

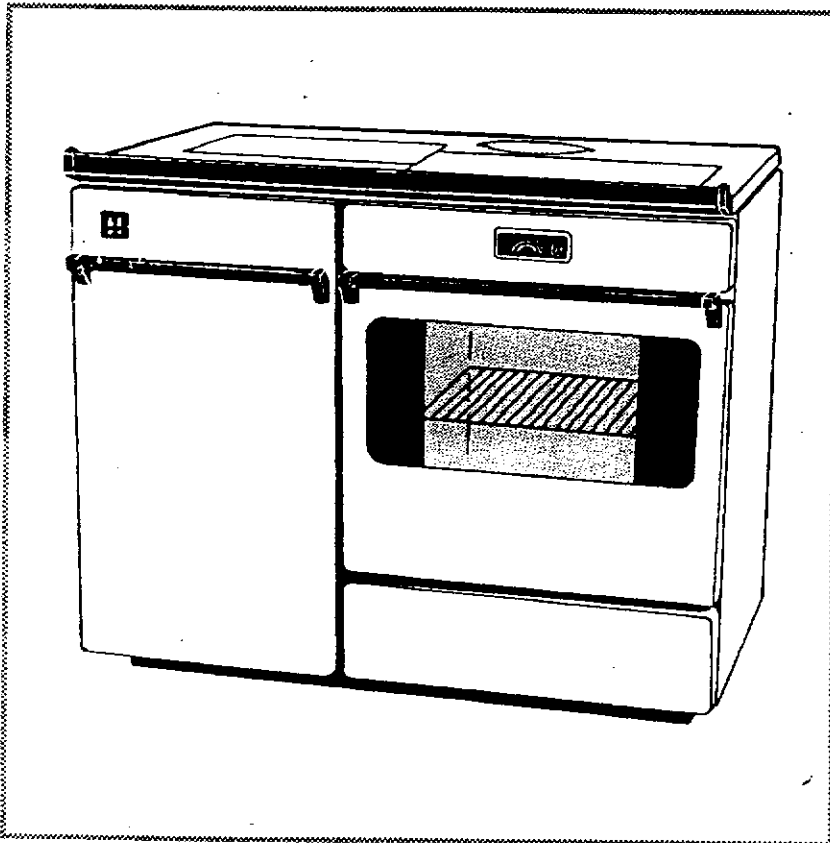
GRETALUX NL

Model 871 29 01

Oil-Fired central heating cooker
Fitted with an automatic SILENTA burner.
Output variable from 40 000 to 100 000 Btu/hr.

Please read and understand thoroughly before commencing installation.

Important ! The installation of this product must be accordance with current building regulations and codes of practice.



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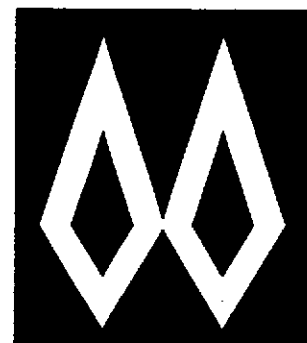
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Document n° 377-2 / 441070

Technical manual

Save
these instructions
for
future reference.

FONDERIES FRANCO-BELGES
59660 MERVILLE
Telephone : 28.43.43.43
Fax : 28.43.43.99
RC Hazebrouck 445750565B
Subject to modifications.

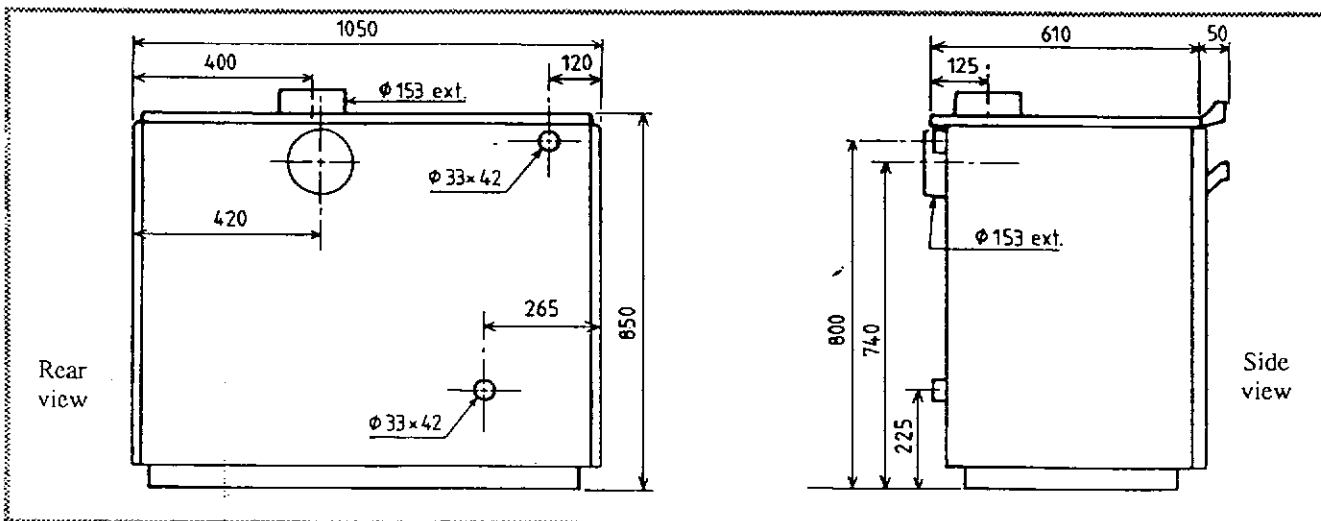


FRANCO BELGE

1. Description

1.1. Technical details and performance

Calibration		10	15	20	25
Maximum output	Btu/hr	40.000	60.000	80.000	100.000
Heating position maximum speed					
- Water heating output	Btu/hr	31.000	47.000	64.000	82.000
- Heat radiated (with covers down)	Btu/hr	9.000	13.000	16.000	18.000
Cooking position 260/290°C					
- Water heating output	Btu/h	11.000	15.000	15.000	16.000
- Heat radiated (with covers open)	Btu/hr	23.000	23.000	23.000	24.000
Flue draught for :					
- Maximum speed	ins.w.g	0,06	0,06	0,06	0,06
- Minimum speed	ins.w.g	0,03	0,03	0,03	0,03
Oil flow for :					
- Maximum speed	litre/hr	1,80	2,3	2,6	3,3
- Minimum speed	litre/hr	0,72	0,72	0,72	0,72
Supply voltage	volt	220	220	220	220
Electrical power consumed on maximum fire position	Watts	51	57	60	63
Electrical power consumed when igniting	Watts	120	120	120	120
Oven :					
- Width	mm	410	410	410	410
- Depth	mm	400	400	400	400
- Height	mm	320	320	320	320
Capacity of water jacket	litre	11	11	11	11
Maximum pressure	bar	3	3	3	3
Ø of oil supply flexible	mm	6 x 10	6 x 10	6 x 10	6 x 10
Weight	kg	260	260	260	260



Diag. 1 - Dimensions in mm

1.2. Description of the appliance

The GRETALUX NL cooker is a double use appliance for cooking and heating, fitted with an automatic vaporisation burner.

To select the position cooking/heating, the user will first operate a lever that controls a distribution flap and then the heating/cooking switch placed above the burner.

The SILENTA burner on the GRETALUX NL cooker has

with all the necessary operation, regulation and safety components.

The GRETALUX NL can be used for cooking purposes and domestic hot water production during summer when a 40 gallons hot water cylinder is installed on a gravity circuit.

Optional : covers in 2 parts for rear flue outlet, in 3 parts for flue outlet ; covers limit the radiation of the unit when

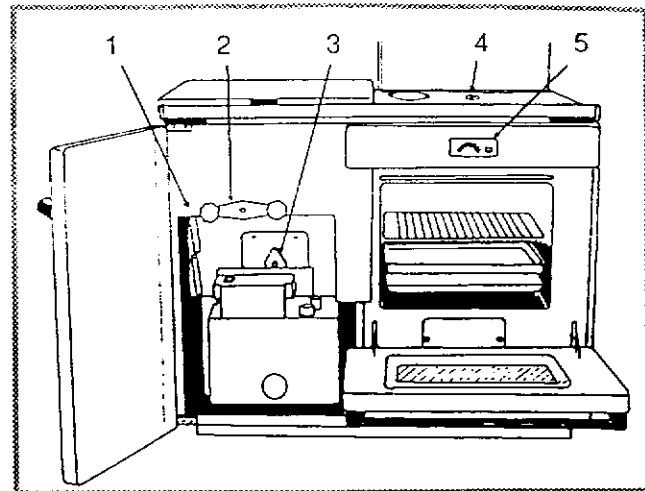
1.2.1. Components

- 1 - Thermostat sensor seating
- 2 - Cooking/heating control lever. The control lever has got two positions to direct the heat between central heating and cooking according to needs.
- 3 - Flame viewer.
- 4 - Direct draught flap control. It gives easier lighting.
- 5 - Thermometer (temperature of oven)
- 6 - Cooking/heating switch.
- 7 - Transformer.
- 8 - Fan.
- 9 - Electrovalve.
- 10 - Float regulator.
- 11 - Thermal relay.
- 12 - Oil supply flexible.
- 13 - Integral thermostat control.
- 14 - Calibration selector.
- 15 - Safety lever.
- 16 - Thermal reverser sensor (see diag. 12)
- 17 - Printed circuit with relays and fuses (see diag. 16)
- 18 - Sparkling plug (see diag.12)
- 19 - Room thermostat - model ASE 22 JN.

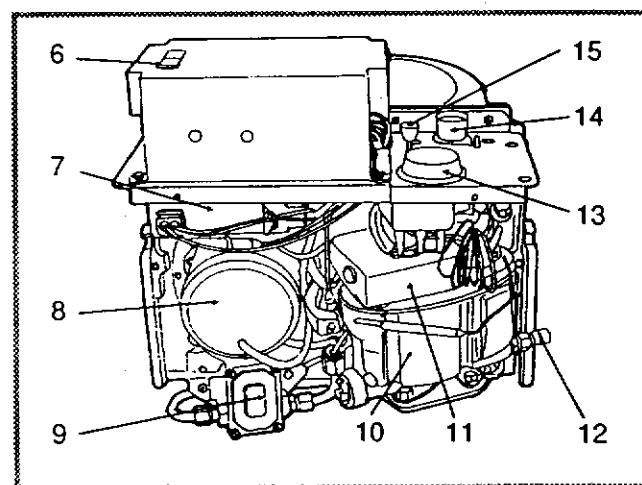
1.2.2. Cross sections

Diagrams nr 4 and 5

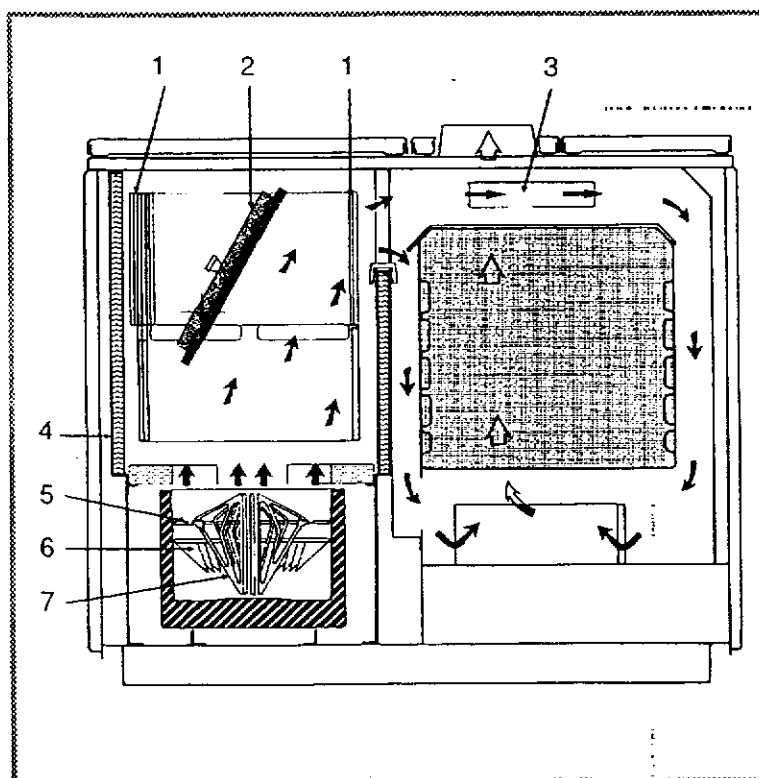
- 1 - Hearth wall
- 2 - Cooking/Heating flap
- 3 - Direct draught flap
- 4 - Boiler
- 5 - Upper burning ring
- 6 - Lower burning ring
- 7 - Catalyser
- 8 - Flame viewer



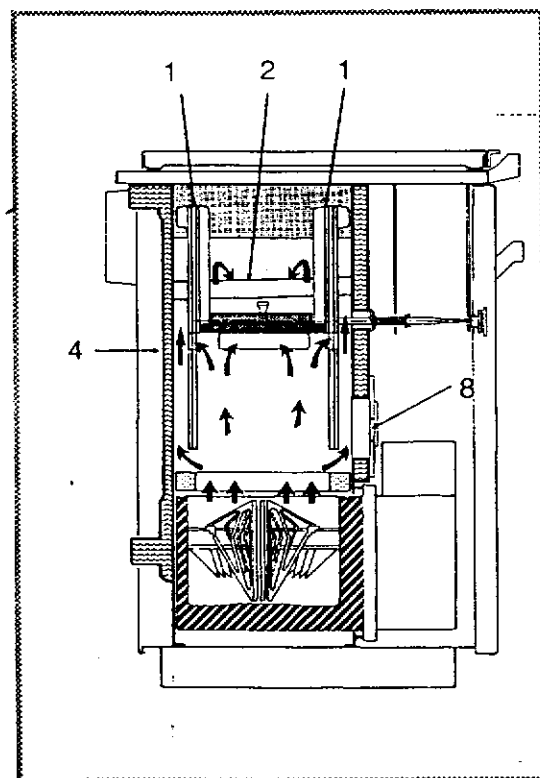
Diag. 2



Diag. 3



Diag. 4 - Front cross section (cooking position)



Diag. 5 - Side cross section (heating position)

1.3. Operating principles

The entire modulation of speed is obtained through the regulation system of the room thermostat ASE 22 JN. This thermostat ensures an entirely automatic running of the whole installation. The sensing element of the thermostat reacts to two electrical contacts. The first contact starts the burner (reduced speed), the second contact ensures a maximum speed. In accordance with the variation between the room temperature and the recorded one on the room thermostat, the first contact only or both contacts simultaneously are switched on by the thermostat in order to obtain one of the following fire positions : Maximum - Minimum - Off.

When the room temperature is far above the set point, the two contacts are disconnected and therefore the burner stops. The room temperature will be reduced of 4°C/39°F when the thermostat selector is on night position.

This may be achieved automatically when the appliance is fitted with a time switch (closing contact) and the thermostat selector is on automatic position.

The room temperature at night time is reduced by switching on a small resistance that provides an artificial warming up of the sensing element of the thermostat.

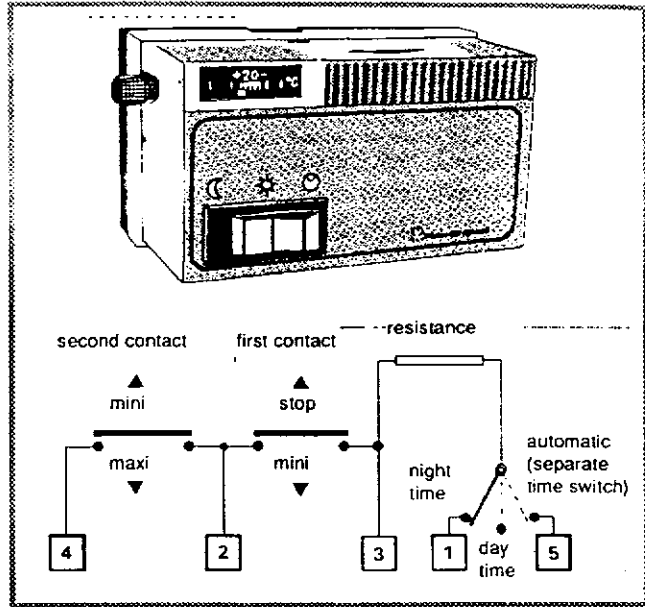
On heating position, the burner is directly controlled by the room thermostat. According to heating demand, the room thermostat will select one of the three fire positions of the burner : Maximum - Minima - Off.

The burner stops automatically when the water in the water jacket exceeds 90-95°C/194-230°F.

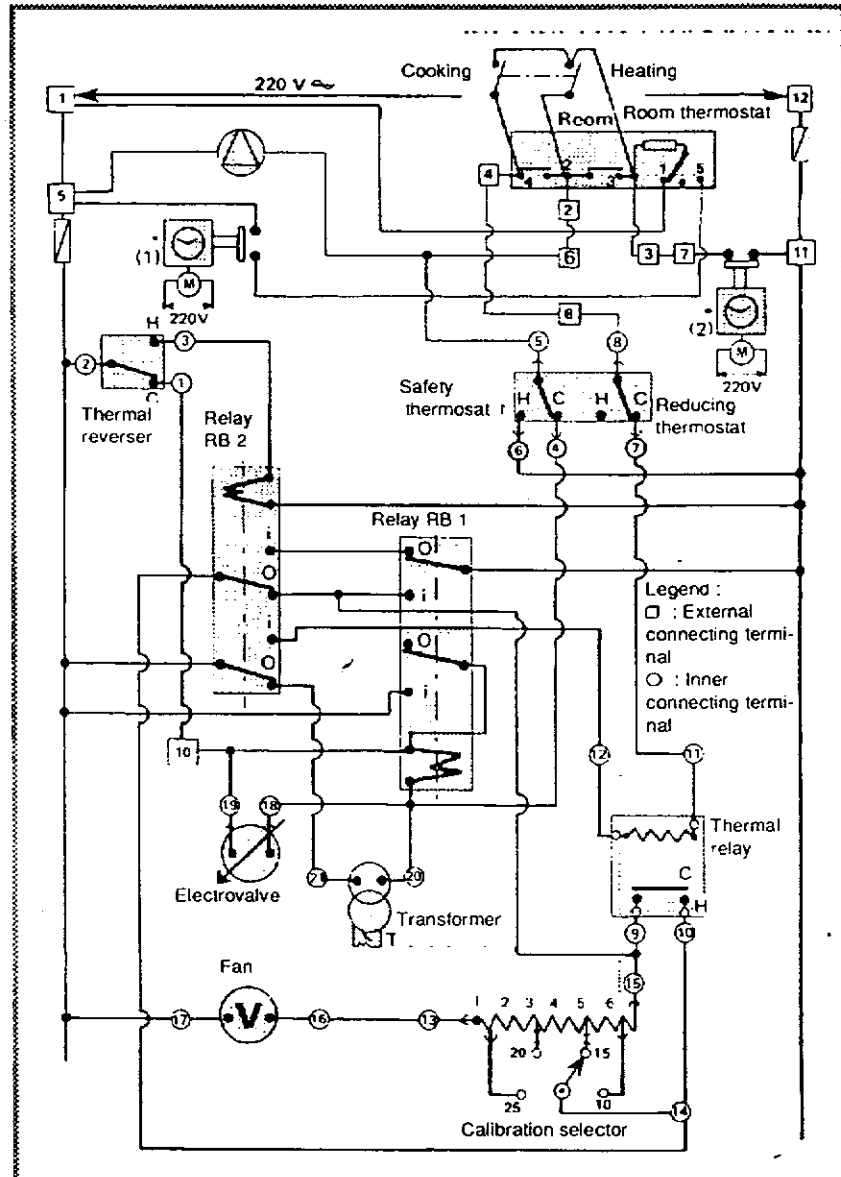
The maximum output of the burner is measured by means of a calibration selector fitted on the speed control lever. The selector enables the burner to reach the different levels of the maximum output and at each selected level to provide the fan the suitable voltage through a resistance (a variable speed fan).

The integral thermostat of the burner reduces the speed (minimum position) when the heat exchanger reaches the required temperature ; The latter stops the burner completely when the water temperature is 10°C/50°F over the required one on the thermostat (safety).

On cooking position, the room thermostat is switched off and the burner is kept constant at the speed selected by the calibration selector, nevertheless it remains under control of the thermostat which controls the temperature of the water jacket. On cooking position, the calories are diffused mainly onto the top plates and the oven as well. The selector allows the adjustment of heat output according to needs ; When cooking, it helps to maintain a constant oven temperature.



Diag. 6



Diag. 7 - Schematic diagram of Silenta burner

* connection of a time switch : Refer to paragraph 3 - 9

(1) time switch giving automatic night set back (closing contact)

Ignition of the burner

To ignite the burner, the fan must reach its maximum speed and the igniting device and the electrovalve must be switched on.

The fuel oil released through the electrovalve is introduced into the burner at low flow rate (minimum flow rate of the float regulator). The fuel oil comes into contact with the vaporisation resistance of the sparking plug. When the fuel oil is hot, it turns into vapour. When mixed with combusting air it ignites whittled sparks of the sparking plugs electrode.

Normal operating

After a few minutes, the thermal balance of the burner is obtained and the temperature of the flame acts upon

the thermal sensor immersed into the combustion pot. This thermal reverser stops the igniting system, the speed of the fan is back to minimum. After the igniting stage, in accordance with the regulation component, the burner will operate at one of the two fire positions : Maximum or Minimum.

Stopping

When the stopping is required by the regulation component, the electrovalve is locked out and the fan is at its maximum speed so that all the combustible particles that may have been in the burner can be discharged. This post ventilation goes on until the sensor cools down, the burner is then ready for the next ignition.

2. Assembly and installation

2.1. Siting the cooker

The room in which the cooker is to be installed must satisfy all local regulation. These will stipulate an adequate fresh air inlet of at least 55 sq. in. **The appliance must be level.** If necessary blocks must be set under the supports.

The cooker should not be inserted nearby combustibles which do not withstand heat. It is recommended to keep a minimum clearance of 4 inches between the cooker and the environment.

2.2. The chimney

The chimney must be in good condition and must satisfy all local heating regulations. These are some essentials for a good chimney :

- to be cleaned and swept regularly to avoid build up of soot or tar.
 - to be well insulated, to remain warm under all conditions and to hold heat to give a stable draught.
 - to be airtight.
 - to be independent not be shared with any other appliance and not exhaust into a large void at the base.
 - to be at least 14 ft high to ensure satisfactory performance.
 - to be at least 3 ft above any obstructions within 25 ft radius or use a suitable cowl to avoid down draughts.
 - to have a fairly constant cross section, without sudden bends.
 - to have an optimum draught of 0,08 ins. w. g.
- NOTE :** if the draught exceeds 0,12 ins. w. g. it is recommended to fit a draught regulator

Connection to chimney : Either horizontally from the back of the cooker or vertically from its top. In this case, remove the blanking plate of the cover.

2.3. Domestic hot water cylinder

The following instructions have to be observed in order to produce domestic hot water with the GRETALUX NL. The hot water cylinder must be of the indirect type, having a capacity of 40 gallons and a large diameter

water cylinder must be engineered to work by gravity. A pipe thermostat must be fitted from the nr 6 wire to the circulating pump.

2.4. Connecting the central heating circuit

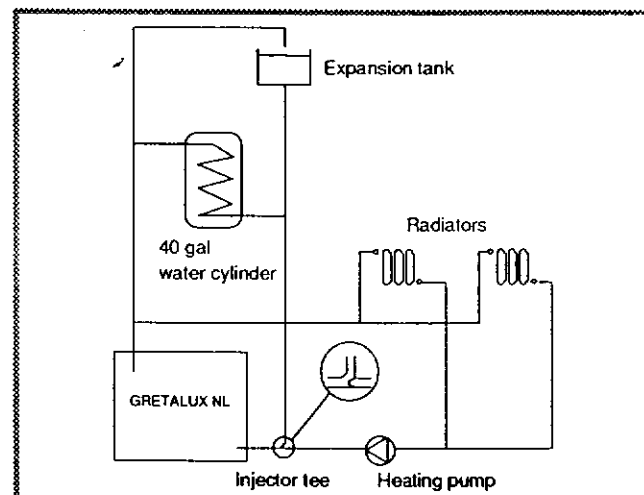
In any installation building codes and practices must be observed. The appliance should be connected to the installation with joints and unions to make the dismantling easy.

The layout of the heating circuit can be designed in any fashion that suits the house, as the pump will ensure circulation of hot water to all points, but the hot water cylinder must be engineered to work by gravity.

Use 1 1/4 inch min. I.D. pipe (28 mm) to the cylinder, ensure that the cylinder has a 3/4 inch min. I.D coil (22 mm) wound from top to bottom, and that the inlet is above the boiler and the outlet is above the return tapping of the boiler.

An expansion tank open to the atmosphere must be provided to ensure that no pressure build-up can occur, and this should be connected to the highest point of the circuit by 1 inch I.D pipe (28 mm).

We recommend to fit, as well, a heat leak radiator.



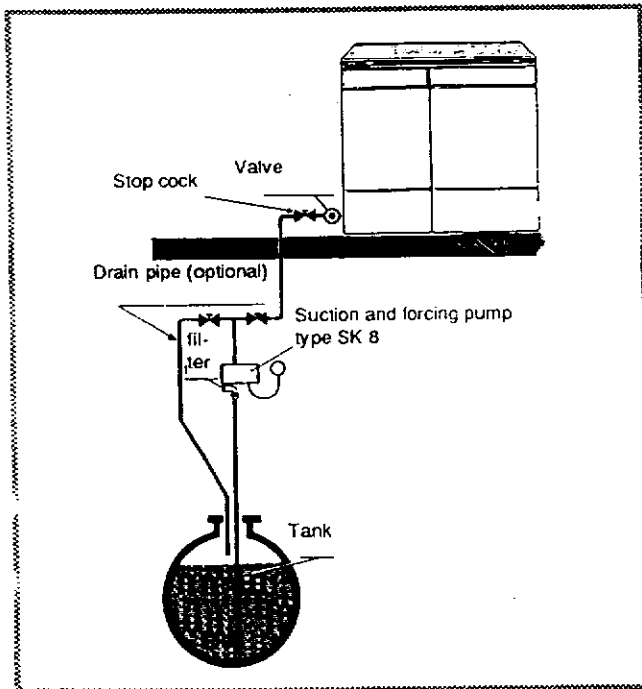
Diag. 8 - Example of installation

Pumped central heating, gravity hot water system : An injector tee must be connected where the gravity and central heating circuits join together to return to the cooker. It permits a stable circulation of hot water through both circuits and avoids priority to be given to the stronger flow (commonly to

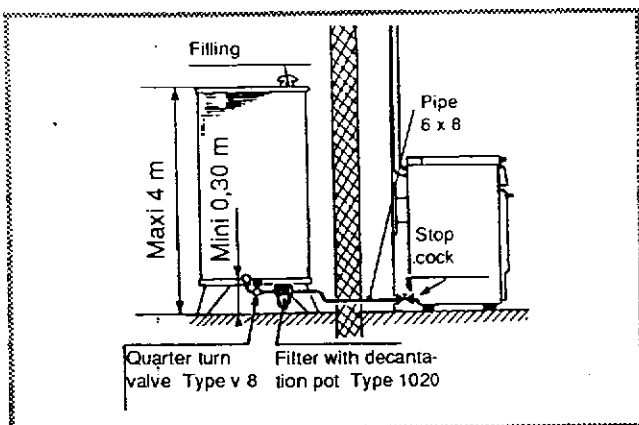
2.5. Checking of the burner

- Remove the warming drawer and take off the burner to check the proper seating of its inner parts.
- Connect the flexible pipe at the back to the oil inlet pipe. **CAUTION !** Leave sufficient length at the back to take out the burner easily.
- Lock the burner on the water jacket with the two latches and check the tightness of the gasket.
- The locking track can be corrected if necessary by turning the off centre pin round with a screwdriver after having first loosened the press-screw in order to increase or reduce the tightening of the latch on the locking pin of the burner.
- Check that the thermostat sensor of the burner is placed in the seating on the left of the front part of the water jacket.

IMPORTANT ! Check the burner level with a water level placed on the specially provided stoppers (diag.12). If possible the burner must be leaning to the right (sparkling plug side), and the level of the appliance must be corrected if necessary.



Diag. 9



Diag. 10

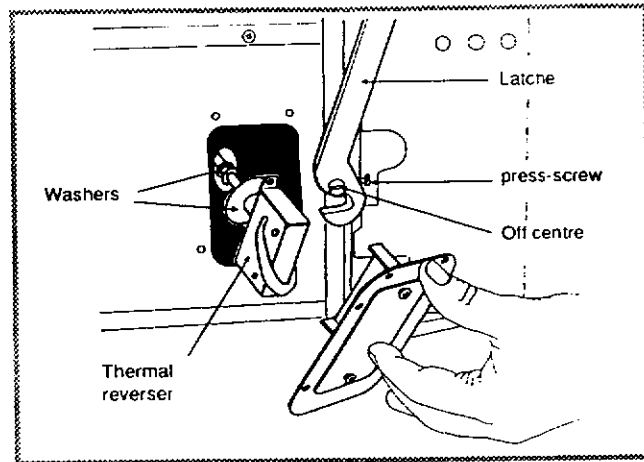
2.6. Oil supply of the generator

The SILENTA burner can be supplied with oil, either by gravity when the tank is a gravity feed one (diag. 10), or through a suction and forcing pump (diag. 9). Those accessories are provided on request.

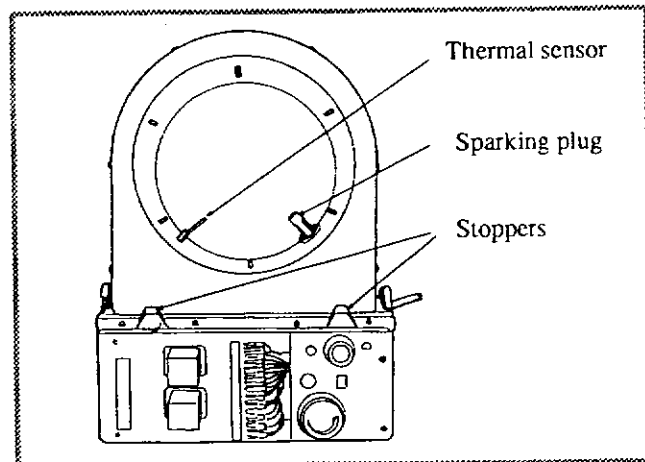
NOTE: the SK 8 pump can be connected to the burner (terminals 9 and 10). This allows pump to be switched off with burner.

2.7. Covers

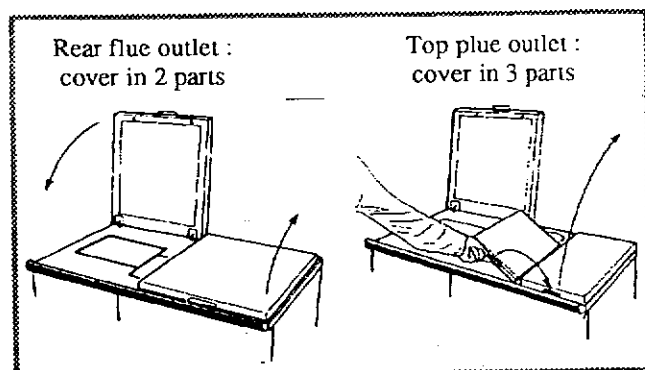
Locate the lugs on the covers in the holes of the rear of the top plate (Diag. 13).



Diag. 11



Diag. 12



2.8. Guard rail, firebox and oven door handles

The guard rail, firebox and oven door handles are not fixed on the cooker to avoid damage during transit. Fit the guard rail and the firebox door handle with the screws supplied.

To fit the oven door handle :

- Remove the oven door as show diag. 31.
- Remove the two screws and hold the inner door half open with a block (diag. 15).
- Unscrew the struts and place the nuts into the slot of the handle supports.
- Centre the handle before screwing up the struts
- Fit the inner oven door and replace the oven door.

2.9. Electrical connection

All the external electrical component will be connected onto the 12 terminals on the left side of the printed circuit : diag. 16

- Power to cooker : 12 Live, 1 Neutral, Earth.
 - Room thermostat : Terminal 1 and binding-post 2, 3, 4
 - Pump : 6 Live, 5 Neutral.
- Pipe stat can be used to give priority to hot water
- Oil supply pump : terminals 9 and 10

- Time clock : Remove link 7 to 11, Power to clock !! Switch wire 7, Neutral n1

The electrical supply will be by means of a flexible cable and earthed plug and socket. Connect the earth wire to the screw provided for this purpose and located above the casing of the burner (diag. 16).

NOTE : the cables will have to be protected by a flexible sheath between the casing and the water jacket of the appliance. Leave sufficient length to be able to remove the burner easily.

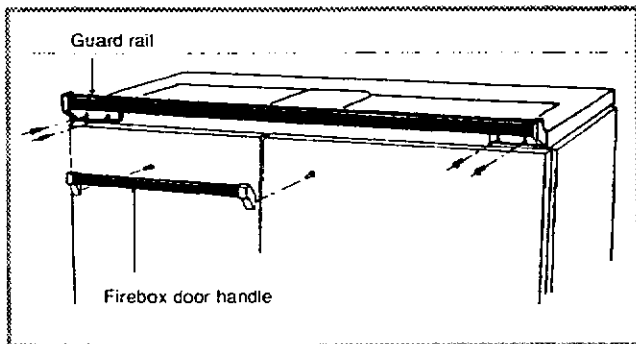
Before plugging in the appliance, check the voltage of the main supply. The burner can operate only at 220 V. If necessary add an autotransformer to provide the correct voltage.

The power of the transformer must be at least 250 VA to supply the burner and circulator.

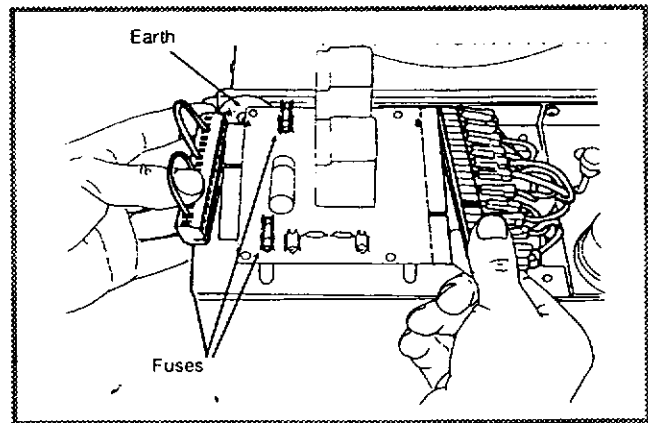
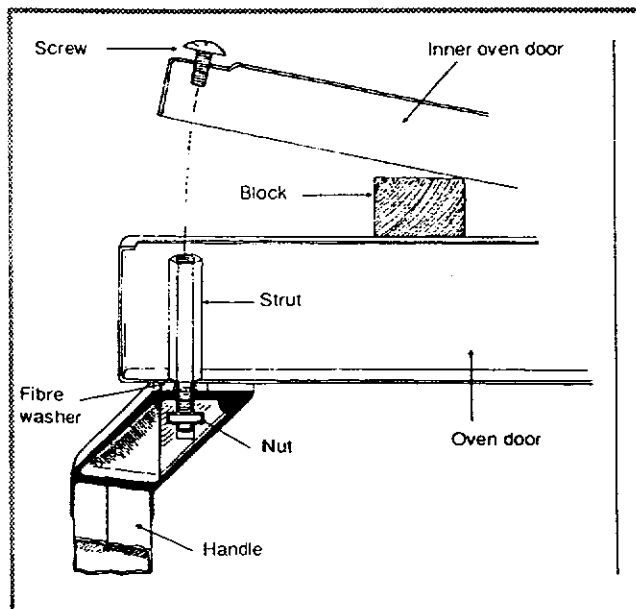
- in the case of an installation with a domestic hot water cylinder, a "Summer/Winter" switch must be provided and connected between the heating pump and terminal 6.

2.9.1. Room thermostat

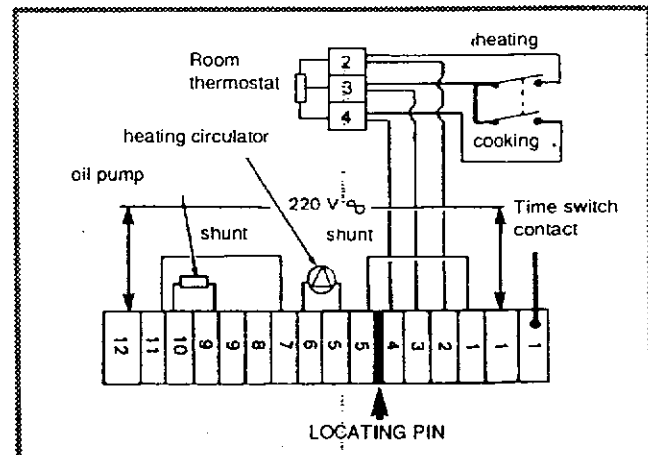
The room thermostat must be placed about 1.5 m above floor level on the inner wall of the main room. It must not be fitted in the kitchen neither in the hallway. There must be a good air circulation in that place : avoid corners, hot places, such as near radiators, hot water pipes, smoke pipe and sunbeams. Avoid cold places as well such as outside walls, windows, draughts caused

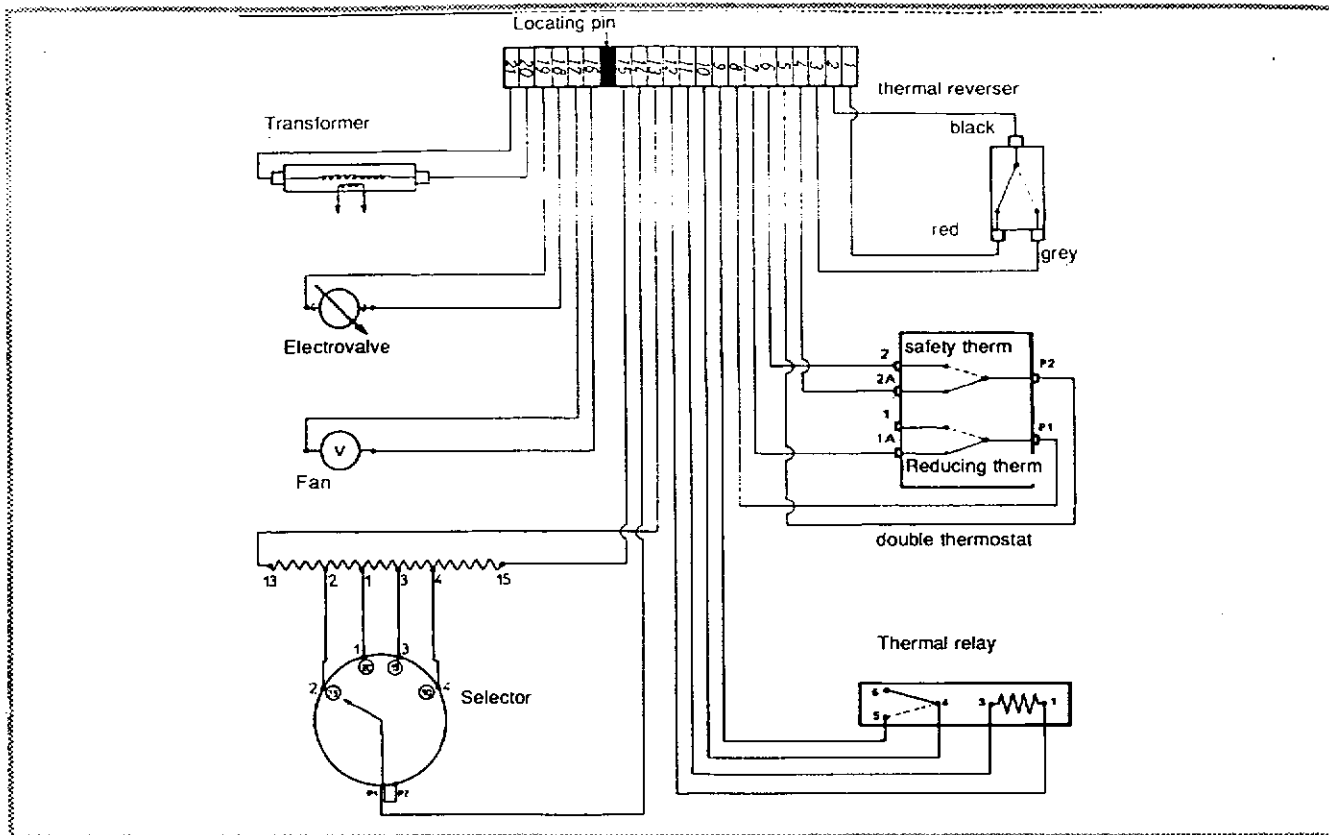


Diag. 14



Diag. 16 - Printed circuit





Diag. 18

by opening doors. Diagram 20 and 19 show the connections without and with night set-back time switch respectively.

2.9.2. Time switch

The appliance can be fitted with a time switch to allow either :

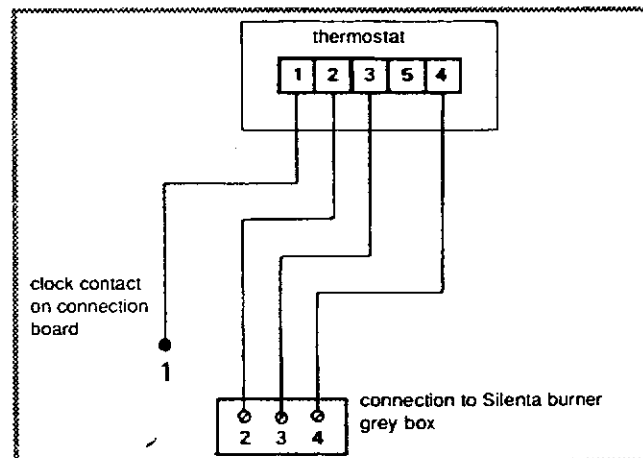
(1) the room temperature overnight time condition to be set-back automatically ; the room temperature will be reduced by 4°C/39°F when the thermostat selector of the room thermostat is on the automatic position. Refer to diagrams 7 and 20 for connection to Silenta burner.

(2) the burner to switch out completely through it . The operation of the time switch is independent of the room thermostat. When the time switch setting calls for the burner to stop, a coll-down period occurs before the burner stops completely. Refer the diagrams 7 and 17 for connection to SILENTA burner. Remove the link between terminals 7 and 11 of the connection board and connect the time switch contacts between terminals 7 and 11 (action "Contacts Open").

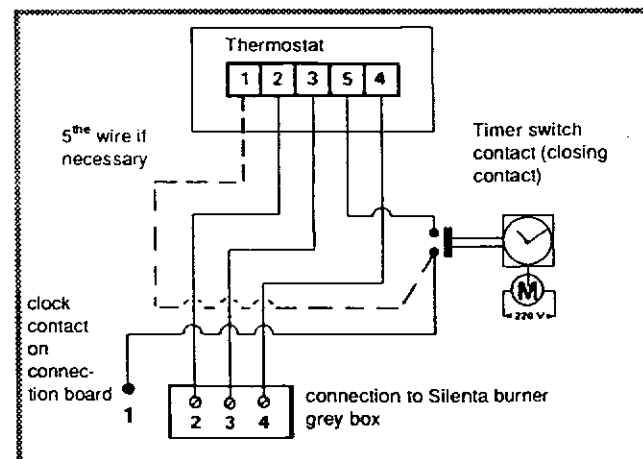
3. Operation

3.1. Checks prior the igniting

Before leaving the factory, the top plate is protected with a blue plastic coating which must be peeled off before igniting. Check that all the inner parts are properly seated (diag 4 et 5).



Diag. 19 - Room thermostat without time switch

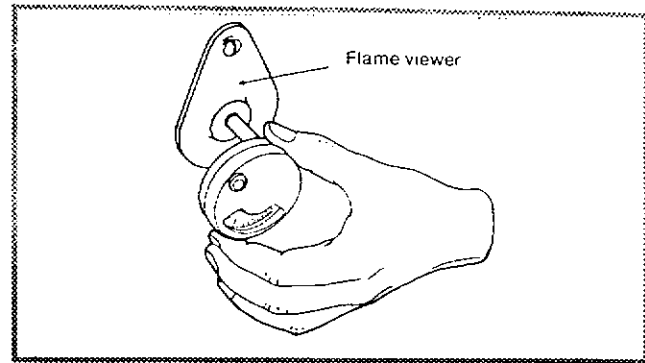


Diag. 20 - Room thermostat with time switch

3.2. Control of the draught of the chimney

The draught of the chimney must be measured when the cooker is first started and before the oil flow is adjusted.

- insert the measuring tube draught gauge (diag. 21) in the opening of the flame viewer; having first taken off the top screw.
- the optimum draught is about 0,03 ins.w.g at minimum speed and 0,06 ins.w.g at maximum speed.
- if the draught is lower than the values stated, it will be necessary to modify the chimney (see paragraph 2.2)
- if the draught is far above, we advise the fitting of a draught regulator to ensure a good balance of the burner in operation and optimum efficiency of the boiler.



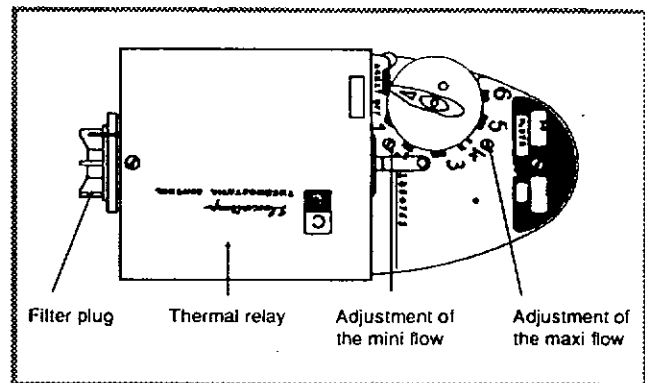
Diag. 21 - draught gauge

3.3. Adjustment of the operation of the burner

The burner is checked at the factory to operate well under normal conditions :

- Mains voltage 220 volts $\pm 10\%$
- Draught at the plug : 0,04 ins.w.g. (about 0,06 in the chimney)

Under those conditions, the flame does not cling to the upper ring of the burner at minimum speed. The flame does not reach the cooking-heating flap when operating at maximum speed (selector on position 25).



Diag. 22 - Float regulator

Adjusting the oil flows

In case the maximum and minimum flows must be modified, see diag. 22

Control of the thermostat operation

In accordance with a certain temperature of the water in the water jacket, operate and check that the thermostat control ensures a slow speed of the burner when its setting corresponds with the water temperature ;

The burner completely stops when the thermostat control is set $10^{\circ}\text{C}/50^{\circ}\text{F}$ below this temperature.

The good operation of the appliance is guaranteed as long as the equipment has not been modified by the installer and the electrical connections have been properly made as described in this manual.

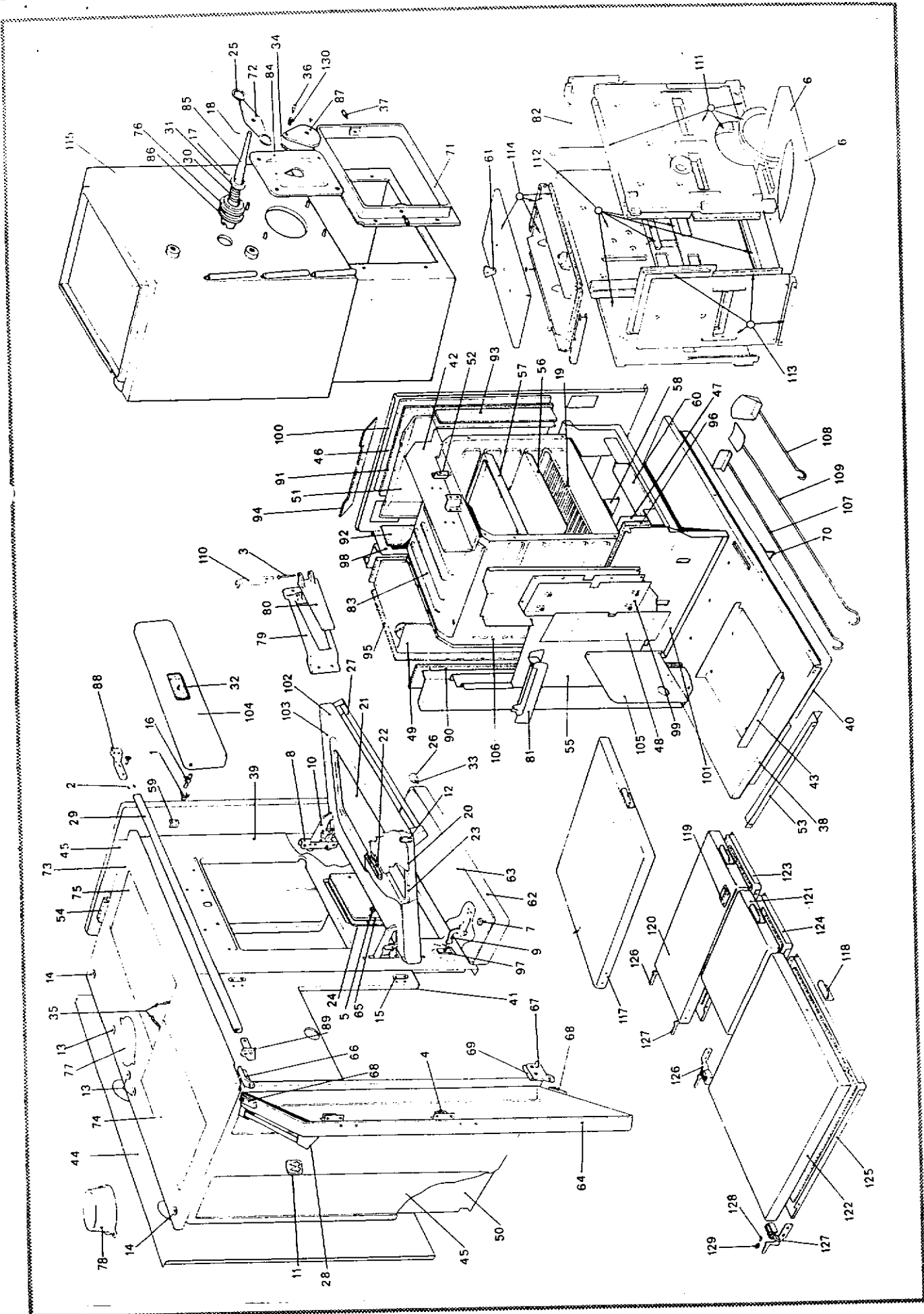
4. Spare parts

For any order of spare parts, please indicate : model nr, code of the colour, description of the part, code number of the part.

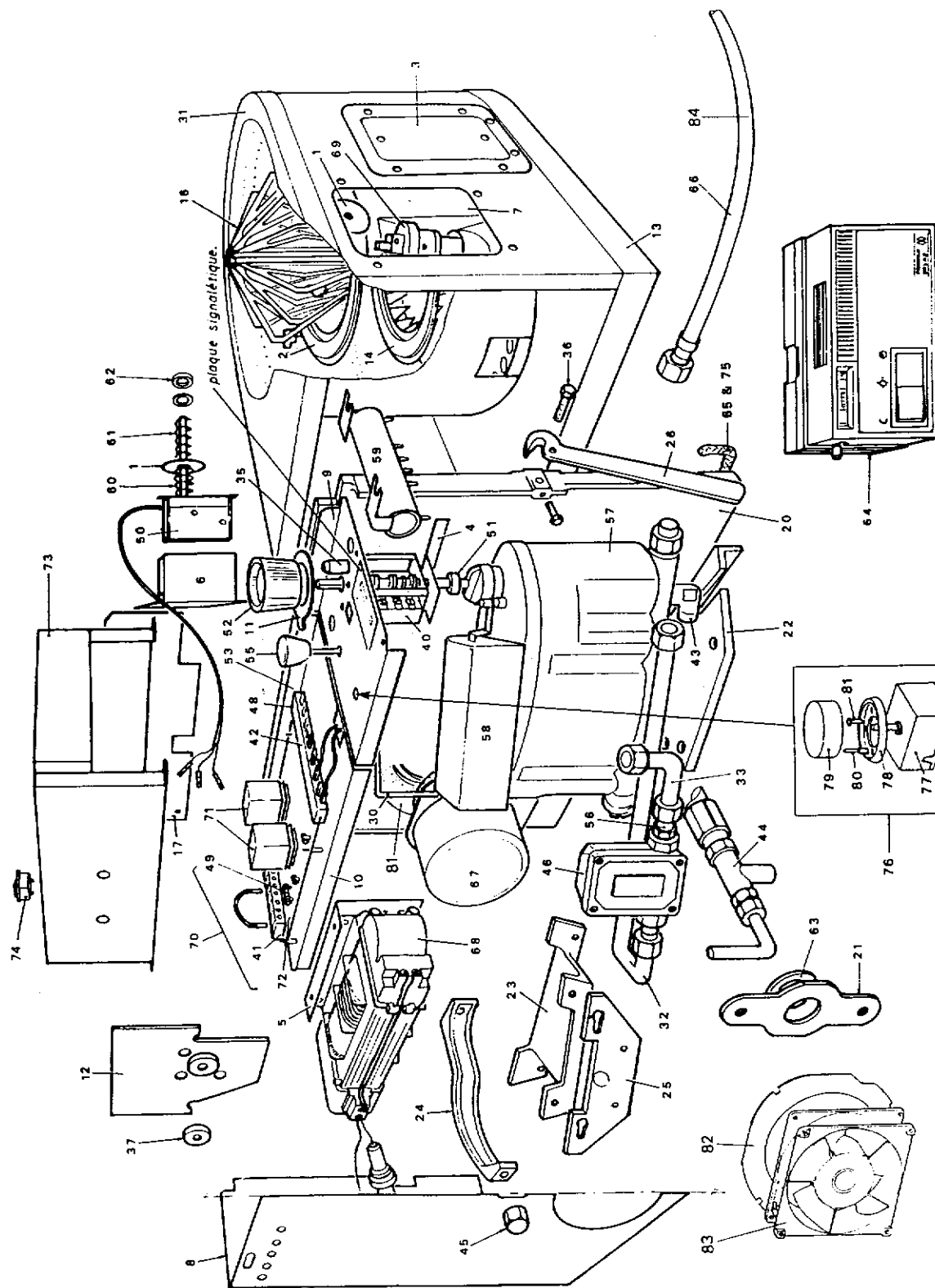
Example of order : GRETALUX NL, model 871.29.01, color Z, side panel 207833

4.1. Cooker (fig. 23)

1	100605	panel fastener	19	134915	wire rack
2	100940	axis	20	137154	oven door glass
3	100966	axis	21	137155	inner oven door glass
4	101007	magnet	22	142303	glass joint
5	105118	nut	23	142306	glass joint
6	105206	fire brick	24	142308	door gasket
7	105501	block stop	25	158613	knob
8	109844	hinge	26	158619	handle
9	109845	hinge	27	158760	handle
10	109847	hinge	28	158761	handle
11	122807	name plate	29	164558	rail
12	124454	stud	30	166024	spring
13	132750	hinge support	31	167304	washer
14	132751	hinge support	32	178607	thermometer
15	134304	striking plate	33	179911	stud
16	134505	stud	34	181603	ceramics rope 13
17	134506	stud	35	181604	ceramics rope 10x4
18	134507	stud	36	189103	stud 27x8x6
			37	189105	stud 28x8x7
			38	200155	base
			39	200394	front panel
			40	200422	plinth
			41	200728	suppl. front panel
			42	201221	heat shield
			43	201409	top plate shield
			44	204169	rear panel
			45	207833	side panel
			46	208104	right heat shield
			47	208305	screen



Diag 23 - Cooker



Diag 24. Burner

49	208408	rear heat shield
50	208808	left inner panel
51	209305	suppl.right heat shield
52	209704	screen
53	209907	protective
54	211900	upper flat
55	216115	circulation duct
56	218805	backing tray
57	218904	baking dish
58	222505	oven flue baffle
59	228000	side square
60	233008	soot guide
61	158603	handle
62	249100	inner warming panel
63	249200	inner warming panel
64	252585	lower front panel
65	266602	access cover
66	273206	hinge
67	273406	hinge
68	273508	hinge
69	274406	hinge support
70	275301	stiffening plate
71	301017	firebox frame
72	301822	handle
73	302109	cast iron top
74	302227	left top plate
75	302525	right top plate
76	303409	washer
77	303714	blanking plate
78	303819	flue collar
79	304510	draught door frame
80	304616	direct draught door
81	306304	right screen
82	308605	firebox right inner plate
83	308882	oven top plate
84	316306	sight hole plate
85	319803	axis
86	320104	disc
87	320603	shutter
88	324902	right support for rail
89	325002	left support for rail
90	446201	insulated plate
91	446202	insulated plate
92	446203	insulated plate
93	446204	insulated plate
94	446208	insulated plate
95	446213	insulated plate
96	446214	insulated plate
97	451009	stiffening plate
98	607504	rear heat shield
99	608500	left insulated plate
100	608702	right inner panel
101	639001	warming drawer top
102	647519	oven door
103	647614	inner oven door
104	653393	upper front panel
105	660503	screen
106	691021	oven
107	858003	scraper
108	858005	scraper
109	858200	scraper
110	958600	handle
111	905203	firebrick front plate
112	905204	firebrick rear plate
113	905205	firebrick left plate
114	919200	baffle flap
115	911112	water jacket
117	652604	right cover
118	158540	cover handle
119	109826	top hinge
120	652605	right half cover
121	252801	central cover
122	652738	left cover
123	254701	inner cover
124	254801	inner cover
125	254520	inner cover

128	109108	set screw
129	122303	cap nut
130	166003	spring

4.2. Burner (fig. 24)

1	234100	Washer
2	234300	Upper burner ring
3	236108	Access cover
4	237200	Selector support
5	239201	Transformer support
6	241001	Thermal reverser support
7	262202	Sparking plug support
8	267400	Top casing
9	268200	Top casing
10	268401	Instrument panel
11	277603	Index plate
12	277901	Ignition wire support
13	617101	Rear casing
14	634200	Lower burner ring
16	678102	Catalyser
17	261801	Heat shield
20	301118	Firebox plate
21	301314	De scaling support
22	316108	Float regulator support
23	321401	Electrovalve support
24	322600	Casing support
25	322700	Electrovalve support
26	430000	Door latch
30	461600	Float regulator rod
31	905301	Burner
32	982538	Float regulator pipe
33	982539	Float regulator pipe
35	100904	Stop
36	100915	Cam pin
37	105104	Nut
40	110712	Selector
41	110759	External connection
42	110757	Internal connection
43	111201	Knee pipe
44	119206	De scaling
45	122302	Nut
46	122901	Electrovalve
49	199909	Safety fuse
50	198705	Thermal reverser
51	149104	Selector coupling
52	149831	Selector Knob
55	158603	Regulator knob
56	164202	Oil-tight nut
57	165104	Float regulator
58	165652	Thermal relay
59	165910	Resistance
60	166003	Spring
61	166023	Spring
62	167003	Isolating washer
63	167004	Isolating washer
64	179008	Room thermostat
66	183001	Flexible pipe
67	988500	Fan
68	198605	Transformer
69	199803	Sparking plug
70	158351	Complete control circuit
71	165703	Relay
72	158360	Stripped control circuit
73	112707	Protection cover
74	139206	Switch
75	181603	Ceramics rope
76	900514	Complete thermostat
77	100618	Thermostat
78	123465	Trim
79	149819	Thermostat knob
80	105603	Stop
81	671400	Joint

5. Operators instructions

5.1. Description

The GRETALUX NL provides central heating and cooking from just one kitchen unit. It also heats the kitchen by radiation. The output range of the SILENTA burner allows flexibility of heat output according to needs. The removable burner has all the operation, regulation and safety components. The large polished cast iron surface provides both high temperatures for frying and areas of lower heat for slower cooking.

IMPORTANT : provided the installation has a hot water indirect cylinder on gravity circulation, the GRETALUX

NL can be used for cooking and domestic water heating in summertime.

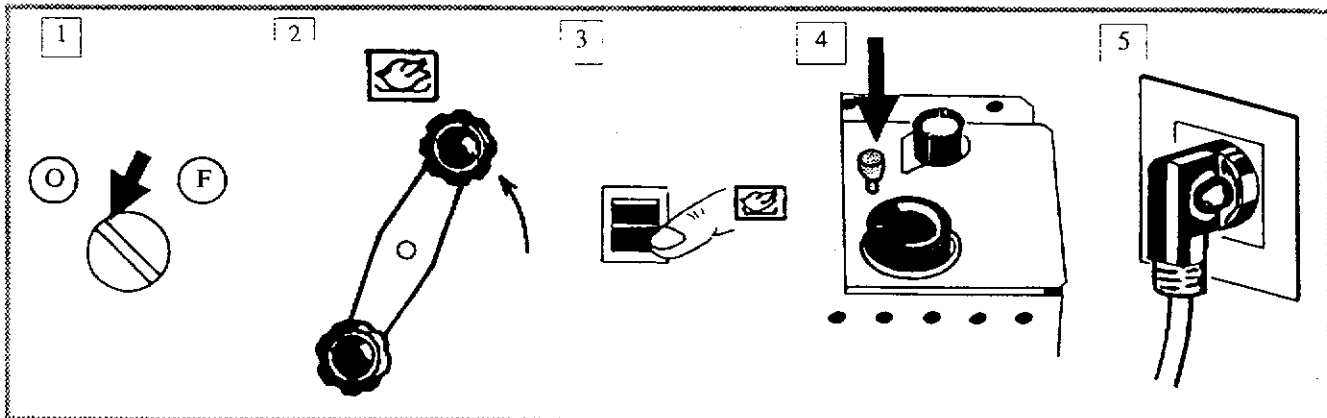
5.2. Fuel

USE ONLY REDWOOD 35 SEC. DIESEL OIL

The fuel oil must be free from any dirt and water which could disturb the cooker in operation.

Filling the tank :

We recommend to fill the tank when the burner is not in operation to avoid the pipes to get dirty : the mud lying at the bottom of the tank could be stirred up during filling and built up in the pipes.



Diag. 25 - Automatic ignition

1, open the direct draught flap control.

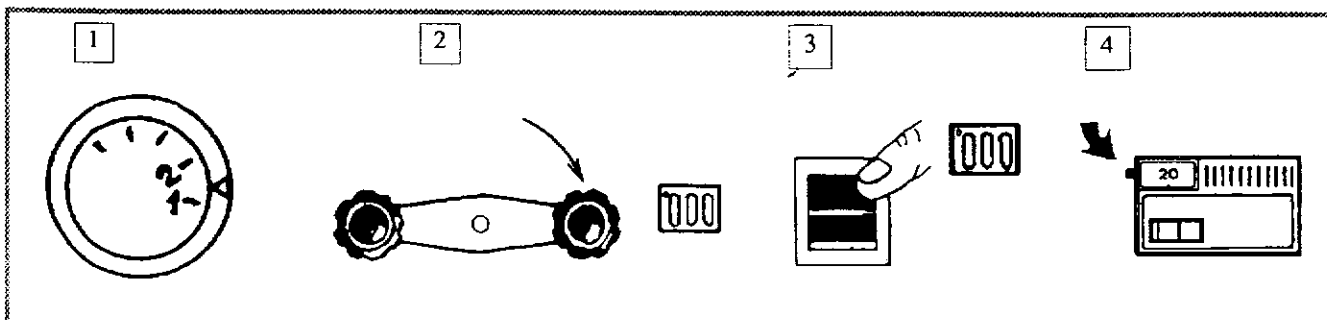
2, Control lever in cooking position (For this, press the control lever first and then turn it to required position).

3, switch in cooking position. (On cooking position, the room thermostat is disconnected to allow a normal running of the burner to help heating of the hot plates and oven. On heating position, the room thermostat controls the running of the burner.)

4, open the fuel-oil supply valve and push the safety lever downward (It allows the automatic safety system of the float regulator to be in operation. It has to be pushed down-ward to operate.

5, Connect power supply.

Close the direct draught flap as soon as the unit is in operation.



Diag. 26 - Heating regulation

1, set the thermostat control in required position to obtain a water temperature in the water jacket as following :

- 1 = 20°C / 69°F
- 2 = 40°C / 104°F
- 3 = 50°C / 122°F
- 4 = 70°C / 158°F
- 5 = 85°C / 185°F

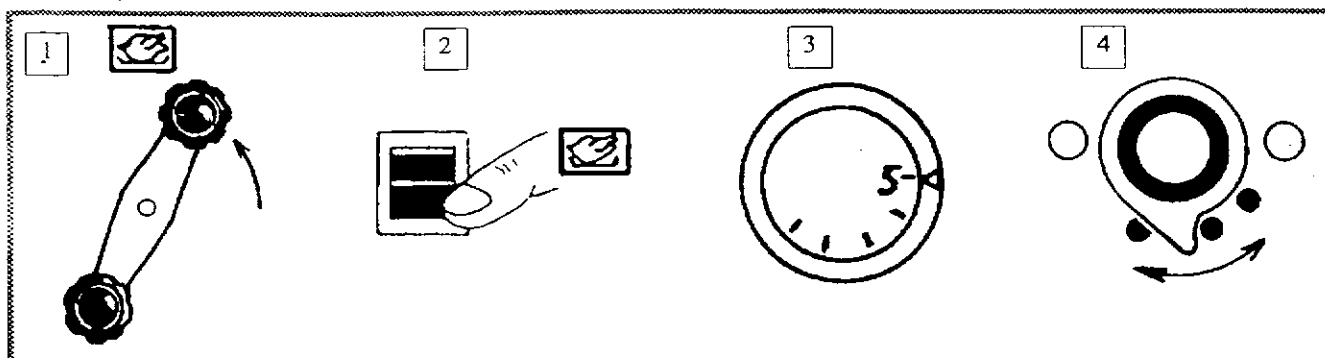
2, 3, set control lever and switch in heating position

4, set the required room temperature on the room thermostat by turning the milled knob. Place the selector switch in the required position :

Night time position : this position is advised for night-time. The actual room temperature will be 4°C / 39°F below the setting of the room thermostat.

Day-time position : the actual room temperature will be the same as the setting.

Automatic position : No need to switch the selector, but the room thermostat has to be connected to a time



Diag. 27 - Cooking regulation

1, 2, set control lever and switch in cooking position.

3, set the thermostat control in high position.

4, set the calibration selector in required position to regulate the oven temperature as following :

	Calibration 10	Calibration 15	Calibration 20
Heating position	Very mild 100/150°C 212/302°F	Mild 130/190°C 266/374°F	Medium 180/230°C 356/446°F
Cooking position	Mild 130/190°C 266/374°F	Medium 180/230°C 356/446°F	Warm 220/270°C 428/518°F

The temperature of the oven can be read on the thermometer.

CAUTION : Setting 25 is reserved for central heating operations and should not be used for cooking only.

Hot plate cooking : when using the oven, the hot plate will in any case ready for use. If full use of the hot plate is required, open the direct draught flap with the control lever and switch in cooking position.

IMPORTANT ! The direct draught control must be returned to normal running position after use.

5.3. Power cut

In that case, the burner will stop. It will start again automatically when the power is back

5.4. Safety system

A double safety system is included in the Silenta burner : An automatic safety system incorporated in the float regulator in case of a failure of the oil supply system. The safety lever is raised when this operates. An overheat safety thermostat in case of anormal overheating. Automatic ignition of the burner follows cooling of the appliance.

Note : the speed of the fan of the burner is automatically selected according to the combustion speed. However the speed of the fan reaches its maximum during igni-

ting and stopping time to increase the quality of the combustion in order to limit the sooting up of the unit.

5.5. Stop mechanism (diag. 28)

- Disconnect the power supply.
- Pull the safety lever upward.

5.6. Removing the oven door (Diag. 31)

With the door open :

- Press down on front edge
- Lift up the small "U" brackets (1) on each of the hinges (2).
- Lift the door and draw it out at the same time

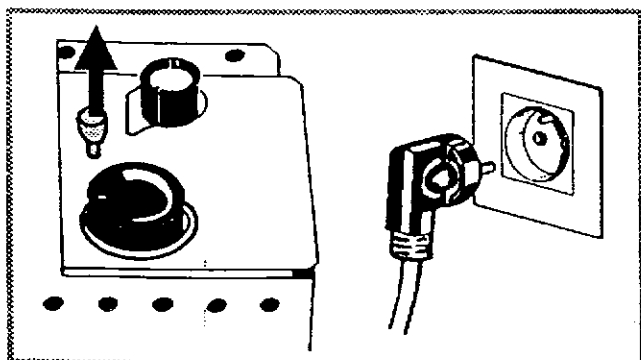
To replace it, reverse the procedure. Check the smooth working of the door.

6. Maintenance

The cooker is more efficient when the burner and all the surface of the heat exchanger and flue passages are kept perfectly clean. With this in mind, at least one cleaning of the appliance per year is advised.

The burner :

- Stop the appliance and disconnect the power supply.
- Level surface too prevent oil control flooding.
- Remove the burner completely (diag. 29)
- Remove all the internal parts of the burner (different



- Clean the pot for the burner but be careful not to damage the sparking plug and the sensor for the thermal inverter.

The water jacket and the hearth walls :

- Remove the burner first before taking off the top plates.
- Remove the cooking/heating flap as follows : (position control lever on heating, lift up the side of the flap set at the rear of the hearth).
- Remove the left and right hearth walls by lifting them up.
- Remove the front and back hearth wall

Use the scraper to clean all the inner walls of the water jacket and the four hearth walls.

Remove the soot and the deposits of the place where the burner was through the access plate situated under the oven.

Oil supply :

- Clean the filter of the automatic oil supply
- For this, use oil and a soft brush if necessary, never a wire-brush
- After fitting of the filters, ensure the joints are tight

De scaling lever :

Every week, operate the de scaling lever of the burner in order to clean the oil feed pipe : push thoroughly the rod and turn it completely two or three times. Pull the rod back for normal running of the burner.

Enamelled casing :

- Clean all the enamelled panels of the casing with a soft cloth, dry out the burner first. As the appliance must be cold.

Polished cast iron top surface :

- Clean this surface with emery paper or ZEBRACIER.

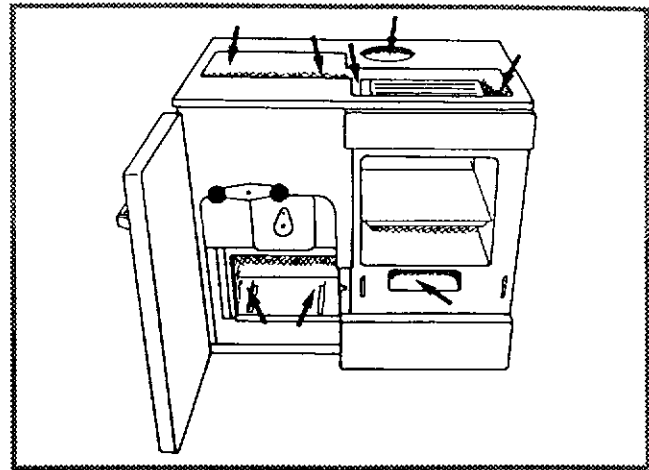
End of heating period :

If the cooker is not to be used for any length of time, its burner and water jacket should be cleaned thoroughly, debris removed and flue disconnected or obstructed. This latter operation is recommended to avoid air circulations inside the unit, motive of condensation and pitting of the walls of the water jacket.

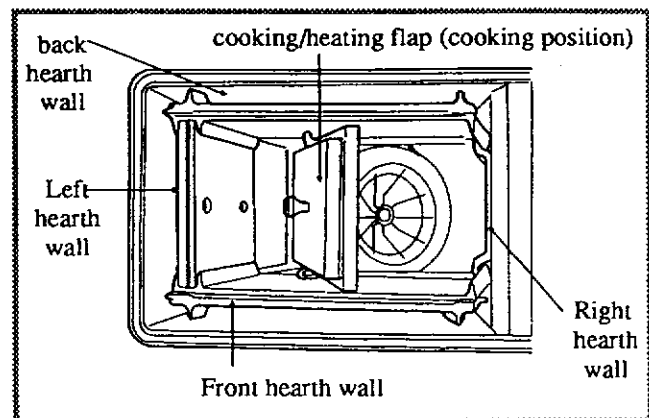
7. Recommendations

The adjustment of your appliance has been done by your installer. Don't touch it. Any anomaly of operation must be reported at once to him.

Never light the burner if there is any layer of oil at its bottom. Dry up the burner before.



Diag. 29



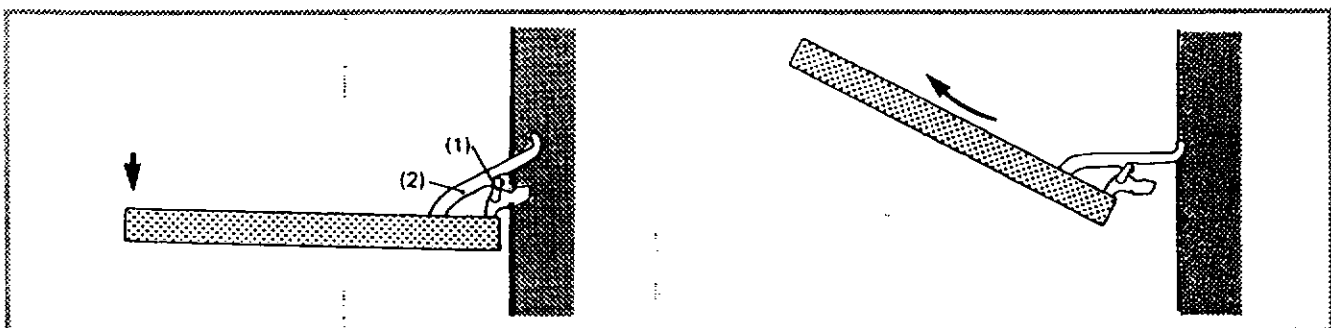
Diag. 30

Water supply

If the generator does not leak when it is first lit by a competent installer, there is no chance of a leak occurring later. Thereafter any incorrect operation of the burner must be reported to him.

If a leak occurs it will not be caused by the Franco-Belge product but by bad installation. Should the temperature rise rapidly or should the radiators not get warm quickly there is probably insufficient water in the installation. In that case the burner should be turned off and the installer called to check the system.

FRANCO BELGE decline all responsibility concerning parts that would have been damaged by the use of other fuels than heating oil or additives mixed with the oil.



Diag. 31. Removing the oven door

Warranty certificate

Legal warranty

Our products are guaranteed for twelve months against any defect, flaw or imperfection. During this time, all parts judged defective by our « Warranty control department » may be replaced in our workshops. Incidental costs of transportation and packing payable by the buyer.

Some parts or components have a longer warranty period :

- Cast-iron shell of boiler : 3 years
- Steel shell of boiler : 3 years
- Removable or independent stainless steel hot water cylinder : 5 years
- Independent enamelled steel hot water cylinder : 5 years
- incorporated circulating pump : 3 years.

Terms of the warranty

This warranty is only valid if :

- The unit has been installed and checked by a professional installer before operating,
- All installation and adjustment instructions listed in the technical manual supplied with the unit have been followed,
- All operation and maintenance instructions have been followed.

This warranty does not cover :

- Lamps, fuses, spark plugs, cast iron parts directly in contact with burning coal and wood ;
- Any damage resulting from the use of fuel not recommended in our instructions ;
- Parts which are damaged by external causes such as unadapted chimneys, thunderstorms, damp, faulty pressure or fail in pressure, thermic anomalies, explosions, etc...
- Electrical parts which are deteriorated by any connection or use on a supply circuit with voltage within 10% of the indicted voltage (220 V).

Name and address of installer :

Telephone :

Name and address of customer :

Date of installation :

Model of the appliance :

Color :

Serial number :



This certificate has to be completed and kept carefully.
In case of claims, send a copy of this to :
Fonderies FRANCO-BELGES, rue Orphée Variscotte, 59660 MERVILLE.