

KitchenAid

TECHNICAL EDUCATION

PROFESSIONAL DUAL FUEL RANGE WITH SELF-CLEAN THERMAL CONVECTION OVEN



FORWARD

This Job Aid, "Professional Dual Fuel Range With Self-Clean Thermal Convection Oven," (Part No. 4317282), provides the technician with information on the operation and service of the Professional Dual Fuel Range. It is to be used as a training Job Aid and Service Manual.

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 diagrams 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 Professional Dual Fuel 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 Professional Dual Fuel Range to the proper operational status.

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

Copyright 2001, Whirlpool Corporation, Benton Harbor, MI 49022

Table of Contents

	Page
SPECIFICATIONS	1-1
COMPONENT ACCESS	2-1
Component Locations	2-1
Removing A Sealed Burner & Ignitor	2-2
Removing The Control Power And Lamp Transformers, The Electronic Range Control, The Oven Door Latch Assembly, & Spark Module	2-4
Removing The Front Panel, Display, Selector & Set Controls, Gas Valve, & Ignition Switches	2-8
Removing A Halogen Lamp Assembly	2-13
Removing The Broil Element	2-14
Removing The Oven Temperature Sensor	2-15
Removing The Gas Regulator	2-16
Removing The Rear Panel	2-17
Removing The Convection Bake Element & Fan Motor Assembly	2-18
Removing The Blower Motor Assembly	2-20
Removing The Suppressor Board	2-21
Removing The Oven Shutdown Thermal Fuse	2-22
Removing The Hidden Bake Element	2-23
Removing The Oven Door	2-25
Removing The Oven Door Glass, Hinges, & Handle	2-26
Removing The Oven Door Gasket	2-28
COMPONENT TESTING	3-1
Electronic Range Control	3-1
Control Power & Lamp Transformers	3-2
Blower Motor	3-3
Oven Door Latch Assembly	3-4
Oven Temperature Sensor	3-5
Oven Shutdown Thermal Fuse	3-6
Convection Bake Element	3-7
Convection Fan Motor	3-8
Broil Element	3-9
Hidden Bake Element	3-10
Ignition Switches	3-11
DIAGNOSIS & TROUBLESHOOTING	4-1
Failure/Error Display Codes	4-1
Electronic Range Control Pinouts	4-2
Electronic Range Control Component Test Points	4-3
Relay Logic	4-3
WIRING DIAGRAMS & STRIP CIRCUITS	5-1
Oven Wiring Diagram	5-1
Cooktop Wiring Diagram	5-1
Strip Circuits	5-2
TECH TIPS	6-1
Requesting Assistance Or Service	6-1
Dual Fuel Range Warranty	6-2

MODEL & SERIAL NUMBER DESIGNATIONS

MODEL NUMBER

MODEL NUMBER		K	DR	P	40	7	H	SS	0
INTERNATIONAL SALES IND. or MARKETING CHANNEL IF PRESENT									
K = KITCHENAID BRAND									
PRODUCT IDENTIFICATION									
DD = DUAL FUEL DROP-IN / SLIDE-IN									
DR = DUAL FUEL RANGE									
ED = ELECTRIC DROP-IN RANGE									
EE = ELECTRIC EYE-LEVEL RANGE									
ER = ELECTRIC STANDARD RANGE									
ES = ELECTRIC SLIDE-IN RANGE									
GD = GAS DROP-IN RANGE									
GE = GAS EYE-LEVEL RANGE									
GR = GAS STANDARD RANGE									
GS = GAS SLIDE-IN RANGE									
MERCHANDISING SCHEME									
C = CERAMIC GLASS TOP									
H = CERAMIC WITH HALOGEN									
I = IMPERIAL									
P = PROFESSIONAL / COMMERCIAL									
S = STANDARD TOP									
T = TEMP. GLASS TOP									
CAPACITY / SIZE / SERIES / CONFIGURATION									
1ST POSITION	2ND POSITION								
1 = DROP-IN	0 = 30" WIDE								
2 = DROP-IN/SLIDE-IN	6 = 36" WIDE								
COMBINATION									
3 = SLIDE-IN									
4 = COMMERCIAL									
5 = STANDARD									
7 = EYE-LEVEL									
FEATURES									
0 = STANDARD FEATURES									
2 = PLUS FEATURES									
5 = DELUXE FEATURES									
7 = DELUXE FEATURES / CONVECTION									
YEAR OF INTRODUCTION									
H = 1999									
J = 2000									
COLOR CODE									
SI - SILVER									
SS = BRUSHED STAINLESS STEEL									
ENGINEERING CHANGE									
0 = Basic Release									
1 = First Revision									
2 = Second Revision									

SERIAL NUMBER

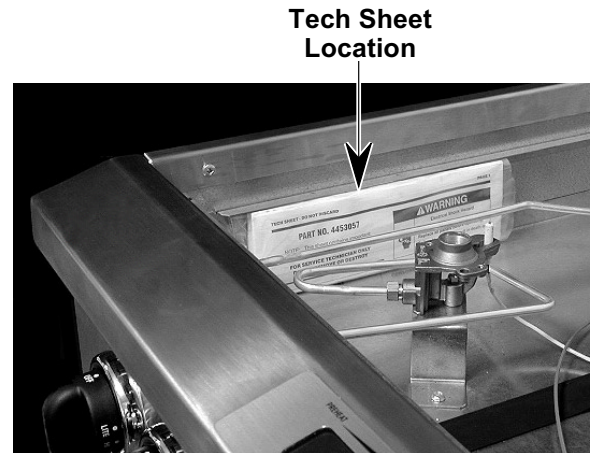
SERIAL NUMBER	X	K	0	5	1	0	5	2
MANUFACTURING SITE X = OXFORD								
YEAR OF MANUFACTURE K = 2000								
WEEK OF MANUFACTURE								
PRODUCT SEQUENCE NUMBER								

MODEL & SERIAL NUMBER LABEL AND TECH SHEET LOCATIONS

The Model/Serial Number label and Tech Sheet locations are shown below. NOTE: The tech sheet is accessible by removing the cooktop. To remove the cooktop, refer to page 2-2 for the procedure.



**Model & Serial
Number Label Location
(On Right Side Of Chassis)**



**Tech Sheet
Location**

IMPORTANT SAFETY INFORMATION

Your safety and the safety of others is very important.

Important safety messages have been provided in this Job Aid. 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 be preceded by the safety alert symbol and the word **“WARNING.”**

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

IMPORTANT

Electrostatic Discharge (ESD) Sensitive Electronics

ESD problems are present everywhere. ESD may damage or weaken the electronic control assembly. The new control assembly may appear to work well after repair is finished, but failure may occur at a later date due to ESD stress.

- Use an anti-static wrist strap. Connect the wrist strap to the green ground connection point, or to an unpainted metal surface in the appliance.

- OR -

Touch your finger repeatedly to a green ground connection point, or to an unpainted metal surface in the appliance.

- Before removing the part from its package, touch the anti-static bag to a green ground connection point, or to an unpainted metal surface in the appliance.
- Avoid touching electronic parts, or terminal contacts. Handle the electronic control assembly by the edges only.
- When repackaging the failed electronic control assembly in an anti-static bag, observe the previous instructions.

SPECIFICATIONS

SIZE	30"
NEW MODEL NUMBER	KDRP407HSS
Controls	
Push-To-Turn	Yes -4
Infinite	Yes - 4
Location	Front/Vertical
Ignition System	Electronic-Lite Position
Knobs	Black-KA design-heavy duty
Control Panel Color	Stainless
Landing Ledge	Stainless-KA design
Oven "On" Light	Yes
Oven Clean Light	Yes
Hot Surface Indicators	NA
Burners	
Sealed	Yes-4
Right Front	15,000 btu natural
	12,000 btu LP
Left Front	15,000 btu natural
	12,000 btu LP
Right Rear	15,000 btu natural
	12,000 btu LP
Left Rear	15,000 btu natural
	12,000 btu LP
Grates	2 Cast Iron-Full Surface
Color	Matte Black
Burner/Grate Support	None required
Burner Pan	Black Porcelain
Filler Grate	Cast Iron KA Design
Bezel	No
Drip Bowl	No
Surface	
Porcelain/Metal	Yes
9" Backsplash	Standard-required
Cooktop Island Trim	Optional
Drip Tray	No
Color	Stainless
Oven Control Features	
Type	Electronic with knob interface
Off	Yes
Light	Auto
Bake	Yes
Broil	Yes
Econo Broil	No
Convection Bake	Yes
Convection Broil	Yes
Convection Roast	Yes
Bread Raising	Yes
Keep Warm	Yes
Clean	Yes
Browning Feature	Three Level
Kitchen Timer	Yes
Start	No
Cancel/Off	Yes
Oven Light	Yes

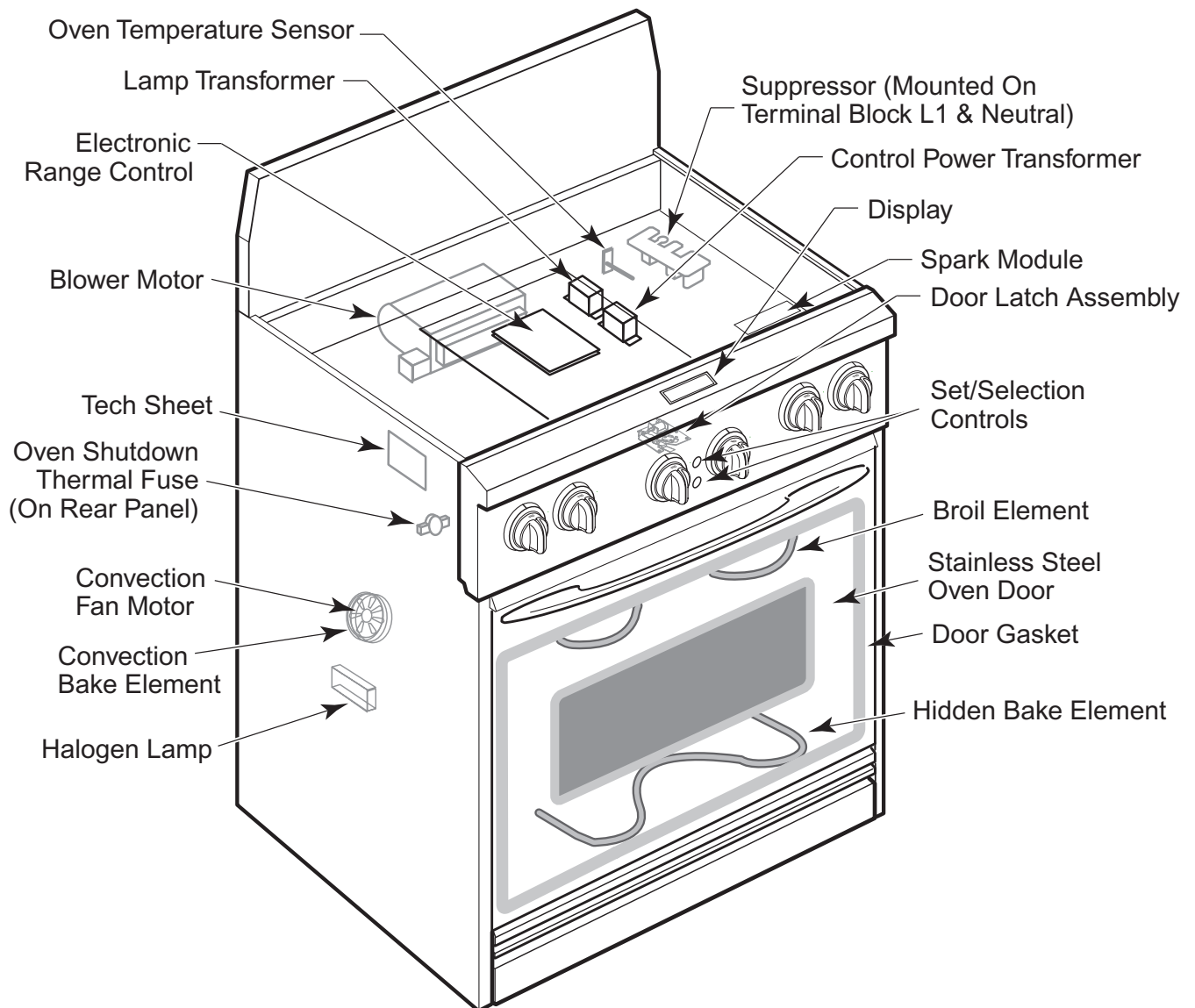
Specifications (continued)

SIZE	30"
NEW MODEL NUMBER	KDRP407HSS
Other Upper Oven Features	
Oven Cleaning System	Self Clean
Auto Self Clean Latch	Yes
Hidden Bake Element	Yes
Bake Element	2000w @ 240V
	1500w @ 208V
Broil Element	2667w @ 240V
	2000w @ 208V
Convection Element	1600w @ 240V
	1200w @ 208V
Size - Cavity	25"W X 16"H X 18 1/2"D
Cavity Volume-Cu. Ft.	4.24 Cu. Ft.
Oven Door/Liner Finish	Porcelain
Integral Rack Guides	Yes
Oven Racks	3
Broiler Pan and Grid	Porcelain/Chrome KA
Roasting Rack	Yes-KA Design
Window Glass	Black
Removable Door	Yes
Door Gasket	Yes
Floating Glass	No
Vent Color	NA
Oven Features (Cont.)	
Front Frame	Porcelain
Bottom Trim	Stainless
Oven Lights	Yes-2
Manual Light	Yes
Auto Light	Yes
Dimensions	
Width (Side to Side)	
Front	29 7/8"
Depth (Front to Back)	26 1/4"
Height (Top to Bottom)	36" Adjustable
Cutout	
Width (Side to Side)	30"
Depth (Front to Back)	24"-25 3/8"
Height (Top to Bottom)	36" Adjustable
Mounting Hardware	No
Other Specifications	
Electrical	240/208 Volts,
	Single Phase,
	60 Hz
Circuit	30 Amp
Total Connected Load	"E"
Power Cord/Conduit	Pigtail Required
	3 Wire
Domestic Use Only	Yes
Agency Approvals	AGA/CGA
Approximate Shipping Weight	375 lbs.

COMPONENT ACCESS

This section instructs you on how to service each component inside the range. The components and their locations are shown below.

COMPONENT LOCATIONS



REMOVING A SEALED BURNER & IGNITOR

WARNING

ELECTRICAL SHOCK HAZARD

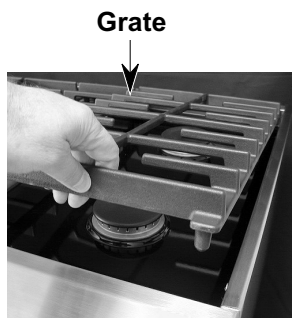
Disconnect power before servicing the range.
Replace all panels before operating range.
Failure to do so can result in death or electrical shock.

FIRE HAZARD

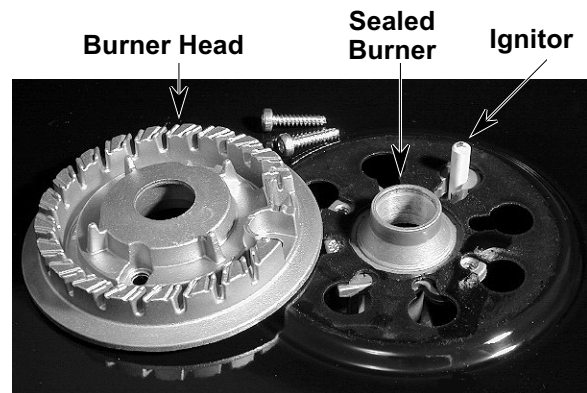
Shut off gas supply line valve before servicing the range.
Check all gas line connections and replace all panels before operating the range.
Failure to do so could result in explosion, fire, or other injury.

CAUTION: When you work on the dual fuel range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

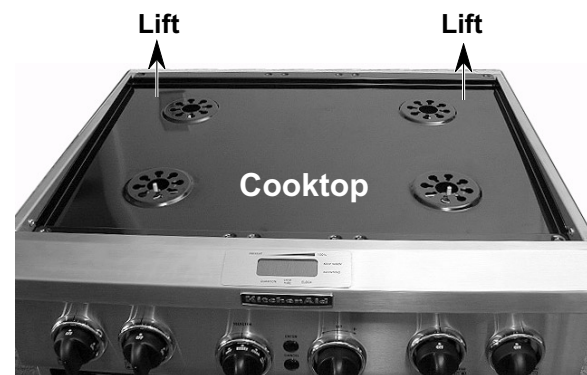
1. Turn off the gas and electrical power going to the range.
2. Remove the grates and burner caps from the cooktop.



3. Use a T20 torx screwdriver and remove the two screws from each burner head, then lift the heads off the cooktop.

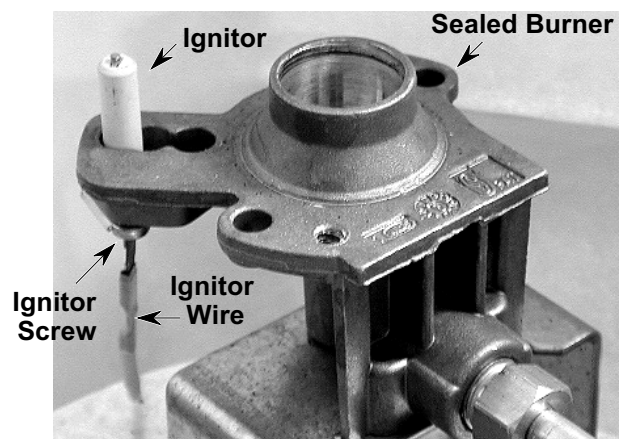


4. Lift the rear of the cooktop, slide it forward, and remove it.



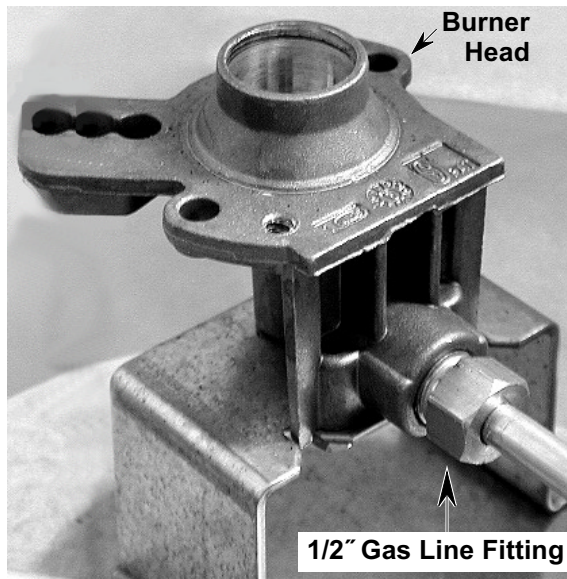
5. To remove an ignitor from a sealed burner:

- a) Disconnect the ignitor wire from the terminal.
- b) Remove the screw from the ignitor bracket.

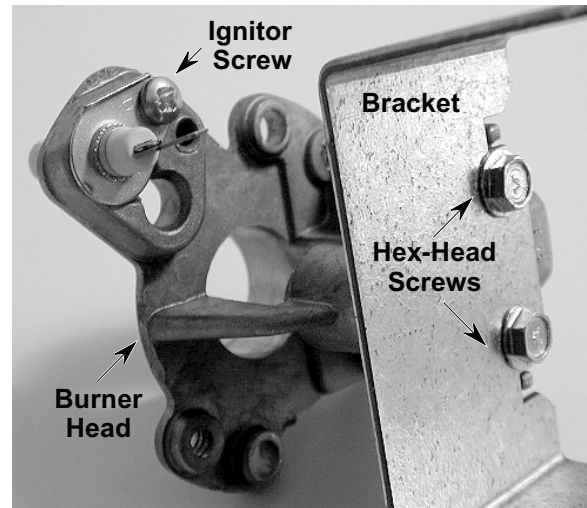


6. **To remove a sealed burner:**

- a) Disconnect the ignitor wire from the ignitor terminal (see step 5).
- b) Use a 1/2" open-end or an adjustable wrench and remove the gas line fitting from the sealed burner you are replacing.



- c) Remove the two hex-head screws from the burner bracket and remove the sealed burner.
- d) Remove the screw from the ignitor bracket and remove the ignitor from the sealed burner.



REMOVING THE CONTROL POWER AND LAMP TRANSFORMERS, THE ELECTRONIC RANGE CONTROL, THE OVEN DOOR LATCH ASSEMBLY, & SPARK MODULE

WARNING

ELECTRICAL SHOCK HAZARD

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

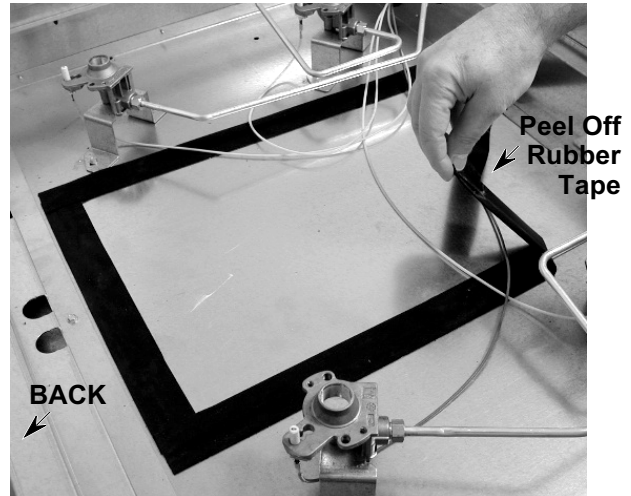
FIRE HAZARD

Shut off gas supply line valve before servicing the range.
Check all gas line connections and replace all panels before operating the range.
Failure to do so could result in explosion, fire, or other injury.

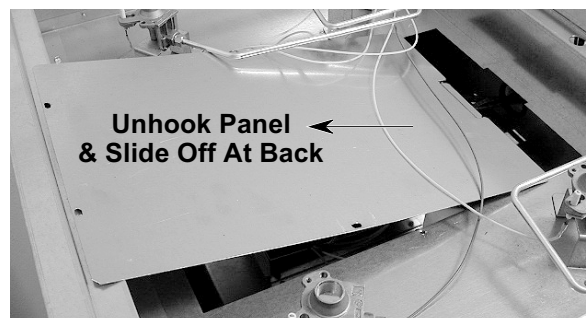
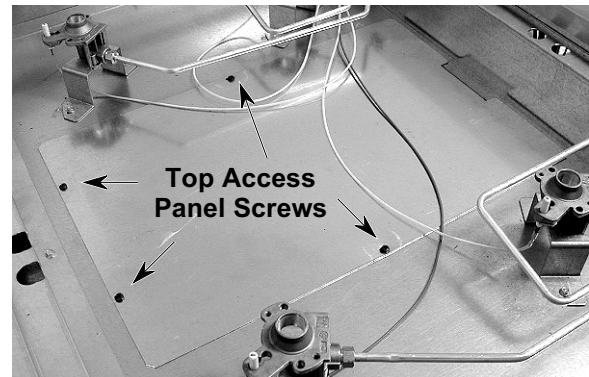
CAUTION: When you work on the dual fuel range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

1. Turn off the gas and electrical power going to the range.
2. Remove the grates, burner caps, and burner heads from the cooktop (see page 2-2).
3. Remove the cooktop from the range (see page 2-2).

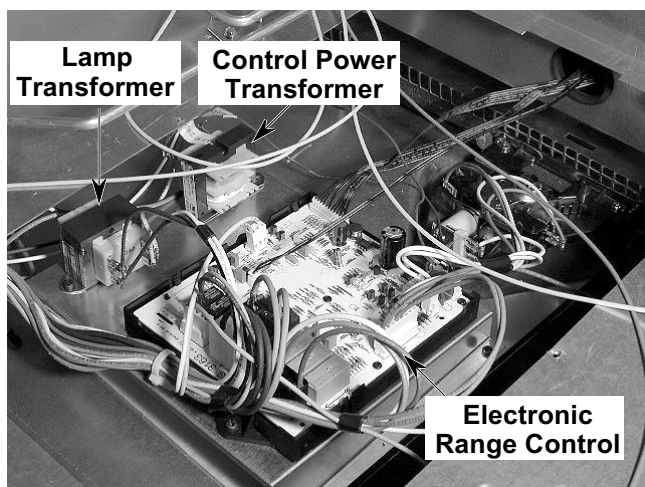
4. Starting from the front, peel off the rubber tape from around the top access panel. **NOTE:** Carefully peel the tape off as one continuous piece, and do not allow the adhesive sections to stick together.



5. To remove the access panel, remove the four screws, raise the back, and unhook the panel from the front.

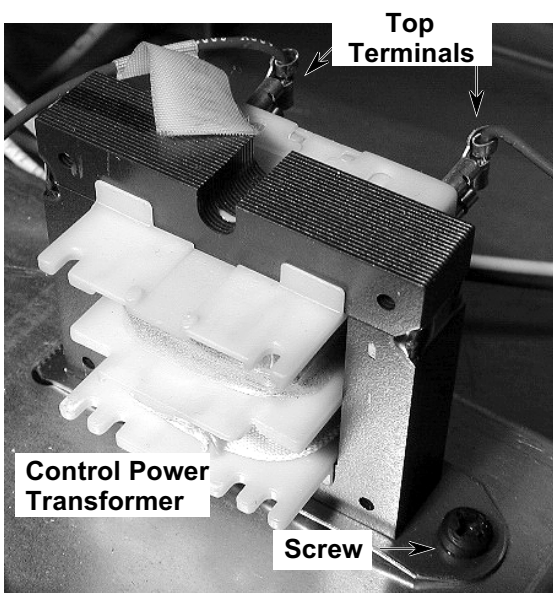


The top access panel components described on this page are shown below.



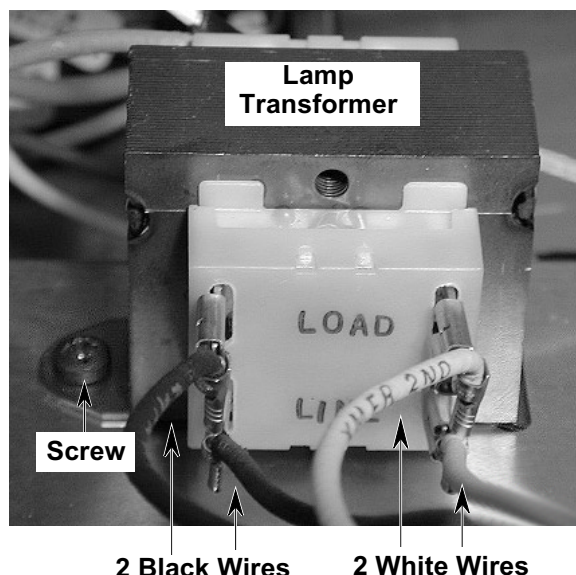
6. To remove the control power transformer:

- a) Remove the screw from the mounting bracket tab and slide the other bracket tab out of the chassis slot.
- b) Disconnect the top (2 blue) and bottom (red & white) wires from the terminals.



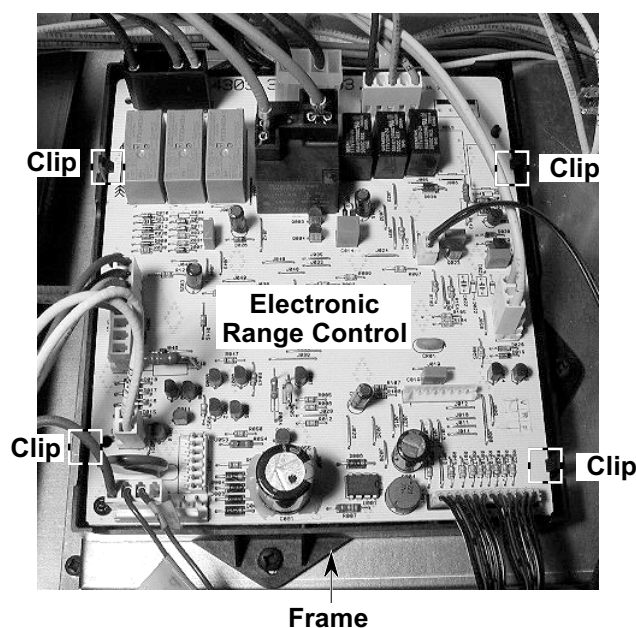
7. To remove the lamp transformer:

- a) Remove the screw from the mounting bracket tab and slide the other bracket tab out of the chassis slot.
- b) Disconnect the 2 white and 2 black wires from the terminals.



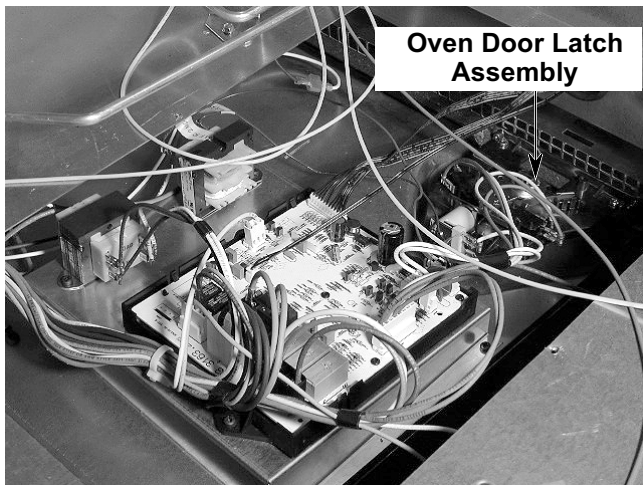
8. To remove the electronic range control:

- a) Disconnect the connectors (9) and wires (2) from the board and relay terminals.
- b) Unclip the board from the plastic mounting frame (4 clips).

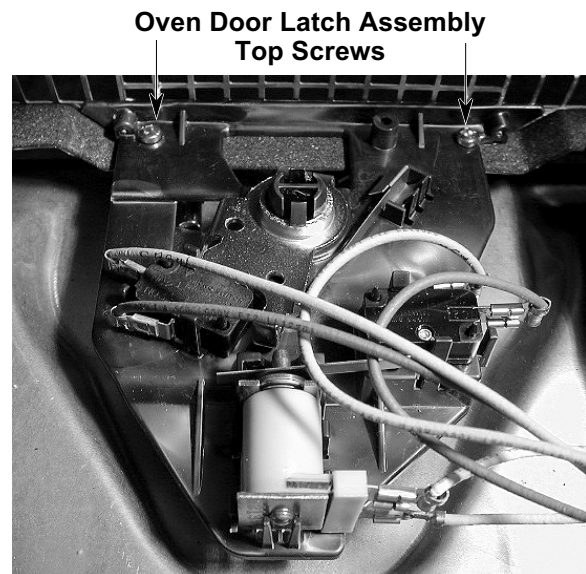


Continued on the next page.

The oven door latch assembly location is shown below.

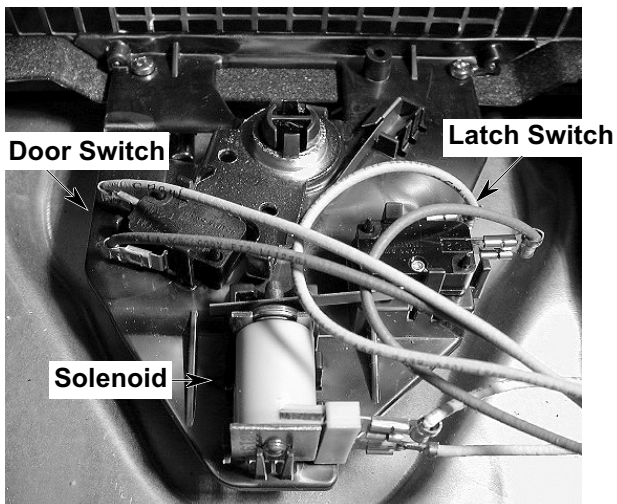


- b) Remove the four screws from the front and top of the assembly (2 at each location).

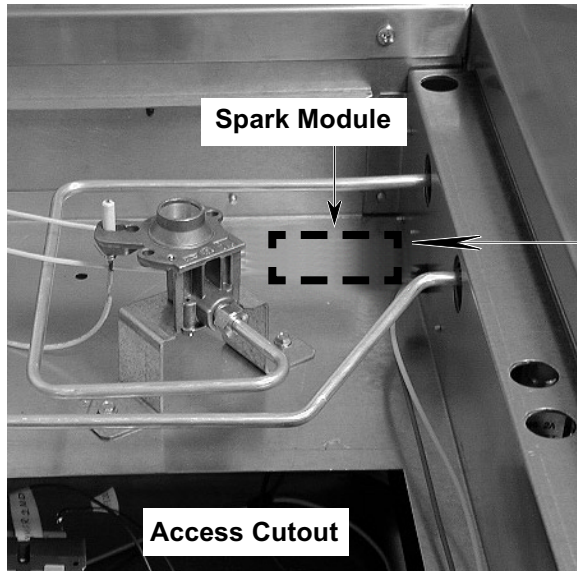


9. To remove the oven door latch assembly:

- a) Disconnect the wires from the two switches and from the solenoid terminals.

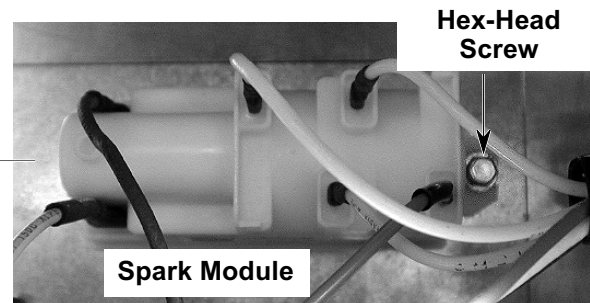


The spark module is mounted to the right side of the range just below the front corner of the chassis, as shown in the dashed line area below. Access the module through the access cutout.



10. **To remove the spark module:**

- a) Disconnect the wires from the terminals.
- b) Use a 1/4" socket with an 8" extension and remove the hex-head screw (hidden in the photo) and remove the module.



REMOVING THE FRONT PANEL, DISPLAY, SELECTOR & SET CONTROLS, GAS VALVE, & IGNITION SWITCHES

⚠ WARNING

ELECTRICAL SHOCK HAZARD

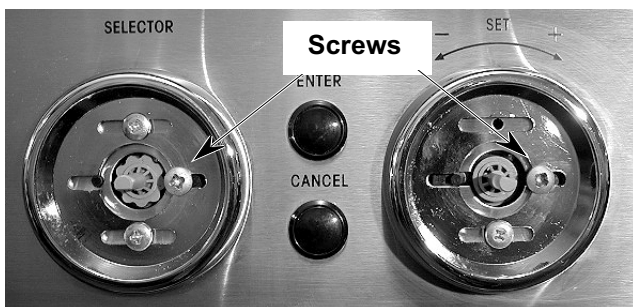
Disconnect power before servicing the range.
Replace all panels before operating range.
Failure to do so can result in death or electrical shock.

FIRE HAZARD

Shut off gas supply line valve before servicing the range.
Check all gas line connections and replace all panels before operating the range.
Failure to do so could result in explosion, fire, or other injury.

CAUTION: When you work on the dual fuel range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

1. Turn off the gas and electrical power going to the range.
2. Remove all of the knobs from the front panel by pulling them off the control shafts.
3. **To remove the front panel:**
 - a) Remove the two center screws from the selector and set bezel rings.



- b) Open the oven door and remove the two bottom end front panel screws.



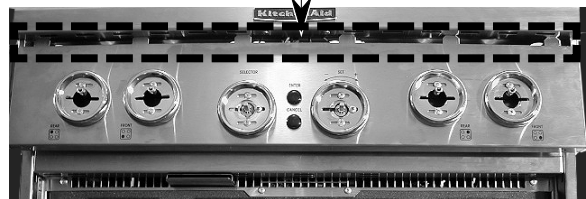
Left Front Panel Screw



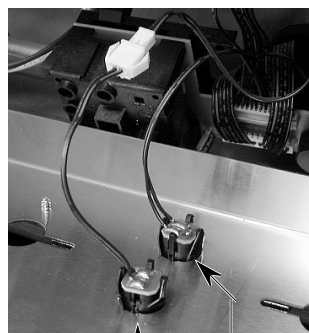
Right Front Panel Screw

- c) Slide the panel down so that the tabs are out of their slots, and rotate it so that you can access the pushbutton switches on the back side.

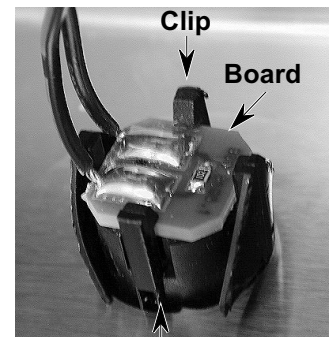
Front Panel Tabs



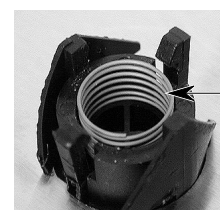
- d) Carefully unclip the small boards and springs from the pushbutton switch holders. Be careful not to overbend the small clips or you will break them.



Pushbutton Switches



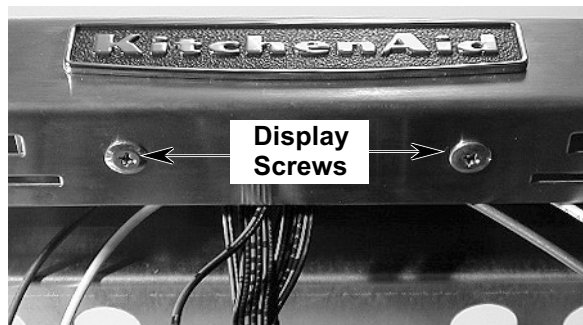
Pushbutton Switch Holder



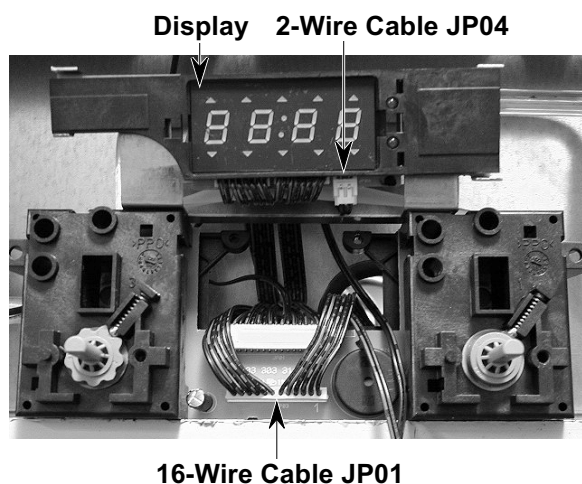
Pushbutton Spring

4. **To remove the display:**

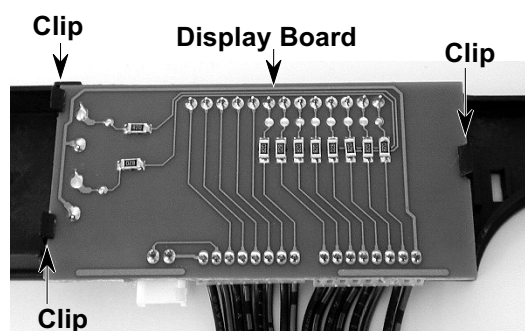
- a) Remove the front panel (see step 3 on the previous page).
- b) Remove the two display screws from under the chassis.



- c) Carefully remove the display and mounting bracket from under the chassis.
- d) Disconnect the 2-wire cable at display board connector JP04.



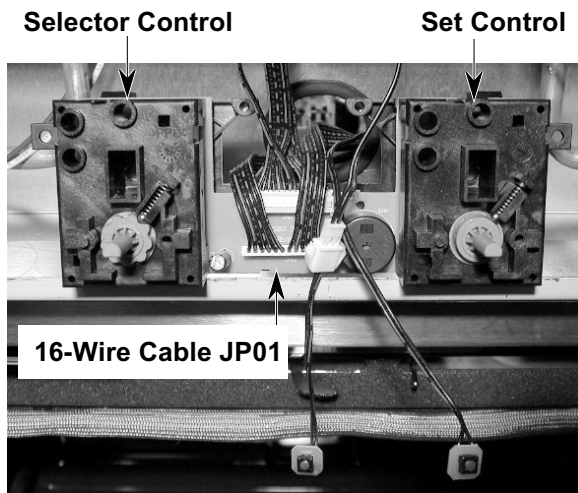
- e) Disconnect the 16-wire cable at the selector and set control assembly board connector JP01.
- f) Unclip the display board from the plastic holder. Be careful not to overbend the clips or you will break them.



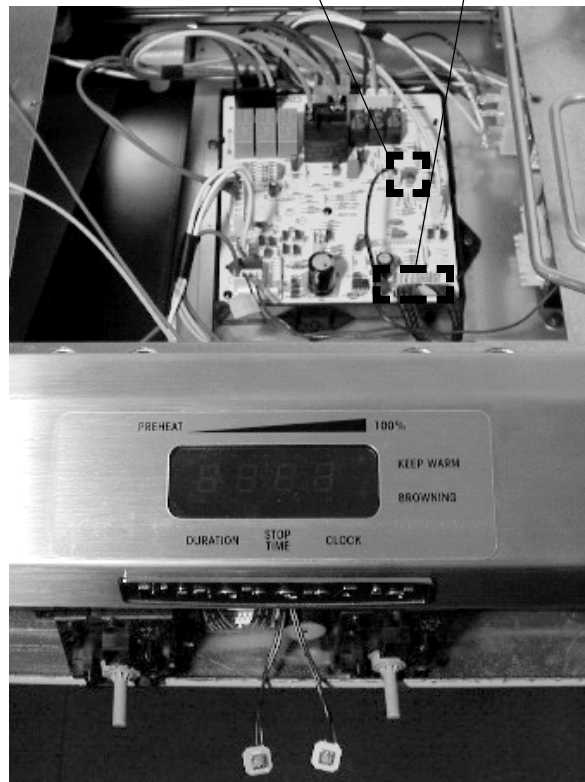
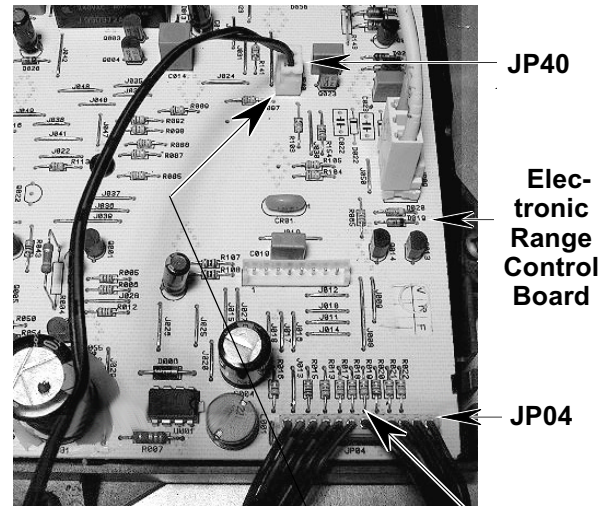
Continued on the next page.

5. **To remove the selector and set control assembly:**

- a) Remove the cooktop (see page 2-2).
- b) Remove the top access panel (see page 2-4).
- c) Remove the center screws from the selector and set bezel rings (see step 3a on page 2-8).
- d) Remove the front panel and pushbutton boards (see pages 2-8 & 2-9).
- e) Disconnect the 16-wire cable at the selector and set control assembly board connector JP01.

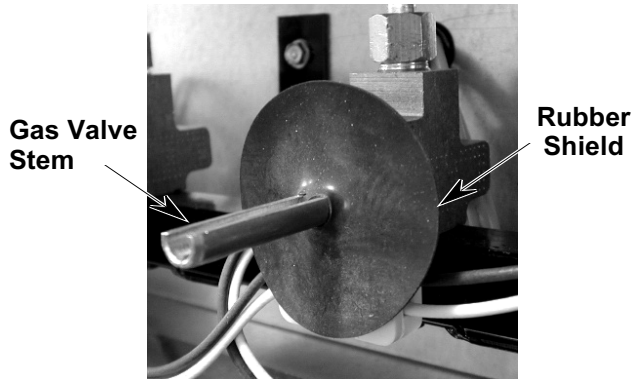


- f) Disconnect the 2-wire cable from the electronic range control board connector JP40.
- g) Disconnect the 16-wire cable from the electronic range control board connector JP04.

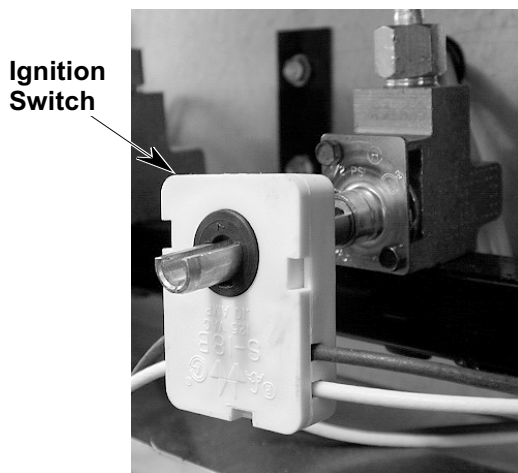


6. To remove a gas valve:

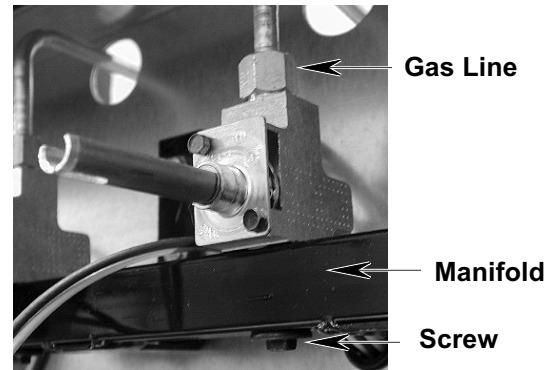
- a) If not already done, remove the front panel (see step 3 on page 2-8).
- b) Remove the rubber shield from the gas valve stem.



- c) Pull the ignition switch off the gas valve you are removing.



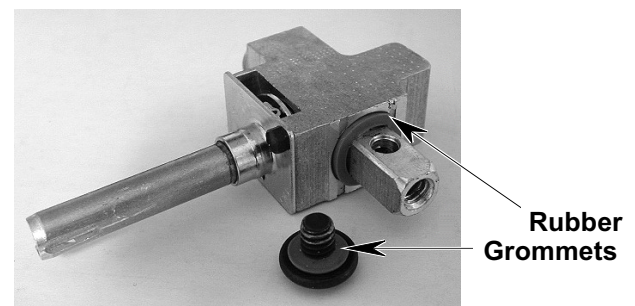
- d) Remove the gas line from the gas valve.



- e) Remove the mounting screw from the gas manifold and remove the valve and its rubber grommet from the manifold.

REASSEMBLY NOTES:

- 1. When installing a new gas valve, make sure that the rubber grommet is in place on the valve and the mounting screw washer.
- 2. Do not overtighten the gas valve mounting screw.

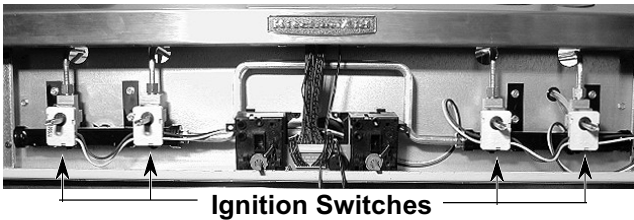


Continued on the next page.

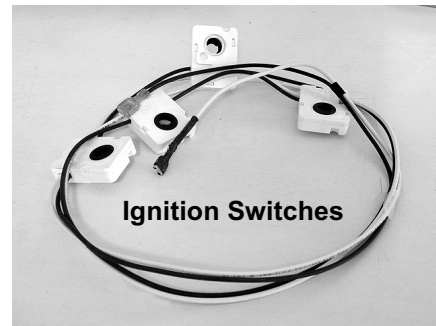
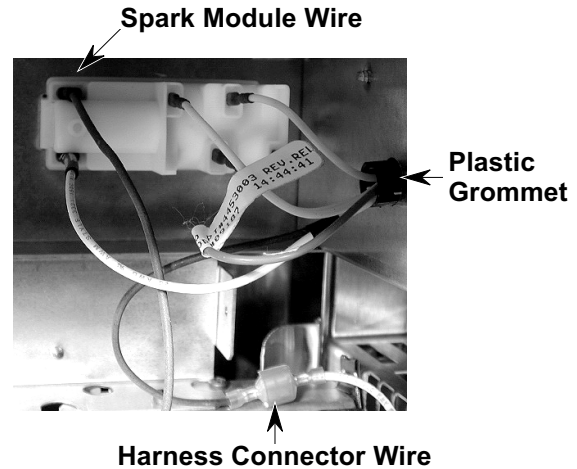
7. To remove the ignition switches:

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

- If not already done, remove the cooktop (see page 2-2), the top access panel (see page 2-4), and the front panel (see step 3 on page 2-8).
- Remove the rubber shields from the gas valve stems.
- Pull the four ignition switches off the gas valves.



- Disconnect the ignition switch wires from the harness connector and the spark module terminal.
- Remove the plastic grommet and pull the ignition switch wire connectors through the chassis hole.



REMOVING A HALOGEN LAMP ASSEMBLY

WARNING

ELECTRICAL SHOCK HAZARD

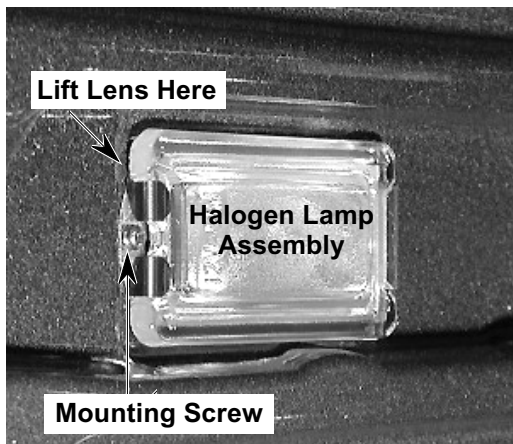
Disconnect power before servicing the range.
Replace all panels before operating range.
Failure to do so can result in death or electrical shock.

FIRE HAZARD

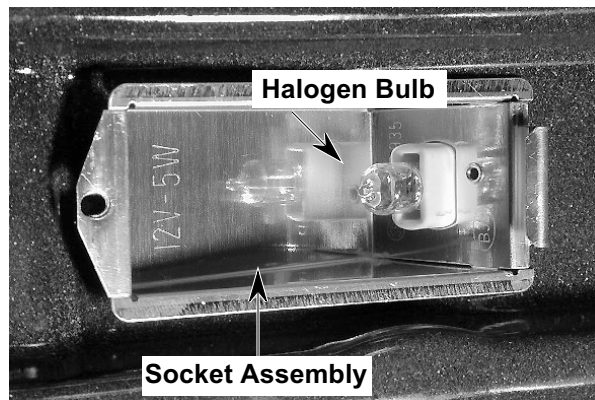
Shut off gas supply line valve before servicing the range.
Check all gas line connections and replace all panels before operating the range.
Failure to do so could result in explosion, fire, or other injury.

CAUTION: When you work on the dual fuel range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

1. Turn off the gas and electrical power going to the range.
2. Remove the racks from inside the oven.
3. Remove the lens from the halogen lamp socket by lifting the end by the mounting screw and unsnapping it.
4. Remove the screw from the halogen lamp assembly.



5. Pull the halogen bulb out of the socket.



6. Pull the halogen socket assembly out of the oven liner and cut the wires near the socket terminals.



7. Cut the new halogen lamp socket wires to the proper length.
8. Remove 3/8" of insulation from the cut wires on the wire harness and the halogen lamp socket. Splice the halogen lamp socket wires to the harness wires, and twist two wire nuts over the bare wire ends.

REMOVING THE BROIL ELEMENT

WARNING

ELECTRICAL SHOCK HAZARD

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

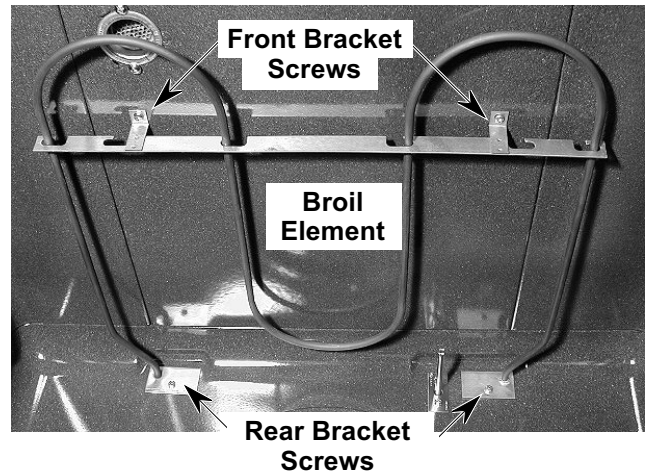
FIRE HAZARD

Shut off gas supply line valve before servicing the range.
Check all gas line connections and replace all panels before operating the range.
Failure to do so could result in explosion, fire, or other injury.

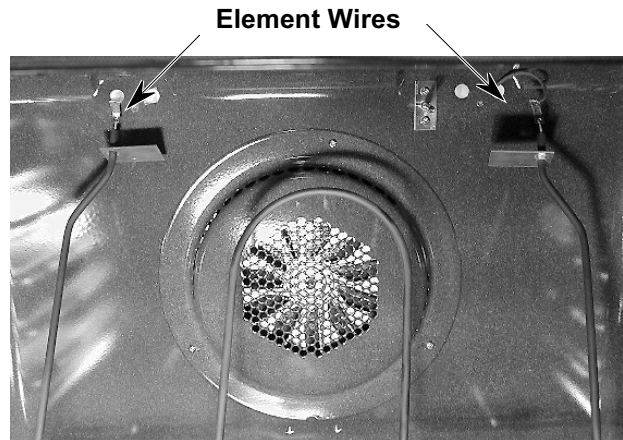
CAUTION: When you work on the dual fuel range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

1. Turn off the gas and electrical power going to the range.
2. Remove the racks from inside the oven.

3. Remove the two front bracket screws and two rear bracket screws from the broil element.



4. Carefully pull the element forward so that the terminal connectors are through the oven liner holes, and disconnect the wires from the terminals.



REMOVING THE OVEN TEMPERATURE SENSOR

WARNING

ELECTRICAL SHOCK HAZARD

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

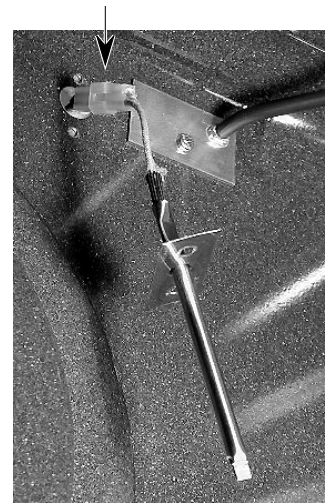
FIRE HAZARD

Shut off gas supply line valve before servicing the range.
Check all gas line connections and replace all panels before operating the range.
Failure to do so could result in explosion, fire, or other injury.

CAUTION: When you work on the dual fuel range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

1. Turn off the gas and electrical power going to the range.
2. Remove the racks from inside the oven.
3. Remove the two mounting screws from the oven temperature sensor and pull the connectors out of the mounting hole in the oven liner.
4. Disconnect the sensor connector from the main wire harness connector.

Sensor Connectors



REMOVING THE GAS REGULATOR

WARNING

ELECTRICAL SHOCK HAZARD

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

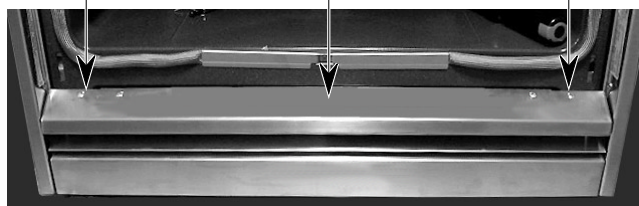
FIRE HAZARD

Shut off gas supply line valve before servicing the range.
Check all gas line connections and replace all panels before operating the range.
Failure to do so could result in explosion, fire, or other injury.

CAUTION: When you work on the dual fuel range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

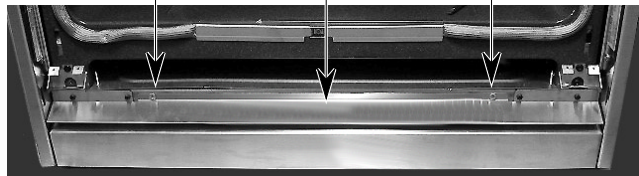
1. Turn off the gas and electrical power going to the range.
2. Remove the oven door from the range (see page 2-25).
3. Remove the two outer screws from the top trim strip and remove the strip.

Outer Screw Top Trim Strip Outer Screw

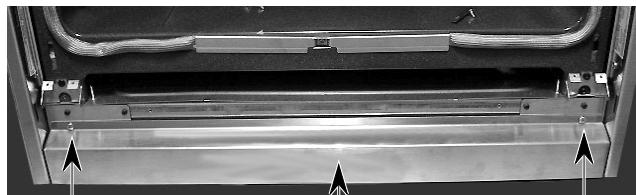


4. Remove the two screws from the center trim strip and remove the strip.

Screw Center Trim Strip Screw

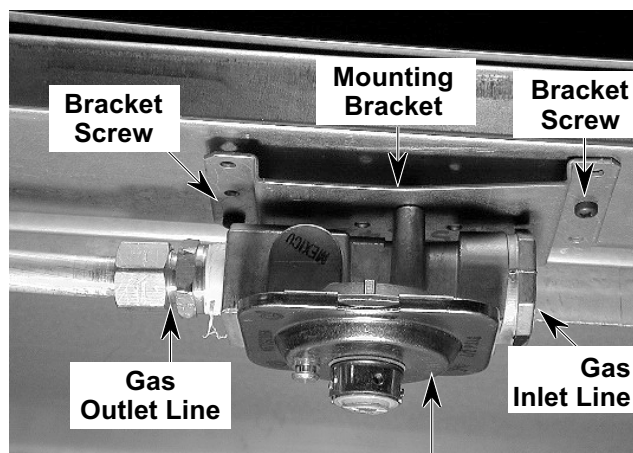


5. Remove the two screws from the bottom trim strip. Lower the trim strip so it is free of the slots in the sides of the oven, and remove the strip.



Screw Bottom Trim Strip Screw

6. Remove the inlet and outlet gas lines from the gas regulator.
7. Remove the two screws from the gas regulator mounting bracket and remove the gas regulator assembly from the range.



Gas Regulator

8. Remove the two screws holding the gas regulator to the mounting bracket and remove the regulator.

REMOVING THE REAR PANEL

WARNING

ELECTRICAL SHOCK HAZARD

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

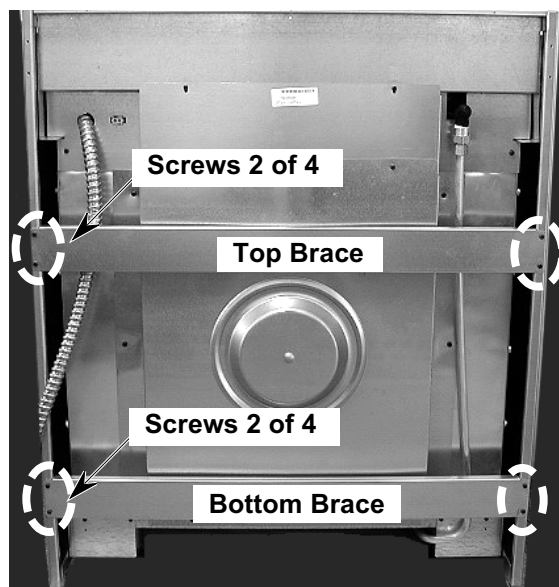
FIRE HAZARD

Shut off gas supply line valve before servicing the range.
Check all gas line connections and replace all panels before operating the range.
Failure to do so could result in explosion, fire, or other injury.

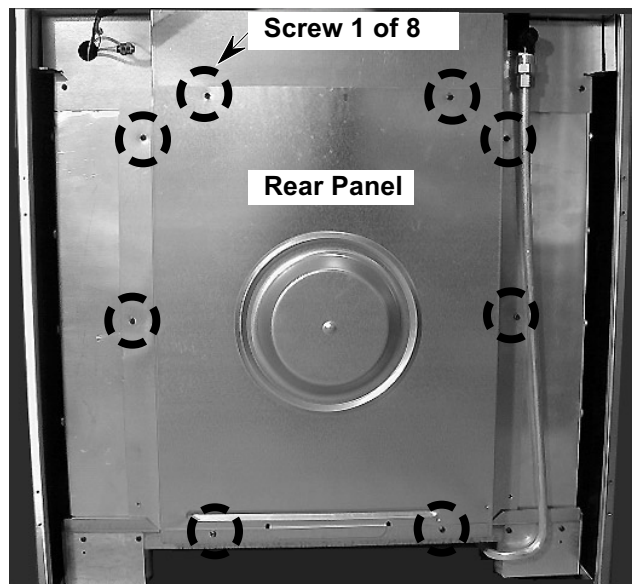
CAUTION: When you work on the dual fuel range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

1. Turn off the gas and electrical power going to the range.
2. Pull the range away from the wall so that you can access the rear panel.

3. Remove the two screws from the top and bottom braces and remove the braces from the range.



4. Remove the eight screws from the rear panel and remove the panel from the range.



REMOVING THE CONVECTION BAKE ELEMENT & FAN MOTOR ASSEMBLY

⚠ WARNING

ELECTRICAL SHOCK HAZARD

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

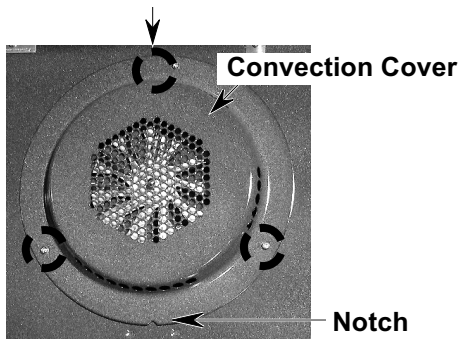
FIRE HAZARD

Shut off gas supply line valve before servicing the range.
Check all gas line connections and replace all panels before operating the range.
Failure to do so could result in explosion, fire, or other injury.

CAUTION: When you work on the dual fuel range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

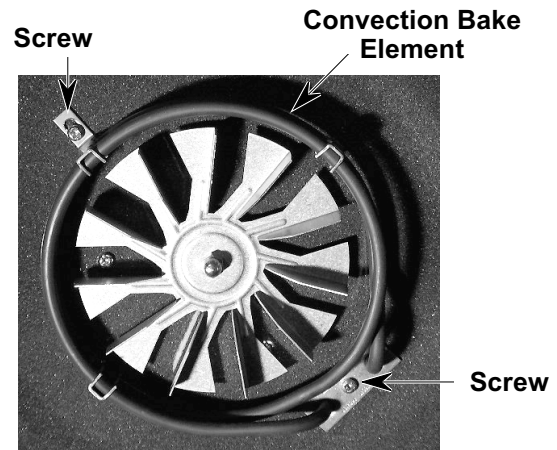
1. Turn off the gas and electrical power going to the range.
2. Remove the oven door from the range (see page 2-25).
3. Remove the racks from inside the oven.
4. Remove the three screws from the convection cover and remove the cover from the rear of the oven liner. Note the location of the notch in the cover. Be sure to position the cover with the notch as shown when you reinstall it.

Screw 1 of 3

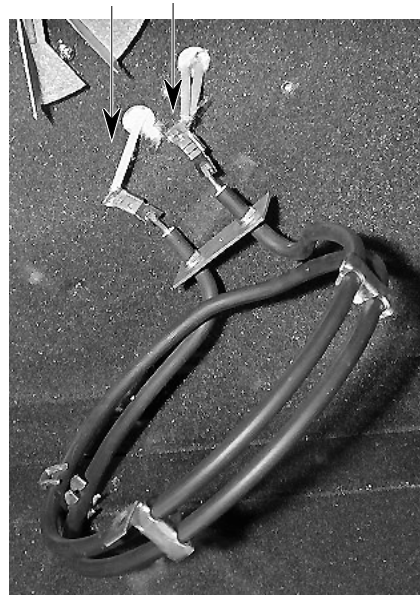


5. To remove the convection bake element:

- a) Remove the two screws from the convection bake element.
- b) Pull it forward so you can access the terminals.
- c) Disconnect the wires from the element terminals.

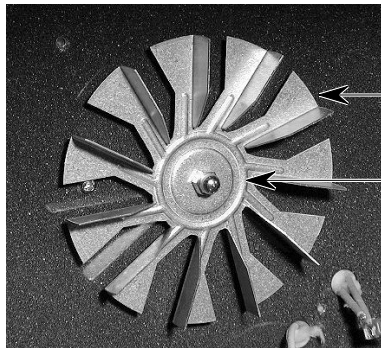


Element Terminals



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

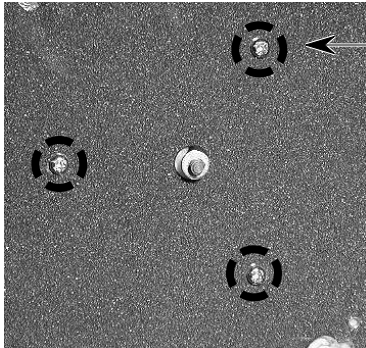
- a) If not already done, remove the convection cover and the convection bake element from the rear of the oven liner (see page 2-18).
- b) Use a 10 mm (7/16") socket and remove the hex nut from the convection fan. **NOTE:** The nut has a left-rotation thread for removal.



Convection Fan

10 mm
(7/16")
Hex Nut

- c) Remove the three front convection fan motor screws from the rear of the oven liner.

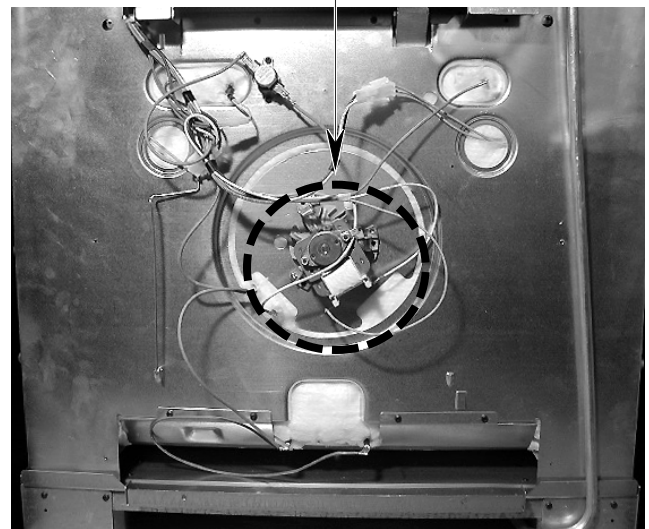


Convection Fan Motor Front Screw (1 of 3)

- d) Pull the range away from the wall so that you can access the rear panel.
- e) Remove the braces and rear panel from the range (see page 2-17).

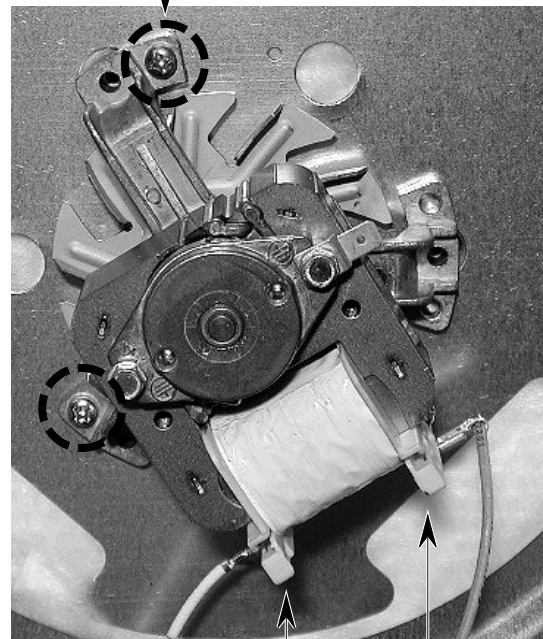
- f) Remove the two convection fan motor mounting screws and remove the motor from the rear of the range.

Convection Fan Motor



BACK OF RANGE

Convection Fan Motor Rear Screw (1 of 2)



Convection Fan Motor Terminals

REMOVING THE BLOWER MOTOR ASSEMBLY

WARNING

ELECTRICAL SHOCK HAZARD

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

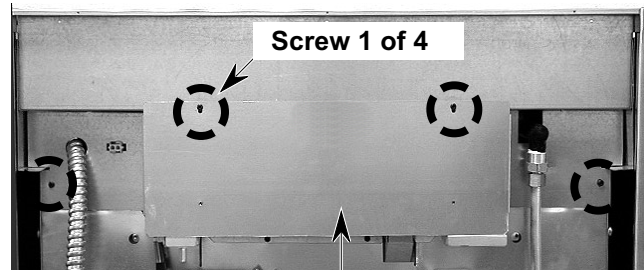
FIRE HAZARD

Shut off gas supply line valve before servicing the range.
Check all gas line connections and replace all panels before operating the range.
Failure to do so could result in explosion, fire, or other injury.

CAUTION: When you work on the dual fuel range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

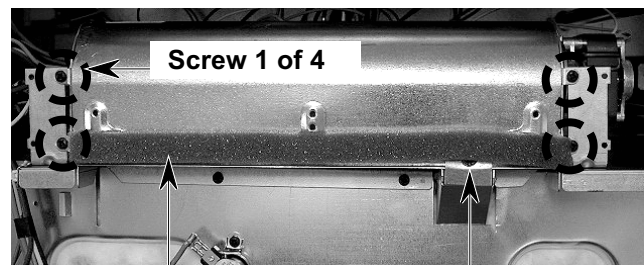
1. Turn off the gas and electrical power going to the range.
2. Pull the range away from the wall so that you can access the rear panel.
3. Remove the braces and rear panel from the range (see page 2-17).

4. Remove the four screws from the blower motor assembly cover and remove the cover from the range.



Blower Motor
Assembly Cover

5. Remove the four mounting screws and the air vent screw from the blower motor assembly and remove the assembly from the range.



Blower Motor
Assembly

Air Vent Screw

REMOVING THE SUPPRESSOR BOARD

WARNING

ELECTRICAL SHOCK HAZARD

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

FIRE HAZARD

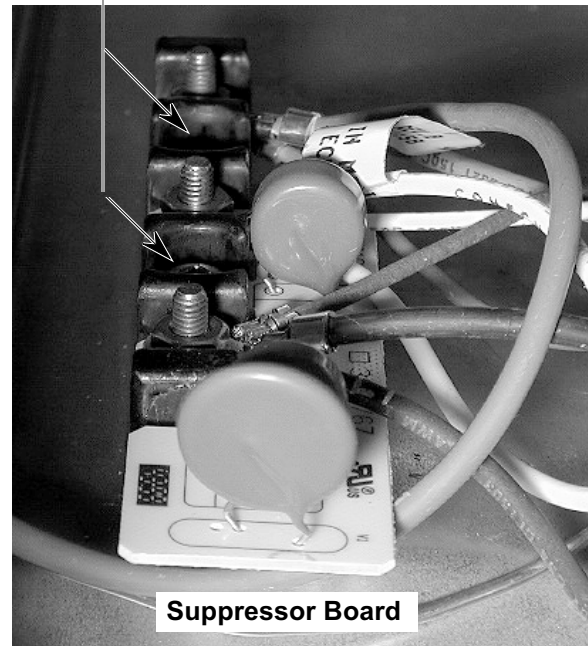
Shut off gas supply line valve before servicing the range.
Check all gas line connections and replace all panels before operating the range.
Failure to do so could result in explosion, fire, or other injury.

CAUTION: When you work on the dual fuel range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

1. Turn off the gas and electrical power going to the range.
2. Pull the range away from the wall so that you can access the rear panel.
3. Remove the braces and rear panel from the range (see page 2-17).

4. Remove the blower motor assembly cover (see page 2-20).
5. Remove the two screws from the suppressor board.
6. Disconnect the wires from the terminals and remove the board from the range.

Screws



Suppressor Board

REMOVING THE OVEN SHUTDOWN THERMAL FUSE

WARNING

ELECTRICAL SHOCK HAZARD

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

FIRE HAZARD

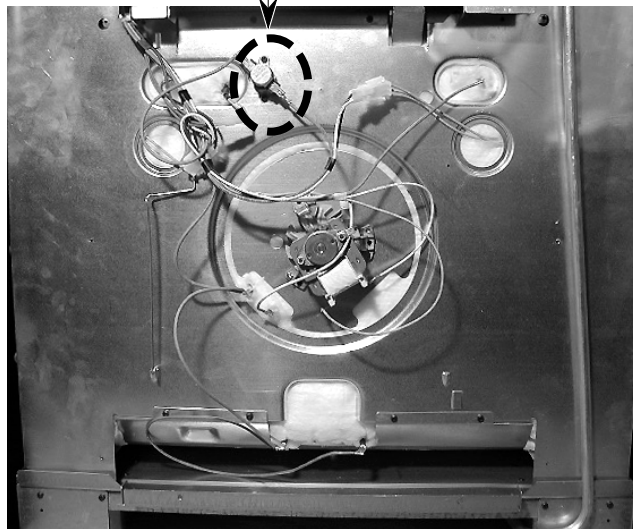
Shut off gas supply line valve before servicing the range.
Check all gas line connections and replace all panels before operating the range.
Failure to do so could result in explosion, fire, or other injury.

CAUTION: When you work on the dual fuel range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

1. Turn off the gas and electrical power going to the range.
2. Pull the range away from the wall so that you can access the rear panel.
3. Remove the braces and rear panel from the range (see page 2-17).

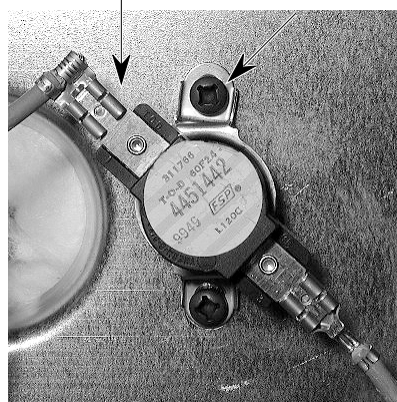
4. Remove the two screws from the oven shutdown thermal fuse and remove the fuse from the rear of the range.

Oven Shutdown
Thermal Fuse



Oven Shutdown
Thermal Fuse
Terminal (1 of 2)

Mounting
Screw (1 of 2)



5. Disconnect the wires from the thermal fuse terminals.

REMOVING THE HIDDEN BAKE ELEMENT

WARNING

ELECTRICAL SHOCK HAZARD

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

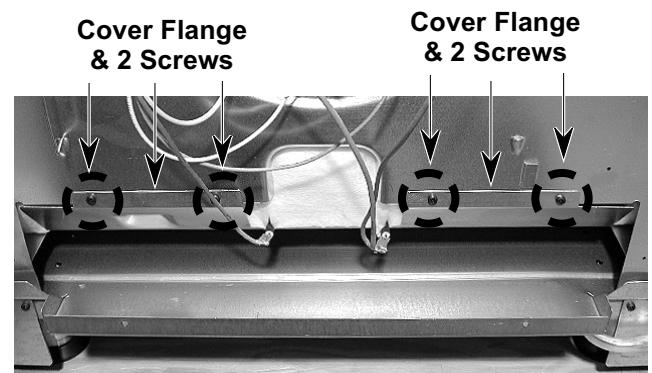
FIRE HAZARD

Shut off gas supply line valve before servicing the range.
Check all gas line connections and replace all panels before operating the range.
Failure to do so could result in explosion, fire, or other injury.

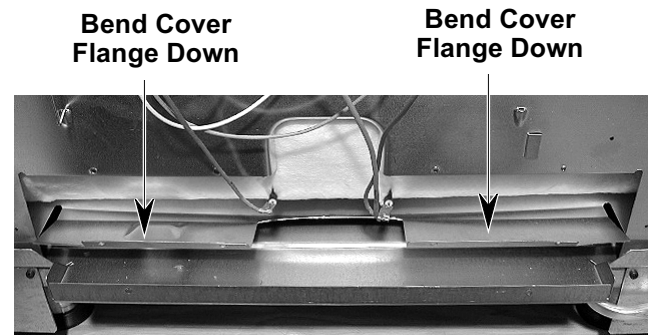
CAUTION: When you work on the dual fuel range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

1. Turn off the gas and electrical power going to the range.
2. Pull the range away from the wall so that you can access the rear panel.
3. Remove the braces and rear panel from the range (see page 2-17).

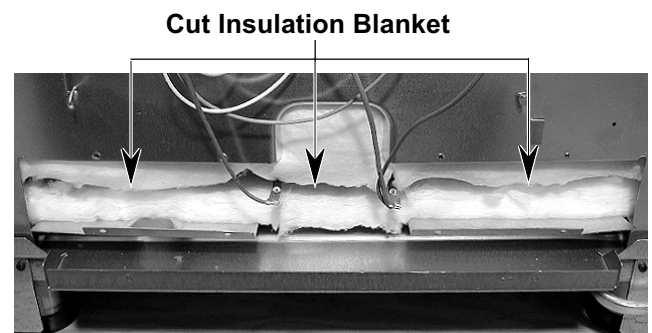
4. Remove the four screws from the hidden bake element cover flanges.



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



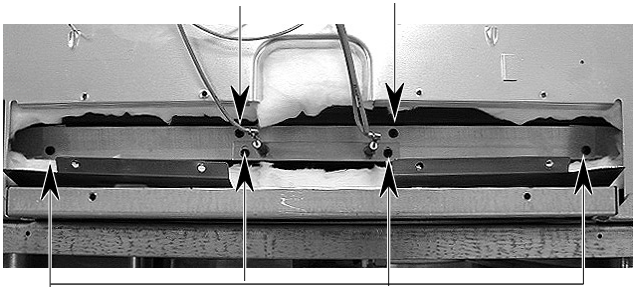
6. Use a pen knife or a single-edged razor blade and cut the insulation blanket, as shown. Be sure to separate the insulation blanket as cleanly as possible.



Continued on the next page.

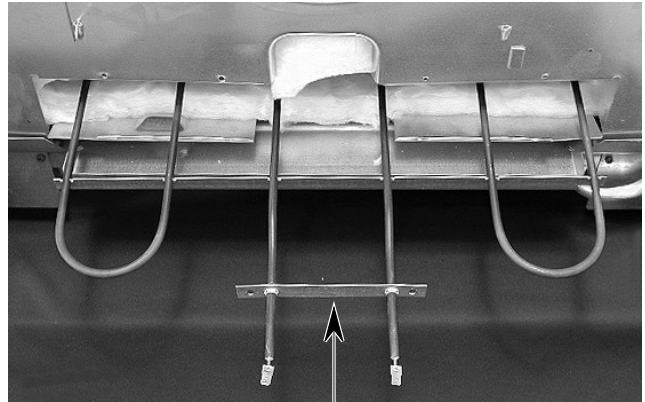
7. Carefully move the upper and lower sections of the insulation blanket out of the way so that you can access the hidden bake element and its mounting bracket.
8. Remove the four mounting bracket screws and the two hidden bake element bracket screws.

Remove two Screws



Remove four Screws

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



Pull Out Hidden Bake Element

REMOVING THE OVEN DOOR

WARNING

ELECTRICAL SHOCK HAZARD

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

FIRE HAZARD

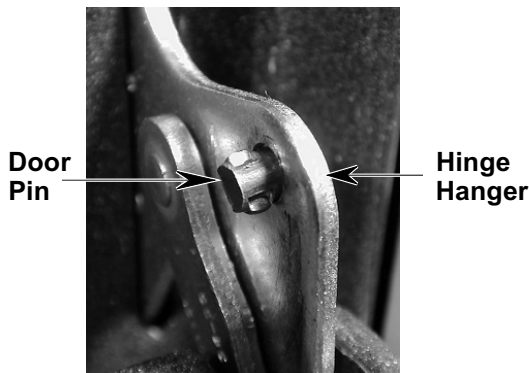
Shut off gas supply line valve before servicing the range.
Check all gas line connections and replace all panels before operating the range.
Failure to do so could result in explosion, fire, or other injury.

CAUTION: When you work on the dual fuel range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

CAUTION: Do not lift the oven door by its handle.

To remove the oven door:

1. Open the oven door to its fully open position.
2. Install a pin in the hole of each oven door hinge hanger.



3. Close the oven door as far as the two pins will allow.
4. Grasp the sides of the door and lift the door until it stops, then pull the hinge hangers out of the slots.



To reinstall the oven door:

1. Grasp the sides of the door and tilt it back at a slight angle, then insert the hinge hangers into the hinge slots as far as they will go.
2. Rotate the top of the door towards the range so the hinge hangers fit onto the support pins.
3. Close the oven door as far as the pins will allow, and make sure that the hinge hangers are fully seated on the support pins. If they are not seated properly, the door will not close tightly and may be off-center. To seat the hinge hangers, open the door slightly, and push in on the bottom until the hangers are fully seated.
4. Open the oven door to its fully open position and remove the two hinge hanger pins.
5. Close the oven door completely and check it for proper operation and alignment.

REMOVING THE OVEN DOOR GLASS, HINGES, & HANDLE

WARNING

ELECTRICAL SHOCK HAZARD

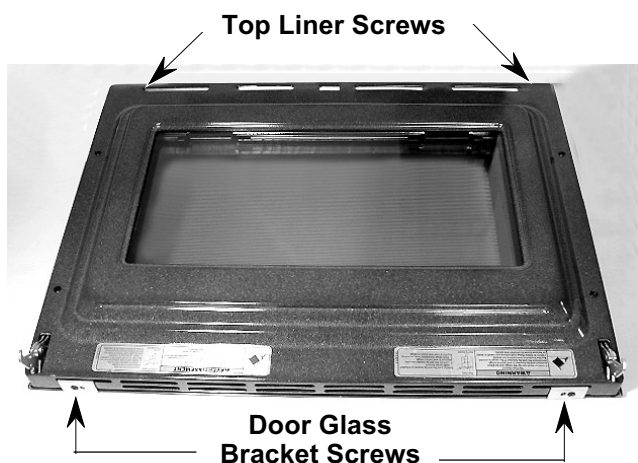
Disconnect power before servicing the range.
Replace all panels before operating range.
Failure to do so can result in death or electrical shock.

FIRE HAZARD

Shut off gas supply line valve before servicing the range.
Check all gas line connections and replace all panels before operating the range.
Failure to do so could result in explosion, fire, or other injury.

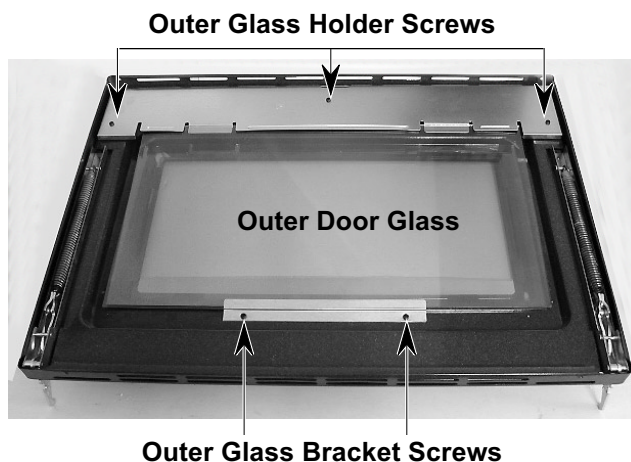
CAUTION: When you work on the dual fuel range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

1. Remove the oven door from the range (see page 2-25).
2. Place the oven door on a padded work surface with the front decorative glass facing down.
3. Remove the two top door liner screws and the two door glass bracket screws, and lift the liner assembly off the decorative door glass and handle.

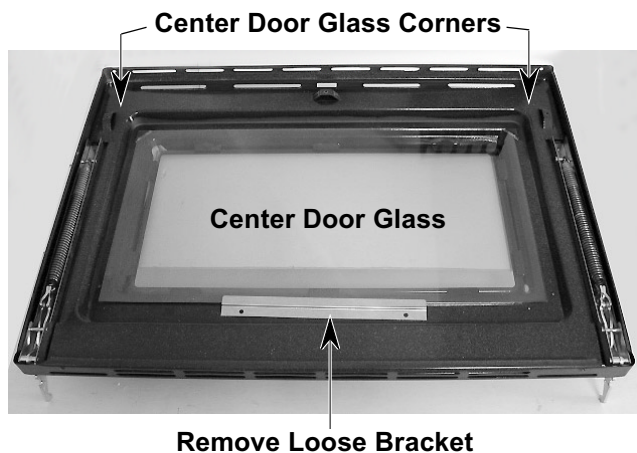


4. To remove the outer door glass:

- a) Remove the three outer glass holder screws and two outer glass bracket screws from the door liner.
- b) Lift the outer glass with the glass holder off the door liner.
- c) Remove the bracket.



5. To remove the center door glass, remove the bottom bracket, (it is loose), and slide the two top corners of the glass out of the door liner slots.



6. To remove the hinges and the inner door glass:

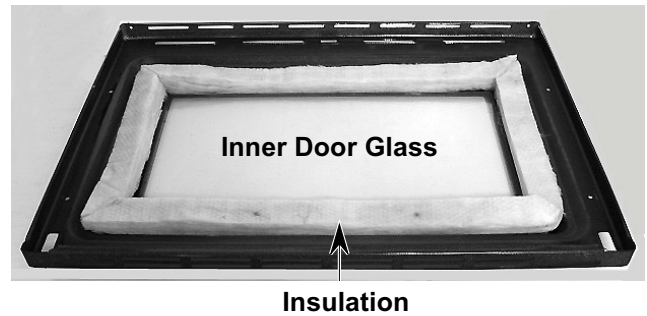
NOTE: You will have to remove both hinges to remove the inner door glass from the oven door liner.

- a) Lift either side of the door liner, remove the two door hinge screws, and remove the hinge.

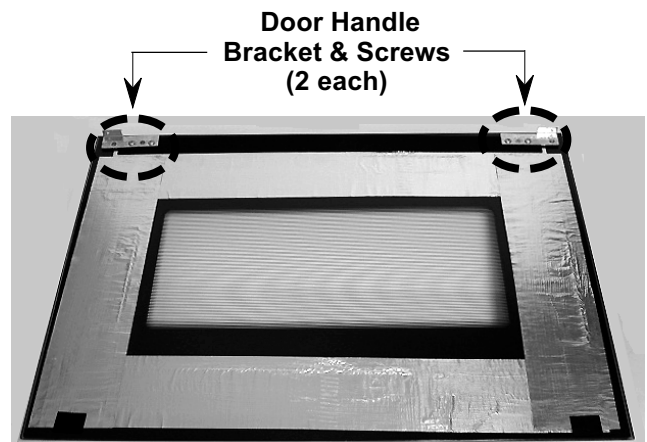


- b) Lift the other side of the door liner, remove the two screws for the other hinge, and remove the hinge.
c) Lift the inner door glass liner cover off the liner.

- d) Remove the insulation and the inner door glass.



7. To remove the door handle, remove the two door handle screws from the bracket.



REMOVING THE OVEN DOOR GASKET

WARNING

ELECTRICAL SHOCK HAZARD

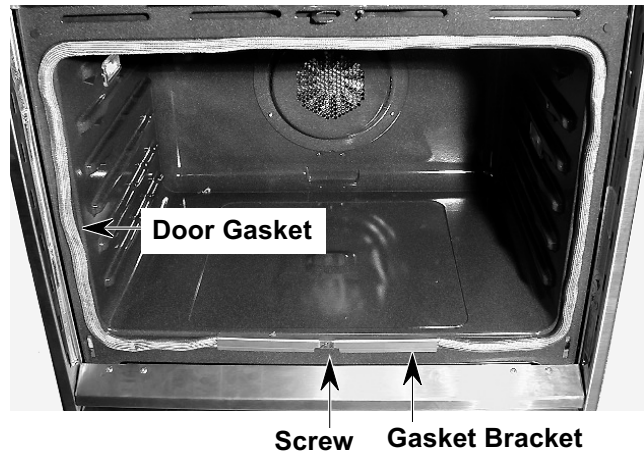
Disconnect power before servicing the range.
Replace all panels before operating range.
Failure to do so can result in death or electrical shock.

FIRE HAZARD

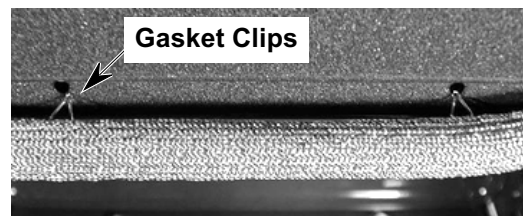
Shut off gas supply line valve before servicing the range.
Check all gas line connections and replace all panels before operating the range.
Failure to do so could result in explosion, fire, or other injury.

CAUTION: When you work on the dual fuel range, be careful when handling the sheet metal parts. Sharp edges may be present, and you can cut yourself if you are not careful.

1. Open the oven door to its fully open position.
2. Remove the screw from the door gasket bracket and remove the bracket from the range.



3. Pull the ends of the gasket out of the liner holes.



REASSEMBLY NOTE: When you install the new gasket, make sure that all of the clips are seated in their liner holes, and that the ends of the gasket are pushed fully into their holes. Use the pointed end of a pencil to push the gasket ends into the holes.

COMPONENT TESTING

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

- The most common cause for control failure is corrosion on connectors. Therefore, disconnect and reconnect the wire connectors to their terminals throughout any of the test procedures.
- All tests and checks should be made with a VOM (volt-ohmmeter), or a DVM (digital voltmeter), having a sensitivity of 20,000 ohms-per-volt DC, or greater.
- Check all of the connections before you replace the components. Look for broken, or loose wires, failed terminals, or wires that are not pushed firmly onto their connectors.
- Voltage checks must be made with all connectors attached to the boards.
- Resistance checks must be made with power removed from the appliance, and with the wiring harness or connectors disconnected.

ELECTRONIC RANGE CONTROL

! WARNING

Electrical Shock Hazard

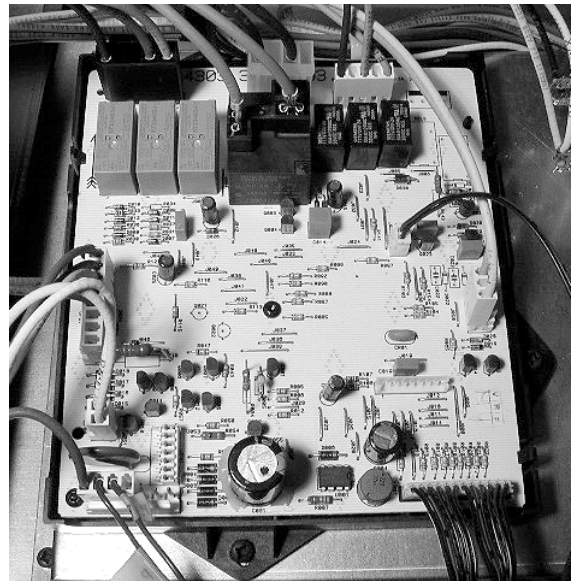
Voltage is present during these tests.

TEST PROCEDURE

Refer to page 2-4 for the procedure for servicing the electronic range control.

Voltage Test

1. Connect power to the range.
2. Set the voltmeter to read 120 VAC.
3. Touch the test leads to the oven control P2 connector at terminals 7 (white) and 5 (black). The AC voltmeter should indicate 120 VAC.



CONTROL POWER & LAMP TRANSFORMERS

WARNING

Electrical Shock Hazard

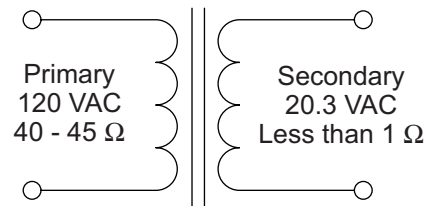
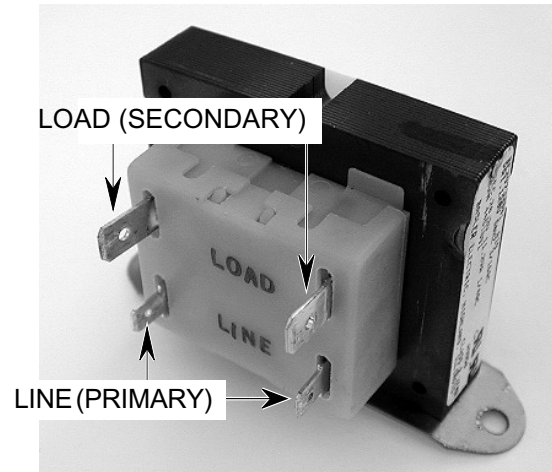
Disconnect the electrical supply from the unit before servicing.

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

TEST PROCEDURE

Refer to page 2-4 for the procedure for servicing the control power and lamp transformers.

1. Disconnect power from the range.
2. Set the ohmmeter to the R X 1 scale.
3. Disconnect the wires from the transformer's terminals.
4. Touch the test leads to the transformer LINE (primary) terminals. The ohmmeter should indicate 40 to 45 Ω .
5. Touch the test leads to the transformer LOAD (secondary) terminals. The ohmmeter should indicate less than 1 Ω .



BLOWER MOTOR

WARNING

Electrical Shock Hazard

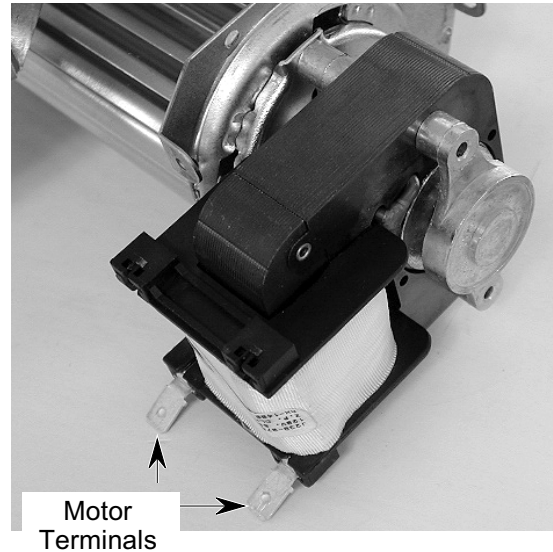
Disconnect the electrical supply from the unit before servicing.

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

TEST PROCEDURE

Refer to page 2-20 for the procedure for servicing the blower motor.

1. Disconnect power from the range.
2. Set the ohmmeter to the R X 1 scale.
3. Disconnect the wires from the blower motor's terminals.
4. Touch the test leads to the motor terminals. The ohmmeter should indicate 14 to 18 Ω .



Resistance Test (At The Electronic Range Control)

NOTE: To test the blower motor at the electronic range control, perform the following steps (see page 2-4 for removing the top access panel).

1. Disconnect power from the range.
2. Set the ohmmeter to the R x 100 scale.
3. Disconnect the P1-1 wire (gray) connector and the neutral (white) wire from the electronic range control.
4. Touch the ohmmeter test leads to the gray and white wires. The ohmmeter should indicate 14 to 18 Ω .

OVEN DOOR LATCH ASSEMBLY

WARNING

Electrical Shock Hazard

Disconnect the electrical supply from the unit before servicing.

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

TEST PROCEDURE

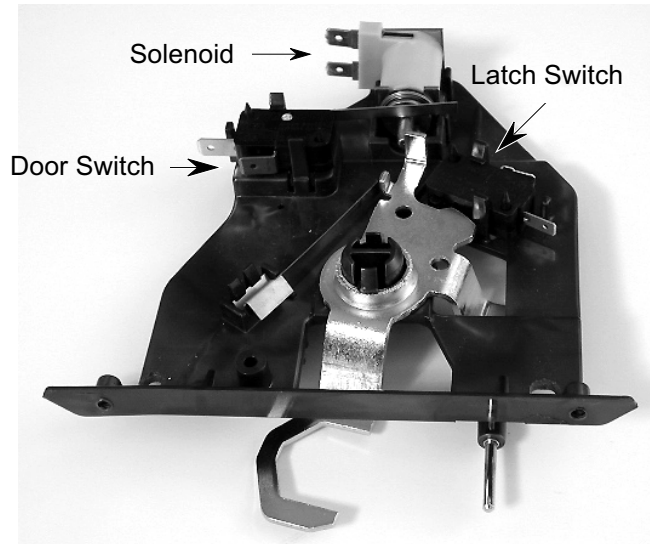
Refer to page 2-6 for the procedure for servicing the oven door latch assembly.

1. Disconnect power from the range.
2. Set the ohmmeter to the R x 10 scale.
3. Disconnect the wires from the solenoid terminals.
4. Touch the ohmmeter test leads to the solenoid terminals. The ohmmeter should indicate 165 to 180 Ω .
5. For the switch you are testing, touch the ohmmeter test leads to the following terminals:
 - a) N.O. and COM. The ohmmeter should indicate an open circuit (infinity ∞).
 - b) N.C. and COM. The ohmmeter should indicate a closed circuit (0 Ω).

Resistance Tests (At The Electronic Range Control)

NOTE: To test the door latch solenoid and switch assembly at the electronic range control, perform the following steps (see page 2-4 for removing the top access panel).

1. Disconnect power from the range.
2. If not already done, close the oven door.
3. Set the ohmmeter to the R x 1 scale.



4. **To test the solenoid:**
 - a) Disconnect the P6-1 (white) and the P6-2 (yellow) wire connectors from the electronic range control.
 - b) Touch the test leads to the P6-1 (white) and the P6-2 (yellow) wire connectors. The ohmmeter should indicate 50 Ω .
5. **To test the door switch:**
 - a) Disconnect the P7-1 (green) and the P7-3 (tan) wire connectors from the electronic range control.
 - b) Touch the test leads to the ends of the green and tan leads. The ohmmeter should indicate a closed circuit (0 Ω) with the door open, and an open circuit (infinity ∞) with the door closed.
6. **To test the latch switch:**
 - a) Disconnect the P7-2 (blue) and the P7-3 (tan) wire connectors from the electronic range control.
 - b) Touch the test leads to the ends of the green and tan leads. The ohmmeter should indicate a closed circuit (0 Ω) with the door locked, and an open circuit (infinity ∞) with the door unlocked.

OVEN TEMPERATURE SENSOR

WARNING

Electrical Shock Hazard

Disconnect the electrical supply from the unit before servicing.

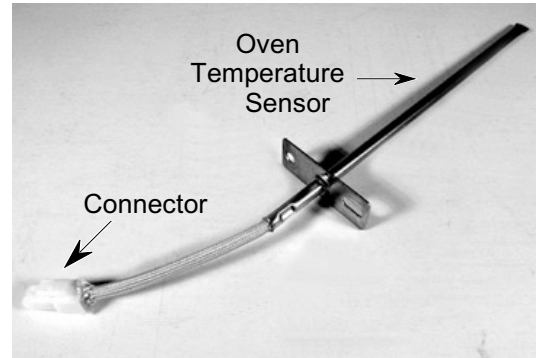
Failure to do so could result in death or electrical shock.

TEST PROCEDURE

Refer to page 2-15 for the procedure for servicing the oven temperature sensor.

1. Disconnect power from the range.
2. Set the ohmmeter to the R x 10 scale.
3. Disconnect the oven temperature sensor connector from the wiring harness.
4. Touch the ohmmeter test leads to the oven temperature sensor connector pins. Depending on the oven temperature, you should obtain the corresponding resistance reading, as shown in the following chart:

Temperature (°F)	Resistance (ohms)
32	1000
75	1100
250	1450
350	1650
450	1860
550	2050
650	2230
900	2700



Resistance Test (At The Electronic Range Control)

NOTE: To test the oven temperature sensor at the electronic range control, perform the following steps (see page 2-4 for removing the top access panel).

1. Disconnect power from the range.
2. Set the ohmmeter to the R x 100 scale.
3. Disconnect the P7-4 (violet) and the P7-5 (violet) wire connectors from the electronic range control.
4. Touch the test leads to the P7-4 (violet) and the P7-5 (violet) wire connectors. The ohmmeter should indicate approximately 1080 Ω at 70°F (21°C).

OVEN SHUTDOWN THERMAL FUSE

WARNING

Electrical Shock Hazard

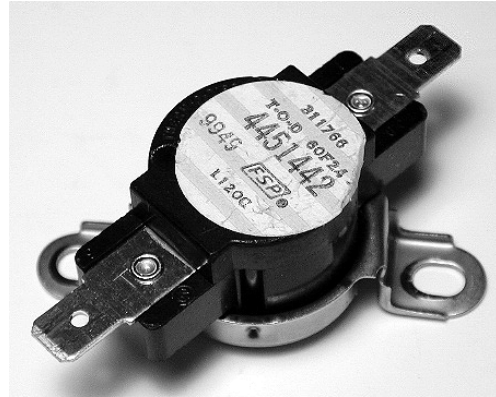
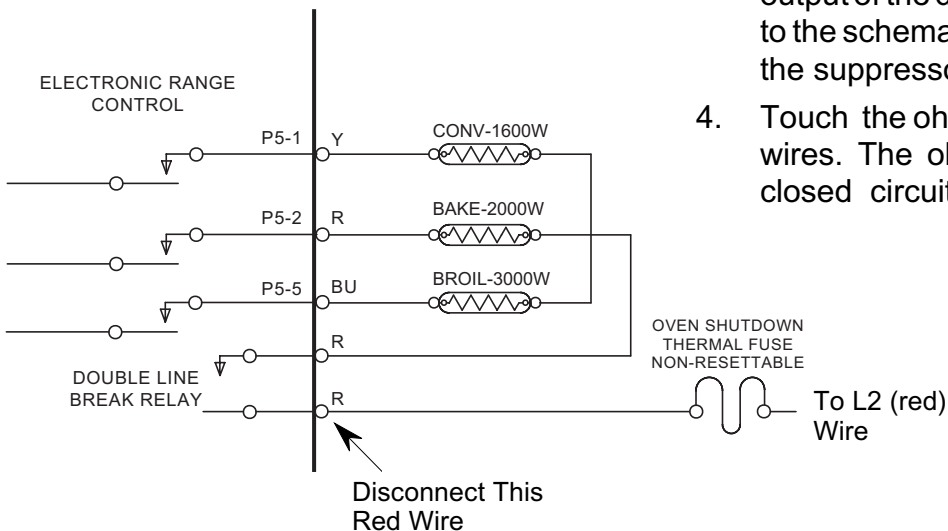
Disconnect the electrical supply from the unit before servicing.

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

TEST PROCEDURE

Refer to page 2-22 for the procedure for servicing the oven shutdown thermal fuse.

1. Disconnect power from the range.
2. Set the ohmmeter to the R x 1 scale.
3. Disconnect the wires from the oven shutdown thermal fuse terminals.
4. Touch the ohmmeter test leads to the oven shutdown thermal fuse terminals. The ohmmeter should indicate a closed circuit (0 Ω).



Resistance Test (At The Electronic Range Control)

NOTE: To test the oven shutdown thermal fuse at the electronic range control, perform the following steps (see page 2-4 for removing the top access panel).

1. Disconnect power from the range.
2. Set the ohmmeter to the R x 1 scale.
3. Disconnect the red wire that is on the output of the double line break relay, (refer to the schematic), and the red wire (L2) on the suppressor board terminal block.
4. Touch the ohmmeter test leads to the red wires. The ohmmeter should indicate a closed circuit (0 Ω).

CONVECTION BAKE ELEMENT

WARNING

Electrical Shock Hazard

Disconnect the electrical supply from the unit before servicing.

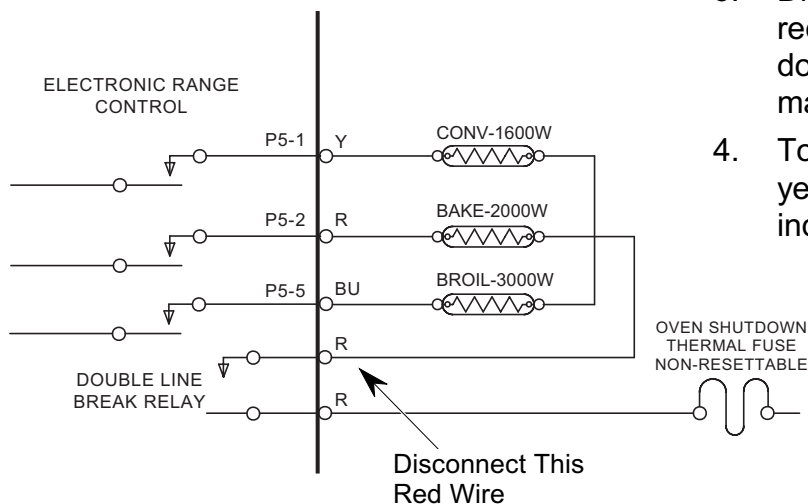
Failure to do so could result in death or electrical shock.



TEST PROCEDURE

Refer to page 2-18 for the procedure for servicing the convection bake element.

1. Disconnect power from the range.
2. Set the ohmmeter to the R x 1 scale.
3. Disconnect the wires from the convection bake element terminals.
4. Touch the ohmmeter test leads to the convection bake element terminals. The ohmmeter should indicate 28 to 35 Ω .



Resistance Test (At The Electronic Range Control)

NOTE: To test the convection bake element at the electronic range control, perform the following steps (see page 2-4 for removing the top access panel).

1. Disconnect power from the range.
2. Set the ohmmeter to the R x 1 scale.
3. Disconnect the P5-1 (yellow) wire and the red wire that is on the common side of the double line break relay (refer to the schematic) on the electronic range control.
4. Touch the ohmmeter test leads to the yellow and red wires. The ohmmeter should indicate 28 to 35 Ω .

CONVECTION FAN MOTOR

WARNING

Electrical Shock Hazard

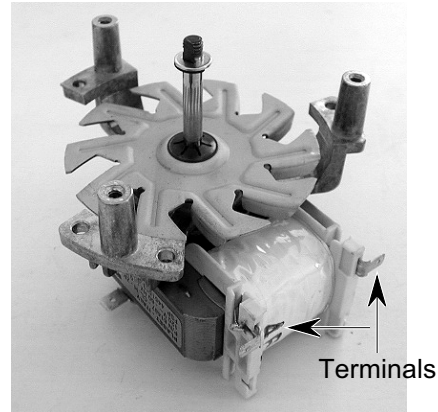
Disconnect the electrical supply from the unit before servicing.

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

TEST PROCEDURE

Refer to page 2-18 for the procedure for servicing the convection fan motor.

1. Disconnect power from the range.
2. Set the ohmmeter to the R x 1 scale.
3. Disconnect the wires from the convection fan motor terminals.
4. Touch the ohmmeter test leads to the convection fan motor terminals. The ohmmeter should indicate 8 to 12 Ω .



Resistance Test (At The Electronic Range Control)

NOTE: To test the convection fan motor at the electronic range control, perform the following steps (see page 2-4 for removing the top access panel).

1. Disconnect power from the range.
2. Set the ohmmeter to the R x 1 scale.
3. Disconnect the P1-3 (orange) and the neutral (white) wires from the electronic range control terminals.
4. Touch the ohmmeter test leads to the orange and white wires. The ohmmeter should indicate 8 to 12 Ω .

BROIL ELEMENT

WARNING

Electrical Shock Hazard

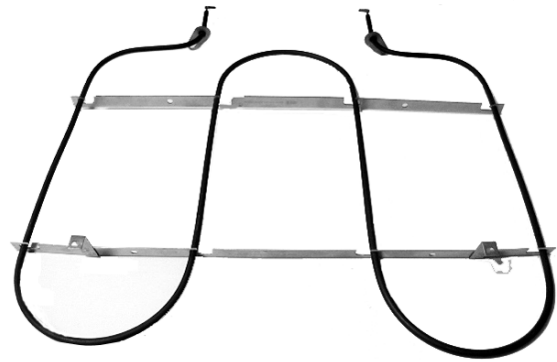
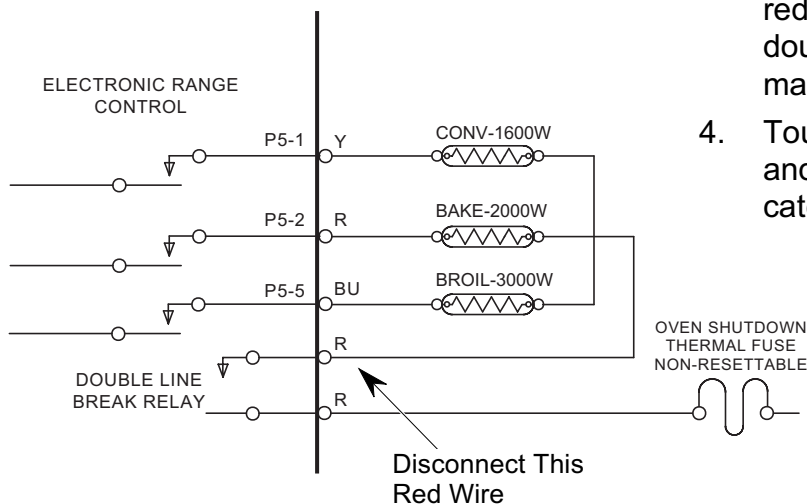
Disconnect the electrical supply from the unit before servicing.

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

TEST PROCEDURE

Refer to page 2-14 for the procedure for servicing the broil element.

1. Disconnect power from the range.
2. Set the ohmmeter to the R x 1 scale.
3. Disconnect the wires from the broil element terminals.
4. Touch the ohmmeter test leads to the broil element terminals. The ohmmeter should indicate 45 to 55 Ω .



Resistance Test (At The Electronic Range Control)

NOTE: To test the broil element at the electronic range control, perform the following steps (see page 2-4 for removing the top access panel).

1. Disconnect power from the range.
2. Set the ohmmeter to the R x 1 scale.
3. Disconnect the P5-5 (blue) wire and the red wire that is on the common side of the double line break relay (refer to the schematic) on the electronic range control.
4. Touch the ohmmeter test leads to the blue and red wires. The ohmmeter should indicate 45 to 55 Ω .

HIDDEN BAKE ELEMENT

WARNING

Electrical Shock Hazard

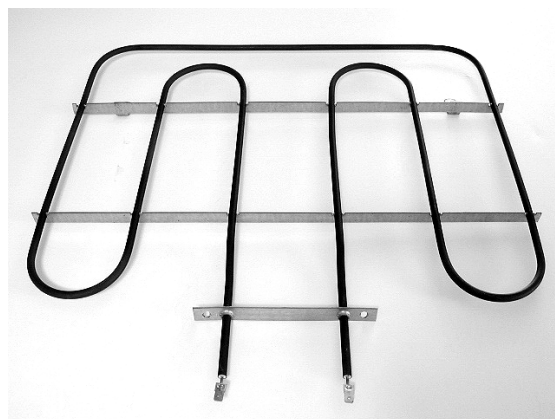
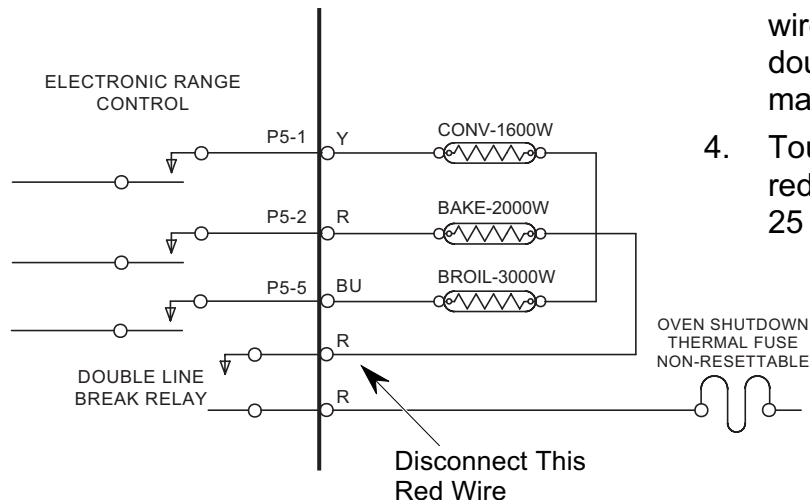
Disconnect the electrical supply from the unit before servicing.

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

TEST PROCEDURE

Refer to page 2-23 for the procedure for servicing the hidden bake element.

1. Disconnect power from the range.
2. Set the ohmmeter to the R x 1 scale.
3. Disconnect the wires from the hidden bake element terminals.
4. Touch the ohmmeter test leads to the bake element terminals. The ohmmeter should indicate 25 to 30 Ω .



Resistance Test (At The Electronic Range Control)

NOTE: To test the hidden bake element at the electronic range control, perform the following steps (see page 2-4 for removing the top access panel).

1. Disconnect power from the range.
2. Set the ohmmeter to the R x 1 scale.
3. Disconnect the P5-2 (red) wire and the red wire that is on the common side of the double line break relay (refer to the schematic) on the electronic range control.
4. Touch the ohmmeter test leads to the two red wires. The ohmmeter should indicate 25 to 30 Ω .

IGNITION SWITCHES

! WARNING

Electrical Shock Hazard

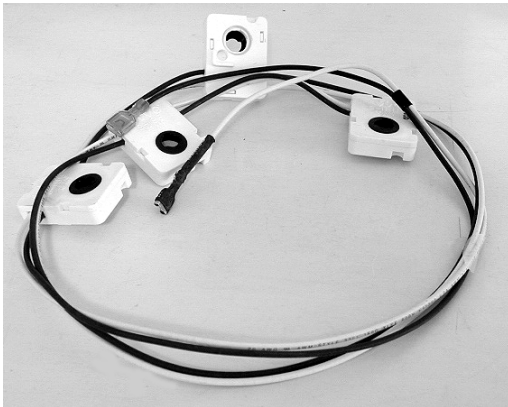
Disconnect the electrical supply from the unit before servicing.

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

TEST PROCEDURE

Refer to page 2-12 for the procedure for servicing the ignition switches.

NOTE: The ignition switches will be serviced as a complete assembly (see below). If a switch is defective, the complete assembly must be replaced.



Ignition Switch Wire
Connector At Spark Module



Ignition Switch Wire Connector
At Main Wire Harness

1. Disconnect power from the range.
2. Set the ohmmeter to the R x 1 scale.
3. Remove the top access panel (see page 2-4 for the steps).
4. Locate the two ignition switch connectors. (one is connected to the spark module, and the other is connected to the main wire harness under the right front corner of the range), and disconnect them.
5. Touch the test leads to the ignition switch connectors. With all of the switches in the Off position, the ohmmeter should indicate an open circuit (infinite ∞). When a switch is turned to the LITE position, the ohmmeter should indicate a closed circuit (0 ohms).

— NOTES —

DIAGNOSIS & TROUBLESHOOTING

NOTES:

1. When diagnosing this dual fuel range, always begin by checking for the correct line voltage, blown fuses, and failed components.
2. All ranges that fail within the first few days should be checked for loose connections or miswiring.
3. All voltage and resistance checks should be made with a meter having a sensitivity of greater than 20,000 ohms-per-volt.

FAILURE / ERROR DISPLAY CODES

FAULT CODE	CODE EXPLANATION	RECOMMENDED REPAIR PROCEDURE
F01	Temperature sensor opened.	1. Check sensor connection. 2. Measure sensor resistance ($1080\ \Omega$ @ 21°C (70°F). Add $2\ \Omega$ per 1.8°C (1°F)). 3. If resistance is not valid, replace sensor. 4. If sensor resistance and connections are okay, check for pinched sensor wires from the control to the sensor. 5. If wires are okay, then the oven cavity temperature must have exceeded a safe level. Check for welded-closed relays on the electronic range control.
F02	Welded element relays.	With the control power off, check continuity across P4-1 or P4-3 (both are L1) and the following connections: - P5-1 for the convection bake element. - P5-2 for the bake element. - P5-5 for the broil element.
F03	EEPROM error.	Replace the electronic range control.
F05	Door or latch problems.	1. Check the latch assembly: a) Latch arm pivot joint, arm/solenoid connection, solenoid spring, and spring washer. 2. Check the latch solenoid: a) Electrical connections. b) Resistance (with wires disconnected). The resistance should be approximately $175\ \Omega$. An open coil will indicate infinity and a shorted coil will measure $0\ \Omega$. An open or shorted solenoid should be replaced. 3. Check the latch switch: a) Disconnect the wires. With the switch closed (door latched) the meter should indicate $0\ \Omega$. With the switch open (door unlatched) the meter should indicate infinity. 4. Check the door open/closed switch: a) Disconnect the wires. With the door open (switch closed) the meter should indicate $0\ \Omega$. With the door closed (switch open) the meter should indicate infinity. 5. Check the power and element connections.
F06	Electronic range control malfunction.	Replace the control.

ELECTRONIC RANGE CONTROL PINOUTS

PIN	FUNCTION	COLOR
P1-1	Blower	Gray
P1-2	N/C	–
P1-3	Convection Fan Motor	Orange
P1-4	N/C	–
P1-5	Halogen Light	Black
P3-1	Earth Ground	Green
P3-2	Control Power	
	Transformer Secondary	Blue
P3-3	Control Power	
	Transformer Secondary	Blue
P3-4	N/C	–
P3-5	N/C	–
P3-6	N/C	–
P3-7	N/C	–
P4-1	L1	Black
P4-2	Blank	–
P4-3	L1	Black
P4-4	Blank	–
P5-1	Convection Bake Element	Yellow
P5-2	Bake Element	Red
P5-3	Blank	–
P5-4	Blank	–
P5-5	Broil Element	Blue
P6-1	Latch Solenoid (–)	White
P6-2	Latch Solenoid (+)	Yellow
P7-1	Door Switch	Green
P7-2	Latch Switch	Blue
P7-3	Switch Common (strobe)	Tan
P7-4	Temperature Sensor	Violet
P7-5	Temperature Sensor	Violet
P7-6	N/C	–
P7-7	N/C	–
P7-8	N/C	–
P9-1	Wisp Connector	Yellow
P9-2	N/C	–
P9-3	Wisp Connector	Orange

ELECTRONIC RANGE CONTROL COMPONENT TEST POINTS

COMPONENTS	FRONT/REAR	CHECK POINTS	RESULTS
Door Switch	Top	P7-1 (green) to P7-3 (tan)	Door Open = Closed Circuit Door Closed = Open Circuit
Door Lock Solenoid (with door closed)	Top	P6-1 (white) to P6-2 (yellow)	50 Ω
Oven Temperature Sensor	Front	P7-4 (violet) to P7-5 (violet)	1080 Ω @ 21 °C (70°F)
Blower Motor	Rear	P1-1 (gray) to Neutral (white)	14 to 18 Ω
Lamp Transformer	Top	Primary Winding	40 to 45 Ω
		Secondary Winding	Less than 1 Ω
Oven Shutdown Thermal Fuse	Rear	Output side of Double Line Break Relay (red wire) to red wire at terminal block	Closed Circuit
Bake Element	Rear	P5-2 (red) to output side of Double Line Break Relay (red)	25 to 30 Ω
Broil Element	Front	P5-5 (blue) to output side of Double Line Break Relay (red)	45 to 55 Ω
Convection Bake Element	Front	P5-1 (yellow) to output side of Double Line Break Relay (red)	28 to 35 Ω
Convection Fan Motor	Front/Rear	P1-3 (orange) to Neutral (white)	8 to 12 Ω
Latch Switch	Top	P7-2 (blue) to P7-3 (tan)	Door Unlocked = Open Circuit Door Locked = Closed Circuit

RELAY LOGIC

MODES	RELAYS	BAKE ELEMENT	BROIL ELEMENT	CONVECTION BAKE ELEMENT	CONVECTION FAN MOTOR	HALOGEN LIGHTS	BLOWER MOTOR
Reset		0	0	0	0	0	X
Bake Preheat		X	+	0	0	X	X
Bake		+	+	0	0	X	X
Broil Preheat		0	X	0	0	X	X
Broil		0	+	0	0	X	X
Convection Bake Preheat		+	0	X	X	X	X
Convection Bake		+	0	+	X	X	X
Convection Broil Preheat		0	X	0	X	X	X
Convection Broil		0	+	0	X	X	X
Convection Roast Preheat		X	+	0	X	X	X
Convection Roast		+	+	0	X	X	X
Bread Preheat		X	X	0	X	X	X
Bread Baking		+	+	+	X	X	X
Proof		0	+	0	0	0	0
Keep Warm		+	+	0	0	X	0
Clean		+	+	0	0	0	X

LEGEND:

0 = OFF

X = ON

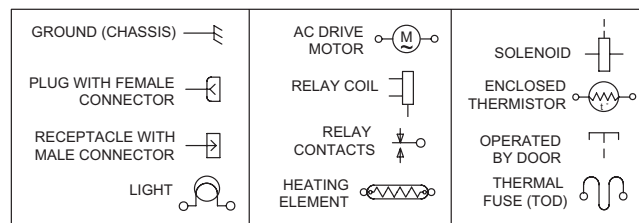
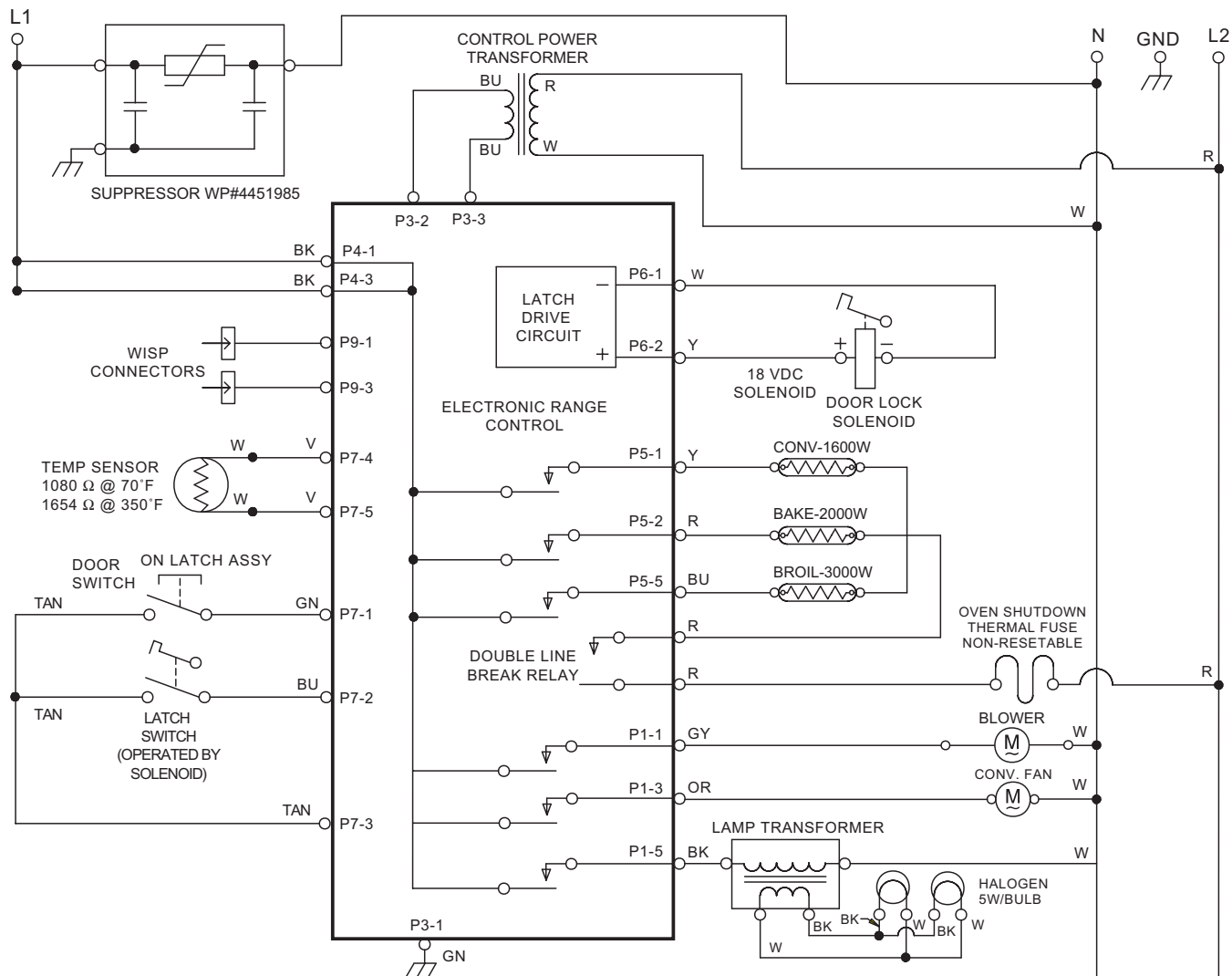
+ = CYCLING (MAXIMUM PERIOD = 60 SECONDS)

⊗ = ON OR OFF

— NOTES —

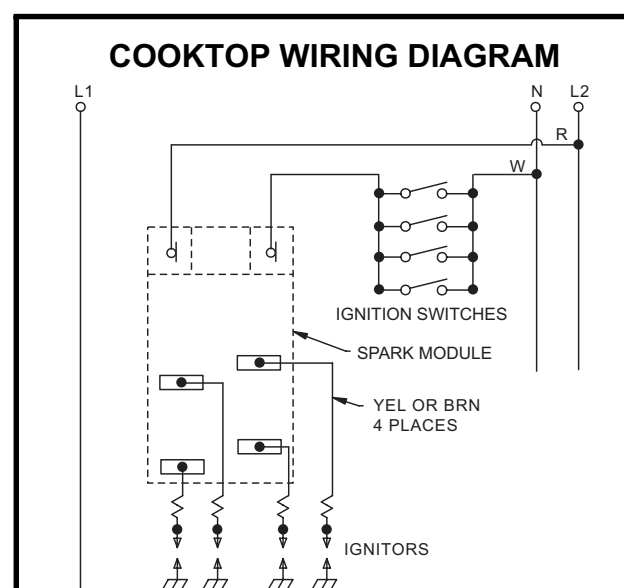
WIRING DIAGRAMS & STRIP CIRCUITS

OVEN WIRING DIAGRAM



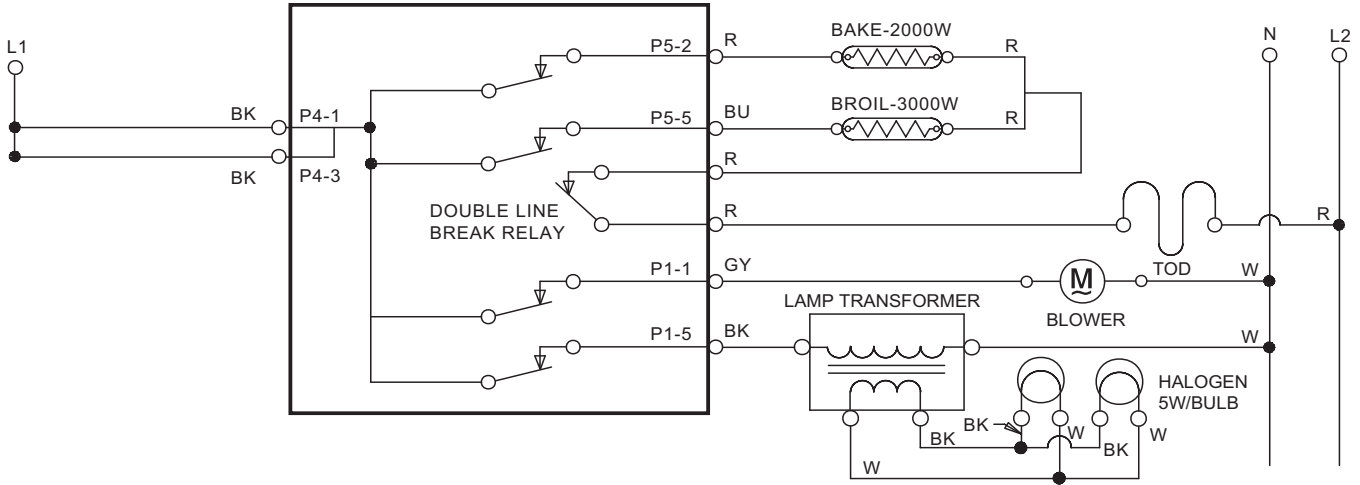
NOTE: Circuit shown in STANDBY/OFF mode with oven door closed.

PN 4453057

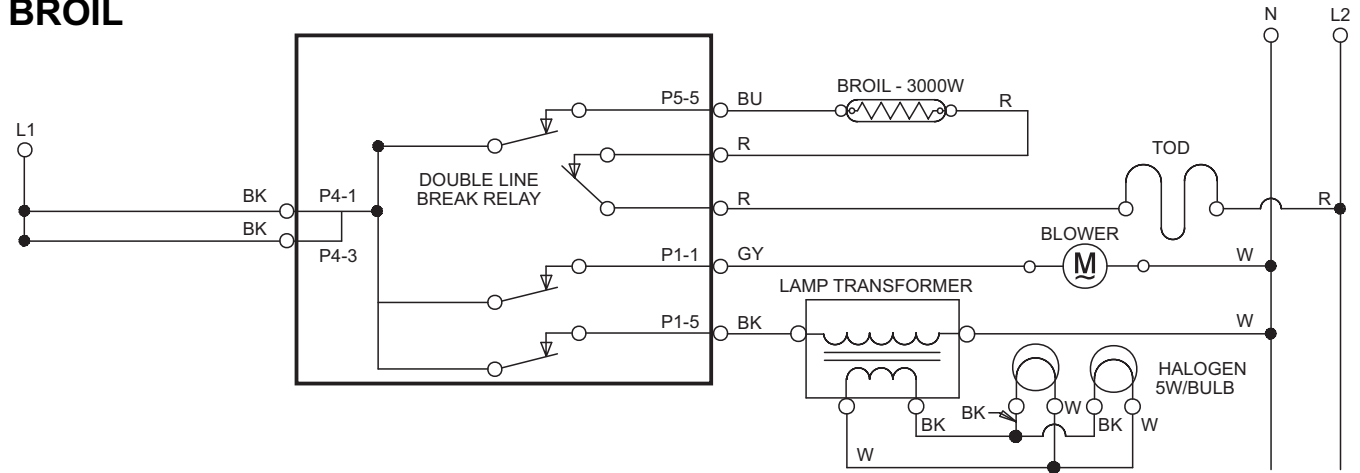


STRIP CIRCUITS

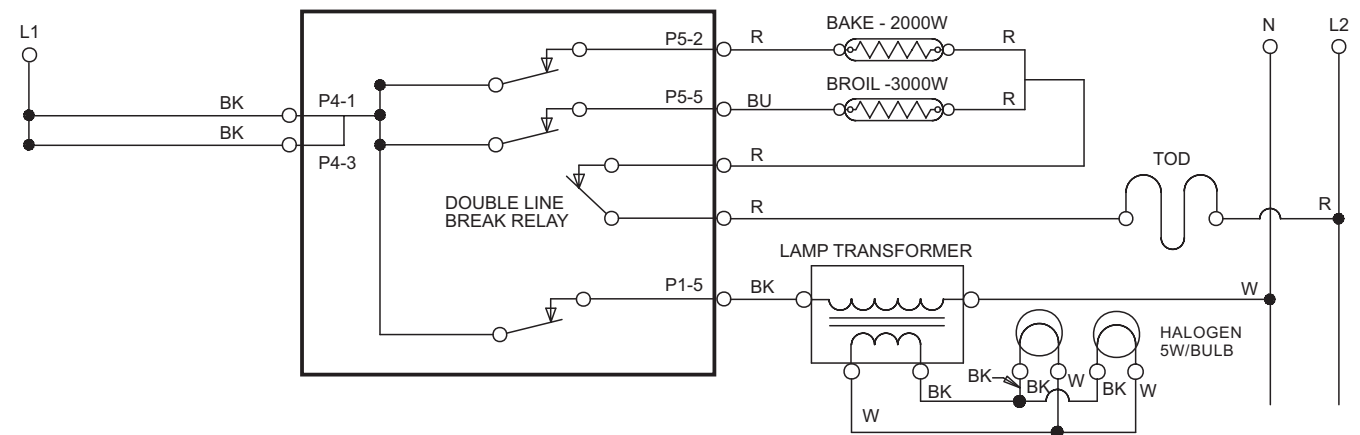
PREHEAT BAKE / BAKE



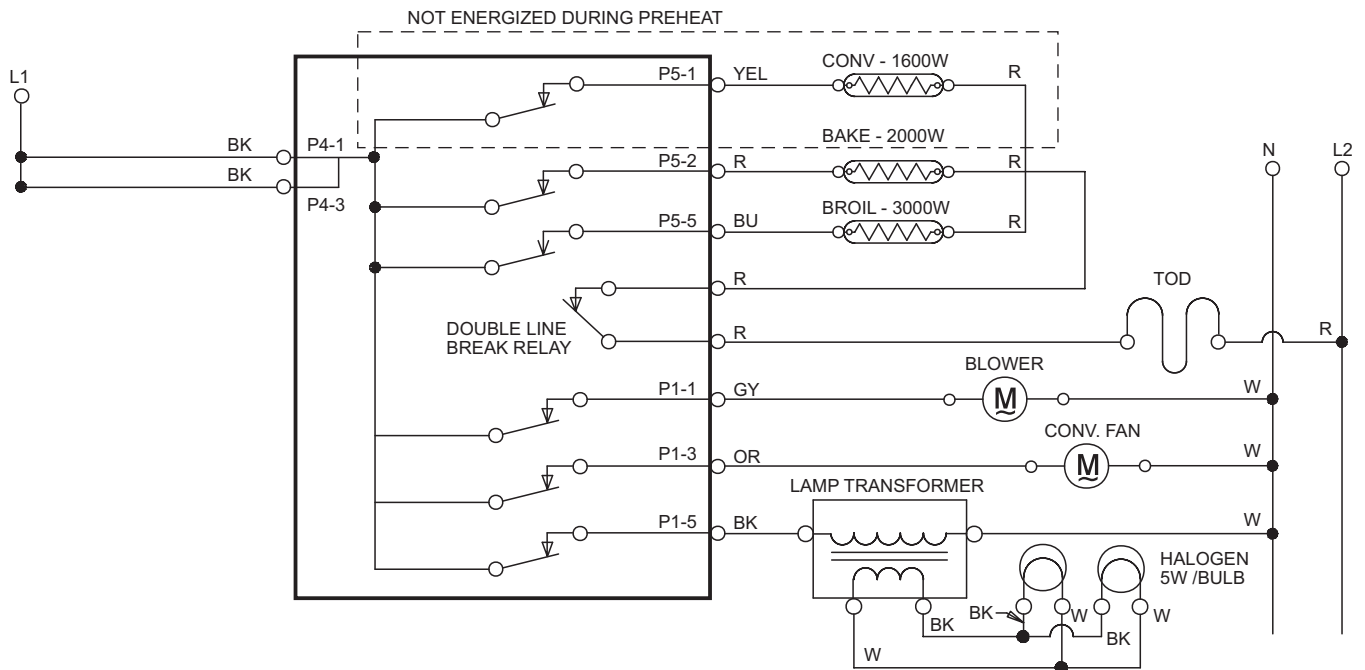
BROIL



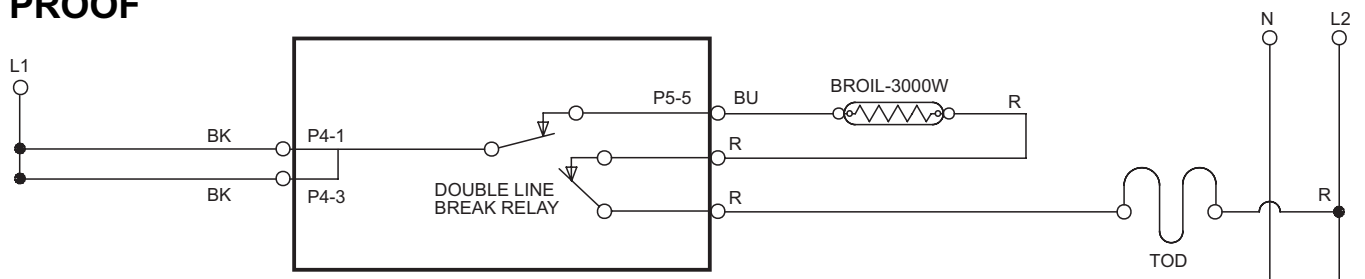
KEEP WARM



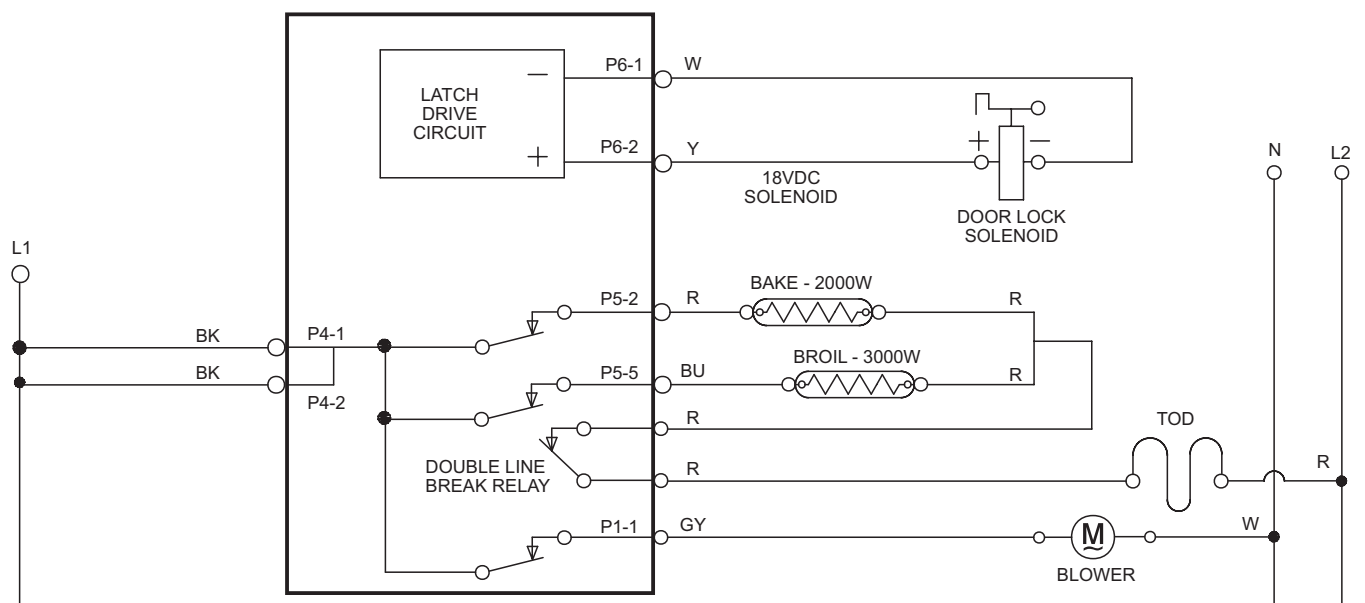
BREAD



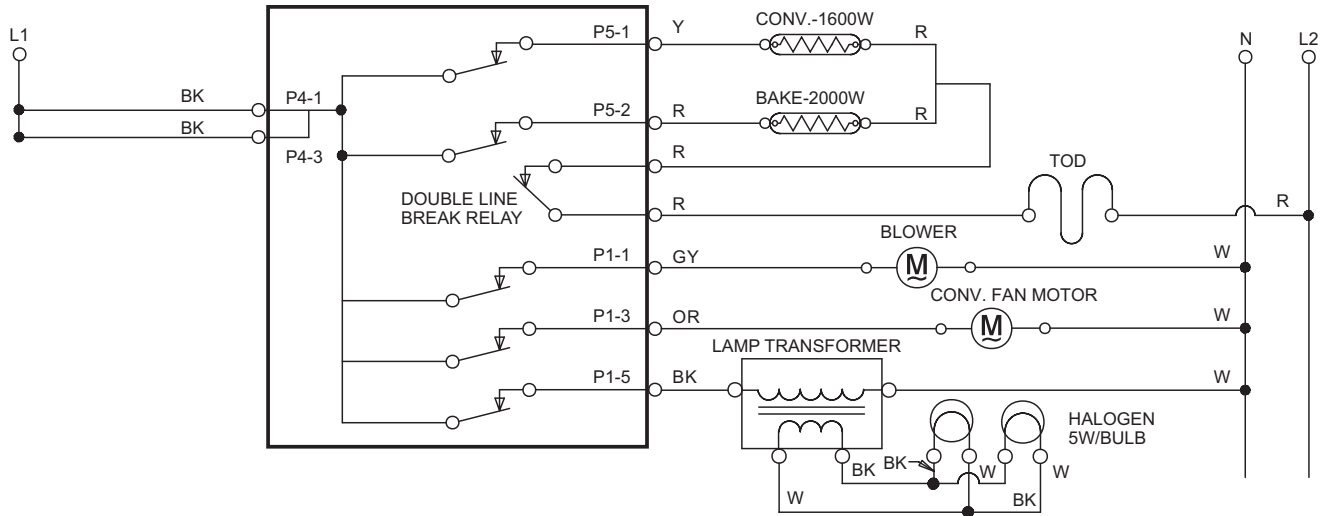
PROOF



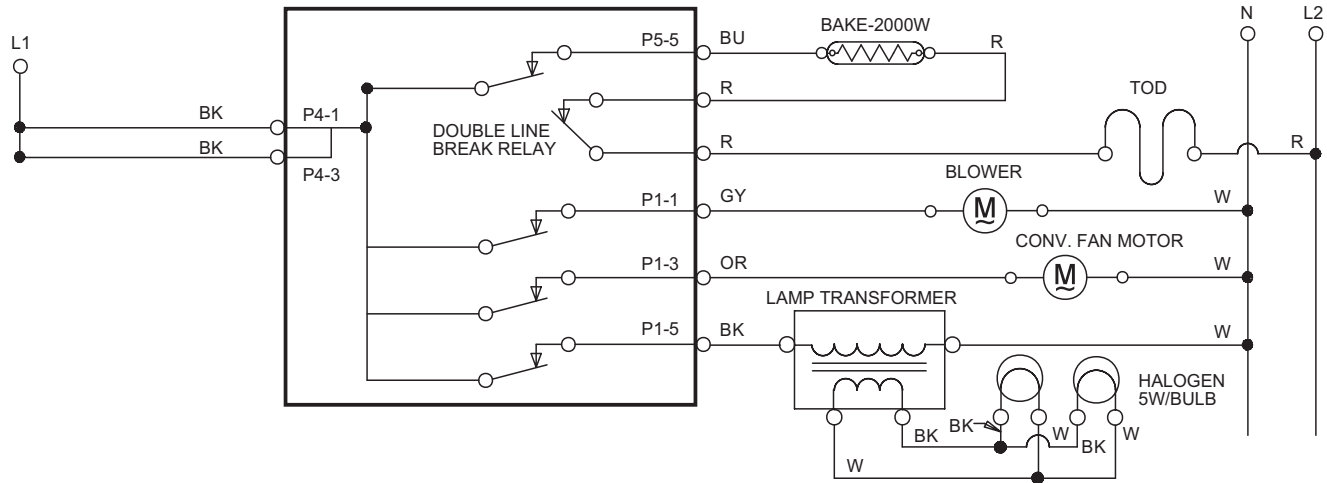
CLEAN



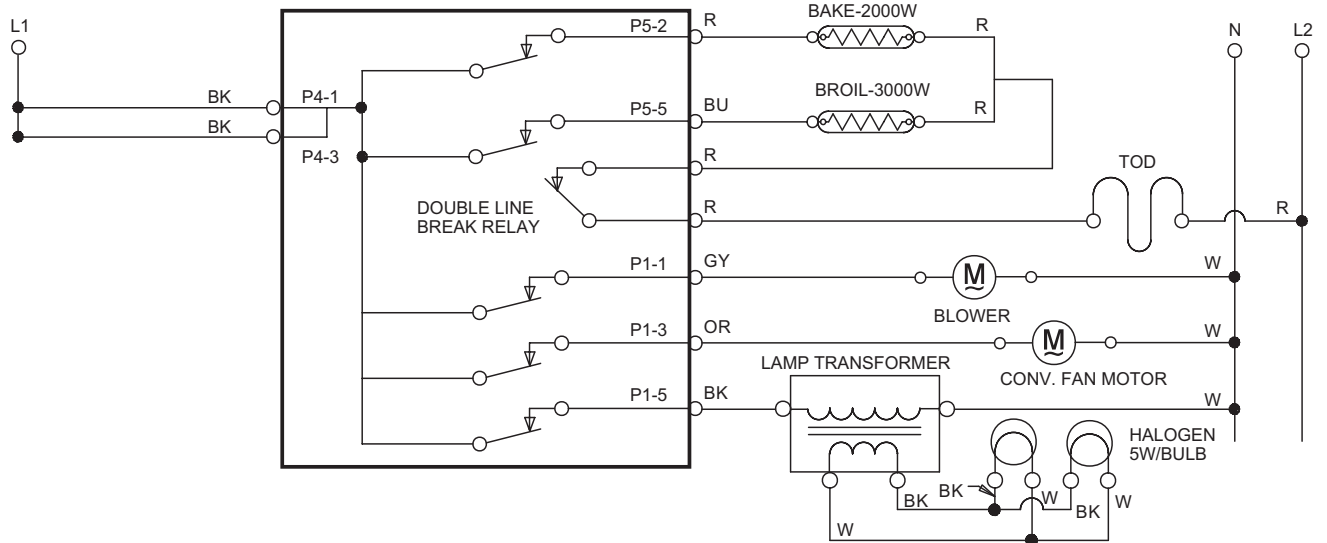
CONVECTION BAKE



CONVECTION BROIL



CONVECTION ROAST



TECH TIPS

REQUESTING ASSISTANCE OR SERVICE

If you need assistance or service in the U.S. A.:

Call the KitchenAid Consumer Assistance Center toll free, at

1-800-422-1230

If you need assistance or service in Canada:

Call the Inglis Limited Consumer Assistance Center telephone number toll-free, 8:30 a.m. to 6:00 p.m. (EST) at:

1-800-461-5681.

Our consultants are available to assist you.

When calling, please have the purchase date, and the complete model and serial number of your appliance handy. This information will help with your request.

Our consultants provide assistance with:

- Features and specifications on our full line of appliances.
- Installation information.
- Use and maintenance procedures.
- Accessory and repair parts sales.
- Specialized customer assistance (Spanish & French (Canada) speaking, hearing impaired, limited vision, etc.).
- Referrals to local dealers, service companies, and repair parts distributors.

KitchenAid service technicians are trained to fulfill the product warranty and provide after-warranty service, anywhere in the United States. To locate the authorized KitchenAid service company in your area, you can also look in your telephone directory Yellow Pages.

If you need to order replacement parts, we recommend that you only use factory authorized parts. These parts will fit right and work right, because they are made with the same precision used to build every new KitchenAid appliance.

To locate factory authorized replacement parts in your area, call our Consumer Assistance Center telephone number or your nearest authorized service center.

If you need further assistance, you can write to KitchenAid with any questions or concerns at:

KitchenAid Brand Home Appliances
Consumer Assistance Center
c/o Correspondence Dept.
2000 North M-63
Benton Harbor, MI 49022-2692

In Canada, contact:

Consumer Relations Department
Inglis Limited
1901 Minnesota Court
Mississauga, Ontario L5N 3A7

Please include a daytime phone number in your correspondence.

DUAL FUEL RANGE WARRANTY

LENGTH OF WARRANTY:	KITCHENAID WILL PAY FOR:	KITCHENAID WILL NOT PAY FOR:
ONE-YEAR FULL WARRANTY FROM DATE OF PURCHASE.	Replacement parts and repair labor costs to correct defects in materials or workmanship. Service must be provided by an authorized KitchenAid servicing outlet.	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. 4. Replace owner-accessible light bulbs. 5. Correct house plumbing. B. Repairs when the range is used in other than normal, single-family household use. C. Pickup and delivery. The range is designed to be repaired in the home. D. Damage to the range caused by accident, alteration, misuse, abuse, fire, flood, acts of God, or use of products not approved by KitchenAid. E. Repairs to parts or systems resulting from unauthorized modifications made to the appliance. F. In Canada, travel or transportation expenses for customers who reside in remote areas. G. Replacement parts or repair labor costs for units operated outside the United States and Canada.

KITCHENAID AND INGLIS LIMITED SHALL NOT BE LIABLE 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 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, refer to the "Requesting Assistance or Service" section on the previous page. After checking "Requesting Assistance or Service," additional help can be found by calling the KitchenAid Consumer Assistance Center telephone number, **1-800-422-1230**, from anywhere in the U.S.A. In Canada, contact your authorized Inglis Limited Appliance Service company, **1-800-461-5681**.

