

KETTLE INOX 304

Model 345 and 500



Range	Capacity	Gas direct heating
Charcutier Traiteur	345	W221411
	500	W221611

It is essential to acquaint yourself with all instructions regarding the goods receipt, installation, utilization, service and maintenance: please refer to the concerned chapters.

GOOD RECEIPT

USER MANUAL

1 - INSTALLATION

2 - UTILIZATION

3 - CLEANING

4 - MAINTENANCE

INSTALLER MANUAL

1 - INSTALLATION

2 - ADAPTATION TO THE DIFFERENT GAS

3 - MAINTENANCE

4 - SPARES PARTS

5 - WIRING DIAGRAMS

GOOD RECEIPT

UNPACKING :

Unpack the machine as soon as delivered and check it has not been damaged during the transport. In case of damages, describe them in details on the delivery note and then confirm them within 48 hours by registered letter with acknowledgement of receipt to the carrier.

CONTROL OF THE NAMEPLATE :

The nameplate is positioned in the front of the device, in the bottom left.



PAYS :
APPAREIL REGLE : Type gaz
Pression **mbar**

The control plate is positioned at the rear of the appliance. When delivered, check the compliance of the information with the order specifications.

CATEGORY	I2H	I2E	I3P
Country	CH ; ES ; GB ; IE ; IT ; LU ; PT	BE ; FR	BE ; CH ; ES ; FR ; GB ; IE ; IT ; LU ; PT
Power rating and low flow	50 kW et 20 kW en G20/20 mbar	50 kW et 20 kW en G20/20mbar & G25/25mbar	55 kW et 20 kW en G31/37 mbar

Handling :

Use a forklift truck or similar to move the units. NEVER GRAB THE HANDLES, PULL TABS OR COVERING ELEMENTS

For each device, refer to the table « gas technical information ».

Weight :

- Kettle 345 litres : 250 kg
- Kettle 500 litres : 335 kg

USER MANUAL

1 - INSTALLATION

1.1 REGULATION :

The equipment must be installed in accordance to the regulations and norms in force by a qualified installer and in a well-ventilated area.

Depending on the type of establishment and the kitchen design, wiring or gas installation and ventilation are subject to very specific safety standards, which vary from one region to another.

It is essential to become acquainted with the security administration of each state or country.

Any adaptation to another gas must be performed by a qualified installer and meet the regulations and standards of the country.

The clean air output required for the combustion is 2m³/h per kW of heat release rate

1.2 CLEANING BEFORE USE:

Before the first ignition of the device, the unit must be impeccably washed.

The body of each unit is protected by a film which guarantees its good condition. To remove this film, cut it at an angle, pull and peel it off on the entire surface. If necessary, remove the possible remaining glue with a solvent.

After production and tests, the cast-iron hotplates are coated with oil to prevent them from corrosion. Degrease them with a domestic detergent. Rinse and dry them carefully before making them ready for use by melting fat on the top.

1.3 GENERAL IMPLANTATION:

The equipment must be stable and placed on a perfectly horizontal area. It is mounted on height adjustable feet assembled by screwing or unscrewing a nozzle. Use a 36 mm wrench to adjust the feet.

The service area of the equipment must be free and well lighted to facilitate the access to the control panel and to the working area.

The area must be well ventilated with a high quality extraction system for the waste gas and steam. For wall-mounted equipment, the back wall of the premises must be built in incombustible material.

For the wheeled units (in option):

- Plan automatically a safe fastener and also a safety cable to maintain the unit fixed, stable and at level. Always use the breaks of the wheels to avoid possible risks during the utilization and possible brutal pulling of the gas piping, electric circuits and water network.
- Plan a completely free service area.
- Do not move the unit when it is ignited. The hot oil, hot surfaces and containers falls could cause serious burns.
- Before moving the machine, wait for a complete cooling, remove all containers and carry out a drain of the tank if necessary.

2 - UTILIZATION

2.1 General instructions:

Nominal volume of the kettles :

model 345: Nominal capacity 345 liters

model 500: Nominal capacity 450 liters

THE APPLIANCE IS DEDICATED TO A PROFESSIONAL USE AND MUST BE USED BY QUALIFIED STAFF.

IN ALL CASES NEVER HEAT AN EMPTY TANK.

ALSO NEVER POUR COLD WATER IN A WARM TANK OR IN A WARM DOUBLE SKIN. THE TANK HAVE A MINIMUM AND MAXIMUM LEVEL. DURING THE COOKING, ALWAYS MAINTAIN THE LEVEL BETWEEN THESE TWO MARKS.

ALWAYS COOK WITH THE KETTLES USING A BOUILLON. DO NOT DRY COOKING(BRAISING,...) OTHERWISE THE TANK MIGHT CRANKED.

2.2 Control identification:

The device is used through a stainless steel wall box.

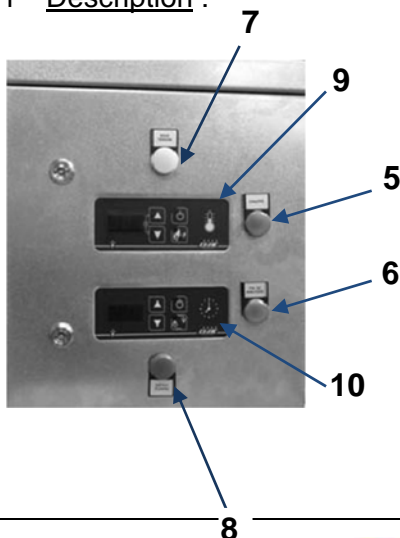
Two electronic cards manage the cooking. A first card manages the product's temperature and a second one manages the waiting and cooking times (delayed start).

The device is composed in his front of:

- Mixing valve Hot water/Cold water with discharge in the tank.
- Draining valve

2.3 Oder unit :

2.3.1 Description :



- 5 - Green heating pilot light
- 6 - Green cooking timer pilot light
- 7 - On white pilot light
- 8 - Default red triangle light
- 9 - Thermostatic regulation card
- 10 - Timers light

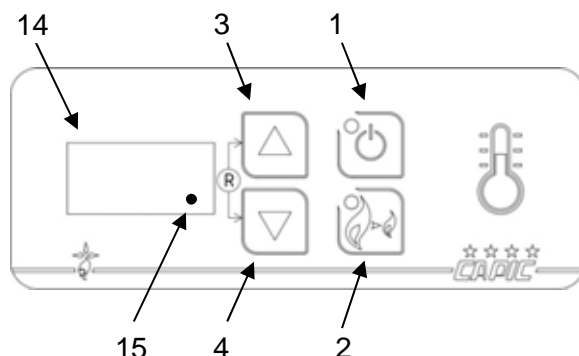
2.3.2 Ignition / Extinction of the control unit :

The control unit has a switch-disconnector on the right side:

- Ignition by action on the switch: The ignition pilot light (7) switches on.
- Extinction by action on the switch: The ignition pilot light (7) switches off.

2.3.3 Thermostatic regulation card :

This card permits to adjust the cooking temperature by a probe situated on the tank.



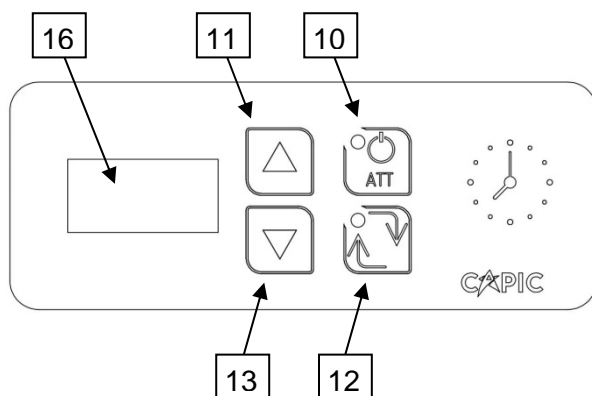
Thermostat :

- 1 - On / Off
- 2 - High flow / Low flow
- 3 - Incrementation
- 4 - Decrementation
- 14 - Display

- Ignition by holding the button (1). The associated pilot light switches on. The display (14) indicates the latter temperature setpoint programmed.
 - In the moment of the ignition of the electronic card, check that the low flow button (2) is not active (pilot light associated to the button (2) off). It will avoid more difficult ignition of the heating element in low flow and eventual situation of default.
 - Adjust the required setpoint temperature with the buttons (3) and (4). Holding on the button permits a fast scrolling; rapid pulses permit a display degree by degree.
The displayed temperature is the setpoint temperature. To display the real temperature, push on (3) or (4).
The real temperature appears a few seconds and the setpoint temperature come back on the display.
The digital point (15) on the right of the display lights on when the thermostat needs heating. The heating pilot light (5) is active when the burner is on.
 - The button high flow / low flow (2) permit the functioning of the burners in high flame or low flame. The standard use is high flow (non active button). For a cooking during a long simmering period, the low flame function is recommended, when the temperature of the product or the temperature of the cooking bath is reached. Push on the button (2). The associated pilot light switches on. Then the setpoint temperature switches off and the display indicates « - - - ». The heating is reduced and continuous.
 - The burning ignition is automatic and starts as soon as the thermostatic control needs it. In case of ignition problem, the red pilot light (8) switches on and an audible alarm starts.
 - To resolve the problem:
 - * Simultaneous push on buttons 3 and 4 until extinction of the audible alarm. A new ignition starts automatically.
- Nota:**
- * A safety delay prevents any resetting for about 30 seconds.
Simultaneous push on buttons 3 and 4 is inoperative during this time.
 - * If the fault persists or happens too often, consult your installer.
- Extinction of the regulator card by holding the button (1). The display (14) switches off.

2.3.4 Timers card :

This card allows programming a delayed start of the cooking (WAITING function). It allows also programming a cooking timer associated to an audible alarm at the end of the cooking. At the end of the timer, the heating stops.



TIMERS

(Waiting timer + cooking)

- 10 - On / Off
- 11 – Incrementation
- 12 - Timer start
- 13 - Decrementation
- 16 - Display

- For the ignition of the card, push 2 seconds on the button (10). The associated led lights up. The display (16) alternately indicates « CUI » and the last programmed cooking timer value.
- With help of the incrementation (11) and decrementation (13) buttons, adjust the required cooking time.
For example: 010 -> 10 minutes
1.10 -> 1 h 10 minutes
10.5 -> 10 h 30 minutes.
- Without delayed start
If you do not want a delayed start. At this step, you can start the cooking timer : push on the button (12).
The display indicates “CUI” and the countdown starts.
The digit point, at the right of the display flashes.
At the end of the countdown, the display flashes “---”.
The heating stops and an audible alarm rings.
- With delayed start
If you want a delayed start, after having choose your cooking time:
 - o Push on the button (10).
The display alternately indicates « ATT » and « OFF ».
 - o Thanks to the incrementation (11) et decrementation (13) buttons, choose the waiting time.
For example: 010 -> 10 minutes
1.10 -> 1 h 10 minutes
10.5 -> 10 h 30 minutes.
 - o To start the waiting timer, push on button (12).
The display indicates « A » on the left part and a mobile sector on the right part. To see momentary the remaining waiting time, push on buttons (11) or (13).
At the end of the waiting timer, the cooking timer is automatically activated.
- Push on 12 to stop the audible alarm. Arrêt alarme sonore par impulsion sur touche 12.
- Push a long time on the button (10) to stop the timer. The display switch off.

USER MANUAL

Be careful :

When you start the waiting timer, please check the simmering function is off (light associated to the light off button (12)). This avoids a complicated start up in reduced flow and an eventual default.

Be careful :

When the timer card is stopped, the heat restarts. It is needed to stop all the other cards in order to definitively stop the heat.

3 - MAINTENANCE

IMPORTANT RECOMMENDATIONS

Before any cleaning operations, switch off the device.

To keep all the performances of the device and to maintain a maximum hygiene, it is compulsory to carefully and regularly clean it. The cleaning should be principally done on the food areas, on the water inlets, on the burners and the discharge outlets of the waste gas.

During the cleaning, do not use a water jet and a foam gun on the fragile parts of the cooking devices especially the control and power panels, the burners and around. The water seepage could damage the proper functioning of the device.

During the cleaning, do not use any chlorinated products (bleach, hydrochloric acid...) which could damage the covering panels, the tank, the hotplate and any components of the device.

During the floor cleaning, do not use hydrochloric acid or similar products of which the splashes are susceptible to cause corrosive attacks on the body of the devices.

The silicones joints (lever joint, window joint, door, inside the oven...) must be exclusively cleaned with soapy warm water. Any other cleaning products (acids, stainless steel cleaning products) are forbidden because they could cause an alteration of the flexibility and of the mechanical aspect of the silicone joint.

3.1 Body:

3.1.1 Air access:

The air intake inlets (griddles, openings) must stay free of any obstructions, dust, fat or others eventual deposits.

It's important to check the cleanliness level and the good functioning of the cooling fans to avoid internal electric degradation of the equipment.

3.1.2 Discharge of the waste gas:

The evacuation cowls must stay free of any obstructions to avoid the risks of fire.

3.1.3 Body panels:

The qualities of the stainless steel body come from the metal components and from the finishing of the surface. A regular maintenance is necessary to keep its original state.

The main rule is to always scrub the body panels in the polishing direction and to avoid in any case the use of metallic wool and iron brush.

The normal cleaning should be done with soapy water (without bleach) and a sponge followed by rinsing with clear water and drying.

Generally do not use bleach products or products with acid. When cleaning the floor, do not use hydrochloric acid or similar products of which the splashes are likely to degrade the body panels.

CLEANING METHODS

CONDITIONS	PRODUCTS	IMPLEMENTATION
Medium dirt	Scouring powder without bleach.	Wet the surfaces, scrub with a sponge, rinse with clear water then dry.
Dirts	Soapy water without bleach + a thin abrasive (painter powder, alumina powder).	As mentioned above, insist on the persistent dirt with a soft brush.
Strong dirt	Product base of phosphoric acid + a thin abrasive. Cleaning product (AD80 & DINOX 10).	Rub the dirt. Let it react a few minutes. Rinse and dry. Scrub softly and let it act 20 min. Rinse and dry.

3.2 Tank:

Under normal use, the stainless steel tank is free of maintenance except daily cleaning.

Exceptionally, for heavy soiling, use cleaning method indicated for the maintenance of the body, taking care to rinse thoroughly to remove any bad taste before use.

Do not use bleach products or products with acid.

At the end of the service, especially if using salt or chloride products drain entirely the tank and rinse with clear water.

The standard 18-10 stainless steel tanks are suitable for the cooking of common foods with a very low concentration in chloride.

In case of cooking specialties (sauerkraut, seafood, salted products, white wine, mustard, chemical industry...) you must contact us first.

3.3 Draining valve:

To open and close the draining valve, turn the handle. Using the key to accelerate the emptying of the tank is forbidden.

The essential parts of the valve are run in the factory; it should have neither scratches nor impacts. When the rotation will become hard, you should use specific oil. For this reason, the maintenance should be operated by a qualified kitchen technician.

3.4 Electric supply:

Any manutention on the electric circuits should be operated by a qualified cooking equipment technician. It is recommended to organize a preventive maintenance visit at least once a year.

Nota :

- Never use chlorine products (bleach, hydrochloric acid,...) to clean the brass heads to avoid the risks of rapid damage.
- In case of cooking seafood or sauerkraut, avoid any overflow and proceed immediately after the service with the cleaning and rinse with clear water.

4 - MAINTENANCE

Warning:

Only a specialist of installation of professional kitchen equipment is qualified to carry out the maintenance operations, possible repairs, settings, location changes, etc.

INSTALLER MANUAL

1 - INSTALLATION

1.1 Regulation :

THE MACHINE IS DEDICATED TO A PROFESSIONAL USE AND MUST BE MAINTAINED BY A QUALIFIED STAFF IN A WELL VENTILATED AREA.

Depending on the type of establishment and the kitchen design, wiring or gas installation and ventilation are subject to very specific safety standards, which vary from one region to another.

It is essential to become acquainted with the security administration of each state or country.

Any adaptation to another gas must be performed by a qualified installer and meet the regulations and standards of the country.

The clean air output required for the combustion is 2m³/h per kW of heat release rate.

1.2 Cleaning before use:

Before the first ignition of the device, the unit must be impeccably washed.

The body of each unit is protected by a film which guarantees its good condition. To remove this film, cut it at an angle, pull and peel it off on the entire surface. If necessary, remove the possible remaining glue with a solvent.

After production and tests, the cast-iron hotplates are coated with oil to prevent them from corrosion. Degrease them with a domestic detergent. Rinse and dry them carefully before making them ready for use by melting fat on the top.

1.3 General implantation:

The equipment must be stable and placed on a perfectly horizontal area. It is mounted on height adjustable feet assembled by screwing or unscrewing a nozzle. Use a 36 mm wrench to adjust the feet.

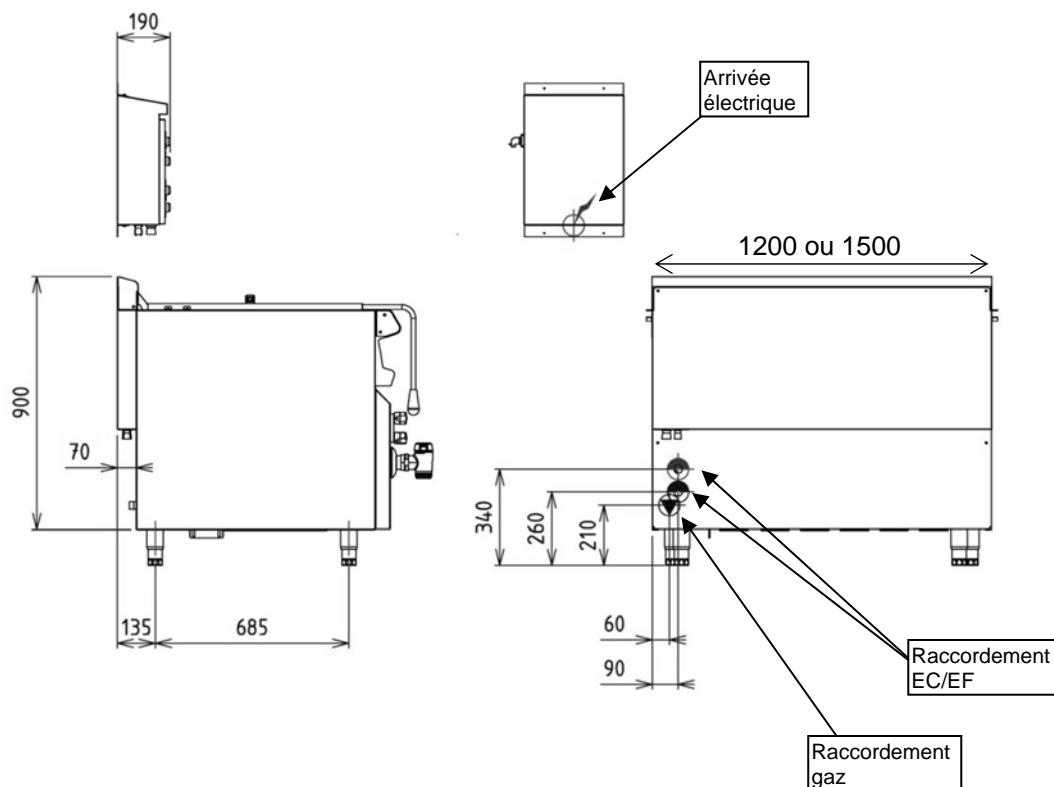
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The area must be well ventilated with a high quality extraction system for the waste gas and steam. For wall-mounted equipment, the back wall of the premises must be built in incombustible material.

For the wheeled units (in option):

- Plan automatically a safe fastener and also a safety cable to maintain the unit fixed, stable and at level. Always use the breaks of the wheels to avoid possible risks during the utilization and possible brutal pulling of the gas piping, electric circuits and water network.
- Plan a completely free service area.
- Do not move the unit when it is ignited. The hot oil, hot surfaces and containers falls could cause serious burns.
- Before moving the machine, wait for a complete cooling, remove all containers and carry out a drain of the tank if necessary.

1.4 Reservation :



1.5 Gas connection :

1.5.1 Gas connection :

The material is made to be permanently installed.

The gas connection is designed with a rigid pipe. The circuit should include:

- A valve per device which allows isolating it of the rest of the device.
- In case of butane and propane, a pressure regulator per device.
- A shut off valve.
- A valve for ventilation control according to the country standard.

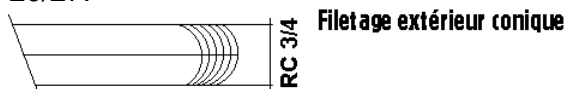
The machine is dedicated to a professional use and must be maintained by a staff qualified in catering equipment

In case of a connection with a hose, the connection point must be situated outside of the device. The hose must meet the applicable gas standards. The hose length must not exceed 1,5 m.

The device is settled in factory according to the gas specified at the order. Before any operation, check that the settings of the equipment mentioned on the nameplate correspond correctly to the nature and the pressure of the gas distributed in the installation.

1.5.2 Gas connection :

Gas connection pipe 20/27.



1.5.3 Electric connection: Beforehand, the electric connection has to be checked and comply with the NFC15100 standard.

1.5.4 Water connection: the connection of the device is made by two hoses 15/21. EC/EF are identified by a red and a blue stickers.

The connection must comply with the EN1717 standard and the national current regulation about water.

2 - ADAPTATION TO DIFFERENT TYPES OF GAS

2.1 Technical datas : (Refer to gas technical information)

Adaptation of the device in case of changing to another type of gas:

- Change of the burner injectors.
- Change of the pilot light injectors.
- Setting of the primary air
- Setting of the supply pressure.
- Setting of the reduced flow (See 3.2.2).

After adapting the device to another type of gas, the information of the new settings must be mentioned on the nameplate replacing the previous ones.

Kettle model 345 (34 kW) :

GAS	G20	G25	G30	G31
Pressure (mbar)	20	25	28 - 30	37
Flow	3,6 m3/h	4,2 m3/h	2,68 kg/h	2,62 kg/h
Ø injector 1/100 (mm)	180	180	120	120
Diaphragm	2 mm	2 mm	Sans bague	Sans bague
Ø injector RIA	85	85	70	70
Low flow pressure CE : Water column height	40 mm CE 3,9mbar	60 mm CE 5,9mbar	60 mm CE 5,9mbar	60 mm CE 5,9mbar

Kettle model 500 (45 kW) :

GAS	G20	G25	G30	G31
Pressure (mbar)	20	25	28 - 30	37
Flow	4,77 m3/h	5,33 m3/h	3,55 kg/h	3,46 kg/h
Ø injector 1/100 (mm)	180	180	120	120
Diaphragm	2 mm	2 mm	Sans bague	Sans bague
Ø injector RIA	2x85	2x85	2x60	2x60
Low flow pressure CE : Water column height	40 mm CE 3,9mbar	60 mm CE 5,9mbar	60 mm CE 5,9mbar	70 mm CE 6,9mbar

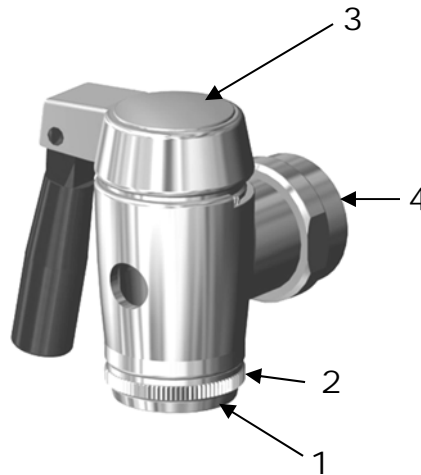
3 - MAINTENANCE

WARNING :

Only a specialist of installation of professional kitchen equipment is qualified to carry out the maintenance operations, possible repairs, settings, location changes, etc...

Before any maintenance operations, switch off the device.

3.1 Draining valve :



Maintenance:

- To perform the maintenance, be sure that the tank is empty.
- Order of dismantling: 1, 2 and 3.
- Unscrew 1 of 2 revolutions.
- Poke with your hand 1 in order to take off 3 from the tap.
- Unscrew totally 1.
- Remove 2 and 3.

Periodicity:

- When the device is dirty.
- Imperatively before a long shutdown.
- When the valve is clogged.
- When the labourer becomes difficult.
- Every time you think it is necessary.

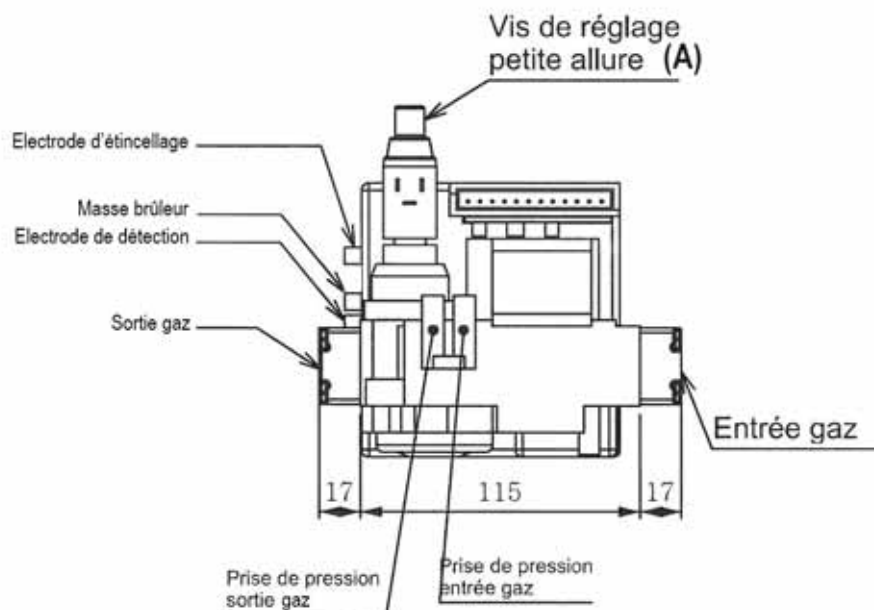
Reassembling:

- Reassembling from 3, 2 to 1.
- Put grease on the conical part 3 in order to obtain a uniform coat of 0.5 mm.
- We recommend the use of alimentary oil with good heat resistance (for e.g: Molycote 111).
- Put 3 in 4.
- Grease the support surface of 2. Set up it and rescrew 1 on 3.
- Move 3 and tighten 1 with the hand to spread the grease and to adjust the flexibility of the valve.
- The valve is ready to be used.

Avoid shock, do not use metal parts. Well maintained, your drain valve will run on as you expect of it.

3.2 Double speed gas unit :

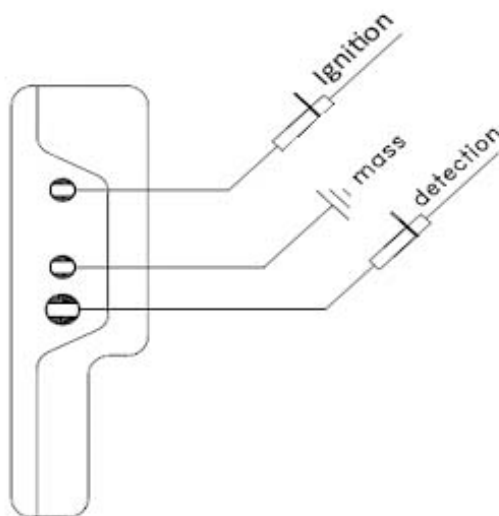
3.2.1 Description :



3.2.2 Low flow setting :

- Connect the water column to the dual speed outlet gas pressure tap.
- Remove the plastic cover to access to the low speed adjustment screw.
- Adjust the A screw :
 - * Screwing to increase the flame intensity
 - * Unscrewing to decrease the flame intensity.
- Adjust the outlet pressure in function of the gas and of the charts paragraph 2.1.

3.3 Electrodes position on flame control unit:

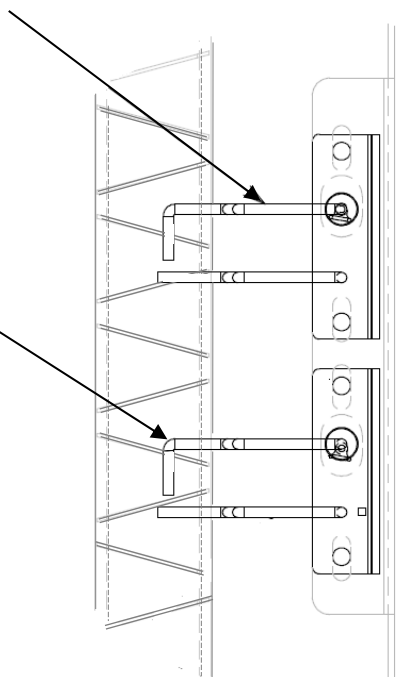


3.4 Electrodes position on the burners:

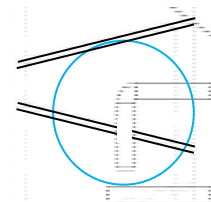
Back ramp burner

Flame control
electrode

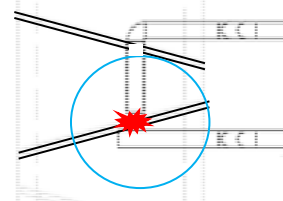
Ignition electrode



- Position the middle of the control electrode above a rib flame output.



- Position the extremity of the ignition electrode above a rib flame output: The spark must be made between the electrode extremity and the mass point, above of a rib flame output.















Front ramp burner







3.5 Hinged cover :

The cover is balanced by a hinge. Its hardness can be adjusted by locking or unlocking a pressure screw which have an action on a spring.

SPARE PARTS

PHOTO	CODE	DESIGNATION	GAS KETTLE	
			345	500
	A504490	Timer plastron	●	●
	A504478	Kettle plastron	●	●
	E050537	Programmable timer card	●	●
	E050539	Programmable thermostat card	●	●
	E052347	Finder relay	●	●
	E204025	Buzzer 230V	●	●
	E403532	Regulation probe	●	●
	G101072	Double solenoid valve unit	●	●
	G101077	Control unit S4565B Ts = 10 secondes	●	●
	G101075	Ionisation electrode or ignition electrode	●	●
	G101076	HT Ø 7 mm lg = 1500 mm cable	●	●
	G203025	Burner ramp lg = 420 mm	●	●

SPARE PARTS

PHOTO	CODE	DESIGNATION	GAS KETTLE	
			345	500
	Q104068	Bakelite tap handle	●	●
	Q104580	Left hinge force 6	●	●
	Q104582	Right hinge force 6	●	●
	Q451030	Draining valve 40/49	●	●
	Q452030	Mixing valve	●	●
	E452071	Delay	●	●

WIRING DIAGRAMS

