

KitchenAid

TECHNICAL EDUCATION

PROFESSIONAL GAS COOKTOPS



FORWARD

This Job Aid, "Professional Gas Cooktops," (Part No. 4317318), provides the technician with information on the operation and service of the Professional Gas Cooktop. It is to be used as a training Job Aid and Service Manual.

The wiring diagrams and strip circuits used in this Job Aid are typical and should be used for training purposes only. Always use the wiring diagrams supplied with the product when servicing the unit.

GOALS AND OBJECTIVES

The goal of this Job Aid is to provide detailed information that will enable the service technician to properly diagnose malfunctions and repair the Professional 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 Professional Gas Cooktop to the proper operational status.

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

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MODEL & SERIAL NUMBER DESIGNATIONS

MODEL NUMBER

MODEL NUMBER		K	GC	P	46	7	J	SS	0
INTERNATIONAL SALES IND. or MARKETING CHANNEL IF PRESENT									
K = KITCHENAID BRAND									
PRODUCT IDENTIFICATION									
EC = ELECTRIC COOKTOP									
GC = GAS COOKTOP									
MERCHANDISING SCHEME									
C = CERAMIC GLASS									
D = DOWNDRAFT VENT									
E = ELECTRONICS									
G = GRILL / GRIDDLE									
M = MODULAR / DOWNDRAFT									
N = INTERNATIONAL COLLECTION									
P = PROFESSIONAL / COMMERCIAL									
S = STANDARD PORCELAIN METAL									
T = TEMPERED GLASS									
X = 208 VOLTS									
CAPACITY / SIZE / SERIES / CONFIGURATION									
1ST POSITION	2ND POSITION								
1 = STANDARD	0 = 30" WIDE								
2 = GRILL / GRIDDLE	2 = 42" OR 12" WIDE								
3 = TEMPERED GLASS	3 = 33" WIDE								
4 = COMMERCIAL	5 = 15" WIDE								
5 = CERAMIC GLASS	6 = 36" WIDE								
8 = MODULAR DOWNDRAFT	8 = 48" WIDE								
0 = 2 BURNER / ELE. SYS.									
FEATURES									
0 = STANDARD ELEMENTS / BURNERS									
1 = RADIANT ELEMENTS									
2 = DUAL ELEMENTS									
3 =									
4 =									
5 = SEALED BURNERS / CAST ELEMENTS									
6 = 5 BURNERS / ELEMENTS									
7 = HALOGEN ELEMENTS / 6 BURNERS									
8 = TOUCH CONTROLS									
9 = INDUCTION									
YEAR OF INTRODUCTION									
H = 1999									
J = 2000									
COLOR CODE									
TL = TILE									
SS = BRUSHED STAINLESS STEEL									
ENGINEERING CHANGE									
0 = BASIC RELEASE									
1 = FIRST REVISION									
2 = SECOND REVISION									

SERIAL NUMBER

SERIAL NUMBER	X	K	05	10052
MANUFACTURING SITE				
X = OXFORD				
YEAR OF PRODUCTION				
K = 2000				
WEEK OF PRODUCTION				
5th Week				
PRODUCT SEQUENCE NUMBER				

MODEL & SERIAL NUMBER LABEL LOCATION

The Model / Serial Number label is located in one of two positions, as shown below.



Model & Serial Number Label Location Prior To July, 2000



Model & Serial Number Label Location Beginning July, 2000

IMPORTANT SAFETY INFORMATION

Your safety and the safety of others is very important.

Important safety messages have been provided in this Job Aid. Always read and obey all safety messages.



This is the safety alert symbol.

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

All safety messages will be preceded by the safety alert symbol and the word **“WARNING.”**

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

SPECIFICATIONS

Model Number	KGCP467JTL	KGCP467JSS	KGCP487JSS
Model Description	Sealed Cooktop	Sealed Cooktop	Sealed Cooktop
Size-Configuration	36" Dec. Tile Frames	36"	48"
Feature Level/Series	Professional	Professional	Professional
Dimensions/Specifications			
Exterior Dimensions			
Overall Height (in)	7 1/2"	7 1/2"	7 1/2"
Overall Width (in)	35 7/8"	35 7/8"	47 7/8"
Overall Depth (in)	26 1/4"	26 1/4"	26 1/4"
Cutout Dimensions			
Cutout Height (in) (Measure Or Min/Max)	7 1/4"	7 1/4"	7 1/4"
Cutout Width (in) (Measure Or Min/Max)	36" (F); 35 1/4" (B)	36" (F); 35 1/4" (B)	48" (F); 47 1/4" (B)
Cutout Depth (in) (Measure Or Min/Max)	1 1/4" (B); 22" (N)	1 1/4" (B); 22" (N)	1 1/4" (B); 22" (N)
Weight			
Net Weight (lbs)	140	140	TBD
Shipping Weight (lbs)	160	160	TBD
Ratings			
Electric Voltage/Phase/Frequency (Hz)	120 V/Single Phase/60 Hz	120 V/Single Phase/60 Hz	120 V/Single Phase/60 Hz
Circuit Amps	15 Amp	15 Amp	15 Amp
Exterior			
Cooktop Controls	Push-to-Turn	Push-to-Turn	Push-to-Turn
Cooktop Control Type	Infinite	Infinite	Infinite
Cooktop Control Location	Front	Front	Front
Cooktop Control #	6	6	8
Control Area	Yes	Yes	Yes
Burner Grate	Cast Iron	Cast Iron	Cast Iron
Griddle	Yes-Opt	Yes-Opt	Yes-Opt
Gas Cooktop Burners	Yes	Yes	Yes
Gas Burner Type	Sealed	Sealed	Sealed
Gas R Front Output (BTU)(Nat/LP)	6000 BTU/5000 BTU	6000 BTU/5000 BTU	6000 BTU/5000 BTU
Gas L Front Output (BTU)(Nat/LP)	6000 BTU/5000 BTU	6000 BTU/5000 BTU	6000 BTU/5000 BTU
Gas R Rear Output (BTU)(Nat/LP)	15000 BTU/12000 BTU	15000 BTU/12000 BTU	15000 BTU/12000 BTU
Gas L Rear Output (BTU)(Nat/LP)	15000 BTU/12000 BTU	15000 BTU/12000 BTU	15000 BTU/12000 BTU
Gas Center Rear Output (BTU)(Nat/LP)	15000 BTU/12000 BTU	15000 BTU/12000 BTU	15000 BTU/12000 BTU
Gas Center Front Output (BTU)(Nat/LP)	15000 BTU/12000 BTU	15000 BTU/12000 BTU	15000 BTU/12000 BTU
Gas Center Right Front (BTU)(Nat/LP)			15000 BTU/12000 BTU
Gas Center Left Front (BTU)(Nat/LP)			15000 BTU/12000 BTU
Gas Ignition	Electronic	Electronic	Electronic
LP Conversion	Kit Included	Kit Included	Kit Included
Accessories			
Backsplash	Included	Included	Included
Backsplash Part/Comment	Standard 9"	Standard 9"	Standard 9"
Island Trim	Included	Included	Included
Island Trim Part/Comment	Standard	Standard	Standard
Other Accessory	Yes	Yes	Yes
Comment	Simmer Plate - Factory Packed	Simmer Plate - Factory Packed	Simmer Plate - Factory Packed
Miscellaneous			
Product Literature			
Installation Instructions Part#	8284670	8284670	8284670
Service Manual Part#	4317318	4317318	4317318
Use & Care Guide Part#	8284642	8284642	8284642
Wiring Diagram Part#	3192100	3192100	
Agency Approvals	AGA, CGA	AGA, CGA	AGA, CGA
Approved to Install Over BI Oven	No	No	No
Power Cord Length & # Wires	3 1/2 Foot/3 Wire	3 1/2 Foot/3 Wire	3 1/2 Foot/3 Wire
Warranty	Yes	Yes	Yes
Full	12 Mo	12 Mo	12 Mo
Gas Burners	60 Mo	60 Mo	60 Mo

— NOTES —

INSTALLATION HIGHLIGHTS

L.P. GAS CONVERSION

! 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.

! WARNING



Explosion Hazard

Securely tighten all gas connections. If connected to L.P. gas, have a qualified person make sure gas pressure does not exceed 14" water column. Examples of a qualified person include licensed heating personnel, authorized gas company personnel, and authorized service personnel. Failure to do so can result in death, explosion, or fire.

The following parts are provided with Conversion Kit **Part #8284673**:

Orifice/Spud Package
Part #8284663



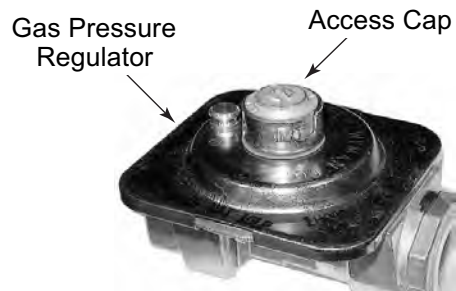
Conversion Label
Part #8284675



Conversion Instructions - **Part #8284674**

To convert the cooktop for use with L.P. gas, perform the following steps.

1. Turn off the gas supply to the cooktop.
2. Disconnect power to the cooktop.
3. Use a screwdriver and remove the access cap on the gas pressure regulator.

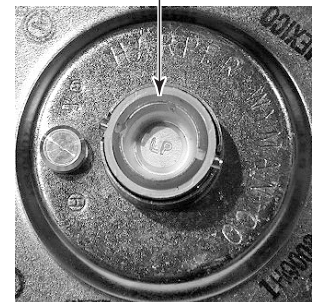


4. Turn the access cap so that the letters **L.P.** are facing up and then reinstall the cap on the regulator.

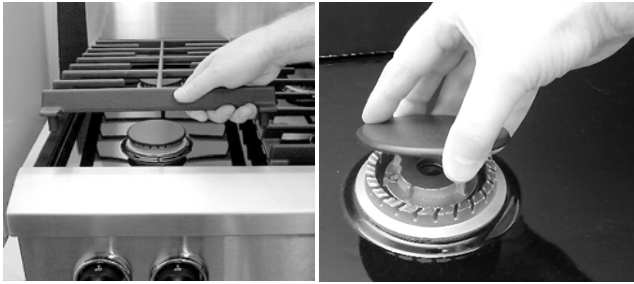
NAT Position



L.P. Position

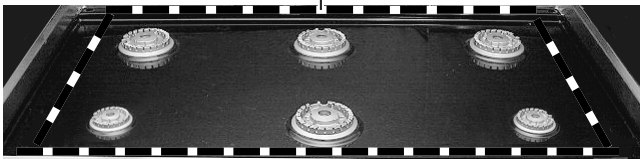


- Remove the grates from the cooktop and the burner caps from the burner bases.



- Use a 7 mm nut driver and remove the orifices from each of the burners. **NOTE:** Place a small piece of masking tape along the inside edge of the nut driver to help keep the orifice in the driver.

Burner Orifice



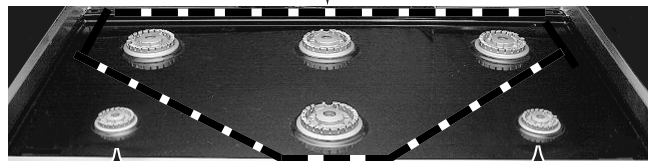
36" / 6-Burner Model Shown

IMPORTANT NOTE: The 5,000 B.T.U. orifices (red, 0.70 mm) **MUST** be used in the small left and right front corner burners only. The 12,000 B.T.U. orifices (blue, 1.10 mm) **MUST** be used in all the other burners.

<i>Rating</i>	<i>Color</i>	<i>Size</i>
5,000 B.T.U.	Red	0.70 mm
12,000 B.T.U.	Blue	1.10 mm

- Install the L.P. orifices in the burner locations shown below. **NOTE:** The 48"/8-burner models also have the two 2,300 B.T.U. burners at the outer front left and right locations.

(4) 12,000 B.T.U.
(Blue / 1.10 mm)



5,000 B.T.U.
(Red/0.70 mm)

5,000 B.T.U.
(Red/0.70 mm)

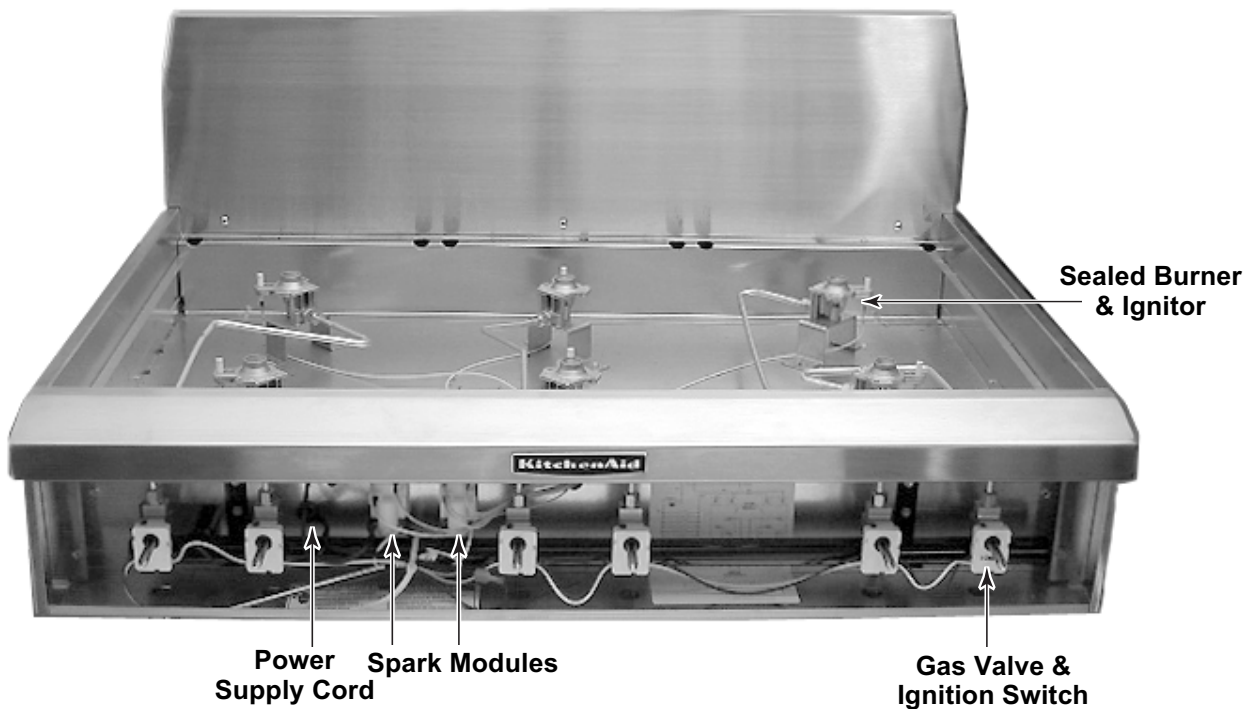
- Replace the burner caps and grates.

COMPONENT ACCESS

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

COMPONENT LOCATIONS

36" Model



REMOVING A SEALED BURNER & IGNITOR

! WARNING

ELECTRICAL SHOCK HAZARD

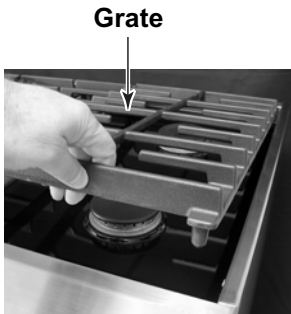
Disconnect power before servicing the cooktop.
Replace all panels before operating cooktop.
Failure to do so can result in death or electrical shock.

FIRE HAZARD

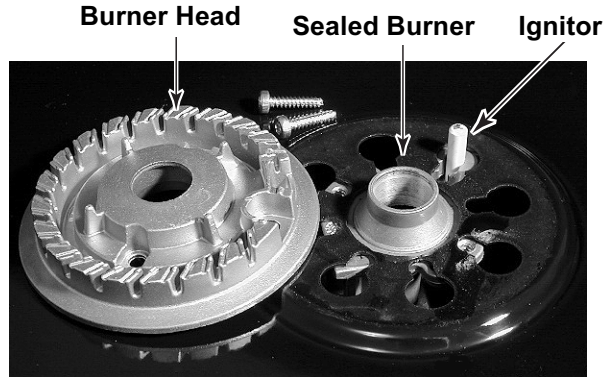
Shut off gas supply line valve before servicing the cooktop.
Check all gas line connections and replace all panels before operating the cooktop.
Failure to do so could result in explosion, fire, or other injury.

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

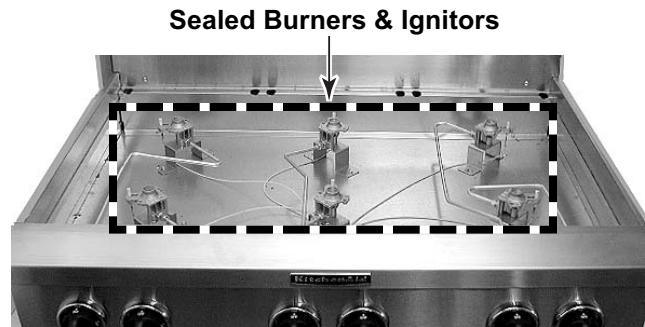
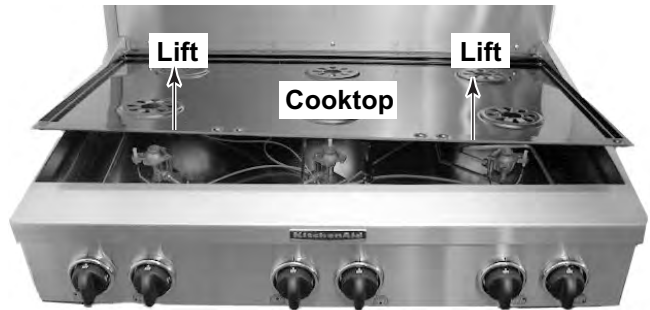
1. Turn off the gas and electrical power going to the cooktop.
2. Remove the grates and burner caps from the cooktop.



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

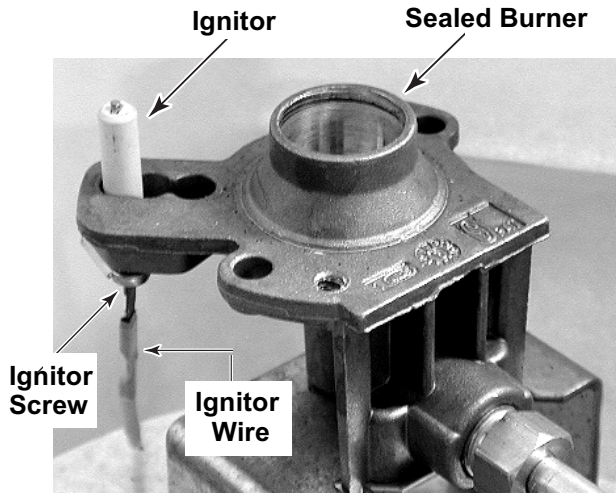


4. Lift the front of the cooktop and remove it.

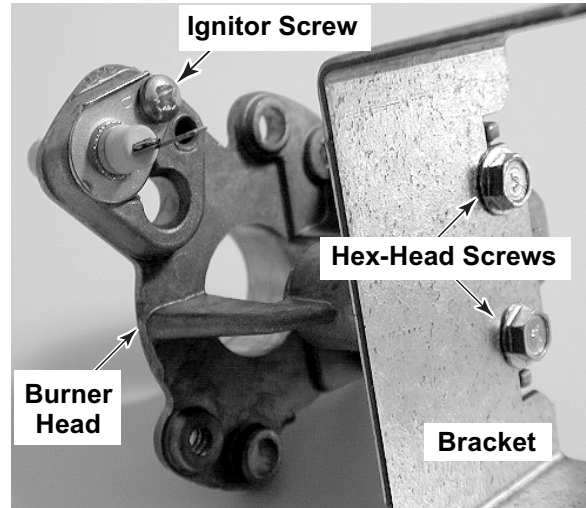


5. **To remove an ignitor from a sealed burner:**

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

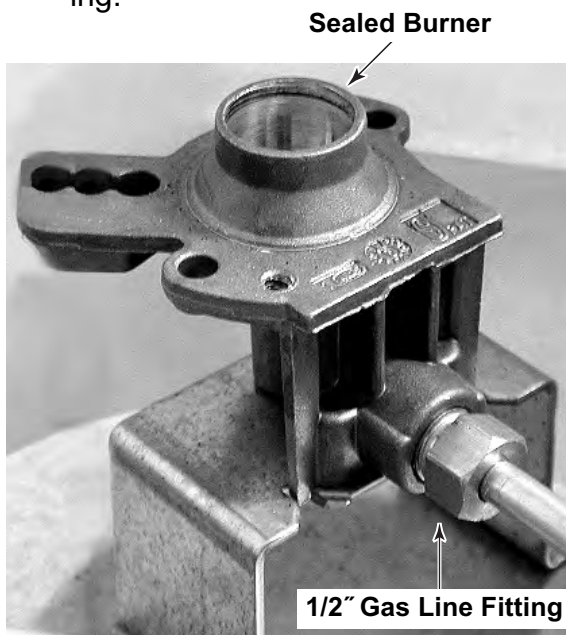


- c) Remove the two hex-head screws from the burner bracket and remove the sealed burner.
- d) Remove the screw from the ignitor bracket and remove the ignitor from the sealed burner.



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

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



REMOVING THE FRONT PANEL

! WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the cooktop.

Replace all panels before operating cooktop.

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

FIRE HAZARD

Shut off gas supply line valve before servicing the cooktop.

Check all gas line connections and replace all panels before operating the cooktop.

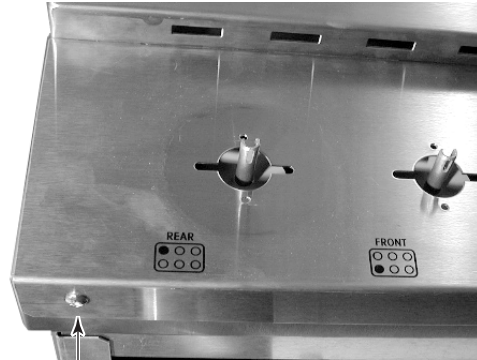
Failure to do so could result in explosion, fire, or other injury.

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

1. Turn off the gas and electrical power going to the cooktop.
2. Remove all of the knobs from the front panel by pulling them off the control shafts.



3. Remove the two lower screws from the ends of the front panel.



Front Panel Screw
(1 of 2)

4. Slide the front panel down so that the five tabs are out of their slots and remove the panel.

5 Front Panel Tabs



REMOVING THE IGNITION SWITCHES & A GAS VALVE

! WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the cooktop.

Replace all panels before operating cooktop.

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

FIRE HAZARD

Shut off gas supply line valve before servicing the cooktop.

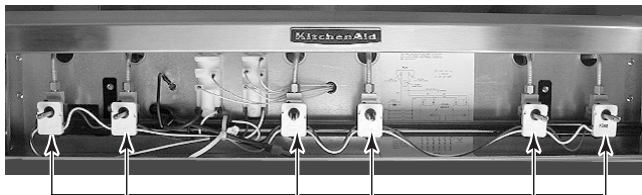
Check all gas line connections and replace all panels before operating the cooktop.

Failure to do so could result in explosion, fire, or other injury.

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

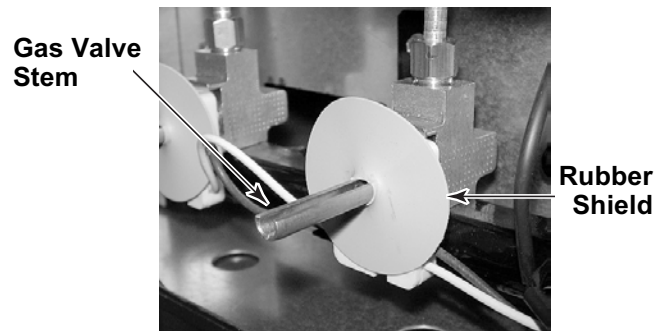
1. Turn off the gas and electrical power going to the cooktop.
2. Remove the front panel (see page 3-4 for the procedure).
3. **To remove the ignition switches:**

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

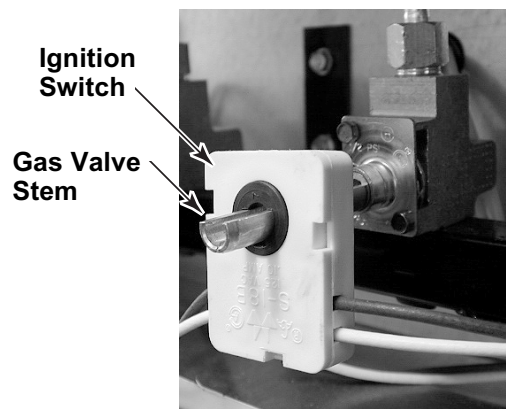


Ignition Switches

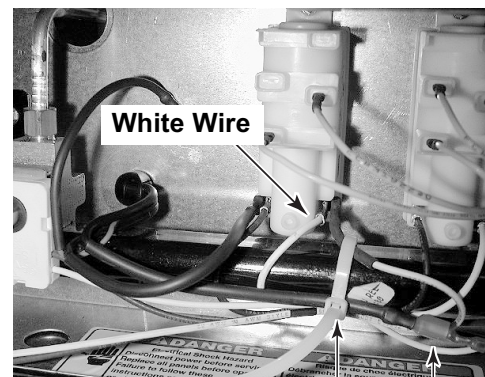
- a) Remove the rubber shields from the gas valve stems.



- b) Pull the ignition switches off the gas valve stems.



- c) Disconnect the black ignition switch wire from the harness connector and the white wire from the indicated spark module terminal.

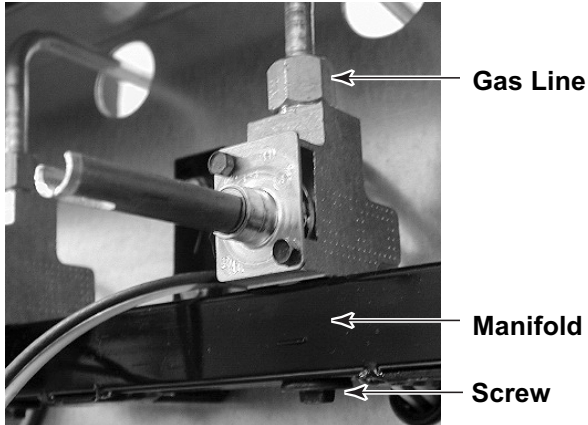


- d) Loosen the wire tie and pull the ignition switch wire connectors through it.

Continued on the next page.

4. **To remove a gas valve:**

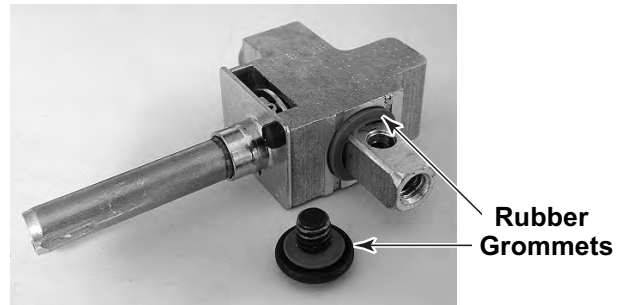
a) Remove the gas line from the gas valve.



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

REASSEMBLY NOTES:

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



REMOVING A SPARK MODULE & THE POWER SUPPLY CORD

! WARNING

ELECTRICAL SHOCK HAZARD

Disconnect power before servicing the cooktop.

Replace all panels before operating cooktop.

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

FIRE HAZARD

Shut off gas supply line valve before servicing the cooktop.

Check all gas line connections and replace all panels before operating the cooktop.

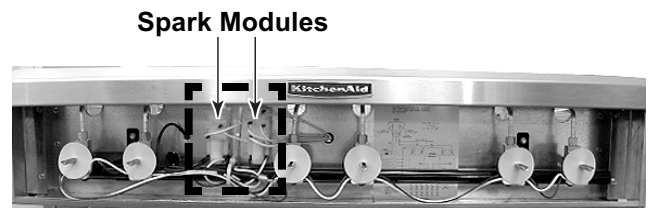
Failure to do so could result in explosion, fire, or other injury.

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

1. Turn off the gas and electrical power going to the cooktop.
2. Remove the front panel (see page 3-4 for the procedure).

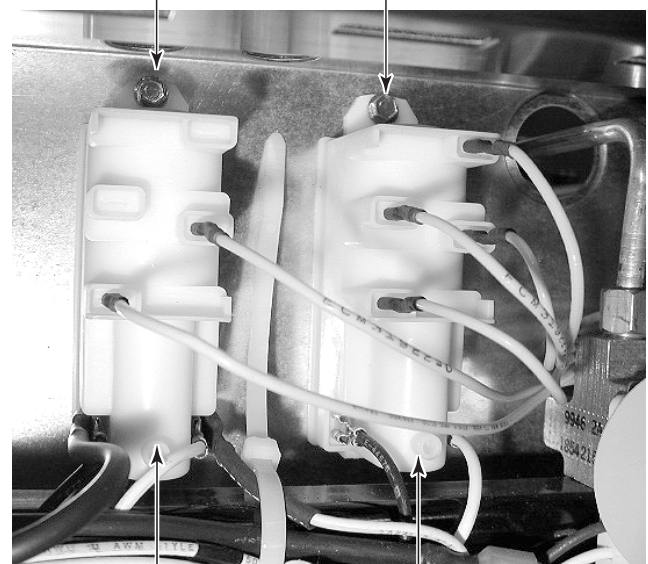
3. To remove a spark module:

- a) Disconnect the wires from the terminals.
- b) Use a 1/4" socket and remove the hex-head screw at the top of the module and unhook the bottom tab from the chassis slot. **NOTE:** The left module controls the left front (LF) and right front (RF) burners. The right module controls the center front (CF), right rear (RR), center rear (CR), and left rear (LR) burners.



1/4" Hex-Head Screw

1/4" Hex-Head Screw



Spark Module For LF & RF Burners

Spark Module For CF, RR, CR, & LR Burners

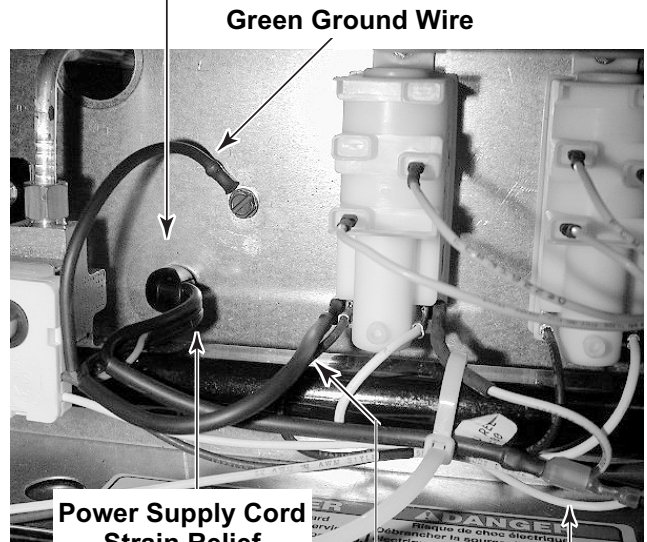
Continued on the next page.

4. **To remove the power supply cord:**

- a) Disconnect the ribbed wire from the indicated left spark module terminal.
- b) Disconnect the smooth wire from the main wiring harness connector.
- c) Remove the 1/4" hex head screw from the green ground wire.
- d) Remove the strain relief from the power supply cord.



Power Supply Cord



Green Ground Wire

**Power Supply Cord
Strain Relief
(Remove From
Other Side Of
Panel)**

**Ribbed Wire
Connector**

**Smooth Wire
Connector**

COMPONENT TESTING

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

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

IGNITION SWITCHES

WARNING

Electrical Shock Hazard

Disconnect the electrical supply from the unit before servicing.

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

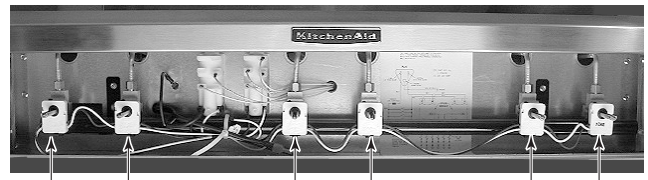
TEST PROCEDURE

Refer to page 3-5 for the procedure for servicing the ignition switches.

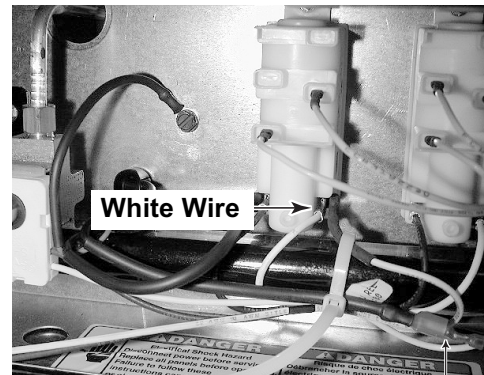
NOTE: The ignition switches will be serviced as a complete assembly. If a switch is defective, the complete assembly must be replaced.

1. Disconnect power to the cooktop.
2. Set the ohmmeter to the R x 1 scale.
3. Remove the front panel (see page 3-4 for the procedure).

4. Locate the black and white ignition switch connectors, (one is connected to the spark module, and the other is connected to the main wire harness), and disconnect them.



Ignition Switches



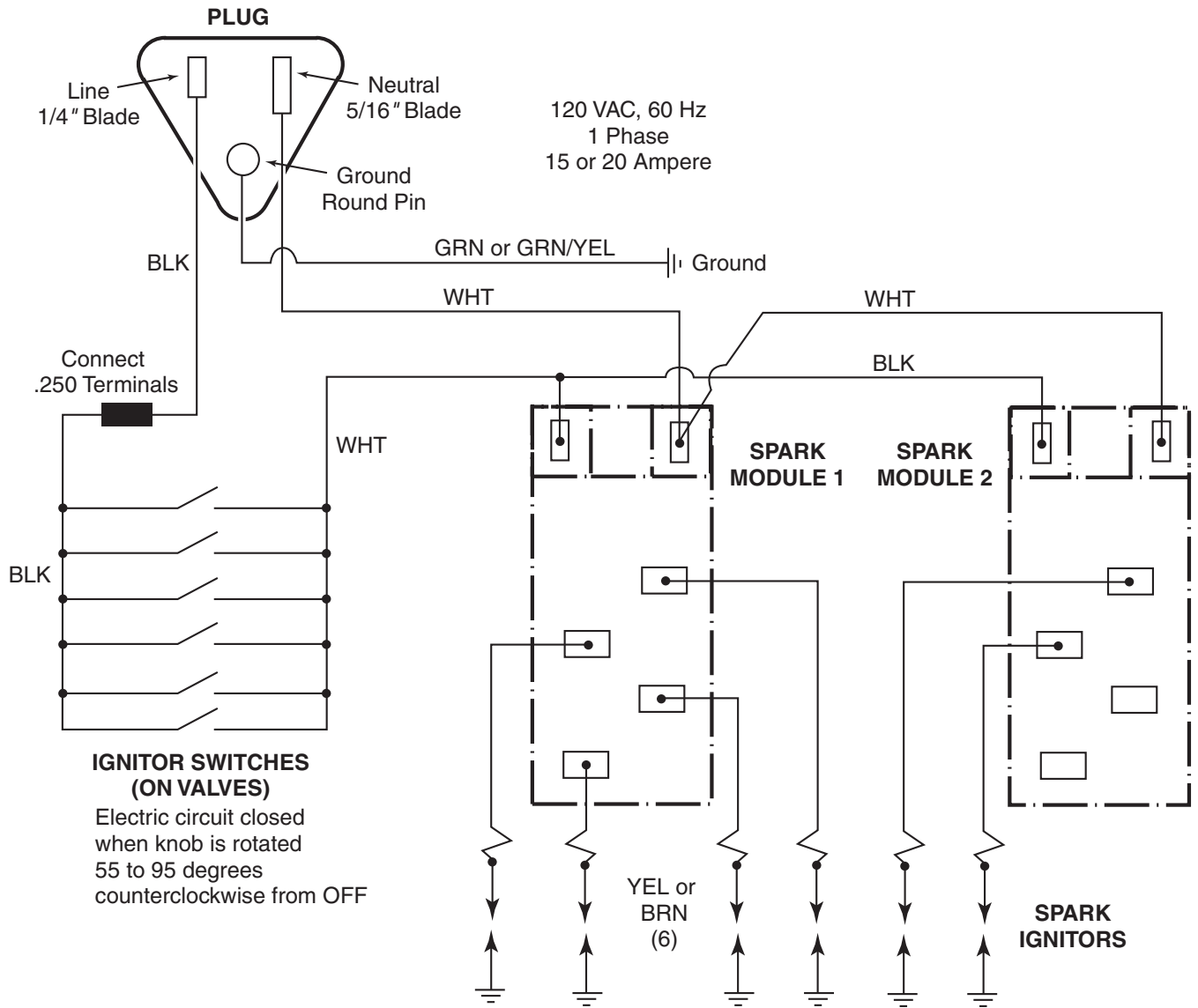
Black Wire Connector

5. Turn all of the switches to the Off position.
6. Touch the test leads to the connectors on the black and white switch wires. The ohmmeter should indicate an open circuit (infinite ∞).
7. Turn each switch to the LITE position. The ohmmeter should indicate a closed circuit (0 ohms).

— NOTES —

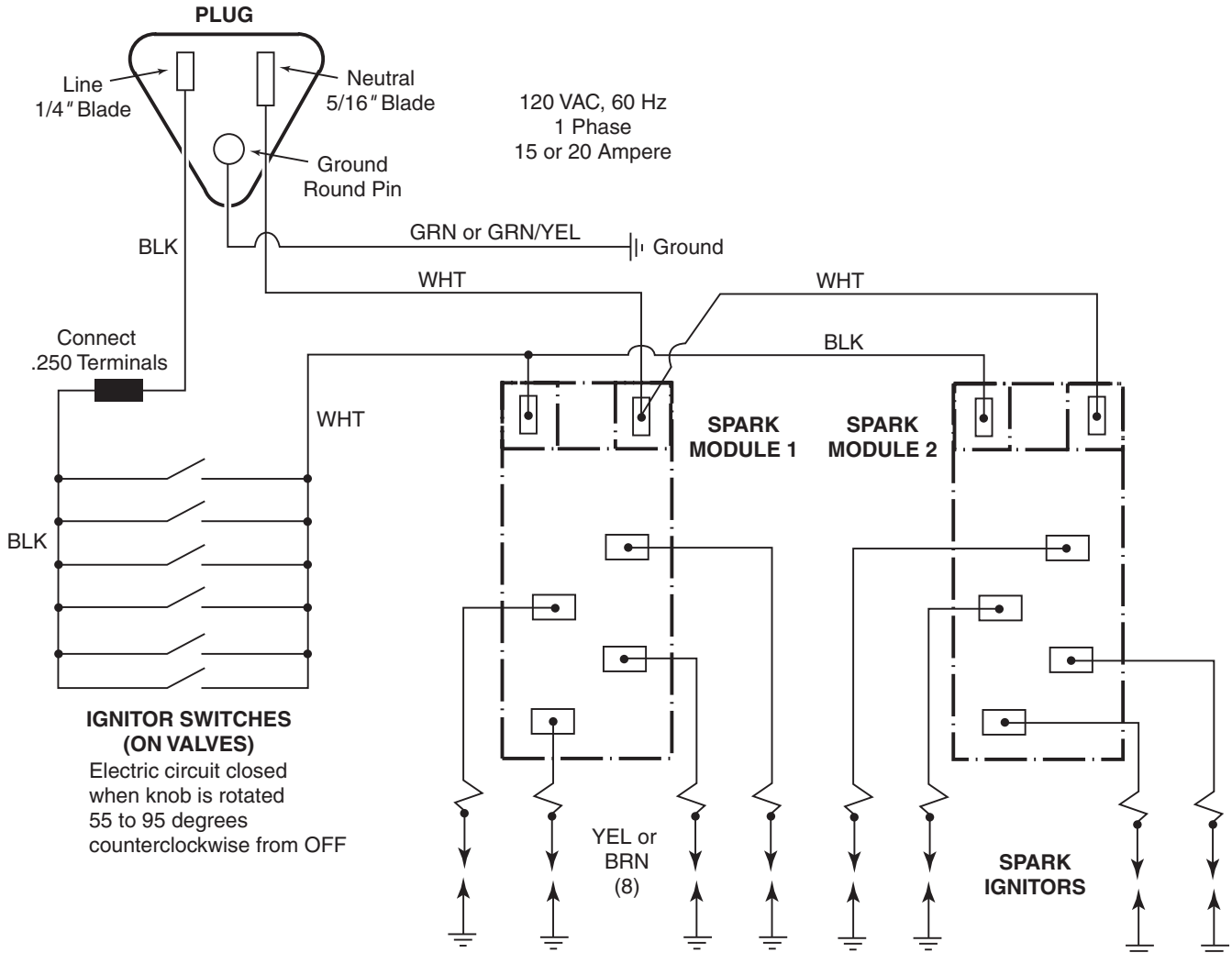
WIRING DIAGRAMS & STRIP CIRCUIT

36" MODELS

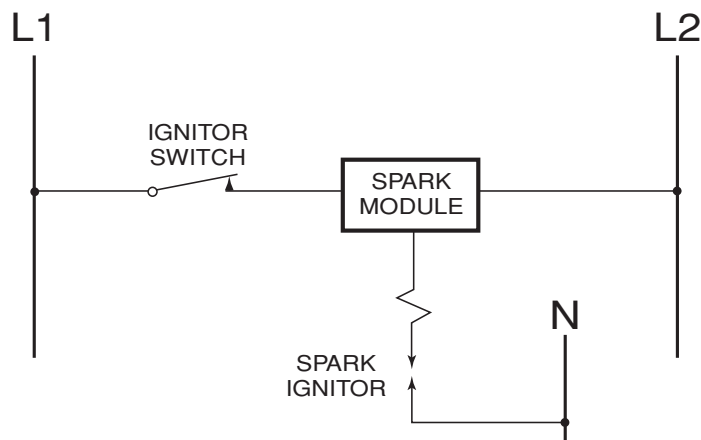


PN 3192100

48" MODELS



STRIP CIRCUIT



TECH TIPS

REQUESTING ASSISTANCE OR SERVICE

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

Call the KitchenAid Consumer Assistance Center toll free, at

1-800-422-1230

If you need assistance or service in Canada:

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

1-800-461-5681.

Our consultants are available to assist you.

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

Our consultants provide assistance with:

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

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

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

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

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

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

In Canada, contact:

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

Please include a daytime phone number in your correspondence.

COOKTOP WARRANTY

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

KITCHENAID AND INGLIS LIMITED SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion or limitation may not apply to you. This warranty gives specific legal rights and you may also have other rights which vary from state to state or province to province.

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

If you need service, refer to the “Requesting Assistance or Service” section on the previous page. After checking “Requesting Assistance or Service,” additional help can be found by calling the KitchenAid Consumer Assistance Center telephone number, **1-800-422-1230**, from anywhere in the U.S.A. In Canada, contact your authorized Inglis Limited Appliance Service company, **1-800-461-5681**.

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