



Users Operating Instructions

Before operating this cooker, please read these instructions carefully



DFS 090 DO

Twin cavity Dual Fuel Cooker

Introduction

Congratulations on your purchase of this **Delonghi Dual fuel cooker** which has been carefully designed and produced to give you many years of satisfactory use.

Before using this appliance it is essential that the following instructions are carefully read and fully understood.

We would emphasise that the installation section must be fully complied with for your safety to ensure that you obtain the maximum benefits from your appliance.

CE Declaration of conformity

This cooker has been designed, constructed and marketed in compliance with:

- safety requirements of EEC Directive "Gas" 90/396;
- safety requirements of EEC Directive "Low voltage" 73/23;
- protection requirements of EEC Directive "EMC" 89/336;
- requirements of EEC Directive 93/68.



This appliance is designed and manufactured solely for the cooking of domestic (household) food and in not suitable for any none domestic application and therefore should not be used in a commercial environmement.

The appliance guarantee will be void if the appliance is used within a none domestic environnement i.e. a semi commercial, commercial or communal environment.

Important precautions and recommendations

After having unpacked the appliance, check to ensure that it is not damaged. In case of doubt, 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.

- Do not attempt to modify the technical characteristics of the appliance as this may become dangerous to use.
- Do not carry out cleaning or maintenance operations on the appliance without having previously disconnected it from the electric power supply.
- After use, ensure that the knobs are in off position.
- Do not allow children or other incapable people to use the appliance without supervision.
- During and after use of the cooker, certain parts will become very hot. Do not touch hot parts.
- Keep children away from the cooker when it is in use.
- Some appliances are supplied with a protective film on steel and aluminium parts. This film must be removed before using the appliance.
- Fire risk! Do not store flammable material in the oven, and in the storage compartment.
- Make sure that electrical cables connecting other appliances in the proximity of the cooker cannot come into contact with the hob or become entrapped in the oven door.
- Do not line the oven walls with aluminium foil. Do not place baking trays or the drip tray on the base of the oven chamber.
- The manufacturer declines all liability for injury to persons or damage to property caused by incorrect or improper use of the appliance.
- To avoid any possible hazard, the appliance must be installed by qualified personnel only. Any repairs by unqualified persons may result in electric shock or short circuit. In order to avoid possible injuries to your body or to the appliance, do not attempt any repairs by yourself. Such work should be carried out by qualified service personnel only.
- Danger of burns! The oven and cooking accessories may become very hot during operation. Make sure children are kept out of reach and warn them accordingly. To avoid burns use kitchen clothes and gloves when handling hot parts or utensils.
- Never clean the oven with a high-pressure steam cleaning device, as it may provoke a short circuit.
- This appliance is intended for use in your household. Never use the appliance for any other purpose!



Fig. 1.1

Gas burners

- 1. Auxiliary burner (A) 1,00 kW
- 2. Semi-rapid burner (SR) 1,90 kW
- 3. Rapid burner (R) 3,15 kW
- 4. Double-ring burner (PB) 3,45 kW

NOTE:

 \checkmark The electric ignition is incorporated in the knobs



CONTROL PANEL - Controls description

- 1. Electronic clock/end cooking timer (main left oven only)
- 2. Fan main oven thermostat knob
- 3. Fan main oven switch knob
- 4. Front left burner control knob
- 5. Rear left burner control knob
- 6. Central burner control knob
- 7. Rear right burner control knob
- 8. Front right burner control knob
- 9. Conventional oven switch knob
- 10. Conventional oven thermostat knob

Pilot lamps:

- 11. Main oven thermostat indicator light
- 12. Conventional oven thermostat indicator light

3 Electronic clock/end cooking timer (main left oven only)

The electronic programmer is a device with the following functions:

- 24 hours clock with illuminated display
- Timing of oven cooking with automatic switch-off (max. 99 minutes).

Electronic clock

Upon immediate connection of the oven or after a mains failure, three zeros will flash on the programmer panel.

To set the clock it is necessary to push the O button and then, within 7 seconds, the (+) or \bigcirc button until you have set the correct time.

The clock will show zero after a mains failure.

Attention: When the programmer display shows three flashing zeros the oven cannot be switched on.

The oven can be switched on when the symbol $\buildrel \buildrel \buildrel$

Setting the frequency of the alarm sound

The selection from 3 possibilities of sound can be made by pressing the \bigcirc button.



Cooking with automatic switch-Off (main left oven only)

The aim of this function is to automatically stop the cooking after a pre programmed time, for a maximum period of 99 minutes. To set the cooking time, push the (+) or button until you obtain the desired time in the display. The symbol AUTO will be shown in the display. Then you adjust the oven thermostat knob according to the required temperature. The oven will immediately start to operate and will work for the pre programmed time. The display shows the count down. Clock time can be displayed by pressing the Θ button. Once the time has elasped, the oven will switch off automatically, the symbol AUTO will go off and an intermittent buzzer, lasting 7 minutes, will start; this can be stopped by pressing the (+)button.

Important: Before the buzzer is stopped switch off the oven manually.

To cancel the cooking program at any time press the \oplus and \bigcirc buttons together and release the \oplus button first.

Electronic alarm

The programmer can be used as an alarm only for a maximum period of 99 minutes. To set the alarm, push the \oplus or \bigcirc button until you obtain the desired time in the display. Once the time has elasped, an intermittent buzzer, lasting 7 minutes, will start; this can be stopped by pressing the \oplus button.

Attention: If the bottom oven is switched on when the buzzer starts, it will be automatically switched off. For it to operate furtherly you have to stop the buzzer by pressing the (+) button.

How to use the hob burners

Hob burners

Each hob burner is controlled by a separate gas tap operated by a control knob (fig. 4.1) which has 3 positions marked on the control panel, these are:

- Symbol : tap closed (burner off) – Symbol : High (maximum)

– Symbol 🕴 : Low (minimum)

ဓ၀၀

Fig. 4.1

Push in and turn the knob anti-clockwise to the selected position.



To turn the burner off, fully rotate the knob clockwise to the off position: •.

The maximum setting of the control tap is for boiling, the minimum setting is for slow cooking and simmering.

All working positions must be choosen between the maximum and minimum setting, never between the maximum setting and the "OFF" position.

Electric ignition

The sparks generated by the electrodes close to the burners will ignite the choosen burner. Whenever the lighting of the burners is difficult due to peculiar conditions of the gas features or supply, it is advised to repeat the ignition with the knob on "minimum" position.

Lighting of the hob burners

To ignite the burner, the following instructions are to be followed:

- 1) Lightly press and turn the knob anti-clockwise, and position the knob indicator to the symbol 🚡 printed on the control panel (fig. 4.1).
- 2) Press the knob to operate the electric ignition; or, in the case of a mains failure light the burner with a match or lighted taper.
- 3) Adjust the burner according to the setting required.

Choice of burner

The burner must be choosen according to the diameter of the pans and energy required.

Burners	Pan diameter	Fig. 4.2		
Auxiliary	16 cm			
Semi-rapid	16 ÷ 22 cm			
Rapid	20 ÷ 24 cm			
Double-ring	up to 30 cm			

do not use pans with concave or convex bases

Saucepans with handles which are excessively heavy, in relationship to the weight of the pan, are safer as they are less likely to tip.

Pans which are positioned centrally on burners are more stable than those which are offset. It is far safer to position the pan handles in such a way that they cannot be accidentally knocked.

When deep fat frying fill the pan only one third full of oil.

DO NOT cover the pan with a lid and **DO NOT** leave the pan unattended.

In the unfortunate event of a fire, leave the pan where it is and turn off all controls.

Place a damp cloth or correct fitting lid over the pan to smother the flames.

DO NOT use water on the fire.

Leave the pan to cool for at least 30 minutes.

Correct use of double-ring burner

The flat-bottomed pans are to be placed directly onto the pan-support.

To use the WOK you need to place the proper stand in order to avoid any faulty operation of the double-ring burner (Fig. 4.3a - 4.3b).

IMPORTANT:

The special grille for wok pans (fig. 4.3b) **MUST BE PLACED ONLY** over the pan-rest for the double-ring burner.





General features

Attention: the oven door becomes very hot during operation. Keep children away.

The heating and cooking in electrical hot air ovens take place by forced convection. The two elements which make this process take place are:

- Circular element 2500 W
- Grill element 2000 W

NOTE:

Upon first use, it is advisable to operate the oven at the maximum temperature (thermostat knob on position 250) for 60 minutes in the position (fan oven) and for another 15 minutes in the position (grill-thermostat knob on position 200°C), to eliminate possible traces of grease on the heating elements.

WARNING:

The door is hot, use the handle.

Operating principles

Heating and cooking in the FAN oven are obtained in the following ways:

a. by forced convection

A fan sucks in the air contained in the oven muffle, which sends it through the circular heating element and then sends it back through the muffle.

Before the hot air is sucked back again by the fan to repeat the described cycle, it envelops the food in the oven, provoking a complete and rapid cooking.

It is possible to cook several dishes simultaneously.

b. by radiation

The heat is radiated by the infra red grill element.

c. by ventilation

The food is defrosted by using the fan only function without heat.



Fig. 5.1

Fig. 5.2

Thermostat knob (Fig. 5.1)

This only sets the cooking temperature and does not switch the oven on. Rotate clockwise until the required temperature is reached (from 50 to 250°C).

The light above the temperature selector will illuminate when the oven is swiched on and turns off when the oven reaches the correct temperature.

The light will cycle on and off during cooking in line with the oven temperature.

Function selector knob (Fig. 5.2)

Rotate the knob clockwise to set the oven for one of the following functions.

· OVEN LIGHT

By setting the knob to this position, only the oven light comes on (15 W). It remains on in all the cooking modes.

DEFROSTING FROZEN FOODS

Only the oven fan comes on. Use with the thermostat knob set to " \bullet " - other positions have no effect. The food is thawed by ventilation without heating.

Recommended for:

Quick thawing of frozen foods; one kg requires approximately 1 hour. Thawing times vary according to the quantity and type of food to be thawed.



HOT AIR COOKING

The circular element and fan come on. The heat is dispersed by forced convection and the temperature can be regulated to between 50° and 250°C via the thermostat knob. The oven does not require preheating.

Recommended for:

Food which has to be well-cooked outside and soft or rosy inside, for example lasagne, lamb, roast beef, whole fish etc.



GRILLING

The infrared grill element comes on. The heat is dispersed by radiation. Set the thermostat knob to between 50° and 200°C.

Always grill with the oven door closed.

For cooking hints, see the chapter "USE OF THE GRILL".

Recommended for:

Intense grilling, browning, cooking au gratin and toasting etc.

Do not grill for longer than 30 minutes at any one time on full heat (200°C). Caution: the oven door becomes very hot during operation. Keep children well out of reach.

Cooking advice

STERILIZATION

Sterilization of foods to be conserved, in full and hermetically sealed jars, is done in the following way:

- a. Set the switch to position $\textcircled{\textcircled{8}}$.
- b. Set the thermostat knob to position 185 °C and preheat the oven.
- c. Fill the dripping pan with hot water.
- d. Set the jars onto the dripping pan making sure they do not touch each other and the door and set the thermostat knob to position 135 °C.

When sterilization has begun, that is, when the contents of the jars start to bubble, turn off the oven and let cool.

REGENERATION

Set the switch to position B and the thermostat knob to position 150° C. Bread becomes fragrant again if wet with a few drops of water and put into the oven for about 10 minutes at the highest temperature.

ROASTING

To obtain classical roasting, it is necessary to remember:

- that it is advisable to maintain a temperature between 180° and 200 °C.
- that the cooking time depends on the quantity and the type of foods.

SIMULTANEOUS COOKING OF DIFFERENT FOODS

The FAN consents a simultaneous heterogeneous cooking of different foods. Different foods such as fish, cake and meat can be cooked together without mixing the smells and flavors together. This is possible since the fats and vapors are oxidized while passing through the electrical element and therefore are not deposited onto the foods.

The only precaution to follow are:

- The cooking temperatures of the different foods must be as close to as possible, with a maximum difference of 20° 25° C.
- The introduction of the different dishes in the oven must be done at different times in relation to the cooking times of each one.

The time and energy saved with this type of cooking is obvious.

USE OF THE GRILL

Preheat the oven for about 5 minutes.

Introduce the food to be cooked, positioning the rack as close to the grill as possible. The dripping pan should be placed under the rack to catch the cooking juices and fats. **Grilling with the oven door closed.**

Do not grill for longer than 30 minutes at any one time on full heat (200°C). Caution: the oven door becomes very hot during operation. Keep children well out of reach.

Safety precautions

During use the oven door glass becomes hot.

In the presence of children, in order to avoid contact with the hot door, a third internal glass should be mounted.

This third internal glass is supplied on request as an optional (not included in price).

Please contact your retailer or the After-Sales Service, indicating the model bought.

General features

Attention: the oven door becomes very hot during operation. Keep children away.

As its name indicates, this is an oven that presents particular features from an operational point of view. The conventional oven is provided with 3 heating elements which are:

- Bottom element 800 W
- Top element 700 W
- Grill element 1450 W

NOTE:

Upon first use, it is advisable to operate the oven at the maximum temperature (thermostat knob on position 250) for 60 minutes in the position and for another 15 minutes in the position (thermostat knob on position 200°C), to eliminate possible traces of grease on the heating elements.

WARNING: The door is hot, use the handle.



Operating principles

Heating and cooking in the CONVENTIONAL oven are obtained in the following ways:

a. by natural convection

The heat is produced by the upper and lower heating elements.

b. by radiation

The heat is radiated by the infra red grill element.

Thermostat knob (Fig. 6.2)

This only sets the cooking temperature and does not switch the oven on. Rotate clockwise until the required temperature is reached (from 50 to 250°C).

The light above the temperature selector will illuminate when the oven is swiched on and turns off when the oven reaches the correct temperature.

The light will cycle on and off during cooking in line with the oven temperature.

Function selector knob (Fig. 6.1)

Rotate the knob clockwise to set the oven for one of the following functions.

· OVEN LIGHT

By setting the knob to this position, only the oven light comes on (15 W). It remains on in all the cooking modes.

TRADITIONAL CONVECTION COOKING

The upper and lower heating elements come on.

The heat is dispersed by natural convection and the temperature must be set to between 50° and 250°C via the thermostat knob. The oven must be preheated before cooking.

Recommended for:

Food that requires the same degree of cooking both inside and out, for example roasts, spare pork ribs, meringues etc.



GRILLING

The infrared grill element comes on. The heat is dispersed by radiation. Set the thermostat knob to between 50° and 200°C.

Always grill with the oven door closed.

For cooking hints, see the chapter "USE OF THE GRILL".

Recommended for: Intense grilling, browning, cooking au gratin and toasting etc.

Do not grill for longer than 30 minutes at any one time on full heat (200°C). Caution: the oven door becomes very hot during operation. Keep children well out of reach.

Use of the grill

Preheat the oven for about 5 minutes. Introduce the food to be cooked, positioning the rack as close to the grill as possible. The dripping pan should be placed under the rack to catch the cooking juices and fats. **Grilling with the oven door closed.**

Do not grill for longer than 30 minutes at any one time on full heat (200°C). Caution: the oven door becomes very hot during operation. Keep children well out of reach.

Safety precautions

During use the oven door glass becomes hot.

In the presence of children, in order to avoid contact with the hot door, a third internal glass should be mounted.

This third internal glass is supplied on request as an optional (not included in price).

Please contact your retailer or the After-Sales Service, indicating the model bought.

Cooking guide

Temperature and times given are approximate, as they will vary depending on the quality and amount of food being cooked.

Remember to use ovenproof dishes and to adjust the oven temperature during cooking if necessary.

Oven cooking temperatures

APPROX. TEMPERATURE	HEAT OF	TYPE OF DISH TO COOK OVEN	
125°C (257°F)	Very cool Meringue, oven slow cooking foods.		
135°C - 140°C (275°F - 285°F)	Cool or slow oven	Milk puddings, very rich fruit cakes, eg., Christmas.	
150°C (300°F)	Cool or slow oven	Stews, casseroles, braising, rich fruit cakes, eg., Dundee.	
160°C - 170°C (320°F - 338°F)	Warm oven Biscuits, Low temperature roasting, rich plain cakes eg., Madeira cake.		
180°C (356°F)	Moderate Plain cakes, eg., Victoria oven sandwich, meat pies.		
190°C (374°F)	Fairly hotSmall cakes, savoury flans,ovenfish.		
200°C (392°F)	Hot oven Plain cakes and buns, swiss rolls, fruit pies. High temp. roasting.		
215℃ (419°F)	Moderately hot oven	Bread and bread rolls etc., scones, flaky and rough puff pastry, Yorkshire pudding.	
225℃ (437°F)	Very hot oven	Sausage rolls, mince pies, puff pastry. Browning ready cooked dishes.	

Important notes

Installation, and any demonstration, information or adjustments are not included in the warranty.

The cooker must be installed by a qualified person in accordance with the Gas Safety (Installation and Use) (Amendment) Regulations 1990 and the relevant building/I.E.E Regulations.

Failure to install the appliance correctly could invalidate any manufacturers warranty and lead to prosecution under the above quoted regulation.

In the UK C.O.R.G.I registered installers are authorised to undertake the installation and service work in compliance with the above regulations. All Comet authorised installers are C.O.R.G.I. registered.

Attention

The appliance gets very hot, mainly around the cooking areas. It is very important that children are not left alone in the kitchen when you are cooking.

After Sales Service

Should you require to book a service call telephone 0870 5425425. For product information and advise telephone 0113 2793520



Do's and do not's

Do's and do not's

- Do always grill with the oven door closed.
- Do read the user instructions carefully before using the cooker for first time.
- Do allow the oven to heat for one and a half hours, before using for the first time, in order to expel any smell from the new oven insulation, without the introduction of food.
- Do clean your oven regularly.
- Do remove spills as soon as they occur.
- Do always use oven gloves when removing food shelves and trays from the oven.
- Do not allow children near the cooker when in use.
- Do not allow fat or oils to build up in the oven trays, or oven base.
- Do not place cooking utensils or plates directly onto the oven base.
- Do not grill food containing fat without using the grid.
- Do not cover the grilling grid with aluminium-foil.
- Do not use the oven tray for roasting.
- Do not place hot enamel parts in water. Leave them to cool first.
- Do not allow vinegar, coffee, milk, saltwater, lemon or tomato juice to remain in contact with enamel parts (inside the oven and on the oven tray).
- Do not use abrasive cleaners or powders that will scratch the surface of the stainless steel and the enamel.
- Do not attempt to repair the internal workings of your cooker.
- Do remove the protective film before the first use.
- Fire risk! Do not store flammable material in the oven and in the storage compartment.

For your safety

The product should only be used for its intended purpose which is for the cooking of domestic foodstuffs.

Under no circumstances should any external covers be removed for servicing or maintenance except by suitably qualified personnel.

Important:

As a safety measure, before you start cleaning the cooker be sure to disconnect it from the mains supply.

Do not use a steam cleaner because the moisture can get into the appliance thus make it unsafe.

Cleaning the hob

Spillage on the hob can usually be removed by a damp soapy cloth. More obstinate stains can be removed by rubbing gently with a soapy scouring pad or mild household cleaner.

Gas taps

If a tap becomes stiff, do not force; contact your local Service Centre.

Flexible tube

From time to time, check the flexible tube connecting the gas supply to the cooker. It must be always in perfect condition; in case of damage arrange for it to be replaced by a C.O.R.G.I. registered installer.

Cleaning oven parts after use

The oven interior and the chromium plated shelves can be cleaned by damp soapy cloth. Obstinate stains can be removed with nylon scouring pads and gentle, non-abrasive, liquid cleaner. Provided the oven is wiped over immediately after roasting, only the minimum of cleaning should be necessary.

Stainless steel aluminium parts and silk-screen printed surfaces

Clean using an appropriate product. Always dry thoroughly.

IMPORTANT: these parts must be cleaned very carefully to avoid scratching and abrasion. You are advised to use a soft cloth and neutral soap.

CAUTION: Do not use abrasive substances or non-neutral detergents as these will irreparably damage the surface.

Burners

They can be removed and washed with soapy water only.

They will remain always perfect if cleaned with products used for silverware.

After each cleaning, make sure that the burner-caps, as well as the burners, have been well wiped off and CORRECTLY POSITIONED.

It is essential to check the correct position of the burner-caps as the least displacement from the housing may cause serious problems.

Special attention has to be paid in order not to exchange the housing of the two small burners shown in fig. 6.1. The burner caps can be interchangeable.

Check also that the electrodes for ignition be always clean in order to ensure a regular spark shooting.



Changing the oven light

- 1. Disconnect the electrical power supply (for example, by switching off the main power switch).
- 2. Unscrew the light cover
- 3. Fit a new bulb.
- 4. Refit the cover.

Note:

Use only bulbs designed to resist up to 300°C with the following characteristics: 15 W, 230 V, type E-14.

Removal of the inner glass door panel

- The inner glass door panel can easily be removed for cleaning by unscrewing the four screws (fig. 6.2).
- When re-assembly ensure that the inner glass is correctly positioned and do not over tighten the screws.



Storage compartment

- The storage compartment is accessible through the pivoting panel.

Do not store flammable material in the oven or in the storage compartment.



Inside of oven

This must be cleaned regularly.

Remove and refit the side runner frames as described on the next chapter.

With the oven warm, wipe the inside walls with a cloth soaked in very hot soapy water or another suitable product.

Side runner frames, tray and rack can be removed and washed in the sink.

Assembling and dismantling of the side runner frames

- Fit the side runner frames into the holes on the side walls inside the oven (Fig. 6.4).
- Slide the tray and rack into the runners (Fig. 6.5).
- The rack must be fitted so that the safety catch, which stops it sliding out, faces the inside of the oven.
- To dismantle, operate in reverse order.





Removing the oven door

Please operate as follows:

- Open the door completely.
- The swivel retainers of the rh and Ih hinges (fig. 6.6a) are hooked onto the metal bar above them (fig. 6.6b).
- Lift the oven door slightly. The noch on the bottom of the hinge will disengage (fig. 6.6c).
- Now pull the oven door forwards off the appliance. Release both hinge sections from the slots (fig. 6.6d).

Door assembly

• Grip the door (as indicated in figure 6.6) and refit it in reverse order of removing procedure.











FOR THE INSTALLER

7 Location

This cookers has type "X" overheating protection.

If the cooker is installed adjacent to furniture which is higher than the gas hob cooktop, a gap of at least 50 mm must be left between the side of the cooker and the furniture. The furniture walls adjacent to the cooker must be made of material resistant to heat.

The veneered syntetical material and the glue used must be resistant to a temperature of 90°C in order to avoid ungluing or deformations.

The cooker may be located in a kitchen, a kitchen/diner or bed-sitting room but not in a room containing a bath or shower.

Curtains must not be fitted immediatly behind appliance or within 500 mm of the sides.

It is essential that the cooker is positioned as stated below.

The cooker must be installed by a qualified technician and in compliance with local safety standards.

If the cooker is located on a pedestal it is necessary to provide safety measures to prevent falling out.



Fitting the adjustable feet





Fig. 7.4

Levelling the cooker

The cooker may be levelled by screwing the lower ends of the feet IN or OUT (fig. 7.6).

The adjustable feet must be fitted to the base of the cooker before use.

Rest the rear of the cooker an a piece of the polystyrene packaging exposing the base for the fitting of the feet.

Moving the cooker

WARNING

When raising cooker to upright position always ensure two people carry out this manoeuvre to prevent damage to the adjustable feet (fig. 7.3).

WARNING

Be carefull: do not lift the cooker by the door handle when raising to the upright position (fig. 7.4).

WARNING

When moving cooker to its final position **DO NOT DRAG** (fig. 7.5). Lift feet clear of floor (fig. 7.3).





Stability bracket

We recommend a stability bracket is fitted to the cooker.

The type shown in fig. 7.7 can be purchased from most plumbers merchants and do it yourself (D.I.Y.) shops.



Backguard

Assembling the backguard

- 1. Insert the side supports S and D into the backguard B (see fig. 7.8)
- 2. Insert the backguard group into the support guides in the cooker
- 3. The backguard can be removed for cleaning or fixed with a screw through the hole C.



Provison for ventilation

The room containing the cooker should have an air supply in accordance with BS.5540: Part 2: 1989.

All rooms require an openable window or equivalent while some rooms require a permanent vent in addition to the openable window.

The cooker should not be installed in a bed-sitting room, of volume less than 21 m³.

Where a DOMESTIC COOKER is installed in a room or internal space, that room or internal space shall be provided with a permanent opening which communicates directly with outside air and is sized in accordance with table below. In domestic premises the permanent opening shall be an air vent.

If there are other fuel burning appliances in the same room, BS.5540: Part 2: 1989 should be consulted to determine the requisite air vent requirements.

If the cooker is installed in a cellar or basement, it is advisable to provide an air vent of effective area 100 cm^2 , irrespective of the room volume.

MINIMUM PERMANENT OPENING FREE AREA FOR FLUELESS APPLIANCE						
	Maximum	aximum Room volume			Openable	
Type of appliance	appliance rated input limit	< 5 m ³	5 m ³ to 10 m ³	11 m ³ to 20 m ³	> 20 m ³	window or equivalent also required
Domestic oven, hotplate, grill or any combination thereof.	None	100 cm ²	50 (*) cm ²	Nil cm ²	Nil cm ²	Yes

(*) If the room or internal space containing these appliances has a door which opens directly to outside, no permanent opening is required.

8 Gas installation

IMPORTANT NOTE

This appliance is supplied for use on NATURAL GAS only and cannot be used on any other gas without modification.

This appliance is manufactured for conversion to LPG and is supplied with a conversion kit. The cooker must be installed by a qualified person in accordance with the Gas Safety (Installation and Use) (Amendment) Regulation 1990 and the relevant building/I.E.E. Regulations.

The following British Standards should be used as reference when installing this appliance.

BS6172 1990, BS5440 part 2 1989 and BS6891 1988.

Failure to install the appliance correctly could invalidate any manufacturers warranty and lead to prosecution under the above quoted regulation.

In the UK C.O.R.G.I registered installers are authorised to undertake the installation and service work in compliance with the above regulations.

Gas connection

The installation of the cooker to Natural Gas or LP Gas must be carried out by a qualified gas engineer. Installer shall take due account of the provisions of the relevant British Standards Code of Practice, the Gas Safety Regulations and the Building Standards (Scotland) (Consolidation) Regulations issued by the Scottish Development Department.

Installation to Natural Gas

Installation to Natural Gas must conform to the Code of Practice, etc. The supply pressure for Natural Gas is 20 mbar.

Installation to LP Gas

This appliance must only be connected to LPG after an LPG conversion kit has been fitted, (see pages from 31 to 33).

When operating on Butane gas a supply pressure of 28-30 mbar is required.

When using Propane gas a supply pressure of 37 mbar is required.

The installation must conform to the relevant British Standards.

Warning: Only a qualified gas engineer, also with technical knowledge of electricity should install the cooker.

He should observe the Regulations and Codes of Practice governing such installation of gas cookers.

Note: It is recommended that the gas connection to the cooker is installed with a flexible connecting tube made to BS 5386.

Gas connection

The gas supply must be connected to the gas inlet which is located at the left or the right hand rear of the appliance (see figure 8.1).

The pipe do not cross the cooker.

To screw the connecting tube operate with two spanners (see fig. 8.2).

The unused end inlet pipe must be closed with the plug interposing the gasket.

After connecting to the mains, check that the coupling are correctly sealed, using soapy solution, but never a flame.



Conversion to LPG

Injectors replacement of top burners

To replace the injectors it is necessary to lift the hobtop and proceed as follows:

- Remove pan-supports and burners from the hobtop.
- Remove the backguard "E".
- Unscrew the screws "B" and remove the sockets and the side trims (Fig. 8.3).
- Unscrew the screw "C".
- Pull forwards the hobtop to release it, then lift following arrow "E" (Fig. 8.3)
- Hold the hobtop open by a support.
- Fully raise the adjusting air tube A (fig. 8.4) in order to easily reach the injector.
- By an angle 7 spanner, remove the injector from its housing and replace it by the proper one according to the kind of gas (see "Table for the choice of the injectors" page 33).



Adjusting of primary air of the top burners

By operating the screw "**M**", reset the air adjuster "**A**" according to the instructions see "Injector table", where the distance between injector and air adjuster is recommended (in mm).

Before lowering the hob top, set the burners on their sites and light them in order to check whether the flames are correct, as per the specifications given in the next page. In case of uncorrect flame, lift or lower the air adjuster.

Flame faulty in primary air	Flame correct	Flame with excess primary air	
long, yellow	clear interior	short and sharptoo blue	
and trembling	blue cone	interior cone tending to detach	
	CAUSE		
air regulating tube,	correct distance	air regulating tube,	
too closed	of the tube	too open	

Adjusting of the minimum of the top burners

Considering that in the minimum position the flame must have a length of about 4 mm and must remain lit even with a quick turn from the maximum position to that of minimum.

The flame adjustment is done in the following way:

- Turn on the burner
- Turn the tap to the MINIMUM position
- Take off the knob
- With a small flat screwdriver turn the screw inside the tap rod to the correct regulation (fig. 8.5).

Normally for LPG, tighten up the regulation screw.





CE @B

Cat: **|| 2H3+**

BURNERS	Nominal Reduced		G 30 - 28-30 mbar G 31 - 37 mbar		G 20 20 mbar	
	Power [kW]	Power [kW]	Ø injector [1/100 mm]	Ring opening [mm]	Ø injector [1/100 mm]	Ring opening [mm]
Auxiliary (A)	1,00	0,30	50	3 *	72	1*
Semi-rapid (SR)	1,90	0,38	67	5,7 *	100	2 *
Rapid (R)	3,15	0,60	86	fully open *	130	5 *
Double-ring	3,45	0,85	92	fully open *	135	5 *

* = Reference value

Increase of air necessary for gas combustion (2 $m^3/h\ x\ kW)$			
BURNERS	Air necessary for combustion [m ³ /h]		
Auxiliary (A)	2,00		
Semi-rapid (SR)	3,80		
Rapid (R)	6,30		
Double-ring	6,90		

Lubrication of the gas taps

The operations must be executed by a qualified technician.



Before effecting any intervention on the electrical parts of the appliance, the connection to the network must be interrupted.

IMPORTANT: The cooker must be installed in accordance with the manufacturer's instructions.

Incorrect installation, for which the manufacturer accepts no responsibility, may cause injury to persons or animals etc.

This appliance must be installed by a qualified technician according with the current local regulations and in compliance with the manufacturer instructions.

- Connection to the mains must be carried out by qualified personnel in accordance with current regulations.
- The appliance must be connected to the mains checking that the voltage corresponds to the value given in the rating plate and that the electrical cable sections can withstand the load specified on the plate.
- The appliance can be connected directly to the mains placing an omnipolar switch with minimum opening between the contacts of 3 mm between the appliance and the mains.
- The power supply cable must not touch the hot parts and must be positioned so that it does not exceed 75°C at any point.
- Once the appliance has been installed, the switch or socket must always be accessible.

N.B. For connection to the mains, do not use adapters, reducers or branching devices as they can cause overheating and burning.

If the installation requires alterations to the domestic electrical system or if the socket and appliance plug are incompatible, call an expert.

He should also check that the socket cable section is suitable for the power absorbed by the appliance.

IMPORTANT: this cooker must be connected to a suitable double pole control unit adjacent to the cooker.

NO DIVERSITY CAN BE APPLIED TO THIS CONTROL UNIT.

IMPORTANT:

This appliance must be earthed.

The connection of the appliance to earth is mandatory. The manufacturer declines all responsibility for any inconvenience resulting from not observing this condition.

Connecting the mains cable

To connect the supply cable:

- Remove the screws securing the cover "A" on the rear of the cooker (fig. 9.1).
- Feed the supply cable through the cable clamp "**D**". The supply cable must be of a suitable size for the current requirements of the appliance; see the section "Feeder cable section" (fig. 9.1).
- Connect the wires to the terminal block "**B**" as shown in the diagram in figure 9.2; or connect the phase wires to the terminal block "**B**" and the earth wire to the terminal **PE** as shown in figure 9.1.
- Take up any slack in the cable and secure with the cable clamp "D".
- Replace the cover "A".

N.B. The earth conductor must be left about 3 cm longer than the others.



Feeder cable section type H05RR-F

230 V \sim 3 x 2,5 mm²



Descriptions and illustrations in this booklet are given as simply indicative. The manufacturer reserves the right, considering the characteristics of the models described here, at any time and without notice, to make eventual necessary modifications for their construction or for commercial needs.

