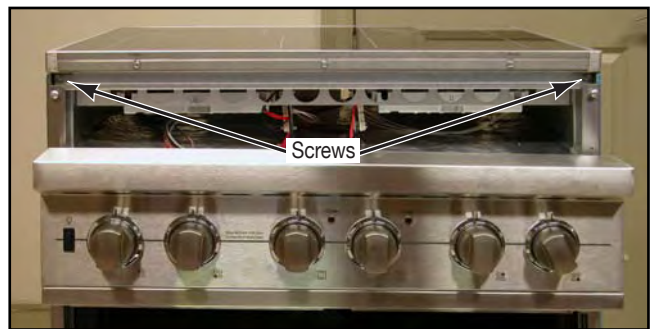
**\*IMPORTANT NOTE:**

Interface boards are pre-programmed for specific inductor configurations. When replacing interface boards be sure to check the replacement part number for the specific board needed or you will get an interface error (Er31).

6. Reverse procedure for installation.

### Indicator, Inductor, Filter and Power Board Removal

1. Remove control panel (see Interface Removal steps 1 -3).
2. Remove two screws securing top.



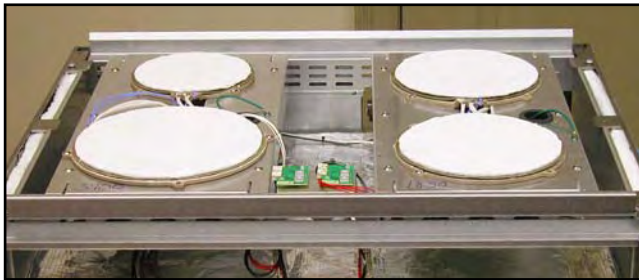


## ⚠ WARNING

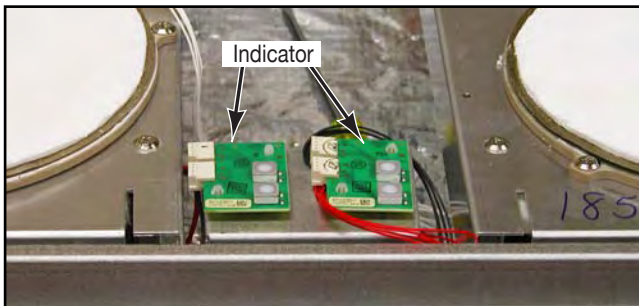
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

### Indicator, Inductor, Filter and Power Board Removal (continued)

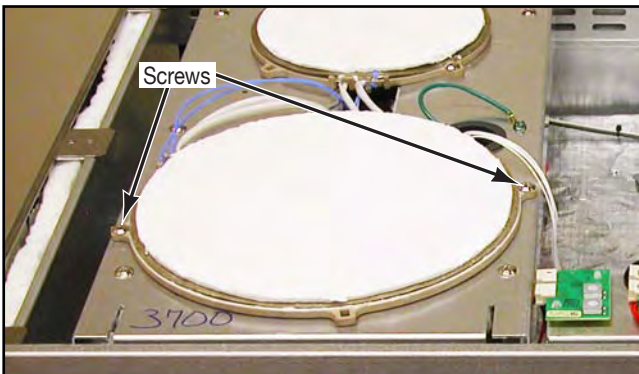
- Lift up slightly on main top and slide forward to remove.



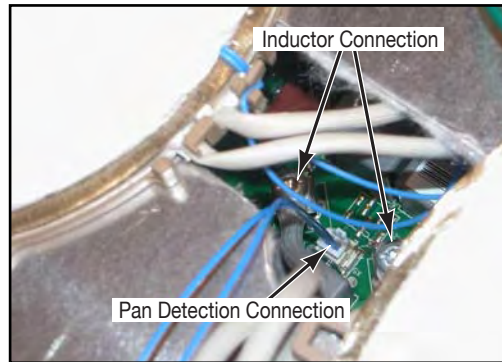
- Indicator board is now accessible.



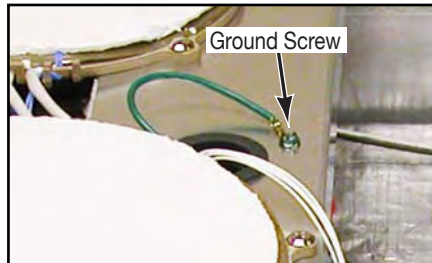
- Remove two screws that secure each inductor to generator cover.



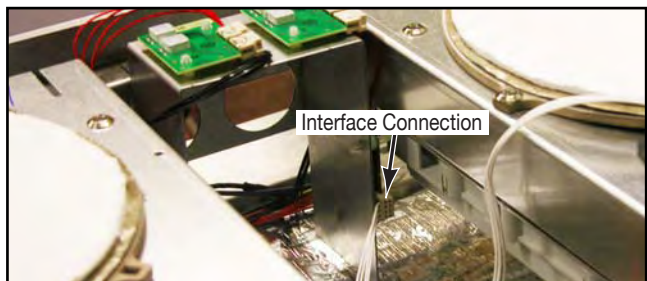
- Disconnect inductor connections and pan sensor from power board.



- Remove ground screw.



- Remove interface connection. Remove inductors from generator cover.



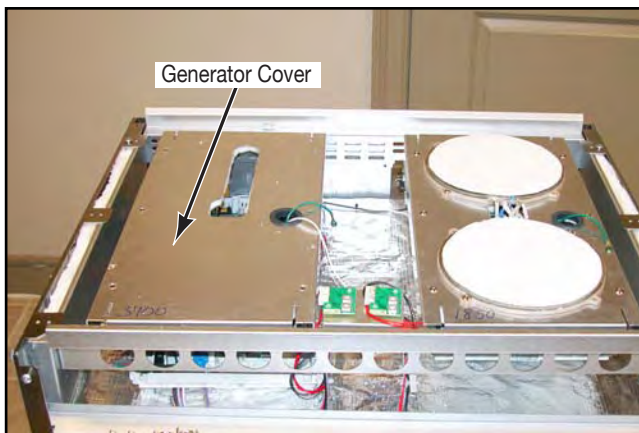
**Note:** Left and right module interface board connection CANNOT be reversed. If this occurs error code ER31 will occur.

## ⚠ WARNING

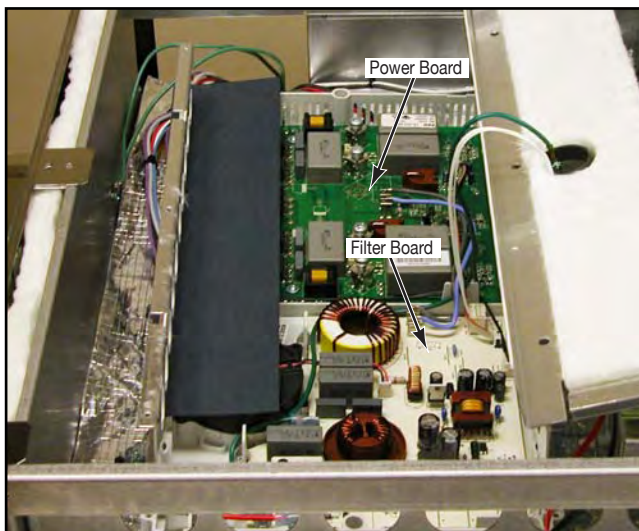
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power source to unit, unless test procedures require power to be connected. Discharge capacitor through a resistor before attempting to service. Ensure all ground wires are connected before certifying unit as repaired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

### Indicator, Inductor, Filter and Power Board Removal (continued)

10. Remove six screws securing generator cover (generator cover is suspended, support generator cover prior to removing screws).



11. Remove generator cover. Filter and power board are now accessible.



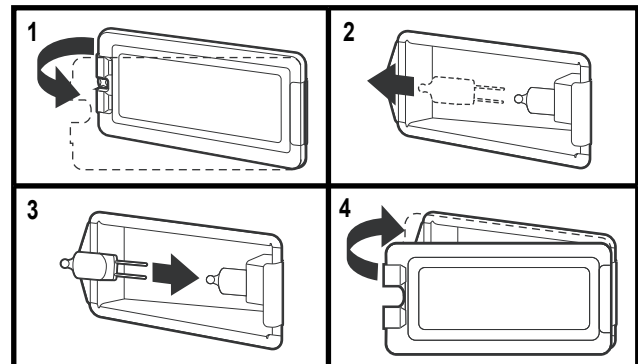
12. Reverse procedure to reassemble.

### Interior Light bulb Replacement

## ⚠ CAUTION

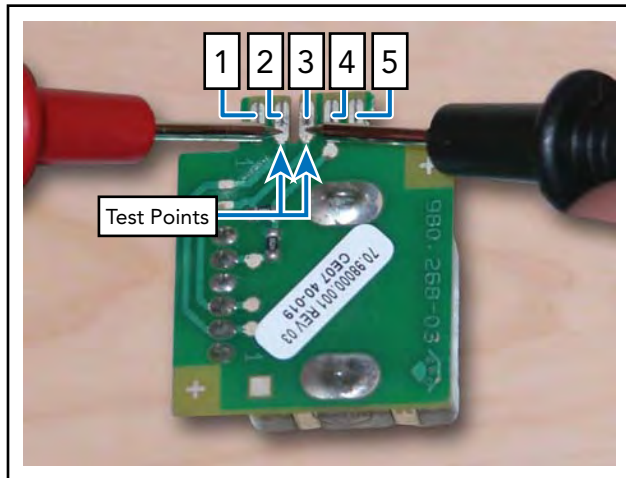
DO NOT touch bulb with bare hands. Clean off any signs of oil from the bulb and handle with a soft cloth.

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.





## Induction Switch



The purpose of the surface switch is to control the cooking operation. Once the end user chooses a setting, the corresponding amount of power and cycle rate to deliver a given output is sent to the interface board. The interface board communicates between the indicator and the generator. The indicator communicates if a pot is in place. The generator receives input to power the inductor and deliver the desired output.

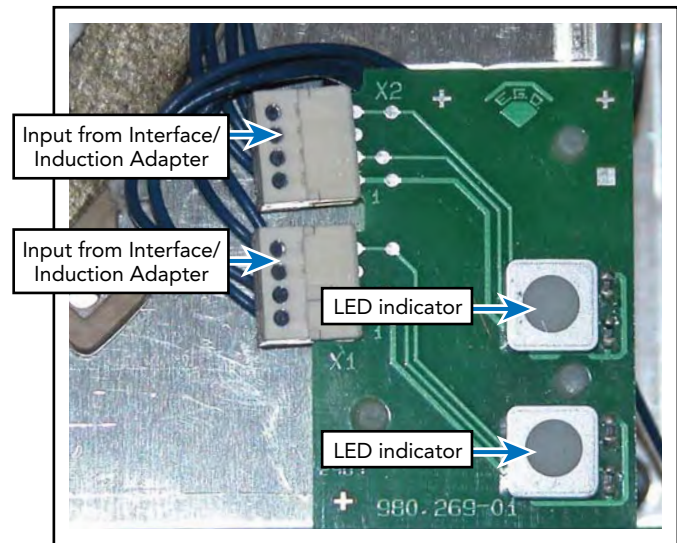
To access the surface switch, see Control Panel Removal (page 23). The switch is a 10K potentiometer. Measure the resistance at different switch settings. If no reading or an open occurs the switch is bad. See chart below for resistance readings:

### Induction Switch Resistance Chart

Setting	Resistance
Off	11690 Ω +/- 50 Ω
Simmer	9430 Ω +/- 50 Ω
Low	9003 Ω +/- 50 Ω
Medium-Low	7850 Ω +/- 50 Ω
Medium	6600 Ω +/- 50 Ω
Medium-High	2840 Ω +/- 50 Ω
High	9.6 Ω +/- 50 Ω

Measured from positions 2 and 3

## Indicator



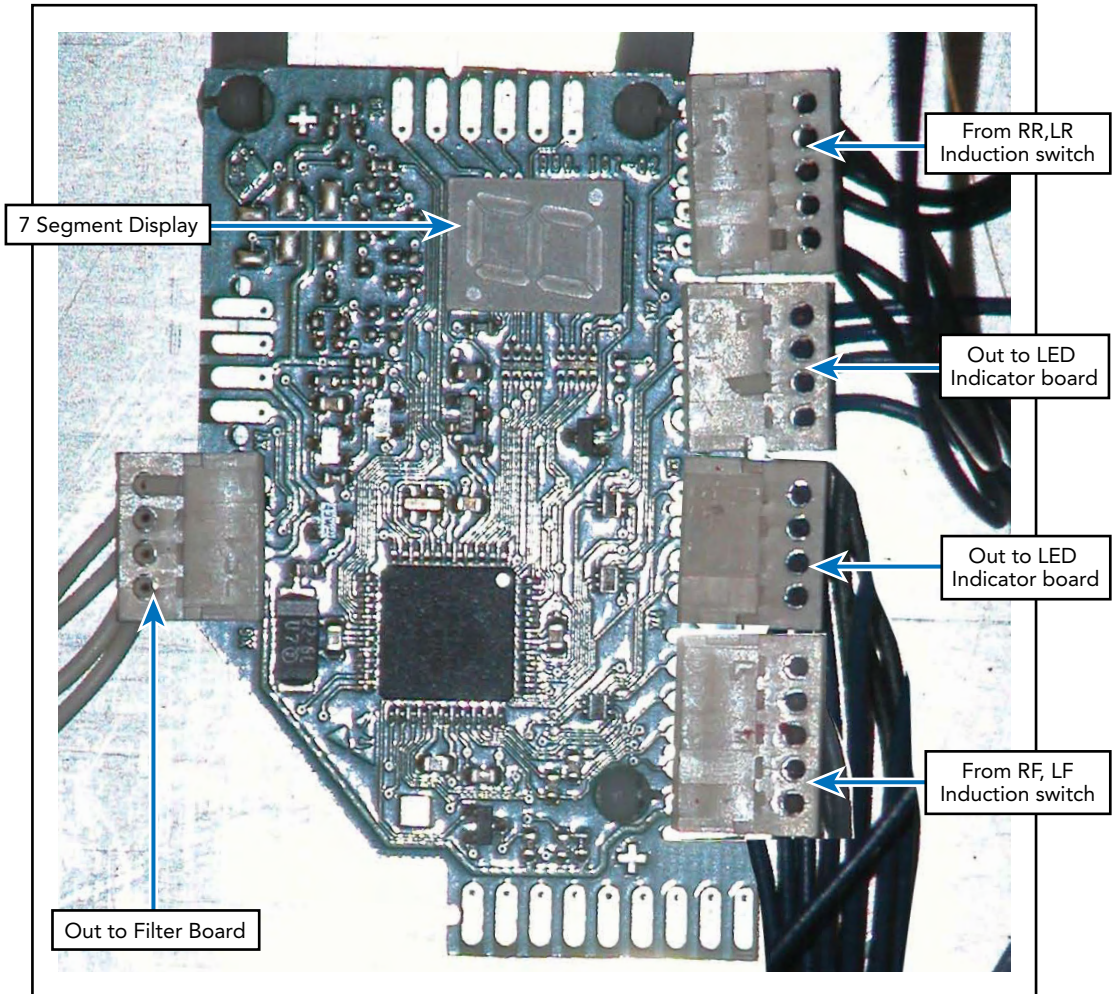
The indicator serves as a means to ensure a pot is on the cooking surface. The indicator will flash if no pot is recognized or if an error is present.

LED flashes with pan detection and residual heat. When cook top is off and residual heat is present, the zone indicator flashes. In case of overheat powerboard LED's flash rapidly.

The indicator receives a signal from the interface indicating which inductor is to be energized. The indicator monitors this signal and will flash if no pot is recognized or will display an error message if a error is present (refer to error chart page 16). Verify wire connections are tight, and ohm wires end to end. If continuity is present, check the induction switch and interface. If both are OK, replace the indicator.

**Note:** Left and right module interface board connection CANNOT be reversed. If this occurs error code ER31 will occur.

Interface/Induction Adapter



Once the end user makes a selection, the interface receives a signal from the induction switch. Once the signal is received at the interface, a corresponding output is sent to the filter board. The filter board in turn sends power to the power board to energize the inductor. Once the inductor is energized, energy is induced into the cooking vessel creating heat.

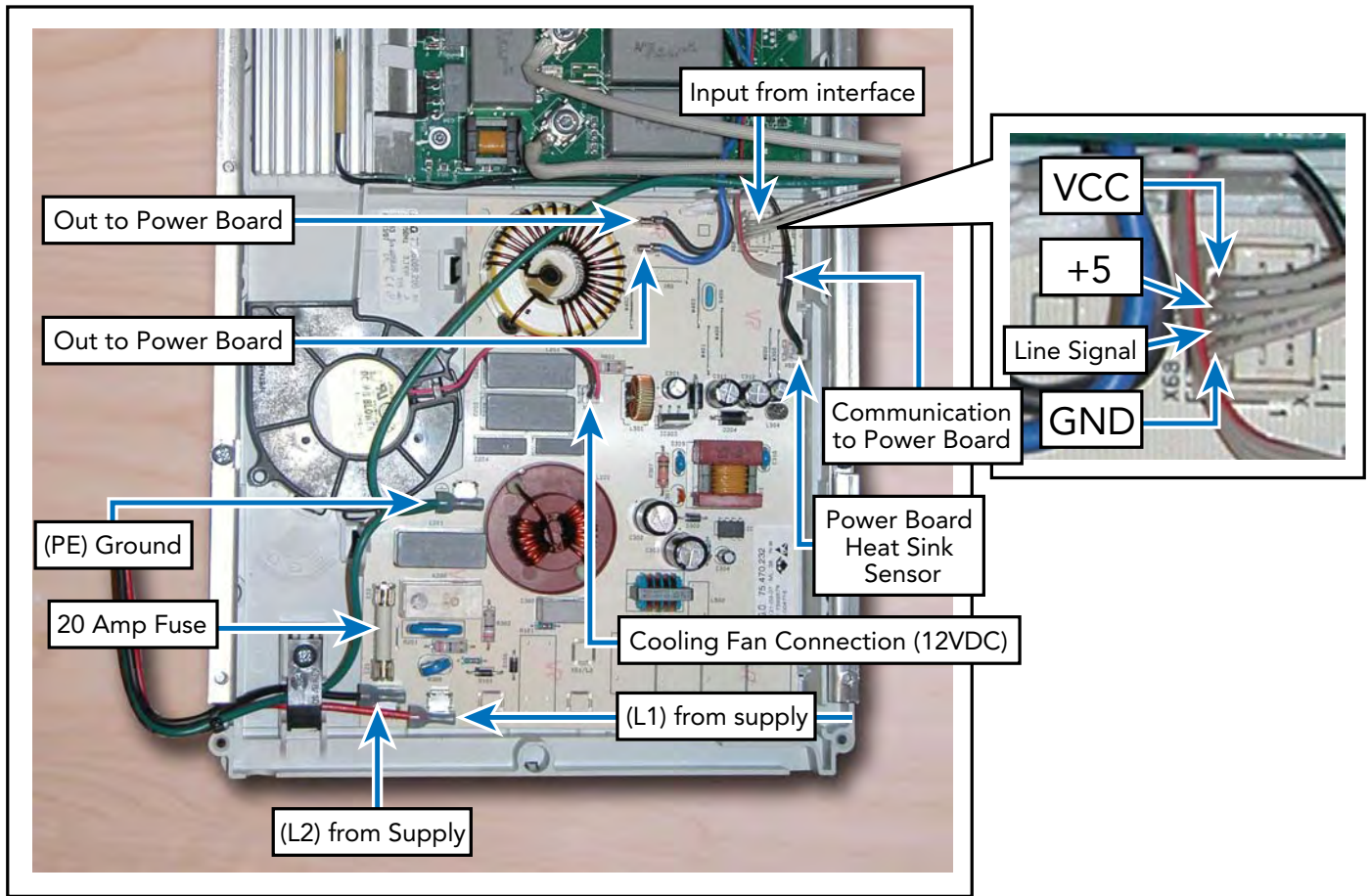
The interface is connected to the induction switch via a 5 wire cable. Ohm the wire tight, to ensure no breaks and verify connections are tight. If the cable is OK, verify resistance of induction switch per information in component testing chart. If connections are tight, wiring is good, and induction switch resistance is in range, replace the interface.

The interface connects to the filter board via a 4 wire cable. Position one is Vcc, position 2 is +5VDC, position 3 is line signal, and position 4 is ground. Verify +5VDC between position 2 and 4, and verify output signal between position 3 and 4. If no output is measured, the indicator lights up, and wiring is correct, replace the interface.\* If output is correct, wiring is correct and the inductor does not energize, check the filter board and power board.

**\*IMPORTANT NOTE:**

*Interface boards are pre-programmed for specific inductor configurations. When replacing interface boards be sure to check the replacement part number for the specific board needed or you will get an interface error (Er31).*

Filter Board



The filter board is part of the generator. Once a selection is made by the end user via the induction switch, the signal is sent to the interface. The interface then sends a signal to the filter board. Once the filter board receives the signal from the interface, power is sent to the power board. The power board then energizes the inductor which induces energy into the cooking vessel generating heat and the vessel heats rapidly.

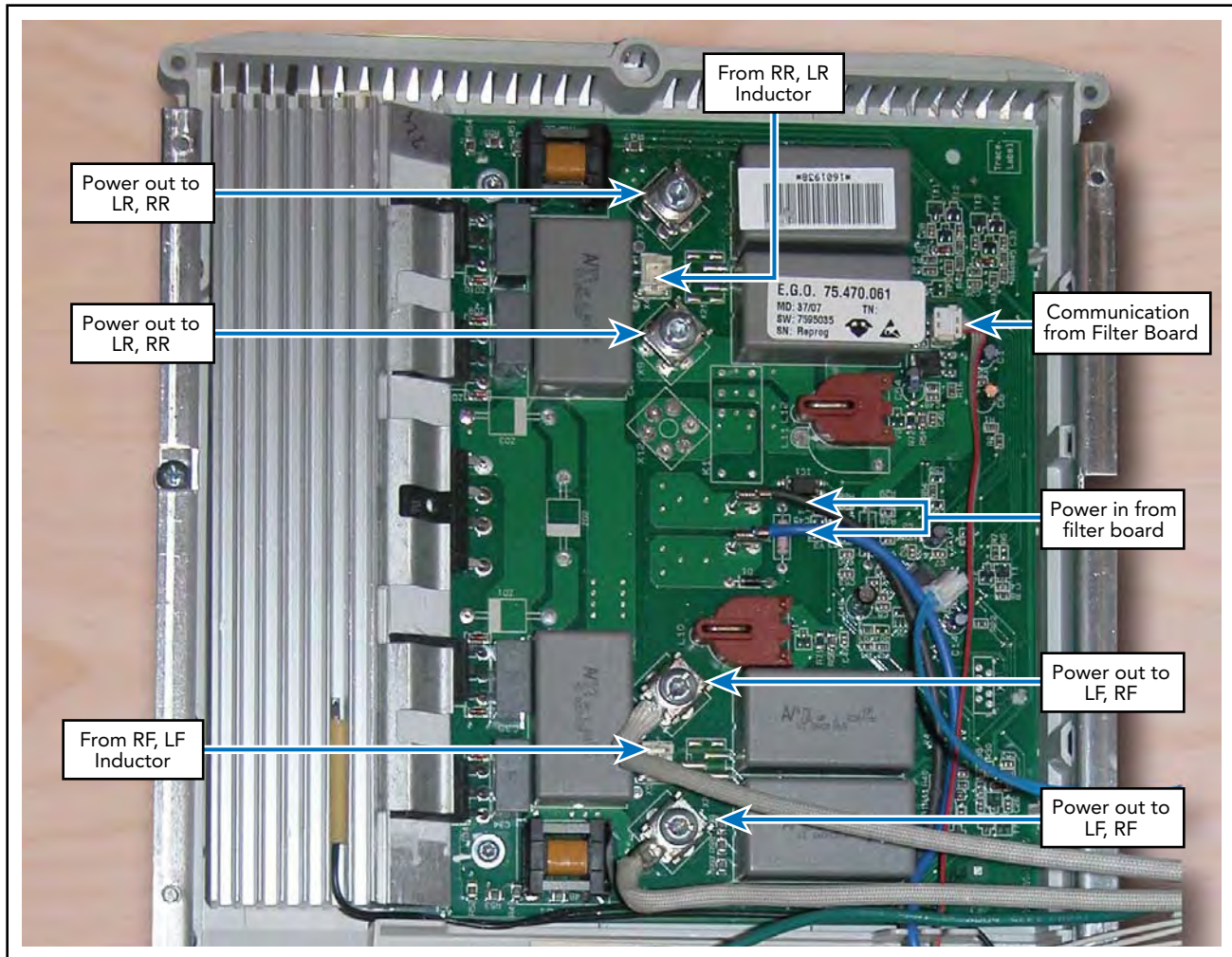
The filter board receives L1 (at position X50) and L2 (at position X52) direct from the power supply. Ground is supplied to the filter board at position PE. The filter board is protected by a 20 amp fuse located between E23 – E22. Verify 120VAC between L1 and ground, 120VAC between L2 and ground, and 240VAC between L1 and L2 at the filter board.

If voltage is present, the fuse is not open, the interface is sending a signal, connections and wiring is proper, the induction switch is in range, and no heat is generated, replace the filter board.

**NOTE:** Replacement parts for items covered in this section are included in a service kit.



## Power Board



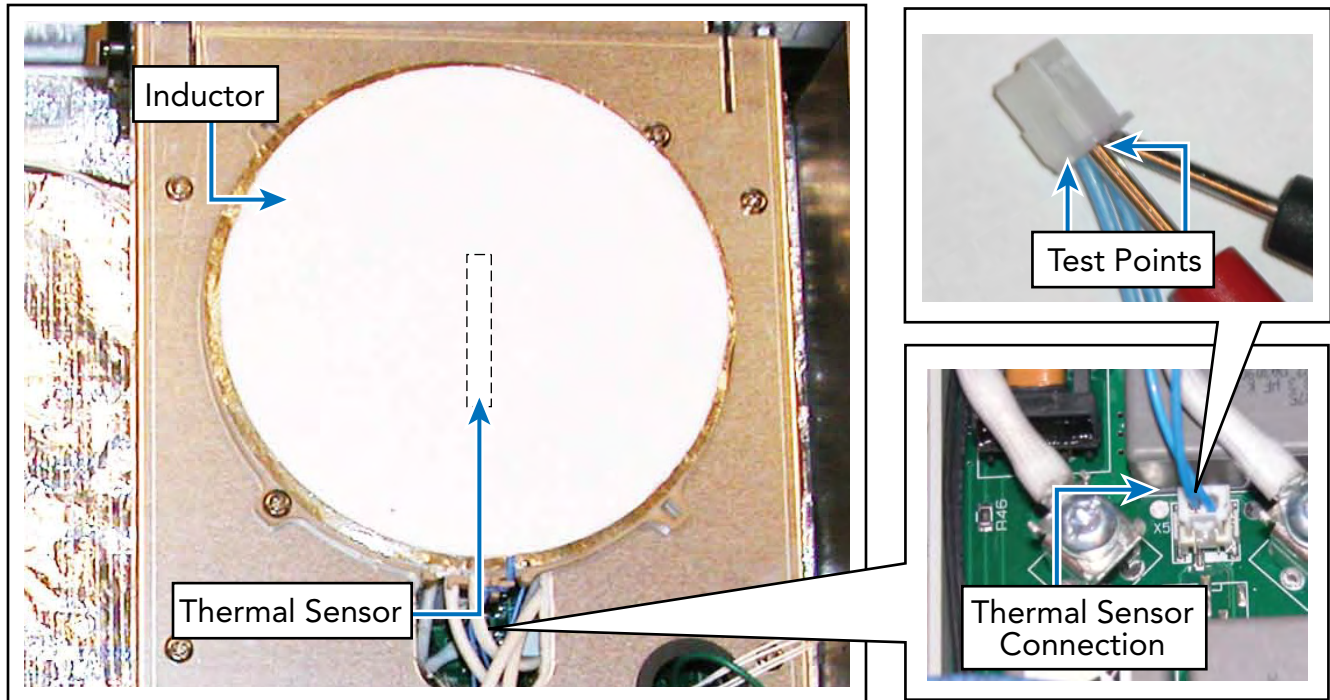
The power board is part of the generator. Once a selection is made by the end user via the induction switch, the selection is sent to the interface. The interface then sends a signal to the filter board. Once the filter board receives the signal from the interface, power is sent to the power board. Once the power board is energized by the filter board and receives a signal from the filter board, power is sent to the inductor, which in turn induces energy into the cooking vessel generating heat. Wattage per cooking zone is 3200W maximum. Total wattage is 3700W.

Verify power at the power board (blue to black). If power is present at power board and no output to inductor, replace power board.

If no power is present at power board, verify wire connection between filter board and power board. If wiring is good, verify voltage output from filter board X55 to X56. If no output voltage is present from filter board and the fuse is not open, replace filter board. If output voltage is present at filter board, wiring is good, and no output voltage to inductors, replace power board.

**NOTE:** Replacement parts for items covered in this section are included in a service kit.

## Inductor



The inductor is similar to the surface element in a normal cooking system. When the end user makes a selection, the signal is sent to the filter board via the interface. The filter board sends power to the power board and in turn energizes the inductor. This creates an electromagnetic field and allows an electromagnetic transfer of energy from the inductor to the cooking vessel which generates heat in the vessel causing it to heat up rapidly.

The inductor has two blue wires that plug into the power board. Resistance should be approximately  $990\ \Omega$  when unplugged from the power board. If resistance is within range, verify voltage from the power board position X5 or X4. If no power verify the inductor leads are properly secured to the power board X6 - X8 (left front and right front) and X7 - X9 (left rear and right rear). If the inductor leads are secured and no power out, replace the power board. If power out and no heat, verify the cooking vessel is proper (a common refrigerator magnet will stick to it). If the cooking vessel is proper, replace the inductor.

## Thermal Sensor

The unit is protected by two thermal sensors. The thermal sensors monitor the temperature of the cooking zone to ensure the glass does not overheat and monitors the induction generator temperature to ensure the electronic components do not overheat.

The sensor is located under the inductor pad and has two wires going to the power board. If a mechanical failure of the sensor occurs, an E9 error code will appear. To correct, check the sensor resistance and approximately  $990\ \Omega$  should be measured. If no resistance is found replace the inductor. If resistance is found, and error continues, replace the inductor. If a thermal failure occurs, an E2 error code will appear. Allow the cooking zone to cool down.

**NOTE:** Replacement parts for items covered in this section are included in a service kit.

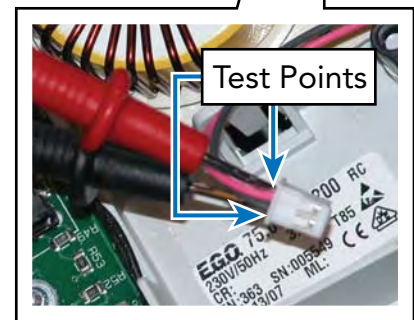
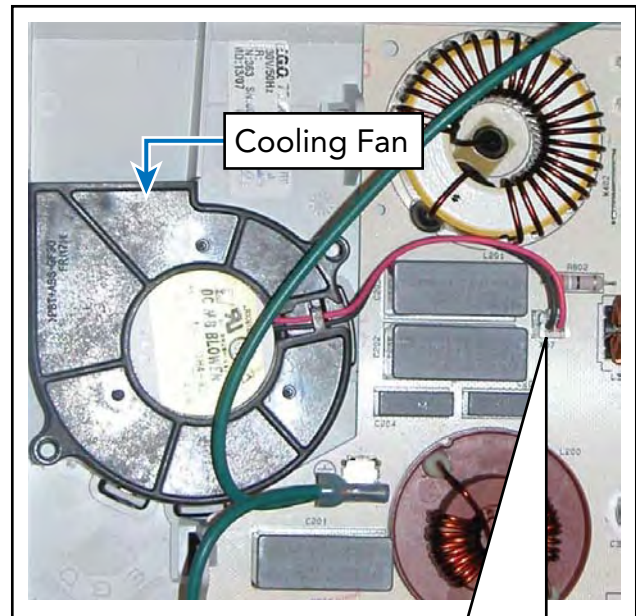


## Thermal Sensor (cont)

The sensor attaches to the filter board and the sensing bulb resides in the power board area. If a mechanical failure of the sensor occurs, an E9 error code will appear. To correct, check the sensor resistance and approximately 990  $\Omega$  should be measured. If no resistance is found replace the sensor. If resistance is found, and error continues, verify the cooling fan is operating. If cooling fan is operating, replace the filter board. If a thermal failure occurs, an E2 error code will appear. Allow the induction generator to cool down, verify the cooling fan is operating, and verify sensor resistance. If all checks well, replace the filter board.

## Cooling Fan

The cooktop uses cooling fans to help with heat management. The fan ensures the electronics and switches are kept cool during cooking modes as well as pulls excess heat from the cooktop. The fan is 12VDC, 0.38 Amp, 4.6 W, 9400 RPM.



**NOTE:** Replacement parts for items covered in this section are included in a service kit.

## Component Testing

Component	Volts	Ohms	Amps	Test Location
Cooling Fan	12VDC	9150 _	0.38	X57 on Filter Board
LR/RR Inductor	240	N/A	N/A	X7-X9 at power board
LF/RF Inductor	240	N/A	N/A	X6-X8 at power board
Power Board	240	N/A	N/A	Black to Blue at board
Filter Board	240	N/A	N/A	L1 (X50) and L2 (X52) at board
Induction Switch	N/A	11690 Ω 9430 Ω 9003 Ω 7850 Ω 6600 Ω 3840 Ω 9.6 Ω	N/A	Off traces 2-3 at switch Simmer traces 2-3 at switch Low traces 2-3 at switch Med-Lo traces 2-3 at switch Medium traces 2-3 at switch Med-HI traces 2-3 at switch HI traces 2-3 at switch
Bake Element	240	38.3 Ω Outer 37.8 Ω Inner	6.3 6.3	K17 yellow – P5 blue K17 yellow – P6 purple
Broil Element	240	34.3 Ω Outer 29.3 Ω Inner	7.0 8.2	K17 yellow – P6 grey K17 yellow – P6 purple
Convection Element	240	18.3 Ω	13.1	K17 yellow - P2 white
Convection Motor	240	103.6	2.3	P1 black – P4 blue CCW P1 black – P4 grey CW
Sensor	5VDC	1100 Ω at 75° F	N/A	P15 pin1 – pin2
Blower Motor	120	18.2	6.6	N – P11 white
Door Latch Motor	240	12.1K _	0.02	P1 black – P12 white
Door Latch Switch (Door Unlocked)	5VDC 0VDC	Open Closed	N/A	P19 green – orange P19 green – blue
Door Latch Switch (Door Locked)	0VDC 5VDC	Closed Open	N/A	P19 green –orange P19 green – blue
Cycle Light	240	Open	N/A	P1 black – P12 grey
Clean Light	240	Open	N/A	P1black – P12 purple
Oven Light Switch–Off (Door Closed)	16VDC	Open (P20 brown–purple)	N/A	P20 brown – purple
Oven Light Switch–On (Door Closed)	0VDC	0 Ω (P20 brown–purple)	N/A	P20 brown – purple
Oven Door Switch (Door Open)	0VDC	Open (P20 brown–purple)	N/A	P20 brown – grey
Oven Door Switch (Door Closed)	16VDC	Open (P20 brown–grey)	N/A	P20 brown – grey

## Troubleshooting Guide

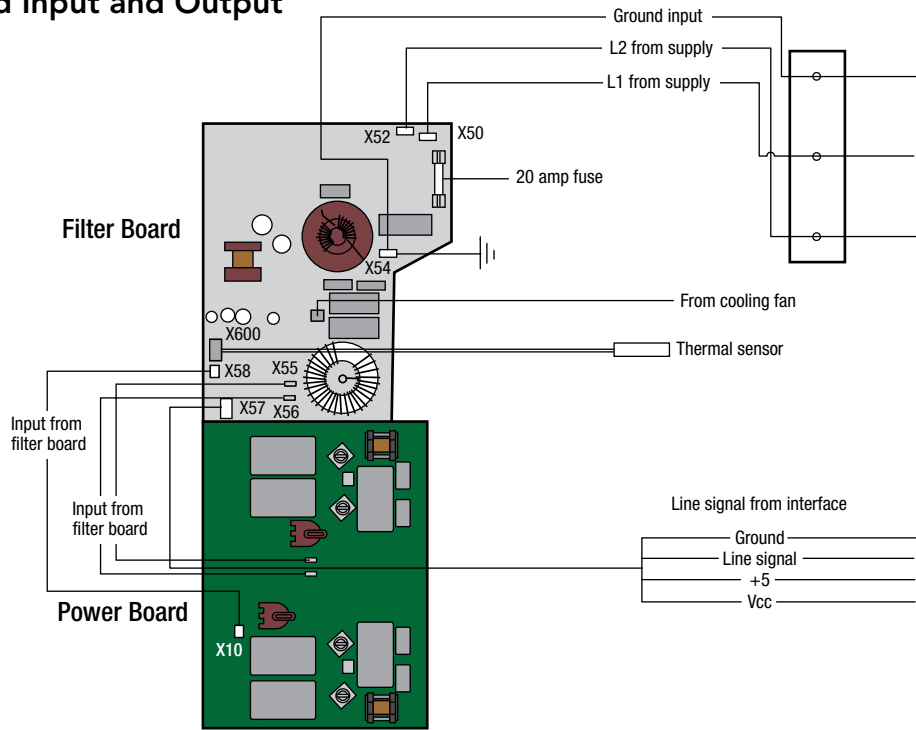
Below and on the following page are some general guides should a problem be detected. Please refer to the test procedures in this manual to determine the defective component.

Problem	Probable Cause	Correction
Nothing operates	Wiring Breaker	Repair or replace wiring as needed Reset breaker
One coil will not energize (indicator light blinking)	Non magnetic pan Cooking zone too hot Coil circuit open Generator board	Use magnetic cookware Allow unit to cool down Check coil circuit Check power and filter board
One coil will not energize (indicator light not blinking)	Switch Cable Interface board Generator Indicator Power connection	Verify switch is working Verify cable is connected and not open Check interface board Check power and filter board Check indicator Check terminal block
Neither coil will energize	Power connection Circuit breaker Internal power	Check terminal block Verify breaker and reset if needed Verify power and not shorted or open
Coil stays on when switch in off position	Defective switch	Check switch and replace if necessary
Coil on indicator not working	Indicator Cable	Check indicator Check connection and possible short open condition
No bake, broil, no oven lights, no power to control board (P1 red to black)	House breaker or fuse open Defective oven wiring (shorted, open, or burned)	Reset breaker or replace fuse Repair or replace defective wiring
No bake, no broil, no oven lights. 240VAC at control board (P1 red to black)	Open control board Defective oven wiring (shorted, open, or burned)	Replace control board (check operation of blower motor) Repair or replace defective wiring
No bake, oven lights operate	Open bake element Open or out of calibration selector Open or out of calibration thermostat Open relay	Confirm resistance Replace selector  Replace thermostat Replace control board
No broil, oven lights operate	Open broil element Open or out of calibration selector Open or out of calibration thermostat Open relay	Confirm resistance Replace selector  Replace thermostat Replace control board

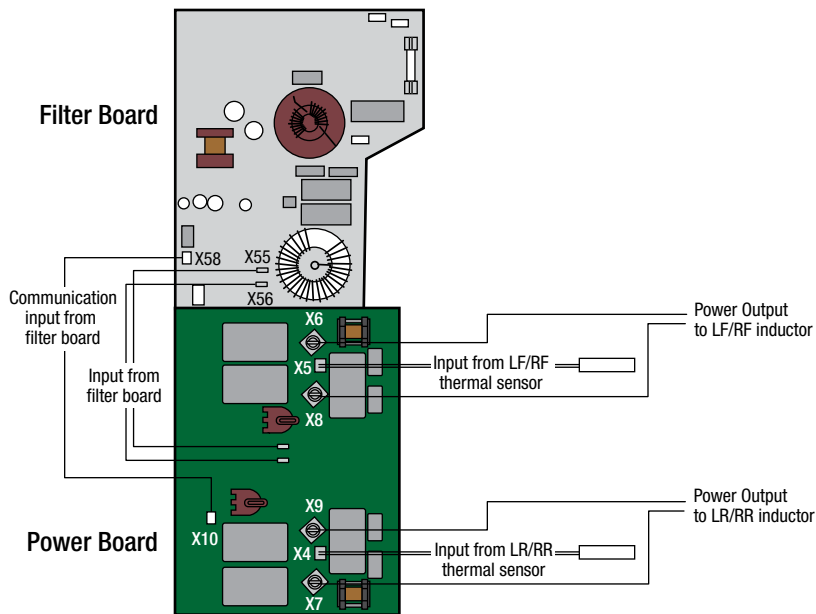
Problem	Probable Cause	Correction
No convection bake, oven lights operate	Open bake element Open broil element Open convection fan motor Open or out of calibration selector Open or out of calibration thermostat Open relay	Confirm resistance Confirm resistance Confirm resistance Replace selector Replace thermostat Replace control board
No self-clean, bake and broil operate normally, oven lights operate, door won't lock, no clean indicator light	Open door latch motor Out of calibration selector Out of calibration thermostat Open relay	Confirm resistance Replace selector Replace thermostat Replace control board
No self-clean, bake and broil operate normally, oven lights operate, door will lock, no clean indicator light	Open door latch switch Open control board Defective oven wiring (shorted, open, or burned)	Replace door latch assembly Replace control board 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 Oven sensor out of calibration Control board Defective oven wiring (shorted, open, or burned)	Replace door latch assembly Replace selector Replace control board Repair or replace defective wiring
Oven door won't unlock (oven below elevated clean temperatures)	Open door latch motor Oven sensor out of calibration Control board Open relay Defective oven wiring (shorted, open, or burned)	Replace door latch motor Ohm oven sensor Replace control board Repair or replace defective wiring
Oven lights inoperable (bulbs ok)	Control board Open relay Defective oven wiring (shorted, open, or burned)	Replace control board Replace control board Repair or replace defective wiring
Oven light will not work	Light bulb is burned out Supply voltage	Check bulb and replace if defective Verify source voltage
Blower motor inoperable	Open blower motor Oven Sensor Open relay	Check blower resistance Ohm oven sensor Replace control board



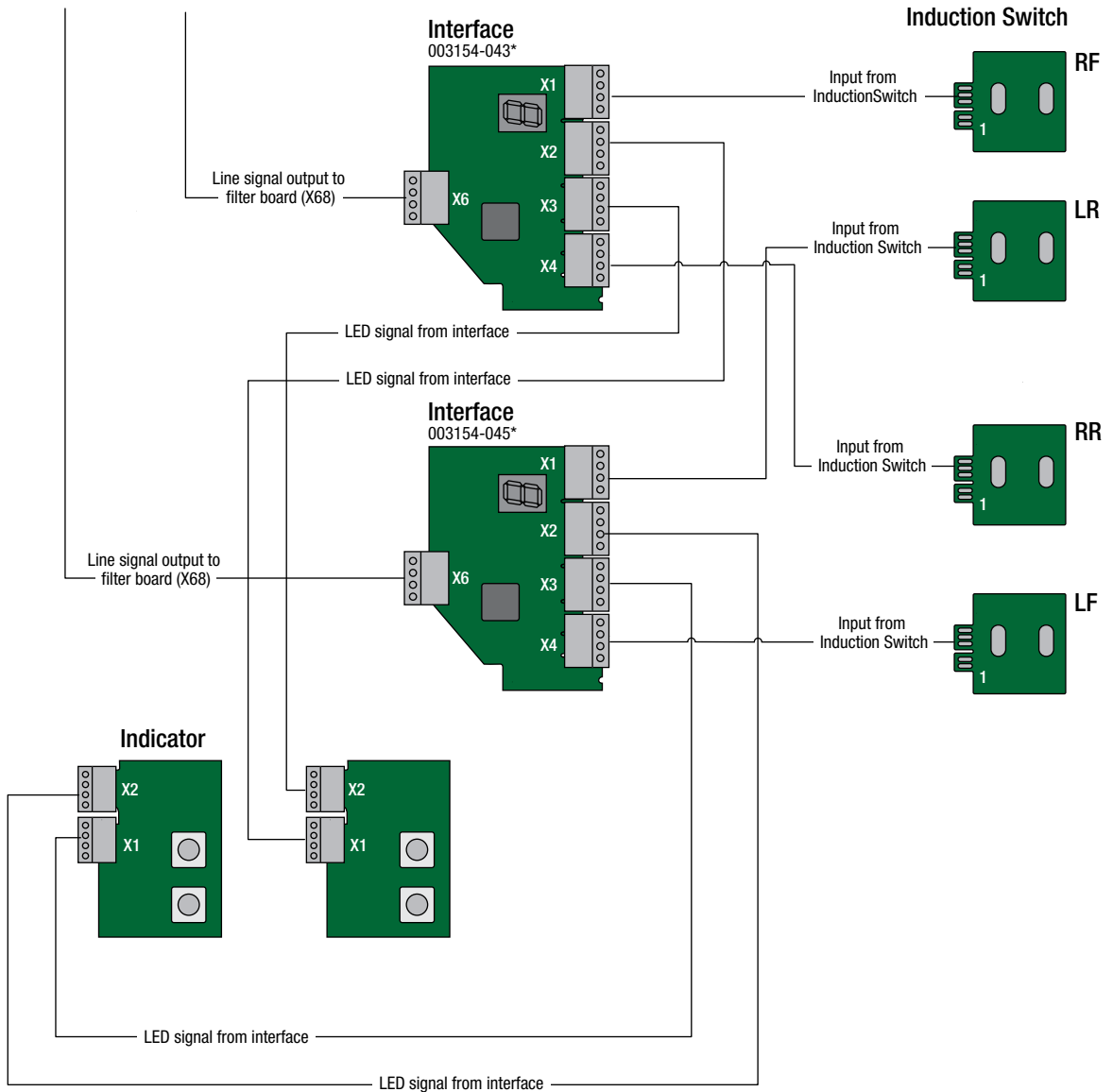
## Filter Board Input and Output



## Power Board Input and Output

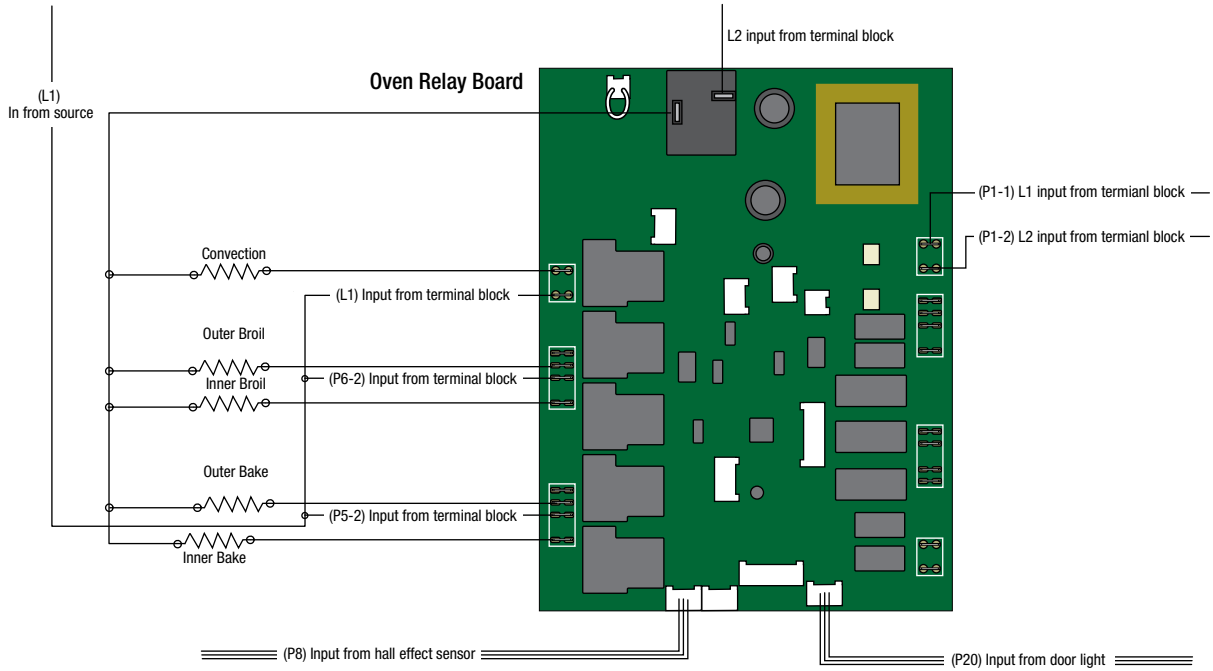


## Induction Switch/Interface/Indicator Input and Output)

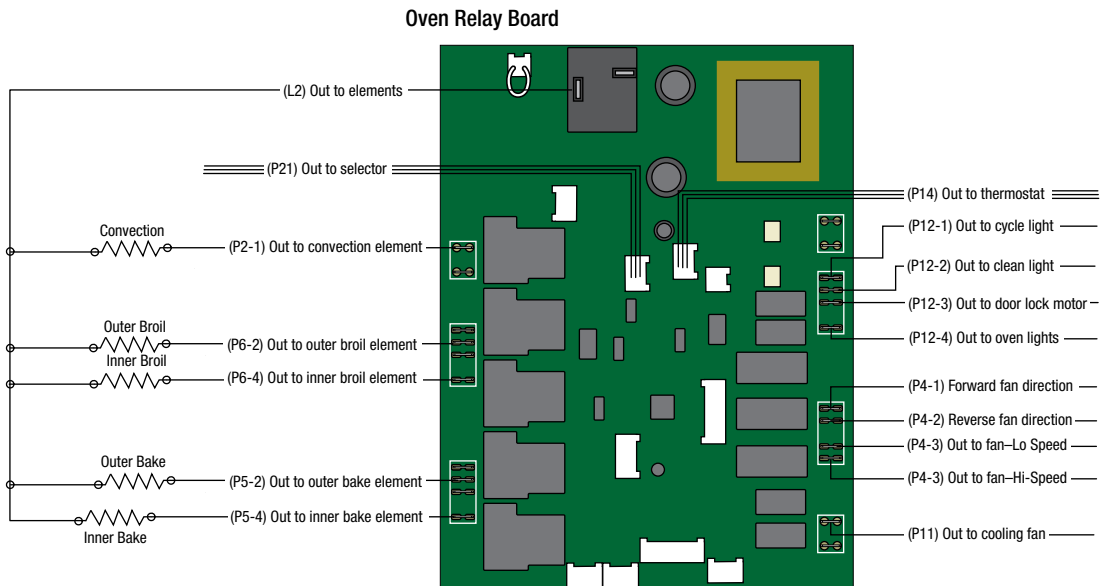


**\*Caution do not swap Interface Boards/Induction Adapters or you will get an Interface error (Er 31).**

## Control Board Input



## Control Board Output



# WIRING DIAGRAM VISC 530

