

BUILT-IN GAS OVEN

for residential use only



Models: **VEBIG30N..**



INSTALLATION INSTRUCTIONS

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 electrical plug should always be accessible.
- **The installer should leave these instructions with the consumer who should retain for local inspector's use and for future reference.**

Installation must conform with local codes or in the absence of codes, the National Fuel Gas Code ANSI Z223.1/NFPA 54 - 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 IN MANUFACTURED (MOBILE) HOME: The 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: The 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.

Installation of any gas-fired equipment should be made by a licensed plumber. A manual shut-off valve must be installed in an accessible location in the gas line external to the appliance for the purpose of turning on or shutting off gas to the appliance (In Massachusetts such shutoff devices should be approved by the Board of State Examiners of Plumbers & Gas Fitters).

If an external electrical source is utilized, the appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, with the national Electrical Code, ANSI/NFPA 70.

Some models are supplied with a protective film on steel and aluminium parts. This film must be removed before installing/using the appliance.

FOR INSTALLER ONLY

THIS OVEN IS FOR RESIDENTIAL USE ONLY

Take care **NOT** to lift the oven by the door handle.



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.
- **NEVER** use this appliance as a space heater to heat or warm the room. Doing so may result in carbon monoxide poisoning and overheating of the 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.

DATA PLATE

CONVERSION LABEL



WARNING: This product can expose you to chemicals including formaldehyde, which is known to the State of California to cause cancer, and lead, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www. P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

This appliance is designed and manufactured solely for the cooking of domestic (household) food and is not suitable for any non-domestic application and therefore should not be used in a commercial environment.

The appliance warranty will be void if the appliance is used within a non-domestic environment i.e. a semi-commercial, commercial or communal environment.

INSTALLATION INSTRUCTIONS

WARNING!

THIS APPLIANCE MUST 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.



WARNING!!

IMPORTANT: The use of suitable protective clothing/gloves is recommended when handling, installing of this appliance.

CAUTION !

Some cabinets and building materials are not designed to withstand the heat produced by the normal safe operation of the appliance. Dis-coloration or damage, such as delamination, may occur.

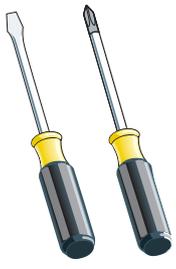
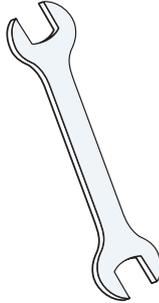
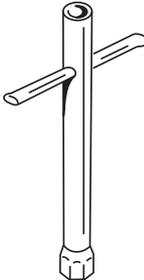
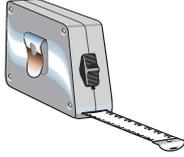
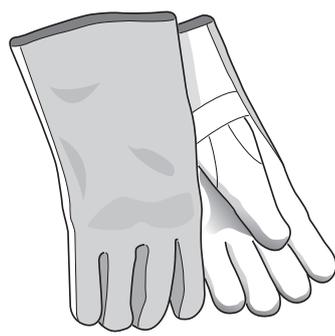
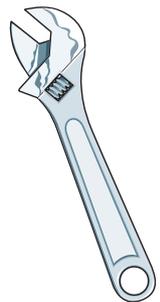
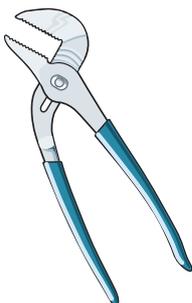
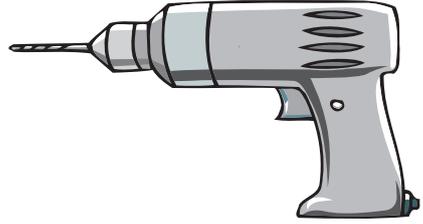
To prevent possible damage to cabinets and cabinet finishes, use only materials and finishes that will withstand temperature up to 190°F (88°C), and that are moisture resistant.

When cabinets are covered with laminates, an appropriate heat-resistant adhesive must be used.

Consult your cabinet manufacturer for proper specifications.

The cabinet must have solid sides, back and bottom. The bottom must be solid either at floor level or with the bottom edge of the cutout. Any openings around the gas or electrical outlets must be sealed. All cabinet openings must be sealed at the time of installation to prevent drafts. Drafts will affect safe use of the oven.

TOOLS NEEDED FOR INSTALLATION (NOT SUPPLIED WITH THE APPLIANCE)

					
Screwdriver	Wrench	T-handle wrench	Angled hexagon key	Pencil	Tape measure
					
Suitable protective gloves	Adjustable wrench	Adjustable pliers	Drill		

GENERAL INFORMATION

1. Installation must conform with local codes or, in the absence of local codes, with the **National Fuel Gas Code**, ANSI Z223.1/NFPA 54 - Latest Edition, CAN/CGA-B149.1 or CAN/CGA-B149.2.
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.
3. 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!!

4. **This appliance shall not be used for space heating. This information is based on safety considerations.**
5. All openings in the wall behind the appliance and in the floor under the appliance shall be sealed.
6. 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.
8. 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: The appliance is heavy; use care in handling.
10. **Electrical Requirement**
Electrical installation should comply with national and local codes.
11. **Air Supply and Ventilation**
The installer must refer to local/national codes.
12. **Gas Manifold Pressure**
Natural gas - 4.0" W.C.P.
LP/Propane - 11.0" W.C.P.
13. The misuse of oven door (e.g. stepping, sitting, or leaning on them) can result in potential hazards and/or injuries.



WARNING!!

ELECTRICAL GROUNDING INSTRUCTIONS

The oven 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, in Canada Canadian Electrical Code**.

Installation should be made by a licensed electrician.

FOR PERSONAL SAFETY, THIS APPLIANCE MUST BE PROPERLY GROUNDED.

If an external electrical source is utilized, the installation must be electrically grounded in accordance with local codes or, in the absence of local codes, with the national Electrical Code, ANSI/NFPA 70.

This appliance is equipped with a three-prong grounding plug (NEMA 5-15P) for your protection against shock hazard and should be plugged directly into a properly grounded socket.

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 appliance. Replacement parts are available from factory authorized parts distributors. Contact the nearest parts distributor in your area.

1

installation

INSTALLATION TO THE CABINET

Oven dimensions (fig. 1.1):

- width = 29" 11/16 (754 mm)
- depth = 20" 9/32 (515 mm)
- depth = 22" 7/16 (570 mm) with gas pressure regulator fitted
- height = 27" 1/64 (686 mm)
- oven frame depth = 63/64" (25 mm)

Cutout dimensions (fig. 1.2):

- width = 28" 1/2 (724 mm)
- depth = 23" 1/2 (597 mm) minimum from front corner of cutout
- height = 26" 25/32 (680 mm)

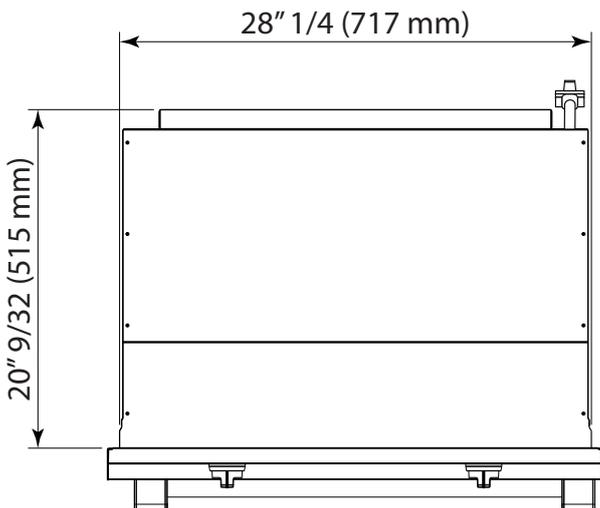
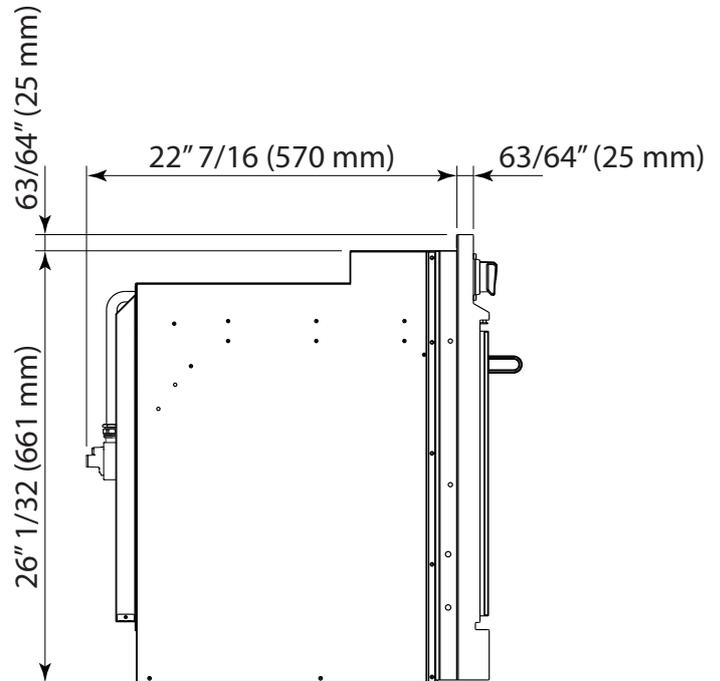
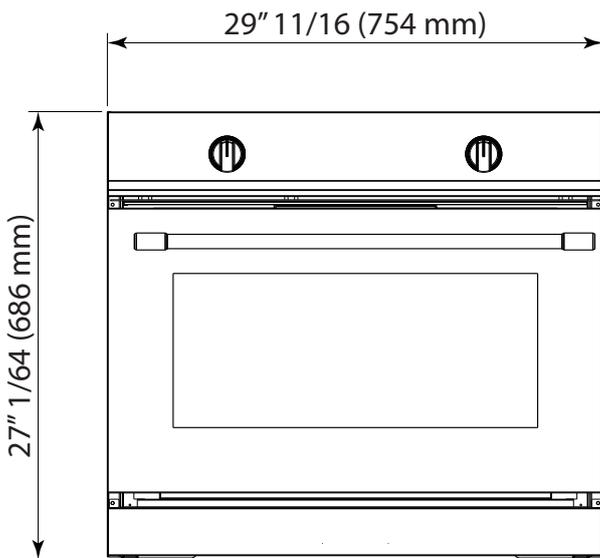
IMPORTANT NOTE: THE BOTTOM OF CUTOUT SHALL BE AT LEAST 14" 7/8 (378 mm) FROM THE FLOOR. DO NOT INSTALL THE OVEN BENEATH THE WORK COUNTER.

On the lower side, the oven must lay on a support standing the oven weight. Oven support surface **MUST** be solid.

All openings in the wall or floor where the oven is to be installed **MUST** be sealed. Oven location should be away from strong draft areas, such as windows, doors and strong heating vents.

For **SAFETY CONSIDERATIONS** the oven **SHALL BE FASTENED** to the cabinet with four (4) **SUITABLE** screws (not supplied with the unit) through the holes in the trim (see fig. 1.4). The unit should be leveled properly before being secured to the cabinet.

Fig. 1.1



AFTER FIXING THE OVEN TO THE CABINET, FIT THE LOWER TRIM (SUPPLIED WITH THE APPLIANCE) AS INDICATED IN FIGURE BELOW

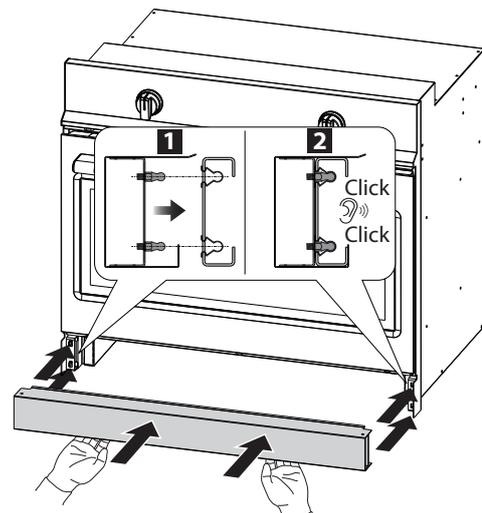
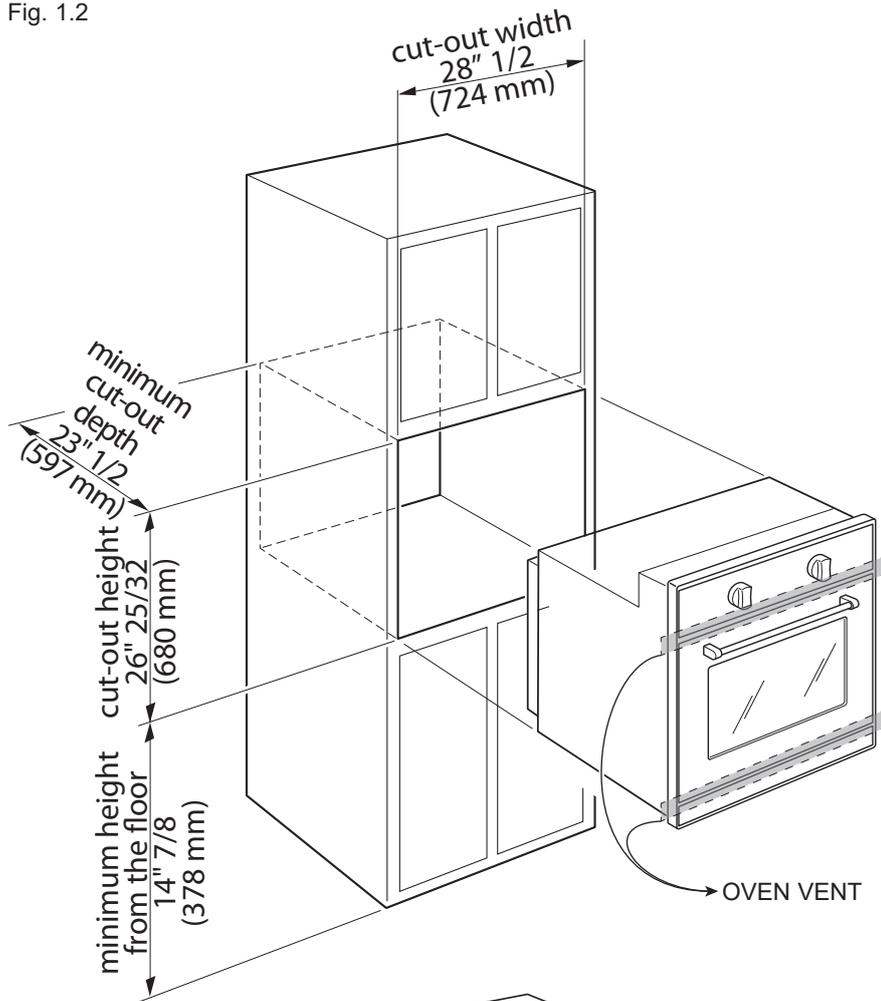


Fig. 1.2



Gas line opening:

Provide a suitable hole on the bottom of cutout. The centre of hole shall be $13\frac{7}{64}$ (332.9 mm) from the centre of cutout to the right side and $20\frac{7}{16}$ (519 mm) from the front corner of cutout to the back.

Grounded outlet:

The electric cord with 3-prong ground plug has a length of 48" (1220 mm). Grounded outlet should be located in an area $7\frac{7}{8}$ (200 mm) below the bottom of cutout and only on the left side of the cabinet.

A suitable hole has to be provided on the bottom of the cutout, in an area positioned on the left rear corner ($2\frac{11}{32}$ [59.5 mm] maximum from the left side of cutout to the centre and minimum $19\frac{19}{64}$ [490 mm] from the front corner of cutout to the back), to pass the appliance cable.

Fig. 1.3

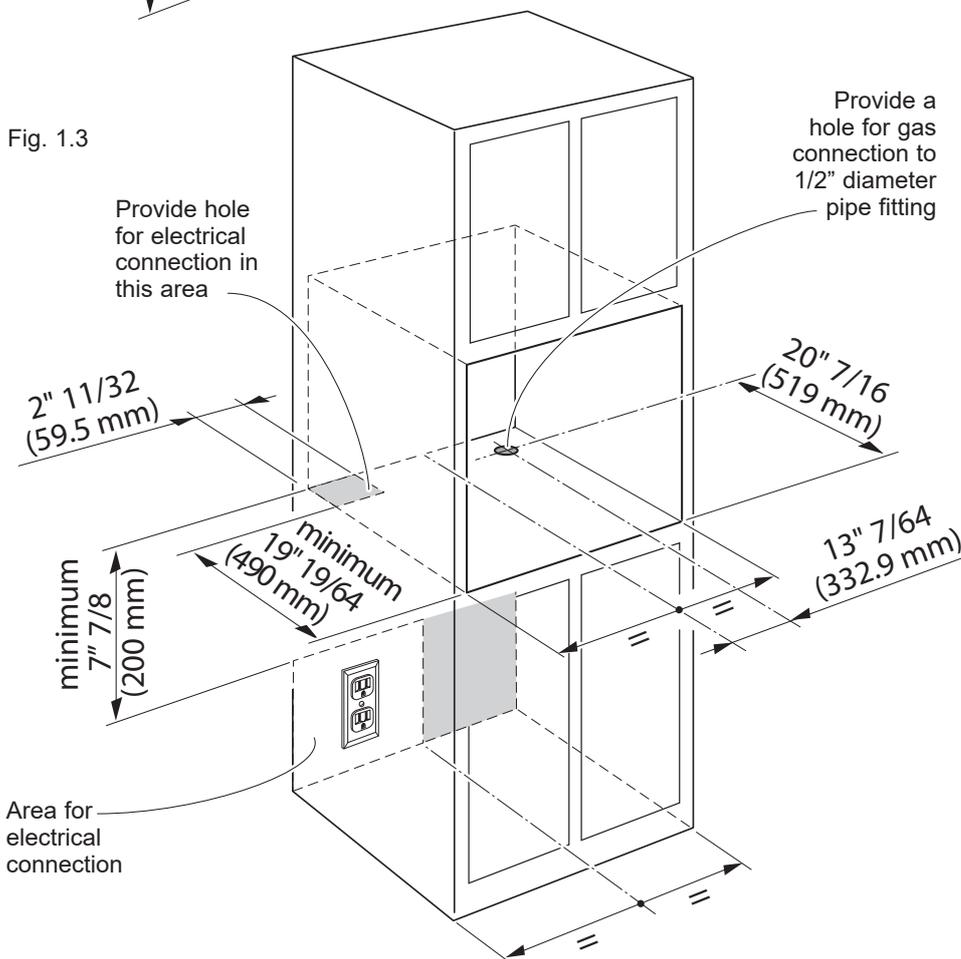
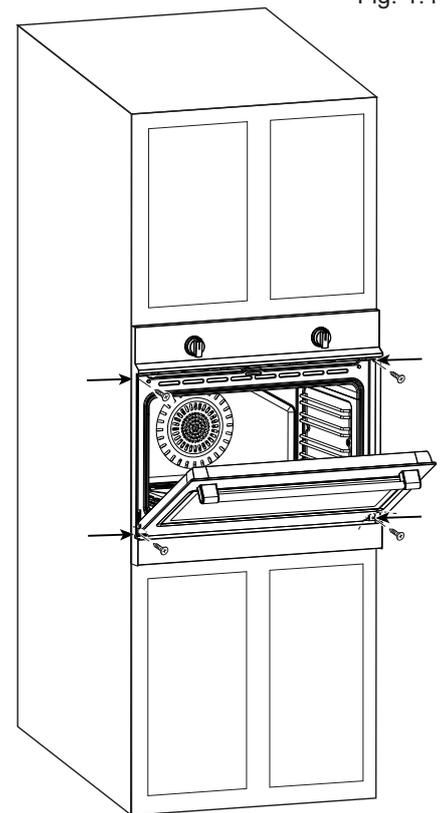


Fig. 1.4



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 the action of LP/Propane gas.

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

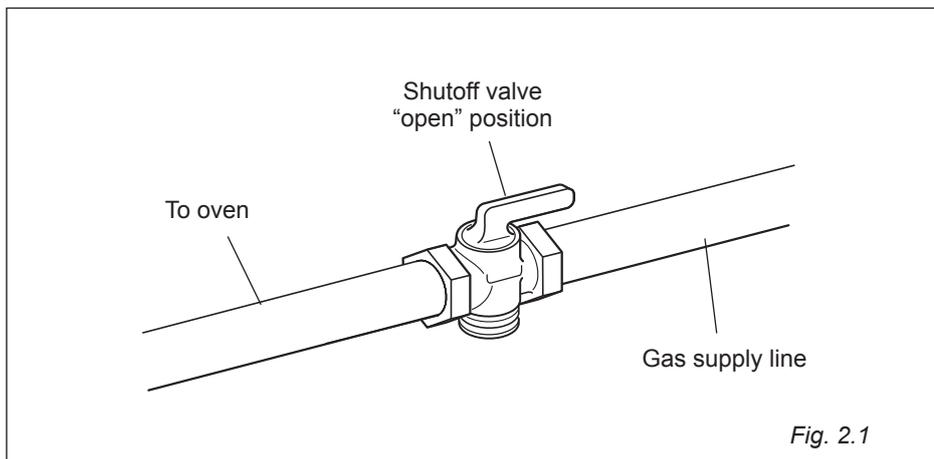
The model/serial rating plate, located on the back of the oven, has information on the type of gas that can be used. If this information does not agree with the type of gas available, check with the local gas supplier. See page from 12 to 15 for L.P. gas conversion instructions.

1. Manual Shut-off Valve (fig. 2.1):

A manual shut-off valve must be installed in an accessible location in the gas line external to the appliance for the purpose of turning on or shutting off gas to the appliance (In Massachusetts such shutoff devices should be approved by the Board of State Examiners of Plumbers & Gas Fitters).

This valve should be located in the same room as the oven 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:

- 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. Before installing the regulator mount the 3/8" NPT (conical) male connector to the regulator (see picture 2.2). Gasket supplied has to be placed between 3/8" NPT (conical) connector/manifold male pipe fitting (see picture 2.3). The regulator supplied with this oven must be installed before any gas connections are made. Use supplied pressure regulator only.



WARNING



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.

PRESSURE REGULATOR INSTALLATION

STEP 1

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.

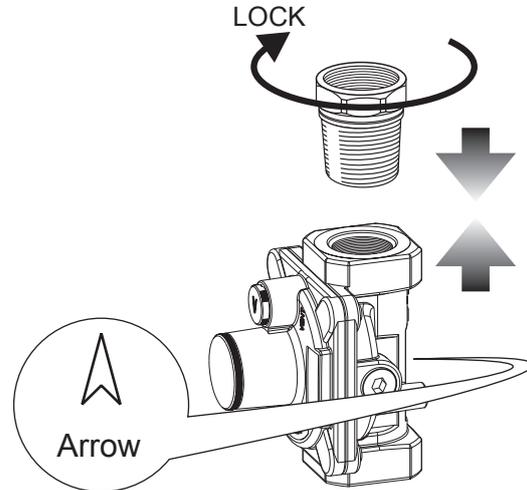


Fig. 2.2

STEP 2

Assemble the 3/8" NPT connector + pressure regulator group to the manifold interposing the gasket supplied. The regulator cover must be oriented toward the back of the cabinet.

IMPORTANT: use two spanners to tighten the connection.

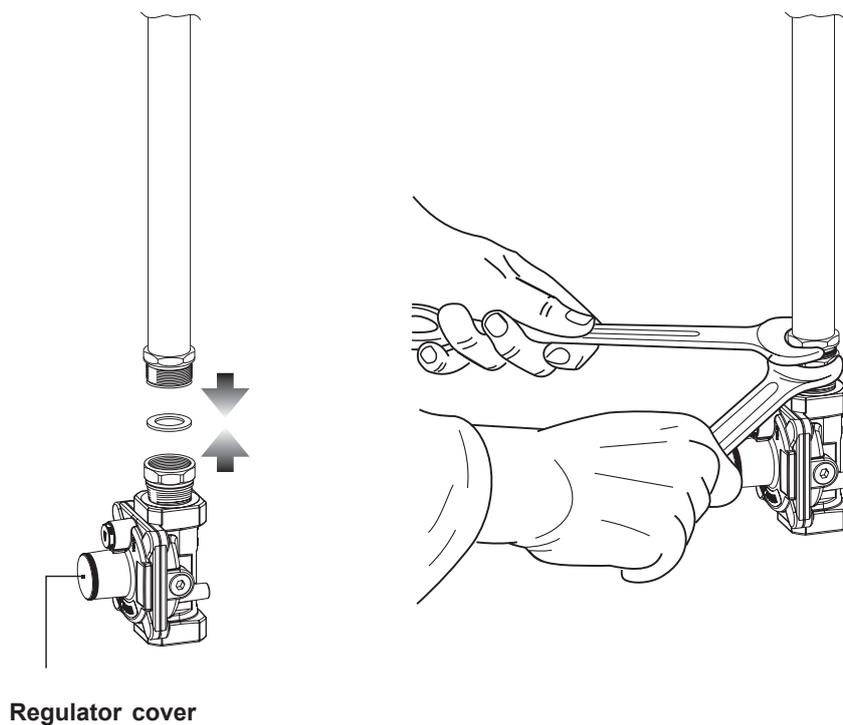


Fig. 2.3

GAS CONNECTION SPECIFICATION

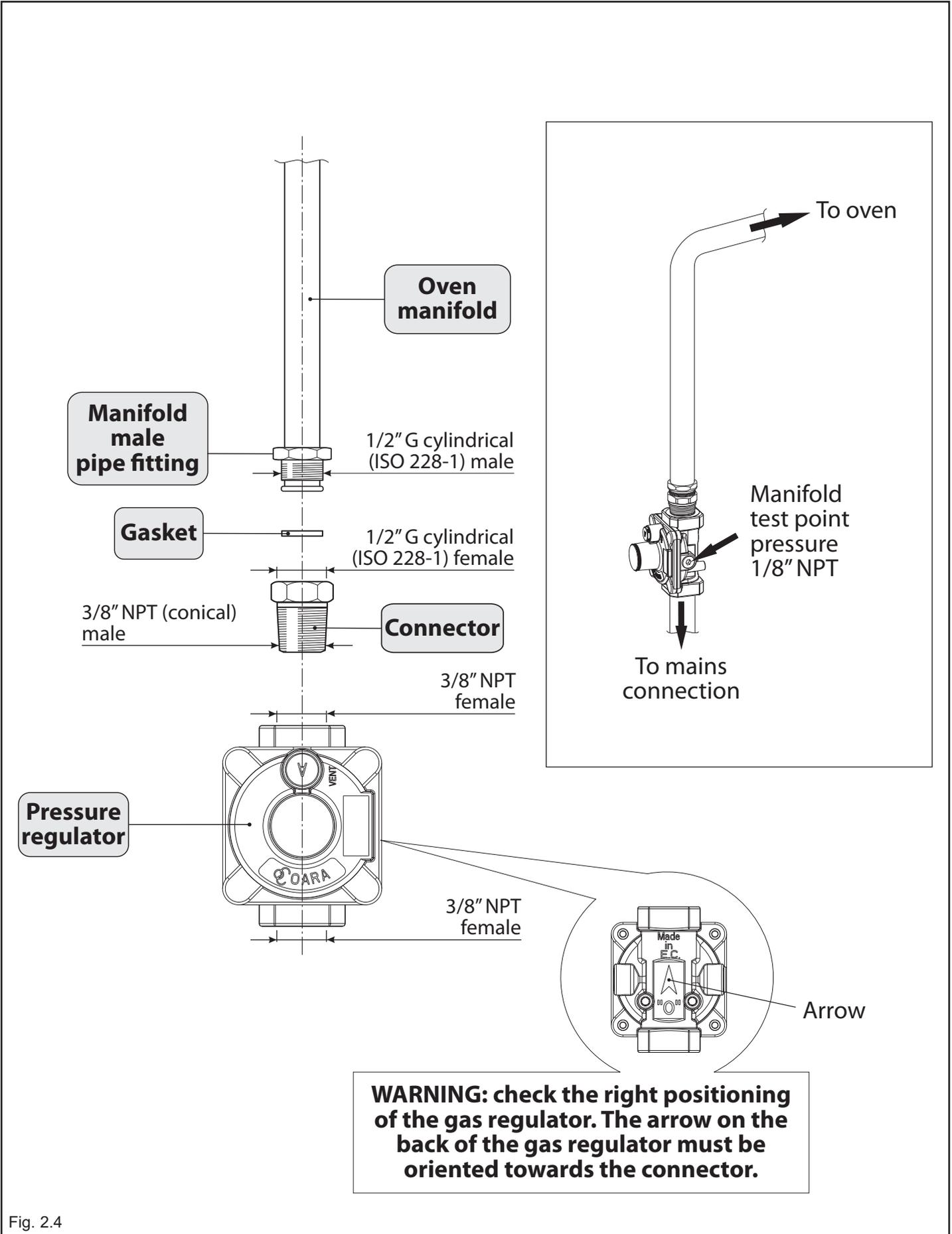
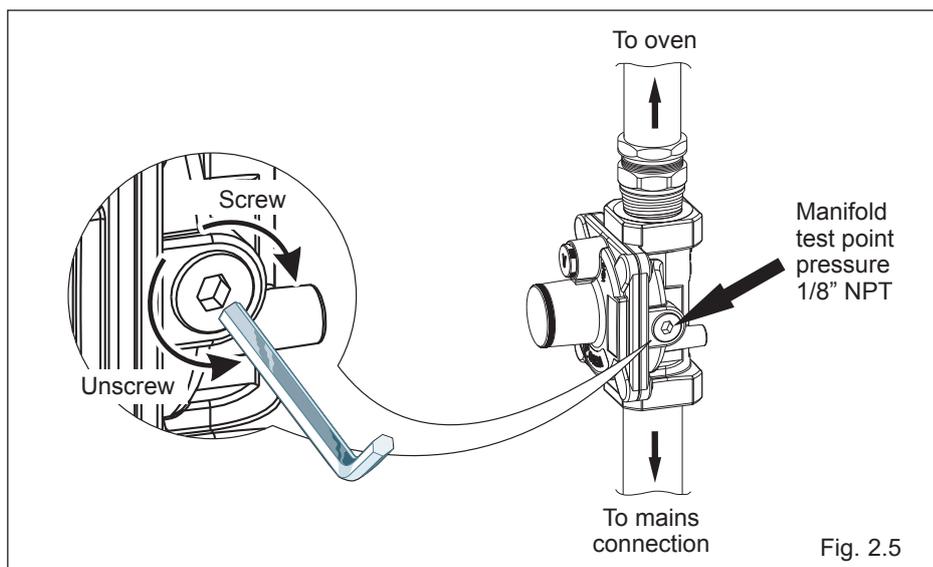


Fig. 2.4

- b. Any conversion required must be performed by your dealer or a qualified licensed technician or gas service company. Please provide the service person with this manual before work is started on the oven. (Gas conversions are the responsibility of the dealer or end user.)
- c. This oven 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 below).
 - 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 oven 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 or UL design-certified, flexible metal appliance connector is recommended for connecting this oven to the gas supply line. Do Not kink or damage the flexible connector when moving the oven. 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 oven. All strains must be removed from the supply and fuel lines so oven 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 (OR CONVERSION BACK TO THE ORIGINAL GAS - NATURAL GAS)

Every oven is provided with a set of injectors for the various types of gas. Select the injectors to be replaced according to the "INJECTORS TABLE".

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

CAUTION: Save the orifices removed from the appliance for future use.

SETTING THE PRESSURE REGULATOR

1. Unscrew the regulator cover.
2. Unscrew the "A" component, reverse and screw it according to the LP/PROPANE (or NATURAL GAS) regulation.

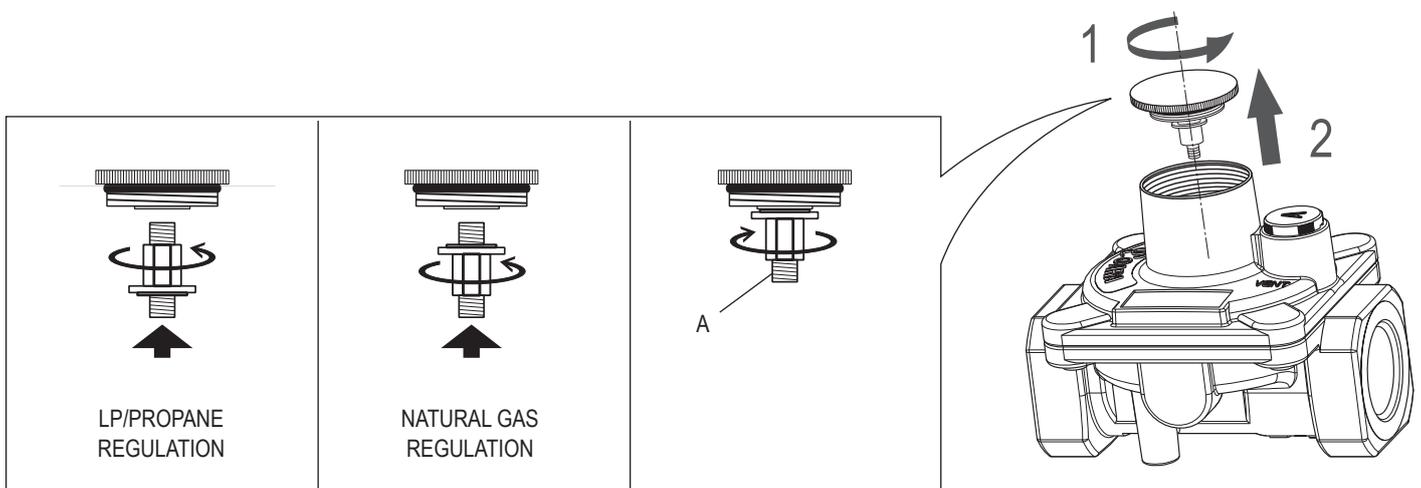


Fig. 2.6

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]	Ø injector [1/100 mm]
Oven burner	13500	2400	109	180
Broil burner	10000	-	95	155

OPERATIONS TO BE EXECUTED FOR THE REPLACEMENT OF THE INJECTOR OF THE OVEN BURNER

- Lift and remove the lower panel inside the oven.
- Gently unlock, from the burner, the safety valve probe "V" and the ignition electrode "E" (as indicated in fig. 2.7). Take care not to damage the probe and the ignition electrode.
- Unscrew and remove the burner securing screws "A" (fig. 2.7).
- Withdraw the burner as shown in figure 2.8.
- Using a 7 mm box spanner, unscrew the injector (indicated by the arrow in fig. 2.8) and replace it with a new one selected in accordance with the "Injectors table".
- Then replace the burner and the other components repeating the above steps in reverse order.

IMPORTANT: Pay special attention to replace correctly the safety valve probe "V" and the ignition electrode "E" as per figure 2.7. Check the correct operation of the safety valve and the ignition electrode.

Fig. 2.7

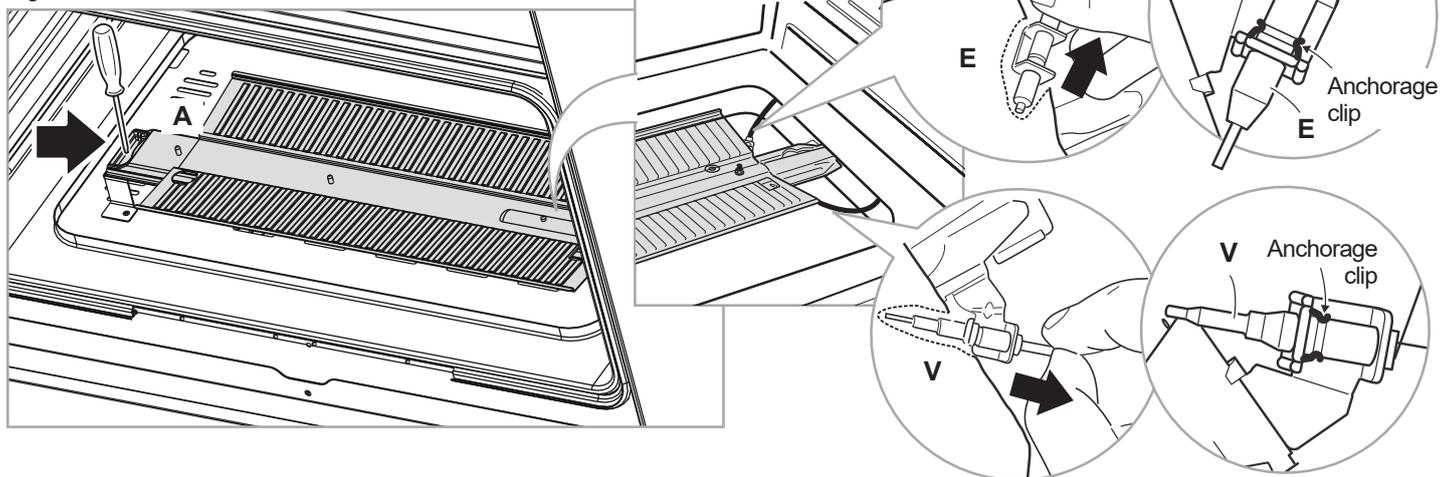
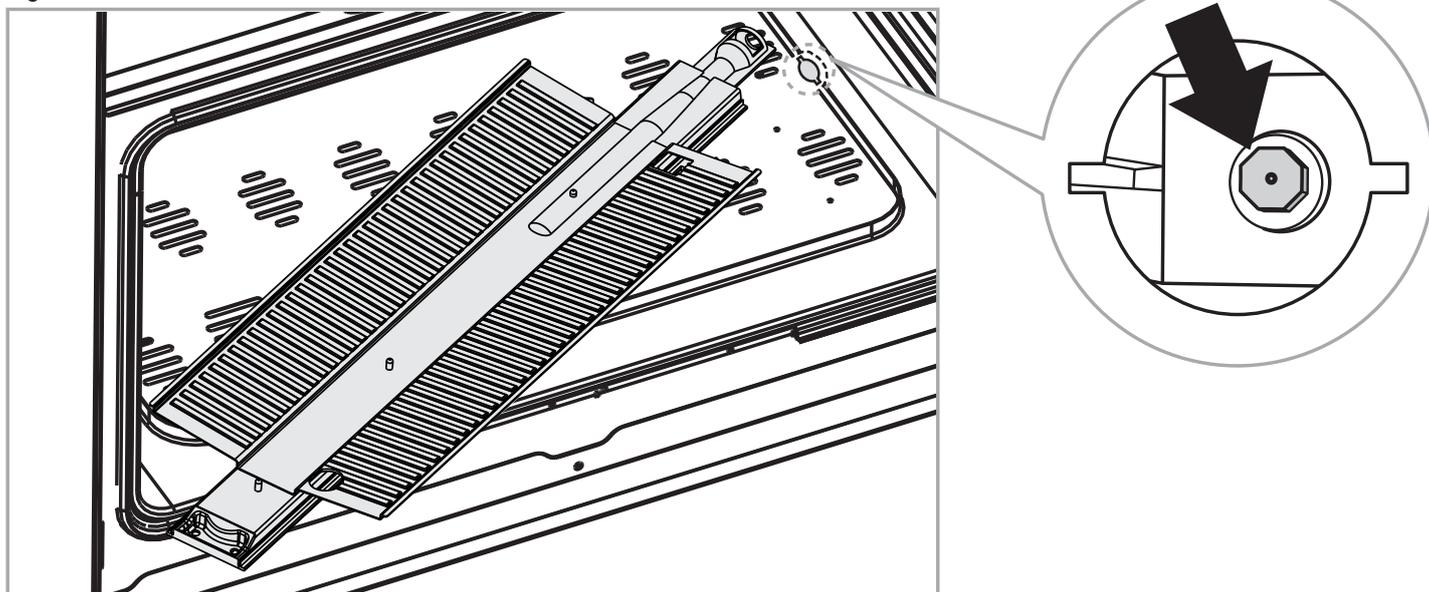


Fig. 2.8



OPERATIONS TO BE EXECUTED FOR THE REPLACEMENT OF THE INJECTOR OF THE BROIL BURNER

- Gently unlock, from the burner, the safety valve probe "V" and the ignition electrode "E" (as indicated in fig. 2.9). Take care not to damage the probe and the ignition electrode.
- Unscrew and remove the burner securing screw "A" (fig. 2.9).
- Withdraw the burner as shown in figure 2.10.
- Using a 7 mm box spanner, unscrew the injector (indicated by the arrow in fig. 2.10) and replace it with a new one selected in accordance with the "Injectors table".
- Then replace the burner and the other components repeating the above steps in reverse order.

IMPORTANT: Pay special attention to replace correctly the safety valve probe "V" and the ignition electrode "E" as per figure 2.9. Check the correct operation of the safety valve and the ignition electrode.

Fig. 2.9

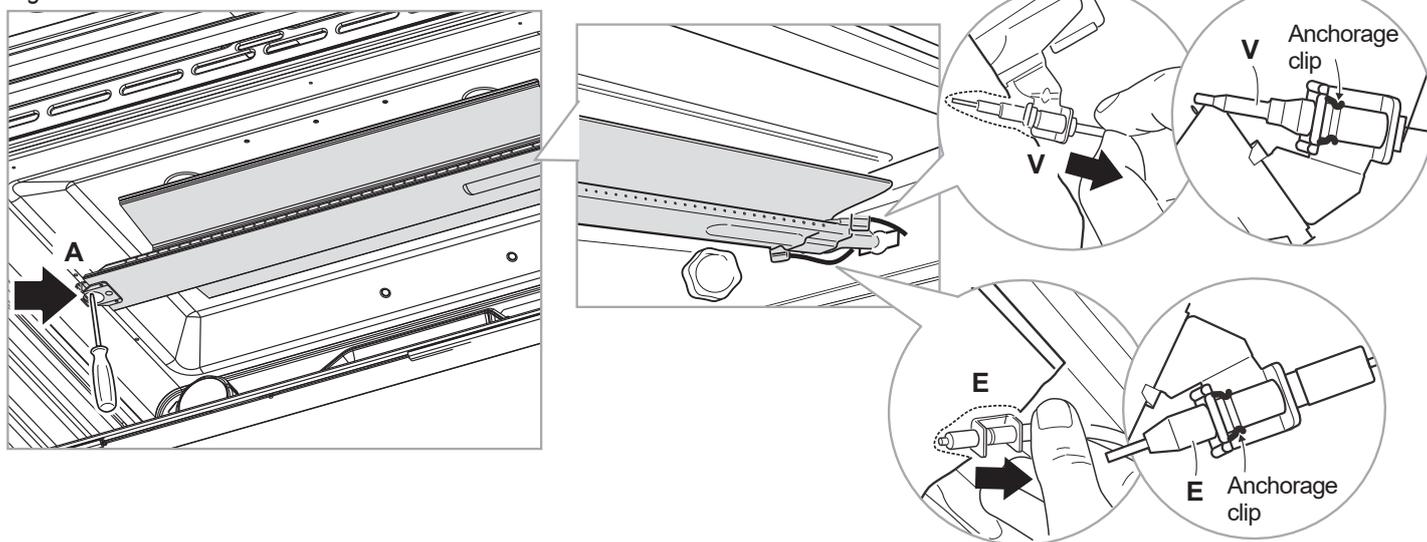
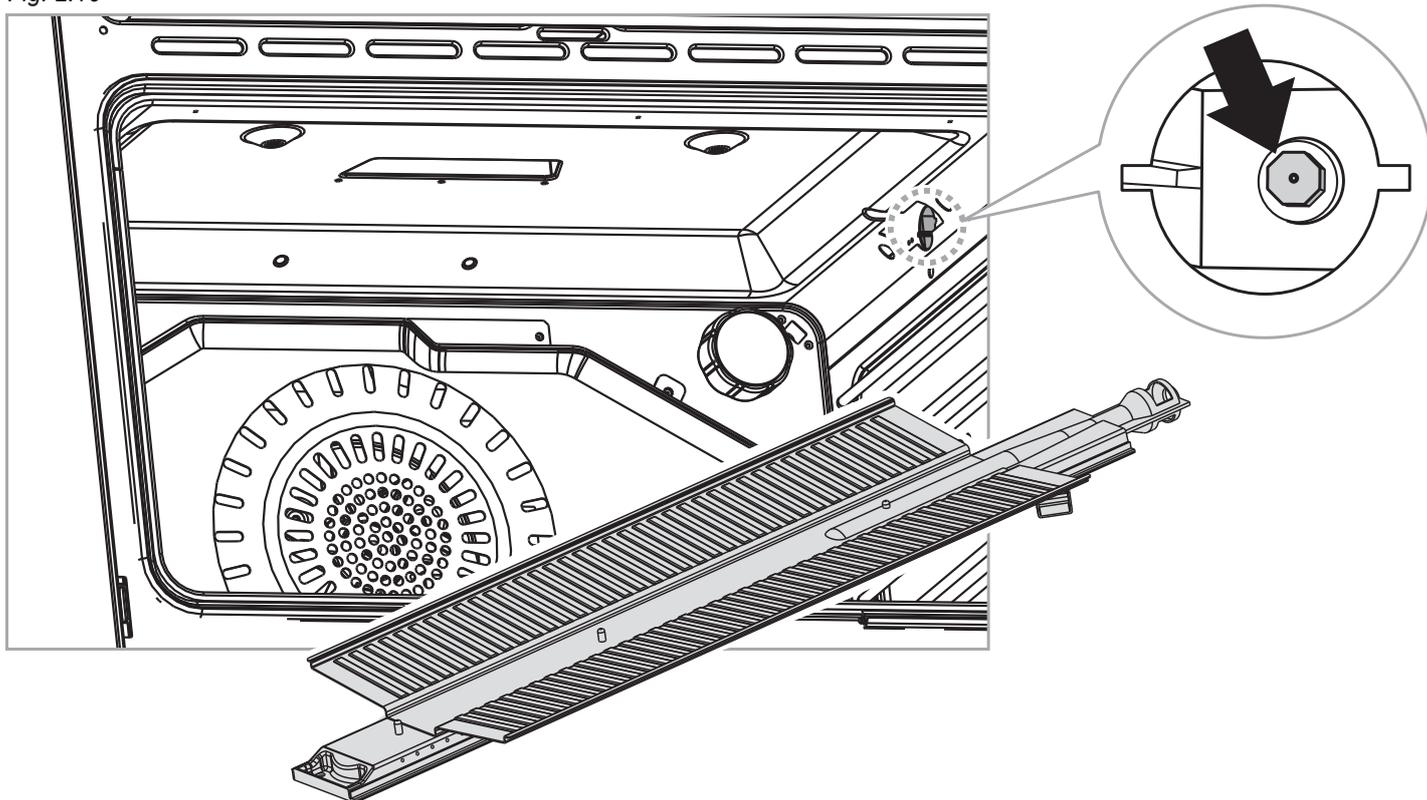


Fig. 2.10

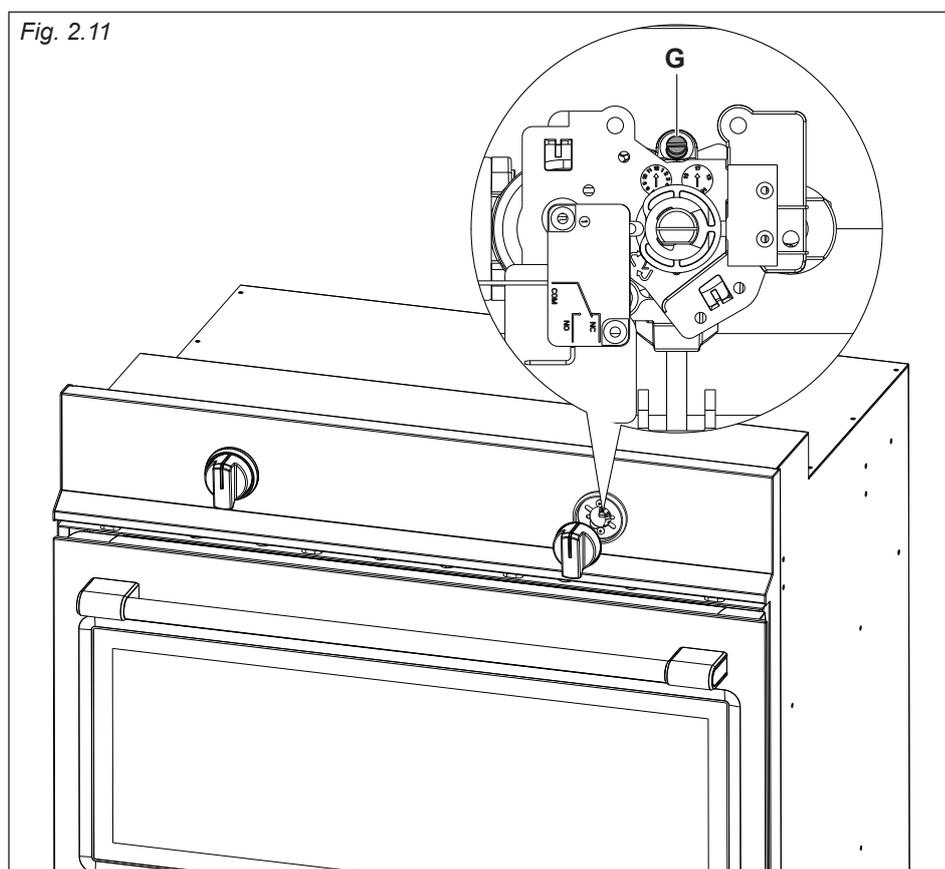


ADJUSTMENT OF THE OVEN BURNER MINIMUM

This needs to be done only for the oven burner (the broil is a fixed capacity) by acting on the thermostat in the following way:

- Turn on the burner by setting the thermostat knob on position “550” (maximum).
- Remove the knob and unscrew the by-pass screw “G” (fig. 2.11) about three times by passing a small flat screwdriver (Ø 3 mm blade, 100 mm length) through the panel opening.
- Re-mount the knob and let the oven heat up for about 10 minutes, then bring the knob to position “200” (minimum) to operate the thermostat by-pass.
- After having removed the knob again and being very careful not to turn the tap rod, slowly screw the by-pass screws “G” (fig. 2.11) until you obtain a flame of 3-4 mm in height. The flame should not go out even when passing suddenly from maximum to minimum flame.

N.B. For LP/PROPANE gas the by-pass screw must be fixed thoroughly.



After regulation repeat the operations indicated in paragraph “2. PRESSURE REGULATOR” at page 8.

If the oven has been disconnected and then connected again to the gas supply line repeat the operations indicated in paragraph “5. LEAK TESTING” at page 12.

IMPORTANT:

- After conversion to LP/PROPANE gas has been carried out affix near the data plate the conversion label supplied and also affix a conversion label at page 3 of this instruction manual.
- After conversion back to the original gas (NATURAL GAS) has been carried out remove, near the data plate and at page 3 of this instruction manual, the LP/PROPANE conversion labels. Save the labels removed for future use.



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 oven 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 oven must be grounded.

This oven 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.

WARNING VERY IMPORTANT

Before any operation of maintenance disconnect the appliance from the electrical main supply.

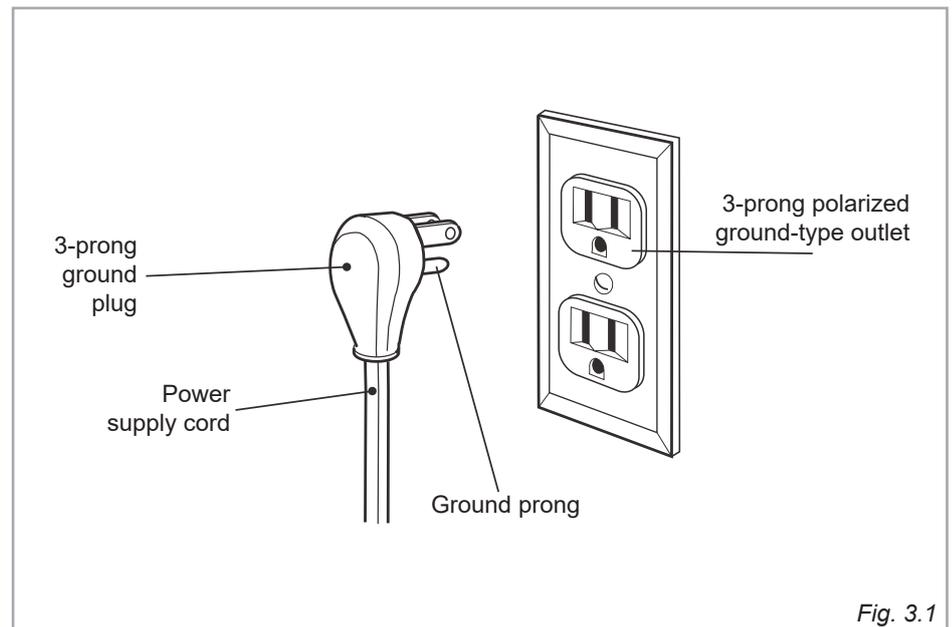
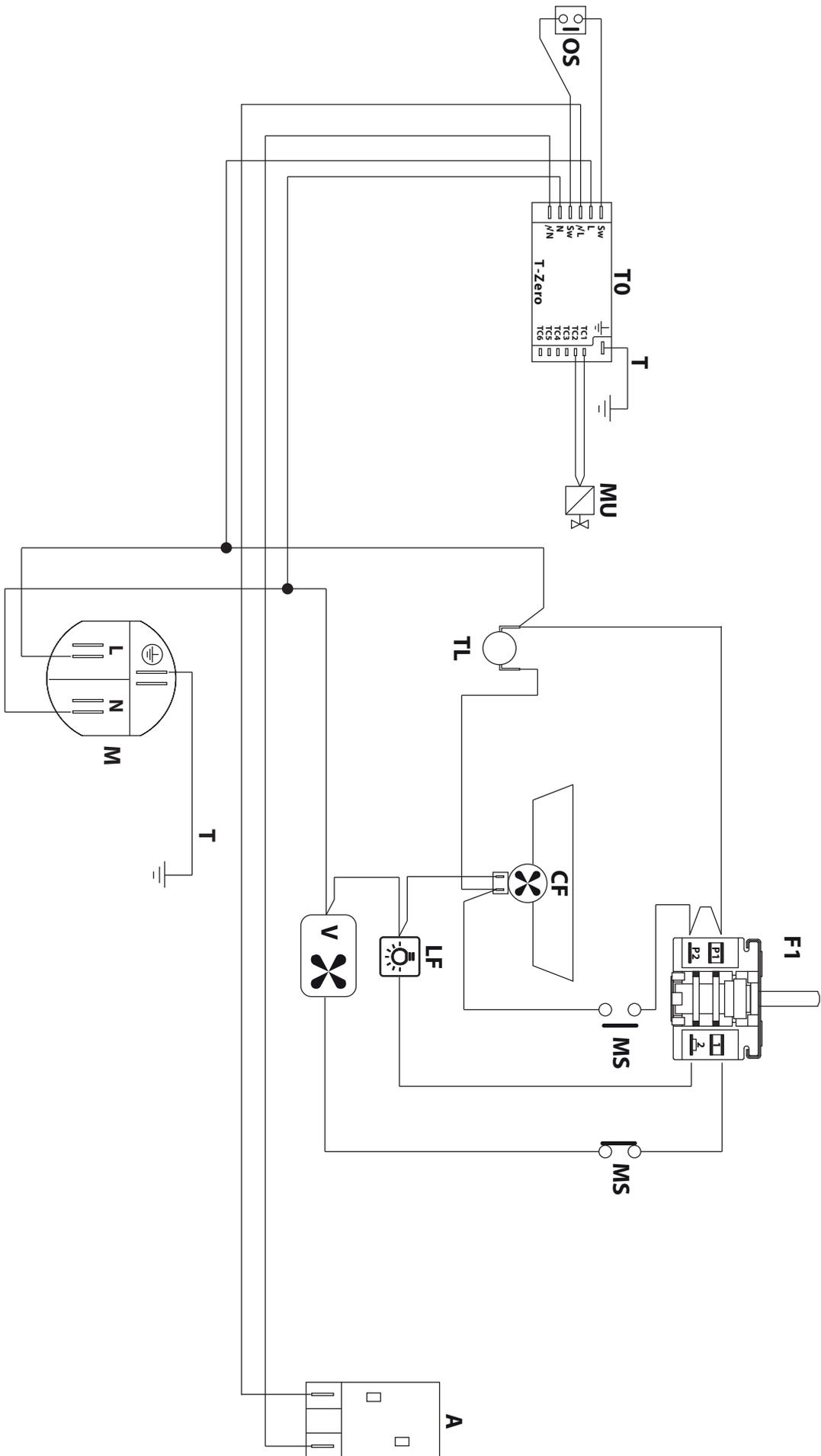


Fig. 3.1

ELECTRIC DIAGRAM



ELECTRIC DIAGRAM KEY

- | | | | |
|-----------|----------------------|-----------|--|
| F1 | SWITCH | OS | OVEN/BROIL IGNITION SWITCH |
| MS | SECURITY MICROSWITCH | MU | MAGNET UNIT - OVEN/BROIL THERMOCOUPLES |
| LF | OVEN LAMP | T0 | OVEN/BROIL IGNITION SYSTEM |
| V | OVEN FAN MOTOR | CF | COOLING FAN MOTOR |
| TL | THERMAL OVERLOAD | M | TERMINAL BLOCK |
| A | IGNITION COIL | T | EARTH CONNECTION |

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.