

*GAS OVENS WITH ELECTROMECHANICAL  
CONTROL*

*INSTRUCTIONS FOR INSTALLATION,  
OPERATION AND MAINTENANCE*



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# 1.

# INSTALLATION

## 1.1. IMPORTANT

Read this booklet carefully as it provides important information about safety during installation, use and maintenance of the appliance. Keep this booklet in a safe place so that it can be used for consultation by different technicians whenever necessary. In the event that the appliance is moved to a different location, attach this booklet (if necessary request a new copy from your authorised dealer or directly from the manufacturer).

- Installation, adaptation to another type of gas, extraordinary maintenance and repairs must be carried out only by professionally qualified staff, according to the manufacturer's instructions.
- The appliance must only be used by staff trained to use it.
- Switch off the appliance in the event that it breaks down or does not work properly. For any repairs, only contact one of the service centres authorised by the manufacturer and demand original spare parts.
- These conditions are only valid for the country which appears in abbreviated form on the oven data plate.
- Failure to comply with the above may compromise the safety of the appliance.
- Take care whilst using the appliance as some of the external surface areas can get hot.

The appliance complies with the essential requirements of Gas Directive 90/396/EEC and therefore comes complete with an EC test certificate issued by a registered body.

It satisfies the requirements of the following gas standards:

- EN203 and subsequent modifications
- EN437 and subsequent modifications.

For installation, the safety requirements given in the following must be respected:

- UNI CIG standards n° 7222-7723-8723 and subsequent modifications.

The appliance complies with the essential requirements of Low Voltage Directive 73/23/EEC and 93/68EEC.

It satisfies the requirements of the following electrical standards:

- EN60335-1 + subsequent modifications
- EN60335-2-46 + subsequent modifications
- EN60335-2-36 + subsequent modifications

The appliance complies with the essential requirements of Electro-Magnetic Compatibility Directive 89/336/EEC.

## 1.2 POSITIONING

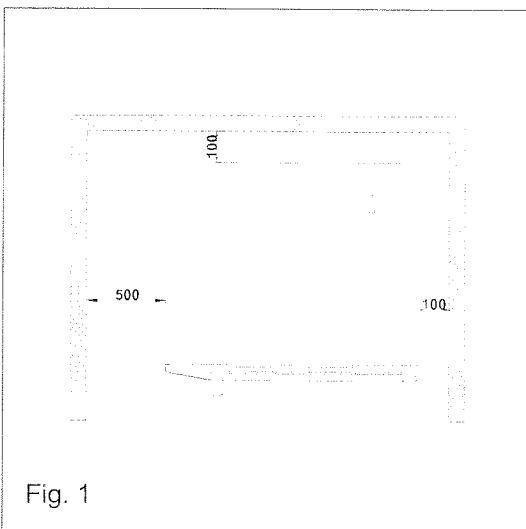


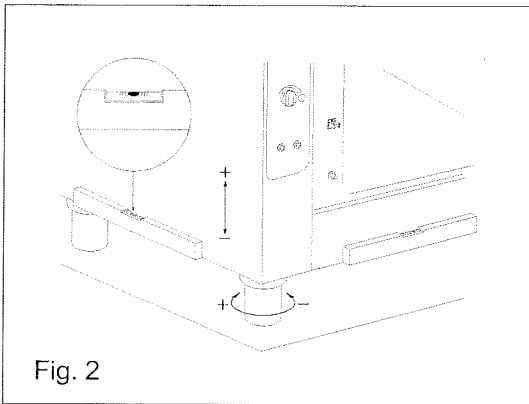
Fig. 1

These appliances are designed for indoor use, and must not be used in the open. Never expose the appliance to the elements (rain etc.).

Remove the appliance from its carton and check for damage. Place the appliance in the preferred position. Avoid installation against a wall or partition, kitchen cabinets or near inflammable materials. The oven must always be installed on the special stand. Leave a gap of **at least 100mm** between all sides of the appliance and surrounding walls or other appliances. It is advisable to leave a gap of 500mm between the left side of the appliance and the wall (see Fig. 1).

The room in which the appliance is installed should be adequately ventilated.

All materials used for packaging are environmentally friendly. These materials may be stored without risk or incinerated in a suitable refuse incinerator.



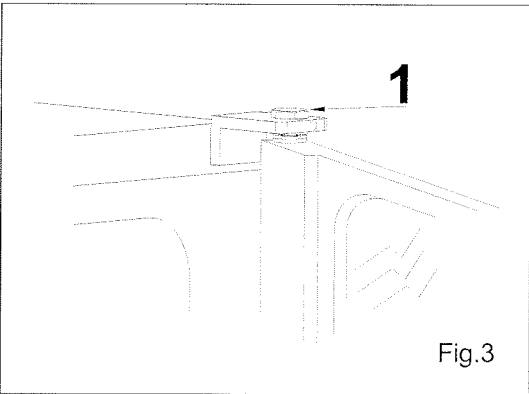
Adjust the feet as shown in Fig. 2 in order to level the appliance and to adjust the height as desired.

The operation of the oven will be affected if it is not level.

Carefully remove the protective film from the external panels in order to avoid leaving traces of adhesive.

Check that the air intake grilles and other apertures are not obstructed.

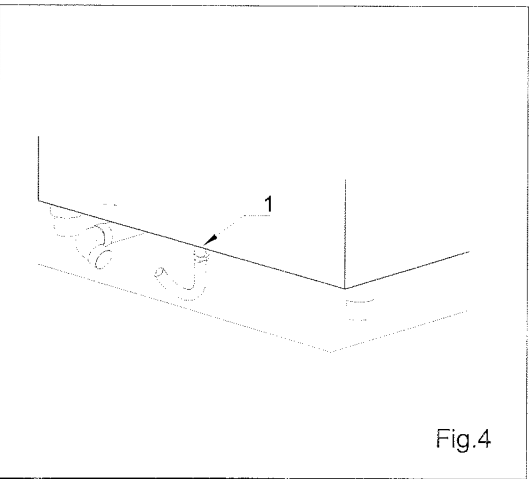
### 1.3 ADJUSTING THE DOOR



Check that the door closes correctly and that the seal between the door and the oven compartment is correctly positioned. If necessary, adjust the door hinges in order to ensure that the oven is air-tight when in operation.

In order to adjust the closure of the door, proceed as follows: loosen the screw (1, Fig. 3), adjust the door, and then re-tighten the screw. Both hinges (upper and lower) can be adjusted.

### 1.4 CONNECTING TO THE WATER SUPPLY



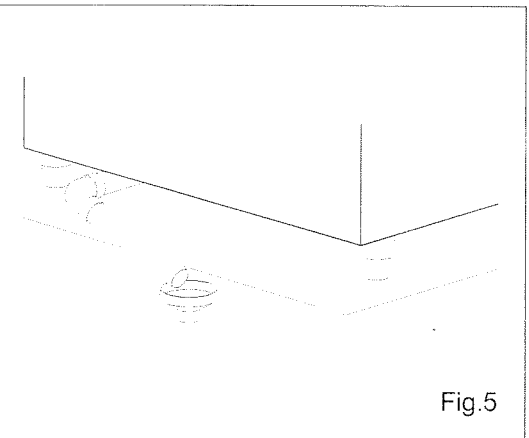
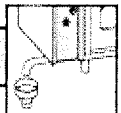
Maximum mains water pressure: (250Kpa) = 2.5 bar.

The manufacturer recommends the installation of a water-softener. 8 - 10°F approx.

**Before connecting the appliance to the water supply, allow a certain quantity of water to run off in order to remove any ferrous residue from the pipes. Check that the filter of the solenoid valve is clean (see paragraph 4.1).**

Connect the water intake coupling marked "Water" to the cold water supply. A cut-off valve should be installed between the water outlet and the intake coupling.

### 1.5 CONNECTING THE DRAIN OUTLET



For connection to the drain outlet, install the funnel (supplied with the appliance) in order to ensure that the water drains off freely.

The drain tube must always be open in order to avoid problems of pressure in the chamber (Fig. 5).

## 1.6 CONNECTION TO THE POWER SUPPLY



Check that the power socket is efficiently grounded in compliance with current safety legislation. Check that the mains voltage and frequency are correct for the appliance.

When connecting the appliance to the power supply, it is necessary to install a safety switch of suitable capacity on all poles of the power supply. The safety switch must be installed between the appliance and the mains, and must be easily accessible to the user. The contact apertures of the safety switch must be at least 3mm.

Set the main switch on the power socket to which the plug on the power cable will be connected to position 0 (zero). Have a qualified technician check that the power socket is suitable for the power absorption of the appliance.

Remove the screws which secure the left-hand panel in position, remove the panel and dismantle the cable protection.

Remove the wiring diagram, which is contained in an envelope on the wiring support. Ensure that the cable is of sufficient dimensions for the power absorption.

Pass the power cable through the cable clamp fitted to the frame, and then through the cable clamp on the wiring bar. Ensure that the distance between the cable clamp on the wiring bar and the cable clamp on the frame is at least 60cm.

Connect the cable to the terminal block. The terminals are marked as follows:

L1 L2  $\perp$  for single-phase versions (**ensure that the polarity is correct**)  
L1 L2 L3 N  $\perp$  for three-phase versions

Tighten the cable clamps to secure the power cable.

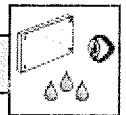
When the appliance is in operation, the power supply voltage must not differ from the rated voltage for the appliance by more than  $\pm 10\%$ .

The appliance must be connected to an equipotential circuit whose efficiency must be checked as required by current safety legislation. The terminal for connection to the equipotential circuit is positioned on the frame and marked "Equipotential".

Replace the wiring diagram in its envelope on the wiring support for future reference, replace the protective casing and re-fit the side panel.

Having made sure that you have replaced the wiring diagram in the cable support wallet for eventual future maintenance use, wait until the gas connection of the appliance has been completed before repositioning the protective device and re-assembling the side.

## 1.7 GAS CONNECTION



### INSTALLATION INSTRUCTIONS

Installation work, any adaptation to other types of gas, switching on for the first time and the elimination of any initial problems in the installations must be carried out solely by qualified staff according to regulations and standards in force. Gas installations, electrical connections and rooms where the appliances are to be installed must comply with regulations and standards in force. In particular, it is necessary to bear in mind that the burners need 2 m<sup>3</sup>/h per kW of installed power of air for combustion.

Standards for the prevention of accidents and fire and panic safety standards must be respected in premises open to the public. During installation the standards given in paragraph 1.1. must be observed.

Connection to gas mains supply must be carried out using rigid or flexible metal pipes, placing an approved closing-off tap in an easily accessible position. Make sure that the flexible metal pipe connecting to the gas mains supply does not touch parts of the oven that get very hot and is not subject to any stress or torsion. Use fixing clamps that comply with regulations regarding installation.

### TESTS TO BE CARRIED OUT BEFORE INSTALLATION

Check on the technical data plate placed on the left-hand side of the oven that the appliance has been tested and approved for the type of gas available on site. Check that the nozzles fitted on the appliance are the correct ones for the type of gas available.

Check with the data given on the technical data plate that the capacity of the pressure reducer is sufficient for the supply of gas to the appliance. (Fig. 6)



## CHECKING HEAT RATING

During initial installation and whenever maintenance is carried out or the appliance is adapted to another type of gas, it is necessary to measure the nominal heat rating. This can be done using a method that measures volume, with the aid of a container that measures litres, or a stop watch.

The appliance functions correctly when pressures keep within the following values:

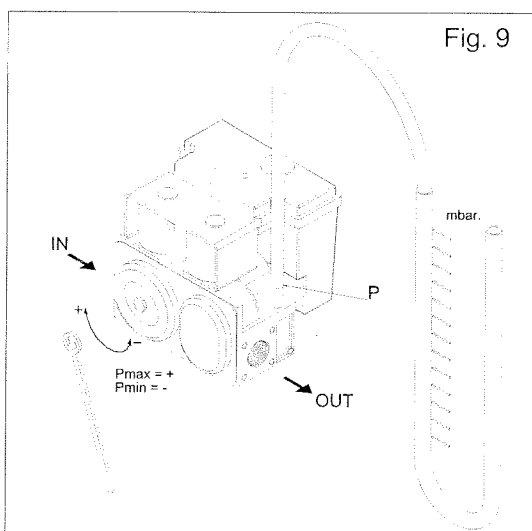
GAS TYPES		PRESSURE in mbar		
		NOM.	MIN	MAX
NATURAL GAS	G20	20	18	25
L.P.G.	G30/31	28-30/37	25/25	35/45

if the pressure falls outside these values, it will not be possible to achieve optimum functioning of the appliance and for it to be installed permanently. Should this happen, contact your gas provider.

After checking the connection pressure and the diameter of the burner injectors, measure the hourly gas capacity and compare your readings with the figures given on the data plate (Fig. 6). A tolerance of  $\pm 5\%$  is allowed for.

## CHECKING GAS PRESSURE

Check that the nozzles fitted are the correct ones for the type and pressure of gas supplied. If these need to be replaced, see following paragraph. Once the appliance is connected, with the appliance switched on, check the gas pressure on both valves located on the left-hand side of the oven, which regulate the steam generator and cooking chamber respectively.



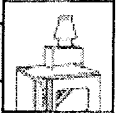
The gas pressure is regulated as follows:

- Check that the nozzles are the right ones;
- Remove screw "P" (Fig. 9) on the pressure outlet of the valve;
- Apply the pressure gauge to the pressure outlet;
- Switch on the oven and light the burners;
- Regulate the gas pressure to the settings given in the chart by turning the 8mm screw. Remember that by turning the screw clockwise, the pressure is increased and by turning it anti-clockwise the pressure is reduced; for the G20 version, the output pressure of the valve must be 10 mbar. For liquid petroleum gas (LPG) (G30-G31) turn the screw to minimum;
- When the pressure is at the correct level, switch off the oven, remove the pressure gauge and replace the fixing screw. Check that there are no leaks using the special liquid for that

**CHART SHOWING NOZZLES TO BE USED FOR EACH TYPE OF GAS Use only original nozzles which must not be tampered with in any way!**

OVENS	G30-30mbar	G31-37mbar	G20-20mbar
6 GN1/1	180K	180K	310L
10 GN1/1	245K	245K	420K
10 GN2/1	200K	200K	350L

## 1.8 VENTING FUMES TO THE OUTSIDE



The appliances must be operated in rooms suitable for venting combustion fumes to the outside, in compliance with standards for their installation.

The following types of connections exist:

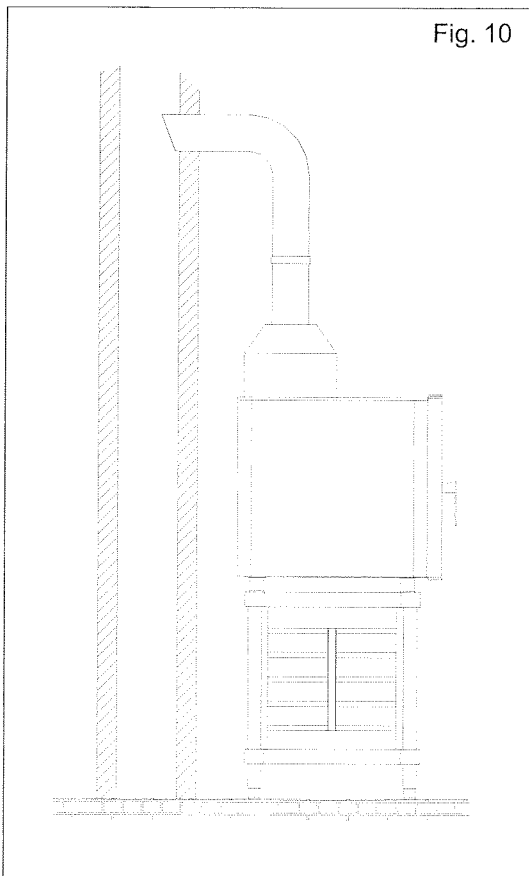


Fig. 10

- a natural conduit such as a naturally-drawing flue which is efficient enough to vent the combustion fumes directly to the outside (Fig. 10)

An extension venting to the outside or into a flue using an appropriate conduit resistant to a temperature of 300°C.

This system must guarantee that the venting of fumes to the outside is not hindered by obstructions and/or excessive length of the venting pipe (maximum length 3m).

**WARNING:** before positioning the fume venting pipe, remove the cylindrical connection from the oven chimney pipe!

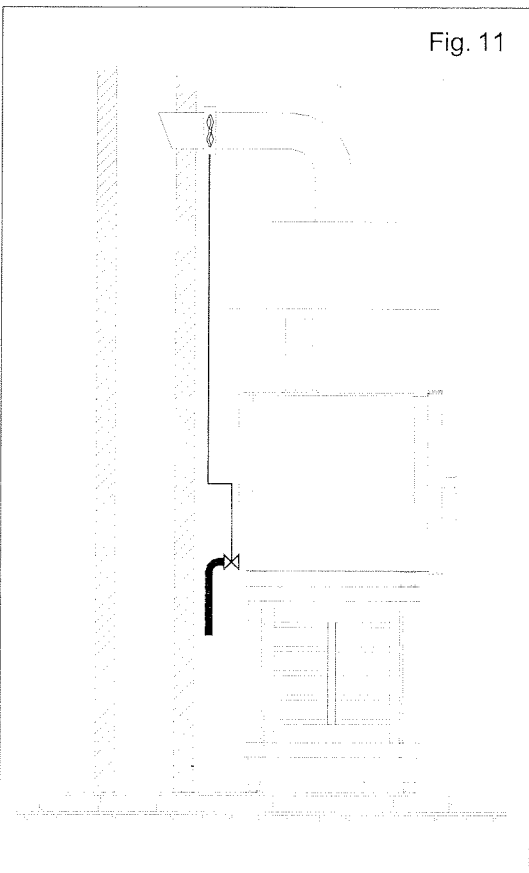


Fig. 11

- a system of forced venting such as a hood fitted with a mechanical air extraction system. In this case the supply of gas to the appliance must be controlled directly by this system and must be interrupted whenever the capacity falls below prescribed levels.

When the appliance is installed under the hood, checks must be made that the following indications are respected:

The volume of extracted air must be greater than the volume of burnt gas generated (see standards in force);

The material the hood filter is made from must be checked since the temperature of burnt gasses coming from the venting pipe can reach 300°C;

The end part of the appliance's venting conduit must be positioned inside the projection of the perimeter base of the hood;

It must only be possible to restore gas supply to the appliance manually (Fig. 11).

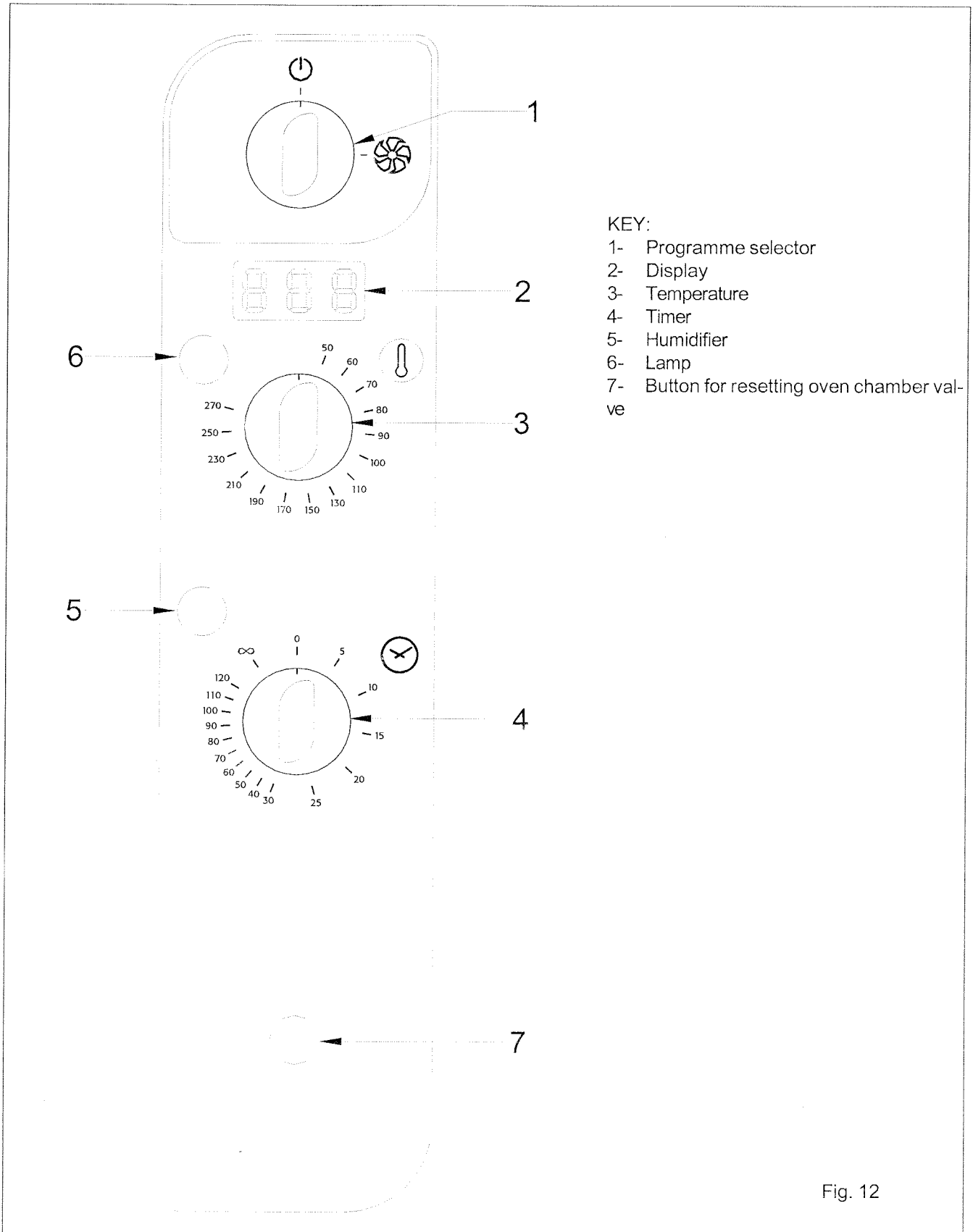


## 2.

# OPERATING INSTRUCTIONS

This appliance must be used exclusively for the purposes for which it is specifically designed. Any other utilization is considered improper.

Always supervise the appliance when in operation.



KEY:

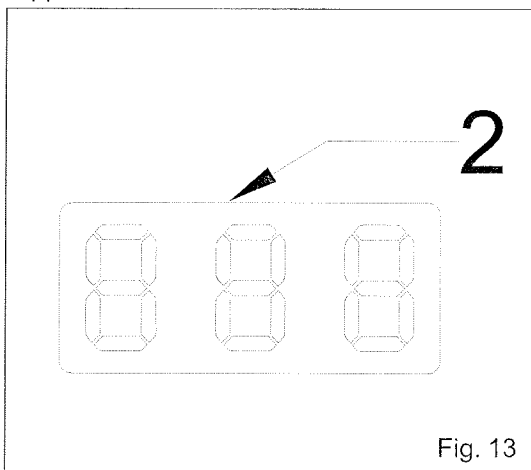
- 1- Programme selector
- 2- Display
- 3- Temperature
- 4- Timer
- 5- Humidifier
- 6- Lamp
- 7- Button for resetting oven chamber valve

Fig. 12

## 2.1 STARTING THE APPLIANCE

Before switching the appliance on for the first time, all the packaging material must be removed and any pieces dismantled to carry out installation must be replaced.

To switch on the appliance, switch off the main switch and turn on the taps supplying water and gas to the appliance.



### DISPLAY

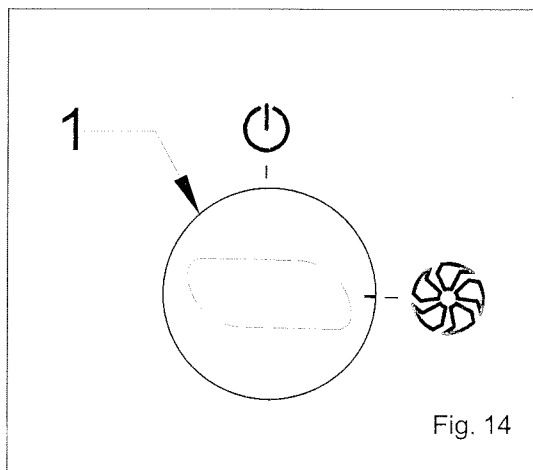
The oven features a single control display panel (2, Fig. 7) which lights when the programme selector is rotated.

The display shows the temperature inside the oven compartment.

## 2.2 SETTING

BEFORE COOKING, IT IS ADVISABLE TO PRE-HEAT THE OVEN TO A TEMPERATURE OF APPROXIMATELY +30°C/+40°C HIGHER THAN THE DESIRED COOKING TEMPERATURE.

If the oven is switched on (by turning the change-over switch) with the timer set to zero, a buzzer will be heard for 10 seconds.

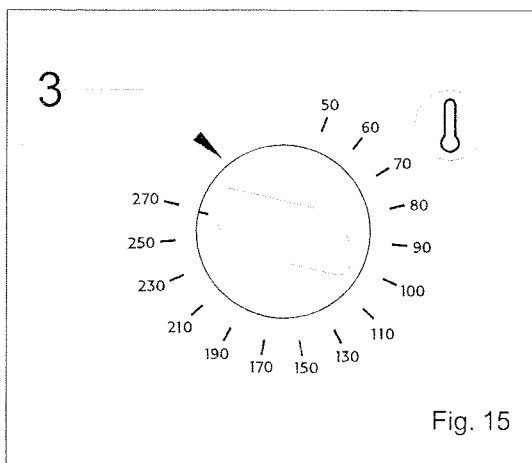


### CONVECTION COOKING

Turn the cooking cycle selector knob to the position shown in Fig. 14.

Enter the parameters for the cooking cycle, following the instructions shown in paragraph 2.3.

The cycle will start automatically after a few seconds.



### TEMPERATURE

Turn the knob (4) clockwise in order to select the desired cooking temperature (up to a maximum of 270°C).

While the oven is in operation, the display will show the temperature inside the oven.

The temperature setting may be modified at any time during the cooking cycle simply by turning the knob to the desired temperature.

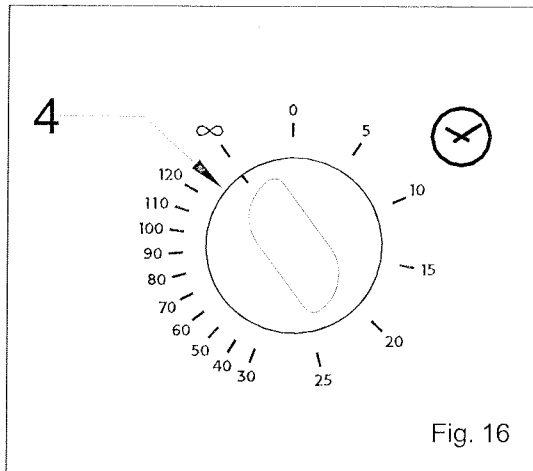


Fig. 16

### TIME

All cooking cycles can be performed with or without timer control of the duration of the cooking cycle.

Turn the timer knob (5) to the desired cooking time (from 1 to 120 minutes).

When the selected cooking time has elapsed, the oven switches off automatically and the buzzer sounds.

To set the oven to manual cooking (i.e. without timer control), turn the knob (5) to the position shown in the figure opposite.

## 2.3 SUPPLEMENTARY FUNCTIONS

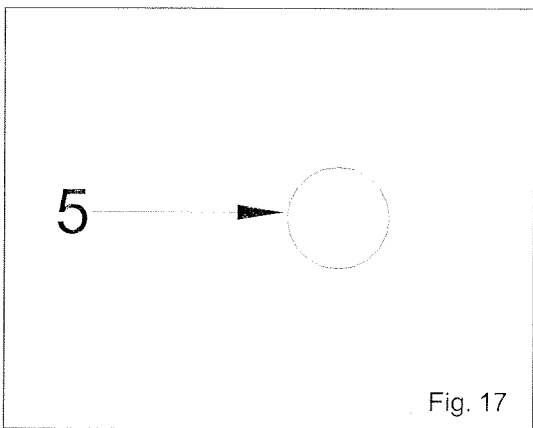


Fig. 17

### USE OF HUMIDIFIER

To increase the amount of moisture in the cooking chamber, press humidifier push-button (5), which nebulises water into the cooking chamber.

**CAUTION:** as regards confectionery, this device is to be used only when baking bread.

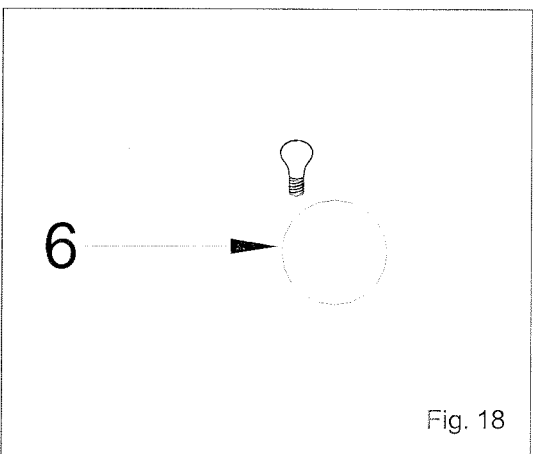


Fig. 18

### OVEN LIGHT

The oven light is switched on and off using the button on the panel (6, fig. 18).

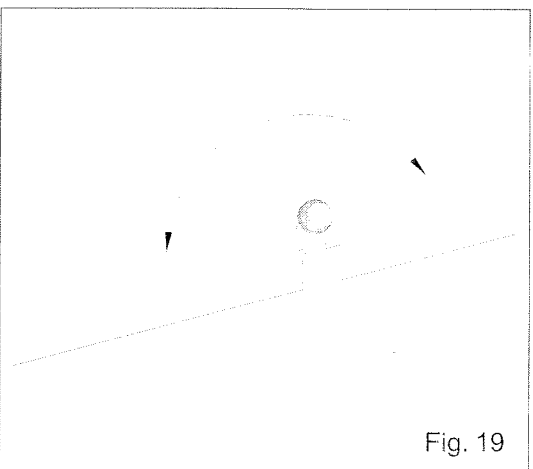


Fig. 19

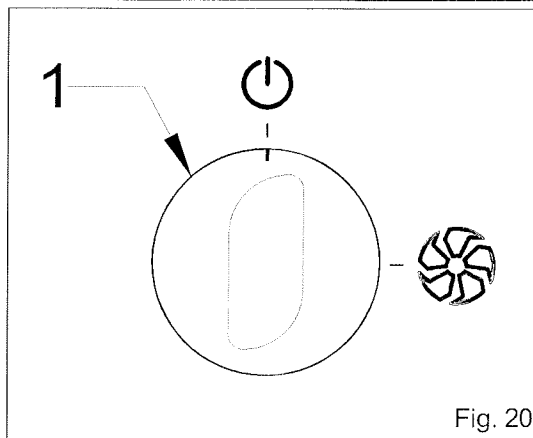
### STEAM DISCHARGE LEVER

The steam discharge function expels the steam produced during cooking from the oven.

Turn the lever (Fig. 19) to open the steam discharge valve.

Even if the discharge valve is completely closed, there is no risk of excessive pressure in the oven, since the discharge outlet acts as a safety valve.

## 2.5 SWITCHING OFF THE OVEN



Once a cooking cycle has ended, turn the cooking cycle selector back to the position indicated in figure 20.  
Turn off the taps supplying gas and water to the appliance.  
Switch on the omnipolar switch on the wall.

NOTE: switching off the oven (also in the case of a power cut) causes the cycle setting to be lost, therefore, when it is switched on again, the settings must be re-entered.

## 2.6 CLEANING

At the end of the working day, the appliance must be cleaned in order to ensure perfect hygiene and to prevent possible malfunctions.

Never clean the appliance using direct or high-pressure water jets. Never use steel wool pads, brushes or normal steel scrapers. If necessary, use stainless steel wire wool, brushing in the direction of the satin finish.

Lift the grille support slightly to remove.

Remove any loose residue by hand. Place the filter and all removable parts in a dishwasher.

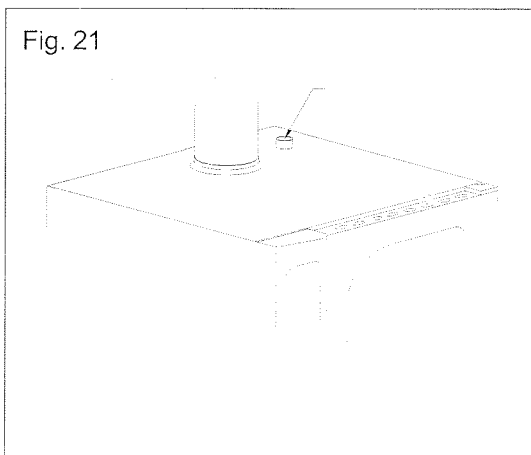
When cleaning the inside of the oven, use warm soapy water and then rinse thoroughly to remove all traces of detergent.

Use a soft cloth and a mild detergent to clean the exterior of the appliance.

# 3.

# MAINTENANCE

Fig. 21



### STEAM DISCHARGE

This function expels the steam produced during cooking from the inside of the oven.

Check that the steam discharge outlet is always clean and unobstructed.

### CLEANING THE GLASS PANEL

In order to clean both sides of the glass panel fitted to the door, remove the screws which hold it in position, remove the glass panel and clean using a suitable detergent.

Replace the glass panel and re-tighten the screws.

### **3.1 SAFETY AND CONTROL DEVICES**

#### **SOLENOID VALVE**

The function of the solenoid valves is to introduce water in the correct quantities and at the appropriate times.

#### **DOOR MICROSWITCH**

The function of the door microswitch is to interrupt the cooking cycle if the door is opened.

When the door is re-closed, the cooking cycle resumes normally.

Do not action this device manually when the door is open.

#### **MOTOR OVERLOAD CUT-OUT**

The fan motor features a thermal overload cut-out which interrupts its operation in the event of overheating. The cut-out resets automatically as soon as the temperature of the motor returns to the normal operating level.

#### **SAFETY THERMOSTAT**

##### **OVEN CHAMBER SAFETY THERMOSTAT**

If the temperature in the oven chamber reaches 350°C, the safety thermostat cuts off the gas supply to the burners.

#### **FLAME CONTROL**

Controlling the flame by means of the special electrode guarantees normal functioning of the burners.

Should the flame be extinguished accidentally or the burners not work properly, the system automatically blocks the gas supply and the corresponding light on the control panel lights up (Fig. 12 Ref. 7).

Wait at least 10 seconds between attempts to reset.

## 4.

# TROUBLESHOOTING

In the event of a malfunction, it is **essential** to switch off the appliance by opening the main multi-pole switch, and to close the water cut-off valves installed upstream of the appliance.

### THE OVEN DOES NOT WORK

Check that the omnipolar switch is switched off.

Check that the tap supplying gas to the appliance is turned on.

Make sure the oven door is closed properly.

Check that the data settings are correct.

Check that the valve control buttons are switched off (Fig.12 Ref. 7).

If after these operations the oven still does not work, contact the service centre.

### THE FAN STOPS DURING OPERATION

Switch off the oven and wait until the motor overload cut-out resets automatically.

Check that the cooling vents are not obstructed.

If the malfunction persists, contact your nearest service centre.

### THE OVEN LAMP DOES NOT LIGHT

Proceed as follows to replace the bulb of the oven lamp:

- Remove the screws which secure the inner glass panel to the door.
- Remove the glass protective panels from the lamp.
- Replace the bulb.

### FLAME CONTROL

Controlling the flame by means of the special electrode guarantees normal functioning of the burners.

Should the flame be extinguished accidentally or the burners not work properly, the system automatically blocks the gas supply and the corresponding light on the control panel lights up (Fig. 12 Ref. 7).

Wait at least 10 seconds between attempts to reset.

## 4.1 TEST PROCEDURES FOR SERVICE ENGINEERS ONLY

**DISCONNECT THE APPLIANCE FROM THE POWER SUPPLY BEFORE CARRYING OUT ANY ADJUSTMENTS OR REPAIRS**

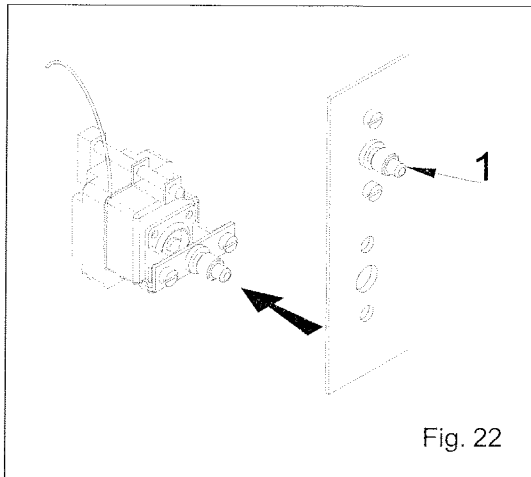


Fig. 22

### RESETTING THE SAFETY THERMOSTAT

Remove the control panel, sliding out along the guides.

The thermostat is located at the far end of the cavity which is revealed when the control panel has been removed:

- Thermostat "1" controls the temperature of the oven compartment.

To reset the thermostat, press the red button until the contacts close (a "click" will be audible).

If the safety thermostat intervenes persistently, this indicates that the appliance is not functioning correctly.

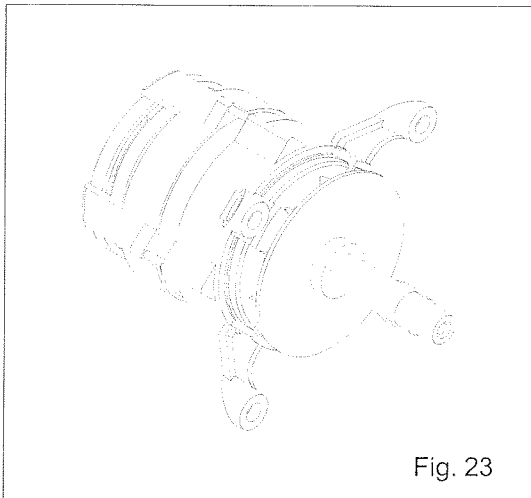


Fig. 23

### MOTOR OVERLOAD CUT-OUT

The motor overload cut-out resets automatically. If this cut-out should intervene, check the ventilation grilles and the cooling devices, and check that there is no friction between moving parts.

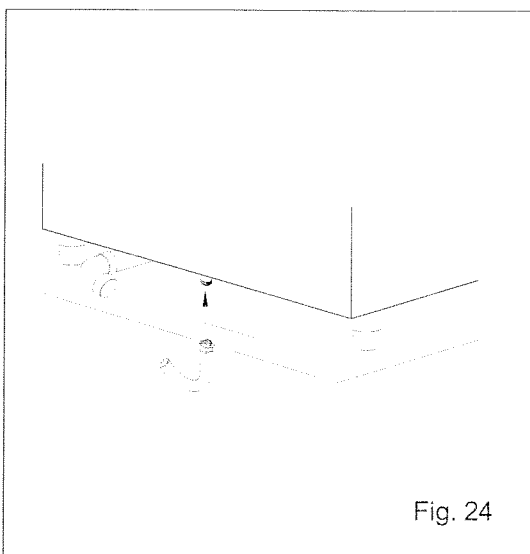


Fig. 24

### WATER FILTERS

If the oven does not receive water, check the intake filter on the solenoid valve, which is located at the rear of the oven. To do so, proceed as follows:

- Close the water tap located upstream of the appliance.
- Detach the intake hose from both intake coupling.
- Use pliers to remove the filter located inside the solenoid valve.
- Clean the filter to remove any residue and replace it correctly in position.
- Re-attach the intake hose.

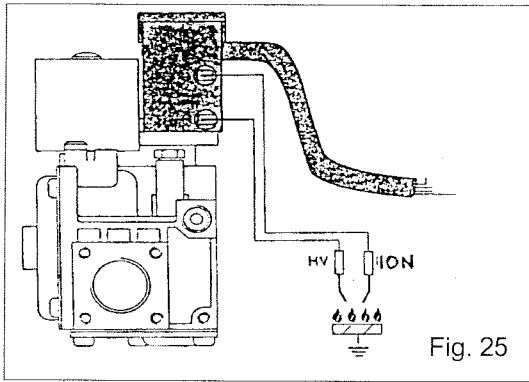


Fig. 25

## FLAME CONTROL

**WARNING:**  
 THE FLAME CONTROL WORKS PROPERLY IF THE MACHINE CONNECTION HAS BEEN CARRIED OUT RESPECTING THE PHASE AND NEUTRAL POSITIONS.

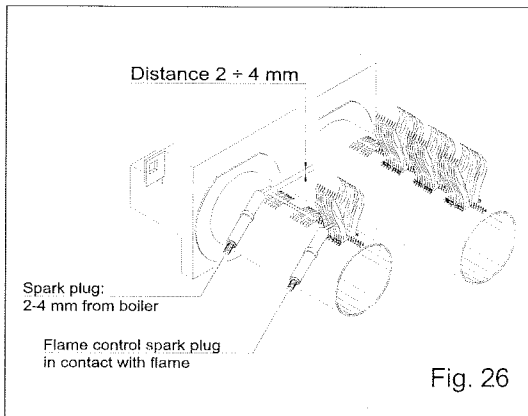


Fig. 26

Regulate the flame control electrode so that while the burners are working it is immersed in the flame otherwise it will not allow the gas valve to supply gas.

Regulate the ignitor at a distance of between 2 and 4mm from the burner on the initial perforated area of the burner and, with the gas turned off, check that it generates sparks.

## 4.2 SPARE PARTS

Spare parts must be installed only by a service engineer from an authorized service centre.

To ascertain the part numbers of the necessary spare parts, contact your nearest service centre, which will identify the parts and forward a written order to the manufacturer quoting the model, serial number, power supply voltage and frequency as well as the code and description of the required spare part.

THE MANUFACTURER ACCEPTS NO LIABILITY FOR DAMAGE OR INJURY ARISING FROM INCORRECT INSTALLATION, TAMPERING WITH THE APPLIANCE, IMPROPER USE, INADEQUATE MAINTENANCE OR FAILURE TO COMPLY WITH CURRENT SAFETY STANDARDS.

THE MANUFACTURER RESERVES THE RIGHT TO MODIFY THE CHARACTERISTICS OF THE APPLIANCE AS DESCRIBED IN THIS MANUAL AT ANY TIME AND WITHOUT PRIOR NOTICE.