BUILT-IN GAS COOKTOP Model CTG212FD...







- USERS OPERATING INSTRUCTIONS
- INSTALLATION ADVICE

IMPORTANT - PLEASE READ AND FOLLOW

- ✓ Before beginning, please read these instructions completely and carefully.
- ✓ Do not remove permanently affixed labels, warnings, or plates from the product. This may void the warranty.
- ✓ Please observe all local and national codes and ordinances.
- ✓ Please ensure that this product is properly grounded.
- ✓ The installer should leave these instructions with the consumer who should retain
 for local inspector's use and for future reference.
- ✓ The electrical plug should always be accessible

Installation must conform with local codes or in the absence of codes, the National Fuel Gas Code ANSIZ223.1 - latest edition. Electrical installation must be in accordance with the National Electrical Code, ANSI/NFPA70 - latest edition and/or local codes. IN CANADA: Installation must be in accordance with the current CAN/CGA-B149.1 National Gas Installation Code or CAN/CGA-B149.2, Propane Installation Code and/or local codes. Electrical installation must be in accordance 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 appliance in the gas stream for safety and ease of service.

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.

Dear Customer,

Thank you for having purchased and given your preference to our product.

The safety precautions and recommendations reported below are for your own safety and that of others. They will also provide a means by which to make full use of the features offered by your appliance.

Please preserve this booklet carefully. It may be useful in future, either to yourself or to others in the event that doubts should arise relating to its operation.

This appliance must be used only for the task it has explicitly been designed for, that is for cooking foodstuffs. Any other form of usage is to be considered as inappropriate and therefore dangerous.

The manufacturer declines all responsibility in the event of damage caused by improper, incorrect or illogical use of the appliance.

DATA PLATE

CONVERSION LABEL	
CONVERSION LABEL	
CONVERSION LABEL	
CONVERSION LABEL	

USER INSTRUCTIONS

IMPORTANT PRECAUTIONS AND RECOMMENDATIONS

- ✓ After having unpacked the appliance, check to ensure that it is not damaged.
 If you have any doubts, do not use it and consult your supplier or a professionally qualified technician.
- ✓ Packing elements (i.e. plastic bags, polystyrene foam, nails, packing straps, etc.) should not be left around within easy reach of children, as these may cause serious injuries.
- ✓ The packaging material is recyclable and is marked with the recycling symbol △.
- ✓ Do not attempt to modify the technical characteristics of the appliance as this may become dangerous to use.
- √ The manufacturer cannot be considered responsible for damage caused by unreasonable, incorrect or rash use of the appliance.
- ✓ If you should decide not to use this appliance any longer (or decide to substitute an older model), before disposing of it, it is recommended that it be made inoperative in an appropriate manner in accordance to health and environmental protection regulations, ensuring in particular that all potentially hazardous parts be made harmless, especially in relation to children who could play with old appliances.
- √ The appliance should be installed and all the gas/electrical connections made by a qualified engineer in compliance with local regulations in force and following the manufacturer's instructions

IMPORTANT PRECAUTIONS AND RECOMMENDATIONS FOR USE OF ELECTRICAL APPLIANCES

Use of any electrical appliance implies the necessity to follow a series of fundamental rules. In particular:

- ✓ Never touch the appliance with wet hands or feet;
- √ do not operate the appliance barefooted;
- √ do not allow children or disabled people to use the appliance without your supervision.

The manufacturer cannot be held responsible for any damages caused by improper, incorrect or unreasonable use of the appliance.

TIPS FOR THE USER

- ✓ During and after use of the cooktop, certain parts will become very hot. Do not touch hot parts.
- ✓ Keep children away from the cooking hob when it is in use.
- ✓ After use, ensure that the knobs are in position OFF, and close the main gas delivery valve or the gas cylinder valve.
- ✓ In case of difficulty in the gas valves operation, call Service.
- ✓ Before any cleaning or maintenance, switch off the electricity to the cooktop.

Risk of fire!

- ✓ Do not leave inflammable material on the cooktop.
- ✓ Make sure that the electrical cables of other appliances installed nearby cannot come into contact with the cooktop.

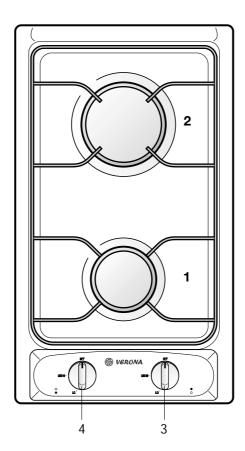


Fig. 1.1

COOKING POINTS

- 1. Semirapid burner (SR) 6,000 BTU/hr
- 2. Rapid burner (R) 10,000 BTU/hr

CONTROL PANEL DESCRIPTION

3. Rapid burner (R) control knob (2)



4. Semirapid burner (SR) control knob (1)



Note:

- The electric gas-lighting device is incorporated into the knobs.

CAUTION:

If the burner is accidentally extinguished, turn the gas off at the control knob and wait at least 1 minute before attempting to relight.

CAUTION:

Gas cooktops produce heat and humidity in the environment in which they are installed.

Ensure that the cooking area is well ventilated following national/local codes.

GAS BURNERS

Gas flow to the burners is adjusted by turning the knobs (illustrated in fig. 2.1) which control the valves.

Turning the knob so that the indicator line points to the symbols printed on the panel achieves the following functions:

OFF = closed valve
HI = maximum rate

LO = minimum rate

The maximum aperture position permits rapid boiling of liquids, whereas the minimum aperture position allows simmer warming of food or maintaining boiling conditions of liquids.

To reduce the gas flow to minimum, rotate the knob further anti-clockwise to point the indicator towards the **LO** position.

Other intermediate operating adjustments can be achieved by positioning the indicator between the maximum and minimum aperture positions, and never between the maximum aperture and **OFF** positions.

N.B. When the cooktop is not being used, set the gas knobs to their **OFF** positions and also close the gas shut-off valve placed on the main gas supply line.

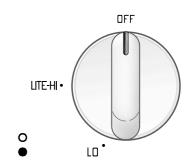


Fig. 2.1

LIGHTING GAS BURNERS

In order to light the burner, you must:

1 – Turn the knob in an anti-clockwise direction up to the **LITE-HI** position (maximum rate), push in and hold the knob until the flame has been lit (fig. 2.2).

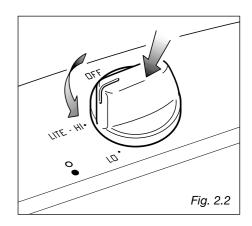
The sparks produced by the lighter situated inside the relative burner will light the flame.

In the event that the local gas supply conditions makes it difficult to light the burner in HI position, try again with the knob in **LO** position.

If there is no mains electrical supply, bring a lighted match close to the burner.

2 - Adjust the gas valve to the desired position.

To re-light the burner, return the knob to the **OFF** position and repeat the operations for lighting.



DIAMETERS OF PANS WHICH MAY BE USED ON THE COOKTOP					
BURNER	MINIMUM	MAX.			
Semirapid	4" 11/16 (12 cm)	9" 7/16 (24 cm)			
Rapid	9" 7/16 (24 cm)	10" 1/4 (26 cm)			
Do not use pans with concave or convex bases					

CHOICE OF BURNER (fig. 2.3)

The symbols printed on the panel beside the gas knobs indicate the correspondence between the knob and the burner.

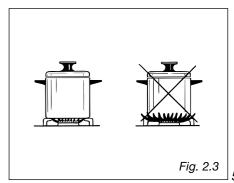
The most suitable burner is to be chosen according to the diameter and volume capacity of the container to be warmed.

It is important that the diameter of the pots or pans suitably match the heating potential of the burners in order not to jeopardise the efficiency of the burners, bringing about a waste of gas fuel.

A small diameter pot or pan placed on a large burner does not necessarily mean that boiling conditions are reached quicker.

Caution!

The cooktop becomes very hot during operation. Keep children well out of reach.



cleaning and maintenance

Do not use steam jet cleaners because the humidity could infiltrate into the appliance making it dangerous.

GENERAL RECOMANDATION

- ✓ Before you begin cleaning you must ensure that the hob is switched off.

 It is advisable to clean when the appliance is cold.
- ✓ All enamelled surfaces have to be washed with soapy water or some other non-abrasive product with a sponge and are to be dried preferably with a soft cloth.
- ✓ Avoid leaving alkaline or acid substances (lemon juice, vinegar etc.) on the surfaces.

ENAMELLED PARTS

- ✓ All the enamelled parts must be cleaned with a sponge and soapy water only or other non-abrasive products.
- ✓ Dry preferably with a chamois leather.
 If acid substances such as lemon juice, tomato conserve, vinegar etc. are left on the enamel for a long time they will etch it, making it opaque.

STAINLESS STEEL ELEMENTS

- ✓ Stainless steel parts must be rinsed with water and dried with a soft and clean cloth or with a chamois leather.
- ✓ For difficult dirt, use a specific non-abrasive product available commercially or a little hot vinegar.
- ✓ Note: regular use could cause discolouring around the burners, because of the high flame temperature.

CONTROL KNOBS

✓ The control knobs may be removed for cleaning but care should be taken not to damage/remove the seal fitted below the knobs.

GAS VALVES

✓ In the event of operating faults in the gas valves, call the Service Department.

BURNERS AND GRIDS

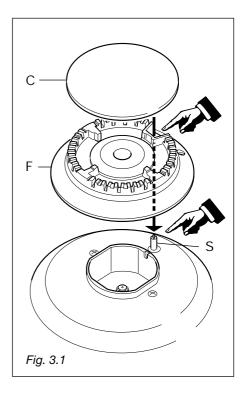
- ✓ These parts can be removed and cleaned with appropriate products.
- ✓ After cleaning, the burners and their flame distributors must be well dried and correctly replaced.
- \checkmark It is very important to check that the burner flame distributor and the cap has been correctly positioned failure to do so can cause serious problems.
- ✓ In appliances with electric ignition keep the electrode clean so that the sparks always strike.
- √ Note: To avoid damage to the electric ignition do not use it when the burners are not in place.

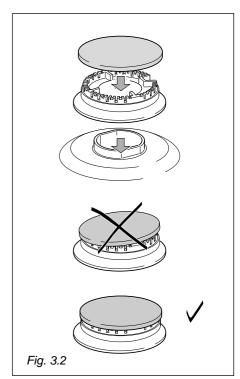


It is very important to check that the burner flame spreader " \mathbf{F} " and the cap " \mathbf{C} " have been correctly positioned (see figs. 3.1 and 3.2). Failure to do so can cause serious problems.

In appliances with electric ignition, check that the electrode " \mathbf{S} " (fig. 3.1) is always clean to ensure trouble-free sparking.

The ignition plug must be very carefully cleaned.





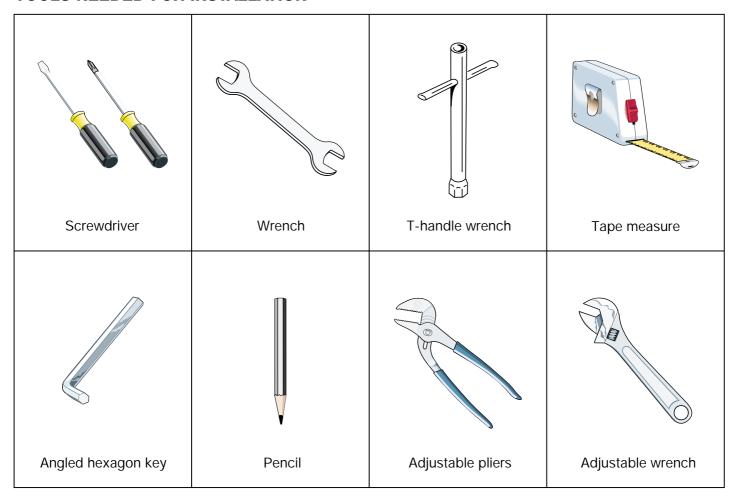
INSTALLATION INSTRUCTIONS

WARNING!

THIS APPLIANCE HAS TO BE INSTALLED BY A QUALIFIED INSTALLER.

Improper installation, adjustment, alteration, services, or maintenance can cause injury or property damage. Consult a qualified installer, service agent, or the gas supplier.

TOOLS NEEDED FOR INSTALLATION



GENERAL INFORMATION

- Installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1-Latest Edition.
- 2. Installation in manufactured (mobile) home: installation must conform with 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)] or, when such standard is not applicable, the Standard for Manufactured Home Installations, ANSI/NCSBCS A225.1, or with local codes where applicable.
- Installation in Recreational Park Trailers: installation must conform with state or other codes or, in the absence of such codes, with the Standard for Recreational Park Trailers, ANSI A119.5.
- WARNING: This appliance shall not be used for space heating. This information is based on safety considerations.
- All openings in the wall behind the appliance and in the floor under the appliance shall be sealed.
- Keep appliance area clear and free from combustible materials, gasoline, and other flammable vapors.
- 7. Do not obstruct the flow of combustion and ventilation air.
- Disconnect the electrical supply to the appliance before servicing.
- 9. When removing appliance for cleaning and/or service;
 - A. Shut off gas at main supply.
 - B. Disconnect AC power supply.
 - C. Disconnect gas line to the inlet pipe.
 - D. Carefully lift appliance out of cabinet cutout. **CAUTION**: Use care in handling.

10. Electrical Requirement

Electrical installation should comply with national and local codes.

11. Air Supply and Ventilation

The installer must refers to local/national codes.

12. Gas Manifold Pressure

Natural gas - 4.0" W.C.P. LP/Propane - 11.0" W.C.P.

WARNING!!

ELECTRICAL GROUNDING INSTRUCTIONS

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 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 socket. Do not cut or remove the grounding prong from the plug.

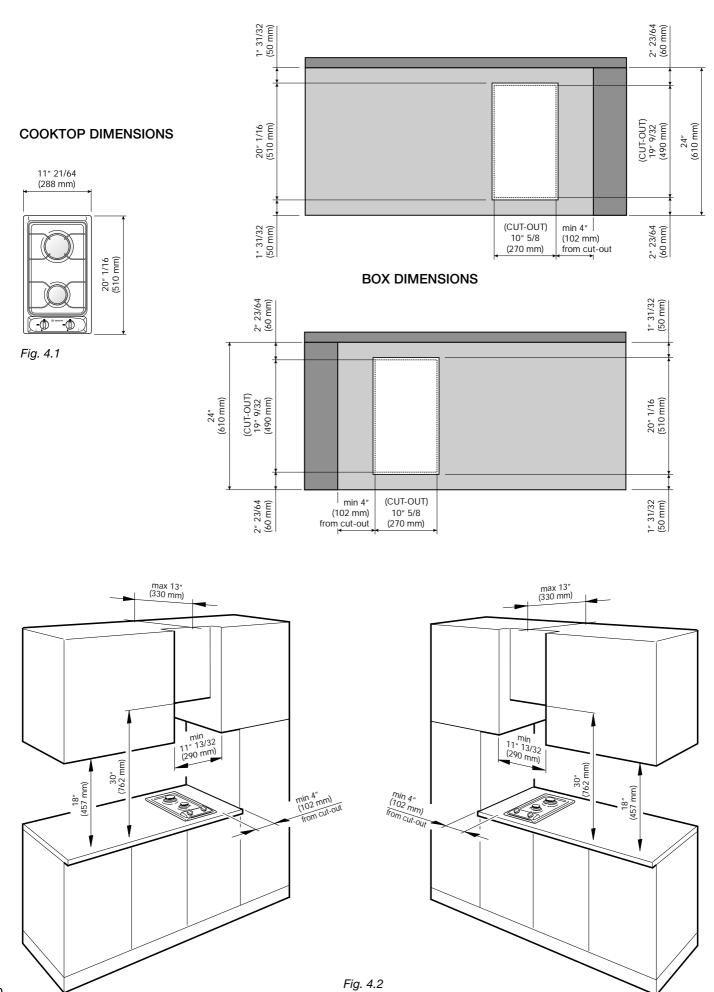
For personal safety, this appliance must be properly grounded.

Do not under any circumstances cut or remove the third (ground) prong from the power plug.

REPLACEMENT PARTS

Only authorized replacement parts may be used in performing service on the cooktop. Replacement parts are available from factory authorized parts distributors. Contact the nearest parts distributor in your area.

installation to the cabinet



PROXIMITY TO SIDE CABINETS

 The cooktop may be installed directly to existing base cabinets. 24" (610 mm) minimum deep countertop is required.

Cooktop dimensions:

- $\text{ width } = 11" \ 21/64 \ (288 \ \text{mm});$
- depth = 20'' 1/16 (510 mm).

Cut-out dimensions:

- width = 10" 5/8 (270 mm);
- depth = 19" 9/32 (490 mm).

To centre the cooktop on the 24" (610 mm) countertop there must be a distance of 2" 23/64 (60 mm) between the front side of the cut-out and the front of the countertop and also between the back side of the cut-out and the back of the countertop. When the cooktop has been installed there must be a distance of 1" 31/32 (50 mm) between the front side of the cooktop and the front of the countertop and also between the back side of the cooktop and the back of the countertop.

Important: Base cabinet construction must allow for size of cooktop cut-out.

Gas line opening:

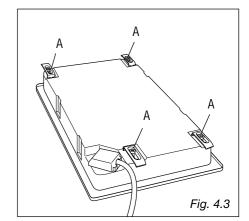
Wall - anywhere 11" 51/64 (300 mm) below underside of countertop; Cabinet floor - anywhere 3" 1/8 (79.2 mm) from the rear wall.

Grounded outlet: the electric cord with 3-prong ground plug has a length of 48" (122 mm). Grounded outlet should be located within 36" (914.4 mm) of right rear corner of cut-out.

2. The cooktop CANNOT be installed directly adjacent to sidewalls, tall cabinets, tall appliances, or other side vertical surfaces. There must be a minimum of 4" (102 mm) side clearance from the cooktop cut-out to such combustible surface TO THE RIGHT OR TO THE LEFT above the counter heigh.

IMPORTANT: ONE SIDE (LEFT or RIGHT) ABOVE THE COUNTER HEIGHT MUST ALWAYS BE KEPT CLEAR.

- 3. The maximum upper cabinet depth recommended is 13" (330 mm). Wall cabinet above the cooktop must be a minimum of 30" (762 mm) above the countertop for a width of minimum 11" 13/32 (290 mm): it has to be centred with the cooktop. Side wall cabinets above the cooktop must be a minimum of 18" (457 mm) above the countertop.
- 4. If cabinet has a drawer, a 4" (102 mm) 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.



FASTENING THE COOKTOP (fig. 4.3 - 4.4)

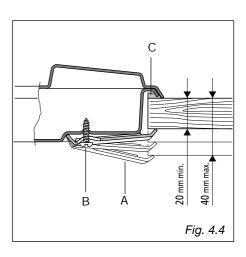
Each cooktop is supplied with a set of tabs and screws to fasten it on units with a working surface from 2 to 4 cm deep.

The kit includes 4 tabs "A" and 4 self-threading screws "B".

- ✓ Cut the unit.
- ✓ Stretch gasket "C" over the edge of the hole made, being careful to overlay the
 junction edges.
- ✓ Turn the cooktop over and put tabs "A" into the mountings; only tighten screws "B" a few turns.

Make sure that the tabs are mounted correctly as shown in the figure.

- ✓ Put the cooktop into the hole cut into the unit and position it correctly.
- ✓ Put tabs "A" into place and tighten screws "B" until the cooktop is completely secured.



gas connection



Explosion Hazard

Use a new CSA or UL 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" 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.

All gas connections must be made according to national and local codes. This gas supply (service) line must be the same size or greater than the inlet line of the appliance. Sealant on all pipe joints must be resistant to te action of LP/Propane gas.

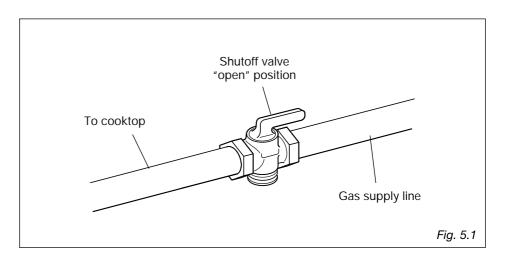
The cooktop is equipped for the use with NATURAL gas. It is design-certified by CSA International for NATURAL and L.P. gases with appropriate conversion.

The model/serial rating plate, located on the underside of the burner box, has information on the type of gas that can be used. If this information does not agree with the type of gas available, check with the local gas supplier. See page 16 for L.P. gas conversion instructions.

1. Manual Shut-off Valve (fig. 5.1):

The supply line shall be equipped with an approved shutoff valve. This valve should be located in the same room as the cooktop and should be in a location that allows ease of opening and closing (in a position where it can be reached quickly in the event of an emergency).

Do not block access to the shutoff valve. The valve is for turning on or shutting off gas to the appliance.



2. Pressure Regulator (figures 5.2a - 5.2b - 5.2c - 5.2d):

a) All heavy duty, commercial type cooking equipment must have a pressure regulator on the incoming service line for safe and efficient operation, since service pressure may fluctuate with local demand. The regulator supplied with this cooktop must be installed before any gas connections are made.

Use supplied pressure regulator only.

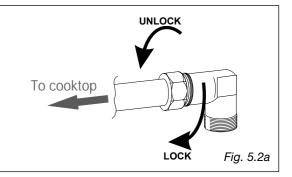
PRESSURE REGULATOR INSTALLATION

STEP 1

The elbow connection can be turned in the direction required after the manifold female pipe fitting has been slackened by using a wrench.

Then tighten the elbow-manifold female pipe fitting connection by using a wrench before proceeding with gas connection.

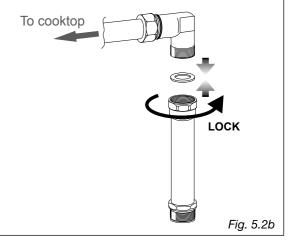
When tightening keep the elbow connection firm i.e. by using an adjustable pliers or an adjustable wrench (pay attention not to damage the thread).



STEP 2

Mount the extension pipe to the elbow connection interposing the gasket supplied and tighten by using a wrench.

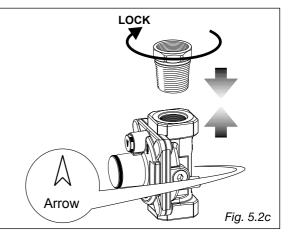
When tightening keep the elbow connection firm i.e. by using an adjustable pliers or an adjustable wrench (pay attention not to damage the thread).



STEP 3

Mount the 3/8" NPT (conical) male connector to the pressure regulator and tighten by using a wrench.

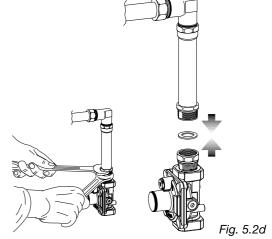
Do not over tighten the connector. Over tightening may crack regulator.



STEP 4

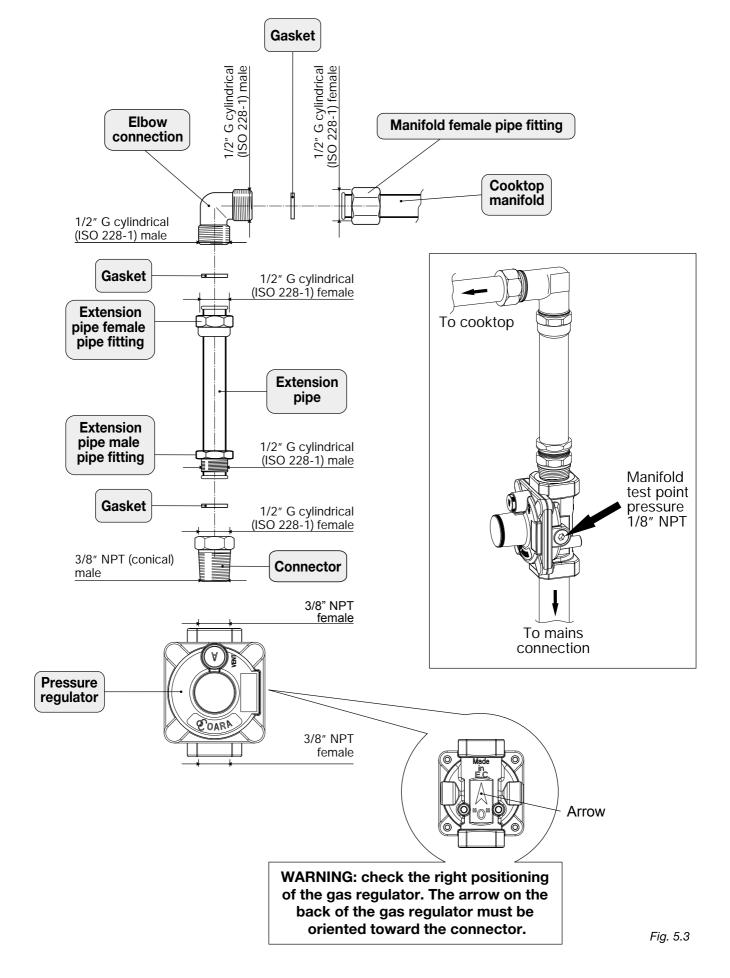
Assemble the 3/8" NPT connector + pressure regulator group to the extension pipe interposing the gasket supplied.

IMPORTANT: use two spanners to tighten the connection.

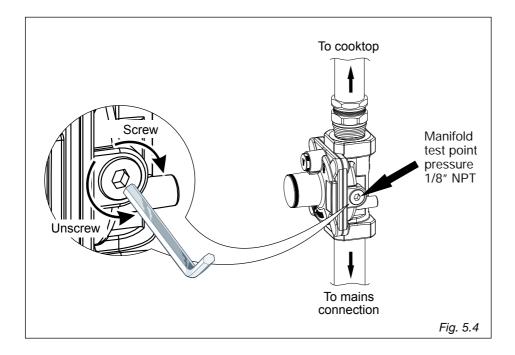




GAS CONNECTION SPECIFICATION



- b) Any conversion required must be performed by your dealer or a qualified licensed plumber or gas service company. Please provide the service person with this manual before work is started on the cooktop. (Gas conversions are the responsibility of the dealer or end user.)
- c) This cooktop can be used with NATURAL or LP/PROPANE gas. It is shipped from the factory adjusted for use with NATURAL gas.
- d) Manifold pressure should be checked with a manometer; NATURAL gas requires 4.0" W.C.P. and LP/PROPANE requires 11.0" W.C.P (see figure 5.4).
 - Incoming line pressure upstream from the regulator must be 1" W.C.P. 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" W.C.P). If the line pressure is in excess of that amount, a step-down regulator will be required.



- e) The appliance, its individual shut-off valve, and pressure regulator must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of 1/2 PSI (3.5 kPa).
- f) 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 pressure equal to or less than 1/2 PSI (3.5 kPa).

3. Flexible Connections:

If local codes permit, CSA design-certified, flexible metal appliance connector is recommended for connecting this cooktop to the gas supply line. Do Not kink or damage the flexible connector when moving the cooktop. The pressure regulator has 3/8" NPT female pipe threads. You will need to determine the fittings required, depending on the size of your gas supply line, flexible metal connector and shutoff valve.

4. Rigid Pipe Connections:

If rigid pipe is used as a gas supply line, a combination of pipe fittings must be used to obtain an in-line connection to the cooktop. All strains must be removed from the supply and fuel lines so cooktop will be level and in line.

- Use joint compounds and gaskets that are resistant to action of natural or propane gas on all male pipe threads.
- Do not over tighten gas fitting when attaching to pressure regulator. Over tightening may crack regulator.

5. Leak Testing:

IMPORTANT: Leak testing of the appliance shall be conducted as follows:

- After final gas connection is made, turn on manual gas valve and test all connections in gas supply piping and appliance for gas leaks with a soapy water solution. During this test all appliance gas valves have to be closed.
- In order to avoid property damage or serious personal injury, never use a lighted match. If a leak is present, tighten joint or unscrew, apply more joint compound, tighten again and retest connection for leak.

CONVERSION TO LP/PROPANE GAS

Every cooktop is provided with a set of injectors for the various types of gas.

Select the injectors to be replaced according to the table below.

The nozzle diameters, expressed in hundredths of a millimetre, are marked on the body of each injector.

SETTING THE PRESSURE REGULATOR (fig. 5.5)

- 1. Unscrew the regulator cover;
- 2. Unscrew the A component, reverse and screw it according to the LP/PROPANE regulation.

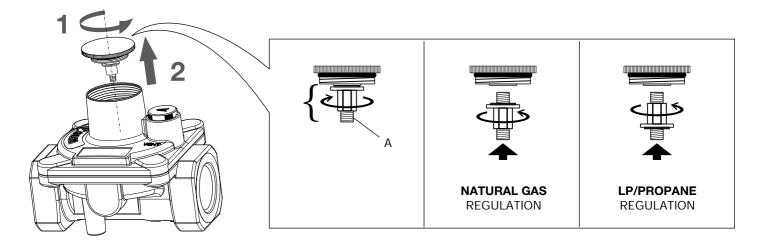
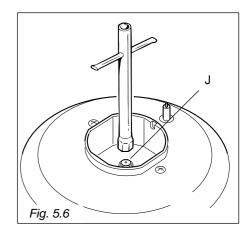


Fig. 5.5

OPERATIONS TO BE PERFORMED WHEN SUBSTITUTING THE INJECTORS

- ✓ Remove the gratings, the burner covers and the knobs;
- ✓ Using a wrench substitute the nozzle injectors "J" (fig. 5.6) with those most suitable for the kind of gas for which it is to be used.

The burner are conceived in such a way so as not to require the regulation of the primary air.



INJECTORS TABLE

	NOMINAL POWER	REDUCED POWER	LP/PROPANE 11" W.C.P.		NATURAL GAS 4" W.C.P.	
BURNERS	BTU/hr	BTU/hr	Ø injector [1/100 mm]	By-pass [1/100 mm]	Ø injector [1/100 mm]	By-pass [1/100 mm]
Semi-rapid (SR)	6000	1500	72	34 (*)	118	adjustable
Rapid (R)	10000	2000	94	44 (*)	155	adjustable

34: brown coloured 44: green coloured

REGULATING THE BURNER MINIMUM SETTING

When switching from one type of gas to another, the minimum flow rate must also be correct: the flame should not go out even when passing suddenly from maximum to minimum flame.

To regulate the flame follow the instructions below:

- Light the burnerSet the gas valve to minimum

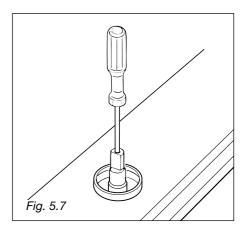
On gas valves provided with adjustment screw in the centre of the shaft (fig. 5.7):

- Using a screwdriver with max. diameter 3 mm, turn the screw inside the tap until the correct setting is obtained.

For LP/PROPANE gas, tighten the adjustment screw completely.

After regulation repeat the operations indicated in paragraph "2. Pressure regulator" at page 12.

If the cooktop has been disconnected and then connected again to the gas supply line repeat the operations indicated in paragraph "5. Leak Testing" at page 16.



electrical connection

A WARNING



Electrical Shock Hazard

Plug into a grounded 3-prong outlet.

Do not remove ground prong.

Do not use an adapter.

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

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

Check with a qualified electrician if you are not sure whether the cooktop is properly grounded.

Do Not ground to a gas pipe.

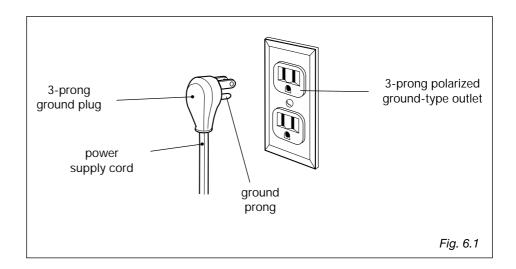
A 120-volt, 60-Hz, AC-only, 15-ampere, fused electrical supply is required. A time-delay fuse or circuit breaker is recommended. It is recommended that a separate circuit serving only this appliance be provided.

The outlet must be checked by a qualified electrician to see if it is wired with correct polarity.

This appliance, when installed, must be electrically grounded in accordance with local codes.

Recommended ground method

For your personal safety, this cooktop must be grounded. This cooktop is equipped with a 3-prong ground plug. To minimize possible shock hazard, the cord must be plugged into a mating 3-prong ground-type outlet, grounded in accordance with the National Electrical Code ANSI/NFPA 70 latest edition or Canadian Electrical Code (CSA) and local codes and ordinances. If a mating outlet is not available, it is the personal responsibility and obligation of the customer to have a properly polarized and grounded, 3-prong outlet installed by a qualified electrician.



WIRING DIAGRAM

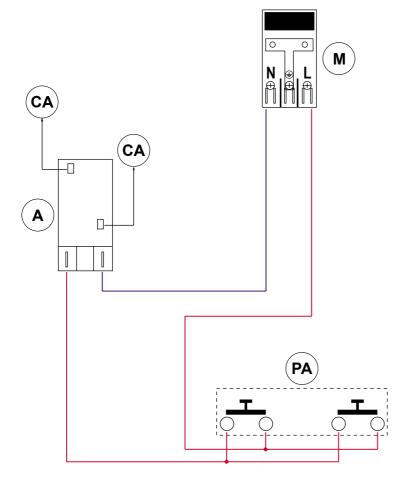


Fig. 6.2

Wiring diagram key

A Ignition coil

PA Ignition switches group

M Terminal block

CA Igniter

The manufacturer cannot be held responsible for possible inaccuracies due to printing or transcription errors in the present booklet.

The manufacturer reserves the right to make all modifications to its products deemed necessary for manufacture or commercial reasons at any moment and without prior notice, without jeopardising the essential functional and safety characteristics of the appliances.