



THERMOROSI

USE AND MAINTENANCE GUIDE

CENTRAL HEATING COOKER

25 - 30 - F25 - F30 - 60 - 65 - 650 - 90 - 95 - 920

CONTENTS

DECLARATION OF CONFORMITY

1.	INTRODUCTION
1.1	General guidelines
1.2	Safety guidelines
1.3	Standards and recommendations
1.4	Transport and storage
2.	TECHNICAL CHARACTERISTICS
2.1	Vitrification
3.	GENERAL DESCRIPTION
3.1	Operating principle
3.2	Wood fuel
4.	INSTALLATION
4.1	Locating your Bosky central heating cooker
4.2	Installing the safety heat exchanger (only for 25 - 30 - F25 - F30)
4.3	Wiring diagram 25 - 30
4.4	Wiring diagram F25 - F30
4.5	Wiring diagram 60 - 65 - 650 - 90 - 95 - 920 without electric oven
4.6	Wiring diagram 60 - 65 - 650 - 90 - 95 - 920 with electric oven
4.7	Guidelines for the hydraulic connections of the central heating cooker to the boiler coils
4.8	Guidelines for the hydraulic connections of the central heating cooker to the boiler tubes with interspacing
4.9	Recommendations for the execution of the hydraulic and electric system
4.10	Installation of casing for Bosky 25-30-F25-F30
5.	OPERATION
5.1	Description of parts and main controls of the central heating cookers
5.2	Lighting and starting the central heating cookers
5.3	Operation of the central heating cookers
5.4	Grate positions in the central heating cookers
5.5	How to use the oven in central heating cookers F25-F30-60-90-920
5.6	The fold-away towel rack (only for 25 - 30 - F25 - F30)
6.	CLEANING AND MAINTENANCE
6.1	General cleaning
6.2	Ash
6.3	How to clean the radiant plate
6.4	How to replace the oven light bulb
6.5	Recommendations
7.	SMOKE EXHAUST PIPE
7.1	General
7.2	Essential requirements for the chimney cap
7.3	Ventilation of the rooms
7.4	Connection with the flue outlet
8.	TROUBLESHOOTING
8.1	Problems, causes and remedies for Bosky central heating cookers
9.	SPARE PARTS

"EC" DECLARATION OF CONFORMITY

In accordance with the following directives:

European Directive	73/23	/ EEC and its amending directive	93/68/EEC		
	89/336	/ EEC and its amending directives	93/68/EEC	92/31/EEC	93/97/EEC

Thermorossi S.p.A. of Via Grumolo 4 – ARSIERO (VI), on its own responsibility, declares that the central heating cookers of the **F25 , F30, 25 , 30, 60 , 65 , 650 , 90 , 95 , 920** series have been designed and built in compliance with the safety requirements of CE marking standards. This declaration refers to the complete range of products in the specified series.

ARSIERO, 1 March 2003

THERMOROSSI S.p.A.

1 INTRODUCTION

1.1 GENERAL GUIDELINES

This installation, use and maintenance guide is an integral and essential part of the product and must be kept by the user. Before commencing with the installation, use and maintenance of the product, carefully read all the instructions contained in this booklet. This appliance must only be used as intended by the manufacturer. Any other use is considered incorrect and therefore hazardous; consequently, the user shall be totally liable for the product if used improperly.

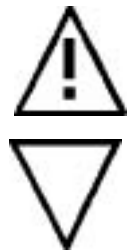
Installation, maintenance and repairs must be carried out by personnel with professional qualifications and in compliance with current regulatory standards and in accordance with the instructions of the manufacturer of the appliance. Use only original spare parts. Incorrect installation or poor maintenance could injure or damage people, animals or things; in this case the manufacturer shall be relieved of all responsibility. Before commencing any cleaning or maintenance operation ensure that the appliance has been disconnected from the mains power supply by means of the main system switch or some other disconnecting device installed upstream from the appliance. The product must be installed in locations suitable for fire-fighting and furnished with all the services (power and outlets) which the appliance requires for a correct and safe operation. If the appliance is sold or transferred to another user ensure that the guide is handed over with it.

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1.2 SAFETY GUIDELINES

PERSONAL INJURY

This safety symbol identifies important messages throughout the manual. When you come across this symbol, read the following message carefully. Users of the central heating cooker must adhere strictly to the instructions to avoid serious injury.



DAMAGE TO PROPERTY

This safety symbol identifies messages or instructions that are essential for the correct operation of the cooker and heating system. These guidelines must be observed scrupulously to avoid serious damage to both the cooker and the heating system.

INFORMATION

This safety symbol signals instructions that are important for the good operation of the cooker and/or heating system. The appliances will not function correctly if the instructions are not observed correctly.



1.3 STANDARDS AND RECOMMENDATIONS

•Normative references: **national and international standards used as reference guides for the design, industrialization and production of the products** indicated in this manual

- | | |
|---------------------------------|-----------------------------|
| - European Directive 73/23/EEC | - standard CEI 61/50 |
| - European Directive 93/68/EEC | - standard CEI EN 60204 |
| - European Directive 89/336/EEC | - standard CEI64-8 (IEC364) |

RECOMMENDATIONS:



Before using the appliance, carefully read every section of this instruction manual as knowledge of the information and the regulations contained in it are essential for a correct use of the appliance.

The entire operation concerning the connection of the electric panel must be carried out by expert personnel; no responsibility will be accepted for damages, even to third parties, if the instructions for installation, use and maintenance of the appliance are not followed scrupulously. Modifications made to the appliance by the user or on his behalf, must be considered to be under his complete responsibility.

The user is responsible for all the operations required for the installation and maintenance of the appliance before and during its use.

GENERAL WARNINGS

Caution: the appliance must be connected to a system provided with a PE conductor (in compliance with the specifications of 73/23/EEC, 93/98/EEC, concerning low voltage equipment). Before installing the appliance check the efficiency of the earth circuit of the power supply system.

Caution: the power supply line must have a section which is suitable for the power of the equipment. The cable section must in any case be no less than 1.5 mm². The central heating cooker requires a power supply of 220-240 V and 50 Hz. Voltage variations 10% above or below the nominal value can cause irregular operation or damage to the electrical device. Ensure that a suitable differential switch is installed upstream from the equipment.

1.4 TRANSPORT AND STORAGE

•Packaging

The central heating cookers models 25-30-F25-F30 are packaged in a wooden crate, whereas the other models are packaged in a cardboard box.

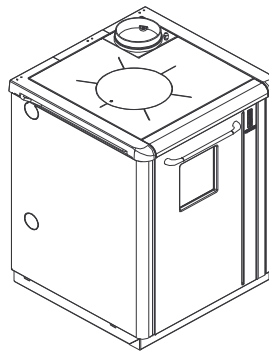
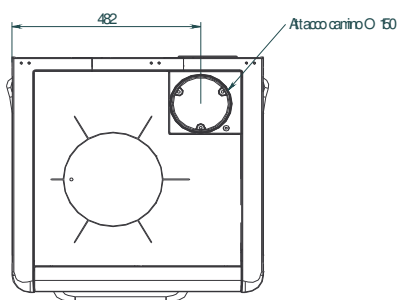
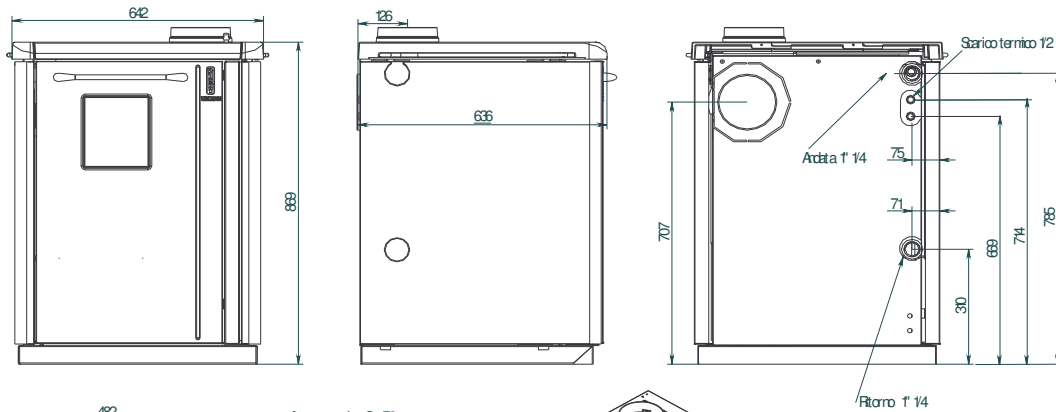
•Transport and handling

The central heating cooker must be kept in a vertical position and moved exclusively by means of trolleys; take particular care not to damage the glass components.

•Storage

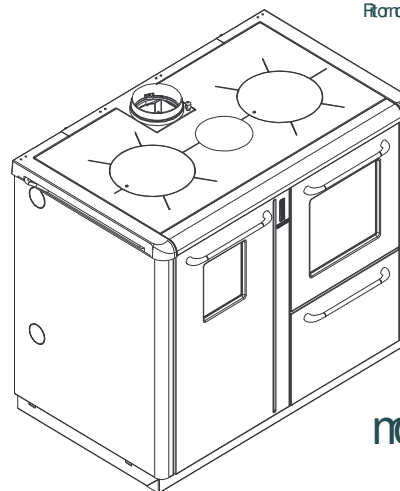
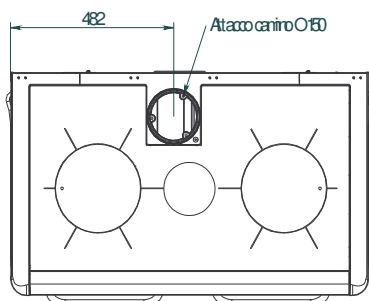
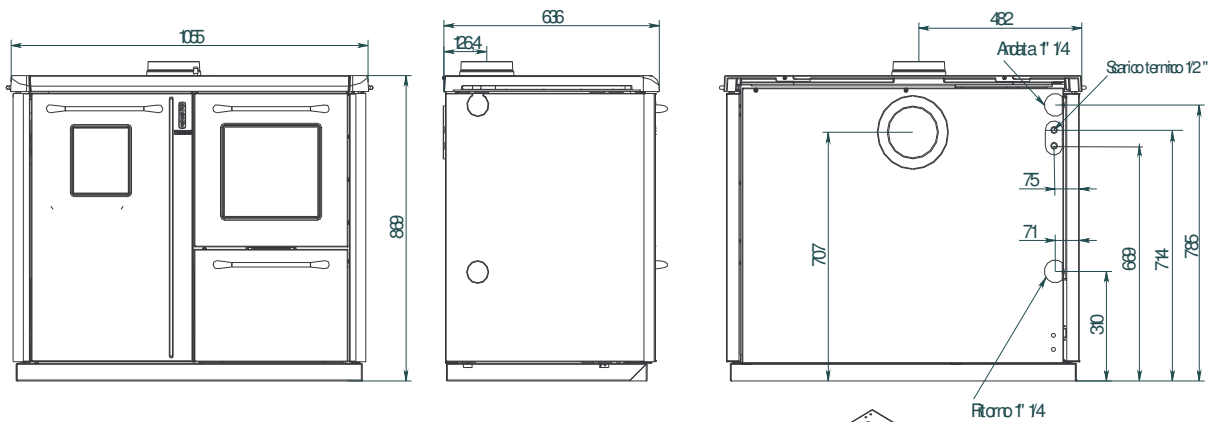
The central heating cooker must be stored in humid free environments sheltered from the weather; it is inadvisable to store the central heating cooker directly on the floor.

2 TECHNICAL CHARACTERISTICS



Legenda	Key
Atacco	Flue outlet
Camino	connection
Andata	Delivery
Ritorno	Return
Scarico	Thermal
termico	discharge

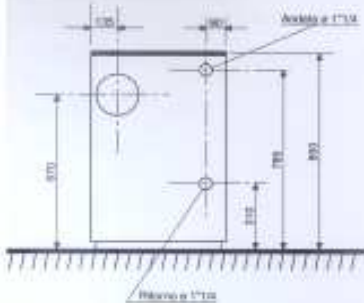
mod. **BSKY 25-30**



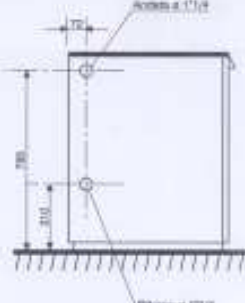
mod. **BSKY F25-F30**

CARATTERISTICHE TECNICHE

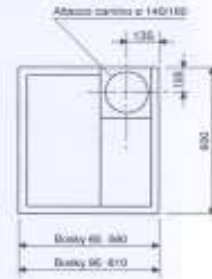
MODELLO 65-95



VISTA POSTERIORE

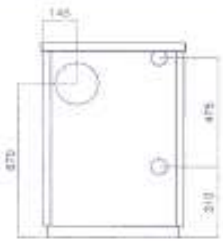


VISTA LATERALE



VISTA DALL'ALTO

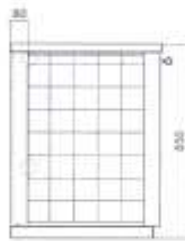
MODELLO B 650



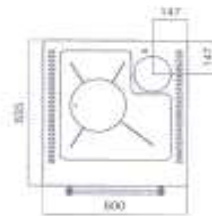
VISTA POSTERIORE

Legenda
 Attacco
 Camino
 Andata
 Ritorno
 Scarico
 termico
 Modello
 Vista posteriore
 Vista laterale
 Vista dall'alto
 Caratteristiche
 tecniche

Key
 Flue outlet
 connection
 Delivery
 Return
 Thermal
 discharge
 Model
 Rear view
 Side view
 View from
 above
 Technical
 Characteristics

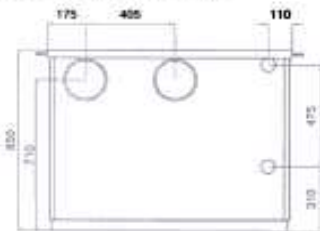


VISTA LATERALE



VISTA DALL'ALTO

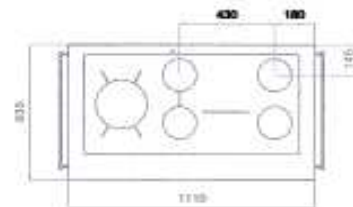
MODELLO B 920



VISTA POSTERIORE

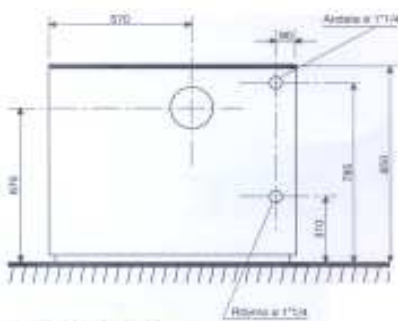


VISTA LATERALE

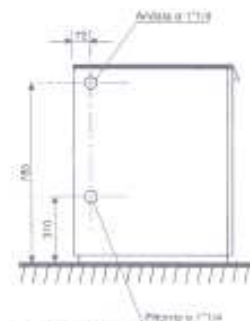


VISTA DALL'ALTO

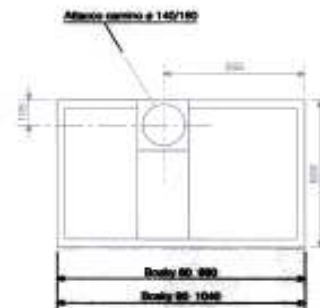
MODELLO 60-90



VISTA POSTERIORE



VISTA LATERALE



VISTA DALL'ALTO

TECHNICAL DATA	BOSKY 650	BOSKY 65	BOSKY 95
Firebox capacity kW	25,3	25,3	29,6
Useful capacity kW	20,9	20,9	24,4
Heat radiation from cook top kW	5	5	5
Width mm	600	560	610
Depth mm	635	600	600
Height mm	850	850	850
Feed opening dim. mm	H 162 X L 184	H 162 X L 184	H 162 X L 184
Firebox width max mm	250	250	300
Firebox depth max mm	442	442	442
Firebox height max mm	535	535	535
Oven width mm	-	-	-
Oven depth mm	-	-	-
Oven height mm	-	-	-
Cooktop dim. mm	520X480	520X480	520X530
Flue outlet D. mm	150	150	150
Rear smoke outlet height . mm	670	670	670
Heating connections D.	1" 1/4	1" 1/4	1" 1/4
Boiler body content lt	20	20	25
Vac. required by chimney mm water column.	-2	-2	-2
Total weigh Kg	197	182	190

TECHNICAL DATA	BOSKY 920	BOSKY 60	BOSKY 90
Firebox capacity kW	29,6	25,3	29,6
Useful capacity kW	24,4	20,9	24,4
Heat radiation from cook top kW	7	7	7
Width mm	1110	990	1040
Depth mm	635	600	600
Height mm	850	850	850
Feed opening dim. mm	H 162 x L 184	H 162 x L 184	H 162 x L 184
Firebox width max mm	300	250	300
Firebox depth max mm	442	442	442
Firebox height max mm	535	535	535
Oven width mm	360	360	360
Oven depth mm	530	530	530
Oven height mm	320	320	320
Cooktop dim. mm	970x470	900x500	950x500
Flue outlet D. mm	150	150	150
Rear smoke outlet height . mm	710	670	670
Heating connections D.	1" 1/4	1" 1/4	1" 1/4
Boiler body content lt	25	20	25
Vac. required by chimney mm water column.	-2	-2	-2
Total weigh Kg	295	260	275

TECHNICAL DATA	BOSKY F25	BOSKY F30	BOSKY 25	BOSKY 30
Firebox capacity kW	25,3	29,6	25,3	29,6
Useful capacity kW	20,9	24,4	20,9	24,4
Heat radiation from top kW	7	7	5	5
Width mm	1055	1055	642	642
Depth mm	636	636	636	636
Height mm	869	869	869	869
Feed opening dim. mm	210x235	210x235	210x235	210x235
Firebox width max mm	300	300	300	300
Firebox depth max mm	442	442	442	442
Firebox height max mm	540	540	540	540
Oven width mm	360	360	-	-
Oven depth mm	550	550	-	-
Oven height mm	320	320	-	-
Cooktop dim. mm	942x525	942x525	525x525	525x525
Flue outlet D mm	150	150	150	150
Rear smoke outlet height mm	707	707	707	707
Heating connections D	1" 1/4	1" 1/4	1" 1/4	1" 1/4
Boiler body content l	27	27	27	27
Dep. required by chimney mm water column	-2	-2	-2	-2
Total weight Kg	304	304	221	221

2.1 VITRIFICATION



The central heating cookers series 25 - 30 - F25 - F30 - 60 - 65 - 90 - 95 can be supplied boiler body with vitrification treatment. This treatment occurs at very high temperatures that permit the glass and steel to melt into an alloy that is completely impervious to corrosion attack caused by acid combustion smoke. Vitrification protects the boiler body from corrosion caused by acid smoke and condensation developed by the combustion of the wood fuel. The presence of surface defects such as indents, scratches, etc..., do not affect the life or resistance of the corrosion proofing treatment.

3 GENERAL DESCRIPTION

3.1 OPERATING PRINCIPLE

•Your central heating cooker has been constructed to satisfy in full all your heating and practical needs.

3.2 THE FUEL



Special attention must be given to the characteristics of the wood: like all biomass generators. The good performance of the generator depends on the type of wood used and on its degree of seasoning.

The recommended fuel is normal wood having a moisture content of 10-20% and a thermal value of 2500-3500 Kcal/Kg. Using the right fuel, and knowing which is in fact the most appropriate wood to use, is one of the most important aspects concerning the use of your central heating cooker in order to prevent damaging it and the flue outlet.

All types of solid fuel are suitable but we recommend using only hard and well-seasoned wood.

We advise against using wet wood or wood that has been seasoned for less than 18/20 months, as it can cause malfunctions and the formation of tarry deposits, as well as not giving the correct thermal performance. All woods have different heat outputs: for example, 1Kg of beech equals 1.15Kg of birch, 1.6 Kg of fir, 0.5 Kg of briquettes... The heat outputs can also vary considerably depending on the type of fuel used and on the size of the piece of wood. Using pieces of wood that are too thick cannot guarantee the declared power yield. Do not burn generic waste or plastic but above all never use petrol or other inflammable liquids. When using briquettes it is mandatory to halve the fuel consumption.

The use of fuel that does not conform to the specifications set out above immediately invalidates the warranty on the central heating cooker.



4 INSTALLATION

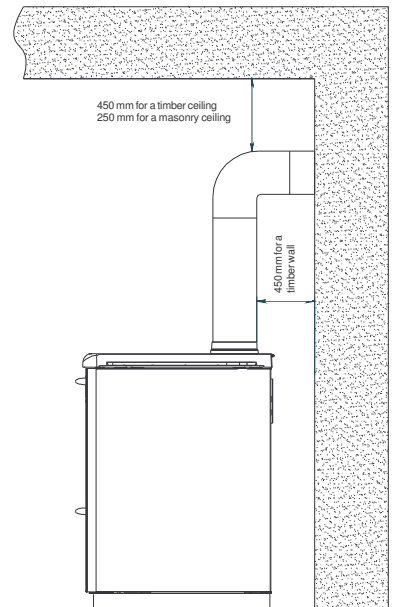
4.1 LOCATING THE CENTRAL HEATING COOKER



A vital aspect to consider is that the flooring of the room in which the central heating cooker is installed must be capable of bearing the weight of the central heating cooker.

CAUTION: The room in which the central heating cooker is installed must be adequately ventilated (1300 m³/h). Ensure that there is always a minimum 75mm safety gap between the central heating cooker and walls or combustable materials. If inflammable items are positioned near the central heating cooker (matchboarding, furniture, curtains, wall hangings, sofas, etc...), this gap must be increased considerably. Adhere to the recommended minimum distances illustrated in the drawing on the right. It is permissible to install the heater near materials that are sensitive to heat as long as suitable insulating protection is placed between the material and the heater (ref. UNI 10683).

For inset installations ensure that the top cast iron cornice is insulated from the surrounding furnishings by means of lateral air spaces or compressed vermiculite insulation board



4.1.1 INSET CENTRAL HEATING COOKER

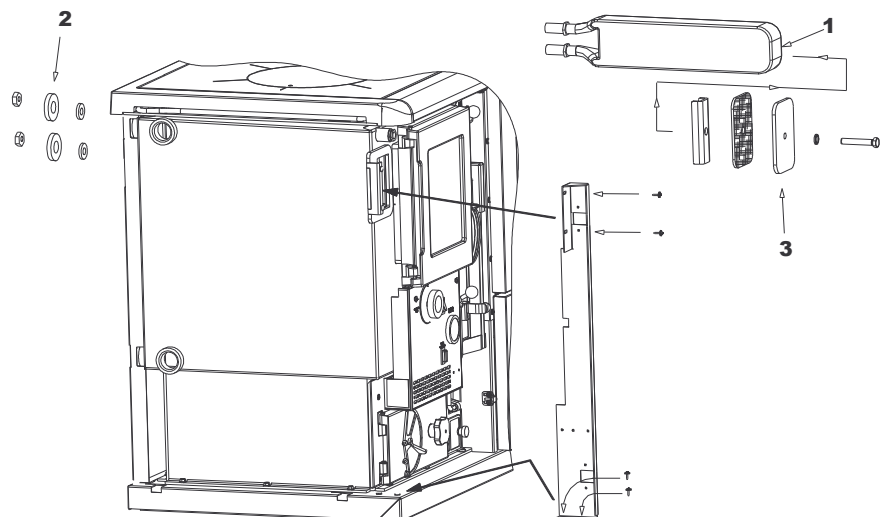


If you wish to integrate your central heating cooker with your kitchen furnishings or with a particular furnishing arrangement remove the fold-away towel rack by undoing the 2 screws as illustrated in the figure below and then mount the enamelled casing (only for models 25 - 30 - F25 - F30). It is also advisable to apply 75mm spacers to the sides of the central heating cooker to prevent the heat from the top cast iron cornice from damaging the adjacent furniture.



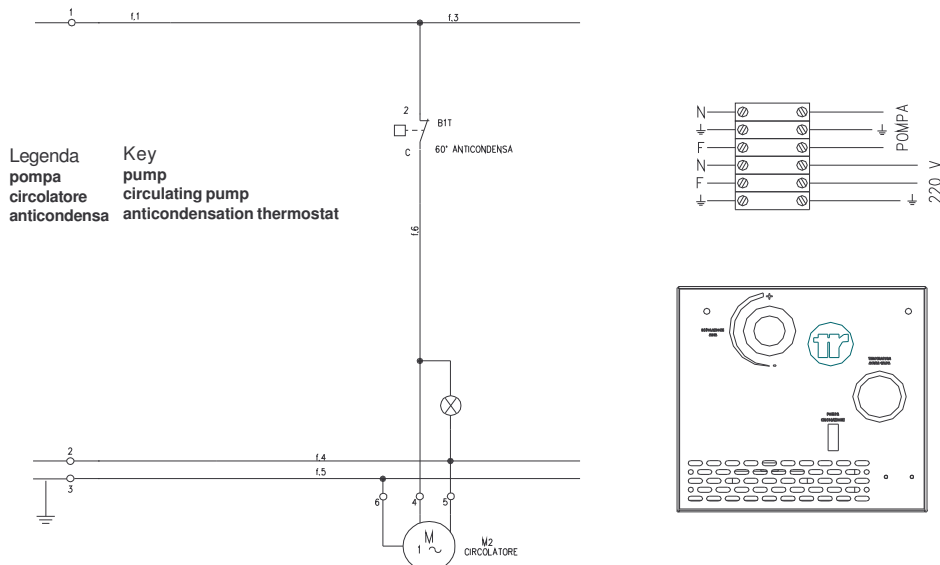
4.2 MOUNTING THE SAFETY HEAT EXCHANGER (OPTIONAL) (ONLY FOR 25 - 30 - F25 - F30)

To install the safety heat exchanger remove the vertical door, the left side together with its insulation and the vertical upright that holds the door together with its screws as indicated. Slide in the heat exchanger (1) and secure it to the boiler using the hardware (2) provided. Close the hole with the plug (3). By installing a thermal relief valve the excess heat is absorbed as soon as the central heating cooker rises to excessive temperature values due to external causes. This function is called fast disconnection phase.



4.3 WIRING DIAGRAM 25 - 30

The electrical connections must be made before mounting the left side panel as the terminal block is located behind the left side panel (see the figure below on the right).



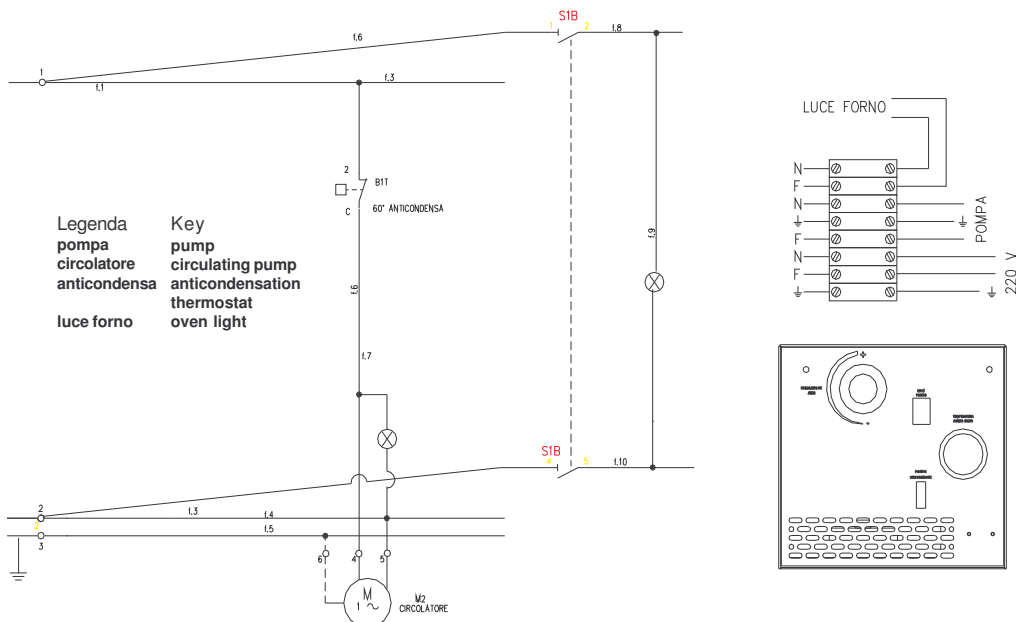
Legenda Key
 pompa pump
 circolatore circulating pump
 anticondensa anticondensation thermostat



CAUTION: IT IS MANDATORY TO EARTH THE CENTRAL HEATING COOKER AS ILLUSTRATED IN THE ABOVE DIAGRAM. IF THIS INSTRUCTION IS NOT OBSERVED SERIOUS DAMAGE, WHICH IS NOT COVERED BY WARRANTY, WILL RESULT TO THE BODY OF THE CENTRAL HEATING COOKER. HAVE AN ELECTRICIAN CHECK THE EARTHING. THERE MUST BE NO ELECTRIC POTENTIAL (VOLTS) BETWEEN THE EARTH OF THE CENTRAL HEATING COOKER EARTH AND THE ACTUAL EARTH OF THE PLANT.

4.4 WIRING DIAGRAM F25 - F30

The electrical connections must be made before mounting the left side panel as the terminal block is located behind the left side panel (see the figure below on the right).



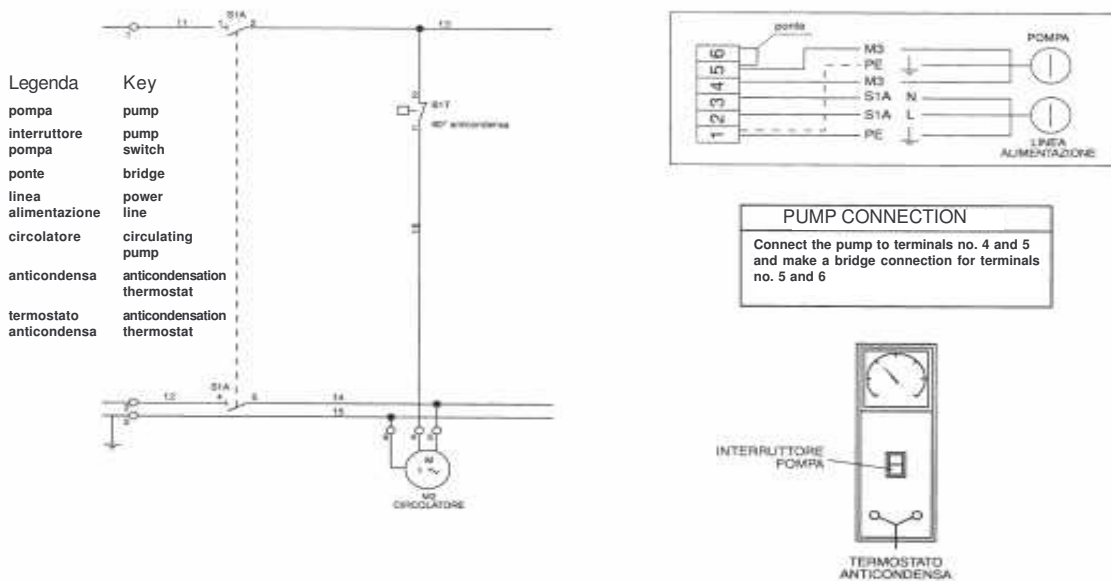
Legenda Key
 pompa pump
 circolatore circulating pump
 anticondensa anticondensation thermostat
 luce forno oven light



CAUTION: IT IS MANDATORY TO EARTH THE CENTRAL HEATING COOKER AS ILLUSTRATED IN THE ABOVE DIAGRAM. IF THIS INSTRUCTION IS NOT OBSERVED SERIOUS DAMAGE, WHICH IS NOT COVERED BY WARRANTY, WILL RESULT TO THE BODY OF THE CENTRAL HEATING COOKER. HAVE AN ELECTRICIAN CHECK THE EARTHING. THERE MUST BE NO ELECTRIC POTENTIAL (VOLTS) BETWEEN THE EARTH OF THE CENTRAL HEATING COOKER EARTH AND THE ACTUAL EARTH OF THE PLANT.

4.5 WIRING DIAGRAM 60 - 65 - 90 - 95 - 650 - 920 WITHOUT ELECTRIC OVEN

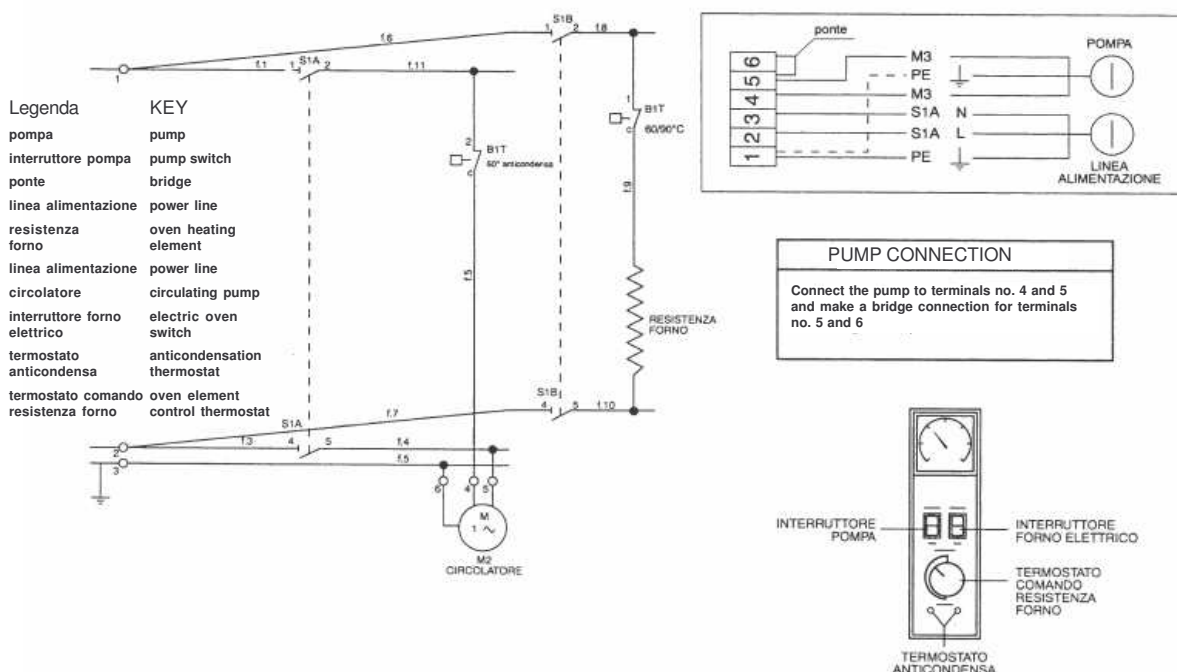
Connect the wiring to the terminal block located in the left side.



CAUTION: IT IS MANDATORY TO EARTH THE CENTRAL HEATING COOKER AS ILLUSTRATED IN THE ABOVE DIAGRAM. IF THIS INSTRUCTION IS NOT OBSERVED SERIOUS DAMAGE, WHICH IS NOT COVERED BY WARRANTY, WILL RESULT TO THE BODY OF THE CENTRAL HEATING COOKER. HAVE AN ELECTRICIAN CHECK THE EARTHING. THERE MUST BE NO ELECTRIC POTENTIAL (VOLTS) BETWEEN THE EARTH OF THE CENTRAL HEATING COOKER EARTH AND THE ACTUAL EARTH OF THE PLANT.

4.6 WIRING DIAGRAM 60 - 65 - 90 - 95 - 650 - 920 WITH ELECTRIC OVEN

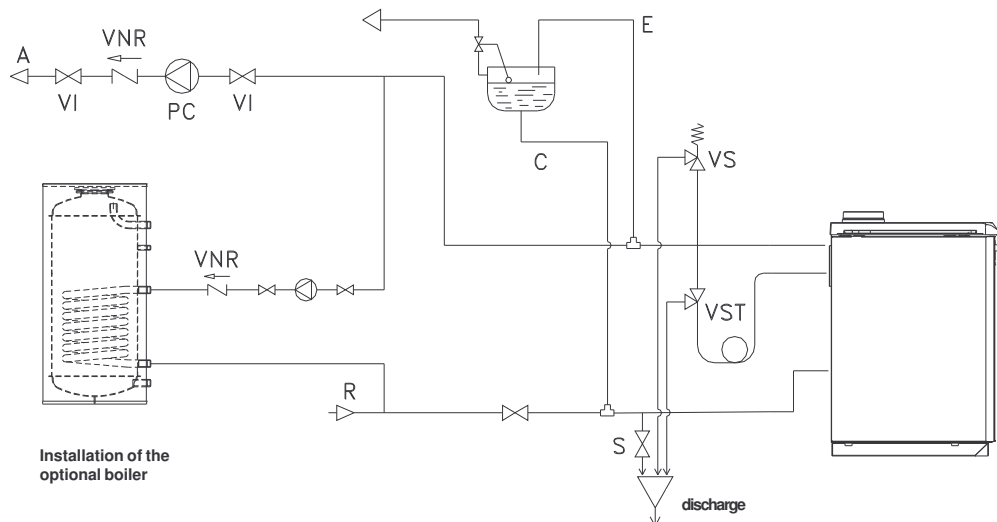
Connect the wiring to the terminal block located in the left side.



CAUTION: IT IS MANDATORY TO EARTH THE CENTRAL HEATING COOKER AS ILLUSTRATED IN THE ABOVE DIAGRAM. IF THIS INSTRUCTION IS NOT OBSERVED SERIOUS DAMAGE, WHICH IS NOT COVERED BY WARRANTY, WILL RESULT TO THE BODY OF THE CENTRAL HEATING COOKER. HAVE AN ELECTRICIAN CHECK THE EARTHING. THERE MUST BE NO ELECTRIC POTENTIAL (VOLTS) BETWEEN THE EARTH OF THE CENTRAL HEATING COOKER EARTH AND THE ACTUAL EARTH OF THE PLANT.

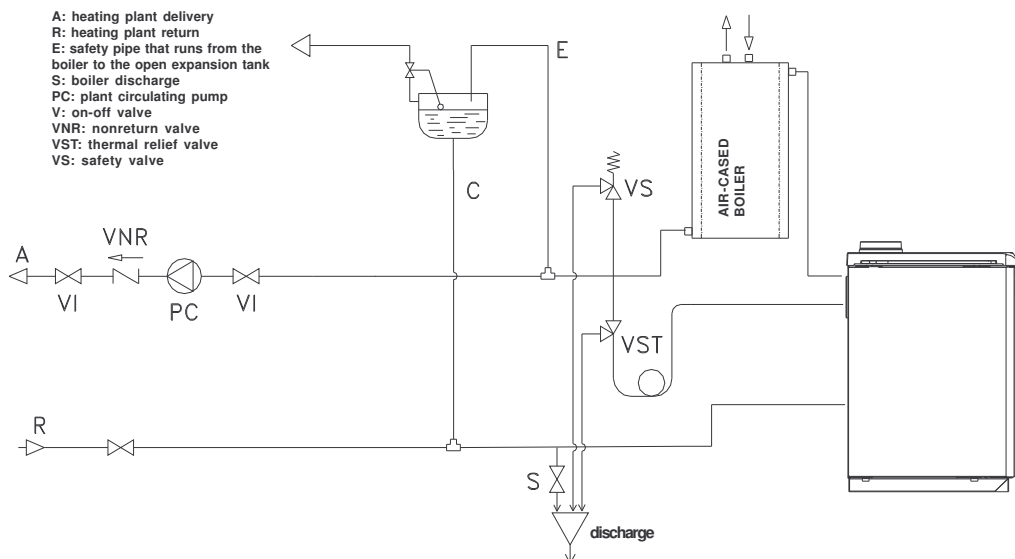
4.7

GUIDELINES FOR THE HYDRAULIC CONNECTIONS OF THE CENTRAL HEATING COOKER TO THE BOILER COILS.



Installation of the optional boiler

4.8 GUIDELINES FOR THE HYDRAULIC CONNECTIONS OF THE CENTRAL HEATING COOKER TO THE AIR-CASED BOILER.



A: heating plant delivery
 R: heating plant return
 E: safety pipe that runs from the boiler to the open expansion tank
 S: boiler discharge
 PC: plant circulating pump
 V: on-off valve
 VNR: nonreturn valve
 VST: thermal relief valve
 VS: safety valve

4.9 RECOMMENDATIONS FOR THE EXECUTION OF THE HYDRAULIC AND ELECTRIC SYSTEM



Before installing your central heating cooker we recommend that your flue outlet has a suitable draught.



We recommend connecting the plant circulating pump to the central heating cooker's control panel.



We recommend installing nonreturn valves to prevent natural circulation phenomena between the central heating cooker and the plant (see drawing par. 4.5 - 4.6 - 4.7 - 4.8). The presence of open boilers causes natural circulation on the water surface with subsequent oxygenation of the water. The presence of natural circulation produces condensation and can consequently cause corrosion to parts of the central heating cooker.



We recommend you earth the central heating cooker and check the efficiency of the earthing of the electrical system to which the central heating cooker is connected.

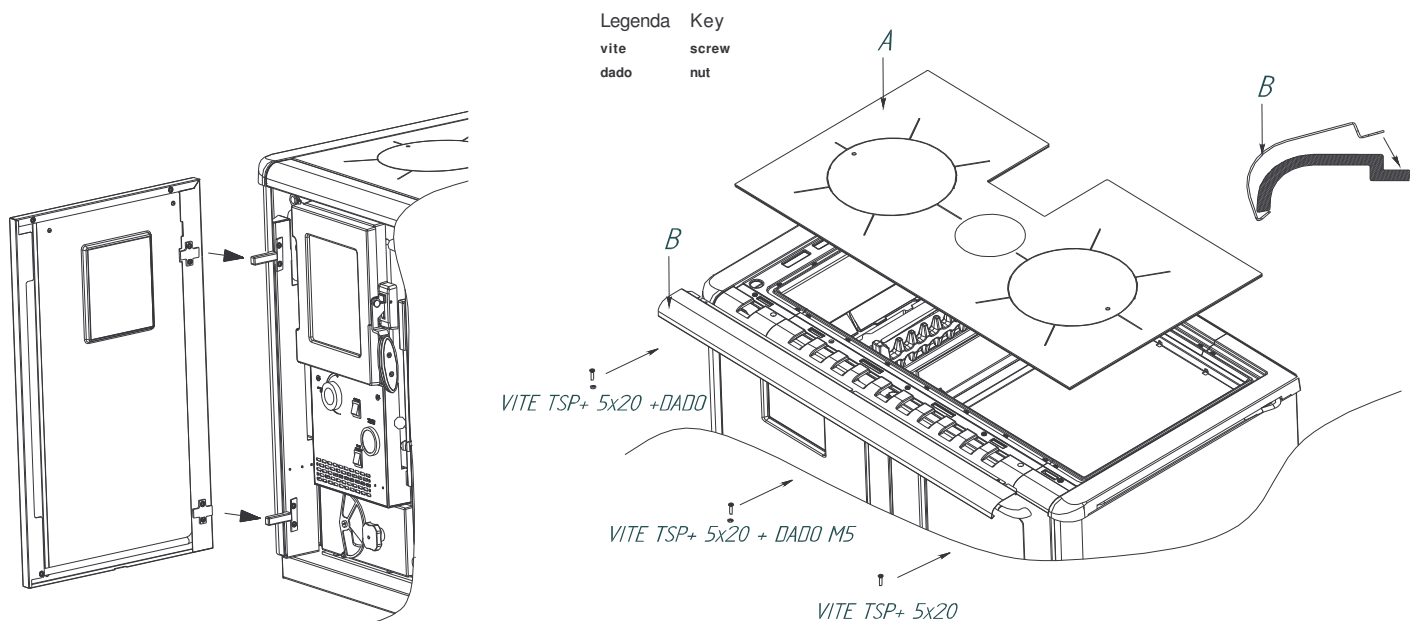
THERMOROSSI DECLINES ALL RESPONSIBILITY FOR THE CORRECT FUNCTIONING AND DURATION OF THE APPLIANCE IF ALL OF THE ABOVE GUIDELINES ARE NOT OBSERVED. NO TECHNICAL SERVICING BY OR ON BEHALF OF THERMOROSSI, CAUSED BY THE NON-OBSERVANCE OF THESE RECOMMENDATIONS, WILL BE COVERED BY WARRANTY.

4.10 INSTALLATION OF CASING FOR BOSKY 25 - 30 - F25 - F30

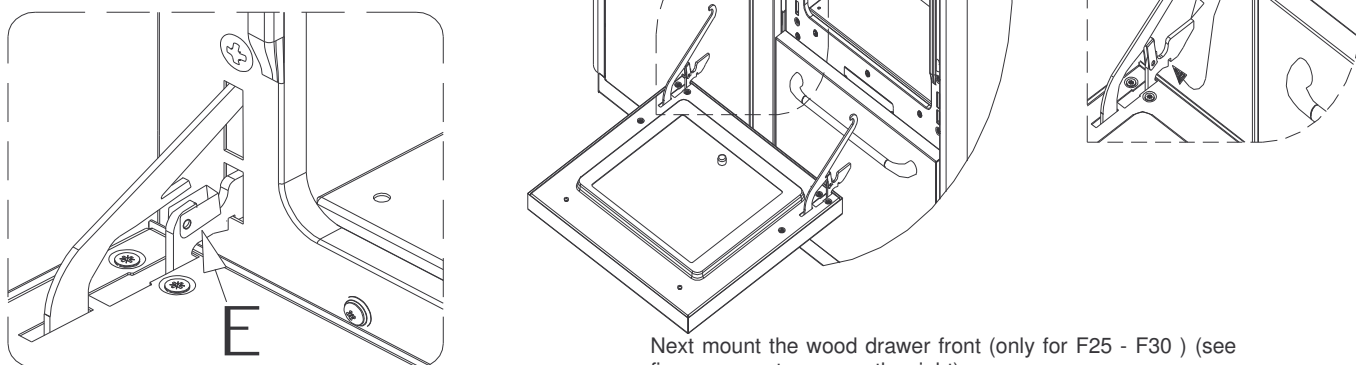
After positioning the central heating cooker, connecting the electrical system and the hydraulic system (only if using the rear delivery and return outlets) (see para. 4.2 - 4.3 - 4.4 - 4.5 - 4.6 - 4.7 - 4.8 - 4.9) proceed with the installation of the casing as illustrated in the images below:

Firstly mount the front profile (figure below right): -Lift and move away the cooktop (A) -Insert the front profile (B) in the cast iron housing. Fix the profile with the hardware specified below. -Next replace the cooktop (A).

Then mount the vertical door (figure below left) : -Mount the door on the hinges as indicated by the arrows in the drawing on the left. Align the vertical door by adjusting the hinges.

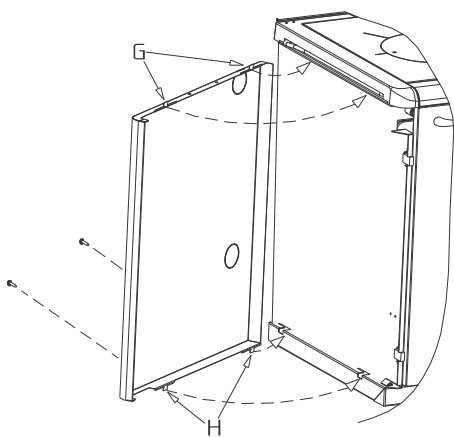


Next mount the oven door (only for F25 - F30).
 - Fix the hooks (C) to the hinges (D) on the oven door. (see figure on right)
 - Slide the oven door into the lodgings as indicated in the figures on the side.
 - Release the lock (E) as indicated in the figure below.



Next mount the wood drawer front (only for F25 - F30) (see figure on next page on the right).

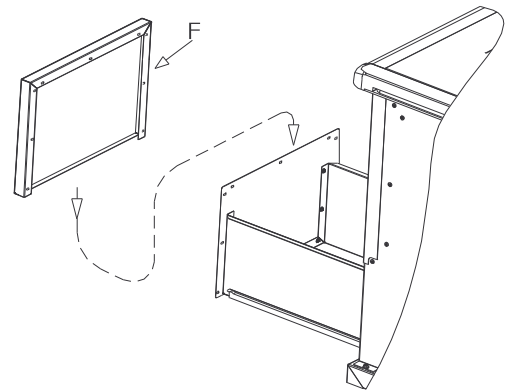
- Slide in the wood drawer front (F) complete with handle.
 - Fasten the front with 9 self-tapping screws TC+ 3.9X13 black z..



Then mount the left side panel complete with insulation (see figure on left):

- Fit the tabs (G) into the rectangular holes under the left side cornice
- Fit the tabs (H) into the holes in the base and push the side panel back until it locks in, then secure using the 2 screws indicated.

Mount the right side panel using the same procedure.



5 OPERATION

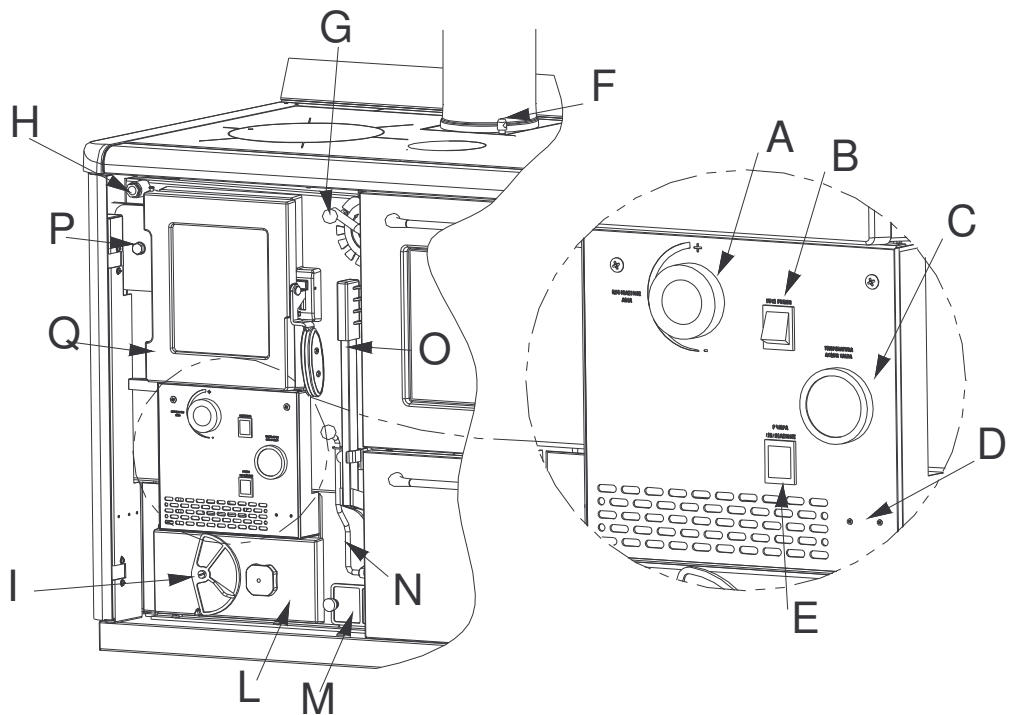
5.1 DESCRIPTION OF MAIN CONTROLS AND COMPONENTS

5.1.1 DESCRIPTION OF MAIN CONTROLS AND COMPONENTS OF CENTRAL HEATING COOKERS 25 - 30 - F25 - F30



The main controls and components listed below are located behind the enamelled door on the boiler side and on the top surface.

- A Automatic combustion air thermostat adjustment knob
- B Oven light switch (only F25 - F30)
- G Water thermometer
- D Anticondensation thermostat
- E Pump active illuminated indicator
- F Starter
- G Smoke deviator flap (only F25 - F30)
- H Thermostat probe and thermometer pocket
- I Adjustment ring for rekindling the fire
- L Ash door
- M Inspection door
- N Grate adjustment handle release mechanism
- O Grate adjustment handle
- P Safety heat exchanger
- Q Feed door

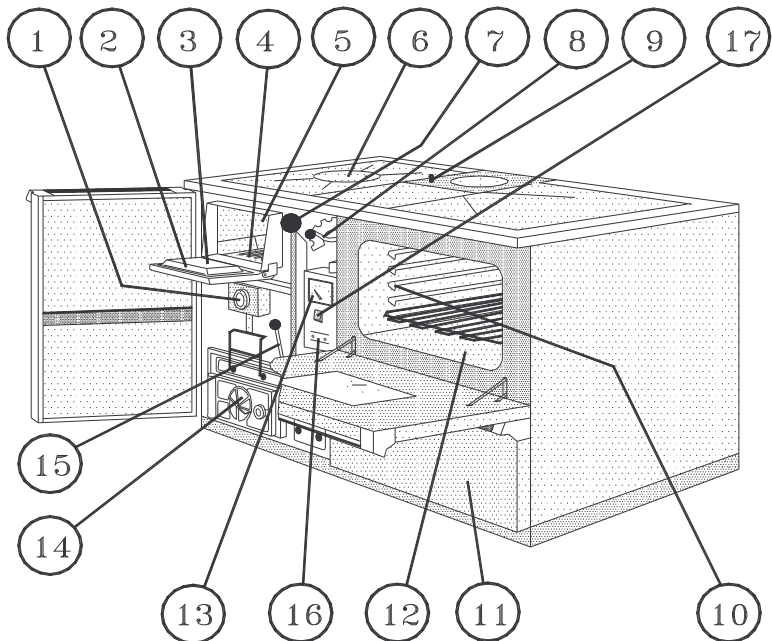


5.1.2 DESCRIPTION OF MAIN CONTROLS AND COMPONENTS OF CENTRAL HEATING COOKERS 60 - 65 - 650 - 90 - 95 - 920 .



The main controls and components of the central heating cooker are listed below.

- 1) Automatic primary air regulator
- 2) Secondary air inlet
- 3) Front feed door
- 4) Three-position grate
- 5) Combustion chamber
- 6) Top feed hole
- 7) Grate adjustment lever
- 8) Oven temperature adjustment lever
- 9) Starter
- 10) Oven grill positioner
- 11) Second oven
- 12) Oven
- 13) Boiler thermometer
- 14) Supplementary air
- 15) Grate control release lever
- 16) Anticondensation thermostat
- 17) Pump switch



5.2 LIGHTING AND STARTING THE CENTRAL HEATING COOKERS



Before using the central heating cooker make sure that all the movable parts are in position; also remove any labels and stickers from the glass to avoid having permanent traces remain on the surfaces. Verify that the hydraulic and electric connections have been made perfectly. **REMOVE THE PROTECTIVE ADHESIVE FILM FROM THE COOKTOP.**

To start the central heating cooker firstly activate the starter by lifting the pin until it hooks onto the plate by means of the groove on it (see fig. above and on page F - 9 ; use the tool provided). Leave the adjustment ring I - 14 open. Now make a small fire using paper or cardboard together with wood chips or small pieces of wood, and keep adding bigger pieces of wood as the fire gets going. When the combustion is well underway, turn the starter F - 9 to the home position and close the adjustment ring I - 14.



CAUTION: DO NOT FORGET TO CLOSE THE ADJUSTMENT RING! IF IT IS LEFT OPEN THERE IS A SERIOUS RISK OF THE BOILER OVERHEATING AND SUBSEQUENTLY DAMAGING THE BOILER ITSELF. THIS DAMAGE IS NOT COVERED BY WARRANTY AS IT WOULD BE THE RESULT OF NEGLIGENCE BY THE USER. IF THE STARTER IS LEFT OPEN THE RESULT IS LESS HEAT TRANSFER TO THE WATER IN THE CENTRAL HEATING COOKER AS THE ADDITIONAL HEAT EXCHANGER IS NOT UTILISED.

5.3 OPERATION OF THE CENTRAL HEATING COOKERS

Once the heater has been lit and started, the combustion can be increased or reduced by acting on the automatic combustion air thermostat adjustment knob to adapt the central heating cooker to your heating or cooking needs. In models 60 - 65 - 90 - 95 - 650 - 920 a secondary air slide is located on the loading door for the ingress of secondary air. The heating pump starts up as soon as the anticondensation thermostat calibrated at 60°C gives the start signal to the plant circulating pump. The pump switch (only for models 60 - 65 - 650 - 90 - 95 - 920) must be positioned on "1" (ON).



The maximum thermal value is achieved by using fuel having a diameter of 5-7 cm , obviously bigger pieces can be used but at the expense of less power. To rekindle the fire move the grate to the lowest position. Move the handle (O - 7) forward and backward several times: this will free the grate slots of the combustion ash.

CAUTION : The wood load must always be suitable for the actual thermal absorption requirements of the plant. Large firewood loads in limited absorption conditions result in the unburnt wood remaining in the forebox for long periods of time. This situation encourages the distillation of the wood resulting in the formation of large quantities of gases and vapours that are only partially burned. The gases condense in the central heating cooker and in the tubes and create tarry deposits.

5.4 GRATE POSITIONS IN THE CENTRAL HEATING COOKERS



During the winter period the grate must remain in the lowest position in order to guarantee the maximum heat exchange from the combustion to the boiler and consequently to the water. There are 3 grate positions:

Lowered grate and only heating

All the heat is transferred to the water to take full advantage of the wet surfaces.

Grate all up with flap (para. 5.5) on oven

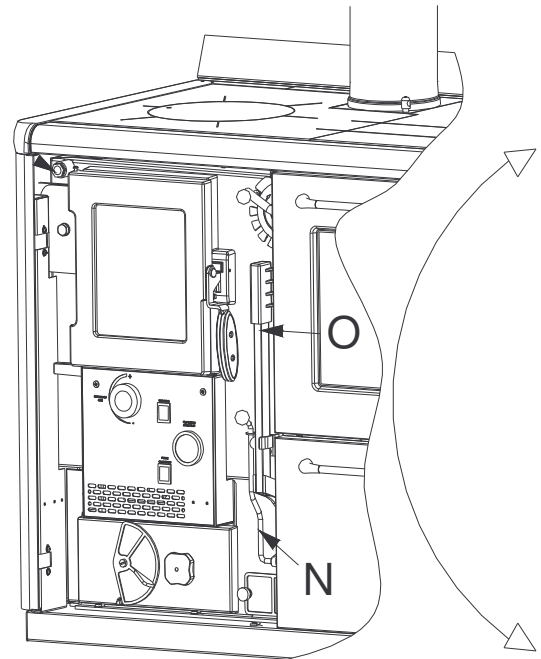
All the heat is transferred to the cook top, the flame envelopes the oven completely.

Intermediate grate and flap positions

Intermediate situations are possible by simply positioning the grate and flap in intermediate positions.

To lift the grate pull the grate handle down gently (O - 7). When the grate is in the desired position return the lever to its home position. The grate will be lifted to one of its 3 positions. If the movement is hard, pull the handle back and forth several times in order to free the grate, before taking it to the top position. It is easier to perform this operation when there is little fuel.

To lower the grate pull the handle (O - 7) until the grate lifts slightly, lift the grate adjustment lever release mechanism (N - 15) and shift the handle (O-7) until the grate is lowered.



5.5 HOW TO USE THE OVEN IN CENTRAL HEATING COOKERS F25 - F30 - 60 - 90 - 920

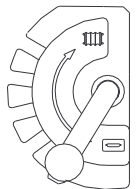
By acting on the smoke deviator flap (Drwg on right) the central heating cooker can have 2 operating modes:

- Only heating**, in this mode the oven cannot be heated, only the left side of the cook top plate is heated. In this operating mode the maximum heat output is transferred to the water.
- Heating and cooking**, in this mode the oven can be heated, the entire cook top plate is heated.

Only heating

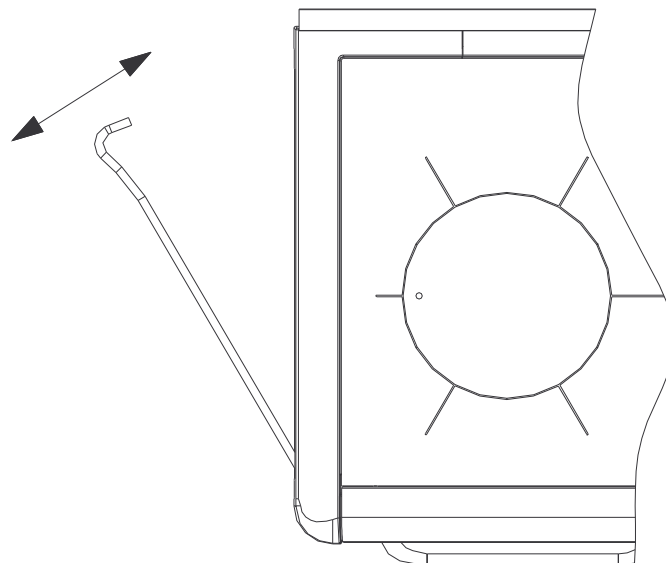


Heating and cooking



5.6 THE FOLD-AWAY TOWEL RACK (ONLY FOR 25 - 30 - F25 - F30)

Central heating cookers models 25 - 30 - F25 - F30 are fitted with 2 practical foldaway racks for hanging your washing on to dry. To extend them simply pull out as indicated in the figure on the right .



6 CLEANING AND MAINTENANCE

6.1 GENERAL CLEANING

Before commencing any operation disconnect the central heating cooker from the electrical power outlet. Your central heating cooker does not require any special maintenance; simply adhere to the simple and basic but regular controls and general cleaning. This will guarantee regular operation and optimal output at all times. As for all machines that run on solid fuel, the main enemy is undoubtedly the dirt generated by ash, condensation, poor fuels; consequently it is important to clean the entire central heating cooker twice a year. The air inlets can be cleaned with an ordinary vacuum cleaner.

However, we recommend having the flue outlet cleaned by a professional chimney sweep.

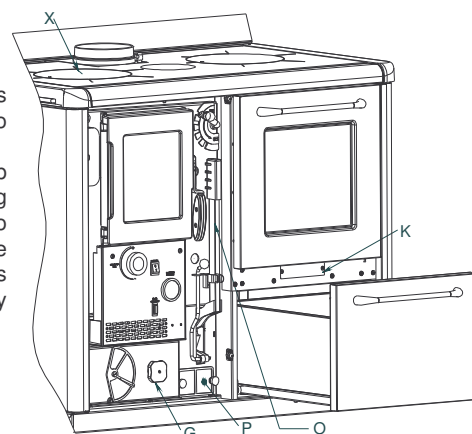


Caution: The glass and all the glazed steel parts must be cleaned with water and a gentle detergent when the oven has cooled.

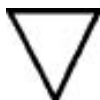
6.2 ASH

The central heating cookers are fitted with 2 ash pans placed under the firebox base. To access the pans you need to open the enamelled door of your central heating cooker completely. To collect the ash simply shift the grate riddling handle (O) (see drwg on right).

We recommend emptying the ash pans (G and P) on a regular basis to prevent them from filling up completely. It is necessary to regularly clean under the oven by opening the plug K, and vacuuming the ash deposits. To ensure that your central heating cooker performs efficiently it is advisable to regularly clean the surfaces of the heat exchanger and of the smoke passages towards the chimney, using the special equipment provided; to access them remove the cook top plates X as illustrated in the drawing on the right. The tarry deposits reduce the exchange and consequently the output as well.



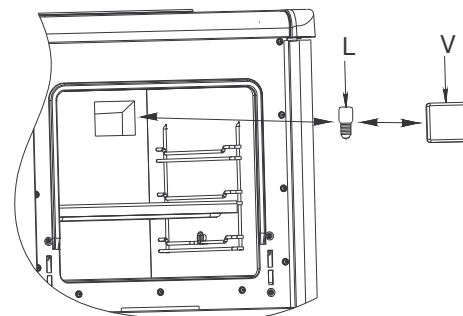
6.3 CLEANING THE HOT PLATES



Clean the hot plates with a normal gentle detergent. After cleaning (for the models with non-vitrified hot plate), protect the plate by applying a film of oil to keep it clean and shiny. As an alternative to the oil apply a thin film of protective chrome paste (readily available from your local hardware store). Take care when applying the paste not to indelibly dirty the cast iron side cornices. If you detect any rust use a lightly abrasive scouring pad to remove it and then proceed to apply the protective oil or chrome paste.

6.4 HOW TO REPLACE THE OVEN LAMP (ONLY MODELS F 25 - F 30)

To replace the oven lamp firstly open the oven door. Use a screwdriver or round-tip blunt knife to lever gently between the glass (V) and the oven back until the glass V comes off its fastening hooks. Then remove the lamp L and replace it with a new one type E 14 25 W 230-240 V 300°C. The lamp is not covered by warranty as it is a consumable object.



6.5 RECOMMENDATIONS

-Every time you stoke the fire use the riddling tool to move the grate. Move the rod O indicated in para. 6.2. The air passage through the firebox grate must always be unobstructed.

-Every 10 hours of operation at least or whenever necessary clean the ash pans G and P as described in paragraph 6.2.

-Every 2 weeks or whenever necessary clean the internal surfaces of the heat exchanger, the oven and the door K under the oven.

-Always ensure that the fuel fed into the firebox catches fire normally. Always ensure that this occurs to prevent dangerous explosions in the firebox caused by the accumulation of unburnt gases. If these explosions prove to be rather violent the manufacturer declines all responsibility for the mechanical resistance of the glass and heater parts.

-Adhere strictly to the declared consumption: max. 8.5 Kg /hour for models 25 - F25 - 60 - 65 - 650, max.10 Kg /hour for models 30 - F30 - 90 - 95 - 920.

-Thoroughly clean the heater and smoke evacuation pipes at least twice each season.

THERMOROSSI SPA DECLINES ALL RESPONSIBILITY FOR DAMAGES TO THINGS AND/OR PERSONS CAUSED BY THE FAILURE TO OBSERVE THESE INSTRUCTIONS.

7 SMOKE EXHAUST TUBE

Due to the frequent accidents caused by poor functioning of flue outlets installed in private dwellings, we have prepared the following paragraph to assist the installer in his inspection of the parts concerned with eliminating the gases produced by combustion. The smoke exhaust pipe must be installed according to UNI 7129/92 and UNI 10683/98.

7.1 GENERAL.

A flue outlet for the evacuation of combustion products into the atmosphere must satisfy the following requirements :

- be sealed against the penetration of combustion products, watertight and thermally insulated;
- be made from materials capable of resisting normal mechanical stress, heat and the action of the combustion products and condensate produced by them over long periods of time;
- have vertical runs and be completely free of any narrow sections along its entire length;
- be kept clean at all times as soot or unburnt oil deposits reduce its section and could, if the deposits are large, catch fire inside the flue outlet; be suitably insulated to avoid phenomena of condensate or cooling of tubes, particularly if located on the external wall of a building;
- be at a suitable distance from combustible or easily inflammable materials separated by means of an air gap or insulation;
- have a clean out chamber for the collection of solid materials and condensate below the first smoke pipe. Access to this chamber must be possible by means of an opening fitted with an airtight metal door.
- have a circular, square or rectangular internal section: in the latter two the corners must be rounded with a radius measuring a minimum of 20mm;
- have an internal section that is slightly larger than the section of the appliance exhaust pipe; in any case, have the following minimum sections:
 - for a height of up to 5m 600cm²
 - for a height between 5 and 7m 400cm²
 - for a height greater than 7m 300cm²

If the section is too small it reduces the flue outlet draft. If the section is too big it can cause inadequate draft if the section is not insulated. Whereas if it is well-insulated it can increase the draft.

-be at least 4m from the floor on which the appliance is installed;

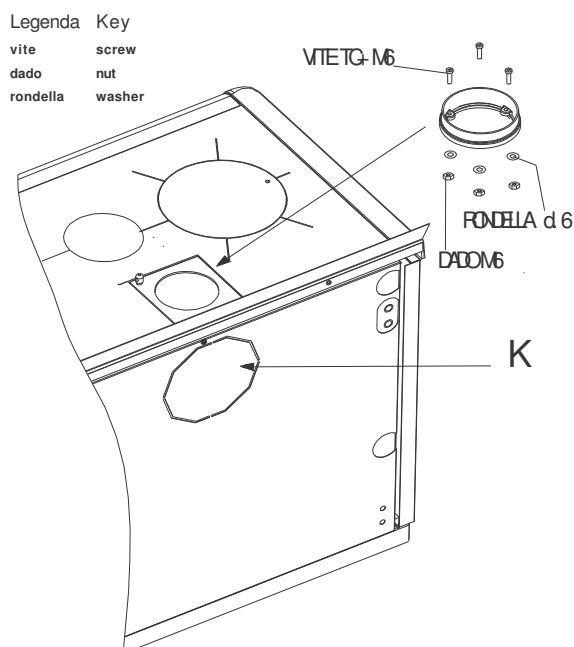
-be fitted at the top with a cap that fulfils definite requirements;

-must not be installed in inhabited locations as the flue outlet is always slightly more pressurised than its surroundings.

If you use a large pre-existing chimney, you can adapt it by installing a stainless steel chimney liner, then filling in the spaces between the liner and the chimney with insulating material.

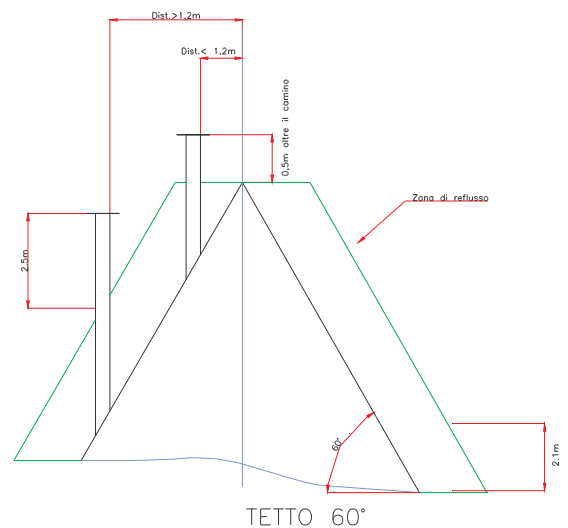
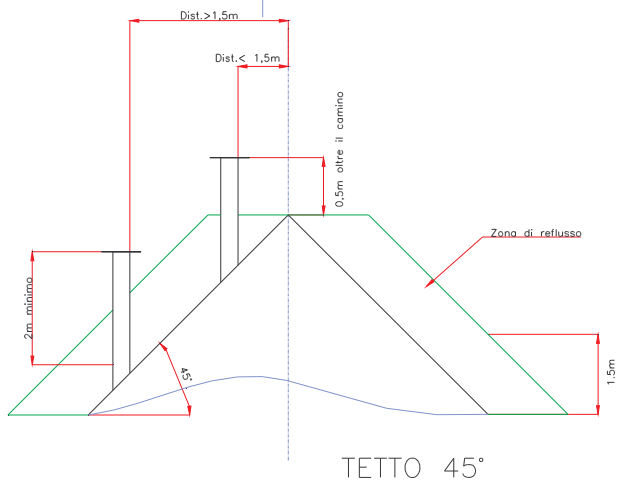
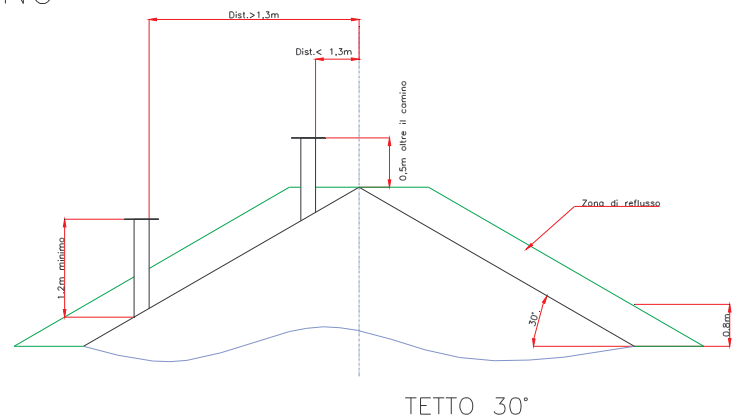
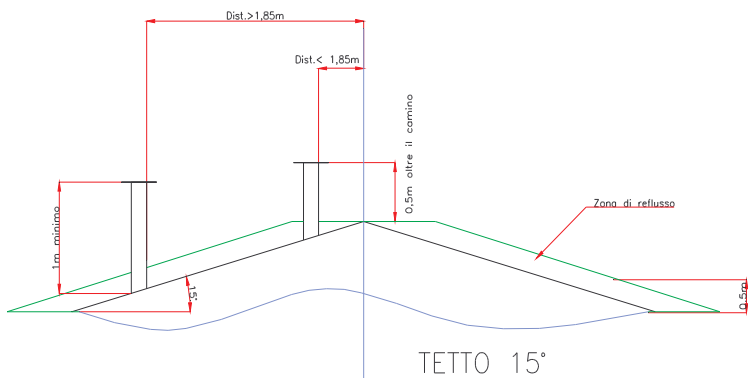
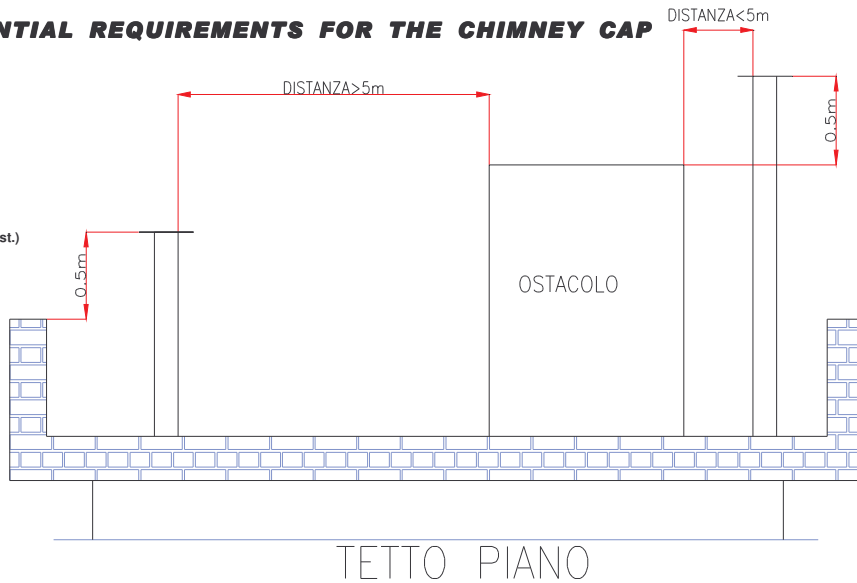
7.1.1 CONNECTION TO THE CHIMNEY

The smoke outlet can be connected at the top of the plate or at the back of the central heating cooker using the hardware provided as illustrated in the figure on the right. If you wish to connect the chimney to the back of the heater then you need to close the top smoke outlet with the cover provided, remove the perforated cover from the back and remove the fixed cover by undoing the screws. Next connect the cast iron flue collar using the hardware provided. There must be no narrowing of the pipes that connect the central heating cooker to the flue outlet. The joints must be completely airtight. The number of elbows used must be kept to a minimum. Horizontal runs must be kept to a minimum and have a minimum slope of 4%. Never use the same flue outlet for more than one appliance.



7.2 ESSENTIAL REQUIREMENTS FOR THE CHIMNEY CAP

Legenda	Key
Tetto piano	Flat roof
Tetto	Roof
Distanza (dist.)	Distance (dist.)
Ostacolo	Obstacle
Oltre il camino	Beyond the chimney
Zona di reflusso	Flow-back zone
Minimo	Minimum



A chimney cap is a device that is normally placed on top of a flue outlet for the purpose of facilitating dispersion of the combustion products; it must satisfy the following requirements;

- have a useful exhaust section that is at least double the section of the flue outlet on which it is inserted;
- have a shape that prevents the entry of snow or rain into the flue outlet;
- be built in such a way that venting of the combustion products is guaranteed regardless of wind direction. The diagrams show how the chimney should be constructed.

7.3 VENTILATION OF THE ROOMS

It is essential for the room in which the appliance is installed to be well-ventilated, also to guarantee secondary air for combustion in the central heating cooker.

The natural air flow occurs directly through permanent apertures to the outside made in the walls of the room, or by means of single or multiple ventilation ducting.

The ventilating air must come from outside and if possible, away from sources of pollution. Indirect ventilation is also allowed by taking in air from rooms adjacent the one where the heater is installed taking into account all the warnings and limitations specified below.

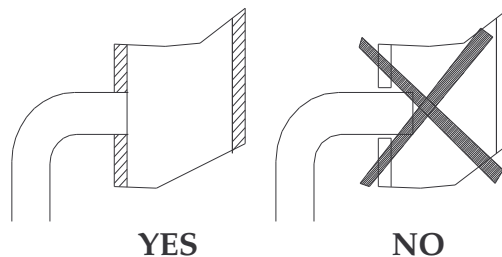
•The apertures in the walls must comply with the following requirements:

- have an unobstructed section of at least 6cm² for each Kw of installed thermal power, with a minimum limit of 100cm²;
- be made in such a way that the vent openings, both on the inside and outside of the wall, cannot be obstructed;
- be protected with grills or similar systems in order not to reduce the section described above;
- be situated at floor-level.

The air flow can also be obtained from an adjacent room as long as:

- the adjacent room is equipped with direct ventilation in compliance with the points described above;
- in the room to be ventilated the installed appliances are only connected to one flue outlet;
- the adjacent room is not used as a bedroom or a common area of the building;
- the adjacent room is not a room with a fire hazard, such as storage sheds, garages, combustible material store rooms, etc...;
- the adjacent room does not become a vacuum compared to the room to be ventilated due to an opposite draught effect;
- the air flow from the adjacent room to the room to be ventilated is unobstructed through the permanent apertures having an overall net section of no less than that indicated above. These apertures can be obtained by enlarging the space between the door and the floor.

7.4 CONNECTION TO THE FLUE OUTLET



Before connecting the central heating cooker to the flue outlet it is advisable to check the flue outlet draft. This operation can be carried out using a draft gauge: the vacuum must measure 1.5 - 2 mm water gauge.

We recommend having an expert technician control the flue outlet at least once a year.

Poor draft causes poor combustion which results in a reduced power.

It is important to be aware of the fact that in terms of correct functioning and safe usage the flue outlet is just as important as the central heating cooker. The smoke pipes must be connected to the flue outlet in the same room in which the heater is installed or in an adjacent room and must satisfy the following requirements:

be airtight and be capable of resisting normal mechanical stress, heat and the action of the combustion products and condensate over long periods of time. The temperature of the gases, at any point in the channel, must be above dew point;

the joints must be sealed tight; if materials are used for this purpose they must be capable of resisting high temperatures;

be in full view, easily accessed for removal and installed in such a way as to be capable of resisting normal thermal expansion;

be installed in such a way that end of the tube with the smaller diameter faces the smoke vent and the end with the larger diameter faces the flue outlet

have a horizontal run with a minimum upward slope of 3-5% (3-5 cm for each metre of tube). The horizontal-sloped part must not be longer than 1/4 of the height of the flue outlet, and in any case must have a maximum length of 2.5m;

have no more than 3 changes of direction, including the flue outlet connector, and with internal corners that are a minimum of 90°. The changes of direction must only be made with curved elements;

have (as described in the figure above) the axis of the female end perpendicular to the opposite wall of the flue outlet, without protruding into the pipe;

Have, along its entire length, a section which is equal to or greater than that of the appliance's exhaust tube fitting;

Have no shut off devices (damper): if devices such as these are already installed they must be eliminated.

The previous chapter does not replace UNI 7129/92 and UNI 10683/98 to which it makes reference. The qualified installer must in any case be fully aware of this standard and its amending versions.

8 TROUBLESHOOTING

8.1 PROBLEMS CAUSES AND REMEDIES FOR BOSKY BOILERS

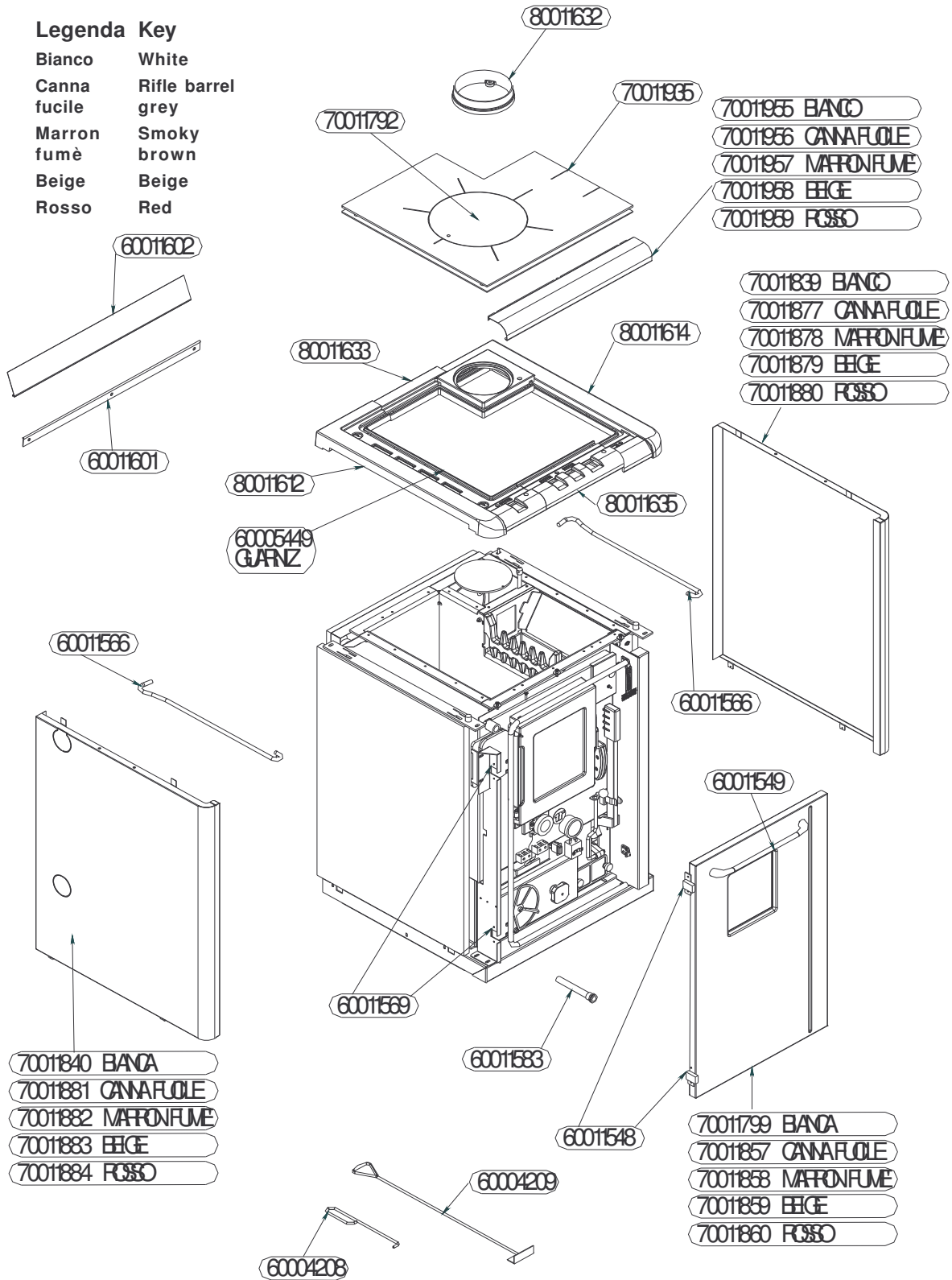
Difficulty igniting the fire	<i>Burner is clogged</i>	<i>Clean the burner by shifting the grate to the winter position and riddle until the ash drops through</i>
	<i>Moisture content of wood is too high or pieces too large</i>	<i>Use smaller pieces of firewood and more seasoned firewood</i>
	<i>Insufficient air in the room</i>	<i>Create an adequate opening for air inlet (see PARA. 7.3)</i>
	<i>Poor draft</i>	<i>See causes -remedies "Poor draft" (below)</i>
	<i>Firewood has not yet caught alight</i>	<i>Open the fire rekindling ring (para. 5.1) and wait for it to catch alight</i>
The water in the boiler has a tendency to boil	<i>The ash pan door and/or inspection fire rekindling ring is open.</i>	<i>Close the ash pan door and/or the flame rekindling ring</i>
	<i>The pumps are not working</i>	<i>Inspect the pumps</i>
Tendency to generate condensation (presence of humidity/water in the ash pan and under the heater)	<i>Faulty anticondensate thermostat</i>	<i>Replace thermostat</i>
	<i>Poor draught</i>	<i>See causes -remedies "Poor draft" (below)</i>
	<i>Low boiler temperature</i>	<i>Connect pumps to panel</i>
The boiler does not heat sufficiently	<i>Firewood pieces are too large</i>	<i>Split the firewood into smaller pieces</i>
Smoke in the room. Difficulty keeping the fire alight. Difficulty reaching the temperature in the oven. Low temperature of cook top. Flame insensitive to variations in draft. Puffs of smoke while operating. Soot deposits in hood. Impossible to operate during the night (fuel remains unburnt). Water does not reach the required temperature.	<i>Poor draft</i>	<i>See causes -remedies "Poor draft" (below)</i>
	<i>Insufficient air in the room</i>	<i>Create an adequate opening for air inlet (see PARA. 7.3)</i>
Oxidised cook top	<i>Poor maintenance of the cook top</i>	<i>Clean and maintain cook top as described in para. 6.3</i>
Impossible to operate at night (the fuel burns too quickly). Uncontrolled combustion.	<i>Draft too strong</i>	<i>Reduce the draft by installing a register in the chimney.</i>
Difficulty in controlling the temperature.	<i>Poor draft</i>	<i>Raise the flue outlet, install an anti-downdraft cap on the chimney top.</i>
	<i>Draft too strong</i>	<i>Reduce the draft by installing a register in the chimney.</i>
	<i>Poor draft</i>	<i>Inspect the flue draft: Presence of constrictions in the chimney, too many curves, poor insulation, section too small / clean the flue outlet/ lift the cook top and thoroughly clean the smoke passage and in particular the additional heat exchanger.</i>
Puffs of smoke issue from the top of the heater when the door is slammed shut.	<i>Insufficient air in the room</i>	<i>Create an adequate opening for air inlet (see PARA. 7.3)</i>
	<i>Variable draft</i>	<i>Raise the flue outlet, install an anti-downdraft cap on the chimney top.</i>
Variable combustion rhythm. Good combustion only occasionally, almost appears to depend on the wind conditions.	<i>Insufficient air in the room</i>	<i>Create an adequate opening for air inlet (see PARA. 7.3)</i>

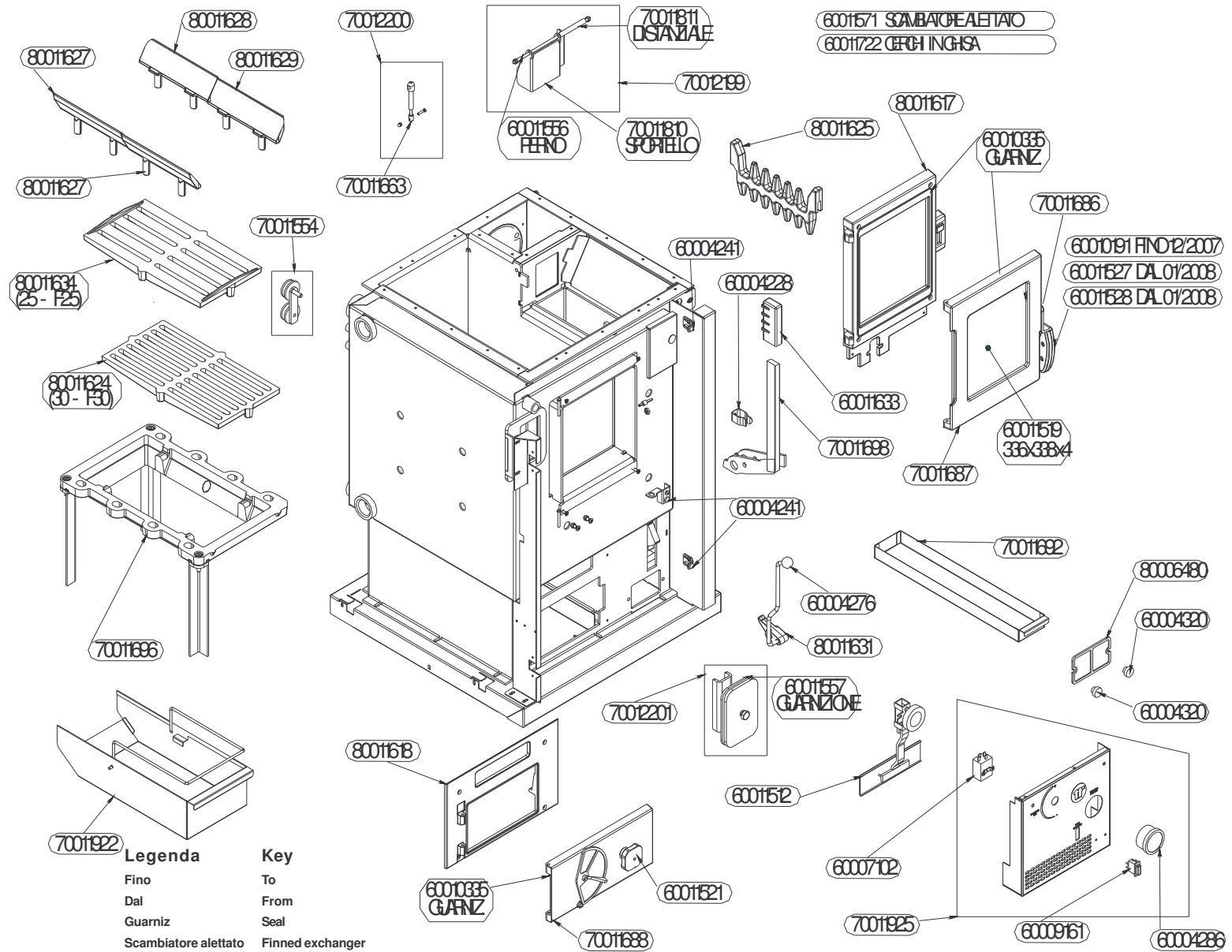
9 SPARE PARTS

9.1 SPARE PARTS FOR BOSKY 25 - 30 (PART 1).

Legenda Key

Bianco	White
Canna fucile	Rifle barrel grey
Marron fumè	Smoky brown
Beige	Beige
Rosso	Red

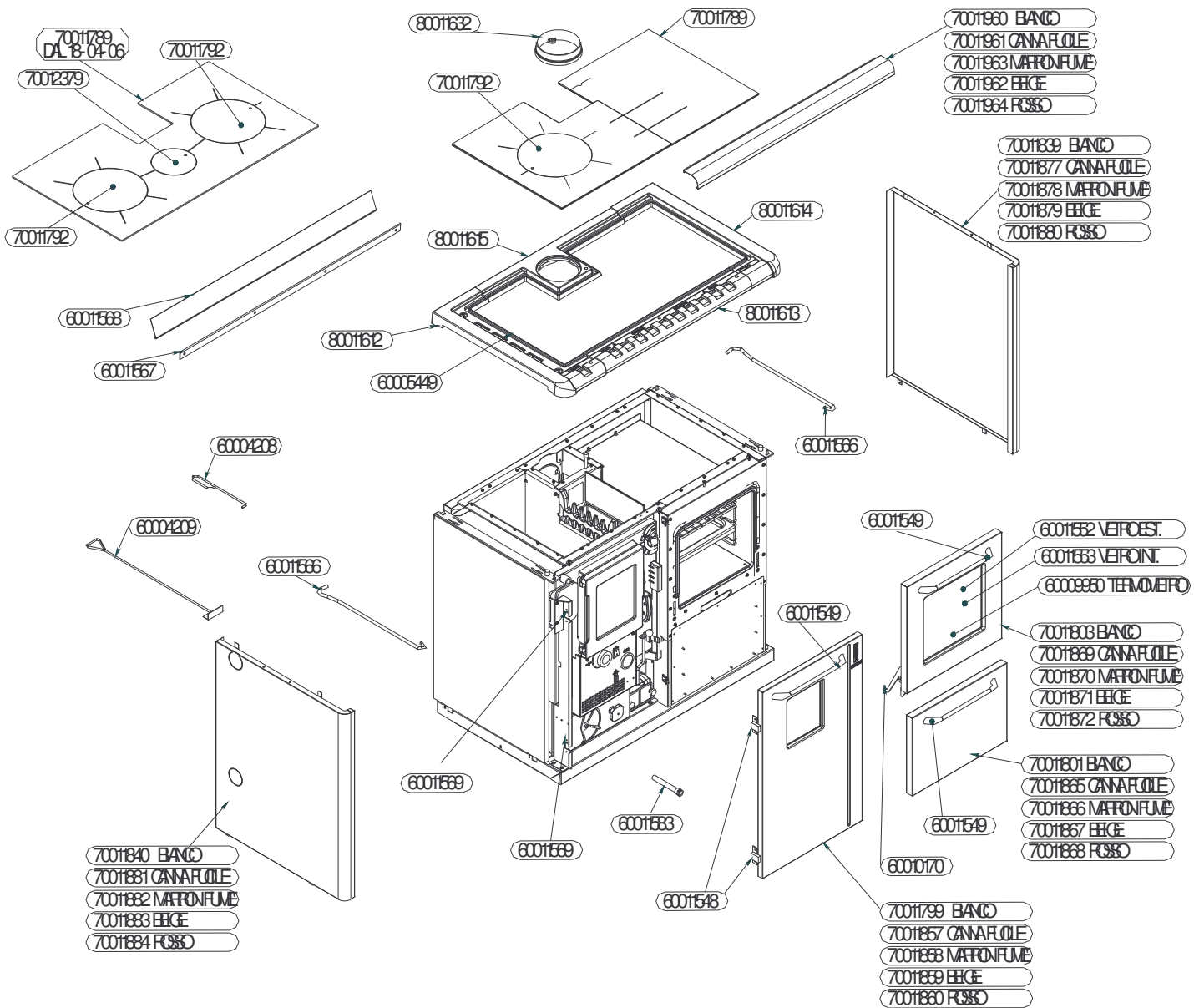




Legenda

- | | |
|----------------------|------------------|
| Fino | To |
| Dal | From |
| Guarniz | Seal |
| Scambiatore alettato | Finned exchanger |
| Cerchi in ghisa | Cast iron rings |
| Distanziale | Spacer |
| Sportello | Door |
| Fermo | Retainer |

9.3 SPARE PARTS FOR BOSKY F25 - F30 (PART 1).

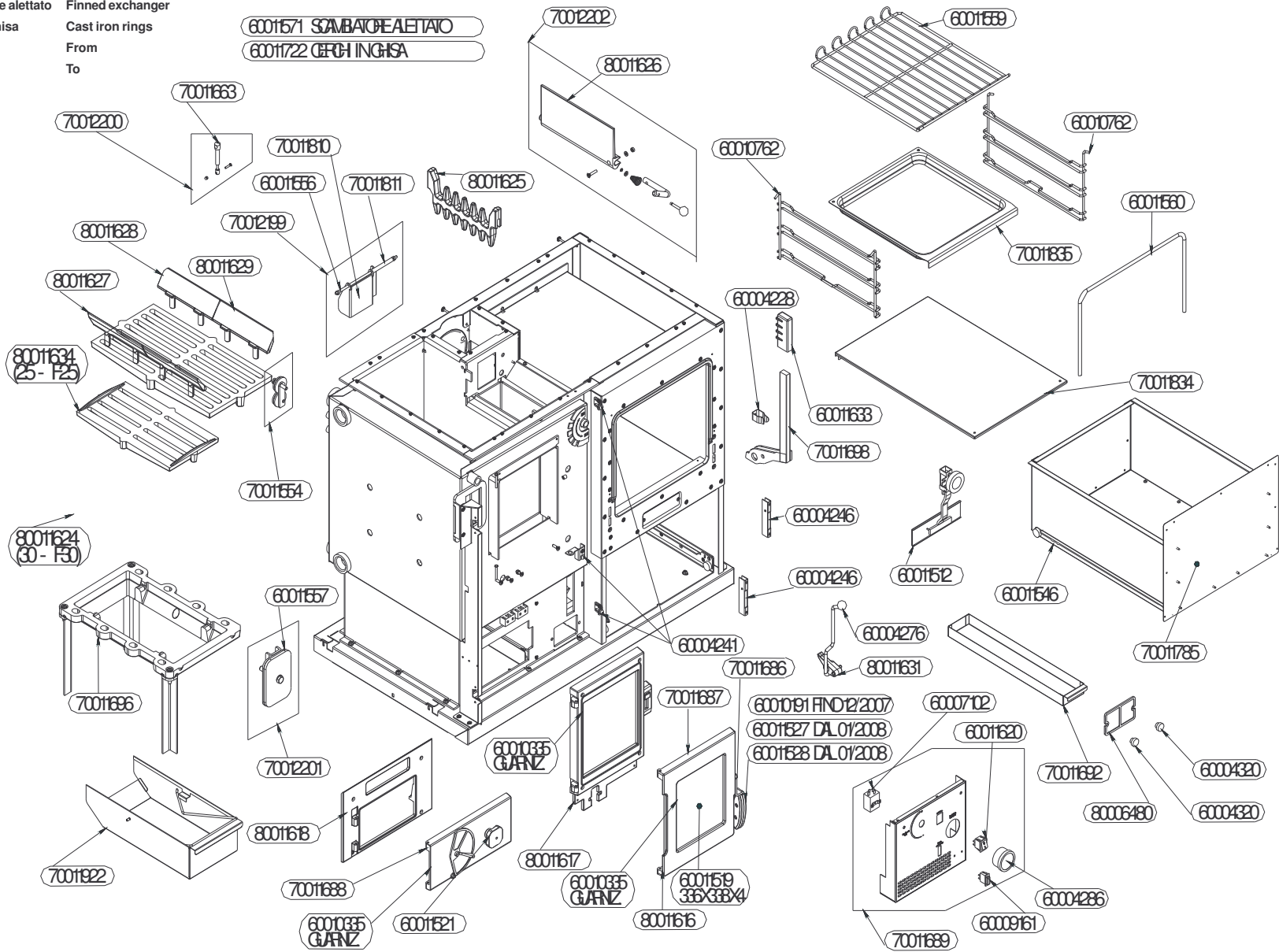


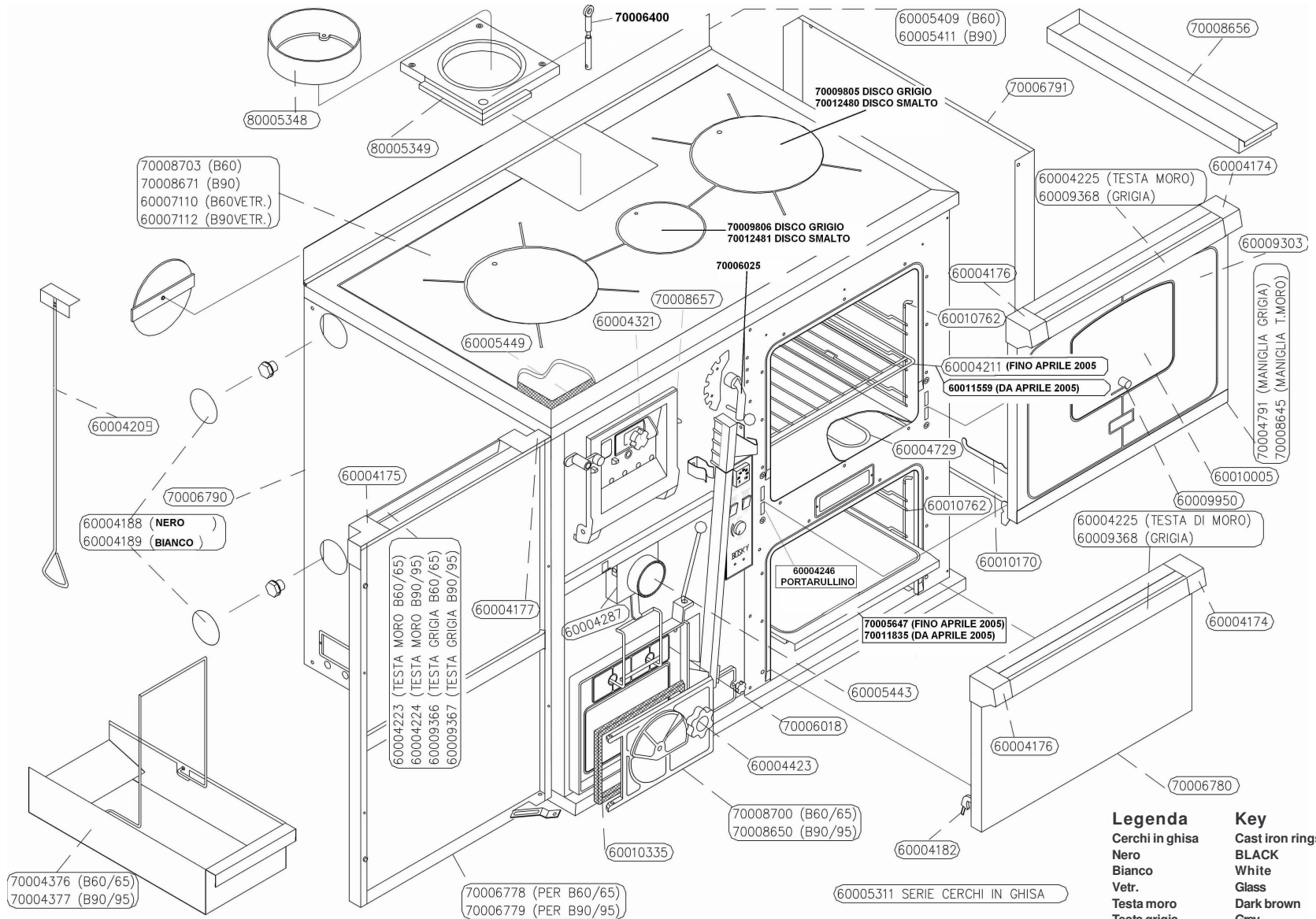
- Legenda**
 Bianco
 Canna fucile
 Marron fumè
 Beige
 Rosso
 Vetro est.
 Vetro int.
 Termometro

- Key**
 White
 Rifle barrel grey
 Smoky brown
 Beige
 Red
 Ext. glass
 Int. glass
 Thermometer

9.4 SPARE PARTS FOR BOSKY F25 - F30 (PART 2).

Legenda	Key
Guarniz	Seal
Scambiatore alettato	Finned exchanger
Cerchi in ghisa	Cast iron rings
Dal	From
Fino	To





Legenda

Cerchi in ghisa
Nero
Bianco
Vetr.
Testa moro
Testa grigia
grigia
Maniglia grigia
Maniglia t. moro
Per
Disco Grigio
Disco Smaltato
Da Aprile 2005
Fino Aprile 2005

Key

Cast iron rings
BLACK
White
Glass
Dark brown
Grey
Grey
Grey handle
Dark brown handle
For
Grey Disk
Enamelled Disk
From April 2005
To April 2005

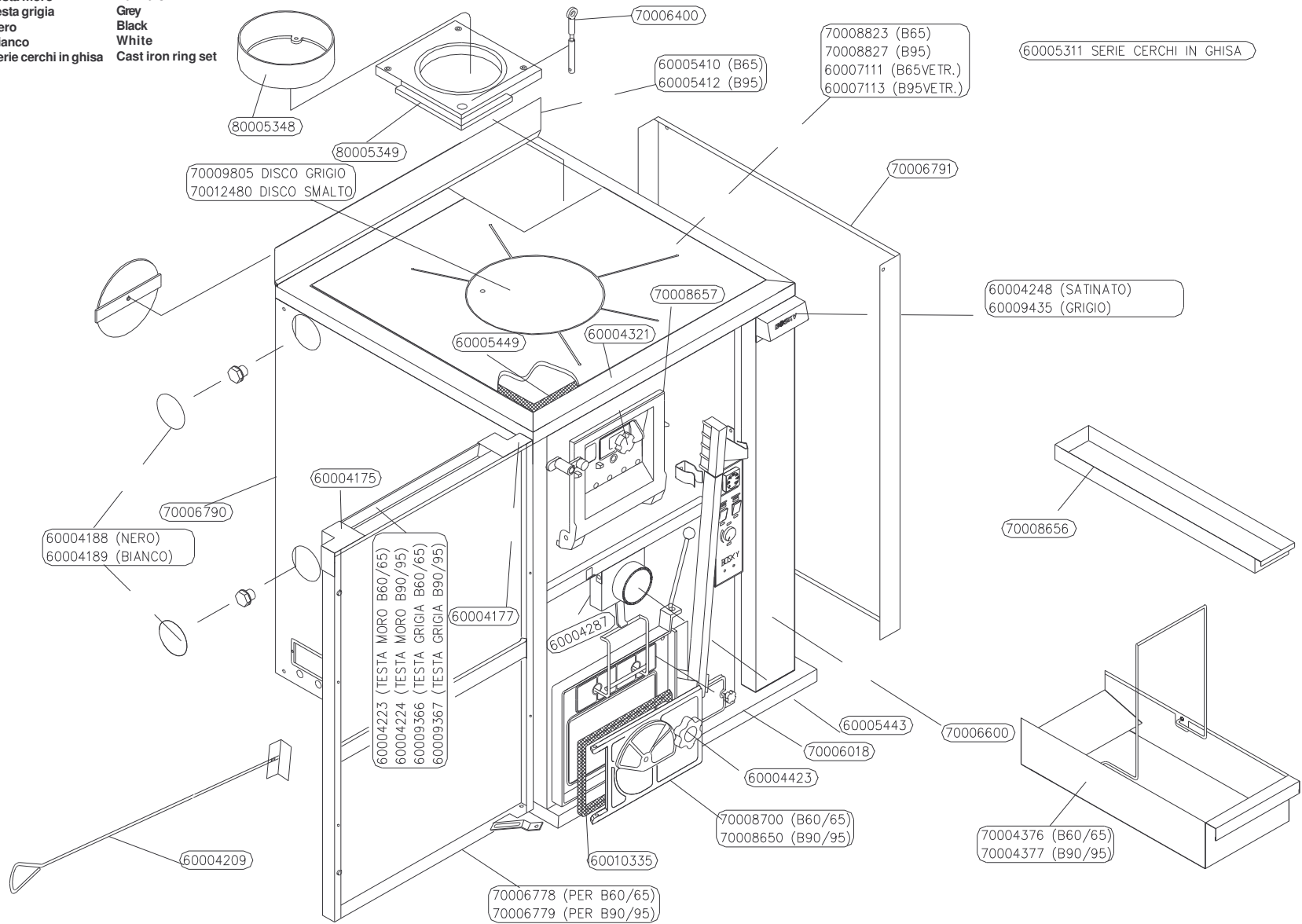
9.6 SPARE PARTS FOR BOSKY 65 - 95 (PART 1).

Legenda

Disco Grigio
Disco Smalto
Satinato
Grigio
Testa moro
Testa grigia
Nero
Bianco
Serie cerchi in ghisa

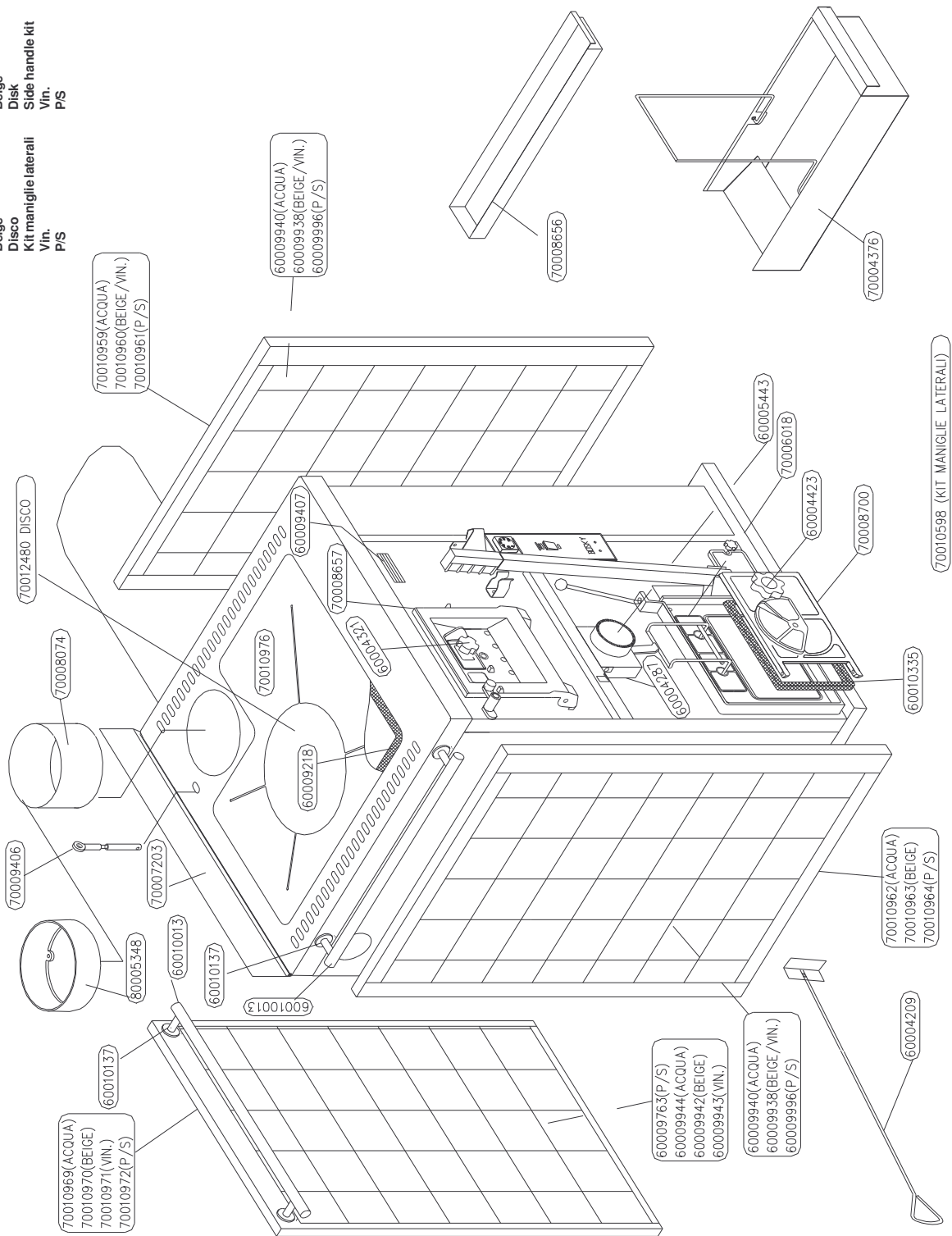
Key

Grey Disk
Enamelled Disk
Satin finish
Grey
Dark brown
Black
White
Cast iron ring set



9.7 SPARE PARTS FOR BOSKY - 650 (PART 1).

Legenda	Key
Acqua	Water
Beige	Beige
Disco	Disk
Kit maniglie laterali	Side handle kit
Vin.	Vin.
P/S	P/S



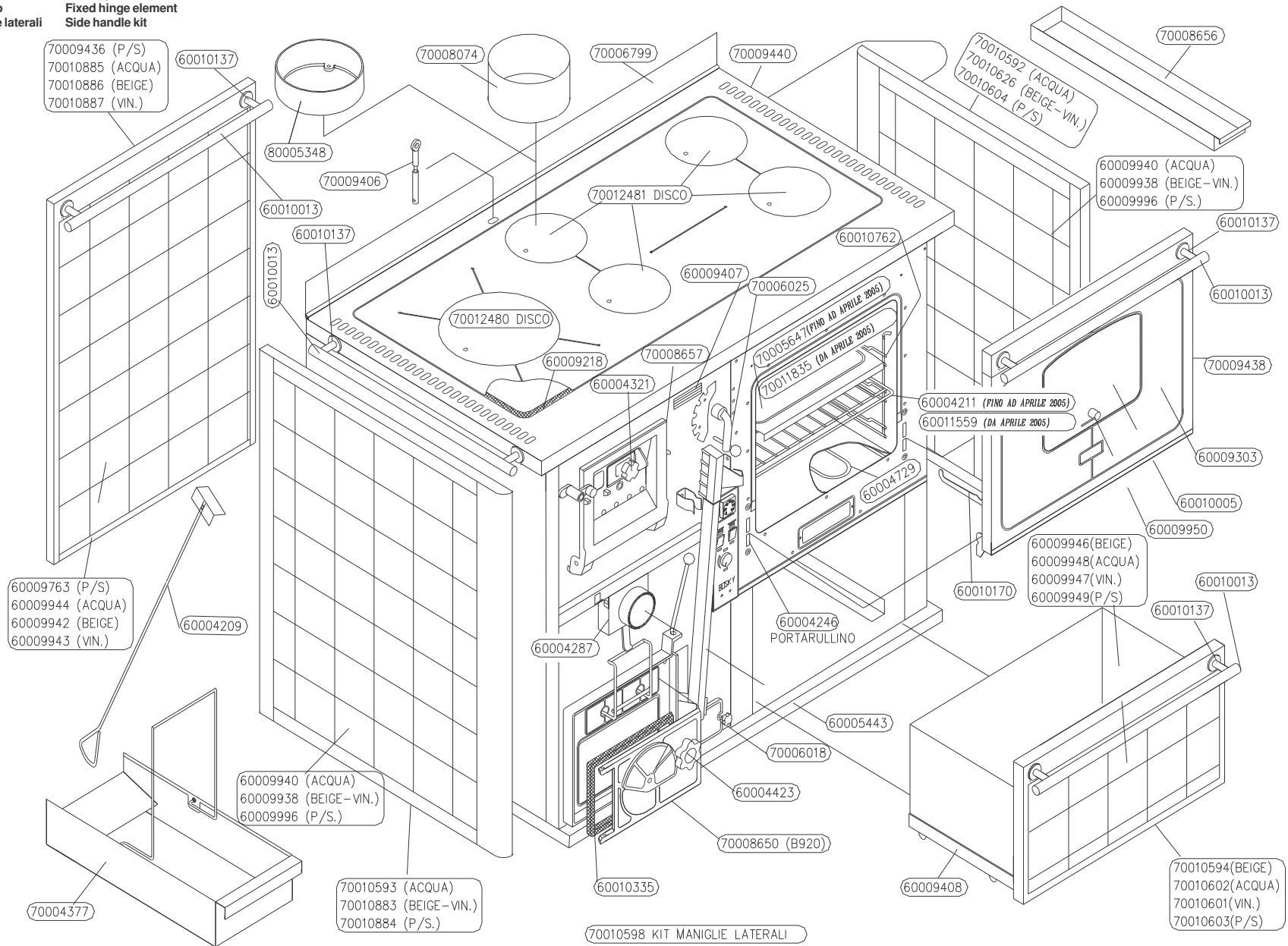
Legenda

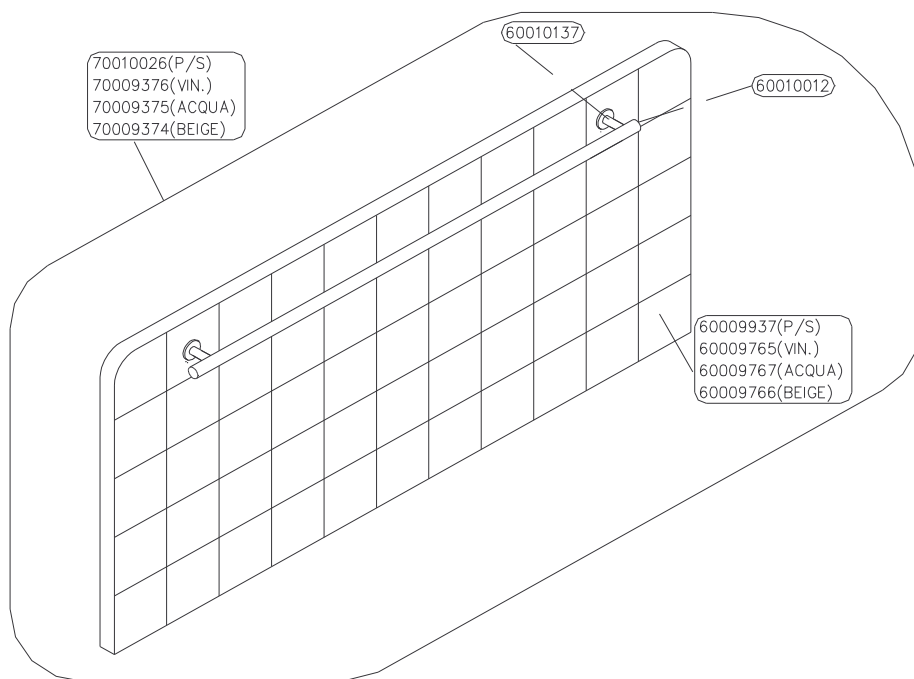
P/S
Vin.
Acqua
Beige
Fino ad aprile 2005
Da aprile 2005
Portarullino
Kit maniglie laterali

Key

S/P
Wine
Water
Beige
To April 2005
From April 2005
Fixed hinge element
Side handle kit

9.8 SPARE PARTS FOR BOSKY 920 (PART 1) .

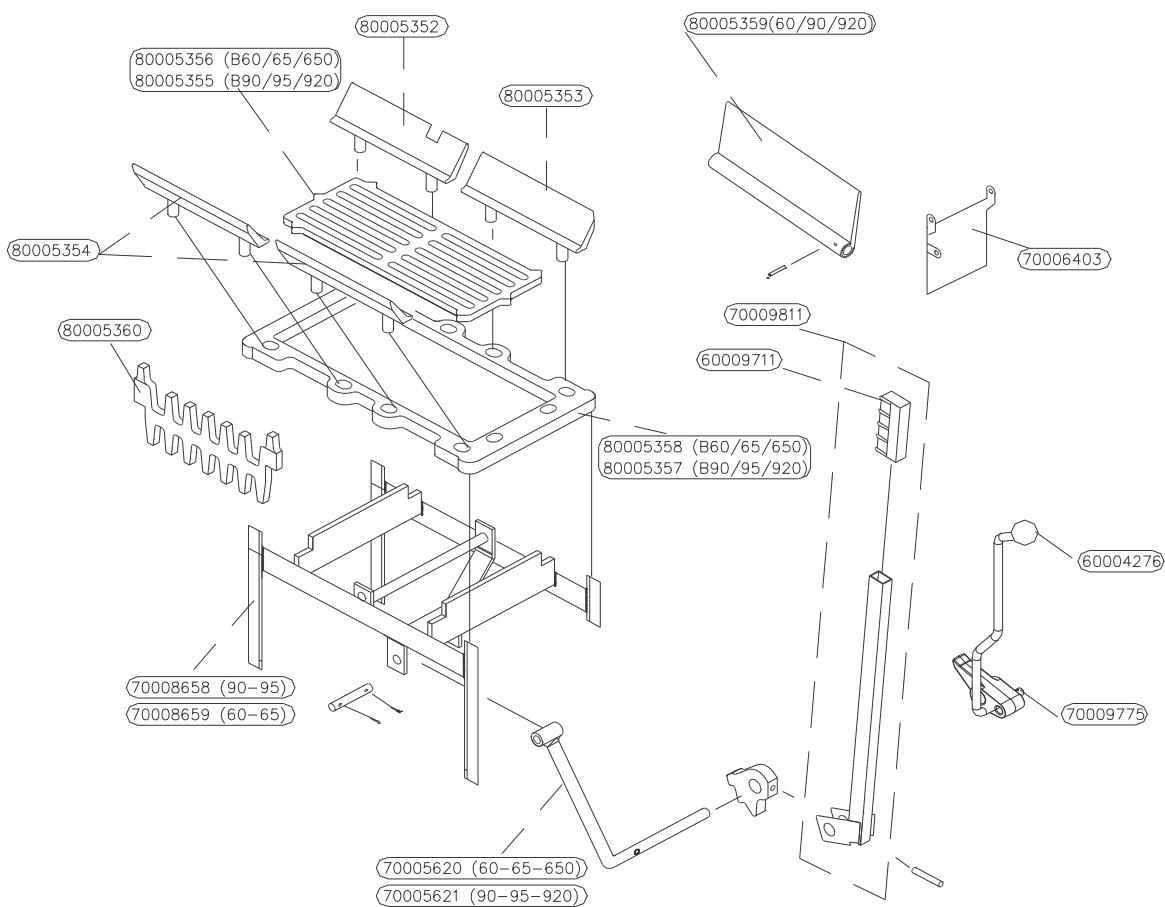




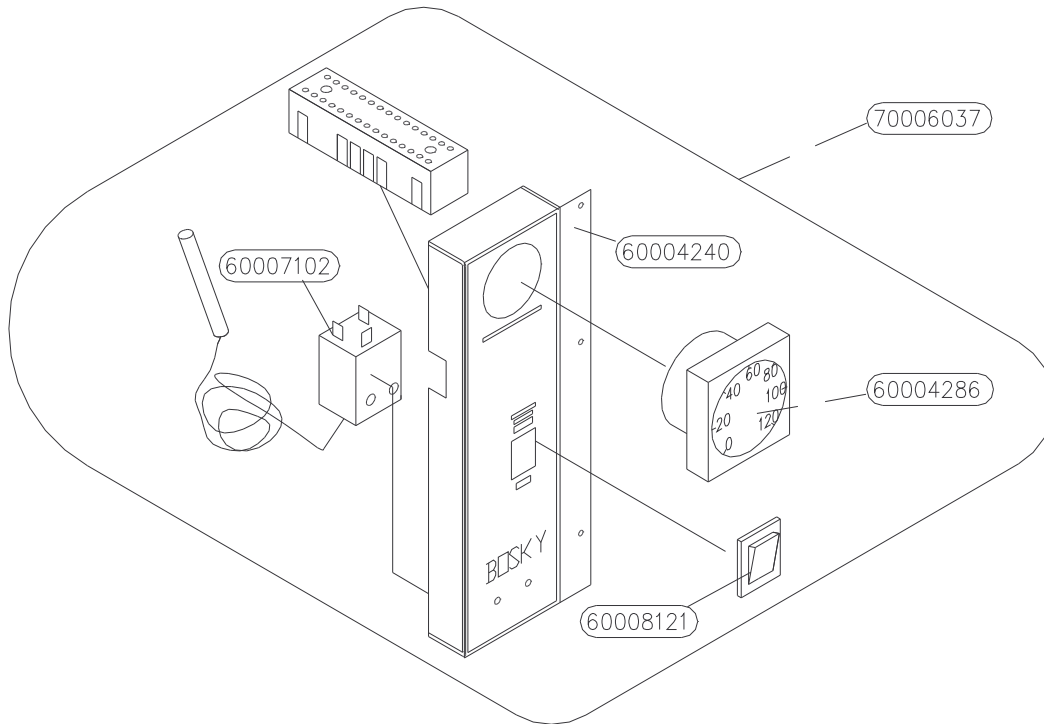
Legenda
P/S
Vin.
Acqua
Beige

Key
SP
Vin.
Water
Beige

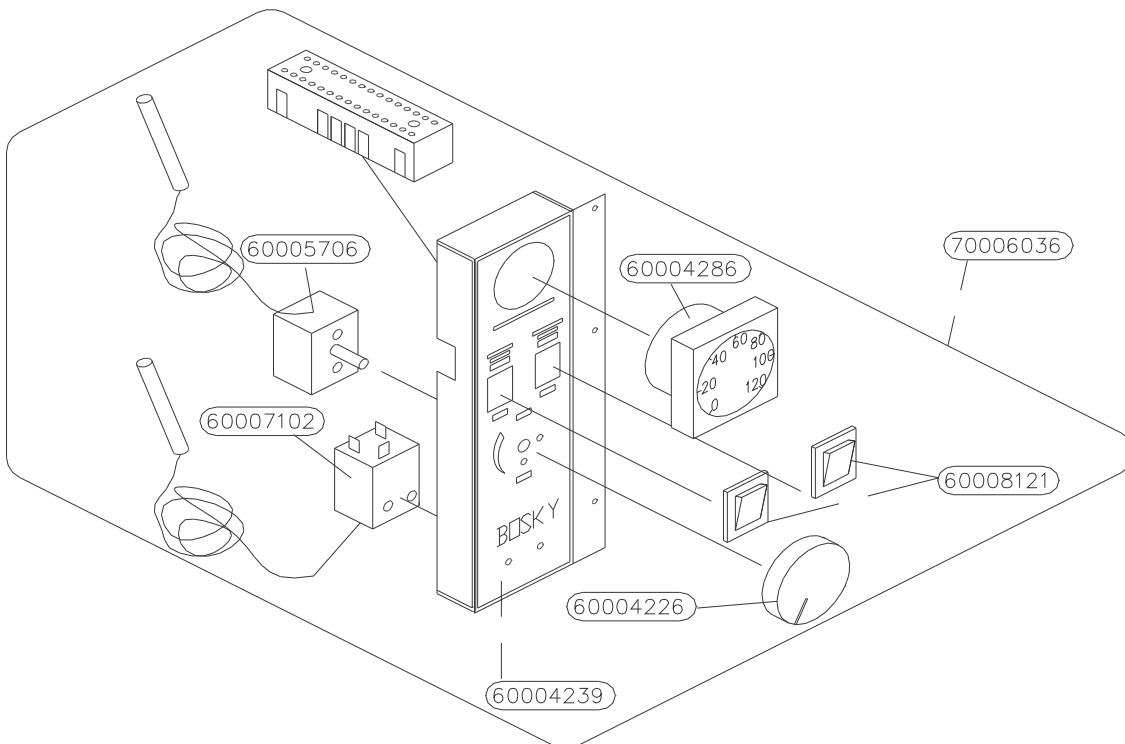
9.9 SPARE PARTS FOR BOSKY 60 - 65 - 90 - 95 - 650 - 920 (PART 2) .



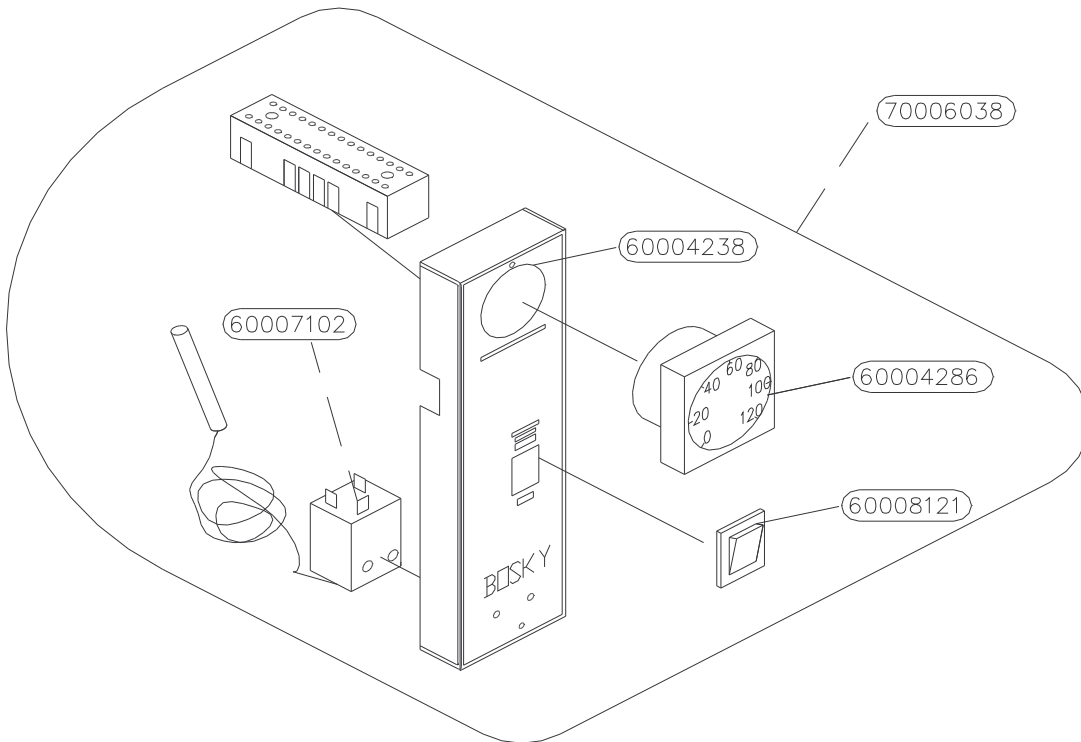
9.10 SPARE PARTS FOR BOSKY 60 - 90 (ELECTRIC PANEL) .



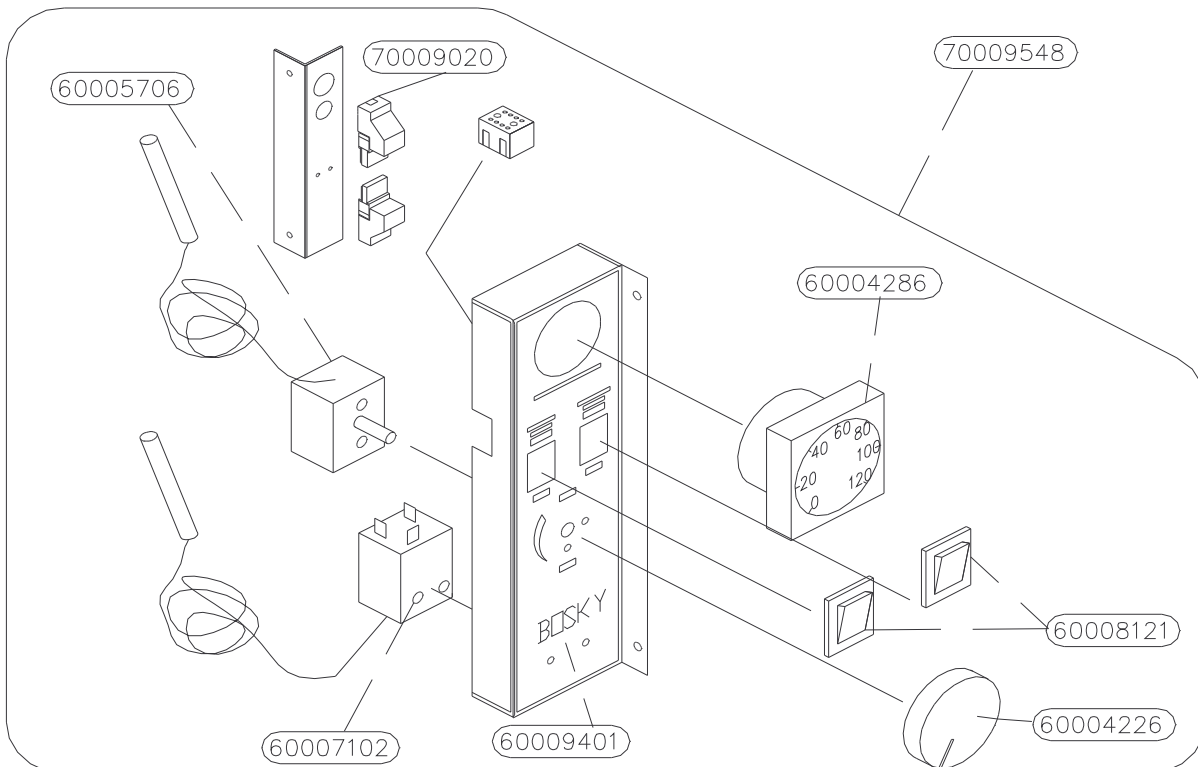
9.11 SPARE PARTS FOR BOSKY 60 - 90 (ELECTRIC PANEL WITH ELECTRIC OVEN) .



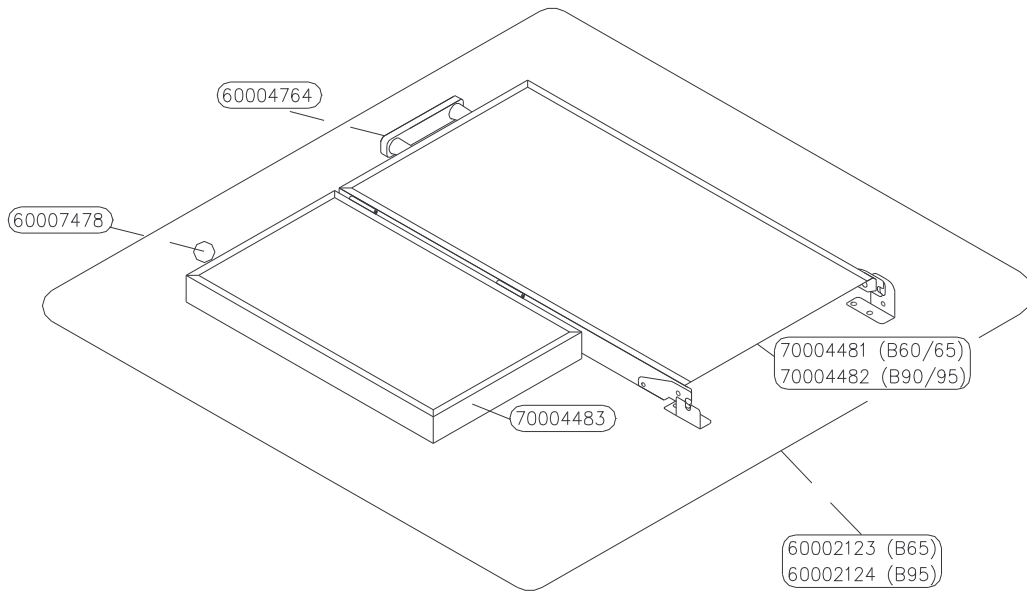
9.12 SPARE PARTS FOR BOSKY 65 - 95 - 650 (ELECTRIC PANEL).



9.13 SPARE PARTS FOR BOSKY 920 (ELECTRIC PANEL).



9.14 SPARE PARTS FOR BOSKY 65 - 95 (INSULATION COVERS).



9.15 SPARE PARTS FOR BOSKY 60 - 90 (INSULATION COVERS).

