Viking Installation Guide



Viking Range Corporation

111 Front Street

Greenwood, Mississippi 38930 USA

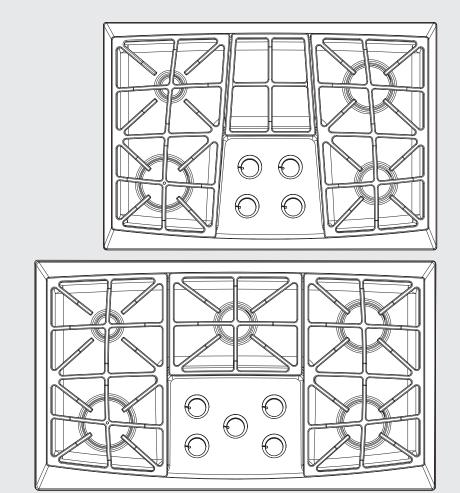
(662) 455-1200

For product information,

call 1-888-VIKING1 (845-4641)

or visit the Viking Web site at

vikingrange.com





Designer DGVU Built-In Gas Cooktops

F20680B EN 09VK3130 ed.11-10 (020111)

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A DANGER



FIRE/EXPLOSION HAZARD

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.

2

 Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

IMPORTANT - Please Read and Follow

- Before beginning, read these instructions thoroughly and carefully.
- Installation and service must be performed by a qualified installer, service agency, or the gas supplier.
- **DO NOT** remove permanently affixed labels, warnings, or plates from the product as this may void the warranty.
- Observe all local and national codes, requirements and ordinances.
- Installation must conform with local codes or in the absence of codes, the National Fuel Gas Code, ANSI Z223.1- latest edition and the National Electrical Code, ANSI/NFPA 70- latest edition.

In Canada: Installation must be in accordance with the current CAN/CGA B149.1 & 2 Gas Installation codes and with the current CSA C22.1 Canadian Electrical Codes Part 1 and/or local codes.

- Installation of any gas-fired equipment should be made by a licensed plumber.
- A manual gas shut-off valve must be installed in the gas supply line ahead of the cooktop in the gas stream for safety and ease of service.

In Massachusetts: This appliance must be installed by a licensed plumber or gas-fitter. A "T" handle manual gas valve must be installed in the gas supply line to the appliance.

 Installers should leave these instructions with the consumer who should retain them for the local inspector's use and for future reference. Your safety and the safety of others is 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 hazards that can kill or hurt you and others.

All safety messages will be preceded by the safety alert symbol and the word "DANGER," "WARNING" or "CAUTION." These words mean:

A DANGER

Hazards or unsafe practices which WILL result in severe personal injury or death

A WARNING

Hazards or unsafe practices which COULD result in severe personal injury or death

A CAUTION

Hazards or unsafe practices which COULD result in minor personal injury or property damage.

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

IMPORTANT - Please Read and Follow

A CAUTION

BURN HAZARD

The use of cabinets for storage above the appliance may result in a potential burn hazard. Combustible items may ignite, metallic items may become hot and cause burns. If a 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.

A WARNING



CHEMICAL HAZARD

If not installed, operated and maintained in accordance with the manufacturer's

instructions, this product could expose you to substances in fuel or from fuel combustion which can cause death or serious illness and which are known to cause cancer, birth defects, or other reproductive harm.

For example, benzene is a chemical which is part of the gas supplied to the cooking product. It is consumed in the flame during combustion. However exposure to a small amount of benzene is possible if a gas leak occurs. Formaldehyde and soot are byproducts of incomplete combustion. Properly adjusted burners with a bluish rather than yellow flame will minimize incomplete combustion.

A CAUTION

Before placing the cooktop into operation, always check for gas leaks with a soapy water solution or other acceptable method. **DO NOT** USE AN OPEN FLAME TO CHECK FOR LEAKS.

▲ WARNING

This appliance shall not be used for space heating. This information is based on safety considerations.

IMPORTANT – Please Read and Follow

A WARNING

ELECTRICAL GROUNDING INSTRUCTIONS

The cooktop must be electrically grounded in accordance with local codes or, in the absence of codes, with the ANSI/NFPA No. 70-latest edition. Installation should be made by a licensed electrician. This appliance is equipped with a three-prong grounding plug for your protection against shock hazard and should be plugged directly into a properly grounded receptacle. **DO NOT** cut or remove the grounding prong from the plug.

For personal safety, this appliance must be properly grounded. DO NOT under any circumstances cut or remove the third (ground) prong from the power plug.

A WARNING

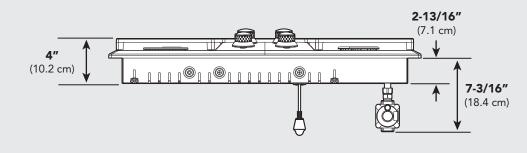
SITE PREPARATION

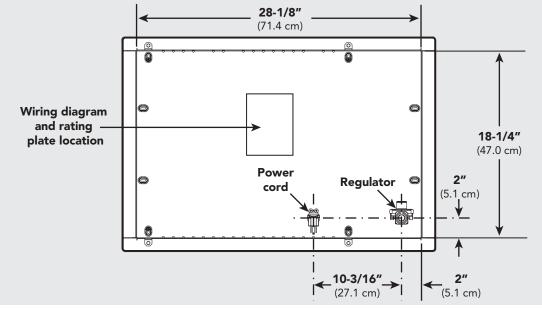
It is recommended that a thorough site inspection be conducted **PRIOR** to unpacking and moving this appliance.

Dimensions

Dimensions

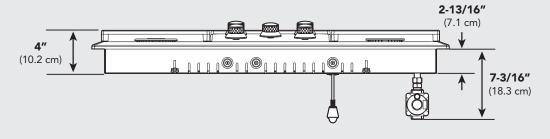
30" Gas Cooktop 30-3/4" (78.2 cm) 21" (53.4 cm)

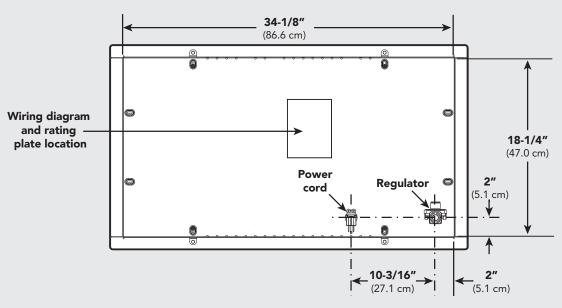




36-3/4" (93.3 cm) 21" (53.4 cm)

36" Gas Cooktop

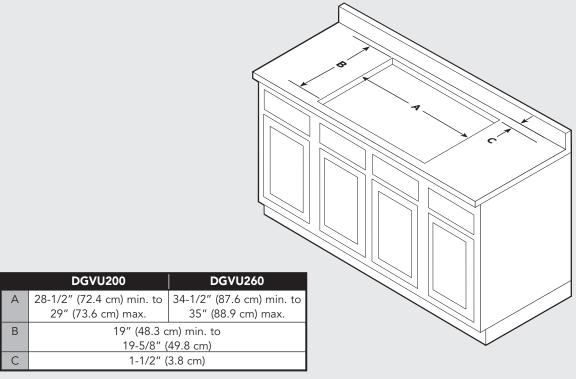




Specifications

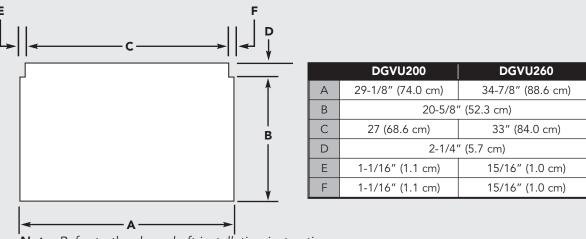
Designer Gas Cooktops		
Description	DGVU200	DGVU260
Overall width	30-3/4" (78.1 cm)	36-3/4" (93.3 cm)
Overall height from bottom to top of grate	4" (10	.2 cm)
Overall depth from rear	21" (53.3 cm)	
Cutout width	28-1/2" (72.4 cm) min. to 29" (73.6 cm) max.	34-1/2" (87.6 cm) min. to 35" (88.9 cm) max.
Cutout height	2-13/16" (7.1 cm)	
Cutout depth	19" (48.3 cm) min. to 19-5/8" (49.8 cm)	
Gas requirements	Accepts standard residential ½" (1.3 cm) I. D. gas service line. Shipped natural; gas regulator and orifice spuds are supplied with the product. To field convert from natural or LP/Propane, the orifice spuds and regulator must be physically changed.	
Electrical requirements	120 VAC/60 Hz; 4 ft. (121.9 cm), 3-wire cord with grounded 3-prong plug attached to product.	
Maximum amp usage	2.0 amps	
Surface element rating Left front	15,000 Nat./LP (BTU)	15,000 Nat./LP (BTU)
Left rear	(4.4 Nat./LP (kw)) 4,000 Nat./LP (BTU) (1.0 Nat./LP (kw))	(4.4 Nat./LP (kw)) 4,000 Nat./LP (BTU) (1.0 Nat./LP (kw))
Center front/rear	N/A	9,000 Nat./LP (BTU) (2.6 Nat./LP (kw))
Right front	9,000 Nat./LP (BTU)	12,000 Nat./LP (BTU)
Right rear	(2.6 Nat./LP (kw)) 12,000 Nat./LP (BTU) (3.5 Nat./LP (kw))	(3.5 Nat./LP (kw)) 12,000 Nat./LP (BTU) (3.5 Nat./LP (kw))
Approximate shipping weight	35 lb. (15.9 kg)	60 lb. (27.2 kg)

Cutout Dimensions



Note: Based on 24" deep cabinet with 3/4" backsplash.

Downdraft Dimensions



Note: Refer to the downdraft installation instructions.

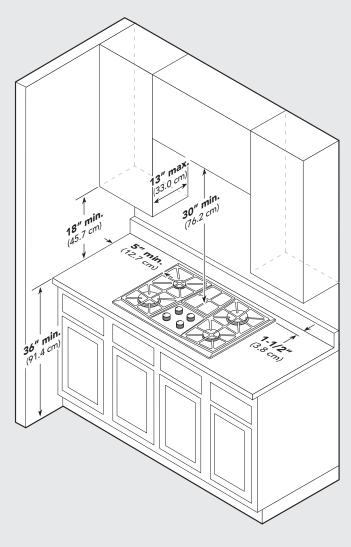
Clearance Dimensions (Proximity to Cabinets)

Proximity to Side Cabinet Installation

- The cooktop may be installed directly to existing base cabinets.
- The cooktop **CANNOT** be installed directly adjacent to sidewalls, tall cabinets, tall appliances, or other side vertical surfaces above 36" (91.4 cm) high. There must be a minimum of 5" (12.7 cm) side clearance from the cooktop to such combustible surfaces above the 36" (91.4 cm) counter height.
- Within the 5" (12.7 cm) side clearance to combustible vertical surfaces above 36" (91.4 cm), the maximum wall cabinet depth must be 13" (33.0 cm) and wall cabinets within this 5" (12.7 cm) side clearance must be 18" (45.7 cm) above the 36" (91.4 cm) high countertop.
- Wall cabinet above the cooktop must be a minimum of 30" (76.2 cm) above the cooking surface for a full width of the cooktop. This minimum height requirement does not apply if a rangehood is installed over the cooking surface.
- A 120 volt wall receptacle should be located approximately 6" (15.2 cm) below the countertop cutout and 12" (30.5 cm) from the right side of the cutout.

Minimum Clearances from Adjacent Combustible Construction

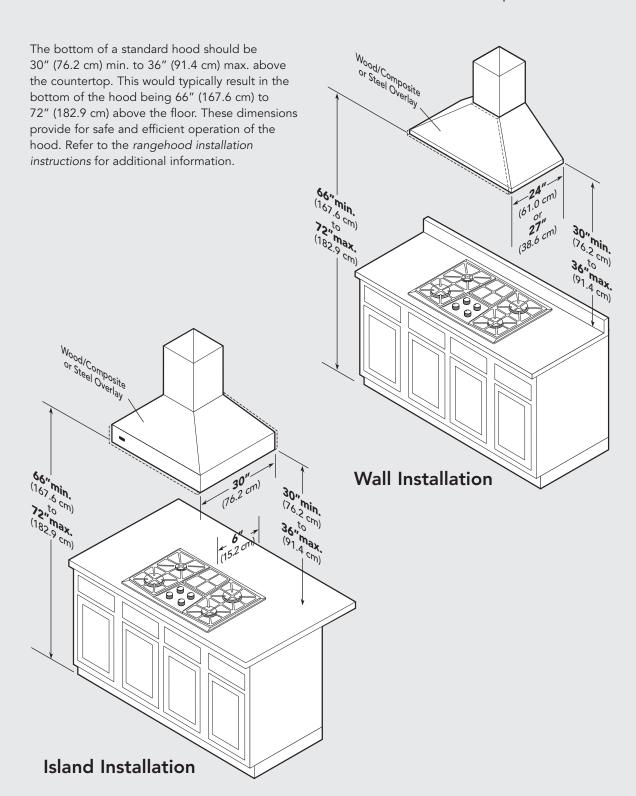
- Wall cabinets directly above the product must be minimum 30" (76.2 cm) above the cooking surface.
- Side 5" (12.7 cm)
- Rear 1-1/2" (3.8 cm) min.
- Within 5" (12.7 cm) side clearance. Wall cabinets no deeper than 13" (33.0 cm)
- Must be minimum 18" (45.7 cm) above countertop



Note: Dimensions shown are for use with combustible surfaces unless otherwise stated.

10

Clearance Dimensions (Wood/Composite or Steel Overlay)



Electrical & Gas Requirements

Electrical Requirements

There is no connection necessary beyond plugging the unit into a polarized, grounded, 120 volt, 60 Hz, 15 amp circuit. A minimum of 120 VAC is required for proper operation of gas ignition systems. **DO NOT** use a GFI circuit. This circuit, however, **MUST** be grounded and properly polarized. The unit is equipped with 16-3 SPT2 power cord.

Note: If electrical power is not supplied or is interrupted, the open top burners will have to be lit manually with a match.

Gas Connection

- Thread the appliances pressure regulator with 1/2" male end connection both supplied with this appliance.
- Make the gas connection to the inlet of the pressure regulator with 1/2" male pipe threads.
- Join the pressure regulator to the entrance threads of the Gas Manifold with gasket supplied with this appliance. The regulator is marked with a directional arrow indicating correct direction of gas flow. Ensure the appliance regulator is installed with the arrow pointing toward the gas manifold entrance and make sure the top of the regulator is facing towards the cabinet front, easily accessible through the cabinet doors.
- Install a coupling between the regulator and the shutoff valve to complete the connection.
- Assure all pipe joint connections are gas tight.
- Check alignment of valves after connecting the cooktop to the gas supply to be sure the manifold pipe has not been moved. A misalignment could cause the valve knob stem to rub on the control panel, resulting in a gas leak at the valve.

If an oven is to be installed below this appliance, connect gas supply line as shown in **Figure 1**. Consider the below cabinet clearance.

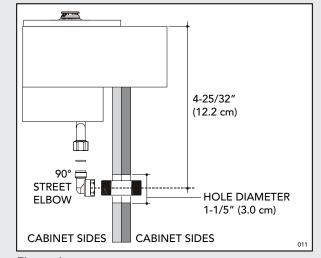


Figure 1

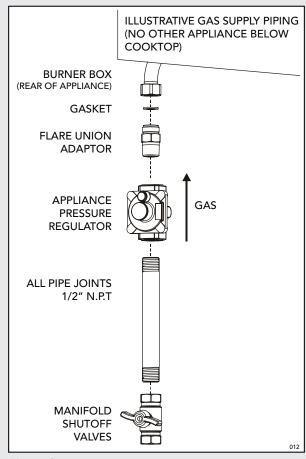


Figure 2

Electrical & Gas Requirements

Manual shut-off valve:

 The supplied valve must be installed in the gas service line ahead of the appliance and regulator in the gas stream. It should be positioned where it can be reached quickly in the event of an emergency.

In Massachusetts: A "T" handle type manual gas valve must be installed in gas supply line to the appliance.

Pressure regulator:

- The regulator supplied with the DGVU cooktops must be installed before any gas connections are made. It is pre-set for use with natural gas. This must be converted to use with LP/Propane gas.
- Manifold pressure should be checked with a manometer. Natural gas requires 5.0" WCP and LP/Propane requires 10.0" WCP. Incoming line pressure upstream for the regulator must be 1" WCP higher than the manifold pressure in order to check the regulator.
- The regulator used on this cooktop can withstand a maximum input pressure of 1/2 PSI (14.0" WCP). If the line pressure is in excess of that amount, a step down regulator will be required.
- The manual shut off valve and pressure regulator on these cooktops must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of 1/2 PSI (3.45kPa.)
- The cooktop must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 PSI (3.45kPa).

IMPORTANT: NEVER reuse old connectors when installing this cooktop.

Rigid Connections:

 Incoming gas is brought from an intake pipe at the rear of the unit to the pressure regulator; then to the manifold pipe for distribution. The intake pipe and shut-off valve are not supplied. The intake pipe and the shut-off valve should be connected to the regulator to complete the connection.

In Massachusetts: This appliance must be installed with a 36" (3-foot) long flexible gas connector.

 Installer-supplied intake pipes should be checked visually for any foreign matter before installing in a service line.

A CAUTION

Before placing the cooktop into operation, always check for gas leaks with a soapy water solution or other acceptable method. **DO NOT** USE AN OPEN FLAME TO CHECK FOR LEAKS.

Electrical & Gas Requirements

LP/Propane Conversion

The DGVU cooktops are shipped natural gas, and manufactured for use with natural gas or LP/Propane gas. Check the rating plate located on the bottom of the burner box for type of gas needed.

- To convert to natural gas or LP/Propane gas, the orifice spuds must be physically changed and the regulator must be reset. Gas conversions must be completed by a qualified service technician.
- The installer must use a flexible connector of at least ½" I.D. (1.3 cm) NPT and comply with ANSI Z21.41 and Z21.69 standards.

A WARNING

Conversion must be performed by a qualified installer, service agency, or the gas supplier in accordance with the manufacturer's instructions. Failure to follow instructions could result in serious injury or property damage.

A WARNING

Electrical power and gas must be turned off prior to conversion.

To convert from both natural to LP/Propane and LP/Propane to natural a conversion kit is supplied.

Initial Ignition of Burners

- All cooktops are tested before leaving the factory. Field adjustments may be necessary for proper mixture of gas and air for proper operation. Contact a qualified technician to make any necessary adjustments.
- The surface burners use electric igniters in place of standing pilots.

Proper Lighting and Shutdown Instructions

To ignite electric igniters on the surface burners:

- 1. Turn the knob counterclockwise to any position.
- 2. Upon ignition of the surface burner, turn the knob to the desired position (HI, Med or Low).
- 3. To shutdown the burner, turn knob clockwise to the OFF position.

In case of failure, shut the gas OFF using the installer supplied manual shut-off valve.

Low Flame Adjustment

A DANGER

Lighting gas burners with a match is dangerous. You should match light the cooktop burners only in an emergency. Light a match and hold the flame near the burner you want to light. Wooden matches work best. Push in and turn the control knob slowly. Be sure you are turning the correct knob for the burner you are lighting.

Note: If the burner does not light within five seconds, turn the knob off and wait one minute before trying again.

A WARNING

If you attempt to measure the inner cone of the flame, please use caution. Burns could result.

This appliance is shipped from the factory with low and medium flame settings adjusted.

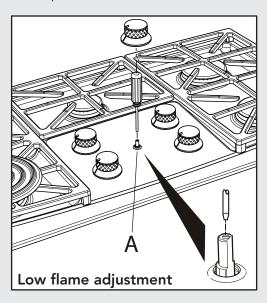
Electrical & Gas Requirements

Low Flame Adjustment (cont.)

If further adjustment is necessary, proceed as follows:

Adjustment for Burners

- 1. Light burner and set control knob for low flame.
- 2. Remove control knob from valve stem.
- 3. Using a flathead screwdriver, adjust the screw to set flame size:
- clockwise to reduce
- counterclockwise to increase
- 4. Replace control knob when adjustment is completed.

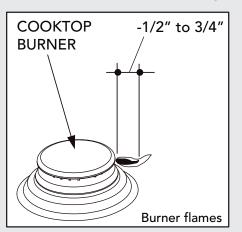


Proper adjustment will produce a stable, steady blue flame of minimum size. The final adjustment should be checked by turning knob from high to low several times without extinguishing the flame.

This adjustment, at low setting, will automatically provide the proper flame size at medium setting. After conversion steps have been completed, check the appearance of each burner's flame at the HI and LO settings. If the flames appear too large or too small, review each step to make sure it was completed correctly.

Burner Flames

Turn each burner on. Flames should be blue in color with no trace of yellow. The burner flames should not flutter or blow away from the burner. The inner cone of the flame should be between 1/2" and 3/4" long.



NOTE: To obtain the correct minimum setting with LP gas, turn clockwise tightening the valve by the thin-blade screwdriver into the recess at center of valve stem.

General Information

A CAUTION



ELECTRICAL SHOCK HAZARD

Plug into a 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.

Electrical Requirement

- A standard 120V/60 Hz, 15 amp circuit,
 3-wire ground, 3-prong plug is equipped.
- A minimum of 120 VAC is required for proper operation of gas ignition systems. The circuit must be MUST be properly grounded and polarized.

IMPORTANT: It is recommended to have the electrical wiring and installation of your cooktop connected by a qualified electrician.

IMPORTANT: The cooktop must be electrically grounded in accordance with local codes or, in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70 latest edition or Canadian Electrical Code (CSA).

Surface Burners Initial Ignition of Burners

- All cooktops are tested before leaving the factory. Field adjustments may be necessary for proper mixture of gas and air for proper operation. Contact a qualified technician to make any necessary adjustments.
- The surface burners use electric igniters in place of standing pilots.

To ignite electric igniters on the surface burners:

• Turn the knob counterclockwise to any position.

- Upon ignition of the surface burner, turn the knob to the desired position (HI, Med or Low).
- To shutdown the burner, turn knob clockwise to the OFF position.
- In case of failure, shut the gas OFF using the installer supplied manual shut-off valve.

Site Preparation

Note: It is recommended that a thorough site inspection be conducted prior to unpacking and moving this appliance.

- Confirm available access to adequate powersee electrical requirements.
- Be sure that the countertop for this appliance is level and cut according to the cutout requirements and dimensions—see cutout requirements and dimensions.
- All wall coverings, countertop and cabinets around the cooktop should withstand heat up to 200°F (90°C).
- Keep appliance free from combustible materials, gasoline, and other flammable vapors.

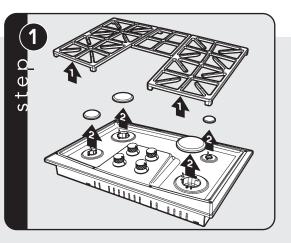
A WARNING

DO NOT use an extension cord with this appliance. Such use may result in fire, electrical shock or other personal injury

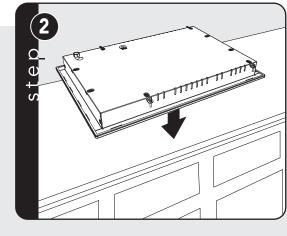
Installation Procedure

Remove packaging materials and literature package from the cooktop before beginning installation. Remove Installation Instructions from literature pack and read them carefully before you begin.

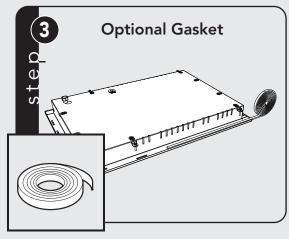
Installation



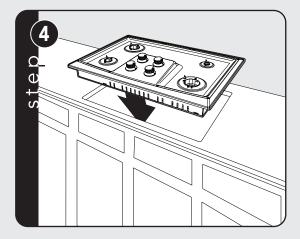
Remove the grates and burner caps.



Turn the cooktop upside down and place on the packaged foam top. **Note:** Make sure there are no loose objects on the cooktop before turning upside down.



Peel away the plastic covering and place the gasket material all the way around the burner flange. IMPORTANT: Make sure the corners are covered completely, leaving no air gaps.

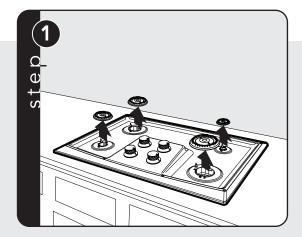


Turn the cooktop over and place into countertop opening.

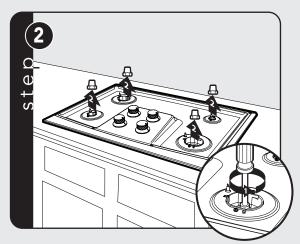
LP Conversion

A WARNING

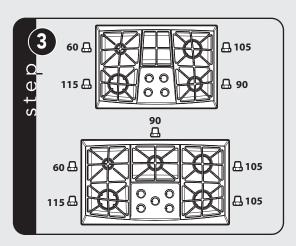
LP conversion should only be performed by a qualified service technician



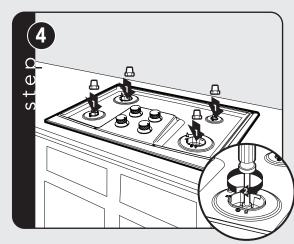
Remove aluminum gas spreaders.



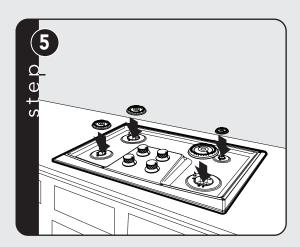
Remove injectors using a 9/32" nut driver.



Reference chart to determine which injectors are needed for each burner.

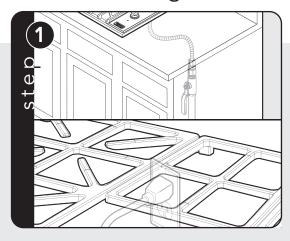


Install and tighten injectors.

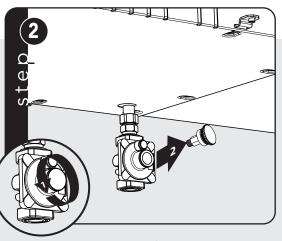


Replace aluminum flame spreaders.

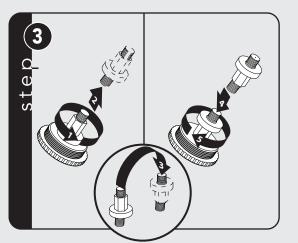
LP Pressure Regulator Conversion



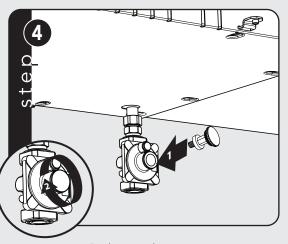
Disconnect electrical power and shut off gas.



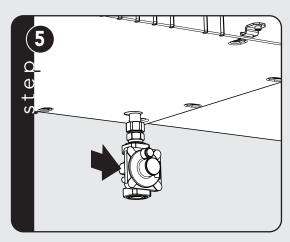
Unscrew regulator cap.



Unscrew the plastic conversion plug from the cap and turn over. Screw plug back into cap with the wide section away from cap.



Replace regulator cap.

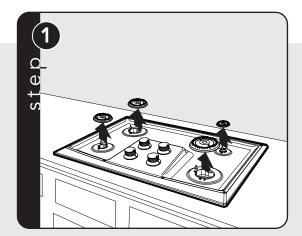


Test gas pressure. When converting the regulator for different settings, the function of the regulator must be checked at a pressure at least 1" WC (249Pa) above the specified manifold pressure.

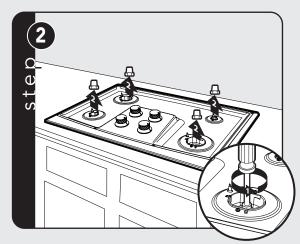
Natural Gas Conversion

A WARNING

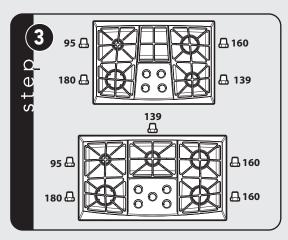
Natural conversion should only be performed by a qualified service technician.



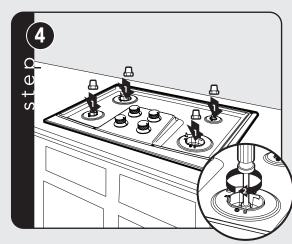
Remove aluminum gas spreaders.



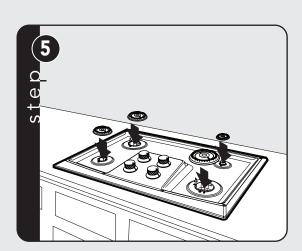
Remove injectors using a 9/32" nut driver.



Reference chart to determine which injectors are needed for each burner.

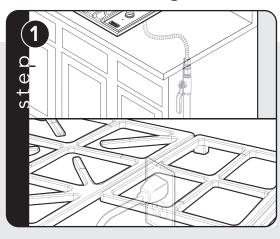


Install and tighten injectors.

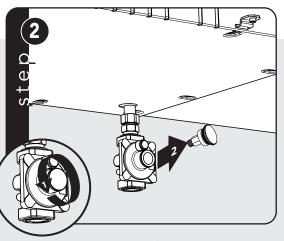


Replace aluminum flame spreaders.

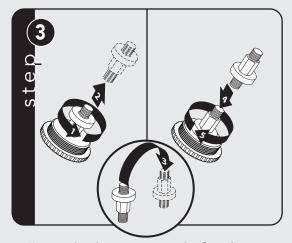
Natural Gas Regulator Conversion



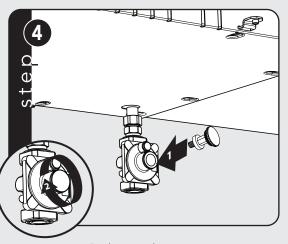
Disconnect electrical power and shut off gas.



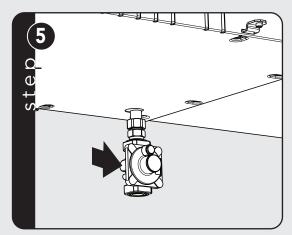
Unscrew regulator cap.



Unscrew the plastic conversion plug from the cap and turn over. Screw plug back into cap with the wide section close to the cap.



Replace regulator cap.



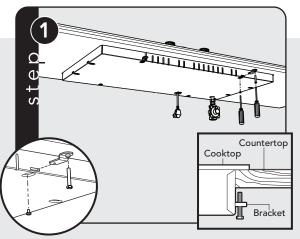
Test gas pressure. When converting the regulator for different settings, the function of the regulator must be checked at a pressure at least 1" WC (249Pa) above the specified manifold pressure.

Note: After injectors replacement, adjust the burner flame (See Low Flame Adjustment in Electrical & Gas Requirements section).

Gas & Electrical Connection Bracket Installation

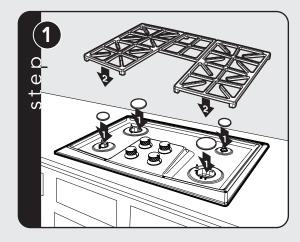


Note: Refer to
"Electrical & Gas
Requirements"
section for
proper
installation
information.



Place brackets in the slots and lower until the bracket catches. Use the bolt to tighten the cooktop to the countertop. **Note:** There must be a 1" (2.5 cm) clearance under counter on all four sides of cooktop. **Note:** If cabinet construction does not provide enough clearance for installing brackets on the front and back of the burner box, install the brackets on the sides of burner box.

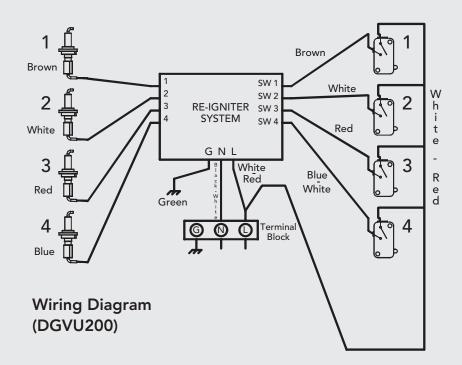
Final Installation

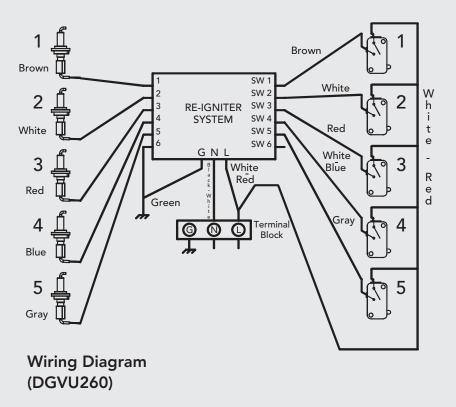


Replace the burner caps and grates. **Note:** The narrow edge of grate goes toward center of unit.

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Wiring Diagrams





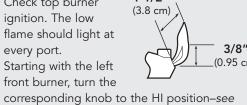
Final Preparation

- New units are cleaned at the factory to remove any visible signs of dirt, oil, grease, etc. remaining from the manufacturing process. Some stainless steel parts may have a plastic protective wrapper which must be peeled off. The cooktop should be washed thoroughly with hot, soapy water and then rinsed and wiped dry to remove these film residues and any installation dust or debris before being used for food preparation.
- All stainless steel body parts should be wiped regularly with hot, soapy water and with a liquid cleanser designed for this material if build-up occurs. **DO NOT** use steel wool, abrasive cloths, cleansers, or powders. If it is necessary to scrape stainless steel to remove encrusted material, soak with hot, wet cloths to loosen the material, then use a wood or nylon scraper. DO NOT use a metal knife, spatula, or any other metal tool to scrape stainless steel. Scratches are almost impossible to remove.

Performance Checklist

A qualified installer should carry out the following checks:

☐ Check top burner ignition. The low flame should light at every port. ☐ Starting with the left



Repeat steps for other burners.

drawing for proper flame height.

Service & Registration

Only authorized replacement parts may be used in performing service on the appliance. All servicing should be referred to a qualified technician.

Contact Viking Range Corporation, 1-888-VIKING1 (845-4641), for the nearest service parts distributor in your area or write to:

> VIKING RANGE CORPORATION PREFERRED SERVICE 1803 Hwy 82W Greenwood, Mississippi 38930 USA

The serial number and model number for your appliance can be found by looking under the cooktop.

Record the following information indicated below. You will need it if service is ever required. Model number

Date of purchase

Date installed

Dealer's name

Address

Serial number

These installation instructions should remain with the unit for future reference.

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Notes		Notes
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