

# **KitchenAid**

TECHNICAL EDUCATION

## **SELF-CLEANING SLIDE-IN/FREESTANDING ELECTRIC RANGES**



**Freestanding Model: KERA807P**

**Slide-In Models: KESV808P, KESV908P,  
KESA907P, & KESI901P**

**JOB AID 4317354**

# FORWARD

This KitchenAid Job Aid, “Self-Cleaning Slide-In/Freestanding Electric Ranges,” (Part #4317354), provides the technician with information on the installation, operation, and service of Self-Cleaning Slide-In/Freestanding Electric Ranges. It is to be used as a training Job Aid and Service Manual. For specific information on the model being serviced, refer to the “Use and Care Guide,” or “Wiring Diagram” provided with the electric range.

The Wiring Diagrams and Strip Circuits used in this Job Aid are typical and should be used for training purposes only. Always use the Wiring Diagram supplied with the product when servicing the unit.

## GOALS AND OBJECTIVES

The goal of this Job Aid is to provide detailed information that will enable the service technician to properly diagnose malfunctions and repair KitchenAid Self-Cleaning Slide-In/Freestanding Electric Ranges.

The objectives of this Job Aid are to:

- Understand and follow proper safety precautions.
- Successfully troubleshoot and diagnose malfunctions.
- Successfully perform necessary repairs.
- Successfully return the range to its proper operational status.

WHIRLPOOL CORPORATION assumes no responsibility for any repairs made on our products by anyone other than Authorized Service Technicians.

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# GENERAL SAFETY FIRST

**Your safety and the safety of others is very important.**

We have provided many important safety messages in this Job Aid and on the appliance. Always read and obey all safety messages.



This is the safety alert symbol.

This symbol alerts you to hazards that can kill or hurt you and others.

All safety messages will follow the safety alert symbol and either the word “DANGER” or “WARNING.” These words mean:

**! DANGER**

**You can be killed or seriously injured if you don't immediately follow instructions.**

**! WARNING**

**You can be killed or seriously injured if you don't follow instructions.**

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

# MODEL & SERIAL NUMBER DESIGNATIONS

## MODEL NUMBER

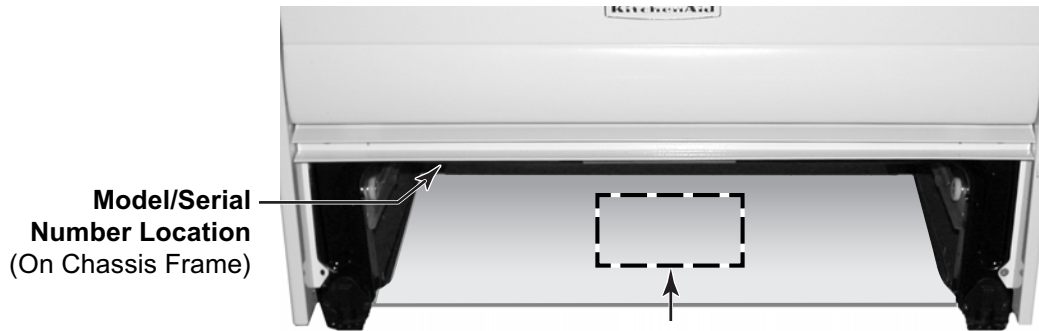
<b>MODEL NUMBER</b>	K	ES	V	90	8	P	MT	0
<b>PRODUCT GROUP</b> K = KITCHENAID								
<b>PRODUCT IDENTIFICATION</b> DR = DUAL FUEL RANGE DS = DUAL FUEL SLIDE-IN RANGE ER = ELECTRIC STANDARD RANGE ES = ELECTRIC SLIDE-IN RANGE GR = GAS STANDARD RANGE GS = GAS SLIDE-IN RANGE								
<b>MERCHANDISING SCHEME</b> A = ARCHITECT C = CONTRACT / ADVERTISING I = STANDARD K/L = SEARS MODELS P = COMMERCIAL STYLE V = VBL PRO LINE STYLE								
<b>CAPACITY / SIZE / SERIES / CONFIGURATION</b> 1ST POSITION 2 = FS RANGE BACK CONTROL 4 = COMMERCIAL 8 = FS RANGE FRONT CONTROL 9 = SLIDE-IN 2ND POSITION 0 = 30" WIDE 6 = 36" WIDE 8 = 48" WIDE								
<b>FEATURES</b> 0 = CONVENTIONAL OVEN, COIL COOKTOP 1 = CONVENTIONAL OVEN, CERAN OR GAS COOKTOP 2 = CONVENTIONAL OVEN, WARMING DRAWER, GAS COOKTOP 3 = CONVENTIONAL OVEN, AUTO CONVECT, CERAN OR GAS COOKTOP 4 = CONVECTION OVEN, COIL COOKTOP 5 = CONVECTION OVEN, CERAN COOKTOP 6 = CONVECTION OVEN, GAS COOKTOP W / TRIPLE TIER 7 = CONVECTION OVEN, WARMING DRAWER, CERAN COOKTOP W / ELECTRONIC KNOB COOKTOP, OR GAS COOKTOP W / TRIPLE TIER 8 = CONVECTION OVEN, WARMING DRAWER, CERAN COOKTOP W / ELECTRONIC COOKTOP								
<b>YEAR OF INTRODUCTION</b> P - 2004, R = 2005								
<b>COLOR CODE</b> BL = BLACK, WH = WHITE, BT = BISCUIT, MT = METEORITE BS = BLACK ON STAINLESS, SS = BRUSHED STAINLESS STEEL								
<b>ENGINEERING CHANGE (NUMERIC)</b>								

## SERIAL NUMBER

<b>SERIAL NUMBER</b>	X	R	31	73981
<b>MANUFACTURING SITE</b> X = OXFORD, MS				
<b>YEAR OF PRODUCTION</b> R = 2004				
<b>WEEK OF PRODUCTION</b> 31 = 31ST WEEK				
<b>PRODUCT SEQUENCE NUMBER</b>				

# MODEL & SERIAL NUMBER LABEL & TECH SHEET LOCATIONS

The Model/Serial Number label and Tech Sheet locations are shown below.



**Model/Serial  
Number Location**  
(On Chassis Frame)

**Tech Sheet Location**  
*Warming Drawer Models Only*  
(On Chassis Under Drawer)



**Model/Serial  
Number Location**  
(On Chassis Frame)

**Tech Sheet Location**  
*Storage Drawer Models Only*  
(On Underside Of Drawer)

# SPECIFICATIONS

Model Number	KES1901P BL, BS, WH	KERA807P BB, BL, SS, WW	KERK807P BB, BL, SS, WW	KESA907P BB, BL, SS, WW	KESV908P MT, SS
Model Description	Slide-In	True Convection with Easy Convection Conversion; Warming Drawer	Freestanding	Slide-In; True Convection with Easy Convection Conversion; Warming Drawer	
<b>Dimensions/Specifications</b>					
<b>Exterior Dimensions</b>					
Shipping Weight (lbs)	160	180	180	160	160
240 Volts	13.5	14.4	14.4	14.4	13.3
208 Volts	10.1	10.9	10.9	10.9	10
Circuit Amps	40	40	40	40	40
<b>Interior</b>					
Broiler Stop	No	No	No	No	No
Cooktop Control Type	Electromechanical	Electronic Knobs	Electronic Knobs	Electronic Knobs	Touch Activated Electronics
Cooktop Control #	Knobs - 4, Buttons - 2	Knobs - 4	Knobs - 4	Knobs - 4	Knobs - 4
Simmer Speciality Switch	Yes - 1	No	No	No	No
Keep Warm Switch	Yes - 1	No	No	No	No
Top Light and Switch	No	Yes	Yes	Yes	Yes
Cooktop Lock Out	No	No	No	No	Yes
Cooktop Features		Melt & Hold, Keep Warm, & 3 Simmer Levels	Melt & Hold, Keep Warm, & 3 Simmer Levels		
Cooktop Material	Ceramic Glass	Ceramic Glass	Ceramic Glass	Ceramic Glass	Ceramic Glass
Cooktop Indicator Light	Yes - Red	Yes - Red, Yes - Red, Single & Dual	Yes - Red, Yes - Red, Single & Dual	Yes - Red, Yes - Red, Single & Dual	Yes - Red, Yes - Red, Single, Dual, Triple
Electric Element Configuration	6", 7", 8", 9, 5"	6"/10", 7", 9"/5", 9"/5"	6"/10", 7", 9"/5", 9"/5"	6"/10", 7", 9"/5", 9"/5"	6"/10", 6", 9"/5", 9"/7"/5"
Electric Element Type	Radiant	Radiant	Radiant	Radiant	Radiant
Electric RF Output (w/@240/208v)	7" 1800W @ 240V	7" 1800W @ 240V	7" 1800W @ 240V	7" 1800W @ 240V	6" 1500W @ 240W
Electric LF Output (w/@240/208v)	9"/5" 2500W/1200W @ 240V	9"/5" 2500W/1200W @ 240V	9"/5" 2500W/1200W @ 240V	9"/5" 2500W/1200W @ 240V	9"/7"/5" 2500W/1600W/800W
Electric RR Output (w/@240/208v)	8" 2200 W @ 240W	9"/5" 2500W/1200W @ 240V	9"/5" 2500W/1200W @ 240V	9"/5" 2500W/1200W @ 240V	9"/5" 2500W/1000W
Electric LR Output (w/@240/208v)	6" 1500W @ 240W	6"/10" 1000W/1800W @ 240W	6"/10" 1000W/1800W @ 240W	6"/10" 1000W/1800W @ 240W	6"/10" 1000W/1800W @ 240W
Electric Keep Warm Burner	6" - 100W	All Elements	All Elements	All Elements	All Elements
Electric Simmer Burner Type	Low Simmer Right Front - 450W	All Elements: 3 Simmer Settings, 1 Melt & Hold Setting	All Elements: 3 Simmer Settings, 1 Melt & Hold Setting		
Electric Simmer Burner-Number	1				
208 V Compensation	Yes	Yes	Yes	Yes	Yes
Oven Controls	Jabil GOC KitchenAid Premium	Jabil GOC KitchenAid Premium	Jabil GOC KitchenAid Premium	Jabil GOC KitchenAid Premium	Jabil GOC KitchenAid Premium
Bake	Yes	Yes	Yes	Yes	Yes
Bread Proofing	Yes	Yes	Yes	Yes	Yes
Oven Broil	Yes	Yes	Yes	Yes	Yes
Closed Door Broil	Yes	Yes	Yes	Yes	Yes
Maxi Broil	Yes	Yes	Yes	Yes	Yes
Econo Broil	Yes	Yes	Yes	Yes	Yes
Convection	Yes	Yes	Yes	Yes	Yes
Convection Bake	True Convection, 3rd Element	True Convection, 3rd Element	True Convection, 3rd Element	True Convection, 3rd Element	True Convection, 3rd Element
Convection Broil	Yes	Yes	Yes	Yes	Yes
Convection Roast	Yes	Yes	Yes	Yes	Yes
Easy Convection Baked Goods	Yes	Yes	Yes	Yes	Yes
Easy Convection Meats	Yes	Yes	Yes	Yes	Yes
Easy Convection Other Foods	Yes	Yes	Yes	Yes	Yes
Sabbath Mode	Yes	Yes	Yes	Yes	Yes
Sales Demo	Yes	Yes	Yes	Yes	Yes
Temperature Probe	Yes	Yes	Yes	Yes	Yes
208 Volt Compensation	Yes	Yes	Yes	Yes	Yes



Model Number	KES1901P BL, BS, WH	KERA807P BB, BL, SS, WW	KERK807P BB, BL, SS, WW	KESA907P BB, BL, SS, WW	KESV908P MT, SS
<b>Interior</b>					
Main Oven	Standard	True Convection	True Convection	True Convection	True Convection
Cooking System	Self Cleaning - Timed Yes - Motorized	Self Cleaning - Soil Level & Timed Yes - Motorized	Self Cleaning - Soil Level & Timed Yes - Motorized	Self Cleaning - Soil Level & Timed Yes - Motorized	Self Cleaning - Soil Level & Timed Yes - Motorized
Cleaning System	Auto Self Clean Latch	Overall Capacity: 3.9; AHAM 2 Incandescent	Overall Capacity: 3.9; AHAM 2 Incandescent	Overall Capacity: 3.9; AHAM 2 Incandescent	Overall Capacity: 3.9; AHAM 2 Incandescent
Oven Dimensions	Oven Volume (cu ft)	Yes	Yes	Yes	Yes
Oven Light Number	Yes	Yes	Yes	Yes	Yes
Main Electric Oven	Hidden Bake Element	Yes	Yes	Yes	Yes
Electric Element Output	Bake (W@240/208v)	2000 W	2000 W	2000 W	2000 W
Broil (W@240/208v)	Broil Inner Elem (W@240/208v)	1790W	1790W	1790W	1790W
Broil Outer Elem (W@240/208v)	Convection (W@240/208v)	1450W	1450W	1450W	1450W
Oven Lower Panel/ Door	Yes	Yes	Yes	Yes	Yes
Warming Drawer	Yes	Yes	Yes	Yes	Yes
Warming Drawer Element Wattage	850 W	850 W	850 W	850 W	850 W
<b>Accessories</b>					
Griddle	Yes - Optional 4396096	Yes - Optional 4396096	Yes - Included 9755634	Yes - Optional 4396096	Yes - Optional 4396096
<b>Miscellaneous</b>					
Installation Instructions Part/Comment	9757446	9757446	9757446	9757446	9757446
Tech Sheet Part/Comment	9757662	9757662	9757662	9757662	9757662
Job Aid Part/Comment	4317354	4317354	4317354	4317354	4317354
Use & Care Guide Part/Comment	9757451	9757451	9757451	9757451	9757451
Agency Approvals	UL	UL	UL	UL	UL
Anti-tip Device With Unit	Floor	Floor	Floor	Floor	Floor
<b>Warranty</b>					
Full	11 months	12 months	12 months	12 months	12 months
Extended					
Ceramic Glass Cooking Surface	2nd through 5th year, parts	2nd through 5th year, parts	2nd through 5th year, parts	2nd through 5th year, parts	2nd through 5th year, parts
Electronic Controls	2nd through 5th year, parts	2nd through 5th year, parts	2nd through 5th year, parts	2nd through 5th year, parts	2nd through 5th year, parts
Electrical Elements	2nd through 5th year, parts	2nd through 5th year, parts	2nd through 5th year, parts	2nd through 5th year, parts	2nd through 5th year, parts
Porcelain Liner/Door	1st through 10th year, parts	2nd through 10th year, parts	2nd through 10th year, parts	2nd through 10th year, parts	2nd through 10th year, parts

# KITCHENAID ELECTRIC RANGE WARRANTY

LENGTH OF WARRANTY	KITCHENAID WILL PAY FOR:
<b>FULL ONE YEAR WARRANTY</b> From Date of Purchase.	Replacement parts and repair labor costs to correct defects in materials or workmanship. Service must be provided by a KitchenAid designated servicing outlet.
<b>SECOND THROUGH FIFTH YEAR LIMITED WARRANTY</b> From Date of Purchase.	Replacement parts for any electric element to correct defects in materials or workmanship. Replacement ceramic glass if breakage is due to defects in materials or workmanship. Replacement parts for solid state touch control system to correct defects in materials or workmanship.
<b>SECOND THROUGH TENTH YEAR LIMITED WARRANTY</b> From Date of Purchase.	Replacement parts for the porcelain oven cavity / inner door if the part rusts through due to defects in materials or workmanship.

**KITCHENAID WILL NOT PAY FOR:**

- A. Service calls to:
  - 1. Correct the installation of the range.
  - 2. Instruct you how to use the range.
  - 3. Replace house fuses or correct house wiring.
- B. Repairs when range is used in other than normal, single family household use.
- C. Damage resulting from accident, alteration, misuse, abuse, fire, flood, acts of God, improper installation, or installation not in accordance with local electrical codes.
- D. Any labor costs during the limited warranties.
- E. Replacement parts or repair labor costs for units operated outside the United States and Canada.
- F. Pickup and delivery. Your range is designed to be repaired in the home.
- G. Repairs to ceramic glass cooktop if it has not been cared for as recommended in the Use and Care Guide.
- H. Repairs to parts or systems resulting from unauthorized modifications made to the appliance.
- I. In Canada, travel or transportation expenses to customers who reside in remote areas.

**KITCHENAID OR KITCHENAID CANADA DO NOT ASSUME ANY RESPONSIBILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.** Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion or limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state-to-state or province-to-province.

**Outside the United States and Canada, a different warranty may apply. For details, please contact your authorized KitchenAid dealer.**

If you need service first see the "Troubleshooting" section of the Use and Care Guide. After checking "Troubleshooting," additional help can be found by checking the "Requesting Assistance or Service" section, or by calling our Customer Interaction Center telephone numbers, listed below, from anywhere in the U.S.A. or Canada.

KitchenAid: **1-800-422-1230**  
Canadian Residents call: **1-800-807-6777**

# INSTALLATION INFORMATION

## INSTALLATION REQUIREMENTS

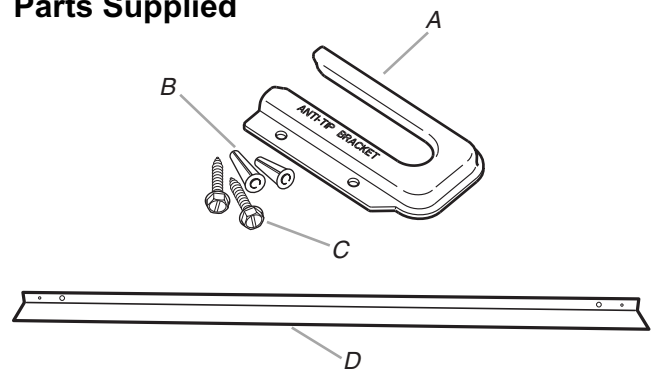
### TOOLS AND PARTS

Assemble the required tools and parts before starting installation. Read and follow the safety instructions provided with any tools listed here.

#### Tools Needed

- Tape measure
- Flat-blade screwdriver
- Level
- Hammer
- Hand or electric drill
- Channel lock pliers
- Marker or pencil
- Masking tape
- 3/8" drive ratchet
- 1/4" nut driver
- 5/16" nut driver
- 1/8" (3.2 mm) drill bit (for wood floors)
- 3/16" (4.8 mm) carbide-tipped masonry drill bit (for concrete/ceramic floors)

### Parts Supplied



- A. Anti-tip bracket
- B. Plastic anchors (2)
- C. #10 x 1/2" screws (2)
- D. Rear spacer cover for slide-in models (supplied on some models)\*

\* To order, contact your dealer or refer to the "Assistance or Service" section of the *Use and Care Guide*. Request Part **#9757784WH** (White), **#9757784BT** (Biscuit), **#9757784BL** (Black), **#9757784MT** (Meteorite), or **#9757784SS** (Stainless Steel).

Check that all parts are included.

- Brackets must be securely mounted to subfloor. Thickness of flooring may require longer screws to anchor bracket to subfloor. Longer screws are available from your local hardware store.

### Parts Needed

Check local codes. Check existing electrical supply (see "Electrical Requirements" on page 2-5).

All electrical connections should be made by a licensed, qualified electrical installer.

## LOCATION REQUIREMENTS

**IMPORTANT:** Observe all governing codes and ordinances. Failure to meet codes and ordinances could lead to fire or electrical shock.

- It is the installer's responsibility to comply with installation clearances specified on the model/serial rating plate. The model/serial rating plate is located on the oven frame behind the storage drawer panel.
- The range should be located for convenient use in the kitchen.
- To eliminate the risk of burns or fire by reaching over heated surface units, cabinet storage space located above the surface units should be avoided. If cabinet storage is to be provided, the risk can be reduced by installing a range hood that projects horizontally a minimum of 5" (12.7 cm) beyond the bottom of the cabinets.
- Cabinet opening dimensions that are shown must be used. Given dimensions are minimum clearances.
- The floor anti-tip bracket must be installed. To install the anti-tip bracket shipped with the range, see the Installation Instructions provided with the range.
- A grounded electrical supply is required (see "Electrical Requirements" on page 2-5).

## Mobile Home - Additional Installation Requirements

The installation of this range must conform to the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280 (formerly the Federal Standard for Mobile Home Construction and Safety, Title 24, HUD Part 280). When such standard is not applicable, use the Standard for Manufactured Home Installations, ANSI A225.1/NFPA 501A or with local codes.

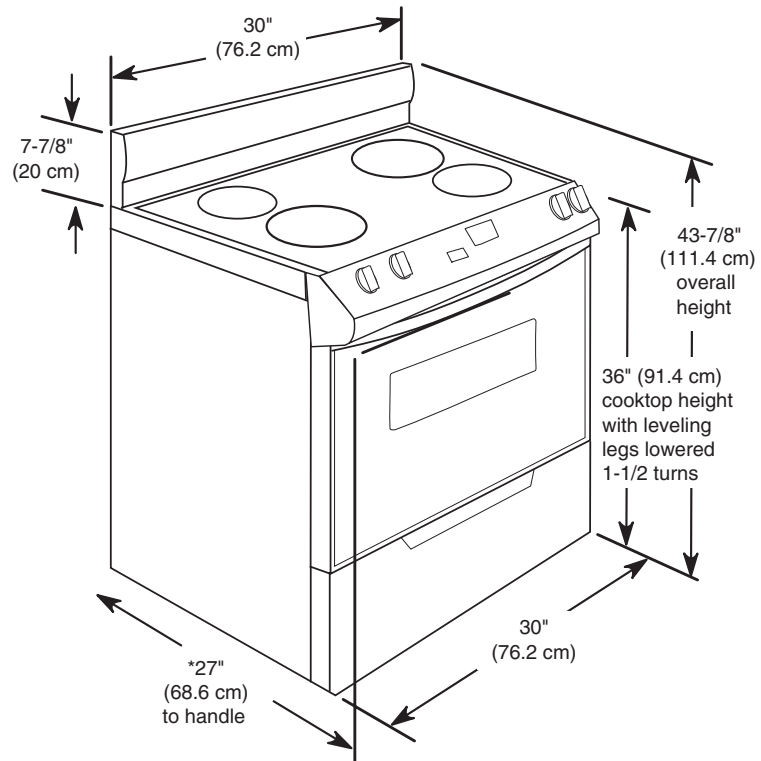
In Canada, the installation of this range must conform with the current standards CAN/CSA-A240-latest edition, or local codes.

### Mobile home installations require:

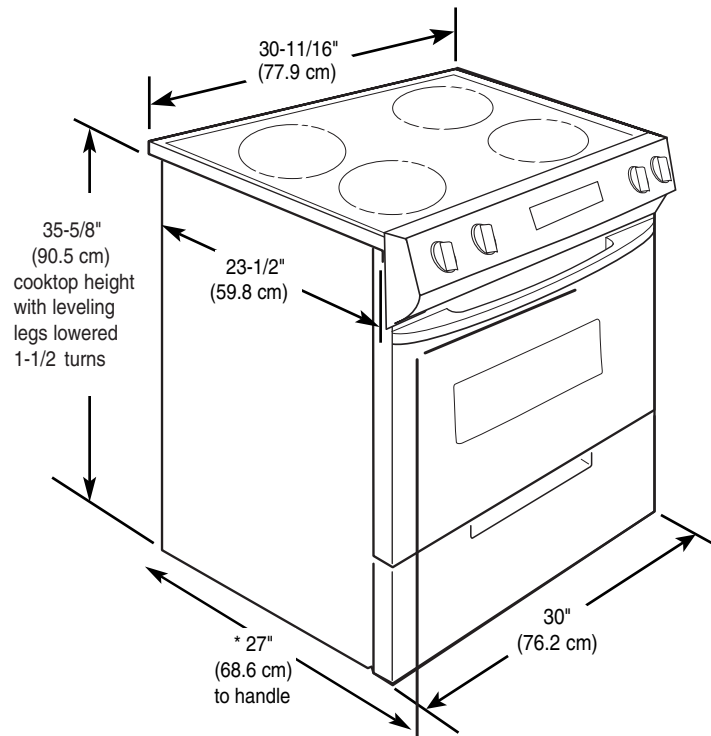
- When this range is installed in a mobile home, it must be secured to the floor during transit. Any method of securing the range is adequate as long as it conforms to the standards listed above.
- Four-wire power supply cord or cable must be used in a mobile home installation. The appliance wiring will need to be revised (see "Electrical Connection" on page 2-5)

# PRODUCT DIMENSIONS

## Freestanding Range



## Slide-In Range



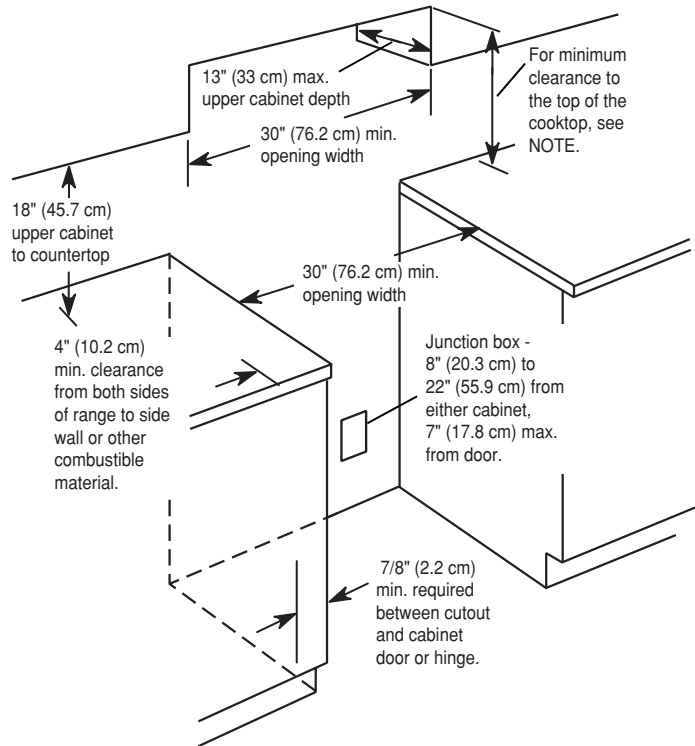
\* When installed in a 24" (61 cm) base cabinet with 25" (63.5 cm) countertop; front of oven door protrudes 1-7/8" (4.8 cm) beyond 24" (61 cm) base cabinet.

## INSTALLATION CLEARANCES

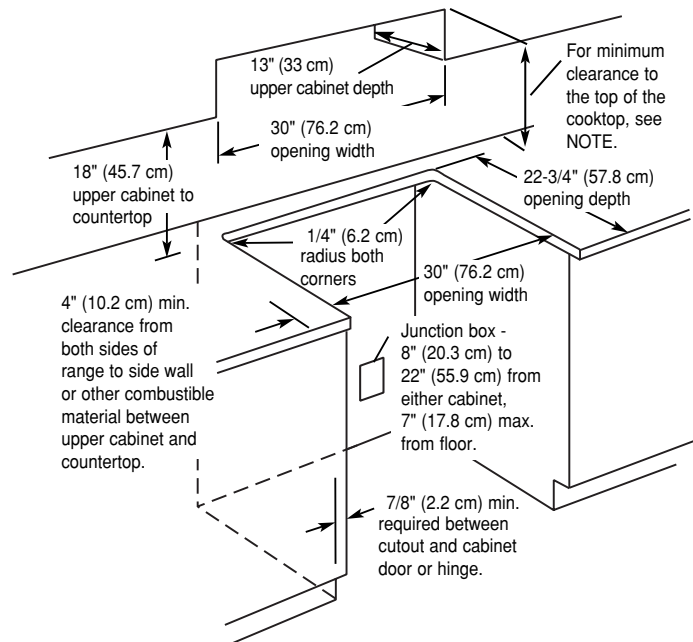
Cabinet opening dimensions shown are for 25," (64 cm) countertop depth, 24" (61 cm)

base cabinet depth and 36" (91.4 cm) countertop height.

### Freestanding Range



### Slide-In Range



**NOTE:** 24" (61 cm) minimum when bottom of wood or metal cabinet is protected by not less than 1/4" (0.64 cm) flame retardant millboard covered with not less than No. 28 MSG sheet steel, 0.015" (0.4 mm) stainless steel, 0.024"

(0.6 mm) aluminum, or 0.020" (0.5 mm) copper.

30" (76.2 cm) minimum clearance between the top of the cooking platform and the bottom of an unprotected wood or metal cabinet.

## ELECTRICAL REQUIREMENTS

If codes permit and a separate ground wire is used, it is recommended that a qualified electrical installer determine that the ground path and wire gauge are in accordance with local codes.

If codes permit and a separate ground wire is used, it is recommended that a qualified electrician determine that the ground path is adequate.

Do not use an extension cord.

Be sure that the electrical connection and wire size are adequate and in conformance with the National Electrical Code, ANSI/NFPA 70-latest edition and all local codes and ordinances.

A copy of the above code standards can be obtained from: National Fire Protection Association, One Batterymarch Park, Quincy, MA 02269.

## ELECTRICAL CONNECTION

To properly install your range, you must determine the type of electrical connection you will be using and follow the instructions provided for it here.

- Range must be connected to the proper electrical voltage and frequency as specified on the model/serial number rating plate. (The model/serial number rating plate is located on the oven frame behind the storage drawer panel.)
- When a 4-wire or 3-wire, single phase 120/240-volt, 60 Hz, AC-only electrical supply is available, a 50 amp maximum circuit protection is required (or, if specified on the model/serial rating plate, when a 4-wire or 3-wire single phase 120/208-volt 60 Hz, AC-only electrical supply is available, a 40 amp maximum circuit protection is required), fused on both sides of the line.
- A time-delay fuse or circuit breaker is recommended.

- The range can be connected directly to the fused disconnect (or circuit breaker box) through flexible, armored or nonmetallic sheathed, copper or aluminum cable.
- Allow 2 to 3 ft. of slack in the line so that the range can be moved if servicing is ever necessary.
- A UL listed conduit connector must be provided at each end of the power supply cable (at the range and at the junction box).
- Wire sizes and connections must conform with the rating of the range (40 amps).
- The wiring diagram is located on the underside of the storage drawer or below the warming drawer in a clear plastic bag.

### If connecting to a 4-wire system:

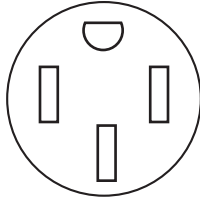
This range is manufactured with the ground connected to the cabinet. The ground must be revised so the green grounding wire of the 4-wire power supply cord is connected to the cabinet.

Grounding through the neutral conductor is prohibited for new branch-circuit installations (1996 NEC); mobile homes; and recreational vehicles, or an area where local codes prohibit grounding through the neutral conductor.

When a 4-wire receptacle of NEMA Type 14-50R is used, a matching UL listed, 4-wire, 250-volt, 40 amp, range power supply cord (pigtail) must be used. This cord contains 4 copper conductors with ring terminals or open-end spade terminals with upturned ends, terminating in a NEMA Type 14-50P plug on the supply end.

The fourth (grounding) conductor must be identified by a green or green/yellow cover and the neutral conductor by a white cover.

The cord should be Type SRD or SRDT with a UL listed strain relief and be at least 4 ft. (1.22m) long.



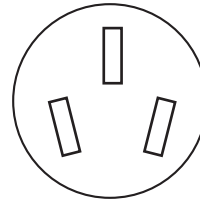
4-Wire Receptacle (14-50R)

The minimum conductor sizes for the copper 4-wire power cord are:

- 40 amp circuit
- 2 No.-8 conductors
- 1 No.-10 white neutral
- 1 No.-8 green grounding

**If connecting to a 3-wire system:**

Local codes may permit the use of a UL listed, 3-wire, 250-volt, 40 amp range power supply cord (pigtail). This cord contains 3 copper conductors with ring terminals or open-end spade terminals with upturned ends, terminating in a NEMA Type 10-50P plug on the supply end. Connectors on the appliance end must be provided at the point the power supply cord enters the appliance. This uses a 3-wire receptacle of NEMA Type 10-50R.

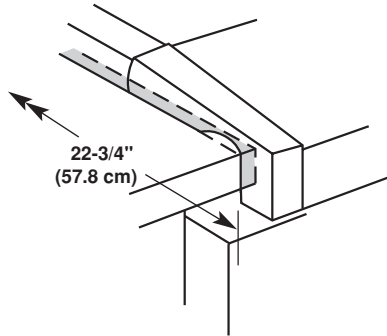


3-Wire Receptacle (10-50R)



## COUNTERTOP PREPARATION (SLIDE-IN RANGES ONLY)

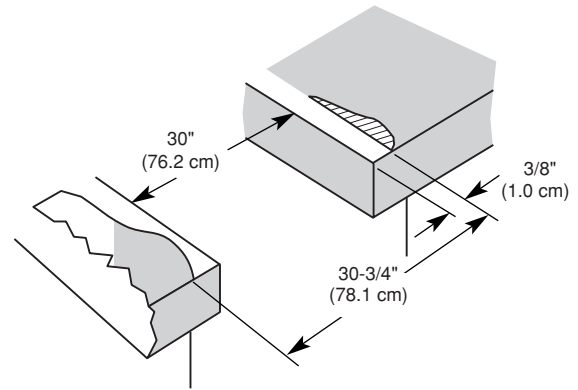
The cooktop sides of the slide-in range fit over the cutout edge of the countertop.



If you have a square finish (flat) countertop, and the opening width is 30" (76.2 cm), no countertop preparation is required.

Formed front-edged countertops must have the molded edge shaved flat 3/8" (1.0 cm) from each front corner of the opening.

Tile countertops may need the trim cut back 3/8" (1.0 cm) from each front corner, and/or have the rounded edge flattened.



If the countertop opening width is greater than 30" (76.2 cm), adjust the 3/8" (1.0 cm) dimension.


The countertop must be level. Place a level on the countertop, first side-to-side; then front-to-back. If the countertop is not level, the range will not be level. The oven must be level for satisfactory baking performance.

# INSTALLATION INSTRUCTIONS

## ELECTRICAL CONNECTION

### Power Supply Cord


## ! WARNING



**Electrical Shock Hazard**  
**Disconnect power before servicing.**  
**Use a new 40 amp power supply cord.**  
**Plug into a grounded outlet.**  
**Failure to follow these instructions can result in death, fire, or electrical shock.**

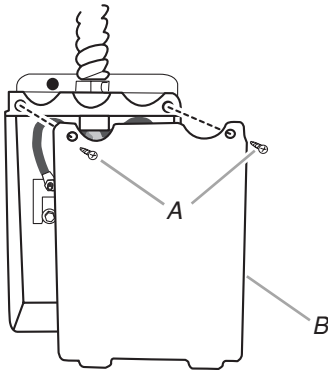
### Direct Wire

## ! WARNING



**Electrical Shock Hazard**  
**Disconnect power before servicing.**  
**Use 8 gauge copper or 6 gauge aluminum wire.**  
**Electrically ground range.**  
**Failure to follow these instructions can result in death, fire, or electrical shock.**


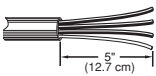

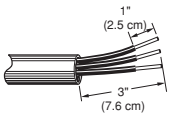
1. Disconnect power.
2. Remove the hold-down screws and terminal block cover from the back of the range.



A. Hold-down screws  
 B. Terminal block cover

3. Complete installation following instructions for your type of electrical connection:  
 4-wire (recommended)  
 3-wire (if 4-wire is not available)

### Electrical Connection Options

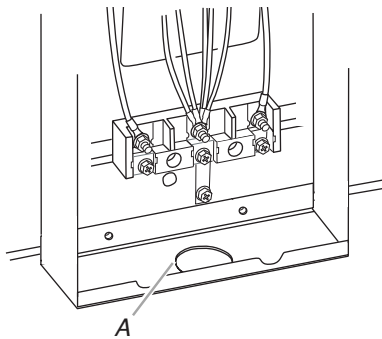
If your home has:	And you will be connecting to:	Go to Section:
4-wire receptacle (NEMA type 14-50R) 	A UL listed, 250-volt minimum, 40 amp, range power supply cord	4-wire connection: Power supply cord
4-wire direct 	A fused disconnect or circuit breaker box	4-wire connection: Direct wire
3-wire receptacle (NEMA type 10-50R) 	A UL listed, 250-volt minimum, 40 amp, range power supply cord	3-wire connection: Power supply cord
3-wire direct 	A fused disconnect or circuit breaker box	3-wire connection: Direct wire

## Power Supply Cord Installation

**WARNING:** Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service technician if you are in doubt as to whether the appliance is properly grounded. Do not modify the power supply cord plug. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

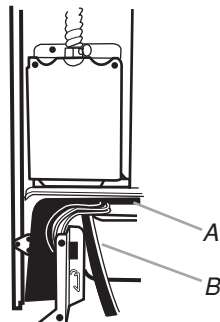
This range is manufactured with the neutral terminal connected to the cabinet. Use a 3-wire, UL listed, 40 amp power supply cord (pigtail); or if local codes do not permit ground through the neutral, use a 4-wire power supply cord rated at 250-volts, 40 amps and investigated for use with ranges.

1. Remove the knockout for the 40 amp power supply cord.



A. Remove knockout for 40 amp power cord and UL listed strain relief

2. Assemble a UL listed strain relief in the opening.
3. Feed the power supply cord behind the black horizontal crossbrace and through the strain relief, allowing enough slack to easily attach the wiring to the terminal block.



A. Black horizontal cross brace  
B. Power supply cord

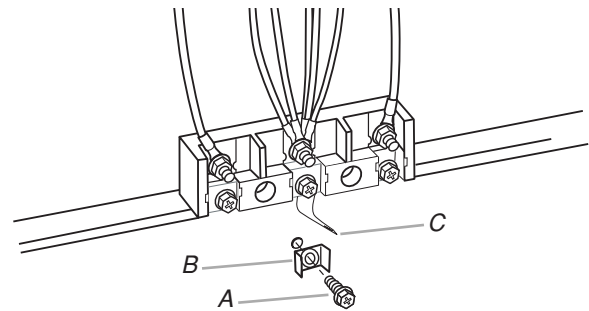
4. Connect the terminals (ring-type or spade with upturned ends) on the end of the power cord to the power supply.
5. Complete electrical connection according to your type electrical supply (4-wire or 3-wire electrical connection).

### 4-wire connection: Power supply cord

Use this method for:

- New branch-circuit installations (1996 NEC)
- Mobile homes
- Recreational vehicles
- In an area where local codes prohibit grounding through the neutral

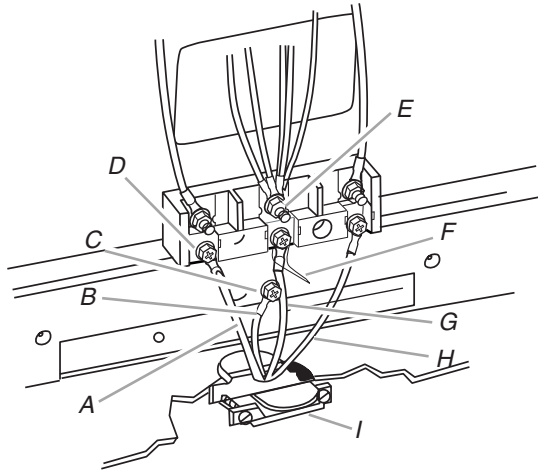
1. Remove the ground-link screw from the range frame. Save the ground link screw and cup washer. Bend the ground-link away from the range so that it does not contact the range.



A. Ground-link screw  
B. Cup washer  
C. Ground-link bent away from range

2. Connect the green ground wire from the power supply cord to the range using the ground-link screw and cup washer. The ground wire must be attached first and must not contact any other terminal.

3. Use a 1/4" nut driver and remove the hex washer head screws from the terminal blocks.
4. Connect the neutral (center) wire to the center terminal connector using one of the hex washer head screws. Securely tighten screw for proper electrical connection.



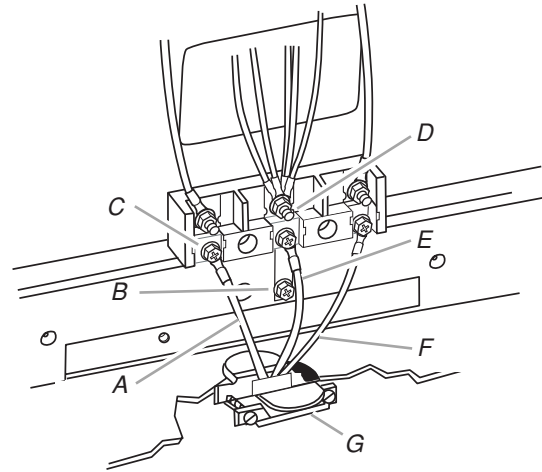
- |  |   |
|--|---|
| A. Line 1                              | F. Ground-link  |
| B. Green ground wire                   | G. Neutral (center) wire                                      |
| C. Ground-link screw                   | H. Line 2   |
| D. Hex washer head screw               | I. UL listed strain relief and 40 amp range power supply cord |
| E. Silver-colored terminal block screw |   |

5. Connect the other 2 wires (lines 1 and 2) to the outer aluminum terminal blocks.
6. Securely tighten screws for proper electrical connection.
7. Tighten strain relief screws.
8. Replace terminal block cover.
9. Plug in range or reconnect power.

### 3-wire connection: Power supply cord

Use this method only if local codes permit connecting cabinet-ground conductor to neutral wire of power supply cord.

1. Use a 1/4" nut driver and remove the hex washer head screws from the aluminum terminal blocks.
2. Connect the neutral (center) wire to the center terminal connector using one of the hex washer head screws. Securely tighten screw for proper electrical connection.



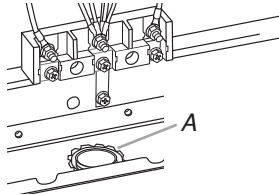
- |  |   |
|--|---|
| A. Line 1                              | E. Neutral (center) wire                                      |
| B. Ground-link                         | F. Line 2   |
| C. Hex washer head screw               | G. UL listed strain relief and 40 amp range power supply cord |
| D. Silver-colored terminal block screw |   |

3. Connect the other 2 wires (lines 1 and 2) to the outer terminal screws on the terminal block.
4. Tighten strain relief screws.
5. Replace terminal block cover.
6. Plug in range or reconnect power.

## Direct Wire Installation: Copper or Aluminum Wire

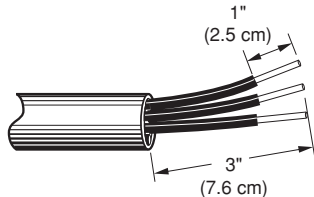
This range may be connected directly to the fuse disconnect or circuit breaker box. Depending on your electrical supply, make the required 3-wire or 4-wire connection.

1. Remove the knockout as needed for the conduit connection.
2. Assemble a UL listed conduit connector in the opening.



A. UL listed conduit connector

3. Strip outer covering back 3" (7.6 cm) to expose wires. Strip the insulation back 1" (2.5 cm) from the end of each wire.



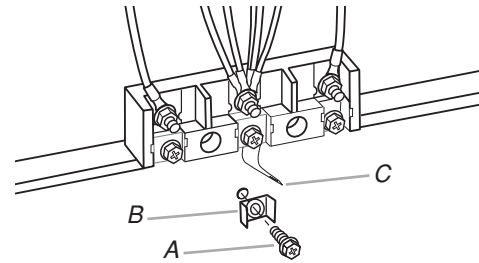
4. Allow enough slack in the wire to easily attach the wiring terminal block.
5. Complete electrical connection according to your type electrical supply (4-wire or 3-wire electrical connection).

### 4-wire connection: Direct wire

Use this method for:

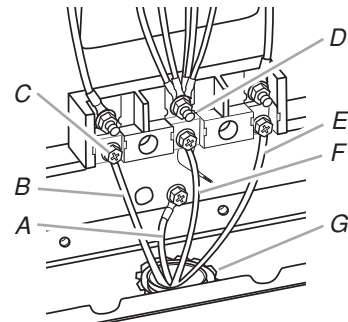
- New branch-circuit installations (1996 NEC)
- Mobile homes
- Recreational vehicles
- In an area where local codes prohibit grounding through the neutral

1. Remove the ground-link screw from the range frame. Save the ground-link screw and cup washer. Bend the ground-link away from the range so that it does not contact the range.



A. Ground-link screw  
B. Cup washer  
C. Ground-link bent away from range

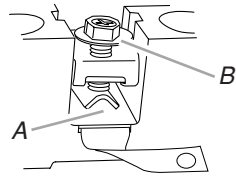
2. Connect the bare ground wire to the range using the ground-link screw and cup washer. The ground wire must be attached first and must not contact any other terminal.



A. Bare wire from power supply cable  
B. Line 1  
C. Hex washer head screw  
D. Silver-colored terminal block screw  
E. Line 2  
F. Neutral (white) wire  
G. UL listed conduit connector and power supply cable

3. Loosen (do not remove) the hex washer head screw and insert the neutral (white) wire under the screw clamp at the bottom of the center position terminal connector.

4. Insert the other 2 wires (lines 1 and 2) under the other 2 screw clamps.



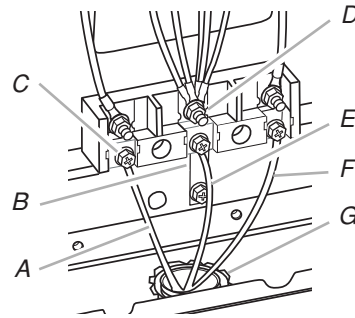
A. Insert wire under screw clamp  
B. Hex washer head screw

5. Securely tighten the hex washer head screws to 90 in.<sup>2</sup>/lbs minimum torque to make proper electrical connection.
6. Tighten the locking ring of the conduit connector.
7. Replace the terminal block cover.

### 3-wire connection: Direct wire

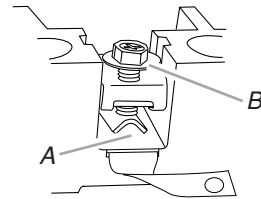
Use this method only if local codes permit connecting ground conductor to neutral supply wire.

1. Loosen (do not remove) the hex washer head screws and insert the neutral (white) wire under the screw clamp at the bottom of the center position terminal connector.



A. Line 1  
B. Ground-link  
C. Hex washer head screw  
D. Silver-colored terminal block screw  
E. Neutral (white) wire  
F. Line 2  
G. UL listed conduit connector and power supply cable

2. Insert the other 2 wires (lines 1 and 2) under the other 2 screw clamps.



A. Insert wire under screw clamp  
B. Hex washer head screw

3. Securely tighten the hex washer head screws to 90 in.<sup>2</sup>/lbs minimum torque to make a proper electrical connection.
4. Tighten the locking ring of the conduit connector.
5. Replace the terminal block cover.

# THEORY OF OPERATION

## CONVECTION BOWTIE BAFFLE

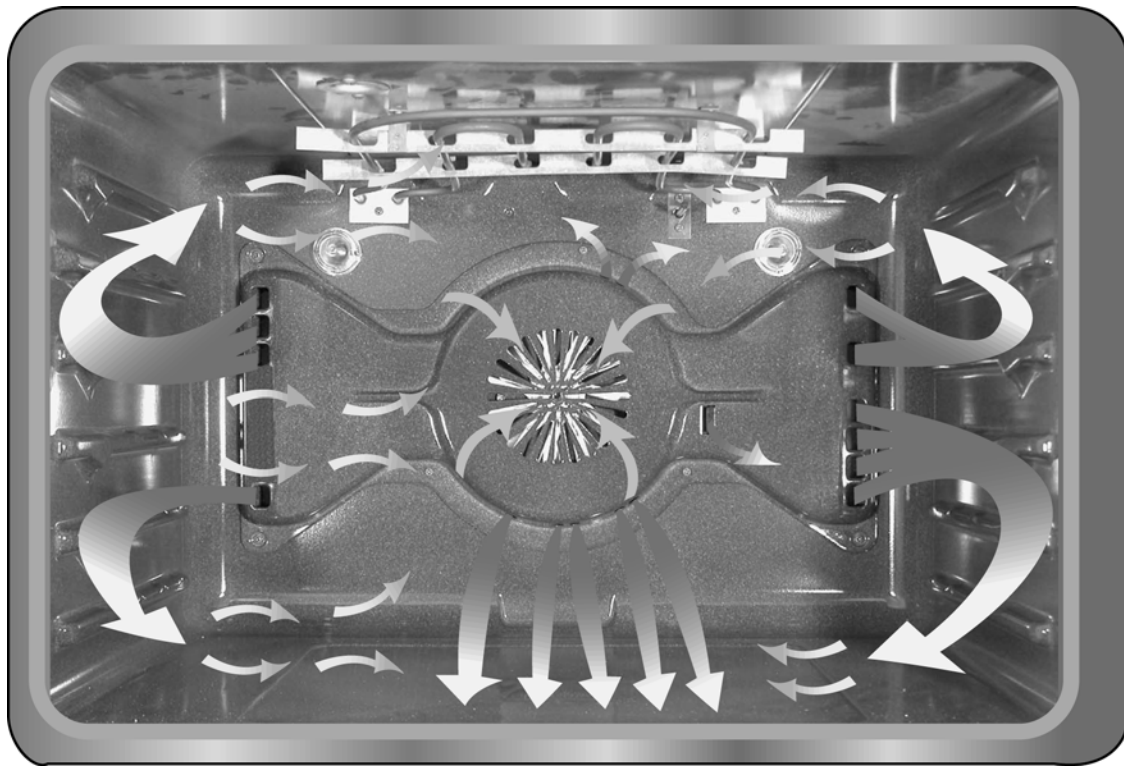
### AIRFLOW

The bowtie baffle provides a wider air flow throughout the oven when using the convection cooking modes. The baffle, shown below, is for an electric, Oxford-built oven. The gas version of the Oxford oven has fewer air outlets, which eliminates too much air movement during cooking (safety).

The correct baffle must always be used when servicing a gas or electric oven. The oven cavity for Tulsa-built ranges is larger, (4.65 cu. ft. as compared to 3.93 cu. ft.), and requires a different baffle.

In a gas range, the convection fan will not turn on for the first four minutes of operation. This is to assure that a proper gas flame is present before the convection fan starts to circulate air in the oven cavity.

The fan blows hot air out the baffle along the outer edges of the oven cavity, toward the front, over the food, and back into the fan inlet. There are air slots at the top and bottom of the center circle, which adds to the overall air flow system.



Electric Oxford-Built Oven Convection Bowtie Baffle System

— NOTES —



# COMPONENT ACCESS

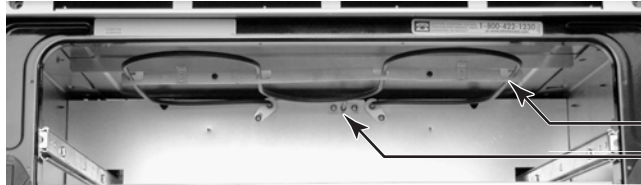
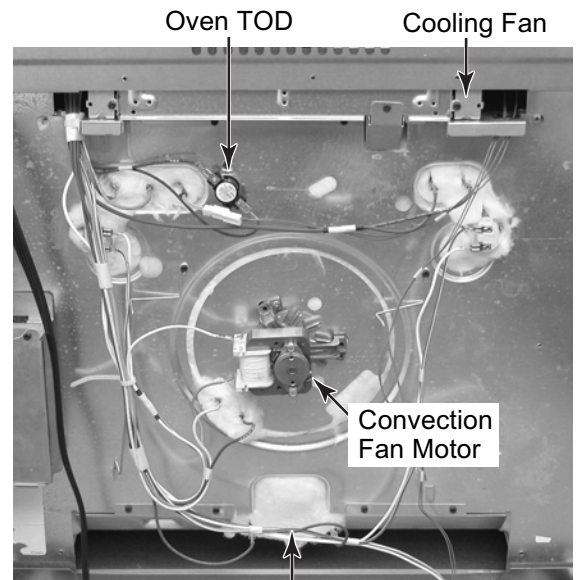
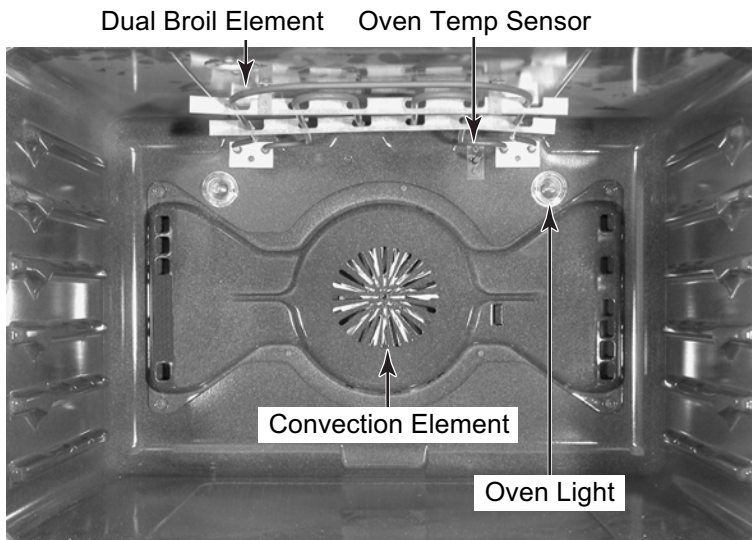
This section instructs you on how to service each component inside the Self-Cleaning Slide-In/ Freestanding Electric Ranges. The components and their locations are shown below.

## COMPONENT LOCATIONS

### Cooktop Components



### Oven & Rear Components



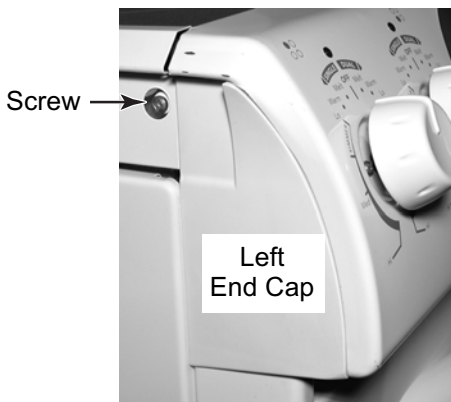
# REMOVING THE EOC ASSEMBLY ON SLIDE-IN & FREESTANDING MODELS, AND THE USER INTERFACE

## ⚠ WARNING

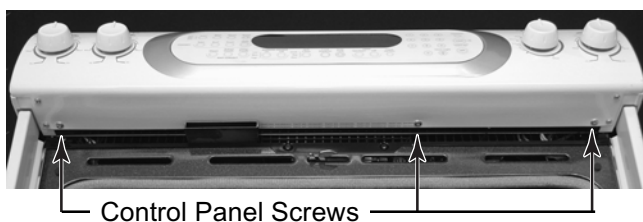


**Electrical Shock Hazard**  
**Disconnect power before servicing.**  
**Replace all parts and panels before operating.**  
**Failure to do so can result in death or electrical shock.**

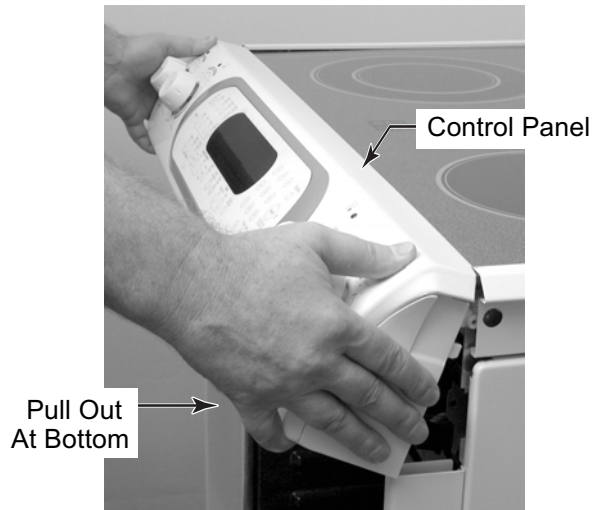
1. Unplug range or disconnect power.
2. Pull the range forward so you can access the two end cap screws.
3. **To remove the electronic oven control (EOC) assembly on slide-in models:**
  - a) Remove the two screws from the sides of the left and right end caps.



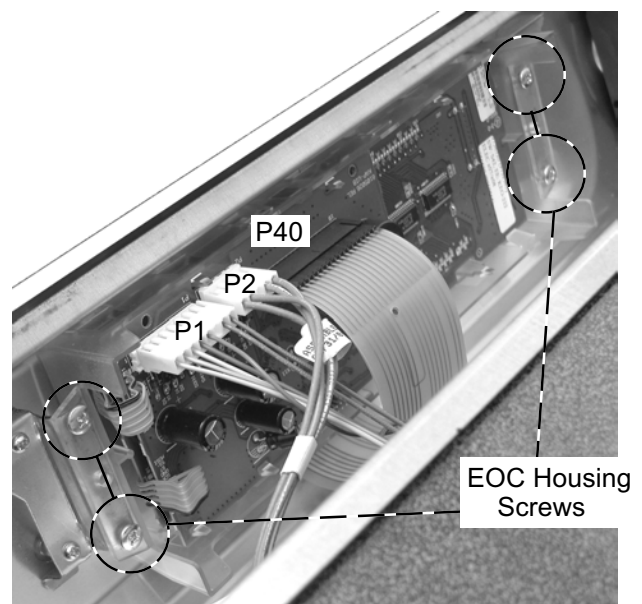
- b) Open the oven door and remove the indicated screws from the bottom of the control panel.



- c) Pull out on the bottom of the control panel, unclip the top edge from the bracket, and rotate the control panel forward so you can access the components.

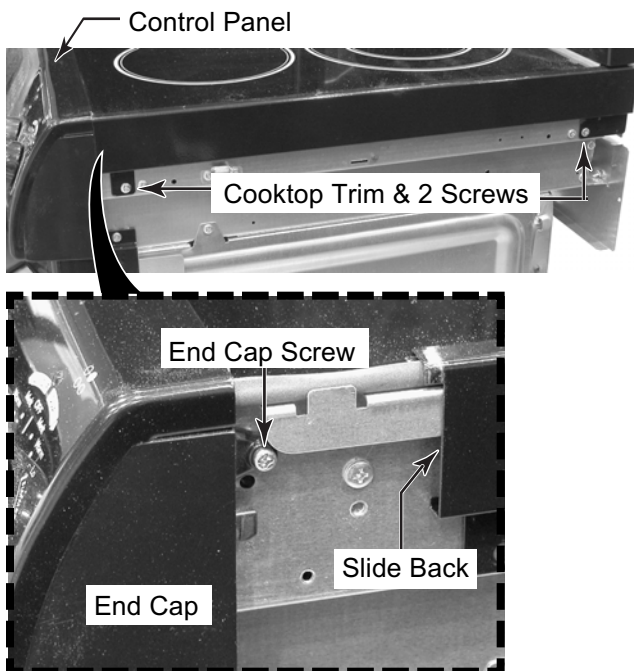


- d) Disconnect the wire connectors from the electronic oven control board at P1 and P2, and the ribbon cable connector at P40.
- e) Remove the four screws from the electronic oven control housing, and remove the assembly from the control panel. **NOTE:** The EOC boards and the housing are replaced as an assembly.



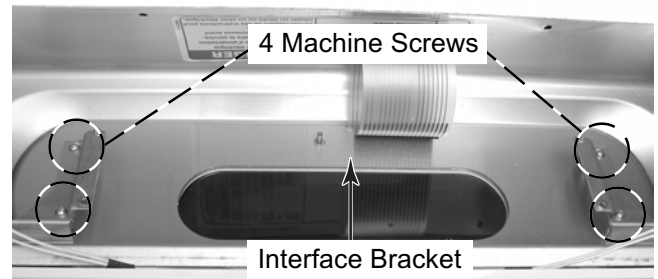
4. **To remove the electronic oven control (EOC) assembly on freestanding models:**

- a) Open the oven door, and remove the screws from the bottom of the control panel (see the photo in step 3b).
- b) Remove the two cooktop trim screws.
- c) Slide the cooktop trim back to expose the end cap screw, and remove the screws (1 on each side).
- d) Perform steps 3c, 3d, and 3e on page 4-2 to remove the EOC assembly.



5. **To remove the user interface:**

- a) Remove the electronic oven control assembly (see steps 3 or 4).
- b) Remove the four machine screws from the EOC mounting brackets, and remove the user interface and its bracket.




Electronic Oven Control (EOC)



# REMOVING AN LED INDICATOR AND AN INFINITE SWITCH

## ! WARNING



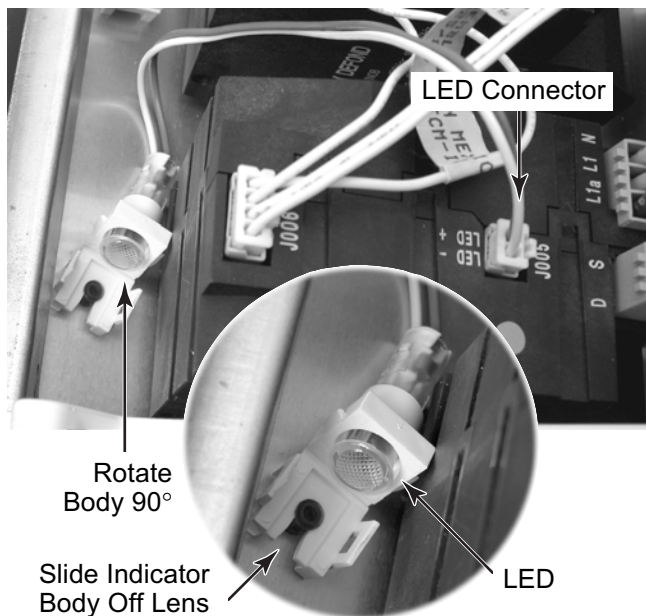
**Electrical Shock Hazard**

**Disconnect power before servicing.**

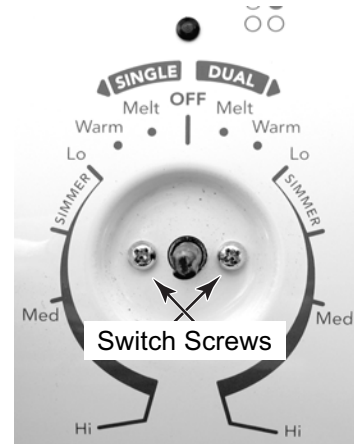
**Replace all parts and panels before operating.**

**Failure to do so can result in death or electrical shock.**

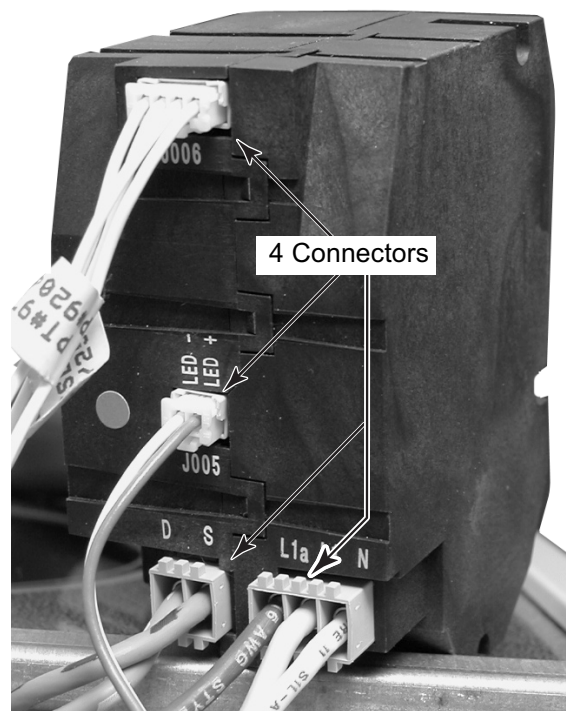
1. Unplug range or disconnect power.
2. Remove the control panel and rotate it forward (see page 4-2, steps 2a through 2d for the procedure).
3. **To remove an LED indicator:**
  - a) Pry out on the two locking tabs and rotate the indicator body 90°.
  - b) Disconnect the LED connector from the infinite switch at J005.
  - c) Remove the LED indicator from the body.
  - d) If you wish to remove the indicator body, slide it off the red lens.



4. **To remove an infinite switch:**
  - a) Pull the knob off the infinite switch you wish to service.
  - b) Remove the two screws from the infinite switch.



- c) Remove the infinite switch from the control panel and disconnect the 4 wire connectors. **NOTE:** Release the locking arm on each connector before removing the connector.



## REMOVING THE COOKTOP GLASS

### **!WARNING**



#### **Electrical Shock Hazard**

**Disconnect power before servicing.**

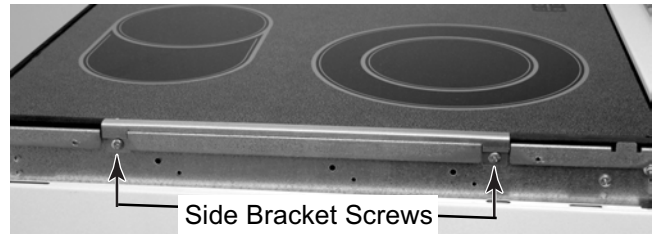
**Replace all parts and panels before operating.**

**Failure to do so can result in death or electrical shock.**

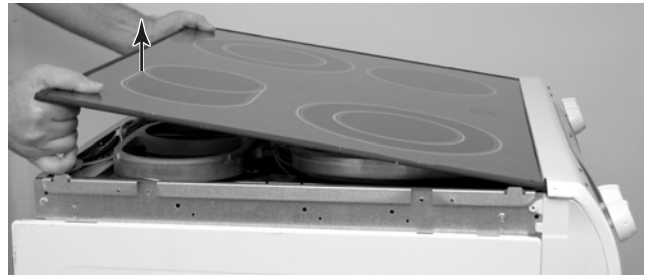
1. Unplug range or disconnect power.
2. Pull the range out of its mounting location so that you can access the rear of the unit.
3. Remove the control panel and rotate it forward (see page 4-2, steps 2a through 2d for the procedure).
4. Remove the screws from the left and right side trim, and then from the rear trim. Remove the trim pieces from around the cooktop glass.



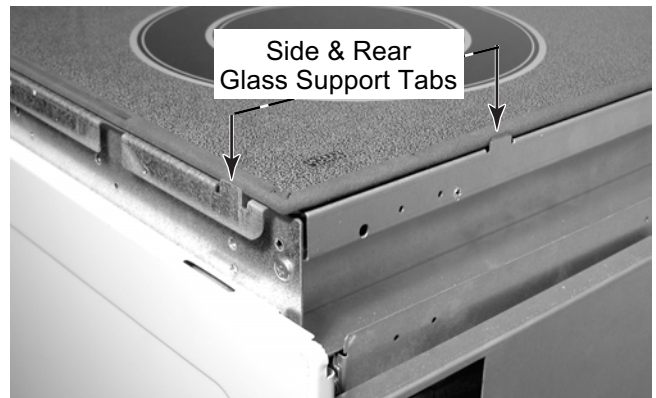
5. Remove the cooktop glass brackets from the left and right sides of the range.



6. Lift the rear of the cooktop glass off the range, slide it out from under the front control bracket, and remove it.



**REASSEMBLY NOTE:** When you reinstall the cooktop glass, be sure to keep the edges of the glass against the rear and side support tabs.



# REMOVING THE CONTROL & COOLING FAN THERMAL SWITCHES, AND THE DOOR LATCH ASSEMBLY

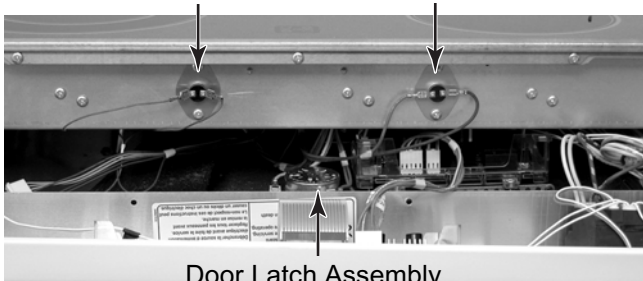
## ! WARNING



**Electrical Shock Hazard**  
**Disconnect power before servicing.**  
**Replace all parts and panels before operating.**  
**Failure to do so can result in death or electrical shock.**

1. Unplug range or disconnect power.
2. Remove the control panel and rotate it forward (see page 4-2, steps 2a through 2d for the procedure).

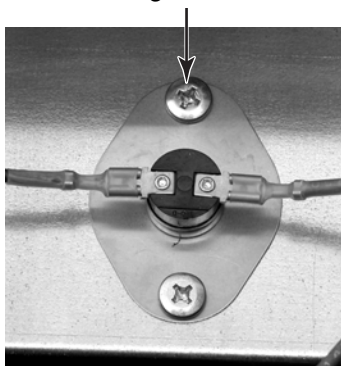
Control Thermal Switch    Cooling Fan Thermal Switch



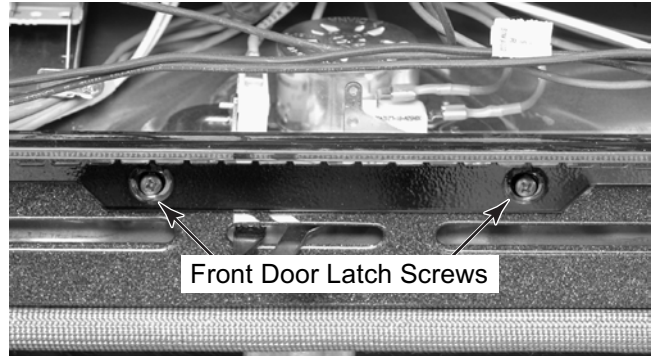
Door Latch Assembly

3. **To remove a thermal switch:**
  - a) Remove the wires from the terminals.
  - b) Remove the mounting screws.

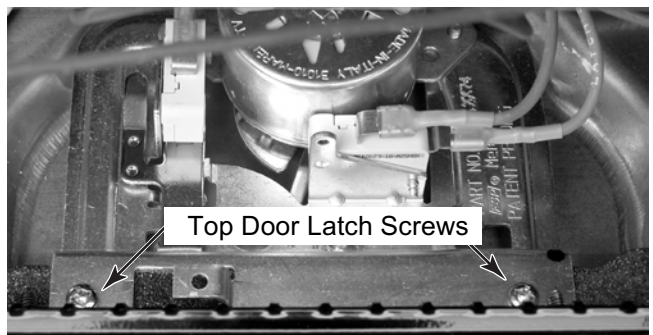
Control Or Cooling Fan Thermal Switch



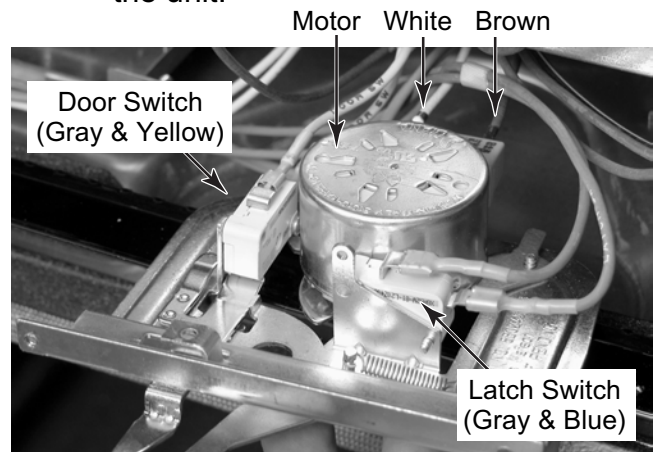
4. **To remove the door latch assembly:**
  - a) Open the oven door and remove the two front mounting screws from the air vent.



- b) Remove the two top screws from the door latch assembly bracket.



- c) Pull the door latch assembly forward as far as it will go, and disconnect the wires from the terminals of the two switches and the motor.
  - d) Remove the door latch assembly from the unit.



# REMOVING THE CONTROL POWER SUPPLY AND THE POWER SUPPLY TRANSFORMER

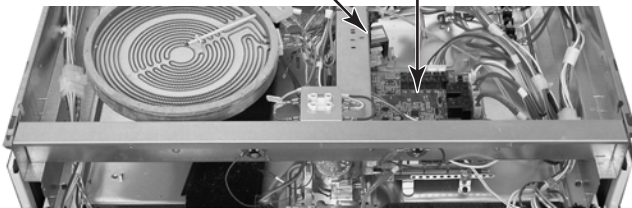
## ⚠ WARNING



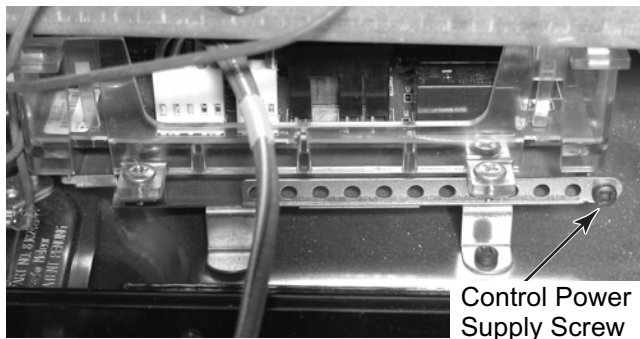
**Electrical Shock Hazard**  
**Disconnect power before servicing.**  
**Replace all parts and panels before operating.**  
**Failure to do so can result in death or electrical shock.**

1. Unplug range or disconnect power.
2. Remove the control panel and rotate it forward (see page 4-2, steps 2a through 2d for the procedure).
3. Remove the cooktop glass (see page 4-5 for the procedure).

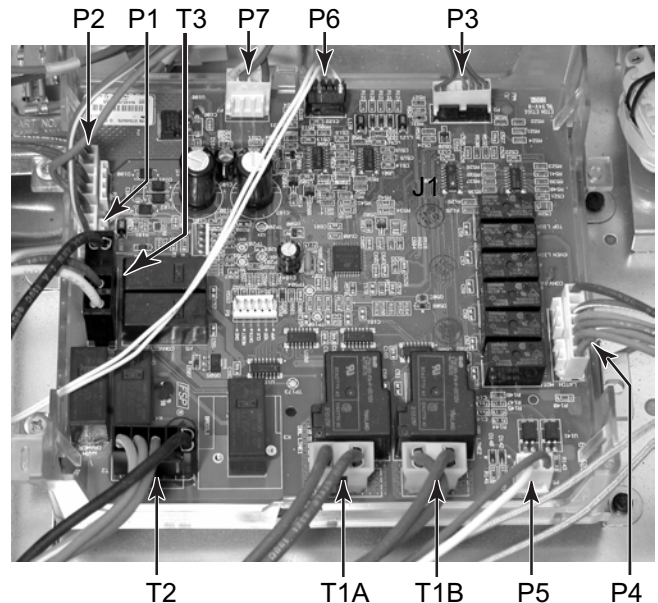
Power Supply Transformer      Control Power Supply



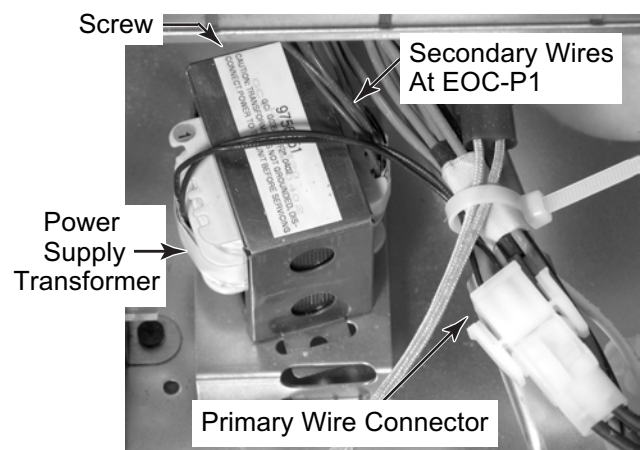
4. **To remove the control power supply:**
  - a) Remove the control power supply mounting screw from the bracket.



- b) Disconnect the wire connectors from the control power supply terminals, and remove the module from the unit.



5. **To remove the power supply transformer:**
  - a) Disconnect the primary wire connector from the wire harness, and remove the wires and connector from the wire tie.
  - b) Disconnect the secondary wire connector from electronic oven control (EOC) connector P1, and the two blue wires from the control thermal switch terminals.
  - c) Remove the power supply transformer screw from the bracket and remove the transformer.



# REMOVING AN ELEMENT & LIMITER AND THE HOT SURFACE INDICATOR ASSEMBLY

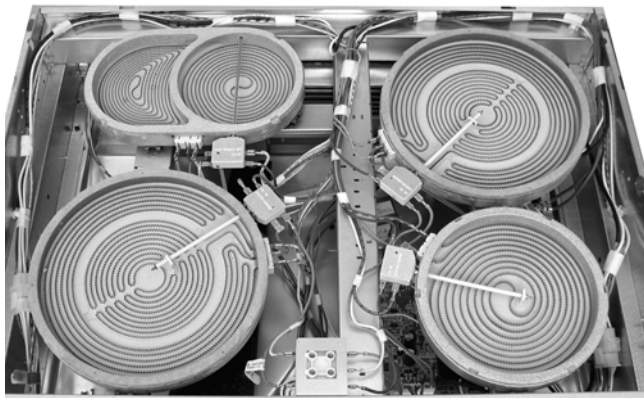
**! WARNING**



## Electrical Shock Hazard

**Disconnect power before servicing.  
Replace all parts and panels before  
operating.  
Failure to do so can result in death or  
electrical shock.**

1. Unplug range or disconnect power.
2. Remove the cooktop glass (see page 4-5 for the procedure).

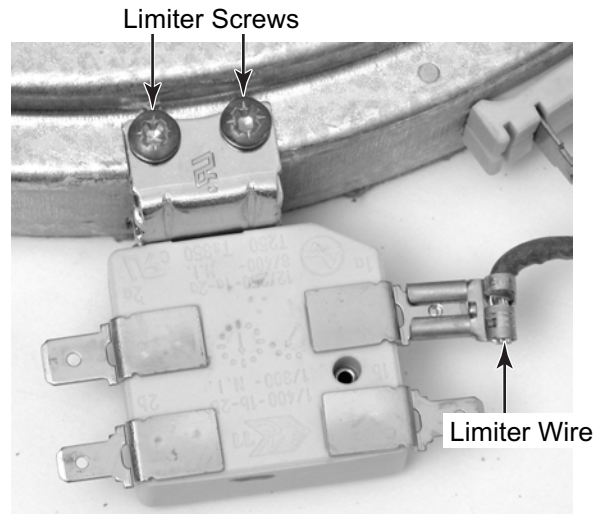


3. **To remove an element and limiter:**
  - a) Disconnect the wires from the limiter and element terminals.
  - b) Lift the element and limiter and remove the spring clips from the support rail slots.

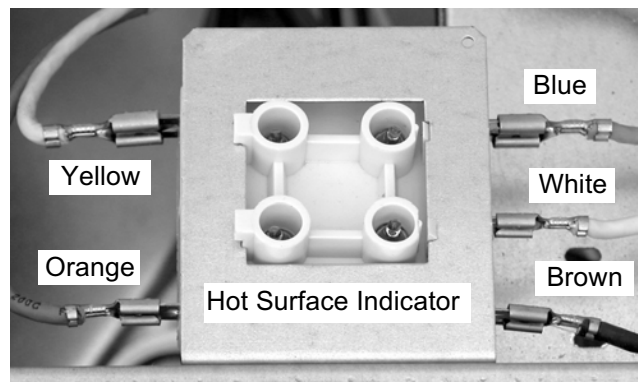


Spring Clip In Slot

- c) Disconnect the wire from the limiter terminal.
- d) Remove the two limiter screws from the bottom of the element, and slide the limiter sensor out of the element.



4. **To remove the hot surface indicator:**
  - a) Disconnect the wires from the indicator terminals.
  - b) Unsnap the hot surface indicator from the bracket and remove the indicator.





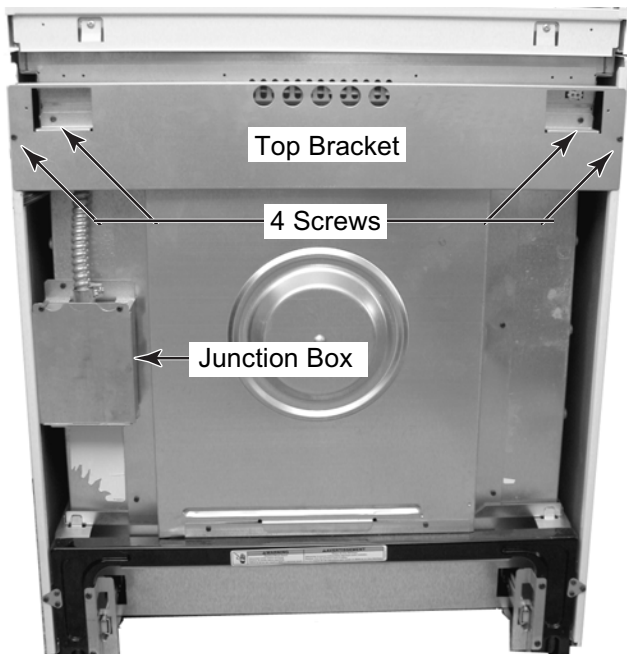
## REMOVING THE REAR PANEL

### **!WARNING**

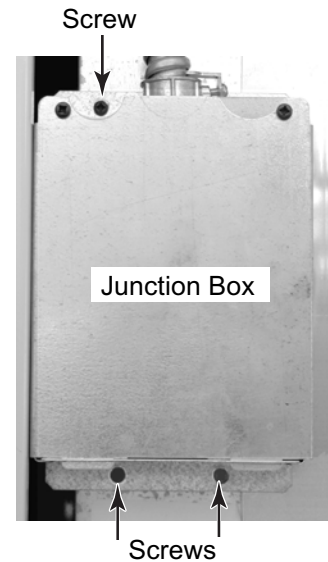


**Electrical Shock Hazard**  
**Disconnect power before servicing.**  
**Replace all parts and panels before operating.**  
**Failure to do so can result in death or electrical shock.**

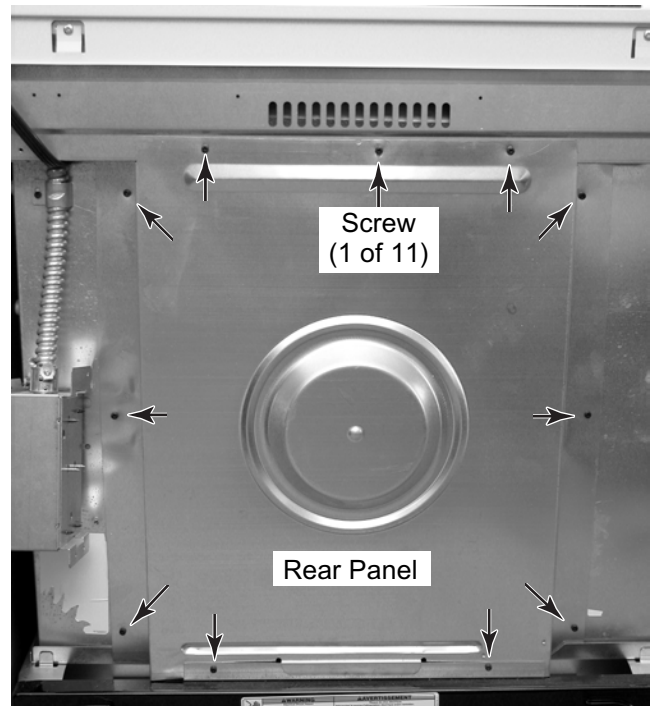
1. Unplug range or disconnect power.
2. Pull the range out of its mounting location so that you can access the rear of the unit.
3. From the rear of the unit, remove the four screws from the top bracket and remove the bracket.



4. Remove the three screws from the junction box and position the box off the rear panel.



5. Remove the eleven screws from the rear panel and remove the panel.



## REMOVING AN OVEN LIGHT SOCKET ASSEMBLY

### **!WARNING**



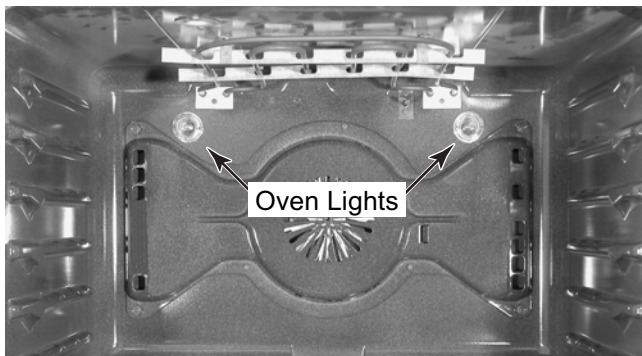
#### **Electrical Shock Hazard**

**Disconnect power before servicing.**

**Replace all parts and panels before operating.**

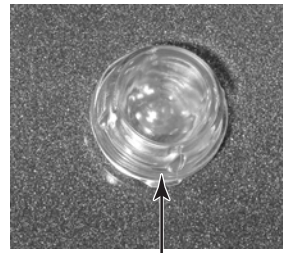
**Failure to do so can result in death or electrical shock.**

1. Unplug range or disconnect power.
2. Pull the range out of its mounting location so that you can access the rear of the unit.

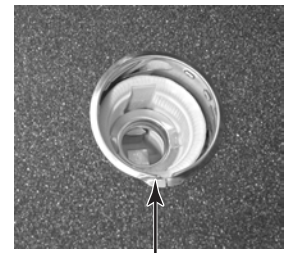


3. Open the oven door and remove the racks from inside the oven.

4. Unscrew the lens and bulb from the oven light socket assembly and remove them.

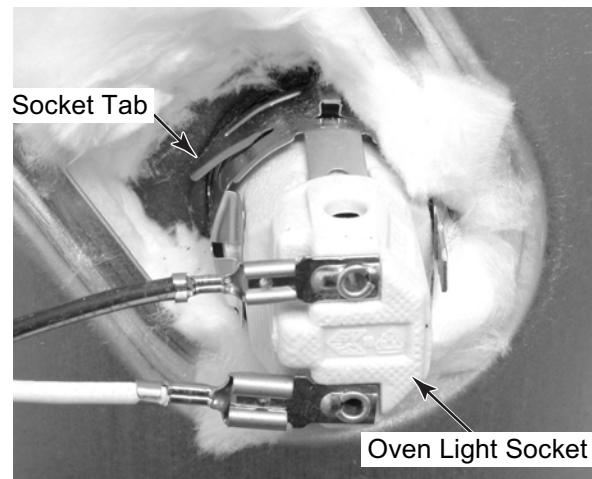


Lens & Bulb



Oven Light Socket

5. Remove the rear panel from the unit (see page 4-9 for the procedure).
6. Disconnect the two wire connectors from the oven light socket terminals.
7. Move the insulation out of the way, and press in on the two locking tabs of the oven light socket, then push the socket out of the liner opening.



## REMOVING THE DUAL BROIL ELEMENT

### **!WARNING**



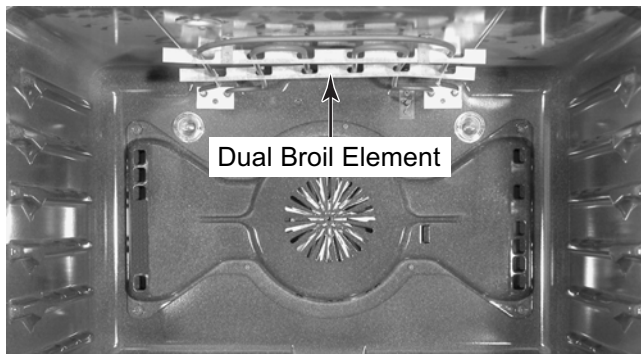
#### **Electrical Shock Hazard**

**Disconnect power before servicing.**

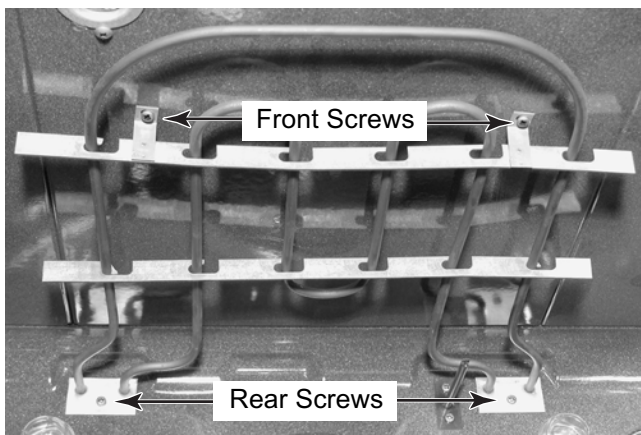
**Replace all parts and panels before operating.**

**Failure to do so can result in death or electrical shock.**

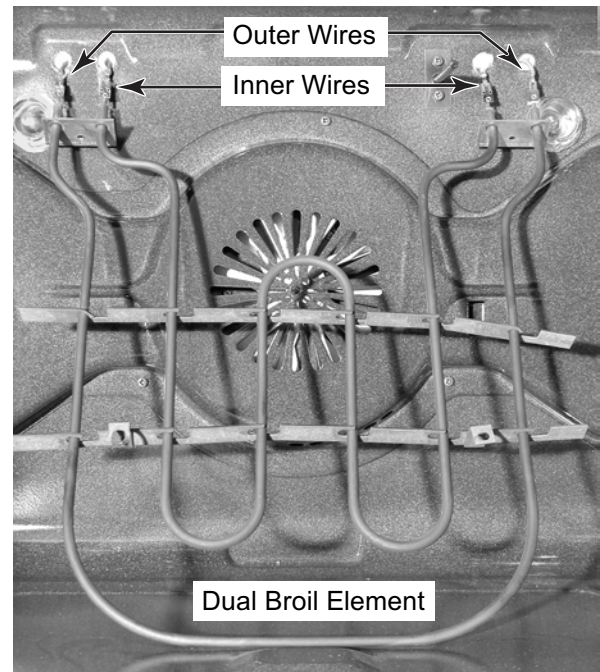
1. Unplug range or disconnect power.
2. Open the oven door and remove the racks from inside the oven.



3. Remove the two front and the two rear dual broil element support screws.



4. Pull the dual broil element forward so that the wire connectors are inside the oven cavity.
5. Disconnect the four wires from the inner and outer element terminals of the dual broil element. **NOTE:** When you disconnect the wires, be careful not to allow them to pull back behind the access holes where you will not be able to retrieve them without removing the unit from its mounting location.



## REMOVING THE OVEN TEMPERATURE SENSOR

### **⚠ WARNING**



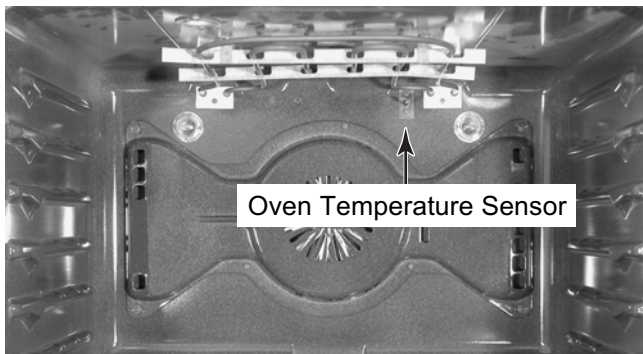
#### **Electrical Shock Hazard**

**Disconnect power before servicing.**

**Replace all parts and panels before operating.**

**Failure to do so can result in death or electrical shock.**

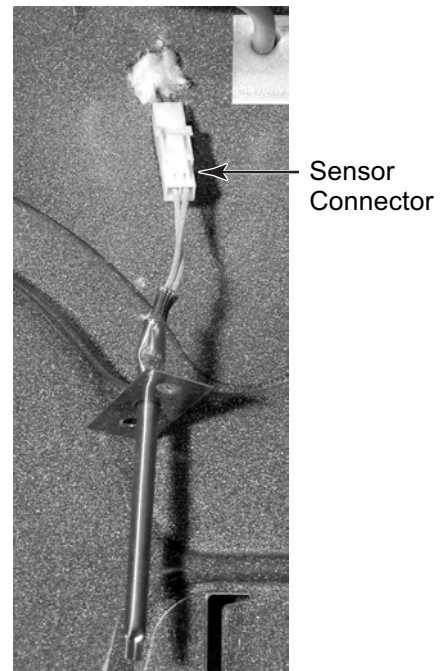
1. Unplug range or disconnect power.
2. Open the oven door and remove the racks from inside the oven.



3. Remove the screws from the oven temperature sensor and remove the sensor.



4. Pull the oven temperature sensor forward and disconnect the connector from the wiring harness.



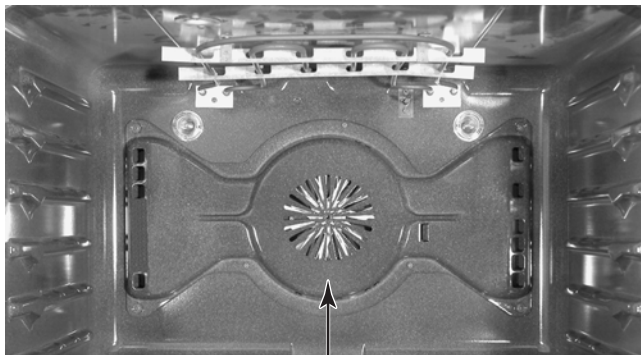
# REMOVING THE CONVECTION ELEMENT & FAN MOTOR

## ⚠️ WARNING



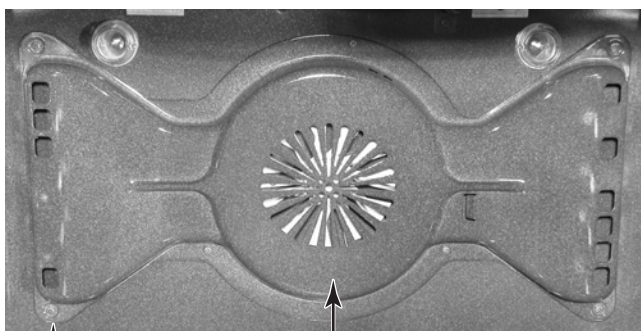
**Electrical Shock Hazard**  
**Disconnect power before servicing.**  
**Replace all parts and panels before operating.**  
**Failure to do so can result in death or electrical shock.**

1. Unplug range or disconnect power.
2. Open the oven door and remove the racks from inside the oven.



Convection Element (Behind Cover)

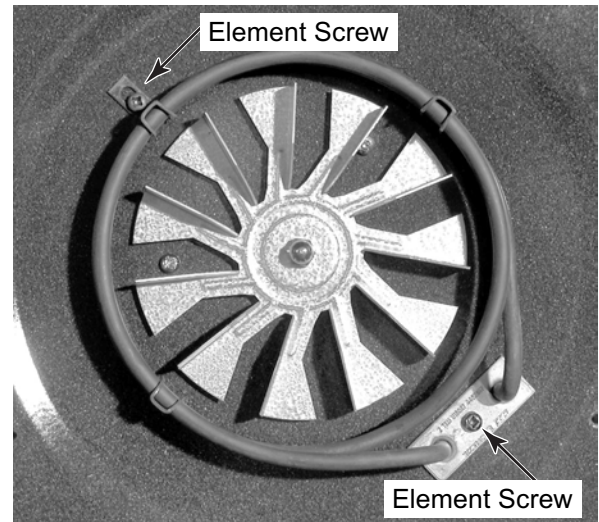
3. Remove the seven screws from the convection element cover and remove the cover.



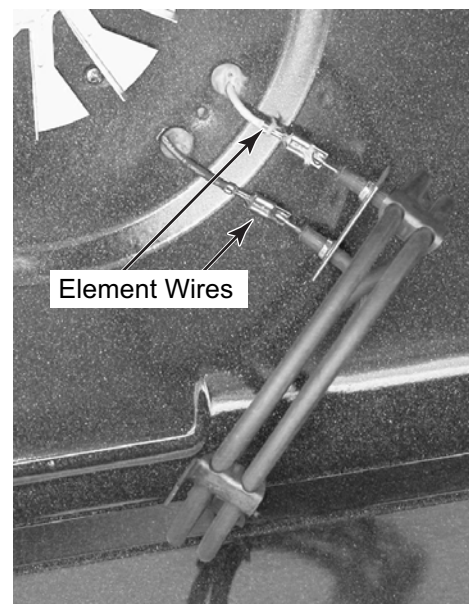
Screw  
(1 of 7)

Convection Element Cover

4. To remove the convection element:
  - a) Remove the two screws from the element brackets.



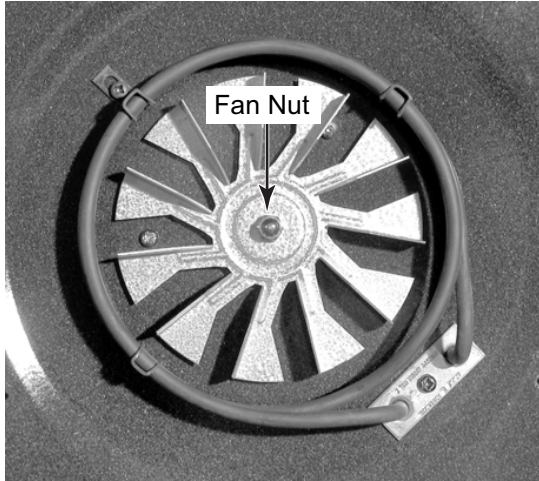
- b) Pull the convection element forward and disconnect the wires from the terminals.



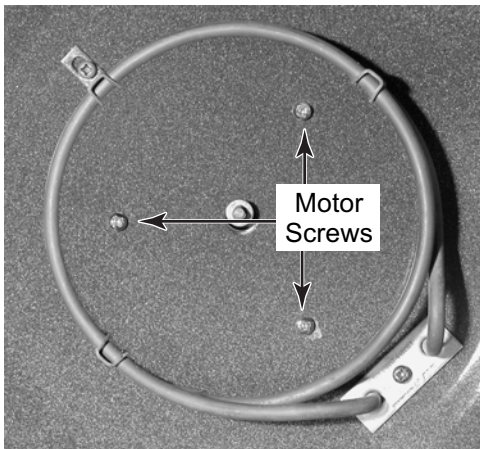
**Continued on the next page.**

5. **To remove the convection fan motor:**

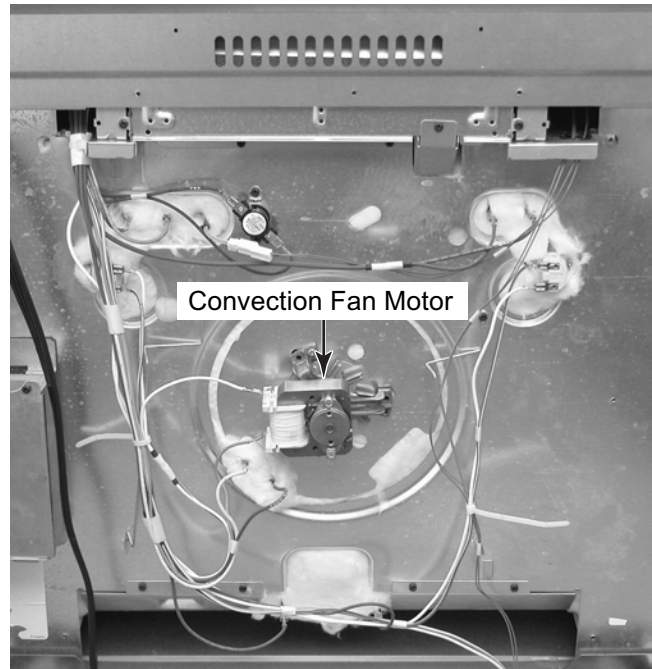
- a) Remove the 7/16" hex-nut from the convection fan and remove the fan from the motor shaft. **NOTE:** The nut has a left-hand thread so turn it clockwise to remove it.



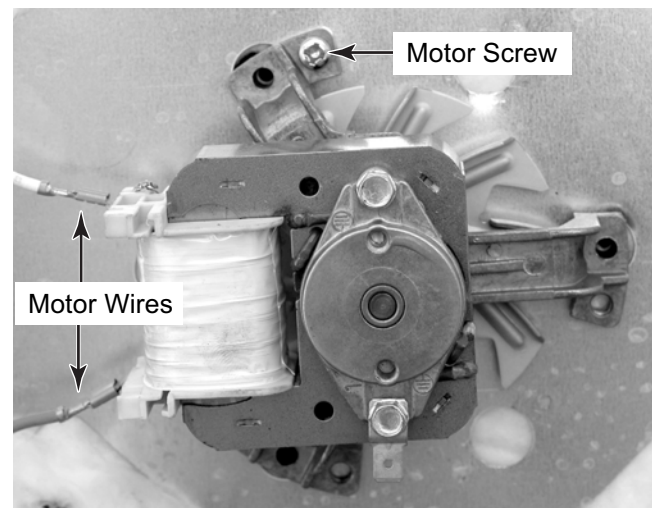
- b) Remove the three motor mounting screws from the cavity liner.



- c) Pull the range out of its mounting location so that you can access the rear of the unit.  
d) Remove the rear panel from the unit (see page 4-9 for the procedure).



- e) Disconnect the two wires from the convection fan motor terminals.  
f) Remove the mounting screw from the convection fan motor and remove the motor.



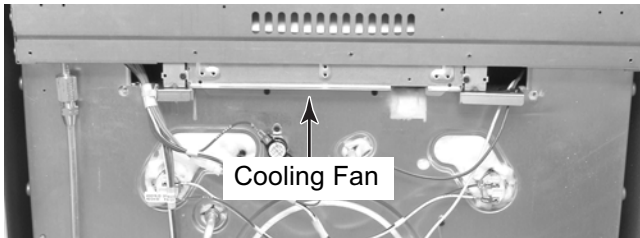
## REMOVING THE COOLING FAN

### **!WARNING**

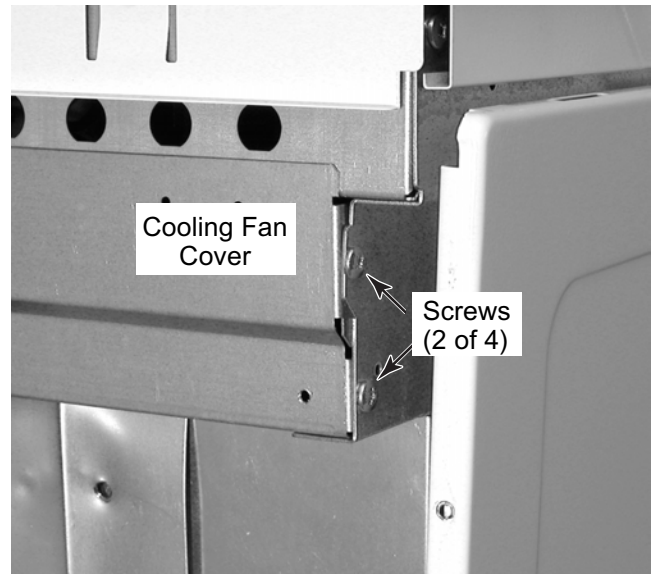


**Electrical Shock Hazard**  
**Disconnect power before servicing.**  
**Replace all parts and panels before operating.**  
**Failure to do so can result in death or electrical shock.**

1. Unplug range or disconnect power.
2. Pull the range out of its mounting location so that you can access the rear of the unit.
3. Remove the rear panel from the unit (see page 4-9 for the procedure).



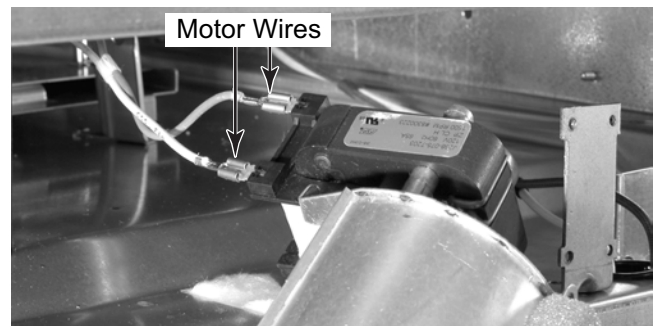
4. Use a 90° screwdriver, and remove the two screws from each end of the cooling fan cover, then remove the cover.



5. Remove the four screws from the cooling fan and remove the fan from the bracket.



6. Disconnect the two cooling fan wires from the motor terminals.



## REMOVING THE OVEN TOD

### **!WARNING**



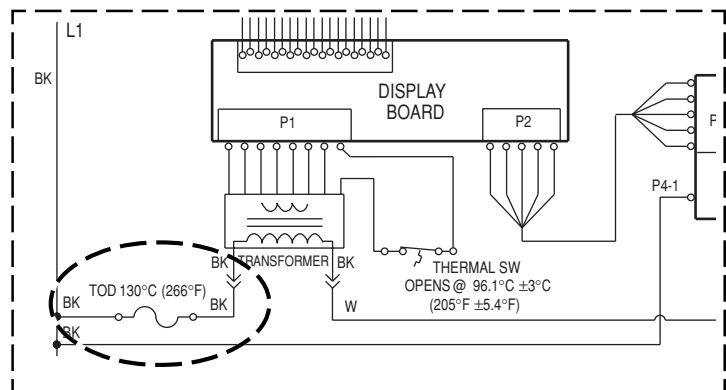
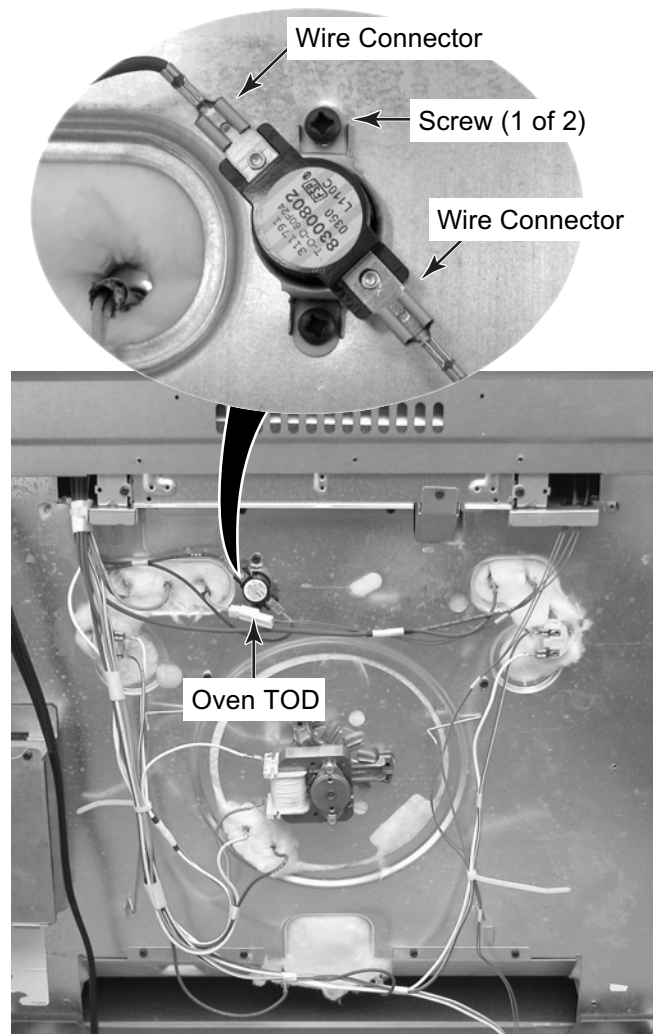
#### **Electrical Shock Hazard**

**Disconnect power before servicing.**

**Replace all parts and panels before operating.**

**Failure to do so can result in death or electrical shock.**

1. Unplug range or disconnect power.
2. Pull the range out of its mounting location so that you can access the rear of the unit.
3. Remove the rear panel from the unit (see page 4-9 for the procedure).
4. Remove the two wire connectors from the oven TOD terminals.
5. Remove the two screws from the oven TOD and remove it.





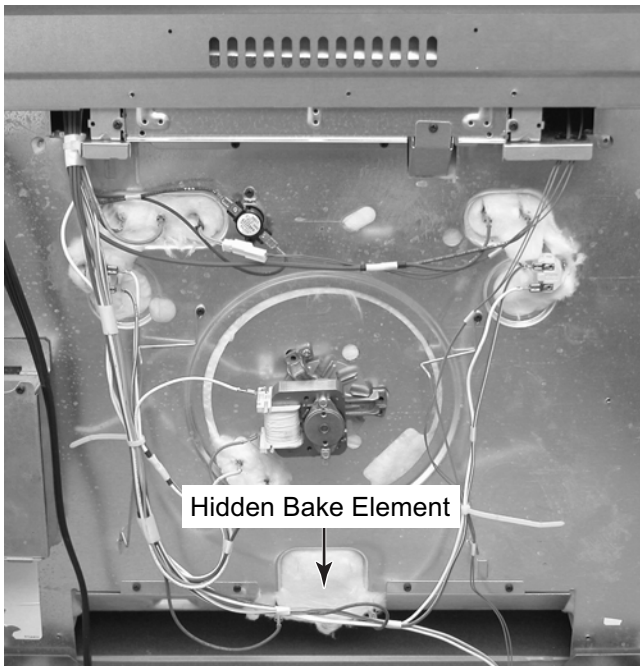
# REMOVING THE HIDDEN BAKE ELEMENT

## ⚠ WARNING



**Electrical Shock Hazard**  
**Disconnect power before servicing.**  
**Replace all parts and panels before operating.**  
**Failure to do so can result in death or electrical shock.**

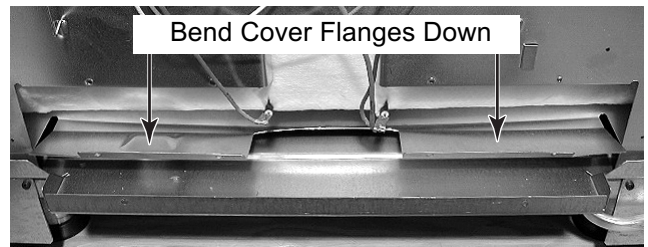
1. Unplug range or disconnect power.
2. Pull the range out of its mounting location so that you can access the rear of the unit.
3. Remove the rear panel from the unit (see page 4-9 for the procedure).



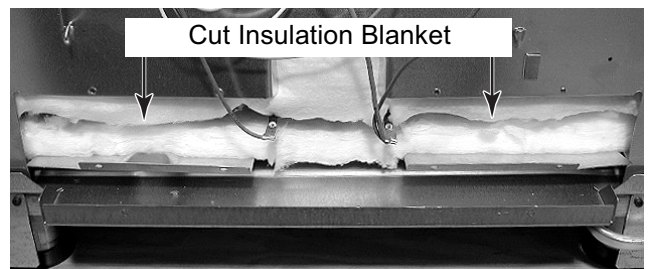
4. Remove the four screws from the hidden bake element cover flanges.



5. Bend the cover flanges down as far as they will go.



6. Use a pen knife or a single-edged razor blade, and cut the insulation blanket as shown below. Be sure to separate the insulation blanket as cleanly as possible.



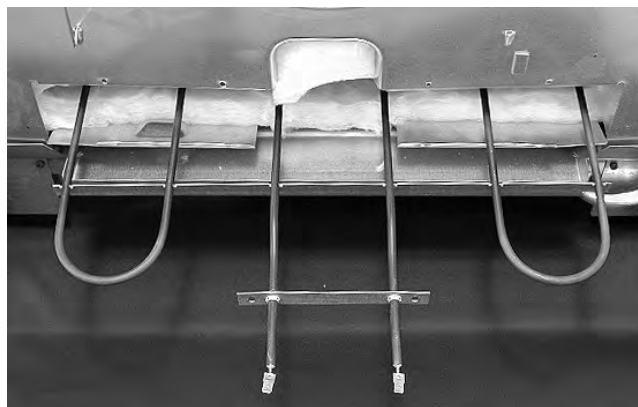
7. Carefully move the upper and lower sections of the insulation blanket out of the way so that you can access the hidden bake element and its mounting bracket.

8. Remove the four mounting bracket screws and the two hidden bake element bracket screws.



Continued on the next page.

9. Carefully pull the hidden bake element and its mounting bracket out of the range.



Pull Out Hidden Bake Element

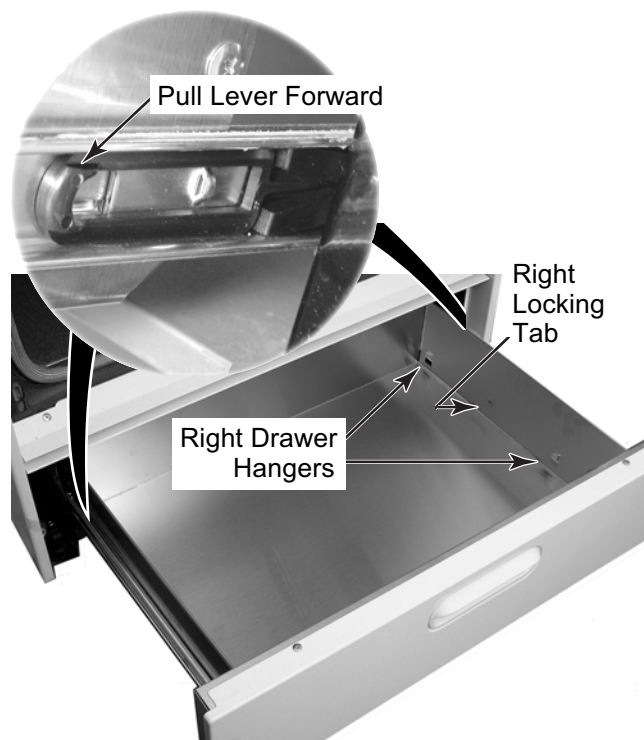
## REMOVING THE WARMING DRAWER TEMPERATURE SENSOR AND ELEMENT

### **!WARNING**

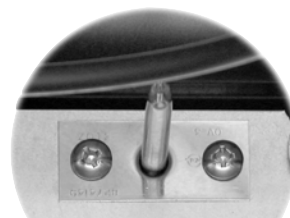


**Electrical Shock Hazard**  
**Disconnect power before servicing.**  
**Replace all parts and panels before operating.**  
**Failure to do so can result in death or electrical shock.**

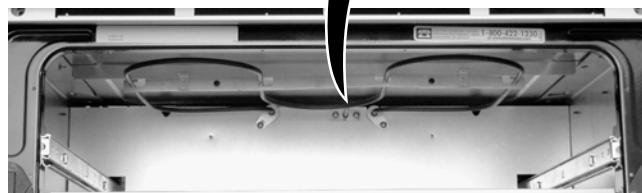
1. Unplug range or disconnect power.
2. Remove the oven door (see page 4-22 for the procedure).
3. Pull the warming drawer out as far as the stop.
4. Pull the left and right release levers on the sides of the warming drawer, and pull the drawer out as far as it will go (see the photos at the top of the right column).  
**NOTE:** The back edge of the drawer should clear the opening in the range.
5. Press in on the left and right drawer rail locking tabs on the inside of the warming drawer, and lift the drawer so the tabs are clear of the slots. Remove the left and right drawer rail hangers from the slots in the sides of the drawer, and remove the drawer from the range.



6. **To remove the warming drawer temperature sensor:**
  - a) Remove the two mounting screws from the sensor.
  - b) Pull the sensor forward until the connector is inside the warming drawer area, and disconnect the sensor from the wiring harness.



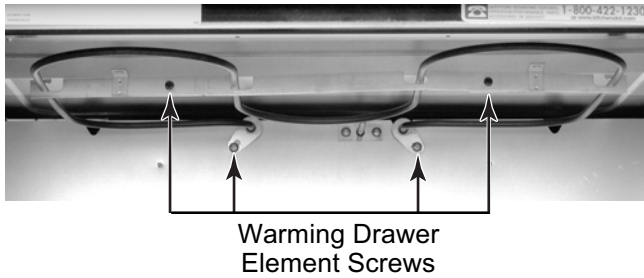
Warming Drawer Temperature Sensor



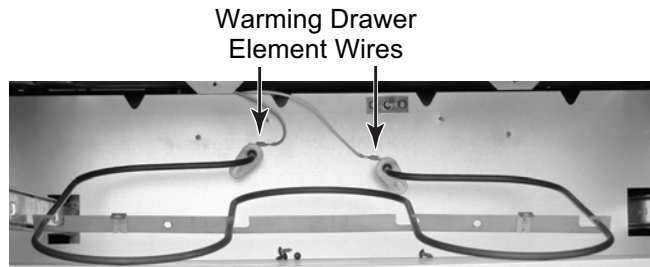
Continued on the next page.

7. **To remove the warming drawer element:**

- a) Remove the two front and two rear mounting screws from the element.



- b) Pull the element forward until the connectors are inside the warming drawer area, and disconnect the wires from the element terminals.



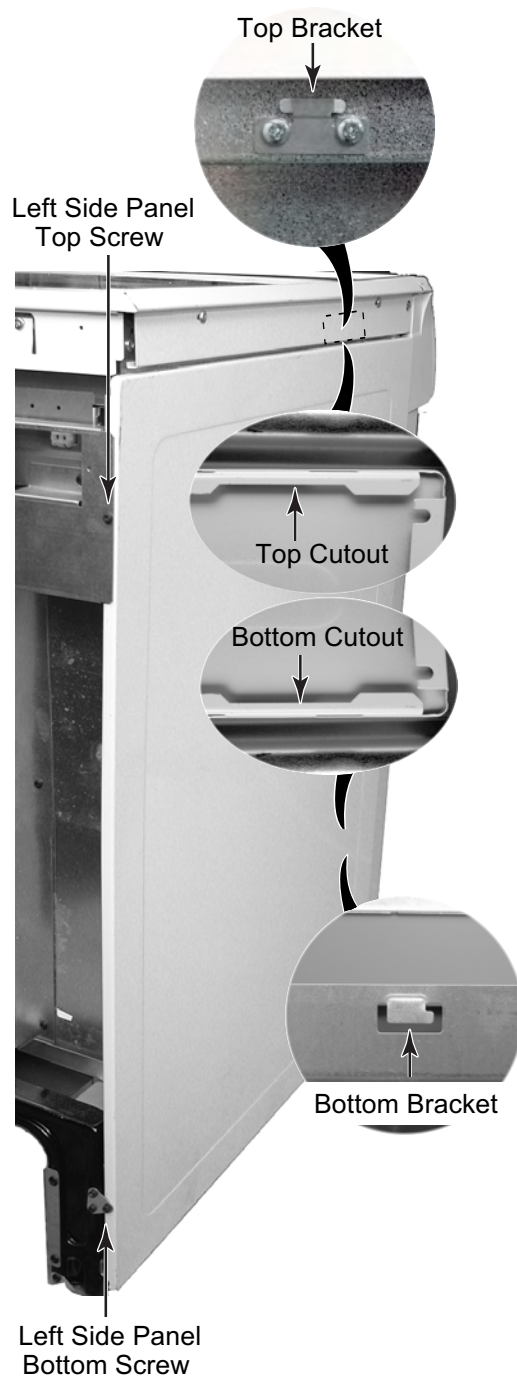
## REMOVING A SIDE PANEL

### **!WARNING**



**Electrical Shock Hazard**  
**Disconnect power before servicing.**  
**Replace all parts and panels before operating.**  
**Failure to do so can result in death or electrical shock.**

1. Unplug range or disconnect power.
2. Pull the range out of its mounting location so that you can access the rear of the unit.
3. Remove the top and bottom rear screws for the side panel you are removing.
4. Pull the back of the side panel out so it clears the mounting bracket, then slide the panel back until the top and bottom brackets are in the panel cutouts, then remove the panel.



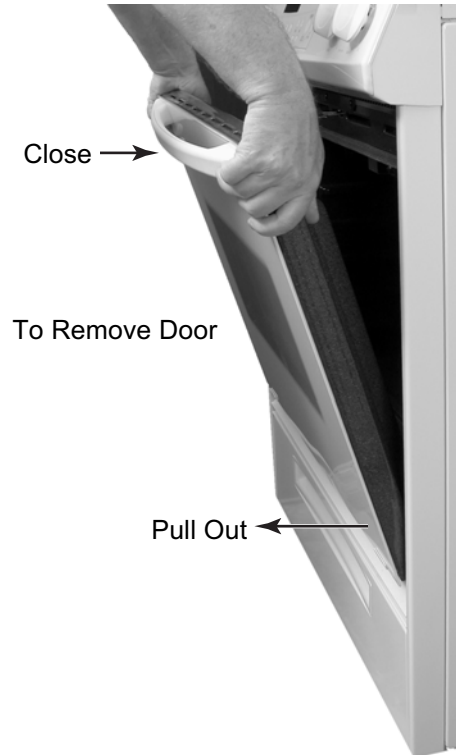
# REMOVING & REINSTALLING THE OVEN DOOR

## To remove the oven door:

1. Fully open the door.
2. Rotate the locking arm on the door hinge from the locked “down” position, to the unlocked “up” position.



3. Close the door to within six to eight inches, then pull out on the bottom of the door while slowly closing the door, and remove the hinge hangers from the slots in the chassis.

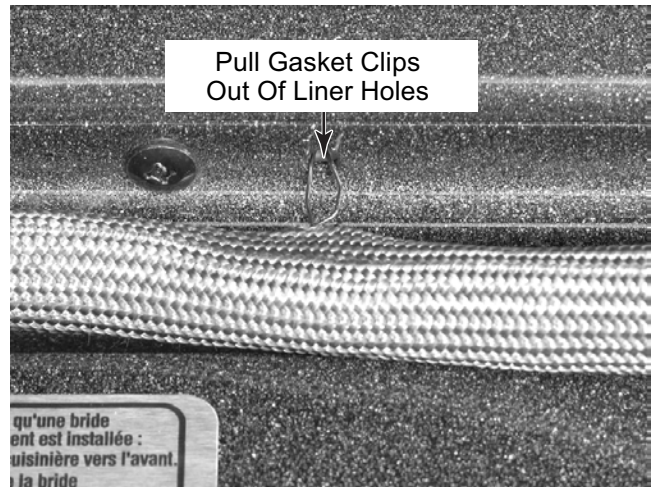
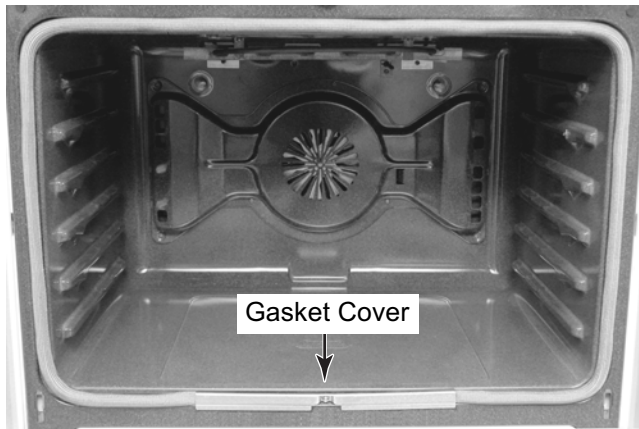


## To reinstall the oven door:

1. While tilting the door back slightly from a vertical position, insert the hinge hangers into the chassis slots as far as they will go. Continue to push in on the bottom, and fully open the door.
2. Rotate the locking arm on the hinge hangers to the locked, or fully “down” position.
3. Open and close the oven door to make sure that it operates and seals properly.

## REMOVING THE OVEN DOOR GASKET

1. Remove the oven door (see page 4-22 for the procedure).
2. Remove the screw from the door gasket cover and remove the cover.
3. Starting at one end of the door gasket, pull the clips out of the liner holes, and remove the gasket.



**REASSEMBLY NOTE:** After the door gasket is installed, make sure that it is even along the surface of the door when the door is closed.

# REMOVING THE DECORATIVE GLASS AND OVEN DOOR HANDLE, THE HINGES, AND THE OVEN DOOR GLASS

1. Remove the oven door from the range (see page 4-22 for the procedure).
2. Place the oven door on a padded work surface with the decorative glass and handle facing up and the bottom edge facing the front.
3. **To remove the decorative glass and handle:**

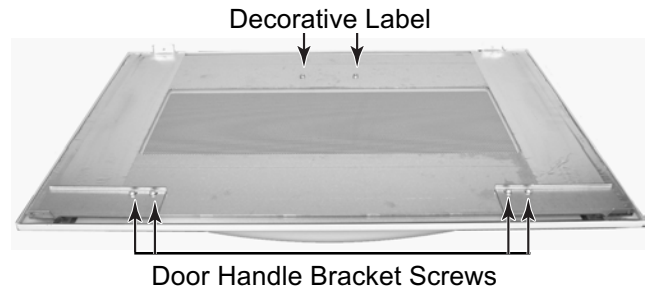
- a) Remove the screw from each of the two decorative glass retainers, and remove the retainers.



- b) Turn the door 180° so the handle faces the front.
- c) Remove the two door handle bracket screws.
- d) Lift the bottom of the decorative glass and slide it down so the top clears the lip of the liner, then lift the glass and handle off the door liner assembly.

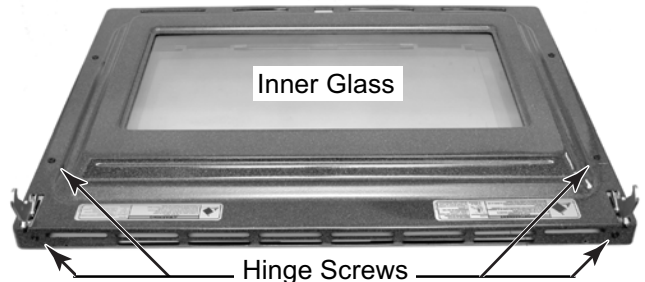


- e) Remove the two door handle screws from each of the brackets and remove the handle from the decorative glass.
- f) Remove the two hex nuts from the decorative label and remove the label.
- g) Remove the decorative glass from the frame.



## 4. **To remove a hinge:**

- a) Remove the decorative glass and handle from the door liner (see step 3).
- b) Position the oven door liner with the inner glass facing up.
- c) Remove the two screws from the left or right hinge you are servicing.
- d) Lift the door liner and remove the hinge.

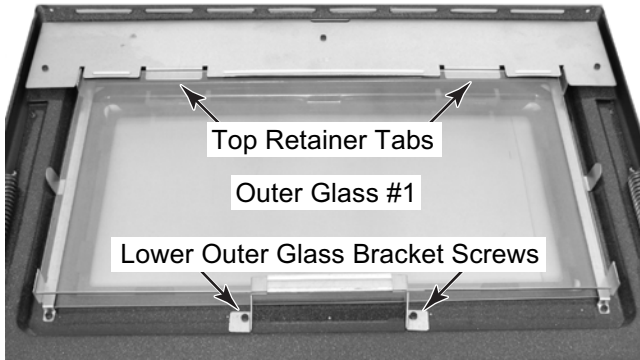


## 5. **To remove the two pieces of outer oven door glass:**

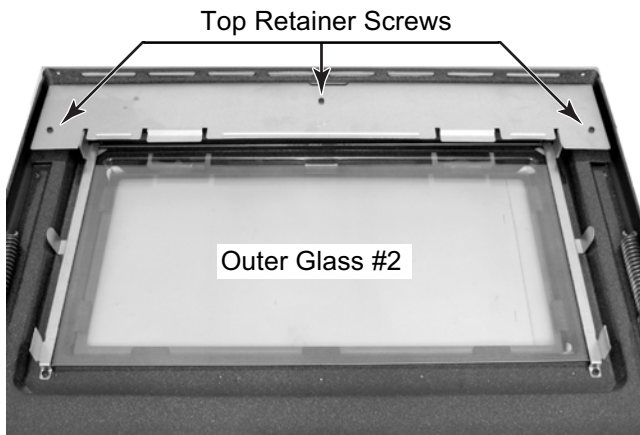
- a) Remove the decorative glass and handle from the door liner (see step 3).



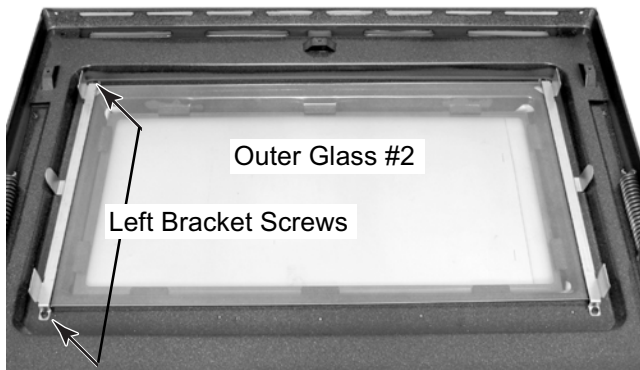
- b) Position the door liner with the outer oven glass facing up, as shown.
- c) Remove the two screws from the lower bracket for the outer oven glass.
- d) Slide the lower bracket off the first piece of outer oven glass, then slide the glass out of the top retainer tabs.



- e) Remove the three screws from the top retainer and remove the retainer from the liner.

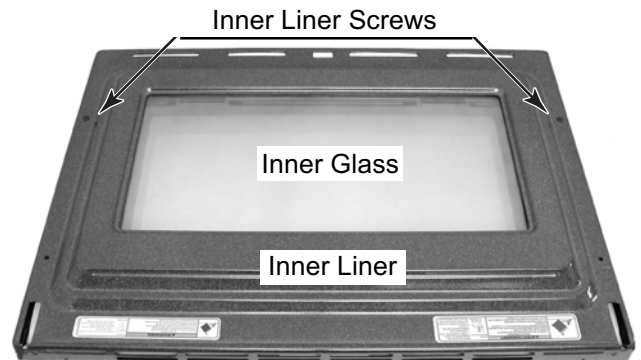


- f) For the second piece of outer oven glass, remove the two screws from the left bracket, then remove the bracket and second piece of glass from the door liner.

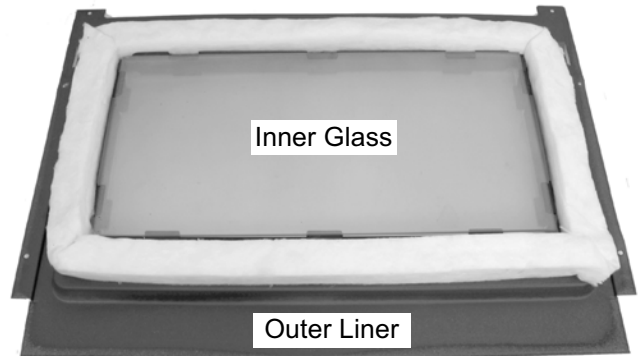


**6. To remove the inner oven door glass:**

- a) Remove the decorative glass and handle from the door liner (see step 3).
- b) Remove the two hinges (see step 4).
- c) Remove the first piece of outer door glass (perform steps 5b through 5d).
- d) Remove the two inner door liner screws and lift the inner liner off the outer liner.



- e) Lift the inner oven door glass off the outer liner.




— NOTES —

# COMPONENT TESTING

Before testing any of the components, perform the following checks:

- The most common cause for control failure is corrosion on connectors. Therefore, disconnecting and reconnecting wires will be necessary throughout test procedures.
- All tests/checks should be made with a VOM or DVM having a sensitivity of 20,000 ohms-per-volt DC, or greater.
- Check all connections before replacing components, looking for broken or loose wires, failed terminals, or wires not pressed into connectors far enough.
- Resistance checks must be made with power cord unplugged from outlet, and with wiring harness or connectors disconnected.



## ⚠ WARNING

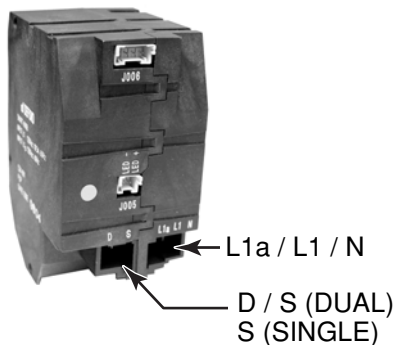
**Electrical Shock Hazard**

**Disconnect power before servicing.**

**Replace all parts and panels before operating.**

**Failure to do so can result in death or electrical shock.**

## INFINITE (SMART) SWITCH



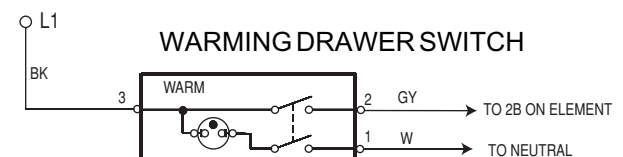
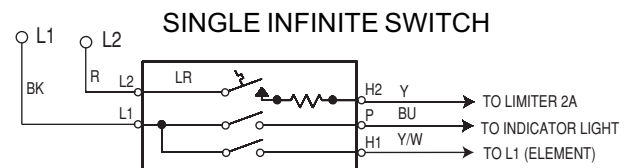
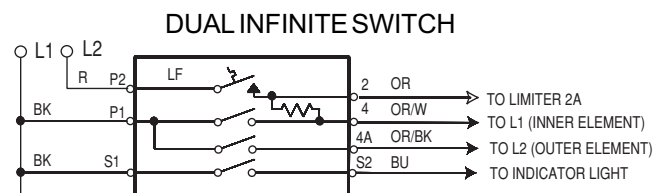
Refer to page 4-4 for the procedure for servicing an infinite switch.

1. Unplug range or disconnect power.
2. Disconnect the wire connectors from the infinite switch.
3. Set the ohmmeter to the R x 100 scale.
4. Touch the ohmmeter test leads to the infinite switch connector pins as follows:

- Switch Off:** L1a to 2 = open circuit ( $\infty$ )
- Switch On:** L1a to 2 = closed circuit ( $0 \Omega$ )
- Switch Off:** L1a to 1 = open circuit ( $\infty$ )
- Switch On:** L1a to 1 = closed circuit ( $0 \Omega$ )

## DUAL & SINGLE INFINITE & WARMING DRAWER SWITCHES MODELS: KESV808, KESV908, & KESI901

**NOTE:** These switches are not included in this Job Aid, but are standard switches found on the model ranges listed above. A wiring diagram for each switch is shown below.





## ⚠ WARNING

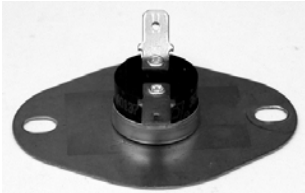
### Electrical Shock Hazard

**Disconnect power before servicing.**

**Replace all parts and panels before operating.**

**Failure to do so can result in death or electrical shock.**

## CONTROL & COOLING FAN THERMAL SWITCHES



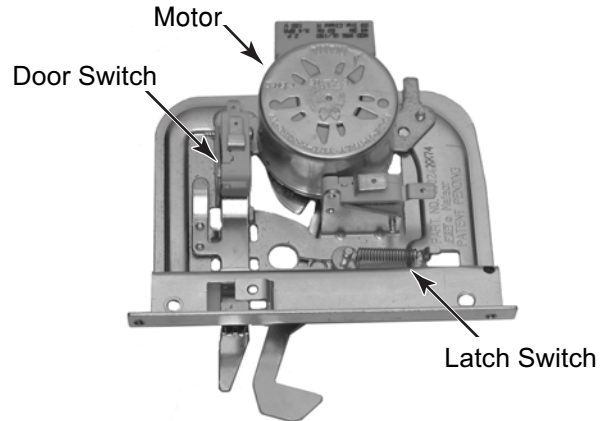
Control  
Opens @ 96°C (205°F)  
Closes @ 74°C (165°F)

Cooling Fan  
Closes @ 70°C (158°F)  
Opens @ 60°C (140°F)

Refer to page 4-6 for the procedure for servicing the control and cooling fan thermal switches.

1. Unplug range or disconnect power.
2. Disconnect one of the wires from the terminals of the thermal switch you are testing.
3. Set the ohmmeter to the R x 1 scale.
4. **For the control thermal switch**, touch the ohmmeter test leads to the terminals. The meter should indicate continuity (0  $\Omega$ ).
5. **For the cooling fan thermal switch**, touch the ohmmeter test leads to the terminals. The meter should indicate an open (infinite) circuit.

## DOOR LATCH ASSEMBLY



Refer to page 4-6 for the procedure for servicing the door latch assembly.

1. Unplug range or disconnect power.
2. Disconnect one of the wires from the door latch assembly component under test.
3. Set the ohmmeter to the R x 1K scale.
4. **To test the motor**, touch the ohmmeter test leads to the terminals. The meter should indicate between 2.6K and 3K  $\Omega$ .
5. **To test the door switch & latch switch:**
  - a) Touch the ohmmeter test leads to the COM and N.O. terminals. The meter should indicate an open circuit (infinite).
  - b) With the ohmmeter test leads connected as stated in the previous step, press the switch actuator. The meter should indicate continuity (0  $\Omega$ ).



## ⚠ WARNING

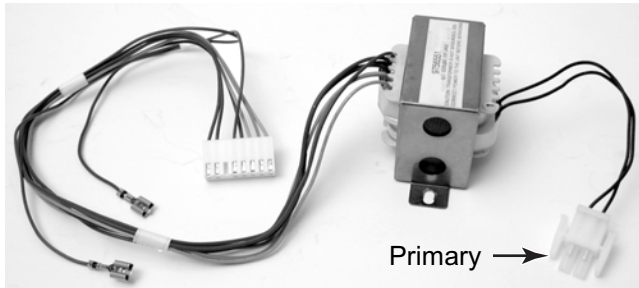
### Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

## POWER SUPPLY TRANSFORMER



Refer to page 4-7 for the procedure for servicing the power supply transformer.

1. Unplug range or disconnect power.
2. Disconnect the transformer primary and secondary wire connectors.
3. Set the ohmmeter to the R x 1 scale.
4. Touch the ohmmeter test leads to the two primary connector pins. The meter should indicate between 10 and 20  $\Omega$ .

## OVEN & WARMING DRAWER TEMPERATURE SENSORS



Refer to page 4-12 for the procedure for servicing the oven temperature sensor, and page 4-19 for the warming drawer temperature sensor.

1. Unplug range or disconnect power.
2. Disconnect the temperature sensor connector.
3. Set the ohmmeter to the R x 1K scale.
4. **To test the oven temperature sensor**, touch the ohmmeter test leads to the temperature sensor connector pins. The meter should indicate as shown in the chart below.

Temperatures (°F)	Temperatures (°C)	Resistance ( $\Omega$ )
32	0	1000
75	25	1100
200	95	1350
250	120	1450
350	175	1650
450	230	1850
550	290	2050
650	350	2240
865	465	2630
900	480	2700

5. **To test the warming drawer sensor**, touch the ohmmeter test leads to the temperature sensor connector pins. The meter should indicate approximately 10 K $\Omega$  @77°F (25°C).



## ⚠️ WARNING

### Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

## ELEMENTS & LIMITERS

Refer to page 4-8 for the procedure for servicing the elements & limiters.

**NOTE:** The elements shown below are tested at their terminal locations. The dual elements can also be checked at the infinite switches, pins 1 and 2.

1. Unplug range or disconnect power.
2. Remove the cooktop glass (see page 4-5 for the procedure).
3. Disconnect one of the wires from the element terminals.
4. Set the ohmmeter to the R X 1 scale.
5. Touch the ohmmeter test leads to the element terminals as follows:

### ***LF & (RR)—(Dual Elements)***

- OR-WH and OR-BK (BU-WH and BU-BK) = 91 to 96  $\Omega$
- OR-BK and BK (BU-BK and BK) = 32 to 44  $\Omega$

- OR-WH and BK (BU-WH and BK) = 52 to 64  $\Omega$

### ***LR (Dual Element)***

- YL-WH and YL-BK = 120 to 130  $\Omega$
- YL-BK and BK = 63 to 76  $\Omega$
- YL-WH and BK = 52 to 64  $\Omega$

### ***RF (Single Element)***

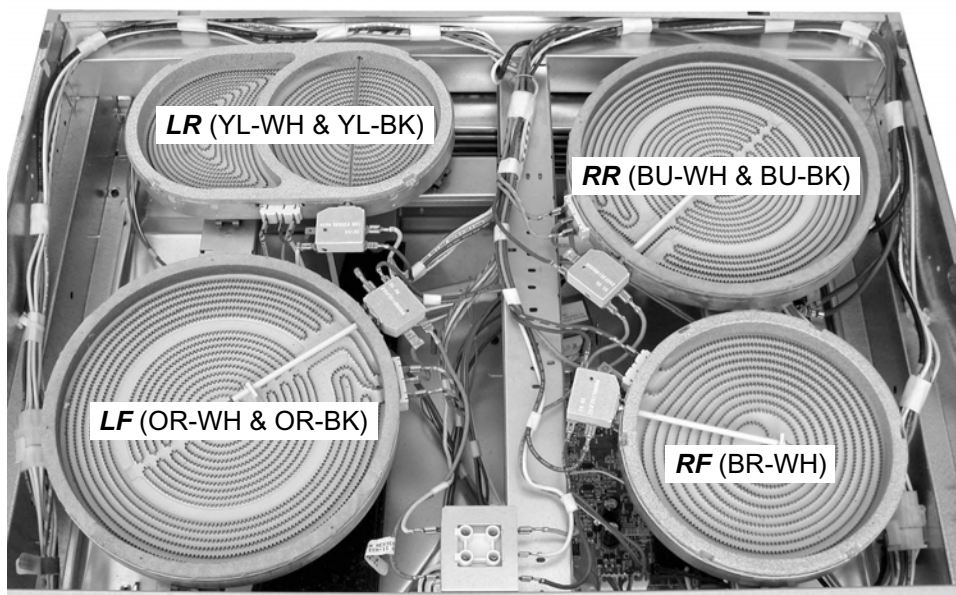
- BR-WH and element terminal = 25 to 37  $\Omega$

### 6. To test a limiter:

- a) Touch the ohmmeter test leads to limiter terminals 1A & 2A. The meter should indicate continuity (0  $\Omega$ ).
- b) Touch the ohmmeter test leads to limiter terminals 1B & 2B.

With the temperature below 150°F, the meter should indicate an open circuit (infinite).

With the temperature above 150°F, the meter should indicate continuity (0  $\Omega$ ).





## ⚠ WARNING

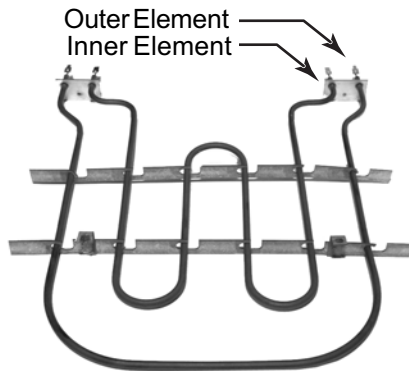
### Electrical Shock Hazard

**Disconnect power before servicing.**

**Replace all parts and panels before operating.**

**Failure to do so can result in death or electrical shock.**

### DUAL BROIL ELEMENT



Refer to page 4-11 for the procedure for servicing the dual broil element.

1. Unplug range or disconnect power.
2. Disconnect one of the wires from the inner and outer dual broil element terminals.
3. Set the ohmmeter to the R x 1 scale.
4. Touch the ohmmeter test leads to the inner broil element terminals. The meter should indicate between 25 and 37  $\Omega$ .
5. Touch the ohmmeter test leads to the outer broil element terminals. The meter should indicate between 32 and 44  $\Omega$ .

### CONVECTION ELEMENT



Refer to page 4-13 for the procedure for servicing the convection element.

1. Unplug range or disconnect power.
2. Disconnect one of the wires from the convection element terminals.
3. Set the ohmmeter to the R x 1 scale.
4. Touch the ohmmeter test leads to the convection element terminals. The meter should indicate between 29 and 41  $\Omega$ .



## ⚠ WARNING

### Electrical Shock Hazard

**Disconnect power before servicing.**

**Replace all parts and panels before operating.**

**Failure to do so can result in death or electrical shock.**

### CONVECTION FAN MOTOR



Refer to page 4-13 for the procedure for servicing the convection fan motor.

1. Unplug range or disconnect power.
2. Disconnect one of the wires from the convection fan motor terminals.
3. Set the ohmmeter to the R x 1 scale.
4. Touch the ohmmeter test leads to the convection fan motor terminals. The meter should indicate between 14 and 22  $\Omega$ .

### COOLING FAN MOTOR



Refer to page 4-15 for the procedure for servicing the cooling fan.

1. Unplug range or disconnect power.
2. Disconnect one of the wires from the cooling fan motor terminals.
3. Set the ohmmeter to the R x 1 scale.
4. Touch the ohmmeter test leads to the cooling fan motor terminals. The meter should indicate between 11 and 17  $\Omega$ .





## ⚠ WARNING

### Electrical Shock Hazard

**Disconnect power before servicing.**

**Replace all parts and panels before operating.**

**Failure to do so can result in death or electrical shock.**

### OVEN TOD



Refer to page 4-16 for the procedure for servicing the oven TOD.

1. Unplug range or disconnect power.
2. Disconnect one of the wires from the oven TOD terminals.
3. Set the ohmmeter to the R x 1 scale.
4. Touch the ohmmeter test leads to the oven TOD terminals. The meter should indicate a closed circuit (0  $\Omega$ ).

### HIDDEN BAKE ELEMENT



Refer to page 4-17 for the procedure for servicing the hidden bake element.

1. Unplug range or disconnect power.
2. Disconnect one of the wires from the hidden bake element terminals.
3. Set the ohmmeter to the R x 1 scale.
4. Touch the ohmmeter test leads to the hidden bake element terminals. The meter should indicate between 21 and 33  $\Omega$ .

## **⚠ WARNING**



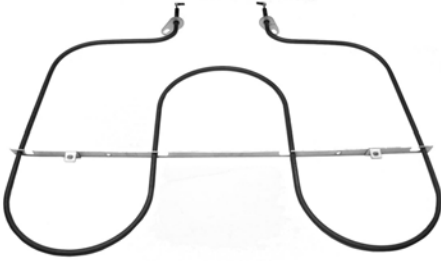
### **Electrical Shock Hazard**

**Disconnect power before servicing.**

**Replace all parts and panels before operating.**

**Failure to do so can result in death or electrical shock.**

### **WARMING DRAWER ELEMENT**

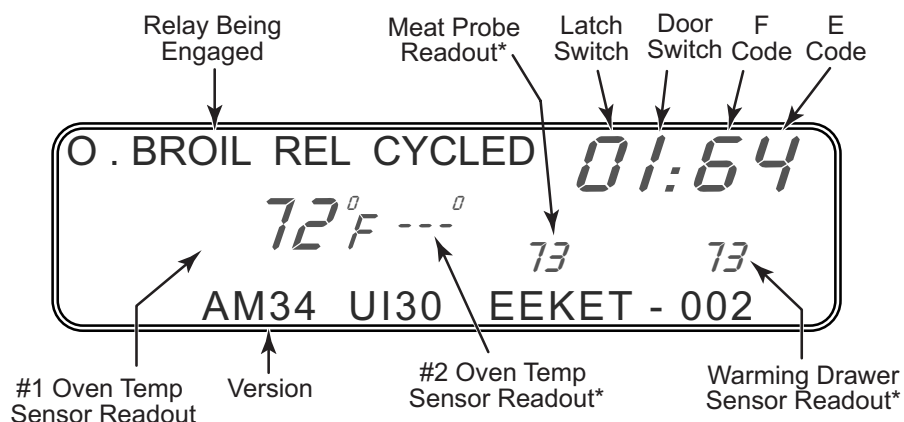


Refer to page 4-19 for the procedure for servicing the warming drawer element.

1. Unplug range or disconnect power.
2. Disconnect one of the wires from the warming drawer element terminals.
3. Set the ohmmeter to the R x 1 scale.
4. Touch the ohmmeter test leads to the warming drawer element terminals. The meter should indicate between 11 and 23  $\Omega$ .

# DIAGNOSTICS & TROUBLESHOOTING

## DIAGNOSTICS



\* If available (3 dashes will be shown if not available)

### ENTERING MANUAL DIAGNOSTICS

Within 120 seconds of power up, press the following keys to enable the relay capabilities listed below, and enter the manual diagnostics mode:

- Cancel** key.
- Cancel** key.
- Start** key.

### ENGAGING THE RELAYS

Pressing the following keys will toggle the state of the associated relays. **NOTE:** For the latch relay, the self-clean button will turn on the latch relay, and changing the state of the latch switch will turn off the relay.

Key Press	Relay	Text Line Display
Bake Key	Bake Relay	BAKE RELAY CYCLED
Maxi Broil Key	Outer Broil Relay	O.BROIL REL CYCLED
Econo Broil Key	Inner Broil Relay	I.BROIL REL CYCLED
Convect Bake	Conv Relay and Fan	CONV REL CYCLED
Warm Drawer On	Warm Drawer Relay	WD RELAY CYCLED
Top Light	Oven Light Relay	O LIGHT REL CYCLED
Oven Light	Top Light Relay	T LIGHT REL CYCLED
Clean Key	Cycle Motor	ROTATING MOTOR
	After Latch Sw Toggles	MOTOR ROTATED

### DOUBLE LINE BREAK (DLB), FANS, AND OPEN DOOR

During diagnostics, all fans and elements may operate with the door open. **NOTE:** The latch motor will not cycle with the door open.

On electric models, the double line break (DLB) will engage when entering the diagnostics mode, and will disengage when exiting the diagnostics mode.

## ERROR CODE

Pressing the **3** key once will cycle to the next error code. An error code is displayed in the two right clock digits.

<b>ERROR CODE LIST ORDER</b>		
1	ERROR CODE #1	MOST RECENT CODE
2	ERROR CODE #2	ERROR CODE #2
3	ERROR CODE #3	ERROR CODE #3
4	ERROR CODE #4	ERROR CODE #4
5	ERROR CODE #5	ERROR CODE #5

## ERROR CODE DETECTION IN DIAGNOSTICS

If an error code is detected in diagnostics, the code will be placed in the two right clock digits, and the system will remain in the diagnostics mode.

## SENSORS

**#1 Oven Temp Probe** is displayed in the main temperature area.

**#2 Oven Temp Probe** is displayed in the probe temperature area.

**Meat Probe** is displayed in the start time area.

**Warming Drawer** is displayed in the stop time area.

If a sensor is out of range, three dashes (- - -) will be displayed in the appropriate temperature field.

## SWITCHES

**Door Switch** is displayed in the 2<sup>nd</sup> hrs clock field (0 = Open, 1 = Closed).

**Latch Switch** is displayed in the left-most clock field (0= Open, 1 = Closed).

## VERSIONS

AM ## UI## EE###-### in the lower text line shows the AM (Appliance Manager) micro code revision, next the UI (User Interface) micro revision, and last the EEPROM brand fuel and revision.

## TIME OUT

The diagnostics mode will time out after 5 minutes from the last user action.

## EXITING DIAGNOSTICS

To exit manual diagnostics press the **Cancel** Key, or remove power.

## OPTIONS SELECTION PAD

The Options selection pad allows you to access 10 hidden functions within the electronic oven control. The hidden functions let you change the oven temperature between Fahrenheit and Celsius, turn the audible signals and visual prompts on and off, and adjust the oven calibration. The Sabbath mode is also set using the Options selection pad.

*To use the Options:* Press the OPTIONS pad. The display will scroll through the options from 1 to 0. Press the OPTIONS selection pad and the number pad to easily access the desired hidden function. For example, pressing 1 on the numeric pad will toggle the temperature readings between Fahrenheit and Celsius.

OPTIONS	HIDDEN FUNCTION
1	Fahrenheit or Celsius
2	Sound On/Off
3	Sound High/Low
4	End Beep On/Off
5	Oven Temp Calibration
6	Sabbath Mode

## ERROR / FAILURE CODES

Before proceeding with any corrective action, perform the following steps to enter the Diagnostic mode.

1. To recall last failure code, if not displayed, press the Cancel key to place the range in an idle state.
2. Press the Cancel and Start keys in the following order: CANCEL, CANCEL, START.
3. Verify the error code displayed on the control by observing for longer than 1 minute. If the error returns, use the applicable procedure listed below for the actual error code that is displayed.

FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	MESSAGE/DESCRIPTION
		SUGGESTED CORRECTIVE ACTION PROCEDURE
F0 Default	E0	No failure
F1 Internal	E0	INTERNAL ERROR
	E1	INTERNAL ERROR
	E2	INTERNAL ERROR
	E3	INTERNAL ERROR
	E4	INTERNAL ERROR
	E9	INTERNAL ERROR
<b>PROCEDURE:</b> Before proceeding, perform steps 1 through 3 above chart to enter the Diagnostic mode. A. Unplug range or disconnect power. B. Replace the display board. C. Plug in range or reconnect power.		
F1 Internal	E5	INTERNAL ERROR
	E6	INTERNAL ERROR
	E7	INTERNAL ERROR
	E8	INTERNAL ERROR
<b>PROCEDURE:</b> Before proceeding, perform steps 1 through 3 above chart to enter the Diagnostic mode. A. Unplug range or disconnect power. B. Replace the power board. C. Plug in range or reconnect power.		
FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	MESSAGE/DESCRIPTION
		SUGGESTED CORRECTIVE ACTION PROCEDURE
F2 Keypad	E0	STUCK KEY (shorted key)
	E1	KEYPAD DISCONNECT or KEYPAD DISCONNECTED
<b>PROCEDURE:</b> Before proceeding, perform steps 1 through 3 above chart to enter the Diagnostic mode. A. Unplug range or disconnect power. B. Check that the keypad is firmly connected. C. Plug in range or reconnect power and observe for longer than 1 minute. D. If error remains then go to step E. E. Unplug range or disconnect power. F. Replace keypad. G. Plug in range or reconnect power and observe for longer than 1 minute. H. If error remains then go to step I. I. Unplug range or disconnect power. J. Replace display board. K. Plug in range or reconnect power.		

FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	MESSAGE/DESCRIPTION								
		SUGGESTED CORRECTIVE ACTION PROCEDURE								
<b>F3 Sensors</b>	<b>E0</b>	MAIN SENSOR OPEN (top oven sensor opened)								
	<b>E1</b>	MAIN SENSOR SHORT or MAIN SENSOR SHORTED (top oven sensor shorted)								
	<b>E2</b>	MEAT PROBE SHORTED								
	<b>E4</b>	BOTTOM SENSOR OPEN (bottom oven sensor open)								
	<b>E5</b>	LOWER SENSOR SHORT or BOTTOM SENSOR SHORT (bottom oven sensor shorted)								
	<b>E6</b>	WD SENSOR OPEN (warming drawer sensor open)								
	<b>E7</b>	WD SENSOR SHORTED (warming drawer sensor shorted)								
<p><b>PROCEDURE:</b> Before proceeding, perform steps 1 through 3 above chart on page 6-3 to enter the Diagnostic mode.</p> <p>A. Unplug range or disconnect power.</p> <p>B. Open the back panels and make sure the indicated temperature sensor is plugged in. If it is not, plug it in to the connector and go to step I. If it is plugged in, go to step C.</p> <p>C. Check connector P3 on the power board. Make sure it is plugged in and fully seated. If it is not, make the proper connection and go to step I. If it is already properly connected, go to step D.</p> <p>D. Visually inspect the wires between P3 on the power board and the indicated temperature sensor. Make sure the wires are not cut or pinched. If the wires appear to be intact, unplug the P3 connector on the power board. Go to step E.</p> <p>E. Measure indicated temperature sensor resistance value (measure between appropriate P3 connector pins). For the following sensors, the resistance value should read:</p> <table border="0"> <tr> <td>Main Oven Sensor</td> <td>Between 931 and 2869 Ω. (Approx. 1080 Ω at room temp).</td> </tr> <tr> <td>Lower Oven Sensor</td> <td>Between 931 and 2869 Ω. (Approx. 1080 Ω at room temp).</td> </tr> <tr> <td>Warm Drawer Sensor</td> <td>Between 1,500 and 319,000 Ω. (Approx. 119,420 Ω at room temp).</td> </tr> <tr> <td>Meat Probe Sensor</td> <td>Between 1,300 and 103,000 Ω. (Approx. 59,000 Ω at room temp). (Insert meat probe into meat probe jack located inside the oven cavity prior to reading resistance.)</td> </tr> </table> <p>Measure any P3 connector pin to chassis. Resistance value should read "open". If it does not, replace sensor harness. Repeat step E. If the indicated temperature sensor does not meet these requirements, go to step F. If the temperature sensor does meet the requirements, go to step I.</p> <p>F. For MAIN, LOWER and WARM drawer sensors: Replace appropriate temperature sensor. Repeat step E. If the requirements are not met, replace sensor harness. Repeat step E. If the requirements are still not met, go to step G.</p> <p>For MEAT PROBE sensor: Replace meat probe sensor. Repeat step E. If the requirements are not met, replace sensor harness. Repeat step E. If the requirements are still not met, replace the meat probe jack. Repeat step E. If the meat probe sensor is still not meeting the requirements, go to step G.</p> <p>G. Replace the power board. Ensure all connectors are properly seated.</p> <p>H. Ensure all wiring connections are made. Replace the back panels.</p> <p>I. Plug in range or reconnect power. Observe for longer than 1 minute.</p> <p>J. Initiate a bake cycle. Let the cycle run at least 1 minute. If no error returns, cancel the cycle. The problem has been repaired. If the error occurs again, restart the troubleshooting procedure at step A.</p>			Main Oven Sensor	Between 931 and 2869 Ω. (Approx. 1080 Ω at room temp).	Lower Oven Sensor	Between 931 and 2869 Ω. (Approx. 1080 Ω at room temp).	Warm Drawer Sensor	Between 1,500 and 319,000 Ω. (Approx. 119,420 Ω at room temp).	Meat Probe Sensor	Between 1,300 and 103,000 Ω. (Approx. 59,000 Ω at room temp). (Insert meat probe into meat probe jack located inside the oven cavity prior to reading resistance.)
Main Oven Sensor	Between 931 and 2869 Ω. (Approx. 1080 Ω at room temp).									
Lower Oven Sensor	Between 931 and 2869 Ω. (Approx. 1080 Ω at room temp).									
Warm Drawer Sensor	Between 1,500 and 319,000 Ω. (Approx. 119,420 Ω at room temp).									
Meat Probe Sensor	Between 1,300 and 103,000 Ω. (Approx. 59,000 Ω at room temp). (Insert meat probe into meat probe jack located inside the oven cavity prior to reading resistance.)									

FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	MESSAGE/DESCRIPTION
		SUGGESTED CORRECTIVE ACTION PROCEDURE
<b>F4</b>	<b>E2</b>	OVER TEMP COOK
	<b>E3</b>	OVER TEMP CLEAN
	<b>E7</b>	OVER TEMP CAVITY 2 (temperature runaway error)
<p><b>PROCEDURE:</b> Before proceeding, perform steps 1 through 3 above chart on page 6-3 to enter the Diagnostic mode.</p> <p>A. Press the BAKE key to cycle the bake relay on and off. If the bake relay does not turn on and off, go to step F. If the element or gas valve does not cycle with the relay, go to step D. If the element or gas valve did cycle on and off, go to step B.</p> <p>B. Press the BROIL key to cycle the broil relay on and off. If the broil relay does not turn on and off, go to step F. If the element or gas valve does not cycle with the relay, go to step D. If the element or gas valve did cycle on and off, go to step C.</p> <p>C. Press the CONVECT BAKE key to cycle the convect bake relay on and off. If the convect bake relay does not turn on and off, go to step F. If the element does not cycle with the relay, go to step D. If the element did cycle on and off, go to step D.</p> <p>D. Unplug range or disconnect power.</p> <p>E. Check integrity of all harness wires and connections between the power board and the electric elements. Ensure no shorted wires to cabinet.</p> <p><b>GAS MODELS:</b> Ensure all wiring and connections between the control and spark module, spark module and bake / broil gas valve are good. If the wiring is good, go to step K.</p> <p><b>ELECTRIC MODELS:</b> Ensure all wiring and connections between the power board and elements, and the power board and the display board are good. If the wiring connections are not intact, go to step J. If the wiring is good, go to step I.</p> <p>F. Unplug range or disconnect power.</p> <p>G. Replace the power board. Go to step P.</p> <p>H. Unplug range or disconnect power. I. Replace the display. Go to step P. J. Replace the harness. Go to step P. K. Replace spark module. L. Plug in range or reconnect power.</p> <p>M. Enter the Diagnostic mode described in steps 1-3 above chart on page 6-3. Press the BAKE key or the BROIL key to turn the bake or broil gas valve on and off. If the bake or broil valves will not turn off, go to step N. If the bake or broil valves will not turn off after being replaced, go to step H. If the bake or broil valves do turn off, go to step P.</p> <p>N. Unplug range or disconnect power.</p> <p>O. Replace the bake / broil gas valve. Go to step L.</p> <p>P. Plug in range or reconnect power.</p>		

FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	MESSAGE/DESCRIPTION
SUGGESTED CORRECTIVE ACTION PROCEDURE		
F5 Inputs	E0	DOOR LATCH MSMATCH or DOOR LATCH MISMATCH (Door and latch switches do not agree.)
	E1	NO OPERATING LATCH or LATCH NOT OPERATING
	E2	DOOR SWITCH FAULT
	E4	LATCH SWITCH FAULT
	E7	UNLOCK DOOR ERROR or CAN NOT UNLOCK DOOR
<p><b>PROCEDURE:</b> Before proceeding, perform steps 1 through 3 above chart on page 6-3 to enter the Diagnostic mode.</p> <p>TO VERIFY DOOR SWITCH:</p> <p>A. While in Diagnostics, open the oven door. "1" should appear in the second clock digit from the left. Close the oven door. The clock digit should toggle to "0". If the digit did not toggle, go to step B. If the digit did not toggle after replacing the door switch, go to step D. If the digit did not toggle after replacing the door switch harness, go to step F. If the digit did toggle, door switch is operating correctly.</p> <p>B. Unplug range or disconnect power.</p> <p>C. Replace door switch. (If door switch is integral to the door latch motor assembly, replace the entire door latch motor assembly). Go to step H.</p> <p>D. Unplug range or disconnect power.</p> <p>E. Check integrity of all harness wires and connections between the power board and the door switch. Ensure no shorted wires to cabinet. If the wiring is bad, replace the door switch harness. Go to step H. If the wiring is good, go to step H.</p> <p>F. Unplug range or disconnect power.</p> <p>G. Replace power board. Go to step H.</p> <p>H. Plug in range or reconnect power.</p> <p>I. Enter the Diagnostic mode described in steps 1-3 above chart on page 6-3. Repeat step A.</p> <p>TO VERIFY DOOR LATCH SWITCH / MOTOR ASSEMBLY:</p> <p>A. While in Diagnostic mode, press the CLEAN key to cycle the latch motor to the locked position. 1 should appear in the first clock digit from the left when locked. Press the CLEAN key to cycle the latch motor to the unlocked position. The clock digit should toggle to "0". If the digit did not toggle, go to step B. If motor runs continuously, wait until motor reaches the unlocked position, open the door. Press the CANCEL key, go to step B. If motor did not run, go to step H. If the digit did not toggle after replacing the door latch motor assembly, go to step D. If the digit did not toggle after replacing the door latch switch harness, go to step F. If the digit did toggle, door latch switch is operating correctly.</p> <p>B. Unplug range or disconnect power.</p> <p>C. Replace door latch motor assembly. Go to step K.</p> <p>D. Unplug range or disconnect power.</p> <p>E. Check integrity of all harness wires and connections between the power board and the door latch switch. Ensure no shorted wires to cabinet. If the wiring is bad, replace the door latch switch harness. Go to step K. If the wiring is good, go to step K.</p> <p>F. Unplug range or disconnect power.</p> <p>G. Replace power board. Go to step K.</p> <p>H. Unplug range or disconnect power.</p> <p>I. Check integrity of latch mechanism from cam / eccentric through actuating rod, to latch pawl and door slot. Ensure that pawl aligns with the door slot. Correct any mechanical malfunction.</p> <p>J. Check continuity of the latch motor and of electrical connections between power board P4 and motor. If continuity is present, replace power board. Go to step K.</p> <p>K. Plug in range or reconnect power.</p> <p>L. Enter the Diagnostic mode described in steps 1-3 above chart on page 6-3. Repeat step A.</p>		

FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	MESSAGE/DESCRIPTION
SUGGESTED CORRECTIVE ACTION PROCEDURE		
F6 Systems	E4	LOST COMMUNICATION
<p><b>PROCEDURE:</b> Before proceeding, perform steps 1 through 3 above chart on page 6-3 to enter the Diagnostic mode.</p> <p>A. Unplug range or disconnect power.</p> <p>B. Open the back panels and make sure the P2 connector is fully plugged in on the power board and on the display board. If it is not, plug it in to the connector and go to step F. If it is plugged in, go to step C.</p> <p>C. Visually inspect all the four wires between P2 on the power board and P2 on the display board. Make sure the wires are not cut or pinched. If the wires appear to be intact, perform a continuity check between pin 4 of the power board and pin 4 of the display board. Do the same for pins 1, 2, &amp; 5. Both of these checks should result in a reading of less than 5. If either of these checks fail, go to step E. If these checks pass, reconnect P2, then go to step D.</p> <p>D. Replace the power board. Ensure all connectors are properly seated and then go to step F.</p> <p>E. Replace the wiring harness (signal) and go to step F.</p> <p>F. Ensure all wiring connections are made. Replace the back panels.</p> <p>G. Plug in range or reconnect power. Observe for longer than 1 minute.</p> <p>H. If error does not appear, initiate a bake cycle. Let the cycle run at least 1 minute. If no error occurs, cancel the cycle. The problem has been repaired. If the error occurs again, restart the troubleshooting procedure at step A (except in step D replace the display board if power board has already been replaced).</p>		
F6 Systems	E5	CANCEL KEY ERROR
<p><b>PROCEDURE:</b> If step 2 above chart on page 6-3 has not been performed, perform steps 2 and 3 to verify error. If error persists, replace the display board.</p>		

# TROUBLESHOOTING

## HIDDEN EOC FUNCTIONS

The user activates all hidden EOC functions by pressing and holding the appropriate key for 5 seconds. The chart shows the hidden functions or features.

HIDDEN FUNCTIONS	KEY
Temperature calibration offset	Bake
°F to °C	Broil
Recall last failure code	Off/Cancel
Disable/enable cycle end audible signal	Cook Time
Disable/enable reminder signal	Timer Set
Disable/enable valid data entry signals	Stop Time

## TEMPERATURE ADJUSTMENT

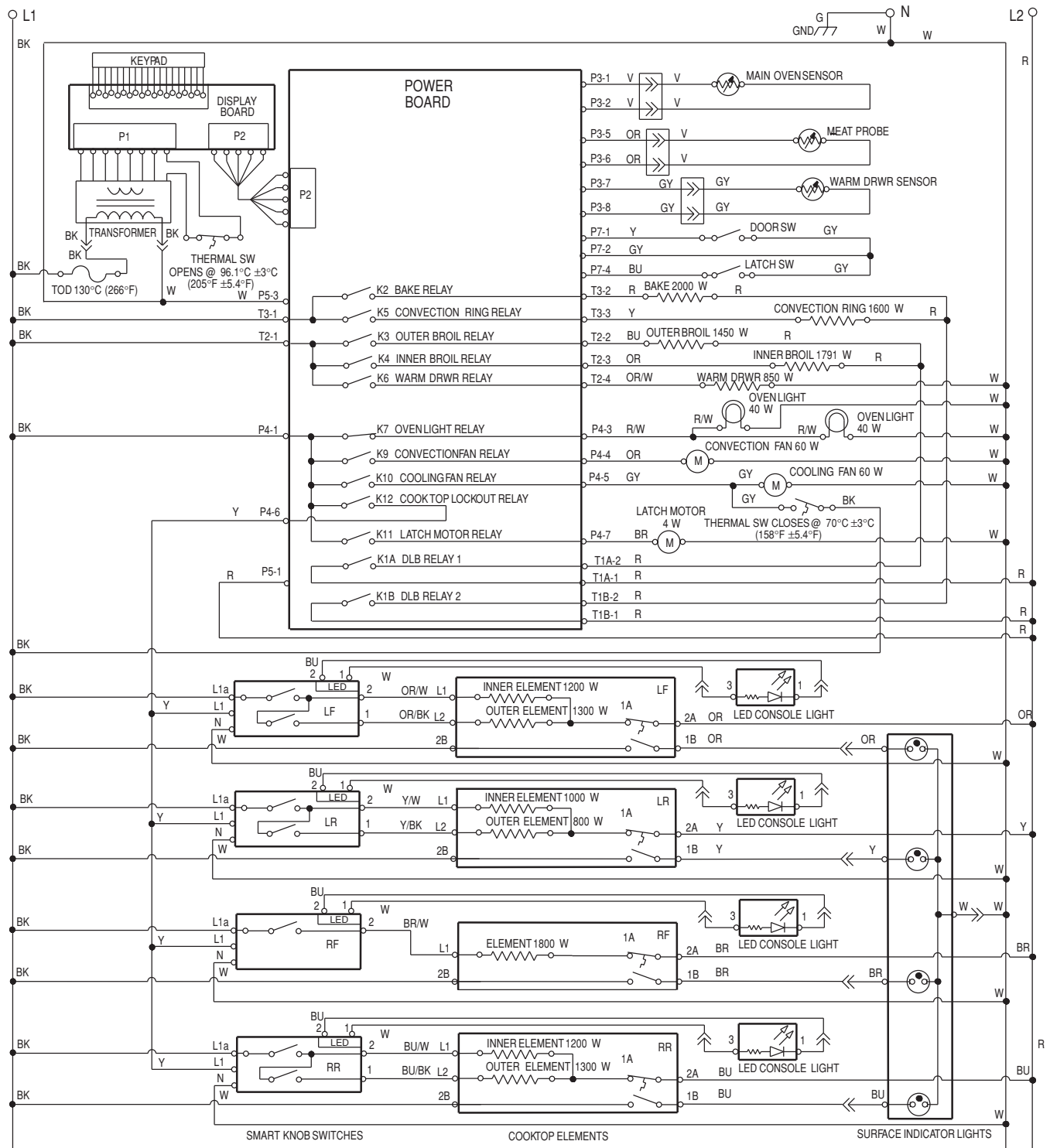
1. Press and hold the BAKE keypad for five (5) seconds. The current offset, if any, will be shown in the 3-digit display. CAL is shown in the 4-digit display (3 digits on right).
2. Pressing the TEMP keypad “up” arrow (▲) adjusts the temperature in 5.6°C (10°F) increments in the following sequence: Celsius: 0°, 5.6°, 11.1°, 16.7°, -16.7°, -11.1°, -5.6°, 0°, (Fahrenheit: 0°, 10°, 20°, 30°, -30°, -20°, -10°, 0°), and so on.
3. Press the START/ENTER keypad to activate the desired temperature adjustment. If the START/ENTER keypad is not pressed within 5 minutes, the adjustment is ignored.
4. BAKE temperature adjustment cannot result in operating temperatures higher than 274°C (525°F), or lower than 77°C, (170°F), as measured at oven cavity center.
5. Once the BAKE temperature has been adjusted, BROIL temperatures are automatically offset to the same degree.
6. The CLEAN temperature is also offset automatically when the BAKE temperature is adjusted. If the BAKE temperature has been raised, the CLEAN temperature is offset +3°C (+5°F). If the BAKE temperature has been lowered, the CLEAN temperature is offset -3°C (-5°F).



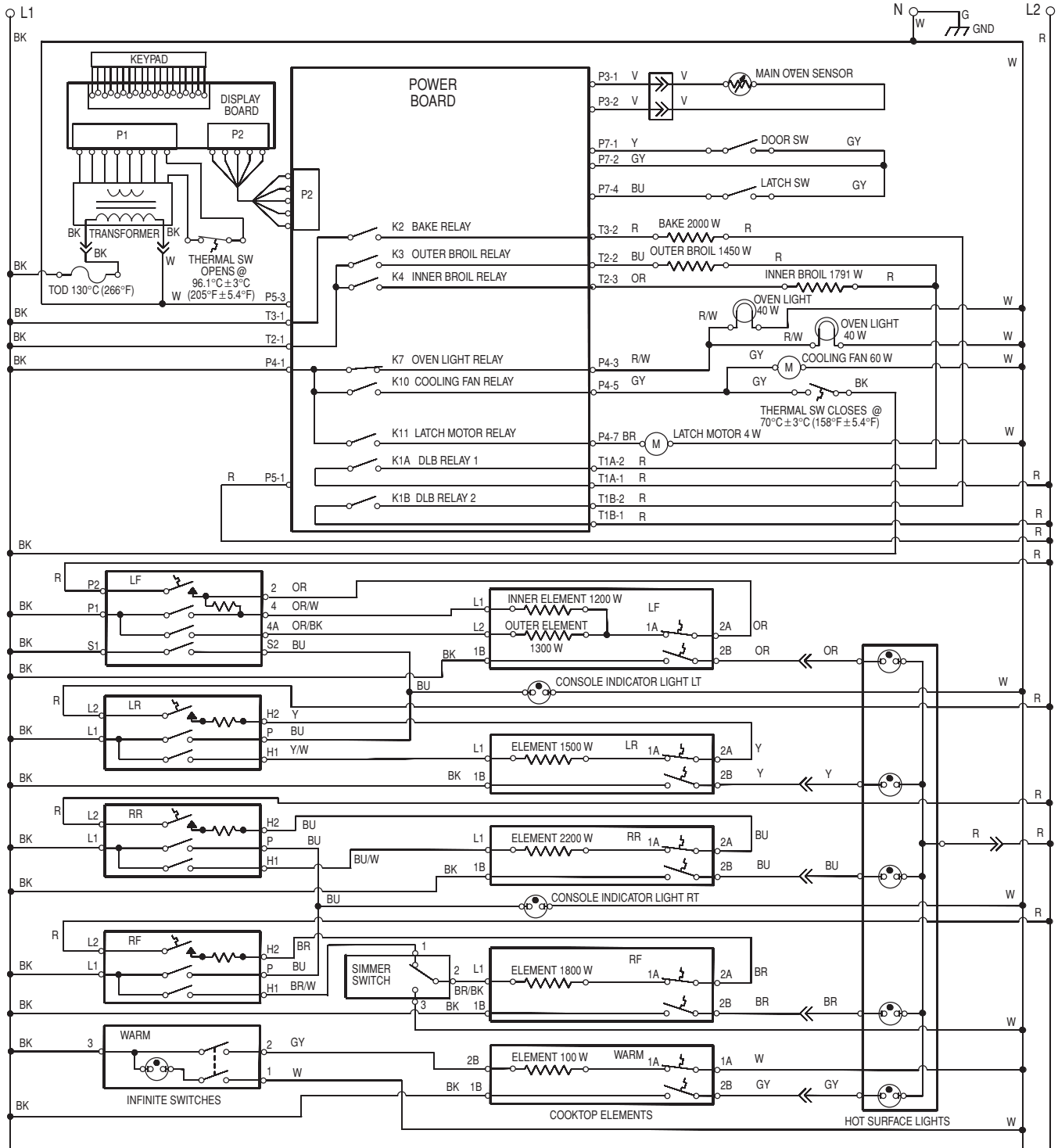
# WIRING DIAGRAMS & STRIP CIRCUITS

## WIRING DIAGRAMS

TECH SHEET #9757662

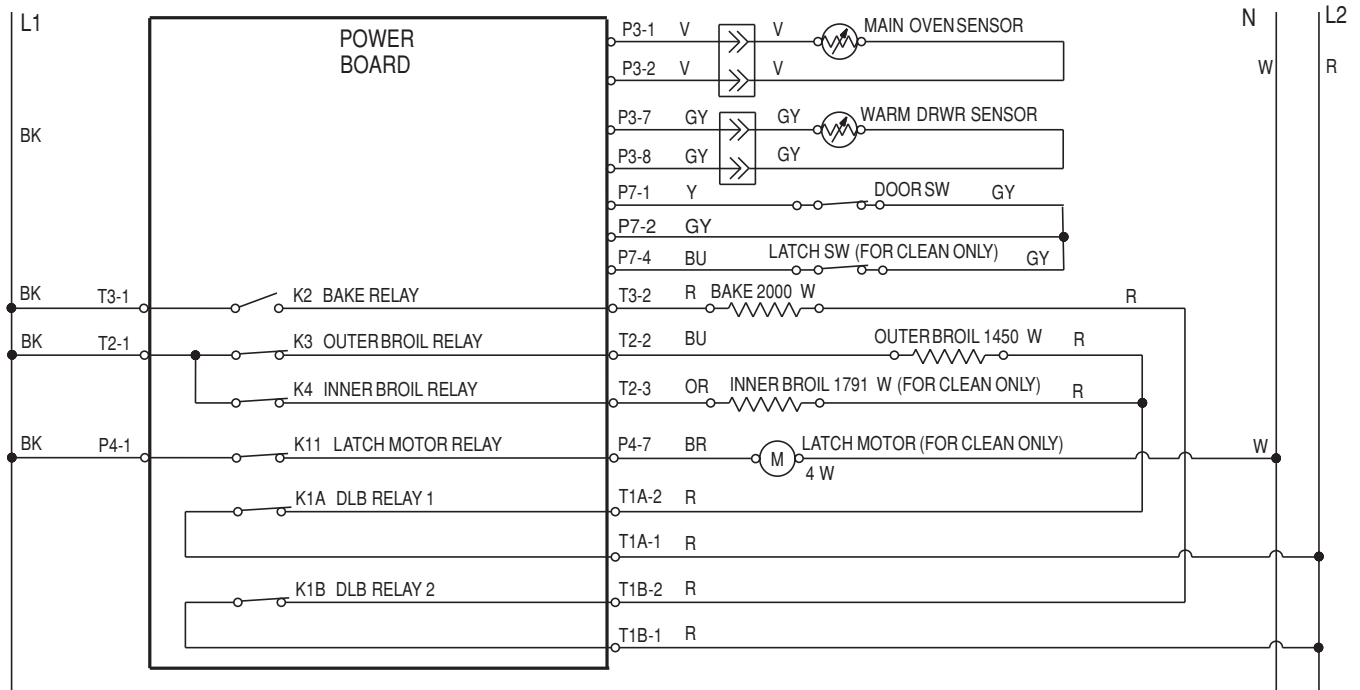


# TECH SHEET #9757663

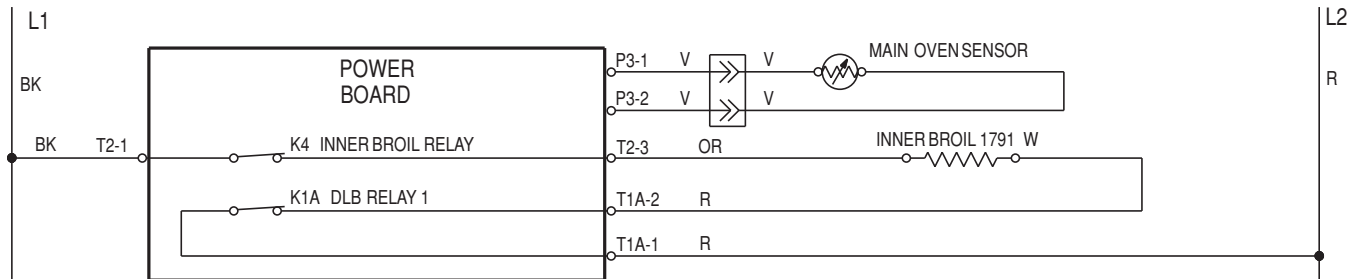


# STRIP CIRCUITS

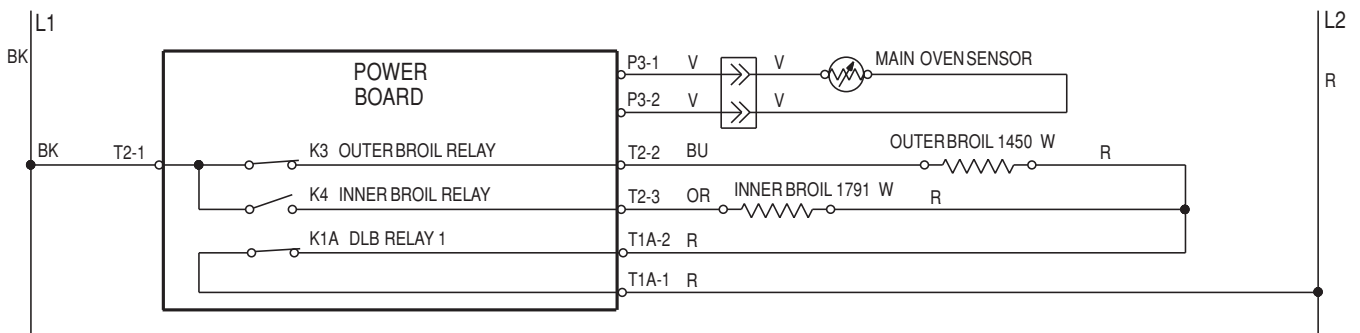
## CLEAN (Bake and inner and outer broil relays cycle)



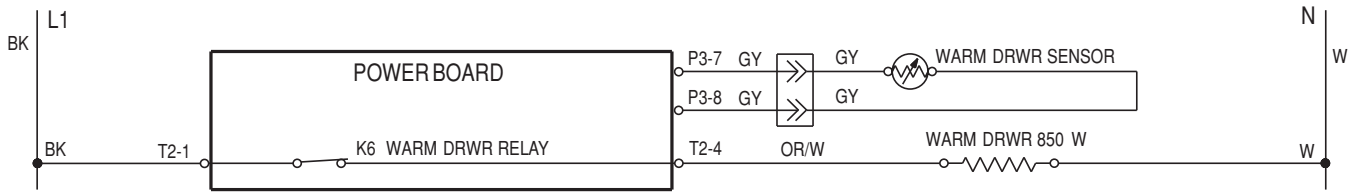
## ECONO BROIL



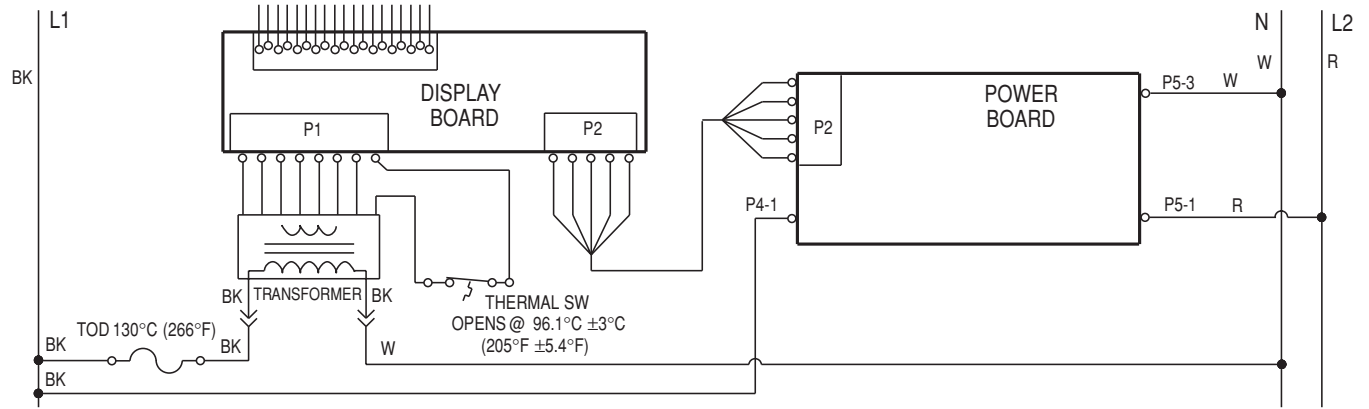
## MAXI BROIL (Inner and outer broil relays cycle)



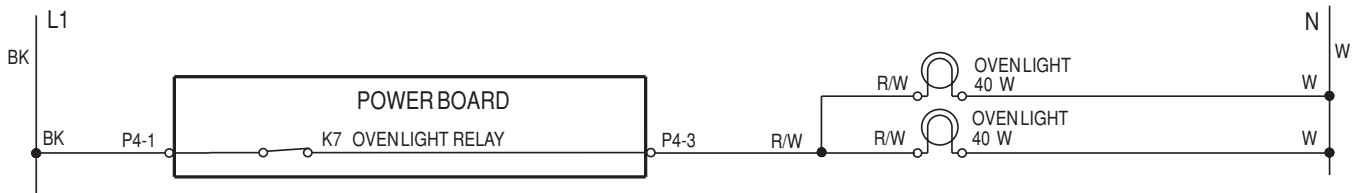
## WARMING DRAWER



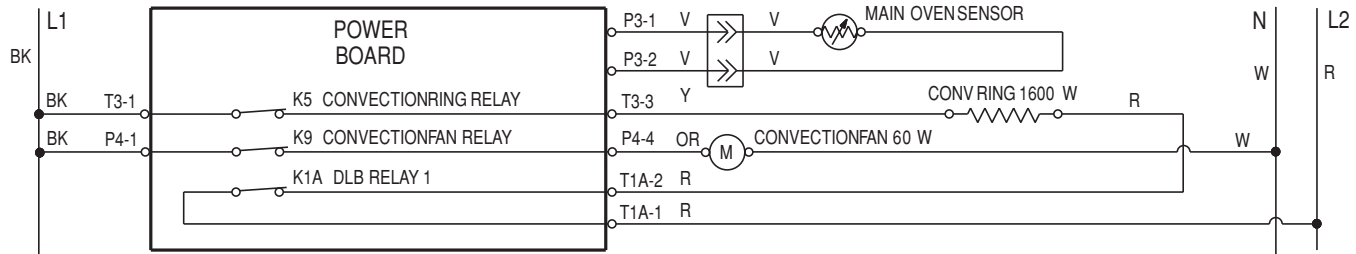
## CONTROL POWER/CLOCK



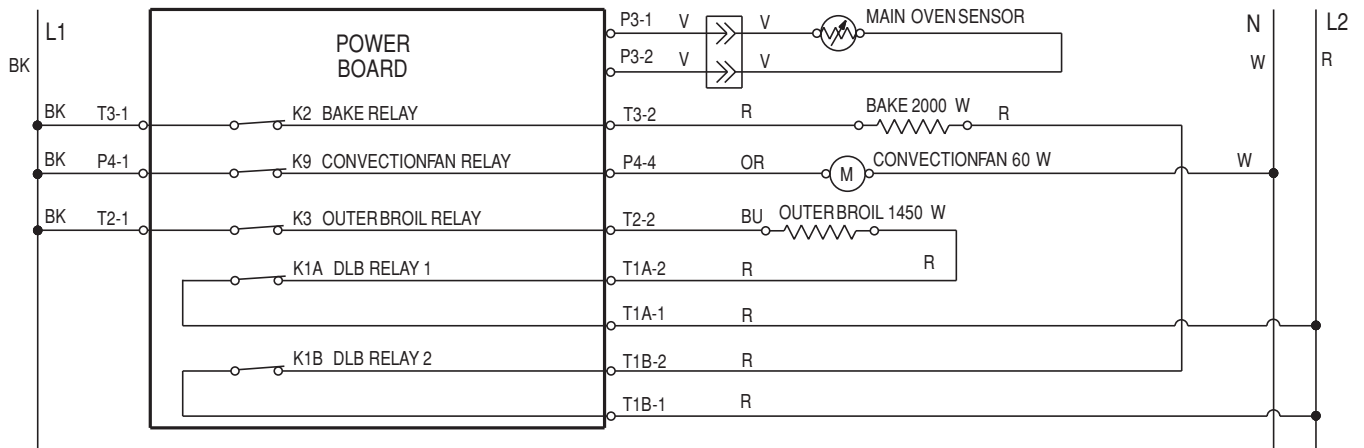
## CONSOLE/OVEN LIGHTS



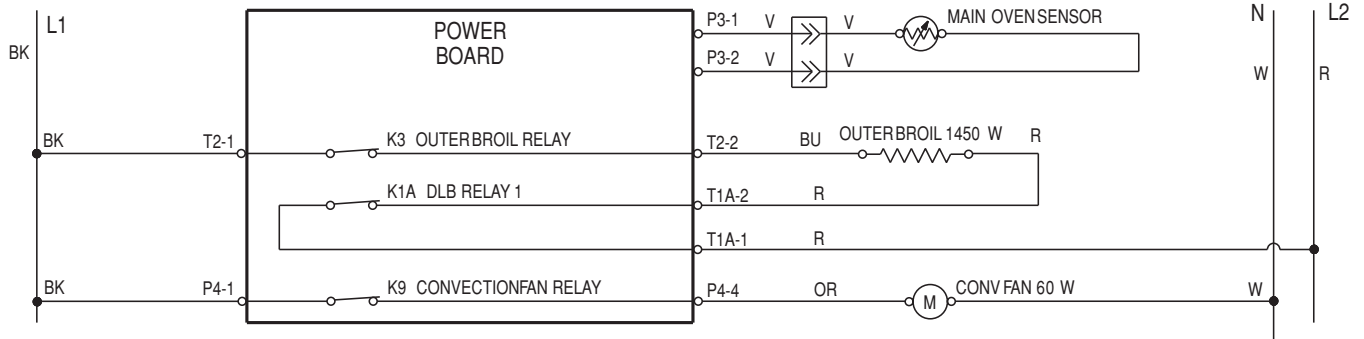
## CONVECTION BAKE



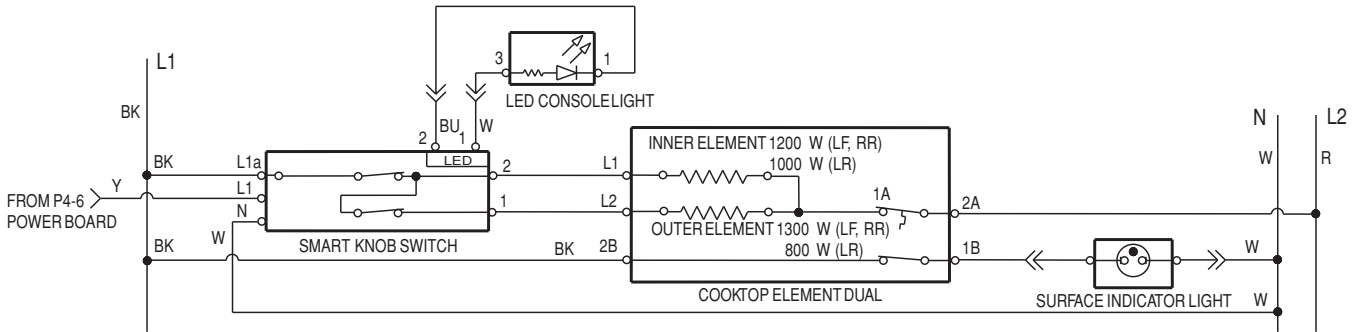
## CONVECTION ROAST



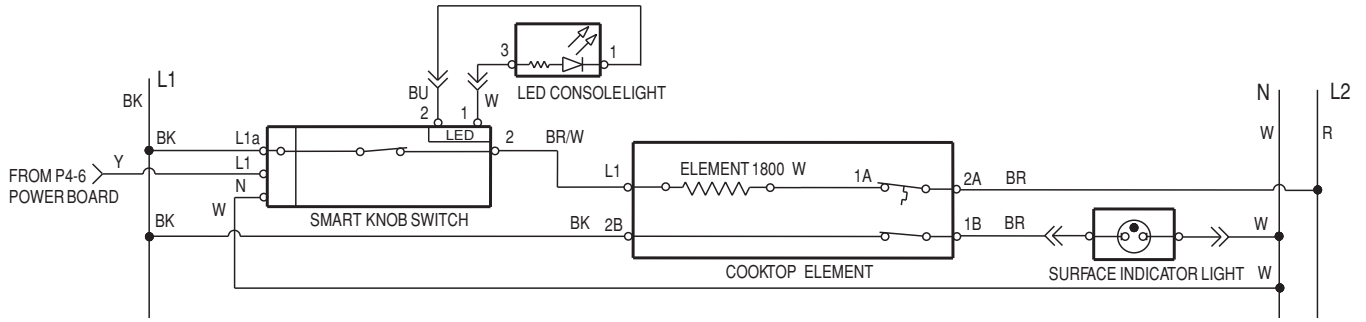
## CONVECTION BROIL



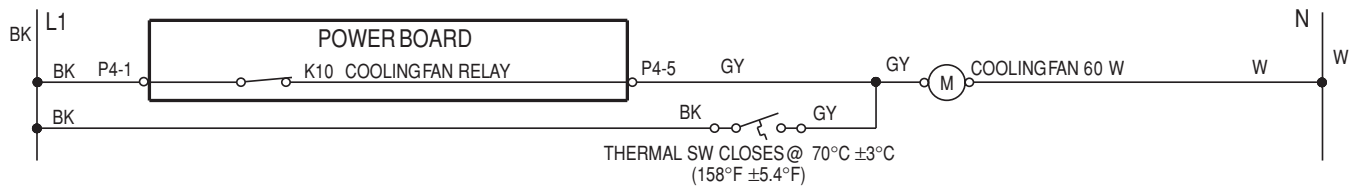
## SURFACE ELEMENT (DUAL) TYPICAL



# SURFACE ELEMENT (SINGLE)

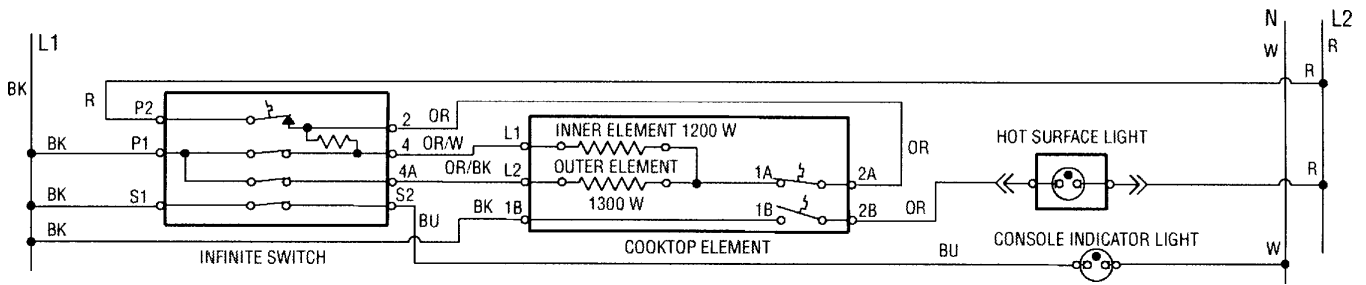


# COOLING FAN

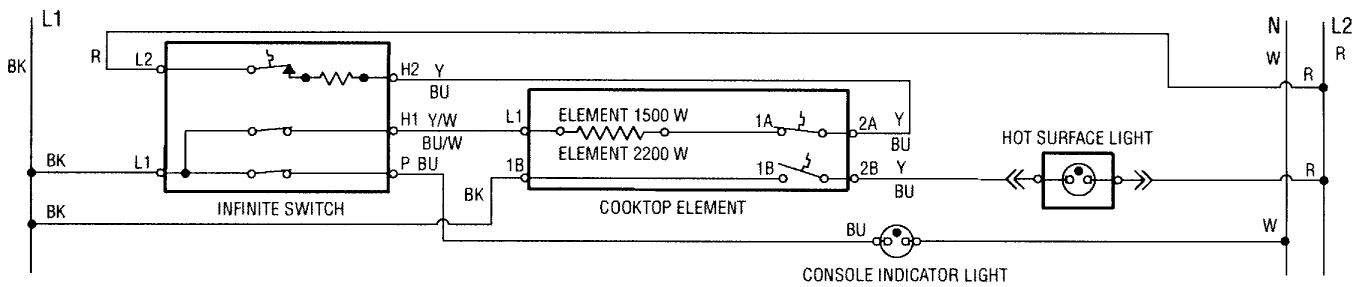


# TECH SHEET #9757663 ONLY

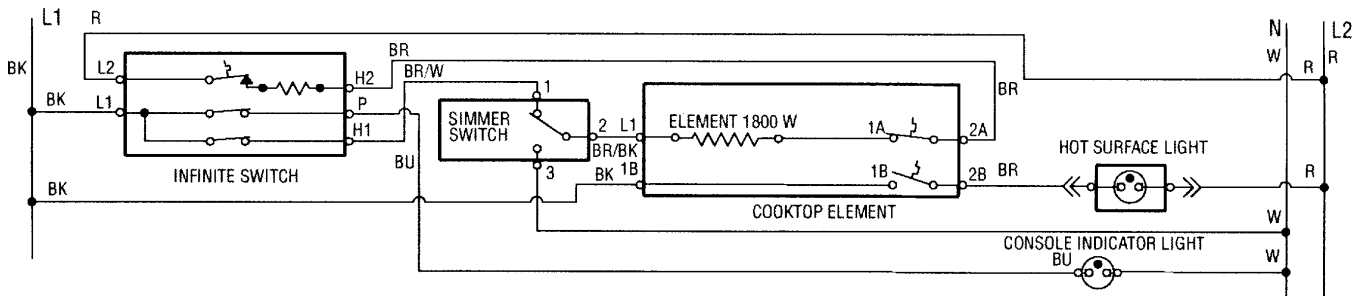
## SURFACE ELEMENT (DUAL)



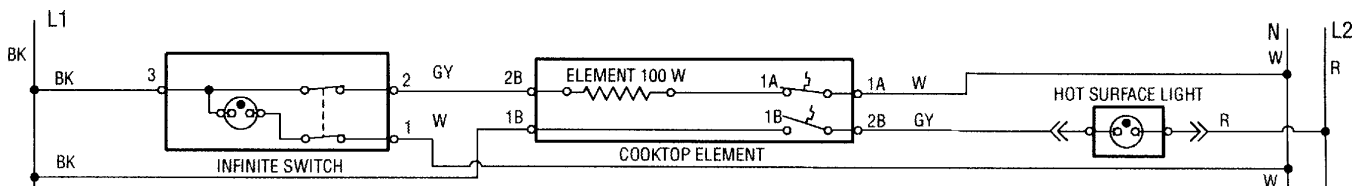
## SURFACE ELEMENT (SINGLE) TYPICAL



## SURFACE ELEMENT (ACCUSIMMER)



## SURFACE ELEMENT (WARM)



— NOTES —



— NOTES —

— NOTES —

# **PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION SOURCES**

***IN THE UNITED STATES:***

**FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION CALL:**

FOR WHIRLPOOL PRODUCTS: 1-800-253-1301  
FOR KITCHENAID PRODUCTS: 1-800-422-1230  
FOR ROPER PRODUCTS: 1-800-447-6737

**FOR TECHNICAL ASSISTANCE WHILE AT THE CUSTOMER'S HOME CALL:**

THE TECHNICAL ASSISTANCE LINE: 1-800-253-2870

**HAVE YOUR STORE NUMBER READY TO IDENTIFY YOU AS AN  
AUTHORIZED SERVICER**

**FOR LITERATURE ORDERS:**

PHONE: 1-800-851-4605

**FOR TECHNICAL INFORMATION AND SERVICE POINTERS:**

[www.servicematters.com](http://www.servicematters.com)

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***IN CANADA:***

**FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION CALL:**

1-800-461-5681

**FOR TECHNICAL ASSISTANCE WHILE AT THE CUSTOMER'S HOME CALL:**

THE TECHNICAL ASSISTANCE LINE: 1-800-488-4791

**HAVE YOUR STORE NUMBER READY TO IDENTIFY YOU AS AN  
AUTHORIZED SERVICER**

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