



CONSUMER SERVICES TECHNICAL
EDUCATION GROUP PRESENTS

KR-35

SELF-CLEANING SLIDE-IN GAS RANGE



Model: GW395LEP

JOB AID
Part No. 8178455



FORWARD

This Whirlpool Job Aid, “Self-Cleaning Slide-In Gas Range,” (Part #8178455), provides the technician with information on the installation, operation, and service of the Self-Cleaning Slide-In Gas Range. 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 Diagram 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 the Whirlpool Self-Cleaning Slide-In Gas Range.

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	G	W	3	9	5	L	E	P	Q
PRODUCT GROUP R = ELECTRIC RANGES S = GAS RANGES G = WHIRLPOOL GOLD RANGE									
PRODUCT IDENTIFICATION A = ACCESSORY K = KITS B = BUILT-IN M = MV COMBO C = COOKTOP S = SET-IN E = EYE-LEVEL W = SLIDE-IN GAS F = FREESTANDING Y = SLIDE-IN ELECTRIC H = HOODS									
MODEL SIZE 3 = 30" SLIDE-IN 4 = 40" SLIDE-IN 5 = 36" SLIDE-IN 6 = 30" SET-IN RANGES									
OVEN TYPE 0 THRU 3 = STANDARD PORCELAIN 4 THRU 9 = PYROLYTIC SELF-CLEAN									
FEATURE / VARIATIONS <i>ELECTRIC</i> 0, 1, 2, 5, 7 = COIL ELEMENTS 4 = STANDARD PATTERN CERAMIC 6, 8, 9 = DELUXE PATTERN CERAMIC <i>GAS</i> 0, 1, 2, 3, 4, 6 = OPEN BURNER 5 & 7 = SEALED BURNER									
DOOR TYPE B = SOLID BLACK GLASS L = LARGE WINDOW O = METAL OVEN DOOR P = STANDARD WINDOW GLASS									
FEATURE CODE E = ELECTRONIC IGNITION (GAS ONLY) S = STANDING IGNITION (GAS ONLY) C = COLOR COORDINATED GLASS (BEFORE 1998) X = NOT DEFINED									
YEAR OF INTRODUCTION P = 2004									
COLOR CODE B = BLACK Q = WHITE ON WHITE S = STAINLESS STEEL T = BISCUIT									

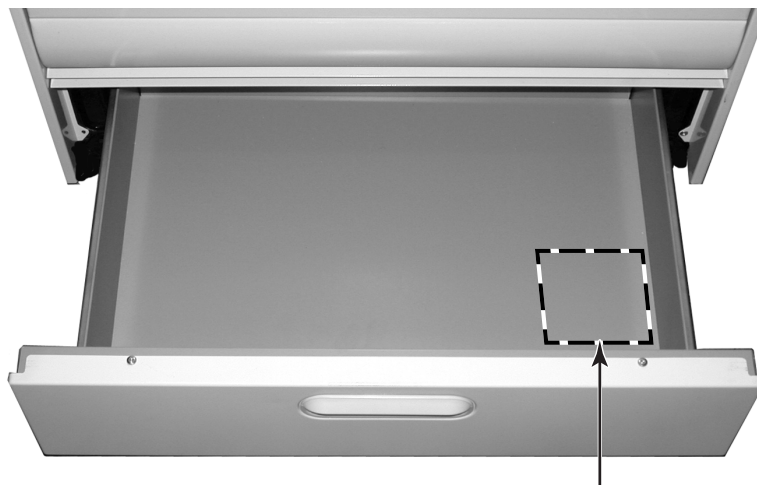
SERIAL NUMBER

SERIAL NUMBER	X	R	07	1	2	3	4	5
MANUFACTURING SITE X = OXFORD, MS								
YEAR OF PRODUCTION R = 2004								
WEEK OF PRODUCTION (7th WEEK)								
PRODUCT SEQUENCE NUMBER								

MODEL & SERIAL NUMBER LABEL & WIRING DIAGRAM LOCATIONS

The Model/Serial Number label and Wiring Diagram locations are shown below.

**Model/Serial Number Location
(Above Storage Drawer)**



**Wiring Diagram Location
(On Underside Of Drawer)**

SPECIFICATIONS

Model #	GW395LEP Q/B/T/S
Model Description	Gas Self-Clean
Oven Control Type	EZ354
OVEN CONTROL FUNCTIONS	
Convect bake	No
Bake	Yes
Temperature range	170 to 500°F
Custom broil	Yes
Temperature range	300 to 500°F
Temperature control	Temperature up/down buttons (5 degree increments)
Self-clean	Yes, variable time
Time set range	2:30 to 4:30 (15 min. increments)
Delay bake	Yes (Cook time, Stop time buttons)
Timer	Yes (up to 12hrs, 59 min. max.)
Oven light (manual)	Yes
Control lockout	Yes
Pre-heat countdown timer	Yes
Control overlay color	Q=White/Nestle, B=Black/blk Divide, T=Biscuit/dk biscuit, S=Black/blk Divide
Oven Heating Indicator Light	In display
Hidden functions	Select F/C temperature, temperature calibration offset, disable/enable timer reminder signals, disable/enable cycle end audible signals
CONSOLE FEATURES	
Location	Front
Burner "ON" Indicator Light	No
Burner Controls	Push to turn, infinite
Valve degrees of rotation	210 degrees
COOKTOP FEATURES	
Burner Type	Sealed
Ignition	Electronic
Burner Configuration	
Right Front Burner	6,000 btu
Left Front Burner	14,000 btu
Right Rear Burner	12,000 btu
Left Rear Burner	6,000 btu
Lift Top	No
OVEN FEATURES	
Oven cleaning type	Self-clean
Accubake system	Yes
Number of temperature sensors	1
Oven Capacity	4.3 Cu. Ft.
Broil Burner	10,000 btu
Door Position in Broil	Closed
Bake Burner	15,500 btu
Oven Light	Yes

Model #	GW395LEP Q/B/T/S
OVEN DOOR FEATURES	
Door Latch	Yes-Motorized
Removable Door	Yes
STORAGE/WARMING DRAWER	
Storage Drawer	Yes
LITERATURE	
Use & Care Guide	Yes (English + French)
Tech Sheets/Wiring Diagrams	9757668
Installation Instructions	Yes (English + French)
Service Manual/Job Aid	8178455
DIMENSIONS	
Height-Overall	35.9"
Width	29.875"
OTHER SPECIFICATIONS	
LP Convertible	Yes, conversion orifices included
Agency Approval	CSA
Power cord	Included
Anti-Tip Device w/ Unit	Floor Bracket
ACCESSORIES	
Trim Kit	Included, matches body color, to close gap from rear of unit to wall (previous freestanding installation)

WHIRLPOOL GAS RANGE WARRANTY

LENGTH OF WARRANTY:	WHIRLPOOL WILL PAY FOR:	WHIRLPOOL WILL NOT PAY FOR:
<p>ONE-YEAR FULL WARRANTY FROM DATE OF PURCHASE.</p>	<p>FSP® replacement parts and repair labor costs to correct defects in materials or workmanship. Service must be provided by an authorized Whirlpool service company.</p>	<p>A. Service calls to:</p> <ol style="list-style-type: none"> 1. Correct the installation of the range. 2. Instruct you how to use the range. 3. Replace house fuses or correct house wiring. 4. Replace owner-accessible light bulbs. 5. Correct house plumbing. <p>B. Repairs when the range is used in other than normal, single-family household use.</p> <p>C. Pickup and delivery. The range is designed to be repaired in the home.</p> <p>D. Damage to the range caused by accident, alteration, misuse, abuse, fire, flood, acts of God, or use of products not approved by Whirlpool.</p> <p>E. Repairs to parts or systems resulting from unauthorized modifications made to the appliance.</p> <p>F. In Canada, travel or transportation expenses for customers who reside in remote areas.</p> <p>G. Replacement parts or repair labor costs for units operated outside the United States and Canada.</p>

**WHIRLPOOL CORPORATION AND WHIRLPOOL CANADA INC.
SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

Some states and 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 50 United States and Canada, this warranty does not apply. Contact your authorized Whirlpool dealer to determine if another warranty applies.

If you need service first see "Troubleshooting" in the "Use & Care Guide." Additional help can be found by checking "Assistance or Service" or call our Customer Interaction Center at **1-800-253-1301** from anywhere in the U.S.A., or write: Whirlpool Brand Home Appliances, Customer Interaction Center, 553 Benson Road, Benton Harbor, MI 49022-2692. In Canada, call Whirlpool Canada Inc. at **1-800-807-6777**.

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.

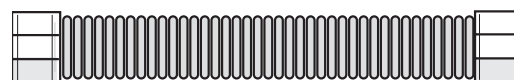
1. This installation must conform with local codes and ordinances. In the absence of local codes, installations must conform with American National Standard, National Fuel Gas Code ANSI Z223.1—latest edition* or CANI-B149—latest edition** installation codes.

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

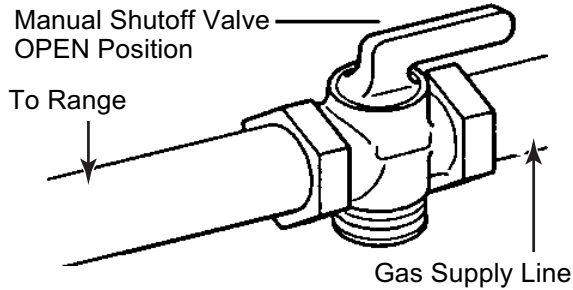
2. Input ratings shown on the model/serial rating plate are for elevations up to 2,000 feet (609.6 m). For elevations above 2,000 feet (609.6 m), ratings are reduced at a rate of 4% for each 1,000 feet (304.8 m) above sea level. (Not applicable for Canada.)
3. This range is equipped for use with Natural 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 Whirlpool 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.



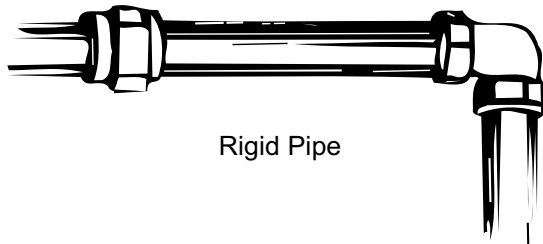
Flexible Gas Supply Line

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.

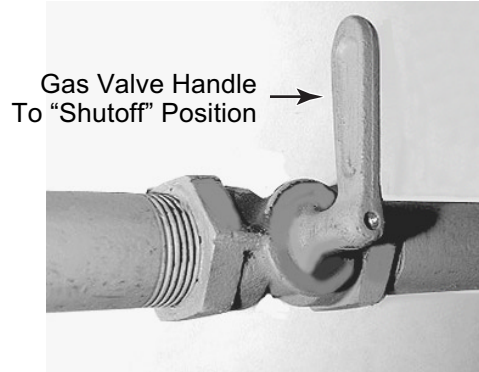
Make all conversions before turning gas supply valve back on.

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

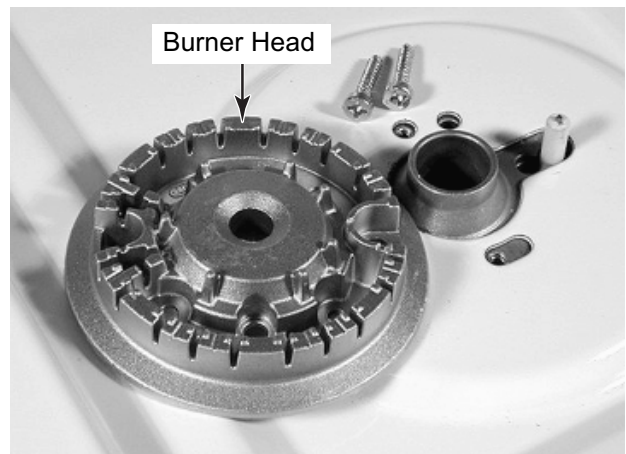
NOTE: Gas conversion from Natural to L.P. gas must be done by a qualified installer. Examples of a qualified installer include licensed heating personnel, authorized gas company personnel, and authorized service personnel.

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.

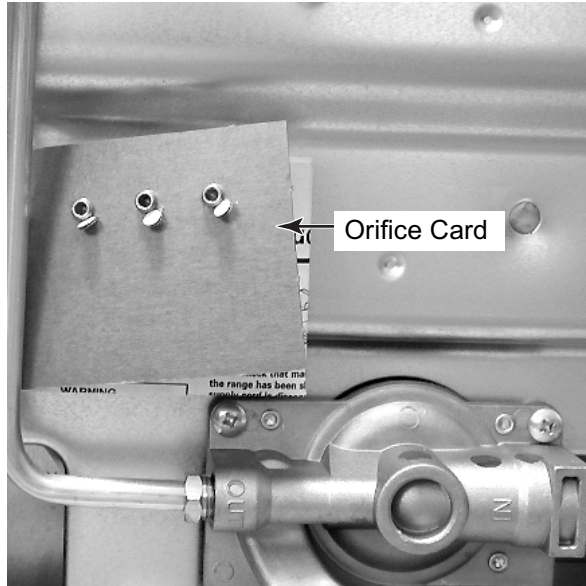
1. Check to make sure that the main gas supply line to the range has been shut off, and that the power supply cord is disconnected from the AC outlet.



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.



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



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



d) Install the four L.P. gas orifices in the burners, as shown in the following chart (do not overtighten them):

Burner Location	Burner Rating	Color	Size
Right Front	5,000 BTU	Red	0.70 mm
Left Front	13,000 BTU	Green	1.10 mm
Right Rear	10,000 BTU	Blue	0.95 mm
Left Rear	5,000 BTU	Red	0.70 mm

e) Place the natural gas orifices in the orifice card holes.

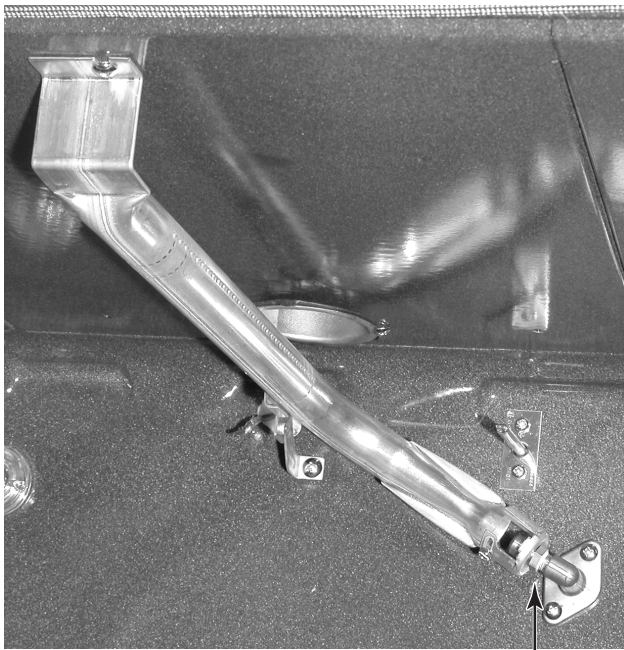
3. To convert the broil burner for use with L.P. gas:

a) Open the oven door and remove the oven racks.

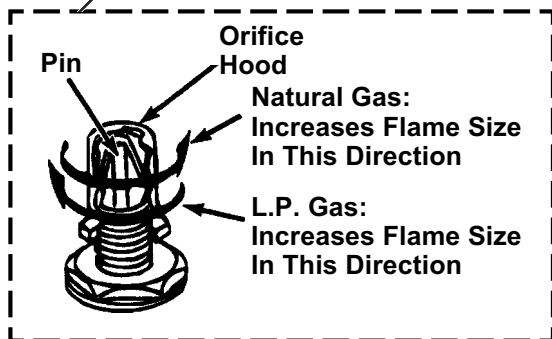
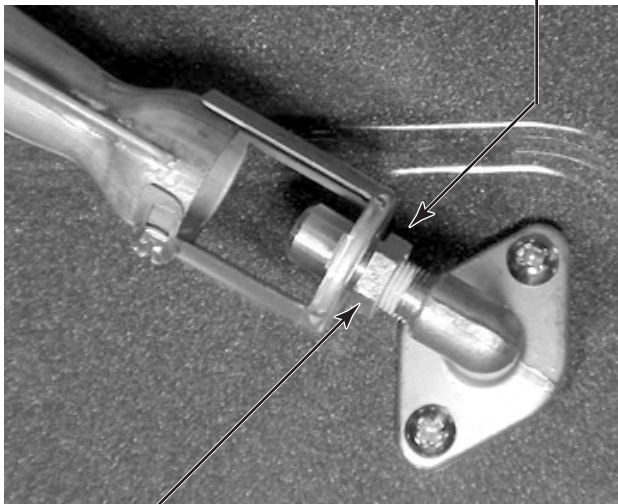
b) Use a 1/2" open-end wrench and turn the orifice hood down snug onto the pin (approximately 2-1/2 turns). **DO NOT OVERTIGHTEN THE ORIFICE.** The burner flame cannot be properly adjusted if this conversion is not made.

c) Reinstall the oven racks and close the oven door.

Continued on the next page.



Broil Burner Orifice



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

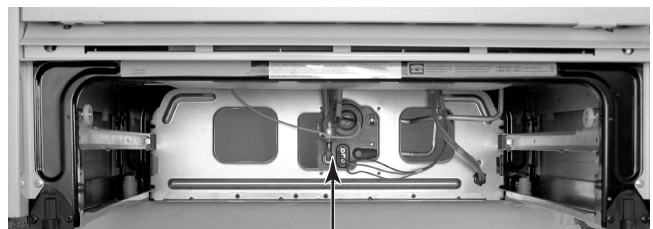
- a) Remove the bake burner from the gas distribution valve orifice (see page 4-14 for the procedure).
- b) Use a 1/2" open-end wrench and turn the bake burner orifice hood down snug onto the pin (approximately 2-1/2 turns). **DO NOT OVERTIGHTEN THE ORIFICE.** The burner flame cannot be properly adjusted if this conversion is not made.



Bake Burner Orifice Hood

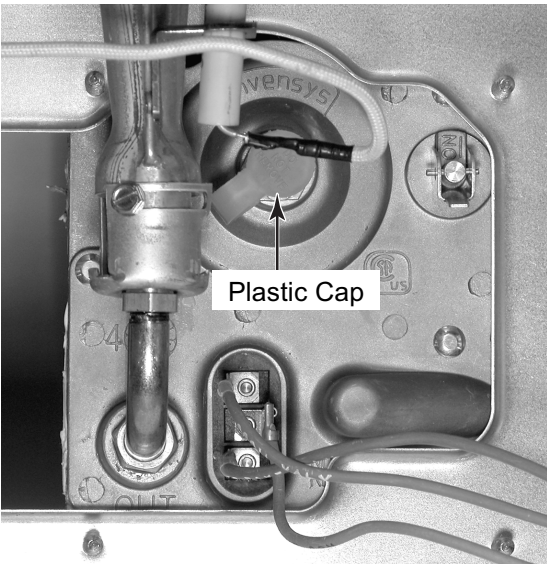
5. To convert the gas distribution valve for use with L.P. gas:

- a) Remove the storage drawer from the range.

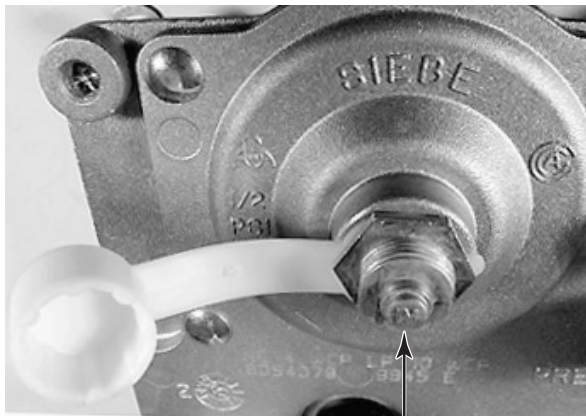


Gas Distribution Valve

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

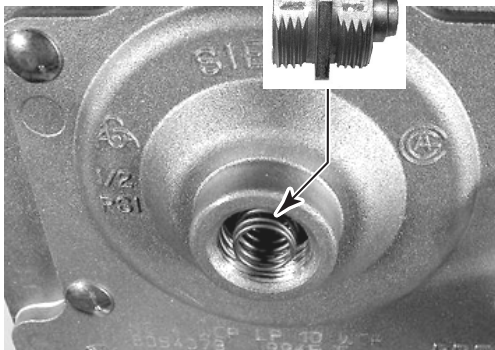


c) Unscrew the conversion cap from the gas distribution valve and remove it and the plastic cap. Note the difference between the L.P. and Natural gas ends of the cap.



Conversion Cap Set For Use With (N) Natural Gas

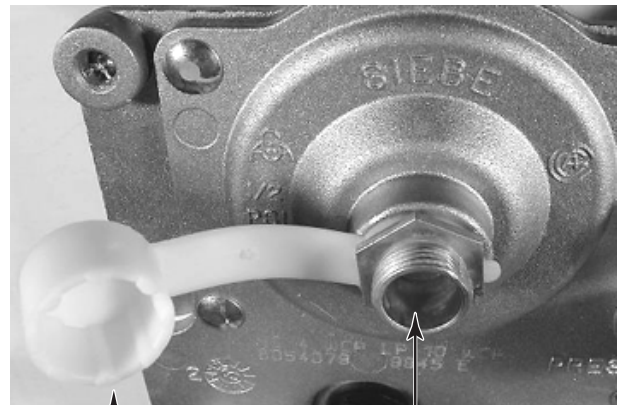
L.P. Gas Natural Gas



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

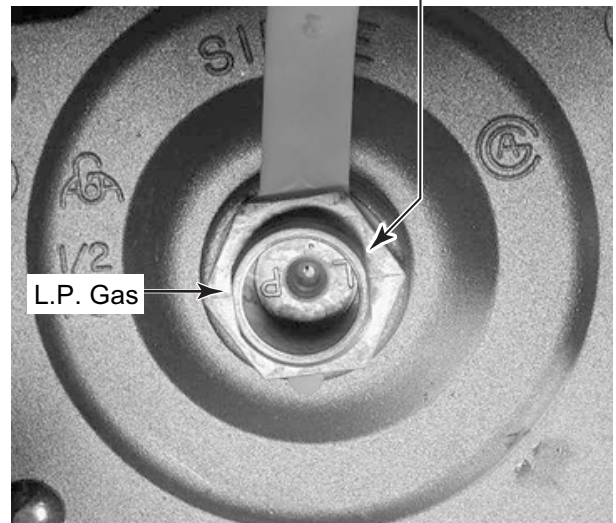
e) Install the plastic cap and the conversion cap on the gas distribution valve with the L.P. side facing up (you will see "LP" stamped inside the cap, as shown below).

f) Reinstall the storage drawer.



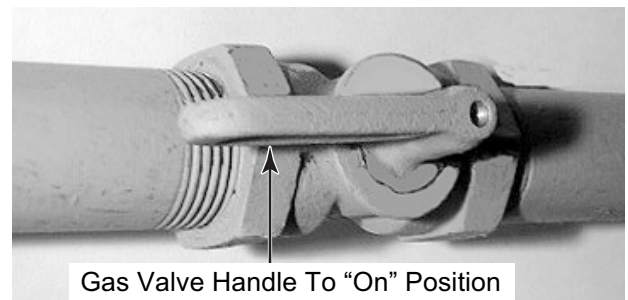
Plastic Cap

Conversion Cap Set For Use With L.P. Gas



L.P. Gas

6. Turn the gas supply valve handle on.

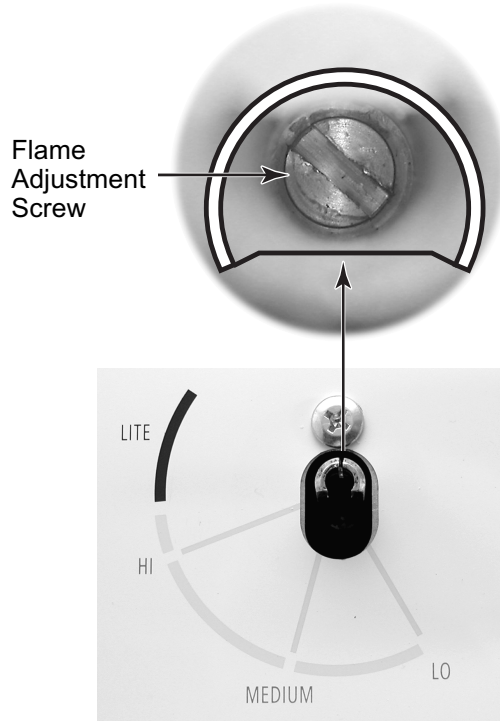


Gas Valve Handle To "On" Position

ADJUSTING FOR THE PROPER FLAME

SURFACE BURNERS

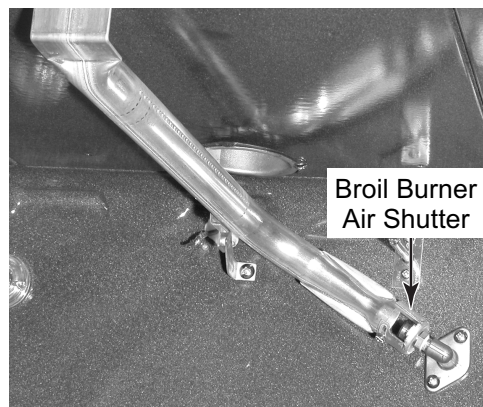
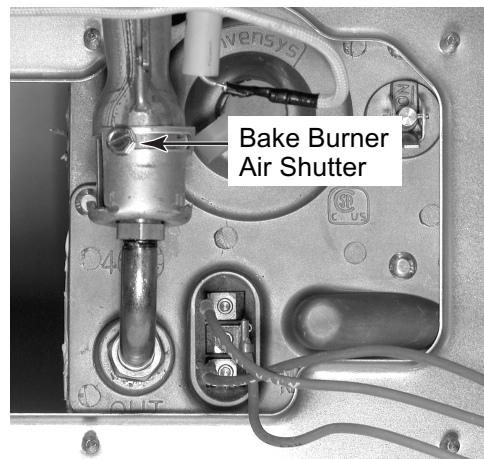
1. Turn on one of the surface burners and set the flame to its lowest (LO) setting. The flame should be steady and the inner cone should be dark blue in color. The size should be approximately 1/4" (0.64 cm) high.
2. If the low flame needs to be adjusted:
 - a) Remove the control knob.
 - b) Look inside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

BAKE & BROIL BURNERS

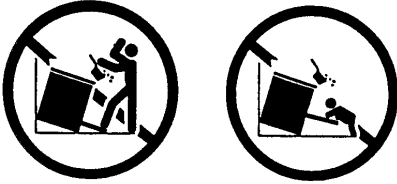
1. Remove the oven racks and oven bottom.
2. Light the bake and broil burners, then check their flames. They should be approximately 1/2" (1.3 cm) high.
3. If the bake or broil burner flame needs to be adjusted:
 - a) Loosen the locking screw on the burner air shutter. **NOTE:** For the bake burner,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

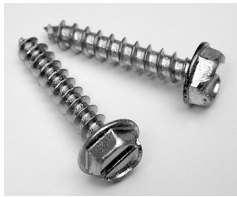
Failure to follow these instructions can result in death or serious burns to children and adults.

PARTS SUPPLIED

(2) Plastic Anchors



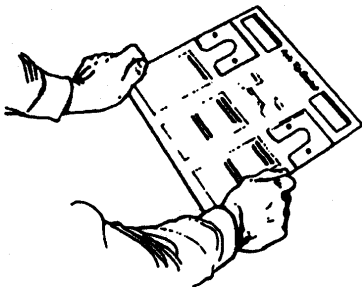
(2) Screws



(1) Anti-Tip Bracket

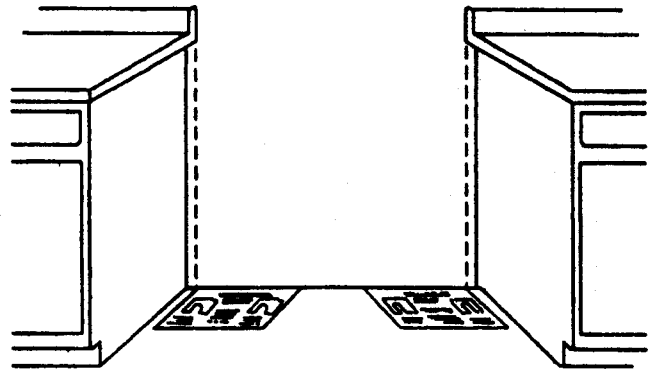


Template



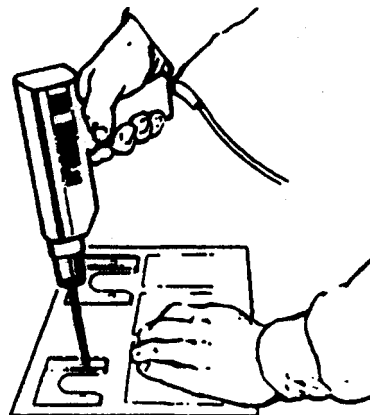
NOTE: The anti-tip bracket can be installed to hold either the right or left rear leg of the range.

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.



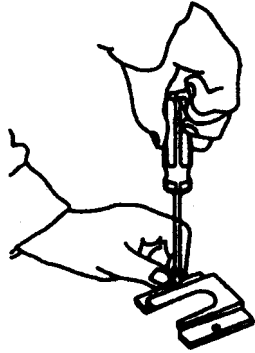
NOTE: For mounting to a wood floor, proceed with step 4. For concrete or ceramic floors, proceed to step 5.

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.



Continued on the next page.

- 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.

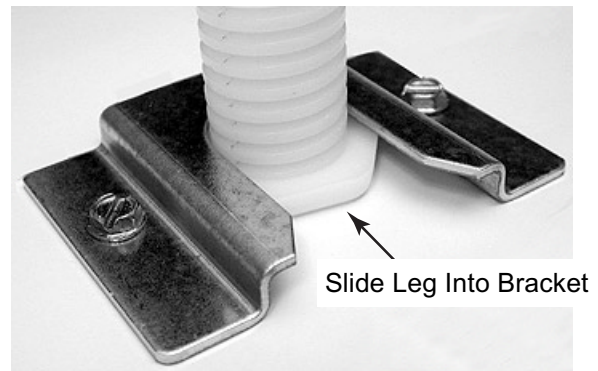


5. **To mount the anti-tip bracket to a concrete or ceramic floor:**

- 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.



THEORY OF OPERATION

ELECTRONIC OVEN CONTROL SYSTEM FUNCTIONS



BAKE PREHEAT

When the user presses the BAKE key, the control displays **Pre** in 3-digit display area during preheat countdown. The BAKE and ON LEDs are also lit.

If the user queries the set temperature, the control displays the set temperature, a flashing degree symbol, and a solidly lit temperature scale.

If the user changes the set temperature during the preheat cycle, the countdown continues uninterrupted.

When the preheat countdown expires:

1. The control sounds the preheat end audible signal.
2. The control shows the set temperature in the 3-digit display area, along with a solidly lit degree symbol.
3. The BAKE and ON LEDs remain lit. The displayed temperature does not change unless the user changes the set temperature.

Open Door Preheat

If the door is opened during the preheat cycle:

1. An open door display is shown (door LED).
2. *Electric Models:* Both bake and broil elements will turn off at the end of cycle.
3. *Gas Models:* The broil burner will turn off as soon as the user opens the door, and the bake burner will turn off after a 15-second delay.
4. The preheat countdown continues in background.

BAKE

If the control receives the door-locked signal during an active bake function, the control should perform the following procedure:

1. Moves the door latch to the unlocked position.
2. Waits for the door-unlocked signal from the door switch.
3. If the door-unlocked signal is not received, it terminates the bake function, and sounds the audible failure signal.
4. If the door-locked signal is discontinued, the control continues the Bake function.

Open Door Bake

If the door is opened during a bake cycle:

1. An open door display is shown (door LED).
2. *Electric Models:* Both bake and broil elements will turn off at the end of cycle.
3. *Gas Models:* The broil burner will turn off as soon as the user opens the door, and the bake burner will turn off after a 15-second delay.
4. Both bake and broil burners will turn off until the user closes the door, or presses the OFF/CANCEL key.

BROIL

Electric ranges offer open-door broiling, and gas ranges offer closed-door broiling.

If the control receives the door-locked signal during an active broil function, the control should perform the following procedure:

1. Moves the door latch to the unlocked position.
2. Waits for the door-unlocked signal from the door switch.

POWER FAILURE DURING CLEAN

The control will write the state of the clean cycle to the EEPROM so that when powerup occurs, the control can follow the cool-down sequence. The door latch will stay latched.

COOLING FAN

The cooling fan will be on during all cook or clean functions. In addition, the fan should remain on after all cook or clean functions until oven cavity temperature reaches 270°F (132°F).

CONVECTION BROIL

The convection broil default temperatures are:

- Electric 500°F (260°C)
- Gas HI (525°F) (292°C)


RECALL LAST FAILURE CODE

The oven control will provide visual identification of the last electronic control failure. The user can recall the last failure code by pressing and holding the OFF/CANCEL key for 5 seconds. The failure code display is terminated by pressing the OFF/CANCEL key, unless it is the OFF/CANCEL key itself that has failed.

KEYBOARD LOCKOUT

Disabling All Cook And Clean Functions

The user disables/enables all oven functions (Bake, Broil, Clean) by pressing and holding the START key for 5 seconds. When the user disables/enables the keyboard lockout, the control sounds the Enable/Disable audible signal.

Clock and timer functions are still available during keyboard lockout. The control illuminates the “lock” icon () and the **Loc** LED whenever the user has disabled the keyboard.

When the keyboard has been disabled, the control prompts the user to press and hold the Oven START key for 5 seconds by illuminating the **START?** LED whenever the user presses an oven function key, a timed oven function key, a temperature, or a time slew.

When the range has powered down, the control stores the status (enabled or disabled) of the keyboard lockout function in the EEPROM. Upon power up, the control recalls the keyboard lockout status from the EEPROM.

This feature can only be activated from the “idle” mode.

POWER UP

When the control is powered up, it checks the oven temperature, the keytail connector and keypad, illuminates the display, and allows one minute for a complete oven test.

Power Up Membrane Switch Connection Test

The keytail connector is checked on power up. An "Invalid Entry Signal" sounds if the membrane switch tail is not connected.

Illumination At Power Up

The electronic display powers up with the entire vacuum display area illuminated for three seconds.

The three second time period can be overridden by pressing any key.

Tulsa/Oxford Manufacturing Test Sequence

This test is available for only the first minute after power up.

The test is accessed by pressing the CANCEL, CANCEL, and START keys. The routine will present a blank display, then any system or control failures will be detected in two seconds. Exit the test sequence by pressing the OFF/CANCEL key.

HIDDEN FUNCTION SUMMARY

The user activates all of the hidden functions by pressing and holding the appropriate key for 5 seconds. The following shows a list of all the hidden features or functions.

KEY	HIDDEN FUNCTION
BAKE	Temperature Calibration Offset
BROIL	Temperature Scale Selection (°F / °C)
OFF/CANCEL	Recall Last Failure Code
START/ENTER*	Software Revision Number
TIMER SET	Disable / Enable Timer Reminder Signals
COOK TIME	Disable / Enable Cycle End Audible Signals
STOP TIME	Disable / Enable Valid Data Entry Signals
TBD	Audible Signal Pitch Control

* Recall last failure code function or failure mode.

— NOTES —

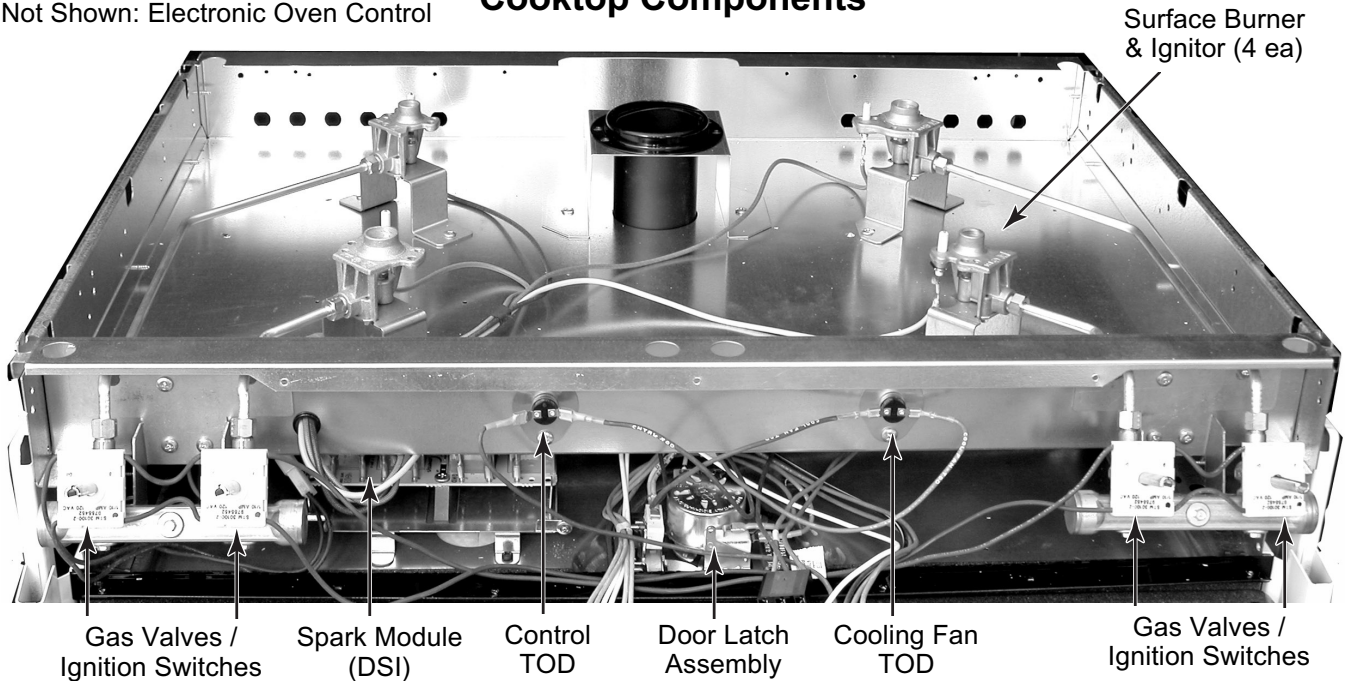
COMPONENT ACCESS

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

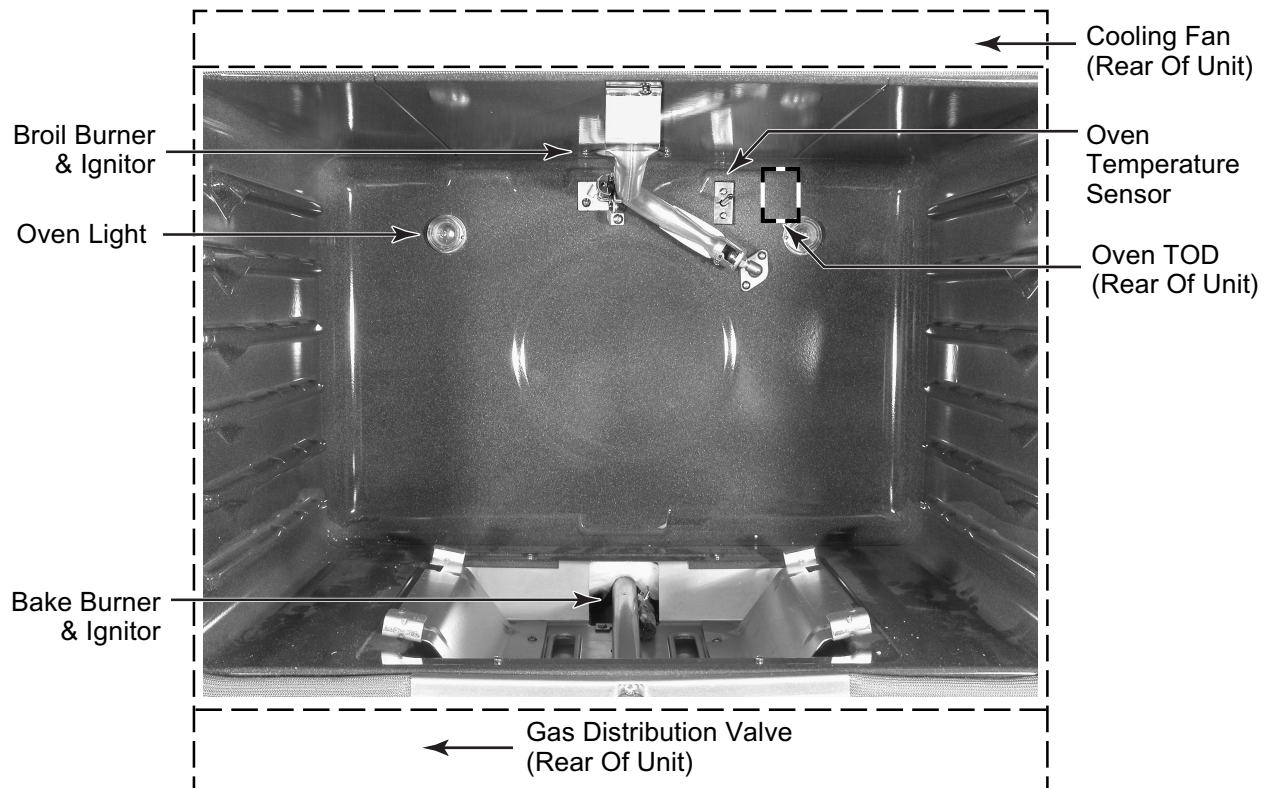
COMPONENT LOCATIONS

Not Shown: Electronic Oven Control

Cooktop Components



Oven & Rear Components



REMOVING THE CONTROL PANEL AND THE ELECTRONIC OVEN CONTROL BOARD & USER INTERFACE

⚠️ WARNING

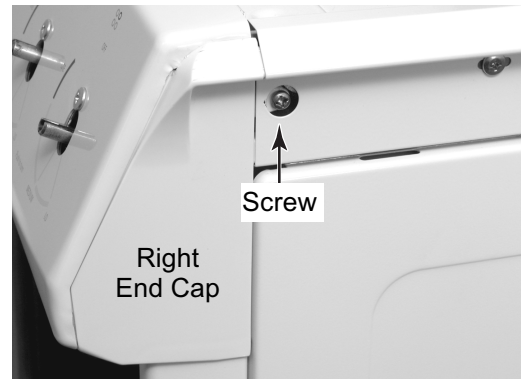


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

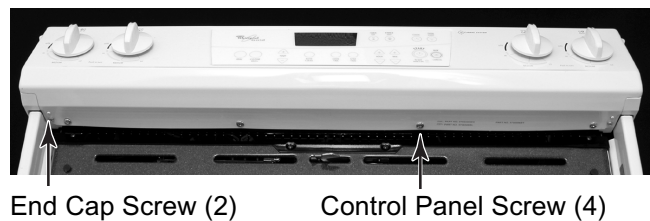
1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Remove the two grates from the top of the range.



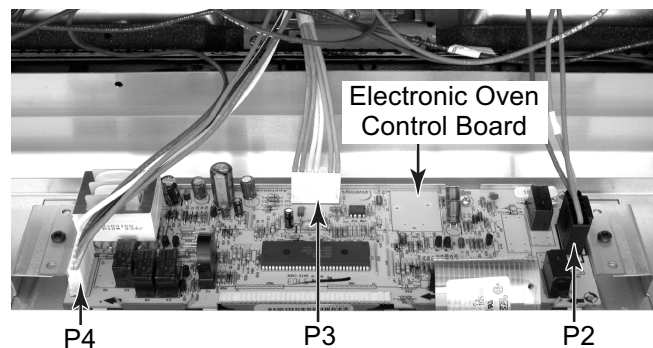
4. To remove the control panel:
 - a) Pull the knobs off the gas valves.
 - b) Remove the two screws from the sides of the end caps.



- c) Open the oven door and remove the six screws from the bottom of the control panel (two end cap screws and four control panel screws).

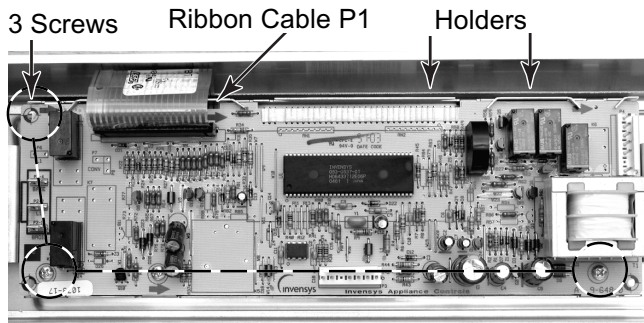


- d) Close the oven door.
- e) Pull the control panel forward and remove the two end caps.
- f) Disconnect the wire connectors from the electronic oven control board at P2, P3, and P4.



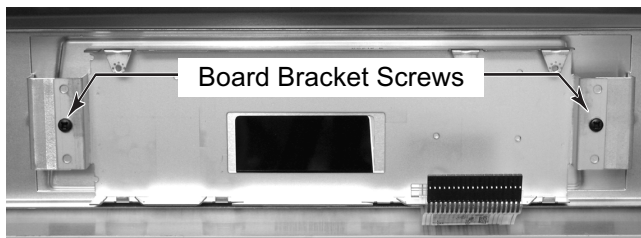
5. **To remove the electronic oven control board:**

- a) Remove the control panel (see step 4).
- b) Disconnect the ribbon cable from connector P1.
- c) Remove the three screws from the electronic oven control board. Lift the bottom of the board slightly, slide the top edge out from under the holders, and remove the board.

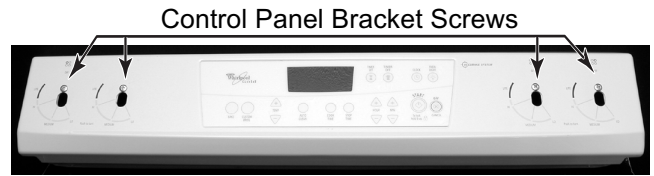


6. **To remove the user interface:**

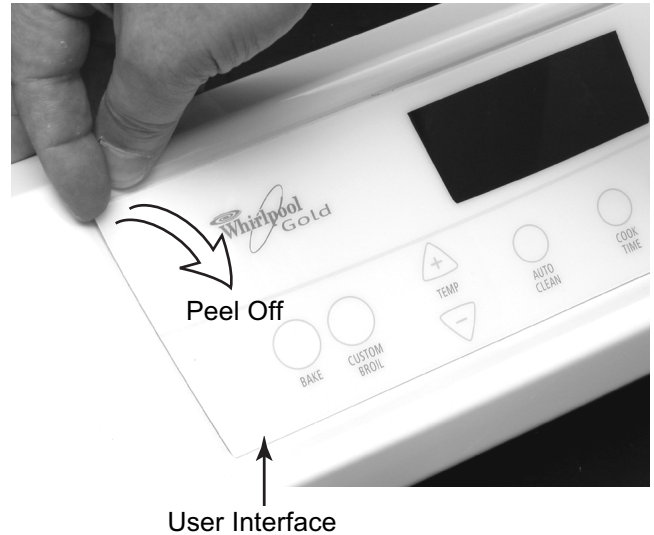
- a) Remove the control panel (see step 4).
- b) Remove the electronic oven control board (see step 5).
- c) Remove the two screws from the electronic oven control board bracket and remove the bracket.



- d) Remove the four screws from the control panel bracket and remove the bracket.



- e) Lift one of the corners, and peel the user interface off the control panel.



REMOVING THE IGNITION SWITCHES, A GAS VALVE, AND THE CONTROL AND COOLING FAN TODS

⚠️ WARNING



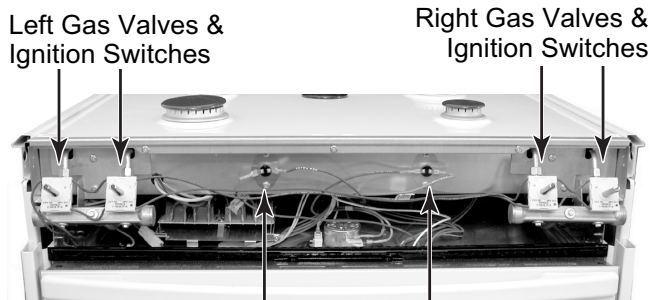
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

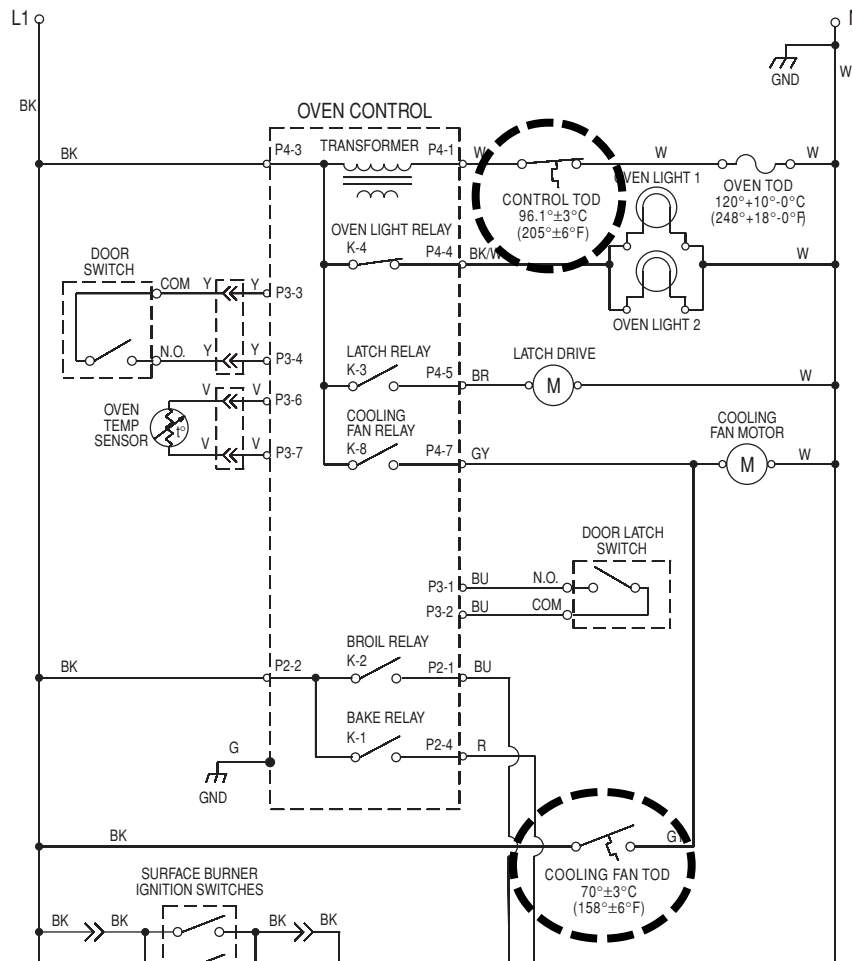
Failure to do so can result in death or electrical shock.

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).



Control TOD (N.C.)
 Opens @ 96°C (205°F)
 Resets @ 74°C (165°F)

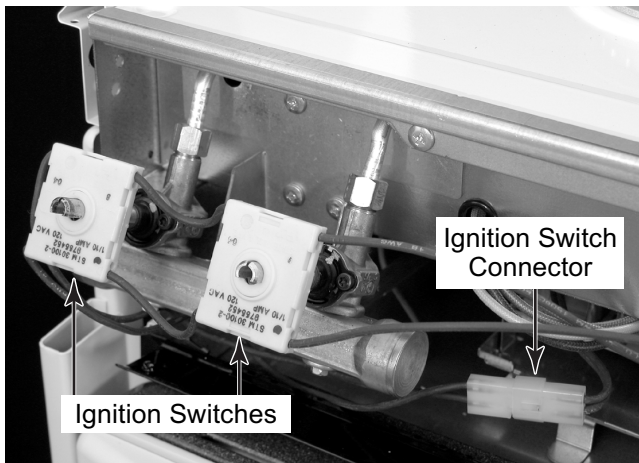
Cooling Fan TOD (N.O.)
 Resets @ 70°C (158°F)
 Closes @ 60°C (140°F)



5. To remove the ignition switches:

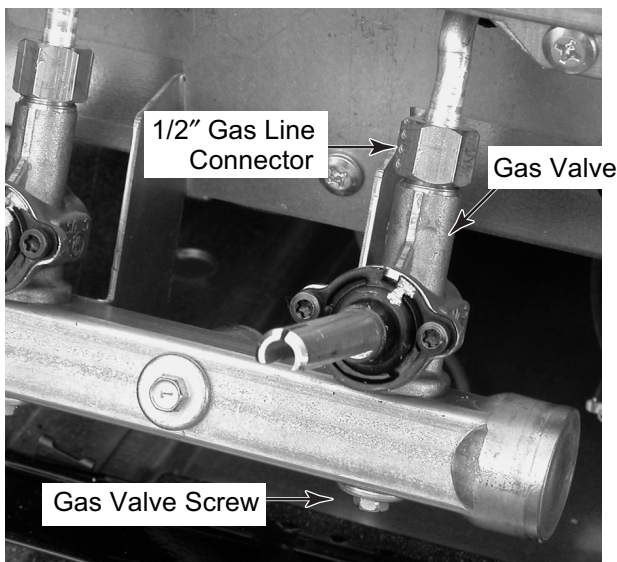
NOTE: The ignition switches must be replaced as an assembly. They cannot be replaced individually.

- a) Pull the ignition switches and unsnap them from the gas valves, then remove them from the valve stems.
- b) Disconnect the ignition switch wire connector from the main harness and remove the switches.



6. To remove a gas valve:

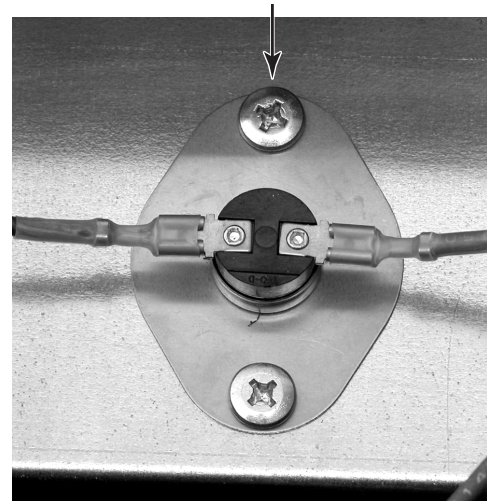
- a) Remove the ignition switch from the gas valve you are servicing (see step 5).
- b) Remove the 1/2" gas line connector from the gas valve.
- c) Remove the 1/4" hex-head gas valve mounting screw and its rubber seal from the front of the gas manifold.



7. To remove a control or cooling fan TOD:

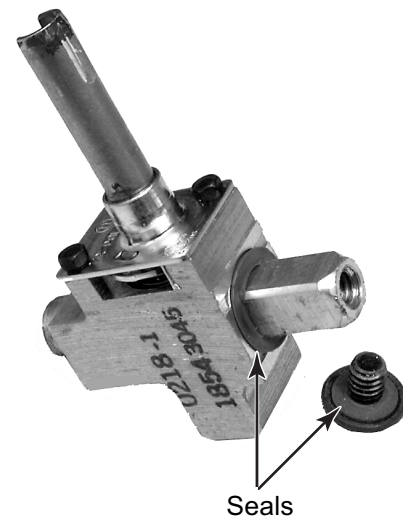
- a) Remove the wires from the terminals.
- b) Remove the mounting screw.

Control Or Cooling Fan TOD



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.



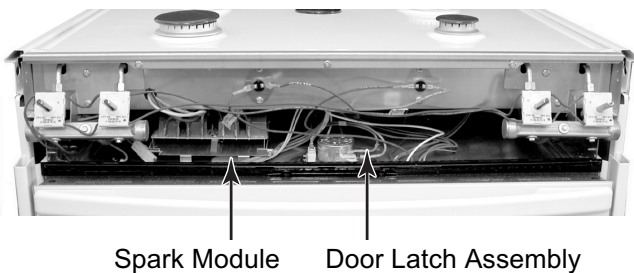
REMOVING THE DOOR LATCH ASSEMBLY AND THE SPARK MODULE (DSI)

!WARNING

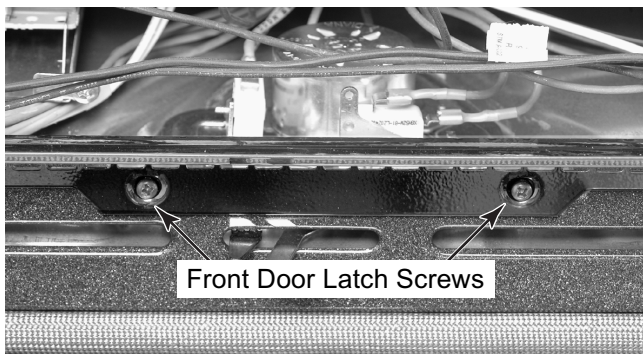


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

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).



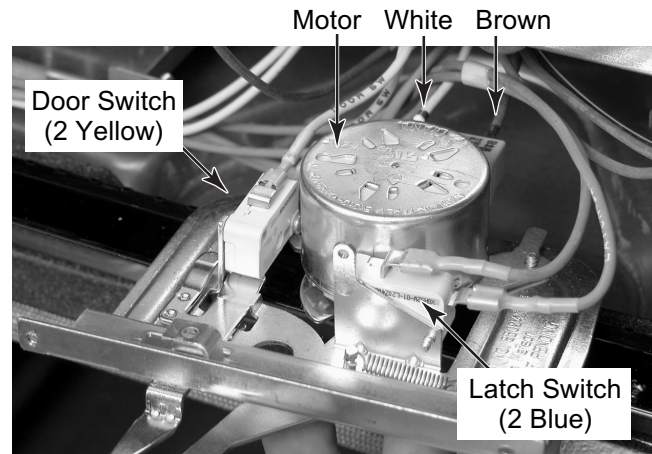
5. **To remove the door latch assembly:**
 - a) Open the oven door and remove the two front mounting screws from the air vent.



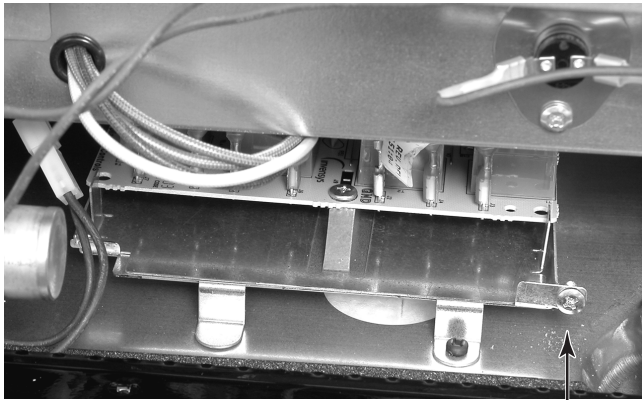
- b) Remove the two top screws from the door latch assembly bracket.



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



6. **To remove the spark module (DSI):**
a) Remove the bracket mounting screw.



Spark Module 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 Screw

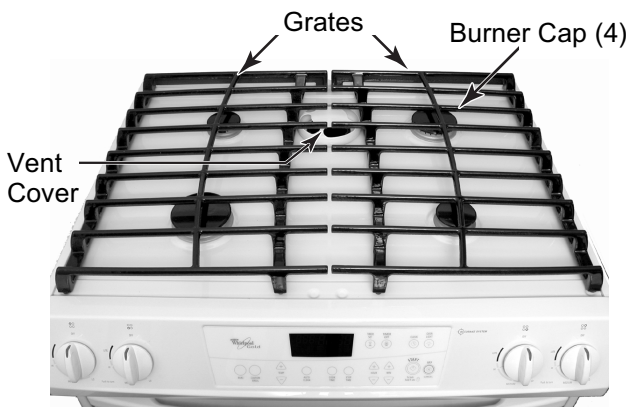
REMOVING THE COOKTOP, AND A SURFACE BURNER & IGNITOR

!WARNING



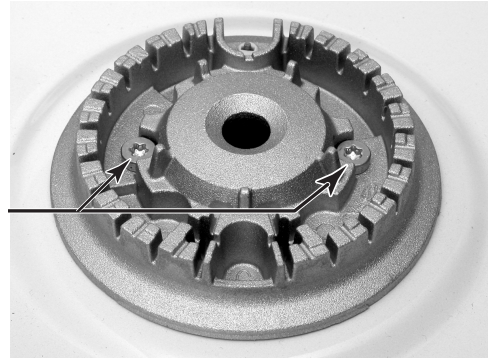
Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

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 control panel (see step 4 on page 4-2 for the procedure).
6. Remove the two screws from each of the burner heads and lift the heads off the cooktop.

Burner Head
W/2 Screws



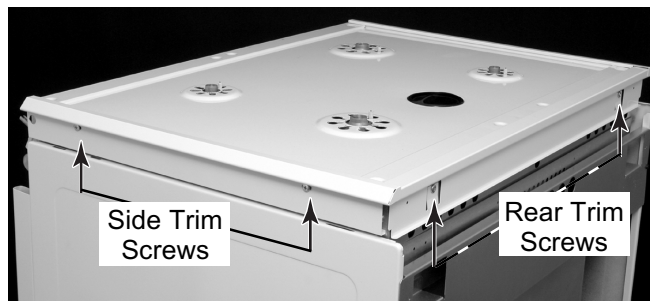
7. To remove the cooktop:

- a) Remove the three screws from the front cooktop bracket and remove the bracket.

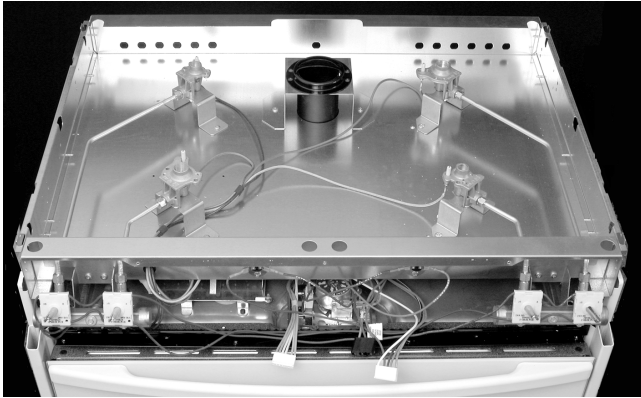
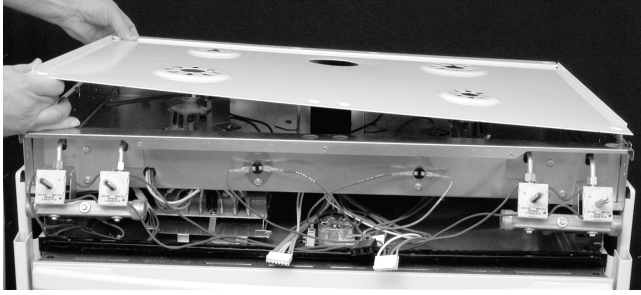


3 Cooktop Bracket Screws

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

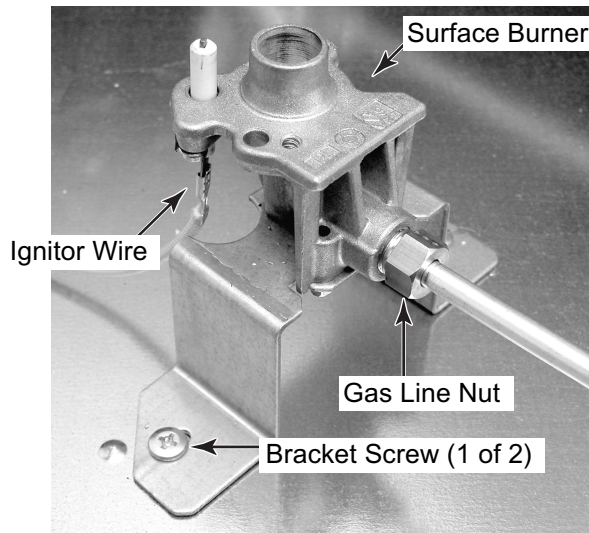


- c) Lift the cooktop off the top of the unit and set it aside.

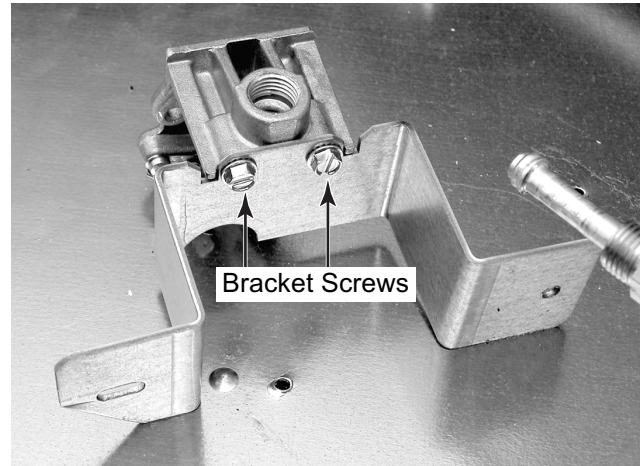


8. To remove a surface burner:

- a) Remove the cooktop (see step 7).
- b) Remove the gas line.
- c) Disconnect the ignitor wire from the terminal.
- d) Remove the two bracket screws from the burner box.

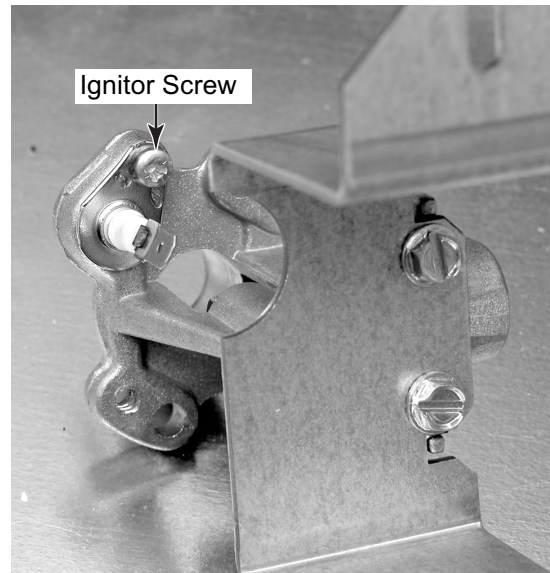


- e) Remove the two hex-head bracket screws and remove the burner from the bracket.



9. To remove an ignitor:

- a) Remove the surface burner from the burner box (see step 8).
- b) Remove the screw from the ignitor.



REMOVING THE REAR PANEL

!WARNING



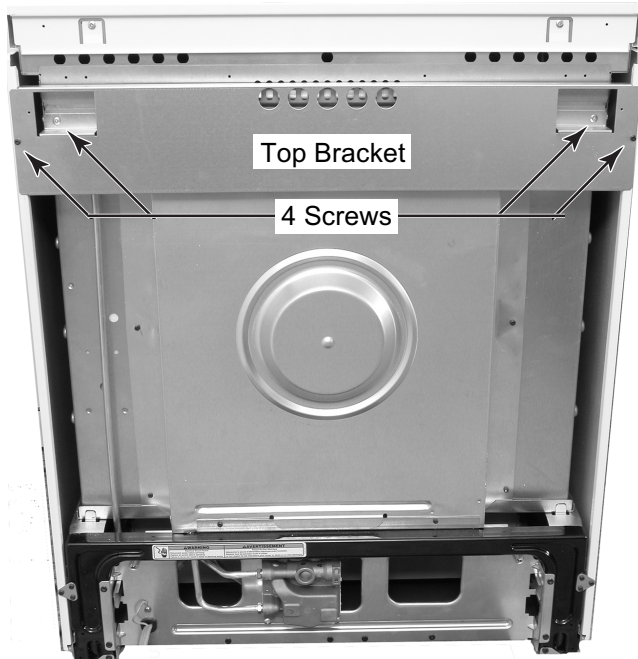
Electrical Shock Hazard

Disconnect power before servicing.

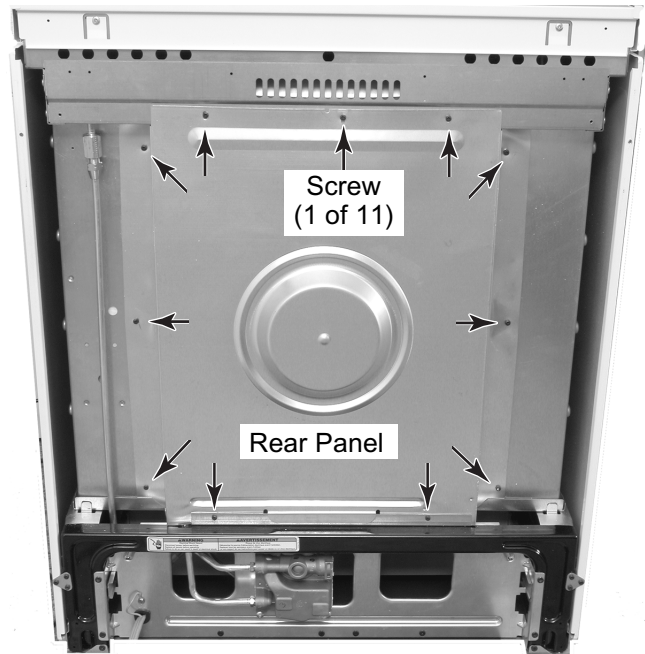
Replace all parts and panels before operating.

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.



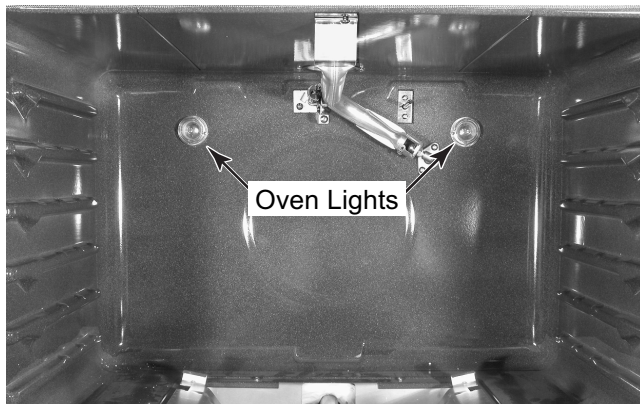
REMOVING AN OVEN LIGHT SOCKET ASSEMBLY

!WARNING

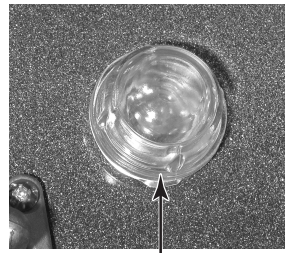


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

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



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

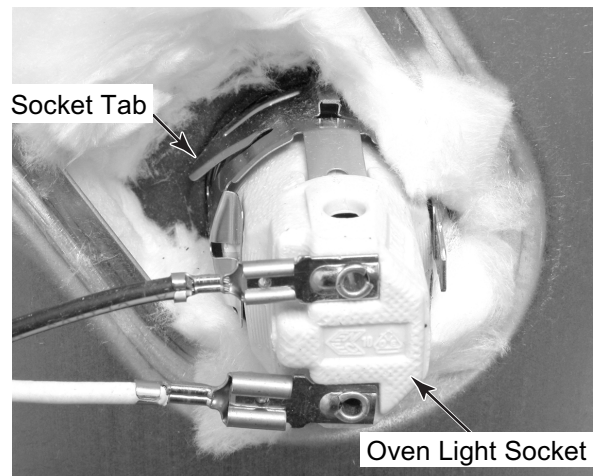


Oven Lens & Bulb



Oven Light Socket

6. Remove the rear panel from the unit (see page 4-10 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 AND IGNITOR

⚠️ WARNING



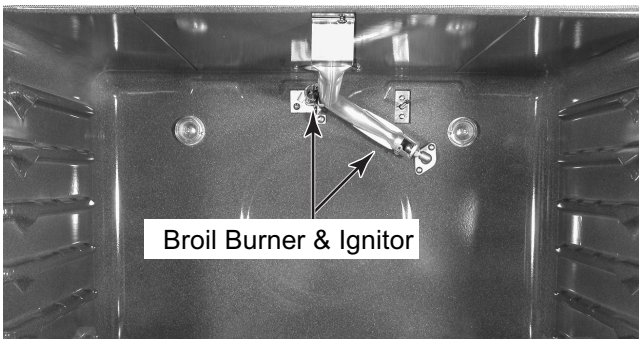
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

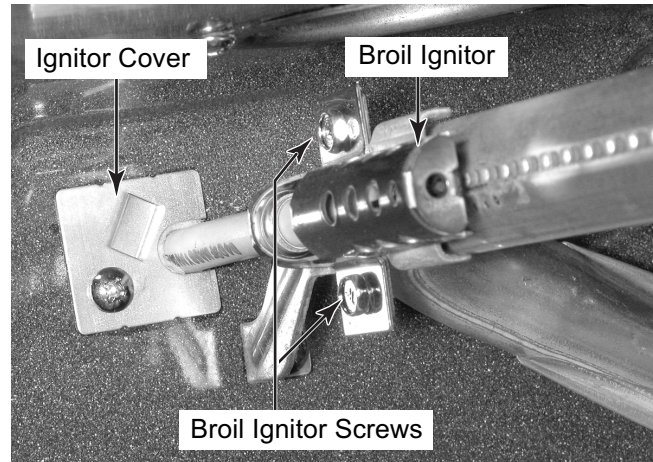
Failure to do so can result in death or electrical shock.

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

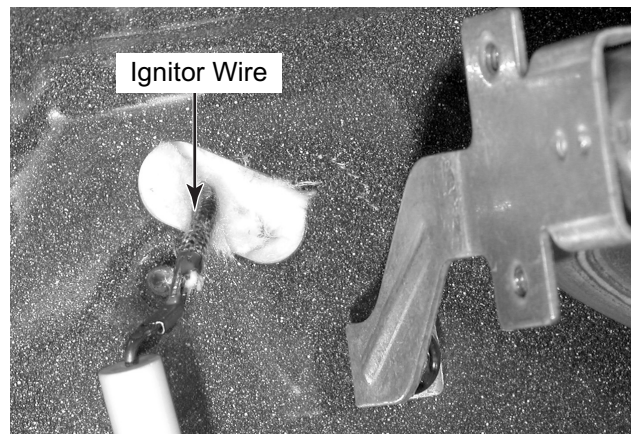


4. To remove the ignitor from the broil burner:

- 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.

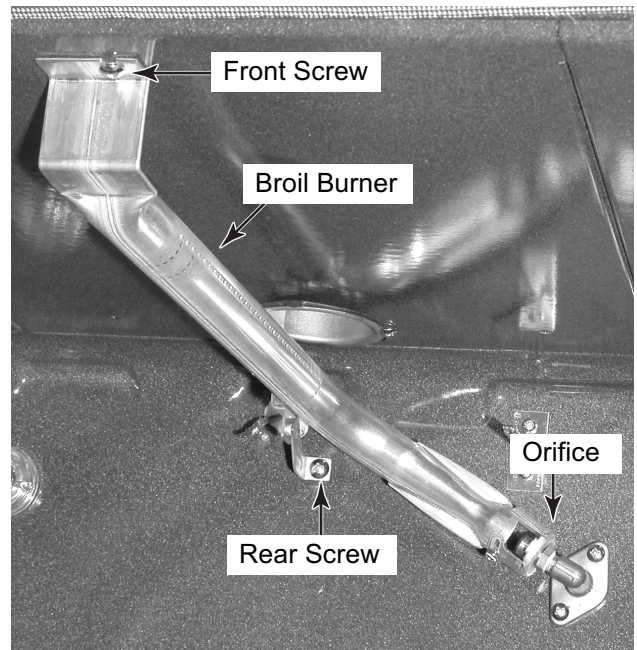


- c) Pull the ignitor into the oven and disconnect the wire from the terminal.



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.



REMOVING THE BAKE BURNER AND IGNITOR

!WARNING



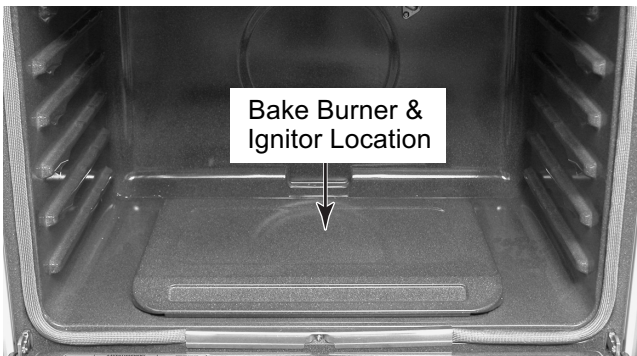
Electrical Shock Hazard

Disconnect power before servicing.

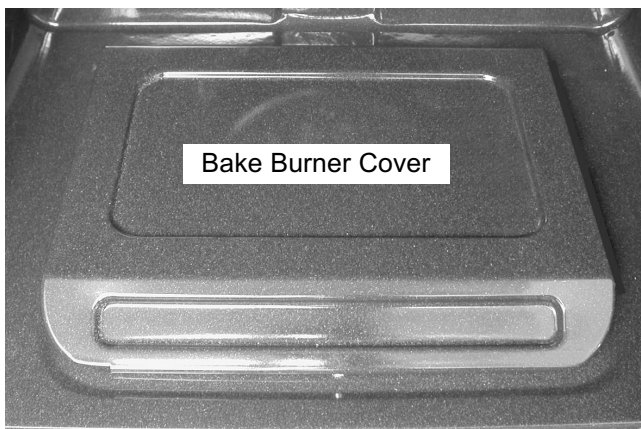
Replace all parts and panels before operating.

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

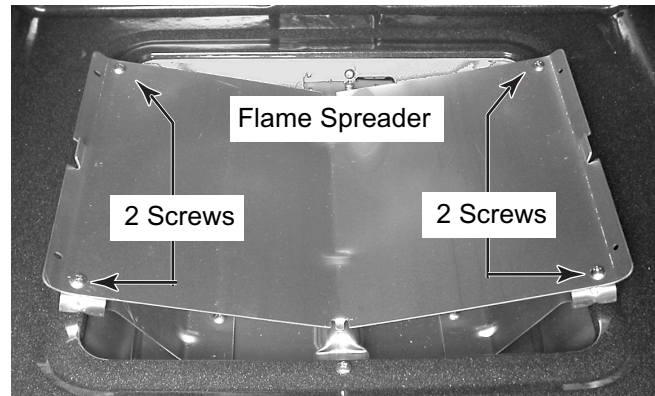
1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Open the oven door, remove the racks from inside the oven, then close the oven door.



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

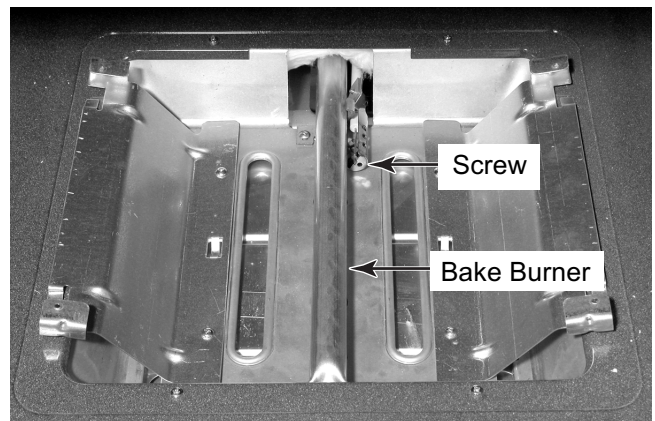


5. Remove the four screws from the flame spreader and remove the spreader.

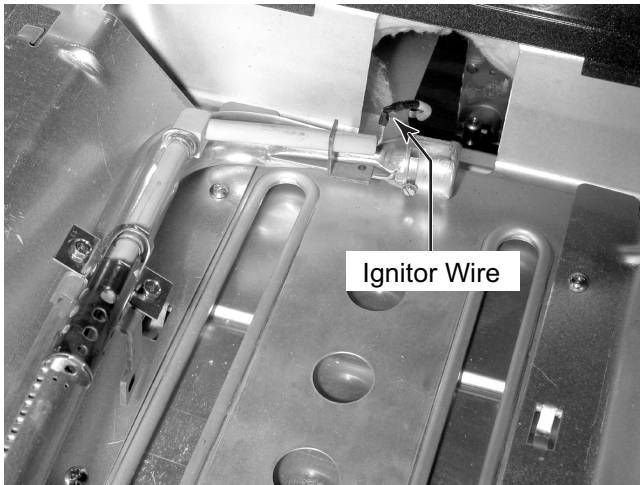


6. **To remove the bake burner:**

- 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.

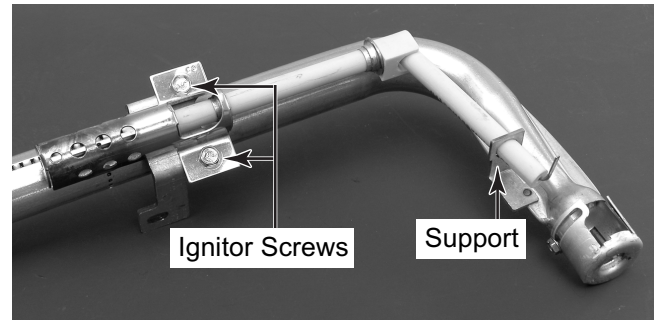


- c) Disconnect the wire from the ignitor terminal.



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 OVEN TEMPERATURE SENSOR

⚠️ WARNING



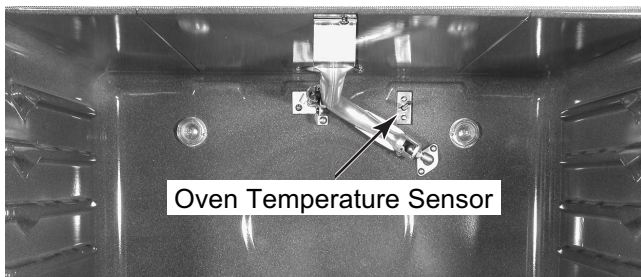
Electrical Shock Hazard

Disconnect power before servicing.

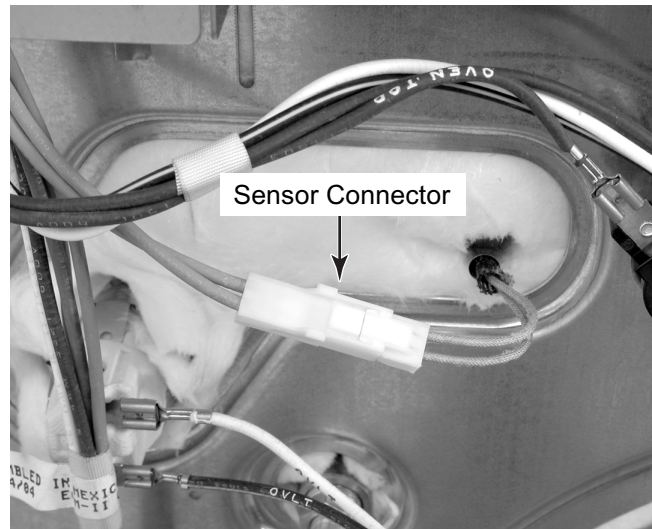
Replace all parts and panels before operating.

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

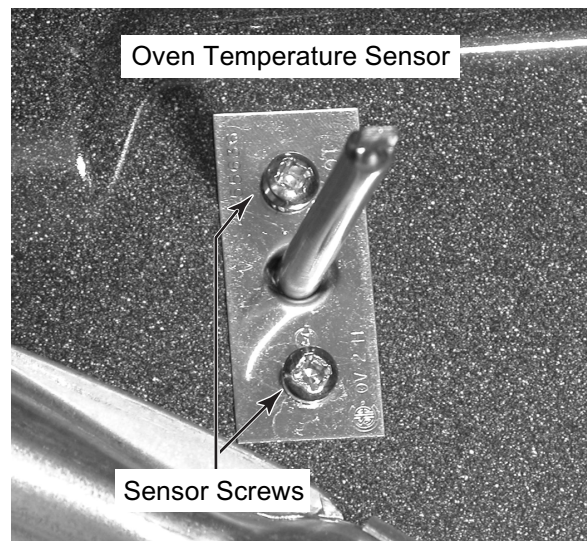
1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Open the oven door, remove the racks from inside the oven, then close the oven door.
4. Pull the range out of its mounting location so that you can access the rear of the unit.



5. Remove the rear panel (see page 4-10 for the procedure).
6. Disconnect the oven temperature sensor connector from the wiring harness.



7. From inside the oven, remove the screws from the temperature sensor and remove the sensor.



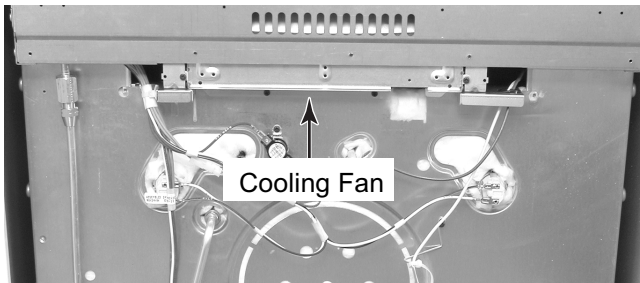
REMOVING THE COOLING FAN

!WARNING

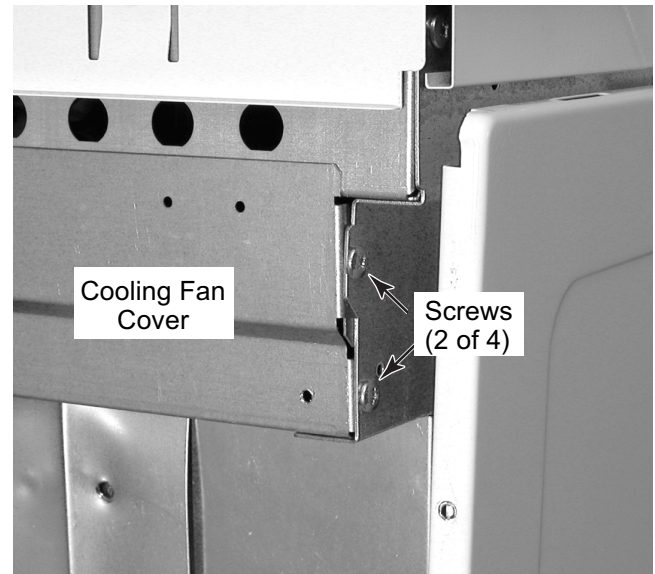


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

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 (see page 4-10 for the procedure).



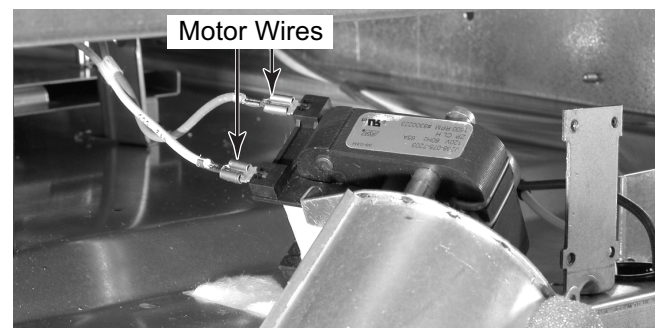
5. Use a 90° screwdriver, and remove the two screws from each end of the cooling fan cover, then remove the cover.



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



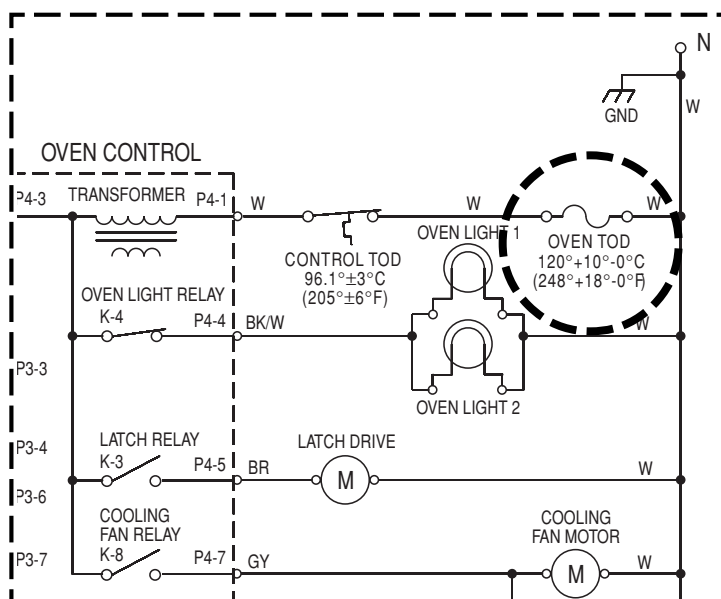
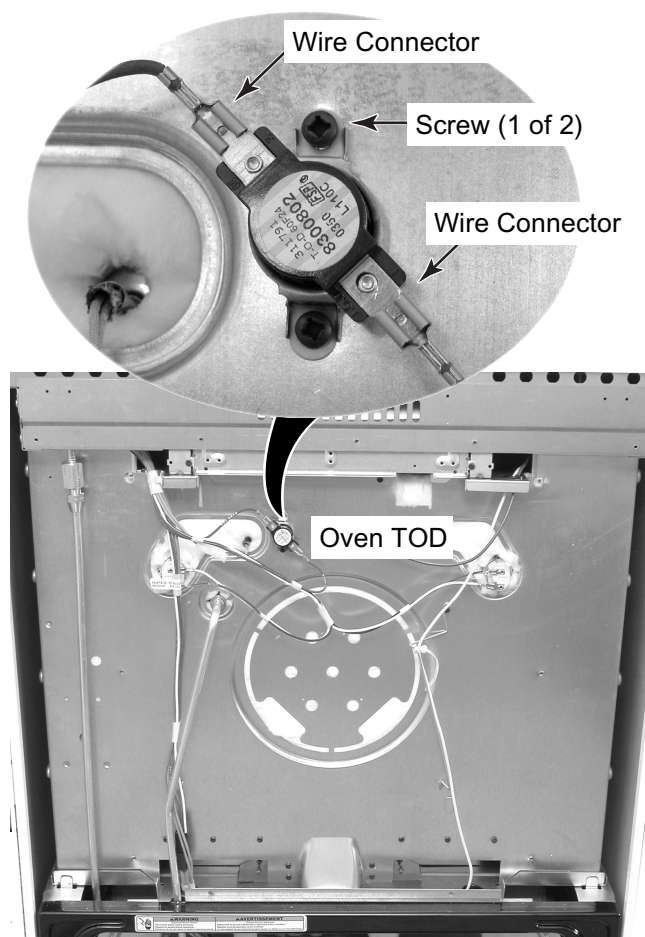
Electrical Shock Hazard

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 (see page 4-10 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



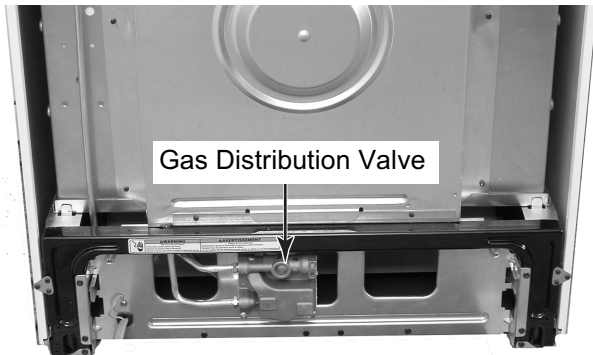
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

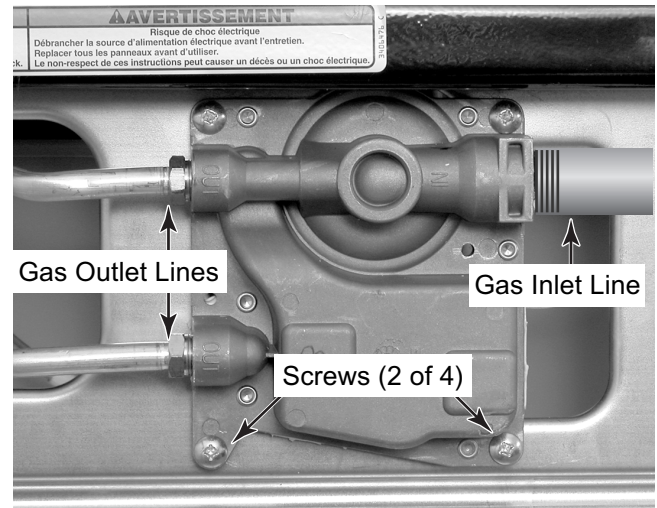
Failure to do so can result in death or electrical shock.

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.

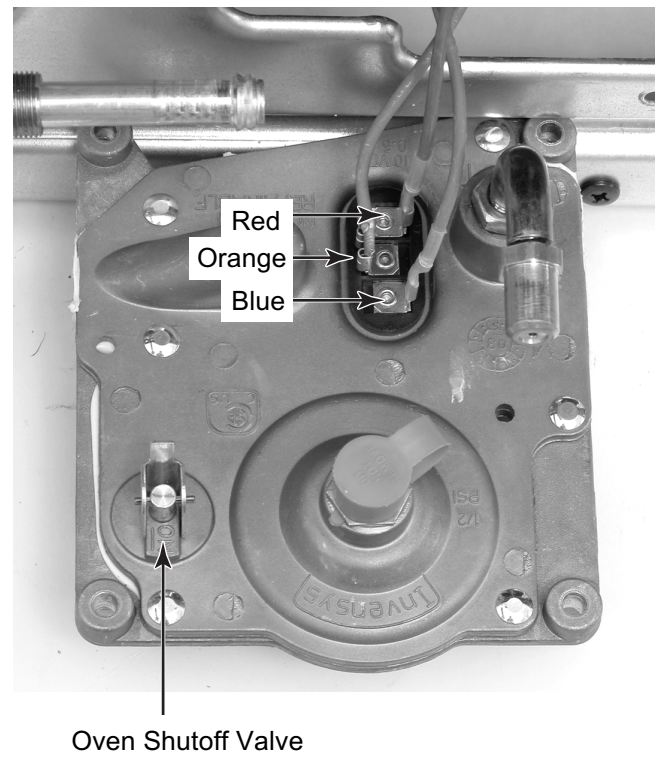


NOTE: For servicing the Gas Distribution System, refer to Job Aid **KR-28**, Part Number **8177893**.

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



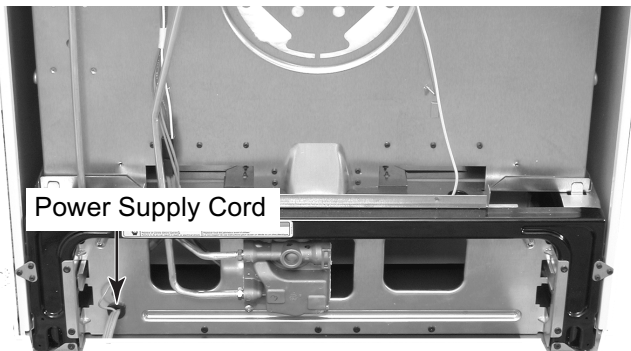
Electrical Shock Hazard

Disconnect power before servicing.

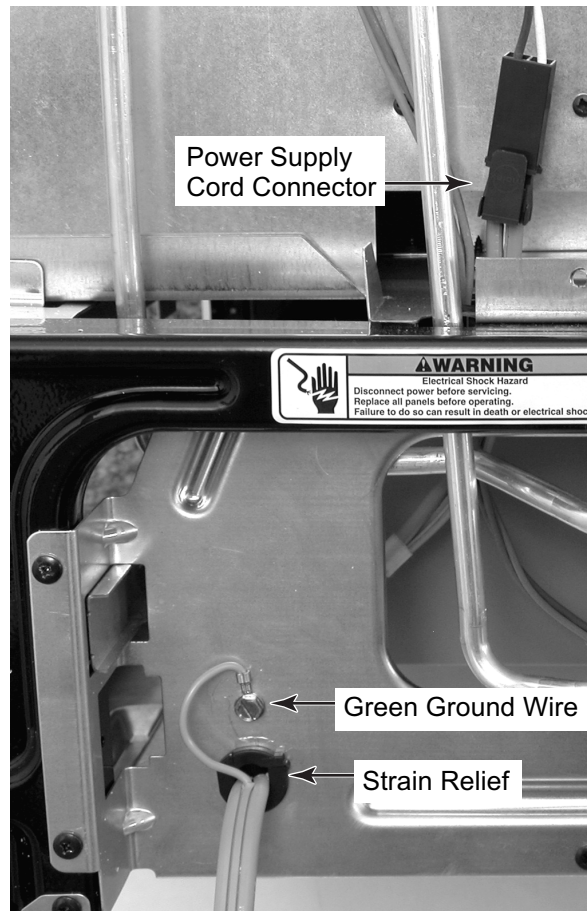
Replace all parts and panels before operating.

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 (see page 4-10 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

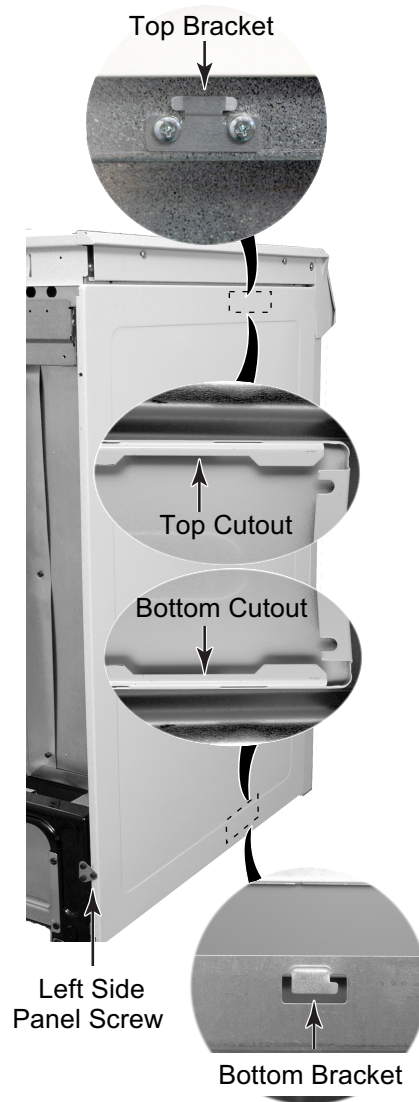
!WARNING



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 4-10 for the procedure).

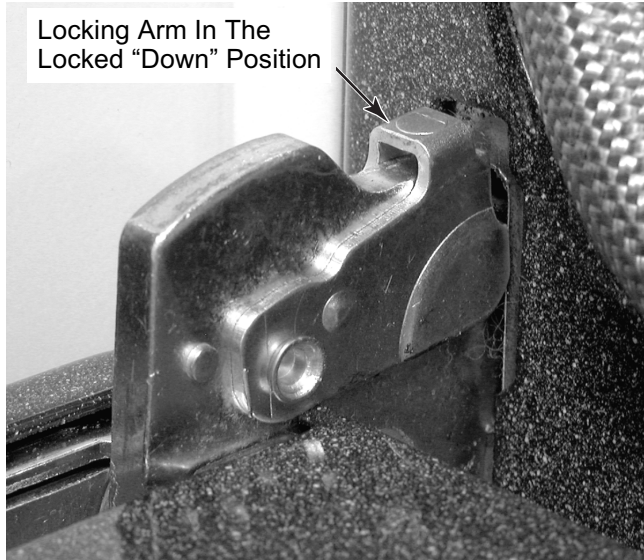
5. Remove the bottom rear screw for the side panel you are removing.
6. Pull the back of the side panel out so it clears the mounting bracket, then slide the panel back until the top and bottom brackets are in the panel cutouts, then remove the panel.



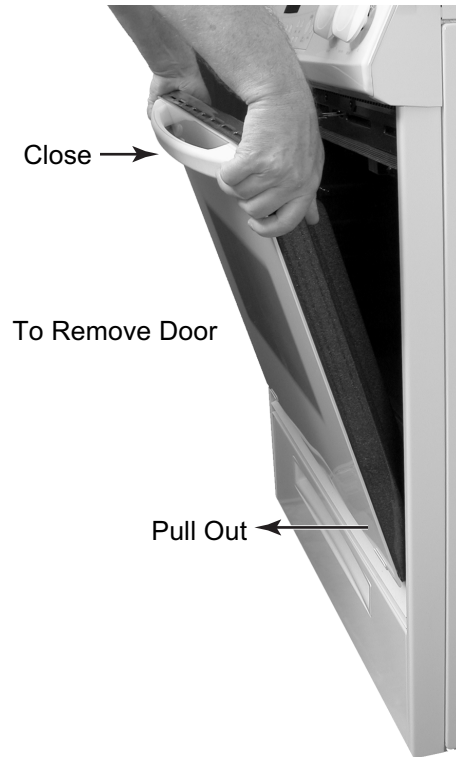
REMOVING & REINSTALLING THE OVEN DOOR

To remove the oven door:

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



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

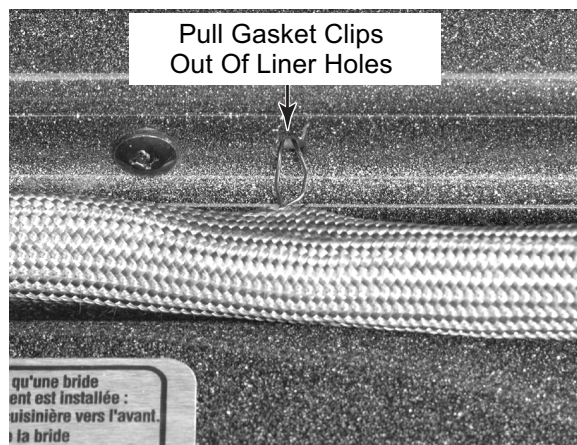


To reinstall the oven door:

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

REMOVING THE OVEN DOOR GASKET

1. Fully open the oven door.
2. Remove the screw from the door gasket cover and remove the cover.
3. Starting at one end of the door gasket, pull the clips out of the liner holes, and remove the gasket.



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

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

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

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



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



- e) Remove the two door handle screws from each of the brackets and remove the handle from the decorative glass.



4. **To remove a hinge:**

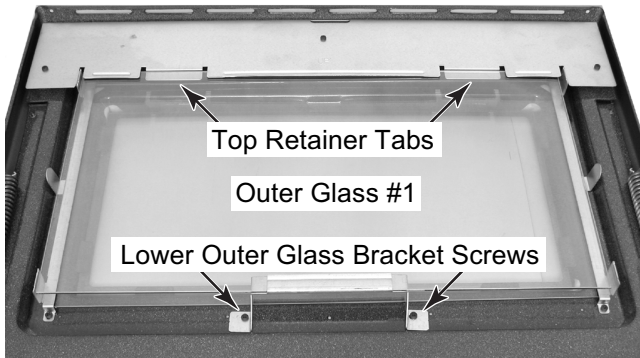
- a) Remove the decorative glass and handle from the door liner (see step 3).
- b) Position the oven door liner with the inner glass facing up.
- c) Remove the two screws from the hinge you are servicing.
- d) Lift the door liner and remove the hinge.



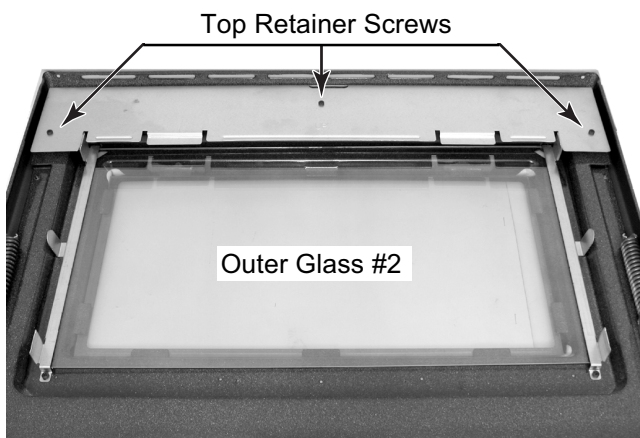
5. **To remove the two pieces of outer oven door glass:**

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

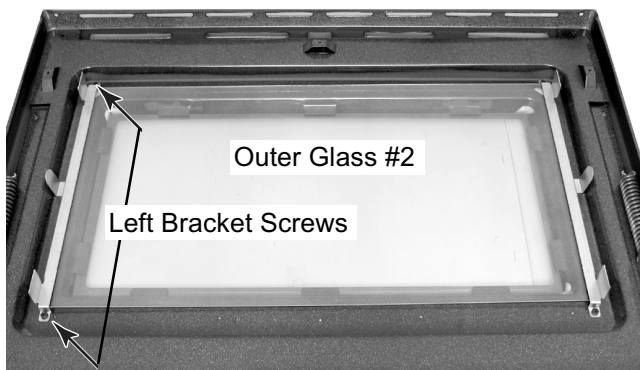
- b) Position the door liner with the outer oven glass facing up, as shown.
- c) Remove the two screws from the lower bracket for the outer oven glass.
- d) Slide the lower bracket off the first piece of outer oven glass, then slide the glass out of the top retainer tabs.



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

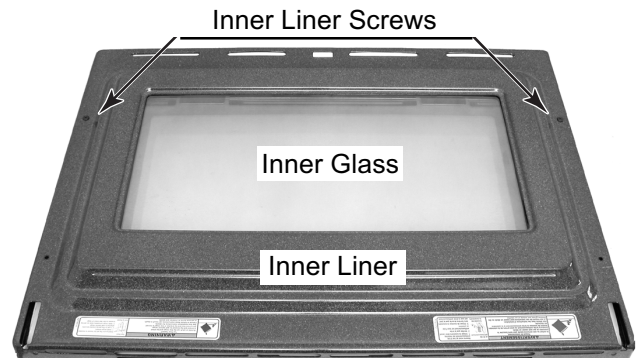


- f) For the second piece of outer oven glass, remove the two screws from the left bracket, then remove the bracket and second piece of glass from the door liner.

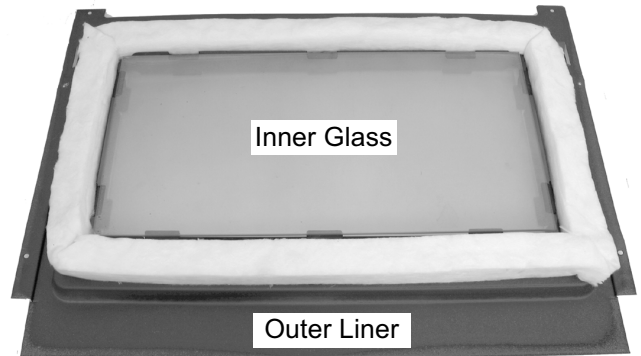


6. To remove the inner oven door glass:

- 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:

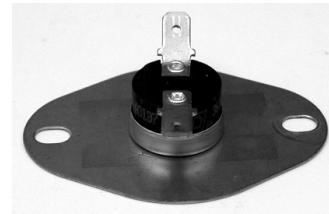
- The most common cause for control failure is corrosion on connectors. Therefore, disconnecting and reconnecting wires will be necessary throughout test procedures.
- All tests/checks should be made with a VOM or DVM having a sensitivity of 20,000 ohms-per-volt DC, or greater.
- Check all connections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

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

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



Control TOD (N.C.)
Opens @ 96°C (205°F)
Resets @ 74°C (165°F)

Cooling Fan TOD (N.O.)
Resets @ 70°C (158°F)
Closes @ 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.

IGNITION SWITCHES



Refer to page 4-4 for the procedure for servicing the ignition switches.

NOTE: The 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. Disconnect the ignition switch connector from the wire harness.
6. Set the ohmmeter to the R x 1 scale.
7. Connect the ohmmeter test leads to the pins of the spark module connector.
8. 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.
9. Continue to turn the knob away from the LITE position. The switch should open, and the meter should indicate an open (infinite ∞) circuit.
10. Repeat steps 8 and 9 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.



⚠ WARNING

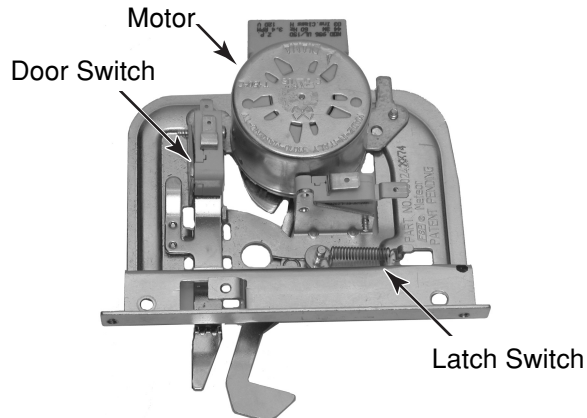
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

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

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 1 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 leads connected as stated in the previous step, press the switch actuator. The meter should indicate continuity (0 Ω).

OVEN TEMPERATURE SENSOR



Refer to page 4-16 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



⚠ WARNING

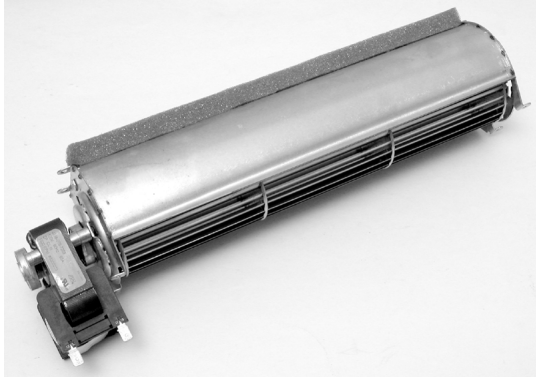
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

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

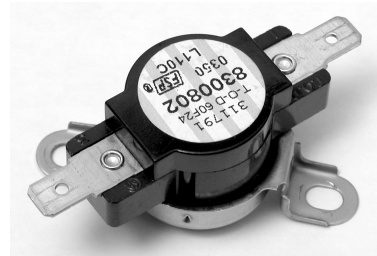
COOLING FAN MOTOR



Refer to page 4-17 for the procedure for servicing the cooling fan motor.

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Disconnect one of the wires from the cooling fan motor.
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 .

OVEN TOD



Refer to page 4-18 for the procedure for servicing the oven TOD.

1. Unplug range or disconnect power.
2. Turn off gas supply to range.
3. Disconnect the wires to 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).



⚠ WARNING

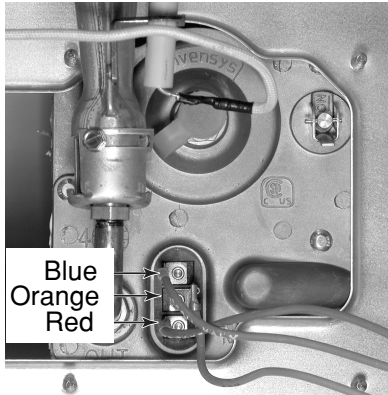
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

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

GAS DISTRIBUTION VALVE



Refer to page 4-19 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 read as follows:

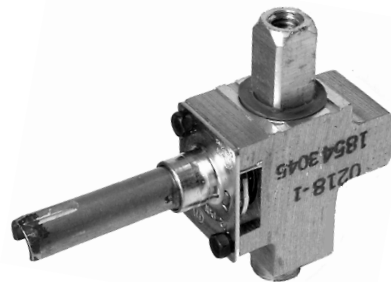
Terminal 1 (red) to terminal 2 (orange)
= $216 \Omega \pm 30$.

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

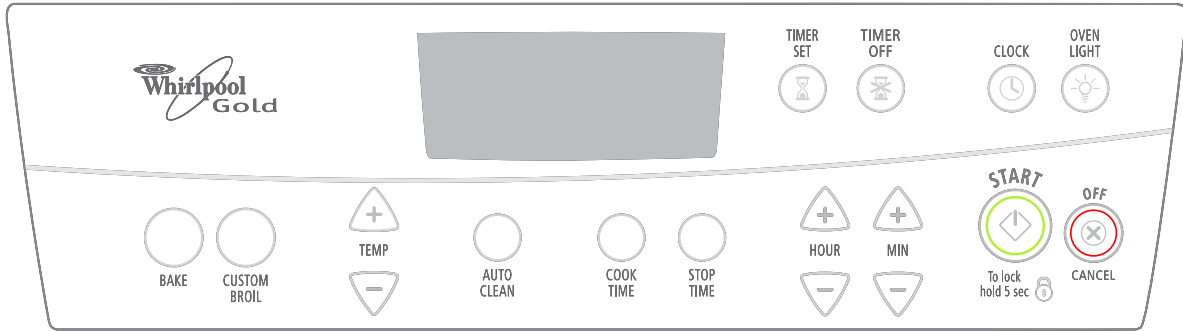
GAS VALVE

Refer to page 4-4 for the procedure for servicing the 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.



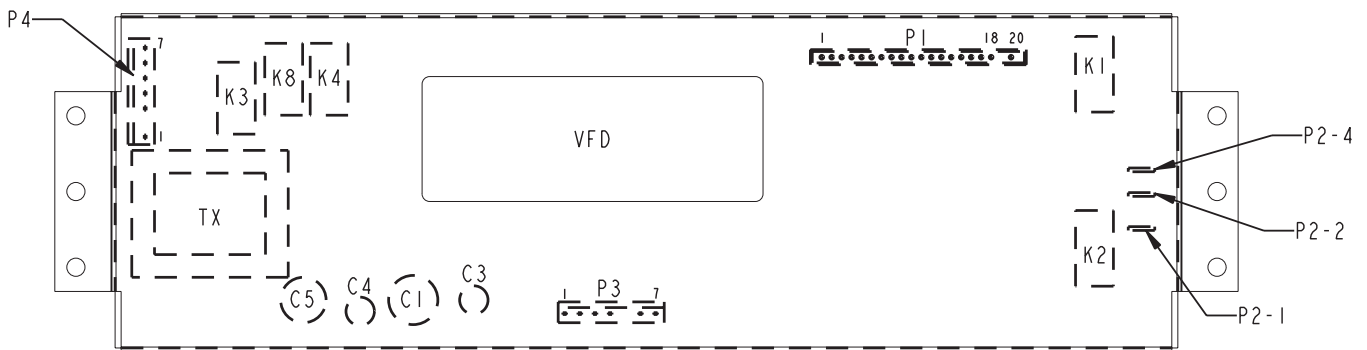
CLOCK



KEYPAD LAYOUT

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
BAKE	■	■																		
BROIL		■		■																
CLEAN		■			■															
TEMP UP	■				■															
TEMP DOWN	■														■					
COOK TIME	■												■							
STOP TIME	■										■									
TIMER SET						■	■	■												
TIMER OFF							■	■	■											
CLOCK											■	■	■							
OVEN LIGHT												■	■	■						
HOUR UP							■	■	■											
MINUTE UP								■	■	■										
HOUR DOWN							■			■										
MINUTE DOWN									■	■	■									
START																	■			
OFF/CANCEL																		■	■	

DISPLAY BOARD & CONNECTOR PINOUTS



BAKE AND BROIL CONNECTOR P2

PIN	P2 FUNCTION
P2-1	BROIL RELAY OUTPUT
SPACE	
P2-2	AC LINE IN (120 VAC, 60 HZ) (L1)
P2-3	NO CONNECTION
P2-4	BAKE RELAY OUTPUT

PIN	P3 FUNCTION
P3-1	DOOR LATCH RECEIVE
P3-2	DOOR LATCH SEND
P3-3	DOOR SWITCH SEND
P3-4	DOOR SWITCH RECEIVE
P3-5	NO CONNECTION
P3-6	OVEN SENSOR SEND
P3-7	OVEN SENSOR RECEIVE

PIN	P4 FUNCTION
P4-1	AC NEUTRAL (N)
P4-2	NO CONNECTION
P4-3	AC LINE (120 VAC, 60 HZ) (L1)
P4-4	OVEN LIGHT RELAY OUT (120 VAC)
P4-5	DOOR MOTORIZED LATCH RELAY OUT (120VAC)
P4-6	CONVECT FAN (ELEC ONLY) RELAY OUT (120VAC)
P4-7	COOLING FAN (ELEC & GAS) RELAYOUT (120VAC)

BAKE CONNECTOR P6

PIN	P6 FUNCTION
P6	L1

P6 FUNCTION: LINE FOR BAKE (ELECTRIC ONLY)
 P7 FUNCTION: CONVECTION
 P1 FUNCTION: KEYBOARD INTERFACE

— NOTES —

DIAGNOSTICS & TROUBLESHOOTING

DIAGNOSTICS

- All diagnoses of this range must begin with a normal check of the line voltage, blown fuses, and failed components.
- All units that have failed during the first few days of use should be checked for loose connections, or miswiring.
- All checks should be made with a meter having a sensitivity of 20,000 ohms-per-volt, or greater.

FAILURE/ERROR DISPLAY CODES

4-DIGIT DISPLAY	3-DIGIT DISPLAY	LIKELY FAILURE CONDITION	SUGGESTED CORRECTIVE ACTION PROCEDURE
F1	E0	EEPROM communications error	<ol style="list-style-type: none"> 1. Verify failure if not displayed, using CANCEL/OFF key. Press key for 5 seconds until last error code is displayed. 2. Unplug range or disconnect power longer than 30 seconds. 3. Plug in range or reconnect power and observe for longer than 1 minute. 4. If failure remains, go to step 5. 5. Unplug range or disconnect power. 6. Replace control.
	E1	EEPROM checksum failure	
	E2	UL A/D error(s)	
F2	E0	Shorted key	<ol style="list-style-type: none"> 1. Verify failure if not displayed, using CANCEL/OFF key. Press for 5 seconds. 2. Unplug range or disconnect power. 3. If applicable, ensure membrane tail is seated in connector on back of control. 4. Plug in range or reconnect power and observe for longer than 1 minute. 5. If failure remains, go to step 6. 6. Unplug range or disconnect power. 7. Replace control.
	E1	Keytail unplugged	
F3	E0	Oven sensor opened	<ol style="list-style-type: none"> 1. Unplug range or disconnect power. 2. Disconnect sensor from harness. 3. Measure sensor value (between connector pins) between 1000 Ω @ 0°C(32°F) and 2697 Ω @ 482°C (900°F), (room temperature approx. = 1080 Ω). Also measure from sensor connector to sensor casing for possible short. If measurements do not correlate to real temperature, or if short is found, replace sensor. 4. Trace the wires and connectors to the sensor from control, and back to control. If wire or connection is damaged, replace the harness. 5. Reconnect the sensor to the harness. 6. Plug in range or reconnect power. 7. Press BAKE and START/ENTER. Observe for longer than 1 minute. If failure remains, go to step 8. 8. Unplug range or disconnect power. 9. Replace control.
	E1	Oven sensor shorted	
	E2	BAKE/BROIL range over temperature	
	E3	CLEAN range over temperature	
F5	E0	Door and switches do not agree	<ol style="list-style-type: none"> 1. Press CANCEL/OFF key. Program and start the CLEAN mode. Ensure door is closed and latched. 2. Unplug range or disconnect power. 3. Check integrity of wires and connectors from control to door switch, and control to door latch switch. 4. If no damage to wires or connectors: <ul style="list-style-type: none"> - Check continuity of the door switch circuit from oven control. If continuity is not present, replace door switch (If door switch is integral to the door latch motor assembly, replace entire door latch motor assembly). - Check continuity of door latch switch circuit. If continuity is not present, replace door latch motor assembly. 5. Plug in range or reconnect power. 6. Press CANCEL/OFF key. Program and start the CLEAN mode, and observe for 1 minute to ensure that operation is normal.
	E1	Door latch not operating	
	E2	Latch error during CLEAN	

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).

EZ354

Test Mode: Available for the first 60 seconds after power up.

Enter the Test Mode by pressing:

CANCEL
CANCEL
START

Any system or control failures will be displayed within 2 seconds.



NORMAL DISPLAY



ERROR DISPLAY

Exit the Test Mode by pressing the OFF/CANCEL key.

To recall the last error code, press the OFF/CANCEL key for 5 seconds.

Pressing the indicated keys will show the following displays:

Convection Bake		Auto Clean	
			WILL CYCLE LATCH MOTOR
Bake		Min +	
Custom Broil		Clock	
			WILL CHECK BUZZER
Temp +		OFF/CANCEL	
			EXIT TEST MODE
Temp -			

Hidden Functions

Holding the appropriate key for 5 seconds will activate the hidden function:

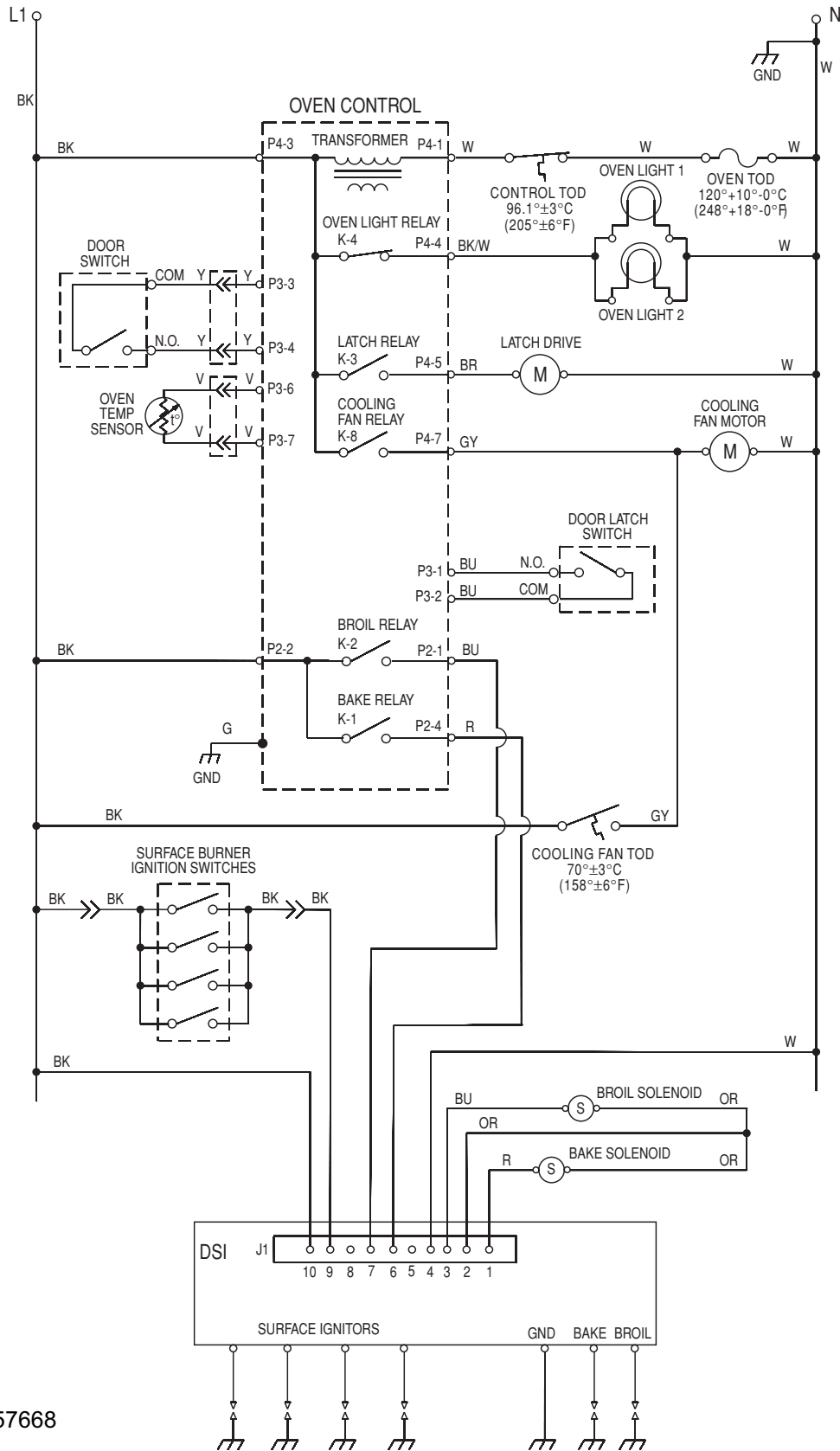
BAKE	Temperature Calibration Offset
BROIL	Temperature Scale Selection (°F / °C)
OFF/CANCEL	Recalls The Last Failure Code
START/ENTER	Software Revision Number
TIMER SET	Disables/Enables Timer Reminder Signals
COOK TIME	Disables/Enables Cycle End Signals
STOP TIME	Disables/Enables Valid Date Entry Signals

TROUBLESHOOTING CHART

PROBLEM	POSSIBLE CAUSE	SOLUTION
Oven will not operate.	Electronic oven control is not set properly. A delay start has been programmed.	Reset the oven control (see the Use & Care Guide for instructions describing the function you are operating). Wait for the start time to be reached.
Burner fails to light.	Range is not plugged in. A household fuse or circuit breaker has opened. Burner ports are clogged.	Plug power cord into a live AC outlet. Replace fuse or reset the breaker. Clean burner ports with straight pin.
Burner flames are uneven.	Burner ports are clogged.	Clean burner ports with straight pin.
Burner flames lift off ports, are yellow, or are noisy when turned off.	The air-to-gas mixture is incorrect.	Adjust air shutters for bake or broil burners. Top burner ports are clogged. Clean or replace burner.
Burner makes "popping" noise when on.	Burner is wet.	Allow burner to dry.
Burners spark.	It is normal for all four burners to spark briefly when: <ul style="list-style-type: none"> • A draft is blowing on the burners. • A very large pot on burner causes flame to be unstable. • The burner is turned on but has not ignited. Continuous sparking may be caused when: <ul style="list-style-type: none"> • A switch contact is wet. • There is a faulty spark module. • The wall outlet wiring is not correct. 	Allow switch to dry. Replace the spark module. Rewire wall outlet.
Control knob will not turn.	Press in on the knob before turning.	If knob is still hard to turn, replace the gas valve.
The self-clean cycle will not operate.	A delay start time has been programmed. The cooling fan is not running.	Wait for the start time to be reached. Check the cooling fan wiring. Test the control panel shutdown switch. Replace the motor.
"PF" shows on the display.	There has been a power failure.	Reset the clock.
A failure code (E3, F1, etc.) is showing on the display.	Press the CANCEL/OFF keypad.	If the code does not disappear, refer to page 6-1, and identify the cause of the error message to help you correct the problem.
The keypads do not operate.	The Control Lock has been set.	Press and hold the Control Lock keypad for 5-seconds to unlock the keypads. The range is not properly grounded.

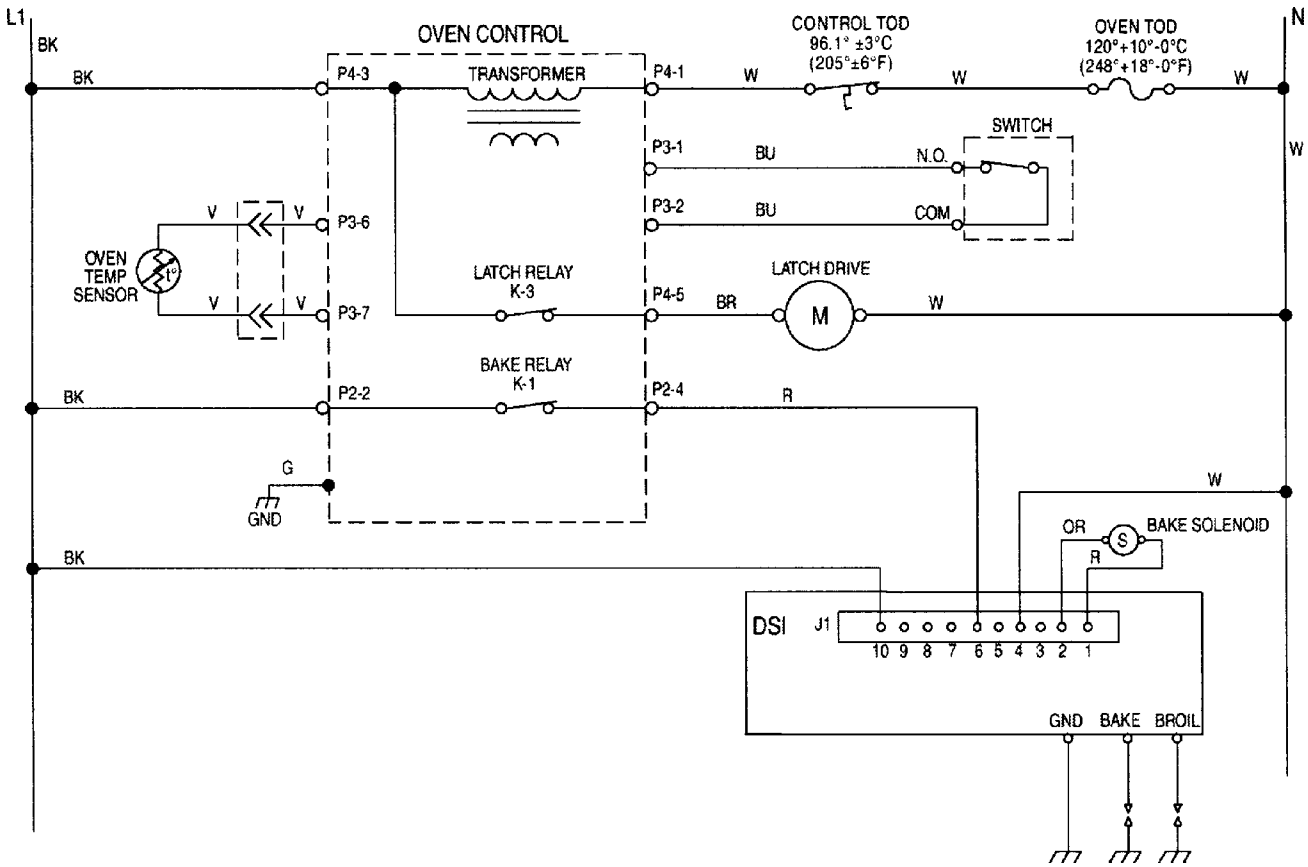
WIRING DIAGRAM & STRIP CIRCUITS

WIRING DIAGRAM

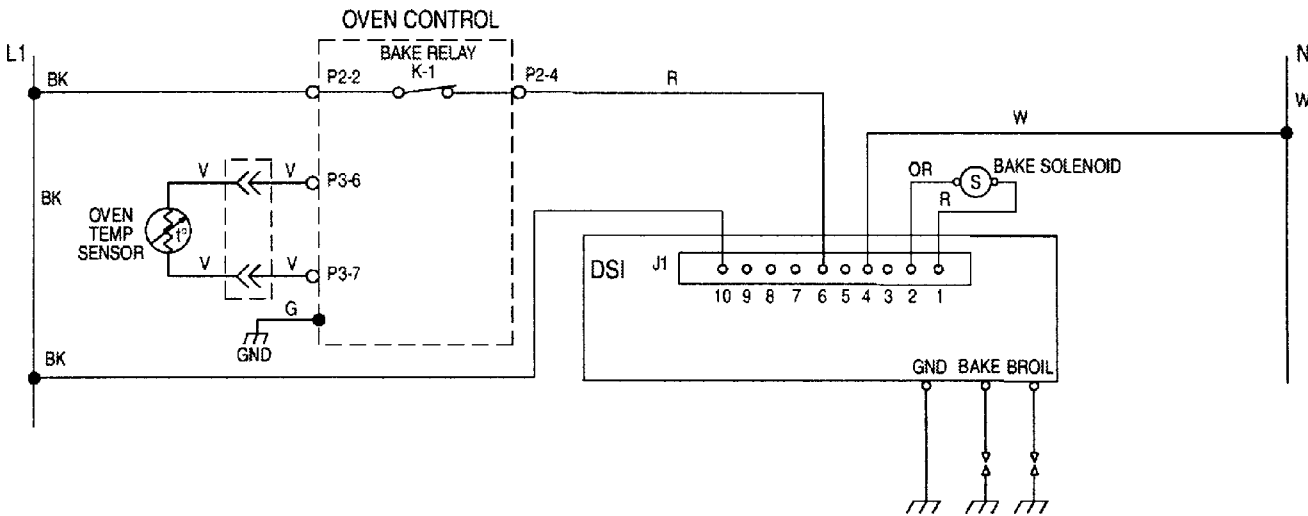


STRIP CIRCUITS

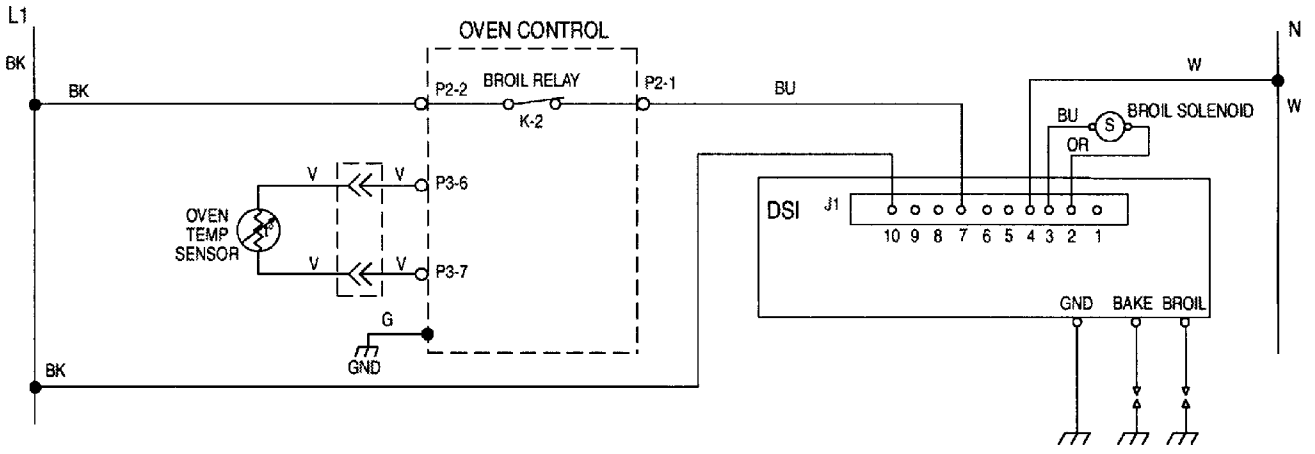
CLEAN



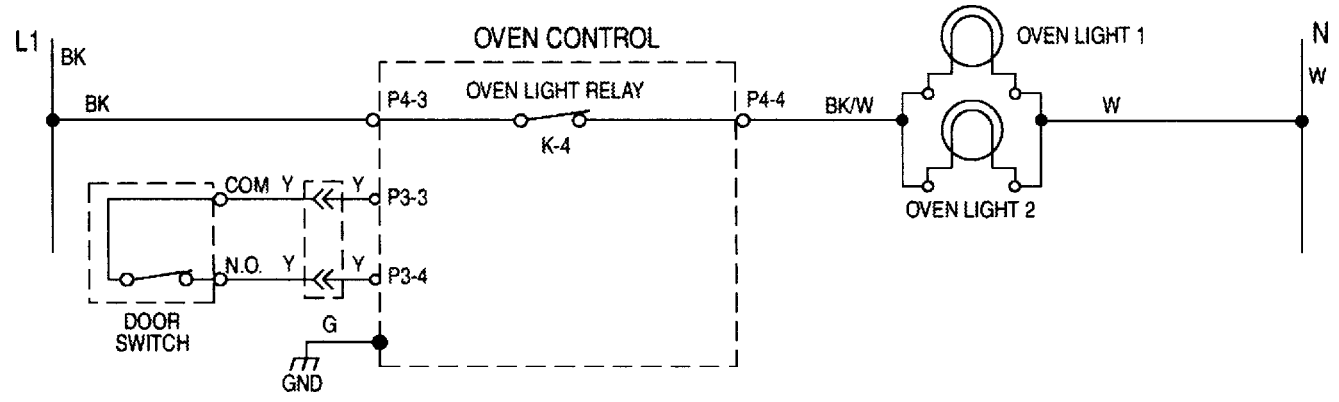
BAKE



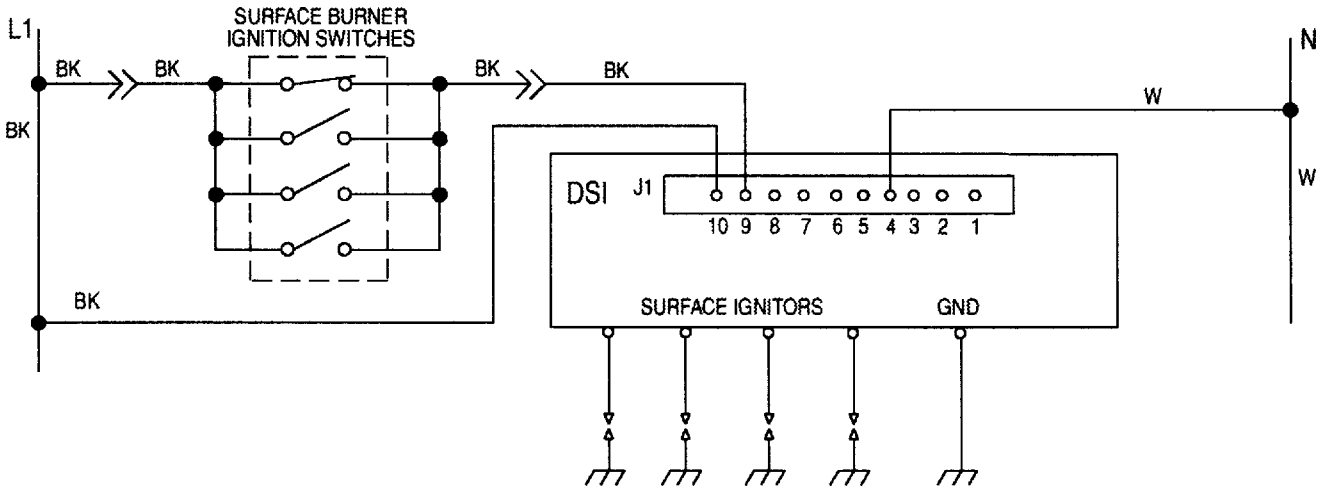
BROIL



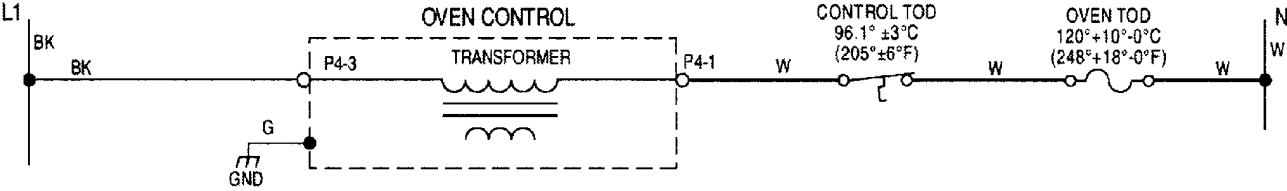
OVEN LIGHT



SURFACE BURNER



CONTROL POWER



PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION SOURCES

IN THE UNITED STATES:

FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION CALL:

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

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

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

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

FOR LITERATURE ORDERS:

PHONE: 1-800-851-4605

FOR TECHNICAL INFORMATION AND SERVICE POINTERS:

www.servicematters.com

IN CANADA:

FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION CALL:

1-800-461-5681

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

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

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