

KitchenAid

TECHNICAL EDUCATION

FLUSH-MOUNT GAS COOKTOP



**MODELS: KFGS306VSS, KFGU706VSS,
KFGS366VSS, KFGU766VSS**

FORWARD

This KitchenAid Job Aid “Flush-Mount Gas Cooktop” (Part No. 4317428), provides the In-Home Service Professional with information on the installation, operation, and service of the Flush-Mount Gas Cooktop. For specific information on the model being serviced, refer to the “Use and Care Guide,” or “Wiring Diagram” provided with the cooktop.

The Wiring Diagram used in this Job Aid is typical and should be used for training purposes only. Always use the Wiring Diagram supplied with the product when servicing the cooktop.

GOALS AND OBJECTIVES

The goal of this Job Aid is to provide information that will enable the In-Home Service Professional to properly diagnose malfunctions and repair the Flush-Mount Gas Cooktop.

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 cooktop to its proper operational status.

WHIRLPOOL CORPORATION assumes no responsibility for any repairs made on our products by anyone other than authorized In-Home Service Professionals.

TABLE OF CONTENTS

Page

GENERAL	1-1
Cooktop Safety.....	1-1
Model & Serial Number Designations	1-2
Model & Serial Number Label And Tech Sheet Locations.....	1-3
Specifications	1-4
INSTALLATION INFORMATION	2-1
LP Gas And High Altitude Conversion Instructions	2-11
PRODUCT OPERATION	3-1
COMPONENT ACCESS	4-1
Component Locations	4-1
Removing The Cooktop	4-2
Removing The Spark Switches, And The Standard Or Crown Burner Gas Valves.....	4-4
Removing The Power Supply Transformer And The Spark Module.....	4-7
Removing The Gas Shutoff Valve	4-8
Removing A Spark Ignitor From Standard Or Crown Burner	4-9
Removing Standard or Crown Burner.....	4-11
Removing The Power Supply Cord.....	4-13
COMPONENT TESTING	5-1
Spark Switches	5-1
Crown Burner Switch	5-2
Power Supply Transformer.....	5-2
DIAGNOSTICS & TROUBLESHOOTING	6-1
WIRING DIAGRAM & STRIP CIRCUIT	7-1

— NOTES —

GENERAL COOKTOP SAFETY

Your safety and the safety of others are very important.

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



This is the safety alert symbol.

This symbol alerts you to potential 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.

KITCHENAID MODEL & SERIAL NUMBER DESIGNATIONS

MODEL NUMBER

MODEL NUMBER	K	FG	S	30	6	V	SS	0
PRODUCT GROUP K = KITCHENAID								
PRODUCT IDENTIFICATION EC = ELECTRIC COOKTOP GC = GAS COOKTOP IC = ELECTRIC INDUCTION COOKTOP FG = FLUSH GAS COOKTOP ED = ELECTRIC DOWNDRAFT COOKTOP ID = ELECTRIC INDUCTION DOWNDRAFT COOKTOP GL = GAS LP COOKTOP								
MERCHANDISING SCHEME K = STANDARD KITCHENAID S = SUPERBA U = ULTIMA								
MATERIAL / STYLE / WIDTH <i>1ST POSITION</i> <i>2ND POSITION</i> 0 = TEMPERED GLASS 0 = 30" WIDE 1 = STAINLESS STEEL 5 = 15" WIDE 4 = COMMERCIAL STYLE 6 = 36" WIDE 5 = CERAMIC GLASS 8 = 48" WIDE 7 = STAINLESS STEEL W/CLEAR COAT								
FEATURE CODE 0 = 1 = 5 = STANDARD KNOBS 6 = STANDARD KNOBS 7 = KNOBS W/ELECTRONICS 8 = TOUCH CONTROLS								
YEAR OF INTRODUCTION T = 2007 V = 2008								
COLOR CODE SS = STAINLESS STEEL BL = BLACK WH = WHITE								
ENGINEERING CHANGE (0, 1, 2, ETC.)								

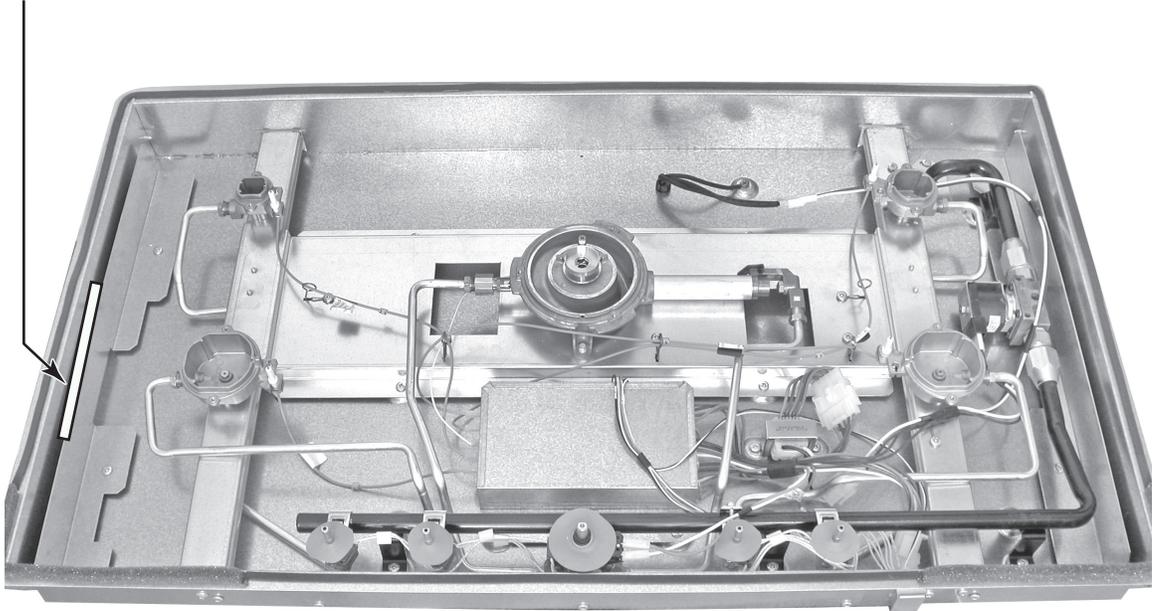
SERIAL NUMBER

SERIAL NUMBER	X	W	41	01002
DIVISION RESPONSIBILITY X = OXFORD				
YEAR OF PRODUCTION U = 2007 W = 2008				
WEEK OF PRODUCTION 41 = 41ST WEEK				
PRODUCT SEQUENCE NUMBER				

MODEL & SERIAL NUMBER LABEL AND TECH SHEET LOCATIONS

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

**Tech Sheet Location
(On Inside Of Cooktop)**



**Model/Serial Number Location
(On Bottom Of Cooktop)**



SPECIFICATIONS

	30"		36"	
	Superba	Ultima	Superba	Ultima
Model Number	KFGS306VSS	KFGU706VSS	KFGS366VSS	KFGU766VSS
Canadian Model Number	KFGS306VSS	KFGU706VSS	KFGS366VSS	KFGU766VSS
Colors	SS	SS	SS	SS
Installs Over Undercounter Oven	Yes	Yes	Yes	Yes
Agency Ratings	CSA	CSA	CSA	CSA
Electric Supply	120 VAC, 60 HZ, 10 Amps			
Power Cable Location	Center Rear	Center Rear	Center Rear	Center Rear
Total Connected Load	2VA	9,8VA	2VA	9,8VA
COOKTOP				
Surface	SS	SS	SS	SS
Clear Coat	No	Yes	No	Yes
BURNERS				
Electronic Ignition with Electronic Re-ignition	Yes	Yes	Yes	Yes
L.P. Convertible (No Additional Kit Needed)	Yes	Yes	Yes	Yes
Number of Burners & Burner BTU (Nat./L.P.)	5	5	5	5
Left Front	9,100	9,100	10,000	12,000
Right Front	10,000	12,000	10,000	10,000
Left Rear	6,000	6,000	6,000	6,000
Right Rear	7,000	7,000	7,000	7,000
Center	15,000	15,000	18,000	20,000
Low Turn Down - LR Burner	1200	1200	1200	1200
Removable Burner Caps	Yes	Yes	Yes	Yes
BURNER GRATES				
Grates	3-piece	3-piece	3-piece	3-piece
Grate Finish	Matte Bk	Matte Bk	Matte Bk	Matte Bk
Contiguous Grates	Yes	Yes	Yes	Yes

CONTROLS				
Location	Front	Front	Front	Front
Removable Dials/Knobs	Metal Puck	Metal Puck	Metal Puck	Metal Puck
Lock Out	No	Yes	No	Yes
Hot Indicator Light	No	Yes	No	Yes
Control Graphics	Etched	Serigraphy on glass	Etched	Serigraphy on glass
DIMENSIONS - IN. (CM)				
Exterior Dimensions				
Overall Height (in)				
Overall Width (in)	30 1/4"	30 1/4"	36 7/32"	36 7/32"
Overall Depth (in)	21"	21"	21"	21"
Cutout Dimensions				
Cutout Width (in) (Measure Or Min/Max)	29"	29"	35 1/4"	35 1/4"
Cutout Depth (in) (Measure Or Min/Max)	20"	20"	20"	20"
Ratings				
Electric Voltage/Phase/Frequency (Hz)	60 Hz	60 Hz	60 Hz	60 Hz
Total Connected Load In kW				
120V AC				
Circuit Amps	15	15	15	15
ACCESSORIES				
LP Conversion Kit Part/ Comment	8287082	8287082	8287082	8287082

— NOTES —

INSTALLATION INFORMATION

INSTALLATION REQUIREMENTS

TOOLS AND PARTS

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

Tools needed

- Tape measure
- Flat-blade screwdriver
- 3/32" (#0 [2 mm]) flat blade screwdriver (screwdriver shaft must be a minimum of 1 1/8" [28 mm] long) 1" (25 mm) drill bit (for wall cabinet installations)
- 15/16" combination wrench
- Pipe wrench
- Wrench or pliers
- Needle-nose pliers
- Marker or pencil
- Pipe-joint compound resistant to LP gas
- Noncorrosive leak-detection solution

Parts needed

Check local codes and consult gas supplier. Check existing gas supply and electrical supply. See "Electrical Requirements" and "Gas Supply Requirements" sections.

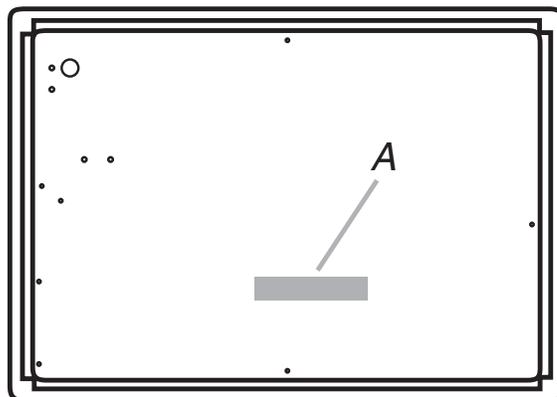
Parts supplied

- Gas pressure regulator
- Burner grates
- Burner caps
- Clamping brackets (2)
- 2 1/2" (6.4 cm) clamping screws (2)

LOCATION REQUIREMENTS

IMPORTANT: Observe all governing codes and ordinances. Do not obstruct flow of combustion and ventilation air.

- It is the installer's responsibility to comply with installation clearances specified on the model/serial rating plate. The model/serial rating plate is located on the underside of the cooktop base.



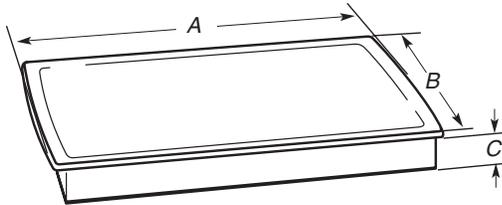
A. Model/serial rating plate

- To eliminate the risk of burns or fire by reaching over heated surface units, cabinet storage space located above the surface units should be avoided. If cabinet storage is to be provided, the risk can be reduced by installing a range hood that projects horizontally a minimum of 5" (12.7 cm) beyond the bottom of the cabinets
- The cooktop should be installed in a location away from strong draft areas, such as windows, doors and strong heating vents or fans.
- All openings in the wall or floor where cooktop is to be installed must be sealed.
- Cabinet opening dimensions that are shown must be used. Given dimensions are minimum clearances.
- Grounded electrical supply is required. See "Electrical Requirements" section. Proper gas supply connection must be available. See "Gas Supply Requirements" section.
- The cooktop is designed to hang from the countertop by its side flanges.
- The gas and electric supply should be located as shown in "Installation Clearances" section so that they are accessible without requiring removal of the cooktop.

- Provide cutout in right rear corner of enclosure as shown to provide clearance for gas inlet, power supply cord, and to allow the rating label to be visible.

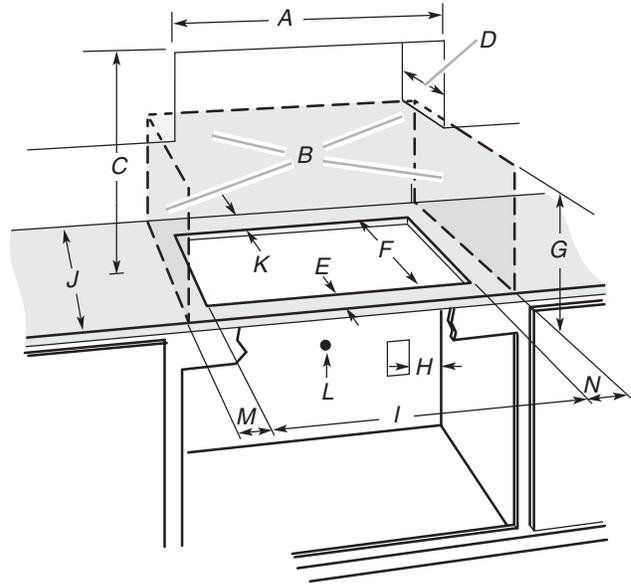
IMPORTANT: To avoid damage, check with your builder or cabinet supplier to make sure that the materials used will not discolor, delaminate or sustain other damage.

Product Dimensions



- A. 30 $\frac{3}{16}$ " (76.7 cm) on 30" (76.2 cm) models,
36 $\frac{1}{4}$ " (92.0 cm) on 36" (91.4 cm) models
- B. 21" (53.3 cm)
- C. 3 $\frac{1}{4}$ " (8.3 cm)

Installation Clearances



- A. 30" (76.2 cm) on 30" (76.2 cm) models; 36" (91.4 cm) on 36" (91.4 cm) models
 - B. Combustible area above countertop (shown by dashed box above)
 - C. 30" (76.2 cm) minimum clearance between top of cooktop platform and bottom of unprotected wood or metal cabinet (24" [61.0 cm] minimum clearance if bottom of wood or metal cabinet is protected by not less than $\frac{1}{4}$ " [0.6 cm] flame retardant millboard covered with not less than No. 28 MSG sheet steel, 0.015" [0.04 cm] stainless steel, or 0.024" [0.06 cm] aluminum or 0.020" [0.05 cm] copper). If installing a range hood see NOTES.*
 - D. 13" (33.0 cm) recommended upper cabinet depth
 - E. 1 $\frac{1}{8}$ " (2.8 cm)
 - F. 20" (50.8 cm)
 - G. 18" (45.7 cm) minimum clearance from upper cabinet to countertop within minimum horizontal clearances to cooktop
 - H. Grounded outlet - Locate within 24" (61.0 cm) of right rear corner of cutout
 - I. 29" (73.7 cm) on 30" (76.2 cm) models; 35 $\frac{1}{4}$ " (89.5 cm) on 36" (91.4 cm) models
 - J. 24" (61.0 cm) minimum countertop depth is required
 - K. 2 $\frac{7}{8}$ " (7.3 cm) minimum distance to rear combustable surface
 - L. Gas line opening - Wall: anywhere 5" (12.7 cm) below underside of countertop. Cabinet floor: anywhere within 6" (15.2 cm) of rear wall is recommended
 - M. 8" (20.3 cm) minimum distance to nearest left side combustable surface.**
 - N. 8" (20.3 cm) minimum distance to nearest right side combustable surface.**
- 30" (76.2 cm) Cooktop Overall: M + N must equal 48" (122.0 cm) minimum + 29" (73.7 cm) cutout for cooktop or 77" (195.6 cm)
- 36" (91.4 cm) Cooktop Overall: M + N must equal 48" (122.0 cm) minimum + 35 $\frac{1}{4}$ " (89.5 cm) cutout for cooktop or 83 $\frac{1}{4}$ " (211.5 cm)
- **M + N combined must be at least 48" (122.0 cm) minimum overall
- Example 1: M = 8" (20.3 cm) left side + N = 40" (101.6 cm) right side = 48" (122.0 cm)
- Example 2: M = 24" (61.0 cm) left side + N = 24" (61.0 cm) right side = 48" (122.0 cm)

NOTES:

After making the countertop cutout, some installations may require notching down the base cabinet side walls to clear the cooktop base. To avoid this modification, use a base cabinet with sidewalls wider than the cutout.

If cabinet has a drawer, a 4" (10.2 cm) depth clearance from the countertop to the top of the drawer (or other obstruction) in base cabinet is required. The drawer depth may need to be shortened to avoid interfering with the regulator.

* If installing a hood above the range, follow the hood instructions for dimensional clearances above the cooktop surface.

ELECTRICAL REQUIREMENTS

IMPORTANT: The cooktop must be electrically grounded in accordance with local codes and ordinances, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 or Canadian Electrical Code, CSA C22.1.

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

A copy of the above code standards can be obtained from:

National Fire Protection Association
One Batterymarch Park
Quincy, MA 02269

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

- A 120-volt, 60 Hz, AC only, 15-amp, fused electrical circuit is required. A time-delay fuse or circuit breaker is also recommended. It is recommended that a separate circuit serving only this cooktop be provided.
- Electronic ignition systems operate within wide voltage limits, but proper grounding and polarity are necessary. Check that the outlet provides 120-volt power and is correctly grounded.

- The Tech Sheet provided is located inside the cooktop on the left wall of the cooktop base

GAS SUPPLY REQUIREMENTS

Observe all governing codes and ordinances.

IMPORTANT: This installation must conform with all local codes and ordinances. In the absence of local codes, installation must conform with American National Standard, National Fuel Gas Code ANSI Z223.1 - latest edition or CAN/CGA B149 - latest edition.

IMPORTANT: Leak testing of the cooktop must be conducted according to the manufacturer's instructions.

Type of Gas

Natural Gas:

This cooktop is design-certified by CSA International for use with Natural gas or, after proper conversion, for use with LP gas.

- This cooktop is factory set for use with Natural gas. If converting to LP gas, see the following "LP Gas Conversion" section. The model/serial rating plate located on the underside of the cooktop base has information on the types of gas that can be used. If the types of gas listed do not include the type of gas available, check with the local gas supplier.

LP Gas Conversion:

Conversion must be done by a qualified service technician.

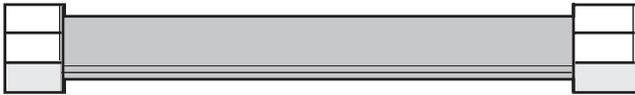
No attempt shall be made to convert the cooktop from the gas specified on the model/serial rating plate for use with a different gas without consulting the serving gas supplier. See the Gas Conversion instructions provided in the literature package.

Gas Supply Line

- Provide a gas supply line of 3/4" (1.9 cm) rigid pipe to the cooktop location. A smaller size pipe on longer runs may result in insufficient gas supply. Pipe-joint compounds that resist the action of LP gas must be used. Do not use TEFLON®† tape. With LP gas, piping or tubing size should be 1/2" minimum. Usually, LP gas suppliers determine the size and materials used in the system.

Flexible metal appliance connector:

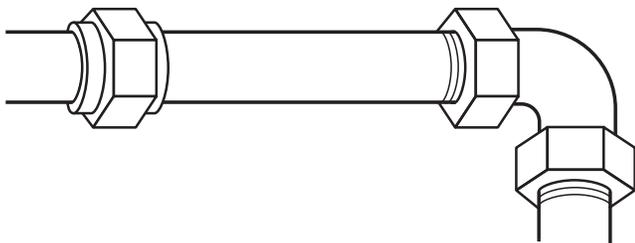
- If local codes permit, use a 1/2" or 3/4" I.D. flexible stainless steel tubing gas connector, designed by CSA to connect the cooktop to the rigid gas supply line.



- A 1/2" male pipe thread is needed for connection to the female pipe threads of the inlet to the cooktop pressure regulator.
- Do not kink or damage the flexible metal tubing when moving the cooktop.

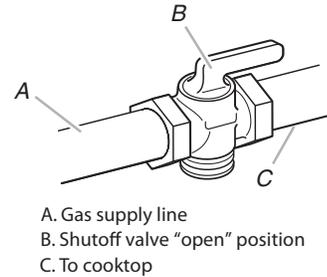
Rigid pipe connection:

The rigid pipe connection requires a combination of pipe fittings to obtain an in-line connection to the cooktop. The rigid pipe must be level with the cooktop connection. All strains must be removed from the supply and fuel lines so cooktop will be level and in line.



- Must include a shutoff valve:

The supply line must be equipped with a manual shutoff valve. This valve should be located in the same room but external to the cooktop. It should be in a location that allows ease of opening and closing. Do not block access to shutoff valve. The valve is for turning on or shutting off gas to the cooktop.



Gas Pressure Regulator

The gas pressure regulator supplied with this cooktop must be used. The inlet pressure to the regulator should be as follows for proper operation:

Natural Gas:

Minimum pressure: 5" (12.7 cm) WCP

Maximum pressure: 7" to 14" (17.8 cm to 35.5 cm) WCP

LP Gas:

Minimum pressure: 11" (27.9 cm) WCP

Maximum pressure: 14" (35.5 cm) WCP

Contact local gas supplier if you are not sure about the inlet pressure.

Burner Input Requirements

Input ratings shown on the model/serial rating plate are for elevations up to 2,000 ft (609.6 m).

For elevations above 2,000 ft (609.6 m), ratings are reduced at a rate of 4% for each 1,000 ft (304.8 m) above sea level (not applicable for Canada).

For elevations above 6,560ft (1999.5 m) a high altitude kit is needed to avoid any reduced power output. See separate LP gas conversion instructions sheet.

INSTALLATION REQUIREMENTS

INSTALL COOKTOP

⚠ WARNING

Excessive Weight Hazard

Use two or more people to move and install cooktop.

Failure to do so can result in back or other injury.

Style 1: Cooktop over undercounter built-in oven

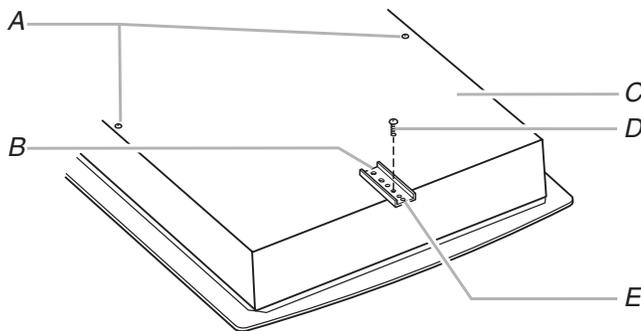
IMPORTANT: Clamping brackets should not be used.

1. Using 2 or more people, place cooktop right side up into the cutout.

NOTE: Make sure that the front edge of the cooktop is parallel to the front edge of the countertop. If repositioning is needed, lift entire cooktop up from cutout to avoid scratching the countertop.

Style 2: Cooktop over cabinets

1. Determine whether your cabinet construction provides clearance for installing clamping brackets at cooktop base ends. This is the recommended location. Clamping brackets can be installed on the front and back of cooktop base bottom, if necessary.

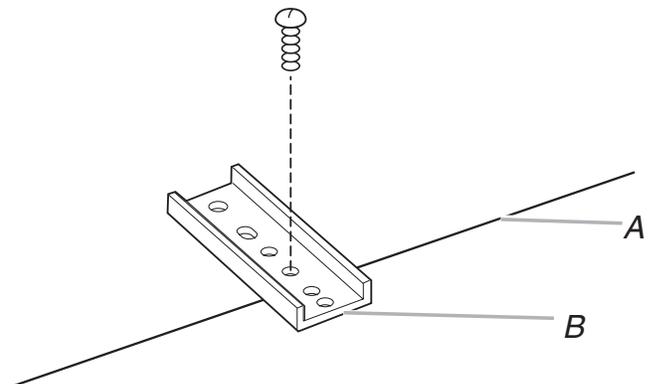


- A. Attachment screw holes for optional front and back location.
- B. Clamping bracket (end locations recommended)
- C. cooktop base bottom
- D. Attachment screw
- E. Attachment screw location (recommended)

2. The clamping brackets can be installed before or after the cooktop is placed into the cutout. Complete the following steps for the option you choose.

Installing Brackets Before Placing Cooktop in Cutout

1. Using 2 or more people, place the cooktop upside down on a covered surface.
2. Remove the attachment screws for the selected bracket locations from the bottom of the cooktop base.
3. Select bracket mounting holes that will allow the bracket to extend far enough out from the cooktop for the installation of 2 1/2" (6.4 cm) clamping screws. See "Attach Cooktop to Countertop" for illustration of clamping screw installation.



- A. Edge of cooktop base bottom
- B. Clamping bracket

4. Attach brackets to cooktop base bottom with bracket attachment screws using the bracket mounting holes selected in Step 2.
5. Rotate brackets so they do not extend beyond edge of cooktop base.
6. Tighten screws just enough to hold brackets in place when cooktop is put in cutout.
7. Using 2 or more people, turn the cooktop right side up and place in cutout.

NOTE: Make sure that the front edge of the cooktop is parallel to the front edge of the countertop. If repositioning is needed, lift entire cooktop up from cutout to avoid scratching the countertop.

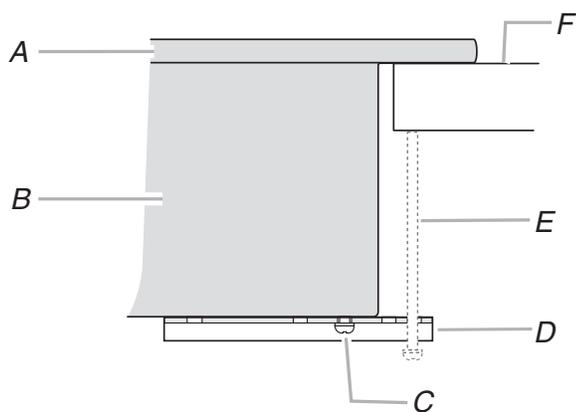
- Loosen the screws and rotate the brackets so that they are perpendicular to the edge of the cooktop base and extend beyond its edge. Securely tighten screws.

Installing Brackets After Placing Cooktop in Cutout

- Using 2 or more people, place cooktop right side up into the cutout.

NOTE: Make sure that the front edge of the cooktop is parallel to the front edge of the countertop. If repositioning is needed, lift entire cooktop up from cutout to avoid scratching the countertop.

- Remove the attachment screws for the selected bracket locations from the bottom of the cooktop base.
- Select bracket mounting holes that will allow the bracket to extend far enough out from the cooktop for the installation of 2 1/2" (6.4 cm) clamping screws.



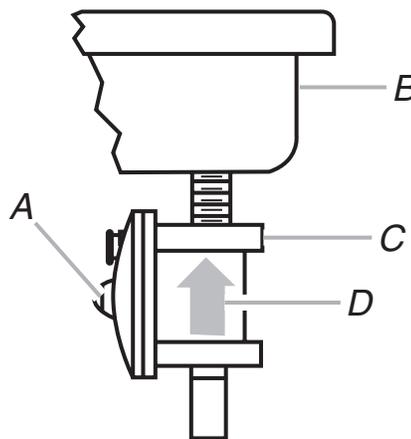
- A. Cooktop
- B. Cooktop base
- C. Attachment screw
- D. Clamping bracket (extends far enough beyond cooktop base to allow installation of clamping screws)
- E. 2 1/2" (6.4 cm) clamping screw (to be installed in "Attach Cooktop to Countertop")
- F. Countertop

- Attach brackets to cooktop base bottom with bracket attachment screws using the bracket mounting holes selected in Step 3. Securely tighten screws.

MAKE GAS CONNECTION

To Assemble Pressure Regulator:

- Using 2 or more people, stand the cooktop on its side or back.
- Connect the flexible stainless steel connector to the pressure regulator using a 1/2" male pipe thread adapter and nipple. A combination of pipe fittings must be used to connect the cooktop to the existing gas line. Shown following is a typical connection. Your connection may be different, according to the supply line type, size and location.
- Install the pressure regulator with the arrow pointing up toward the bottom of the cooktop base and in a position where you can reach the regulator cap.



- A. Access cap
- B. Rear of cooktop
- C. Gas pressure regulator
- D. Up arrow. Regulator must be installed with arrow pointing up to cooktop bottom.

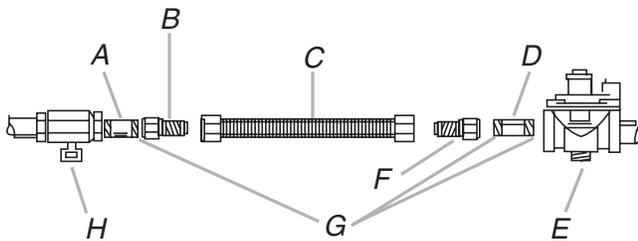
IMPORTANT: All connections must be wrench-tightened. Do not make connections to the gas regulator too tight. Making the connections too tight may crack the regulator and cause a gas leak. Do not allow the regulator to turn on the pipe when tightening fittings.

Use only pipe-joint compound made for use with Natural and LP gas.

Do not use TEFLON® tape. You will need to determine the fittings required depending on your installation.

Typical flexible connection

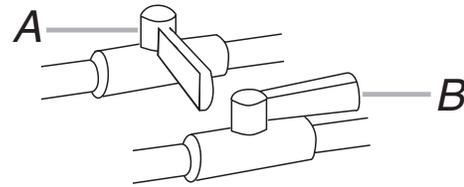
1. Apply pipe-joint compound made for use with LP gas to the smaller thread ends of the flexible connector adapters (see G in following illustration).
2. Attach 1 adapter and nipple to the gas pressure regulator and the other adapter and nipple to the gas shutoff valve. Tighten both adapters and nipples.
3. Use a 15/16" combination wrench and pliers to attach the flexible connector to the adapters. Check that connector is not kinked.



- | | |
|----------------------------|-----------------------------|
| A. $\frac{3}{8}$ " nipple | E. Gas pressure regulator |
| B. $\frac{3}{8}$ " adapter | F. $\frac{1}{2}$ " adapter |
| C. Flexible connector | G. Use pipe-joint compound. |
| D. $\frac{1}{2}$ " nipple | H. Manual gas shutoff valve |

Complete Connection

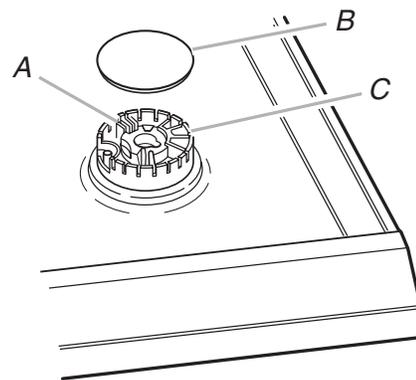
1. Open the manual shutoff valve in the gas supply line. The valve is open when the handle is parallel to the gas pipe.



A. Closed valve

B. Open valve

2. Test all connections by brushing on an approved noncorrosive leak-detection solution. Bubbles will show a leak. Correct any leak found.
3. Remove surface burner caps and grates from parts package. Align notches in burner caps with pins in burner base. Burner caps should be level when properly positioned. If burner caps are not properly positioned, surface burners will not light. Place burner grates over burners and caps.



- | |
|----------------------|
| A. Igniter electrode |
| B. Burner cap |
| C. Burner base |

⚠ WARNING



Electrical Shock Hazard

Plug into a grounded 3 prong outlet.

Do not remove ground prong.

Do not use an adapter.

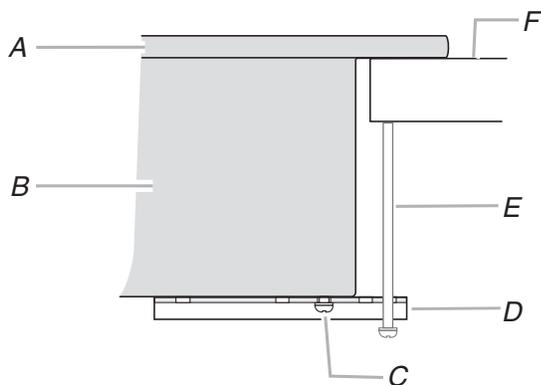
Do not use an extension cord.

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

4. Plug into a grounded 3 prong outlet.

ATTACH COOKTOP TO COUNTERTOP

NOTE: This section applies only if you are using clamping brackets.



- A. Glass cooktop
- B. Cooktop base
- C. Attachment screw
- D. Clamping bracket (extends far enough beyond cooktop base to allow installation of clamping screws)
- E. 2 1/2" (6.4 cm) clamping screw
- F. Countertop

1. Place the 2 1/2" (6.4 cm) clamping screws into the brackets.
2. Check that the cooktop is still level.
3. Use a flat-blade screwdriver to tighten the screws against the countertop. Do not overtighten.

COMPLETE INSTALLATION

Electronic Ignition System

Initial lighting and gas flame adjustments Surface burners use electronic igniters in place of standing pilots. When the cooktop control knob is pushed in and turned to the "LITE" position, the system creates a spark to light the burner. This sparking continues, as long as the control knob is pushed in and turned to "LITE."

Check Operation of Surface Burners

1. Push in and turn the surface burners control knobs to the "LITE" position.
The surface burner flame should light within 4 seconds. The first time a surface burner is lit it may take longer than 10 seconds to light because of air in the gas line.
2. Check the flame on HI for a blue color. It should be clean and soft in character. No yellow tip, blowing or lifting of flame should occur. Occasional orange flashes are normal and reflect different elements in the air or gas.
3. Repeat at LO position.
4. After verifying the proper burner operation, authorized service company for assistance

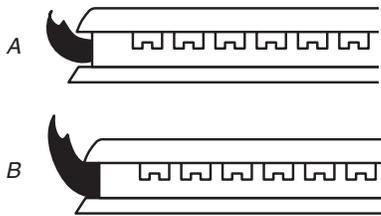
If burners do not light properly:

- Turn surface burner control knob to the OFF position.
- Check that the power supply cord is plugged in and the circuit breaker has not tripped or the fuse blown.
- Check that the gas shutoff valves are set to the "open" position.
- Check that burner caps are properly positioned on burner bases.

Recheck operation of surface burners. If a burner does not light at this point, turn control knobs to Off and contact your dealer or authorized service company for assistance

Adjust Flame Height

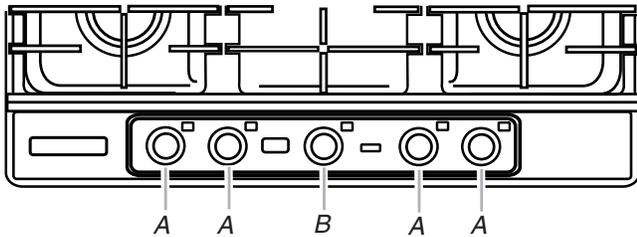
The surface burner "low" flame should be a steady blue flame approximately 1/4" (0.64 cm) high.



A. Low flame
B. High flame

If the "low" flame needs to be adjusted:

The flame can be adjusted using the adjustment screws underneath the control knob.

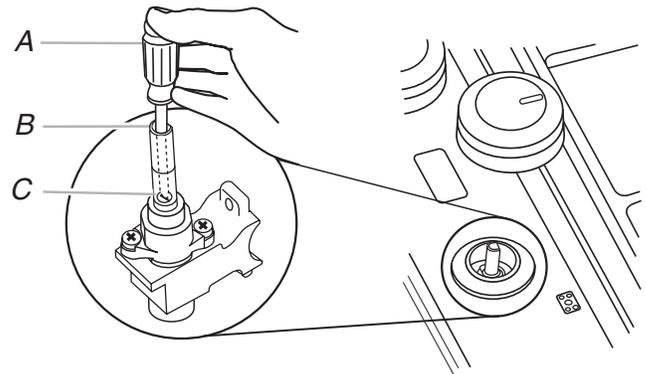


A. Single valve
B. Dual valve

Adjustment for Single Valve:

1. Set the burner flame to LO.
2. Remove the control knob.
3. Hold knob stem with a pair of pliers. Use a 3/32" (#0 [2 mm]) flat blade screwdriver to turn the screw located within the shaft of the control knob stem until the flame is the proper size.

Turn adjustment screw "C" to the right to reduce flame height, turn adjustment screw to the left to increase flame height.

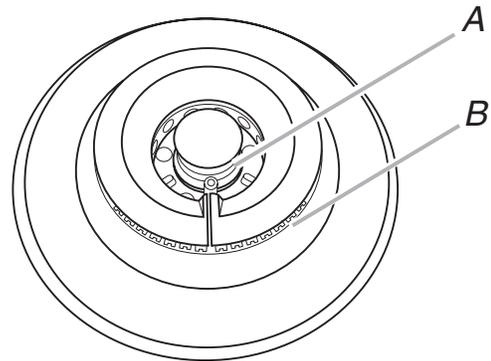


- A. 3/32" (#0 [2.0 mm]) flat blade screwdriver (screwdriver shaft must be a minimum of 1 1/8" (28.0 mm) long)
- B. Control knob stem opening
- C. Adjustment screw location

4. Replace the control knob.
5. Test the flame by turning the control from LO to HI, checking the flame at each setting

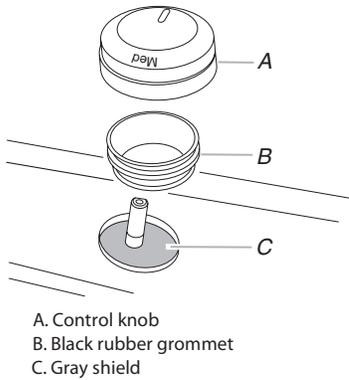
Adjustment for Dual Valve:

1. Set the inner crown flame to LO.



A. Inner crown
B. Outer crown

2. Remove the control knob.
3. Remove the black rubber grommet.
4. Using needle-nose pliers, remove the gray shield inside the burner valve opening.

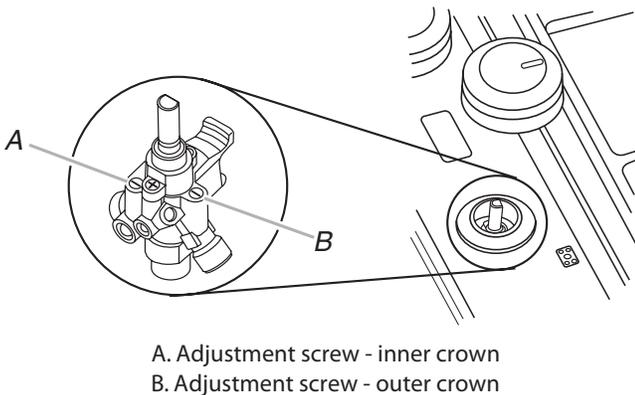


12. Replace the control knob.
13. Test the flame by turning the control from LO to HI, checking the flame at each setting.

If you need Assistance or Service:

Please reference the “Assistance or Service” section of the Use and Care Guide or contact the dealer from whom you purchased your cooktop.

5. Tighten screw “A” to reduce flame height. Loosen screw to increase flame height.



6. Replace the control knob.
7. Set the outer crown flame to LO.
8. Remove the control knob.
9. Tighten screw “B” to reduce flame height. Loosen screw to increase flame height.
10. Replace the gray shield. Use a screwdriver to help push the shield into place.
11. Replace the black rubber grommet.

LP GAS AND HIGH ALTITUDE CONVERSION INSTRUCTIONS

TOOLS AND PARTS

Gather the required tools and parts necessary for correct LP gas conversion.

Tools needed

- Flat-blade screwdriver
- T20 TORX®† screwdriver
- 3/32" (#0[2mm]) flat blade screwdriver (screwdriver shaft must be a minimum of 1 1/8" [28.0 mm] long)
- Phillips screwdriver
- Adjustable wrench
- 7 mm nut driver
- 10 mm wrench
- 15 mm wrench
- 17 mm wrench

Parts supplied

- LP orifice package (8287082)
- Conversion instructions (W10181980)
- Conversion label (8287070)

High Altitude Conversion

To convert the cooktop for elevations above 6,560ft (1999.5 m), order a High Altitude Conversion Kit.

- Part Number W10163349 - LP high altitude
- Part Number W10163727 - Natural gas high altitude

To order, see the "Assistance or Service" section of the Use and Care Guide.

†®TORX is a registered trademark of Textron Innovations Inc.

IMPORTANT: Gas conversions from Natural gas to LP gas must be done by a qualified installer. Before proceeding with conversion, shut off the gas supply to the cooktop prior to disconnecting the electrical power.

WARNING

This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life. The qualified service agency is responsible for the proper installation of this kit. The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with this kit.

In the State of Massachusetts, the following installation instructions apply:

- Installations and repairs must be performed by a qualified or licensed contractor, plumber, or gas fitter qualified or licensed by the State of Massachusetts.
- If using a ball valve, it shall be a T-handle type.
- A flexible gas connector, when used, must not exceed 3 feet.

⚠ WARNING



Explosion Hazard

Use a new CSA International approved gas supply line.

Install a shut-off valve.

Securely tighten all gas connections.

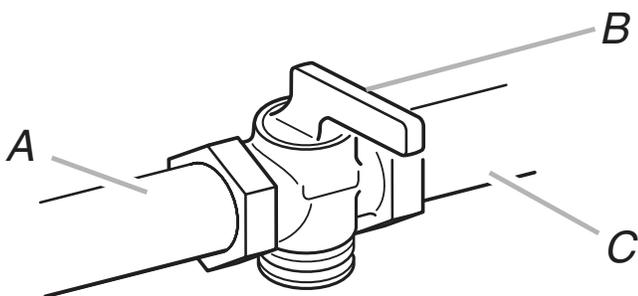
If connected to LP, have a qualified person make sure gas pressure does not exceed 14" (36 cm) water column.

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.

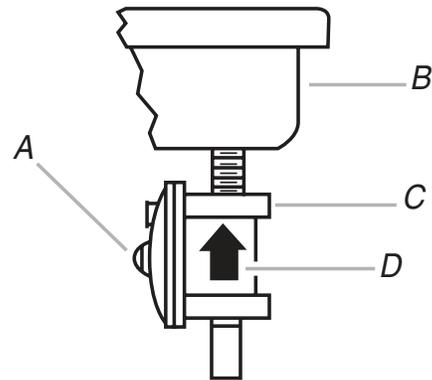
Convert from Natural Gas to LP Gas

1. Turn manual shutoff valve to the closed position.
2. Unplug cooktop or disconnect power.



- A. To cooktop
- B. Shutoff valve (closed position)
- C. Gas supply line

To Convert Gas Pressure Regulator



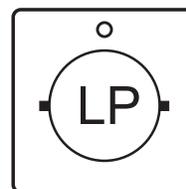
- A. Access cap
- B. Rear of cooktop
- C. Gas pressure regulator
- D. Gas flow

3. Determine the type of regulator you have:

Style 1: The cap has a slot and "NAT" printed on it.

Remove access cap by using a flat-blade screwdriver or coin, turning the access cap counterclockwise.

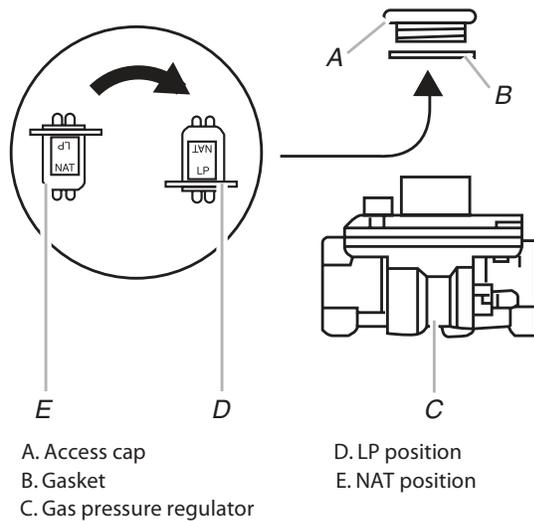
The gas pressure regulator has 2 settings that are stamped on either side of the cap. Turn the cap and reinstall into regulator with the stamp "LP" visible from the outside of the regulator.



Style 2: The cap does not have a slot and requires a wrench to be removed.

Remove the access cap by using a wrench, turning the access cap counterclockwise.

Remove spring retainer from the cap by pushing against the flat side of the spring retainer. Look at the spring retainer to locate the “NAT” or “LP” position. Turn over the spring retainer so the “LP” is showing on the bottom. Snap the spring retainer back into the cap. Reinstall the cap onto the regulator.



4. Test the gas pressure regulator and gas supply line.

The regulator must be checked at a minimum 1" (2.5 cm) water column above the set pressure. The inlet pressure to the regulator should be as follows for operation and checking the regulator setting:

LP Gas:

Minimum pressure 10" (25.4 cm) W.C.P.

Supply pressure 14" (35.5 cm) W.C.P.

Gas Supply Pressure Testing

Line pressure testing above ½ psi gauge (14" WCP)

The cooktop and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ psi (3.5 kPa).

Line pressure testing at ½ psi gauge (14" WCP) or lower

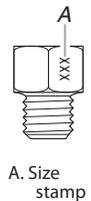
The cooktop must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psi (3.5 kPa).

5. If installed, remove the burner grates.

Use the following charts to match the correct gas orifice spud with the burner location and model being converted.

LP Gas Orifice Spud Chart

Burner Rating	Color	Stamp (A)	Size
5,000 BTU	White (no color)	066	0.66 mm
6,000 BTU	Green	074	0.74 mm
8,000 BTU	Yellow	083	0.83 mm
9,100 BTU	Black	089	0.89 mm
11,000 BTU	Orange	097	0.97 mm
12,000 BTU Outer Inner	White No color	099 6	0.99 mm 0.5*0.5 mm
14,000 BTU Outer Inner	Yellow No color	108 6	1.08 mm 0.5*0.5 mm
16,000 BTU Outer Inner	Orange No color	115 6	1.15 mm 0.5*0.5 mm



Burner Models

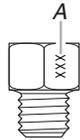
Model No.	Right front	Right rear	Center (outer)	Center (inner)	Left front	Left rear
KFGS306	089 Black	074 Green	099 White	6 No color	083 Yellow	066 White (no color)
KFGS366	089 Black	074 Green	108 Yellow	6 No color	089 Black	066 White (no color)
KFGU706	097 Orange	074 Green	099 White	6 No color	083 Yellow	066 White (no color)
KFGU766	089 Black	074 Green	115 Orange	6 No color	097 Orange	066 White (no color)

High Altitude Conversions

IMPORTANT: You must convert LP gas with LP gas high altitude or Natural gas with Natural gas high altitude. If you need to convert LP gas to Natural gas high altitude or Natural gas to LP gas high altitude you must convert the pressure regulator, for this you must follow steps 1, 2, and 3 of the respective conversion that you need.

LP Gas Orifice Spud Chart for High Altitude Conversion

Burner Rating	Stamp (A)	Size
5,000 BTU	062	0.62 mm
6,000 BTU	070	0.70 mm
8,000 BTU	079	0.79 mm
9,100 BTU	085	0.85 mm
11,000 BTU	092	0.92 mm
12,000 BTU Outer Inner	093 6	0.93 mm 0.5*0.5 mm
14,000 BTU Outer Inner	100 6	1.00 mm 0.5*0.5 mm
16,000 BTU Outer Inner	107 6	1.07 mm 0.5*0.5 mm

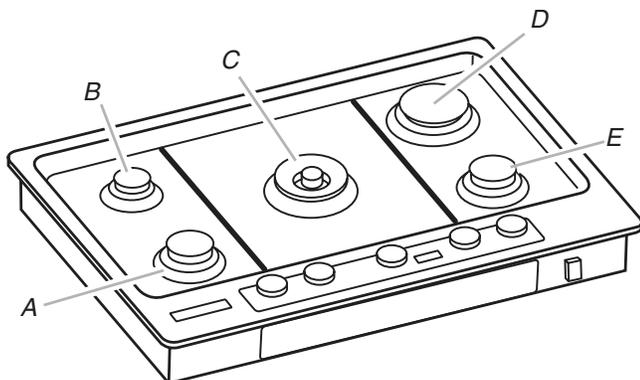


A. Size stamp

Burner Models

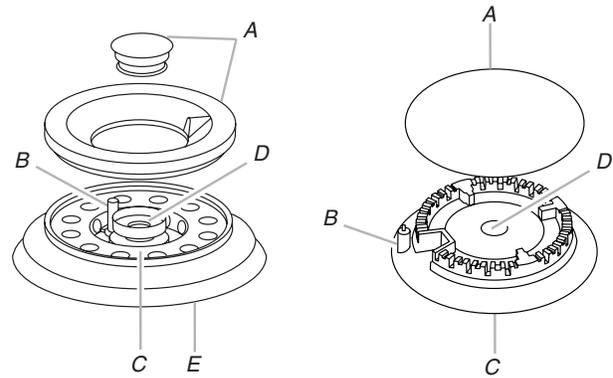
Model No.	Right front	Right rear	Center (outer)	Center (inner)	Left front	Left rear
KFGS306	085	070	093	6	079	062
KFGS366	085	070	100	6	085	062
KFGU706	092	070	093	6	079	062
KFGU766	085	070	107	6	092	062

Burner locations



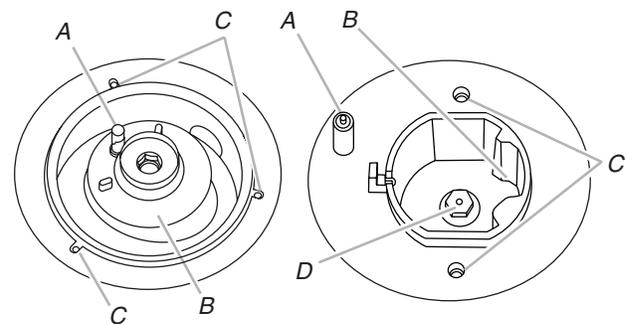
- A. Left front
- B. Left rear
- C. Center
- D. Right rear
- E. Right front

- Remove all burner caps and burner bases. If necessary, remove the burner ring.



- A. Burner cap
- B. Igniter electrode
- C. Burner base
- D. Gas tube opening
- E. Burner ring

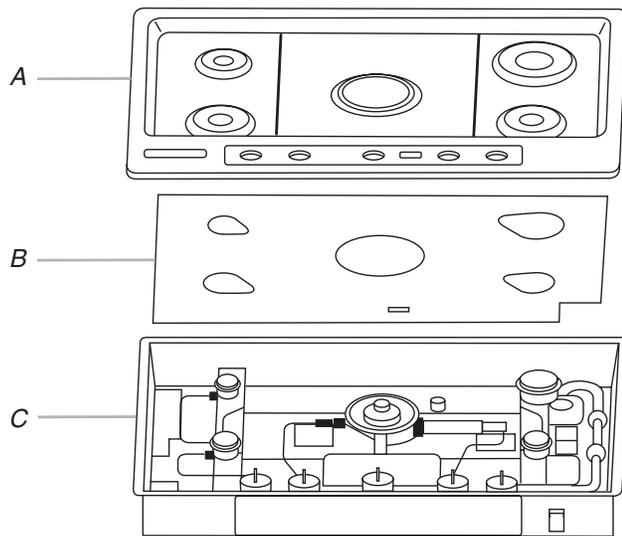
- Using a T20 TORX® screwdriver, remove the orifice holder screws (C).



- A. Igniter electrode
- B. Orifice holder
- C. Orifice holder screws
- D. Orifice spud

- On KFGU models only, lift the front part of the cooktop and unhook the wire harness to detach it from the glass control panel of the metal cooktop.

On all models, remove the metal cooktop and the sheet of insulation from the cooktop base.



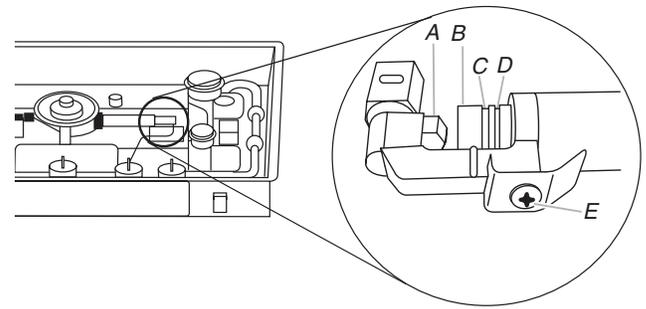
A. Metal cooktop
B. Sheet of insulation
C. Cooktop base

9. To Convert Right or Left Burners:

- Insert 7.0 mm nut driver down onto the gas orifice spud and remove by turning it counterclockwise and lifting out.
- Set gas orifice spud aside.
- Replace with correct LP gas orifice spud. See the LP Gas Orifice Spud Charts.

10. To Convert Center Burners:

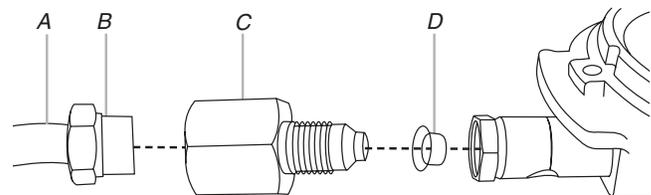
- Use 10.0 mm wrench to loosen and remove the orifice.
- Replace with correct LP gas orifice spud. See the LP Gas Orifice Spud Charts.
- Use Phillips screwdriver to loosen the venturi screw. Slide the brass venturi into the injector, stop at the second groove (C). Securely tighten the venturi screw.



A. Orifice
B. Venturi
C. Second Groove
(16.0 mm LP gas setting)

D. First groove (12.0 mm natural gas setting)
E. Venturi screw

- Use 15.0 mm wrench to loosen the nut securing the tube to the orifice pack. Remove the tube from the orifice pack.

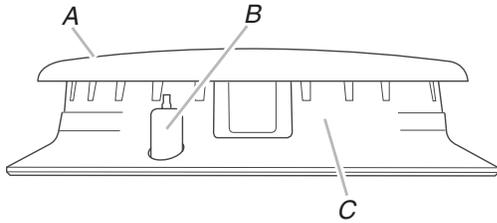


A. Tube
B. Attachment nut (15.0 mm)

C. Adapter nut (17.0 mm)
D. Orifice spud

- Use 17.0 mm wrench to loosen and remove the orifice pack.
 - Replace with correct LP gas orifice spud. See the LP Gas Orifice Spud Charts.
 - Replace adapter nut and secure with 17.0 mm wrench. Reattach tube and secure attachment nut with 15.0 mm wrench.
11. Place Natural gas orifice spuds in plastic parts bag for future use and keep with literature package.
 12. Replace sheet of insulation.
 13. On KFGU models only, reattach wire harness to the control panel on the cooktop glass.
 14. Replace the metal cooktop and tighten all the screws to secure cooktop to base.
 15. Replace burner bases and tighten all the orifice holder screws. Replace burner caps. If necessary, replace burner ring.

IMPORTANT: The igniter electrode is ceramic and could break during conversion. Be sure that the electrode comes through the hole in the burner head smoothly while tightening screws.



A. Burner cap
B. Electrode
C. Burner base

16. Open shutoff valve in the gas supply line. The valve is open when the handle is parallel to the gas pipe.
17. Plug in cooktop or reconnect power.
18. Adjust single and dual valve according to "Flame Height Adjustment" section.

REMEMBER: Once you have completed converting all the cooktop burners, test the cooktop for leaks by brushing on an approved noncorrosive leak-detection solution. Bubbles will show, indicating a leak. Correct any leaks found.

Convert from LP Gas to Natural Gas

1. Turn manual shutoff valve to the closed position.
2. Unplug cooktop or disconnect power.
3. Determine the type of regulator you have:

Style 1: The cap has a slot and "LP" printed on it.

Remove access cap by using a flat-blade screwdriver or coin, turning the access cap counterclockwise.

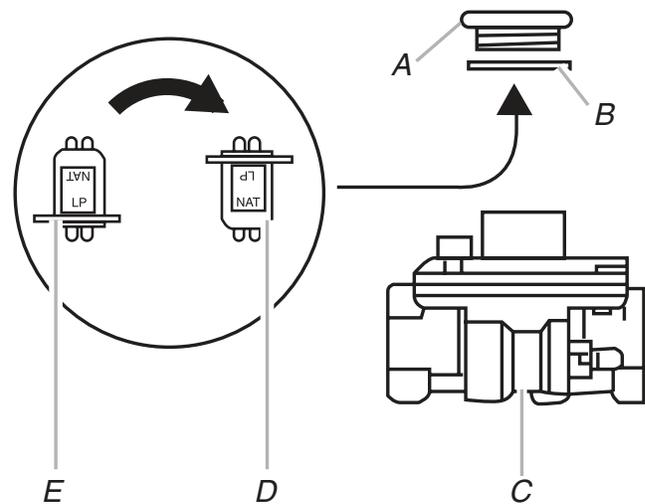
The gas pressure regulator has 2 settings which are stamped on either side of the cap. Turn the cap and reinstall into regulator with the stamp "NAT" visible from the outside of the regulator.



Style 2: The cap does not have a slot and requires a wrench to be removed.

Remove the access cap by using a wrench, turning the access cap counterclockwise.

Remove spring retainer from the cap by pushing against the flat side of the spring retainer. Look at the spring retainer to locate the "LP" or "NAT" position. Turn over the spring retainer so the "NAT" is showing on the bottom. Snap the spring retainer back into the cap. Reinstall the cap onto the regulator.



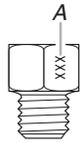
A. Access cap
B. Gasket
C. Gas pressure regulator
D. NAT position
E. LP position

4. If they are installed, remove the burner grates.

Use the following charts to match the correct gas orifice spud with the burner location and model being converted.

Natural Gas Orifice Spud Chart

Burner Rating	Stamp (A)	Size
6,000 BTU	110	1.10 mm
7,000 BTU	118	1.18 mm
9,100 BTU	134	1.34 mm
10,000 BTU	142	1.42 mm
12,000 BTU	155	1.55 mm
15,000 BTU Outer Inner	168 10	1.68 mm 0.5*0.82 mm
18,000 BTU Outer Inner	184 10	1.84 mm 0.5*0.82 mm
20,000 BTU Outer Inner	193 10	1.93 mm 0.5*0.82 mm



A. Size stamp

Burner Models

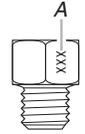
Model No.	Right front	Right rear	Center (outer)	Center (inner)	Left front	Left rear
KFGS306	142	118	168	10	134	110
KFGS366	142	118	184	10	142	110
KFGU706	155	118	168	10	134	110
KFGU766	142	118	193	10	155	110

High Altitude Conversions

IMPORTANT: You must convert LP gas with LP gas high altitude or Natural gas with Natural gas high altitude. If you need to convert LP gas to Natural gas high altitude or Natural gas to LP gas high altitude you must convert the pressure regulator, for this you must follow steps 1, 2, and 3 of the respective conversion that you need.

Natural Gas Orifice Spud Chart for High Altitude Conversion

Burner Rating	Stamp (A)	Size
6,000 BTU	105	1.05 mm
7,000 BTU	118	1.18 mm
9,100 BTU	128	1.28 mm
10,000 BTU	142	1.42 mm
12,000 BTU	148	1.48 mm
15,000 BTU Outer Inner	153 10	1.53 mm 0.5*0.82 mm*
18,000 BTU Outer Inner	173 10	1.73 mm 0.5*0.82 mm*
20,000 BTU Outer Inner	183 10	1.83 mm 0.5*0.82 mm*

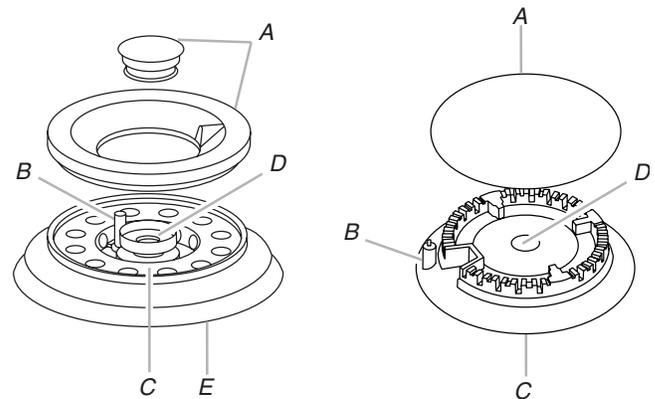


A. Size stamp

Burner Models

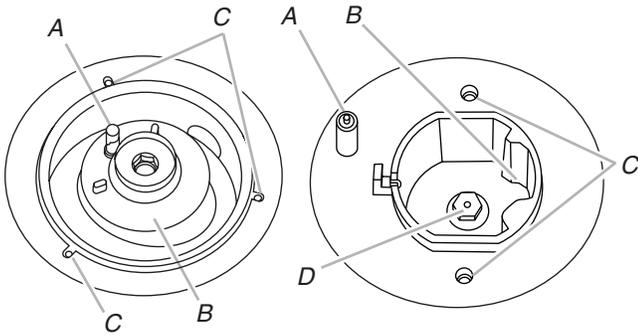
Model No.	Right front	Right rear	Center (outer)	Center (inner)	Left front	Left rear
KFGS306	142	118	153	10	128	105
KFGS366	142	118	173	10	142	105
KFGU706	148	118	153	10	128	105
KFGU766	142	118	183	10	148	105

- Remove all burner caps and burner bases. If necessary, remove the burner ring.



- A. Burner cap
- B. Igniter electrode
- C. Burner base
- D. Gas tube opening
- E. Burner ring

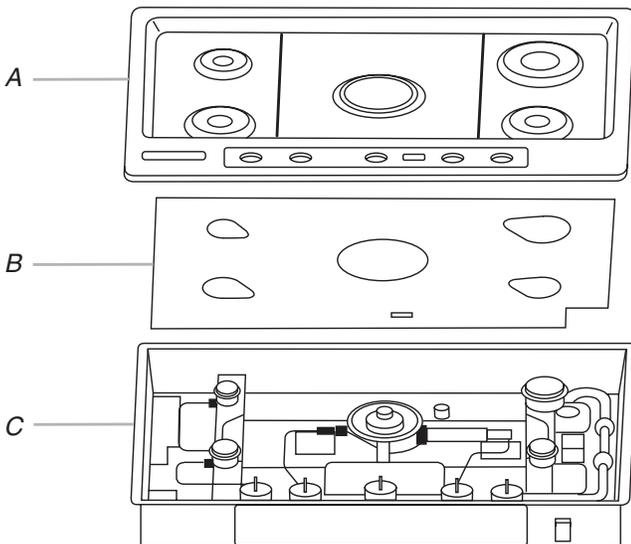
6. Using a T20 TORX® screwdriver, remove the orifice holder screws (C).



A. Igniter electrode
B. Orifice spud
C. Orifice holder screws
D. Orifice holder

7. On KFGU models only, lift the front part of the cooktop and unhook the wire harness to detach it from the glass control panel of the metal cooktop.

On all models, remove the metal cooktop and the sheet of insulation from the cooktop base.



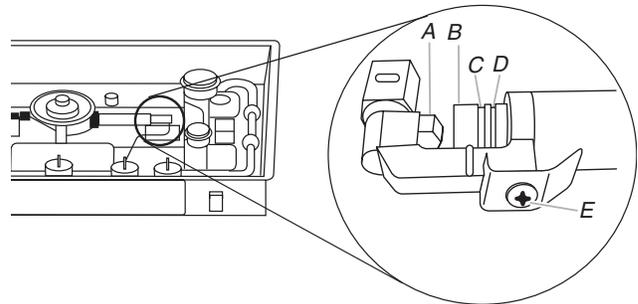
A. Metal cooktop
B. Sheet of insulation
C. Cooktop base

8. To Convert Right or Left Burners:

- Insert 7.0 mm nut driver down onto the gas orifice spud and remove by turning it counterclockwise and lifting out.
- Set gas orifice spud aside.
- Replace with correct Natural gas orifice spud. See the Natural Gas Orifice Spud Charts.

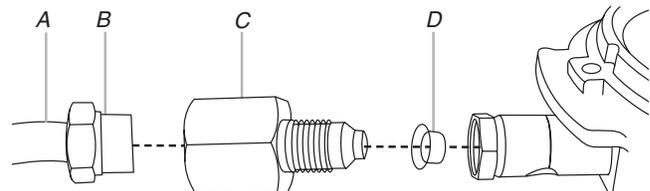
9. To Convert Center Burners:

- Use 10.0 mm wrench to loosen and remove the orifice.
- Replace with correct Natural gas orifice spud. See the Natural Gas Orifice Spud Charts.
- Use Phillips screwdriver to loosen the venturi screw. Slide the brass venturi into the injector, stop at the first groove (D) for Natural gas conversions. Securely tighten the venturi screw.



A. Orifice
B. Venturi
C. Second Groove (16.0 mm LP gas setting)
D. First groove (12.0 mm Natural gas setting)
E. Venturi screw

- Use 15.0 mm wrench to loosen the nut securing the tube to the orifice pack. Remove the tube from the orifice pack.

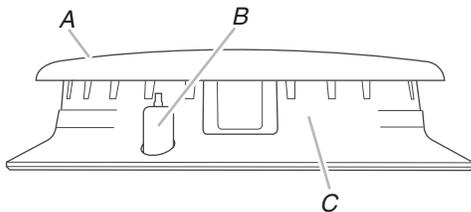


A. Tube
B. Attachment nut (15.0 mm)
C. Adapter nut (17.0 mm)
D. Orifice spud

- Use 17.0 mm wrench to loosen and remove the orifice pack.

- Replace with correct Natural gas orifice spud. See Natural Gas Orifice Spud Charts.
 - Replace adapter nut and secure with 17.0 mm wrench. Reattach tube and secure attachment nut with 15.0 mm wrench.
10. Place LP gas orifice spuds in plastic parts bag for future use and keep with literature package.
 11. Replace sheet of insulation
 12. On KFGU models only, reattach wire harness to the control panel on the cooktop glass.
 13. Replace the metal cooktop and tighten all the screws to secure cooktop to base.
 14. Replace burner bases and tighten all the orifice screws. Replace burner caps. If necessary, replace burner ring.

IMPORTANT: The igniter electrode is ceramic and could break during conversion. Be sure that the electrode comes through the hole in the burner head smoothly while tightening screws.



A. Burner cap
B. Electrode
C. Burner base

15. Open shutoff valve in the gas supply line. The valve is open when the handle is parallel to the gas pipe.
16. Plug in cooktop or reconnect power.
17. Adjust single and dual valve according to "Flame Height Adjustment" section.

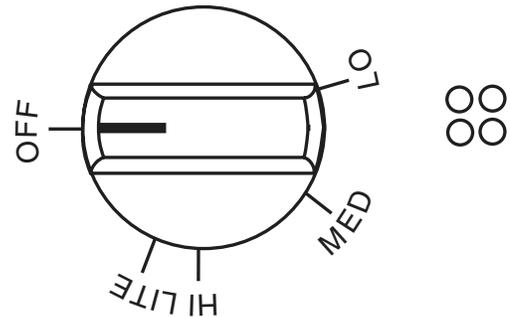
REMEMBER: Once you have completed converting all the cooktop burners, test the cooktop for leaks by brushing on an approved noncorrosive leak-detection solution. Bubbles will show, indicating a leak. Correct any leaks found.

Lighting the Electronic Igniters

The cooktop burners use electronic igniters in place of standing pilots. When the cooktop control knob is pushed, the system creates a spark to light the burner. This sparking continues until the control knob is turned to the desired setting.

To Check Operation of the Cooktop Burners:

1. Push in and turn knobs to the LITE position. The cooktop burner flame should light within 4 seconds. The first time a burner is lit, it may take longer than 4 seconds to light because of air in the gas line. Do not leave the knob in the LITE position after burner lights.



2. If burners do not light properly, turn the control knob to the OFF position. Make sure the burner caps are in the proper position.
3. Check that the power supply cord is plugged in. Check that the circuit breaker has not tripped or the household fuse has not blown.
4. Check that the shutoff valve is in the open position.
5. Check burner operation again.

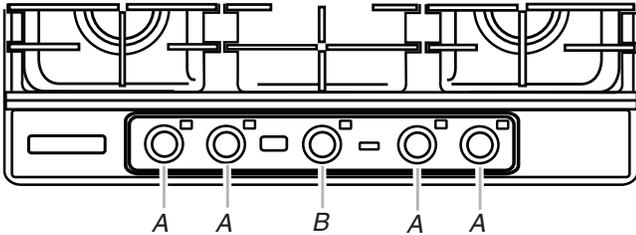
If one or all of the burners do not light at this point, see "Assistance or Service" section in the Use and Care Guide.

Flame Height Adjustment

Each burner flame has been factory set to the lowest position available to provide reliable and constant reignition of the burner; however, each burner can be adjusted.

To Adjust:

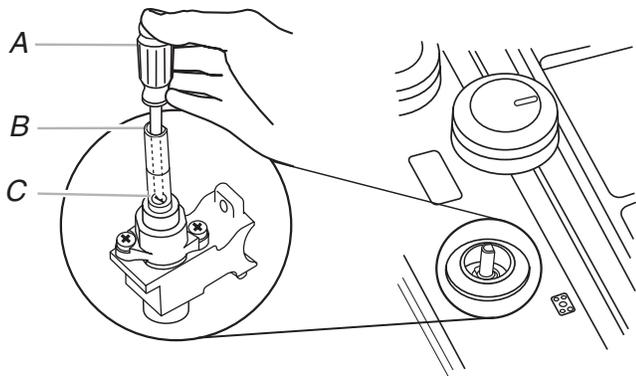
The flame can be adjusted using the adjustment screws underneath the control knob.



A. Single valve
B. Dual valve

Adjustment for Single Valve

1. Set the burner flame to LO.
2. Remove the control knob.
3. Hold knob stem with a pair of pliers. Use a $\frac{3}{32}$ " (#0 [2.0 mm]) flat blade screwdriver to turn the screw located within the shaft of the control knob stem until the flame is the proper size.



- A. $\frac{3}{32}$ " (#0 [2.0 mm]) flat blade screwdriver (screwdriver shaft must be a minimum of $1\frac{1}{8}$ " (28.0 mm) long)
B. Control knob stem opening
C. Adjustment screw location

4. For LP gas conversion:

Completely tighten screw "C" to set the minimum flame height.

For Natural gas conversion:

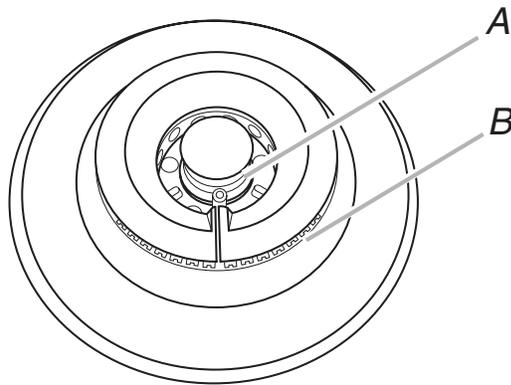
Tighten screw "C" to reduce flame height. Loosen screw to increase flame height. See "Complete Burner Adjustment" section.

5. Replace the control knob.
6. Test the flame by turning the control from LO to HI, checking the flame at each setting.

Adjustment for Dual Valve

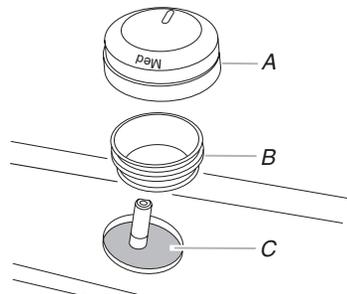
To Adjust Inner Crown Flame:

1. Set the inner crown flame to LO.



A. Inner crown
B. Outer crown

2. Remove the control knob.
3. Remove the black rubber grommet.
4. Using needle-nose pliers, remove the gray shield inside the burner valve opening.



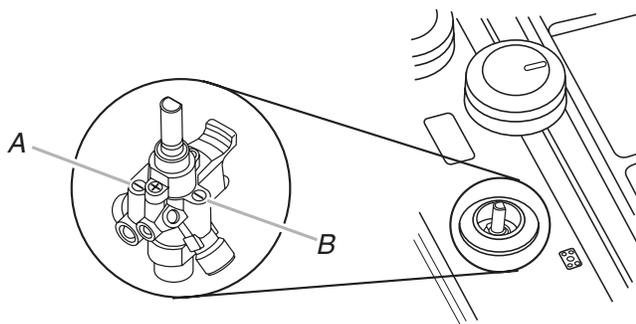
A. Control knob
B. Black rubber grommet
C. Gray shield

5. **For LP gas conversion:**

Completely tighten screw "A" to set the minimum flame height.

For Natural gas conversion:

Tighten screw "A" to reduce flame height. Loosen screw to increase flame height. See "Complete Burner Adjustment" section.



A. Inner crown adjustment screw
B. Outer crown adjustment screw

6. Replace the control knob.

To Adjust Outer Crown Flame:

1. Set the outer crown flame to LO.
2. Remove the control knob.
3. For LP gas conversion:
Completely tighten screw "B" to set the minimum flame height.

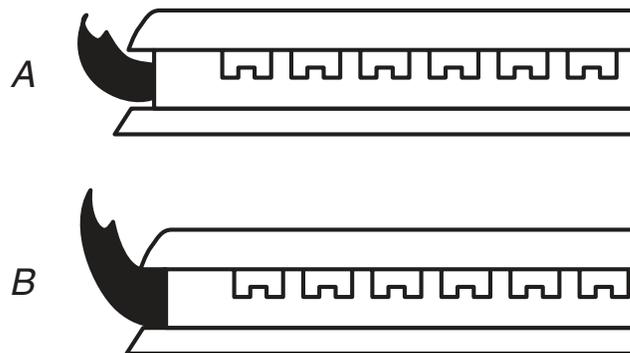
For Natural gas conversion:

Tighten screw "B" to reduce flame height. Loosen screw to increase flame height. See "Complete Burner Adjustment" section.

4. Replace the gray shield. Use a screwdriver to help push the shield into place.
5. Replace the black rubber grommet.
6. Replace the control knob.
7. Test the flame by turning the control from LO to HI, checking the flame at each setting.

Complete Burner Adjustment

1. Check burner flame(s) for proper size and shape. The cooktop "low" burner flame should be a steady blue flame approximately 1/4" (0.64 cm) high.



A. Low flame
B. High flame

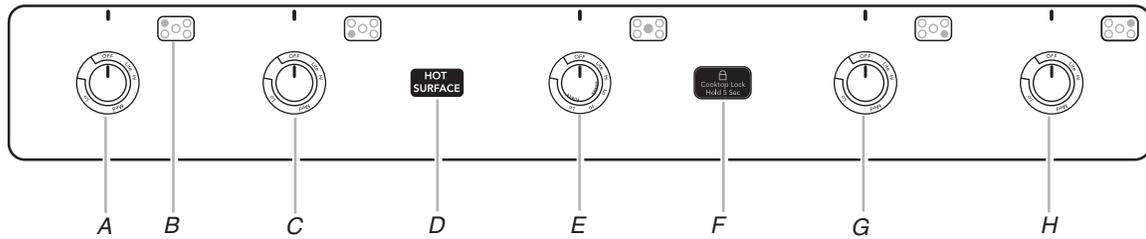
2. Completely fill out the conversion label and attach label to bottom of the cooktop next to the rating tag. Do not cover the rating tag with the conversion label.
3. Save the orifices removed from the cooktop along with these instructions for future reference.

Read "Sealed Surface Burners" section in the Use and Care Guide supplied with your cooktop.

— NOTES —

PRODUCT OPERATION

Control Panel (Glass)

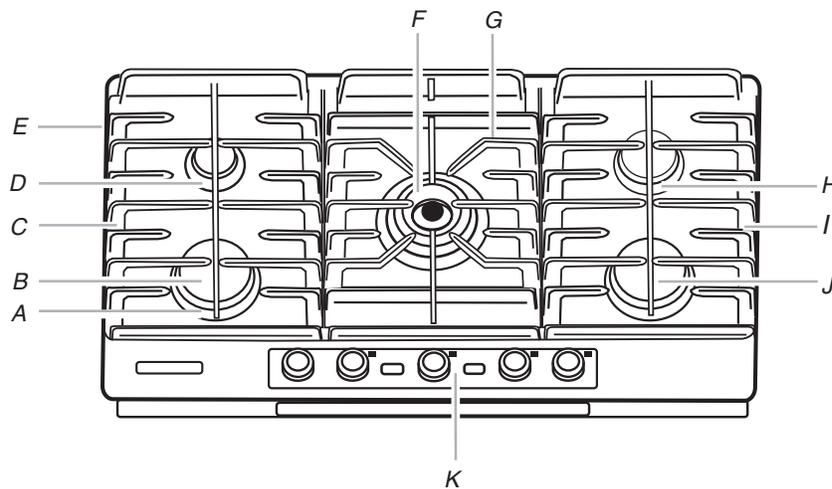


A. Left rear burner control knob
B. Surface burner locator
C. Left front burner control knob

D. Hot surface indicator
E. Center burner control knob
F. Control lock keypad and indicator light

G. Right front burner control knob
H. Right rear burner control knob

Cooktop



A. 12,000 Btu/h burner on 36" (91.4 cm) models
9,100 Btu/h burner on 30" (76.2 cm) models
B. Surface burner cap
C. Left surface burner grate
D. 6,000 Btu/h burner

E. Model and serial number plate (under cooktop)
F. 20,000 Btu/h burner on 36" (91.4 cm) models
15,000 Btu/h burner on 30" (76.2 cm) models
G. Center grate
H. 7,000 Btu/h burner

I. Right surface burner grate
J. 10,000 Btu/h burner on 36" (91.4 cm) models
12,000 Btu/h burner on 30" (76.2 cm) models
K. Control panel

Re-Ignition Features

During the cooking cycle, if one or more burners power off due to external causes (such as water spillage, wind, etc.), The ignition system will turn on to re-ignite the flame. When the flame comes back on, the system will stop sparking. Sparking may also occasionally occur when using the low setting on a burner.

If the flame does not recover within 4 seconds, the cooktop will lock. The Cooktop Lock indicator light will turn on and a long beep will sound.

To unlock the cooktop, turn all control knobs to the Off position, the Cooktop Lock indicator light will turn off. Before restarting, check that the burners are clean. See "Sealed Surfaces Burners" section. You may then continue cooking.

Cooktop Lock

The Cooktop Lock helps to avoid unintended use of the surface burners. If a control knob is turned to Lite when the Cooktop Lock is on, you will hear clicking and you may see the igniter sparking, but the burner will not light.

To activate:

Turn off all burners and touch the lock key for 3 seconds. When the Cooktop Lock activates. The Cooktop Lock Indicator Light will turn on and 1 long beep will sound.

To deactivate:

Touch the lock key for 3 seconds, the indicator light will turn off and 1 long beep will sound.

Tones

Tones are audible signals, indicating the following:

One Long Beep

- Activation/deactivation of the Cooktop Lock function

Three Short Beeps

- Invalid operation - attempting to lock or unlock cooktop with 1 or more burners are on.

Hot Surface Indicator Light

The Hot Surface Indicator Light is located between the left front and center control knobs. The Hot Surface Indicator Light will glow as long as any surface cooking area is too hot to touch, even after the surface cooking area(s) is turn off. If the cooktop is on when a power failure occurs, the Hot Surface Indicator Lights will remain on after the power is restored to the cooktop. They will remain on until the cooktop has cooled completely.

After a power failure, when the power failure is restored the Hot Surface Indicator Light can stay on for up to 30 minutes

Times when this is most likely to occur:

- After the cooktop is first installed.
- After a power failure.
- After a power failure while the cooktop is still cooling (30 to 40 minutes after cooking).
- Any time power is disconnected from the cooktop.

Power Failure

Cooktop will not operate during a power failure. (Models KFGU Only)

To Light:

1. Push in and turn knob counterclockwise to LITE. All surface burners will click. Only the burner with the control knob turned to Lite will produce a flame.
2. Turn knob to anywhere between HI and LO. Use the following chart as a guide when setting heat levels.

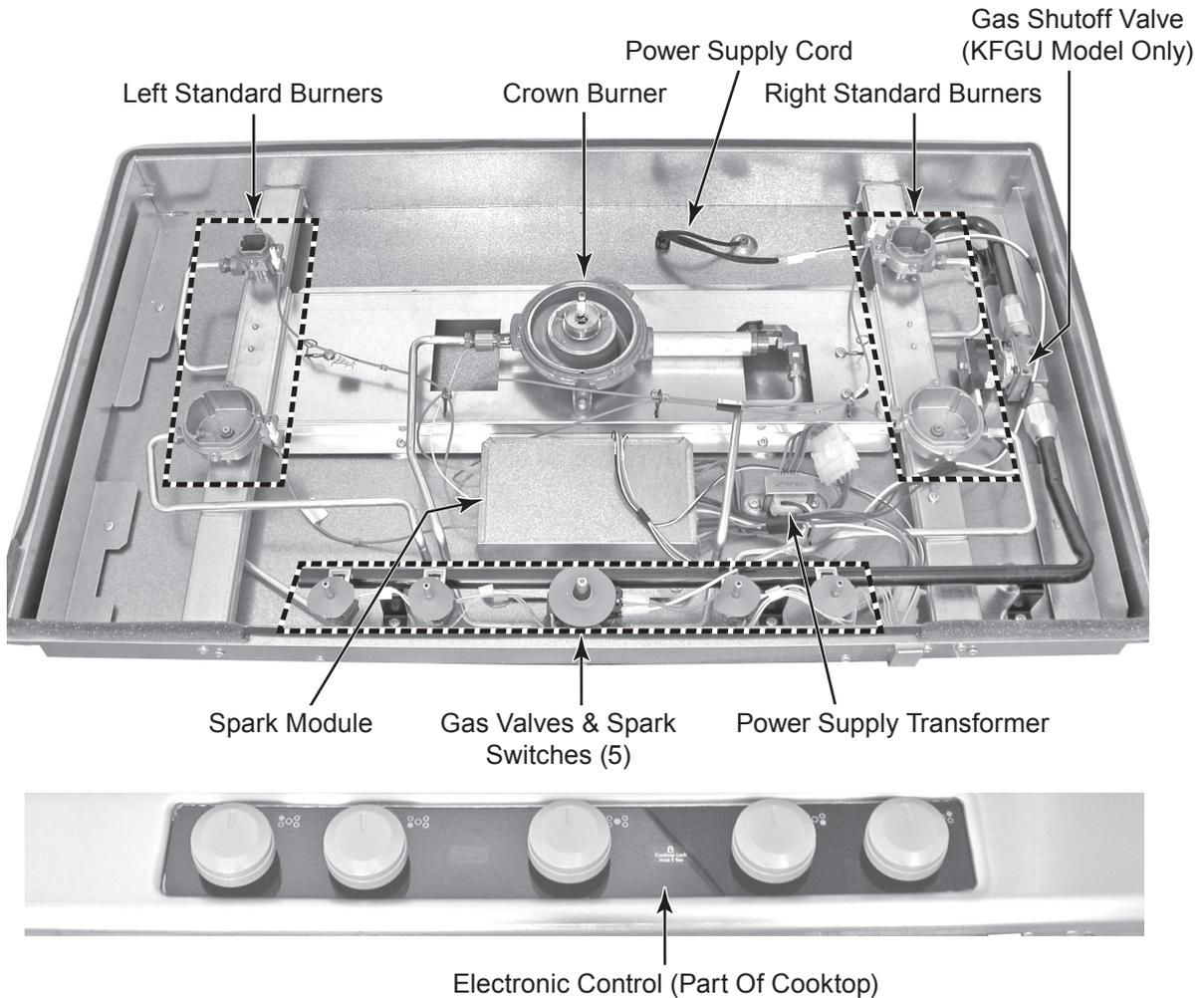
SETTING	RECOMMENDED USE
Lite	■ Light the burner.
Hi	■ Start food cooking. ■ Bring liquid to a boil.
Medium Between Hi and Lo	■ Fry or sauté foods. ■ Maintain a slow boil. ■ Cook soups, sauces and gravies. ■ Stew or steam foods.
Simmer	■ Simmer
Lo	■ Keep food warm.

REMEMBER: When cooktop is in use, the entire cooktop area may become hot.

COMPONENT ACCESS

This section instructs you on how to service each component inside the KitchenAid Flush-Mount Gas Cooktop. The components and their locations are shown below.

COMPONENT LOCATIONS



REMOVING THE COOKTOP

⚠ WARNING



Electrical Shock Hazard

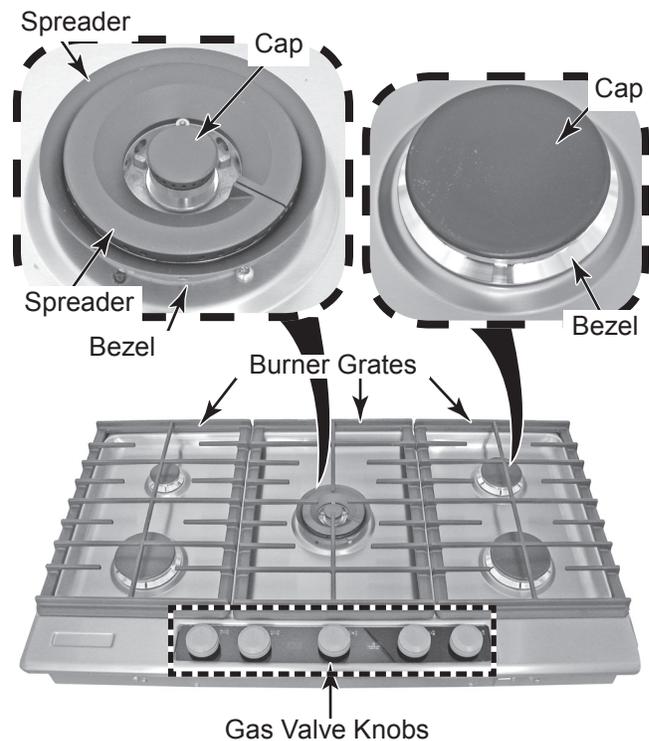
Disconnect power before servicing.

Replace all parts and panels before operating.

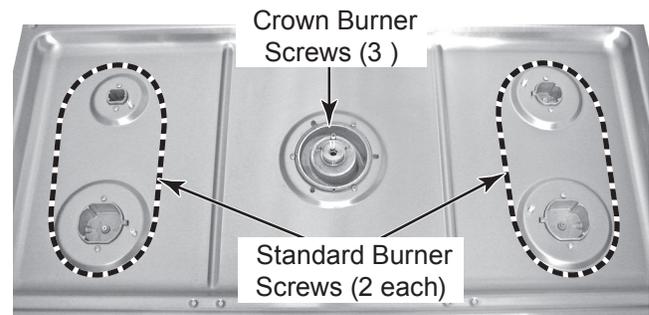
Failure to do so can result in death or electrical shock.

NOTE: The electronic control is part of the cooktop and cannot be serviced separately.

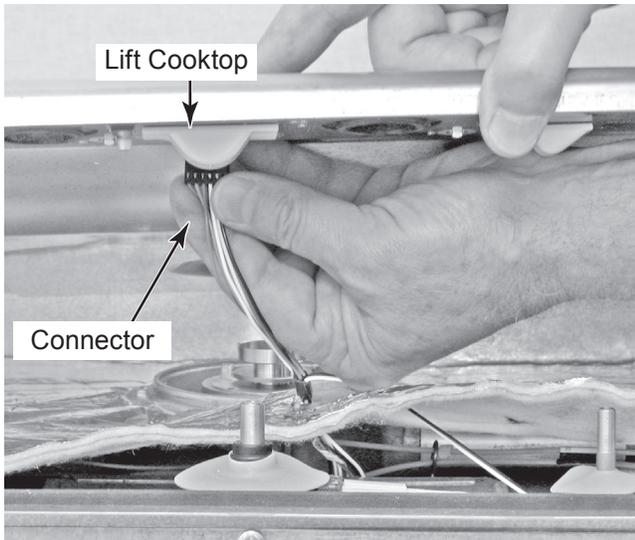
1. Turn manual gas line shutoff valve to the closed position.
2. Unplug cooktop or disconnect power.
3. Remove the burner grates from the cooktop.
4. Pull the knobs off the gas valves.
5. Remove the burner caps and bezels from the standard burner bases.
6. Remove the components from the Crown burner.



7. Remove the three T-20 screws from the crown burner base and the two screws from each of the standard burner bases.



8. Lift the front of the cooktop just high enough to access the electronic control connector, and pull the wire connector off the connector pins. (KFGU models only)



9. Lift the cooktop off the burner box and remove it.

REMOVING THE SPARK SWITCHES, AND THE STANDARD OR CROWN BURNER GAS VALVES

⚠ WARNING



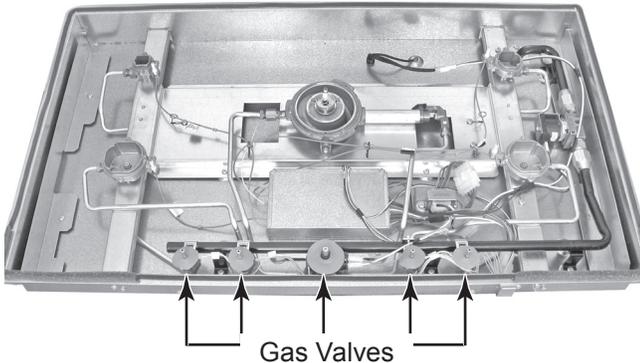
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

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

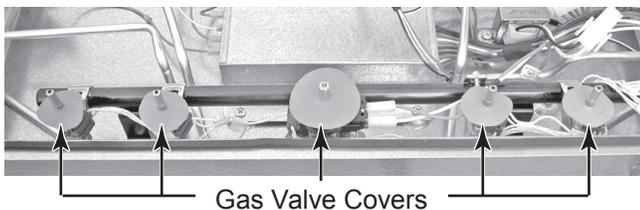
1. Unplug cooktop or disconnect power.
2. Remove the cooktop (see page 4-2 for the procedure).



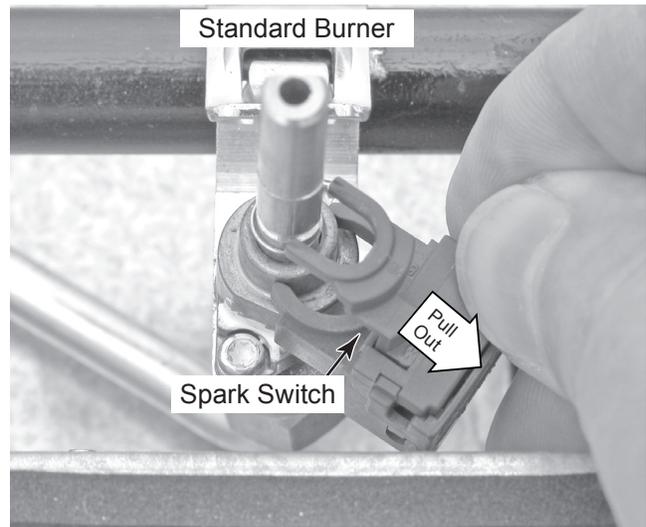
NOTE: The spark switches are serviced as an assembly and cannot be serviced separately.

3. To remove the spark switches:

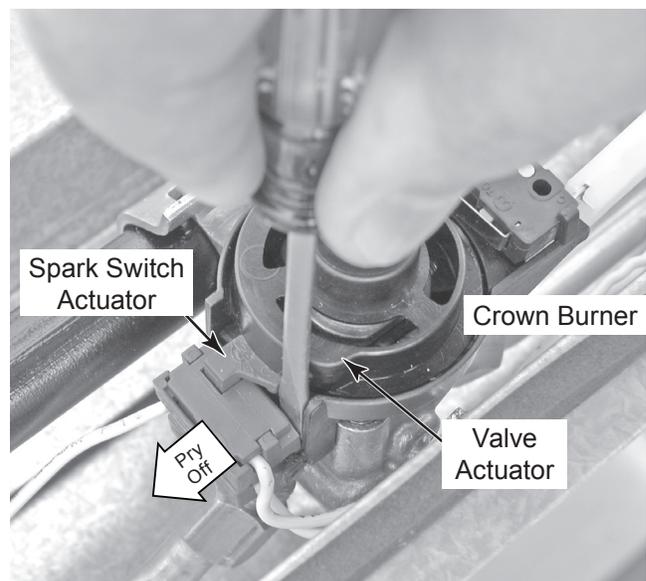
- a) Remove the rubber covers from each of the gas valves.



- b) Pull the spark switches off each of the standard gas valves. Pull the switches straight out from the valves to unclip and remove them.

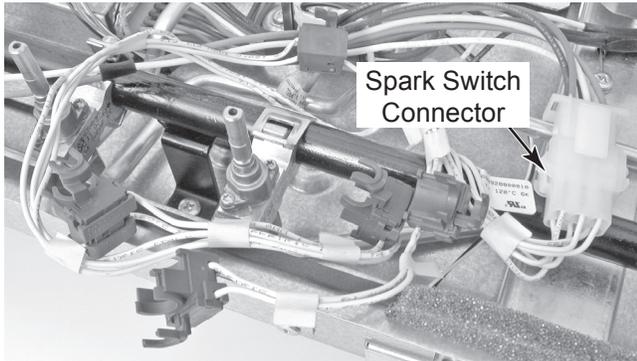


- c) To remove the spark switch on the (center) Crown burner, use a small-blade screwdriver, and pry the switch off the valve. **NOTE:** When you reinstall the spark switch on the Crown burner, press down on the spark switch actuator so that it fits under the valve actuator.

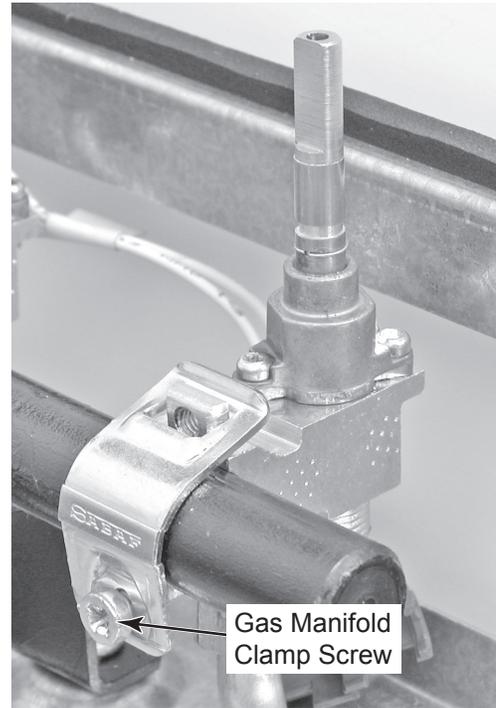


Continued on the next page.

- d) Unlatch and disconnect the main wire connector from the spark switches and remove the switches.

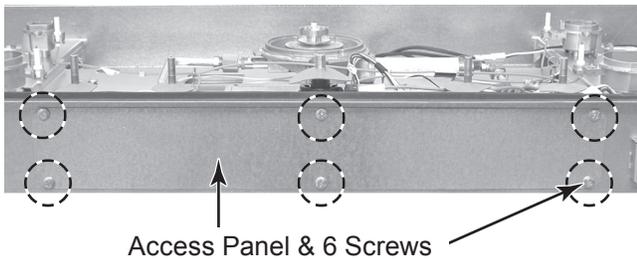


- d) Remove the screw from the gas manifold clamp and remove the gas valve.



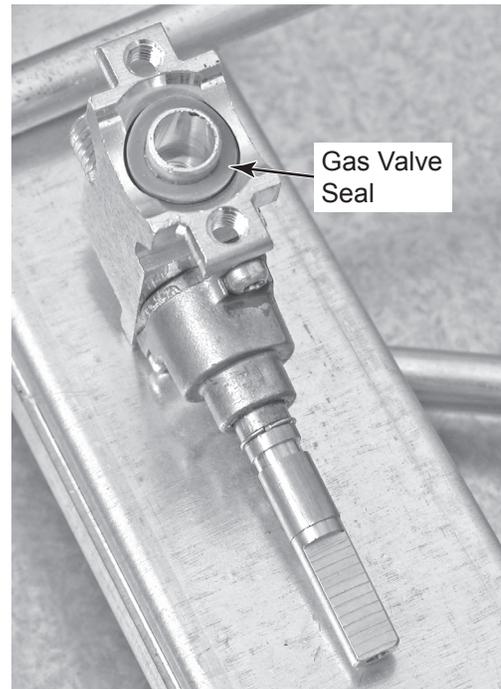
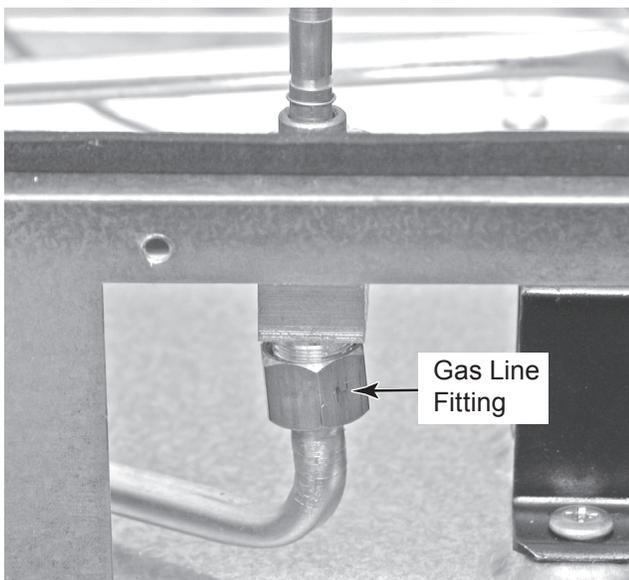
4. To remove a standard gas valve:

- a) Remove the spark switch from the valve you are accessing (see step 3).
b) Remove the six screws from the front burner box access panel and remove the panel.



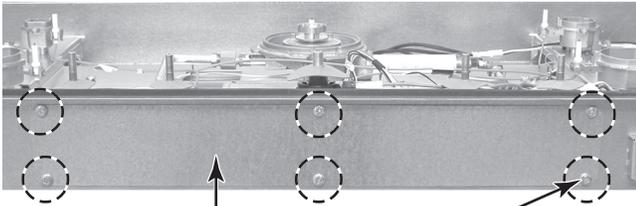
- e) Check the rubber seal on the gas valve stem and make sure that it is not cracked, or torn. If so, replace the seal.

- c) Disconnect the 1/2" gas outlet line fitting from the gas valve.



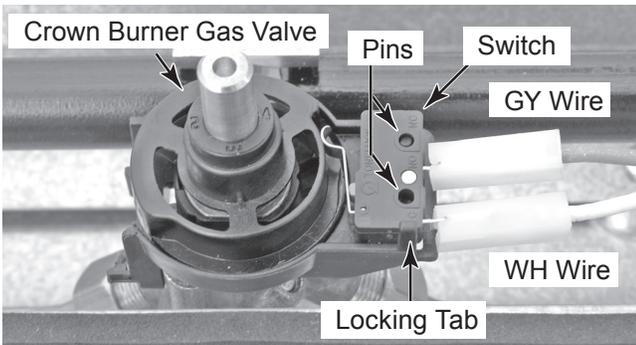
5. **To remove the Crown burner gas valve:**

- a) Remove the spark switch from the Crown burner gas valve (see step 3c).
- b) Remove the six screws from the front burner box access panel and remove the panel.

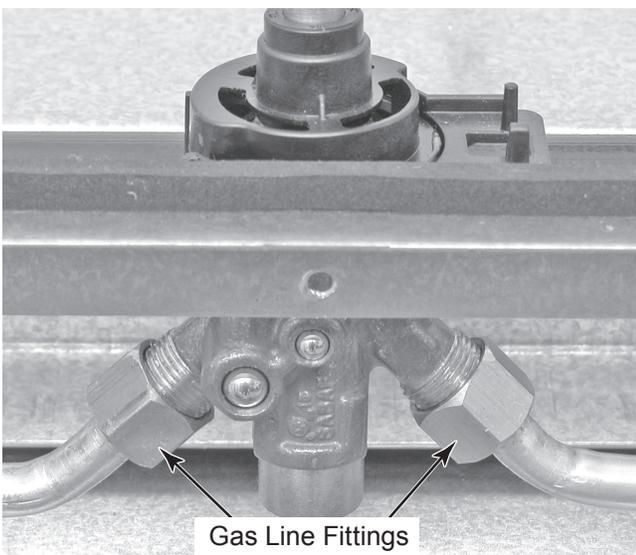


Access Panel & 6 Screws

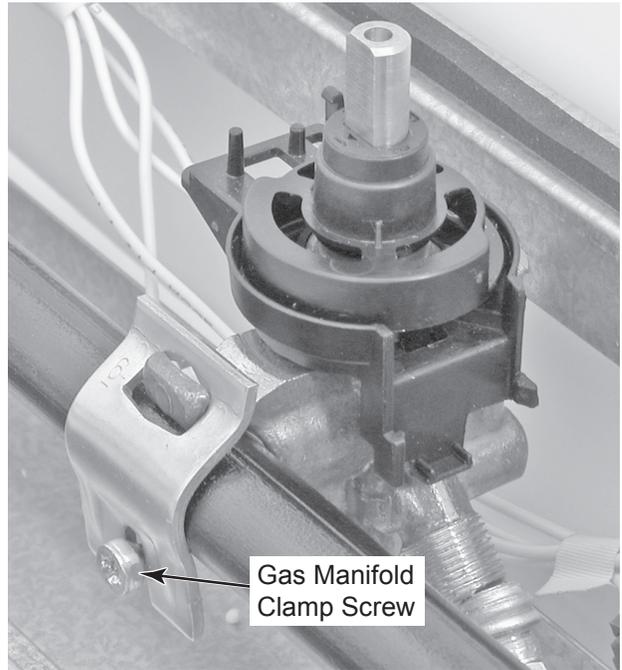
- c) Disconnect the two wire connectors from the from the switch terminals on the Crown burner gas valve.
- d) Push the locking tab and lift the switch off the Crown burner gas valve holder pins.



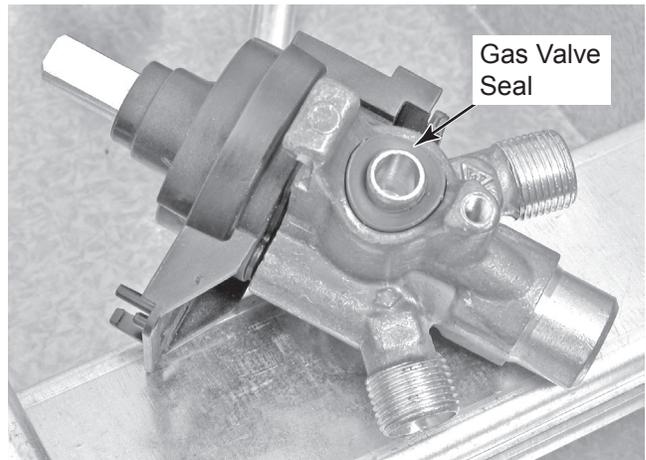
- e) Disconnect the two 1/2" gas line fittings from the gas valve.



- f) Remove the screw from the gas manifold clamp and remove the Crown burner gas valve.



- g) Check the rubber seal on the Crown burner gas valve stem and make sure that it is not cracked, or torn. If so, replace the seal.



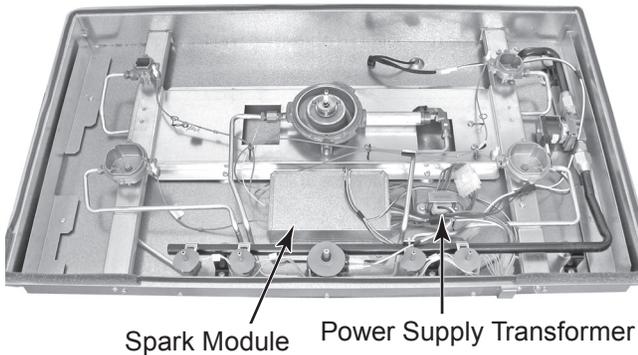
REMOVING THE POWER SUPPLY TRANSFORMER AND THE SPARK MODULE

⚠ WARNING

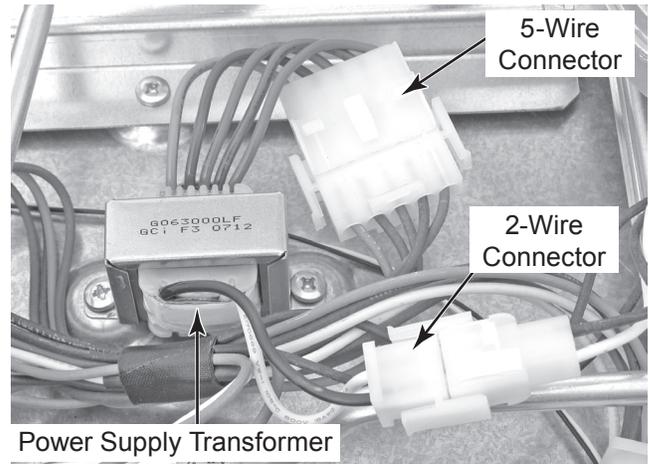


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

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

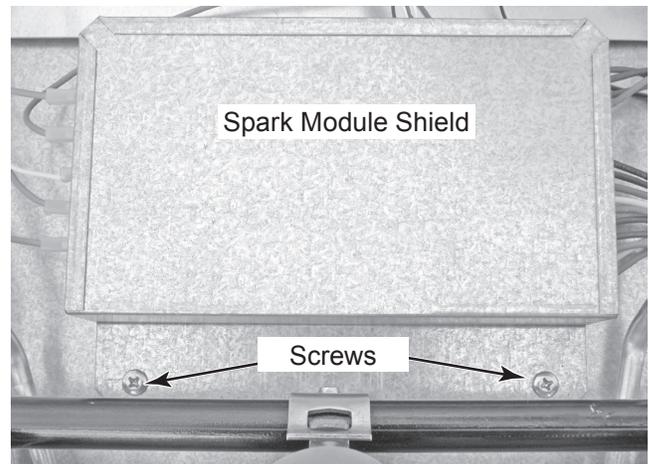


3. **To remove the power supply transformer:**
 - a) Unlatch and disconnect the 2-wire and 5-wire connectors from the transformer (see the top right photo).
 - b) Remove the two screws from the transformer and remove it.

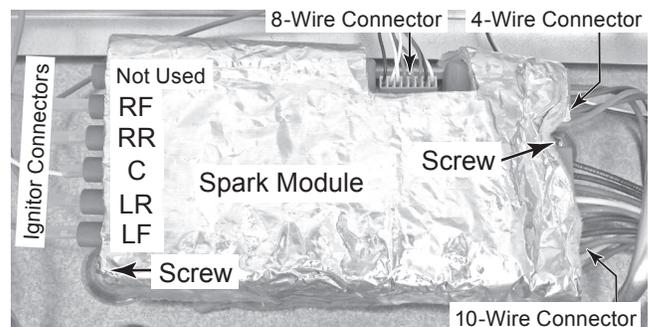


4. To remove the spark module:

- a) Remove the two screws from the shield and remove the shield.



- b) Disconnect the burner ignitor wire connectors, and the 8-, 4-, and 10-wire connectors from the spark module terminals.
- c) Remove the two screws from the spark module and remove the module.



REMOVING THE GAS SHUTOFF VALVE

⚠ WARNING



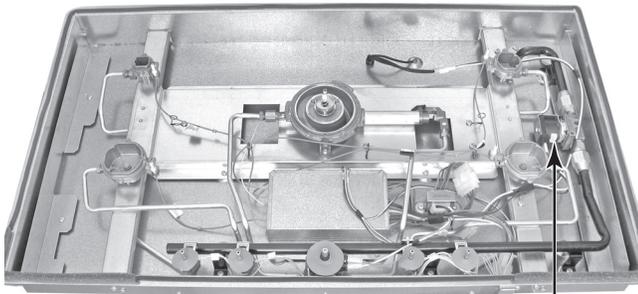
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

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

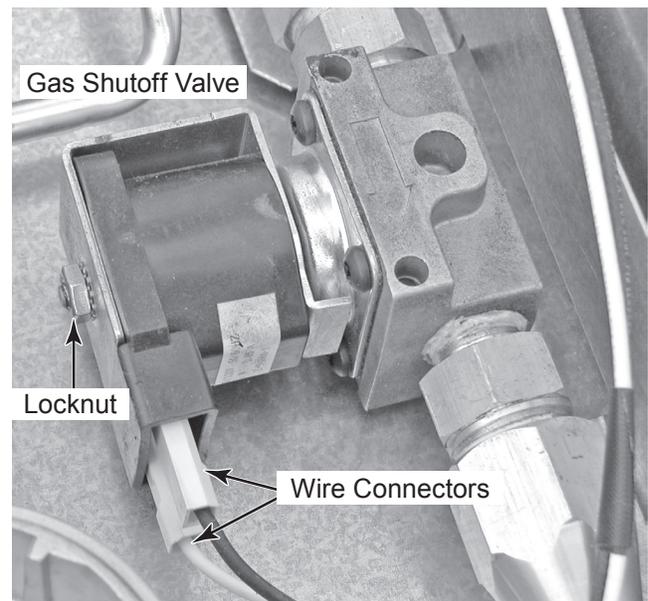
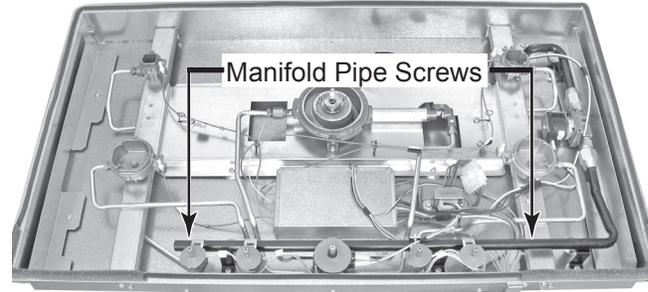
1. Unplug cooktop or disconnect power.
2. Remove the cooktop (see page 4-2 for the procedure).



Gas Shutoff Valve

3. Disconnect the two wire connectors from the gas shutoff valve terminals (see the top right photo).
4. Remove the manifold pipe. (The gas shutoff valve is serviced with the manifold pipe) (see page 4-11 removing standard burner from cooktop for the procedure).

5. Remove the burner assembly then 4 screws securing manifold pipe.



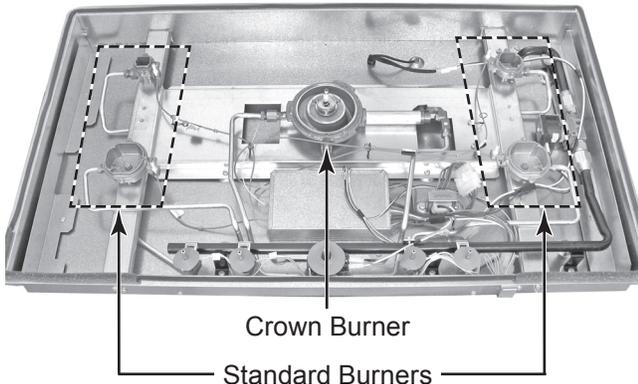
REMOVING A SPARK IGNITOR FROM STANDARD OR CROWN BURNER

⚠ WARNING

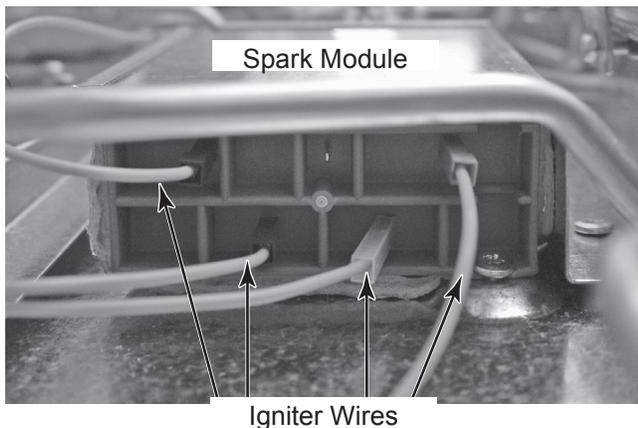


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

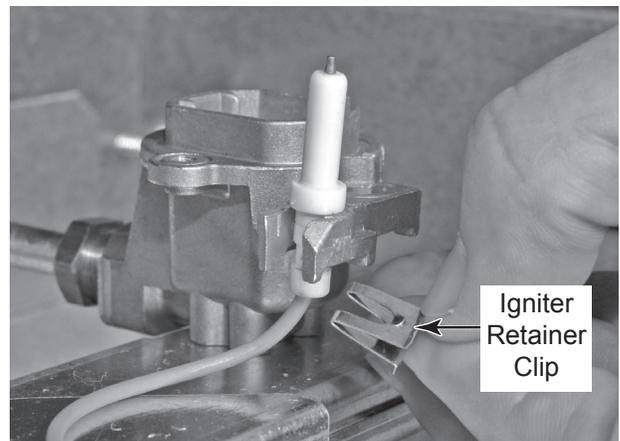
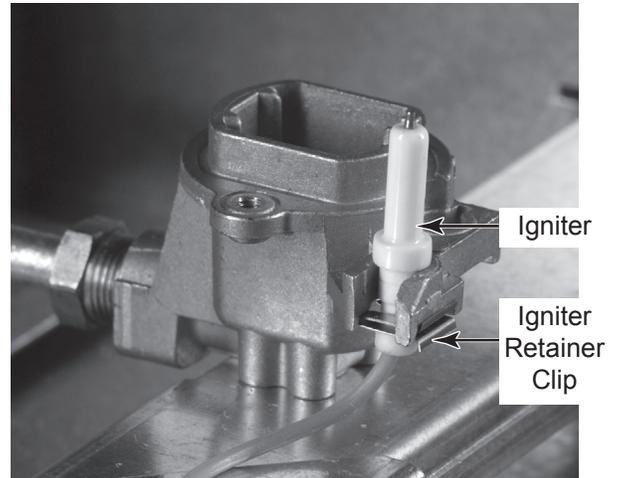
1. Unplug cooktop or disconnect power.
2. Remove the cooktop (see page 4-2 for the procedure).



3. **To remove spark igniter from standard burner.**
 - a) Disconnect spark igniter wire from spark module.



- b) Remove igniter retainer clip from standard burner.

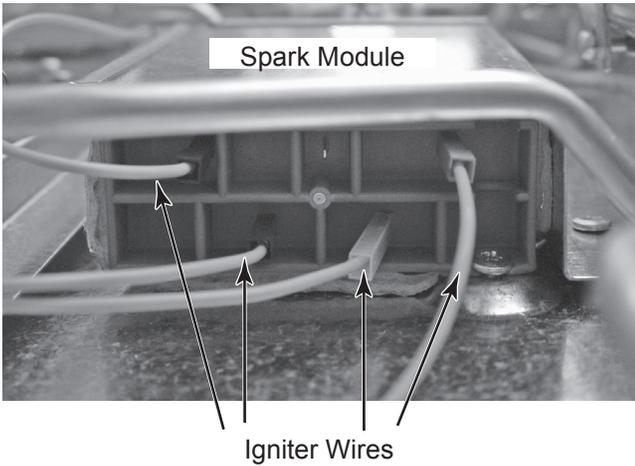


- c) Remove igniter from standard burner.

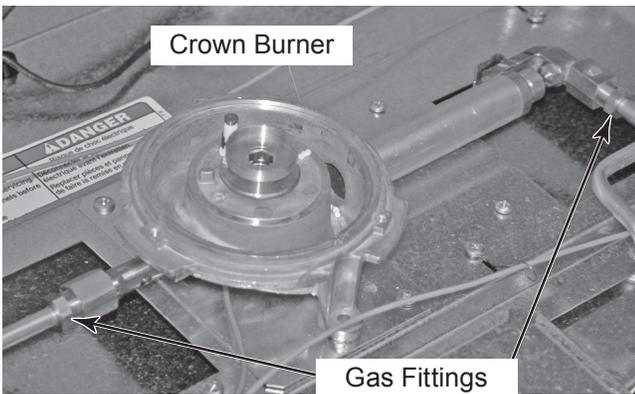
Continued on the next page.

4. To remove spark igniter from crown burner.

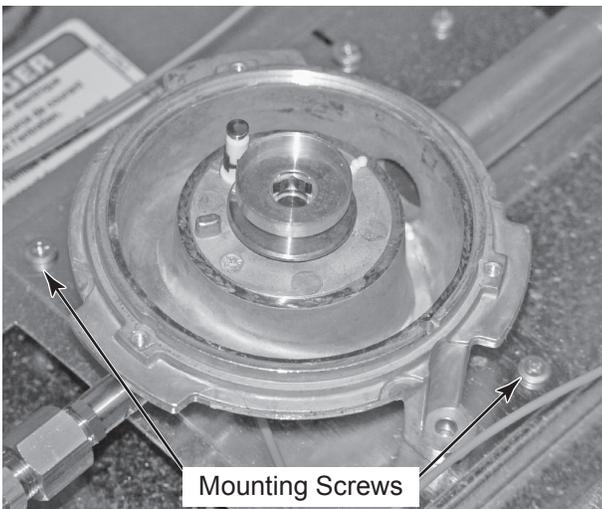
- a) Disconnect spark ignitor wire from spark module.



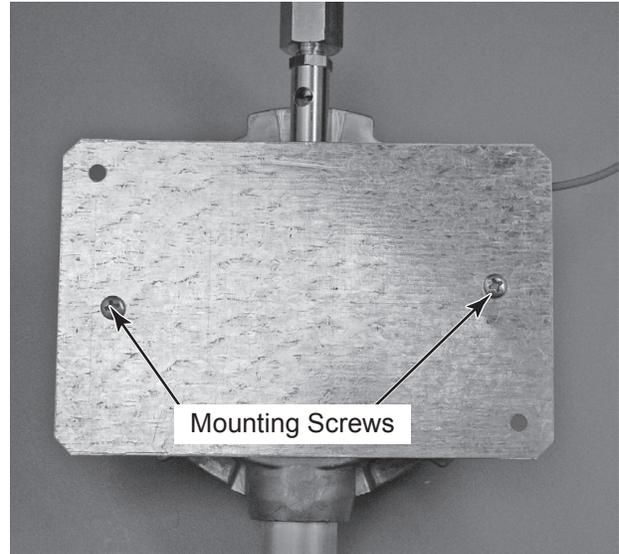
- b) Disconnect two gas fittings from crown burner.



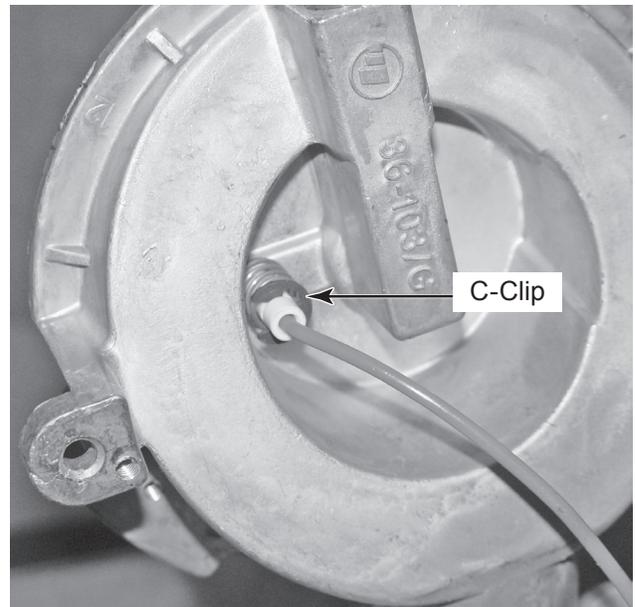
- c) Remove two screws from crown burner mounting plate.



- d) Lift crown burner up and rotate to expose two screws on back of mounting plate.
e) Remove two screws from back of mounting plate attached to crown burner and remove mounting plate.



- f) Remove c-clip from crown burner igniter to release igniter from crown burner.



- g) Pull igniter and igniter wire out of top of crown burner to remove.

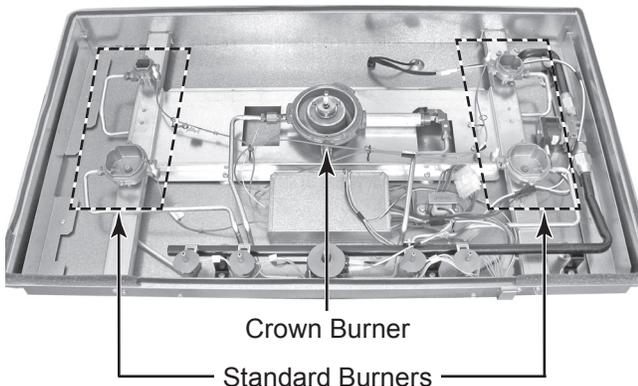
REMOVING STANDARD OR CROWN BURNER

⚠ WARNING

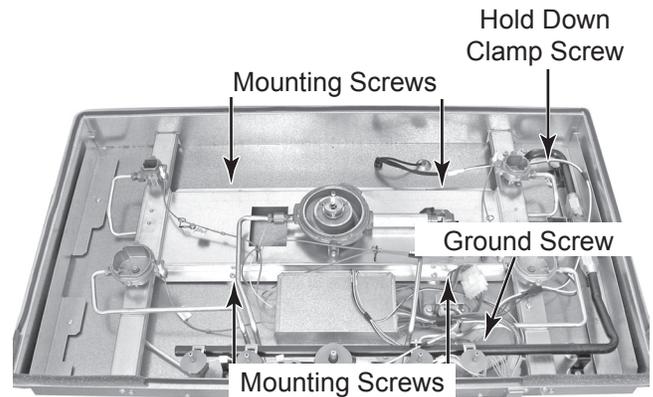


Electrical Shock Hazard
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

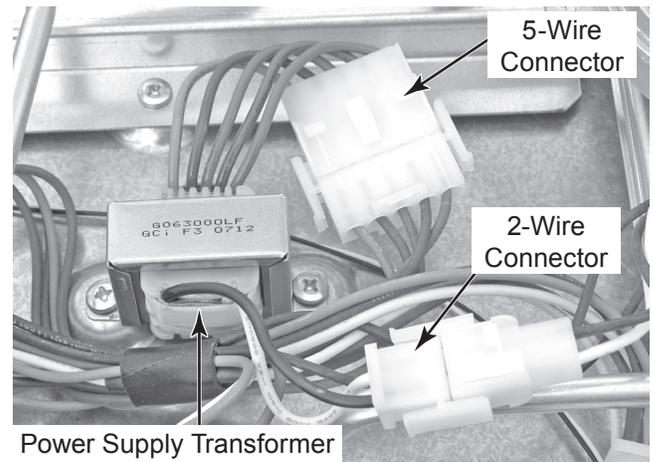
1. Unplug cooktop or disconnect power.
2. Remove the cooktop (see page 4-2 for the procedure).



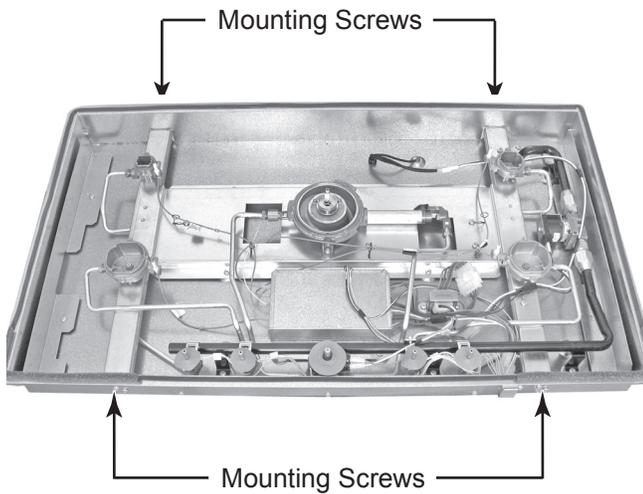
3. **To remove standard burner from cooktop.**
 - a) Remove gas regulator from gas inlet line.
 - b) Remove 4 mounting screws holding burner assembly to base and 1 hold down clamp screw holding gas line.



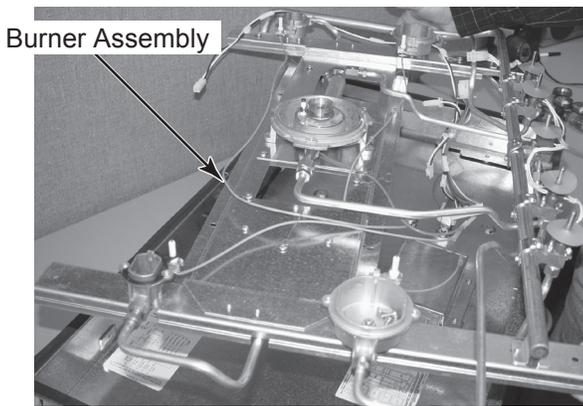
- c) Remove 4 mounting screws located on outside of burner box holding burner supports to burner box.
- d) Remove ground screw holding ground wire to burner box.
- e) Unlatch and disconnect the 2-wire and 5-wire connectors from the transformer.



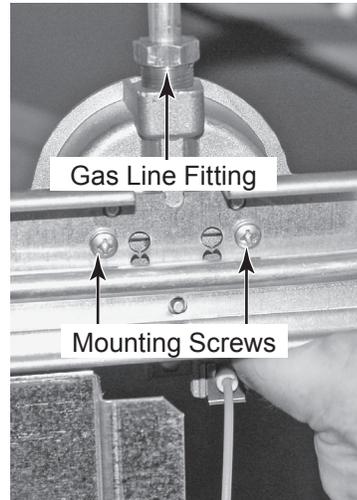
Continued on the next page.



f) Lift burner assembly out of burner box.



- g) Disconnect gas line fitting from standard burner.
- h) Remove igniter from standard burner (see removing a spark igniter from standard or crown burner 4-9).
- i) Turn burner assembly upside down on protected surface.
- j) Remove 2 screws from bottom of standard burner attaching it to burner support.



4. To remove crown burner from cooktop.

- a) Remove igniter from crown burner (see removing a spark igniter from standard or crown burner 4-9).
- b) Remove crown burner from burner assembly.

REMOVING THE POWER SUPPLY CORD

⚠ WARNING



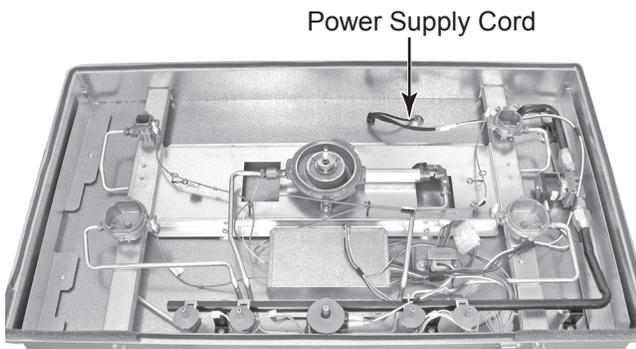
Electrical Shock Hazard

Disconnect power before servicing.

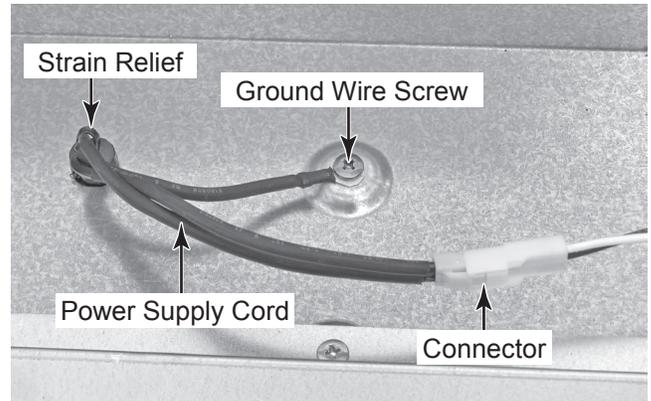
Replace all parts and panels before operating.

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

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



3. Remove the screw from the power supply cord ground wire.
4. Press the locking tab on the power supply cord connector and disconnect it from the main connector.
5. Remove the strain relief from the power supply cord and pull the cord out of the burner box mounting hole.



— 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

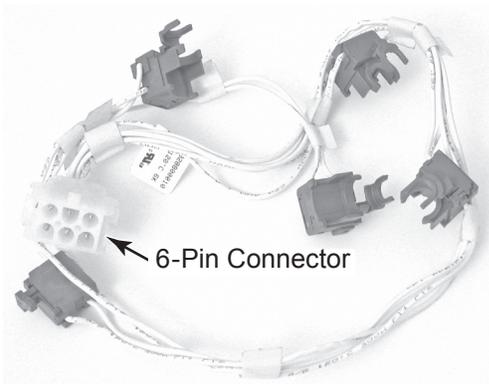
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

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

SPARK SWITCHES



Refer to page 4-3 for the procedure for accessing the spark switches.

1. Unplug cooktop or disconnect power.
2. Disconnect the spark switch 6-pin connector.
3. Set the ohmmeter to the R x 1 scale.
4. Rotate the valve to the setting shown in the chart. Touch the ohmmeter test leads to the indicated connector pins. The meter should indicate an open or closed state.

Test Points	Switch Location	Valve Setting	Meter Reading
Pins P2-1 & P2-7	LF	OFF	Open (∞)
		LITE	Closed (0 Ω)
Pins P2-2 & P2-7	LR	OFF	Open (∞)
		LITE	Closed (0 Ω)
Pins P2-3 & P2-7	C	OFF	Open (∞)
		LITE	Closed (0 Ω)
Pins P2-5 & P2-7	RF	OFF	Open (∞)
		LITE	Closed (0 Ω)
Pins P2-4 & P2-7	RR	OFF	Open (∞)
		LITE	Closed (0 Ω)

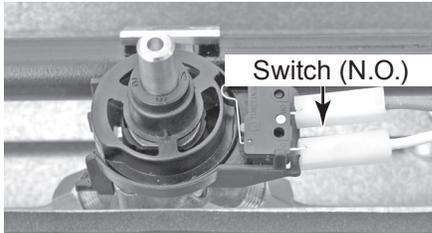


! WARNING

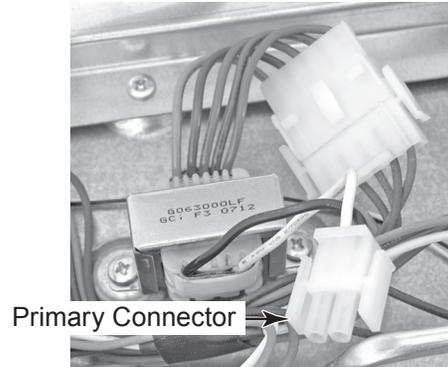
Electrical Shock Hazard

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

CROWN BURNER SWITCH



POWER SUPPLY TRANSFORMER



Refer to page 4-3 for the procedure for accessing the Crown burner switch.

1. Unplug cooktop or disconnect power.
2. Disconnect the wire connectors from the switch terminals.
3. Set the Crown burner to the OFF position.
4. Set the ohmmeter to R x 1.
5. Touch the ohmmeter test leads to the switch terminals. The meter should indicate an open circuit (infinite).
6. Set the Crown burner to the LITE position. The meter should indicate a closed circuit 0 Ω

Refer to page 4-6 for the procedure for accessing the power supply transformer.

1. Unplug cooktop or disconnect power.
2. Disconnect the power supply transformer primary (2-pin) connector.
3. Set the ohmmeter to the R x 1 scale.
4. Touch the ohmmeter test leads to the transformer connector pins. See transformer table below.

TRANSFORMER TABLE

RESISTANCE	TEST	TYP	UNITS	CONDITIONS
Rp	Primary Coil Resistance	60 ± 6	Ω	22 °C
Rs 1-2	Secondary Coil Resistance	4.7 ± 0.5	Ω	22 °C
Rs 2-3	Secondary Coil Resistance	4.7 ± 0.5	Ω	22 °C
Rs 4-5	Secondary Coil Resistance	306 ± 30	Ω	22 °C

DIAGNOSTICS & TROUBLESHOOTING



! 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.

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 wrist strap to green ground connection point or unpainted metal in the appliance.

-OR-

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

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

DIAGNOSTICS

Disconnect power and perform the following checks:

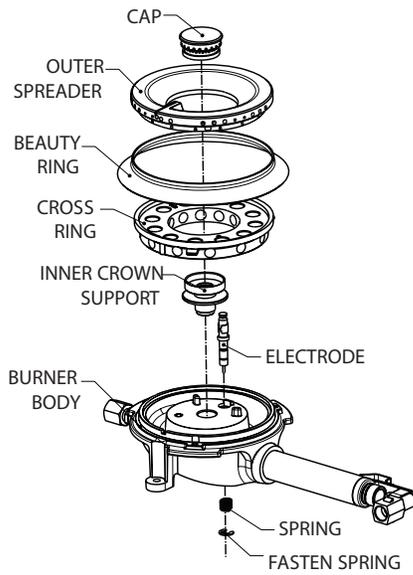
- A potential cause of a control not functioning is corrosion on connections. Observe connections and check for continuity with an ohmmeter.
- All tests/checks should be made with a VOM or DVM having a sensitivity of 20,000 ohms per volt DC or greater.
- Check all connections before replacing components, looking for broken or loose wires, failed terminals, or wires not pressed into connectors far enough. Damaged harness must be entirely replaced. Do not re-work a harness.
- Resistance checks must be made with power cord unplugged from outlet, and with wiring harness or connectors disconnected.

TROUBLESHOOTING

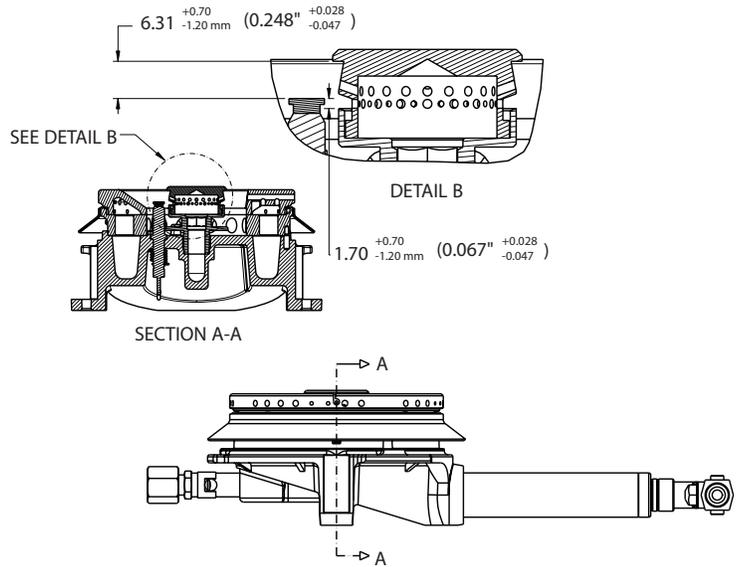
PROBLEM	POSSIBLE CAUSE	ACTION
No spark when any control is turned.	1. No power to unit.	1. Check power is on.
	2. Control connection not correctly plugged in	2. Check connector for contamination or loose connections.
	3. Transformer not properly working.	3. Check transformer coil resistances according to transformer table, page 6-3.
	4. Bad ground connection.	4. Check all ground connections for continuity.
	5. Burners not properly grounded.	5. Check ground continuity.
	6. Spark leads damaged, sparking onto nearby metal.	6. Visually check in dimmed light for sparking to nearby metal.
	7. Grease or dirt build-up around electrode.	7. Clean and dry electrode and cap.
	8. Spark gap to burner cap not correctly set.	8. Check if cap is correctly seated on burner.
No spark when one control knob is turned.	1. Bad connection to switch harness or faulty reignition control board.	1. Check to ensure switch harness connection is OK. 2. Check if wires are correctly attached to switch. 3. Check switch is correctly assembled on gas valve shaft. 4. Replace switch harness if necessary.
Power to ignition unit is OK. One electrode is not sparking.	1. Faulty spark lead/electrode or faulty ignition unit	1. Easy check: To determine if ignition unit or lead is faulty, swap spark lead to another terminal and check for spark.
Intermittent sparking after ignition	1. Generally the cause is a bad ground which can be caused by a build-up of cooking oils, solids, cleansers, etc.	1. Clean and dry all parts. Ensure burner is correctly seated.
	2. Burner ports blocked.	2. Clean and dry burner and electrode. Remember: flame must be near electrode to sense current.
	3. Low micro amp reading.	3. The unit will not spark if the current sensed by the reignition control board drops below a certain level. This generally occurs at simmer or when the flame is unstable due to winds, etc. Check on high power if sparking stops. Adjust gas valve regulation screws. Clean and dry burner and electrode.
	4. Spark gap to burner cap not correctly set	4. Check if cap is correctly seated on burner. Check electrode integrity.
	5. Faulty reignition control board.	5. Replace after checking all the above.
Sparking occurs and burner does not light.	1. No gas to appliance.	1. Verify proper gas supply.
	2. Burner not correctly seated.	2. Check and test.
	3. Burner port wet or dirty.	3. Clean and dry. Also clean electrode.
Continual sparking after ignition	1. Electrode wire does not correspond to relevant reignition control board output.	1. Check if the electrode wire is assembled according to electrode map assembly instructions located close to reignition control board.
	2. Burner ports blocked or wet and not allowing electrode to sense the current.	2. Clean and dry ports and electrodes.
	3. Spark gap to burner not correctly set.	3. Check if cap is correctly seated on burner.
	4. Bad ground connection.	4. Check all ground connections for continuity.
	5. Faulty electrode.	5. Verify electrode integrity. NOTE: The unit may still spark even if the spark lead is faulty, but it will not detect flame.
	6. Transformer not properly working.	6. Check transformer coil resistances according to transformer table, page 6-3.
	7. Faulty reignition control board.	7. Replace and test (only after checking all of the above).

TRANSFORMER TABLE				
RESISTANCE	TEST	TYP	UNITS	CONDITIONS
Rp	Primary Coil Resistance	60 ± 6	Ω	22 °C
Rs 1-2	Secondary Coil Resistance	4.7 ± 0.5	Ω	22 °C
Rs 2-3	Secondary Coil Resistance	4.7 ± 0.5	Ω	22 °C
Rs 4-5	Secondary Coil Resistance	306 ± 30	Ω	22 °C

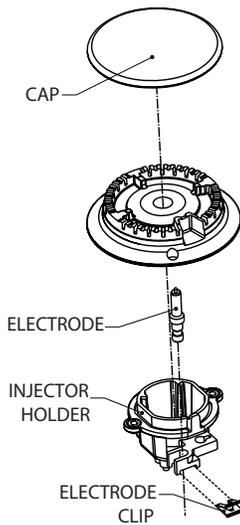
ELECTRODE ASSEMBLY FOR CENTER BURNER



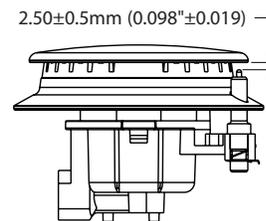
ELECTRODE GAP FOR CENTER BURNER



ELECTRODE ASSEMBLY FOR RF, RR, LF, LR BURNERS



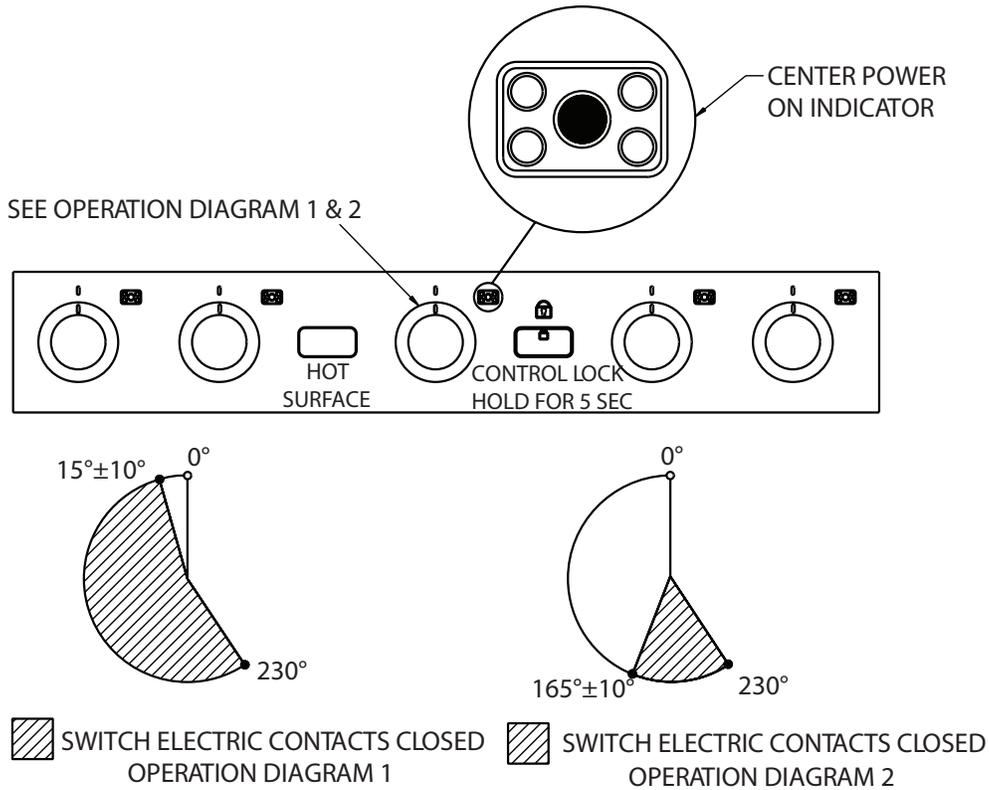
ELECTRODE GAP FOR RF, RR, LF, LR BURNERS



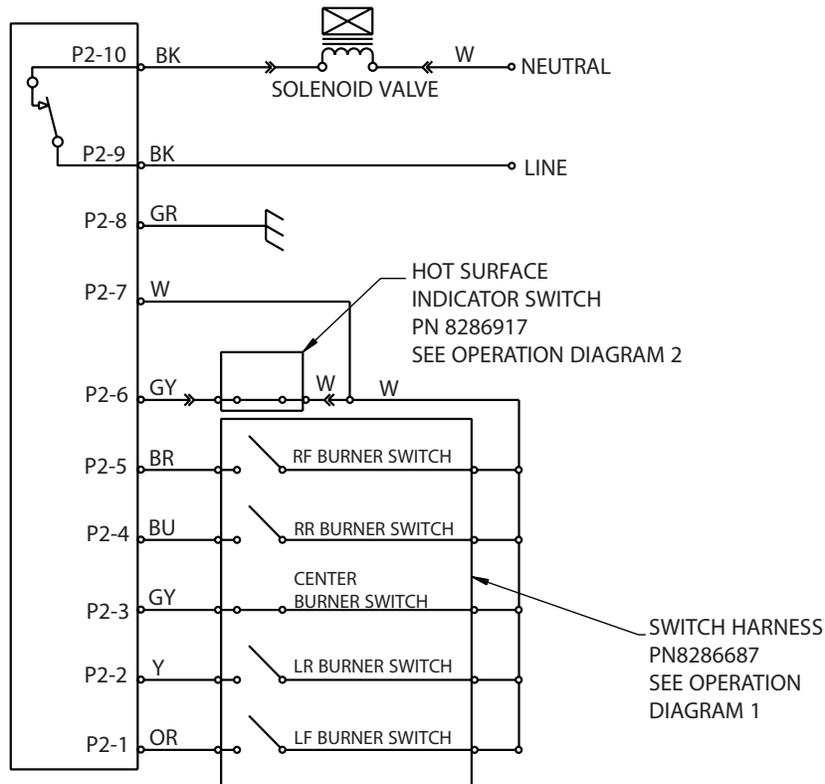
— NOTES —

WIRING DIAGRAM & STRIP CIRCUIT

CONTROL POWER INDICATOR



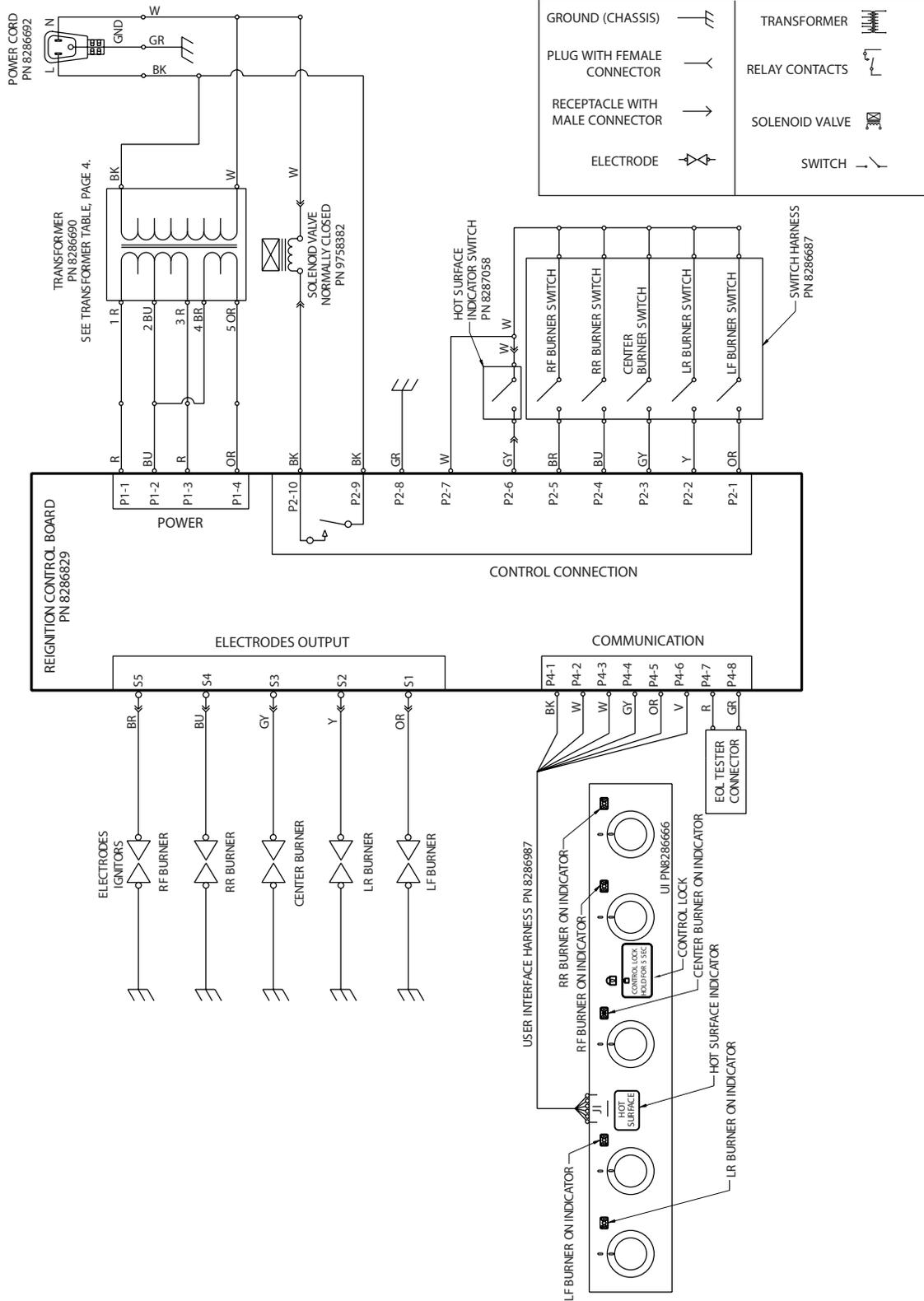
ELECTRONIC CONTROL STRIP CIRCUIT



WIRING DIAGRAM

ELECTRONIC CONTROL WIRING DIAGRAM

SYMBOLS



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: 1-800-832-7174

**HAVE YOUR STORE NUMBER READY TO IDENTIFY YOU AS AN
AUTHORIZED IN-HOME SERVICE PROFESSIONAL**

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

**HAVE YOUR STORE NUMBER READY TO IDENTIFY YOU AS AN
AUTHORIZED IN-HOME SERVICE PROFESSIONAL**

KitchenAid®
FOR THE WAY IT'S MADE.®