



INSTRUCTIONS FOR USE AND MAINTENANCE

TS Gas

Category: II2H3+

Construction type: B₂₁



CE₀₇₀₅

IMPORTANT

The present manual contains the necessary instructions for the correct use and proper working conditions of the appliance, and the safety norms to adopt.

This manual must be consigned to all the persons using the appliance or doing its maintenance.

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CAP.1 - INTRODUCTION AND OVEN DESCRIPTION

The ITALFORNI Pesaro s.r.l. company wishes to thank you for having chosen this oven.

The tunnel ovens are part of the belt oven series, specifically designed for the automatic baking of pizza, bread, biscuits and related products.

The baking can be carried out either directly on the refractory plan or using baking trays or moulds.

These tunnel ovens may be included in any automatic production line.

Improper use of the oven as well as any attempt at dismantling or modifying can lead to accidents and therefore the manufacturer ITALFORNI S.r.l. declines all responsibility for any damage to persons or property caused by such tampering. For any faults encountered, contact the nearest authorised service centre or the manufacturer directly.

The manufacturer declines all responsibility in the following cases:

- Improper use of the oven by staff not suitably trained.
- Use not complying with the laws in force in the country of use.
- Lack of or incorrect routine maintenance.
- The use of non original spare parts.
- Total or partial failure to observe the instructions.
- Failure to send off the guarantee certificate.

The electric-gas conveyor oven Mod. **TS GAS** carries the CE symbol issued by an authorised agency, entrusted with and responsible for assessing compliance with the essential requisites set out by gas Directive **2009/142/CEE**. The oven or the quality of the production system are subjected to periodic monitoring through inspection checks in order to ensure their conformity with the type of certificate as stated in the above Directive.

The ovens conform to product standards EN 203-1, EN 203-2 and EN 437.

The appliance in addition conforms to the following European Directives:

- Low Voltage Directive **2006/95/CEE**.
- Electromagnetic Compatibility Directive **2004/108/CEE**.
- Machinery Directive **89/336/CEE**.

The appliance may be sold in all European countries whose symbol appears on the Technical Data Plate. It must be installed in accordance with the rules in force governing the installation of gas-electric appliances for collective use, with the accessories and the adaptations required by the country of use as described in the use and maintenance manuals printed in the original and official languages of the different countries.

More precisely, the oven must be installed on a suitable stand or sufficiently solid surface which is perfectly horizontal in a room with sufficient ventilation and must be used by trained staff only.

The oven must be placed under a suitable extractor hood in order to divert the cooking vapours and combustion fumes outdoors; the extractor hood must be an interlocked one, able to interrupt the gas feeding if the discharge of the removed combustion fumes from the room is lower than certain parameters. The burner power can be set on two values.

If the burner should fail to ignite, a red warning light comes on and then ignition can be attempted again by pressing the reset button. In the event of excessive or irregular heating of the cooking chamber, a safety thermostat with automatic re-enabling is triggered; in order to signal the anomaly, on the control panel the "over temperature" warning light comes on.

1.1 General warnings

- Read this booklet carefully as it provides directions on safety for the oven use and maintenance. The purpose of this manual is to inform operators of the rules and essential criteria for guaranteeing their safety and for prolonging the working life of the oven. Before the oven is put into service this manual must be read by all staff authorised to work on it.
- This instruction booklet must be kept with the oven for future reference. If the oven is sold or transferred, make sure that the booklet accompanies it every time, so that the new user can be informed of its operation and the safety warnings. It is to be kept in a place which is safe, dry and can be quickly located whenever it needs to be referred to. If it deteriorates or is lost, request a replacement copy from your nearest service centre.

- The product is carefully packed in sturdy wooden cage with nylon bubble packing to protect it from knocks and humidity during transportation and is consigned to the forwarder in the best possible conditions.


However we would advise you to check the packaging on taking delivery, for evidence of any signs of damage. Should they be found they must be noted on the delivery receipt to be signed by the driver. On unpacking the appliance, check for any signs of damage. In the event of any damage do not attempt to use the appliance and contact your nearest service centre.

- Put the appliance into service in accordance with the governing laws. These instructions are only valid for category II2H3+ tunnel pizza oven model.
- This oven is intended for the following use: cooking pizzas or similar foods. It must not be used for other purposes; any other use is considered improper. The appliance is intended for collective and professional use and must be operated by staff trained in its use.
- Servicing, conversion to other types of gas, installation and inspection for proper working must only be performed by qualified persons.
- Each time a new part is fitted or a component adjusted, make sure that it is sealed with paint to discourage any tampering.
- For all repairs, contact an authorised service centre and always insist on original spare parts.
- The following symbol denotes "hot surface". Avoid all direct contact with such surfaces.
- Use personal protective heat equipment when using the appliance.
- When the appliance has reach the end of its working life, all its parts and components must be disposed separately; devide each type of material forming the oven, e.g. stainless steel parts, thermal insulation in ceramic fiber, refractory tiles, cables and electric devices. The disposal of such materials is regulated by law dispositions and EU Directives and may involve penalties in case of intentional behaviours that may cause harm to the environment and to the people. Every countries dispose the appliance complying with the national and local laws in force in the country of use.



1.2 Technical data plate and supplementary plate

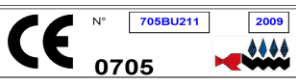
The technical data plate (Fig. 1) is located on the “unloading” side of the oven and contains the voltage rating and all the other information necessary for installation. The supplementary plate (Fig. 2) states the basic rules to be followed for correct installation.



Mod. : **TS GAS**
S/N : Type: **B21**
Qn : **47,0 kW**

220-230 V~ 50 Hz
100 W **IPX0**

**FAC
SIMILE**



		G20	G25	G30	G31	
AT, CH	II2H3B/P	20	/	50	50	mbar
AL, BA, BG, DK, EE, FI, HR, LT, LV, MK, NO, RO, SE, SI, UA	II2H3B/P	20	/	28-30	28-30	mbar
CZ, ES, GR, IE, IT, PT, GB, CH, SK, TR	II2H3+	20	/	28-30	37	mbar
DE	II2ELL3B/P	20	20	50	50	mbar
NL	II2L3B/P	/	25	28-30	28-30	mbar
IS, CY, MT, HU	I3B/P	/	/	28-30	28-30	mbar
LU, FR, BE	I3+	/	/	28-30	37	mbar
LU	I2E	20	/	/	/	mbar
BE	I2E(R)B	20	25	/	/	mbar
FR	I2Esi	20	25	/	/	mbar
						mbar

EN 203-1:2005 ; EN 203-2-2:2006

G20	: 5,0	m ³ /h
G25	: 5,8	m ³ /h
G30	: 3,7	kg/h
G31	: 3,7	kg/h

2H G20 20 mbar

Fig. 1

DE	"Dieses Gerät muß nach geltenden Vorschriften angeschlossen und darf nur in einem gut belüfteten Raum betrieben werden . Bitte beachten Sie vor Inbetriebnahme des Gerätes die Gebrauchs- und Wartungsanleitung."
FR	"L'appareil doit être raccordé conformément aux normes en vigueur et il ne doit être installé que dans locaux bien aérés. Faire attention aux instructions relatives à l'utilisation et l'entretien de l'appareil avant de le mettre en marche."
ES	"El aparato debe ser conectado conforme a las normas vigentes y se tiene que instalar solo en locales bien aireados. Préstese especial atención a las instrucciones para el uso y mantenimiento del aparato antes de ponerlo en marcha."
GB	"The appliance must be connected according to the standards in force and must be installed only in well aired premises. It is recommended to follow the use and servicing instructions of the appliance before operating it."
IT	"L'apparecchio deve essere allacciato conformemente alle norme in vigore e deve essere installato solo in locali ben aerati. Si presti particolare attenzione alle istruzioni per l'uso e la manutenzione dell'apparecchio prima di metterlo in funzione."

Fig. 2

1.3 Technical information

Tab. 1

Model	TS GAS
External dimension L x P x H	1420 x 2160 x 661 mm
Stand dimension L x P x H	1150 x 1330 x 622 mm
Total nominal thermal capacity	47,0 kW
Reduced thermal capacity	42,5 kW
Electrical power rating	100 W
Gas connection	ISO 7-1 da 3 / 4 "
Appliance category	II2H3+
Type of construction	B ₂₁
Electric security class	I
Voltage supply	220-230 V ~ 50 Hz
Power lead	Tipo H07RN-F 3x1,5 mm ²
Gas connection nominal pressure	Liquid butan/propane gas G30/G31 : 28-30/37 mbar Natural gas G20 : 20 mbar
Gas pressure at the injector (MAX.)	Liquid butan/propane gas G30/G31 : 27 mbar Natural gas G20 : 9 mbar
Gas pressure at the injector (MIN.)	Liquid butan/propane gas G30/G31 : 21 mbar Natural gas G20 : 7 mbar
Gas consumption calculated with calorific inferior value H _i at 15° and 1013 mbar :	G 30 : 3,707 kg / h G 31 : 3,651 kg / h G 20 : 4,974 m ³ / h
Main injector diameter	G 30/G 31 : 2 x 255 1/100 mm G 20 : 2 x 450 1/100 mm
Primary air bushing setting	G 30/G 31 : 2 x 18 mm G 20 : 2 x 13 mm

Views and overall dimension

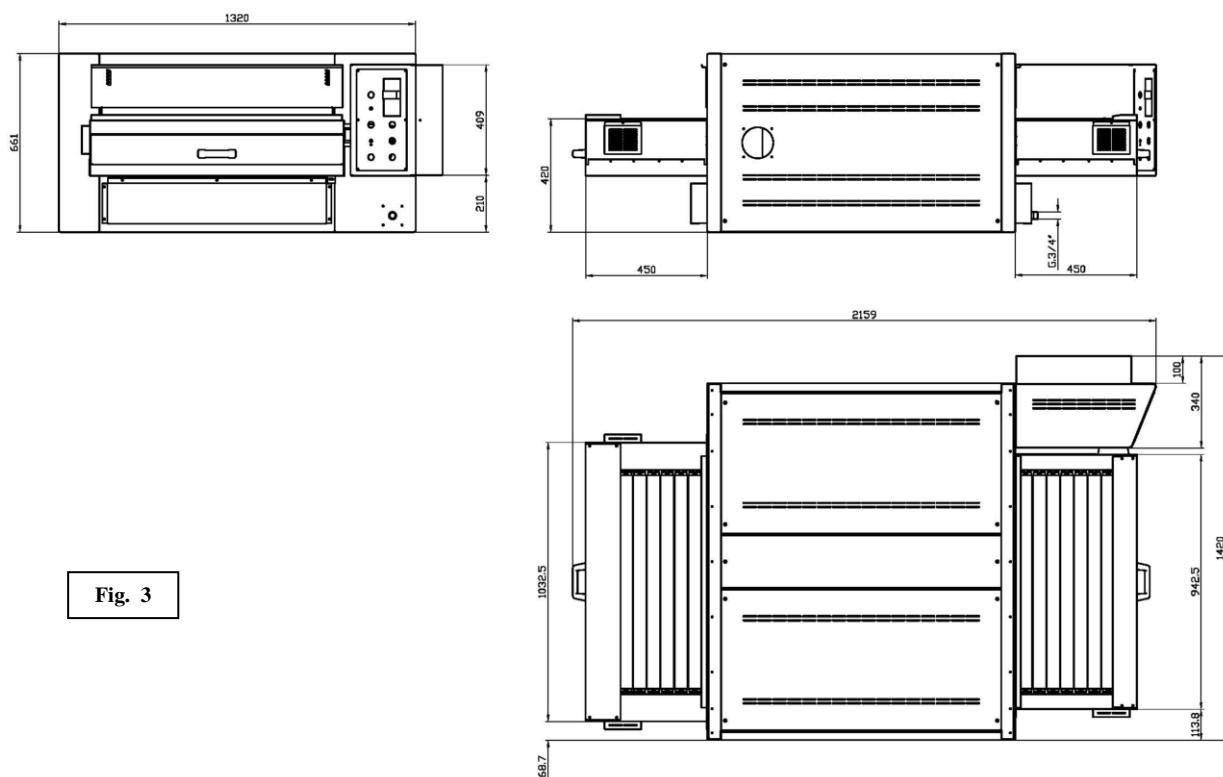


Fig. 3

Support stand

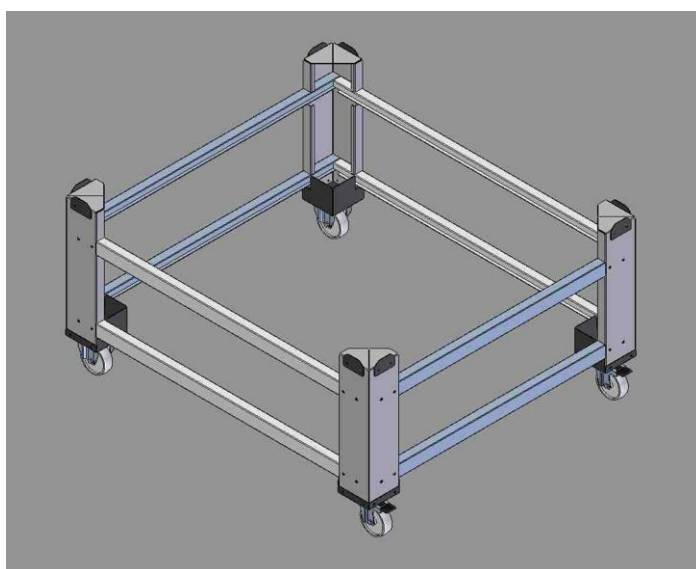
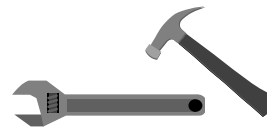


Fig. 4

CAP.2 - GENERAL INSTRUCTIONS *(for the installer)*



2.1 Assembly and installation place

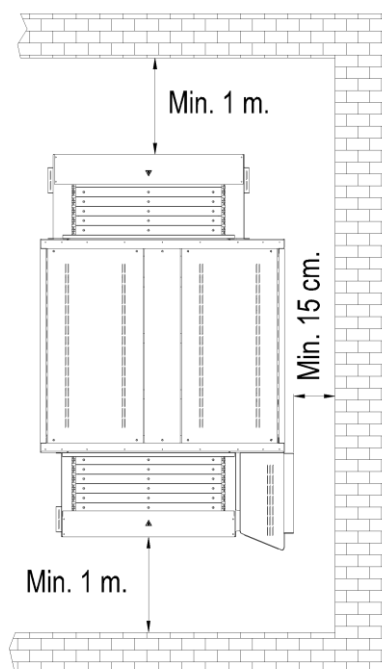
On receipt of the oven and before proceeding with installation check that the goods supplied correspond with the order specifications and that no damage has been caused during transit; in the event of damage or missing parts, inform immediately and in full detail the forwarding agent (see page 4).

The installer must make sure that commissioning is carried out in accordance with the rules in force in the country where the oven is used. He must be in possession of the necessary professional qualifications and must follow the safety rules scrupulously. All extraordinary maintenance (any conversion to other types of gas or parts replacement) must be carried out by qualified persons authorised by the manufacturer.

The oven must be installed in a well ventilated room with permanent ventilation openings which will guarantee sufficient flow of combustion air and a healthy workplace in general; the ovens are classified as type B₂₁ and the combusted fumes must therefore be discharged outside the place where the oven is operated by means of a suitable motorized extractor hood; the extractor hood must have a system interlocked to the gas supply circuit and precisely the gas flow must be cut off if the discharge of the fumes extracted by the motor of the hood is lower than certain parameters; the re-enabling can only be manual. The oven should be positioned perfectly horizontally on the stand supplied as an optional or on a sufficient solid and horizontal structure, placed on four base feet, at a distance of no less than 150 mm from the rear wall and 1000 mm from the loading and unloading sides; the oven must not be located near flammable walls and is not suitable for installation in battery formation. For installation and the minimum ventilation diameters in any countries, refer to the national laws and directions in force. Be particularly careful to make sure that the volume of air needed for combustion is in no way obstructed by objects placed under or around the appliance, in particular the side holes and slits.

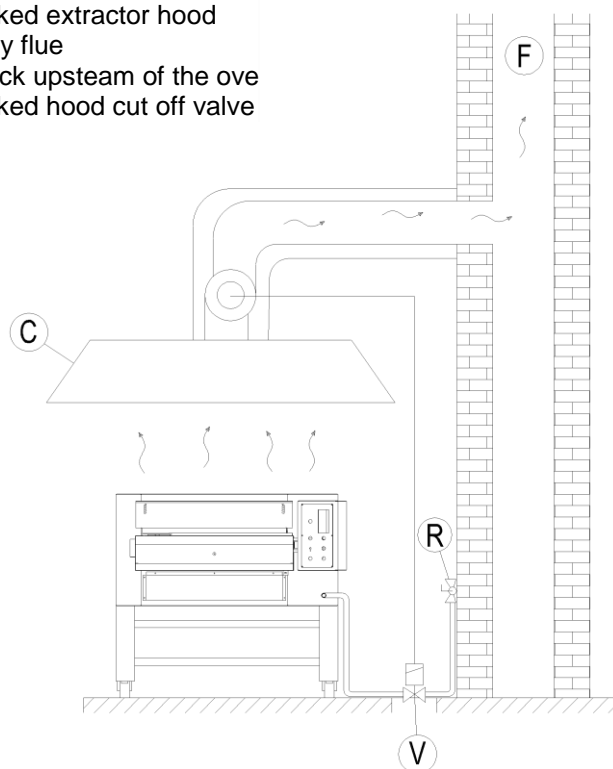
Installation

Fig. 5



Key:

- C = Interlocked extractor hood
- F = Chimney flue
- F = Stop cock upstream of the oven
- \ = Interlocked hood cut off valve



2.2 Gas connection

Before installation, make sure that the oven is set up to take the gas available. If it is not, see the paragraph "Conversion to other types of gas" or contact the manufacturer's service assistance dept. The connection to the gas supply must be performed conforming to the specific installation rules by means of a rigid or flexible pipe made only of metal, with diameters in proportion to the appliance power rating and to the length of travel. Make sure that the pipe does not pass near the hot areas and that it is not twisted or stretched. Between the gas supply and the oven, fit a type approved shutoff cock in a position that will allow easy manoeuvrability for opening and closing. Once the appliance is installed, carry out a soundness test on the whole gas circuit, using a leak searching spray or other non-corrosive foaming substance (do not use naked flames for this operation). The joints of the copper pipes must be made using mechanical couplings without gaskets.

The oven is equipped with a type 3/4 " ISO 7-1 gas connector .

2.3 Electrical connection

Connection to the electrical power supply must be carried out according to the applicable rules. Before making the electrical connection make sure that the voltage and frequency shown on the technical data plate are the same as those of the power supply. The power lead must be flexible, with characteristics of no less than the type with H07RN-F polychloroprene rubber insulation. The lead should be connected to the terminal block according to the wiring diagram enclosed with the appliance, and then secured with a cable clamp.

The wiring pattern is as follows:

- Yellow/green wire \Rightarrow earth \perp
- Blue wire \Rightarrow neutral N
- Brown wire \Rightarrow live L

If the appliance is to be permanently connected to the mains power supply, an omnipolar safety switch of suitable capacity with a contact separation of at least 3 mm must be fitted upstream of it.

Make sure that the power lead does not come into contact with hot or sharp parts.

If the plug continues to spark during ignition, and the burner becomes blocked, swap the live wire with the neutral.

It is essential for the appliance to be properly earthed and included in an equipotential system; this connection is carried out with the stop screw marked by the

\perp symbol to be found behind the appliance. The equipotential wire must have a diameter of at least 10 mm².

CAP.3 - COMMISSIONING (for the installer)

3.1 Checking the nominal thermal capacity

The nominal thermal capacity must be checked by the authorised engineer or by the competent Agency, according to the information contained in this user manual. This check must be made for new installations or for conversions to other types of gas and after all extraordinary maintenance.

There is no way of setting the nominal thermal capacity other than measuring the correct supply pressure and checking that the injectors used are the correct ones. The sealed (for example with paint) components must never be disturbed. Checking the nominal thermal capacity is carried out using a counter and a chronometer. The exact volume of gas that must pass for each unit of time can be seen in the technical data table. This value must be kept within the prescribed range, with a tolerance of $\pm 5\%$.

If any deviation is found a check should be made that the correct size injectors have been fitted.

3.2 Checking the gas supply pressure

Before putting the oven into service, a check must be made to see whether it is suitable for the family and type of gas available, as stated on the technical data plate. If it is not, see the paragraph "Conversion to other types of gas".

The gas supply pressure is measured, with the appliance in operation, using a pressure gauge for liquids (for example a "U" type pressure gauge with a minimum 0.1 mbar resolution). To carry out this check, access the gas valve by removing the right side panel from the oven; then, using flexible pipes, connect the pressure gauge "E" to the pressure inlet "V" and pressure outlet "X" of the gas valve after removing the relative fixing screws "U" and "Z" (see Fig 6).

Measure the incoming pressure: if this is not within the range of values shown in table 2, the oven must under no circumstances be put into operation. The gas supply agency must be informed.

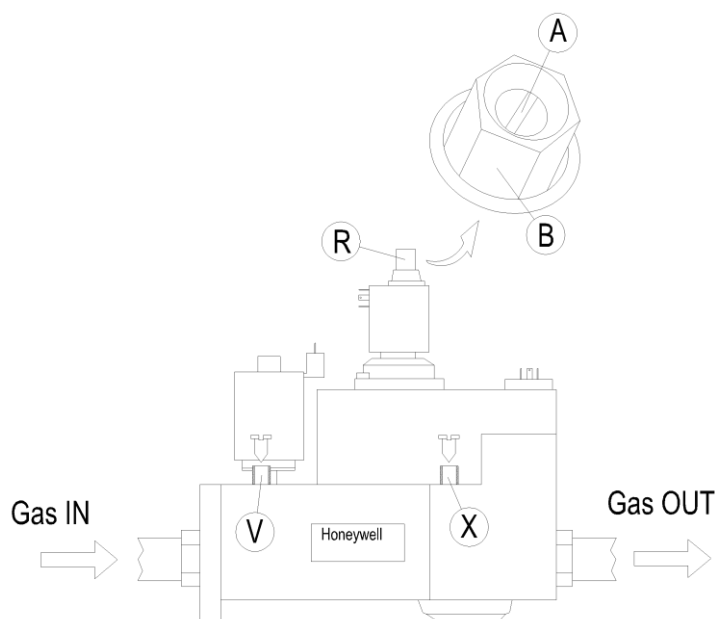
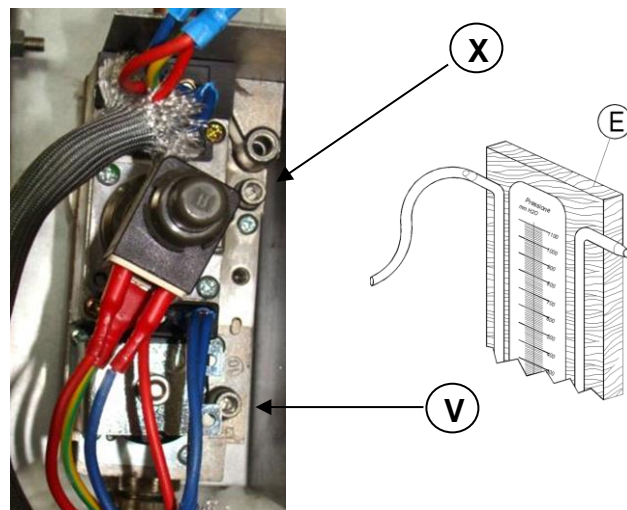


Fig. 6



Key:

- A = Minimum pressure regulator screw
- B = Maximum pressure regulator nut
- E = U-Type pressure gauge
- R = Pressure regulator
- V = Incoming gas pressure plug
- X = Outcoming gas pressure plug

Tab. 2

Type of gas	Incoming gas pressure (mbar)		
	Normal	Minimum	Maximum
Natural gas G20	20	17	25
Liquid gas G30/G31	30/37	20/25	35/45

The outgoing pressure must be checked and, if necessary, corrected using the screw “ A ” and the nut “ B ” located on the pressure regulator “ R ”. After removing the plastic cap, adjust the outgoing pressure by means of the nut “ B ” (with the burner is working at its maximum capacity), then adjust the outgoing pressure by means of the screw “ A ” (with the burner working at reduced capacity); follow the indications in table 3.

Tab. 3

Gas type	Outgoing pressure with burner at maximum (mbar)	Procedure to be followed	Outgoing pressure with the burner at minimum (mbar)	Procedure to be followed
Natural gas G20	9	Turn nut “B” until the valve on the left is reached.	7	Turn nut “A” until the valve on the left is reached.
Liquid gas G30/G31	27	Exclude the pressure regulator by tightening nut “B” fully check the pressure valve on the left is reached.	21	Turn nut “A” until the valve on the left is reached.

After measuring the gas supply pressure, turn oven off, close the gas cock located upstream and remove the flexible pipes of the pressure gauge from the pressure inlet and outlet. Refit the sealing screws on the pressure inlet and outlet, tighten the regulator cover screw and seal it with paint to discourage any tampering.

3.3 Conversion to other type of gas

Gas spare parts are supplied with the oven; if any spare parts are needed, contact the manufacturer's service assistance dept. Conversion must be carried out by a qualified engineer. Referring to table 4, change the two main injectors and regulate the primary air through the two relative brass bushings.

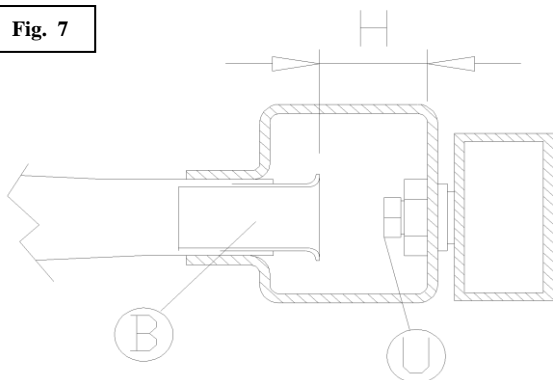
Then regulate the outgoing pressure from the valve by following the procedure described in the preceding paragraph.

WARNING - Carry out this operation only after closing the gas shutoff cock located upstream of the oven and disconnecting the oven electrical power supply. Check that the diameter of the injector is stamped on it in 1/100 of a mm.

Perform the following operations in sequence:

- To gain access to the devices to adjust and replace, remove the oven lateral panel (in the control panel side) after removing the four fixing screws and disconnecting the electrical connexions to the cooling fan.
- With a suitable tool, undo and substitute the two injectors "U" with the correct ones for the gas supply.
- Undo the fixing screw and regulate the air bushings "B" to the correct distance H, according to the settings in tables 4 and in Fig. 7 . Then tighten the fixing screw and seal it with paint.
- Refit the oven lateral panel by proceeding in reverse order.

Fig. 7



Tab. 4

Gas	Injector diameter	Distance H
G30/G31	2 x 255 1/100 mm	18 mm
G20	2 x 450 1/100 mm	13 mm

Key:

B = Primary air bushing

U = Injector

WARNING - After each conversion to new gas, always:

- Add an indelible sticker to the plate showing the data of the new installation.
- Proceed with the appropriate gas circuit soundness test.
- Carry out an operating test checking:
 - ✓ that the burner branches ignite properly, the stability and appearance of the flames.
 - ✓ to make sure there is no flame separation with the burner cold or light-back when the burner is hot denoting that the primary air is properly adjusted.

3.4 Instructions for changing certain components

WARNING - Carry out this operation only after closing the gas shutoff cock located upstream of the appliance and disconnecting the oven electrical power supply. Any component changes must be carried out by an authorised installer.

A) Gas valve

- Remove the lateral panel (control board side) by undoing the four fixing screws.
- Disconnect the electrical connections to the gas electro-valve.
- Undo the inlet and outlet connections on the gas electro-valve and remove the inlet and outlet copper gas pipes.
- Undo the four screws that fix the gas electro-valve to the base and fit a new valve.
- Re-assemble the various parts in reverse order.

B) Electrical components on control panel

- Remove the outer panel of the control panel by undoing the four fixing screws.
- Each component can be replaced by detaching their respective electric wirings and then re-assembling the various part in reverse order.

Caution! When changing the safety thermostat and the pyrometer, pay attention to the capillaries and bulbs which have to be positioned in their appropriate seats.

C) Burner

- Remove the two lateral oven panel by undoing the fixing screws.
- Detach the gas pipe from the gas ramp which feeds the burner.
- Detach the electrical connections to the electrodes, on both sides of the burner.
- Remove the burner with caution and fit a new one.
- Re-assemble the various parts in reverse order.

D) Ignition and sensing plugs

- Remove the two lateral oven panel by undoing the fixing screws.
- Detach the electrical connections to the plugs.
- Each plug couple is formed by one ignition plug and one sensing plug: do not swap the relative electrical connections.
- Change the plug and reattach the connections.
- Re-assemble the various parts in reverse order.

E) Refractory tiles

In case of breaking or damage, the refractory tiles can be extracted and replaced by removing the four rivets (two on each side) and then fixed with new rivets.

Notice: Pay attention when substituting the gas pipings or pipe fittings: conical head mechanical couplings or appropriate sealing gas guarantee the tightness of the circuit ; please refer to the gas circuit diagram.

3.5 Fault finding

A) The oven will not switch on. Possible causes:

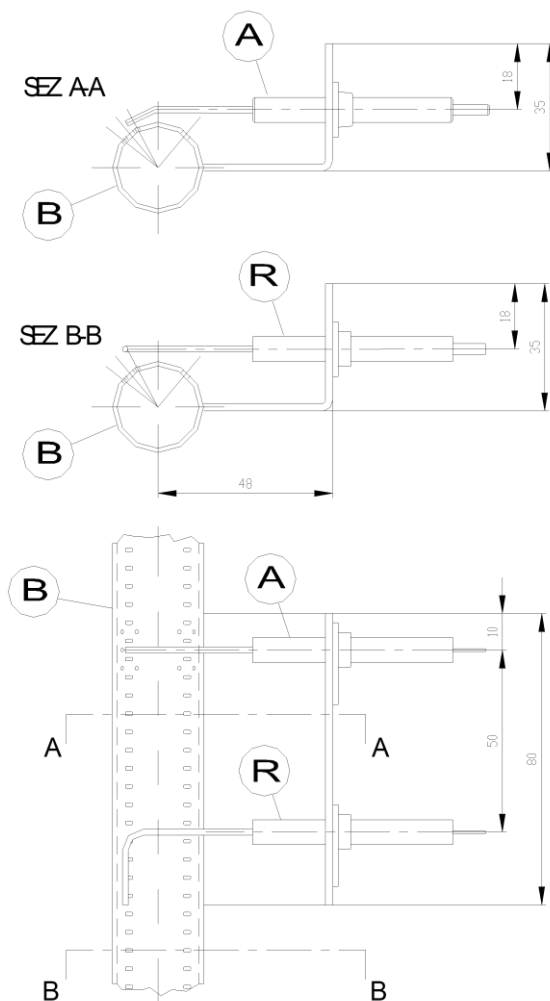
- No electrical power.
- Electrical wires disconnected.

B) The burner does not ignite, continuously defaults or goes out. Possible causes:

- Ignition plug is not properly secured, is badly connected, is wrongly positionned or the wire is damaged.
- The polarity of the electrical wire is wrong. Invert the live and neutral by rotating the pin on the plug.
- Faulty gas valve.
- Insufficient pressure in gas pipes or air the circuit.
- Gas pressure regulator on the valve not properly arranged.
- Obstructed injector.
- Flame outlets on burner are obstructed
- Faulty work thermostat.
- Electrical wires disconnected.

C) Temperature cannot be regulated. Possible causes:

- Faulty work thermostat or thermocouple not properly fitted.
- Faulty electronic temperature control board.



Electrodes position

Fig. 8

Key:

- A = Ignition electrod
- B = Burner
- R = Sensing electrod

CAP.4 – OPERATING INSTRUCTIONS (for the user)



WARNING:

- This gas oven is intended for professional use and must only be operated by staff trained in its use.
- The user must only responsibly use the appliance and do the ordinary cleaning.
- All installation, commissioning and servicing must only be carried out by installers authorised by the manufacturer, in accordance with the national rules that apply.
- It is advisable to have the oven periodically checked by a specialised technician to maintain perfect working order; for this reason, the provision of a servicing contract is strongly recommended.

4.1 Start Up

- Before using on the oven for the first time, clean it thoroughly to remove the film of grease.
- Check that there are no obstructions to the airflow to the burner and in general to the room ventilation. Do not block or leave anything on the combusted gas outlet or on the oven chimney. Check the proper working efficiency of the extractor hood and chimney flue.
- Supervise the oven while it is working. Pay attention to the hot parts and moving parts.
- Do not block the loading and unloading sides of the oven; a minimum height of the refractory tiles is fixed in order to ensure a proper combusted fumes discharge when the burner is working.
- It is advisable to activate the belt before starting up the burner, in order to avoid the overheating of the refractory tiles and the conveyor chain.
- Close the gas shutoff cock located upstream and disconnect the electrical power supply after use.

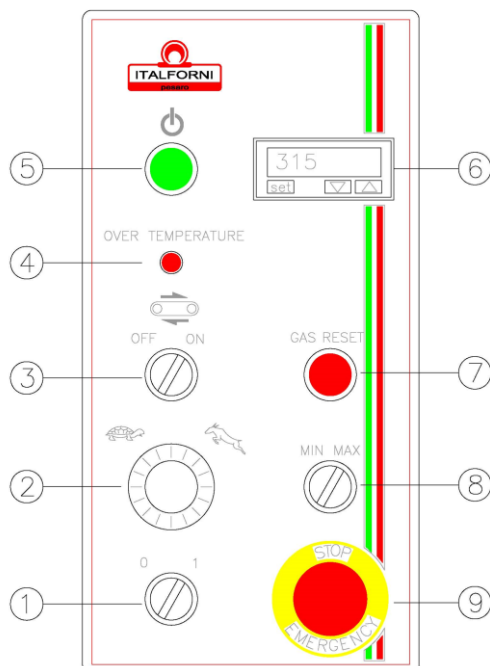


Fig. 9

Key:

- 1 = Main switch
- 2 = Belt speed variator
- 3 = Belt start switch
- 4 = Safety thermostat warning light
- 5 = Burner/Belt start button
- 6 = Temperature setting digital display
- 7 = Burner reset button
- 8 = Burner power selection switch
- 9 = Emergency stop button

Turning on (Fig. 9)

- Open the gas shutoff cock upstream of the oven and plug in the electrical power.
- Turn the main switch “ 1 ” to “ON” position.
- Turn the belt start switch “ 3 ” to “ON” position.
- Turn the belt speed variator “ 2 ” to the required position.
- Set the required baking temperature on the digital display “ 6 ” by pressing the “SET” key and then the increasing or decreasing keys (+ or -). The temperature can be set up to 450°C.
- Turn the burner power selection switch “ 8 ” in the required position. The “MAX” position allows you to reach the baking temperature faster, the “MIN” position allows you to maintain the temperature while saving energy.
- Press the start green button “ 5 ” which activates the belt and turns the burner on.
- Burner ignition can be checked through the inspection glass and the aeration slots placed in the lateral panel of the oven(opposite side of control panel); it's also possible to see the flames through the working plan sides, on the sides of the refractory tiles.
- In case of lack of gas flow, the burner defaults and the red warning light on “ 7 ” button comes on; press the reset button to restart; if the blockage persists, it is necessary to invert the polarity of the electrical wiring; in case of continuous breakdown, contact the manufacturer's service center.
- If the warning light “ 4 ” comes on, the baking chamber is in over-temperature and the working thermostat connected to the digital board is not measuring the temperature properly; the safety thermostat has cut in.

Turning off

- Close the gas shutoff cock upstream of the oven.
- Set on the digital display a baking temperature lower than the room temperature.
- Let the belt turn for few minutes for allowing it to cool down and avoid the refractory overheating.
- At the end of the work, turn the main switch “ 1 ” in “OFF” position and disconnect the electrical power.

Safety Device

The oven is equipped with an automatic safety thermostat which cuts in when the baking chamber is in over-temperature; the “ OVER TEMPERATURE” warning light on the control panel comes on; contact the service center for solving the anomaly.

A red emergency button “ 9 ” is located on the control panel: it can be easily reached in case of emergency; by pressing it, the oven will stop entirely.

The oven is protected by two fuses (one of 6A and one of 2A) in case of overcurrent or short-circuit.

Flame safety

Two flame sensing electrodes connected to two independent control units are placed on the burner branches; in case of lack of flame on one of the two electrodes, the supply of gas is cut off.

Residual hazards

Some parts of the oven, the two ash-drawers and the sides of the working plan reach high temperatures; some of these parts are marked by the symbol shown at page 5. Avoid all direct contact with such surfaces and if they have to be cleaned, wait until they have sufficiently cooled down.

The oven is formed by some moving parts such as the conveyor belt and its gears: do not bring your hands or working tools near to the refractories in the area where they reverse the movement (especially in the unloading side).

CAP.5 – CLEANING AND ROUTINE MAINTENANCE

The oven must be cleaned regularly to ensure the best working efficiency and maximum performance. In the event of malfunction, do not attempt to remedy the problem but contact the dealer or his technical assistance service which will deal with the problem. Never attempt to dismantle the appliance; all repairs must be carried out by qualified engineers.

Pay attention to the following procedures :

- Before cleaning the oven, make sure that the gas and electrical power supplies are turned off. Allow the appliance to cool down.
- Always clean the oven when it is cool and at room temperature.
- Clean the steel parts every day with warm soapy water or suitable detergents, rinsing thoroughly and drying well. Do not use detergents that contain chlorine (bleach, muriatic acid, etc.) and never clean the steel parts with wire wool, brushes or scrapers that could leave behind ferrous deposits subject to oxidation and therefore rust. Clean the refractory tiles with appropriate non-metallic brushes.
- Do not allow food substances (especially acidic ones such as salt, vinegar, lemon ...) to remain on the stainless steel parts as these could deteriorate as a result.
- Do not wash the appliance using direct jets of water, as any water infiltrations could compromise the safety of the oven.
- Do not use corrosive substances (for example muriatic acid) to clean the bed of the oven.
- Every 40 hours of operation is necessary to grease the conveyor chain with the appropriate lubricant supplied.

The oven should be checked periodically. All servicing and repairs must be carried out by authorised and qualified engineers. In particular, it is necessary to grease the belt bearing every 200 working hours; the bearings can be reached by removing the covers with slots in the sides of the working plan. This operation must always be carried on after having disconnected the power supply and with the oven at room temperature.

Compulsory Maintenance Schedule

DAILY MAINTENANCE

Stone Cleaning

- Clean the conveyor/stones using a stiff-bristle natural brush to remove loose debris and food particles, with a movement in the same direction of the stones from left to right. This operation must be done at the end of the work day with the oven still on as it is much easier to clean the stones when they are still hot. Repeat throughout the day.

Oven cabinet cleaning

- Turn off the oven. Allow the oven to completely cool down. Turn off the electrical supply to the oven or unplug the power cord from the receptacle. Clean the exterior of the oven using a mild detergent solution and a soft cloth. Always clean in the direction of the steel grain to avoid visible scratches.

Crumb drawers cleaning

- Remove, empty and clean the two crumb drawers. This operations must be carried out while the oven is cold. Once finished cleaning the drawers, put them back to their original place.

PERIODIC MAINTENANCE

Fan filter cleaning

- At least once a month (more if necessary), remove and clean the fan cover filters using an air compressor. You can also use a soft brush, or a vacuum cleaner or wash the filters under water. Dry completely before reinstallation.

Chain lubrication

- Every 40 hours of operation of the oven, grease the conveyor belt chain. This operation must be carried out when the oven is switched on (but still cold), on the loading side of the belt, using a specific ITALFORNI lubricant.

WARNING

The oven can be used even if some stones are cracked, providing that no stone parts or rivets are missing. If stone parts or rivets are missing, replace immediately before using the oven. Using the oven with missing stone parts or rivets prevents proper functionality.

FAILURE TO COMPLY WITH ALL OF THE PROCEDURES DETAILED ABOVE WILL VOID ANY AND ALL WARRANTY CLAIMS.

STICKER APPLIED ON THE OVEN SIDE

On the oven side it is applied a sticker with the indication of the Compulsory Maintenance Schedule to be performed by the shop attendants.

Stone Conveyor Oven – Compulsory Ordinary Maintenance Schedule

CAUTION

- Never use a water hose, pressure washer, or steam cleaner on ovens.
- Never use metal scrapers, razor blades, steel wool, scouring pads, or any other ferrous abrasives when cleaning ovens.

Daily Maintenance

Stone Cleaning

- Clean the conveyor/stones using a stiff-bristle natural brush to remove loose debris and food particles, with a movement in the same direction of the stones from left to right. This operation must be repeated throughout the day and at the end of the working day with the oven still on as it is much easier to clean the stones when they are still hot.

Oven cabinet cleaning

- Turn off the oven. Allow the oven to completely cool down. Turn off the electrical supply to the oven or unplug the power cord from the receptacle. Clean the exterior of the oven using a mild detergent solution and a soft cloth. Always clean in the direction of the steel grain to avoid visible scratches.

Crumbs collection drawer cleaning

- Remove, empty and clean the two crumb drawers. This operation must be carried out while the oven is cool.

Periodic Maintenance

Fan filter cleaning

- At least once a month (more if necessary), remove and clean the fan cover filters using an air compressor. You can also use a soft brush, or a vacuum cleaner or wash the filters under running water. Dry completely before reinstallation.

Chain lubrication

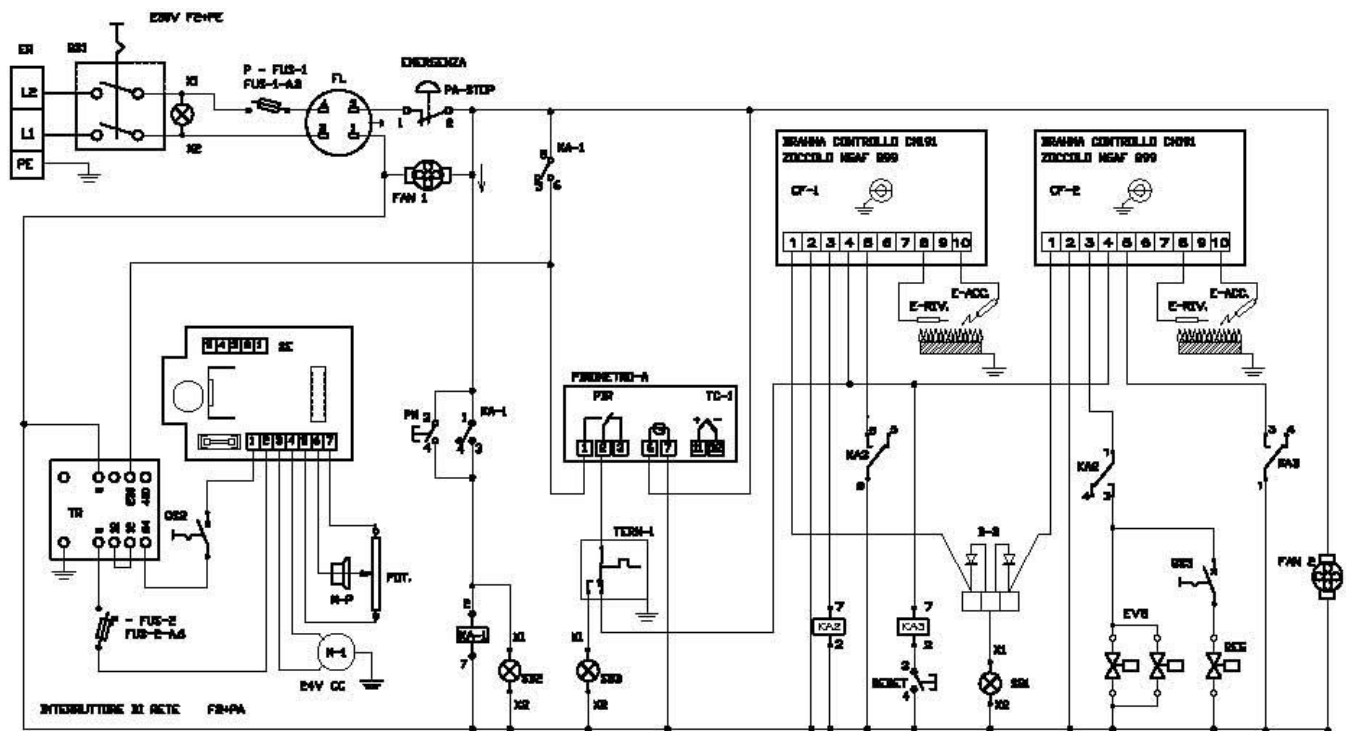
- Every 40 hours of operation of the oven, lubricate the conveyor belt chain using approved ITALFORNI lubricant. This operation must be carried out when the oven has been just switched on and it is still cold, on the loading side of the belt.

WARNING

The oven can be used even if some stones are cracked, providing that no stone parts or rivets are missing. If stone parts or rivets are missing, replace immediately before using the oven. Using the oven with missing stone parts or rivets prevents proper functionality.

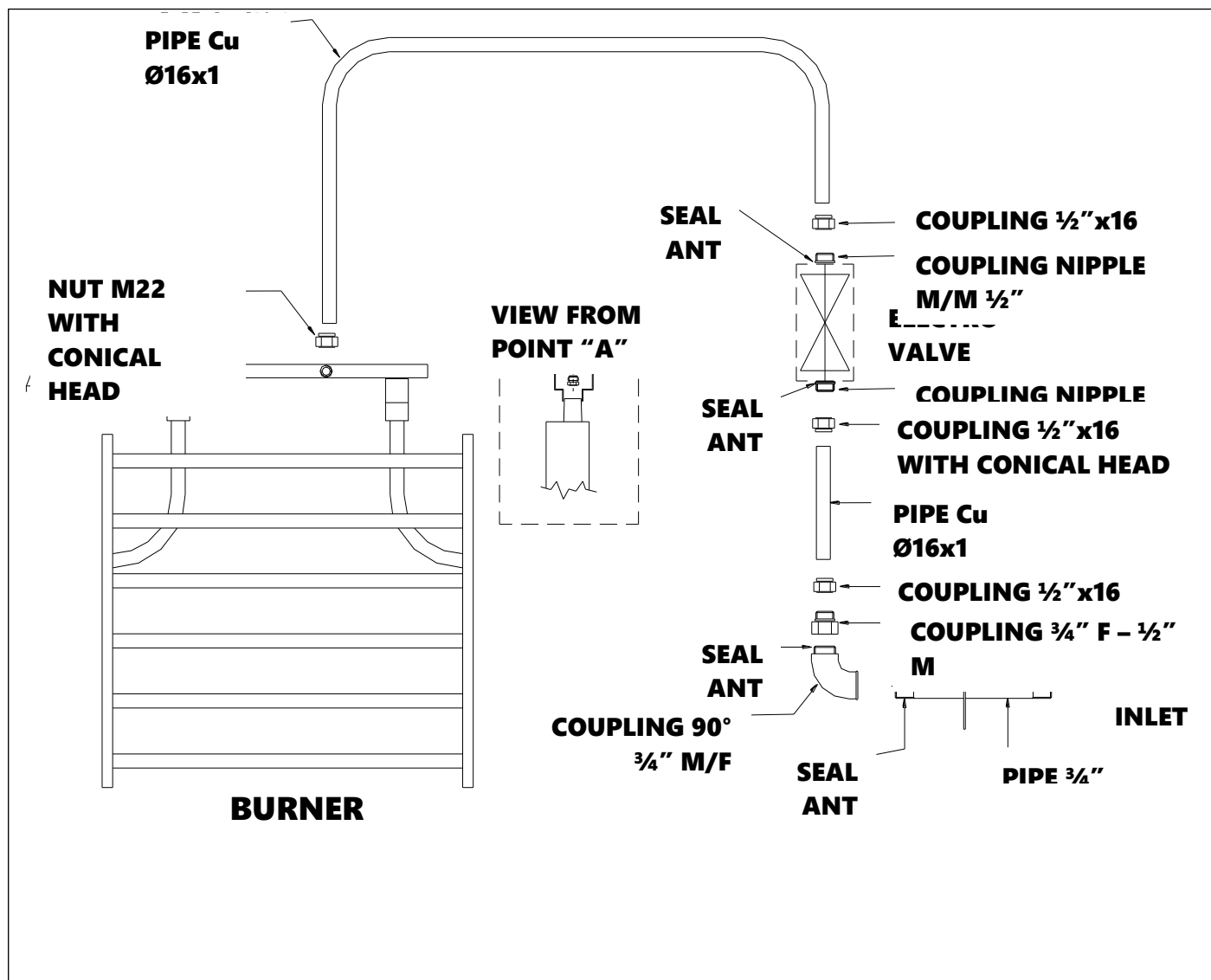
FAILURE TO COMPLY WITH ALL OF THE PROCEDURES DETAILED ABOVE WILL VOID ANY AND ALL WARRANTY CLAIMS.

ITALFORNI PESARO



ER	MAIN SUPPLY INPUT TERMINAL BLOCK
QS-1	2 POS. LEVER SWITCH - SUPPLY INPUT
QS-2	2 POS. LEVER SWITCH - ENGINE CONTROL
QS-3	2 POS. LEVER SWITCH - MINIMUM CONTROL
POT	POTENTIOMETER LIN.2W 10G 1KOHM
M-P	POTENTIOMETER KNOB
M-1	GEAR 24V CC 45WR RPM 14
SE	REGULATION ENGINE ELECTRONIC CARD
KA-1	RELAY 220V
KA-2	BURNER IGNITION RELAY
KA-3	BURNER RESET RELAY
PM-SB2	MOVEMENT SWITCH
PA-S	EMERGENCY SWITCH
PIR.	DIGITAL TEMPERATURE REGULATOR ON-OFF
TR	TRANSFORMER 230V/ S.12+12 24V 100VA
TC-1	THERMOCOUPLE
FUS-1	SERVICE FUSE
FUS-2	ELECTRONIC CARD FUSE
TERM-1	UNIPOLAR SAFETY THERMOSTAT
RESET-SB1	BURNER RESET BUTTON
EVG	GAS ELECTRO-VALVE
REG	MIN/MAX GAS ELECTRO-VALVE REGULATOR
FL	FILTER
CF-1	FLAME CONTROL BURNER 1
CF-2	FLAME CONTROL BURNER 2
D-2	BURNER BLOCK WARNING LIGHT DIODE
E-RIV.	FLAME SENSING ELECTRODE
E-ACC.	BURNER IGNITION ELECTRODE

5.2 Gas circuit diagram



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