

# FULGOR

## MILANO

Installation Instructions  
Instructions d'Installation  
Instrucciones de Instalación

F4GK24\*1

F4GK30\*1

F4GK36\*1

F4GK42\*1



**Table of Contents**

|  | Page      |
|--|-----------|
| <b>Special Warnings .....</b>                          | <b>4</b>  |
| <b>Product Dimensions and Cutout Requirements.....</b> | <b>5</b>  |
| <i>Important Preparation Suggestions.....</i>          | <i>5</i>  |
| <i>Mobile Home Installation.....</i>                   | <i>7</i>  |
| <b>Cooktop Installation.....</b>                       | <b>8</b>  |
| <b>Gas Requirement .....</b>                           | <b>10</b> |
| <i>Gas Connection .....</i>                            | <i>11</i> |
| <i>Pressure Testing.....</i>                           | <i>13</i> |
| <b>Electrical Requirements .....</b>                   | <b>14</b> |
| <i>General Information .....</i>                       | <i>14</i> |
| <i>Electrical Connection .....</i>                     | <i>14</i> |
| <i>Electrical Requirements .....</i>                   | <i>14</i> |
| <b>Conversion for LP or NG Gas .....</b>               | <b>16</b> |
| <i>Converting Appliance for Use with LP Gas .....</i>  | <i>16</i> |
| <i>Converting Appliances for Use with NG Gas.....</i>  | <i>17</i> |
| <i>Low Flame Adjustment.....</i>                       | <i>19</i> |
| <i>Electric gas ignition .....</i>                     | <i>20</i> |

**Pay attention to these symbols present in this manual:**



**DANGER**

You can be killed or seriously injured if you don't IMMEDIATELY follow instructions.



**WARNING**

- This is the safety alert symbol. This symbol alerts you to potential hazards that can kill or hurt you and others.
- You can be killed or seriously injured if you don't follow these instructions.

**READ AND SAVE THESE INSTRUCTIONS.**

**To installer:**

Leave these instructions with the appliance.

**To customer:**

Retain these instructions for future reference.



**WARNING**

- If the information in this manual is not followed exactly, a fire or explosion may result in personal injury or death.
- Do not store or use gasoline or other flammable vapours and liquids in the vicinity of this or any other appliance.

**IMPORTANT:** Save these instructions for the local electrical inspector use.  
**INSTALLER:** Please leave this manual with owner for future reference.  
**OWNER:** Please keep this manual for future reference.

 **IMPORTANT****Special Warnings**

Please read all instructions before using this appliance.

Proper installation is your responsibility. Have a qualified technician install this cooktop.

**Important:**

- Observe all governing codes and ordinances.
- Write down the model and serial numbers before installing the cook top. Both numbers are on the serial rating plate located on bottom of cooktop box.

**Before Starting Installation**

- Check location where cooktop will be installed. The location should be away from strong drafty areas, such as windows, doors and strong heating vents or fans.
- Electrical grounding is required. See "Electrical Requirements"
- Assure that electrical installation is adequate and in conformance with National Electrical Code, ANSI/NFPA 70 - latest edition\*\*, or Canadian Electrical Code, part 1 C22.1 (latest edition)\*\*\* and all local codes and ordinances.
- Assure that gas connection conforms with local codes and ordinances. In the absence of local codes, installations must conform with American National Standard, National Fuel Gas Code ANSI Z223/NFPA 54 - latest edition\*\* Canadian CAN/CGA\_B 149.1 or CAN/CGA-149.2 latest edition\*\*

Copies of the standards listed may be obtained from:

\*\* National Fire Protection Association One Batterymarch Park  
Quincy, Massachusetts 02269

\*\*\* CSA International 8501 East Pleasant Valley Rd. Cleveland, OH  
44131-5575

**NOTE:**

This cooktop is manufactured for use with Natural gas or Propane.

To convert to LP (propane) or NG (natural gas), see instruction in the gas conversion kit provided in literature package. Proper gas supply connection must be available. See gas supply requirements.

**WARNING**

BEFORE CONNECTING THE APPLIANCE ON THE GAS LINE SUPPLY, ENSURE THAT ITS GAS SETTING IS APPROPRIATE. THE TYPE OF GAS ADJUSTED AND SHIPPED FROM THE FACTORY IS INDICATED ON THE RATING PLATE LOCATED ON BOTTOM OF THE BURNER BOX.

**Cooktop Installed over Oven Installation**

Only certain specified cooktop and oven models are approved for cooktop over oven installations. Cooktops approved for this type of installation will have an approval label located on the outside of the burner box.

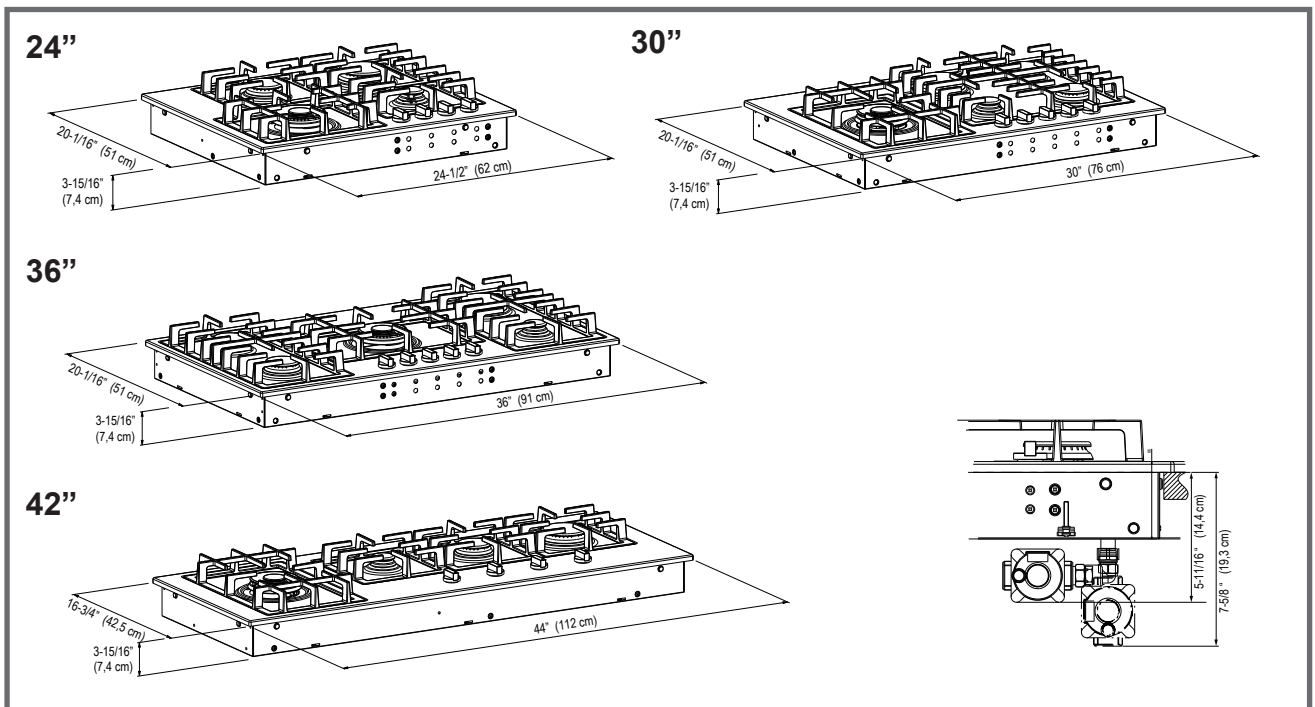
If you do not find this label, contact your dealer to confirm that cooktop is approved.

The label on the bottom of your cooktop lists the cooktop and oven combinations that are approved for this type of installation.

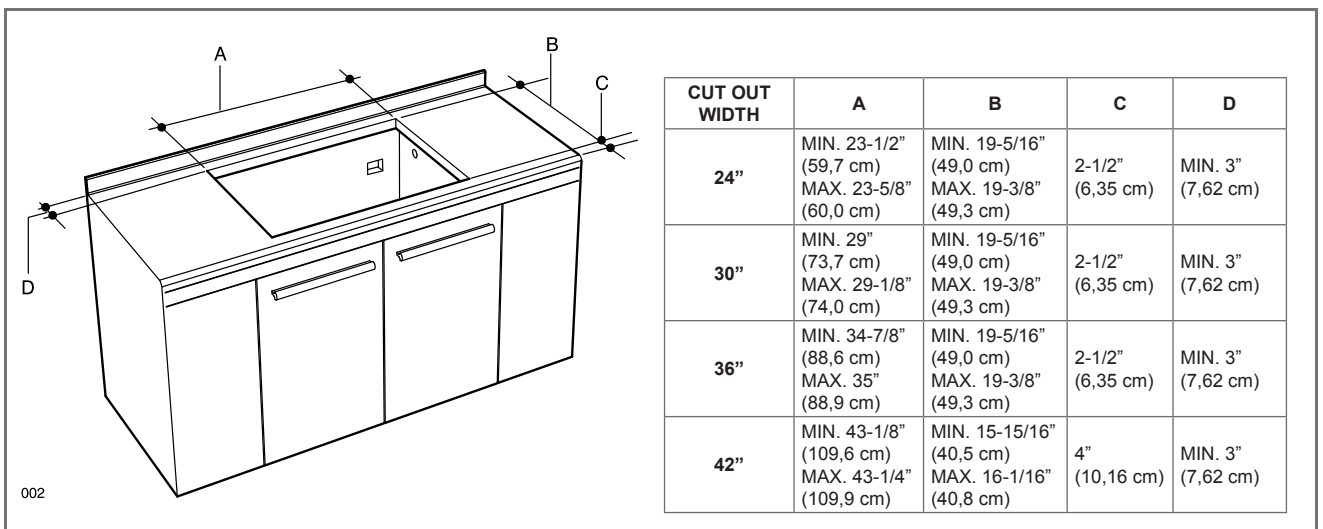
*Product Dimensions and Cutout Requirements*

**Important Preparation Suggestions**

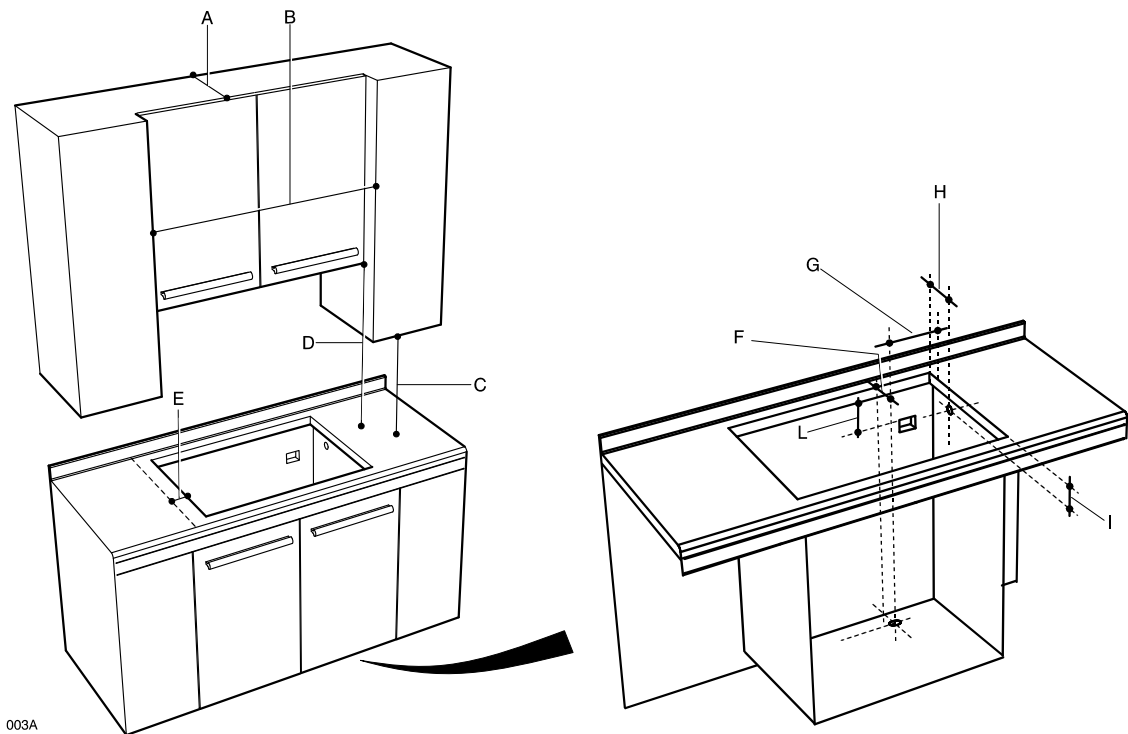
1. Chamfer all exposed edges of decorative laminate to prevent damage from chipping.
2. **Radius corners of cutout and file to insure smooth edges and prevent corner cracking. Recommend 1/4" or 3/8" diameter drill in each corner.**
3. Rough edges, inside corners which have not been rounded and forced fits can contribute to cracking of the countertop laminate.



**Figure 1. Product dimensions**



**Figure 2. Cutout dimensions**



003A

- A 13" (33 cm) Depth of unprotected overhead cabinets.
  - B 24" (61.0 cm) MIN. (Model 24").  
30" (76.2 cm) MIN. (Model 30").  
36" (91.4 cm) MIN. (Model 36").  
42" (106.7 cm) MIN. (Model 42").
  - C 18" (47.7 cm) MIN. Height from countertop to nearest cabinet on either side of unit.
  - D 30" (76.2 cm) MIN. (see Note\*) Clearance from countertop to unprotected overhead surface.
  - E 5" (12.7 cm) min Clearance from cut out to side wall on the left and right of the unit.
  - F From the back corner of cut-out to hole center 2-9/32" (5.8 cm).
  - G From the right corner of cut-out to hole center 2-19/32" (6.6 cm).
  - H From the back corner of cut-out to hole center 2-9/32" (5.8 cm). Opening with oven under cooktop.
  - I From the top of countertop to hole center 4-25/32" (12.2 cm). Opening with oven under cooktop.
  - L Electric outlet from bottom of counter top and adjacent to the cabinet side 12" (30.5 cm).
- **Hole 1-1/5" (3 cm).**

**\* NOTE:**

- If cabinet has a drawer, a 5-1/4"(13,35 cm) depth clearance from the top of the countertop to the top of the drawer (or other obstruction) in base cabinet is required. The drawer depth may need to be shortened to avoid interfering with the regulator.
- 24" (61 cm) min. clearance if bottom of wood or metal cabinets is protected by not less than 1/4" (0.6 cm) flame retardant millboard covered with not less than No. 28 MSG sheet steel 0.015" (0.04 cm) stainless steel, or 0.024" (0.06 cm) aluminium or 0.020" (0.05 cm) copper. 30" (76.2 cm) min. clearance between top of cooking platform and bottom of unprotected wood or metal cabinet.

**Figure 3. Cutout requirements**

We recommend to that you consider the minimum dimension of cut-out size in the case of new installation.



**WARNING**

The appliance should not be installed with a ventilation system that blows air downward toward the range. This type of ventilation system may cause ignition and combustion problems with the gas cooking appliance resulting in personal injury or unintended operation.

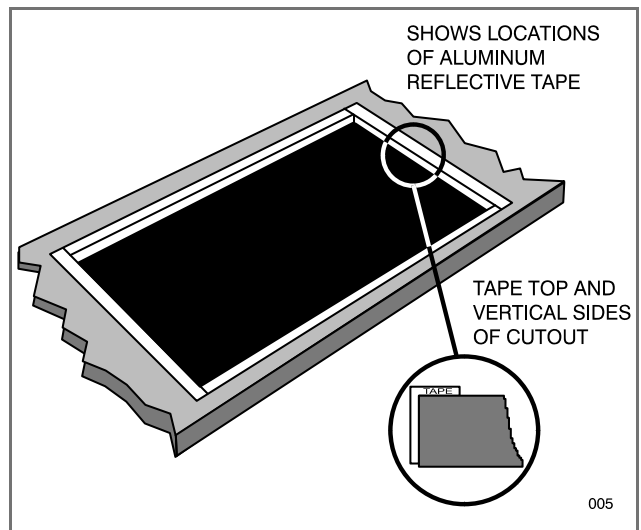
**Mobile Home Installation**

The installation of this cooktop must conform to the Manufactured Home Construction and Safety Standards, Title 24 CFR, Part 3280 (formerly the Federal Standard for Mobile Home Construction and Safety; Title 24 HUD part 280); or when such standard is not applicable, the Standard for Manufactured Home Installations (Manufactured Home Sites, Communities and Setups), ANSI A225.1 - latest edition, or with local codes.

In Canada, the installation of this cooktop must conform with the current standards CAN/CSA-Z240 - latest edition, or with local codes.

**Important:**

- For solid surface material installations such as Surel™ and Corian®, consult with solid surface manufacturer. Apply heat reflective tape such as Scotch® Aluminum Foil Tape #425 or #427 around the cutout so that it folds over on the top and sides.
- DO NOT WRAP THE TAPE UNDERNEATH THE COOKTOP.
- Be sure the tape extends beyond the outermost flange of the cooktop. All corners should be covered with tape.



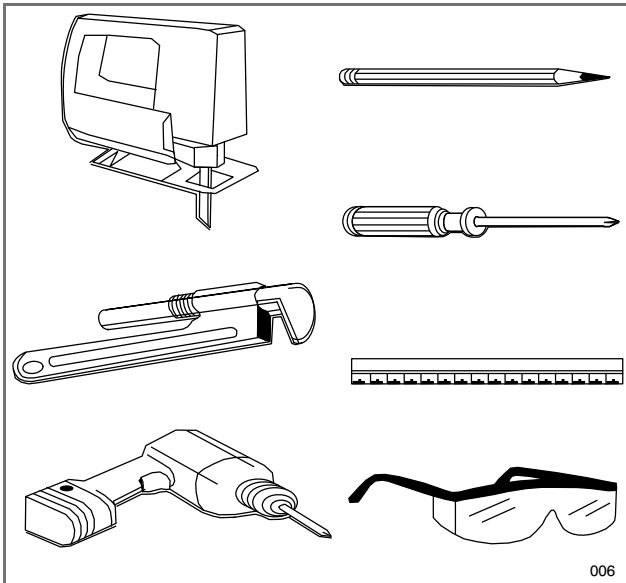
**Figure 4. Solid surface countertop installation**

*Cooktop Installation*

**⚠ WARNING**

- **Excessive Weight Hazard**  
Use two or more people to move and install cooktop. Failure to do so can result in back or other injury.
- **Cut Hazard**  
Beware of sharp edges. Use the polystyrene ends when carrying the product. Failure to use caution could result in minor injury or cuts.

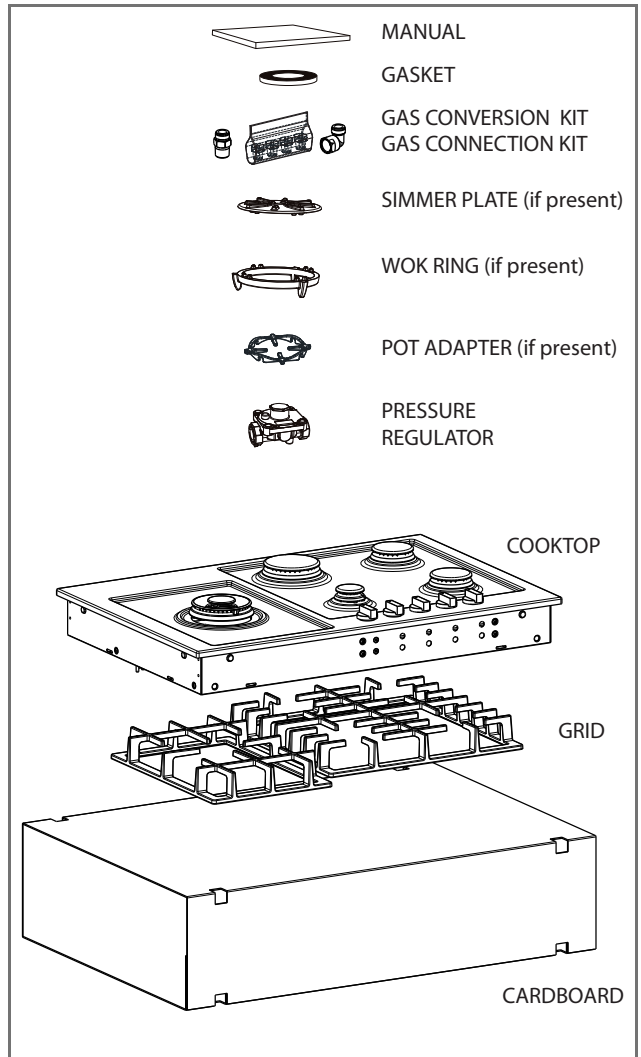
- Always consult the countertop manufacturer for specific instructions.
- Ensure the countertop is square and level and ensure no structural members interfere with space requirements.
- Prepare the cut-out according to the instructions (see cut-out dimensions).
- Make sure the wall coverings, countertop and cabinets around the cooktop can withstand heat (up to 200 °F).



**Figure 5. Tools you will need**

**Step 1**

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.



**Figure 6. Parts**



### Step 2

Before installing apply the foam tape.

A tape is provided to seal the cooktop edges to the countertop. Apply tape near inner underside cooktop edge.

Use tape around the entire cooktop perimeter.

Cut off excess where tape butt ends.

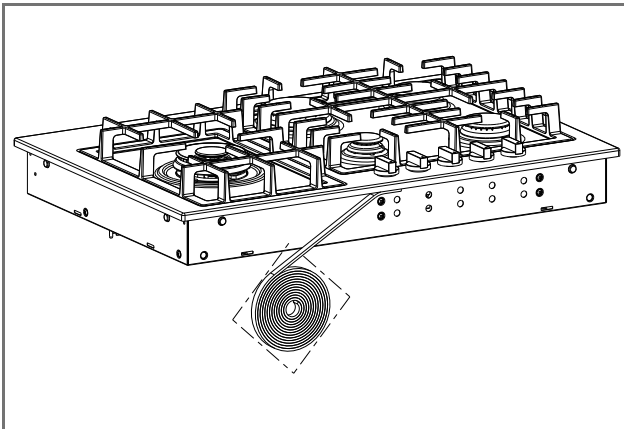


Figure 7.

### Step 3

Insert the cooktop centered into the cutout opening. Make sure the front edge of the counter top is parallel to the cooktop. Make final check that all required clearances are met.

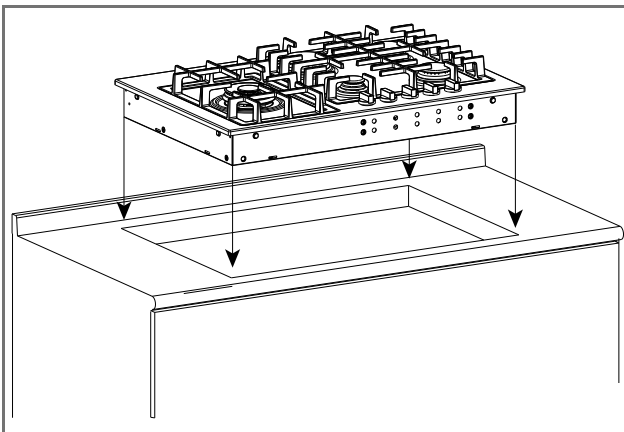


Figure 8.

### Step 4

Four clamp brackets are provided with your unit. After cooktop has been installed into the countertop, install the brackets on the burner box as shown in figure 9.

Install the clamp brackets on the front and back of the burner box bottom (if the cabinet construction does not provide clearance for installing brackets at the

burner box front back install the clamp brackets on the lateral position of burner box).

**step A** place the clamping screws into brackets

**step B** attach brackets by using the attachment screws on the selected location of burner box, tighten screws just enough to hold brackets in place

**step C** position brackets so that they are with the clamp screw in contact with the counter top bottom

**step D** tighten attachment screws securely.

**step E** check that the front edge of the cooktop is parallel to the front edge of the countertop tighten the screw clamping against the countertop.

**DO NOT OVER TIGHTEN**

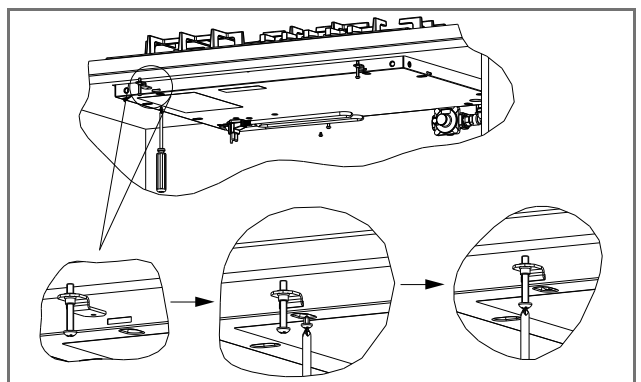


Figure 9.

## Gas Requirement

### A QUALIFIED SERVICE MAN OR GAS APPLIANCE INSTALLER MUST MAKE THE GAS SUPPLY CONNECTION.

Leak testing of the appliance shall be conducted by the installer according to the instructions given.



### WARNING

If the line pressure supplying the appliance pressure regulator exceeds 14 inches W.C. (any gas), an external regulator must be installed in the gas line ahead of the appliance regulator to reduce the pressure to no more than 14 inches W.C. Failure to do this can result in malfunction and damage to the appliance.

### Important Notes for Gas Connection

The appliance and its individual gas shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi (3.5 kPa).

The appliance 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 (3.5 kPa).

All supply piping, except as noted, should use common National Pipe Thread (N.P.T.). For all pipe connections use an approved pipe joint compound resistant to the action of LP gas.

This appliance is designed for use with NG gas or LP gas.

The gas pressure regulator is supplied with this appliance. It must be installed in the gas way ahead of the manifold entrance. It is pre-set for use with natural gas. To use it with different gas it must be converted, as described in the Gas conversion paragraph (see figure 17 and 18).

If at any time the appliance is to be used with a different type of gas, all the conversion adjustments must be made by a qualified technician before attempting to operate the cooktop on that gas.

The gas should be supplied to the appliances pressure regulator, at line pressure between 6 and 14 inches of water column for NG, and between 11 and 14 inches of water column for LP.

### Important:

- **NEVER REUSE OLD CONNECTORS WHEN INSTALLING THIS COOKTOP.**

To reduce the likelihood of gas leaks, apply teflon tape or a thread compound approved for use with LP or Natural gases to all threaded connections. Apply a non-corrosive leak detection fluid to all joints and fittings in the gas connection between the supply line shut-off valve and the cooktop inlet.

Check for leaks!

Bubbles appearing around fittings and connections will indicate a leak. If a leak appears, turn off supply line gas shut-off valve, tighten connections, turn on the supply line gas shutoff valve, and re-test for leaks. Never test for gas leaks with an open flame.

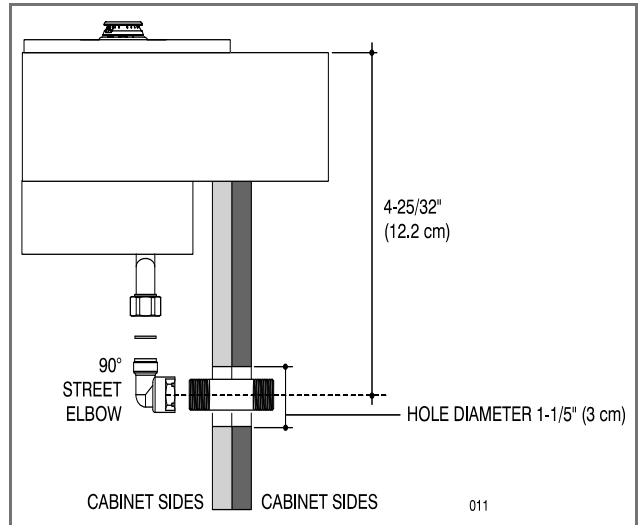
- **NEVER TIGHTEN TO MORE THAN 35 ft lbs OF TORQUE.**

**Gas Connection**

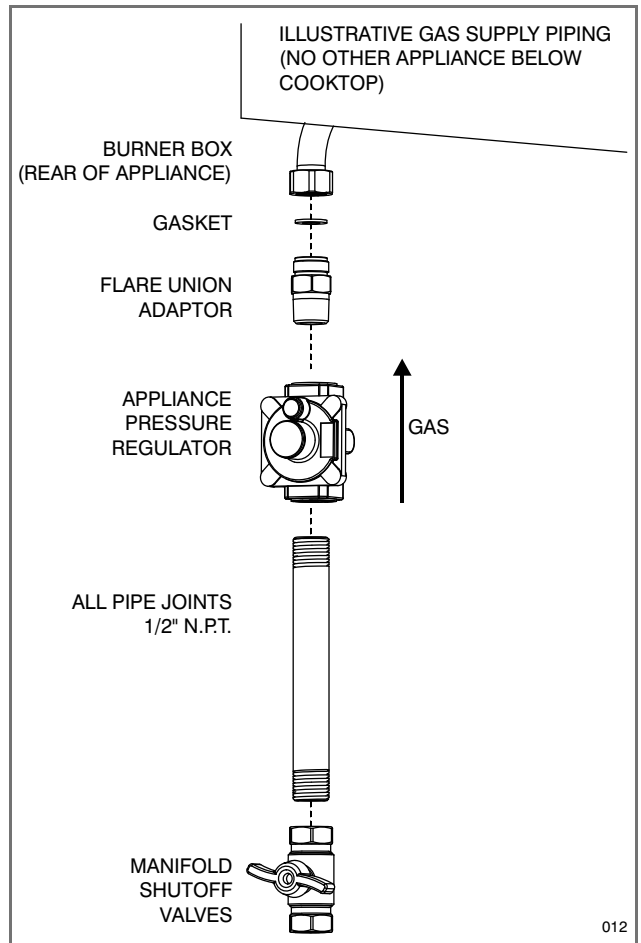
- Thread the appliances pressure regulator with 1/2" male end connection both supplied with this appliance.
- Make the gas connection to the inlet of the pressure regulator with 1/2" male pipe threads.
- Join the pressure regulator to the entrance threads of the Gas Manifold with gasket supplied with 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.
- Connect a manual shut-off valve to the gas supply in an accessible location for turning on or shutting off gas to the appliance.
- 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 10 consider the below cabinet clearance.



**Figure 10.**



**Figure 11.**

**FOR ALTERNATIVE PIPING METHODS TO CONNECT THE APPLIANCE TO THE GAS SUPPLY, A TRAINED SERVICE MAN OR GAS APPLIANCE INSTALLER MUST MAKE THE GAS SUPPLY CONNECTION. Leak testing of the appliance shall be conducted by the installer according to the instructions given.**

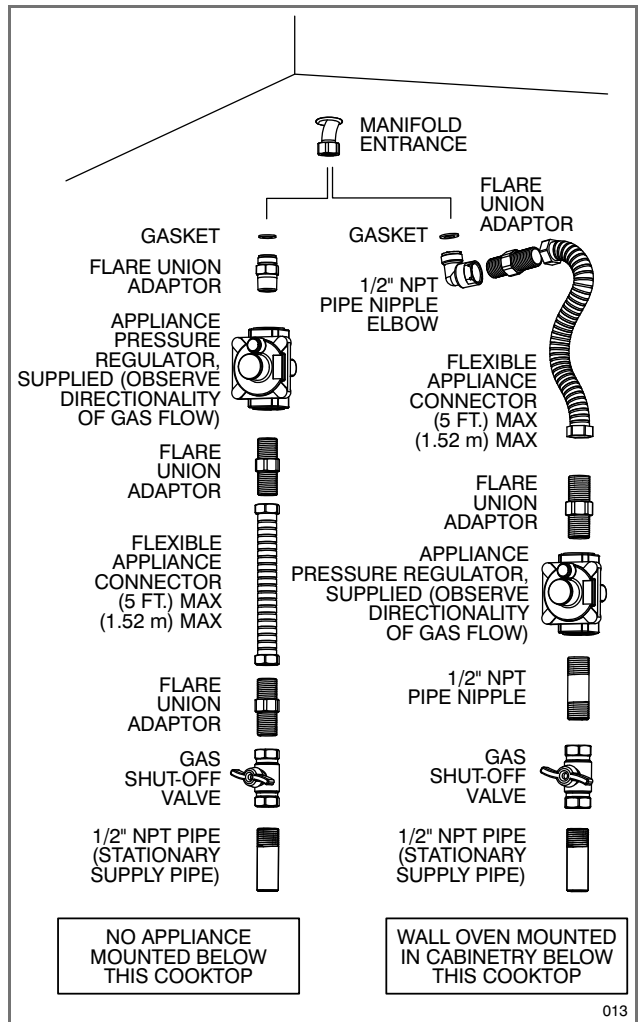
Unless prohibited by local codes or ordinances, a new A.G.A. - Certified, flexible metal appliance connector may be used to connect this appliance to its gas supply. The connector must have an internal diameter not less than nominal 1/2" NPT pipe and be no more than 5 feet in length. A 1/2" NPT x 1/2" flare union adaptor is required at each end of the flexible connector. If a flexible connector is used assure that both the appliance pressure regulator and manual shut-off valve are joined solidly to other permanent hard piping (either gas supply or the appliance manifold) so as to be physically stationary. See figure 12.

**CAUTION**

Do not attempt to attach the flexible connector directly to an external pipe thread. Connection requires flare union adaptors.

For Massachusetts Installations:

1. Shut-off valve must be a "T" handle gas cock.
2. Flexible gas connector must not be longer than 36 inch.
3. Not approved for installation in a bedroom or a bathroom unless unit is direct vent.



013

Figure 12.

## Pressure Testing

The appliance 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 PSIG (3.5 kPa).

This appliance, as well as its individual shut-off valve, must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of 1/2 PSIG (3.5 kPa).

When checking appliance regulator function, make certain pressure of natural gas supply is between 6 and 14 inches of water column or, if converted for LP gas, between 11 and 14 inches.

THE PRESSURE TESTING SHOULD BE PERFORMED BY MEANS OF THE INJECTOR THREAD ZONE

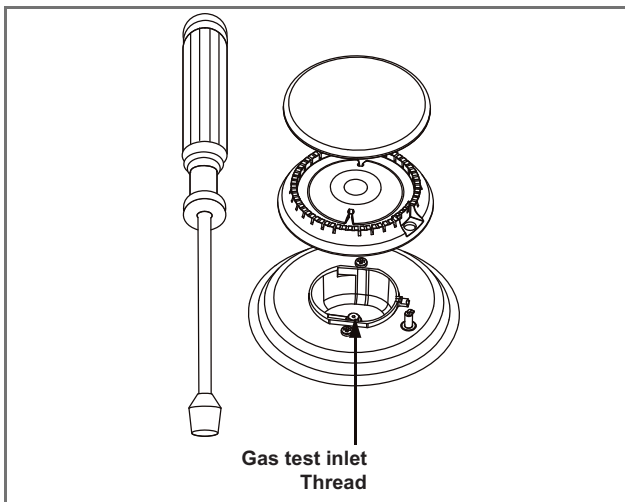


Figure 13.

### Pressure Test Method

- Remove grate and burner cap
- Remove aluminum gas spreader
- Temporarily remove the injectors
- Connect the pressure Test instrument into injector holder thread zone (M6x0,75)
- Check if the cooktop has the correct pressure
- Fix the injector removed for testing and replace the parts in the right position.

**Electrical Requirements**

**General Information**

This appliance must be supplied with the proper voltage and frequency and connected to an individual, properly grounded branch circuit, protected by a circuit breaker or fuse having amperage as noted on the rating plate. We recommend you have the electrical wiring and hookup of your cooktop connected by a qualified electrician.

After installation, have the electrician show you where your main cooktop disconnect is located. Check with your local utilities for electrical codes which apply in your area. Failure to wire your cooktop according to governing codes could result in a hazardous condition.

If there are no codes, your cooktop must be wired and fused to meet the requirements of the National Electrical Code, ANSI/NFPA No. 70 - Latest edition. You can get a copy by writing:

National Fire Protection Association  
Battery march Park  
Quincy, MA 02269

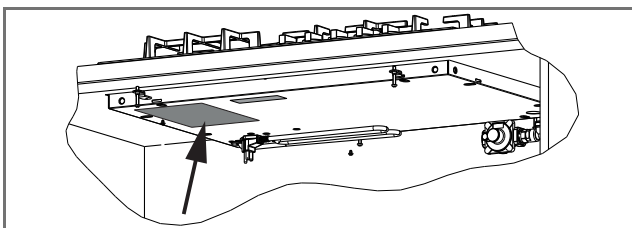
In Canada your cooktop must be wired and fused to meet the requirements of the Canadian Electrical Code.

Be sure the installation of this product in a mobile home conforms with the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280.

If this standard does not apply, you must follow the standard for Manufactured Home Installations, ANSI A225.1 and Manufactured Home Installations, Sites and Communities and ANSI/NFPA 501A or with local codes.

You can get a copy of the Federal Standard by Writing:


Office of Mobile Home Standards  
HUD Building  
451 7th Street, S.W.  
Washington, D.C. 24010



**Figure 13a. Location of rating plate**


**Electrical Connection**

An adequate electrical supply and outlet must be used to operate the cooktop.




**WARNING**

**Electrical Grounding Instruction**  
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.



**WARNING**



**ELECTRICAL SHOCK HAZARD**

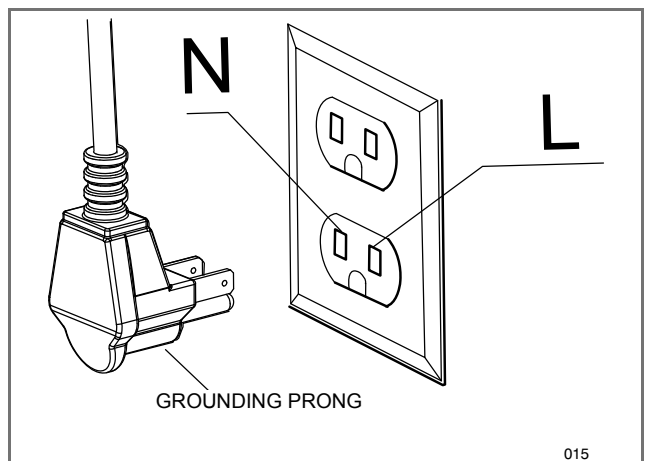
**Important:**

**FOR PERSONAL SAFETY, THIS APPLIANCE MUST BE PROPERLY GROUNDED.**

The power cord of this appliance is equipped with a 3-prong (grounding) plug which must be used with a properly grounded 3-hole outlet with a standard 120 Volt, 60 cycle AC household current. If you do not have a 3-hole grounded outlet, have a qualified electrician change your old one. A grounding adaptor will be needed to convert the old one until the outlet can be replaced. This method is only temporary, and a qualified electrician should test it to be sure it meets requirements.

**Electrical Requirements**

**Do not under any circumstances cut or remove grounding prong from the cooktop cord.**



**Figure 14.**

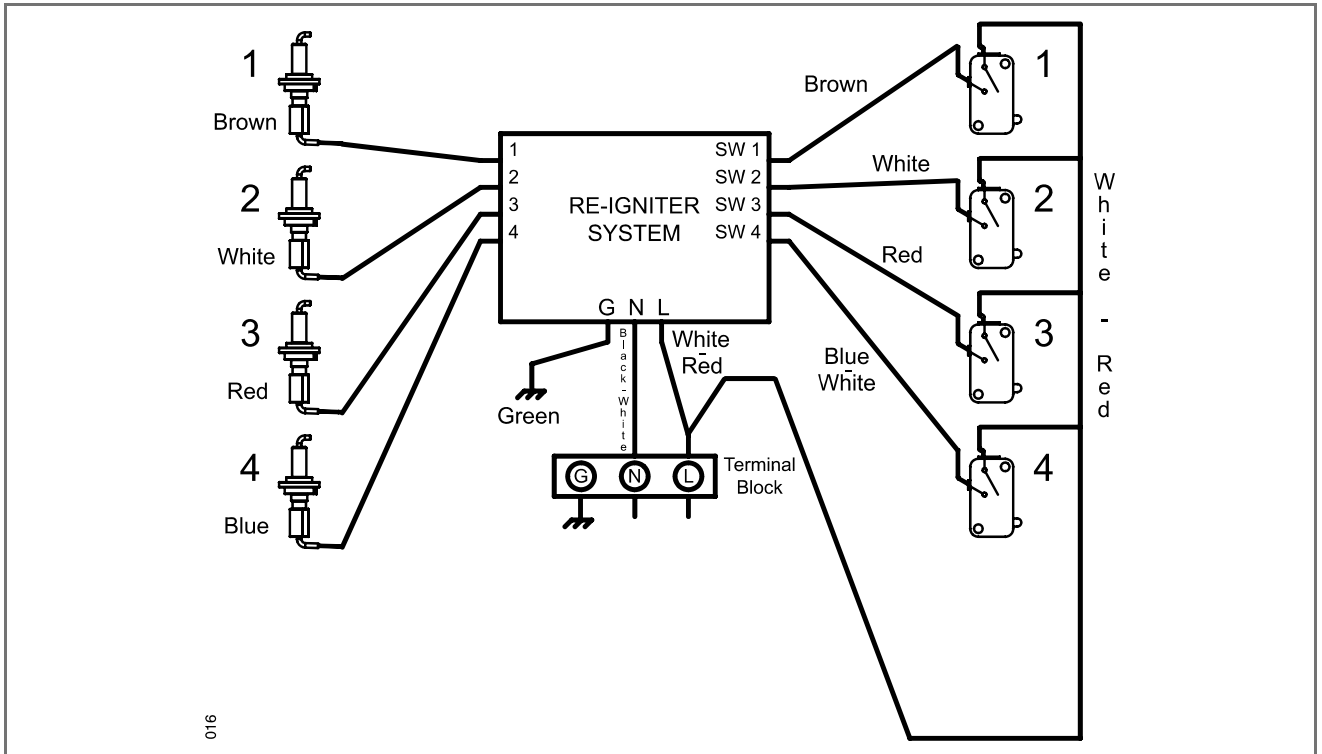


Figure 15. Wiring diagram (4 zones)

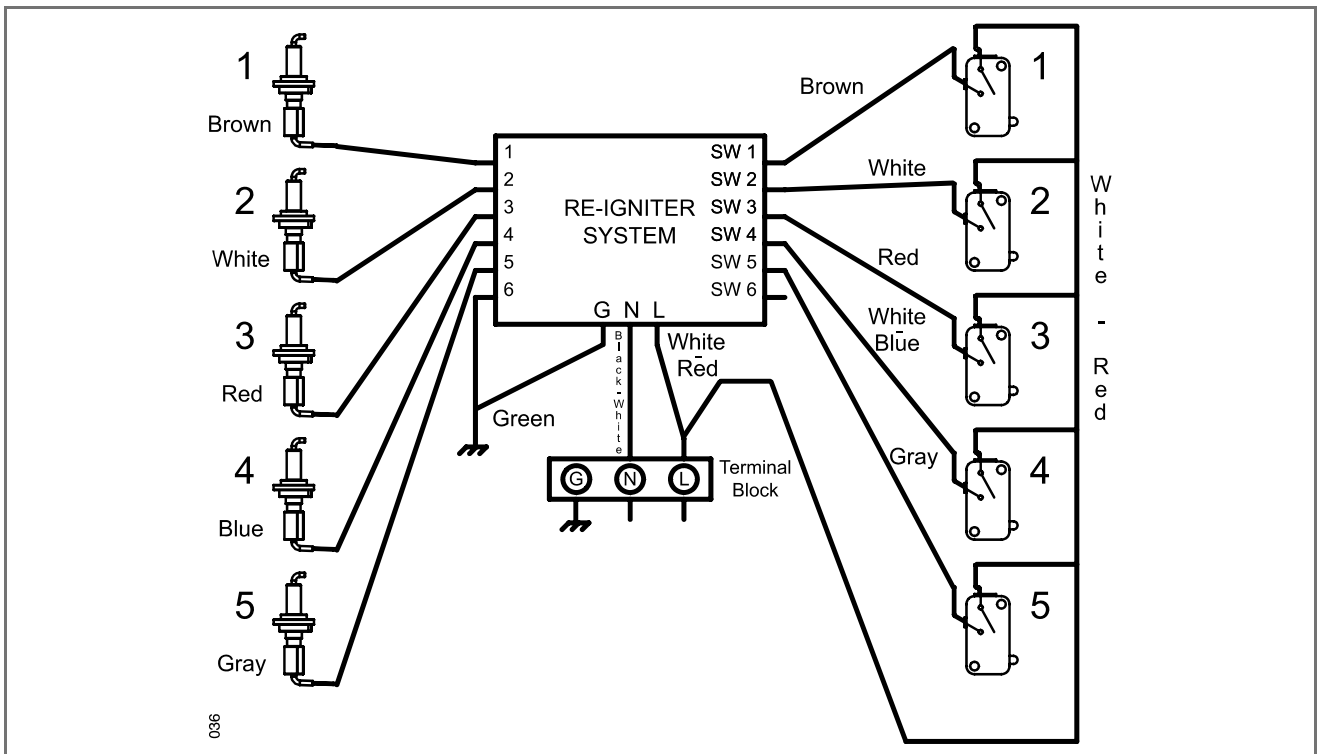


Figure 16. Wiring diagram (5 zones)

**Conversion for LP or NG Gas**

**Converting Appliance for Use with LP Gas**



**WARNING**

Conversion is to be performed by a **AUTHORIZED SERVICER** (or other qualified agency) in accordance with the manufacturer's instructions and all codes and requirements of the authority having jurisdiction. Failure to follow instructions could result in serious injury or property damage. The qualified agency performing this work assumes responsibility for this conversion.



**WARNING**

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

If this appliance should be converted for use with gas LP (propane or butane), each of the following modification must be performed:

**Replace injector on (one ring flame burners)**

1. Remove the grates and burner cups.
2. Remove aluminum gas spreader.
3. Loosen injector by turning 9-32" nut driver counter clockwise.
4. Install the injectors supplied with this appliances in the appropriate burner. The injectors have small number stamped on the side, this number codes the orifice diameter and its correct burner location (see figure on page 18).
5. Turn clockwise to tighten (tighten to a torque of 15 to 20 inch-lbs).
6. Replace all parts following the reverse order.
7. **Save the orifices removed from the appliance for future use.**

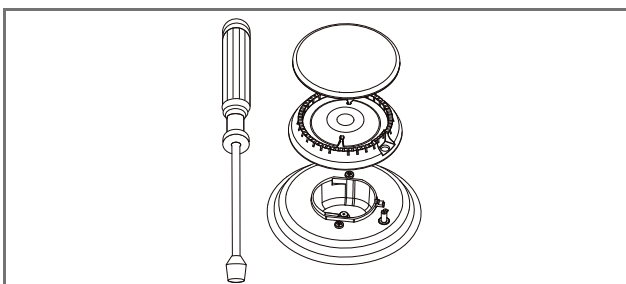


Figure 17.

**Replace injectors on (two rings flame burner)**

1. Remove the grates and burner cups.
2. Remove aluminium gas spreader.
3. Remove the three screws of simmer gas spreader (1).
4. Remove the two screws of injector cover (2).
5. Loosen injector (A) by turning 9-32" nut driver counter clockwise.
6. Loosen injector (B) by turning 9-32" box wrench counter clockwise.
7. Install the injectors supplied with this appliances in the appropriate burner. The injectors have small number stamped on the side, this number codes the orifice diameter and its correct burner location (see figure of the paragraph "Injectors position").
8. Turn clockwise to tighten (tighten to a torque of 15 to 20 inch-lbs).
9. Replace all parts following the reverse order.
10. **Save the injectors removed from the appliances for future use.**

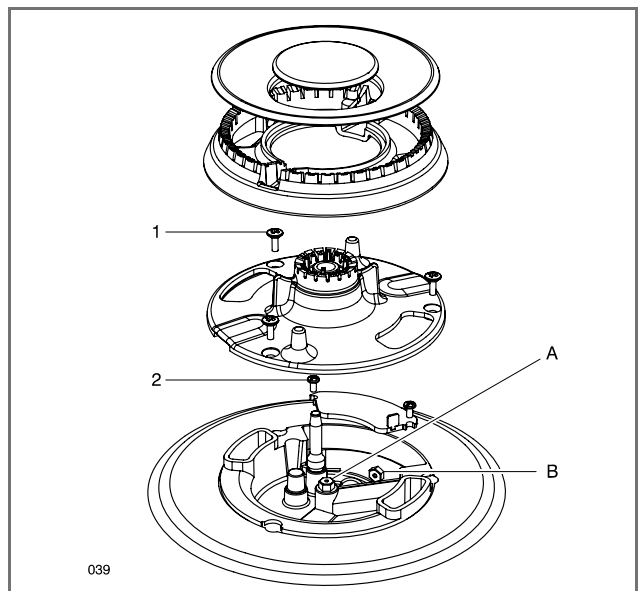


Figure 18.



After injectors replacement adjust the burner flame (see Low Flame Adjustment paragraph). Check the appearance of each burner's flame at HI-LO settings, if the flame appear too large or too small make sure that all steps were completed correctly.  
**Convert the pressure regulator on LP position following the illustration 20.**

**Converting Appliances for Use with NG Gas**

If this appliance should be converted for use with gas NG (natural gas), each of the following modifications must be performed.

1. Replace all injectors following the step described on page 18, observe the number stamped on the side, this number codes the orifice diameter and its correct burner location (following the illustration of injectors position).
2. Convert the pressure regulator on LP position (following the illustration of pressure regulator conversion).
3. Adjust the burner flame (see Low Flame Adjustment paragraph).

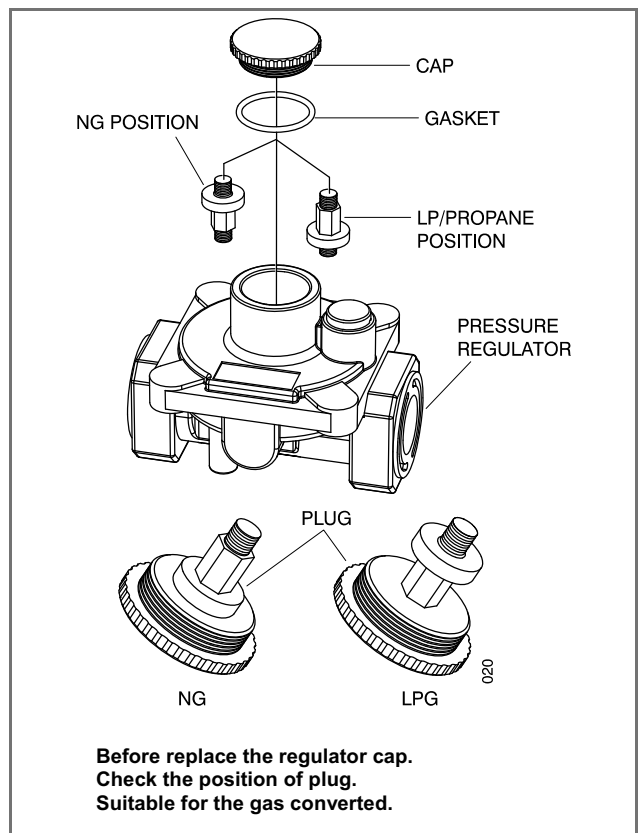
Check the appearance of each burner's flame at HI-LO settings, if the flame appears too large or too small make sure that all steps were completed correctly.

**Pressure regulator conversion**

The appliances is designed for use with NG gas or LP gas. The gas pressure regulator is supplied. It must be installed in the gas way ahead of manifold entrance. It is pre-set for use with the gas supplied with the appliances. For use with different gas must be converted.

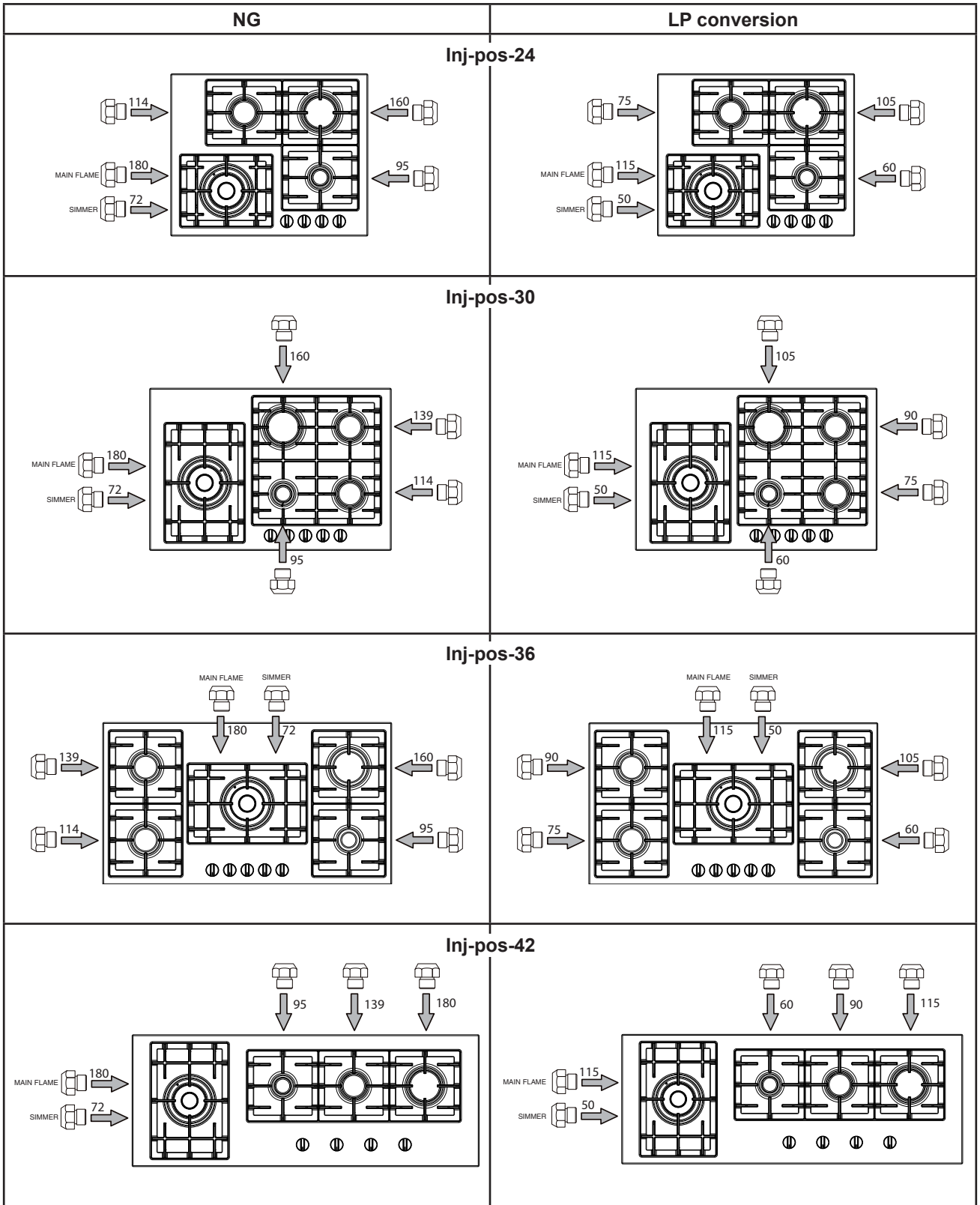
**For the pressure regulator conversion following the below instructions:**

- Disconnect all electrical power, at the main circuit breaker or fuse box.
- Shut off the gas supply to the cooktop by closing the manual shut-off valve.
- Adjust the pressure regulator, by following the instruction (see figure)
  1. Unscrew the regulator cap
  2. Unscrew the plastic conversion plug from the cap turn over and screw back (wide section away from cap for LP and against cap for NG) see figures below.
  3. Replace the cap regulator.



**Figure 20. Pressure regulator conversion**

### Injectors position



## Low Flame Adjustment



### 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.



### WARNING

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

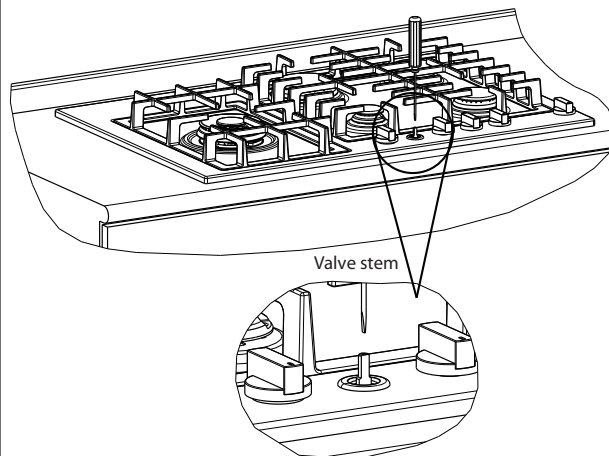
This appliance is shipped from the factory with low and medium flame settings adjusted.

If further adjustment is necessary, proceed as follows:

#### Adjustment for Burners with one or two rings flame:

1. Light burner and set control knob for low flame.
2. Remove control knob from valve stem.
3. Insert a slender, thin-blade screwdriver into the recess at centre of valve stem and engage blade with slot in adjusting screw.
4. Turn center stem adjusting screw to set flame size:
  - clockwise to reduce
  - counterclockwise to increase
5. Replace control knob when adjustment is completed.

#### ONE OR TWO RINGS FLAME



- Counterclockwise to increase flame size

- Clockwise to reduce flame size

Figure 21. Low flame adjustment

8. Remove the "B" plastic hole cover (see figure)
9. Follow the steps 4 and 5.
10. After the adjustment have been completed, go out the burner, replace "A and B" plastic cover and replace the knob in final position.

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.

**NOTE:**

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

**Electric gas ignition**

The gas burner use an electric ignition device located near each burner that by means a spark igniters ensure its surface light automatically.

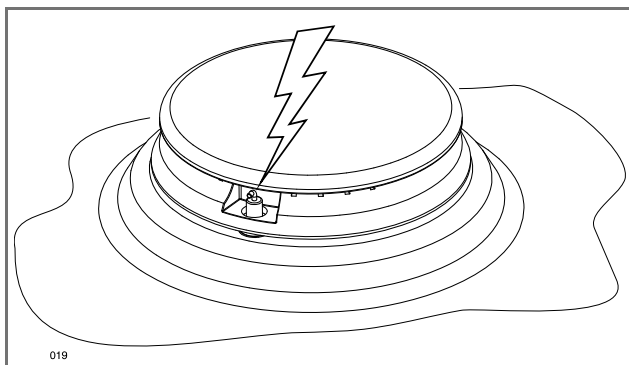


Figure 22. Electric ignition

See Use & Care manual for better explanation and its control.

**The 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.

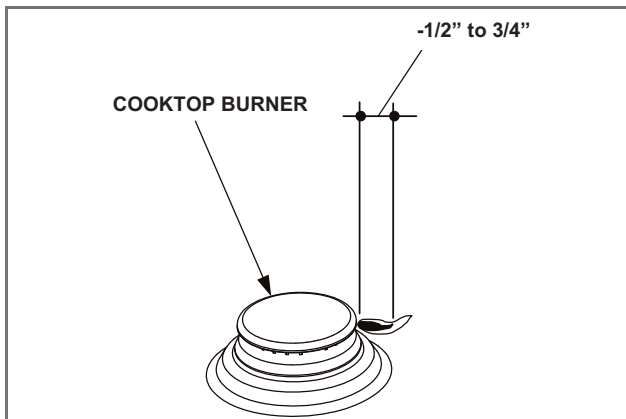


Figure 23. Burner flames

**FULGOR**  
MILANO