



Preferred Service

Service Manual

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

Single and Double Wall Oven

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

RDSOE306SS

RDDOE306SS



Contents Important Information

<i>Safety Information</i>	3
General Information	
<i>Warnings</i>	4
<i>Warnings</i>	5
<i>Warnings</i>	6
<i>Model–Serial Number Matrix</i>	7
<i>Model Numbers</i>	7
<i>Serial Numbers</i>	7
Operation	
<i>Settings and Functions–Control Panel</i>	8
<i>Settings and Functions</i>	9
<i>Settings and Functions</i>	10
General Information	
<i>Cleaning and Maintenance</i>	11
Diagnostics	
<i>Diagnostic Procedures</i>	12
<i>User Settings</i>	12
<i>User Settings (cont.)</i>	13
<i>Oven Selection And Offset Adjustment</i>	14
<i>Offsets</i>	15
<i>Diagnostics and Testing</i>	16
<i>Diagnostics and Testing (cont.)</i>	17
<i>Upper/Lower Diagnostics</i>	17
<i>Upper/Lower Diagnostics (cont.)</i>	18
<i>Component Testing</i>	19
<i>Component Testing (cont.)</i>	20
<i>Component Testing (cont.)</i>	21
<i>Component Testing (cont.)</i>	22
Service Diagnostics and Procedures	
<i>Parts Location–Relay Board</i>	23
<i>Relay boards</i>	24
Selector	25
Thermostat	25
Relay board LED's	25
<i>Fail Codes</i>	26
<i>Relay Board Diagnosis</i>	27
<i>Relay Board Diagnosis</i>	28
<i>Relay Board Diagnosis</i>	29
<i>Relay Board Diagnosis</i>	30
<i>Relay Board Diagnosis</i>	31
<i>Relay Board Diagnosis</i>	32
<i>Relay Board Diagnosis</i>	33
<i>Relay Board Diagnosis</i>	35
<i>Hall Effect Sensor</i>	36
<i>Parts Location–Oven Top</i>	37
<i>Main Top/Front Disassembly</i>	38
<i>Main Top/Rear Disassembly</i>	38
<i>Relay Board</i>	39

<i>Power Supply Board</i>	39
<i>Terminal Block</i>	40
<i>Control Panel Disassembly</i>	41
<i>Oven Light Switch</i>	42
<i>Oven Selector Switch</i>	42
<i>Oven Thermostat Switch</i>	43
<i>Clock</i>	43
<i>Parts Location–Oven</i>	44
<i>Parts Location–Back</i>	45
<i>Door Removal</i>	46
<i>Rear Cover Disassembly</i>	47
<i>Oven Light</i>	47
<i>Door Lock Assembly</i>	48
<i>Broil Element</i>	49
<i>RTD Sensor</i>	49
<i>Convection Element</i>	50
<i>Convection Fan</i>	51
<i>Smoke Eliminator</i>	52
<i>Rack Support</i>	52
<i>Bake Element</i>	53
<i>Oven Cooling Fan</i>	54
<i>Meat Probe Socket</i>	55
<i>Troubleshooting Guide</i>	56
<i>Troubleshooting Guide (cont.)</i>	57
Wiring and Schematics	
<i>Wiring Schematic RDSOE306 & RDDOE306 Upper Oven</i>	59
<i>Wiring Schematic RDDOE306 Lower Oven</i>	60

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:

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.

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

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

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

Technical support for authorized servicers:

1-800-914-4799

Address your written correspondence to:

Viking Preferred Service
1803 HWY 82 West
Greenwood, MS 38930

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

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

- Oven requires a separate, grounded 4-wire, 240V (AC), 30 amp service (single oven) or 50 amp service (double oven) with its own circuit breaker.
- Wire sizes and connections must conform with the rating of the appliance and to the requirements of the National Electrical Code, ANSI/NFPA 70 – latest edition, or Canadian Electrical Code, CSA C22.1-1982 and C22.2 No. 01982 – latest edition, and all local codes and ordinances.
- Oven must be connected to the proper electrical voltage and frequency as specified on the model/serial rating plate (located under right side of control panel).
- Oven must be connected to grounded metal permanent wiring system. Check with a qualified electrician to make sure the oven is properly grounded.
- **DO NOT** ground to a gas pipe.
- **DO NOT** use an extension cord with this appliance, because this may result in electrical shock or other personal injury.

- This unit is equipped with a No. 10 ground wire in the conduit.
- The electrical conduit must be kept to the top left for a flush installation. **NEVER** cut the conduit.
- Connect the flexible armored cable directly to 4-wire, 240V household service. If codes permit and separate grounding wiring is used, we recommend that a qualified electrician determine the grounding path and that the wire gauge is in accordance with local codes.
- Junction boxes installed on rear wall directly behind oven must be recessed and located at the upper left-hand corner of the cabinet.
- A UL-Listed conduit connector must be provided at the junction box.
- **DO NOT** install a fuse in the neutral or grounding circuit. We recommend a time delayed fuse or circuit breaker. Connect directly to the fused disconnect (or circuit breaker box) through flexible armored, or non-metallic sheathed, copper cable (with grounding wire).

Cleaning Safety

- Turn off all controls and wait for appliance parts to cool before touching or cleaning them.
- 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 spill-overs 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.

Warnings

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.

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 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 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.

 **WARNING**

BURN OR ELECTRICAL SHOCK HAZARD
The misuse of the oven door(s) (e.g. stepping, sitting, or leaning on them) can result in hazards or injuries and damage to the product.

 **WARNING**

DO NOT use the handle or oven door to lift the oven. **DO NOT** lift or carry the door by the handle.

 **WARNING**

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

Warnings

WARNING

This 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 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!

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.

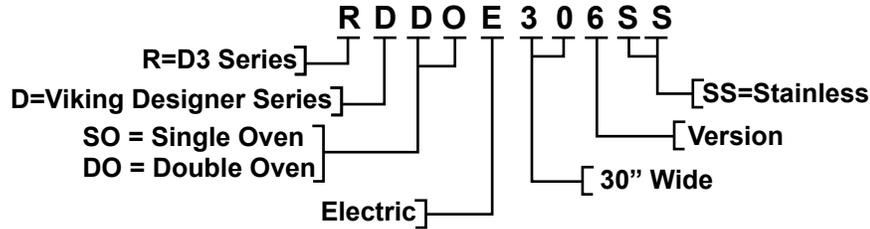
CAUTION

The oven is heavy—use extreme care when handling.

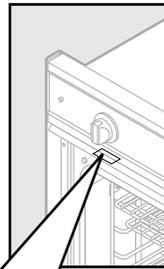
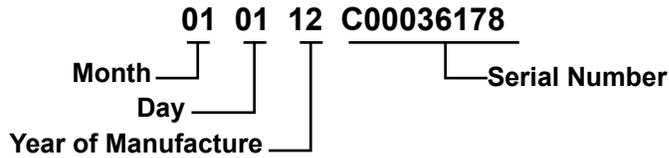
Model–Serial Number Matrix

The serial number and model number for your appliance are located on the identification plate mounted on the underside of the control panel.

Model Numbers



Serial Numbers



VIKING RANGE CORP.
GREENWOOD, MISSISSIPPI 38930

VOLTAGE	Hz	WATTS	AMPS
240 VAC	60 Hz	9.6 KW MAX	40
208 VAC	60 Hz	7.2 KW MAX	34.7

MODEL: **RDDOE306SS**

SERIAL: **010112C00036178**

SA

C US

PEO20061

Ce style est certifié sous UL 856 et les électriques domestiques, CAN/USA C22.2 No.1 M-89

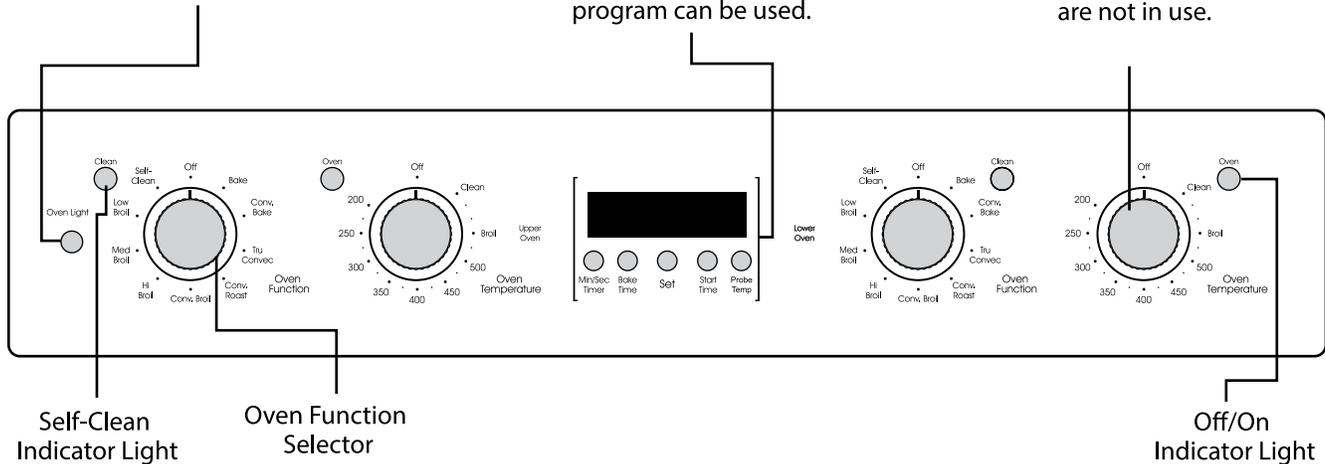
Settings and Functions—Control Panel

Interior Oven Light Control
The oven has interior oven lights that are controlled by one switch on the control panel. Push the switch to turn the interior oven lights “ON” and “OFF”.

Electronic Timing Center
The Electronic Timing Center is used to program and control all timing functions.

Temperature Control
Each oven has a separate temperature control dial. The controls can be set at any temperature from 200°F (93°C) to 550°F (288°C). ALWAYS be sure the controls are in the “OFF” position when the ovens are not in use.

IMPORTANT: The time-of-day must be set before any other program can be used.



Bake

Conventional, single-rack baking (breads, cakes, cookies, pastry, pies, entrees, vegetables)

Conv Bake (Convection Bake)

Multi-rack baking for heavier or frozen foods (e.g., four frozen pies, pizzas, entrees, vegetables)

TruConvec™

Multi-rack baking for breads, cakes, cookies (up to six racks of cookies at once)

Conv Roast (Convection Roast)

Whole turkeys, whole chickens, hams, etc.

Conv Broil (Convection Broil)

Thicker meats, faster than regular broil, and with less smoke generation

High-Broil

Dark meats at 1” thickness or less where rare or medium doneness is desired

Medium-Broil

White meats such as chicken or meats greater than 1” thick that would be over-browned in high broil

Low-Broil

Delicate broiling such as meringue

Conv Dehydrate (Convection Dehydrate)

Use this setting to dehydrate fruits and vegetables

Conv Defrost (Convection Defrost)

Use this setting to defrost foods

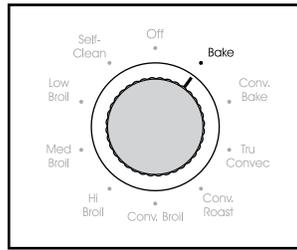
Self-Clean

A pyrolytic self-cleaning cycle where the oven reaches elevated temperatures in order to burn off soils and deposits

Settings and Functions

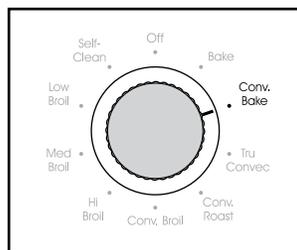
BAKE

Full power heat is radiated from the bake element in the bottom of the oven cavity and supplemental heat is radiated from the broil element. This function is recommended for single-rack baking. Many cookbooks contain recipes to be cooked in the conventional manner. Conventional baking/roasting is particularly suitable for dishes that require a high temperature. Use this setting for baking, roasting, and casseroles.



CONV BAKE (Convection Bake)

The bottom element operates at full power, and the top broil element operates at supplemental power. The heated air is circulated by the motorized fan in the rear of the oven providing a more even heat distribution. This even circulation of air equalizes the temperature throughout the oven cavity and eliminates the hot and cold spots found in conventional ovens. A major benefit of convection baking is the ability to prepare food in quantity using multiple racks—a feature not possible in a standard oven.

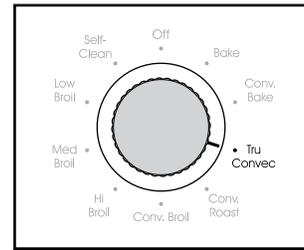


When roasting using this setting, cool air is quickly replaced, searing meats on the outside and retaining more juices and natural flavor on the inside with less shrinkage. With this heating method, foods can be baked and roasted at the same time with minimal taste transfer, even when different dishes are involved, such as cakes, fish or meat. The hot air system is especially economical when thawing frozen food. Use this setting for baking and roasting.

TRU CONV (TruConvec™)

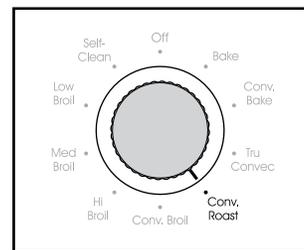
The rear element only operates at full power. There is no direct heat from the bottom or top elements. The motorized fan in the rear of the oven circulates air in the oven cavity for even heating.

Use this setting for foods that require gentle cooking such as pastries, souffles, yeast breads, quick breads and cakes. Breads, cookies, and other baked goods come out evenly textured with golden crusts. No special bakeware is required. Use this function for single-rack baking, multiple-rack baking, roasting, and preparation of complete meals. This setting is also recommended when baking large quantities of baked goods at one time.



CONV ROAST (Convection Roast)

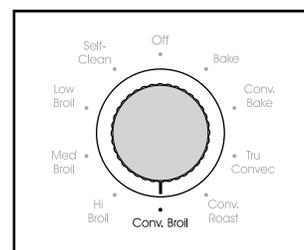
The convection element runs in conjunction with the inner and outer broil elements. This transfer of heat (mainly from the convection element) seals moisture inside large roasts. Use this setting for whole turkeys, whole chickens, hams, etc.



CONV BROIL (Convection Broil)

The top element operates at full power. This function is exactly the same as regular broiling with the additional benefit of air circulation by the motorized fan in the rear of the oven.

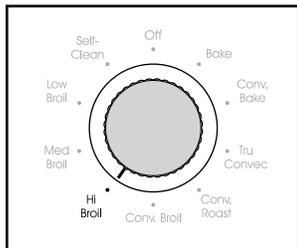
Smoke is reduced since the airflow also reduces peak temperatures on the food. Use this setting for broiling thick cuts of meats.



Settings and Functions

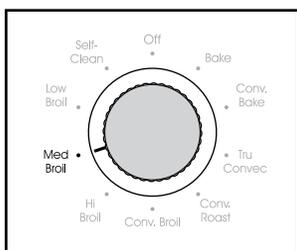
HI BROIL

Heat radiates from both broil elements, located in the top of the oven cavity, at full power. The distance between the foods and the broil elements determines broiling speed. For fast broiling, food may be as close as 2" (5 cm) to the broil element or on the top rack. Fast broiling is best for meats where rare to medium doneness is desired. Use this setting for broiling small and average cuts of meat.



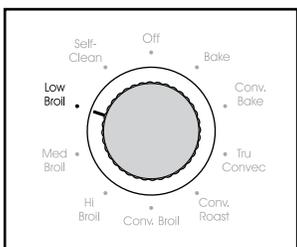
MED BROIL

Inner and outer broil elements pulse on and off to produce less heat for slow broiling. Allow about 4" (10 cm) between the top surface of the food and the broil element. Slow broiling is best for chicken and ham in order to broil food without over-browning it. Use this setting for broiling small and average cuts of meat.



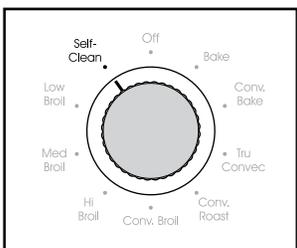
LOW BROIL

This mode uses only a fraction of the available power to the inner broil element for delicate top-browning. The inner broil element is on for only part of the time. Use this setting to gently brown meringue on racks 3 or 4 in 3-4 minutes.



SELF-CLEAN

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.

⚠ WARNING

This oven 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.

Cleaning and Maintenance

Any piece of equipment works better and lasts longer when maintained properly and kept clean. Cooking equipment is no exception. Your oven must be kept clean and maintained properly.

Oven Surfaces

Several different finishes have been used in your electric oven. Cleaning instructions for each surface are given below. Your oven features a self-clean cycle for the oven interior. **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 THE 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

Some stainless steel parts may have a protective wrap, which must be peeled off. All stainless steel body parts should be wiped regularly with hot, soapy water at the end of each cooling period and with liquid cleaner designed for this material when soapy water will not do the job. If build-up occurs, **DO NOT** use steel wool, or abrasive cloths, cleaners, or powders. If it is necessary to scrape a stainless steel surface to remove encrusted material, soak area with hot, wet 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 surfaces. Scratches are almost impossible to remove.

Brass Parts



All special ordered brass parts are coated with an epoxy coating. **DO NOT USE BRASS CLEANERS OR ABRASIVE CLEANERS ON ANY BRASS PARTS.** All brass body parts should be wiped regularly with hot soapy water. When hot soapy water will not do the job, use every day household cleaners that are not abrasive.

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 CLEAN THE OVEN RACKS OR RACK SUPPORT USING THE SELF-CLEAN CYCLE.** They could sustain damage due to the extreme heat of the self-clean cycle.

Meat Probe

The meat probe may be cleaned with soap and water or a soap-filled scouring pad. Cool the probe before cleaning. Scour stubborn spots with a soap-filled scouring pad, rinse and dry.

- **DO NOT** immerse the meat probe in water.
- **DO NOT** store the probe in the oven.

Diagnostic Procedures

This manual will refer to (from left to right) MIN/SEC TIMER, BAKE TIME, SET KNOB, START TIME, PROBE TEMP Buttons and knob.



User Settings

To enter into Settings parameter, press and hold "MIN/SEC TIMER" for three seconds. When the Settings mode is entered, the clock display will change to the first parameter (Temperature). To exit the Settings mode, press "BAKE TIME".

Note: Settings mode will automatically exit the Settings mode if nothing is pressed within 60 seconds.

Degrees

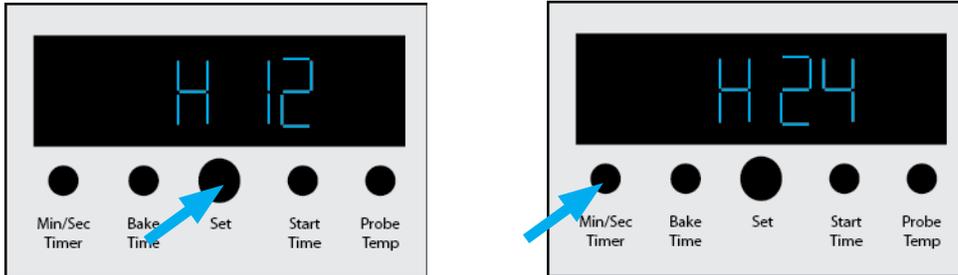
The "F" indicates that the unit is set to display fahrenheit (below left). To change to celsius, depress "MIN/SEC TIMER". The unit set for celsius is shown (below right).



User Settings (cont.)

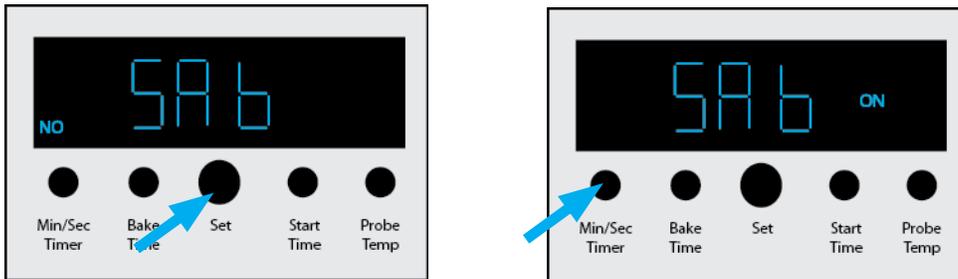
Clock Setting

Rotate the “SET KNOB” clockwise one click to access the 12/24-hour Clock parameter (below left). The H 12 indicates that the unit is set to display in AM/PM time (12-hour clock). To change to 24-hour time, depress “MIN/SEC TIMER”. The clock set to 24-hour clock is shown (below right).



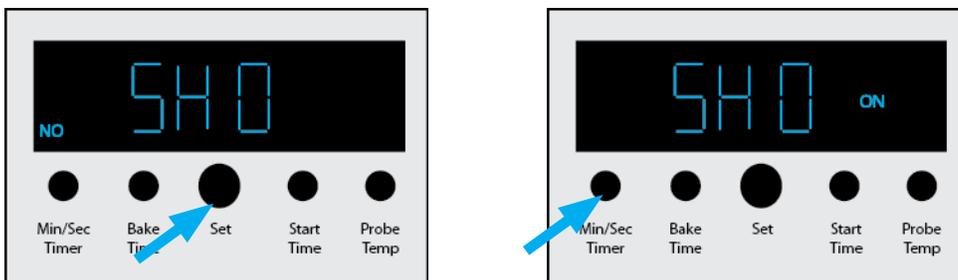
Sabbath Mode

Rotate the “SET KNOB” clockwise one click to access the Sabbath mode parameter. The default is SABBATH NO (below left). In order to activate the Sabbath mode feature, depress “MIN/SEC TIMER”. The Sabbath mode is shown ON and activated (below right)



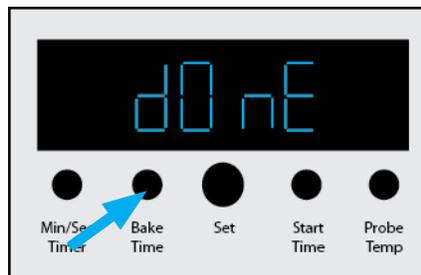
Showroom Mode

Rotate the “SET KNOB” clockwise one click to access the Showroom mode parameter. The default is SHOWROOM NO (below left). In order to activate the Showroom mode feature, depress “MIN/SEC TIMER”. The Showroom mode is shown ON and activated (below right)



Done

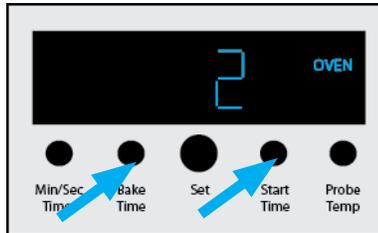
When the “SET KNOB” is advanced past the Showroom mode, the display will show DONE. Rotate the “SET KNOB” counter-clockwise to access previously shown Settings parameters. Depress “BAKE TIME” to exit.



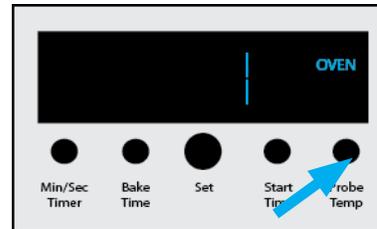
Oven Selection And Offset Adjustment

Oven Selection

To access this parameter, you must already be in the Settings parameters. To enter, push and hold “BAKE TIME” and “START TIME” simultaneously and you will hear three beeps. Continue holding for five seconds until you hear a confirmation beep. You will see a numeric number “2” on the RDDOE series or a numeric number “1” on the RDSOE series in the display as shown below on left and right. If the oven selection is incorrect, depress “MIN/SEC TIMER” to toggle between 1 (single) or 2 (double). After setting the proper parameter, press “PROBE TEMP” to exit the program mode.



Double Oven (RDDOE)



Single Oven (RDSOE)

Important Parts Information

A replacement TOD2 (Clock) comes set at a default for a double oven (2). After replacing a clock on a single oven, you must access the Oven Selection parameter and set it to number “1” for a single oven.

Note: Failure to do this will cause improper operation.

Offsets

In order to adjust the Offset parameter, you must first enter the Settings parameter as shown on page 12. Next, access the Oven Selection parameter as shown on page 14. When you see either number “1” (single) or number “2” (double), rotate the “SET KNOB” clockwise.

First, you will see the Offset parameter for the upper oven (RDDOE) (below left). This will also be for the single (RDSOE) oven. If you need to adjust the lower oven temperature offset on a double oven, rotate the “SET KNOB” clockwise to access the Lower Oven parameter as shown (below center). If you rotate the “SET KNOB” clockwise past the lower offset, the word DONE will show in the display as shown (below right).



Once you have made your selection, press “MIN/SEC TIMER”. The Default parameter is 0°F (below left).

Now, if for example you need to **INCREASE** the temperature in the upper oven by 30° (determined by checking the oven temperature with a loaded probe and averaging five temperature swings), you must **DECREASE** the offset by 30° (below middle). If you find that the oven is 30° too hot, then you must **INCREASE** offset by 30° (below right).



Once the proper adjustment has been made, depress “MIN/SEC TIMER” to accept the change. Then, depress “PROBE TEMP” to exit the Settings mode.

Remember: To increase (>) the temperature, decrease the offset. To decrease (<) the temperature, increase > the offset!

Diagnostics and Testing

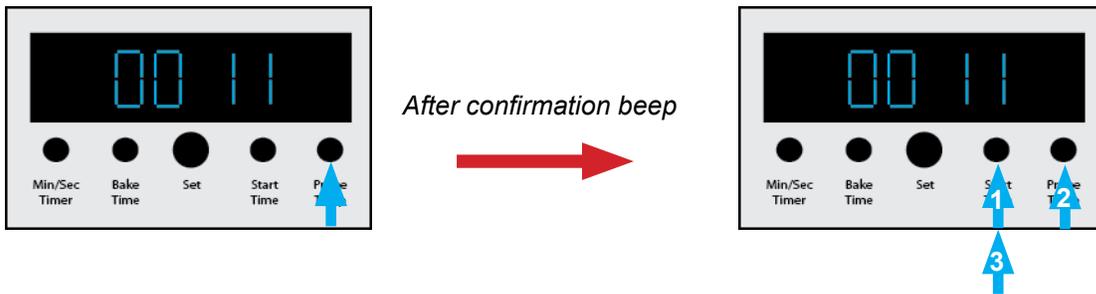
To enter Built-in Test mode, first enter the Settings mode.

Press and hold the “PROBE TEMP” key. You will hear 3 beeps. Continue holding for five seconds, until the relay board signals one confirmation beep.

Then press within five seconds “START TIME”, then “PROBE TEMP”, then “START TIME”.

When you have successfully entered the Diagnostic mode, the display will show the TOD2 software version number (currently Version 11, shown below on left).

Note: Version numbers 4, 5 and 6 will not work with EOC4 versions 19 or higher. Version 9 or higher will work with EOC4 versions 19 or Higher.



Note: While in the Diagnostic parameter, rotating the “SET KNOB” clockwise or counterclockwise will scroll through all the testing parameters. When in a particular test, depress “MIN/SEC TIMER” to get back to Parameter Selection to access other test. Depressing “PROBE TEMP” at this point will exit the test mode.

When you have successfully entered the Diagnostic mode, rotate the “SET KNOB” clockwise. The display will show the supplied frequency to the oven (60 Hz is shown below).



Rotate the “SET KNOB” clockwise and the display will show EOC4 Upper Oven.
 Rotate the “SET KNOB” clockwise again and the display will show EOC4 Lower Oven.

Rotate the “SET KNOB” clockwise to the DISPLAY parameter (below left). Depress “MIN/SEC TIMER” to activate all elements within the clock (below right). Depress “PROBE TEMP” to exit.



Note: Display test implemented in version 11.

Diagnostics and Testing (cont.)

Rotate the “SET KNOB” clockwise to the UPPER EOC4 Testing parameter (below left). Press “MIN/SEC TIMER” to access all the individual component tests for the upper oven cavity. If you want to check the lower oven components, rotate the “SET KNOB” clockwise to access the lower oven cavity LOWER EOC4 Testing parameters (below middle). From this point, depressing “PROBE TEMP” will exit the test mode. Press “MIN/SEC TIMER” to enter tests for a particular EOC. Advancing the “SET KNOB” once more will display the DONE screen (below right). To exit Test Mode, press “PROBE TEMP”.



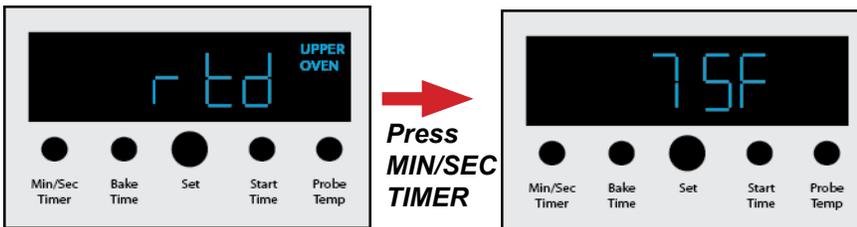
Upper/Lower Diagnostics

The following tests are under EOC4 – Upper Oven (single)/EOC4 and Lower Oven (double oven). Use the “SET KNOB” toggle through all the test parameters. Press “MIN/SEC TIMER” to run a particular test and see the value associated with that test. Press “MIN/SEC TIMER” again to stop test and return to selection screen. The first parameter is the version number of the relay board for the particular cavity being tested.

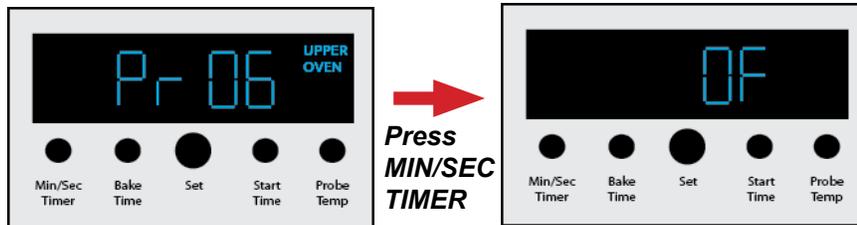
EOC Version–This number indicates the software version of the relay board.



RTD–Displays temperature at RTD probe.



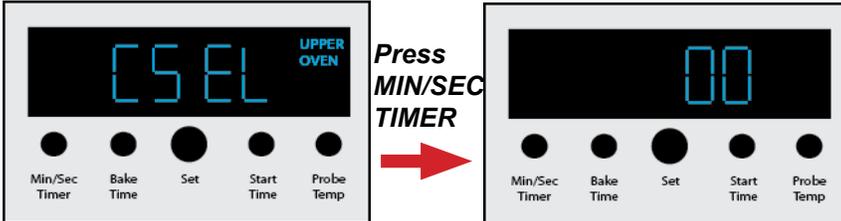
Probe–Displays the meat probe temperature. If a meat probe is not plugged in, the display will show 0°.



Upper/Lower Diagnostics (cont.)

Cycle Selector—To test the selector functions, the value is a four-digit value. The first digit is the cycle ID, from 0 to 9. The remaining three digits are the raw AD value, divided by two. Rotate “SET KNOB” and compare values shown below.

Note: Start test with the selector in the OFF position.



Upper Oven	ID	Lower Oven	ID
Bake	1485	Bake	1480
Convection Bake	2418	Convection Bake	2420
Tru Convection	3351	Tru Convection	3354
Convection Roast	4292	Convection Roast	4299
Convection Broil	5234	Convection Broil	5244
Hi Broil	6176	Hi Broil	6186
Med Broil	7126	Med Broil	7132
Low Broil	8073	Low Broil	8072
Self-Clean	9019	Self-Clean	9016

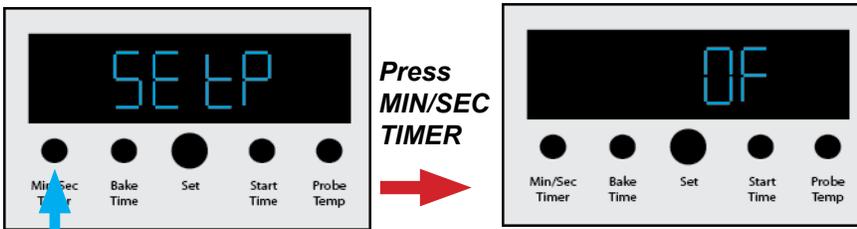
From OFF, rotate the “SET KNOB” switch either direction and compare display readout to charts shown here. Readings should be within + – 10%.

Note: It takes several seconds for all 4 digits to come up in the display. Turn the knob and then wait for 10 seconds to let the display settle out.

Note: To test the UPPER selector, you must be in the UPPER test mode. The same is true for the LOWER selector.

Setpoint

When SEtP is in display, press “MIN/SEC TIMER”. With the thermostat in the OFF position, OF should be in the display. Rotating the temperature dial to any temperature should register in the display. This will test the potentiometer values of the thermostat.



AD—Raw setpoint AD (Analog to Digital) value.

SKIP THIS TEST



Component Testing

On the following tests, when you have selected a particular component, press “MIN/SEC TIMER” to activate. The display will change to AC current. Press “MIN/SEC TIMER” one more time to turn it off and go back to the test selection menu, or rotate the “SET KNOB” to move to the next component in the menu. Values are approximate.

	240 Volts Current (AMPS)	280 Volts Current (AMPS)
Inner Bake Note: Inner bake is not used on RDDOE and RDSOE series ovens.		
Outer Bake Press “MIN/SEC TIMER” to operate Outer bake element.		
Inner Broil Press “MIN/SEC TIMER” to operate Inner broil element.		
Outer Broil Press “MIN/SEC TIMER” to operate Outer broil element.		
Convection Press “MIN/SEC TIMER” to operate Convection element.		
Convection Fan Hi F Press “MIN/SEC TIMER” to operate the Conv fan high.		

Component Testing (cont.)

		240 Volts Current (AMPS)	208 Volts Current (AMPS)
<p>Convection Fan Lo F Press "MIN/SEC TIMER" to operate the Conv fan low.</p>			
<p>Cooling Fan High Press "MIN/SEC TIMER" to operate Cooling fan high.</p>			
<p>Cooling Fan Low Press "MIN/SEC TIMER" to operate Cooling fan low. <i>Note: Same speed as High fan.</i></p>			
<p>Cooling Fan High Speed-RPM When "MIN/SEC TIMER" is depressed, cooling fan comes on and the RPM'S are shown in the display.</p>		<p>Press MIN/SEC TIMER</p>	
<p>Cooling Fan Low Speed-RPM</p>		<p>Press MIN/SEC TIMER</p>	
<p>Lights-Oven This parameter will cycle the EOC light relay ON and OFF with each press of "MIN/SEC TIMER", as well as the display showing the status.</p>		<p>Press MIN/SEC TIMER</p>	

Component Testing (cont.)

Conv Fan
Low Speed Reverse



240 Volts
Current (AMPS)



208 Volts
Current (AMPS)



Conv Fan
High Speed Reverse

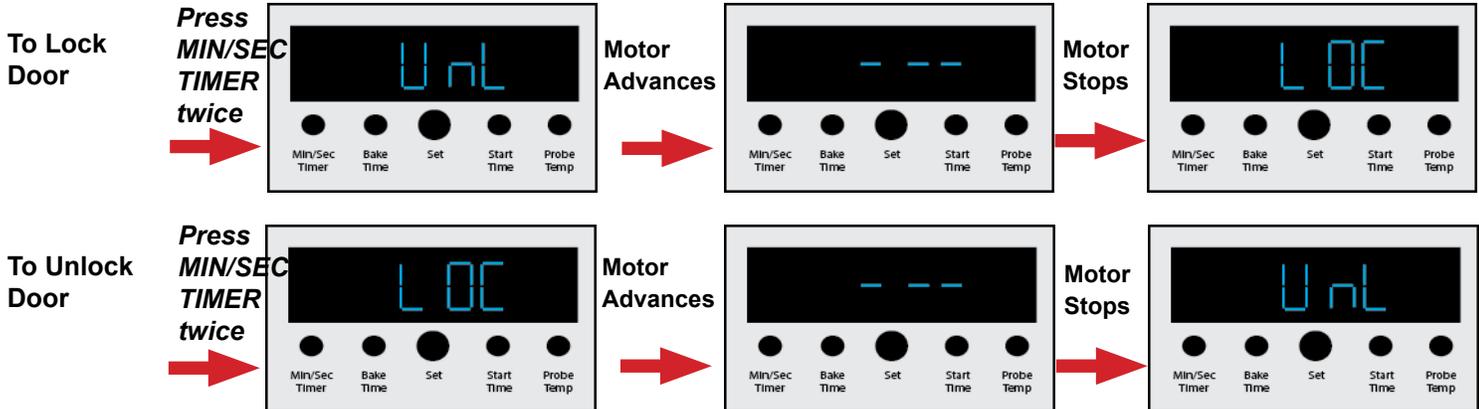


Latch Motor

This parameter will cycle the EOC lock relay and operate the lock motor. Press "MIN/SEC TIMER" and LATC will show in the display. Press "MIN/SEC TIMER" again to lock and un-lock the door and the display will show the current state. When in-between switch contacts three dashes will show in display.



When in-between switch contacts, three dash's will show in display.

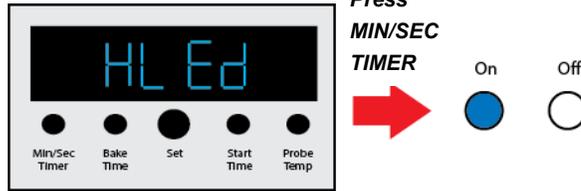


Caution: Door must be installed and closed while performing LATCH MOTOR test or damage may occur to latch assembly.

Component Testing (cont.)

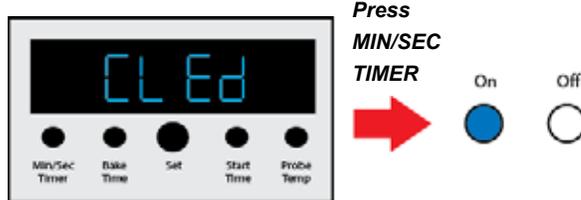
Heat Light LED

Each press of "MIN/SEC TIMER" will turn the Oven Cycle light on and off.



Clean Light LED

Each press of "MIN/SEC TIMER" will turn the Clean light on and off.



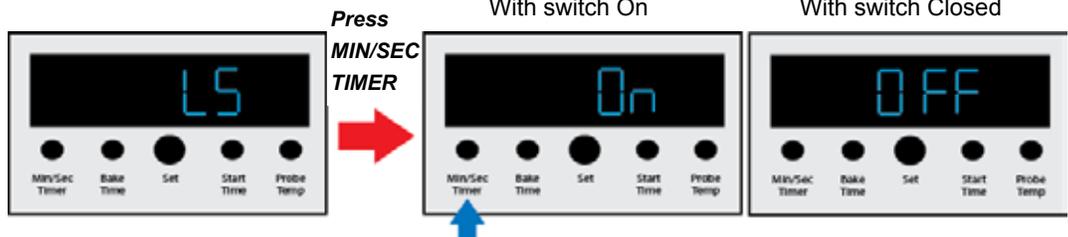
Door Switch

Opening and closing the door will test the door interlock switch.



Light Switch

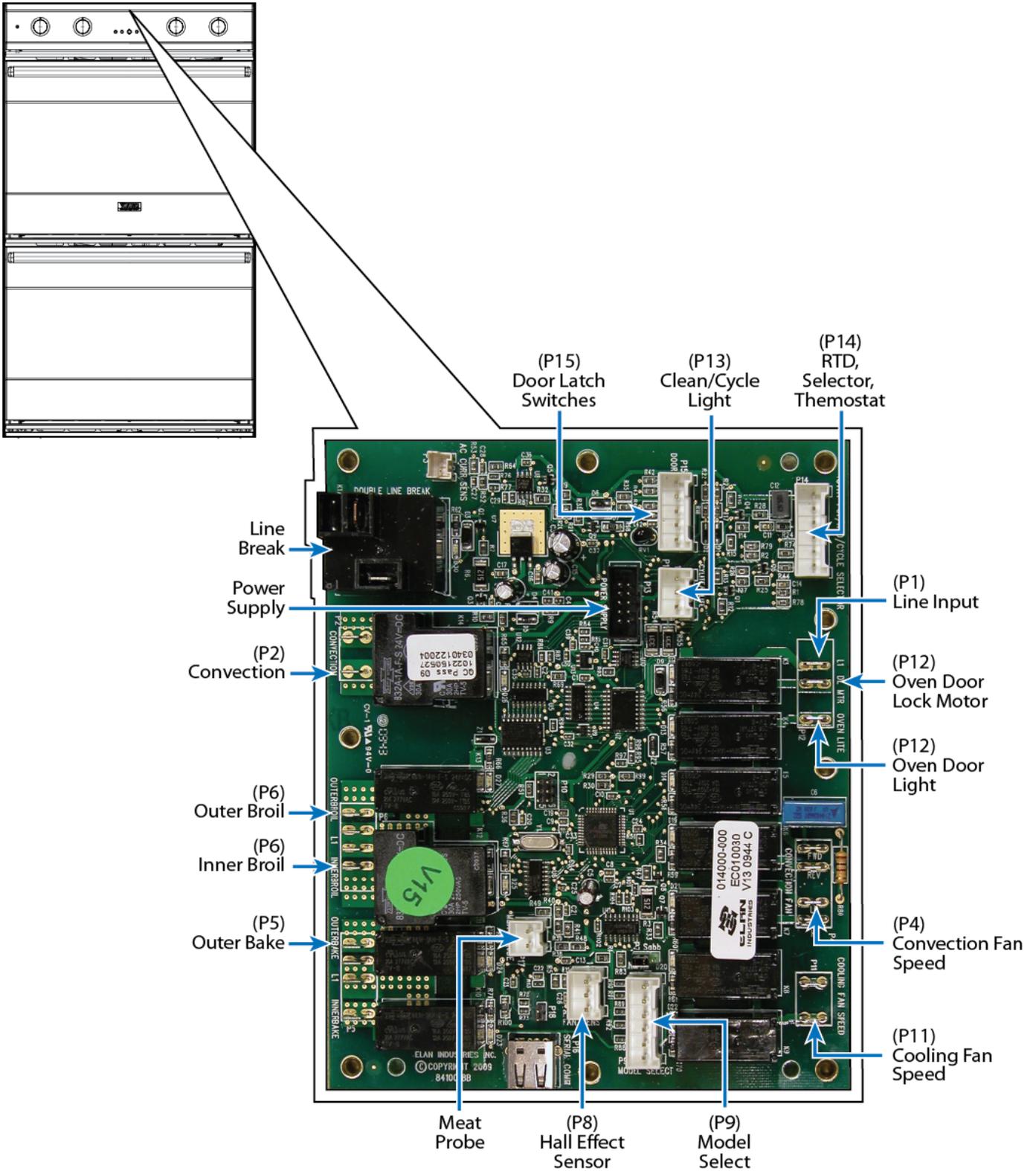
Pressing the panel light switch ON and OFF to test switch.



Note: This test for Upper oven and single ovens only!

When testing is complete, press "PROBE TEMP" twice to exit Test Mode.

Parts Location-Relay Board



Relay boards

The unit has an upper and lower relay board that controls functions of the respective oven cavity. Components can be diagnosed via the relay board. With the relay board accessed (*see Relay Board Access procedure*), the following can be measured:

Component	Operating Voltage (Approx.)	*Resistance (Approximate)	Oven Board Test Location
Outer Bake Element	240 VAC	28.4 Ω	(P5) Blue – line break Yellow
Inner Broil Element	240 VAC	23.7 Ω	(P6) Violet – line break Yellow
Outer Broil Element	240 VAC	45.5 Ω	(P6) Gray – line break Yellow
Convection Element	240 VAC	34.4 Ω	(P2) White/Red – line break Yellow
Cooling Fan Motor	120 VAC	18.4 Ω	(P11) White/Black – (P1) White (Power Board)
Convection Motor – Hi Speed	120 VAC	38.3 Ω	(P4) Orange/Black – (P1) White (Power Board)
Convection Motor – Low Speed	120 VAC	44.1 Ω	(P4) Orange/White – (P1) White (Power Board)
Oven Lights	120 VAC	13.5 Ω	(P12) Yellow/Black – (P1) White (Power Board)
RTD	-	1089 Ω @ room temp	(P14) Violet – (P14) Gray
Door Latch Motor	120 VAC	2180 k Ohms	(P12) Black/White – (P1) White (Power Board)
Door Switch (Door Open)	8.0 VDC	Infinite Ω door open	(P15) Gray – (P15) Brown (DL Com) (P15 disconnected)
Door Switch (Door Closed)	0 VDC	0 Ω door closed	(P15) Gray – (P15) Brown (DL Com)
Oven Light Switch ON (Door Closed)	8.0 VDC	0 Ω light switch on	(P15) Violet/White – (P15) Brown
Oven Light Switch OFF (Door Closed)	0 VDC	Infinite Ω light switch off	(P15) Violet/White – (P15) Brown (P15 disconnected)
Door Latch Switch	8.0 VDC (Door Locked)	0 Ω door unlocked Infinite Ω door locked (P15 disconnected)	(P15) Blue/White – (P15) Brown
Door Lock Switch	8.0 VDC (Door Unlocked)	Infinite Ω door unlocked (P15 disconnected) 0 Ω door locked	(P15) Orange – (P15) Brown
Hall Effect Sensor	-	425 Ω connector plugged in and 6.36M Ω connector unplugged	(P8) Red – (P8) Black
Hall Effect Sensor	-	9.9K Ω connector plugged in and 21.2M Ω connector unplugged	(P8) White – (P8) Black
Clean Light	7.45 VDC	Infinite Ω – (P1 disconnected)	(P1) Orange/Black – (P1) Violet
Cycle Light	7.45 VDC	Infinite Ω – (P1 disconnected)	(P1) White/Black – (P1) Violet

Relay boards (cont.)

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



Selector

Resistance checks are made on the selector wire harness with the selector wire harness disconnected from the board at location P14 and thermostat disconnected. The harness is connected to P14 for voltage checks.

Selector Position	Resistance - Voltage blue to yellow		Resistance - Voltage blue to black		Resistance - Voltage black to yellow	
	Resistance	Voltage	Resistance	Voltage	Resistance	Voltage
Off	10.0 kΩ	5 VDC	∞	5 VDC	∞	0
Bake	10.0 kΩ	5 VDC	374 Ω	0.24 VDC	9.48 kΩ	4.74 VDC
Convection Bake	10.0 kΩ	5 VDC	1.60 kΩ	0.86 VDC	8.42 kΩ	4.12 VDC
Tru Convection	10.0 kΩ	5 VDC	2.60 kΩ	1.47 VDC	7.28 kΩ	3.49 VDC
Convection Roast	10.0 kΩ	5 VDC	3.85 kΩ	2.08 VDC	6.01 kΩ	2.88 VDC
Convection Broil	10.0 kΩ	5 VDC	5.00 kΩ	2.64 VDC	4.81 kΩ	2.31 VDC
Hi Broil	10.0 kΩ	5 VDC	6.14 kΩ	3.21 VDC	3.78 kΩ	1.80 VDC
Med Broil	10.0 kΩ	5 VDC	7.20 kΩ	3.66 VDC	2.72 kΩ	1.26 VDC
Low Broil	10.0 kΩ	5 VDC	8.28 kΩ	4.21 VDC	1.58 kΩ	0.77 VDC
Self Clean	10.0 kΩ	5 VDC	9.41 kΩ	4.82 VDC	443 Ω	0.22 VDC

Thermostat

Resistance checks are made on the thermostat wire harness with the thermostat wire harness disconnected from the board at location P14 and selector disconnected. The harness is connected to P14 for voltage checks.

Thermostat Position	Resistance - Voltage blue to yellow		Resistance - Voltage blue to orange		Resistance - Voltage orange to yellow	
	Resistance	Voltage	Resistance	Voltage	Resistance	Voltage
Off	10.0 kΩ	5 VDC	∞	5 VDC	∞	0
200°F	10.0 kΩ	5 VDC	8.75 kΩ	4.32 VDC	1.31 kΩ	0.64 VDC
300°F	10.0 kΩ	5 VDC	6.88 kΩ	3.37 VDC	3.23 kΩ	1.40 VDC
400°F	10.0 kΩ	5 VDC	4.75 kΩ	2.50 VDC	5.20 kΩ	2.46 VDC
500°F	10.0 kΩ	5 VDC	2.89 kΩ	1.56 VDC	7.10 kΩ	3.42 VDC
Broil	10.0 kΩ	5 VDC	2.19 kΩ	1.11 VDC	8.00 kΩ	3.88 VDC
Clean	10.0 kΩ	5 VDC	696 Ω	0.36 VDC	9.34 kΩ	4.63 VDC

Relay board LED's

D12 – K3 Relay (L1)	D23 – Inner Bake
D13 – K4 Relay (Door Lock Motor)	D24 – Outer Bake
D14 – K5 Relay (Oven Light)	D25 – Inner Broil
D19 – K6 Relay (Convection Speed Lo)	D26 – Convection
D20 – K8 Relay (Cooling Fan Power)	D27 – Outer Broil
D21 – K7 Relay (Convection Speed Hi)	D30 – Line Break
D22 – K9 Relay (Cooling Fan Speed)	

Fail Codes

TOD2 Code	Clean Light	Cycle Light	Error	Detection	Action	Priority*	How To Clear
F01	Flash: 1	Off	Door Latch	Door lock is not in unlocked position during a cook or a locked position during a clean.	If in clean cycle, cancel cycle and go to the diagnostics and test door latch. If door does not lock after one minute something is wrong with the latch (latch will not run unless the door switch button is depressed).	A	Turn cycle off. Power down and correct door lock issue.
F02	Off	Flash: 1	RTD	Open or Short	Cancel any cook or clean cycle, EOC4 will be inoperable.	A	Power down and replace or plug in RTD.
F03	On	Flash: 3	Cooling Fan Hall Effect	EOC4 is not receiving a square wave in the allowable frequency range.	Cancel bake or clean operation immediately.	A	Turn cycle off. Power down and correct cooling fan issue.
F04	N/A	N/A	Meat Probe Shorted	Meat Probe input is shorted.	Cancel any cook by probe operation.	B	Correct short, reenter timed or delay function.
F06	On	Flash: 2	Invalid Model Header	Model header is undefined.	This is read-only at power up. EOC4 will be inoperable.	A	Power down and insert correct model header.
F07	On	Flash: 7	Door Switch	The door is open during CLEAN (the door latch has failed, the door sensor has failed or the user has opened the door immediately after selecting CLEAN before the latch can engage).		A	Turn cycle off. Power down and correct door lock issue.
F08	On	Flash: 8	Communication Error	RS485 Serial communication is lost or unable to establish a connection between EOC4 and any UI (if one is present).	The EOC4 can still perform a cook if the UI is a TOD2 and the user selected a cook cycle via the selector potentiometers. The EOC4 will not however do a Clean cycle or Preheat since it doesn't know if the other unit is currently operating (for double ovens).	A or B depending on the UI.	Turn unit off. Power down and correct issue.

***Priority A:** Critical error, cancel current cycle, turns off all elements.

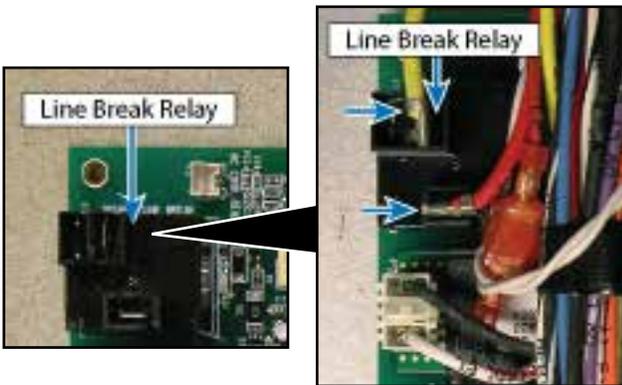
Priority B: Non-Critical, cancel only the feature that is affected, allow oven to still operate.

Relay Board Diagnosis

With the relay board assembly accessed, the following components can be diagnosed without removal of the components:

Line Break Relay

The line break relay breaks the L2 side of line voltage. As the relay is energized, the relay closes and allows L2 to the convection, broil, and bake element. Locate the line break relay on the relay board. The relay will have a red wire and a yellow wire connected to it. The red wire is L2 input from the main power supply and the yellow wire supplies L2 when the line break relay energizes.

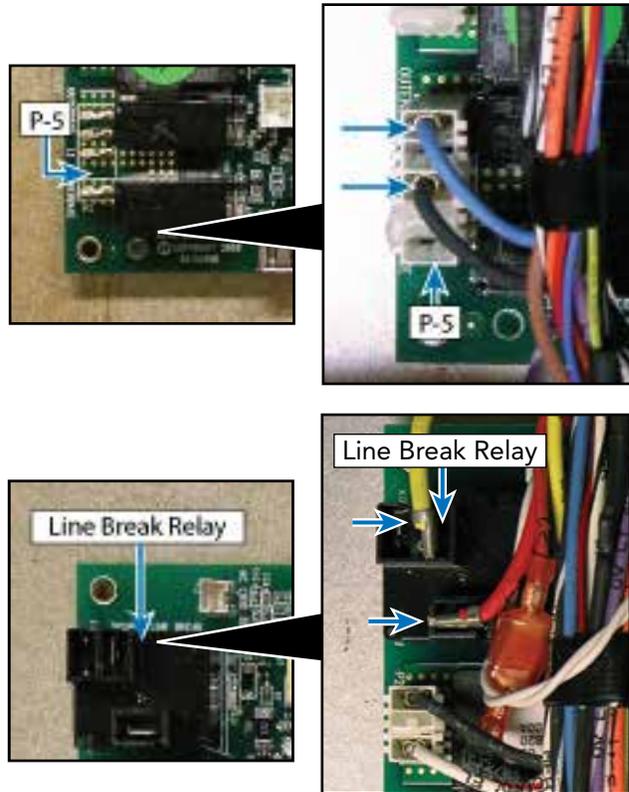


When heating is selected by the control input, voltage is sent to the line break relay coil. A red LED (D30) in front of the coil verifies coil voltage is being sent to the relay. This means that 12 VDC is being sent to the relay coil. It does not indicate that the relay contacts are closing. To check the relay contacts, verify input voltage to the relay between the red wire (L2) and (L1) black at the main terminal block is 240 VAC.

Select a cooking program. When the relay contact is closed (D30 LED at base of relay is illuminated red) 240 VAC should be measured between the yellow wire and (L1) black. If 0 VAC is measured, disconnect power and remove the red and yellow wire off the relay. With power applied, use an Ohm meter to check for continuity between the two relay contacts with the relay energized. If infinite resistance (∞) is measured, this indicates a bad relay and replacement of the relay board is necessary.

Bake Element

Locate the P5 connector and the line break relay on the relay board. The P5 connector will have a Molex plug containing a blue and black wire. The blue wire goes to the outer bake element terminal and the black wire is L1 input from the main power supply.



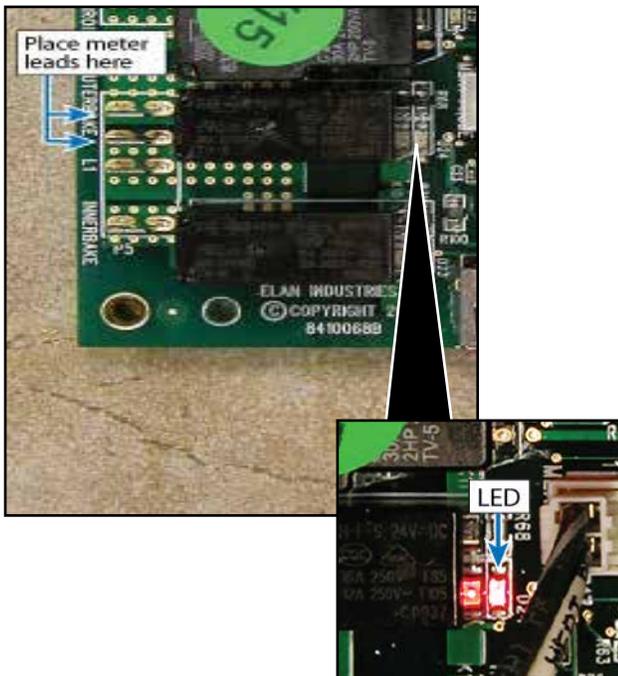
With the power off and the Molex connector removed from the P5 relay board connection, use an Ohm meter to measure the resistance between the blue wire in the Molex plug and the yellow wire from the line break relay. This will measure the resistance of the bake element and a reading of 23.7Ω should be measured. If the element fails to read resistance, repair or replace bake element as necessary (see *Bake Element Disassembly*).

Relay Board Diagnosis

Bake Relay

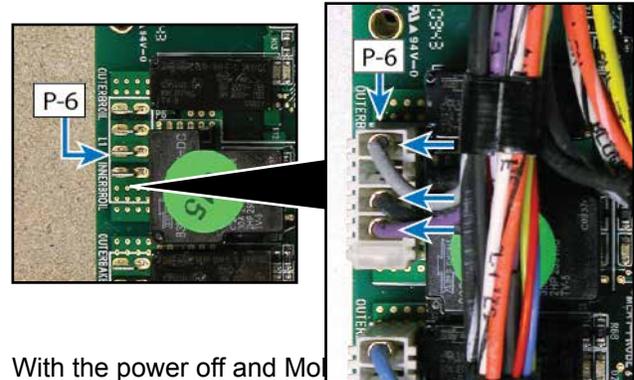
The RDSOE and RDDOE series oven use one concealed bake element in the cavity floor. It is connected on the relay board to the Outer Bake connection (Inner Bake connection is not used).

When the BAKE relay contact is energized (red LED D24 at base of relay is illuminated red), check for 240 VAC between the yellow wire at the line break relay and the blue wire on P5. If 0 VAC is measured, disconnect power and remove P5 Molex plug. Reconnect power and using an Ohm meter, check for continuity between the relay contacts. When the relay is energized; if infinite ohms (Ω) are measured, this indicates a bad relay and replacement of the relay board is necessary. If 0 ohms are measured, the relay contact is closing.



Broil Element

Locate the P6 connector and the line break relay on the relay board. The P6 connector will have a Molex plug containing a violet, black, and gray wire. The violet wire goes to the inner broil element, the black wire is L1 input from main power supply, and the gray wire goes to the outer broil element.



With the power off and Molex plug removed from the P6 relay board connection, use an Ohm meter to measure resistance between the violet wire in the Molex plug and the yellow wire at the line break relay. This will measure the resistance of the inner broil element and should be approximately 24 Ω . Likewise, the outer broil element can be measured by reading resistance between the gray wire in the Molex plug and the yellow wire at the line break relay. A resistance of approximately 45 Ω should be found. If either element fails to read resistance, remove the element to repair or replace as necessary (see *Broil Element Disassembly*).

Relay Board Diagnosis

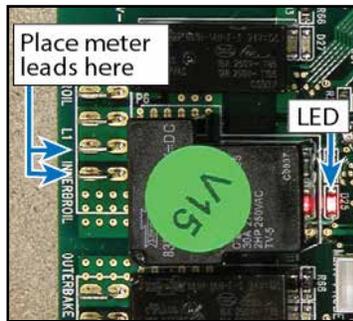
Broil Relay (Inner and Outer)

When a broil element is selected, voltage is sent to the broil relay coils. A red LED (D25 and D27) in front of the respective relay verifies coil voltage is being sent to that particular relay. This means that 12 VDC is being sent to the relay coil. It does not indicate that the relay contacts are closing. When the individual element relays are energized, power (L1-black) is sent through the relay to the broil elements. Power (L2-red) is supplied from the line break relay).

Inner Broil Relay

Select a cooking program. When the inner relay contact is energized (D25 LED at base of relay illuminates red), check for 240 VAC between the yellow wire at the line break relay and the violet wire on P6. If 0 VAC is measured, disconnect power and remove the P6 Molex plug.

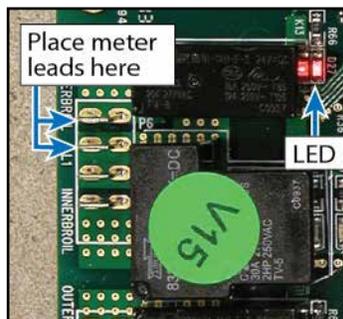
Reconnect power and using an Ohm meter, check for continuity between the two relay contacts. When the relay is energized; if you read infinite ohms (Ω) this indicates a bad relay and replacement of the relay board is necessary. If 0 ohms are measured, the relay contact is closing.



Outer Broil Relay

Select a cooking program. When the outer relay contact is energized (D27 LED at base of relay illuminates red), check for 240 VAC between the yellow wire at the line break relay and the gray wire on P6. If 0 VAC is measured, disconnect power and remove P6 Molex plug.

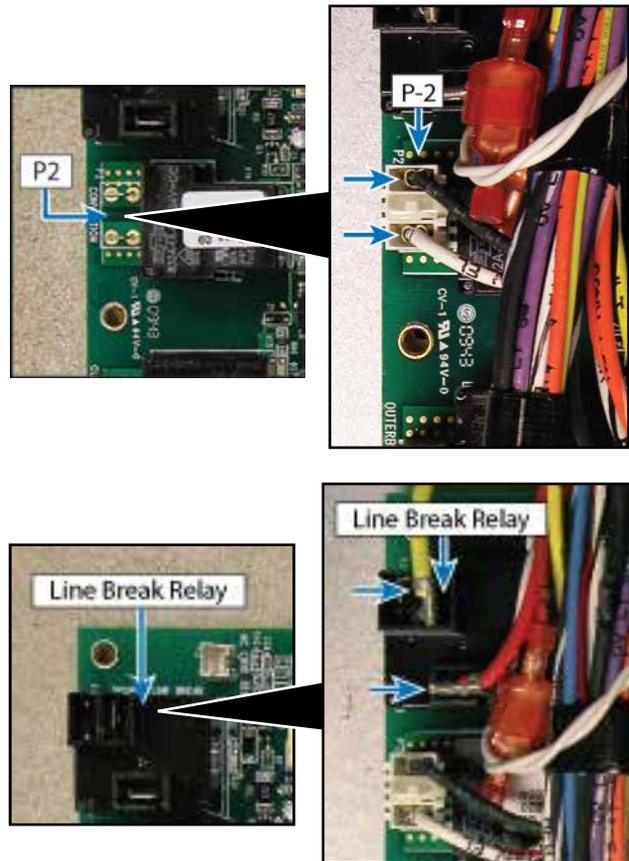
Reconnect power and using an Ohm meter, check for continuity between the two relay contacts. When the relay is energized; if infinite



ohms (Ω) are measured this indicates a bad relay and replacement of the relay board is necessary. If 0 ohms are measured, the relay contact is closing.

Convection Element

Locate the P2 connector and the line break relay on relay board. The P2 connector will have a Molex plug containing a white/red and black wire. The white/red wire goes to the convection element and the black wire is L1 input from main power supply.



With the power off and Molex connector removed from the P2 relay board connection, use an Ohm meter to measure resistance between the white/red wire in the Molex plug and the yellow wire at the line break relay. This will measure the resistance of the convection element and should be approximately 34.4 Ω . If the element fails to read resistance, remove element to repair or replace as necessary (see *Convection Element Disassembly*).

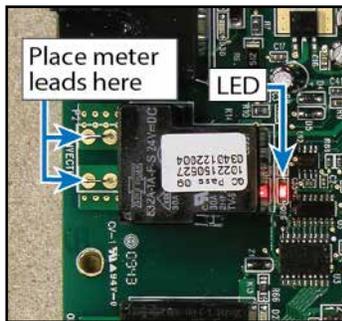
Relay Board Diagnosis

Convection Relay

When the convection element is selected, voltage is sent to the convection relay coils. A red LED (D26) in front of each coil verifies coil voltage is being sent to that particular relay. This means that 12 VDC is being sent to the relay coil. It does not indicate that the relay contacts are closing. When the convection element relay is energized, power (L1-black) is sent through the relay to the convection element. Power (L2-red) is supplied by the line break relay.

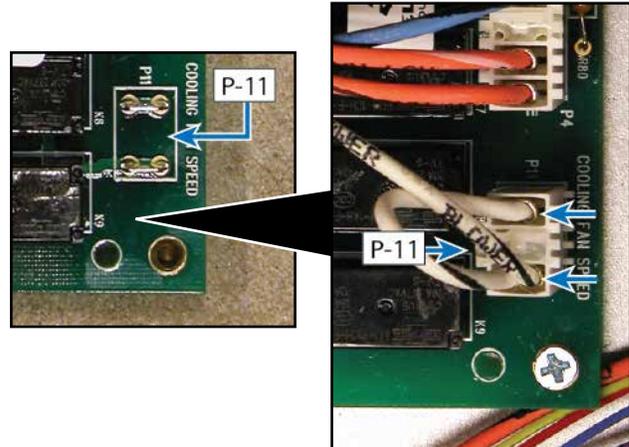
To test, select a cooking program. When the convection relay contact is energized (D26 at base of relay illuminates red), check for 240 VAC between the yellow wire at the line break relay and the white/red wire on P2. If 0 VAC is measured, disconnect power and remove P2 Molex plug.

Reconnect power and using an Ohm meter, check for continuity between the two relay contacts. When the relay is energized; if infinite ohms (Ω) are measured this indicates a bad relay and you will need to replace the relay board. If 0 ohms are measured, the relay contact is closing.



Cooling Fan

Locate the P11 connector on the relay board. The P11 connector will have a Molex plug containing white/black wires.



With the Molex connector removed from the P11 board connection, use an Ohm meter to measure resistance between one of the white/black wires and neutral at P1 on the power supply board. The resistance should be approximately 18 Ω . If no resistance is measured, remove fan to repair or replace as necessary (*see Oven Cooling Fan Disassembly*).

With the Molex connector attached to the P11 board connection, use a voltmeter to measure voltage between the white/black wire of the Molex plug and the white wire in the Molex plug at the P1 power supply board. The voltage should be 120 VAC. If 120 VAC is present and no fan rotation, replace the cooling fan (*see Oven Cooling Fan Disassembly*). If no voltage is present, verify wiring. If wiring is OK, check the relay on the relay board.

Relay Board Diagnosis

Fan Relay

The unit is designed to operate a two-speed cooling motor. The RDSOE and RDDOE series utilize a one-speed motor so both the HI and LO speeds are jumped together on the relay board. On initial startup, the Fan Power relay (K8) and the LO speed (K9) is selected. When the oven temp reaches proper temperature, the board will switch the speed relay to HI. However, both are jumped together so this change is not noticed. If a fan error is shown, proceed with the test shown below.

When the unit is switched on, voltage is sent to the fan relay coil(s). A red LED (D20, D22) in front of each coil verifies coil voltage is being sent to that particular relay. This does not indicate however that the relays are functioning.

When a cooking program is activated, the initial cooling fan speed depends on the cycle selected. When set for CONVECTION ROAST, CONVECTION BROIL, HIGH BROIL, MEDIUM BROIL and SELF CLEAN, the fan runs at HIGH speed.

BAKE, CONVECTION BAKE, TRU CONVECTION and LOW BROIL start at LOW speed and when the oven temperature reaches 400°F, the EOC switches to HIGH speed.

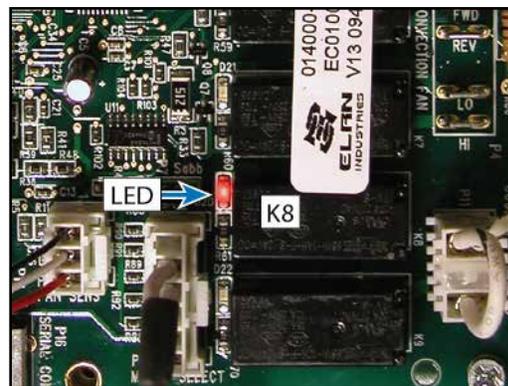
When the oven is turned off (cycle selector in OFF position), the fan switches from high to low when the temperature at the RTD drops below 375°F, and shuts off completely when the temperature drops below 250°F.

To test, disconnect power and disconnect P11 Molex plug. With voltmeter set for AC voltage, check between neutral and the terminal. The reading should be 120 VAC. If 0 volts are shown and the red LED (D20 D22) is illuminated, the relay board should be replaced.

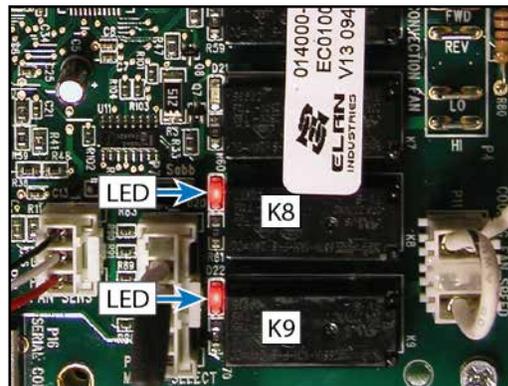
Fan-Hi Speed

When the EOC calls fan operation, K8 relay is energized and the fan operates. When a program calls for LOW speed, K9 is energized. Because both are tied together, the results are the same.

With both relays engaged and voltmeter set for AC voltage, check between neutral and each terminal. The reading should be 120 VAC. If 0 volts is measured and red LED (D20 D22) is illuminated, then the relay board needs to be replaced.



Fan-Lo Speed



Relay Board Diagnosis

Convection Fan

Locate the P4 connector and line break relay. The P4 connector will have a Molex plug containing 4 wires:

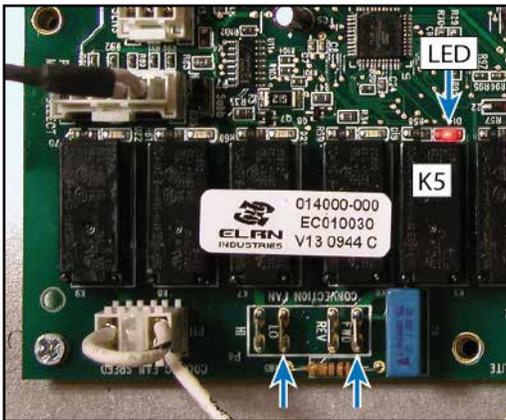
- (1) & (2) A blue wire jumper between terminals REV and FWD
- (3) orange/white wire—LO speed capacitor
- (4) orange/black wire—HI speed capacitor

Convection Operation

The main power and speed are controlled by the EOC by two relays (K5 and K7). K6 (directional is not used on the RDSOE and RDDOE series ovens.

K5 is the main control (power) relay and is an SPDT relay. It controls all functions of the convection fan system. The photo below shows the K5 relay energized.

Low Speed—Clockwise (FWD)

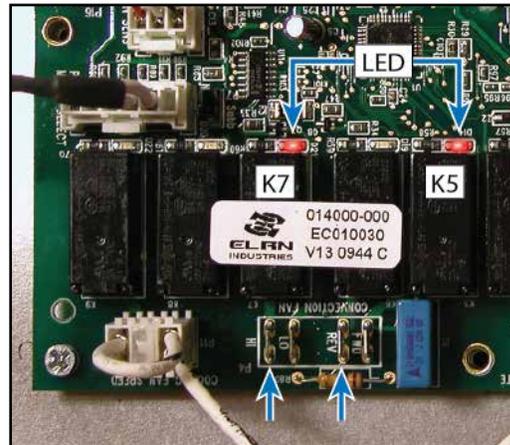


When closed, it sends power through K6 relay and out the LO contact of the K7 relay.

The output from K5 is connected to the C (common terminal) of K6. Because K6 is not used, both the FWD and REV contacts are jumped together.

Clockwise (FWD)—High Speed

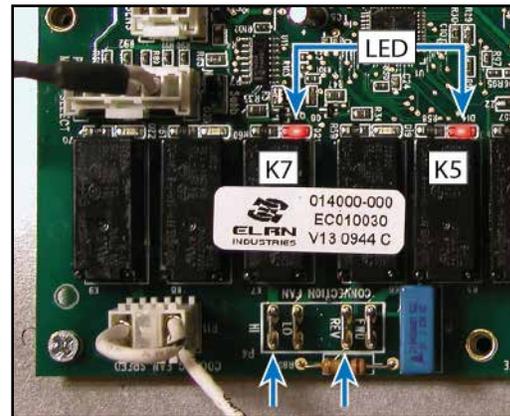
K7 is the speed relay. It too is an SPDT relay. When not energized, the LO circuit is energized through the C terminal of the K7 relay. The N.O. terminal is now closed resulting in the unit running at a higher speed.



Testing Relay Board

Use a volt meter to measure voltage between the orange/white (Low Speed) and the orange/ black (High Speed) wire in the Molex plug and the neutral terminal block.

The voltage should be 120 VAC. This will indicate the K5 and K7 are functioning properly. With K7 energized, 120 volts should be measured between neutral and the HI contact and when the relay is not energized between neutral and the LO contact.



Relay Board Diagnosis

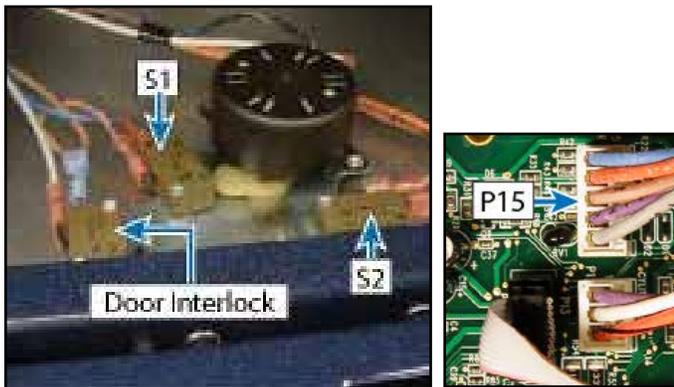
Door Lock Assembly

The door lock motor is a 120 volt motor. One side of the motor is wired directly to the main neutral terminal block. L1 power to the lock motor is connected on the P15 connector (DL) on the main relay board.



When the door is required to lock or unlock, the K3 relay energizes and sends line voltage to the door lock motor.

The position of the door lock motor is monitored by the S1 and S2 door interlock switches connected to P15 shown below (right).



There are three micro switches mounted on the door lock assembly. One switch is not used on this model. The photo above shows the latch assembly lifted upwards to expose the switch positioning.

When the door is in the unlocked position, the cam is depressing the S1 switch plunger. The N.O. switch contact is closed and a completed circuit is made at the P15 connection between the brown wire and blue/white. This signals the board that the door is unlocked.

S2 is also N.O. and is open when the door is unlocked. When the lock motor is activated and begins to lock, the S1 contact opens. When the plunger catches the door liner and pulls inwards, the S2 switch plunger is actuated. The switch contact is closed and a completed circuit is made at the P15 connection between the brown wire and orange. This signals the board that the door is locked. When it is time to unlock the door, power is sent to the door lock motor and it continues its rotation. The plunger releases the door liner and opens the contact on S2. When the door is fully opened, S1 is closed by the motor cam. This will signal the board that the door is unlocked.

Testing Lock Motor

With the Molex connector removed from the P12 board connection, use an Ohm meter to measure resistance between black/white wire in the Molex plug and the neutral terminal block. The resistance should be approximately 12.3K Ω . If no resistance is read, remove the latch motor to repair or replace as necessary (see *Lock Motor Disassembly*).

Testing Latch Switches

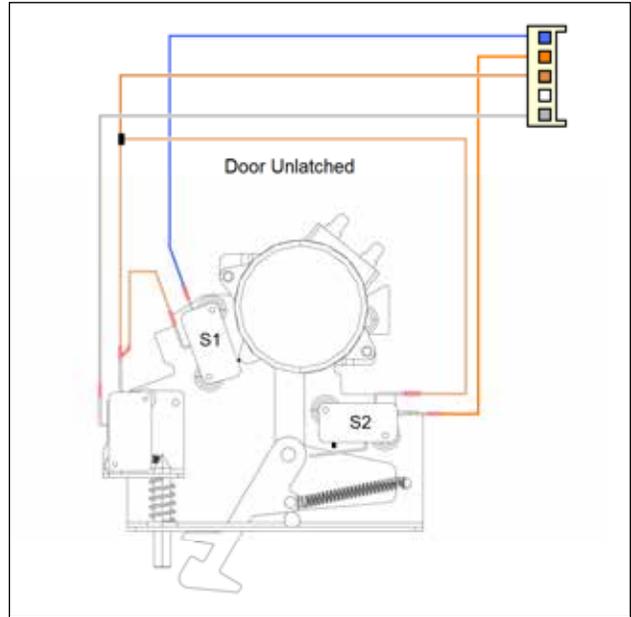
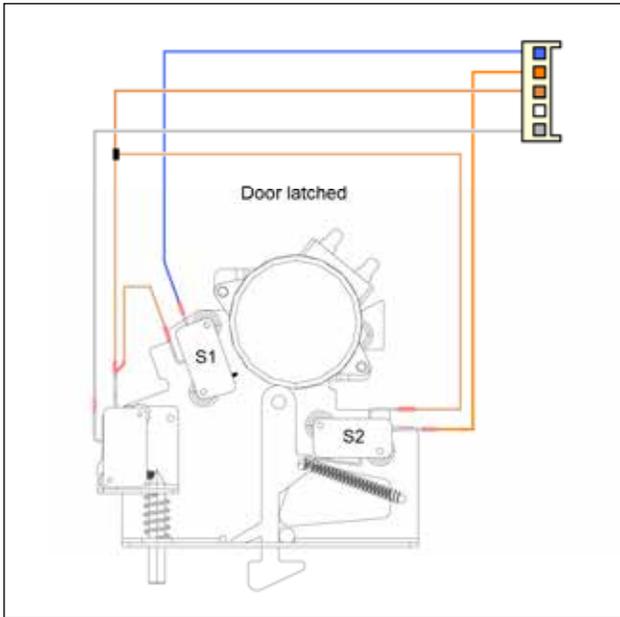
To check the latch switches, access the relay board and unplug the P15 Molex plug. With the door in the unlocked position, you should read continuity between the brown wire and the blue/white wire and infinite ohms Ω between the brown wire and the orange. If your readings are incorrect or reversed, remove the latch and inspect, repair/replace (see *Lock Motor Disassembly*).

Relay Board Diagnosis

Checking the door lock position switches

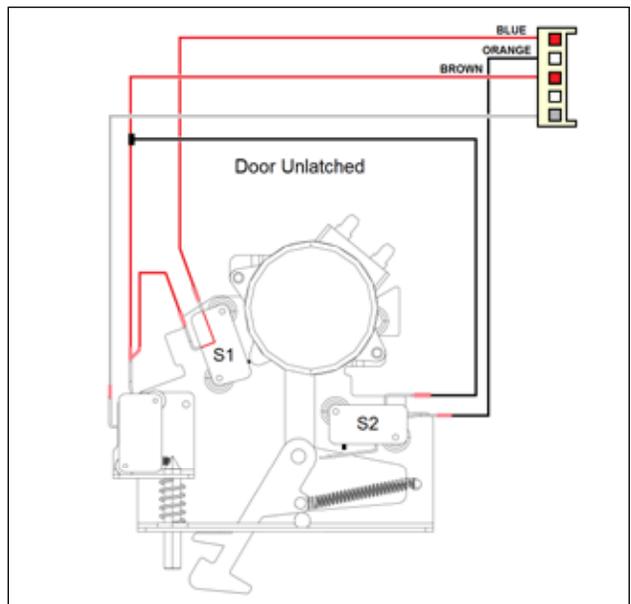
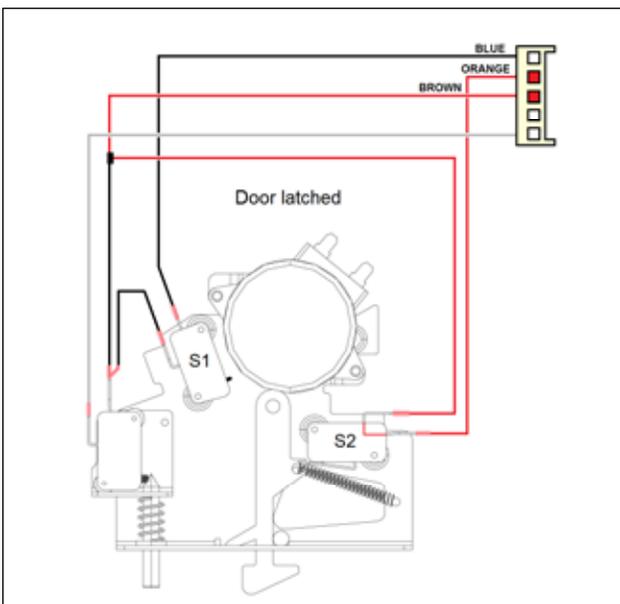
With the door in the unlocked position, the S1 switch (N.O.) is being activated by the motor cam. Shown below are the switch positions and wire colors. To test, ohm out the wires between blue and brown. The reading should be zero (0) Ω . The S2 switch is N.O. and will read infinite ohms (∞) when the door is unlocked.

When the door locks, the S1 switch (N.O.) is no longer in contact with the motor cam and will read infinite ohms (∞). The S2 switch is N.O. and should close when the door is locked. To test, ohm out the orange and brown. The reading should read zero (0) Ω when the door is locked.



Shown below is the closed circuit in red.

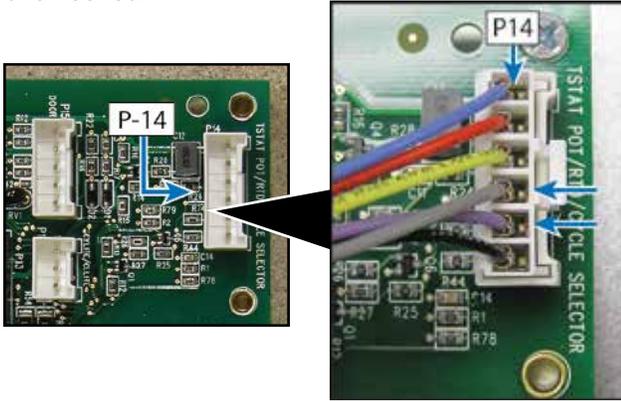
Shown below is the closed circuit in red.



Relay Board Diagnosis

RTD Sensor

Locate the P14 connector on relay board. The P14 connector will have a Molex plug containing a gray and violet wire. The gray and violet wires go to the oven sensor.



With the Molex plug removed, use an Ohm meter to measure resistance between the gray and violet wires in the Molex connector. At room temperature the reading should be approximately 1050 – 1100 Ω . If Zero resistance (shorted RTD) or infinite resistance (open RTD) is read, verify sensor wiring is connected completely through circuit. If wiring is OK, replace the sensor.

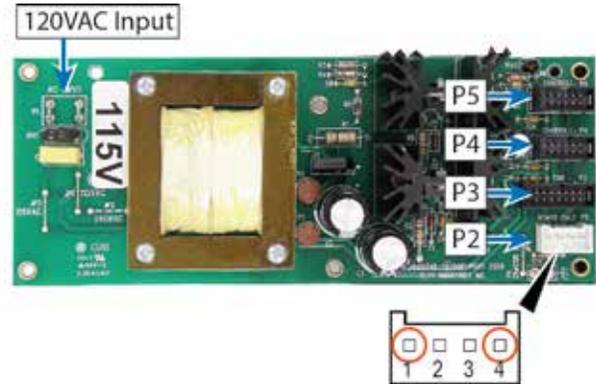
RTD Characteristics

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

Note: Door switch must be depressed in order for the Convection Fan and all convection cycles to operate when the door is opened.

Test Main Power Board

The main power board receives power directly from the power supply. Verify 120 VAC between Neutral (white wire) and L1 (black wire). If no voltage is present, verify supply and check breaker.

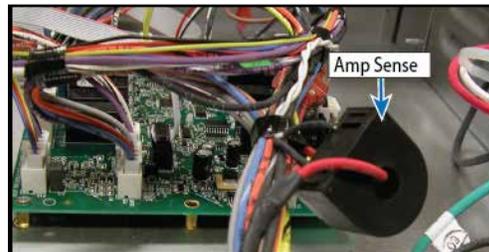


With voltage present to the power board, verify the output voltage. Locate pin connection P2. Output voltage can be checked between pin 1 – 4 (see below). Voltage should be 8VDC. If 0 volts is read, replace the board.

P5 is the interface connection to the upper relay board P13. P4 is the interface connection to the lower relay board P13 and P3 is the interface connection to the TOD (clock) user interface.

Amp Sense

An current (Amp) sensor is used on the wall oven to measure current flow. The RDDOE306 has 2 on the unit. One for each cavity. The amp sensor is placed around the L2 (red) feed and connected to the relay board.

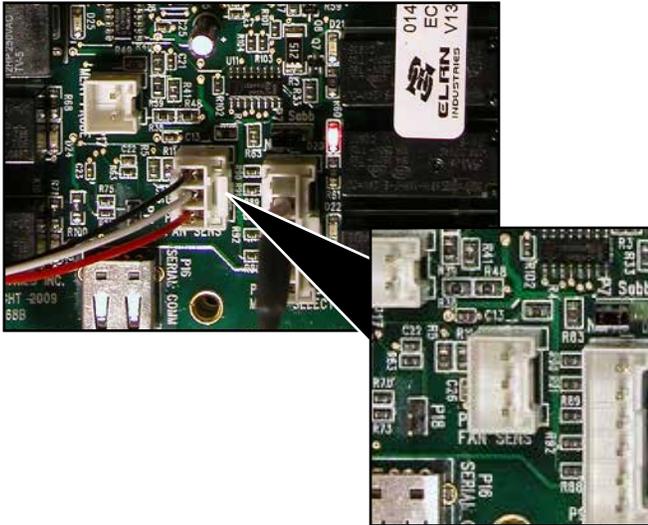


To test the sensor, unplug the sensor and check resistance across the two wires. A resistance reading 28.2 Ω should be measured.

Note: The current sensor is only utilized in the diagnostic mode. It is disabled during normal operation.

Hall Effect Sensor

The cooling motor incorporates a device called a Hall Effect Sensor. The sensor is connected to the relay board. Below you will see the three wire connectors to the Hall Effect Sensor, which consists of a black (1), white (2), and red (3) wire. The Hall Effect Sensor is built into the cooling motor.



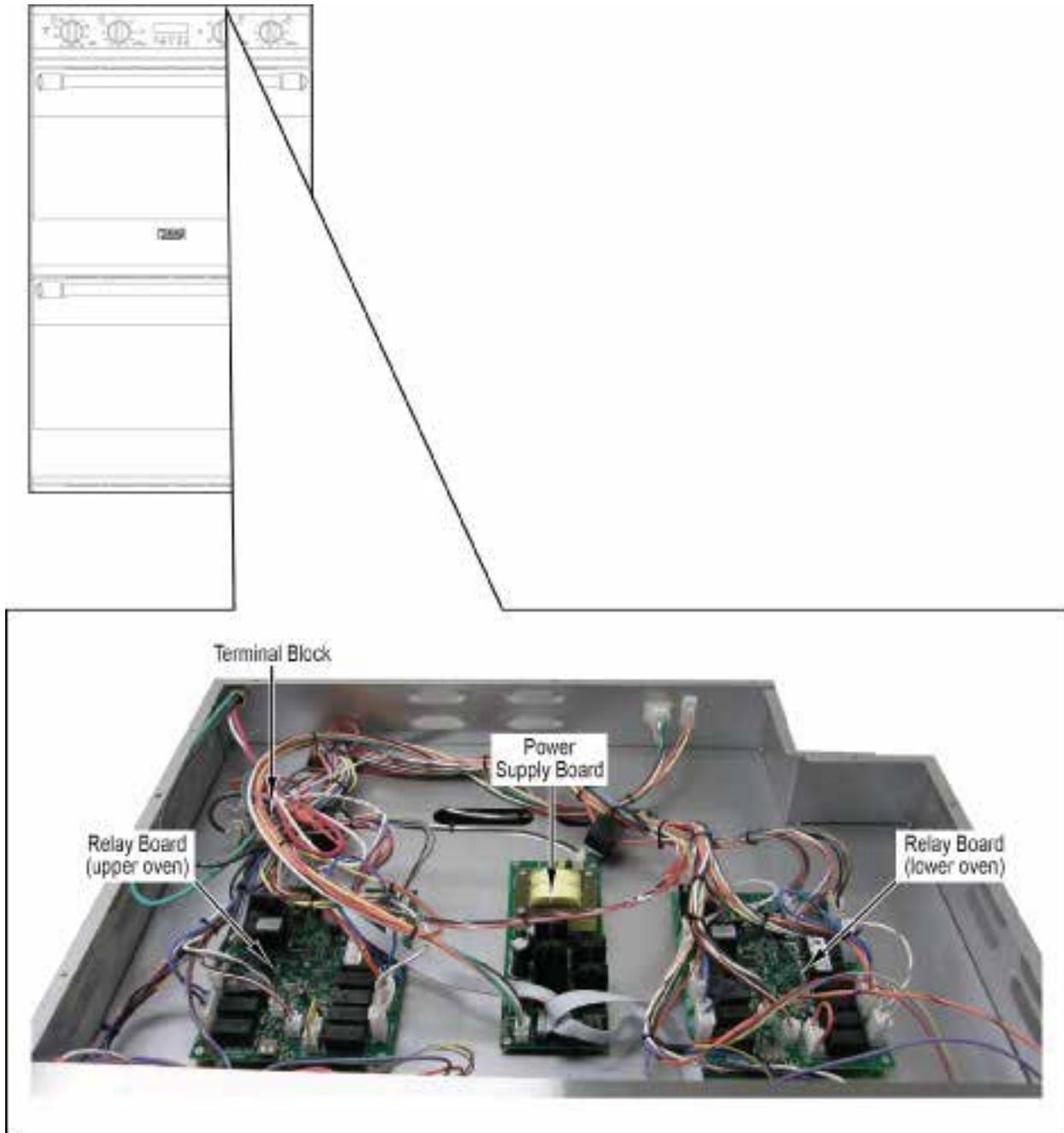
Activate the oven so that the fan is energized. With the fan turning, 2.5 VDC should be measured. If 2.5 VDC is present, then connect meter leads between pin (2) white and pin (3) red. A voltage of 2.5 VDC should be measured. If 2.5 VDC is not measured, but a full 5 VDC is measured, then the Hall Effect Sensor is defective and replacement of the cooling fan is necessary.

Another test that can be made is with the oven shut off and the Molex plug connected, place meter leads between pin (1) black and pin (2) white. With the voltmeter set to DC voltage, a reading of 0 or 5 volts should be measured depending on where the motor is positioned. If the motor is spun manually the voltage should jump between 0 – 5 volts. The same is true if the meter leads are placed between pin (2) white and pin (3) red. As the fan is manually spun a voltage of 0 to 5 volts will be measured. Therefore, in any position, one side will read 0 volts while the other will read 5 volts. This is a good test to see that the three wire cable and Hall Effect Sensor has closed contacts.

To check the cooling fan, verify the cooling fan is operating. If the fan is not turning, then verify power is being supplied to the motor. If the fan is running, locate the 3-wire Molex plug on the relay board. With the oven switched OFF, unplug the connector from the board as shown above and set the voltmeter to DC voltage.

A voltage of +5 volts between the pin (1) black and pin (3) red should be measured. Measure the voltage between pin (2) white and pin (3) red and +5 volts should be measured as well. Measure the voltage between pin (1) black and pin (2) white and 0 volts should be measured. If the voltages are not correct and there is 120 volts supplied, replacement of the relay board is necessary. If the voltages are correct, reconnect the 3-wire Molex plug. Place meter leads in pin (1) black and pin (2) white.

Parts Location–Oven Top



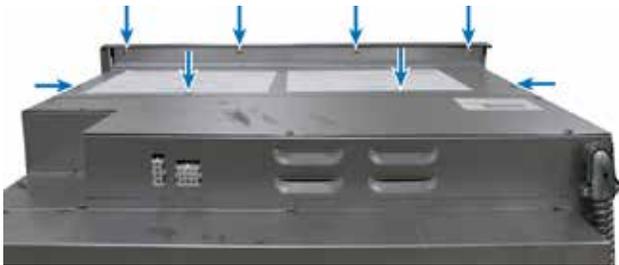
WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to unit before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct earth ground and polarization. After servicing, reconnect electrical power.

Main Top/Front Disassembly

To access main top/front:

1. Slide the unit out 6 – 8”.
2. Remove screws securing front top panel.
3. Remove panel.



4. Reverse to reassemble.

Main Top/Rear Disassembly

To access main top/rear:

1. Remove unit from installation.
2. Remove main top/front (see *Main Top/Front Disassembly*).
3. Remove screws securing rear main top.
4. Remove panel.



5. Reverse to reassemble.

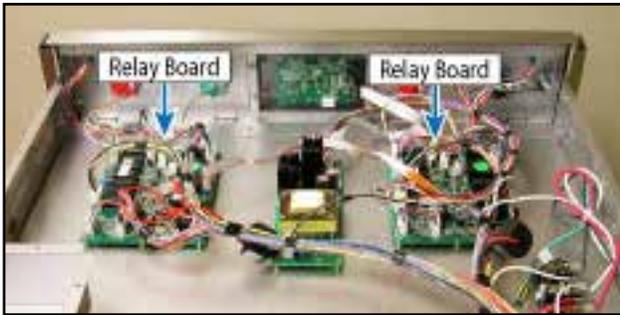
⚠ WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to unit before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct earth ground and polarization. After servicing, reconnect electrical power.

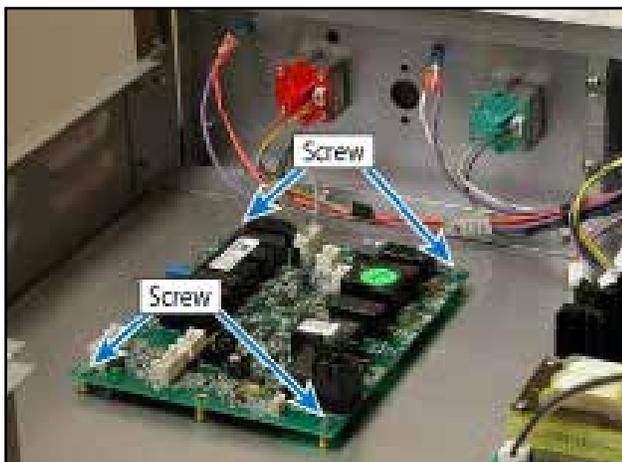
Relay Board

To access relay board:

1. Remove main top/front and main top/rear (see *Main Top/Front and Main Top/Rear Disassembly*).
2. Relay board is accessible.



3. Label and disconnect wiring.
4. Remove screws securing relay board.

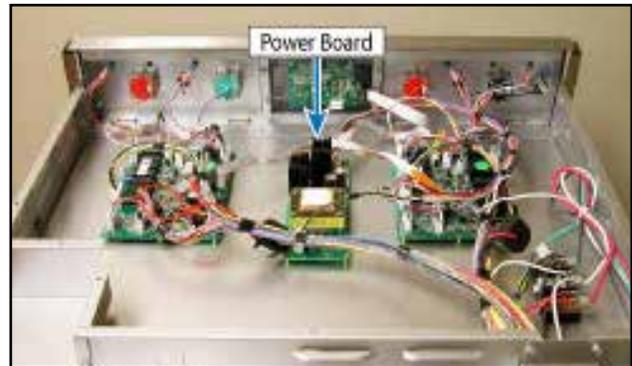


5. Repair or replace relay board as necessary.
6. Reverse procedure to reinstall.

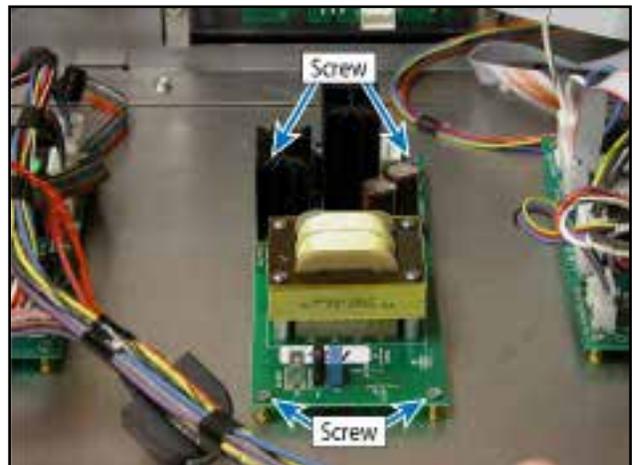
Power Supply Board

To access power supply board:

1. Remove main top/front and main top/rear (see *Main Top/Front and Main Top/Rear Disassembly*).
2. Power supply board is accessible.



3. Label and disconnect wiring.
4. Remove screws securing power supply board.



5. Repair or replace power supply board as necessary.
6. Reverse procedure to reinstall.

WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to unit before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct earth ground and polarization. After servicing, reconnect electrical power.

Terminal Block

To access terminal block:

1. Remove main top/front and main top/rear (see *Main Top/Front and Main Top/Rear Disassembly*).
2. Terminal block is accessible.



3. Disconnect wires.
4. Remove screws securing terminal block.



5. Repair or replace terminal block as necessary.
6. Reverse procedure to reinstall.

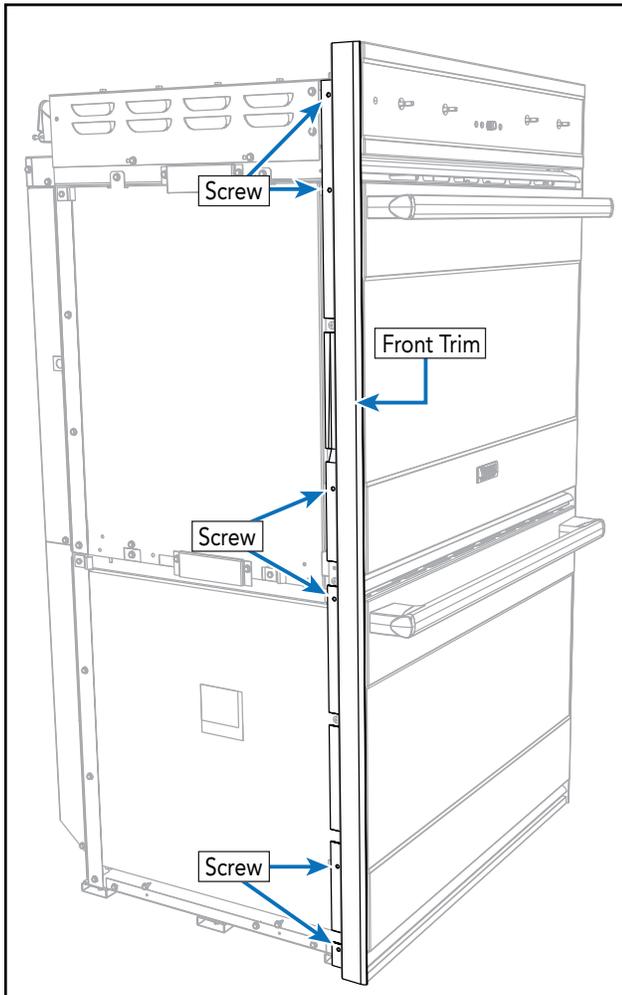
⚠ WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to unit before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct earth ground and polarization. After servicing, reconnect electrical power.

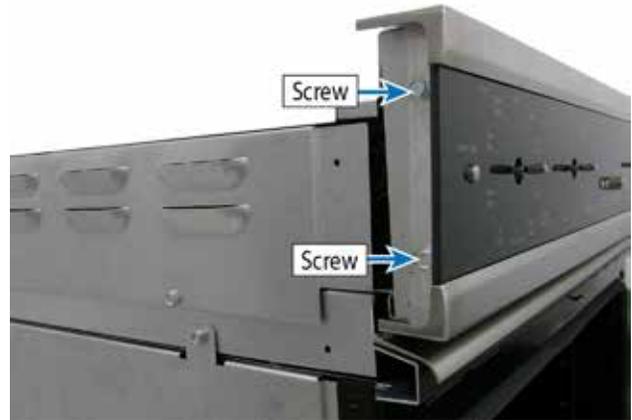
Control Panel Disassembly

To access control panel:

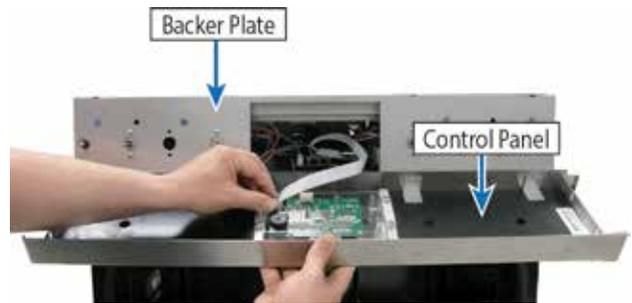
1. Remove oven knobs.
2. Slide oven forward from installation to access the front trim.
3. Remove screws and washers securing front trim and remove trim.



4. Remove screws on each end of control panel.



5. Separate control panel from backer plate.
6. Disconnect ribbon cable from clock.



7. Reverse procedure to reinstall.

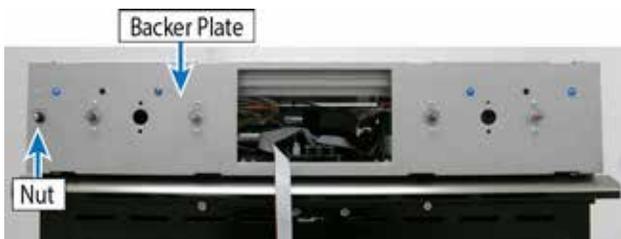
⚠ WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to unit before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct earth ground and polarization. After servicing, reconnect electrical power.

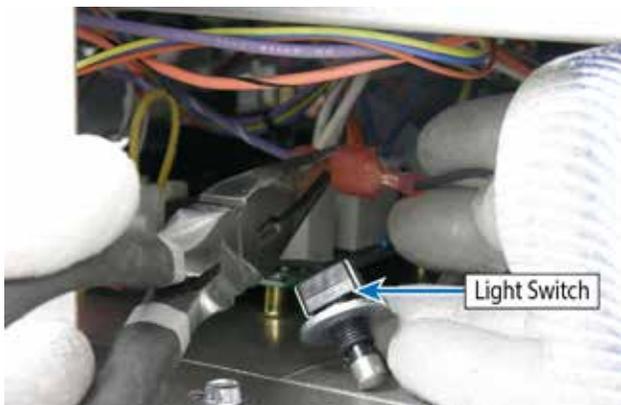
Oven Light Switch

To access oven light switch:

1. Remove control panel (see *Control Panel Disassembly*).
2. Remove nut securing light switch to backer plate.



3. Reach into the opening and remove light switch and disconnect wiring.

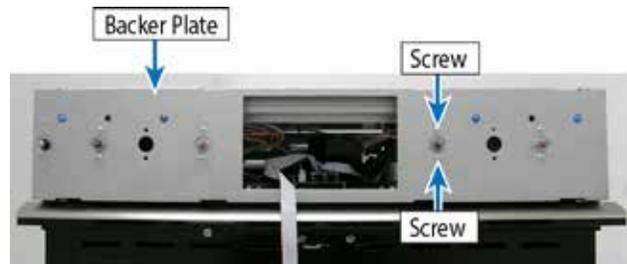


4. Repair or replace light switch as necessary.
5. Reverse procedure to reinstall.

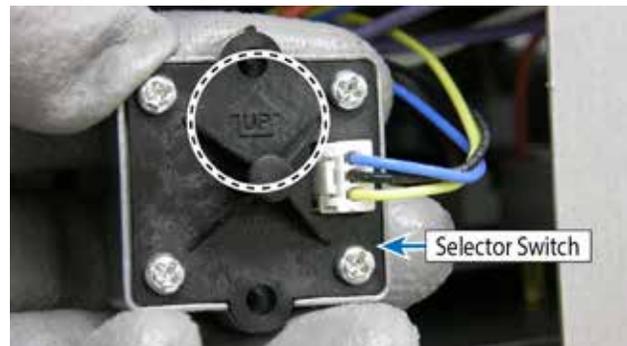
Oven Selector Switch

To access oven selector switch:

1. Remove control panel (see *Control Panel Disassembly*).
2. Remove screws securing selector switch to backer plate.



3. Reach into the opening and remove oven selector switch and disconnect wiring.



4. Repair or replace oven selector switch as necessary.
5. Reverse procedure to reinstall.

Note: When replacing the selector switch take note of the position when reinstalling. There is a mark on the back of the switch to indicate the "TOP" for orientation.

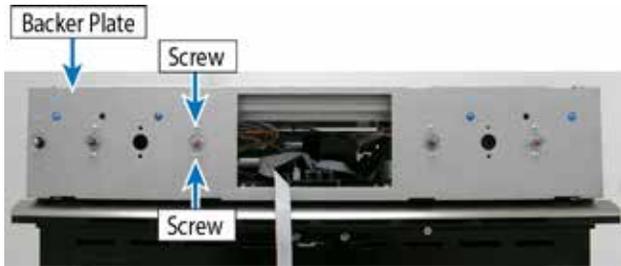
⚠ WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to unit before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct earth ground and polarization. After servicing, reconnect electrical power.

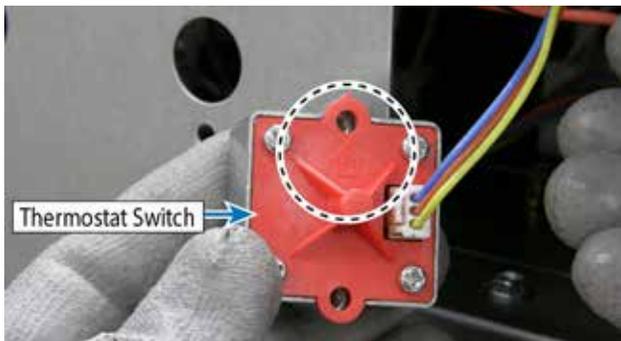
Oven Thermostat Switch

To access oven thermostat switch:

1. Remove control panel (see *Control Panel Disassembly*).
2. Remove screws securing oven thermostat switch to backer plate.



3. Reach into the opening and remove oven thermostat switch and disconnect wiring.



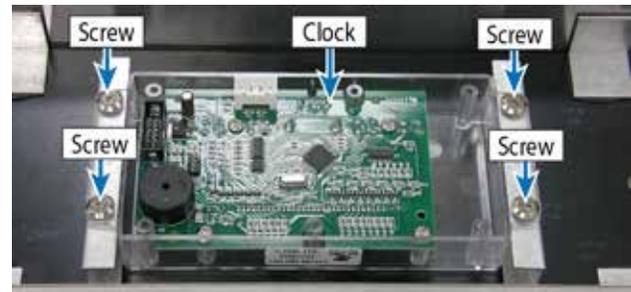
4. Repair or replace oven thermostat switch as necessary.
5. Reverse procedure to reinstall.

Note: When replacing the thermostat switch take note of the position when reinstalling. There is a mark on the back of the switch to indicate the “TOP” for orientation.

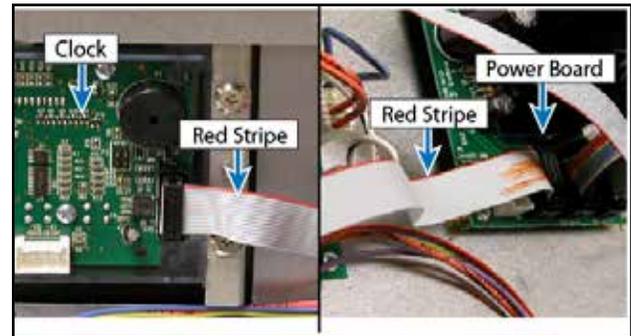
Clock

To access clock:

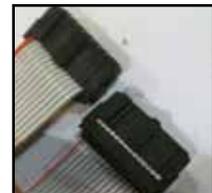
1. Remove control panel (see *Control Panel Disassembly*).
2. Remove screws securing clock to control panel.



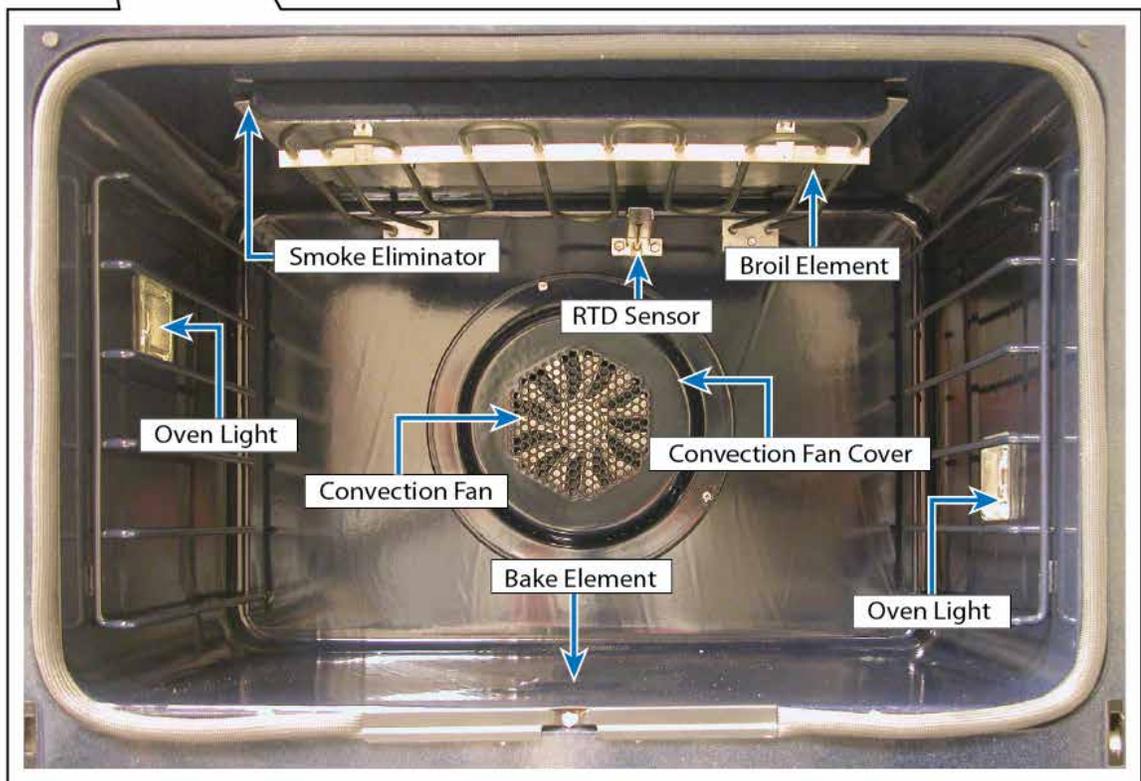
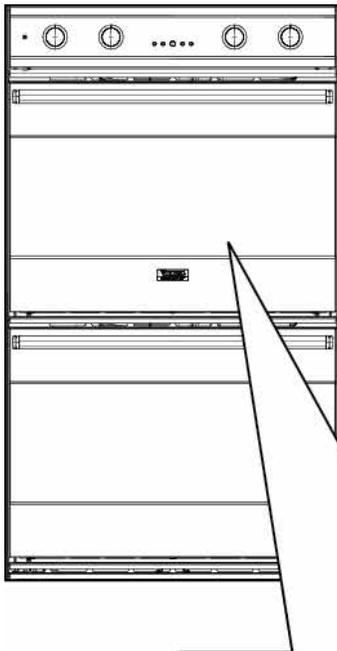
3. Repair or replace clock as necessary.
4. Reverse procedure to reinstall.



Note: If replacing a ribbon cable, the orientation of the plugs must be the same. Hold both ends of the ribbon cable side by side. With the plugs in the same orientation, verify that the red marked side is the same on both plugs. If the red mark is on the left on one plug and the right on the other plug, this will not work and could damage the relay boards.

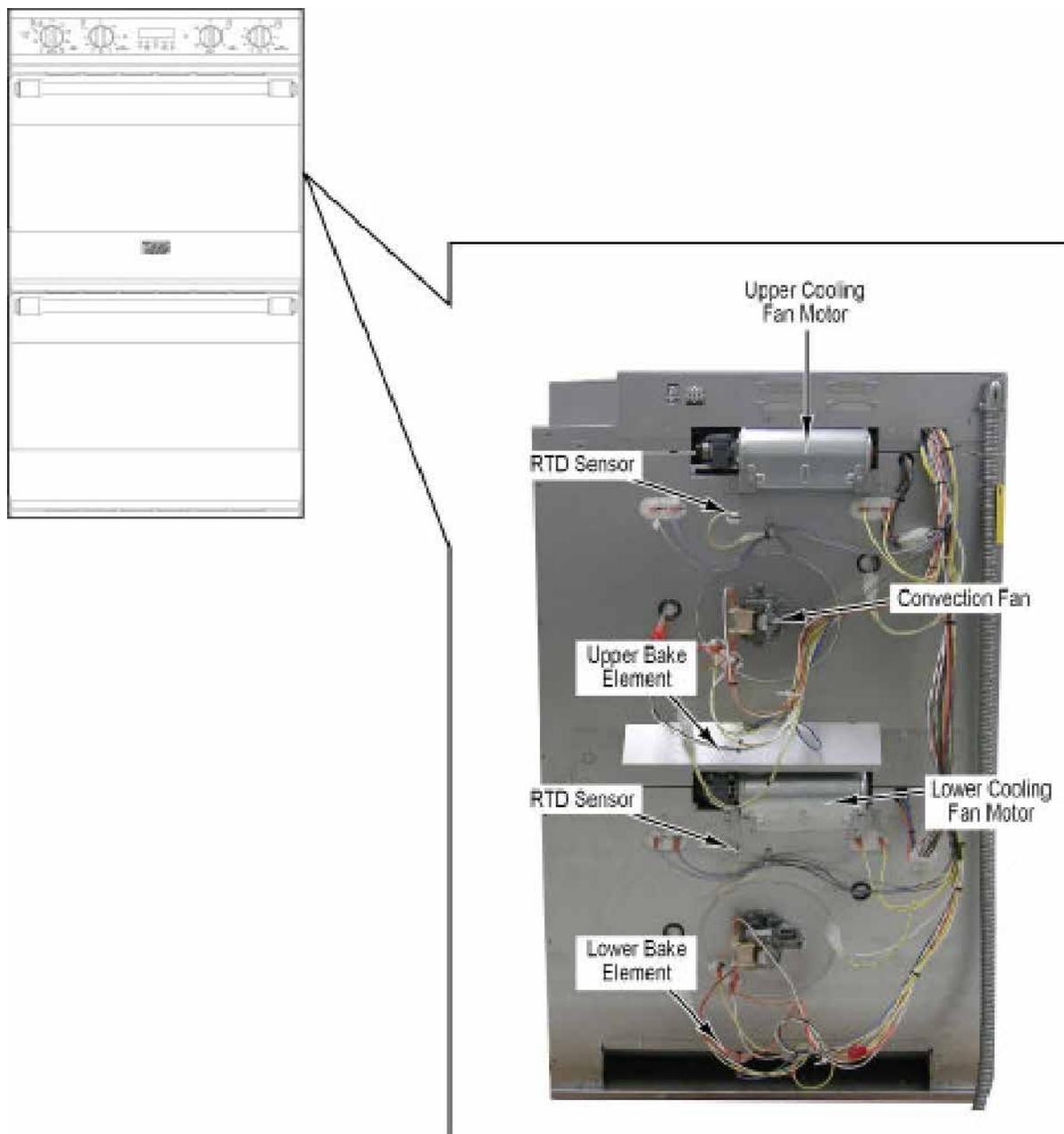


Parts Location–Oven



Note: Upper oven shown.

Parts Location-Back



Note: RDDOE306SS model shown.

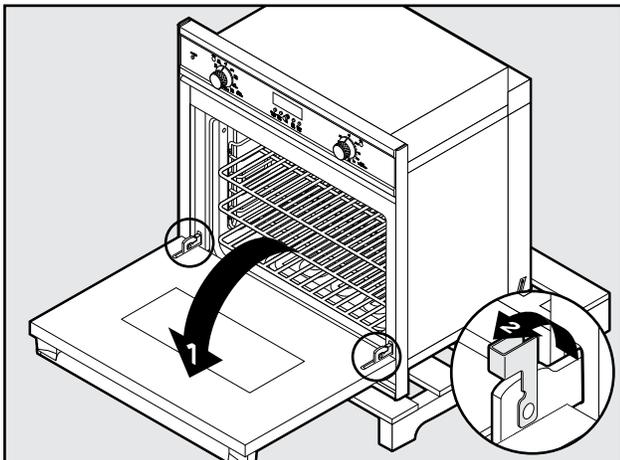
WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to unit before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct earth ground and polarization. After servicing, reconnect electrical power.

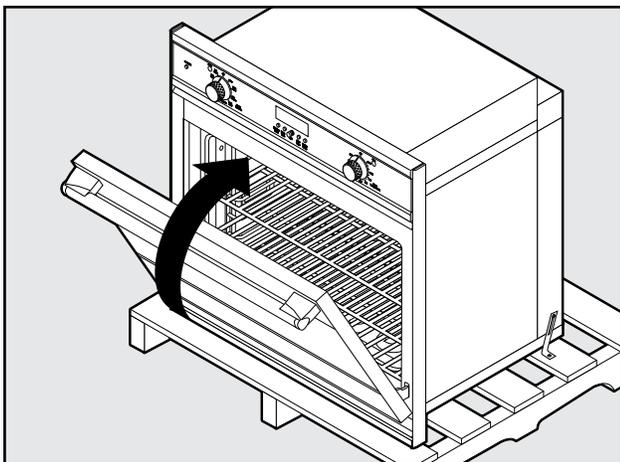
Door Removal

To remove oven door:

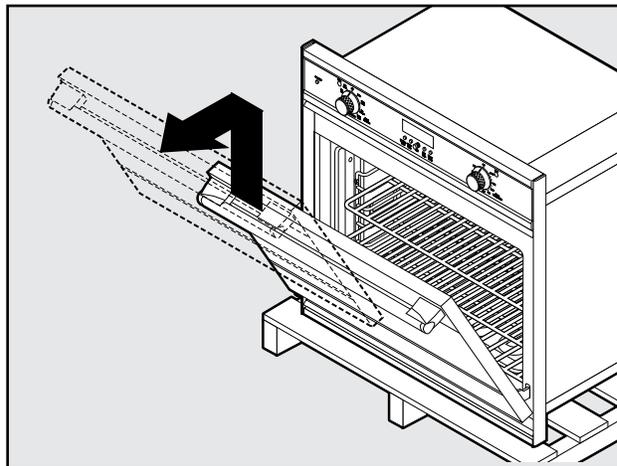
1. Open door completely.
2. Slide locking tabs, located on left and right side of door hinge, down completely to disengage hinge from receiver.



3. Close oven door to the broil stop position.



4. Lift door up and out.



5. Reverse procedure to reinstall.

Note: RDSOE306SS model shown.

⚠ WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to unit before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct earth ground and polarization. After servicing, reconnect electrical power.

Rear Cover Disassembly

1. Remove unit from installation.
2. Slide the unit out until rear cover is accessible.
3. Remove screws securing rear cover.
4. Remove panel.



5. Reverse to reassemble.

Note: RDDOE306SS model shown.

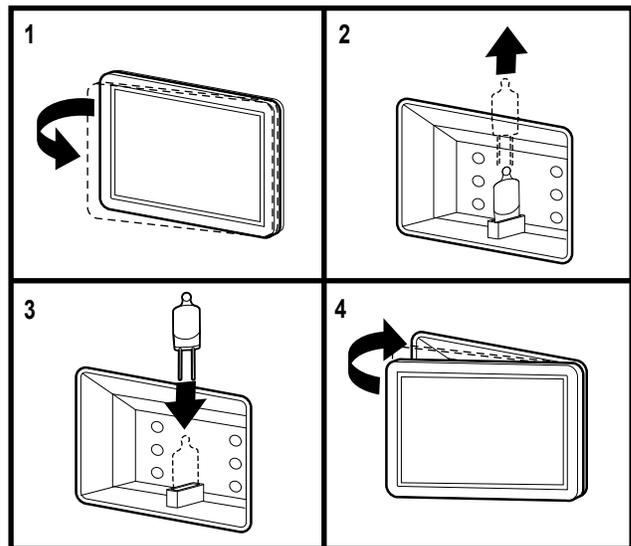
Oven Light

⚠ CAUTION

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

To access oven light:

1. Unsnap oven light cover.
2. Firmly grasp light bulb and pull out of socket.
3. Replace with new halogen bulb following wattage and voltage rating on old halogen bulb.
4. Reinstall light cover.

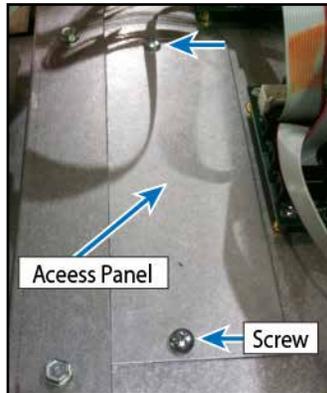


⚠ WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to unit before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct earth ground and polarization. After servicing, reconnect electrical power.

Door Lock Assembly

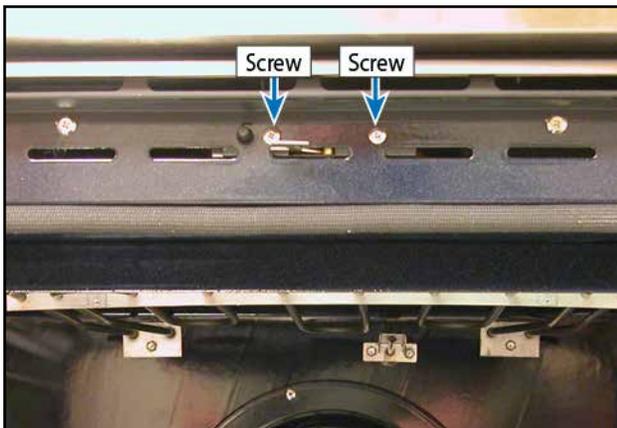
Note: Access to the upper door latch requires removal of the main top/front cover. Then removal of the access cover shown here. Access to the lower latch will require removal of the oven for service.



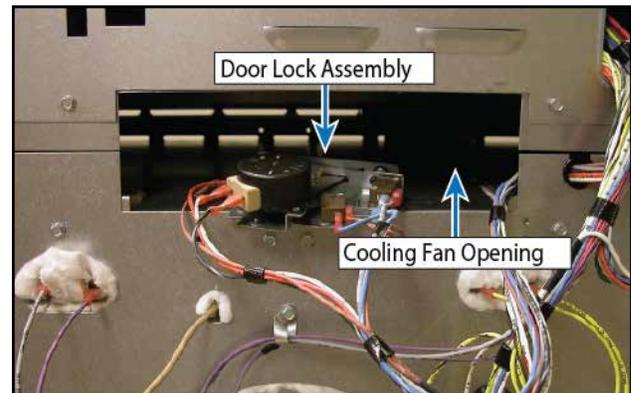
To access door lock assembly:

1. Remove unit from installation.
2. Open oven door.
3. Remove screws securing door lock assembly to front frame.

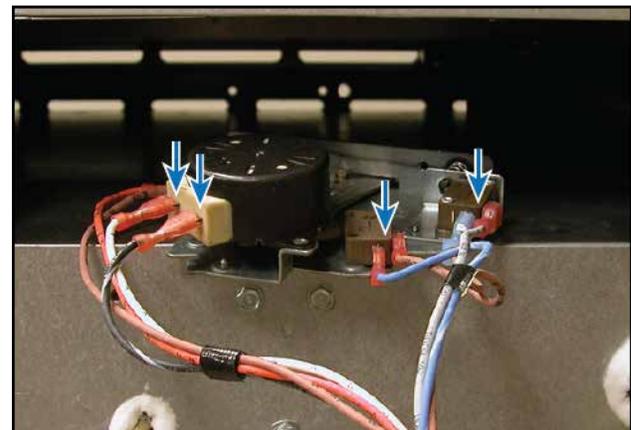
Note: A string or wire should be tied to the old latch hook so that when the new latch is replaced, the service technician can use the wire to pull the hook and latch through the front frame.



4. Remove rear cover (see *Rear Cover Disassembly*).
5. Remove cooling fan (see *Oven Cooling Fan Disassembly*).



6. Slide door lock assembly through cooling fan opening at rear of unit.



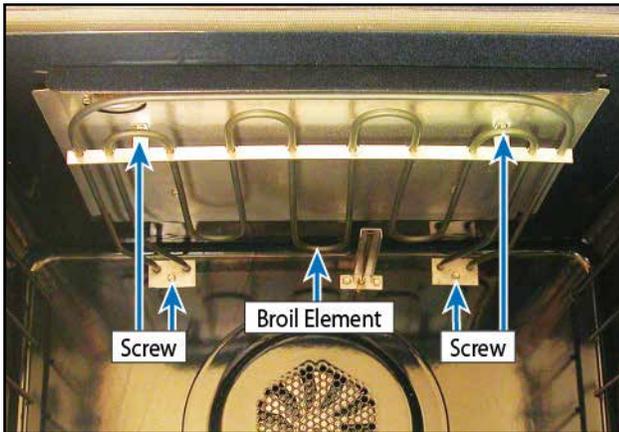
7. Disconnect wiring.
8. Repair or replace door lock assembly as necessary.
9. Reverse procedure to reinstall.

⚠ WARNING

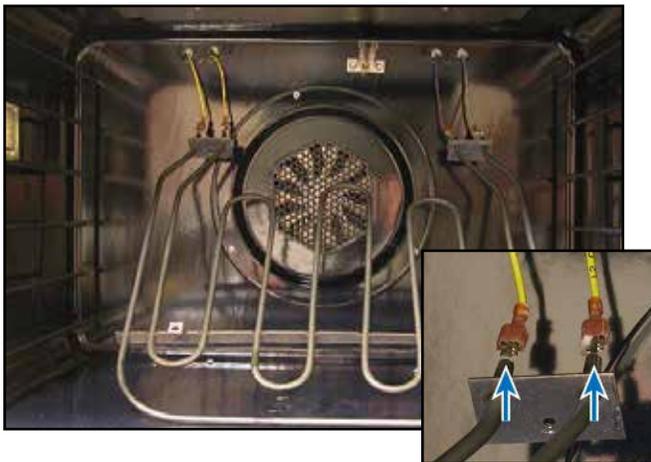
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to unit before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct earth ground and polarization. After servicing, reconnect electrical power.

Broil Element

1. Open oven door.
2. Remove screws securing broil element.



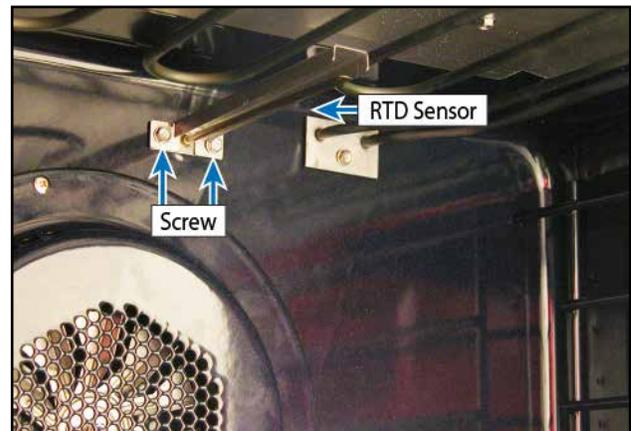
3. Slide broil element into cavity and disconnect wiring.



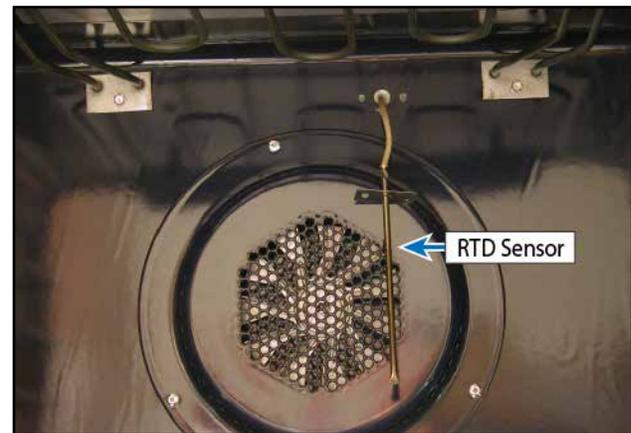
4. Repair or replace broil element as necessary.
5. Reverse procedure to reinstall.

RTD Sensor

1. Open oven door.
2. Remove screws securing sensor and cover to oven cavity.



3. Slide sensor into oven cavity and disconnect wiring.



4. Repair or replace RTD sensor as necessary.
5. Reverse procedure to reinstall.

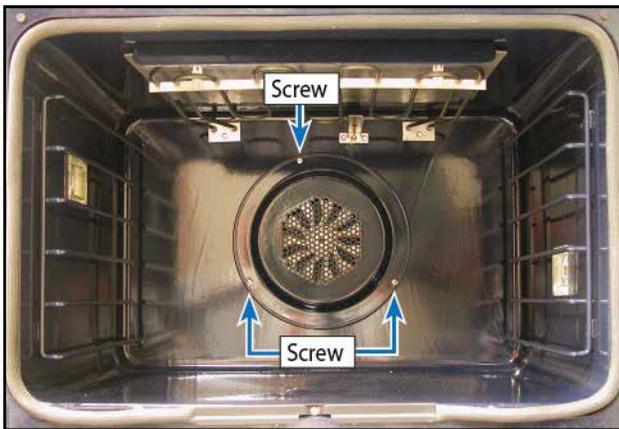
WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to unit before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct earth ground and polarization. After servicing, reconnect electrical power.

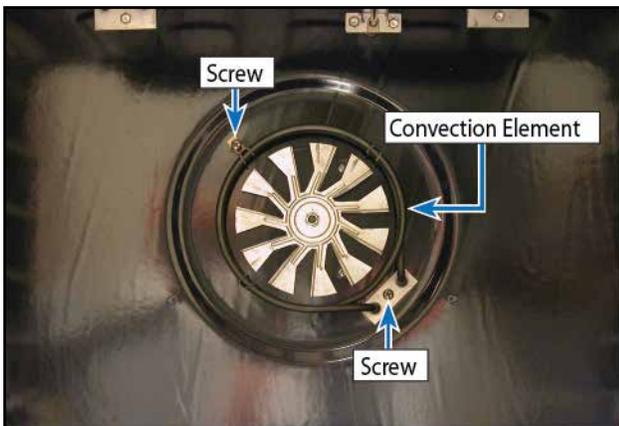
Convection Element

To access convection element:

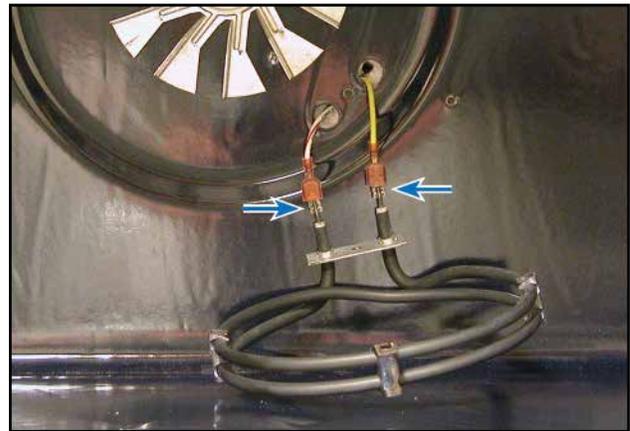
1. Open oven door.
2. Remove screws securing convection fan cover.



3. Remove screws securing convection element to oven cavity.



4. Slide convection element into cavity and disconnect wiring.



5. Repair or replace convection element as necessary.
6. Reverse procedure to reinstall.

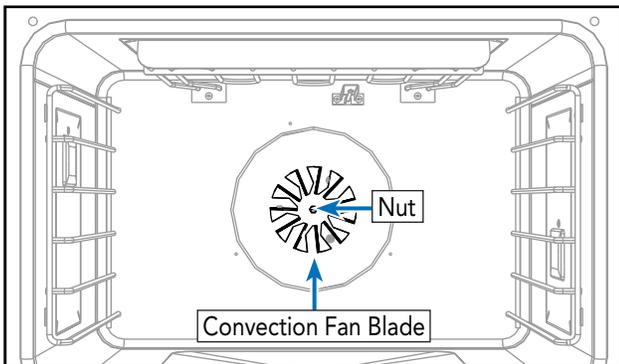
⚠ WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to unit before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct earth ground and polarization. After servicing, reconnect electrical power.

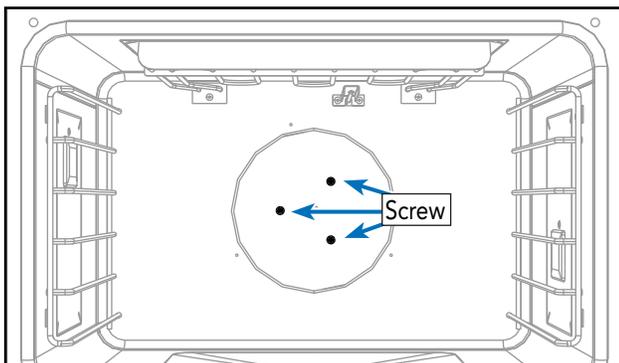
Convection Fan

To access convection fan:

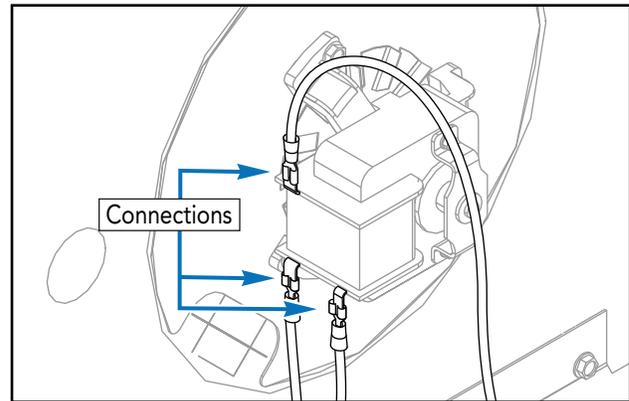
1. Remove unit from installation (in order to replace the convection motor, the oven has to be completely removed from the cabinet).
2. Remove oven door (see *Door Removal*).
3. Remove rear cover (see *Rear Cover Disassembly*).
4. Remove convection element (see *Convection Element*).
5. Remove nut securing fan blade to convection fan motor shaft.



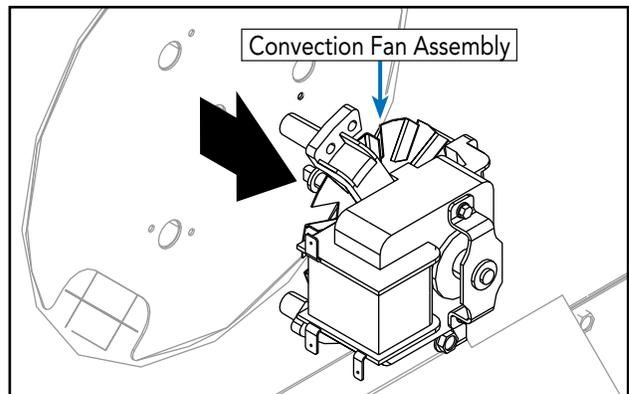
6. Remove screws securing convection fan assembly to oven cavity.



7. Disconnect wiring.



8. Remove convection fan assembly.



9. Repair or replace convection fan assembly as necessary.
10. Reverse procedure to reinstall.

Note: Removing the convection fan is a two man operation.

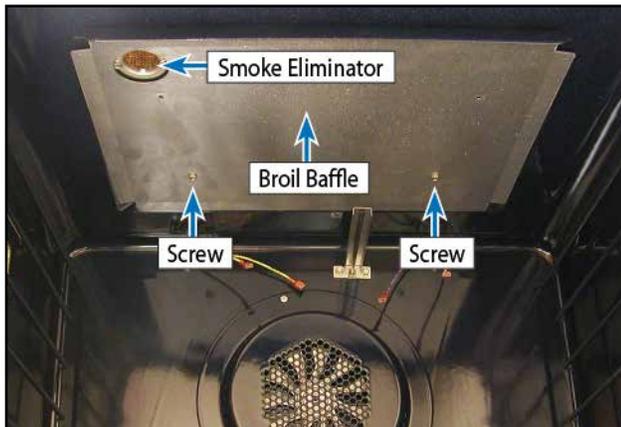
WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to unit before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct earth ground and polarization. After servicing, reconnect electrical power.

Smoke Eliminator

To access smoke eliminator:

1. Open oven door.
2. Remove broil element (see *Broil Element Disassembly*).
3. Remove screws securing broil baffle and remove baffle.



4. Remove screws securing smoke eliminator to oven cavity.

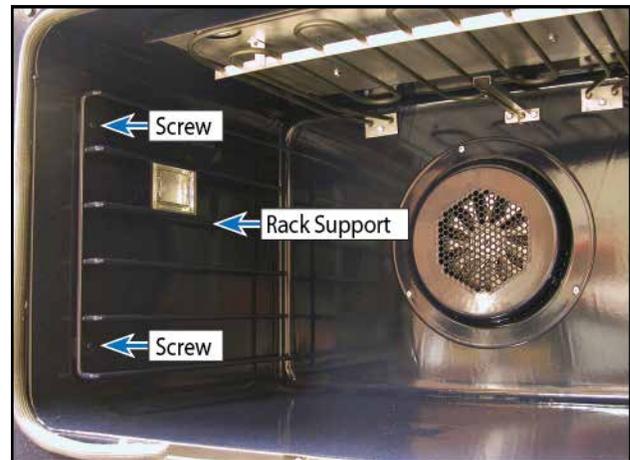


5. Repair or replace smoke eliminator.
6. Reverse procedure to reinstall.

Rack Support

To access rack support:

1. Remove oven door (see *Door Removal*).
2. Remove screws and rack supports from each side of oven cavity.



3. Reverse procedure to reinstall.

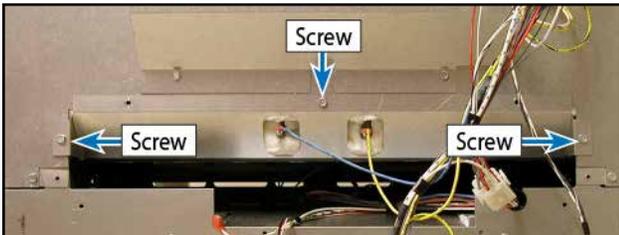
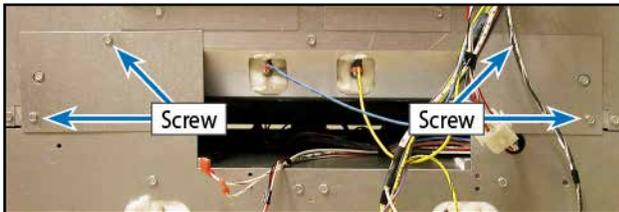
⚠ WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to unit before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct earth ground and polarization. After servicing, reconnect electrical power.

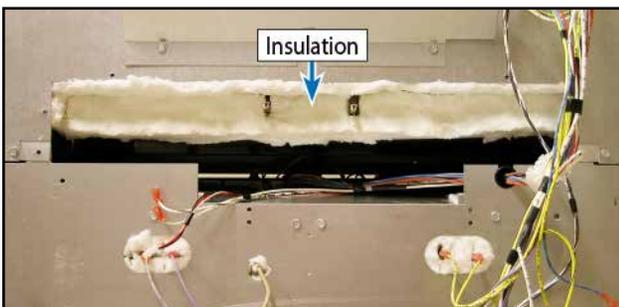
Bake Element

To access bake element:

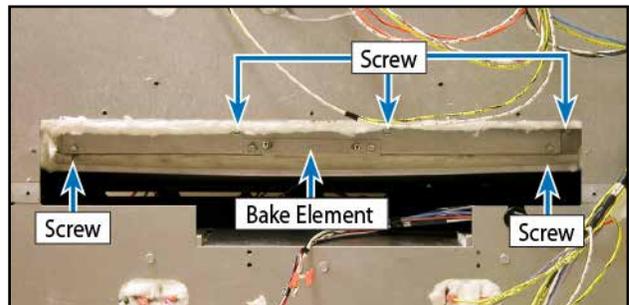
1. Slide unit out of installation (in order to replace the bake element, the oven has to be completely removed from the cabinet).
2. Remove rear cover (see *Rear Cover Disassembly*).
3. Remove cooling fan (see *Oven Cooling Fan*).
4. Disconnect wiring, remove screws securing rear trim pieces and remove trim.



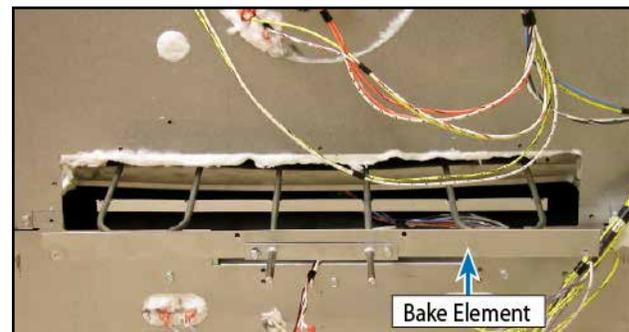
5. Carefully remove insulation covering bake element.



6. Remove screws securing bake element to unit.



7. Slide bake element out.



8. Repair or replace bake element as necessary.
9. Reverse procedure to reinstall.

⚠ WARNING

To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to unit before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct earth ground and polarization. After servicing, reconnect electrical power.

Oven Cooling Fan

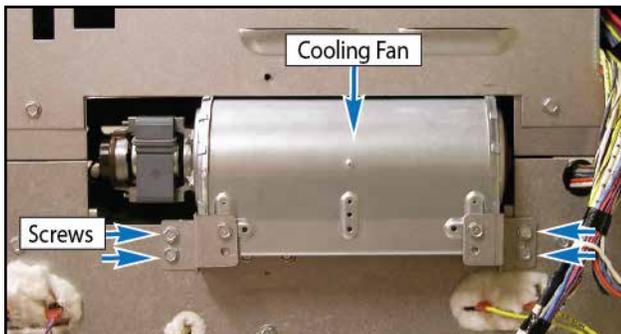
The oven is designed to circulate air around the control box area whenever the oven is switched on. The cooling fan has a Hall Effect Sensor that monitors the fan and communicates information to the relay board.

To access the cooling fan:

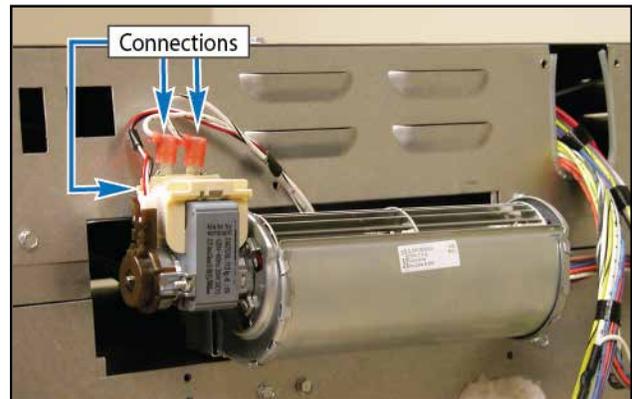
1. Slide unit out of installation.
2. Remove rear cover (see *Rear Cover Disassembly*).
3. Remove screws and element shield.



4. Remove screws securing cooling fan.



5. Remove fan and disconnect wiring to fan and Hall Effect Sensor.



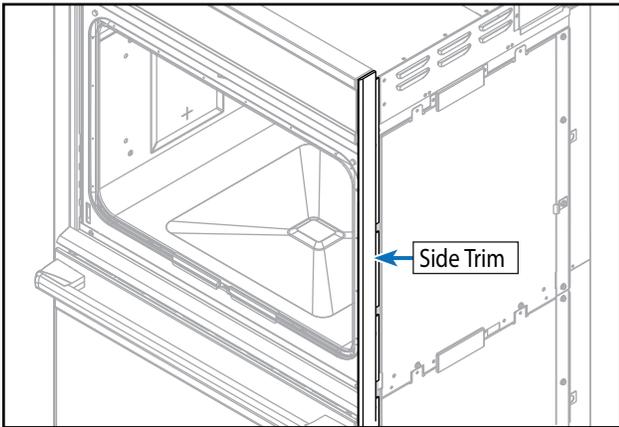
6. Repair or replace cooling fan as necessary.
7. Reverse procedure to reinstall.

⚠ WARNING

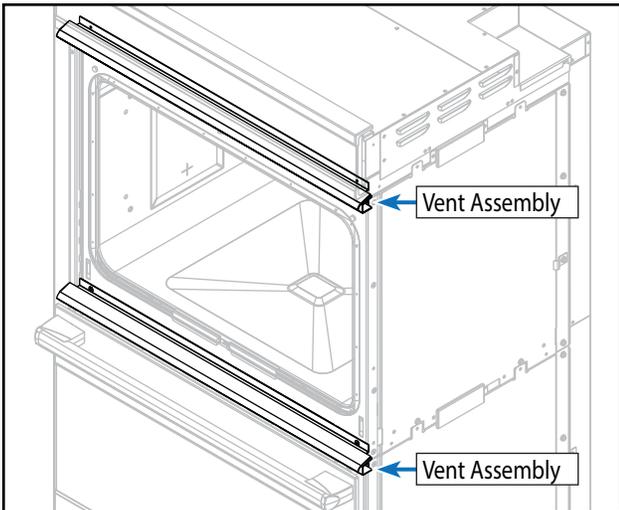
To avoid risk of electrical shock, personal injury, or death, disconnect electrical power to unit before servicing. Wires removed during disassembly must be replaced on proper terminals to insure correct earth ground and polarization. After servicing, reconnect electrical power.

Meat Probe Socket

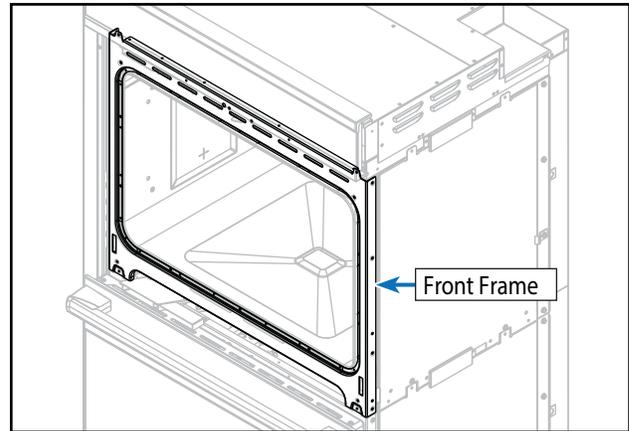
1. Slide unit out of installation (in order to replace the meat probe socket, the side cover has to be removed from the cabinet).
2. Remove door (see *Door Removal*) oven racks and rack supports (see *Rack Support*).
3. Remove screws and right side trim.



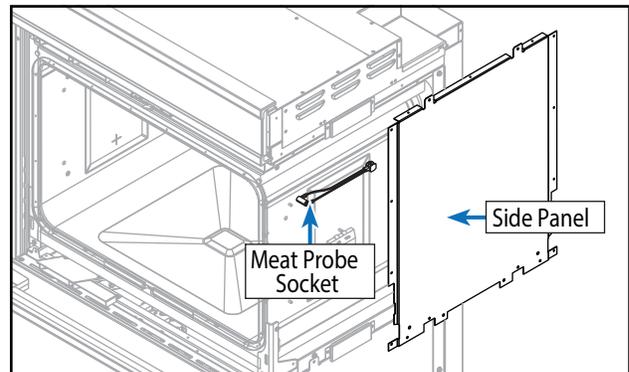
4. Remove screws and vent assemblies.



5. Remove screws and front frame.

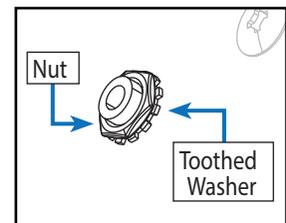


6. Remove side cover screws, slide out side cover and remove insulation.



7. Meat probe socket is now accessible.

8. From inside the oven cavity, remove nut and toothed washer to repair or replace meat probe.



9. Reverse procedure to reinstall.

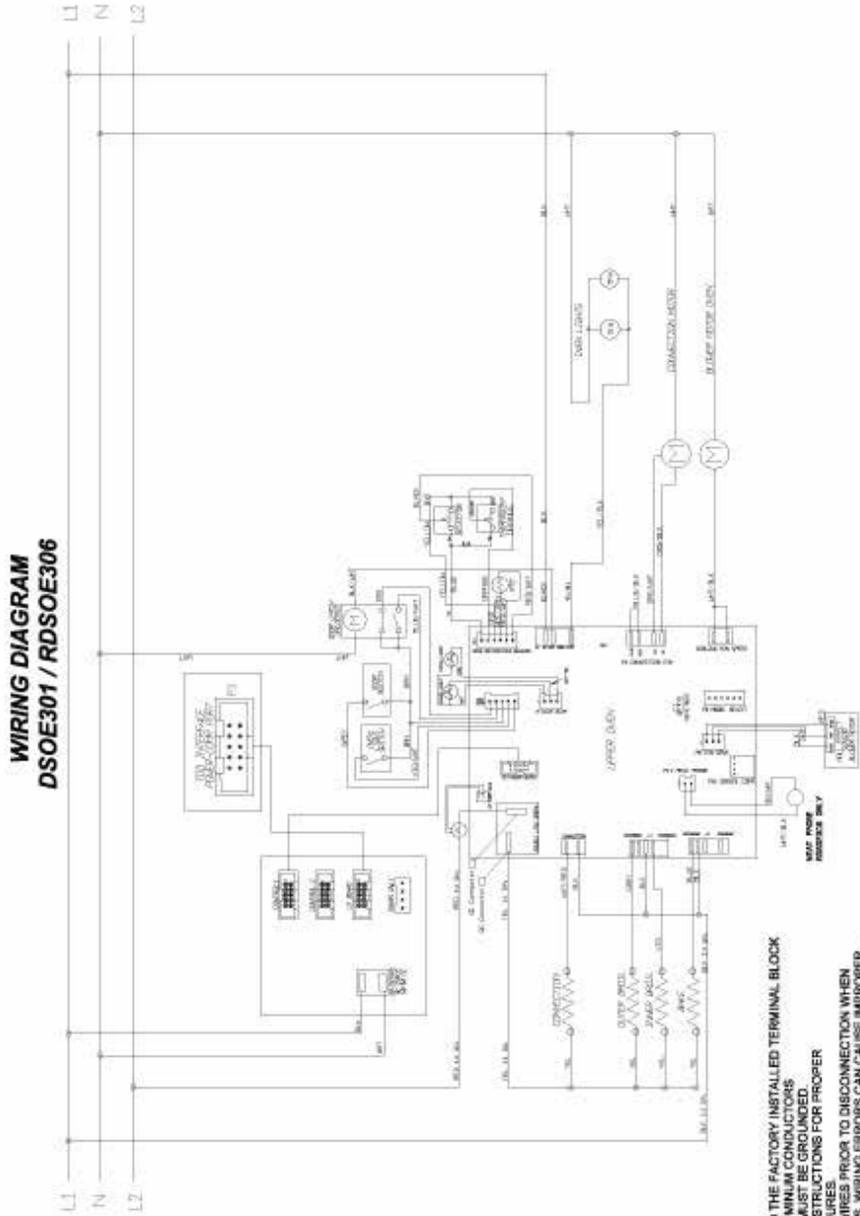
Subheating Guide

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
Convection fan inoperable	Defective oven wiring Convection Fan Motor Relay board	Repair/replace defective wiring Test convection fan motor Verify relay operation, wiring, and inputs
Convection fan operates, but no heat	Defective oven wiring Convection element Oven relay board Bake element/broil element	Repair/replace defective wiring Test convection element Verify relay operation, wiring, and inputs Replace bake element/broil element
Oven lights inoperable	Defective oven wiring Light bulb Light switch Door switch Open relay	Repair/replace wiring Replace light bulb Test light switch Test door switch Replace relay board
No bake, broil, oven lights, power to relay board (P1 white to black)	House breaker or fuse open Defective oven wiring (shorted, open, or burned)	Reset breaker or replace fuse Repair/replace defective wiring
No bake, broil, oven lights 120 VAC at relay board (P1 white to black)	Defective oven wiring (shorted, open, or burned) Open Relay board	Repair/replace defective wiring Replace relay board (check operation of blower motor)
Bake element inoperable	Defective oven wiring Bake element Relay board	Repair/replace wiring Test bake element Verify relay operation, wiring, and inputs
Broil element inoperable	Defective oven wiring Broil element Relay board	Repair/replace wiring Test broil element Verify relay operation, wiring, and inputs
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 relay board
No self-clean, bake and broil operate normally, oven lights operate, door will lock, no clean indicator light	Open door latch switch Open relay board Defective oven wiring (shorted, open, or burned)	Replace door latch assembly Replace relay 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 Relay board Defective oven wiring (shorted, open, or burned)	Replace door latch assembly Replace selector Replace relay board Repair or replace defective wiring

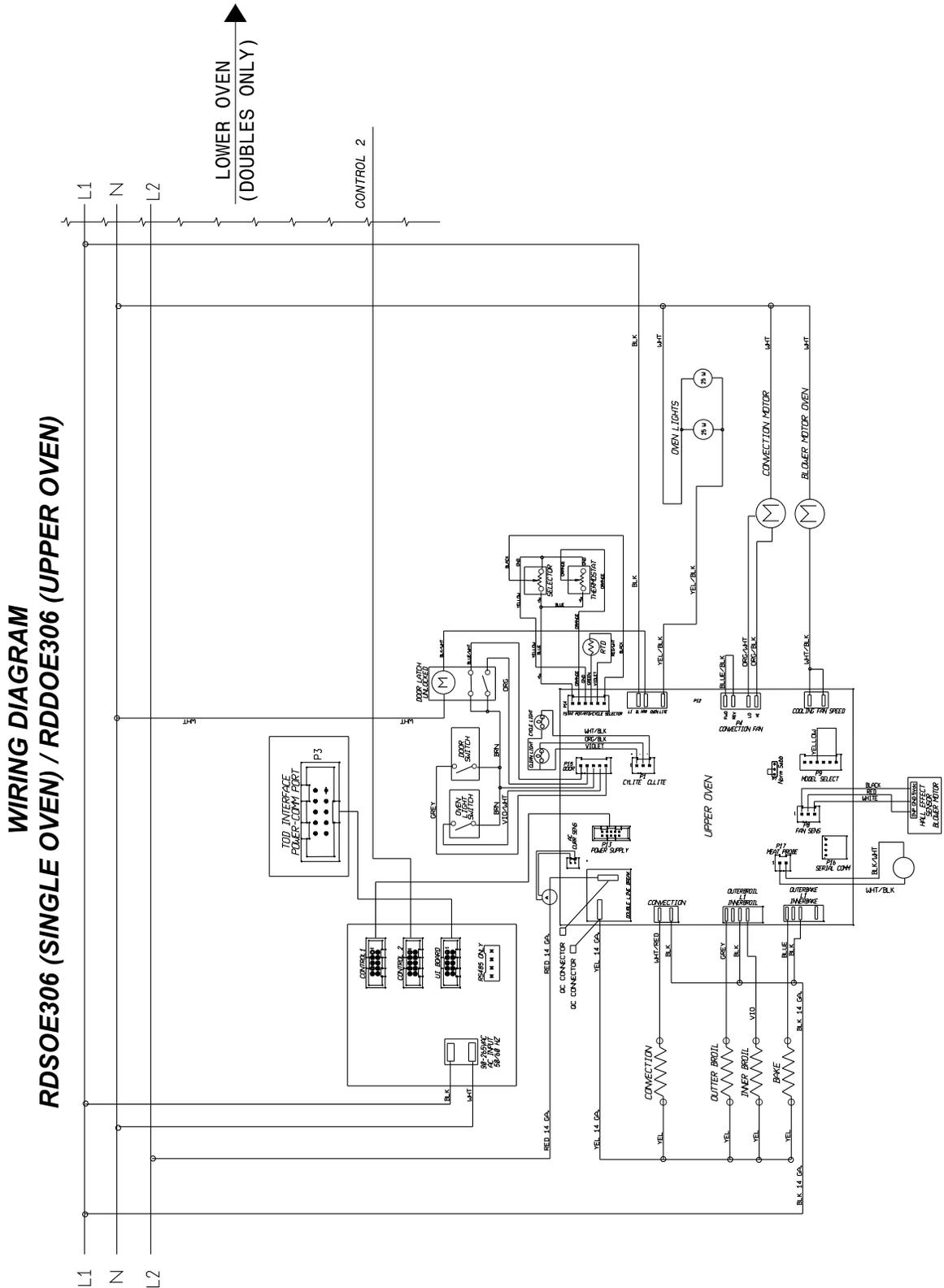
Troubleshooting Guide (cont.)

Problem	Probable Cause	Correction
Oven door won't unlock (oven below elevated clean temperatures)	Open door latch motor Oven sensor out of calibration Relay board Open relay Defective oven wiring (shorted, open, or burned)	Replace door latch motor Ohm oven sensor Replace relay board Repair or replace defective wiring
Oven lights inoperable (bulbs OK)	Relay board Open relay Defective oven wiring (shorted, open, or burned)	Replace relay board Replace relay 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 relay board



FOR CONNECTION TO THE FACTORY INSTALLED TERMINAL BLOCK
USE COPPER OR ALUMINUM CONDUITS
WARNING - THIS UNIT MUST BE GROUNDED
SEE INSTALLATION INSTRUCTIONS FOR PROPER
GROUNDING PROCEDURES
**CAUTION - LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN
SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER
AND DANGEROUS OPERATION. VERIFY PROPER OPERATION AFTER
SERVICING**
MAGNETIC STRIPES OR STRIPES WILL BE THE SECOND COLOR IN
A COLOR COMBINATION
REFER ONLY TO FEATURES WHICH ARE EQUIPPED WITH THIS UNIT.

Wiring Schematic RDSOE306 & RDDOE306 Upper Oven



Wiring Schematic RDDOE306
Lower Oven

WIRING DIAGRAM
RDDOE306 (LOWER OVEN)

