

KitchenAid

TECHNICAL EDUCATION

SELF-CLEANING SLIDE-IN/FREESTANDING GAS RANGES



Freestanding Models: KGRA806P & KGRI801P
Slide-In Models: KGSA906P & KGS1901P

FORWARD

This KitchenAid Job Aid, “Self-Cleaning Slide-In/Freestanding Gas Ranges,” (Part #4317367), provides the technician with information on the installation, operation, and service of Self-Cleaning Slide-In/Freestanding Gas 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 gas 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 Gas 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

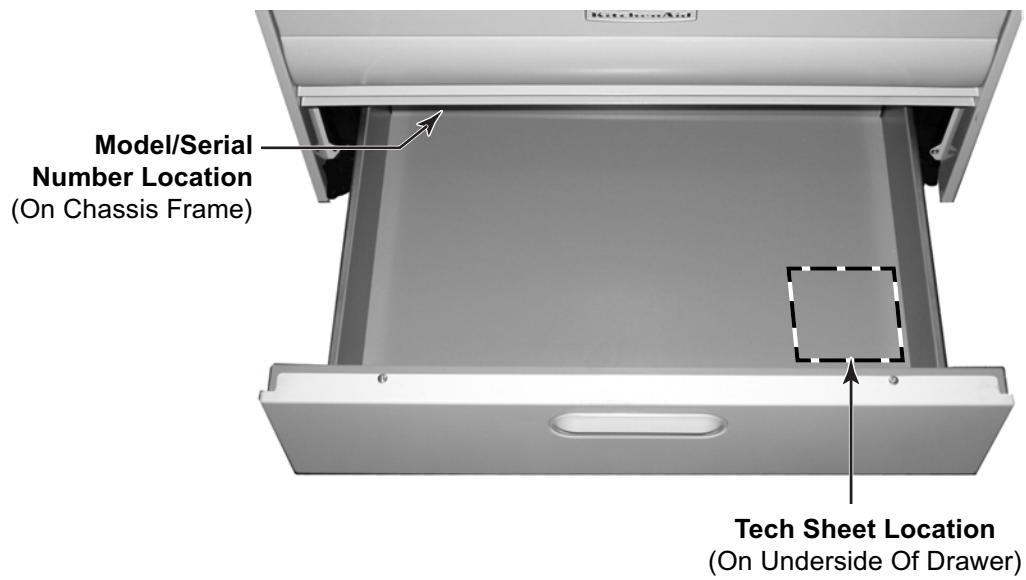
MODEL NUMBER	K	GS	A	90	6	P	WH	0
PRODUCT GROUP K = KITCHENAID								
PRODUCT IDENTIFICATION DR = DUAL FUEL RANGE DS = DUAL FUEL SLIDE-IN RANGE ER = ELECTRIC STANDARD RANGE ES = ELECTRIC SLIDE-IN RANGE GR = GAS STANDARD RANGE GS = GAS SLIDE-IN RANGE								
MERCHANDISING SCHEME A = ARCHITECT C = CONTRACT / ADVERTISING I = STANDARD K/L = SEARS MODELS P = COMMERCIAL STYLE V = VBL PRO LINE STYLE								
CAPACITY / SIZE / SERIES / CONFIGURATION 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								
FEATURES 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								
YEAR OF INTRODUCTION P - 2004, R = 2005								
COLOR CODE BL = BLACK, WH = WHITE, BT = BISCUIT, BS = BLACK ON STAINLESS, SS = BRUSHED STAINLESS STEEL								
ENGINEERING CHANGE (NUMERIC)								

SERIAL NUMBER

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

MODEL & SERIAL NUMBER LABEL & TECH SHEET LOCATIONS

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



SPECIFICATIONS

Model Number	KGRI801P BL, BS, WH	KGSI901P BL, BS, WH,
Model Description		
Division Name	Oxford	Oxford
Dimensions/Specifications		
Weight		
Shipping Weight (lbs)	185	180
Ratings		
Electric Voltage/Phase/Frequency(Hz)	120 V	120 V
Circuit Amps	15	15
Exterior		
Main Oven Door	Black Painted Steel Over Glass	Black Painted Steel Over Glass
Broiler Stop	No	No
Control Panel Location	Front	Front
Control Knob Type, #, Fcn	Cooktop: Infinite Switch Round Domed Design, Bladeless, Skirtless	Cooktop: Infinite Switch Round Domed Design, Bladeless, Skirtless
Gas Burner Type	Sealed	Sealed
Gas Right Front Output (BTU)(Nat/LP)	6000 BTU/5000 BTU	6000 BTU/5000 BTU
Gas Left Front Output (BTU)(Nat/LP)	14000 BTU/13000 BTU	14000 BTU/13000 BTU
Gas Right Rear Output (BTU)(Nat/LP)	12500 BTU/10000 BTU	12500 BTU/10000 BTU
Gas Left Rear Output (BTU)(Nat/LP)	6000 BTU/5000 BTU	6000 BTU/5000 BTU
Gas Ignition Cooktop	Electronic	Electronic
Gas Valves Degrees	210 degrees	210 degrees
Oven Controls	Jabil GOC KitchenAid Premium	Jabil GOC KitchenAid Premium
Oven Display	Scrolling Text	Scrolling Text
Interior		
Main Oven		
Cooking System	Standard	Standard
Cleaning System	Self Cleaning - Timed	Self Cleaning - Timed
Auto Self Clean Latch	Yes - Motorized	Yes - Motorized
Oven Volume (cu ft)	Overall Capacity: 3.8; AHAM	Overall Capacity: 3.8; AHAM
Oven Ignition Type	Electronic	Electronic
Gas Broiler Type	Log Burner with 1200 W Halo Element	Log Burner with 1200 W Halo Element
Gas Bake Output (BTU) (Nat/LP)	16500 BTU/16500 BTU	16500 BTU/16500 BTU
Gas Broil Output (BTU) (Nat/LP)	10000 BTU/9000 BTU	10000 BTU/9000 BTU
Oven Lower Panel/ Door	Yes	Yes
Accessories		
Griddle	Yes	Yes
Griddle Part/Comment	4396096	4396096
LP Conversion Kit	Included	Included
LP Conversion Kit Part/Comment	9757426	9757426
Miscellaneous		
Product Literature		
Installation Instructions Part/Comment	9757447	9757447
Tech Sheet Part/Comment	9757666	9757666
Use & Care Guide Part/Comment	9757452, 9757457	9757452, 9757457
Service Manual	4317367	4317367
Agency Approvals	CSA	CSA
Anti-tip Device With Unit	Floor	Floor
Warranty		
Full	12 months	12 months
Extended		
Ceramic Glass Cooking Surface		
Electronic Controls	2nd through 5th year, parts	2nd through 5th year, parts
Electrical Elements	2nd through 5th year, parts	2nd through 5th year, parts
Porcelain Liner/Door	2nd through 10th year, parts	2nd through 10th year, parts
Sealed Gas Burners	2nd through 5th year, parts	2nd through 5th year, parts

Model Number	KGRA806P BL, BT, SS, WH	KGSA906P BL, BT, SS, WH
Model Description	True Convection with Easy Convect Conversion	Slide-In; True Convection with Easy Convect Conversion
Division Name	Oxford	Oxford
Dimensions/Specifications		
Weight		
Shipping Weight (lbs)	185	180
Ratings		
Electric Voltage/Phase/Frequency(Hz)	120 V	120 V
Circuit Amps	15	15
Exterior		
Main Oven Door	Black Painted Steel Over Glass	Black Painted Steel Over Glass
Broiler Stop	No	No
Control Panel Location	Front	Front
Control Knob Type, #, Fcn	Cooktop: Infinite Switch Round Domed Design, Bladeless, Skirtless	Cooktop: Infinite Switch Round Domed Design, Bladeless, Skirtless
Gas Burner Type	Sealed	Sealed
Gas Right Front Output (BTU)(Nat/LP)	6000 BTU/5000 BTU	6000 BTU/5000 BTU
Gas Left Front Output (BTU)(Nat/LP)	Triple Tier(TM): 15000 BTU/14000 BTU	Triple Tier(TM): 15000 BTU/14000 BTU
Gas Right Rear Output (BTU)(Nat/LP)	12500 BTU/10000 BTU	12500 BTU/10000 BTU
Gas Left Rear Output (BTU)(Nat/LP)	6000 BTU/5000 BTU	6000 BTU/5000 BTU
Gas Ignition Cooktop	Electronic	Electronic
Gas Valves Degrees	210 degrees	210 degrees
Oven Controls	Jabil GOC KitchenAid Premium	Jabil GOC KitchenAid Premium
Oven Display	Scrolling Text	Scrolling Text
Interior		
Main Oven		
Cooking System	True Convection	True Convection
Cleaning System	Self Cleaning - Soil Level & Timed	Self Cleaning - Soil Level & Timed
Auto Self Clean Latch	Yes - Motorized	Yes - Motorized
Oven Volume (cu ft)	Overall Capacity: 3.6; AHAM	Overall Capacity: 3.6; AHAM
Oven Ignition Type	Electronic	Electronic
Gas Broiler Type	Log Burner with 1200 W Halo Element	Log Burner with 1200 W Halo Element
Gas Bake Output (BTU) (Nat/LP)	16500 BTU/16500 BTU	16500 BTU/16500 BTU
Gas Broil Output (BTU) (Nat/LP)	10000 BTU/9000 BTU	10000 BTU/9000 BTU
Oven Lower Panel/ Door	Yes	Yes
Accessories		
Griddle	Yes	Yes
Griddle Part/Comment	4396096	4396096
LP Conversion Kit	2 Included	2 Included
LP Conversion Kit Part/Comment	9757426; Triple Tier(TM): 9757427	9757426; Triple Tier(TM): 9757427
Miscellaneous		
Product Literature		
Installation Instructions Part/Comment	9757447	9757447
Tech Sheet Part/Comment	9757665	9757665
Use & Care Guide Part/Comment	9757452, 9757457	9757452, 9757457
Service Manual	4317367	4317367
Agency Approvals	CSA	CSA
Anti-tip Device With Unit	Floor	Floor
Warranty		
Full	12 months	12 months
Extended		
Ceramic Glass Cooking Surface		
Electronic Controls	2nd through 5th year, parts	2nd through 5th year, parts
Electrical Elements	2nd through 5th year, parts	2nd through 5th year, parts
Porcelain Liner/Door	2nd through 10th year, parts	2nd through 10th year, parts
Sealed Gas Burners	2nd through 5th year, parts	2nd through 5th year, parts

Model Number	KGRK806P BL, BT, SS, WH
Model Description	True Convection with Easy Convection Conversion
Division Name	Oxford
Dimensions/Specifications	
Weight	
Shipping Weight (lbs)	185
Ratings	
Electric Voltage/Phase/Frequency(Hz)	120V
Circuit Amps	15
Exterior	
Main Oven Door	Black Painted Steel Over Glass
Broiler Stop	No
Control Panel Location	Front
Control Knob Type, #, Fcn	Cooktop: Infinite Switch Round Domed Design, Bladeless, Skirtless
Gas Burner Type	Sealed
Gas Right Front Output (BTU)(Nat/LP)	6000 BTU/5000 BTU
Gas Left Front Output (BTU)(Nat/LP)	Triple Tier(TM): 15000 BTU/14000 BTU
Gas Right Rear Output (BTU)(Nat/LP)	12500 BTU/10000 BTU
Gas Left Rear Output (BTU)(Nat/LP)	6000 BTU/5000 BTU
Gas Ignition Cooktop	Electronic
Gas Valves Degrees	210 degrees
Oven Controls	Jabil GOC KitchenAid Premium
Oven Display	Scrolling Text
Interior	
Main Oven	
Cooking System	True Convection
Cleaning System	Self Cleaning - Soil Level & Timed
Auto Self Clean Latch	Yes - Motorized
Oven Volume (cu ft)	Overall Capacity: 3.6; AHAM
Oven Ignition Type	Electronic
Gas Broiler Type	Log Burner with 1200 W Halo Element
Gas Bake Output (BTU) (Nat/LP)	16500 BTU/16500 BTU
Gas Broil Output (BTU) (Nat/LP)	10000 BTU/9000 BTU
Oven Lower Panel/ Door	Yes
Accessories	
Griddle	Yes - Included
Griddle Part/Comment	9755634
LP Conversion Kit	2 Included
LP Conversion Kit Part/Comment	9757426; Triple Tier(TM): 9757427
Miscellaneous	
Product Literature	
Installation Instructions Part/Comment	9757447
Tech Sheet Part/Comment	9757665
Use & Care Guide Part/Comment	9757452, 9757457
Service Manual	4317367
Agency Approvals	CSA
Anti-tip Device With Unit	Floor
Warranty	
Full	12 months
Extended	
Ceramic Glass Cooking Surface	
Electronic Controls	2nd through 5th year, parts
Electrical Elements	2nd through 5th year, parts
Porcelain Liner/Door	2nd through 10th year, parts
Sealed Gas Burners	2nd through 5th year, parts

KITCHENAID GAS RANGE WARRANTY

LENGTH OF WARRANTY	KITCHENAID WILL PAY FOR:
FULL ONE YEAR WARRANTY 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 service company.
SECOND THROUGH FIFTH YEAR LIMITED WARRANTY From Date of Purchase.	<p>On ceramic glass ranges and ceramic glass cooktops, when this appliance is operated and maintained according to instructions attached to or furnished with the product, KitchenAid will pay for factory-specified parts and repair labor for the ceramic glass cooktop. KitchenAid warrants that the ceramic glass cooktop will not discolor, the cooktop pattern will not wear off, the rubber seal between the ceramic glass cooktop and porcelain edge will not crack, and the ceramic glass cooktop will not crack due to thermal shock.</p> <p>On gas ranges and gas cooktops, KitchenAid will pay for factory-specified parts and repair labor for any gas burner to correct defects in materials or workmanship. Service must be provided by a KitchenAid-designated service company.</p>
SECOND THROUGH TENTH YEAR LIMITED WARRANTY 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 "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**

— NOTES —

INSTALLATION INFORMATION

GAS SUPPLY REQUIREMENTS

!WARNING



Explosion Hazard

Use a new AGA or CSA approved gas supply line.

Install a shutoff valve.

Securely tighten all gas connections.

If connected to L.P. gas, have a qualified person make sure gas pressure does not exceed 14" water column.

Examples of a qualified person include licensed heating personnel, authorized gas company personnel, and authorized service personnel.

Failure to do so can result in death, explosion, or fire.

Observe all governing codes and ordinances.

IMPORTANT: Range must be connected to a regulated gas supply.

1. This installation must conform with local codes and ordinances. In the absence of local codes, installations must conform with American National Standard, National Fuel Gas Code ANSI Z223.1—latest edition* or CANI-B149—latest edition** installation codes.

Copies of the standards listed may be obtained from:

* American Gas Association
1515 Wilson Boulevard
Arlington, Virginia 22209

** CSA International
8501 East Pleasant Valley Road
Cleveland, Ohio 44131-5575

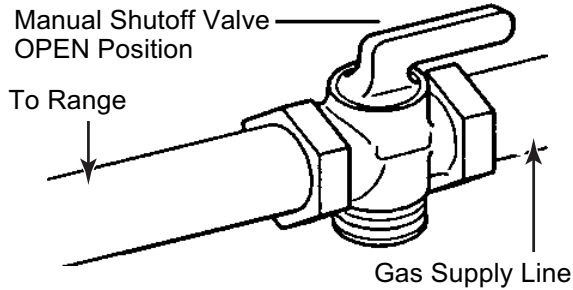
2. Input ratings shown on the model/serial rating plate are for elevations up to 2,000 feet (609.6 m). For elevations above 2,000 feet (609.6 m), ratings are reduced at a rate of 4% for each 1,000 feet (304.8 m) above sea level. (Not applicable for Canada.)
3. This range is equipped for use with Natural gas. It is design-certified by AGA/CSA for Natural and L.P. gas with appropriate conversion. Conversion to L.P. gas can be made using the kit included in the literature package. The model/serial rating plate has information on the type of gas that can be used. If this information does not agree with the type of gas available, check with your KitchenAid dealer.
4. Provide a gas supply line of 3/4" (1.9 cm) rigid pipe to the range location. A smaller size pipe on long runs may result in insufficient gas supply. Pipe-joint compounds appropriate for use with L.P. gas must be used. With L.P. gas, piping or tubing size can be 1/2" (1.3 cm) minimum. L.P. gas suppliers usually determine the size and materials used on the system.
5. If local codes permit, a new AGA/CSA design-certified, 4-5 foot (122 -152.4 cm) long, 1/2" (1.3 cm) or 3/4" (1.9 cm) I.D., flexible metal appliance connector is recommended for connecting this range to the gas supply line. Do Not kink or damage the flexible tubing when moving the range. A 1/2" (1.3 cm) male pipe thread is needed for connection to pressure regulator female pipe threads.



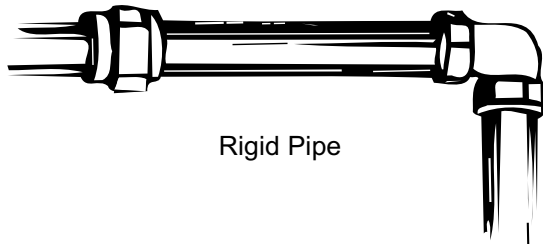
Flexible Gas Supply Line

Continued on the next page.

- The supply line shall be equipped with an approved shutoff valve. This valve should be located in the same room, but external to the range, and should be in a location that allows ease of opening and closing. Do Not block access to shutoff valve.



- If rigid pipe is used as a gas supply line, a combination of pipe fittings must be used to obtain an in-line connection to the range. All strains must be removed from the supply and fuel lines so the range will be level and in line.



- The regulator setting must be checked at a minimum of 1 inch water column above the manifold pressure. The inlet pressure to the regulator should be as follows for operation:

Natural gas:

- Manifold pressure—5 inches
- Maximum pressure—14 inches

L.P. gas:

- Manifold pressure—10 inches
- Maximum pressure—14 inches

- Line pressure testing:**

Testing above 1/2 psi (gauge)

The range and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures greater than 1/2 psig (3.5 kPa).

Testing at 1/2 psi (gauge) or lower

The range must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

ELECTRICAL REQUIREMENTS

⚠ WARNING



Electrical Shock Hazard

Plug into a grounded 3 prong outlet.

Do not remove ground prong.

Do not use an adapter.

Do not use an extension cord.

Failure to follow these instructions can result in death, fire, or electrical shock.

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 ground to a gas pipe.

Check with a qualified electrician if you are not sure range is grounded.

Do Not have a fuse in the neutral or ground circuit.

A 120-volt, 60-Hz, AC-only, 15-ampere, fused electrical circuit is required. A time-delay fuse or circuit breaker is recommended. It is recommended that a separate circuit serving only this range be provided.

Electronic ignition systems operate within wide voltage limits, but proper grounding and polarity are necessary. In addition to checking that the outlet provides 120-volt power and is correctly grounded, the outlet must be checked by a qualified electrician to see if it is wired with correct polarity.

NOTE: The metal chassis of the range **MUST** be grounded in order for the control panel to work. If the metal chassis of the range is not grounded, **NO** keypads will operate. Check with a qualified electrician if you are in doubt as to whether the metal chassis of the range is grounded.

Recommended ground method

For personal safety, this range is equipped with a power supply cord having a 3-prong ground plug. To minimize possible shock hazard, the cord must be plugged into a mating 3-prong, ground-type outlet, grounded in accordance with the National Electrical Code, ANSI/NFPA 70—latest edition* or CSA Standard C22.1, Canadian Electrical Code, Part 1,—latest edition** and all local codes and ordinances. If a mating outlet is not available, it is the personal responsibility and obligation of the customer to have a properly grounded, 3-prong outlet installed by a qualified electrician.

Copies of the standards listed may be obtained from:

* National Fire Protection Association
Batterymarch Park
Quincy, Massachusetts, 02269

** CSA International
8501 East Pleasant Valley Road
Cleveland, Ohio 44131-5575

L.P. GAS CONVERSION

⚠️ 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.

⚠️ WARNING



Fire Hazard

Shut off gas supply line valve.

Make all conversions before turning gas supply valve back on.

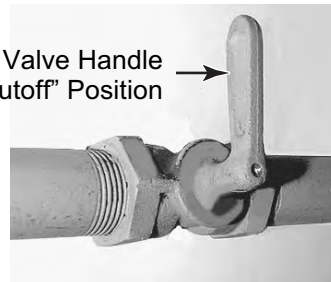
Failure to follow these instructions could result in explosion, fire, or other injury.

NOTE: Gas conversion from Natural to L.P. gas must be done by a qualified installer. Examples of a qualified installer include licensed heating personnel, authorized gas company personnel, and authorized service personnel.

L.P. gas must not be used unless the L.P. conversion has been made using the kit that is included with this range. See the “Gas Supply Requirements” starting on page 2-1.

1. Check to make sure that the main gas supply line to the range has been shut off, and that the power supply cord is disconnected from the AC outlet.

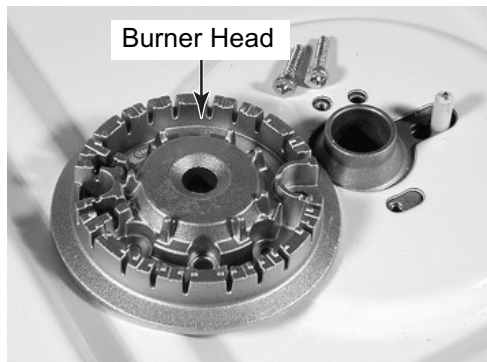
Gas Valve Handle
To “Shutoff” Position



2. To convert the surface burners for use with L.P. gas:

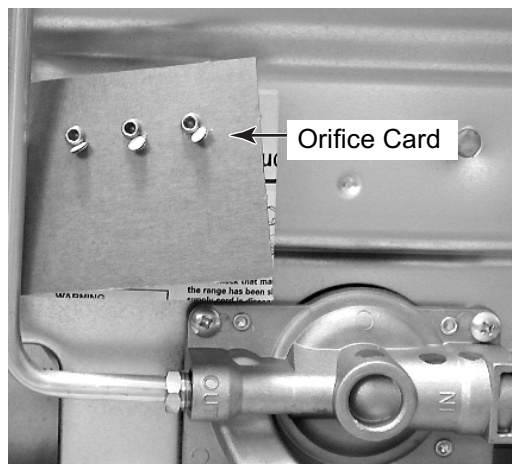
- a) Remove the grates and burner caps from the cooktop.
- b) Remove the two screws from each of the burner heads and lift the heads off the cooktop.

Burner Head



NOTE: The L.P. orifices are fastened to the back of the range near the bottom on a cardboard form.

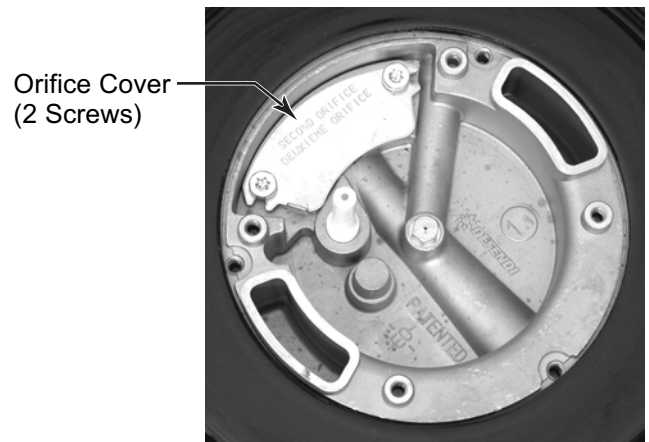
Orifice Card



c) Use an 8 mm socket and carefully remove the orifice spud from each of the three standard surface burners.

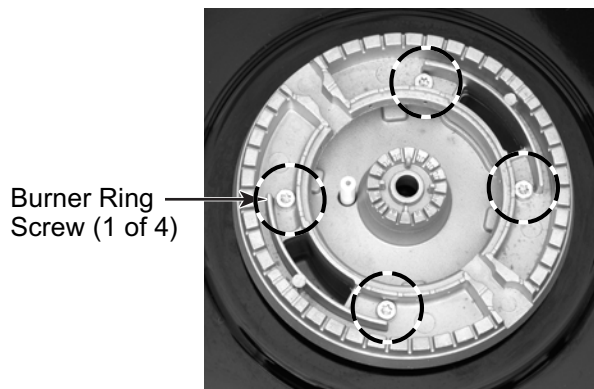


d) Remove the two T-20 torx screws from the orifice cover and remove the cover.

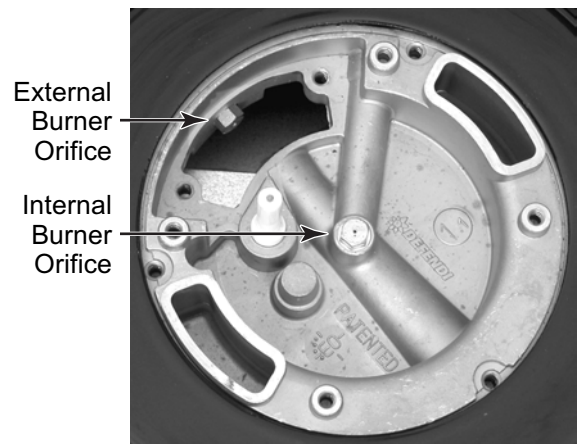


3. To convert the TripleTier™ Crown burner:

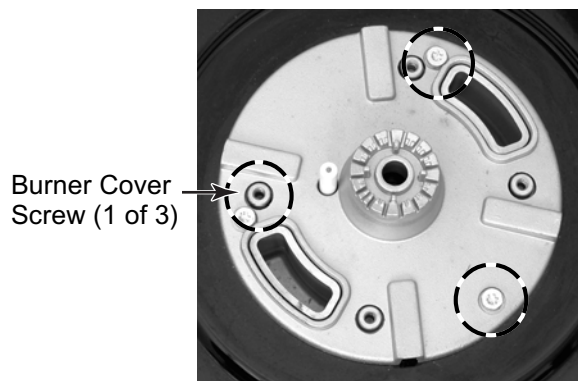
- a) Remove the grate and burner caps from the cooktop.
- b) Remove the four T-20 torx screws from the burner ring and remove the ring.



e) Use a 7 mm nut driver and remove the two burner orifices.



c) Remove the three T-20 torx screws from the burner cover and remove the cover.



4. Install the L.P. gas orifices in the burners as shown in the following charts (do not overtighten them).

Standard Burners

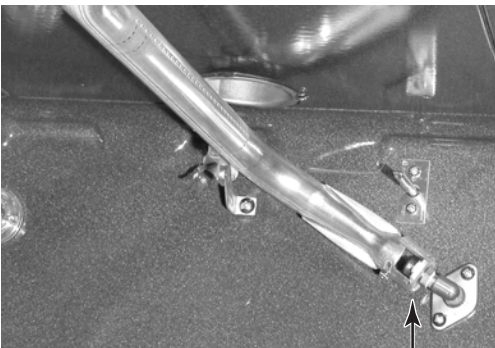
<i>Rating</i>	<i>Color</i>	<i>Size</i>	<i>Burner</i>
5,000 B.T.U.	Red	0.70 mm	RF & LR
10,000 B.T.U.	Blue	0.95 mm	RR
13,000 B.T.U.	Green	1.10 mm	LF

TripleTier™ Crown Burner

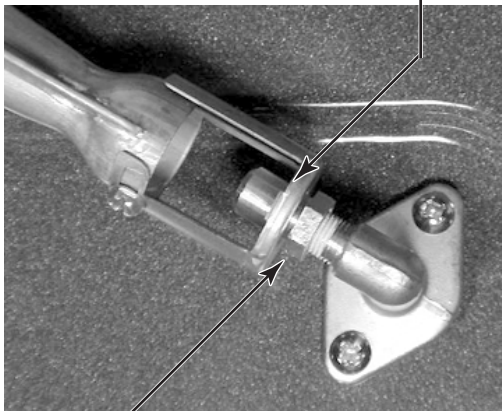
<i>Rating</i>	<i>Color</i>	<i>Size</i>	<i>Burner</i>
11,800 B.T.U.	Brown	1.00 mm	External
2,200 B.T.U.	Orange	0.42 mm	Internal

Continued on the next page.

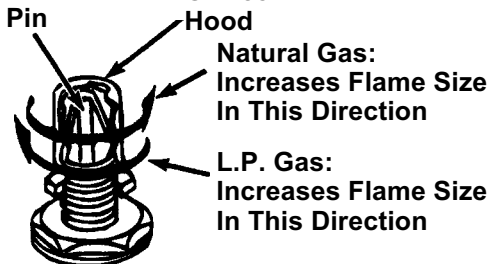
5. Place the natural gas orifices in the orifice card holes.
6. Replace the burner caps and grates.
7. **To convert the broil burner for use with L.P. gas:**
 - a) Open the oven door and remove the oven racks.
 - b) Use a 1/2" open-end wrench and turn the orifice hood down snug onto the pin (approximately 2-1/2 turns). **DO NOT OVERTIGHTEN THE ORIFICE.** The burner flame cannot be properly adjusted if this conversion is not made.
 - c) Reinstall the oven racks and close the oven door.



Broil Burner Orifice



Orifice Hood



8. **To convert the bake burner for use with L.P. gas:**

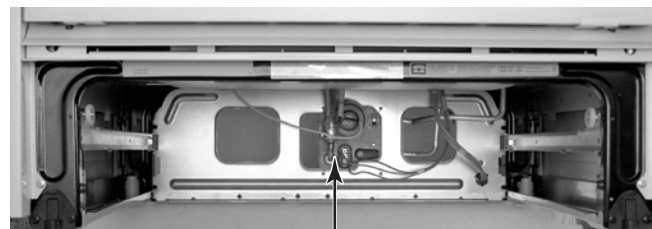
- a) Remove the bake burner from the gas distribution valve orifice (see page 4-16 for the procedure).
- b) Use a 1/2" open-end wrench and turn the bake burner orifice hood down snug onto the pin (approximately 2-1/2 turns). **DO NOT OVERTIGHTEN THE ORIFICE.** The burner flame cannot be properly adjusted if this conversion is not made.



Bake Burner Orifice Hood

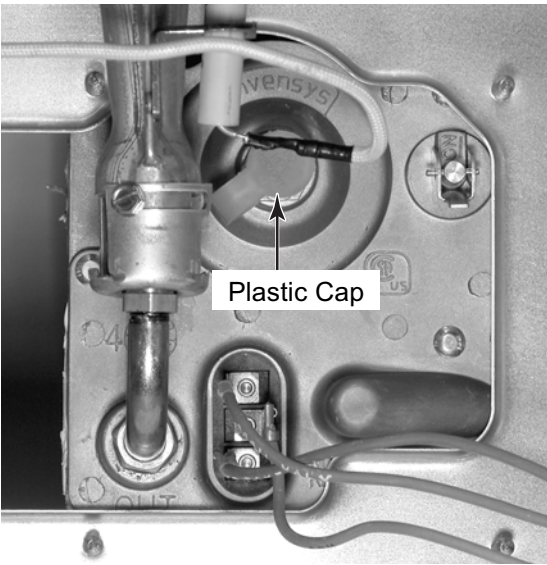
9. **To convert the gas distribution valve for use with L.P. gas:**

- a) Remove the storage drawer from the



Gas Distribution Valve

b) Pull the plastic cap off the gas distribution valve conversion cap.

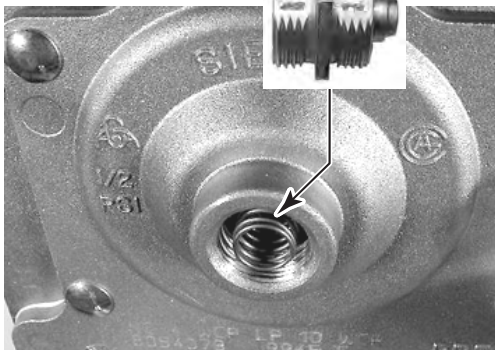


c) Unscrew the conversion cap from the gas distribution valve and remove it and the plastic cap. Note the difference between the L.P. and Natural gas ends of the cap.



Conversion Cap Set For Use With (N) Natural Gas

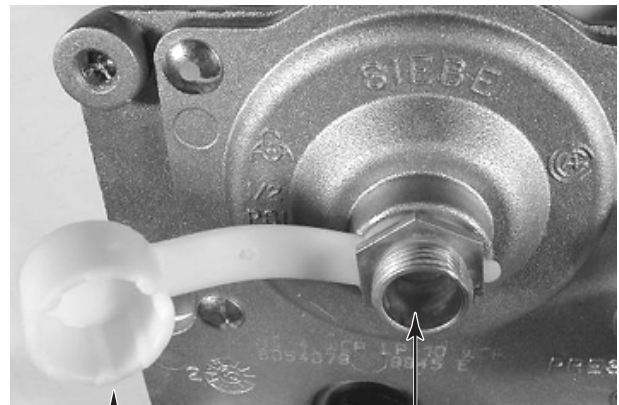
L.P. Gas Natural Gas



d) Install the loop on the plastic cap over the natural gas side of the conversion cap.

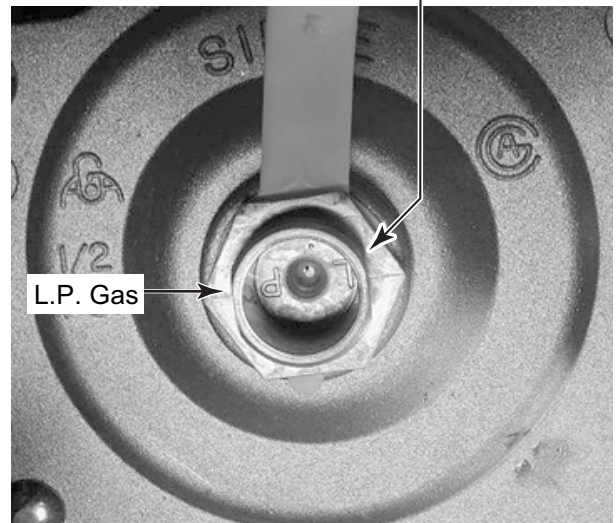
e) Install the plastic cap and the conversion cap on the gas distribution valve with the L.P. side facing up (you will see "LP" stamped inside the cap, as shown below).

f) Reinstall the storage drawer.



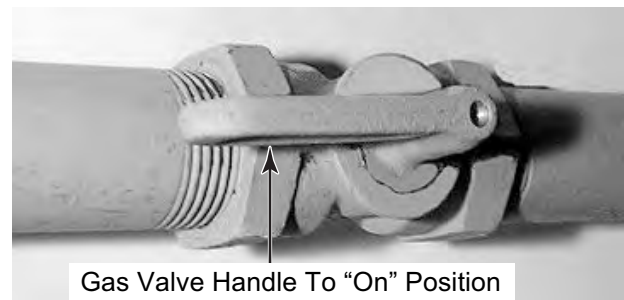
Plastic Cap

Conversion Cap Set For Use With L.P. Gas



L.P. Gas

10. Turn the gas supply valve handle on.

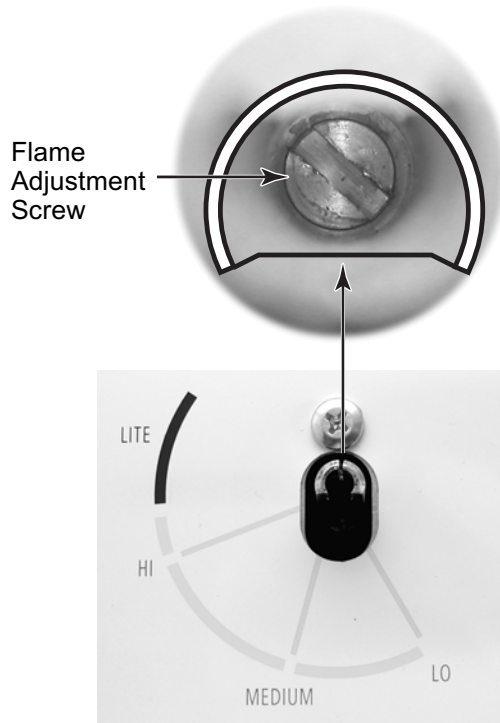


Gas Valve Handle To "On" Position

ADJUSTING FOR THE PROPER FLAME

SURFACE BURNERS

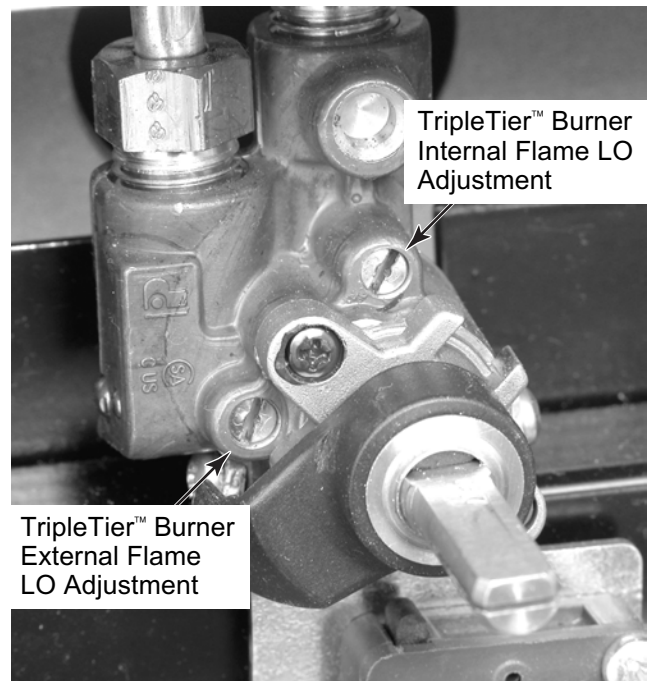
1. Turn on one of the surface burners and set the flame to its lowest (LO) setting. The flame should be steady and the inner cone should be dark blue in color. The size should be approximately 1/4" (0.64 cm) high.
2. If the low flame needs to be adjusted:
 - a) Remove the control knob.
 - b) Look inside the gas valve stem and note the small screw. Insert a small screwdriver into the gas valve stem and fit it in the screw slot.



- c) Hold the gas valve stem with a pair of pliers, and turn the screw in either direction until the flame size is approximately 1/4" high.
- d) Replace the control knob.
- e) Turn the control knob from HI to LO and check to make sure that it remains adjusted properly.
- f) Check the other three burners, and adjust them, if necessary.

TRIPLETIER™ CROWN BURNER

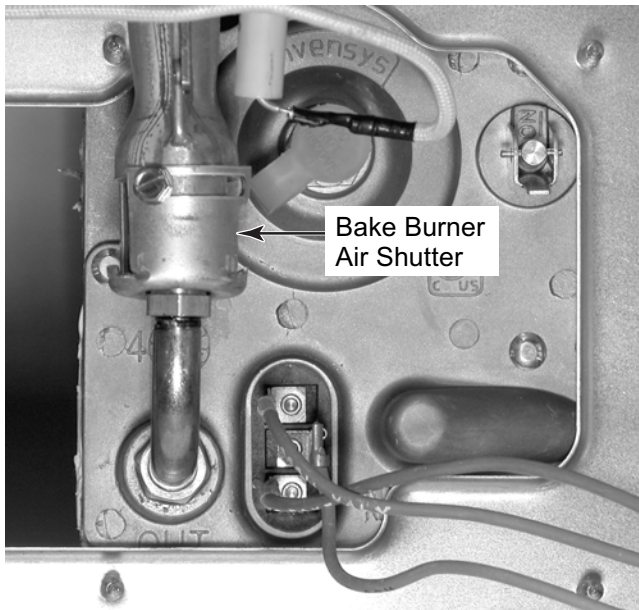
1. Remove the control knobs from the five gas valves.
2. Remove the control panel from the front panel (see page 4-2).
3. Pull the rubber shield off the gas valve stem.
4. Turn on the power and gas and set the inner and outer burner flames to the LO setting.
5. One at a time, insert a flat-blade screwdriver into the slot in the external and internal adjustment screws. Turn each of the screws until the flame sizes are as small as possible without going out.



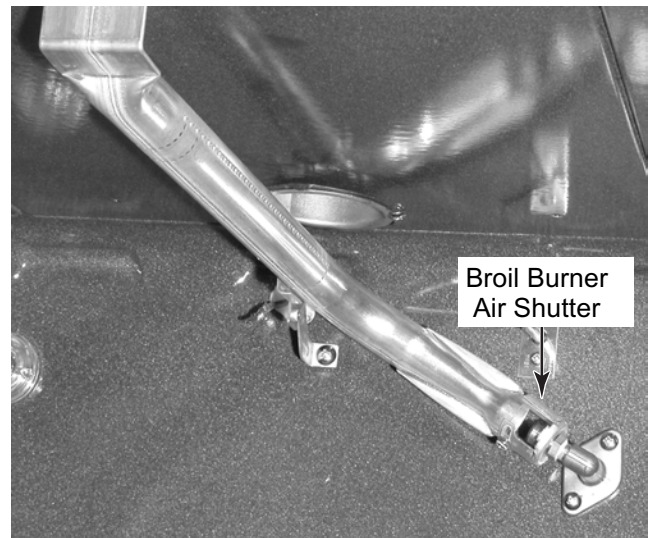
6. Quickly turn the gas valve from LO to HI, and then back to LO. Both flames should be on steady and not go out.

BAKE & BROIL BURNERS

1. Remove the oven racks and oven bottom.
2. Light the bake and broil burners, then check their flames. They should be approximately 1/2" (1.3 cm) high.
3. If the bake or broil burner flame needs to be adjusted:
 - a) Loosen the locking screw on the burner air shutter. **NOTE:** For the bake burner, you will have to remove the unit from its mounting location to access the air shutter.

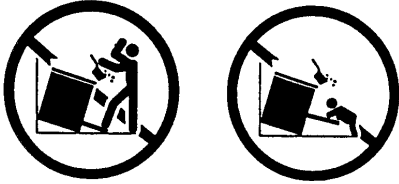


- b) Adjust the air shutter until the flame is the proper height. The inner cone should be bluish-green, and the outer mantle should be dark blue. There should be no blowing or lifting of the flame away from the burner ports. **NOTE:** Natural gas flame does not have a yellow tip.
- c) Retighten the air shutter screw.



INSTALLING THE ANTI-TIP BRACKET

! WARNING



Tip-Over Hazard

A child or adult can tip the range and be killed.

Connect anti-tip bracket to rear range foot.

Reconnect the anti-tip bracket, if the range is moved.

Failure to follow these instructions can result in death or serious burns to children and adults.

PARTS SUPPLIED

(2) Plastic Anchors



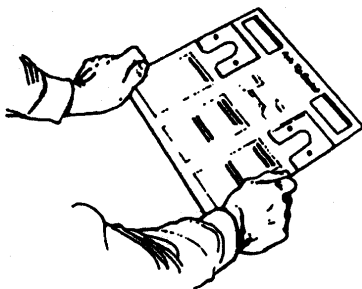
(2) Screws



(1) Anti-Tip Bracket

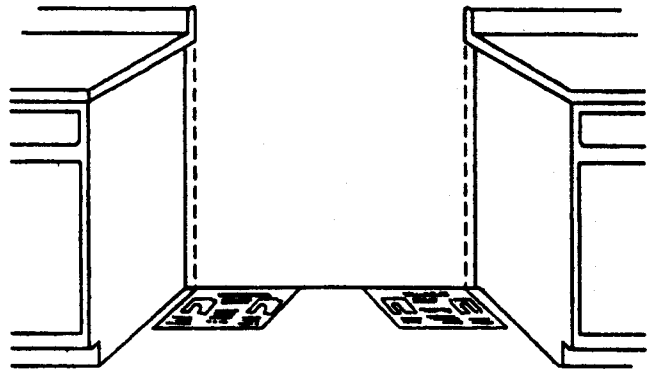


Template



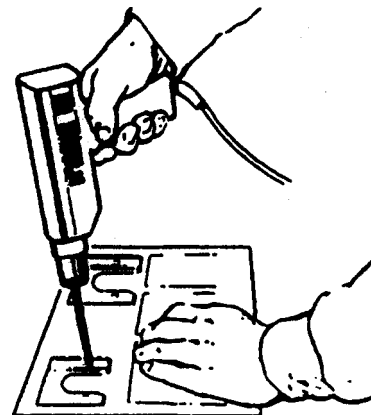
NOTE: The anti-tip bracket can be installed to hold either the right or left rear leg of the range.

1. Determine which leg you wish to anchor to the floor.
2. Place the template on the floor in the range opening so that the top edge is against the wall, molding, or cabinet, and the template is in the location where the anti-tip bracket will be installed.
3. Tape the template to the floor.

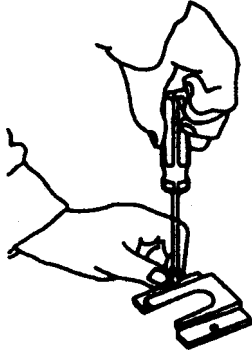


NOTE: For mounting to a wood floor, proceed with step 4. For concrete or ceramic floors, proceed to step 5.

4. **To mount the anti-tip bracket to a wood floor:**
 - a) Use the template to mark the hole locations to be drilled.
 - b) Use a 1/8" drill bit and drill the two holes.



- c) Remove the template from the floor.
- d) Line up the two mounting holes in the anti-tip bracket with the two holes you just drilled in the floor.
- e) Use the two screws that were supplied and fasten the anti-tip bracket to the floor.



5. **To mount the anti-tip bracket to a concrete or ceramic floor:**

- a) Use the template to mark the hole locations to be drilled.
- b) Use a 3/16" drill bit and drill the two holes.

- c) Remove the template from the floor.
- d) Tap the two plastic anchors into the mounting holes with a hammer.
- e) Line up the two mounting holes in the anti-tip bracket with the two holes you just drilled in the floor.
- f) Use the two screws that were supplied and fasten the anti-tip bracket to the floor.

- 6. Move the range close to the cabinet opening and plug the power supply cord into a grounded outlet.
- 7. Move the range into position and make sure that the rear leveling leg slides into the anti-tip bracket, as shown.



— NOTES —

THEORY OF OPERATION

CONVECTION BOWTIE BAFFLE

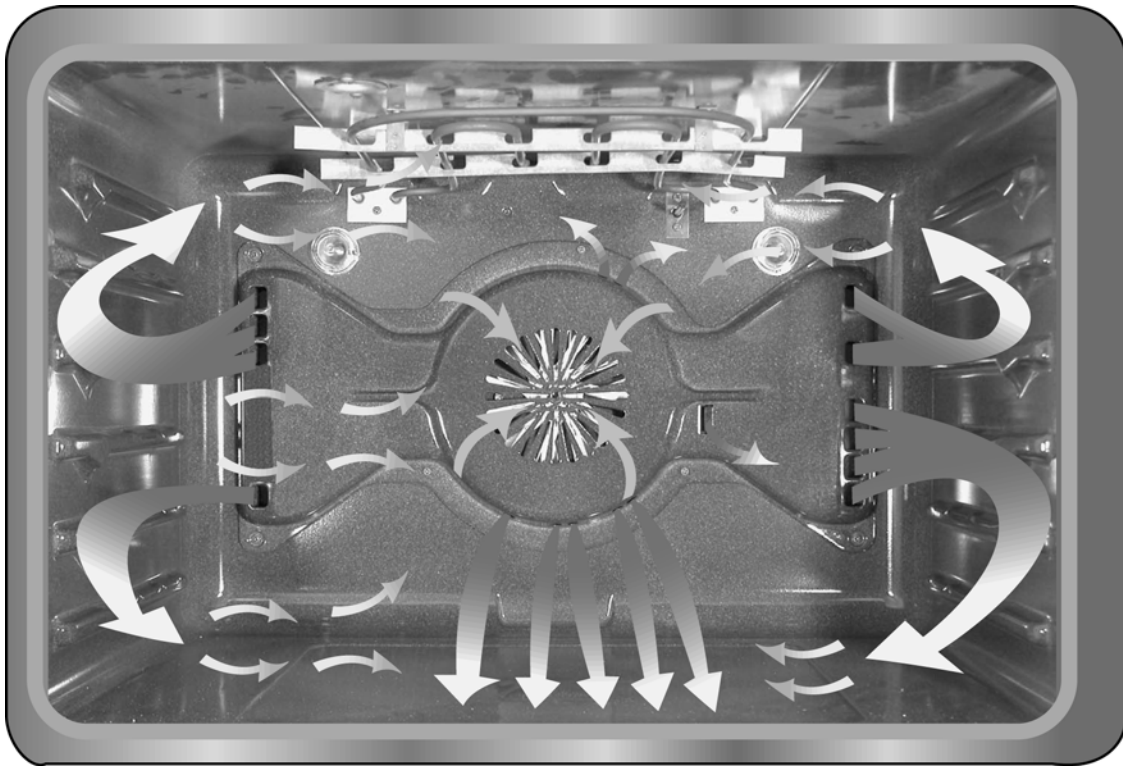
AIRFLOW

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 —

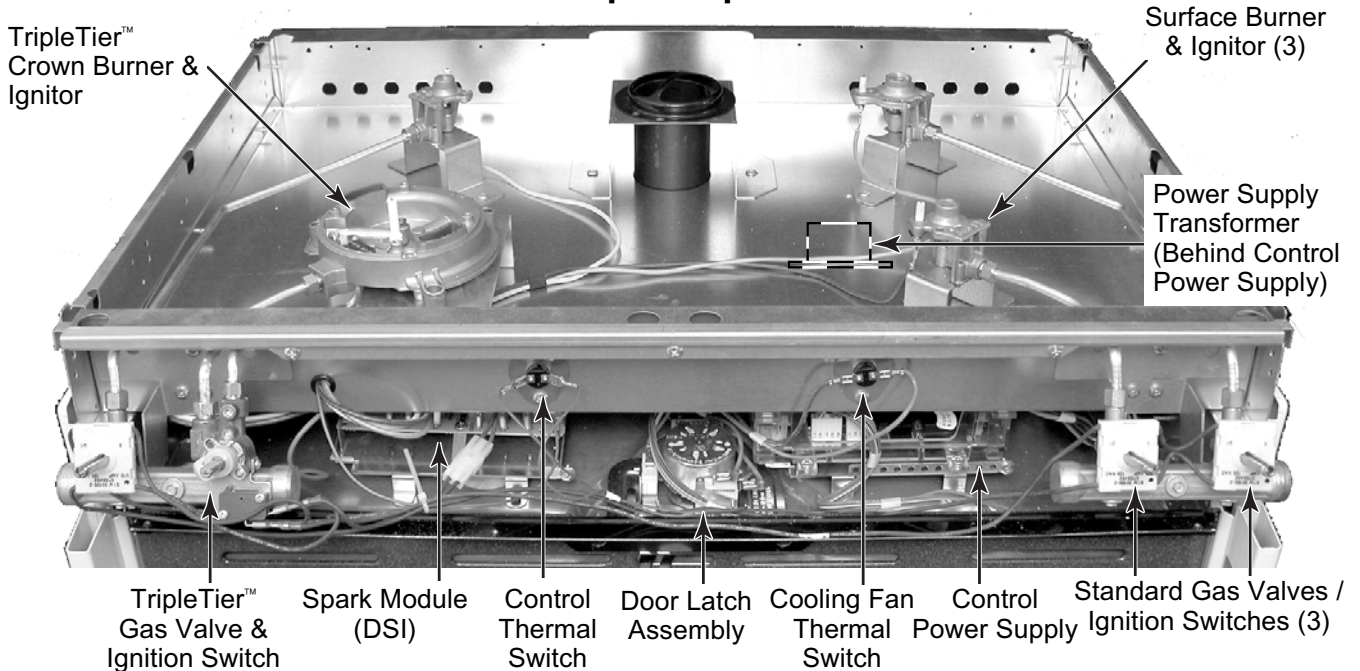
COMPONENT ACCESS

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

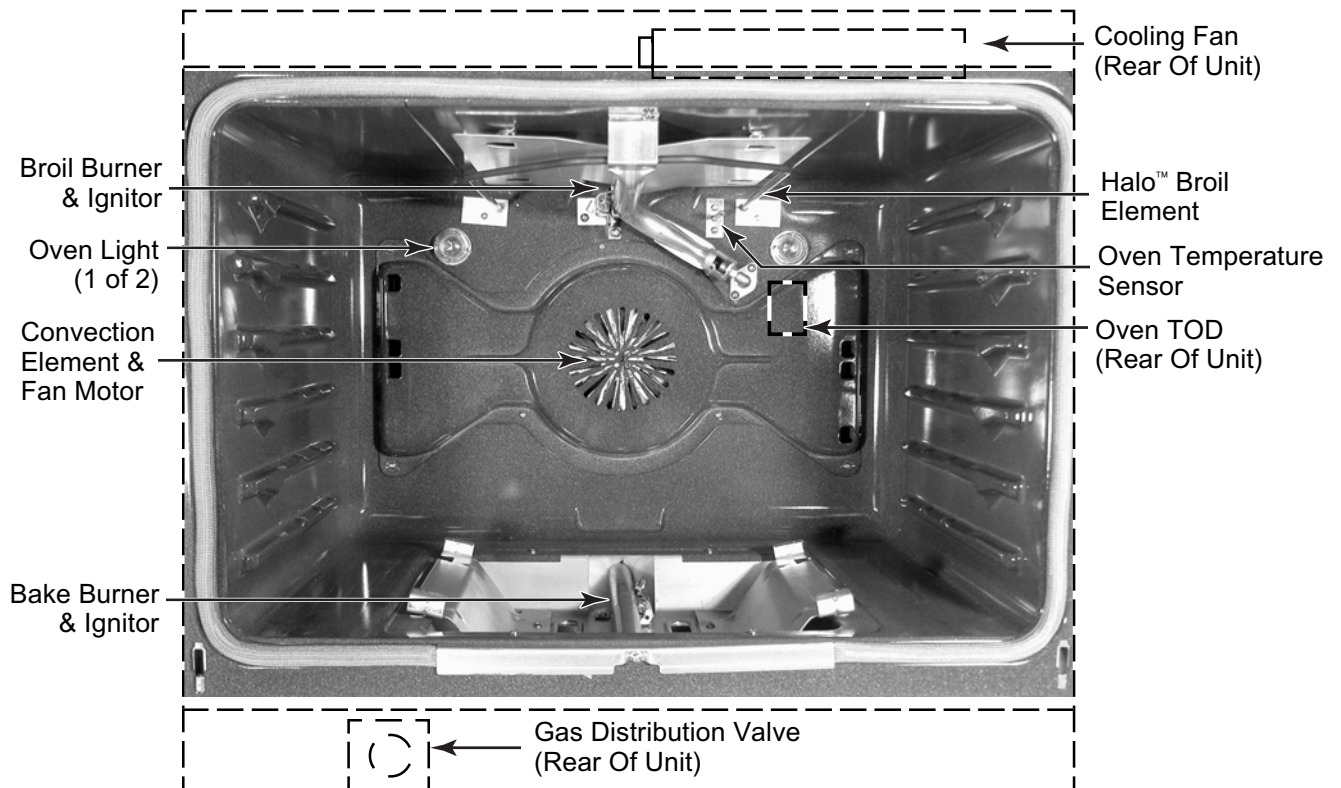
COMPONENT LOCATIONS

Not Shown: Electronic Oven Control

Cooktop Components



Oven & Rear Components



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

⚠️ WARNING



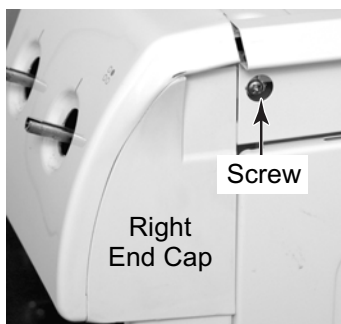
Electrical Shock Hazard

Disconnect power before servicing.

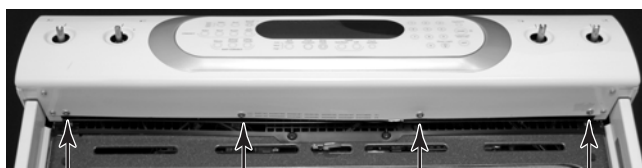
Replace all parts and panels before operating.

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

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Remove the two grates from the top of the range.
4. Pull the range forward so you can access the two end cap screws.
5. **To remove the electronic oven control (EOC) assembly on slide-in models:**
 - a) Pull the knobs off the gas valves.
 - b) Remove the two screws from the sides of the end caps.

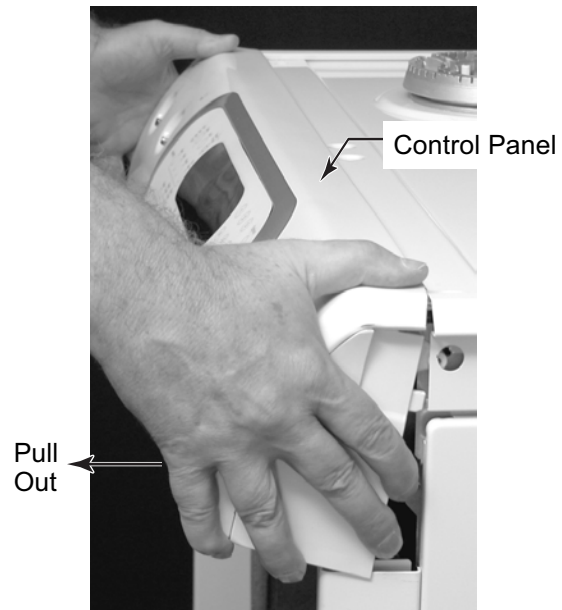


- c) Open the oven door and remove the indicated screws from the bottom of the control panel.

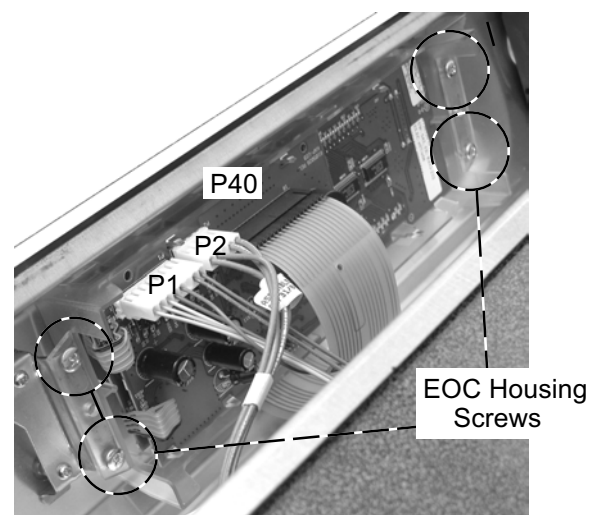


Control Panel Screws

- d) 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.

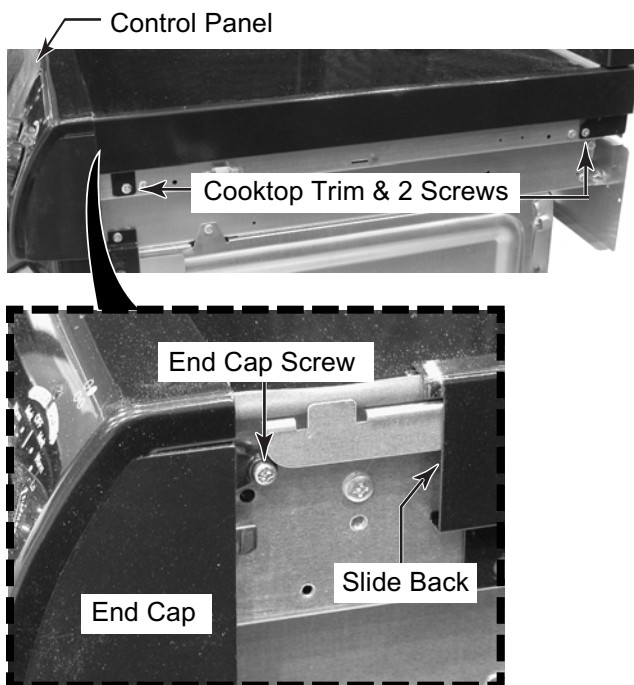


- e) Disconnect the wire connectors from the electronic oven control board at P1 and P2, and the ribbon cable connector at P40.
- f) Remove the four screws from the electronic oven control housing, and remove the assembly from the control panel. **NOTE:** The EOC boards and the housing are replaced as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



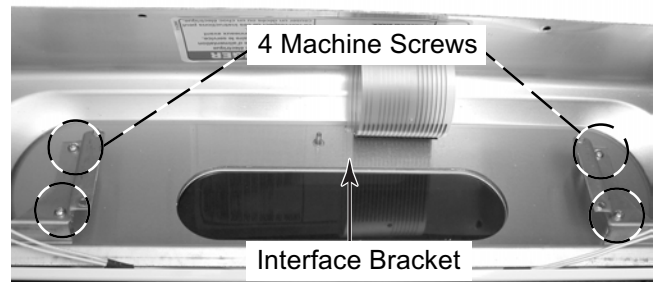
6. **To remove the electronic oven control (EOC) assembly on freestanding models:**

- a) Open the oven door, and remove the screws from the bottom of the control panel (see the photo in step 5c).
- 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 5d, 5e, and 5f on page 4-2 to remove the EOC assembly.



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

- a) Remove the electronic oven control assembly (see steps 5 or 6).
- b) Remove the four machine screws from the control panel mounting brackets, and remove the user interface and its bracket.



Electronic Oven Control (EOC) Assembly



User Interface

REMOVING THE IGNITION SWITCHES, GAS VALVES, AND CONTROL & COOLING FAN THERMAL SWITCHES

⚠ WARNING



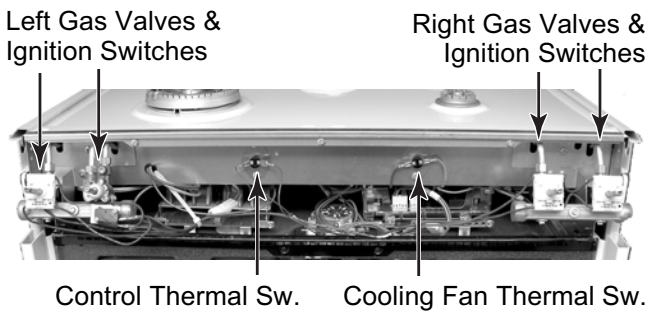
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

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

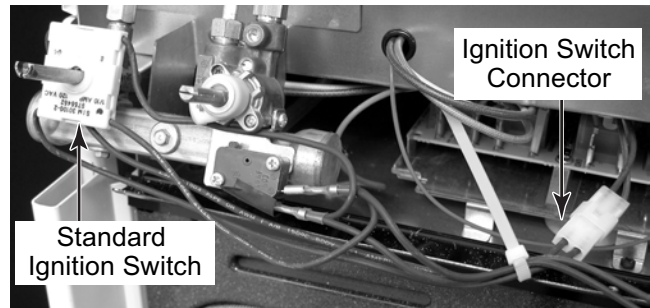
1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Remove the two grates from the top of the range.
4. Remove the control panel (see step 4 on page 4-2 for the procedure).



5. To remove the standard ignition switches:

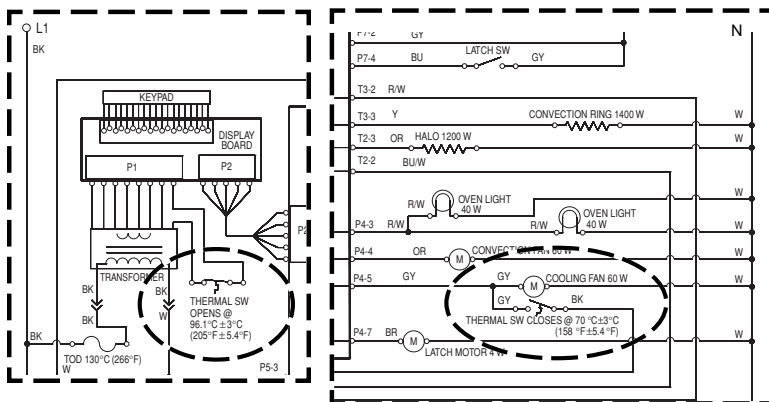
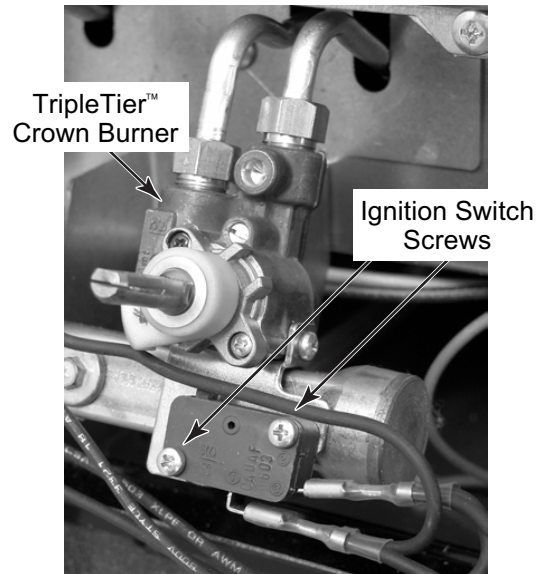
NOTE: The standard ignition switches must be replaced as an assembly. They cannot be replaced individually.

- a) Pull out on the standard ignition switches and unsnap them from the gas valves, then slide them off the valve stems.
- b) Disconnect the ignition switch wire connector from the main harness, cut the wire tie, and remove the standard switches.



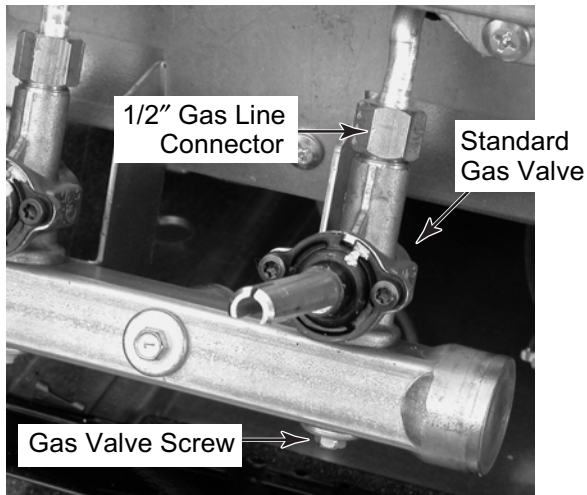
6. To remove the TripleTier™ Crown Burner ignition switch:

- a) Disconnect the two wires from the ignition switch terminals.
- b) Remove the two screws from the ignition switch and remove the switch from the mounting plate.



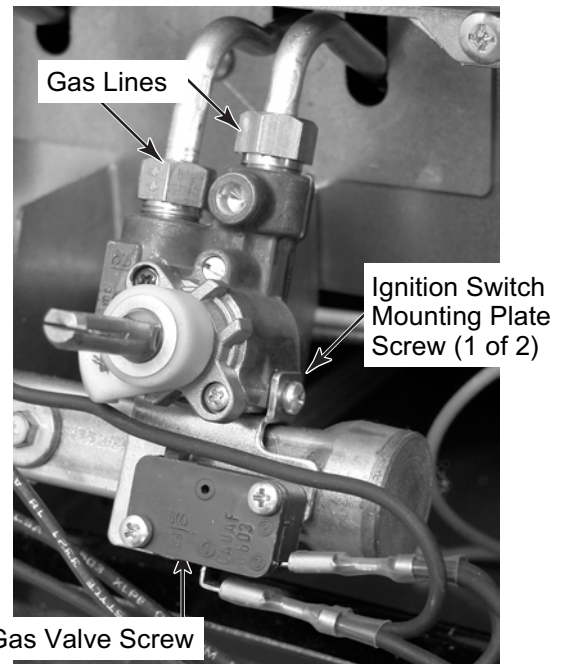
7. **To remove a standard gas valve:**

- a) Remove the ignition switch from the gas valve you are servicing (see step 5).
- b) Remove the 1/2" gas line connector from the gas valve.
- c) Remove the 1/4" hex-head gas valve mounting screw and its rubber seal from the front of the gas manifold.
- d) Lift the gas valve off the ignition switch mounting plate and the gas manifold.



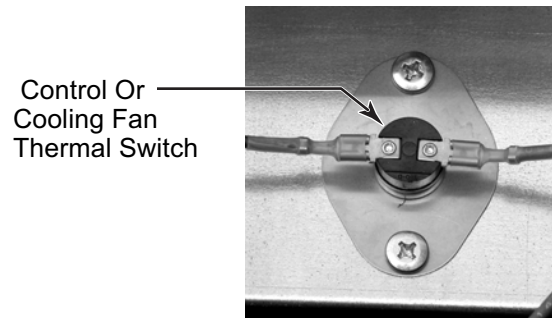
8. **To remove a TripleTier™ Crown Burner gas valve (see the photo at the top right column):**

- a) Remove the two ignition mounting plate screws from the gas valve, and pull the plate and switch off the valve.
- b) Remove the two 1/2" gas line connectors from the gas valve.
- c) Remove the 1/4" hex-head gas valve mounting screw and its rubber seal from the front of the gas manifold.
- d) Lift the TripleTier™ Crown Burner gas valve off the ignition switch mounting plate and the gas manifold.



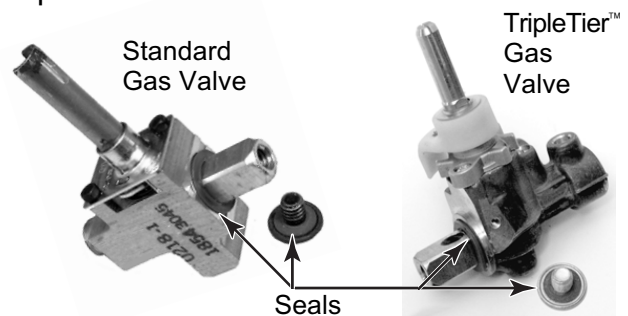
9. **To remove a thermal switch:**

- a) Remove the wires from the terminals.
- b) Remove the mounting screws.



REASSEMBLY NOTES:

- Before reinstalling the gas valve, make sure that the rubber seals on the mounting screw, and on the valve, are not cracked or damaged. If they are, replace them.
- Perform a leak check on the gas valve after reinstalling it. Use a soap bubble method to perform the check.



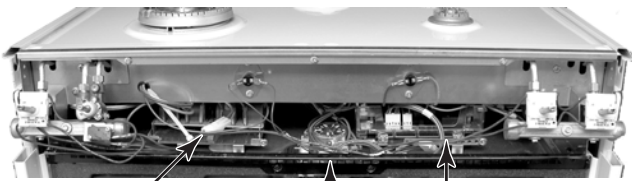
REMOVING THE DOOR LATCH ASSEMBLY, THE SPARK MODULE (DSI), AND THE CONTROL POWER SUPPLY

⚠️ 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.

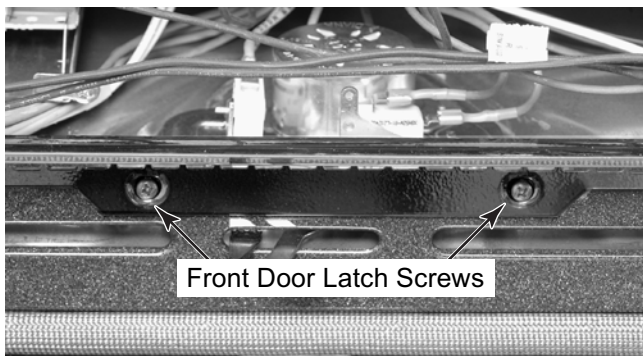
1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Remove the two grates from the top of the range.
4. Remove the control panel (see step 4 on page 4-2 for the procedure).



Spark Module Door Latch Assy Ctrl Pwr Supply

5. To remove the door latch assembly:

- a) Open the oven door and remove the two front mounting screws from the air vent.



Front Door Latch Screws

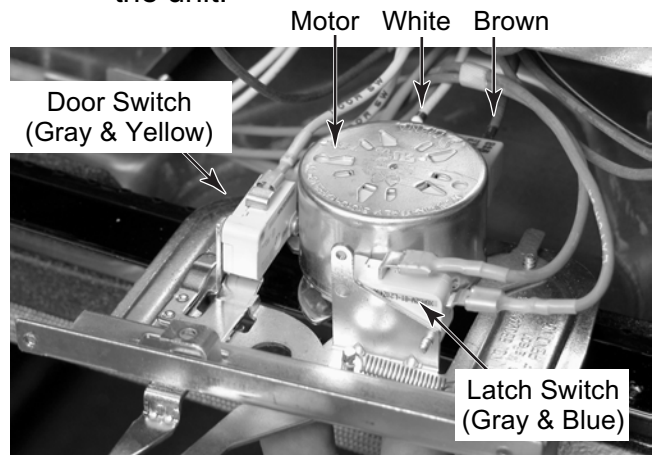
- b) Remove the two top screws from the door latch assembly bracket.



Top Door Latch Screws

- 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.



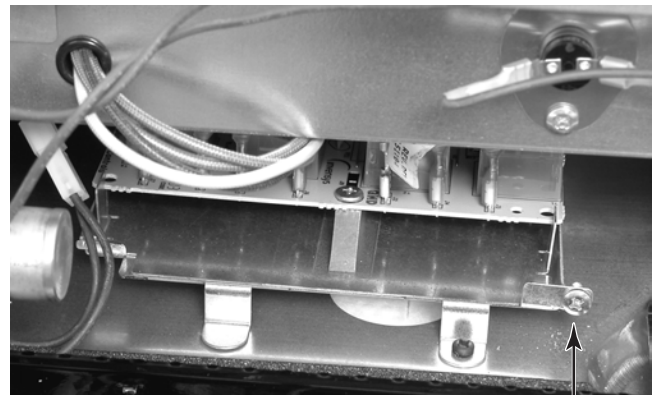
Motor White Brown

Door Switch (Gray & Yellow)

Latch Switch (Gray & Blue)

6. To remove the spark module (DSI):

- a) Remove the bracket mounting screw.



Bracket Mounting Screw

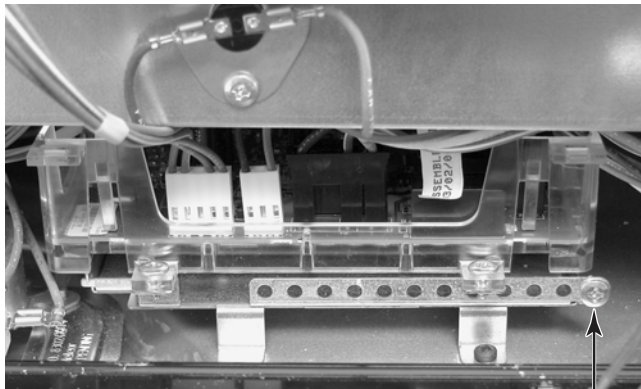
- b) Pull the spark module forward as far as it will go and disconnect the wires from the terminals, then remove the spark module from the unit.
- c) Remove the spark module mounting screw from the bracket and remove the module from the bracket.



Module Mounting Screw

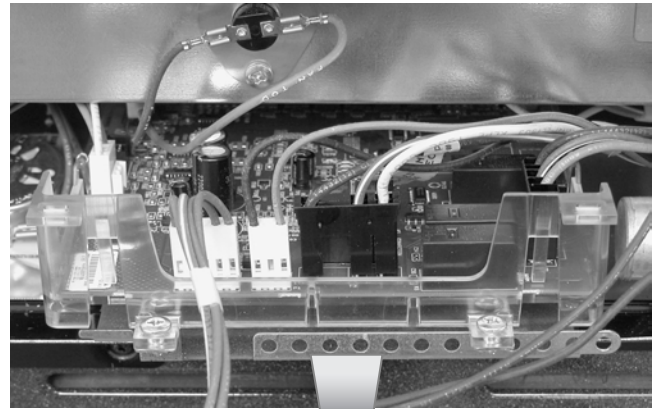
7. To remove the control power supply:

- a) Remove the control power supply bracket mounting screw.



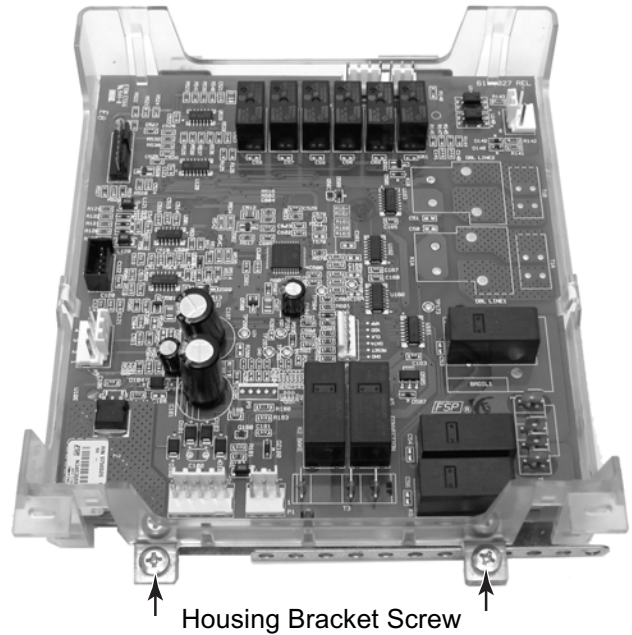
Bracket Mounting Screw

- b) Pull the control power supply forward as far as it will go, and disconnect the wires from the terminals, then remove the power supply from the unit.



Pull Out

- c) Remove the control power supply housing mounting screws from the bracket and remove the bracket from the housing.



Housing Bracket Screw

REMOVING THE POWER SUPPLY TRANSFORMER

!WARNING



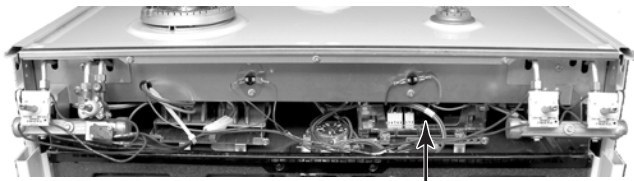
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

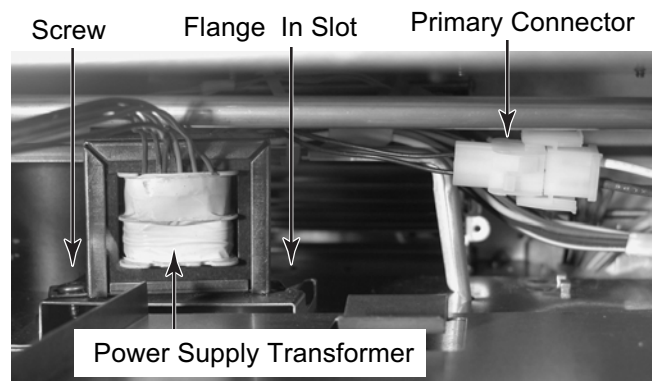
Failure to do so can result in death or electrical shock.

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Remove the control panel (see step 4 on page 4-2 for the procedure).
4. Remove the control power supply (see step 7 on page 4-7 for the procedure).



Power Supply Transformer
(Behind Control Power Supply)

5. Using a 90° offset screwdriver, remove the screw from the power supply transformer.
6. Disconnect the 2-wire primary wire connector on the power supply transformer from the wiring harness. Cut the wire tie from around the primary wires.
7. Unhook the flange on the end of the power supply transformer from the mounting bracket slot, and remove the transformer from the front of the unit.



REMOVING THE COOKTOP, AND A SURFACE BURNER & IGNITOR

⚠️ WARNING

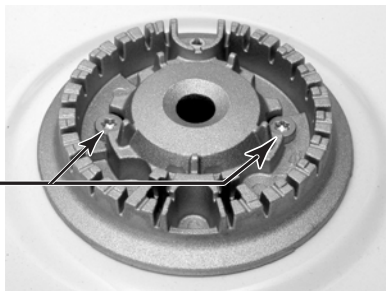


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Pull the range out of its mounting location so that you can access the rear of the unit.
4. Remove the grates, the vent cover, and the burner caps from the top of the range.
5. Remove the two screws from each of the standard burner heads and lift the heads off the cooktop.

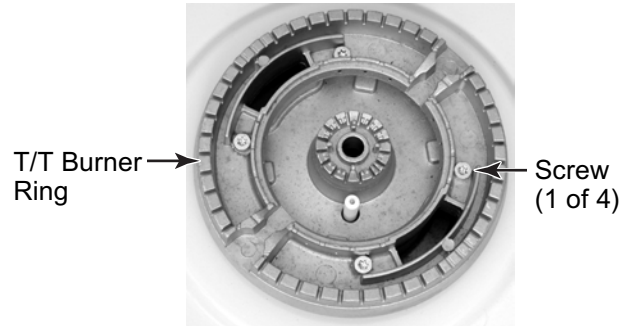


TripleTier™ Burner

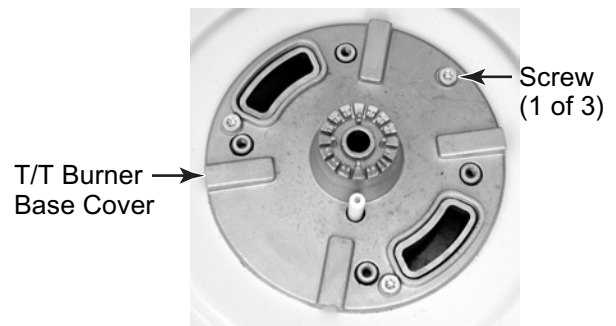


Standard Burner Head W/2 Screws

6. Remove the four burner ring Torx screws from the TripleTier™ Burner and lift the ring off the cooktop.



7. Remove the three TripleTier™ Burner base cover Torx screws and remove the cover.



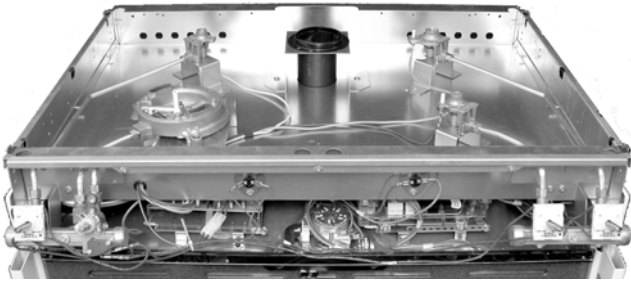
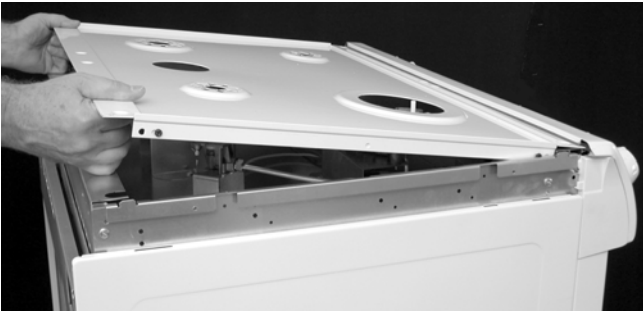
8. **To remove the cooktop:**

- a) Remove the screws from the left, right, and rear trim pieces and remove the trim from around the cooktop.



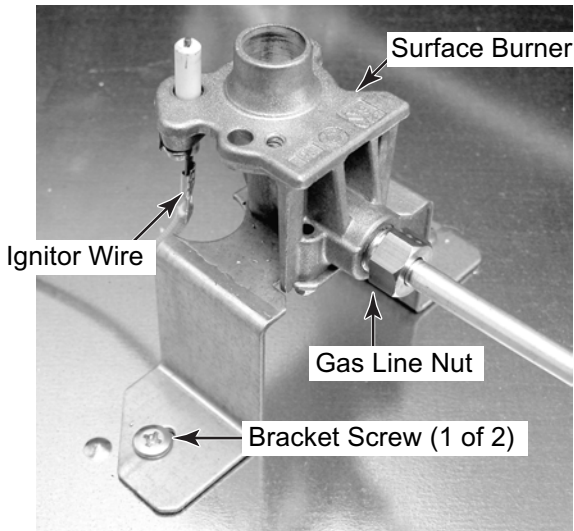
Continued on the next page.

- b) Lift the rear of the cooktop off the unit, and set it aside.

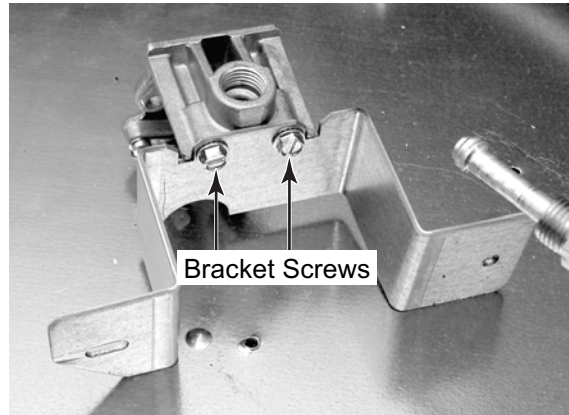


9. **To remove a standard surface burner and ignitor:**

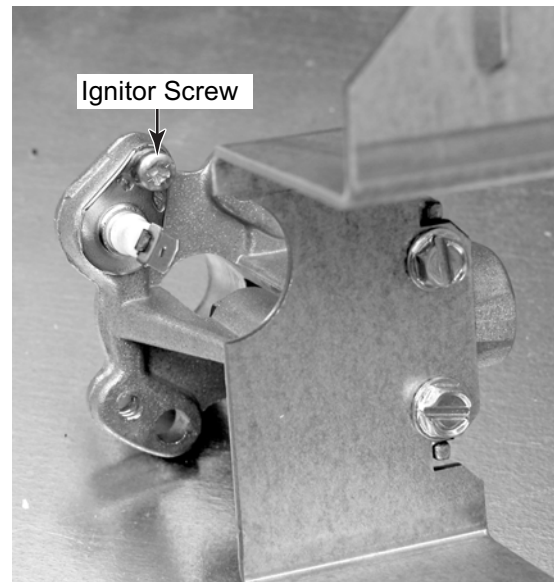
- a) Remove the cooktop (see step 8).
- b) Remove the gas line.
- c) Disconnect the ignitor wire from the terminal.
- d) Remove the two bracket screws from the burner box.



- e) Remove the two hex-head bracket screws and remove the burner from the bracket.

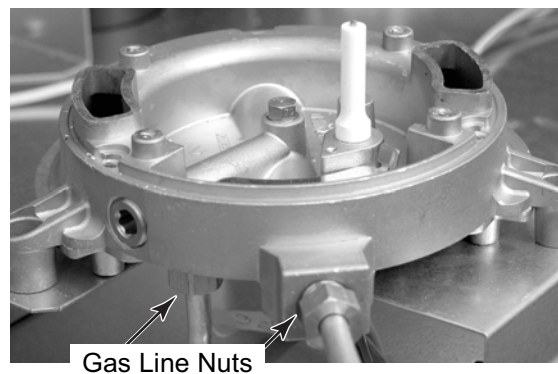


- f) Remove the screw from the ignitor.

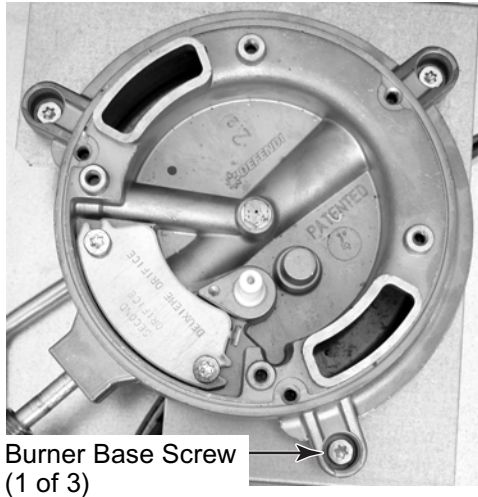


10. **To remove the TripleTier™ Burner base and ignitor:**

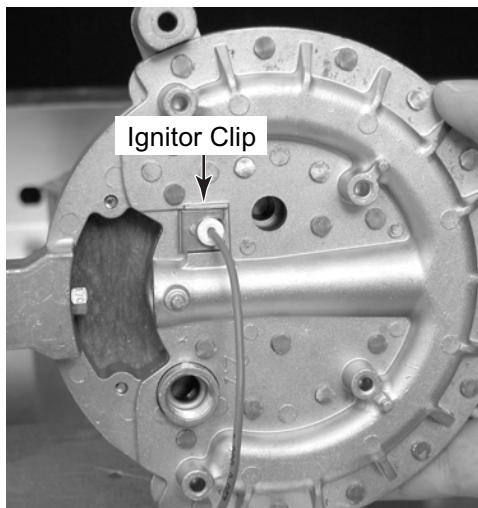
- a) Remove the cooktop (see step 8).
- b) Remove the two gas lines.



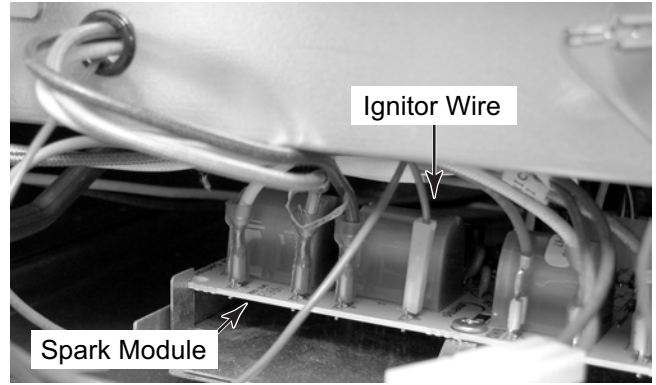
- c) Remove the three Torx screws from the burner base.



- d) Slide the ignitor clip off the ignitor.



- e) Remove the control panel (see page 4-2 for the procedure).
- f) Disconnect the TripleTier™ Burner base ignitor wire from the spark module terminal and remove the ignitor and wire from the unit.



REMOVING THE REAR PANEL

!WARNING



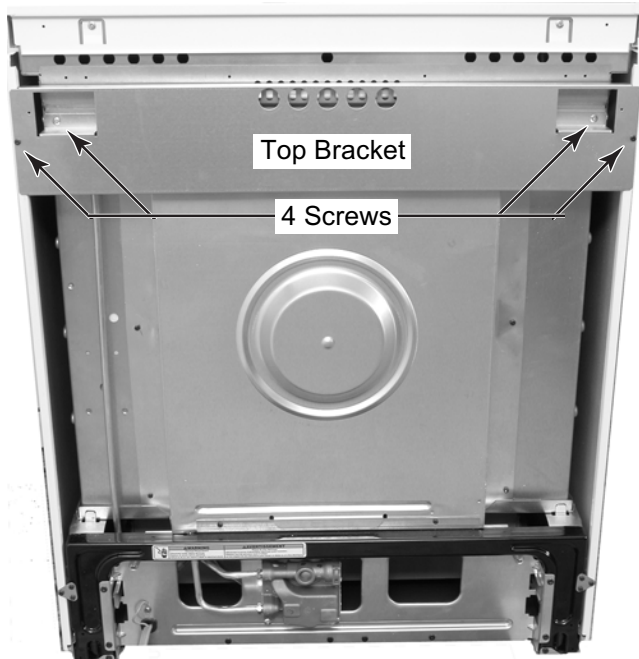
Electrical Shock Hazard

Disconnect power before servicing.

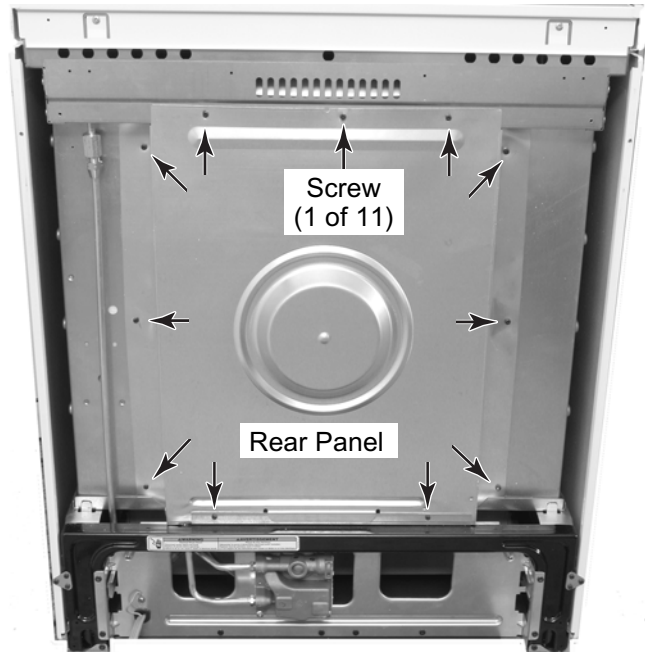
Replace all parts and panels before operating.

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

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



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



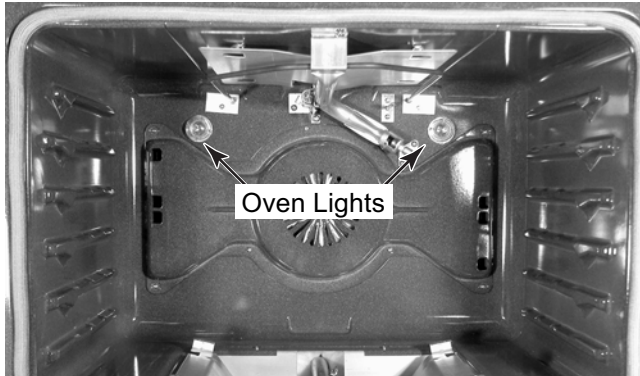
REMOVING AN OVEN LIGHT SOCKET ASSEMBLY

!WARNING

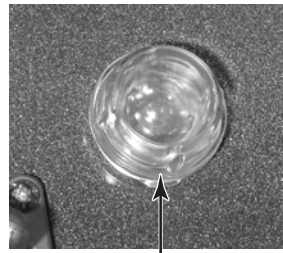


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

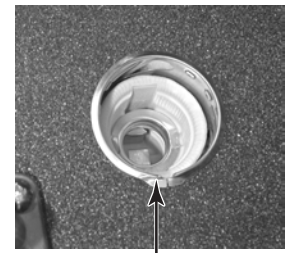
1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Pull the range out of its mounting location so that you can access the rear of the unit.
4. Open the oven door and remove the racks from inside the oven.



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

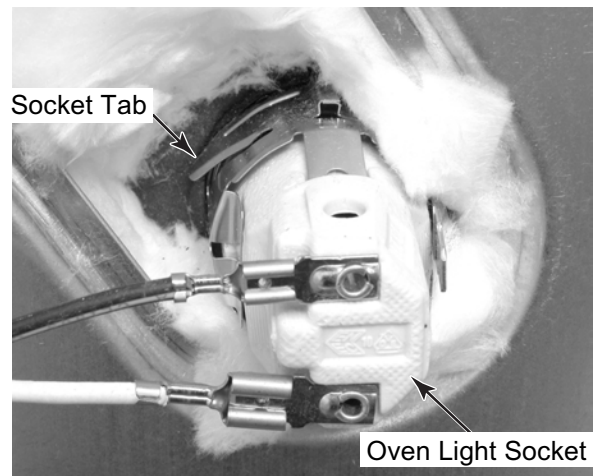


Lens & Bulb



Oven Light Socket

6. Remove the rear panel from the unit (see page 4-12 for the procedure).
7. Disconnect the two wire connectors from the oven light socket terminals.
8. 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.



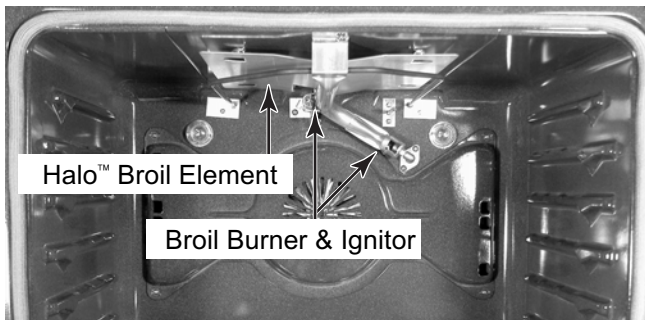
REMOVING THE BROIL BURNER, IGNITOR, & HALO™ BROIL ELEMENT

⚠ WARNING



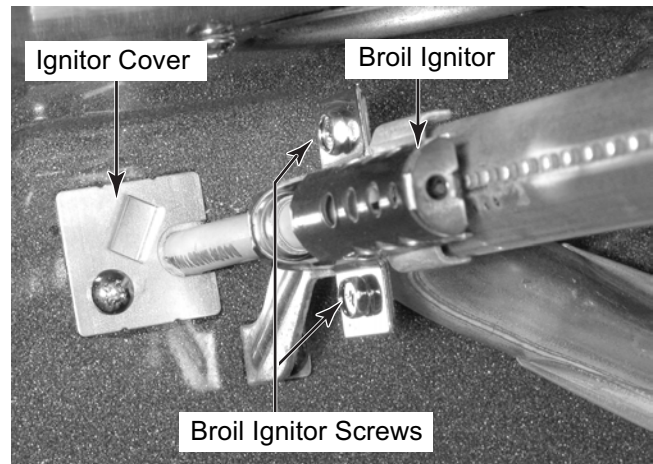
Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Open the oven door and remove the racks from inside the oven.

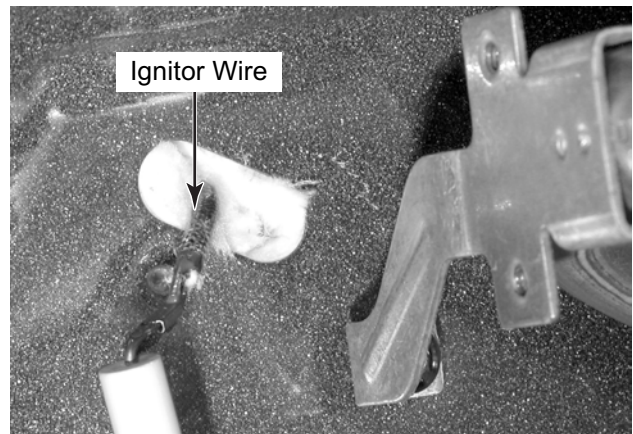


4. To remove the ignitor from the broil burner:

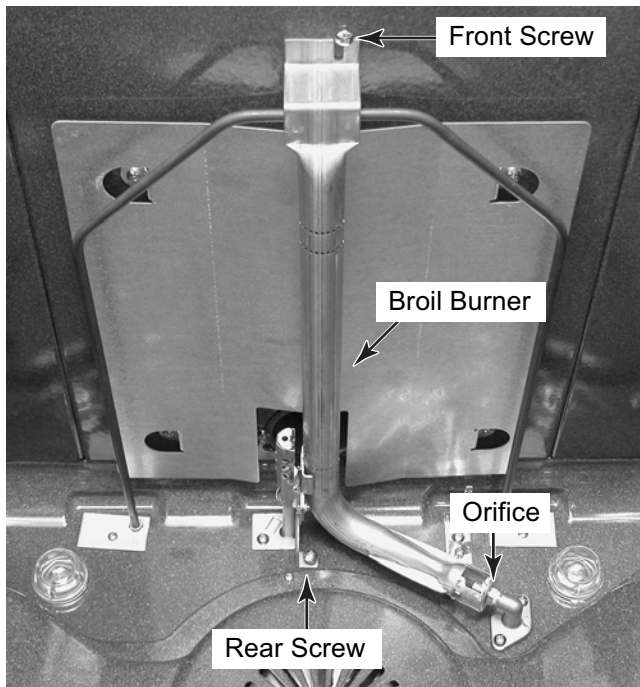
- a) Remove the ignitor cover screw and remove the cover from the liner.
- b) Remove the two 5/16" hex-head screws from the ignitor bracket.



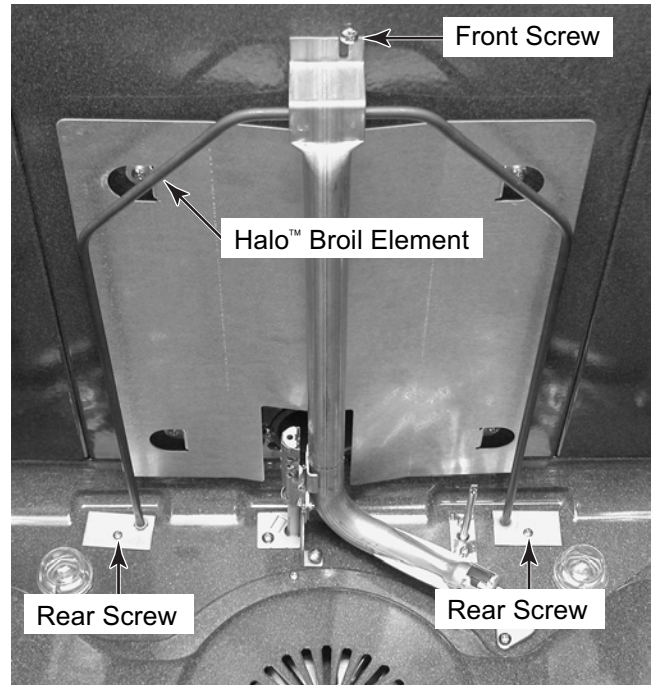
- c) Pull the ignitor into the oven and disconnect the wire from the terminal.



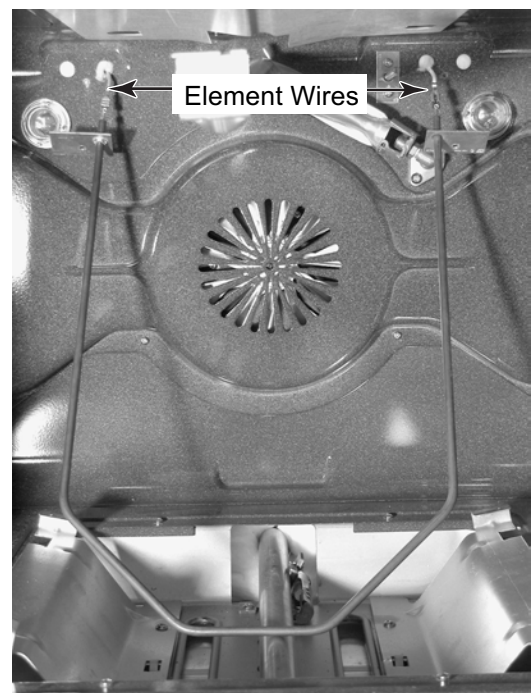
5. **To remove the broil burner:**
- a) Remove the ignitor from the broil burner (see step 4).
 - b) Remove the rear screw from the broil burner.
 - c) Loosen the front broil burner screw, slide the burner off the orifice, and remove the burner.



6. **To remove the Halo™ broil element:**
- a) Remove the front screw from the broil burner and allow it to drop down.
 - b) Remove the rear screws from the Halo™ broil element.



- c) Pull the Halo™ broil element forward so that the element terminal wires are inside the oven cavity, and disconnect the wires from the terminals.



REMOVING THE BAKE BURNER AND IGNITOR

!WARNING



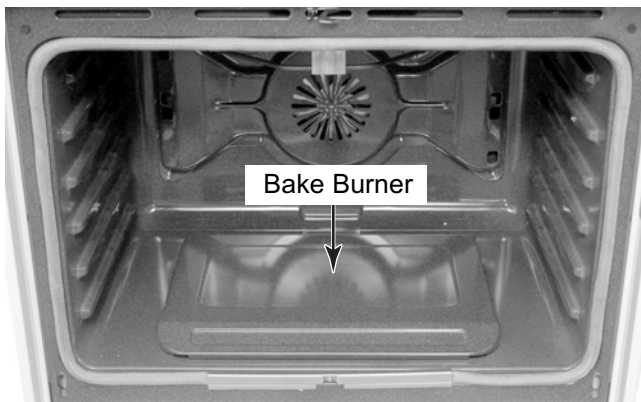
Electrical Shock Hazard

Disconnect power before servicing.

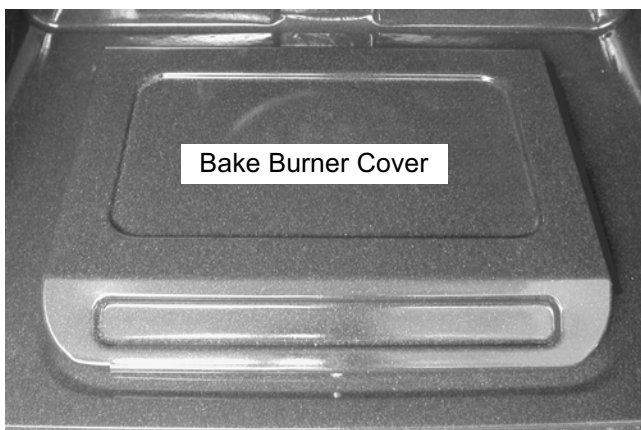
Replace all parts and panels before operating.

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

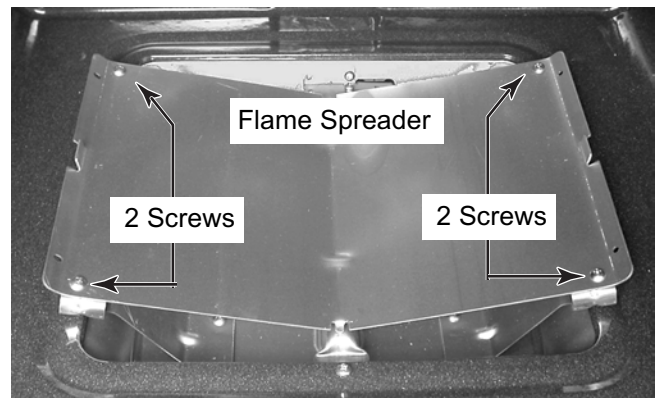
1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Open the oven door and remove the racks from inside the oven.



4. Lift the bake burner cover off the flame spreader.

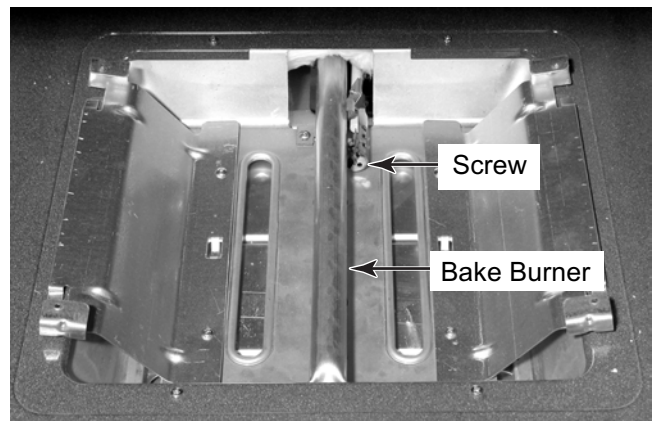


5. Remove the four screws from the flame spreader and remove the spreader.

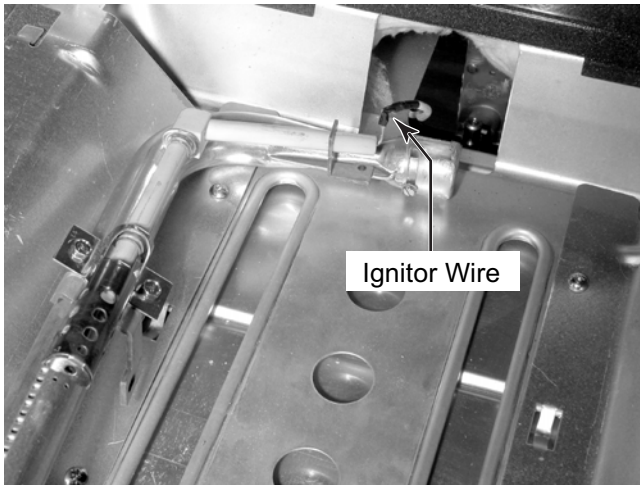


6. **To remove the bake burner:**

- a) Remove the screw from the bake burner bracket.
- b) Lift the bake burner off the gas orifice and slide it back to remove the front from the chassis slot. Position the burner and ignitor so you can lift it out of the lower section of the oven.

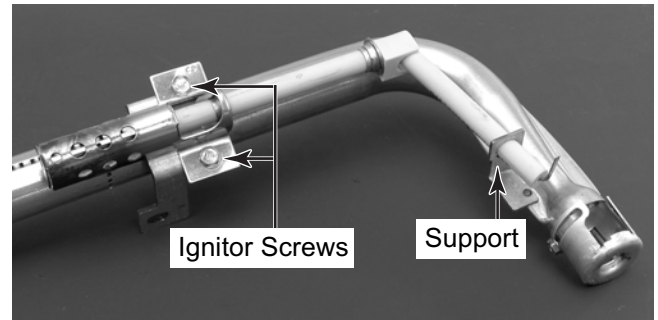


- c) Disconnect the wire from the ignitor terminal.



7. **To remove the ignitor from the bake burner:**

- a) Remove the bake burner from the unit (see step 6).
b) Remove the two 5/16" hex-head screws from the ignitor bracket, and slide the end of the ignitor out of the support.



REMOVING THE CONVECTION ELEMENT & FAN MOTOR

⚠️ WARNING



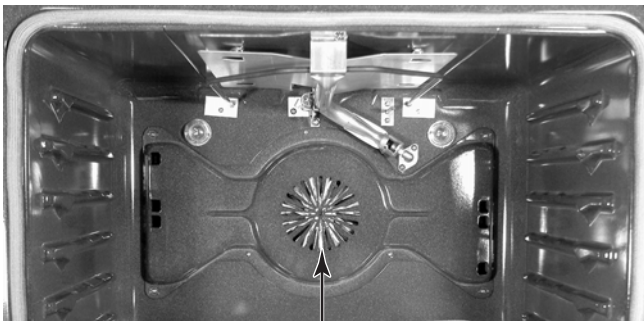
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

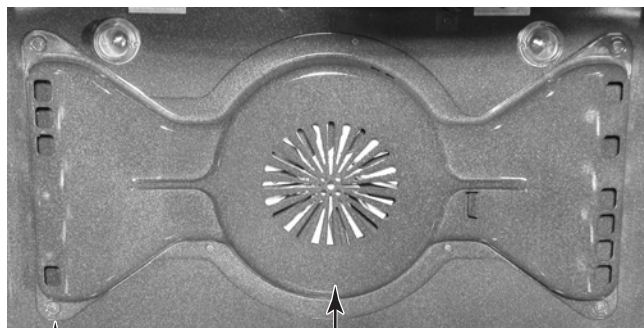
Failure to do so can result in death or electrical shock.

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Open the oven door and remove the racks from inside the oven.



Convection Element (Behind Cover)

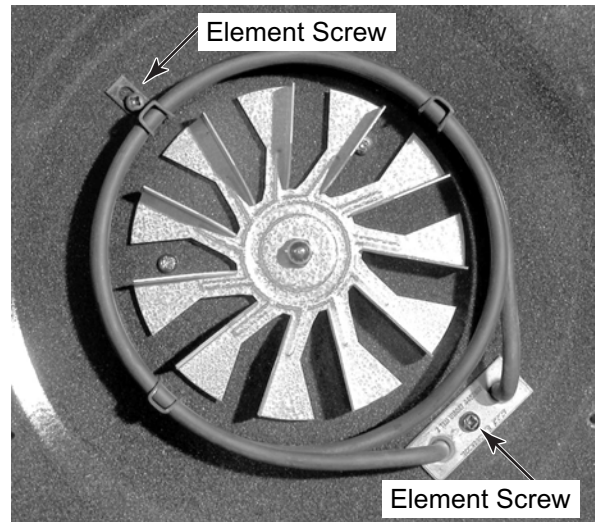
4. Remove the seven screws from the convection element cover and remove the cover.



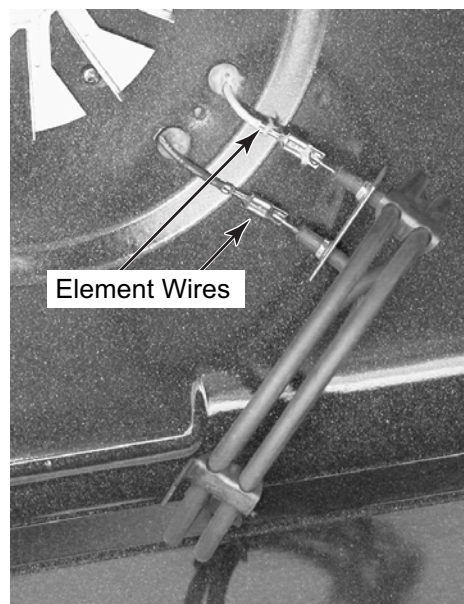
Screw (1 of 7)

Convection Element Cover

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

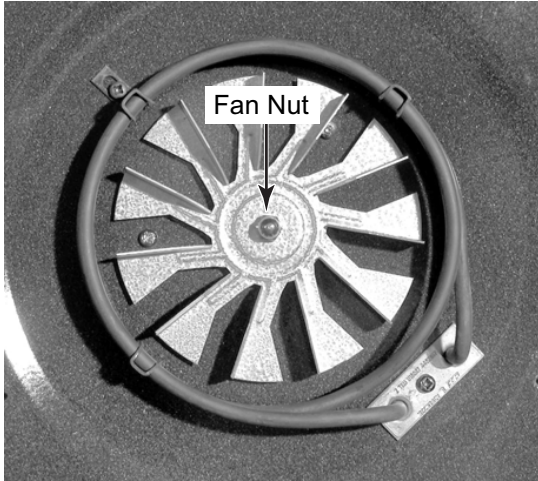


- b) Pull the convection element forward and disconnect the wires from the terminals.

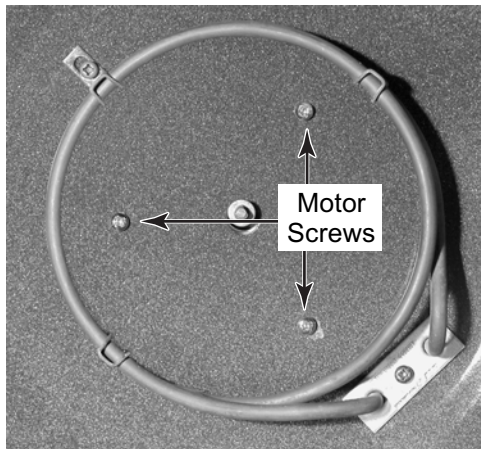


6. **To remove the convection fan motor:**

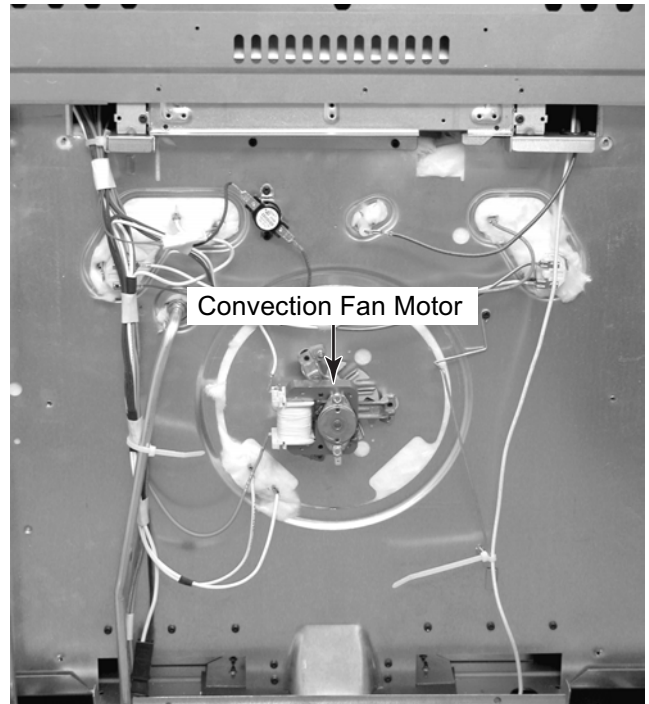
- a) Remove the 7/16" hex-nut from the convection fan and remove the fan from the motor shaft. **NOTE:** The nut has a left-hand thread so turn it clockwise to remove it.



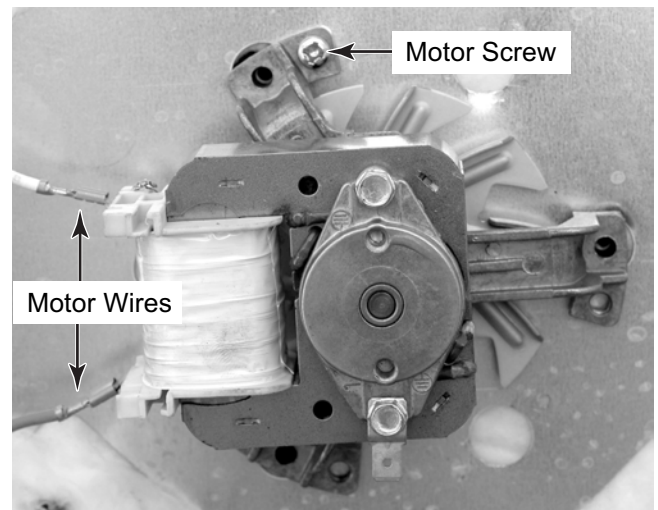
- b) Remove the three motor mounting screws from the cavity liner.



- 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 4-12 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 OVEN TEMPERATURE SENSOR

!WARNING



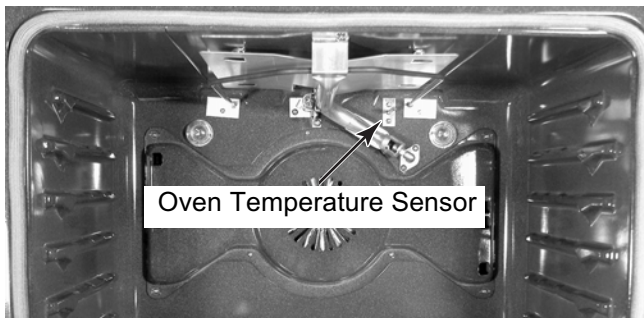
Electrical Shock Hazard

Disconnect power before servicing.

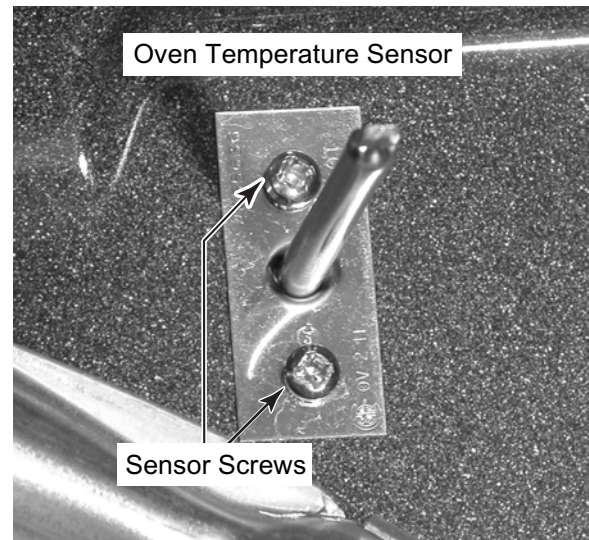
Replace all parts and panels before operating.

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

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Open the oven door and remove the racks from inside the oven.



4. Remove the screws from the oven temperature sensor and pull the sensor wires and connector into the oven cavity.



5. Disconnect the oven temperature sensor connector from the wiring harness.



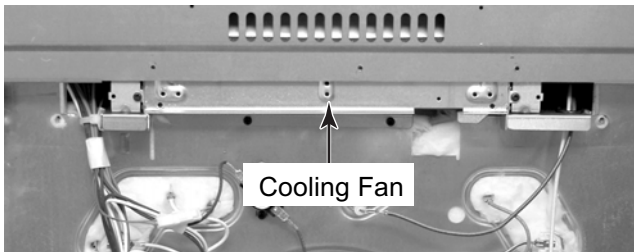
REMOVING THE COOLING FAN

!WARNING

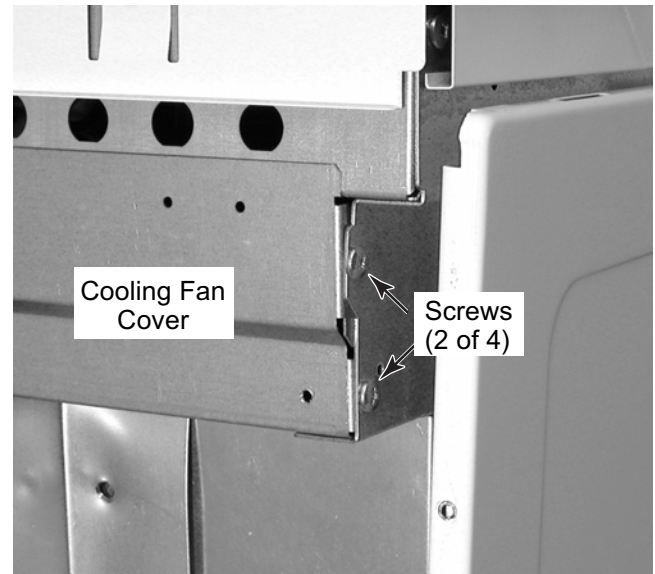


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Pull the range out of its mounting location so that you can access the rear of the unit.
4. Remove the rear panel from the unit (see page 4-12 for the procedure).



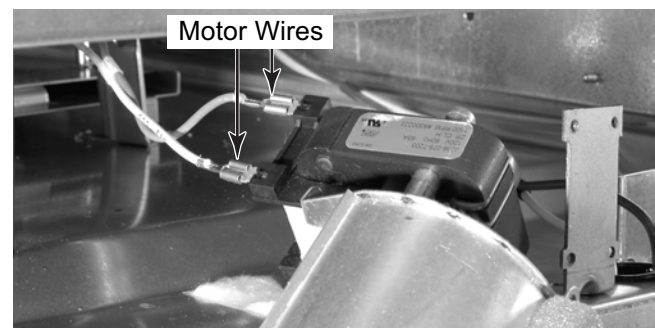
5. Use a 90° screwdriver, and remove the two screws from each end of the cooling fan cover, then remove the cover.



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



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



REMOVING THE OVEN TOD

!WARNING



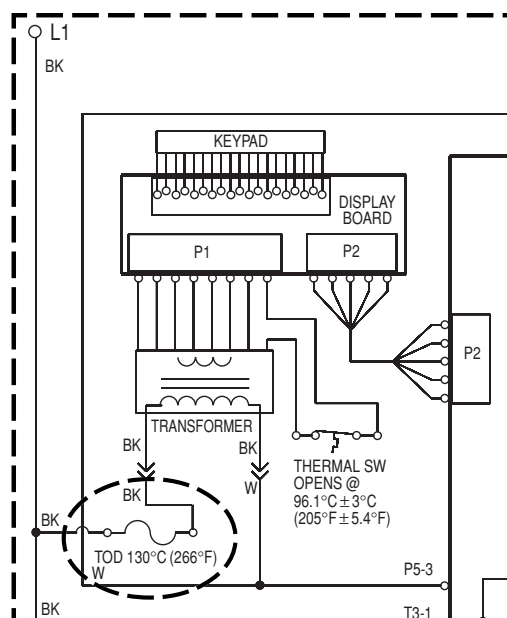
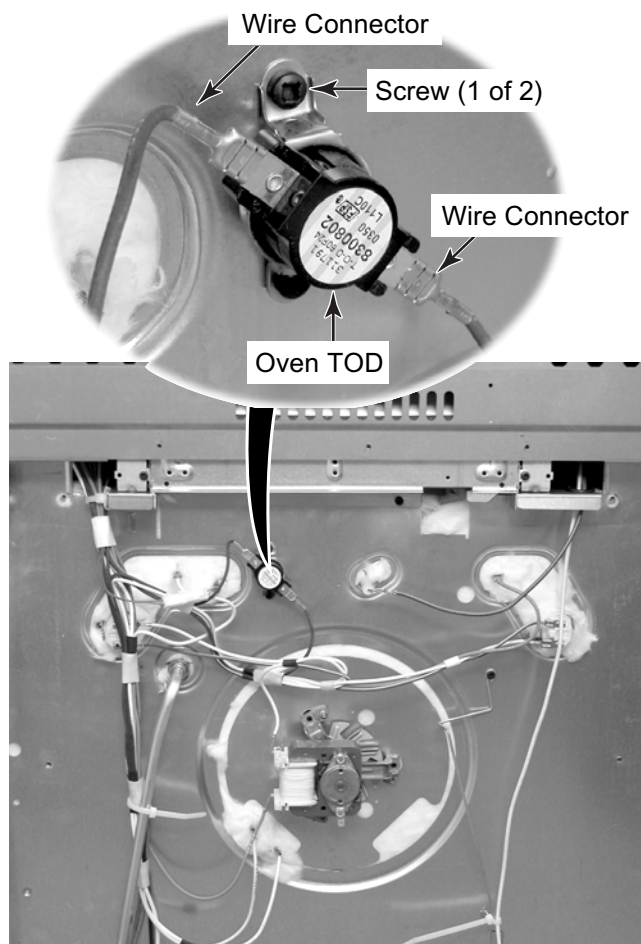
Electrical Shock Hazard

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. Turn off gas supply to range.
3. Pull the range out of its mounting location so that you can access the rear of the unit.
4. Remove the rear panel from the unit (see page 4-12 for the procedure).
5. Remove the two wire connectors from the oven TOD terminals.
6. Remove the two screws from the oven TOD and remove it.



REMOVING THE GAS DISTRIBUTION VALVE

!WARNING



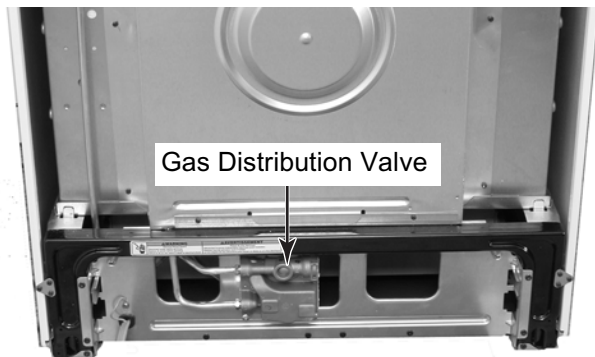
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

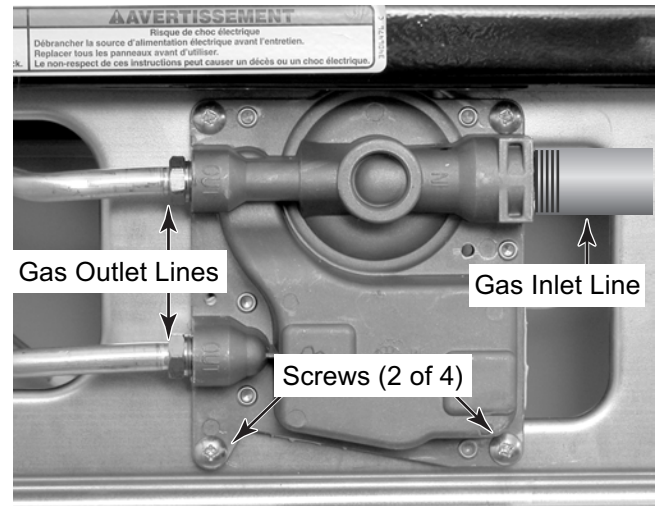
Failure to do so can result in death or electrical shock.

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Pull the range out of its mounting location so that you can access the rear of the unit.

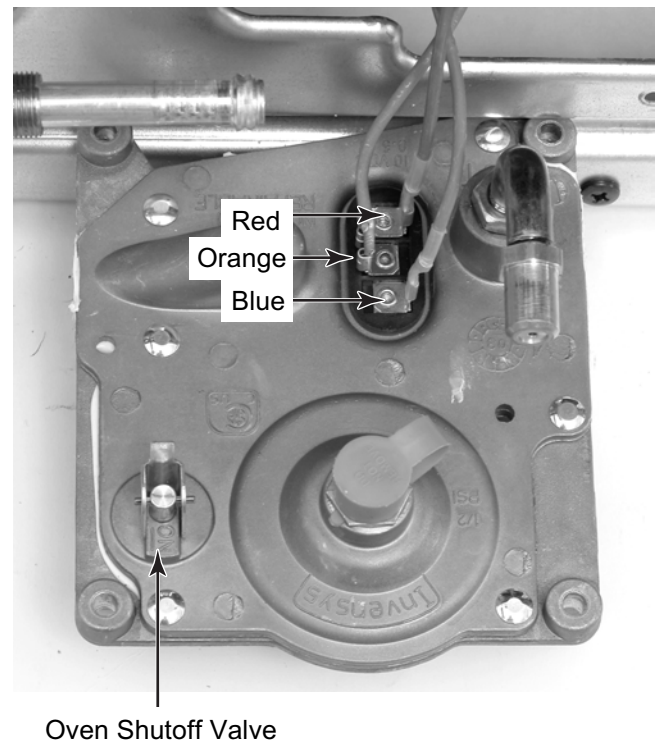


NOTE: For servicing the Gas Distribution System, refer to Job Aid **KR-28**, Part Number **8177893**.

4. Disconnect the gas lines from the gas distribution valve.
5. Remove the four screws from the gas distribution valve, pull it down to remove the orifice from the bake burner, and lay it down so you can access the wires.



6. Disconnect the three wires from the gas distribution valve terminals.



REMOVING THE POWER SUPPLY CORD

!WARNING



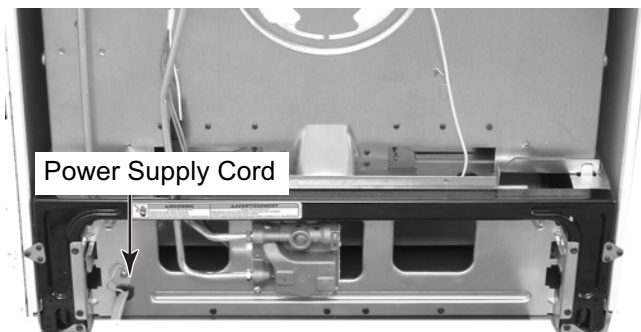
Electrical Shock Hazard

Disconnect power before servicing.

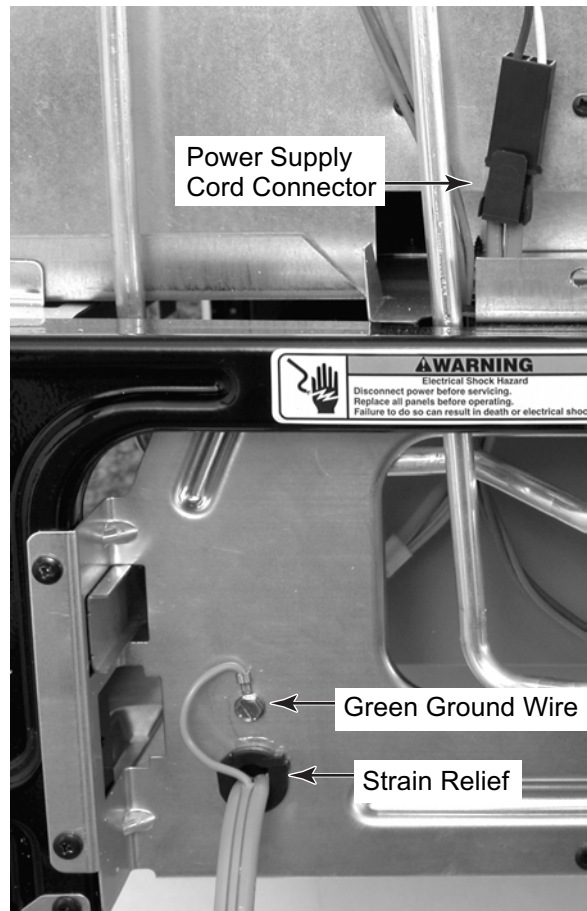
Replace all parts and panels before operating.

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

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Pull the range out of its mounting location so that you can access the rear of the unit.
4. Remove the rear panel from the unit (see page 4-12 for the procedure).



5. Disconnect the power supply cord connector from the main harness connector.
6. Remove the green ground wire screw from the power supply cord.
7. Release the strain relief from the power cord and remove the cord from the unit.



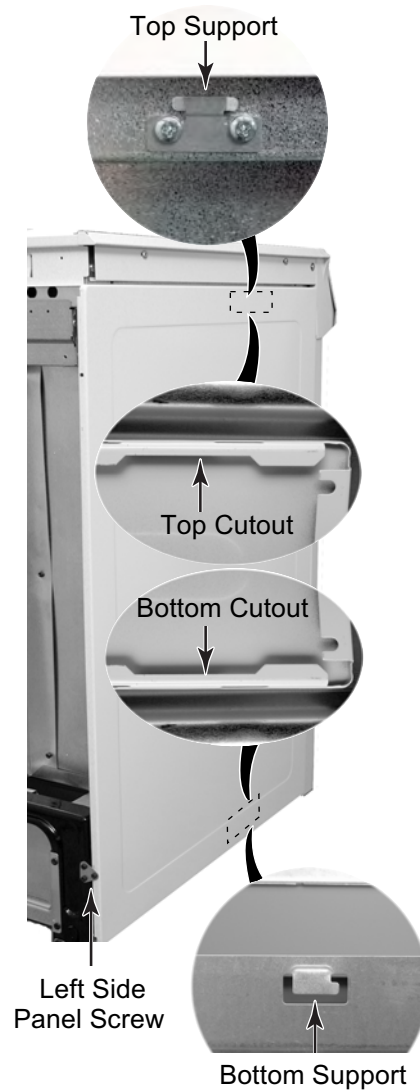
REMOVING A SIDE PANEL

!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.

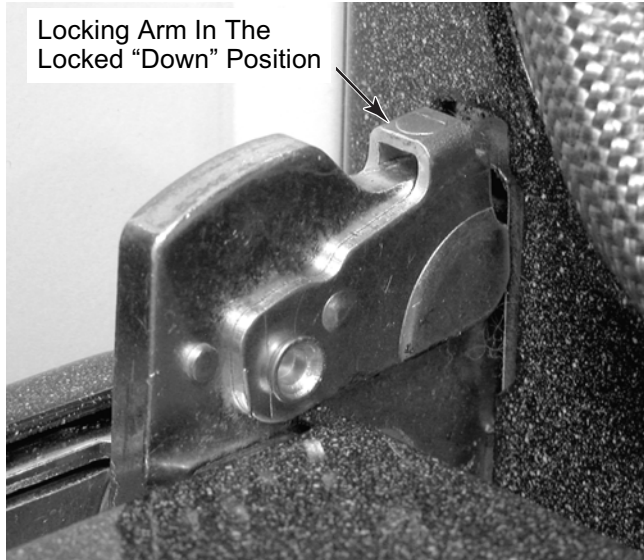
1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Pull the range out of its mounting location so that you can access the rear of the unit.
4. Remove the top bracket (see page 4-12 for the procedure).
5. Remove the bottom rear screw for the side panel you are removing.
6. Pull the back of the side panel out so it clears the support bracket, then slide the panel back until the top and bottom supports are in the panel cutouts, then remove the panel.



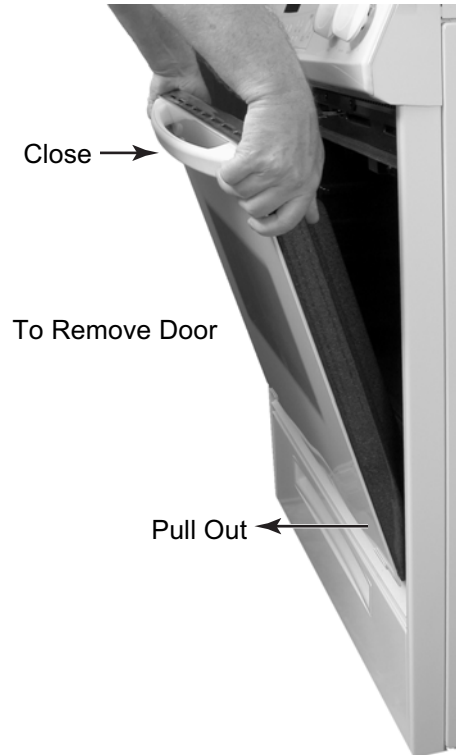
REMOVING & REINSTALLING THE OVEN DOOR

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.

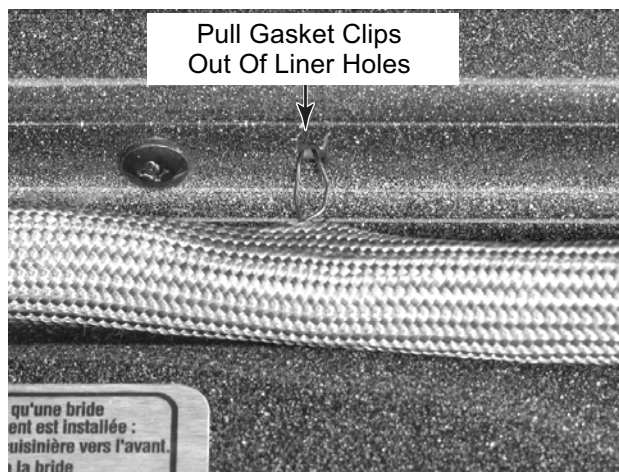
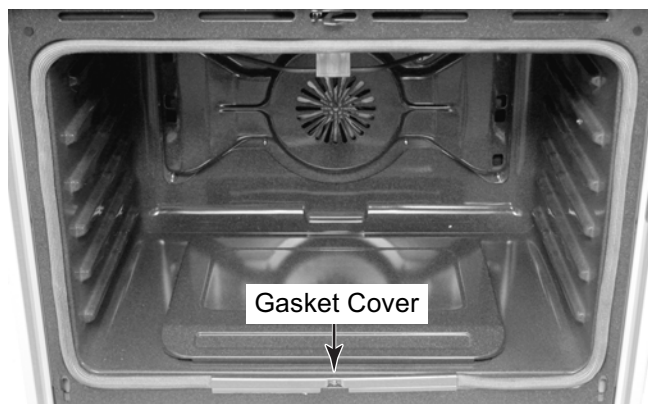


To reinstall the oven door:

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 from the range (see page 4-26 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

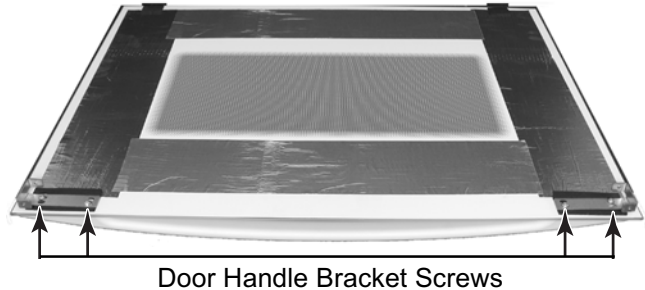
1. Remove the oven door from the range (see page 4-26 for the procedure).
2. Place the oven door on a padded work surface with the decorative glass and handle facing up and the bottom edge facing the front.
3. **To remove the decorative glass and handle:**
 - a) Remove the screw from each of the two 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.

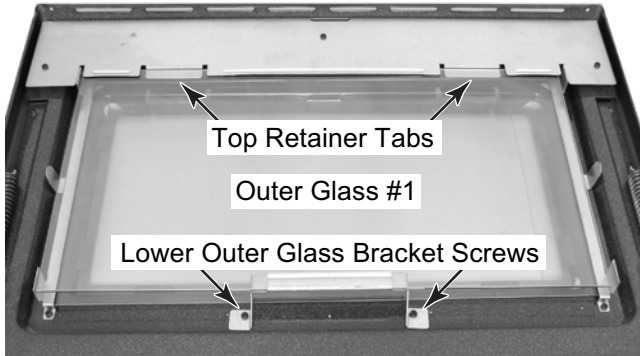


4. **To remove a hinge:**
 - a) Remove the decorative glass and handle from the door liner (see step 3).
 - b) Position the oven door liner with the inner glass facing up.
 - c) Remove the two screws from the hinge you are servicing.
 - d) Lift the door liner and remove the hinge.

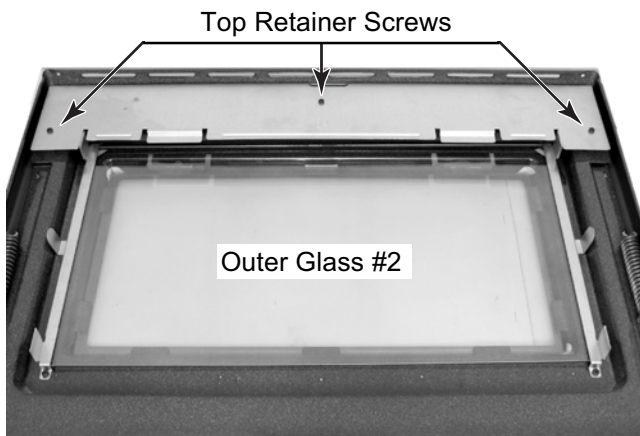


5. **To remove the two pieces of outer oven door glass:**
 - a) Remove the decorative glass and handle from the door liner (see step 3).

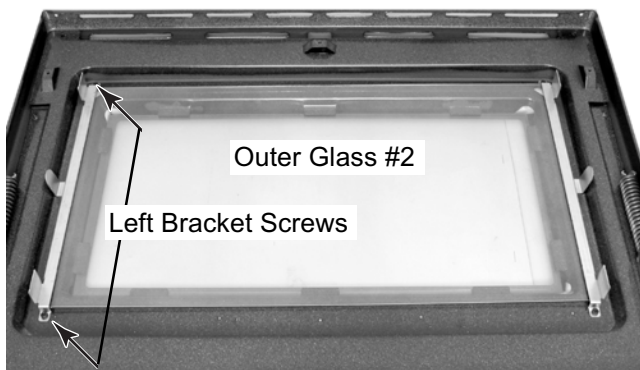
- b) Position the door liner with the outer oven glass facing up, as shown.
- c) Remove the two screws from the lower bracket for the outer oven glass.
- d) Slide the lower bracket off the first piece of outer oven glass, then slide the glass out of the top retainer tabs.



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

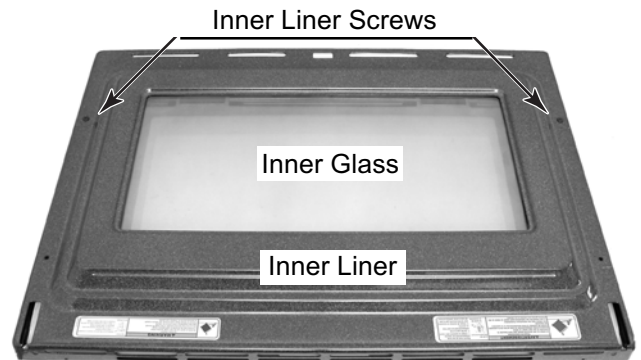


- f) For the second piece of outer oven glass, remove the two screws from the left bracket, then remove the bracket and second piece of glass from the door liner.

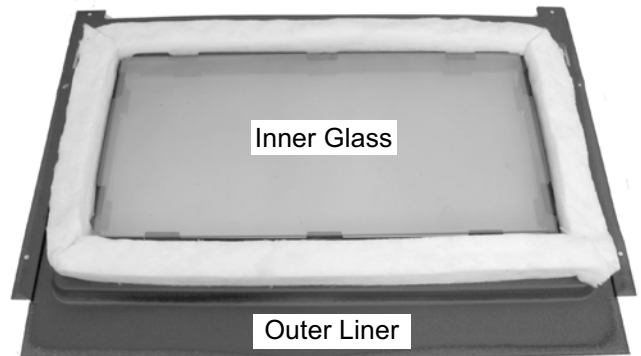


6. **To remove the inner oven door glass:**

- 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:

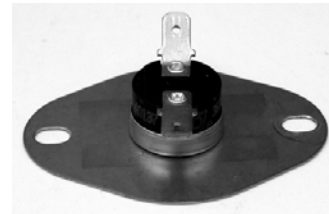
- The most common cause for control failure is corrosion on connectors. Therefore, disconnecting and reconnecting wires will be necessary throughout test procedures.
- All tests/checks should be made with a VOM or DVM having a sensitivity of 20,000 ohms-per-volt DC, or greater.
- Check all connections 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.

CONTROL & COOLING FAN THERMAL SWITCHES

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

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



Control Thermal Switch (N.C.)
Opens @ 96°C (205°F)
Closes @ 74°C (165°F)

Cooling Fan Thermal Switch (N.O.)
Closes @ 70°C (158°F)
Opens @ 60°C (140°F)



⚠️ 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.

STANDARD & TRIPLETIER™ IGNITION SWITCHES



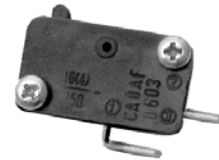
Refer to page 4-4 for the procedure for servicing the standard and TripleTier™ ignition switches.

NOTE: The standard ignition switches are connected to each other in a parallel circuit so that if one switch fails, the others will still operate. To check each of the ignition switches for proper operation, perform the following steps.

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Remove the control panel and access the ignition switch connector (see page 4-2 for the procedure).
4. Reinstall the knobs on the valve stems.
5. **To test the standard ignition switches:**
 - a) Disconnect the ignition switch connector from the wire harness.
 - b) Set the ohmmeter to the R x 1 scale.
 - c) Connect the ohmmeter test leads to the pins of the spark module connector.

- d) Press and turn one of the gas valve knobs to the LITE position. At that point, the switch should close, and the meter should indicate continuity.
- e) Continue to turn the knob away from the LITE position. The switch should open, and the meter should indicate an open (infinite ∞) circuit.
- f) Repeat steps d and e for the other ignition switches. If the readings are not as stated, replace the entire ignition switch assembly. They are supplied as an assembly and cannot be changed individually.

6. To test the TripleTier™ ignition switch:



- a) Disconnect one of the wires from the ignition switch terminals.
- b) Set the ohmmeter to the R x 1 scale.
- c) Connect the ohmmeter test leads to the pins of the ignition switch. The meter should indicate an open circuit (infinite).
- d) With the ohmmeter test leads connected as stated in the previous step, press the switch actuator. The meter should indicate continuity (0 Ω).



⚠ WARNING

Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

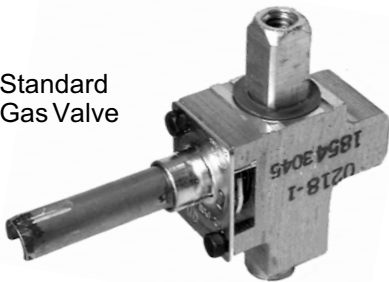
Failure to do so can result in death or electrical shock.

STANDARD & TRIPLETIER™ GAS VALVES

Refer to page 4-4 for the procedure for servicing the standard and TripleTier™ gas valves.

To test a gas valve, use a low-pressure manometer, and measure the inlet and outlet pressure across the valve. There should be no pressure drop. If there is a pressure drop, the valve should be replaced.

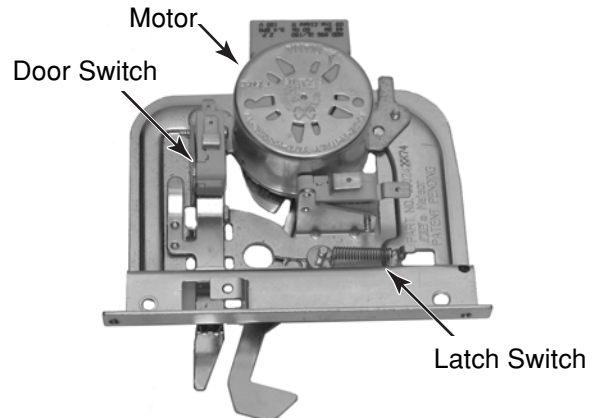
Standard
Gas Valve



TripleTier™
Gas Valve



DOOR LATCH ASSEMBLY



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

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Disconnect one of the wires from the door latch assembly component under test.
4. Set the ohmmeter to the R x 1K scale.
5. **To test the motor**, touch the ohmmeter test leads to the terminals. The meter should indicate between 2.6K and 3K Ω .
6. **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 Ω).



⚠ WARNING

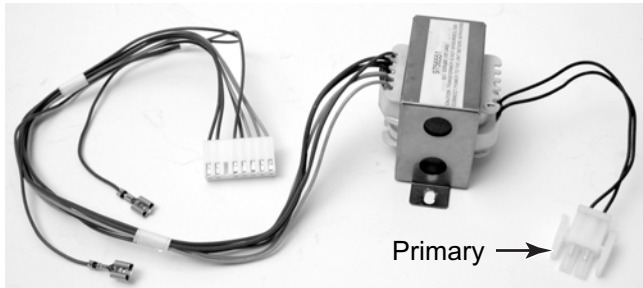
Electrical Shock Hazard

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 4-8 for the procedure for servicing the power supply transformer.

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

HALO™ BROIL ELEMENT



Refer to page 4-14 for the procedure for servicing the Halo™ broil element.

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Disconnect one of the wires from the Halo™ broil element terminals.
4. Set the ohmmeter to the R x 1 scale.
5. Touch the ohmmeter test leads to the Halo™ broil element terminals. The meter should indicate between 10 and 14 Ω .



⚠️ 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 ELEMENT



Refer to page 4-18 for the procedure for servicing the convection element.

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Disconnect one of the wires from the convection element terminals.
4. Set the ohmmeter to the R x 1 scale.
5. Touch the ohmmeter test leads to the convection element terminals. The meter should indicate between 14 and 22 Ω

CONVECTION FAN MOTOR



Refer to page 4-18 for the procedure for servicing the convection fan motor.

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Disconnect one of the wires from the convection fan motor terminals.
4. Set the ohmmeter to the R x 1 scale.
5. Touch the ohmmeter test leads to the convection fan motor terminals. The meter should indicate between 29 and 41 Ω .



⚠ 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 TEMPERATURE SENSOR



Refer to page 4-20 for the procedure for servicing the oven temperature sensor.

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Disconnect the oven temperature sensor connector.
4. Set the ohmmeter to the R x 1K scale.
5. Touch the ohmmeter test leads to the oven temperature sensor connector pins. The meter should indicate as shown in the chart below.

Temperatures (°F)	Temperatures (°C)	Resistance (Ω)
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

COOLING FAN MOTOR



Refer to page 4-21 for the procedure for servicing the cooling fan.

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Disconnect one of the wires from the cooling fan motor terminals.
4. Set the ohmmeter to the R x 1 scale.
5. Touch the ohmmeter test leads to the cooling fan motor terminals. The meter should indicate between 3 and 6 Ω .



⚠ 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.

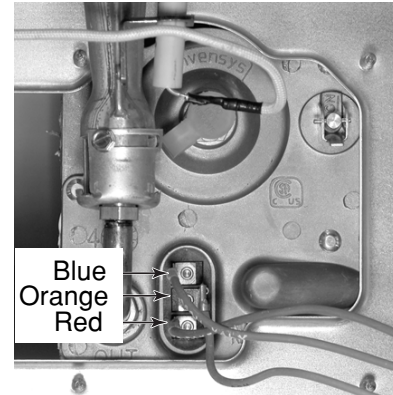
OVEN TOD



Refer to page 4-22 for the procedure for servicing the oven TOD.

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

GAS DISTRIBUTION VALVE



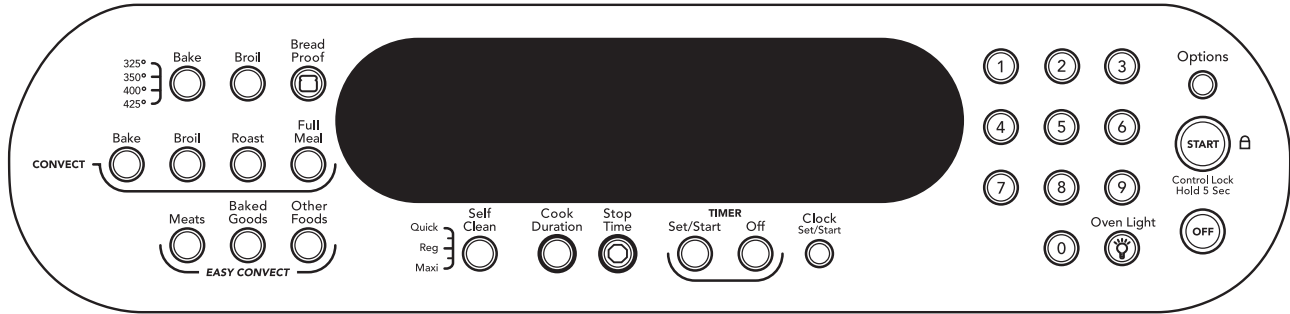
Refer to page 4-23 for the procedure for servicing the gas distribution valve.

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Remove the storage drawer. **NOTE:** You can access the gas distribution valve from inside the drawer area.
4. Disconnect the wires from the gas distribution valve terminals.
5. Set the ohmmeter to the R x 1 scale.
6. Touch the ohmmeter test leads to the indicated gas distribution valve terminals. The meter should indicate as follows:

Terminal 1 (red) to terminal 2 (orange)
= 216 Ω \pm 30.

Terminal 2 (orange) to terminal 3 (blue)
= 216 Ω \pm 30.

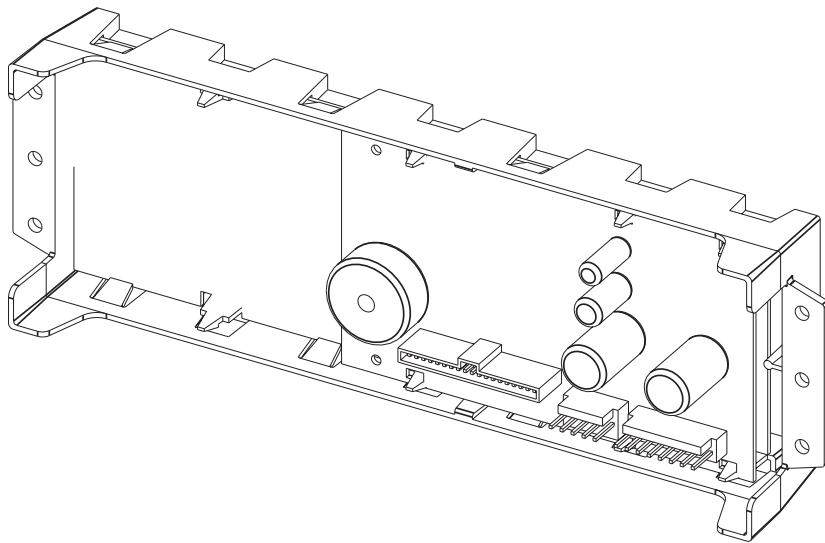
CLOCK MODELS KGRA806P & KGSA906P



Keypad Layout

MODELS KGRA806P & KGSA906P							
	16	15	14	13	12	11	10
8		BAKE	CLEAN	COOK TIME	3	OPTIONS	OPEN
7	CONVECT BAKE	CONVECT BROIL	STOP TIME	TIMER	6	START	OPEN
6		MEATS	TIMER OFF	CLOCK	9		OPEN
5	MAXI BROIL	BREAD PROOF	1	2	OVEN LIGHT		OPEN
4	CONVECT ROAST	FULL MEAL	4	5			OPEN
3	BAKED GOODS	OTHER FOODS	7	8			OPEN
2				0			OPEN

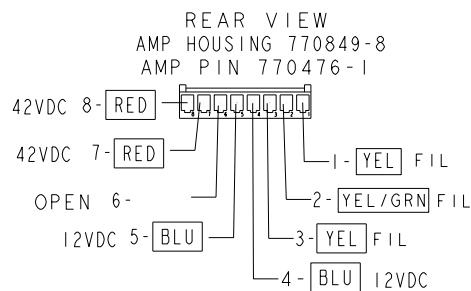
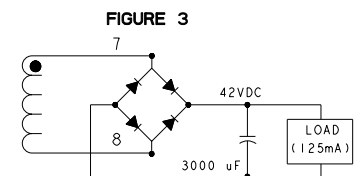
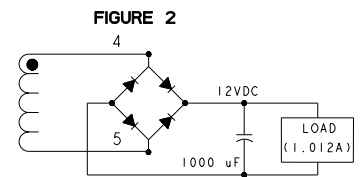
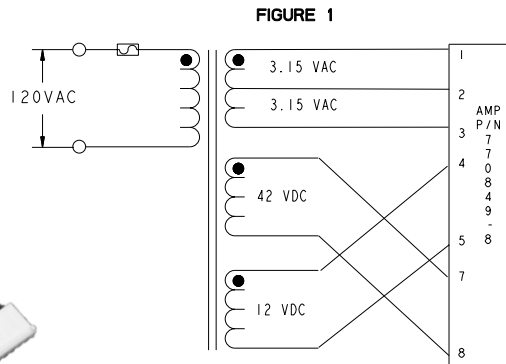
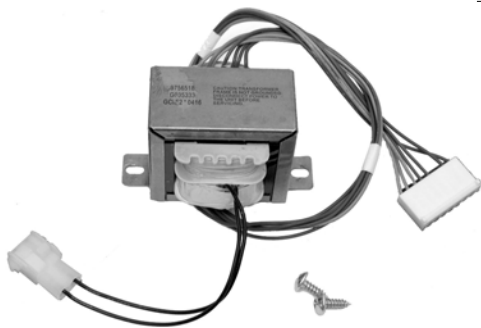
Display Board & Connector Pinouts



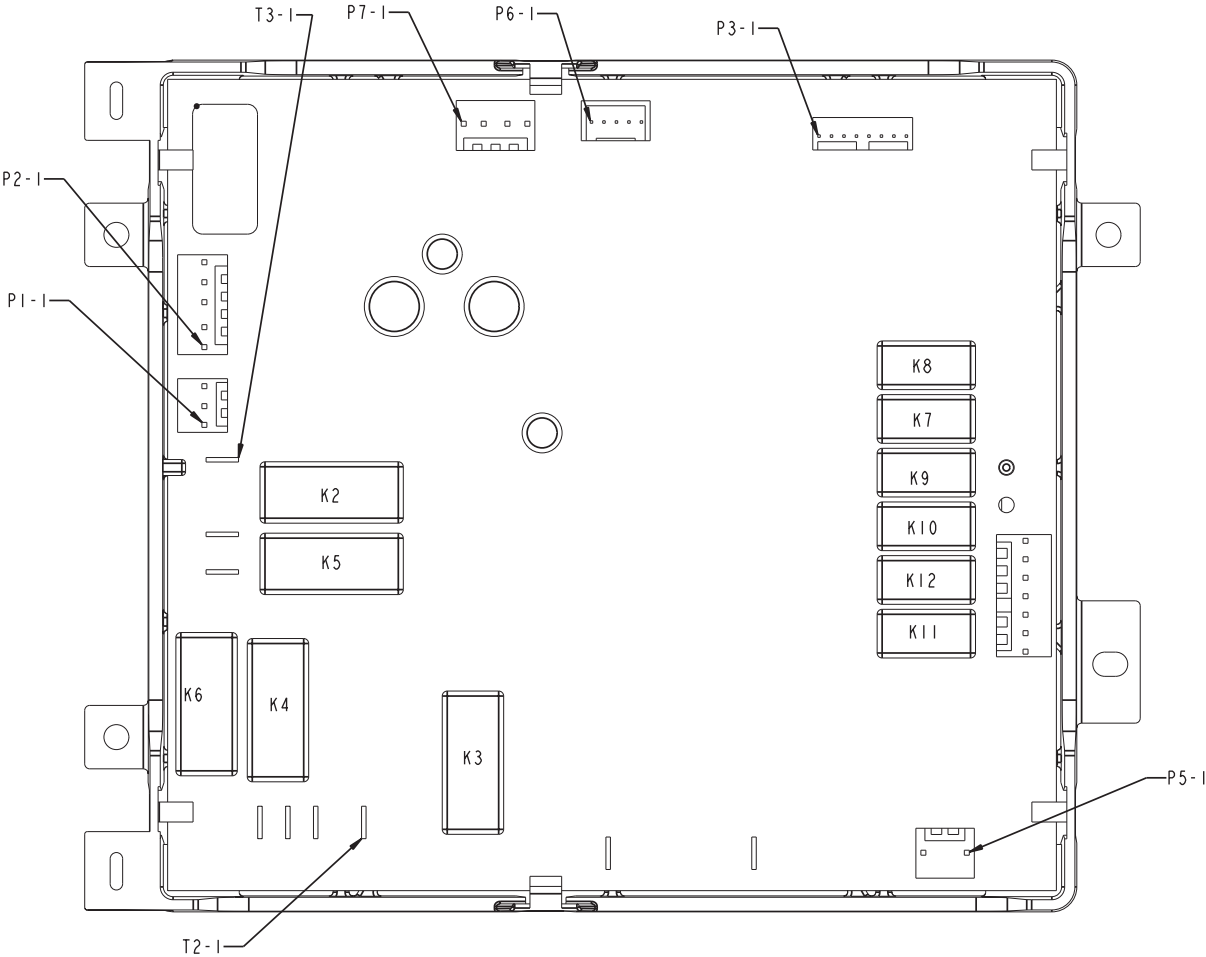
CONN HDR-ST LOCK W/PEG 8 PIN 7A.156 AMP 644615-8	
PI-1	FILAMENT
PI-2	CENTER TAP
PI-3	FILAMENT
PI-4	12 VDC
PI-5	12 VDC
PI-6	OPEN
PI-7	42 VDC
PI-8	42 VDC

CONN HDR-ST LOCK W/PEG 5 PIN 7A.156 AMP 644615-5	
P2-1	12 VDC
P2-2	12 VDC
P2-3	OPEN
P2-4	DATA
P2-5	DGND

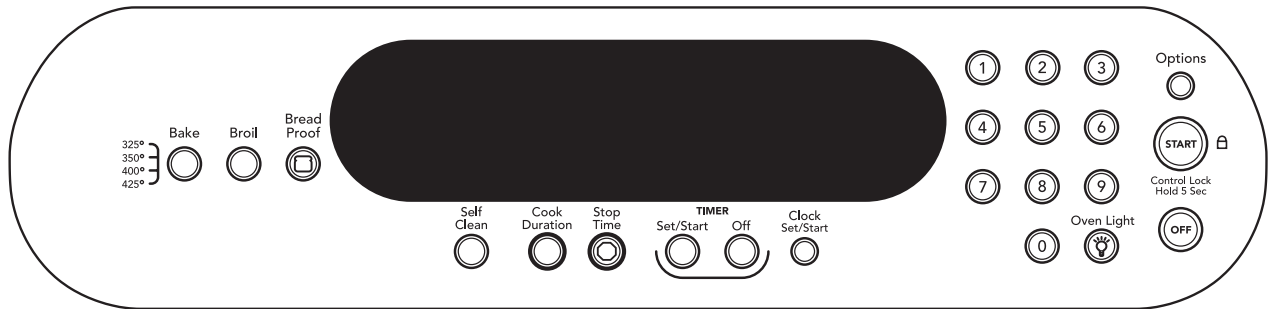
Low Voltage Transformer



Power Board



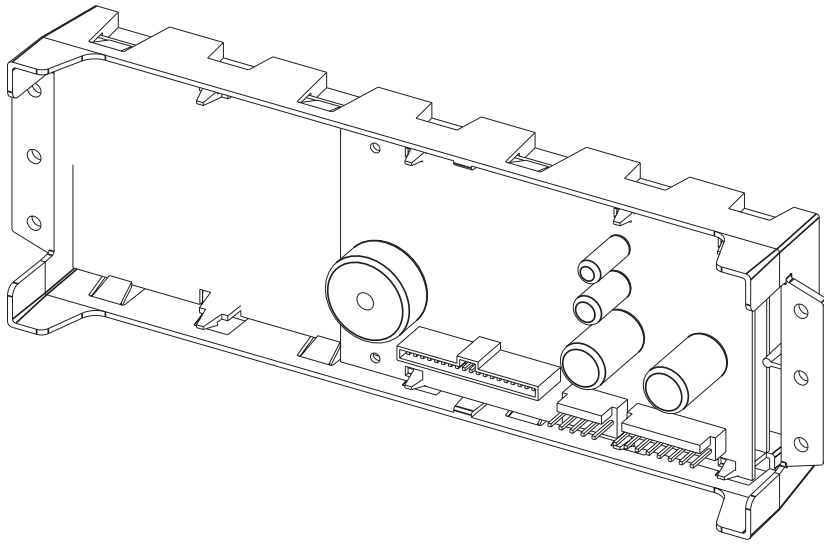
CLOCK MODELS KGRI801P & KGS1901P



Keypad Layout

MODEL KGRI801P & KGS1901P							
	16	15	14	13	12	11	10
8		BAKE	CLEAN	COOK TIME	3	OPT	OPEN
7			STOP TIME	TIMER	6	START	OPEN
6			TIMER OFF	CLOCK	9		OPEN
5			1	2	OVEN LIGHT		OPEN
4	MAXI BROIL	BREAD PROOF	4	5			OPEN
3			7	8			OPEN
2				0			OPEN

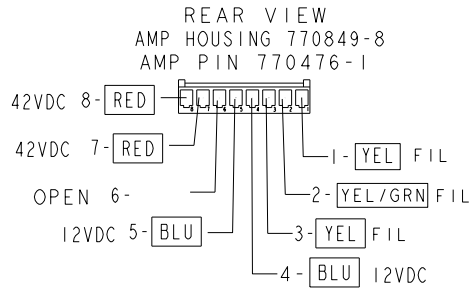
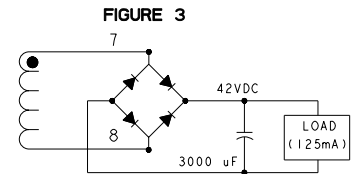
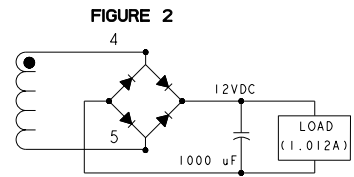
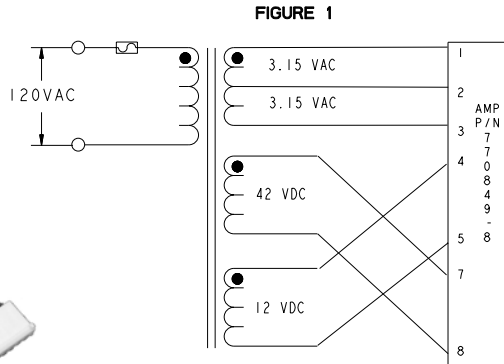
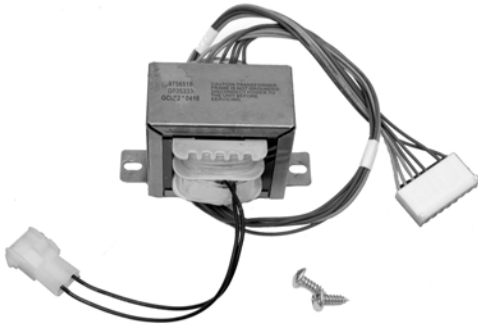
Display Board & Connector Pinouts



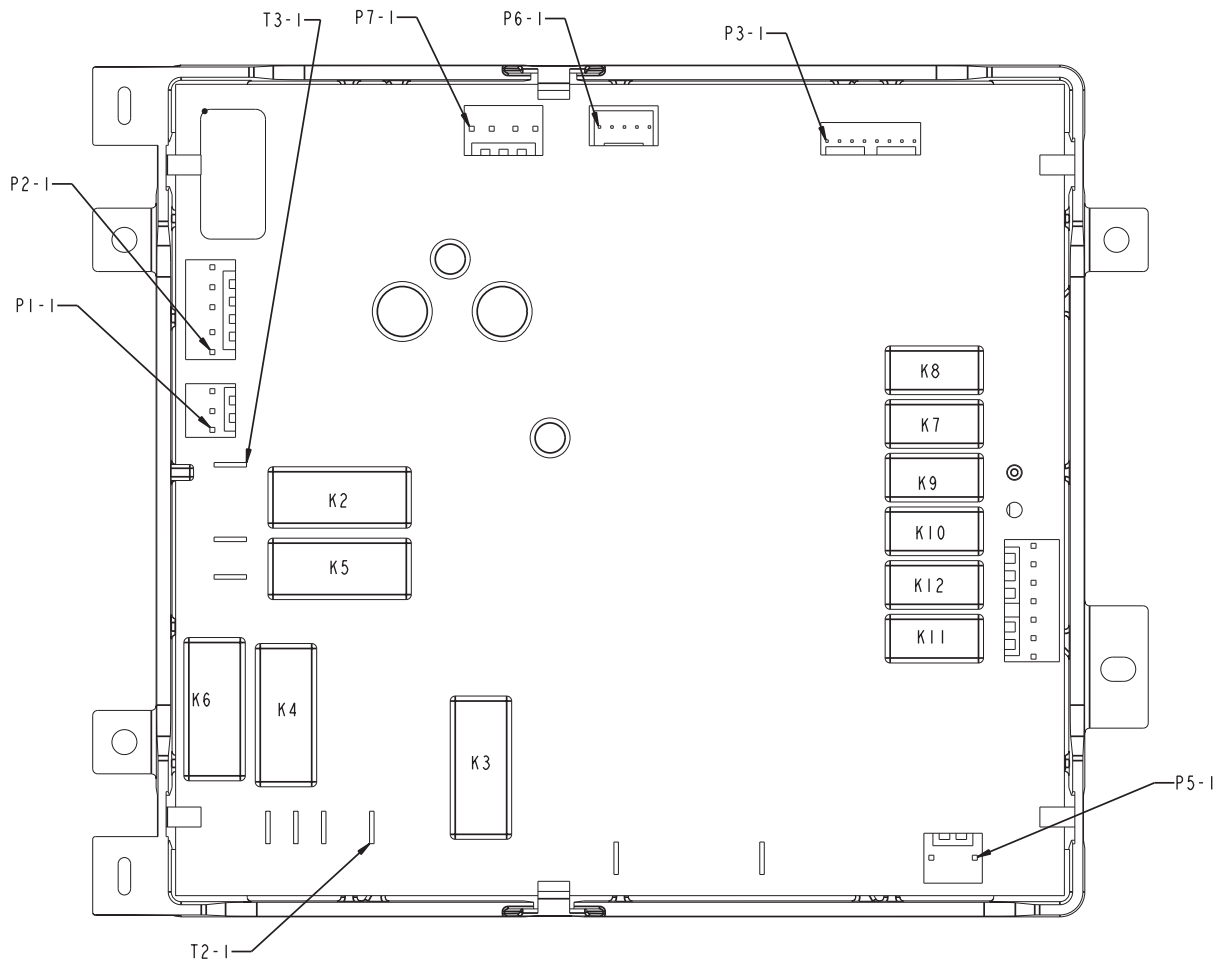
CONN HDR-ST LOCK W/PEG 8 PIN 7A.156 AMP 644615-8	
PI-1	FILAMENT
PI-2	CENTER TAP
PI-3	FILAMENT
PI-4	12 VDC
PI-5	12 VDC
PI-6	OPEN
PI-7	42 VDC
PI-8	42 VDC

CONN HDR-ST LOCK W/PEG 5 PIN 7A.156 AMP 644615-5	
P2-1	12 VDC
P2-2	12 VDC
P2-3	OPEN
P2-4	DATA
P2-5	DGND

Low Voltage Transformer



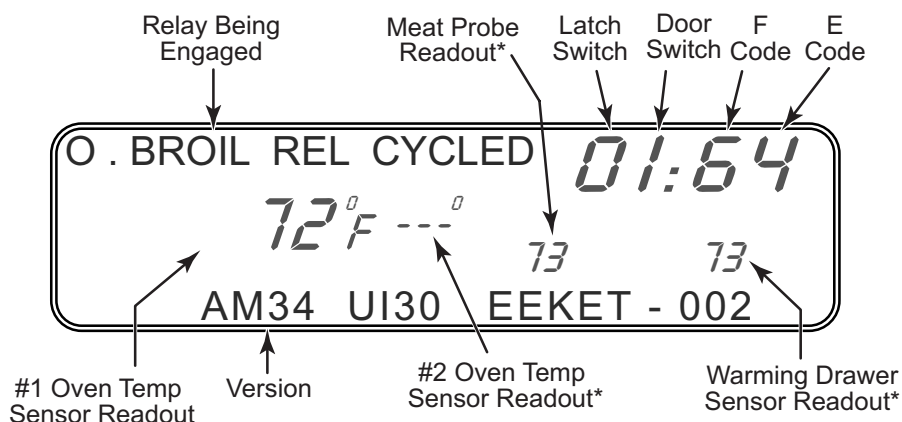
Power Board



— NOTES —

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.

ERROR CODE LIST ORDER		
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 2nd 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
<p>PROCEDURE: Before proceeding, perform steps 1 through 3 above chart to enter the Diagnostic mode.</p> <p>A. Unplug range or disconnect power. B. Replace the display board. C. Plug in range or reconnect power.</p>		
F1 Internal	E5	INTERNAL ERROR
	E6	INTERNAL ERROR
	E7	INTERNAL ERROR
	E8	INTERNAL ERROR
<p>PROCEDURE: Before proceeding, perform steps 1 through 3 above chart to enter the Diagnostic mode.</p> <p>A. Unplug range or disconnect power. B. Replace the power board. C. Plug in range or reconnect power.</p>		
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
<p>PROCEDURE: Before proceeding, perform steps 1 through 3 above chart to enter the Diagnostic mode.</p> <p>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.</p>		

FAILURE (Leftmost 2 Clock Digits)	ERROR (Rightmost 2 Clock Digits)	MESSAGE/DESCRIPTION SUGGESTED CORRECTIVE ACTION PROCEDURE								
F3 Sensors	E0	MAIN SENSOR OPEN (top oven sensor opened)								
	E1	MAIN SENSOR SHORT or MAIN SENSOR SHORTED (top oven sensor shorted)								
	E2	MEAT PROBE SHORTED								
	E4	BOTTOM SENSOR OPEN (bottom oven sensor open)								
	E5	LOWER SENSOR SHORT or BOTTOM SENSOR SHORT (bottom oven sensor shorted)								
	E6	WD SENSOR OPEN (warming drawer sensor open)								
	E7	WD SENSOR SHORTED (warming drawer sensor shorted)								
<p>PROCEDURE: 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).									
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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
F4	E2	OVER TEMP COOK
	E3	OVER TEMP CLEAN
	E7	OVER TEMP CAVITY 2 (temperature runaway error)
<p>PROCEDURE: 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>GAS MODELS: 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>ELECTRIC MODELS: 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>PROCEDURE: 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>PROCEDURE: 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, & 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>PROCEDURE: 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

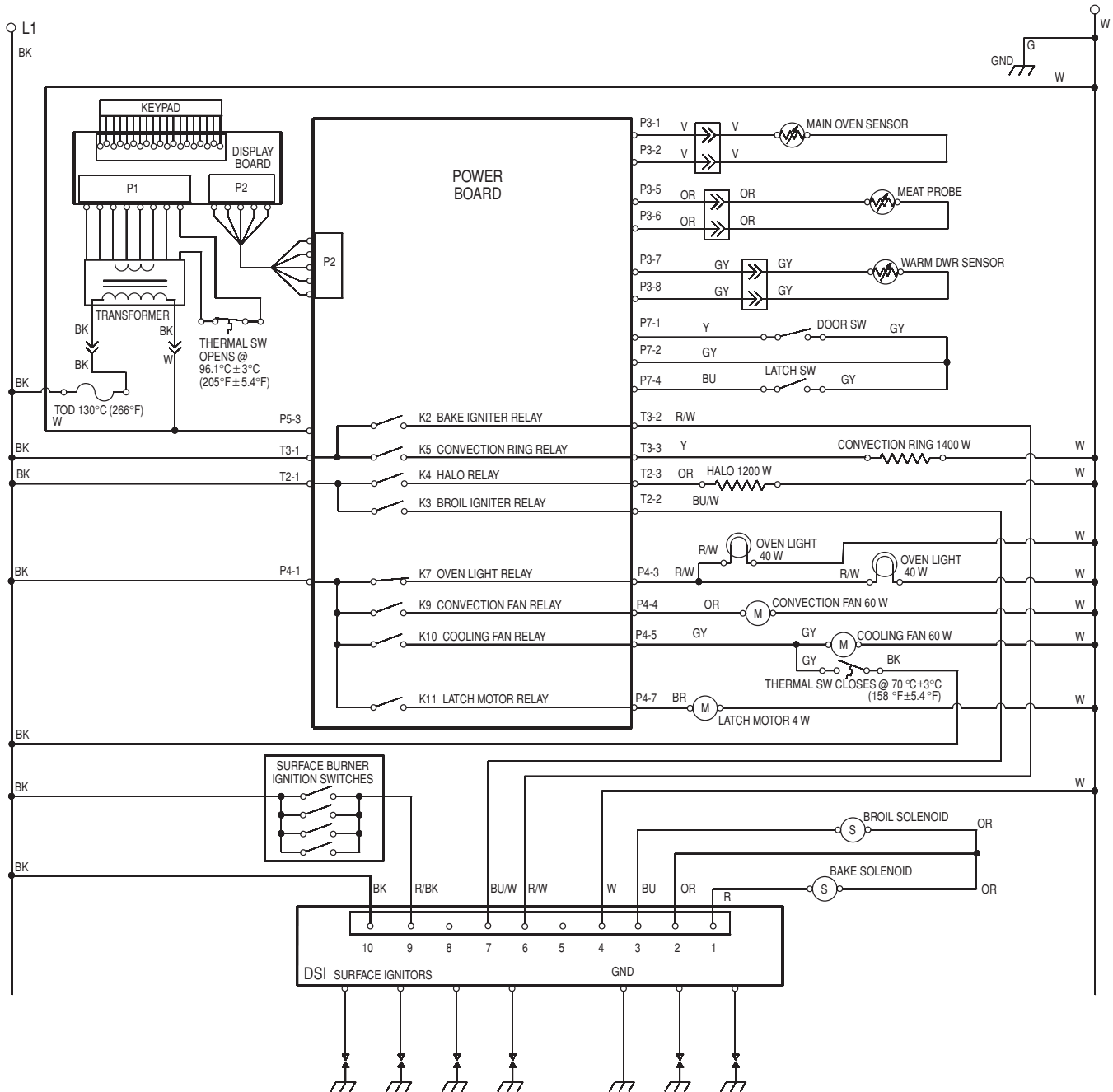
TEMPERATURE ADJUSTMENT

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

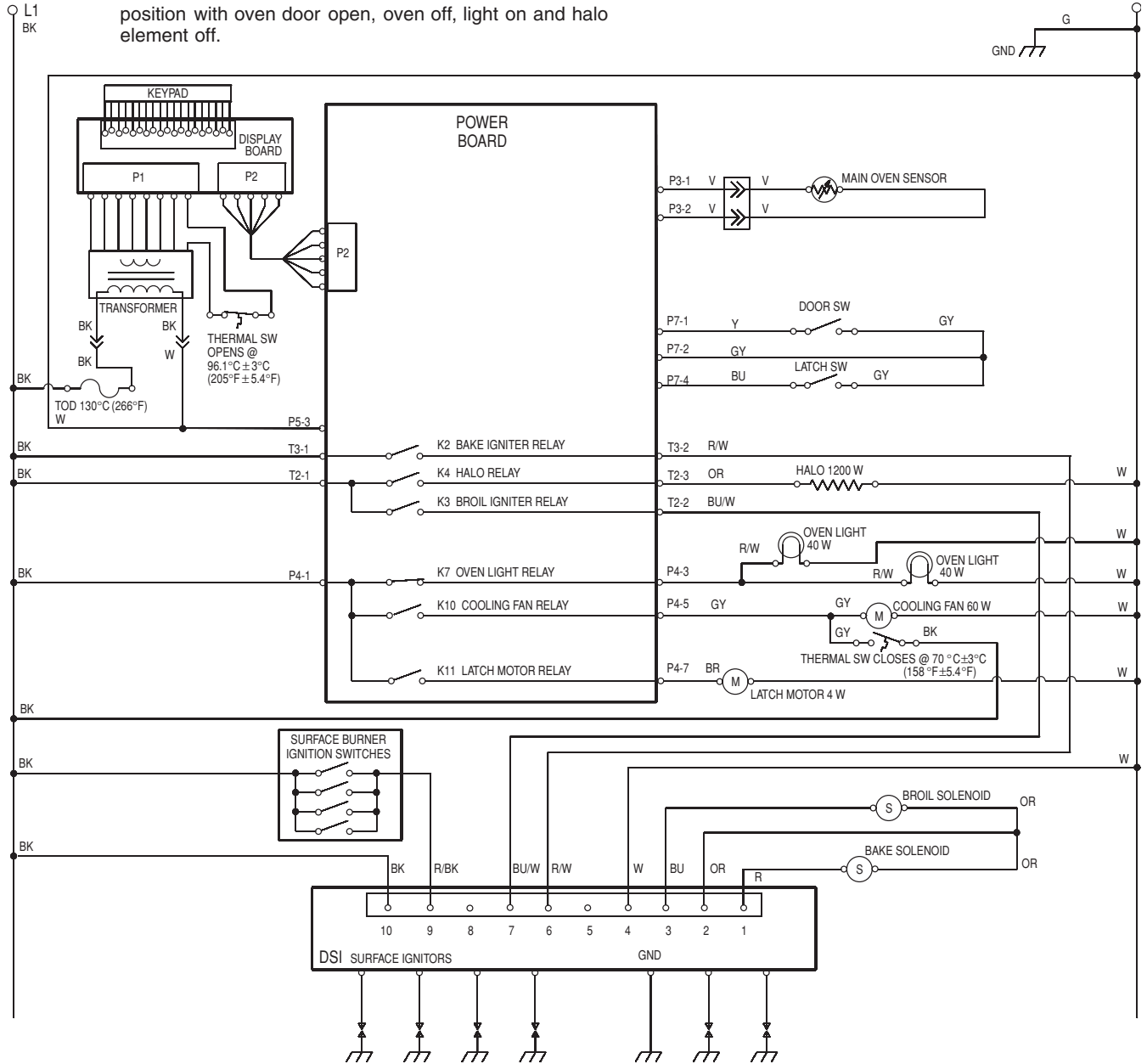
WIRING DIAGRAMS

TECH SHEET #9757665



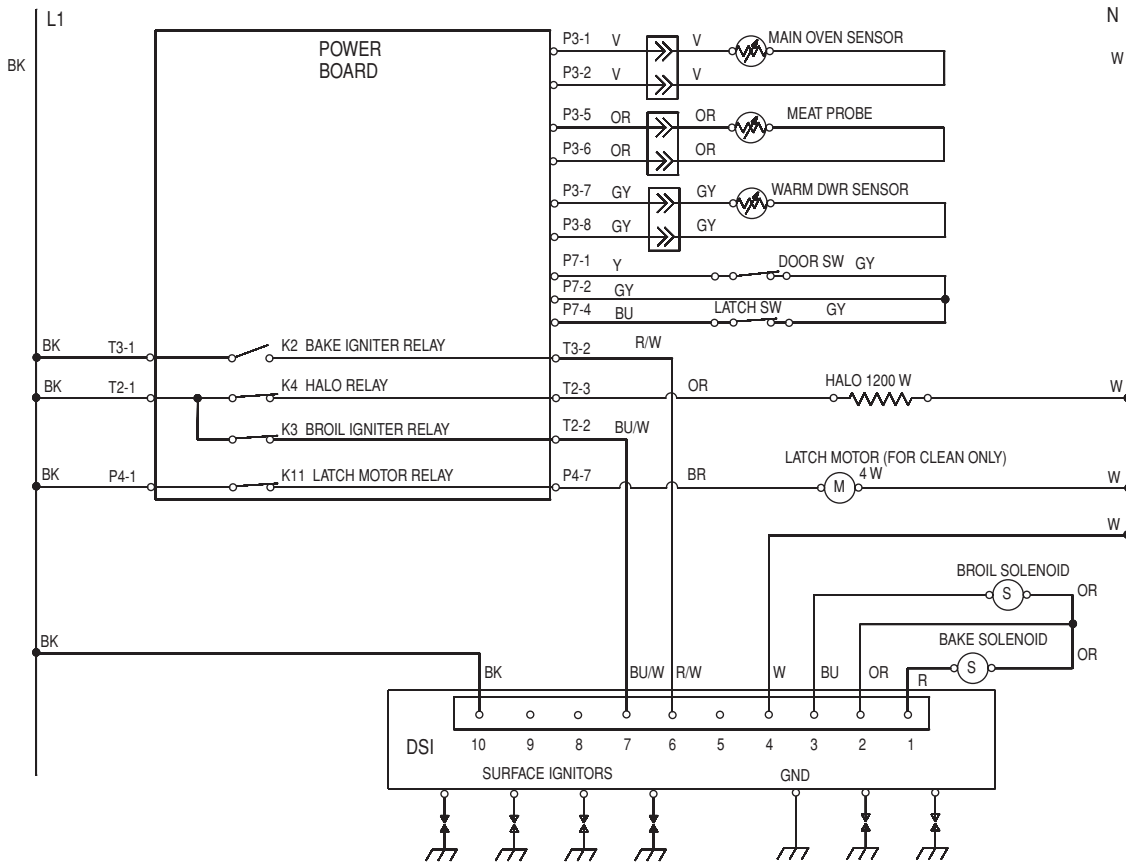
TECH SHEET #9757666

NOTE: Schematic shows door latch switch in the COOK position with oven door open, oven off, light on and halo element off.

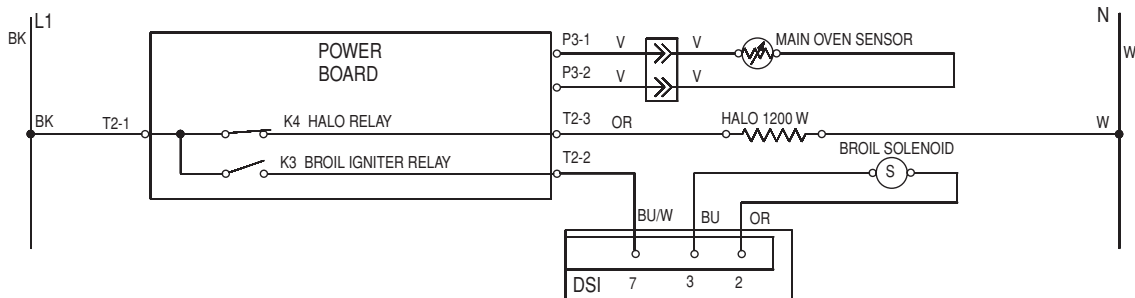


STRIP CIRCUITS

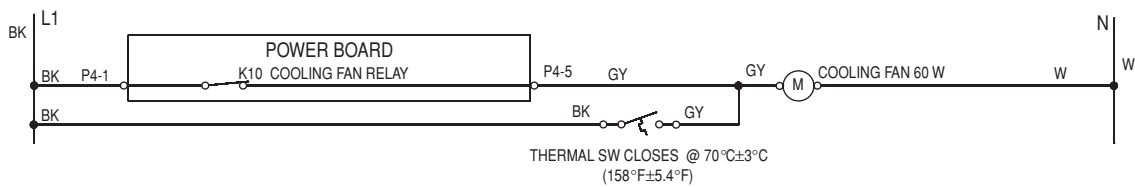
BAKE, PREHEAT, CLEAN



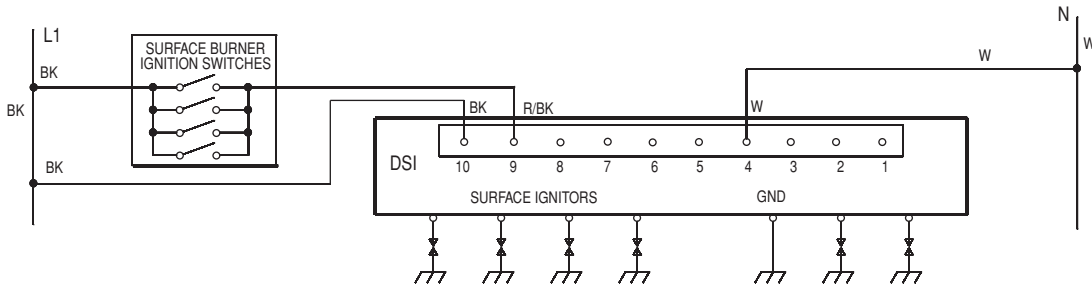
BROIL



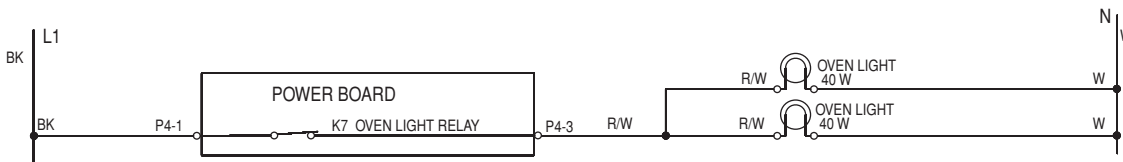
COOLING FAN



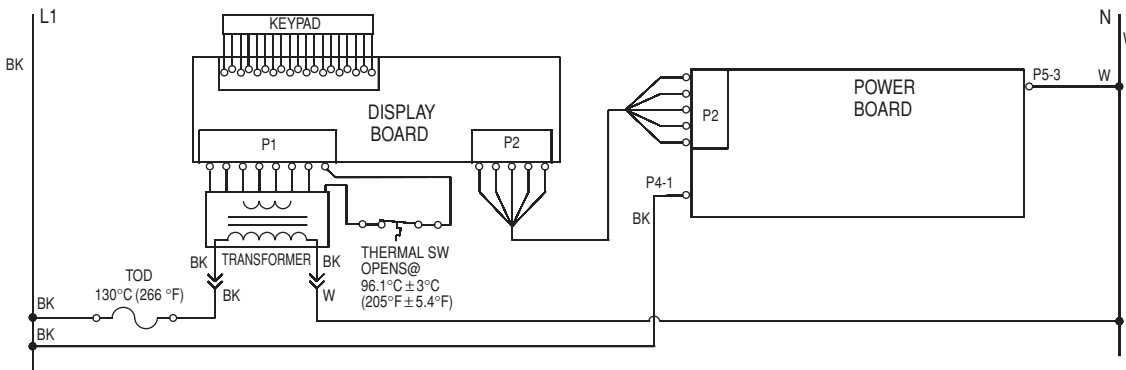
SURFACE UNIT (TYPICAL)



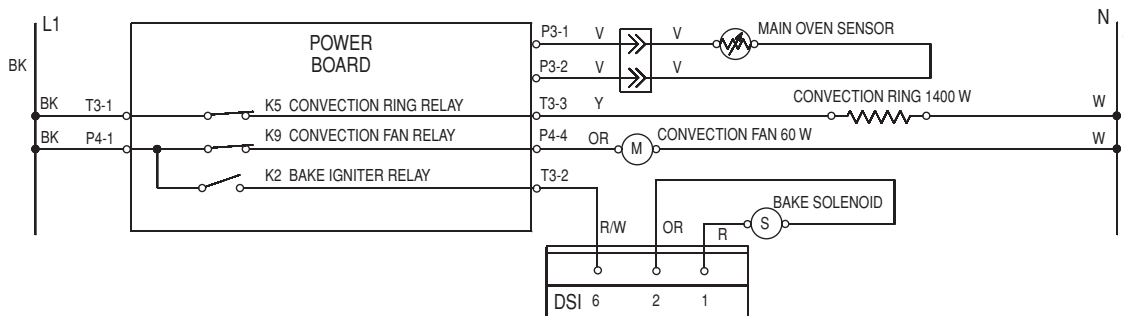
OVEN/CONSOLE LIGHTS



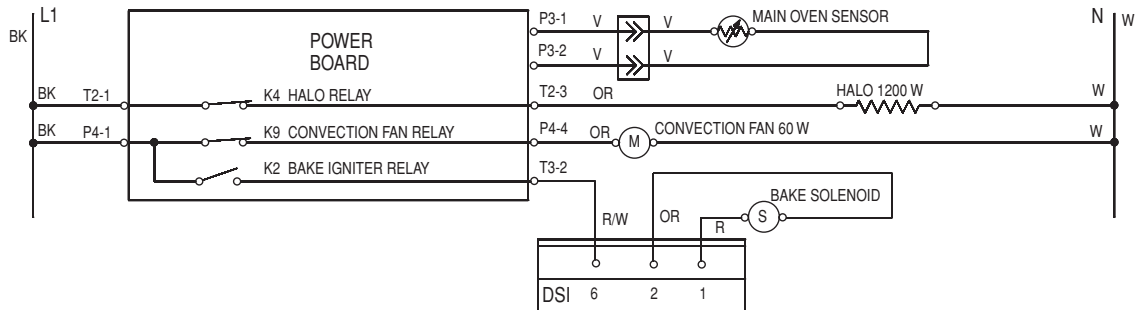
CONTROL POWER/CLOCK



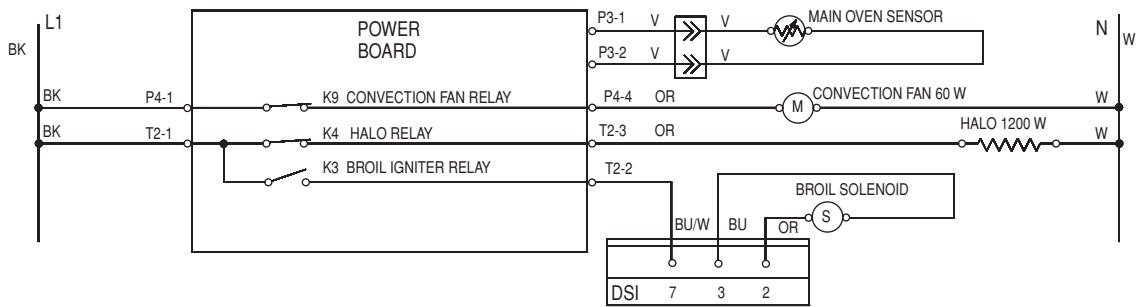
CONVECTION BAKE



CONVECTION ROAST



CONVECTION BROIL



— NOTES —

PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION SOURCES

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