

**SERVICE MANUAL** 



# **FREE-STANDING** COOKERS **SMEG**

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# 2. Presentation of the range

#### 2.1. 60x50 cm models



#### **Product Characteristics:**

#### HOB

- · Electronic ignition over the knobs or push key
- · Enameled glazed pan stands

### OVEN

- · Clock or timer
- · Cooling tangential fan

• Electronic ignition

### NOTE: NOT THE ENTIRE REPORTED COMPONENTS ARE PRESENT ON EACH MODEL

### 2.2. 60x60 cm models



#### Product Characteristics:

#### HOB

- · Electronic ignition over the knobs or push key
- Cast-iron pan stands or enameled glazed pan stands
- Splash board or crystal lid

#### OVEN

- Electronic Programmer / Clock / Timer
- Electronic Ignition
- · Cooling tangential fan

NOTE. NOT THE ALL REPORTED COMPONENTS ARE PRESENT ON EACH MODEL

#### 60x60 cm - Double Oven



#### **Product Characteristics :**

#### нов

- · Electronic ignition over the knobs
- Cast-iron pan stands or enameled glazed pan stands
- · Splash board

#### MAIN OVEN

- Digital clock with programmer of cooking start up (automatic start)
- Acoustic signaller of cooking end (automatic switch off)
- · Cooling tangential fan system
- Upper protection inside the oven
- · Door which can be dismantled with temperate triple glass
- · Stay clea liners
- Turn spit

### AUXILIARY OVEN

- · Cooling tangential fan system
- · Door which can be dismantled with temperate triple glass
- · Grill with variable temperature
- · Stay clea liners

### NOTE. NOT THE ALL REPORTED COMPONENTS ARE PRESENT ON EACH MODEL

2.3. 80x50 cm models

#### <u>80x50 cm</u>



Maxi oven / with box/ With box with extractable trolley

### нов

- Electronic Ignition over the knobs or push key
- Enameled glazed pan stands
- Crystal Lid

#### OVEN

- Clock / Timer
- Cooling tangential fan
- Electronic Ignition

NOTE: NOT THE ALL REPORTED COMPONENTS ARE PRESENT ON EACH MODEL

#### 2.4. 90x60 cm models





#### нов

- Electronic Ignition over the knobs or push key
  Cast-iron pan stands/ Enameled glazed pan stands
- · Splash board or crystal Lid

#### OVEN

- Maxi oven
- Electronic Programmer / Clock / Timer
- Cooling tangential fan
- Electronic Ignition
- Maxi oven / With cylinder carrier

NOTE. NOT THE ALL REPORTED COMPONENTS ARE PRESENT ON EACH MODEL

90x60 cm - Double Oven



### нов

- Electronic Ignition over the knobs
- Cast-iron pan stands/ Enameled glazed pan stands

0000

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Spalsh board

### MAIN OVEN

- Electronic programmer
- Cooling tangential system

#### AUXILIARY OVEN

• Grill

NOTE. NOT THE ALL REPORTED COMPONENTS ARE PRESENT ON EACH MODEL

### 2.5. Semi-professional models

# <u>70 cm</u>



<u>100 cm</u>



#### HOB

- Polished inox steel structure
- Electronic Ignition over the knobs
- Safety valves
- 18/10 steel pan stands
- 18/10 inox steel burner caps
- Crystal lid

#### FORNO

- Electronic programmer / electronic clock
- Double speed cooling tangential
- Thermostat
- Electric grill

NOTE: NOT THE ALL REPORTED COMPONENTS ARE PRESENT ON EACH MODEL



# <u>100 cm</u> - <u>Doppio Forno</u>

#### **Product Characteristics**

### нов

- Polished inox steel structure
- Electronic Ignition over the knobs
- Safety valves
- 18/10 steel pan stands
- 18/10 inox steel burner caps
- Crystal lid

### MAIN OVEN

- Electronic programmer
- Double speed cooling tangential

- Thermostat
- Electric grill

#### **AUXILIARY OVEN**

- Thermostat
- Turn spit
- Double speed cooling tangential

#### NOTE. NOT THE ALL REPORTED COMPONENTS ARE PRESENT ON EACH MODEL

# 3. Constructive principles

#### 3.1. Cooling tangential system

The cooling system of the door ensures it has a continuous flow of air passing through it, eliminating residual heat and external heat expel. This circulation is carried out by a mechanical fan (Tangential or Centrifugal) which creates the flow of air passing through the slits in the door, as schematically indicated below.



this drawing shows the air flow created by a moto-tangential fan .

The air is sucked from the surrounding room and spreads through the door and expelled in the temperature (the lower temperature) which is expelled towards the bottom side.

On the other hand, the double oven cookers (ex: SUK62), the air flow is created thanks to a moto-fan (tangential) whose air flow passes through slits positioned on the upper door and under the hob as shown in the following drawing.

This drawing shows the air flow created by a mototangential fan.

Hot air suction movement : the room cold air is sucked and passes through the slits obtained on the front panel and through the upper door , then the air is expelled from the back slits.

The lower door has 4 glasses, not cooled.



# 4. Front panel controls description

### 4.1 60x50, 60x60, 80x50, 90x60 COOKERS

#### HOB KNOB CONTROL BURNERS

The ignition of the flame occurs by pressing and rotating the knob in counterclockwise sense on the minimum flame value  $\Delta$ .

To adjust the flame, rotate the knob on the zone between the maximum  $\Delta$  and the minimum  $\Delta$ . The extinction of the burner occurs by taking back the knob in position

# KNOB OF THE OVEN GAS THERMOSTAT ( only in those models which are equipped of this)

This knob allows of turn on the burner a gas in the inner of the oven. The chosen cooking temperature occurs by rotating the knob in counter-clockwise sense of the desiderate value, included between MIN and 275°C.

For the gas grill it is not possible to set the cooking temperature but the grill always works at the maximum power.

# LIGHT OVEN / GRILL, GRILL SPIT SWITCHING MODULE KNOB ( only in those models which are equipped of this)

This knob allows to activate the function Grill / Grill Spit or to turn on the internal light of the oven to verify the status of the food cooking.







# ATTENTION: IT IS NOT POSSIBLE TO RUN THE GAS OVEN AND THE GRILL / GRILL SPIT AT THE SAME TIME.

# ELECTRIC OVEN THERMOSTAT KNOB ( only in those models which are equipped of this)

The cooking temperature choosed occurs by rotating the knob in clockwise sense to the desiderate value, included between 50° and 260°C. The ignition of the orange warning light shows that the oven is in the warming up phase. The extinction of this warning light indicates that the prefixed temperature has been reached. The intermittent adjusting shows that the temperature at the inner of the oven is kept constantly on the set level.

# ELECTRIC STATIC OVEN FUNCTIONS KNOB ( only in those models which are equipped of this)

The different functions of the electric oven are suitable to varoius modalities of cooking. After the desiderate function has been selected, set the temperature of cooking through the thermostat knob.



\* for those models equipped with turn spit

# VENTILATED ELECTRIC OVEN FUNCTIONS KNOB (only in those models which are equipped of this)

The different functions of the electric oven are suitable to varoius modalities of cooking. After the desiderate function has been selected, set the temperature of cooking through the thermostat knob.





\*

GRILL FUNCTION+FAN

LOWER HEATING ELEMENT .+FAN

VENTILATED OVEN FUNCTION

VENTILATED ELECTRIC OVEN KNOB FUNCTIONS (only in those models which are equipped of this)





The different functions of the electric oven are suitable to various modalities of cooking. After t the function desiderate has been selected, set the temperature of cooking through the knob of the thermostat.





N.B. If the ccoker is endowed with electronic programmer, before using the oven, make sure that the display shows the symbol

#### 4.2 100x60 COOKERS

#### BURNERS CONTROL KNOB OF THE HOB

The ignition of the flame occurs by pressing and rotating the knob in counterclockwise sense on the minimum flame value  $\Delta$ .

To adjust the flame, rotate the knob on the zone between the maximum  $\Delta$  and the minimum  $\Delta$ . The extinction of the burner occurs by taking back the knob in position



# MAXI ELECTRIC OVEN THERMOSTAT KNOB (only in those models which are equipped of this)

The choosing of the cooking temperature occurs by rotating the knob in clockwise sense to the desiderate value, included between 50° and 260°C. The ignition of the orange warning light shows that the oven is in the warming up phase. The extinction of this warning light indicates that the prefixed temperature has been reach. The intermittent adjust light shows that the temperature in the inner of the oven is kept constantly on the set level.

# MAXI GAS OVEN THERMOSTAT KNOB ( only in those models which are equipped of this)

This knob allows to turn on the burner gas inside the oven. The choosing of the



cooking temperatures occurs by rotating the knob in counter-clockwise sense on desiderates value, included between **MIN** and **275°C**.

# MAXI ELECTRIC OVEN KNOB FUNCTIONS (only in those models which are equipped of this)

The different functions of the electric oven are suitable to various modalities of cooking. After t the function desiderate has been selected, set the temperature of cooking through the knob of the thermostat.



# OVEN LIGHT COMMUTATOR KNOB / MAXI OVEN GRILL ( only in those models which are equipped of this)

This knob allows of activate the Grill / Grill spit function or to turn on the internal light of the oven in order to verify the cooking status of the food. ATTENTION: IT IS NOT POSSIBLE TO RUN AT THE SAME TIME THE GAS OVEN AND THE GRILL / GRILL SPIT.

#### MANOPOLA TERMOSTATO FORNO PICCOLO

(only in those models which are equipped of this)

The choosing of the cooking temperature occurs by rotating the knob in clockwise sense to the desiderate value, included between 50° and 260°C. The ignition of the orange warning light shows that the oven is in the warming up phase. The extinction of this warning light indicates that the prefixed temperature has been reach. The intermittent adjust light shows that the temperature in the inner of the oven is kept constantly on the set level.

# SMALL OVEN THERMOSTAT KNOB ( only in those models which are equipped of this)

The diverse functions of the electric oven are suitable to sundries modalities of cooking. After the desiderate function has been selected, set the temperature of cooking via the knob of the thermostat.













**N.B.** If the cooker is applicable of an electronic programmer, before utilizing the oven, make sure that on the display will appear the symbol

# 5. Function legend





Ventola + resistenza circolare (cottura a ventilazione forzata o ventilata): la combinazione tra la ventola e la resistenza circolare (incorporata nella parte posteriore del forno) consente la cottura di cibi diversi su più piani, purché necessitino delle stesse temperature e dello stesso tipo di cottura. La circolazione

		di aria calda assicura una istantanea ed uniforme ripartizione del calore. Sarà possibile, per esempio, cucinare contemporaneamente pesce, verdure e biscotti senza alcuna mescolanza di odori e sapori.
9		Fan + central grill element this function is available only on 7, 9 and 10 functions models, through the simultaneous action of fan and heat of the only central element is excellent for cooking and rapid gratinate small quantities of food (specially meats), putting together the grill dietetically advantages to the uniformity of the ventilated cooking.
10		Fan + bottom element (delicate cooking): the combination between the fan and the bottom element allows to end the cooking more rapidly. This system is advisable for sterilizer or to finish cooking of well cooked food on the outside, but not internally, thus requiring a moderate high heat. Ideal for any kind of food.
11		<b>Central grill element:</b> this function is available only on models with 7, 9, 10 functions, allowing the action of heat emission from the only central element, grilling small portions of meat and fish, for preparing kebabs, toasted sandwiches and grilled vegetable side plates.
12		Fan: By selecting this symbol ( where foresee) the defrosting function can be obtained by putting the thermostat on the 0°C initial position, in fact, this symbol gives the possibility to act on the thermostat, in order to activate the circular element at the same time.
13		Fan + circular element + bottom element: the ventilated cooking is combined with the heat coming from the bottom giving a slight browning at the same time. Ideal for any kind of food.
14		Rotisserie: The rotisserie (where installed) works in combination with the grill element to brown foods to perfection.
	¢¢	The symbols that are present on the pyrolytic oven show the possibility to use the grill spit in combination with the central or large grill.

# 6. Programmers & Clocks

# 6.1. Electronic programmer with 5 buttons



6.1.1 Functions list



▲ MINUTE COUNTER KEY





DECREASE TIME KEY

+ INCREASE TIME KEY

#### 6.1.2 Time Regulation

When using the oven for the first time or, after a power cut, the display will flash an intermittently indicating **0:00**. By pressing both keys and **u** at the same time, press keys value variation **o** or **+**: you obtain an increase or the decrease of a minute for each single pressure.

N.B. Activate the function and the desired temperature before each programmer setting.

#### 6.1.3 Semi automatic Cooking

This setting allows the automatic switch to turn off the oven only at the end of cooking.

By pressing the <i>u</i> key the display lights up showing the figures	0:00 ;keep it pressed and at the same time
press the value variation keys - or + to set the cooking dura	ation. By releasing the Key the programmed
cooking duration count will begin and the current time appears on the	he display along with the symbol A and

#### 6.1.4 Automatic Cooking

This setting allows the oven to automatically turn on or off.

By pressing the key the display will light up showing the figures 0:00 keep it pressed and at the same time push over the variation value keys or to set the of cooking duration.

By pressing the kine sum of the current time plus the duration of cooking time appears on the display: keep it

pressed and at the same time press the value variation keys or to set the end of cooking time. By releasing

the key the programmed counting will begin and the current time will appear on the display along with the symbol A and

N.B. After setting, to see the remaining cooking time press the key; to see the end of the cooking time press the end of cooking key. Set-up with incoherent values is logically (e.g: the contrast between a cooking time and a longer period will not be accepted by the programmer).

#### 6.1.5 End of cooking

At the end of cooking the oven turns itself off automatically and an intermittent sound is heard at the same time.

After the activation of this sound the display shows the current time again along with the symbol *manual*, which indicates that the oven is returning to manual use conditions.

#### 6.1.6 Adjusting alarm volume

The signal has a varied noise level (3), while it activates by pressing the key

#### 6.1.7 Switching off the alarm

The signal switches off automatically after 7 minutes and it is possible to manually disactivate the signal by pressing the the and . together. To turn off the unit put back successively the knobs in position 0

#### 6.1.8 Minute counter

The programmer can be used also simply as a timer. By pressing the key $\Omega$ the display shows the figures
0:00 ; keep it pressed and at the same time press the value variation keys — or +. On releasing the key it
will start the programmed counting and the current hour and the symbol $oldsymbol{\Omega}$ will appear on the display.

N.B. After setting, to see the residual time press the key . Using this as a timer will not interrupt the functioning of the oven at the end of the time set.

#### 6.1.9 Cancellation of data settings

With the programmer set, keep pressed the key of the function to be cancelled and at the same time the programmer

reaches the value **0:00** with the value variation keys **•** or **•**. The cancellation of the time duration will be interpreted by the programmer as the end of cooking.

#### 6.1.10 Modifying data settings

The cooking data can be modified in any time by maintaining the function key pressed and at the same time pressing

over the variation keys

#### 6.2. Digital counter minute with 3 buttons

or

This part allows to indicate the end of cooking hour foresees thanks to the intermittant alarm. Therefore it is a minute counter and not a programmer.



6.2.1 Functions list

TIME ADJUSTING BUTTON

DECREASE TIME KEY

➡ INCREASE TIME KEY

#### 6.2.2 Time adjusting

Using the oven for the first time, or after an electric current cut off, the display regularly flashes with intermittency showing **0:00**. Press the button and, through the **-** or **+** keys, adjust the time on the current time.

#### 6.2.3 Setting of the counter minute



#### 6.3. Analogic clock



The setting of the mechanical counter happens turning the little knob in the clockwise sense. The minutes set come from 0 to 55.

At the end of cooking, an alarm will start to function and to switch off it it is necessary to turn the outside section of the

little knob on the position **1**. the clock is set by pulling out and turning the little knob in the clockwise sense.

# 7. Temperature check

#### 7.1 Frontal temperature check

### TEST OF THE HEATING OF ACCESSIBLE FRONTAL SURFACES OF OVENS AND ELECTRIC COOKERS Norm EN 60335-2-6; §11.101+11.102

The cookers are mounted as indicated on the manual, complete with its support (foot rests or basement, according to the model). In case the height is adjustable, keep it at the minimum.

The built-in ovens are inserted in the right furniture element; this furniture is positioned in the test dihedron put against the rear wall and at a distanced from the side wall.

No accessories are inserted inside the oven, except from the shelf that is positioned in the middle of the ooven (to support the thermocouple)

On the gas burner of gas hobs that may be tested in combination with the oven, a pot containing 2 kg of water is put.

#### -

#### Test conditions

Put the oven (as well as the cooker) on heating function: static, fan, bottom o other (<u>DO NOT USE GRILL</u> <u>FUNCTION</u>): maintain temperature in the middle of the oven at 200°C for 60 minutes. Temperature is measuredon the appliance's frontal surfaces that are accessible.

#### Accessible surfaces are:

on front panel and/or side column: all points that are accessible by a test probe excepted from those points of the accessible surface that are smaller than 10mm as well as those that are at less that 25mm distance from the top panel of a cooker.

• on the oven door: all points that are accessible, except from those at 10mm from the door border and those at a height of more than 850mm from ground level.

The following drawing shows the exact points where to measure the temperature in order to check the frontal temperatures.

FUNCTION	TIME	TEMP	SURROUNDING TEMP
Static Ventilated	60'	200 °C	25 °C



#### Notes

- 230V, built-in oven without hob
- · It is necessary to use a measure instrument idoneous for superficial contact temperatures

#### MAXIMUM TEMPERATURES ADMITTED

according to NORM CEI EN 60335-1 (CEI 61-150) + CEI EN 60335-2-6 (CEI 61-223 del 6-2000)

#### ► Temperatures of components, touch organs and furniture

Test conditions

Room conditions

Room temperature (ta) 20°C ÷ 25°C

Alimentation voltage 1.15 x Nominal Voltage

(Es. 230V nominal -> 245V test voltage)

(Es. 240V nominal-> 256V test voltage)

#### Duration of functioning

- Grill (grill pan at 4th height) 30 min.
- Grill Rotisserie (with pole and weight) 60 min.
- Grill ventilated (grill pan at 2nd height) 30 min.
- Other functions- 60 min.
- Hob (moderate boiling) 60 min.
- Pirolysis 90 min.

#### Central oven temperatures

· Grill (grill pan at 4th height) - max or according to manufacturer's indications

- Grill Rotisserie (with pole and weight) max or according to manufacturer's indications
- · Grill ventilated (grill pan at 2nd height) max or according to manufacturer's indications
- Ventilation Function: 220°C
- Static function: 240°C

Rotations	Class F:	115 K + Room temperature (ta)
	Class H:	140 K + Room temperature (ta)
Alimentation cable		50 K + ta (o T-25 se marchiato)
Wooden parts		70 K + ta
Wiring		145 K + ta
Metallic touch organs		35 K + ta
china or glass material		45 K + ta
molded material, rubber or wood		60 K + ta

#### **During pyrolysis**

Metallic touch organs	55 K + ta
China or glass material	65 K + ta
Molded material, rubber or wood	80 K + ta

#### ► Temperatures of external accessible surfaces

Test conditions

Room conditions

See above

Duration of functioning

See above

#### Central oven temperatures

- Grill (grill pan at 4th height): max or according to manufacturer's indications
- · Grill Rotisserie (with pole and weight): max or according to manufacturer's indications
- Grill Ventilated (grill pan at 2nd height); max or according to manufacturer's indications
- Other functions 200°C

Frontal and lateral surfaces			
metal and lacked metal	85°C		
enamelled metal	90°C		
glass and china	105°C		
plastic (width > 0.3mm)	125°C		

Door		
metal and lacked metal	70°C	
enamelled metal	75°C	
glass and china	85°C	
plastic (width > 0.3mm)	105°C	

7.2 Check of the correspondence between the thermostat serigraphy and the temperature in the oven centre

The hereby test method describes how to check the correspondence between the temperature pointed out on the thermostat knob serigraphy and the temperature measured in the centre of the oven. This method can be carried out even for the electric and gas ovens ( even those belonging to a cooker or to a cooker block).

#### **Test conditions**

The appliance is installed as explained in the instruction manual. If the oven is fitted in a cooker including other heating elements, all these elements are switched off during the test. The room temperature during the test has to be included between 20° and 25°C.

#### **Test description**

- 1. Position a thermocouple in the centre of useful volume of the oven fixing it to a oven grid and setting it in a way that the hot joint is as much as possible near to the centre of the useful volume of the oven.
- 2. if it is possible position a thermocouple even on the thermostat bulb in the middle of the length of the sensitive part (it is necessary to keep the sensitive element shielded from the direct grill heat)
- 3. Set the desired function through function knob ( do not use the GRILL and LOWER elements)
- 4. Set the lowest temperature among those available on thermostat knob you would like to check
- 5. Let the appliance working till the temperature becomes stable; this happens when the thermostat completely switches on/off for 3 cycles. After the temperature has reached its stability, record the values noticed when the thermocouples swith on/ff for at least 3 cycles.
- 6. Estimate the average temperature in the middle of the oven muffle carrying out the average of the 6 recorded values.
- 7. End the test and let that the appliance cools down until reaching a thermic balance between the thermostat body and the ambient.
- 8. Repeat the test for the following temperature values and eventually check them with other oven functions.

# 8. Access to the inner parts of the appliance

#### 8.1. Free-standing cookers

Take out the lid and the door oven, in order to make easier the access into the inner parts and the possibility to work on over the unit.



2.Take out the knobs of the tap of the clock in order to take out the front panel, unscrewing the 3 screws showed in the picture









6.At this point, slide out the lateral side taking out the 4 screws of the fore side of the unit and the 5 screws put on the back side.



The picture shows the fixing screws of the lateral side, to the fore side face of the unit. 4 of the 5 fixing screws of the lateral side are accessible from the back side of the unit







Now it is possible to work under the hob, to take out the cup, remove the 2 fixing screws (if it is a TRC burner, triple crown or also the ultra rapid, the screws are 4) of the cup burner (picture 8); taking the cup burner as shown in the picture below.

ATTENTION: in case you work on the cup burner not fixed to the hob, be careful to DO NOT FORCE the flexing operation of the Bundy pipe; this can cause possible leakages and it can compromise THE TIGHTNESS OF THE BURNER. In case it is necessary to replace the sparking plug or the thermocouple which is hard to reach by only removing the right or left side, proceed with the complete removal of the hob.





11.Positioning of the cup, such to let the replacement of the thermocouple/igniter plug, without further forcing the inflexion of the Bundy tube.

Now repeat the elimination procedure of the fixing screws of the burner, for all the burners itself, take out the 2 fixing screws of the hob, in the fore side, to the head section of the front panel and take out the supporting brackets of the hob; after that the hob can be picked off.



#### 8.2. SEMI\_PROFESSIONAL cookers

Take out the lid and the door oven, in order to make easier the access into the inner parts and the possibility to work on over the unit.

1. Remove the 4 fixing scrwes of the splash board back profile and remove the part.







3. Now remove the lid.

Take out the tap knobs and the clock handles to allow the front panel remouval, unscrewing the 3 screws pointed out in the following photo.

4. Unscrew the 3 screws (the others are in the center and on the right), which fix the front panel to the cross-piece of the front panel, placed in the
lower edge.





6. Remove the 4 fixing screws of the front side of the appliance





<ul> <li>8. Once all the front/back fixing screws have been removed, it is possible to take the side out, starting from the lower zone (as the arrows point out); starting from the upper part it is not possible because the side is overlapped to the hob.</li> <li>Pull the lower part of the side towards the operator and then lift the part up with care.</li> </ul>	
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Now it is possible to work under the hob, to take out the cup, remove the 2 fixing screws (if it is a TRC burner, triple crown or also the ultra rapid, there are 4 screws) of the cup burner (picture 10); taking the cup burner as shown in the picture below.

ATTENTION: in case you work on the cup burner not fixed to the hob, be careful to DO NOT FORCE the flexing operation of the Bundy pipe; this can cause possible leakages and it can compromise THE TIGHTNESS OF THE BURNER. In case it is necessary to replace the sparking plug or the thermocouple which is hard to reach by only removing the right or left side, proceed with the complete removal of the hob. (see photo 12).









12.Detail of the cup gasket which has replaced the o-ring.

N.B. Every time the hob is opened, the cup gaskets have to be replaced.

# 9. Components replacement

### 10. Primary air minimum adjustment

#### -Adjustment of the oven's burner minimum level.

The thermostat of the oven is providing with a by-pass for the minimum regulation, it can be visible by taking out the knob of the thermostat.

Changing the type of gas feeding it necessary to adjust the by-pass as follows:

- Turn on the burner oven and keep it to the maximum for 10/15 minutes with the door closed and without the hob; passed such time take the knob to the minimum temperature, take out the knob and introduce a plate screwdriver for regulation.
- In the case of liquid gas use it needs to screw in clockwise sense the by-pass screw to the end of stroke. The diameter of the by-pass is showed in the table "Injectors and Burners Characteristics". .
- In the case that city gas or methane is used, adjust the by-pass in a way that when rotating the knob of the thermostat from the minimum position to that of maximum the flame will be stable and homogeneous. When the regulation has been done, put back the seal on the by-pass using painting or equivalent materials.
- To verify if the regulation done is correct, let in minimum position the thermostat for 10/15 minutes; after that time, open and closed, almost slamming it, the oven door. On the contrary case, work again on the by-pass.

#### - Adjustment of the cooking burner's hob minimum level

Using gas city (G110) and methane (G20).

- Turn on the burner and put it on the minimum position. Pull out the knob of the gas tap and work on the regulation screw of the rod tap side, until you get a minimum flame adjust.
- Put back the knob and verify the stability of the burner flame (rotating rapidly the knob from the maximum position to that of minimum, the flame should not extinct.) Repeat the operation on all the gas taps

#### For liquid gas (GPL or G30).

- For the regulation of the minimum position with liquid gas you will need to screw completely in clockwise sense the screw located on the rod of the tap side.
- The by-pass diameters for each one of the burner are showed in the table "Burners and Injectors Characteristics" of the instruction manual.

When the regulation has been done, put back the seal on the by-pass using painting or equivalent materials.



#### - Adjustment of the gas oven/grill burner's primary air

• Loosen the adjusting screw "A" of the air adjustment pipe coupling.

• Turn the adjusting pipe coupling **"B"** in the corresponding position according to the gas type to be used (see the chart below).

• Tighten the adjusting screw and recover the sealings.

• Once the operation ends, properly assemble the the burner



	METHANE (N)	G30/G31 (GPL)	G 110 – GAS CITY
X =	5 mm	15 mm	3 mm

# **11. Troubleshootings**

The aim of this paragraph is to make a list of an immediate solution to the possible complaints /faults which can be posed by the users.

#### Complaint/Effect

• the hob/oven burner flame switches off or does not stay switched on

#### Causes

- · Hob/oven thermocouples faulty;
- Hob/oven thermocouples not properly fitted
- Lack of pressure on the tap/thermostat knob (right value 2,4, 2,7kg for the hob taps);

· Tap/thermostat magneto faulty .

#### how to work

- it is necessary to check that the hooking strain is 1,5, 1,7mV and the unhooking one is 0,5, 0,7mV. In optimal conditions the TC has to supply at least 5 mV. If the mV noticed values are too different from those indicated, the functioning is not regular; in this case it is suggested the magento replacement.
- · check the magneto functioning and if necessary replace it
- · check that there is not oxidation between the TC and the burner bracket and if necessary replace it
- check that the TC is properly tightened on the cup
- check that the bundy pipe is properly tightened on the cup and on the tap.
- · check that the tap is properly tightened to the ramp
- Only at the end check the thermocouple and if necessary replace it

#### Complaint/Effect

anomalous flame of the hob/oven burner, not stable.

#### Causes

- Presence of anomalous air flow which unsettles the hob flames;
- · Presence of impurity (working residues) inside the nozzle housing ,which may obstruct the hole;
- Presence of the cooking residues (greasy, crumbs ...) which obstruct the flame passing zones ;
- Wrong supply gas pressure .

#### How to work

• check that any of the faults quoted is occured. Then verify that the supply gas pressure is the proper one.

#### Complaint/Effect

 enamel cracked, near the screws fixing the burner cups to the hob (this can be noticed lifting hte burner body up)

#### Causes

- the fixing screws mentioned, have not the washer under the head,
- moving the screw, it can be noticed an hollow near the hole

#### How to work

- · Fit the washer under the head
- · Replace the hob

#### Complaint/Effect

 hob browning, particularly in correspondence with the burners which have an higher power (RPD,TRC), placed on the edges of the hob.

#### Causes

- Use of pans/cooking plates with a high diameter;
- wrong burner nozzle;
- wrong centering of the pans/cooking plates;
- wrong supply gas pressure .

#### How to work

- it is advisable to suggest to users to use pans/cooking plates with proper dimensions (see instruction manual); then check the possible anomalies which may happen on the nozzles/supply gas .
- for the cleaning use the SMEG product proper for the steel.
- at the worst replace the components.

#### Complaint/Effect

noisy burner.

#### Causes

· during funcitoning it is noticed a "whistle" in correspondence of the hob burner

#### How to work

check that there are not foreign bodies which can obstruct the outgoing path of the gas/flame; verify that the
nozzle diamter is the proper one and then check that the supply gas pressure is right.

#### Complaint/Effect

• Cooker stability.

#### Causes

• during the switching on , it is noticed a instability of the applaince.

#### How to work

 check the presence of the 4 protective feet (black rubber discs in contact with the ground), verify the proper fixing of the feet to the base flat of the cooker and the proper adjustment of them.

#### Complaint/Effect

• High frontal outside temperatures.

#### Causes

- · after a good cooking time with the oven a high external temperature is read off;
- · the cooling tangential fan does not start;
- cooling tangential fan not present.

#### how to work

- · check the temperatures as explained in the manual .
- · check the cooling fan functioning

#### Complaint/Effect

• no intervention/wrong intervention /of the safety thermostat.

#### Causes

- after some minutes that the oven work, the safety thermostat start to function (clicson disconnecting the unit feeding
- after a lot of time that the oven is in function, the external and frontal temperatures get higher and the clicson do not intervene.

#### How to work

- · check that the clicson is properly positioned and that the sealing of the same is correct
- in addition to this verify the temperature of the center of the oven to look for possible funcitnal anomalies of the oven thermostat

#### Complaint/Effect

cooking uniformity (the food is cooked outside but inside is still raw).

#### Causes

- · thermostat not properly adjusted;
- · deflector not properly positioned or twisted;
- · bad calibration of the motor-fan;
- faulty heating elements;
- · very high cooking temperatures;
- not correct roasting pan or containers (too much large or too much low);
- · oven not pre-heated;
- · using the foil over the food during cooking ;
- · accessories inside the oven during cooking.

#### how to work

- · Verify the deflector positioning and a possible bad calibration;
- Positioning bulb (when this is put near the heating element the temperature at the center of the oven decreases, if the bulb is put towards the inlet hole the temperature increases of some degrees
- · Not calibrated fan, check the fan movement when it is started up, if it is not calibrated verify the fan planarity
- Verify the position of the heating element ;
- Control the insulation of the wool glass on the covering of the oven that must be well stacked at the sides and on the front face of the upper side.
- Check the thermostat capillary (must not be present chokes or too much tight fold)
- · Verify the correct functioning of the heating element
- Verify the temperature at the center of the oven.

#### Complaint/Effect

Vapor condensation on the oven door

#### Causes

 During the cooking in the oven, the inside/outside of the external oven door glass shows a a condensation halo

#### how to work

· To solve this kind of inconvenience it is necessary to always pre-heat the oven;

- Check that the "breathing chimney" between the upper heating element flange and the muffle, are not blocked or deformed
- The ovens equipped with automatic switching on and extinction of the centrifugal with TOC thermostat, check that the start up is not too delayed (this normally is started after the first 2' 5'); if there is the clicson which controls the cooling tangential fan on the chimney, verify that this will be activated as soon as the heat flows out from the chimney itself (the clicson intervenes at ~100°C, on the contact wall of the chimney).
- if there is persistan durty , dismantle the door and carry out the glass cleaning

#### Complaint/Effect

• the oven does not heat

#### Cause

• bad functioning of the heating system (thermostat + heating elements)

#### how to work

- · check the proper functioning of the thermostat (adjustment, switching on, switching off)
- check that all the elements are properly connected to the control devices (thermostats and commutators)
- check with a tester because an element could be interrupted, positioning the tips to the two extremities and verify the constancy
- check the electronic card which controls the heating elements properly function (where it si foreseen)
- · check the proper functioning of the safety thermostat

# 12. Introduction of the energetic class

#### 12.1. List of the energetic classes

All the built-in ovens have been changed after the introduction of the energetic classes for all the cooking products.

All the appliances are identified by a label ( here below) which shows the energetic class of the product.
In Italy the labelling has become obligatory after the Legislative Decree issued on Jenuary 2nd 2003 which includes the regulations 2002/40/CE and 92/75/CEE of the European Economic Community.
The reference eurpoean rule, to carry out the laboratory tests for the energetic class, is the EN50304.
The law refers only to electric products, therefore excluding :
gas ovens
movable ovens
<ul> <li>vapor ovens</li> </ul>
The oven dimension is identified by the type (little, medium, big) this depends on the useful volume over-mentioned.
The voulume division is necessary to class the appliances with the corresponding energetic class, referring to the tables successively included.

Energia	Forno Elettrico
Costructione	
Modello	
Bassi consumi A B C C E E	
Atti consumi Consumo di energia (kWh) Funzione di riscatdamento Convezione naturale Convezione forzata	
(Rifeito al cariconomalizato)	
Volume utile (lifti) Tipo: Piccolo — Medio — Grande —	
Rumore [dB(A) re 1 pW] Gilop troolil Ber tat bi contregono 1 haš otieda particicareggis ti Nerma SA 1950 O unity 2000-OCC part eldentatus dertamatisking	****

# Definition of the energetic class for all products of a little volume (12 - 35 litres)

Energetic class	Energetic consumption
A	E < 0,6 Kwh
В	0,6 < E < 0,8 Kwh
С	0,8 < E < 1,0 Kwh
D	1,0 < E < 1,2 Kwh
E	1,2 < E < 1,4 Kwh
F	1,4 < E < 1,6 Kwh
G	1,6 < E

# Definition of the energetic class for all products of a medium volume (35 - 65 litres)

Energetic class	Energetic consumption
A	E < 0,8 Kwh
В	0,8 < E < 1,0 Kwh
С	1,0 < E < 1,2 Kwh

D	1,2 < E < 1,4 Kwh
E	1,4 < E < 1,6 Kwh
F	1,6 < E < 1,8 Kwh
G	1,8 < E

### Definition of the energetic class for all products of a big volume (more than 65 litres)

Energetic class	Energetic consumption
A	E < 1,0 Kwh
В	1,0 < E < 1,2 Kwh
С	1,2 < E < 1,4 Kwh
D	1,4 < E < 1,6 Kwh
E	1,6 < E < 1,8 Kwh
F	1,8 < E < 2,0 Kwh
G	2,0 < E

The Smeg cooking products changed in order to improve the energetic class are identified through a suffix -5 included in the model name.

# 12.2. Modifications introduced in the cookers

The main changes introduced in the free-standing cookers concern the insulation.

The glass wool mats have been modified with others with a greater insulating power to assure the necessary energetic saving and to reach an higher class.



# 13. Position and set of contact thermostats

ТҮРЕ	REFERNCE MODEL	FEATURES
60x50	CX51VE	SINGLE OVEN



#### START/SWITCH-OFF THERMOSTAT TG (TOC)

<u>Set</u>: 100°C

TYPE	REFERENCE MODEL	FEATURES
60x60	CX61VML	SINGLE OVEN



# SAFETY THERMOSTAT Set: 190 °C

START/SWITCH-OFF THERMOSTAT TG (TOC)

<u>Set</u>: 90°C

ТҮРЕ	REFERENCE MODEL	FEATURES
60x60	SUK62MFX	DOUBLE OVEN



# AUXILIARY OVEN

SAFETY THERMOSTAT Set: 100 °C

START/SWITCH-OFF THERMOSTAT TG (TOC)

<u>Set</u>: 70°C

#### MAIN OVEN

Bottom limit-thermostat Set: 190 °C



#### SAFETY THERMOSTAT Set:140 °C

START/SWITCH-OFF THERMOSTAT TG (TOC)

<u>Set</u>:70°C

ТҮРЕ	REFERENCE MODEL	FEATURES
80x50	SX81VM	SINGLE OVEN
	SAFETY THERMOSTAT Set: 190 °C START/SWITCH-OFF THE Set: 90°C	RMOSTAT TG (TOC)

ТҮРЕ	REFERENCE MODEL	FEATURES
80x50	CX81VM	WITH STORAGE COMPARTMENT



ТҮРЕ	REFERENCE MODEL	FEATURES
90x60	SX91VML	SINGLE OVEN

SAFETY THERMOSTAT <u>Set</u>: 190 °C



START/SWITCH-OFF THERMOSTAT TG (TOC)

<u>Set</u>: 90°C

ТҮРЕ	REFERENCE MODEL	FEATURES
90x60	CX91VM	CON PORTABOMBOLA



ТҮРЕ	REFERENCE MODEL	FEATURES
90x60	SUK92MFX	DOUBLE OVEN





ТҮРЕ	REFERENCE MODEL	FEATURES
70 cm	SP71VML	SINGLE OVEN
	SAFETY THERMOS Set: 190 °C	STAT
	START/SWITCH-O Set: 90°C	FF THERMOSTAT TG (TOC)

ТҮРЕ	REFERENCE MODEL	FEATURES
90 cm	SP91VML	SINGLE OVEN



SAFETY THERMOSTAT Set: 170 °C

START/SWITCH-OFF THERMOSTAT TG (TOC) Set: 90°C

ТҮРЕ	REFERENCE MODEL	FEATURES
100 cm	SP106VML	SINGLE OVEN



SAFETY THERMOSTAT Set: 190 °C

START/SWITCH-OFF THERMOSTAT TG (TOC) <u>Set</u>: 100°C

TIPO	MODELLO DI RIFERIMENTO	CARATTERISTICHE
100 cm	SP206VML	DOPPIO FORNO

AUXILIARY OVEN

SAFETY THERMOSTAT Set: 100 °C



#### START/SWITCH-OFF THERMOSTAT TG (TOC) Set: 70°C



MAIN OVEN

SAFETY THERMOSTAT Set: 190 °C

START/SWITCH-OFF THERMOSTAT TG (TOC) Set: 90°C

# 14. Product modifications

### 14.1 New roll holder and door microswitch

Starting from December 2002 all the built-in cookers will assemble a roll holder which completely replaces the previous one. This rol

I holder improves the coupling with the door hinge and guarantees a better positioning. The pictures below show the old and the new configuration.

The new roll holder group cod. 695970046 (on the left) is completely interchangeable with the old cod. 6959700 (on the right).



You can see the shortened blade (avoiding insulation which instead happens when the blade is activated by the door hinge) and the different positioning of the micro-switch compared with the little plaque.

#### 14.2 Nut change of the tap fixing

Starting from the October 2002 production and progressively in all models, the fixing nut of the tap to the bar has been replaced. The nut has been increased in order to facilitate the micro-switch hooking start up. The picture below shows the nut dimensions.



At the same time the knobs dimensions (descreased) have been changed (inox and black plastic) to fit them to the new nut. The old and new codes are indicated in the table below:

Old knob fot nut 892610264			New knob for nut 892610286		
Code	Descriptio	n	Code	Descriptio	n
892610264	VALVE TAP N SX93VG	TUT	892610286	VALVE TA NUT CX61\	P /G
694971699	TAP KNOB GR S852X		694975086	TAP KNOI GRSUK61M	B IFX
694974938	TAP KNOB GRCB61VJME		694975141	TAP KNOB SB93VGM	GR A
694974977	TAP KNOB GR SX91VJME		694975142	TAP KNOB GR S	X91VJM
694975033	TAP KNOB GR A1-2SE		694975143	TAP KNOB GR S	P71VGL

# **15. Linked documents**

Service bulletin
CUC-SB2002-01-Ignition_mswitch_assembly_FS_cookers-GB.pdf
CUC-SB2002-03-New thermocouple nut and washer-GB.pdf
CUC-SB2002-04-New_commutator_cookers90X60TF-GB.pdf
CUC-SB2003-01-Enlarged oven shelves-GB.pdf
CUC-SB2003-02-New_hinge_supp_CUC_90-100X60-GB.pdf

CUC-SB2003-03-New heating element fixing-GB.pdf	
CUC-SB2003-04-Safety_thermostat_SUK62-GB.pdf	

Technical info
CUC-TI2002-01-New thermostat fixing square-GB.pdf
CUC-TI2002-02-Thermocouple-magnet assy checking-GB.pdf
CUC-TI2003-01-Kit for thermocouples repairing-GB.pdf