

THERMOROSSI

CHEF, CHEF F



INSTALLATION, USER & SERVICE MANUAL

VER 1 10/2015

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DICHIARAZIONE DI CONFORMITA'

DECLARATION OF CONFORMITY

La **THERMOROSSI S.P.A., VIA GRUMOLO N° 4 36011 ARSIERO (VI)**, sotto la sua esclusiva responsabilità DICHIARA che l'apparecchiatura descritta in appresso: *DECLARES that the product:*

Descrizione

Cucina a legna

Description
Marchio
Trademark

Wood Cooker
THERMOROSSI
S.P.A.

DICHIARAZIONE DI PRESTAZIONE

DECLARATION OF PERFORMANCE

Dichiarazione di prestazione in accordo con il Regolamento (UE)
EN.12815-2001 *Declaration of performance according to Regulation*
(EU) EN.12815-2001/A1.2004

Modelli *Models*

CHEF, CHEF F

Ultime due cifre dell'anno in cui è affissa la marcatura CE 11
Last two figures of the year of the CE marking

Luogo **Arsiero**
Place

Data 8 Novembre 2011

Date

Firma

Sign

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.

Thermorossi S.p.A. maintains the author's rights on these service instructions. The information in this booklet may not be reproduced or given to third parties or used for competitive purposes without the appropriate authorization.

1.2 SAFETY GUIDELINES

PERSONAL INJURY

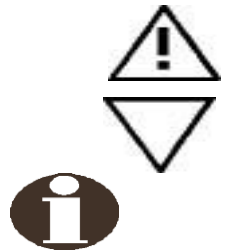
This safety symbol identifies important messages throughout the manual. When you come across this symbol, read the following message carefully. Users of the cooker must adhere strictly to the instructions to avoid serious injury.

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 to avoid serious damage to both the cooker and the heating system.

INFORMATION

This safety symbol instructions are important for the good operation of the cooker/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) EN 12815 : 2001 , EN 12815 : 2001 / A1:2004**

- **RECOMMENDATIONS:**



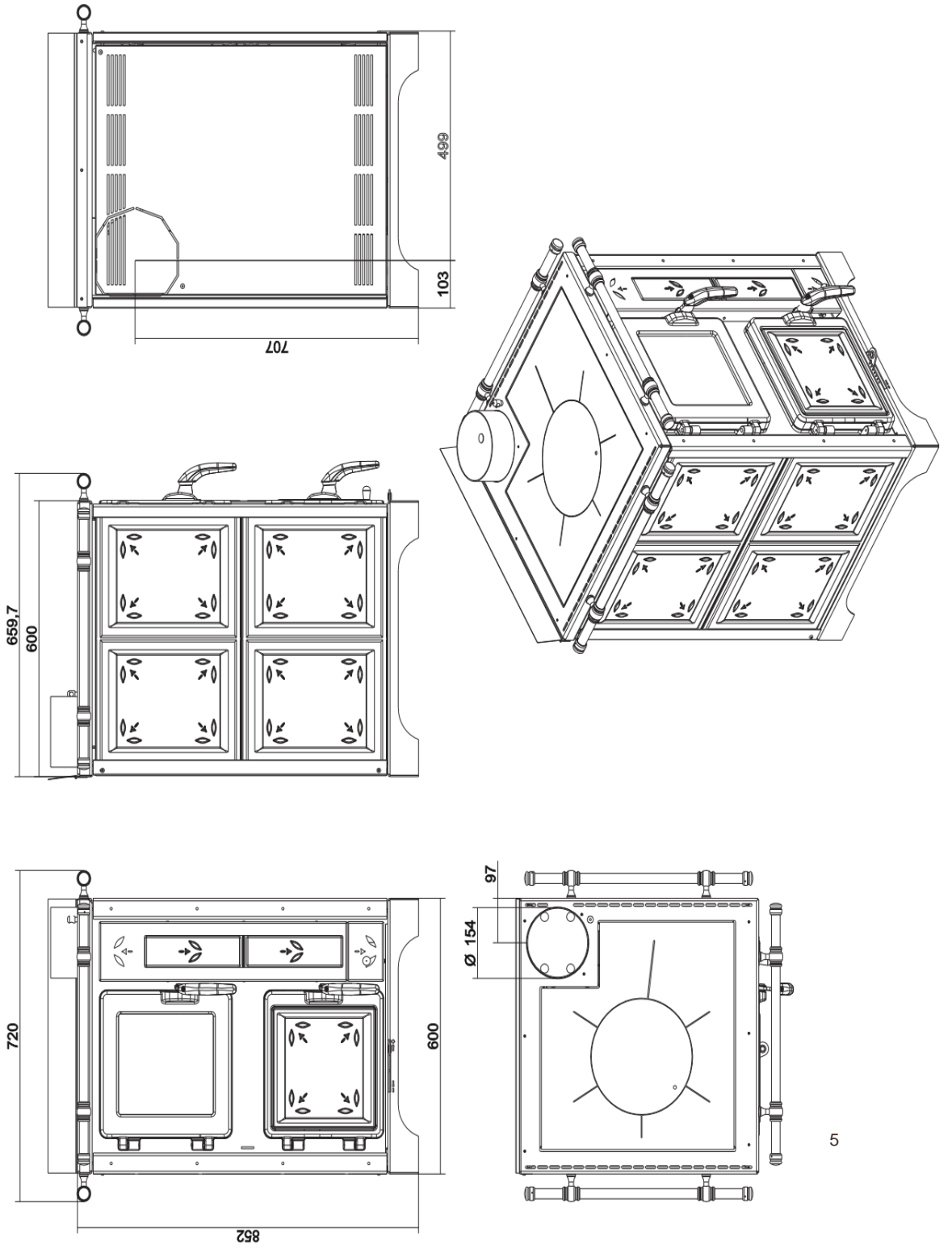
Before using the appliance, carefully read every section of this instruction manual as knowledge of the information and the regulations contained in it are essential for a correct use of the appliance.

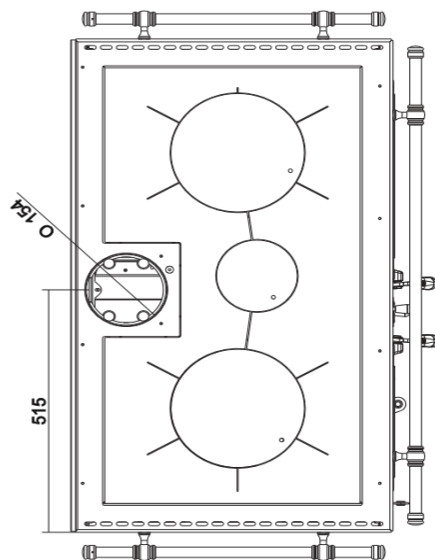
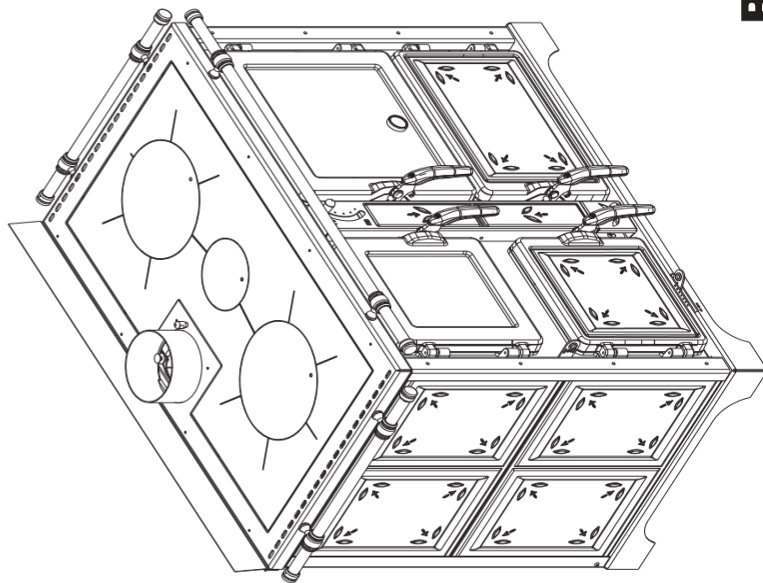
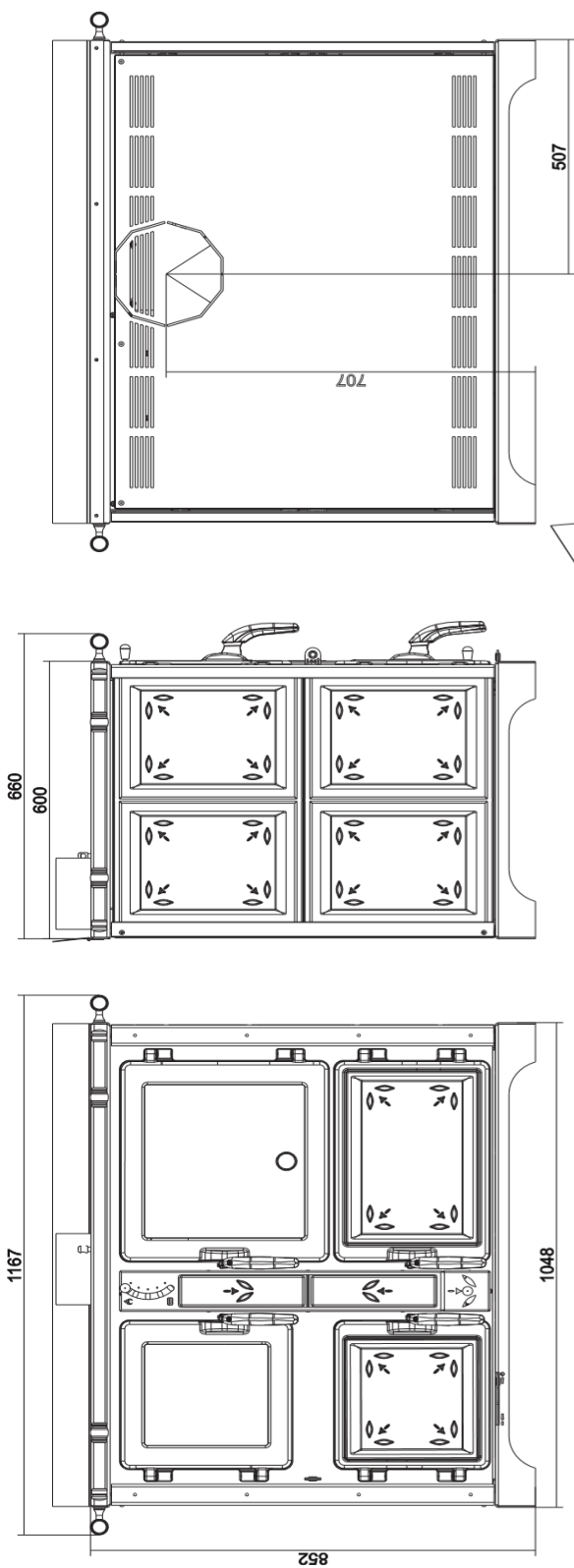
The entire operation concerning the connection of the electric panel must be carried out by expert personnel; no responsibility will be accepted for damages, even to third parties, if the instructions for installation, use and maintenance of the appliance are not followed scrupulously.

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.

1.4 TRANSPORT AND STORAGE Packaging The products are packaged in a wooden crate Transport and handling The 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 cooker must be stored in humid free environments sheltered from the weather; it is inadvisable to store the cooker directly on the floor. Thought must be given to the flooring as damage cannot be responsible to Thermorossi.

BOSKY CHEF





BOSKY CHEF-F

	CHEF FIORI	CHEF F FIORI
HEIGHT (mm)	852	852
DEPTH (mm)	667	667
WIDTH (mm)	600	1048
WEIGHT (Kg)	247	330
FLUE DIAMETER (mm)	Ø150	Ø150
MINIMUM FLUE DRAUGHT (Pa)	12	12
MAXIMUM POWER (kW)	16.4	16.4
MAXIMUM POWER (Btu)	56000	56000
NOMINAL POWER (KW)	12	12
NOMINAL POWER (Btu)	41000	41000
EFFICIENCY %	73.4	73.4
EMISSIONS CO (mg/m ³ AT 13% O)	939.6	939.6
TOP OVEN DEPTH mm		515
TOP OVEN WIDTH mm		340
TOP OVEN HEIGHT mm		320
TOP OVEN CAPACITY LT		56
BOTTOM OVEN DEPTH mm		530
BOTTOM OVEN WIDTH mm		350
BOTTOM OVEN HEIGHT mm		200
BOTTOM OVEN CAPACITY LT		37
MAXIMUM ALLOWED FUEL PER HOUR KG	3.7	3.7
HOTPLATE DIMENSIONS MM	480 x 480	930 x 480

The performance values are from two beech logs totalling 3.7kg where the calorific value was 15.953 kj/kg with a moisture content of 9%. Using wood with different specifications to this will directly effect performance, efficiency, ash formation, glass cleanliness and general dirtiness..

	CHEF VINTAGE	CHEF F VINTAGE
HEIGHT (mm)	852	852
DEPTH (mm)	667	667
WIDTH (mm)	680	1119
WEIGHT (Kg)	251	332
FLUE DIAMETER (mm)	Ø150	Ø150
MINIMUM FLUE DRAUGHT (Pa)	12	12
MAXIMUM POWER (kW)	16.4	16.4
MAXIMUM POWER (Btu)	56000	56000
NOMINAL POWER (KW)	12	12
NOMINAL POWER (Btu)	41000	41000
EFFICIENCY %	73.4	73.4
EMISSIONS CO (mg/m ³ AT 13% O)	939.6	939.6
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GENERAL DESCRIPTION

3.1 OPERATING PRINCIPLE

•Your cooker has been constructed to satisfy in full all your cooking needs.

3.2 THE FUEL



CORRECT use of appliance when using wood fuel

For anyone interested in wood burning, there is much to learn; in the following text you will find guidance and information on the subject.

Before installing or using a wood burning appliance, carefully read the installation procedure or if you are in any doubt as to the soundness of your chimney, call us and we will be pleased to advise you. ALL WORK MUST COMPLY WITH CURRENT BUILDING REGULATIONS or local applicable legislation.

1-1 GOOD WOODBURNING TECHNIQUE

If wood is burned at high temperatures a more complete combustion occurs, complete combustion means that most of the volatile hydrocarbons locked in the wood are released in the form of heat generally displayed as long yellow flame combustion.

The higher the combustion chamber temperature, the more complete the combustion process.

1-2 BAD WOOD BURNING technique

If wood is burned at low temperatures then very little is achieved and incomplete combustion occurs.

Incomplete combustion is typified by wood tar deposits all over the internals of the firebox, flue ways and door glass.

The lower the combustion chamber temperature, the worse the combustion and the greater the build up of wood tar.

In really bad cases, wood tar can drip from the appliance.

- GOOD wood burning technique increases the efficiency of the burn process.
- BAD wood burning technique decreases the efficiency of the burn process.
- GOOD wood burning technique decreases your running costs.
- BAD wood burning technique increases your running costs.
- GOOD wood burning technique increases the life expectancy of the COOKER.
- BAD wood burning technique decreases the life expectancy of the COOKER.
- GOOD wood burning technique results in a clean appliance and chimney.
- BAD wood burning technique results in a tar covered appliance and chimney.
- Below is an example of tar build up that caused excessive damage when the chimney caught fire – totally preventable!



1-3 loading and running the appliance

The fire is ignited in the usual way and air is automatically admitted through the air inlet flap controlled by the relevant setting of the thermostat knob.

When the fire is established, build it up slowly by adding a small quantity of wood, take care not to put too much wood on at once otherwise this will :-

Kill the fire.

Reduce the firebox temperature.

Create smoke.

Cause tarring.

Cause condensation.

When the combustion chamber is up to a high enough temperature, the wood oil starts to vaporise from the wood, and creates long yellow flames.

Secondary air is drawn in to mix with these flames and this further improves the combustion.

As the wood fuel burns away it slowly decomposes leaving a light grey coloured ash.

As is the case with all fires, if it is allowed to die down too much, it will not be possible to recover it.

Try to keep topping the firebox up regularly but do not overload it so as to kill the temperature of it.

If you need to keep the appliance in for longer periods of time try topping it up with smokeless fuel otherwise let it go out and re light it.

If your wood has a moisture content above 25%, it would an idea to mix it with expensive kiln dried wood (which is normally sub 10% moisture) to make sure the average burning is well below 20% moisture.

Do not burn general waste or various plastics, but above all never use gasoline or flammable liquids.

In the case of use of briquettes it is required to halve the fuel consumption.

2. ABOUT WOOD FUEL

2-1 Do I know how much wood I will need to burn?

Roughly 1 lb of wood equals 1Kw of energy; therefore if you need 10Kw of energy per hour you are going to have to burn about 10 lbs of wood per hour.

Pine and Oak have different density therefore a tonne of Pine will take up substantially more volume than a tonne of Oak.

If you work out how many Kilowatt hours are required to keep your property warm then you should be able to work out the weight of wood required for a seasons heating.

2-2 Do I have a reliable and proven supplier of wood and do I know the cost?

Once you have established your seasons requirement you can order your supplies from a local wood fuel supplier.

2-3 Do I know how to store the wood?

Before any wood is burnt, it should have a moisture content of no more that 20%.

This can be achieved by drying outdoors for 12 months and then under cover for the second 12 months assuming that the wood has been cut, split and stored in such a way as to allow adequate air to circulate through the wood pile.

Ash is an exception to this rule as it can be cut early in the year and (providing it is stored correctly) burned in the autumn.

2-4 equipment to help me get the best from my wood burning appliance

There are many factors which will affect the running of your wood burning appliance but the most common problems are:-

WET WOOD

RUNNING THE APPLIANCE AT THE WRONG TEMPERATURE

INCORRECT INSTALATION

INCORRECT CHIMNEY

The main problem here is knowing

How do I know that the wood fuel is at the correct moisture content for burning?

How do I know if I am burning the wood at the correct temperature?

Two pieces of equipment will help here, a moisture meter will tell you what the moisture content of your wood is and a stove top thermometer will tell you what temperature your appliance is running at.

Both of these are available from us.

COAL

Firstly and most importantly we must say that you cannot burn coal on any appliance in a smoke controlled area unless the appliance is specially designed and approved according to statutory requirements.

If you wish to burn ordinary house coal on a chef or chef F you need to know how to do it, and that the chef or chef F has the necessary design features. Do not use petrocok as this will damage the appliance.

The main problems are nearly always caused by: -

Putting too much coal on a fire which is almost out and then opening the ash pan door to increase the draw.

Running the appliance at too low a temperature causing the fire to smoulder continuously.

Not riddling the fire often enough so preventing the required amount of combustion air reaching the fire

If you put masses of coal on a low fire and then open the bottom ash access door, the result will be that the fire will produce too much smoke which cannot burn or which when it bursts into flames will cause a small explosion in the firebox and also up the chimney, the latter being particularly dangerous.

The name of the game is to keep your fire burning healthily. Build it up with small amounts regularly rather than large amounts infrequently and use coal no smaller than doubles. Cobbles are better because they allow plenty of air to get around the firebox.

When loading the fire with a fresh change of coal, if it is possible rake the hot or glowing embers to the front of the firebox and pout the new coal to the back. In this way the new coal will burst into flames more quickly and the bright embers will encourage the smoke to ignite quickly.

Slack, shale, singles or small fuel will simply stop air getting through and cause the sooting and exploding problems, which are to be avoided. Regular riddling is of prime importance, as mentioned earlier.

If you get it wrong - you will normally do it in the first week or month. In some cases the result can be a blocked chimney in less than a week. The part of the chimney, which blocks up first, will be the pipe connecting the cooker to the chimney. This pipe must be as near vertical as possible for coal burning. Rear outlet flues or bends are to be avoided at all costs, according to building regulations the minimum angle a flue pipe can run is 45 dg., although we think a minimum of 60 dg is better. Regular cleaning of the appliance and the chimney is essential the frequency of such cleaning would be established by experience but we would think once every 6 weeks would be adequate.

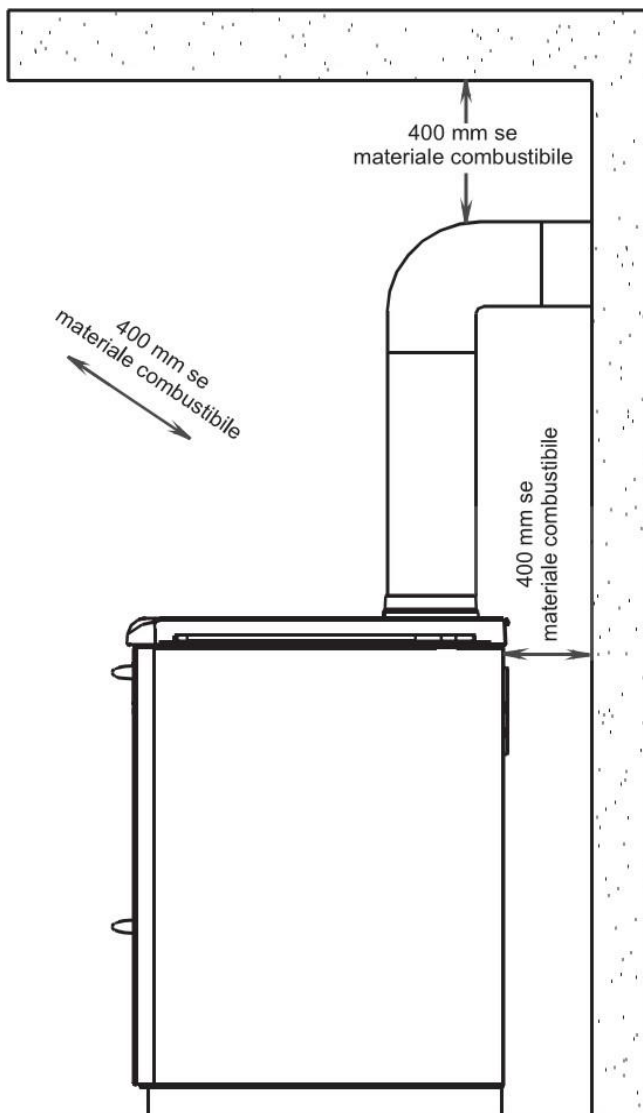


4.1 LOCATING THE COOKER

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

CAUTION: The room in which the cooker is installed must be adequately ventilated (1300 m³/h). Ensure that there is always a minimum 75mm safety gap between the cooker and walls or combustible materials. Inflammable items are positioned near the cooker (matchboarding, furniture, curtains, wall hangings, sofas, etc...), this gap must be increased considerably. Adhere to the recommended minimum distances illustrated in the drawing below. 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



4.13 mounting panels chef, chef F

After positioning the cooker proceed to mount the panels, as represented in the images below;

Proceed first to the fixing of ceramics (4) and (5) in their seats it is advisable to carry out this operation by removing the doors themselves. Fix after degreased and dried both ceramics and the seat, the same on the ceramic support with the thermal silicone supplied . Before moving and reassembling the doors to the cooker you must wait at least 24 hours.

Remove profiles (2) and (1) .

Now proceed to the assembly of the lateral ceramics (3) assembling first the lower and then the upper . Insert the ceramic (3) as shown in Figure 2 and Figure 3 first deforming the fins indicated

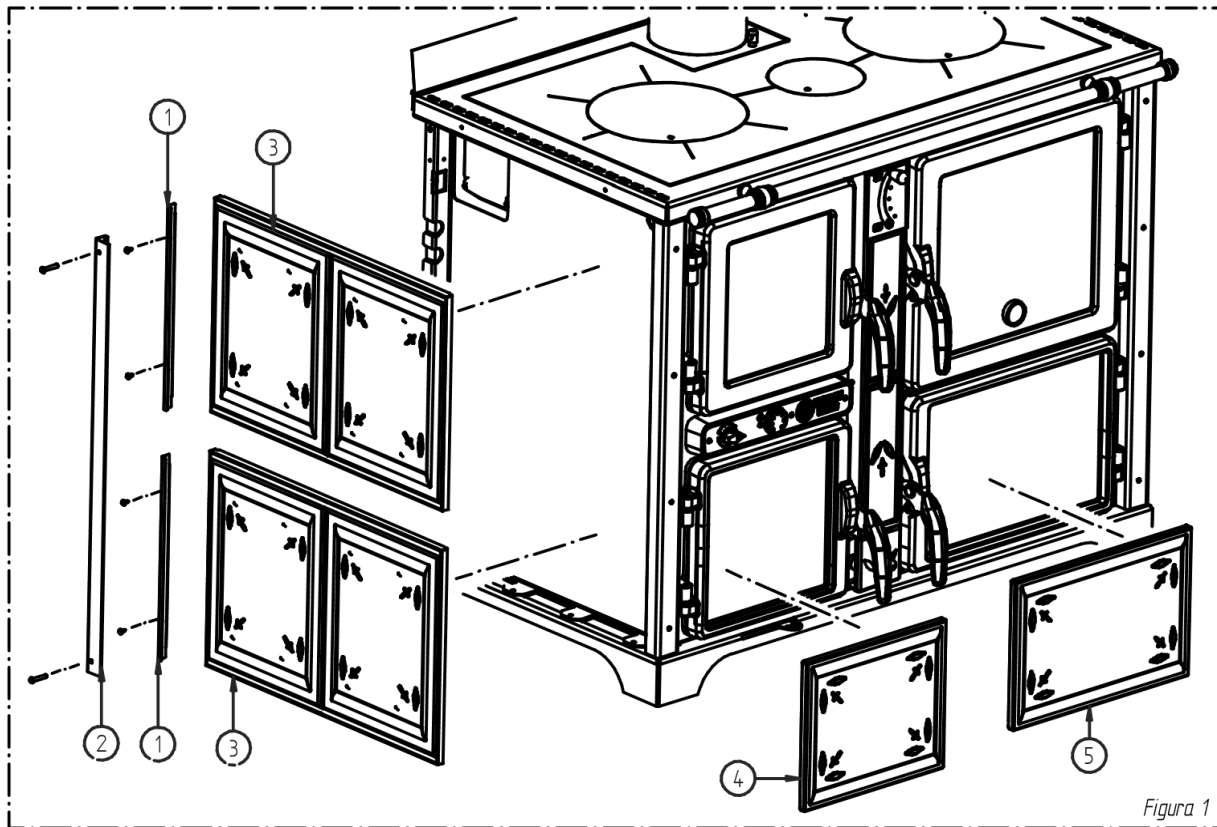


Figura 1

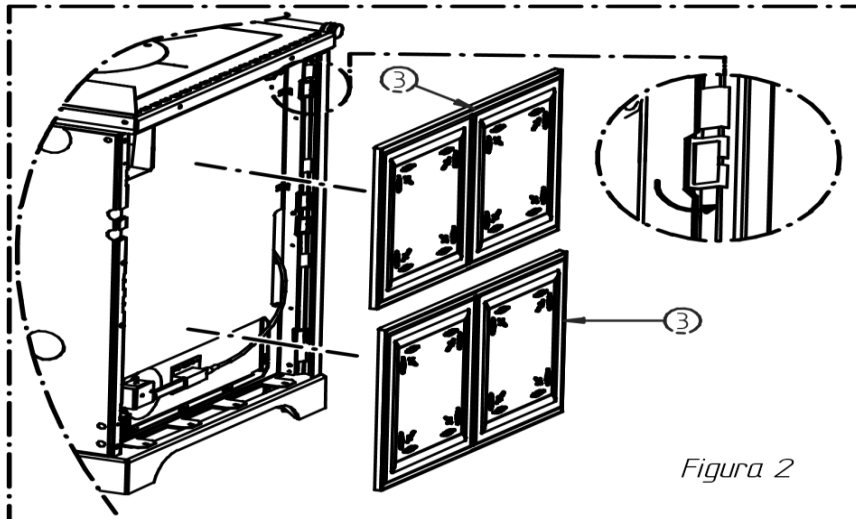


Figura 2

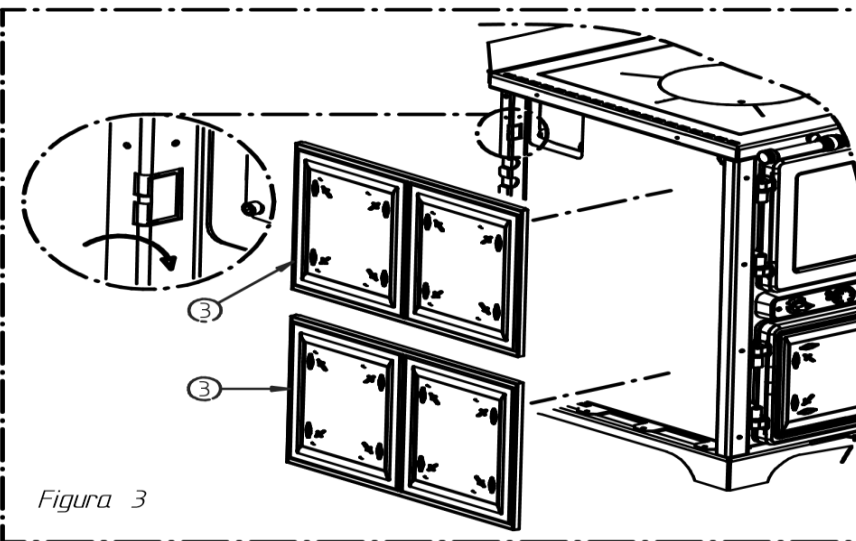


Figura 3

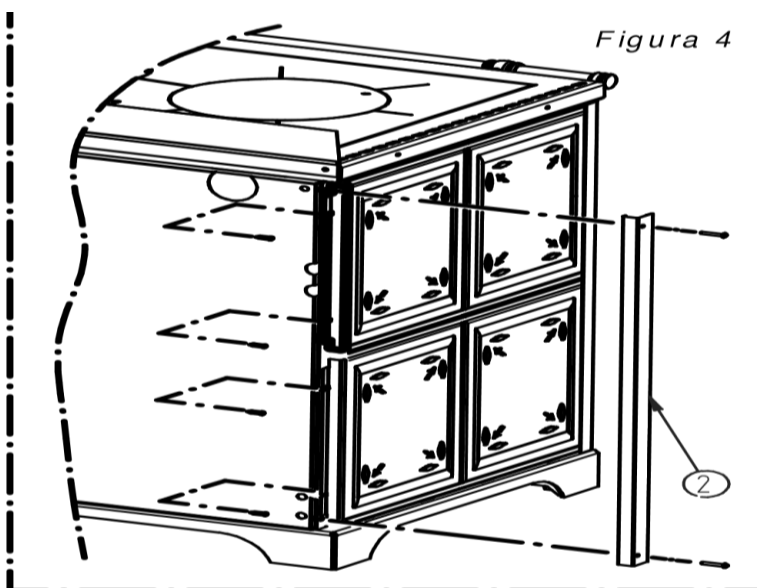
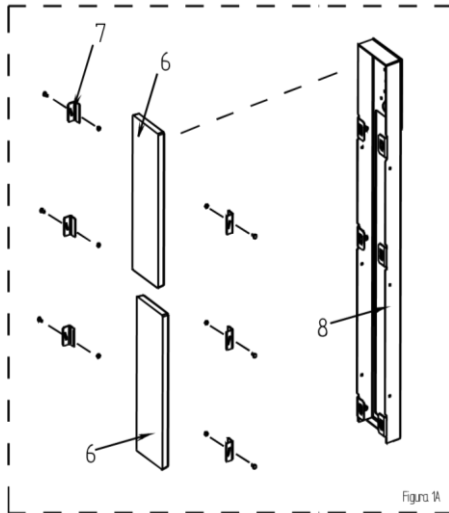


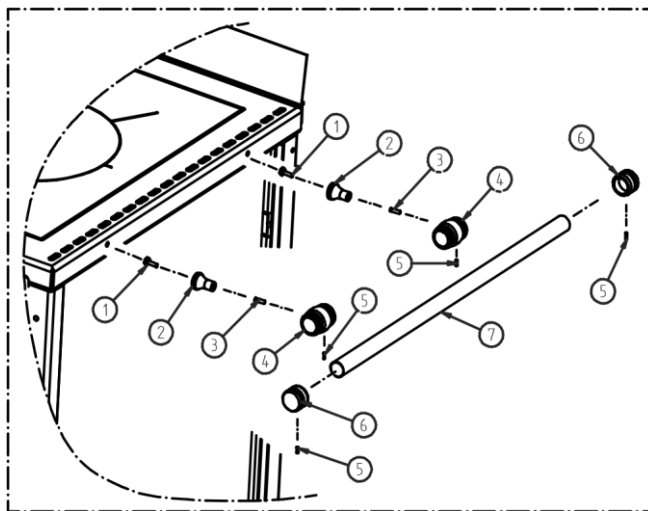
Figura 4

Provide for reassembling ceramics (6) by removing first the black knob of the smoke diverter and then pulling the central support ceramics (8) by pulling on the inside ; later proceed through the use of screws (7) to fixing the plate (6) on the support (8) . Finally fix the support (8) with the ceramic to the cooker



4.13.2 Mounting side rails (OPTIONAL for chef, chef F)

In order to assemble the side handles (optional) you must assemble before mounting ceramics. Proceed fixing of the spacers (2) and the supports (4) through the screws (3) . Now attach the group created at the cooker through the screws (1) . Now align the supports (4) and insert the rail (7) . Insert the rail end plugs (6) and fix the grub screws (5)



5 OPERATION



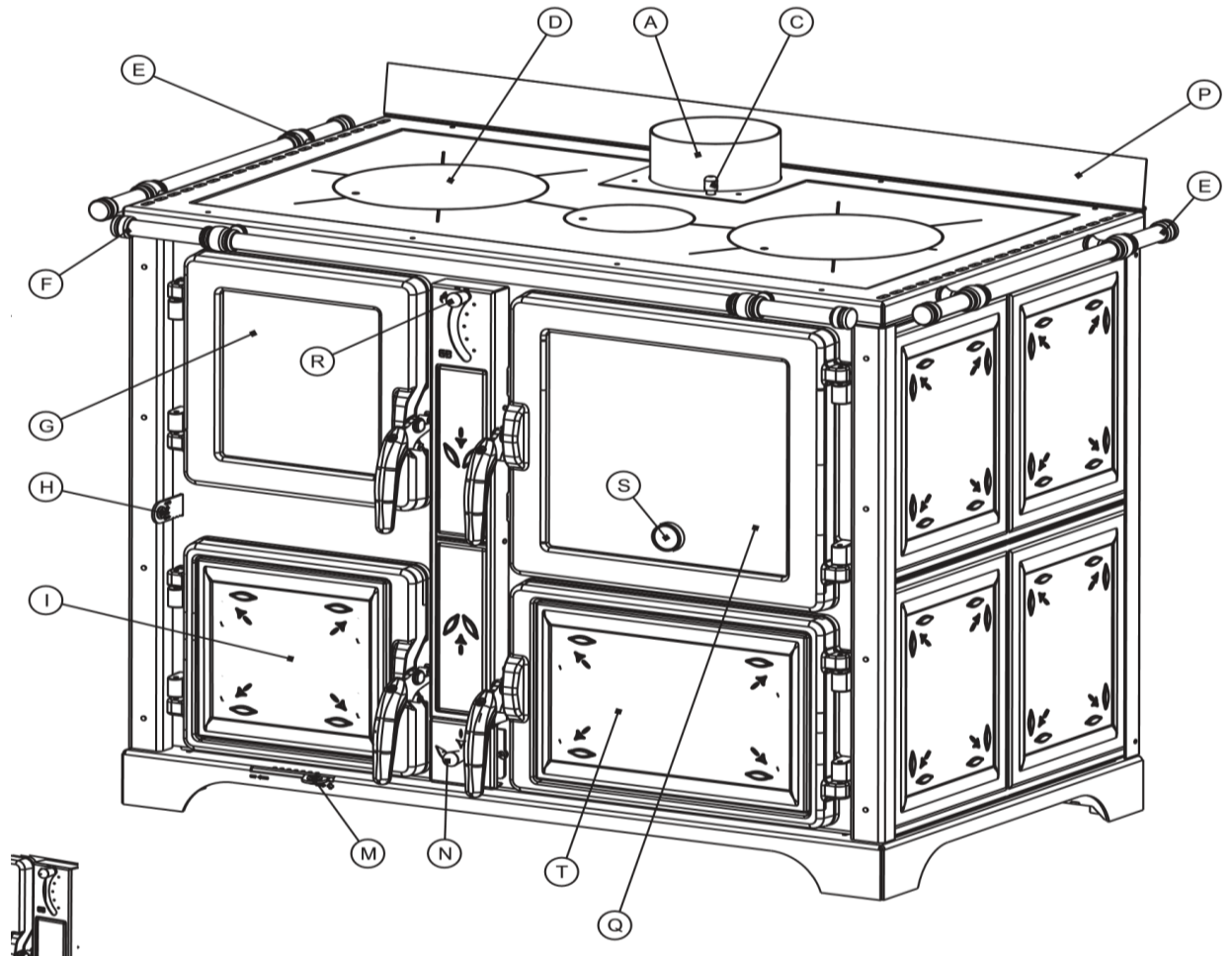
5.1.1 DESCRIPTION OF MAIN CONTROLS AND COMPONENTS OF CHEF, CHEF F

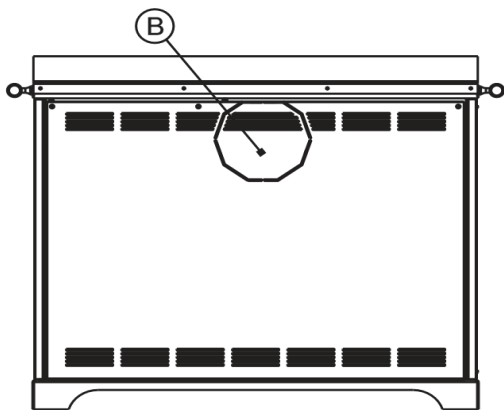
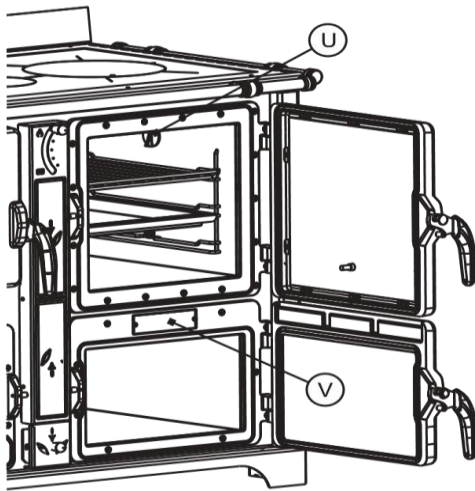
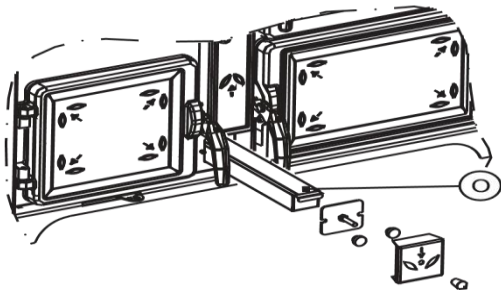
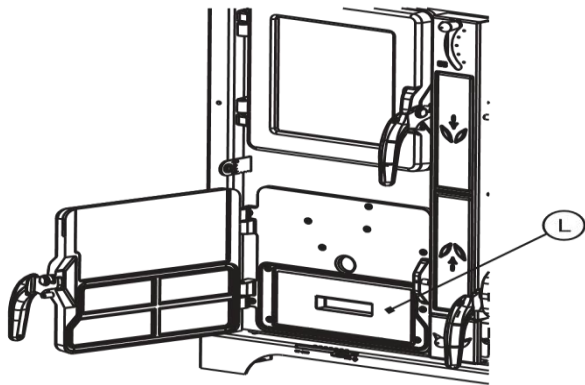
The main controls and components listed below are located on the enamelled door and on the top surface.

- A TOP FLUE EXIT
- B REAR FLUE EXIT
- C STARTER
- D HOTPLATE RINGS - REMOVABLE
- E OPTIONAL SIDE RAILS
- F FRONT RAIL
- G FIRE LOADING DOOR
- H SECONDARY AIR REGULATION
- I ASH PAN DOOR
- L ASH PAN
- M PRIMARY AIR REGULATOR
- N SECONDARY ASH DOOR
- O SECONDARY ASH PAN
- P SPLASH BACK

CHEF F MODEL ONLY;

- Q OVEN
- R OVEN REGULATOR
- S OVEN THEROMETER
- T SECONDARY OVEN/WOOD DOOR
- U COOKING VAPOUR EXIT VALVE
- V UNDER OVEN CLEANING FLAP





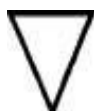
5.2 LIGHTING AND STARTING THE COOKERS



Before using the 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

REMOVE THE PROTECTIVE ADHESIVE FILM FROM THE COOKTOP.

To start the cooker firstly activate the starter by lifting the pin until it hooks onto the plate by means of the groove on it (see fig.below; use the tool provided). Leave the adjustment ring 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 to the home position and close the adjustment ring.



CAUTION: DO NOT FORGET TO CLOSE THE ADJUSTMENT RING! IF IT IS LEFT OPEN THERE IS A SERIOUS RISK OF THE COOKER OVERHEATING AND SUBSEQUENTLY DAMAGING THE COOKER 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 COOKER.

5.3 OPERATION OF THE COOKERS

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.



Do not operate whilst leaving the firebox door open.

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 firebox 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 cooker and in the flue and create tarry deposits.

The hotplate rings can be lifted out to allow direct heat transfer (using the tool provided), this is the style of Chinese cooking with woks placed on directly on flames, very hot and quick cooking follows. Correctly choosing the right pans is obviously important.

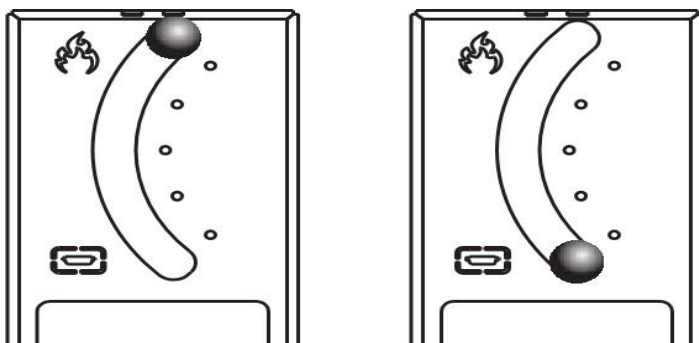
The left handside of the hotplate being directly over the firebox is considerably hotter than the right, so you can have boil, fry zone and a simmer zone at the same time.

5.5 HOW TO USE THE OVEN IN chef F

By using the smoke deviator flap (Drawing below) the cooker can have 2 operating modes:

-Lever upwards-**Only heating hotplate above the firebox**, 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 hotplate, but there is some heat transfer to the oven to allow gentle heating .

-Lever downwards-**Hotplate and oven**, in this mode the oven can be heated, the entire cook top plate is heated.



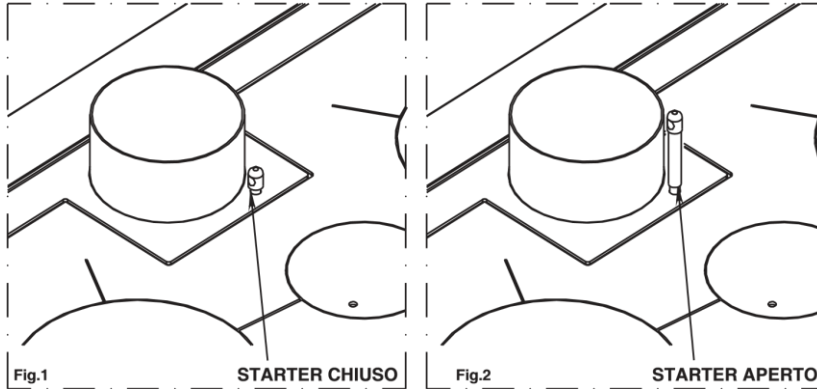
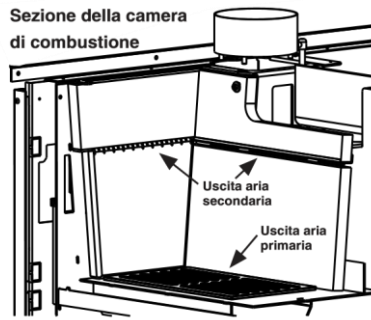
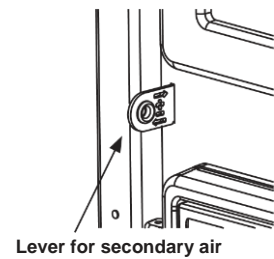


Fig.4



5 STOVE FUNCTION

When it turns on and start reacting to the regulation of primary and / or secondary air you can increase or decrease the combustion adjusting the kitchen to the various needs of heating or cooking . The useful power is reached using fuel as indicated in par.5.4 To rekindle the fire to free the slots for the air from the ash to promote better combustion.

6 CLEANING AND MAINTENANCE

6.1 GENERAL CLEANING

Your 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 cooker twice a year. The air inlets can be cleaned with an ordinary vacuum cleaner.



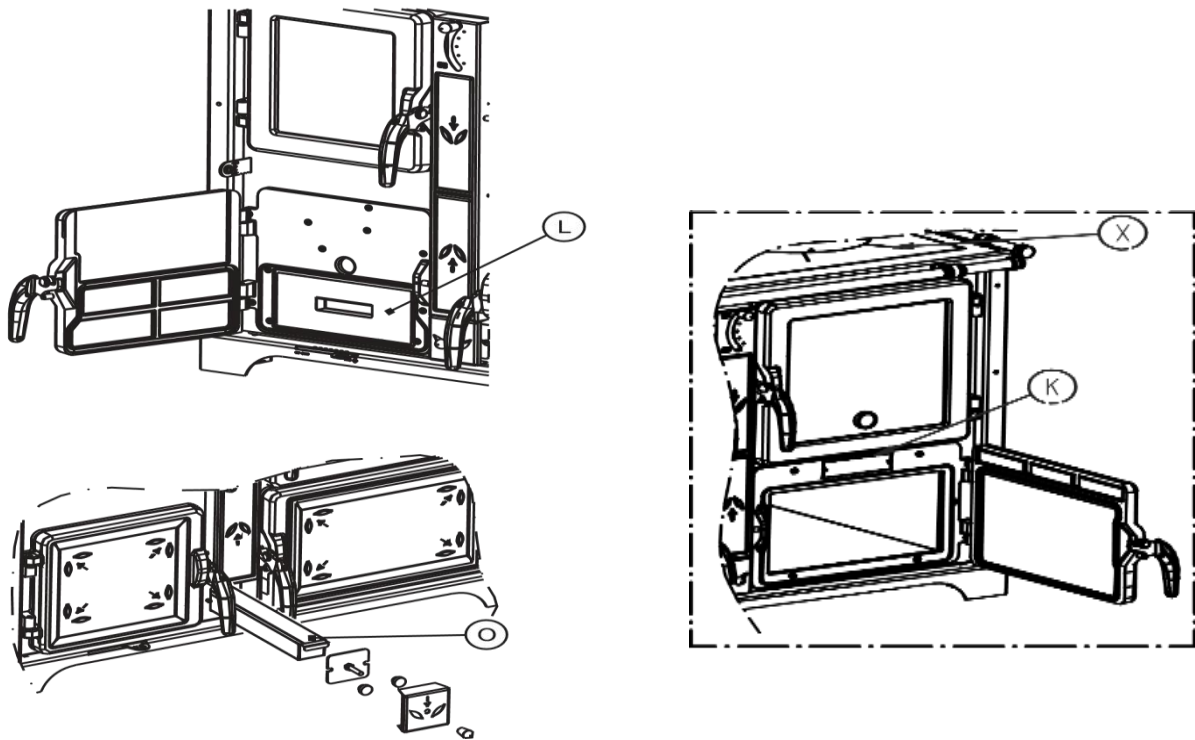
However, we recommend having the flue outlet cleaned by a professional chimney sweep.

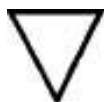
Caution: The glass and all the glazed steel parts must be cleaned with water and a gentle detergent when the oven has cooled.

6.2 ASH

The 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 cooker completely

We recommend emptying the ash pans (L and O) 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 cooker performs efficiently it is advisable to regularly clean the surfaces 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 below. 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.

6.5 RECOMMENDATIONS

-Every time you stoke the fire make sure the grate is not too deep in material. 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 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:

consumption: max. 3.7 Kg / hour.

-Thoroughly clean the cooker and flue at least twice each season .

Warning it is normal for the hotplate area to deform approximately 3-4mm

Warning it will void the warranty if you load more than 3.7kg of wood per hour

Warning it is normal for the hotplate to discolour after the first lighting turning blue/yellow

Warning it is normal in the first few hours of use for there to be odours as material is burnt off

Warning leave the oven door open for at least the first five hours of use

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

CHIMNEYS basics

An efficient wood burning stove is one of the most effective ways to improve the energy efficiency & reduce the CO₂ emissions in a house. To achieve its optimal performance an efficient appliance needs an efficient chimney system. The key to a well performing chimney is consistent insulation along the entire length of the flue without cold spots.

Vacuum .05" WG average.

Solid fuel appliances need class 1 chimneys which are designed to deal with flue gas temperatures above 260 deg C.

Class 1 chimneys can be of lined, masonry construction or of prefabricated insulated metal construction.

The job of the chimney is two fold:-

1. To safely remove the products of combustion (SMOKE)
2. To generate suck (VACUUM) to provide the fire with an adequate supply of air.

The power (DRAFT), (*suck or vacuum the chimney can develop*) depends upon the following:-

- THE HEIGHT.
- THE POSITION OF THE TERMINAL RELATIVE TO OTHER, LOCAL, OBJECTS
- THE DIAMETER.
- THE TEMPERATURE OF THE GASSES IN IT. (lining and insulation may come in to this)
- THE RESISTANCE OF THE INNER SURFACE OF THE CHIMNEY.
- THE AVAILABILITY OF ADEQUATE VENTILATION.
- THE HEIGHT ABOVE SEA LEVEL

Any bend in any part of the chimney or roughness on the internal chimney wall will slow down the velocity of rising gasses and reduce the effectiveness of the chimney.

Any slight reduction in the flue gas temperature will reduce the chimney vacuum or pull, hence when the stove is slowed down for all night burning, as the flue gas cools down the chimney vacuum reduces and as the chimney vacuum drops, the stove may well go out. This problem is highlighted even more during very cold weather when the chimney can cool down even faster.

Minimum draft of 18/20 PASCAL 0.18/0.20 mBAR

BEWARE, no one can guarantee that a chimney will work even after relining has been carried out.

Check out your chimney, look around your locality at other chimneys to see if there is a localised problem of down draughting.

If you have bought a house and have no experience as to the performance of the chimney be very careful, ask the previous owners and try to gather as much information as possible before you commit yourself.

As a rough rule of thumb consider that if you have a 90 bend in the flue you will need an additional 1m of height and for every metre of horizontal flue you will need an additional 2m of height.

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. A spinning cowl can be effective of which we supply.

LINING OF EXISTING CHIMNEY'S

Most old, leaking chimneys need lining and insulating with special materials designed to:-

1. Cure Leaks.
2. Reduce the build up of tar and soot on the walls of the flue.
3. Withstand the tremendous heat generated when tar and soot catch fire.
4. Generate a steady and controlled flue vacuum.

Old unlined chimneys are not suitable, if wood burning appliances are used on these chimneys the following may happen:

Tar builds up on the brick faces of the internal chimney walls.

This build up can take from 12 months to 5 years, and as time passes the tar gets thicker and thicker, in really bad cases the tar can work its way through the chimney walls into the plasterwork of adjoining rooms staining the wallpaper or plaster and causing a pungent wood smoke smell which can contaminate the affected rooms.

If a chimney in this state catches fire the results are severe causing bricks and mortar to crumble and drop down the chimney, and tar to ooze through the affected walls.

Often, with a chimney fire of this nature it could well be necessary to remove the complete stack taking out and replacing all the walls affected by the tar impingement.

Severe damage can also occur on some types of twin wall stainless steel chimneys, causing distortion and leaks of flue gases.

CHIMNEY HEIGHTS AND TERMINAL POSITIONS

Fig 1 is a rough guide about chimney heights and terminal positions.

Many manufacturers will call for a minimum flue height of 4.5 meters.

Document J of the building regulations provides details of the required statutory flue heights and terminal positions, the British Standard for chimney height calculations is BS5854:1980. (1996)

It would be illegal to install any appliance in a residential dwelling without complying with Document J or the manufacturers instructions.

In the schematic shown in fig1 chimney locations are graded on a scale of 1 to 4

4. being the optimum position.

3. being the next

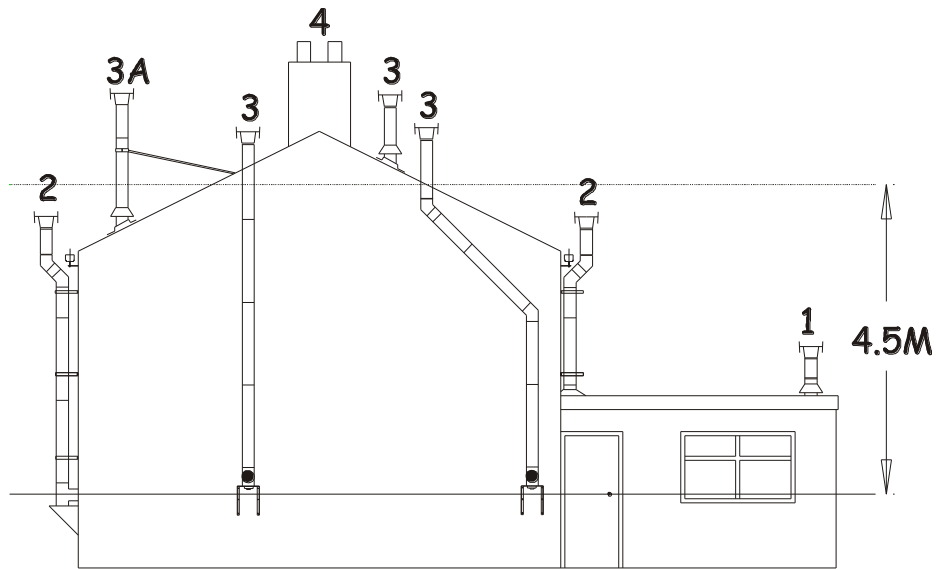
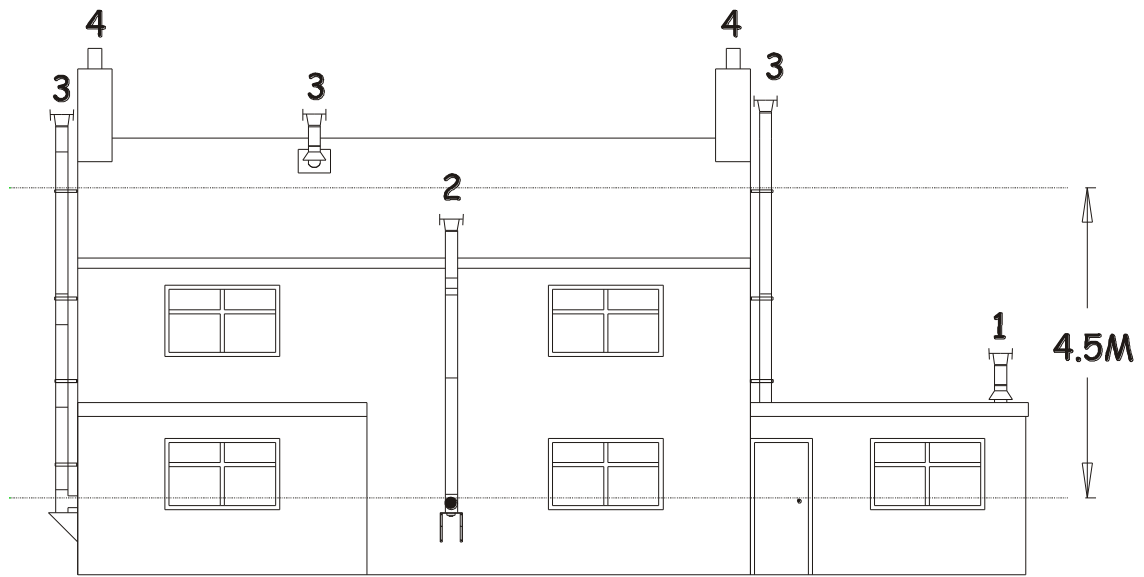
2. being not very good and likely to cause problems

1. Being not capable of complying with current legislation.

Note that the fig 1 illustration is not accurate and should only be used as a general guide.

Before any installation work is carried out, accurate compliance with Doc J of the Building Regs should be ensured.

Fig 1



**Pre Fabricated Chimneys
FIG 2 Single Story Instalations INTERNAL**

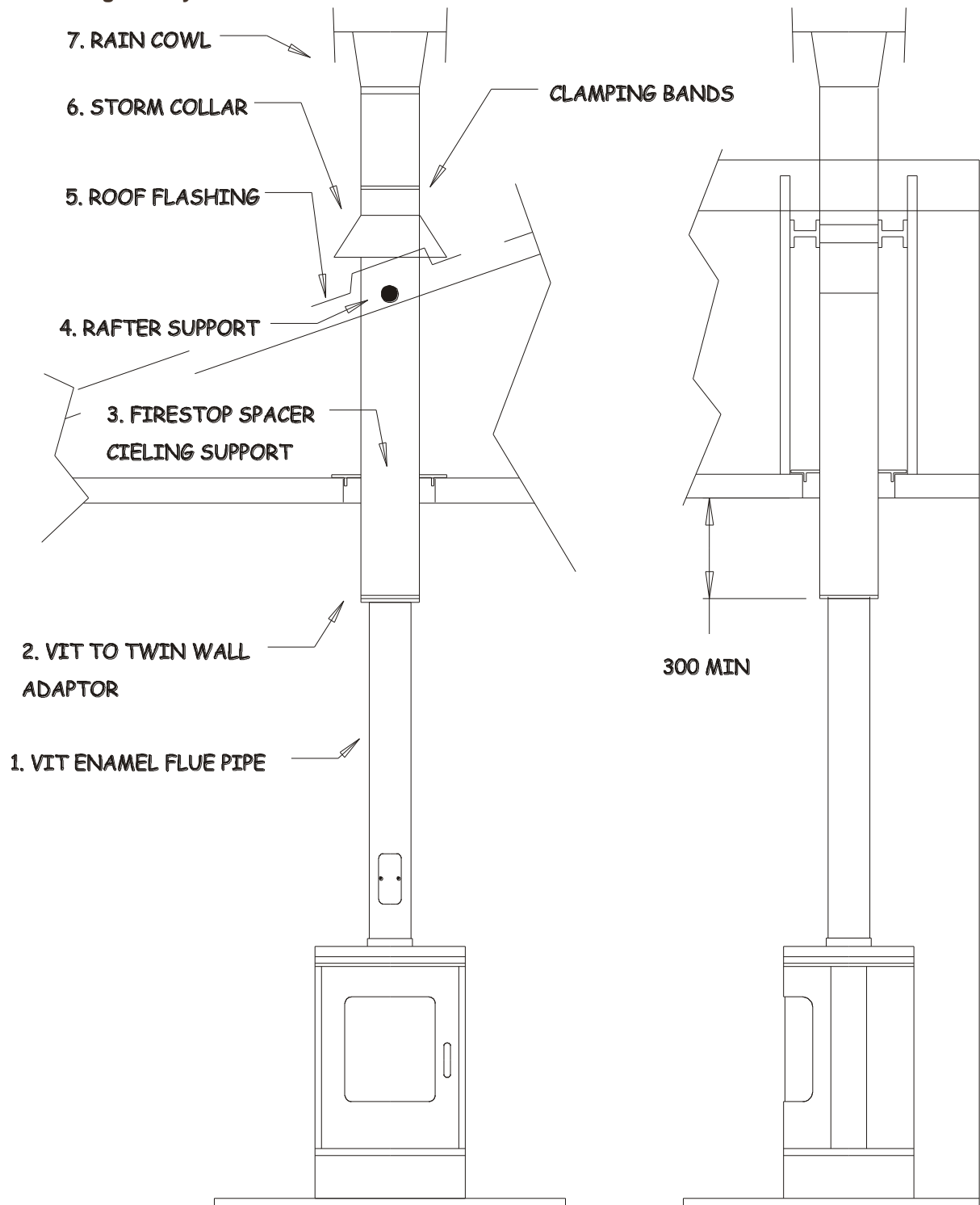
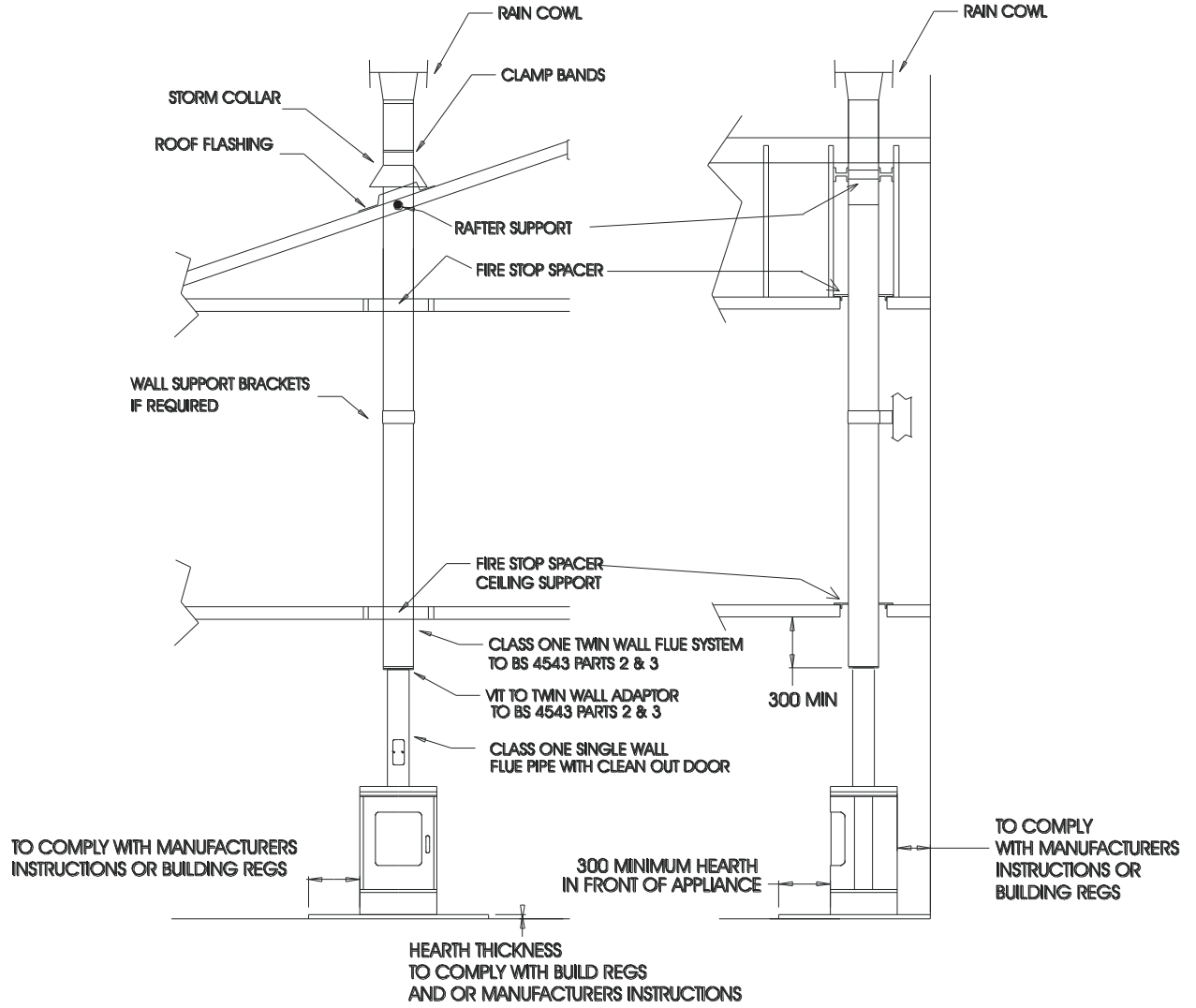
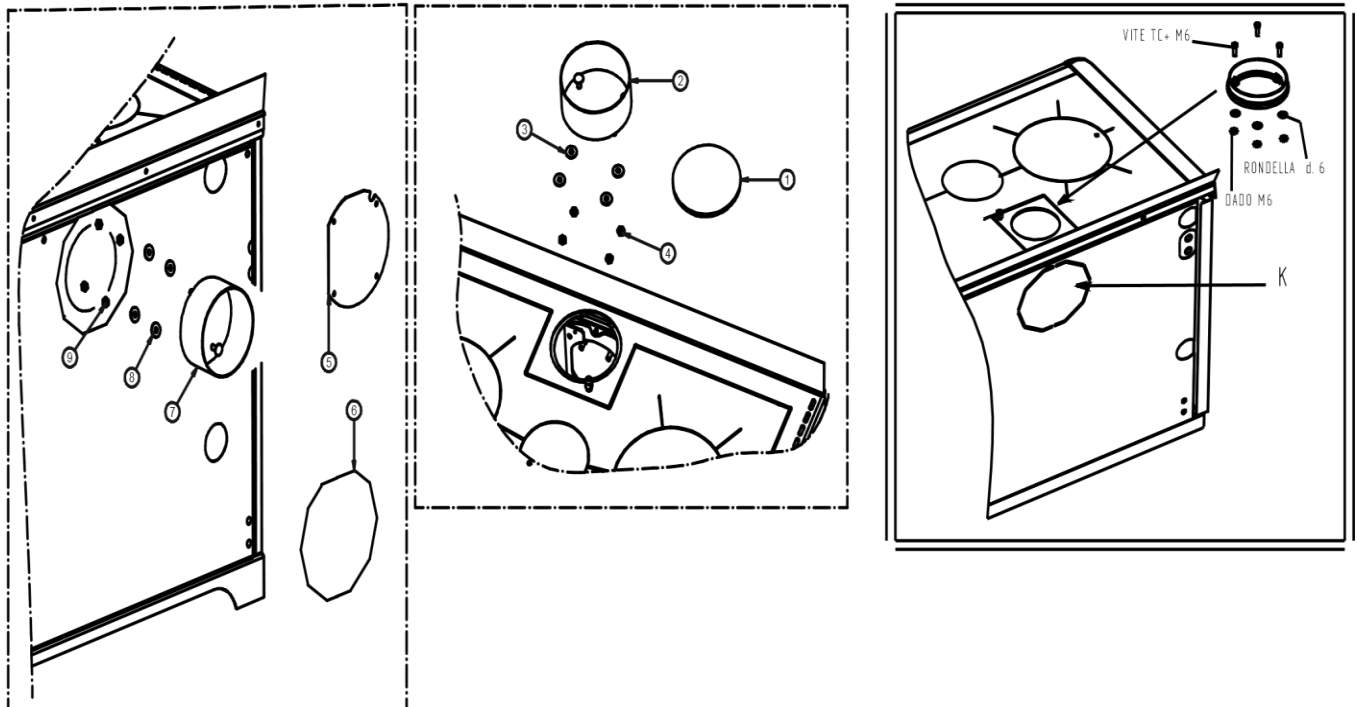


FIG 3 TWO STORY INSTALATIONS INTERNAL



7.3 CONNECTION TO THE CHIMNEY

The smoke outlet can be connected at the top of the hotplate or at the back of the cooker using the hardware provided as illustrated in the figure below. If you wish to connect the chimney to the back of the cooker 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 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.



7.4 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 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.

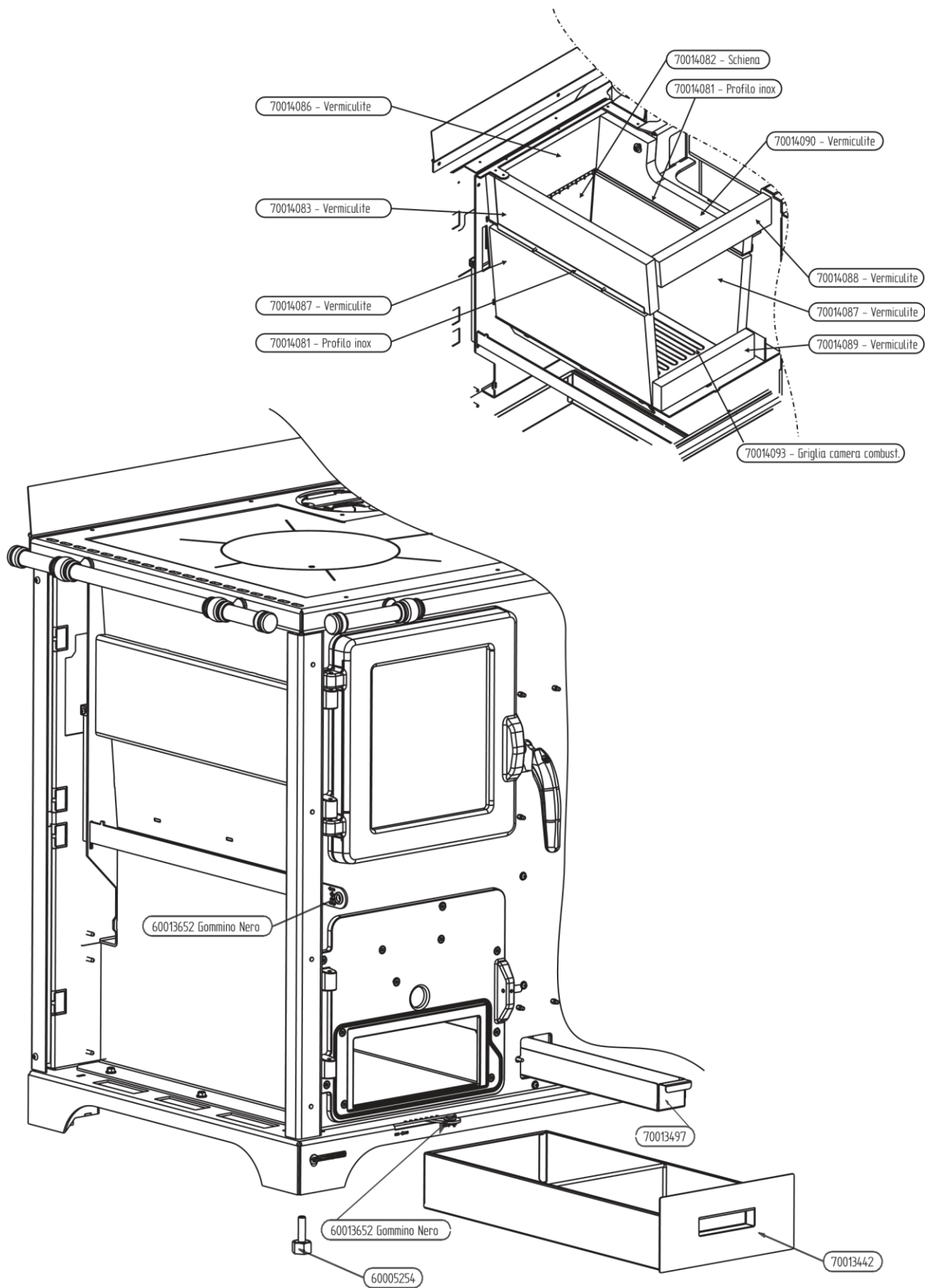
The air flow can also be obtained from an adjacent room as long as:

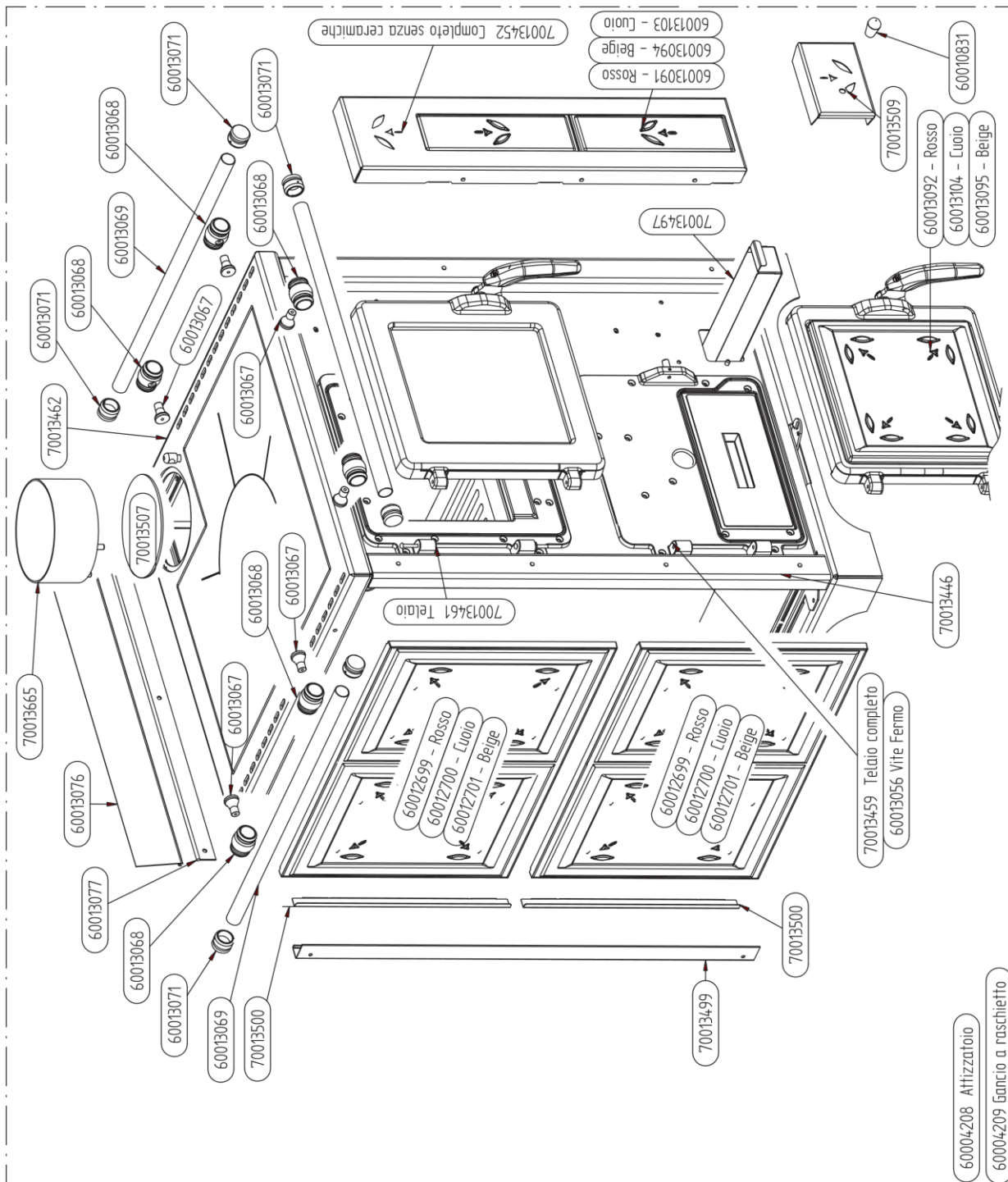
- the adjacent room is equipped with direct ventilation in compliance with the points described above;
- in the room to be ventilated the installed appliances are only connected to one flue outlet;
- the adjacent room is not used as a bedroom or a common area of the building;
- the adjacent room is not 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.
 - Under Reg J in the UK, an air vent is not required for older properties built before about 2005. Properties that have been 'improved' with extra insulation and draught proofing of windows and doors do require a vent.
 - If the chimney/cooker is to be fitted on an external wall the air supply can be taken straight from the outside. A 5" (100mm) diameter hole needs to be drilled in the correct place, 138mm above the hearth and the cooker 'manifold/extension air pipe' kit purchased and fitted. A proprietary grille is supplied with the kit, if not used an air brick or non-closing vent should be fitted to ensure the air supply is not blocked in any way.
 - The manifold method of supplying air is always to be preferred as there will be no draught in the room especially when the cooker is not in use.
 - If the cooker is not on an outside wall or the direct air supply method cannot be used, an air vent must be supplied in the room in which the cooker is fitted.
 - The sizes of the vents required is: 1650mm sq. (50mm diam.)
 - Only permanently open vents can be used and consideration should be given to draught when the cooker is not in use. Site these vents carefully. The vent covers should comply with Building Regulations Part J and should be sited where they cannot be blocked.
 - Extractor Fans: These suck air out of the room and cause a negative pressure in the room so they must have their own air vent to counter this. Even when the air is taken directly from the outside using the manifold system a vent will be required for any extractor fan fitted in the same room or adjacent rooms. Great care must be taken with restaurant/café kitchens which have professional levels of extraction.

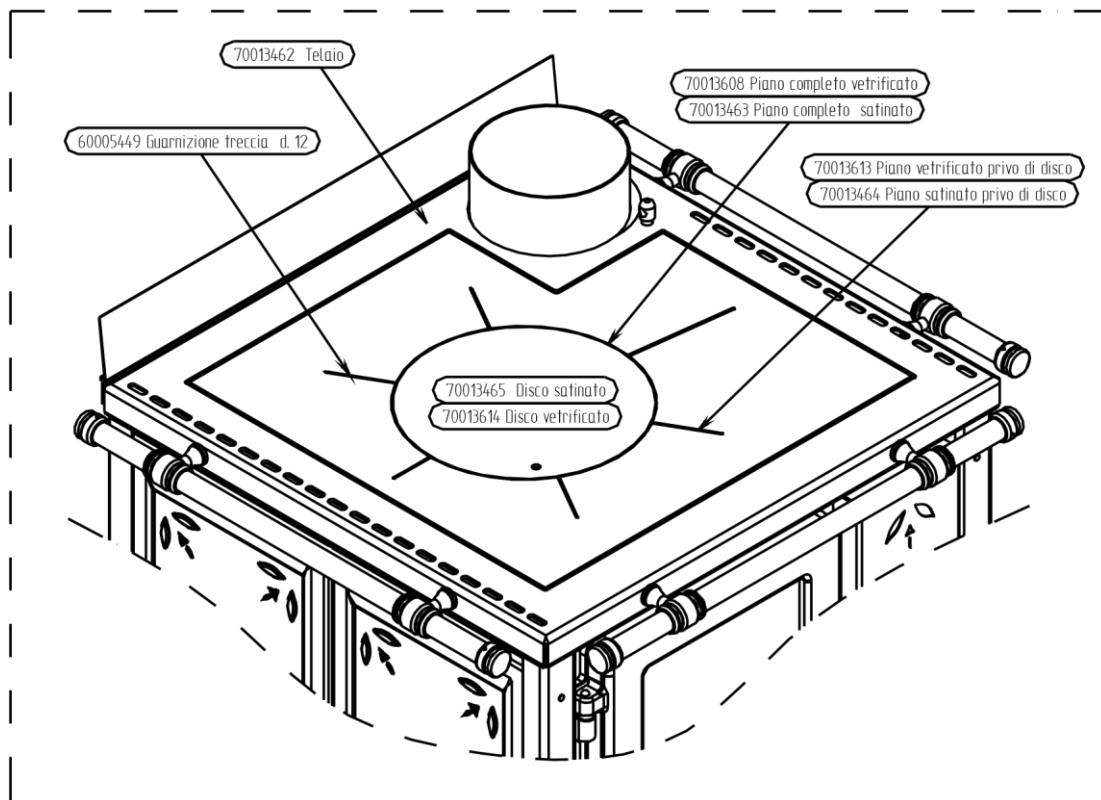
Difficulty lighting the fire	<i>Burner is clogged</i>	<i>Clean the burner by shifting the grate to the winter position and riddle until the ash drops through</i>
	<i>Moisture content of wood is too high or pieces too large</i>	<i>Use smaller pieces of firewood and more seasoned firewood</i>
	<i>Insufficient air in the room</i>	<i>Create an adequate opening for air inlet(see PARA. 7.4)</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>
Tendency to generate condensation (presence of humidity/water in the ash pan and under the heater)	<i>ty anticondensate thermostat</i>	<i>Replace thermostat</i>
	<i>Poor draught</i>	<i>See causes -remedies "Poor draft" (below)</i>
Smoke in the room. Difficulty keeping the fire alight. Difficulty reaching right oven temperature 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).	<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. 7.4)</i>
Oxidised cook top	<i>Poor maintenance of the cook top</i>	<i>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 antidowndraft cap on the chimney top.</i>
	<i>Draft too strong</i>	<i>Reduce the draft by installing a register in the chimney.</i>

	Poor draft	<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>
<i>Puffs of smoke issue from the top of the heater when the door is slammed shut.</i>	<i>Insufficient air in the room</i>	<i>Create an adequate opening for air inlet(see PARA. 7.4)</i>
	<i>Variable draft</i>	<i>Raise the flue outlet, install an antidowndraft cap on the chimney top.</i>
<i>Variable combustion rhythm. Good combustion only occasionally, almost appears to depend on the wind conditions.</i>	<i>Insufficient air in the room</i>	<i>Create an adequate opening for air inlet (see PARA. 7.4)</i>

Legenda	Key
gomino	Rubber washer
Profile inox	Stainless steel strip
telaio	frame
Bianco	White
Canna fucile	Rifle barrel grey
Marron fumè	Smoky brown
Beige	Beige
Rosso	Red
Vetro esterno	External glass
Vetro interno	Internal glass
Termometro	Thermometer







70013460 Porta caricamento completa

70013456 Maniglia Chef acciaio
(specificare dove usata)

60013055 Perno fissaggio maniglia Chef

60012670 Semiguscio anteriore maniglia grigio scuro

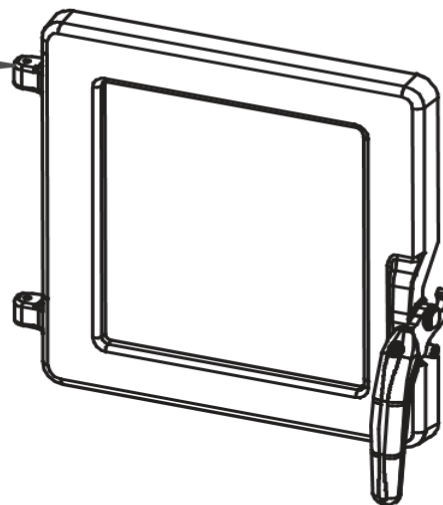
60012671 Semiguscio posteriore maniglia grigio scuro

60013056 Vite fermo maniglia

60010335 Guarnizione porta

60010336 Guarnizione vetro

60013057 Vetro porta caricamento



70013455 Porta cassetto cenere completa

70013456 Maniglia Chef acciaio
(specificare dove usata)

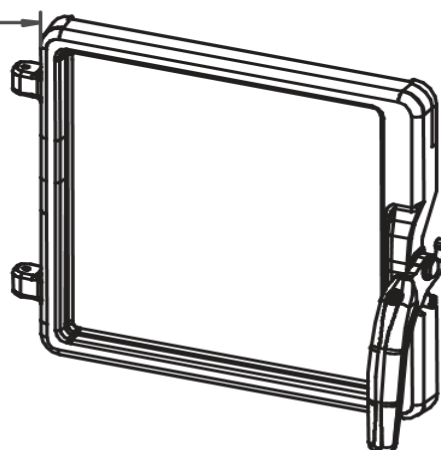
60013055 Perno fissaggio maniglia Chef

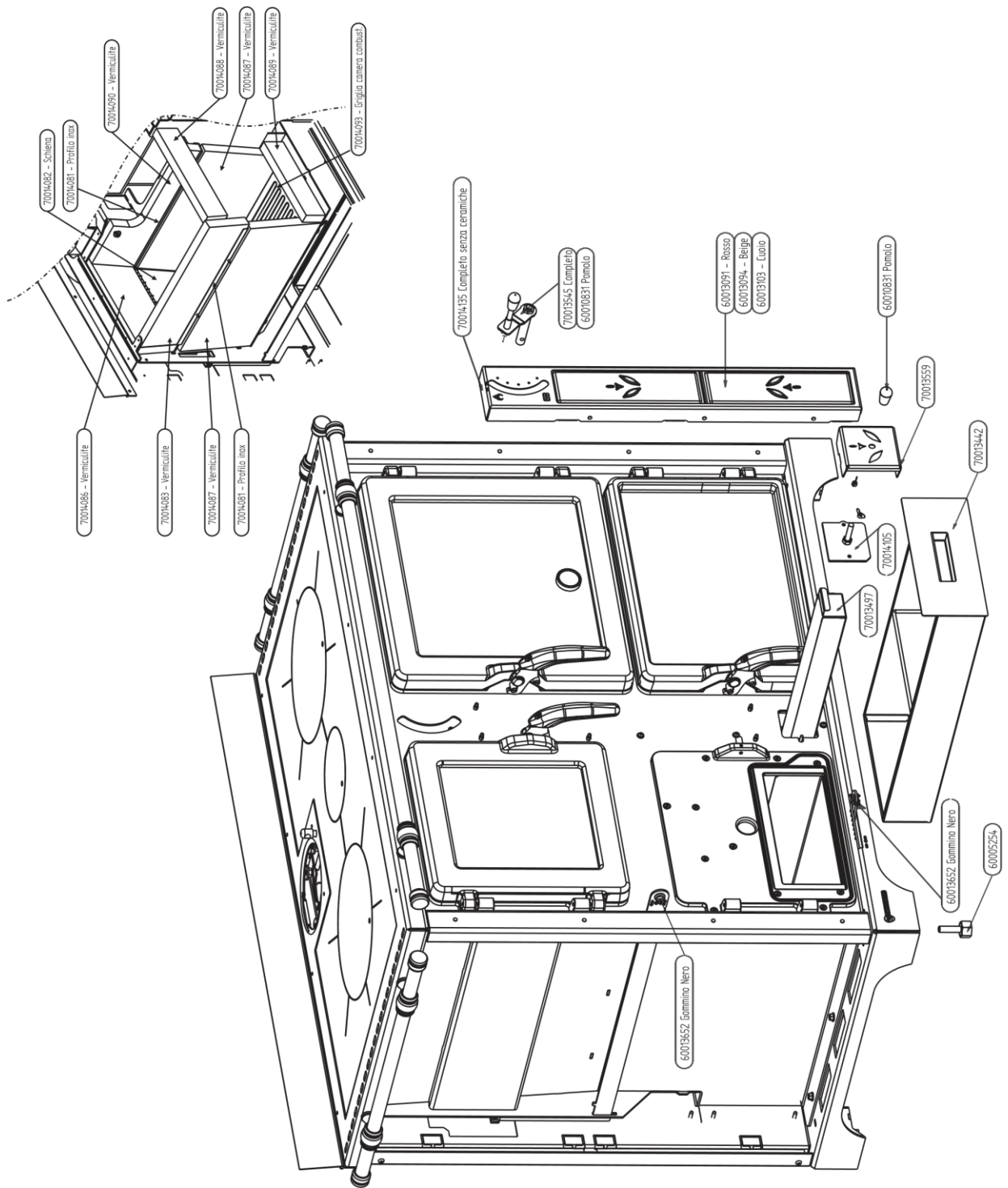
60012670 Semiguscio anteriore maniglia grigio scuro

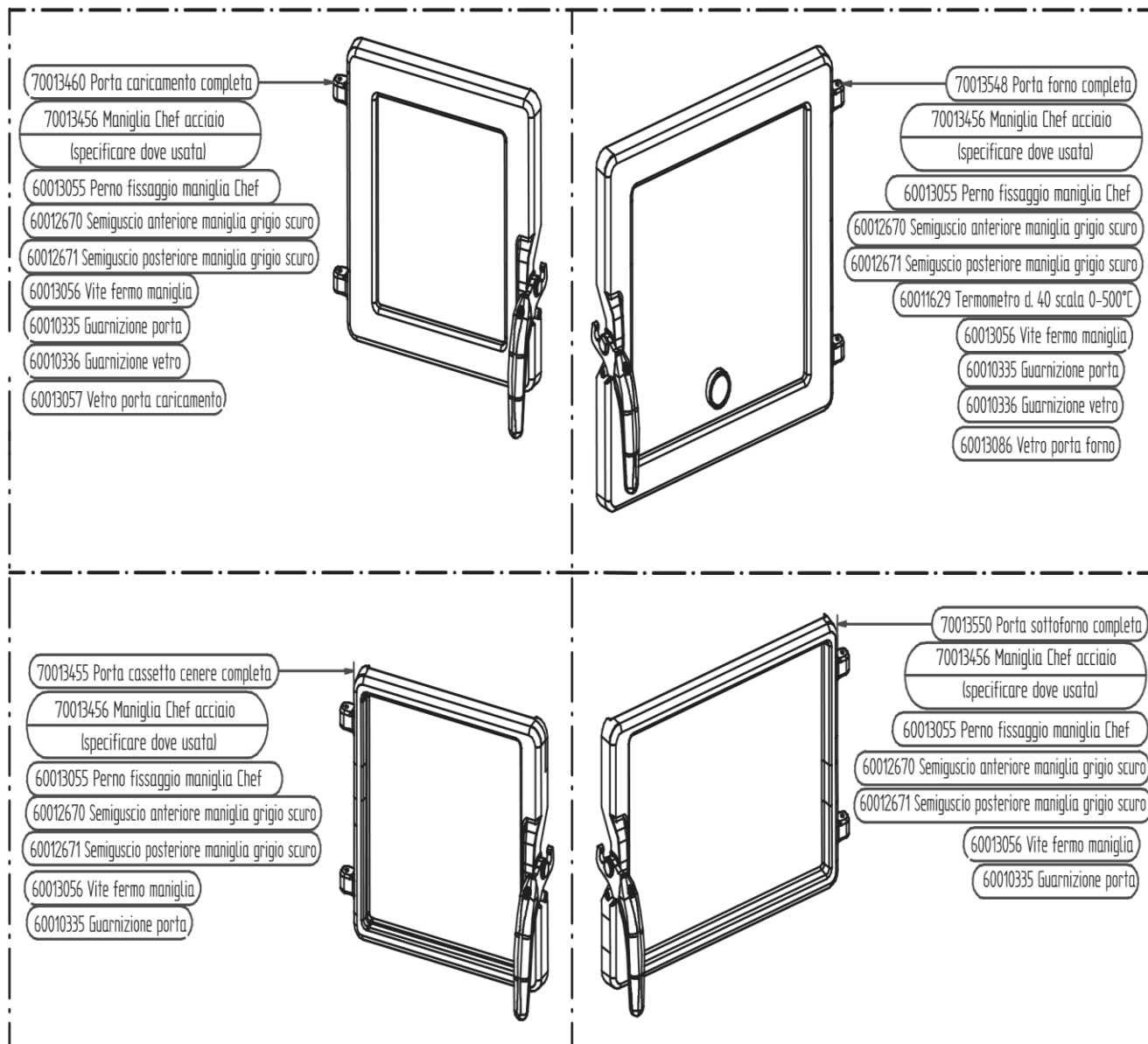
60012671 Semiguscio posteriore maniglia grigio scuro

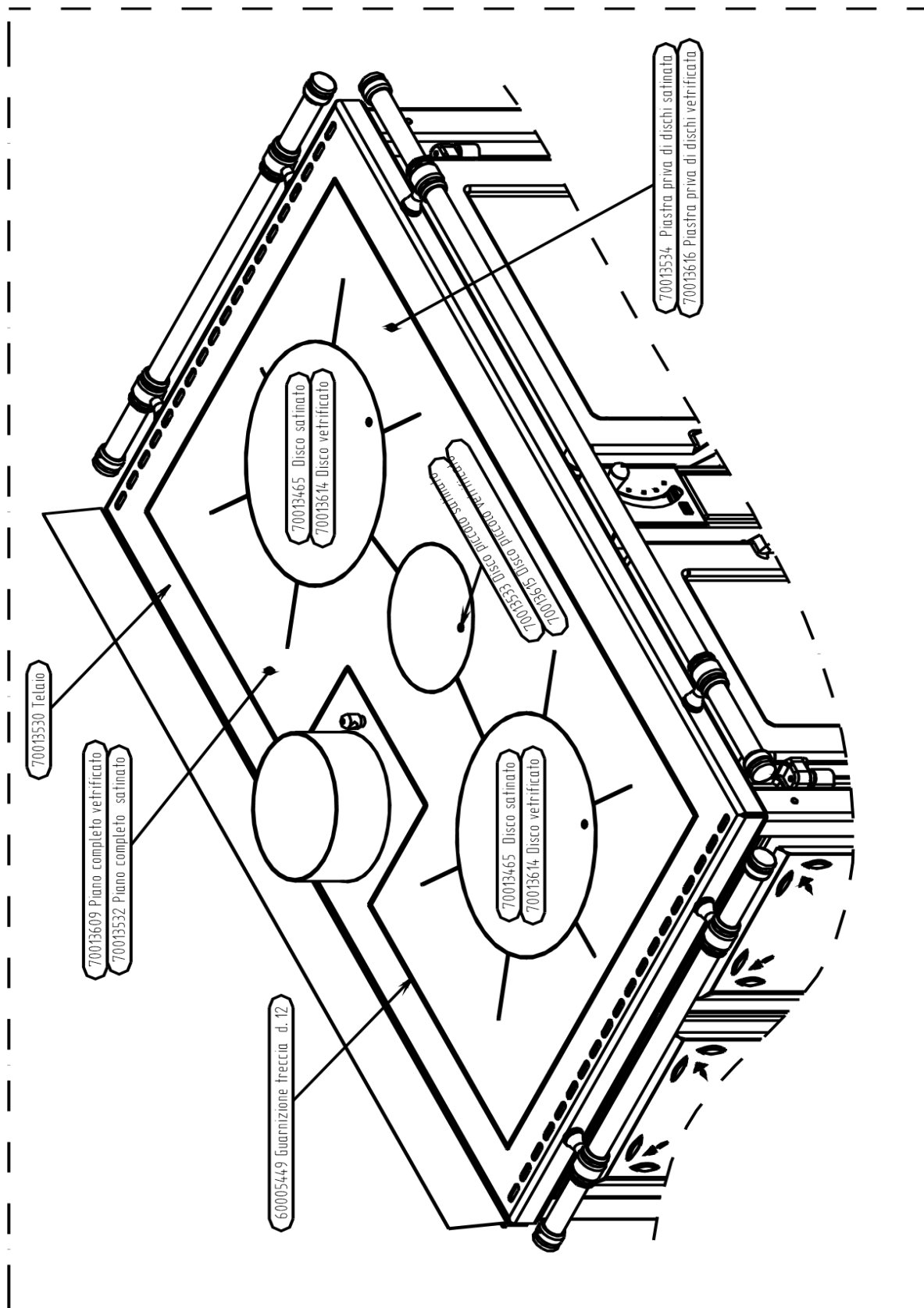
60013056 Vite fermo maniglia

60010335 Guarnizione porta

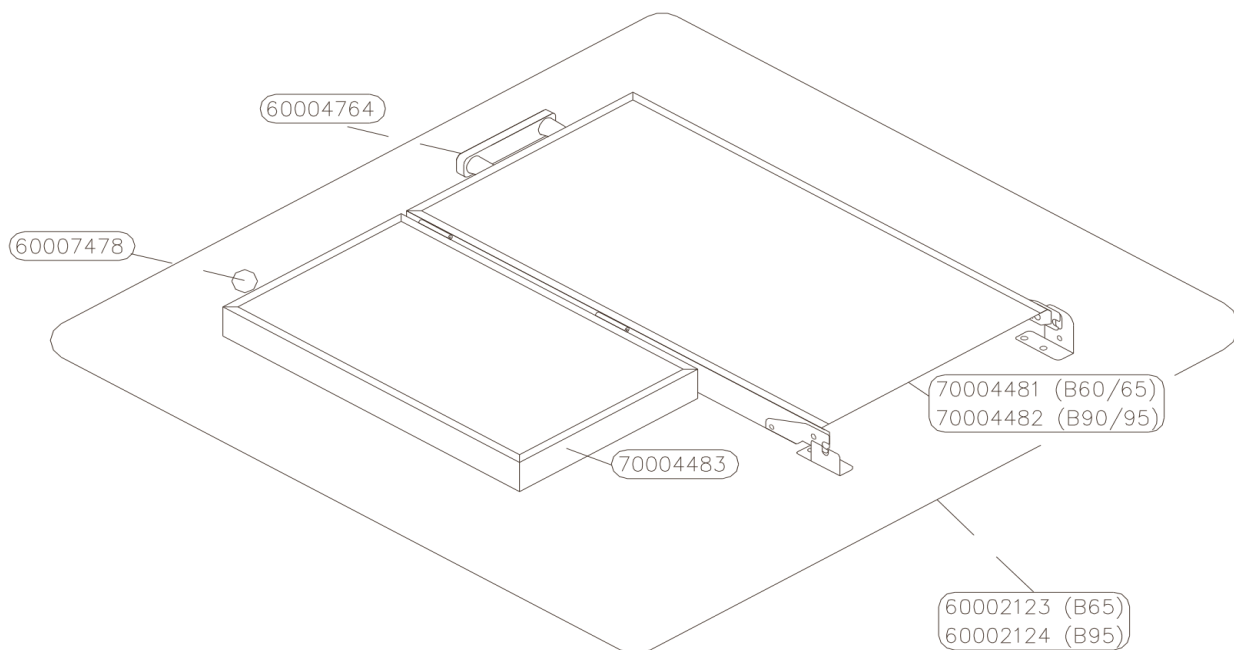








9.14 SPARE PARTS FOR BOSKY 25-30, COUNTRY (INSULATION COVERS).



9.15 SPARE PARTS FOR BOSKY F25, F30 COUNTRY F (INSULATION COVERS).

