

INSTRUCTIONS FOR USE AND MAINTENANCE

Gas-fired lava-stone grill

Model:

***508.200 - *508.210**

CATEGORY: II2H3+

TYPE OF INSTALLATION: A₁

Please read this instruction book carefully before installing and using the appliance.

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I INTRODUCTION AND DESCRIPTION OF THE APPLIANCE

All the gas system parts of this appliance are under guarantee as from the date of the invoice.

Any attempt to dismantle, modify or tamper with any part of this appliance will invalidate the guarantee.

Incorrect use of the grill and also any attempt to dismantle or modify it can cause accidents and therefore the manufacturer, ACOPA Srl, declines all responsibility for any injury to persons or damage to property resulting from such tampering. For all problems with the appliance, please contact the nearest authorized service centre or the manufacturer.

The manufacturer will not be held responsible in the following cases:

- Improper use of the appliance by untrained staff.
- Use that is not in compliance with the regulations in force in the country of destination.
- Lack of, or incorrect, routine maintenance.
- Utilization of non-original spares.
- Partial or total failure to comply with the instructions.
- Failure to send in the guarantee certificate.

1.1 General instructions

- Read this booklet carefully because it gives instructions regarding safety during use and maintenance. The purpose of this manual is to inform the operators about the requirements and essential criteria for guaranteeing their safety and lengthening the working life of the grill.

This manual should be read by all staff authorized to work on the appliance before it is used.

- This instruction booklet should be kept with the appliance for future reference. In the event of the appliance being sold or moved, the manual must always accompany it, so that the new user can refer to the instructions and information in it. It should be kept in a safe, dry, quickly accessible place for all reference purposes. In the event of deterioration or loss, ask for a new copy directly from the manufacturer. If you have any doubts, please contact the nearest service centre or the ACOPA Company.
- The instructions contained in this booklet exclusively concern the gas-fired lava-stone grill of category II2H3+ fully.
- Use the appliance in compliance with the regulations in force.
- This appliance is intended for cooking food by direct grilling. Do not use it for other purposes; any other use is considered improper. The appliance is intended for collective and professional use and should be used by staff trained in its use.
- Its maintenance, its conversion to another type of gas, its installation, and the checking of its correct working should be carried out only by qualified staff.
- After every replacement or adjustment of a component, such as the primary air tube or the by-pass screw, make sure it is sealed with a paint dab to prevent tampering.
- We advise you to take out a maintenance contract.
- When repairs are necessary, contact an authorized technical service centre and demand original spare parts.

- These instructions are valid only for countries whose abbreviation appears on the cover of this manual and on the data plate (section on type of gas installed).
- The following symbol indicates "hot surfaces".



1.2 Data plate and additional plate

The plate containing the technical data (fig. 1) and the plate with the installation instructions are applied in a visible manner on the lower part of the grill. The additional plate (fig. 2) that shows the country of destination, the category, the type of gas and the pressure for which the grill is set, and instructions on installation and use, is placed on the packaging of the appliance.

		REGOLATO :					
			G20	G25	G30	G31	
MOD:	IT-ES-GB-PT-IE-GR	112H3+	20	/	28-30	37	mbar
S/N :	DE	112ELL3B/P	20	20	50	50	mbar
Qn : 9 kW	LU	12E	20	/	/	/	mbar
TYPE : A ₁	AT-CH	112H3B/P	20	/	50	50	mbar
	DK-SE-FI		20	/	30	30	mbar
	BE-FR	112E+3+	20	25	28	37	mbar
	NL	112L3B/P	/	25	30	30	mbar
	NO	13B/P	/	/	30	30	mbar

G20 = 0.95 m ³ /h	G30 = 0.71 kg/h
G25 = 1.11 m ³ /h	

	N° 705F8050	
	0705	

Fig. 1

IT	112H3+	G 20	: 2H : 20 mbar	<input type="checkbox"/>
		G 30 / G 31	: 3+ : 30/37 mbar	<input type="checkbox"/>
<small>L'apparecchio deve essere allacciato conformemente alle norme in vigore e deve essere installato solo in locali ben aerati. Gli utenti particolari attendono alle istruzioni per l'uso e la manutenzione dell'apparecchio prima di mettere in funzione.</small>				

Fig. 2

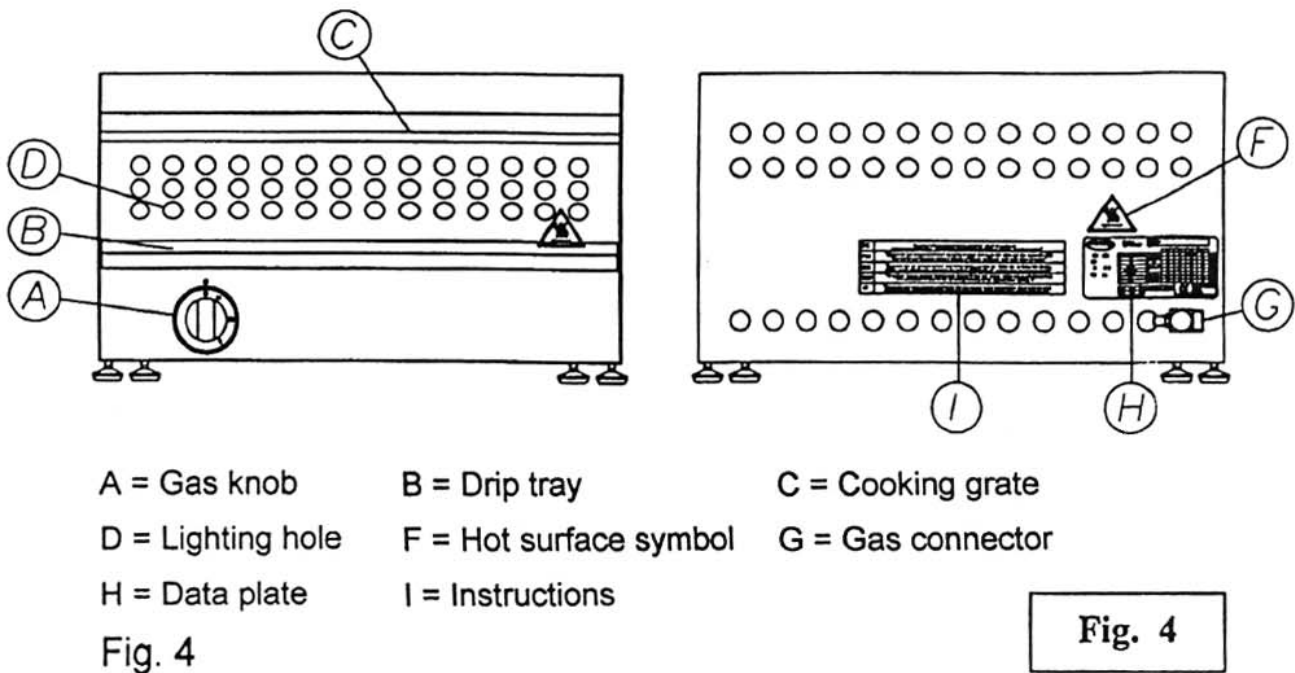
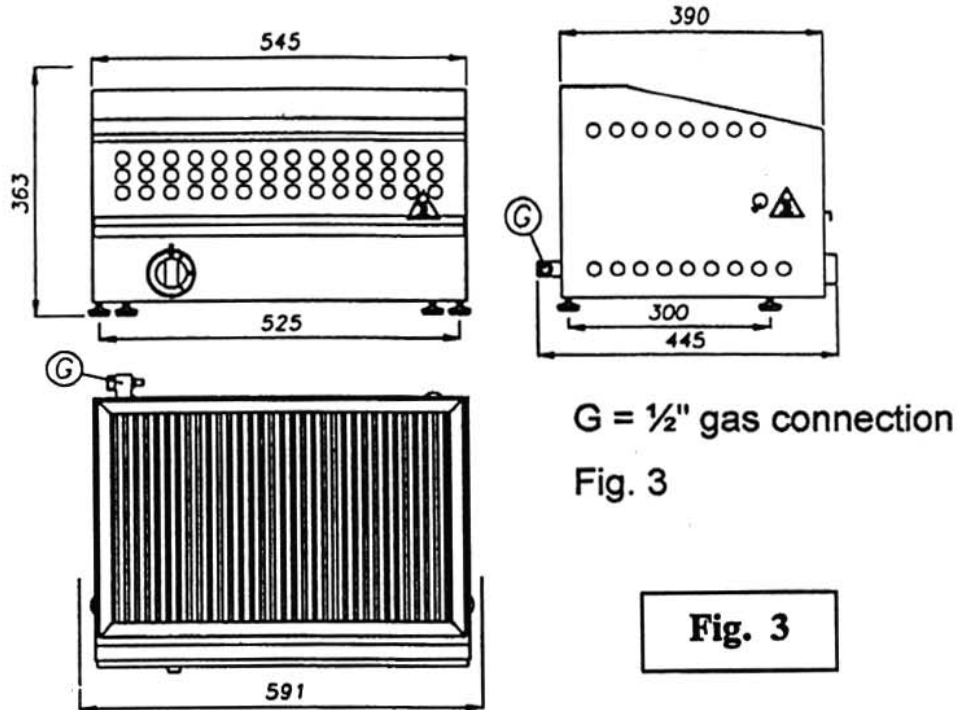
IT	The appliance should be connected in conformity with current standards and must be installed in well-ventilated places. Particular attention should be paid to the instructions for use and maintenance of the appliance before using it.
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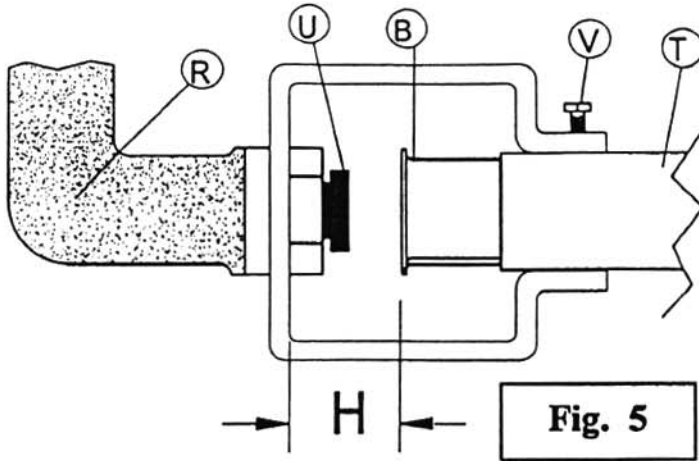
1.3 Technical data

Overall dimensions L x W x H (mm)	591 x 390 x 363		
Total nominal heat output (kW)	9		
Reduced heat output (kW)	4		
Number of burners	1		
Pipe thread	½"		
Category	II 2H3+		
Factory setting	LPG		
Type of construction	A ₁		
Gas connection pressure (mbar)	Gas G30/G31	:	30/37
	Gas G20	:	20

Gas consumption calculated with the lower calorific power H ₁ at 15° C and 1013 mbar	Total consumption G30: 0.71 kg/h	Total consumption G20: 0.85 m ³ /h
	Consumption on low G30: 0.32 kg/h	Consumption on low G20: 0.42 m ³ /h
Diameter of main jet (1/100 mm)	G30/G31: 165	G20: 225
Diameter of pilot jet (1/100 mm)	G30/G31: 21	G20: 35
Diameter of by-pass jet (1/100 mm)	G30/G31: 110	G20: Adjustable
Primary air setting (mm) (see page 6)	G30/G31: 30	G20: 13

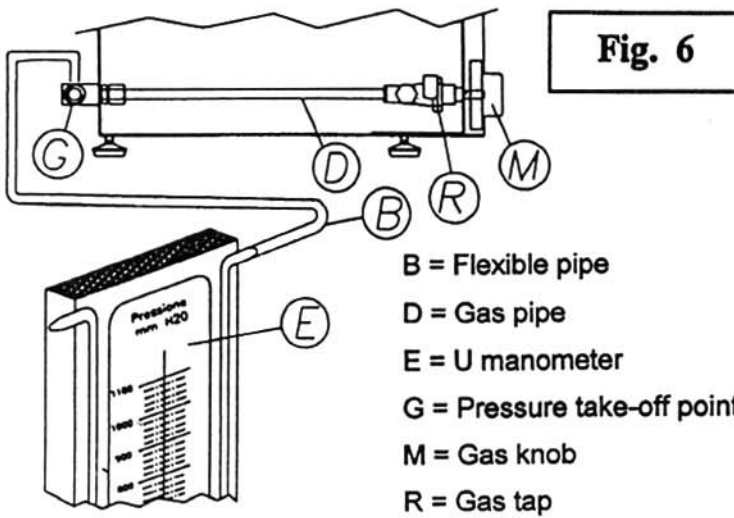
1.4 Drawings



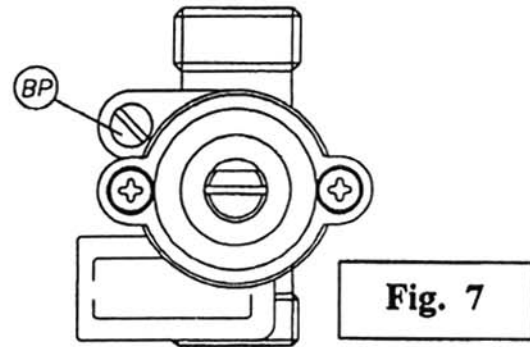


U = Main burner jet
 R = Gas supply
 B = Air adjustment tube
 V = Tube adjustment screw
 T = Burner venturi tube
 Adjustment of tube B:

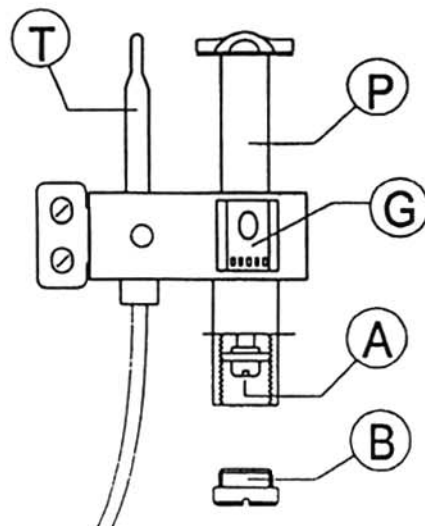
Gas	Pressure (mbar)	Distance H (mm)
G20	20	13
G30/G31	30/37	30



B = Flexible pipe
 D = Gas pipe
 E = U manometer
 G = Pressure take-off point
 M = Gas knob
 R = Gas tap



BP = Tap by-pass screw



A = Pilot burner jet
 B = Screw plug
 G = Air adjustment ring
 P = Pilot burner
 T = Thermocouple

Fig. 8

II GENERAL INSTRUCTIONS (for the installer)

2.1 Installation position

The installer should make sure that the operation of the appliance is in compliance with the country's current provisions. The appliance should be installed only by qualified staff, authorized by the manufacturer, who should abide by the current safety standards in the place where the appliance is installed. Every extra maintenance operation (changing to another gas, or replacing components) should be carried out by skilled staff with the necessary professional qualifications.

The appliance must be installed in a well-ventilated place; if possible, it should be located under an exhaust hood that will ensure the complete evacuation of the burnt gases generated during cooking. The grill should be placed at a distance of not less than 100 mm from the walls. For the installation and the minimum ventilation requirements, consult the UNI-CIG 7722-7723-8723 safety standards, the Italian Ministerial Decree dated 12 April 1996 and the subsequent amendments.

Particular attention must be paid so that the volume of air required for combustion is in no way restricted by objects placed under or around the appliance.

2.2 Gas connection

Before installation, make sure that the appliance is set for the gas to be used. If it is not, consult the "Conversion to another type of gas" paragraph or contact the manufacturer's technical service. Connection to mains gas should be carried out in accordance with the UNI-CIG 8723 standard.

The connection to the gas supply should be made using rigid or flexible pipes made exclusively of metallic material, with sections suitable for the power of the appliance and for the length to be used. Make sure that the pipe does not pass near hot areas and that it is not subjected to twisting or tensile stresses. Between the gas mains and each individual appliance, place a quick-action shut-off tap in a position that will allow the opening and closing operations to be carried out easily.

After installing the grill, check the whole gas circuit for leaks, using a leak-detecting spray or other non-corrosive foaming agents. Do not use a naked flame to detect leaks.

The joints in the copper tubes should be made using mechanical couplings without gaskets.

Ask ACOPA for the gas connector with the pressure take-off point.

III COMMISSIONING

Commissioning of the appliance should be carried out only by qualified staff.

Before commissioning, make sure the characteristics and category of the gas correspond to the family and group of gas supplied; if they do not, consult the “Conversion to another type of gas” paragraph.

3.1 Checking the nominal heat output

The nominal heat output should be checked by an authorized technician or by the gas supply company, following the information contained in this manual. This check should be made in the event of change or conversion to another type of gas and every time extra maintenance is carried out.

The nominal heat output and the connection pressures can be checked on the technical data table.

The components sealed by the manufacturer must not be tampered with.

3.2 Volumetric method

The nominal heat output can be obtained by installing the injectors described in the data table and with the connection pressure for the type of gas supplied. The checking of the heat output is carried out using a meter and a stopwatch. The exact volume of gas that must pass per unit of time can be checked on the technical data table. For the connection, this value should be kept within the envisaged range, with a tolerance of $\pm 5\%$.

If greater deviations are found, the injectors should be checked to make sure that ones of the correct diameter have been used.

3.3 Checking the connection pressure (fig. 6)

The connection pressure should be measured, with the appliance turned on, using a pressure gauge for liquids, (e.g. a “U” manometer, minimum resolution 0.1 bar). To carry out this check, remove the screw plug and then connect the manometer (E) to the inlet pressure take-off point located on the gas connector (G).

Measure the connection pressure: if this does not fall within the values indicated in the following table, the turning on of the appliance will not be possible in any case. The gas supply company should be informed.

Type of gas	Gas pressure (mbar)		
	Normal	Minimum	Maximum
Methane gas H G20	20	17	25
LPG gas G30/31	30/37	20/25	35/45

After measuring the connection pressure, disconnect the flexible pipe and screw the screw plug back on the pressure take-off point.

3.4 Conversion to another type of gas

In the event of spare parts not being available, please contact the manufacturer’s technical service. The conversion should be carried out by qualified staff. Referring to the technical data table, change the main jet, the pilot burner jet and the tap by-pass, and set the primary air and flow rate to low.

CAUTION: The diameter of the jet is stamped on it in 1/100 mm.

3.5 Replacing the jets, setting the primary air and flow rate to low

CAUTION: Carry out this operation only after closing the gas shut-off tap placed upstream of the appliance.

A) Main burner jet (Fig. 5)

Carry out the following operations in the order given:

1. Remove the grills and the drip tray.
2. Slacken the tube-fixing screw V, slide the tube B inwards, unscrew and replace the jet U with one that corresponds to the gas supplied.
3. Adjust the primary air flow by adjusting the tube B to the correct distance H.

B) Pilot burner jet (Fig. 8)

Carry out the following operations in the order given:

1. Through the hole on the left side of the grill, unscrew the screw plug B using a screwdriver.
2. Unscrew and change the jet A with one that corresponds to the gas supplied.
3. Screw in the plug B.
4. Light the pilot burner, and adjust the primary air (checking the flame) by means of the adjustment ring G.

C) Setting the flow rate to low (Fig. 7)

Carry out the following operations in the order given:

Remove the knob and, through the hole on the left, reach the by-pass screw "BP" of the tap with a straight screwdriver. Then set it according to the type of gas as follows:

For G20: Adjust the by-pass jet screw until the correct low setting is obtained. Once this has been done, light the burner and check that, when passing from the high position to the low one, the flame does not go out or backfire.

Clockwise rotation of screw = decrease in flow rate.

Anticlockwise rotation of screw = increase in flow rate.

For G30/G31: After checking that the by-pass jet is of the correct diameter, screw the by-pass screw right in.

CAUTION! After every conversion to a new type of gas, be sure to:

- **Apply an indelible label to the plate with the data relevant to the new installation.**
- **Carry out the necessary tests for gas leaks.**
- **Retouch the paint dab seals on all the parts that have been adjusted.**

IV INSTRUCTIONS FOR USE (for the user)

CAUTION!

- THE APPLIANCE IS MADE FOR PROFESSIONAL USE AND SHOULD BE USED BY STAFF TRAINED IN ITS USE.
- ALL ROUTINE MAINTENANCE AND REPAIR WORK SHOULD BE CARRIED OUT ONLY BY QUALIFIED STAFF.
- ALL INSTALLATION, COMMISSIONING AND MAINTENANCE OPERATIONS, PARTICULARLY THE GAS CONNECTION AND

COMMISSIONING, SHOULD BE CARRIED OUT EXCLUSIVELY BY THE MANUFACTURER'S AUTHORIZED INSTALLERS IN COMPLIANCE WITH THE STANDARDS IN FORCE IN THE COUNTRY.

- WE ADVISE HAVING THE APPLIANCE CHECKED PERIODICALLY BY A QUALIFIED TECHNICIAN IN ORDER TO KEEP IT IN PERFECT WORKING ORDER. TO THIS END, WE ADVISE TAKING OUT A MAINTENANCE CONTRACT.

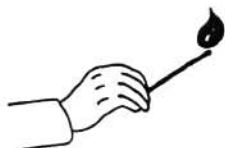
4.1 Turning on

CAUTION!

- Arrange the lava uniformly above the burner grill after washing or replacing it.
- Position the cooking grate firmly in one of the two possible positions (inclined or horizontal).
- Check that there are no obstructions to the flow of air to the burner or to the ventilation of the site.
- Do not leave the appliance unattended during use.
- Lift the cooking grate with the special hooks available from the manufacturer.
- Take out the drip tray only when the grill is cold.
- A safety thermocouple, which interrupts the flow of gas if the flame accidentally goes out, is connected to the gas tap.
- For every operation on the grill during use, wear heat resistant gloves.
- Close the upstream gas shut-off tap after you have finished using the appliance.

To light the grill, follow these instructions:

- Open the upstream gas shut-off tap.
- Light the pilot burner by pushing in the gas knob and turning it anticlockwise from the off position (●) to the pilot lighting position (★). Then, through the hole in the front panel, introduce a long match to light the pilot burner. Keep the knob pressed for about 15 seconds so that the flame has time to heat the thermocouple that allows the gas to pass, and then release the knob, checking that the pilot burner remains alight. If it does not, repeat the operation from the beginning.
- After lighting the pilot burner, light the main burner by pushing in and turning the gas knob anticlockwise from the pilot lighting position (★) to the high flow rate position (large flame). After checking that the gas is lit and the flame is stable, the knob can be turned to the reduced flow rate position if required (small flame).



Manual lighting:
Use a long match or lighter!

4.2 Turning off

- To turn off the main burner, push in and turn the gas knob from the high or reduced flow rate position to the pilot position (★). To turn off the pilot burner, push in and turn the knob to the off position (●).
- After use, close the shut-off tap upstream of the appliance.

V ROUTINE CLEANING AND MAINTENANCE

The appliance should be cleaned regularly in order to guarantee the best functionality and performance. In the event of a breakdown, do not

attempt to solve the problem but call the dealer who will do the troubleshooting. Do not attempt to dismantle the appliance; all work on the appliance should be carried out by qualified staff. Periodically check the condition of the gas supply pipes. For routine cleaning of the grill, carry out the following operations, heeding the warnings:

- Before cleaning the appliance, make sure that the upstream gas tap is closed and that all burners are turned off. Let the appliance cool down.
- Carry out the daily cleaning of the steel parts with lukewarm, soapy water, and then rinse thoroughly and dry well. Do not use detergents containing chlorine (bleach, hydrochloric acid, etc) and, at all costs, avoid cleaning the steel parts with steel wool, brushes or scrapers that could deposit ferrous particles subject to oxidation and, therefore, rust.
- Remove the cooking grate, the lava stones and the burner grill and gently clean off with a brush whatever deposits have formed during use.
- The burner should be cleaned with soap or non-abrasive detergents and water. Check that the burner openings are not obstructed; if they are, carefully remove the deposits taking care not to damage the elements connected to the burner.