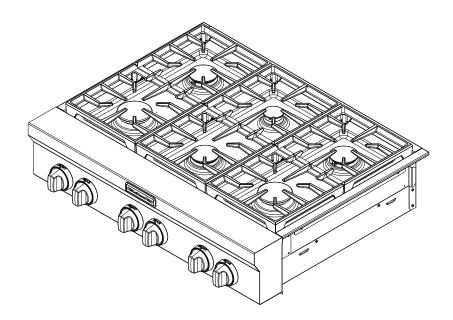
## **KitchenAid®**

# INSTALLATION INSTRUCTIONS 30" (76.2 CM), 36" (91.4 CM) AND 48" (121.9 CM) COMMERCIAL STYLE GAS COOKTOPS

for residential use only

# INSTRUCTIONS D'INSTALLATION -TABLES DE CUISSON À GAZ DE 30" (76,2 CM), 36" (91,4 CM) ET 48" (121,9 CM) -MODÈLE COMMERCIAL

pour utilisation résidentielle uniquement



#### **IMPORTANT:**

**Installer:** Leave installation instructions with the homeowner. **Homeowner:** Keep installation instructions for future reference.

#### **IMPORTANT:**

Installateur : Remettre les instructions d'installation au propriétaire.

Propriétaire : Conserver les instructions d'installation pour référence ultérieure.

#### W10526088B

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## COOKTOP SAFETY

#### Your safety and the safety of others are very important.

We have provided many important safety messages in this manual and on your 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:

## ADANGER

You can be killed or seriously injured if you don't <u>immediately</u> follow instructions.

## <u> A WARNING</u>

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.

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS:
  - Do not try to light any appliance.
  - Do not touch any electrical switch.
  - Do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

WARNING: Gas leaks cannot always be detected by smell.

Gas suppliers recommend that you use a gas detector approved by UL or CSA.

For more information, contact your gas supplier.

If a gas leak is detected, follow the "What to do if you smell gas" instructions.

**IMPORTANT:** Do not install a ventilation system that blows air downward toward this gas cooking appliance. This type of ventilation system may cause ignition and combustion problems with this gas cooking appliance resulting in personal injury or unintended operation.

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

- Installations and repairs must be performed by a qualified or licensed contractor, plumber, or gasfitter 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.

## 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**

- Adjustable wrench
- Tape measure
- Marker or pencil
- Pipe wrench
- Flat-blade screwdriver
- 15/16" combination wrench
- Wrench or pliers
- Pipe-joint compound resistant to LP gas
- Noncorrosive leakdetection solution

## For LP/Natural Gas Conversions

- Adjustable wrench
- ¾" drive ratchet
- ½" deep-well socket
- 7 mm nut driver
- Masking tape

#### Parts Supplied

Check that all parts are included.

- Gas pressure regulator
- Burner grates
- Burner bases and burner caps
- Grill grate (on grill models)
- Wave tray (on grill models)
- Flame spreader (on grill models)
- Burner assembly (on grill models)
- Grease trays (2) (on grill models)
- Griddle drip tray (on griddle models)
- Grill drip tray (on grill models)
- Foam tape
- LP orifice package (W10393255)
- Conversion label (W10393342)

**NOTE:** The cooktop is manufactured for use with Natural gas. To convert to LP gas, see the "Gas Conversions" section.

#### **Optional Backguards**

48" (121.9 cm) models and grill models must be installed with a backsplash if installing at zero clearance to a combustible backwall. See "Cabinet Dimensions" in the "Location Requirements" section for installation requirements.

- 36" (91.4 cm) Retractable Backguard Order Part Number 8284756
- 48" (121.9 cm) Retractable Backguard Order Part Number 8284755
- 9" (22.9 cm) Backguard for 36" (91.4 cm) Cooktops Order Part Number W10115776
- 9" (22.9 cm) Backguard for 48" (121.9 cm) Cooktops Order Part Number W10115777
- 22" (55.9 cm) Backguard with Shelf for 36" (91.4 cm) Cooktops Order Part Number W10225949
- 22" (55.9 cm) Backguard with Shelf for 48" (121.9 cm)
   Cooktops
   Order Part Number W10225948

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

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

#### **High Altitude Conversion**

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

- Part Number W10394296 LP high altitude
- Part Number W10394295 Natural gas high altitude

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

## 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 burner base.
- It is recommended that a 600 CFM or larger vent hood be installed above the cooktop.
- It is not recommended that a microwave hood combination be mounted above the cooktop.
- 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 or rear flanges.
- The gas and electric supply should be located as shown in "Gas and Electric Connection Locations" section so that they are accessible without requiring removal of the cooktop.
- Provide cutout in left rear corner of cutout enclosure as shown to provide clearance for gas inlet, power supply cord, and to allow the rating label to be visible.

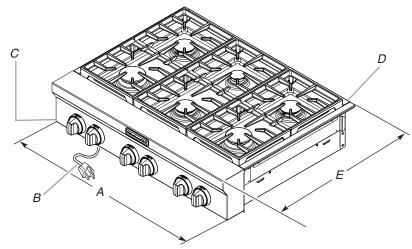
**IMPORTANT:** To avoid damage to your cabinets, check with your builder or cabinet supplier to make sure that the materials used will not discolor, delaminate or sustain other damage.

#### Mobile Home - Additional Installation Requirements

The installation of this cooktop must conform to the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280 (formerly the Federal Standard for Mobile Home Construction and Safety, Title 24, HUD Part 280). When such standard is not applicable, use the Standard for Manufactured Home Installations, ANSI A225.1/NFPA 501A or local codes.

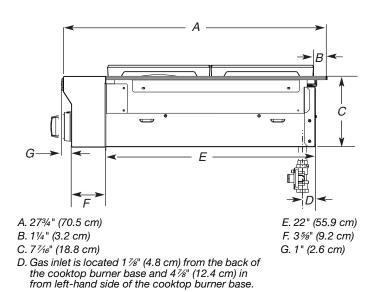
In Canada, the installation of this cooktop must conform with the current standards CAN/CSA-A240-latest edition, or with local codes.

#### **Product Dimensions**

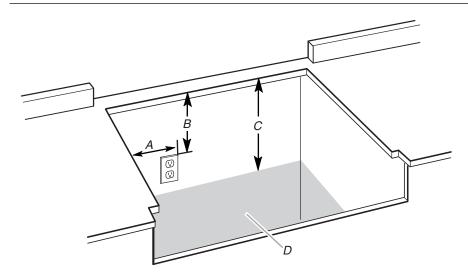


- A. 30" (76.2 cm) cooktop: 29 ½" (75.9 cm) 36" (91.4 cm) cooktop: 35 ½" (91.1 cm) 48" (121.9 cm) cooktop: 47 ½" (121.6 cm)
- B. 36" (91.4 cm) long 3 prong grounding-type power supply cord
- C. Model/serial rating plate (located on the underside of the cooktop burner base)
- D. Island trim or optional backguard
- E. 27¾" (70.5 cm)

#### **Side View of Cooktop**



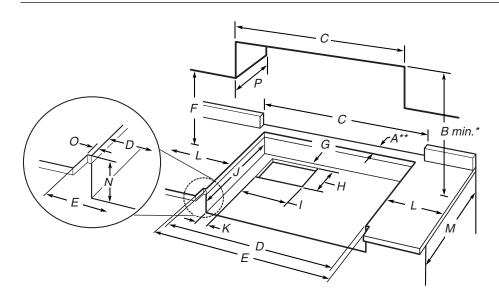
#### **Gas and Electric Connection Locations**



- A. Grounded 3-prong outlet should be located on left-hand side of the cutout 16" (40.6 cm) max. from enclosure sidewall
- B. 10" (25.4 cm) min. clearance from countertop to top of the outlet
- C. 14" (35.6 cm) countertop to the gas supply line
- D. Gas supply line should be located in this area on rear or side walls, or the supply line can come up through the floor.

**NOTE**: Solid side and bottom of cutout enclosure not shown.

#### **Cabinet Requirements**



- A. See chart.
- B. See chart.
- C. See chart.
- D. See chart.
- E. See chart.
- F. 18" (45.7 cm) min. clearance upper cabinet to countertop
- G. ¾" (1.9 cm) back of cabinet cutout to gas opening cutout
- H. 61/8" (16.1 cm) gas opening cutout depth
- I. 121/2" (31.7 cm) gas opening cutout width
- J. 221/4" (56.5 cm) cabinet cutout depth
- K. 2" (5.1 cm) cabinet side to gas cutout
- L. 6" (15.2 cm) min. distance on both sides of the cooktop to the side wall or other combustible material above cooking surface
- M. 24" (61.0 cm) cabinet depth
- N. 71/4" (18.4 cm) cabinet depth to countertop
- O. Notch to be equal on both sides
- P. 13" (33.0 cm) upper cabinet depth

Size	Model	A** Cooktop Cutout to Back Wall	B* Cooktop to Cabinet	C Optional Backguard and Upper Cabinet Opening	D Cabinet and Countertop	E Countertop Only
30" (76.2 cm)	KGCU407	1¾" (4.4 cm)**	30" (76.2 cm)	30" (76.2 cm)	29¼" (74.3 cm)	30" (76.2 cm) or 29%" (75.9 cm) for zero clearance
36" (91.4 cm)	KGCU462 KGCU463 KGCU467	1½" (3.8 cm)** 1¾" (4.4 cm) 1¾" (4.4 cm)	42" (106.7 cm)	36" (91.4 cm)	35¼" (89.5 cm)	36" (91.4 cm) or 35%" (91.1 cm) for zero clearance
48" (121.9 cm)	KGCU482 KGCU483 KGCU484	1½" (3.8 cm)** 1¾" (4.4 cm)** 1½" (3.8 cm)**	42" (106.7 cm)	48" (121.9 cm)	47¼" (120.0 cm)	48" (121.9 cm) or 471/8" (121.6 cm) for zero clearance

<sup>\*</sup>NOTES: Dimension "B" can be reduced by 6" (15.2 cm) when bottom of wood or metal cabinet is covered by not less than 0.25" (6.4 mm) flame retardant millboard covered with not less than No. 28 MSG sheet metal, 0.015" (0.4 mm) stainless steel, 0.024" (0.6 mm) aluminum or 0.020" (0.5 mm) copper.

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

<sup>\*\*</sup>NOTE: If backwall is constructed of a combustible material and a backguard is not installed, a minimum clearance of dimension A + 6" (15.2 cm) is required for 48" (121.9 cm) cooktops and cooktops with a grill.

## **Electrical Requirements**

## AWARNING



#### **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.

**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.

This cooktop is equipped with an electronic ignition system that will not operate if plugged into an outlet that is not properly polarized.

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 1 Batterymarch Park Quincy, MA 02169-7471

CSA International 8501 East Pleasant Valley Road Cleveland, Ohio 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 wiring diagrams are provided with this cooktop. The wiring diagrams are located inside the control console and in the "Wiring Diagrams" section.

## Gas Supply Requirements

## AWARNING



#### **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.

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 factory-set for use with Natural gas. To convert to LP gas, see the Gas Conversion instructions provided in the package containing literature. The model/serial rating plate located on the left underside of the cooktop burner 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. To convert to LP gas, use the LP gas conversion kit provided with the cooktop and see the "Gas Conversions" section.

#### Gas Supply Line

■ Provide a gas supply line of ¾" (1.9 cm) rigid pipe to the cooktop location. A smaller size pipe on longer runs may result in insufficient gas supply. With LP gas, piping or tubing size can be ½" (1.3 cm) minimum. Usually, LP gas suppliers determine the size and materials used in the system.

**NOTE:** Pipe-joint compounds that resist the action of LP gas must be used. Do not use TEFLON $^{\odot}$ † tape.

#### Flexible metal appliance connector:

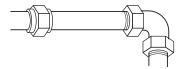
If local codes permit, a new CSA design-certified, 4 - 5 ft (122 - 152.4 cm) long, %" (1.6 cm) or ¾" (1.9 cm) I.D., flexible metal appliance connector may be used for connecting the cooktop to the gas supply line.



- A ½" (1.3 cm) male pipe thread is needed for connection to the female pipe threads of the inlet to the appliance pressure regulator.
- Do not kink or damage the flexible metal tubing when moving the cooktop.

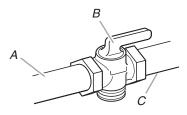
#### Rigid pipe connection:

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 enclosure or cabinet. 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.



A. Gas supply line

B. Shutoff valve "open" position

C. To 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: 6" (15.2 cm) WCP Maximum pressure: 14" (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 Rating - Altitude**

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 need to be reduced at a rate of 4% for each 1,000 ft (304.8 m) above sea level (not applicable for Canada).

#### **Gas Supply Pressure Testing**

Gas supply pressure for testing regulator must be at least 1" water column pressure above the manifold pressure shown on the model/serial rating plate.

#### 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  $\frac{1}{2}$  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  $\frac{1}{2}$  psi (3.5 kPa).

## INSTALLATION INSTRUCTIONS

## Install Cooktop

## AWARNING

#### **Excessive Weight Hazard**

Use two or more people to move and install cooktop. Failure to do so can result in back or other injury.

Write down the model and serial numbers before installing the cooktop. Both numbers are located on the left front underside of the burner base.

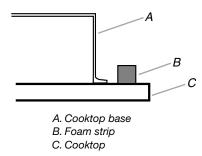
Unpack the parts supplied with your cooktop. The parts shipped with the cooktop depend on your model ordered. See "Tools and Parts" section for a complete list parts supplied with your cooktop.

The pressure regulator and flexible stainless steel gas supply line connector can be assembled to the cooktop now or after the cooktop is installed in the cutout. See "Make Gas Connection" section.

- L. Decide on the final location for the cooktop.
- Using two or more people, place the cooktop upside down on a covered surface.

3. Remove foam strip from literature packing. Remove backing from foam strip. Apply foam strip adhesive-side down along the left and right sides of the cooktop trim.

**NOTE:** The foam strip helps the cooktop sit flat on uneven counters and avoids damage to the countertop surface.

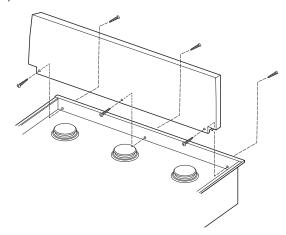


4. Using 2 or more people, turn cooktop right side up.

## Install Optional Backguard

48" (121.9 cm) models and all models with a grill may require a backguard. See "Cabinet Dimensions" in the "Location Requirements" section for installation requirements. See the "Tools and Parts" section for information on ordering.

Remove island trim and attach backguard using 6 screws; insert 3 from the front and 3 from the back (9" [22.9 cm] backguard shown).



#### Make Gas Connection

## AWARNING



#### **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:

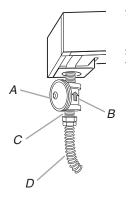
licensed heating personnel, authorized gas company personnel, and authorized service personnel.

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

#### To Assemble Pressure Regulator:

- Using 2 or more people, stand the cooktop on its side or back.
- 2. Connect the flexible stainless steel connector to the pressure regulator using a ½" male pipe thread adapter.

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.



- A. Gas pressure regulator
- B. Regulator Must be installed with arrow pointing up to cooktop bottom
- C. Adapter Must have 1/2" male pipe thread
- D. CSA approved flexible stainless steel gas supply line

3. Install the pressure regulator with the arrow pointing up toward the bottom of the cooktop burner base and in a position where you can reach the regulator cap.

**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.

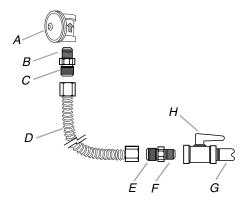
You will need to determine the fittings required depending on your installation.

4. Place cooktop into the countertop cutout.

**NOTE:** Check 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.

#### Typical flexible connection

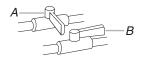
- Apply pipe-joint compound made for use with LP gas to the smaller thread ends of the flexible connector adapters (see B and F in the following illustration).
- Attach one adapter to the gas pressure regulator and the other adapter to the gas shutoff valve. Tighten both adapters.
- 3. Use a 15/16" combination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



- A. Gas pressure regulator
- B. Use pipe-joint compound. C. Adapter - Must have ½"
- C. Adapter Must have 1/2 male pipe thread
- D. Flexible connector
- E. Adapter
- F. Use pipe-joint compound.
- G. 1/2" or 3/4" gas pipe
- 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
- Test all connections by brushing on an approved noncorrosive leak-detection solution. If bubbles appear, a leak is indicated. Correct any leak found.

3. Remove cooktop burner caps, burner bases and grates from parts package. Place burner bases on cooktop. Place burner caps on burner bases. Place grates over burners and caps.

## AWARNING



#### **Electrical Shock Hazard**

Plug into a grounded 3 prong outlet.

Do not remove ground prong.

Do not use an adapter.

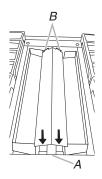
Do not use an extension cord.

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

- 4. Plug into a grounded 3 prong outlet.
- Check the operation of the surface burners. See "Check Operation of Cooktop Burners" section in the "Complete Installation" section.
- 6. If your model has a grill or griddle, see "Install Grill Grease Trays" or "Install Griddle" section.

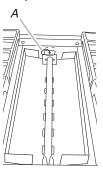
# Install Grill Grease Trays (on grill models)

 Remove flame spreader. Pull forward slightly on the flame spreader to release the tabs from the rear slots and lift out.



A. Grill front B. Rear tabs and slots

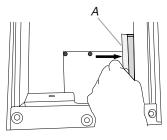
2. Cut and remove tie strap from rear of burner assembly.



A. Tie strap

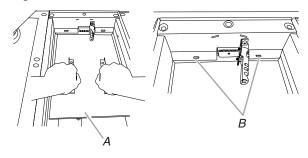
3. Lift burner assembly up and out to remove.

 Slide drip tray into opening on the right front side of the grill basin. There are guides to assure correct placement of the drip tray.



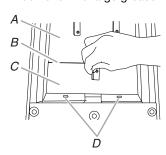
A. Drip tray

5. Insert the large grease tray all the way under the back edge of the grill basin and hook it into the slots.

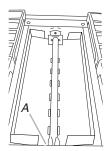


A. Large grease tray B. Slots

- **6.** Insert the small grease tray all the way under the front of the grill basin and hook it into the slots.
  - When the 2 grease trays are installed properly, the small grease tray will hook over the large grease tray.

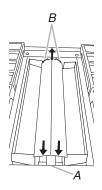


- A. Large grease tray
- B. Grease tray connection
- C. Small grease tray
- D. Slots
- Insert the orifice tube on the front of the burner assembly into the opening at the front of the grill basin and set burner assembly into place.



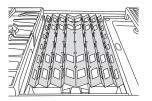
A. Front opening

8. Insert front tabs of the flame spreader into slots at the front of the grill basin, then the rear tabs into the rear slots.



A. Front tabs and slots B. Rear tabs and slots

- 9. Check the surface burner and grill flames. Refer to the "Electronic Ignition System" section.
- 10. Place the wave tray on top of the flame spreader.

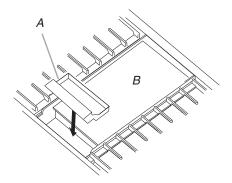


11. Place the grill grate into position.

# Install Griddle (on griddle models)

The griddle is factory installed.

1. Place drip tray in the well at the front of the griddle. Slide tray toward the back until it stops.



A. Griddle drip tray B. Griddle

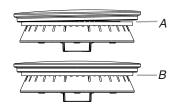
2. Clean griddle before using. Refer to the Use and Care Guide.

## Complete Installation

#### **Install Burner Bases and Burner Caps**

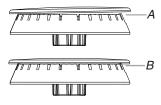
Install the burner base, making sure the igniter electrode is properly aligned with the base. Place burner caps on top of burner bases. If burner caps are not properly positioned, surface burners will not light.

#### 20,000 Btu/h Ultra Power™ Dual-Flame Burner



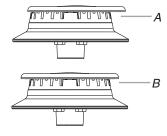
A. Incorrect B. Correct

#### 15,000 Btu/h Professional Burner



A. Incorrect B. Correct

#### 5,000 Btu/h Simmer/Melt Burner



A. Incorrect B. Correct

#### **Electronic Ignition System**

#### Initial lighting and gas flame adjustments

Cooktop burners use electronic igniters in place of standing pilots. When the cooktop control knob is turned to any position, the system creates a spark to light the burner. This sparking continues, until the flame is lit or the knob is turned to Off.

#### **Check Operation of Cooktop Burners**

Push in and turn each control knob to the "LITE" position.

The surface burners and grill flames 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.

After verifying the proper burner operation, turn the control knobs to OFF.

#### If burners do not light properly:

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

Repeat start-up. If a burner does not light at this point, contact your dealer or authorized service company for assistance.

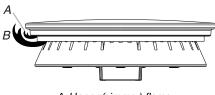
#### If you need Assistance or Service:

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

#### Flame Height

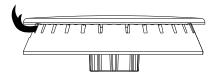
The cooktop flame should be a steady blue flame approximately  $\frac{1}{4}$  (0.64 cm) high.

#### **Dual Flame Burner**



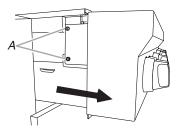
A. Upper (simmer) flame B. Lower flame

#### Single Flame Burner



#### To Adjust Flame Height:

- 1. Unplug cooktop or disconnect power.
- 2. Remove burner grates.
- 3. Remove the control knobs.
- **4.** Pull cooktop forward to expose the control console screws on the side of the cooktop burner base.
- Remove the 2 screws on each side of the cooktop burner base that hold the control console in place.

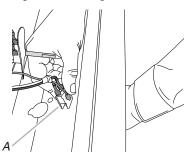


A. Console attachment screws

6. Disconnect wiring from the control console.

#### On Grill Models:

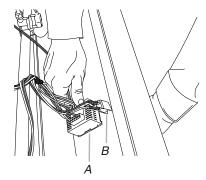
Support the control console in the middle with one arm and disconnect the grill indicator light with the other hand.



A. Grill indicator light connector

#### On Griddle Models:

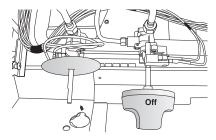
Support the control console in the middle with one arm and disconnect the griddle switch connectors and the grill indicator light with the other hand.



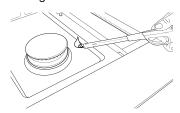
A. Griddle switch connectors

B. Grill indicator light connector

- 7. Remove console and set aside.
- 8. Remove the round gasket from the valve stem.
- 9. Put a control knob onto the valve stem of the burner you want to adjust.

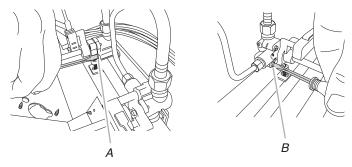


**10.** Turn the control knob to LO and light the burner using a butane extension lighter.



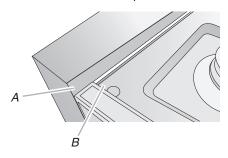
- 11. Remove the control knob.
- **12.** Use a 1/8" x 41/4" flat-blade screwdriver to adjust the flame height. Tighten screw to reduce flame height. Loosen screw to increase flame height.

**NOTE:** When you are converting to LP gas, the screw should be tightened down completely on the single output valves. The dual output valve should not be adjusted.



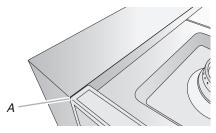
A. Single flame burner adjustment screw (on right side of valve) B. Dual flame burner adjustment screw (on left side of valve)

- **13.** When finished adjusting the flame height, put a control knob back onto the valve stem and turn off the burner.
- 14. Remove the control knob.
- 15. Replace the round gasket.
- **16.** Repeat steps 8 through 15 for any other burners that need adjustment.
- 17. Reinstall the control console. Support the control console in the middle with one arm and reconnect the griddle switch connectors and/or grill indicator light connector.
- **18.** Set the control console back into place on the cooktop. For a proper fit, the flange of the control console must hook over the lip on the front of the cooktop.



A. Control console flange B. Front lip of range cooktop

**19.** Check that the control console is flush with the top edge of the cooktop.



A. Flush with top of cooktop

- 20. Replace the 2 screws on each side of the control console.
- 21. Push the cooktop back into place in the cutout.
- 22. Replace the control knobs.
- 23. Replace burner grates.
- 24. Plug in cooktop or reconnect power.
- **25.** Test the flame by turning the control from LO to HI, checking the flame at each setting.

## **GAS CONVERSIONS**

**IMPORTANT:** Gas conversions from Natural gas to LP gas must be done by a qualified installer.

## **AWARNING**



#### **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.

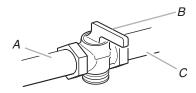
Examples of a qualified person include:

licensed heating personnel, authorized gas company personnel, and authorized service personnel.

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

#### LP Gas Conversion

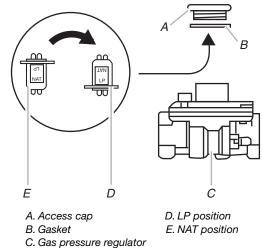
1. Turn the manual shutoff valve to the closed position.



- A. To cooktop
- B. Shutoff valve (closed position)
- C. Gas supply line
- 2. Unplug cooktop or disconnect power.

#### To Convert Gas Pressure Regulator

- Remove the access cap by using a wrench, turning the access cap counterclockwise.
- 2. 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.



o. das prossure regulator

3. 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 11" (27.9 cm) WCP Maximum pressure 14" (35.5 cm) WCP

#### **Gas Supply Pressure Testing**

Gas supply pressure for testing regulator must be at least 1" water column pressure above the manifold pressure shown on the model/serial rating plate.

#### 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).

#### **To Convert Surface Burners**

- 1. If installed, remove the burner grates.
- 2. Remove burner cap.
- 3. Remove the burner base.



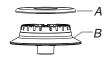
#### Large Dual Burner

- A. Burner cap
- B. Burner base



#### Medium Burner

- A. Burner cap
- B. Burner base
- C. Choke (for use with medium burner, LP gas only)



#### Small Burner

- A. Burner cap
- B. Burner base

- 4. Apply masking tape to the end of a 7 mm nut driver to help hold the gas orifice spud in the nut driver while changing it. Insert nut driver into gas opening and press down onto the gas orifice spud and remove by turning the gas orifice spud counterclockwise and lifting out. Set gas orifice spud aside.
- Replace with correct LP gas orifice spud. See the "LP Gas Orifice Spud/Hood Chart."

Use the following chart to find the exact orifice spud placement.

Fully insert choke into bottom of medium burner base. Choke should snap into place.

#### LP Gas Orifice Spud/Hood Chart

	-		
Burner Rating	Color	Size	Burner Style
3,000 BTU	Blue	0.55 mm	Small burners
			<u> </u>
11,000 BTU	Yellow	0.97 mm	Medium burners
14,000 BTU	Red/ Green	1.05 mm	Large burner - main
	Green	0.35 mm	Large burner - simmer
14,500 BTU	Black	1.18 mm	Grill burner

#### **Burner orifice spud**

#### **Grill orifice hood**

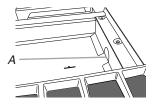




- A.Size stamp or color
- Place Natural gas orifice spuds in plastic parts bag for future use and keep with package containing literature.
- 7. Replace the burner base.
- 8. Replace burner cap.
- 9. Repeat steps 2 through 8 for the remaining burners.

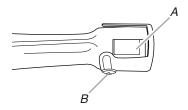
#### To Convert Grill Burner (on some models)

- 1. Remove grill grate, wave plate, flame spreader and burner assembly. See "Install Grill Grease Trays" section for removal instructions. Set parts aside.
- 2. Use a ½" deep-well socket to remove the Natural gas orifice hood. Replace with correct grill LP gas orifice hood. See "LP Gas Orifice Spud/Hood Chart."



A. Grill orifice hood location

- 3. Turn LP gas orifice hood down tightly onto orifice base.
- **4.** Place Natural gas orifice hoods in plastic parts bag for future use and keep with package containing literature.
- Before replacing the burner assembly, loosen the screw at the front of the burner and rotate the shutter so that the opening is <sup>5</sup>/<sub>16</sub>" (8.0 mm) wide.



A. Shutter opening B. Screw

- Reinstall the burner assembly, flame spreader, wave plate, and grill grate. See "Install Grill Grease Trays" section for installation instructions.
- 7. Open shutoff valve in the gas supply line. The valve is open when the handle is parallel to the gas pipe.

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

8. Plug in cooktop or reconnect power.

#### **Complete Installation**

- Refer to the "Make Gas Connection" section for properly connecting the cooktop to the gas supply.
- 2. Refer to the "Electronic Ignition System" section for proper burner ignition, operation, and burner flame adjustments.

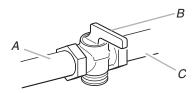
**IMPORTANT:** You may have to adjust the "LO" setting for each cooktop burner.

Checking for proper cooktop burner flame is very important. The small inner cone should have a very distinct blue flame  $\frac{1}{4}$ " (0.64 cm) to  $\frac{1}{2}$ " (1.3 cm) long. The outer cone is not as distinct as the inner cone. LP gas flames have a slightly vellow tip.

3. Refer to "Complete Installation" in the "Installation Instructions" section of this manual to complete this procedure.

#### Natural Gas Conversion

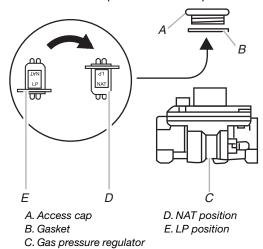
1. Turn manual shutoff valve to the closed position.



- A. To cooktop
- B. Shutoff valve (closed position)
- C. Gas supply line
- 2. Unplug cooktop or disconnect power.

#### To Convert Gas Pressure Regulator

- Remove the access cap by using a wrench, turning the access cap counterclockwise.
- 2. 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.



3. 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:

#### **Natural Gas:**

Minimum pressure: 6" (15.2 cm) WCP Maximum pressure: 14" (35.5 cm) WCP

#### **Gas Supply Pressure Testing**

Gas supply pressure for testing regulator must be at least 1" water column pressure above the manifold pressure shown on the model/serial rating plate.

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

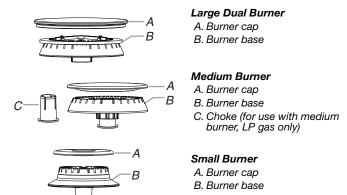
The cooktop and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ psi (3.5 kPa).

#### 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).

#### **To Convert Surface Burners**

- 1. If installed, remove the burner grates.
- 2. Remove burner cap.
- 3. Remove the burner base.



- 4. Apply masking tape to the end of a 7 mm nut driver to help hold the gas orifice spud in the nut driver while changing it. Insert nut driver into gas opening and press down onto the gas orifice spud and remove by turning the gas orifice spud counterclockwise and lifting out. Set gas orifice spud aside.
- Replace with correct Natural gas orifice spud. See the "Natural Gas Orifice Spud/Hood Chart."
   Use the following chart to find the exact orifice spud placement.

Remove choke from medium burner base.

#### Natural Gas Orifice Spud/Hood Chart

A.Size stamp or color

Burner Rating	Size	Burner Style
5,000 BTU	1.01 mm	Small burners
15,000 BTU	1.75 mm	Medium burners
20,000 BTU	2.10 mm 0.52 mm	Large burner - main Large burner - simmer
18,000 BTU	1.93 mm	Grill burner (on some models)
Burner orifice spud	Gril	ll orifice hood
A ×××		A

A.Size stamp

- **6.** Place LP gas orifice spuds in plastic parts bag for future use and keep with package containing literature.
- 7. Replace the burner base.
- 8. Replace burner cap.
- 9. Repeat steps 2 through 8 for the remaining burners.

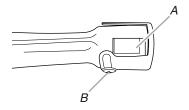
#### To Convert Grill Burner (on some models)

- Remove grill grate, wave plate, flame spreader and burner assembly. See "Install Grill Grease Trays" section for removal instructions. Set parts aside.
- 2. Use a ½" deep-well socket and remove the LP gas orifice hood. Replace with correct grill Natural gas orifice hood. See "Natural Gas Orifice Spud/Hood Chart."



A. Grill orifice hood location

- 3. Turn Natural gas orifice hood down tightly onto orifice base.
- 4. Place LP gas orifice hoods in plastic parts bag for future use and keep with package containing literature.
- 5. Before replacing the burner assembly, loosen the screw at the front of the burner and rotate the shutter so that the opening is 3/8" (9.0 mm) wide.



A. Shutter opening

B. Screw

- Reinstall the burner assembly, flame spreader, wave plate, and grill grate. See "Install Grill Grease Trays" section for installation instructions.
- Open shutoff valve in the gas supply line. The valve is open when the handle is parallel to the gas pipe.

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

8. Plug in cooktop or reconnect power.

#### **Complete Installation**

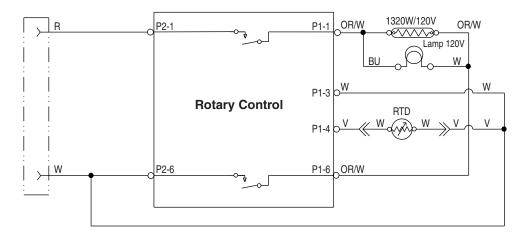
- **1.** Refer to the "Make Gas Connection" section for properly connecting the cooktop to the gas supply.
- Refer to the "Electronic Ignition System" section for proper burner ignition, operation, and burner flame adjustments.
   IMPORTANT: You may have to adjust the "LO" setting for each cooktop burner.

Checking for proper cooktop burner flame is very important. The small inner cone should have a very distinct blue flame  $\frac{1}{4}$ " (0.64 cm) to  $\frac{1}{2}$ " (1.3 cm) long. The outer cone is not as distinct as the inner cone. LP gas flames have a slightly yellow tip.

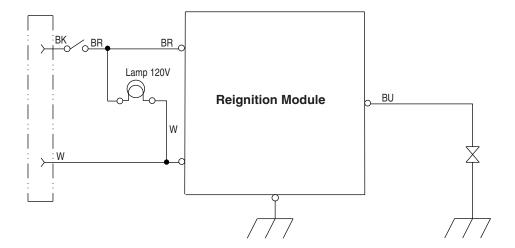
3. Refer to "Complete Installation" in the "Installation Instructions" section of this manual to complete this procedure.

# STRIP CIRCUITS

#### **Griddle 120V Control Wiring Diagram To Cooktop Stand-Alone**



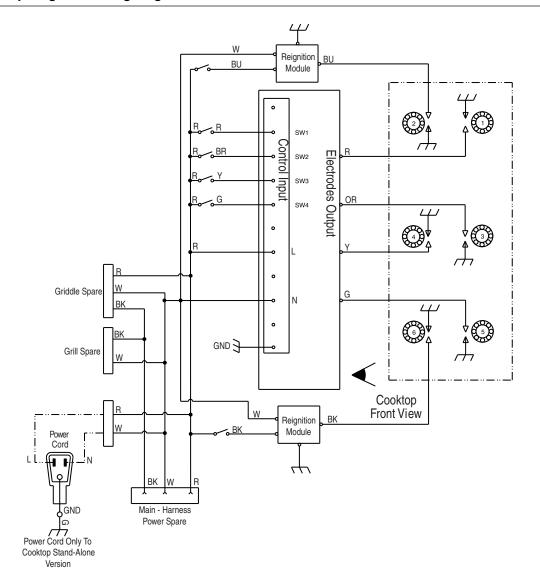
## **Grill Reignition Wiring Diagram To Cooktop Stand-Alone and Freestanding**



# WIRING DIAGRAMS

**Caution**: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

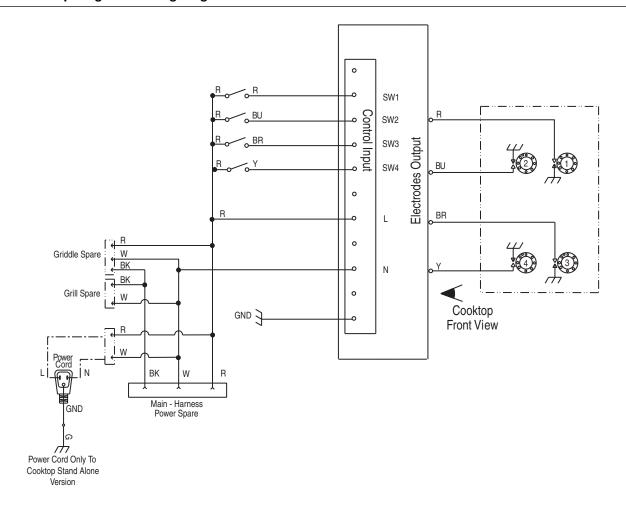
#### 6 Burner Cooktop Reignition Wiring Diagram



#### **LEGEND**

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Ground (Chassis)	Plug With Female Connector	Receptacle With Male Connector	Electrode	Transformer	Relay Contacts	Solenoid Valve	Switch	Cooktop Gas Burner	RTD - Temperature Sensor	Heating Element	Indicator Lamp

#### 4 Burner Cooktop Reignition Wiring Diagram



## **LEGEND**

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Ground (Chassis)	Plug With Female Connector	Receptacle With Male Connector	Electrode	Transformer	Relay Contacts	Solenoid Valve	Switch	Cooktop Gas Burner	RTD - Temperature Sensor	Heating Element	Indicator Lamp