INTRODUCTION

1.1 Purpose of the document

1.2 Pictograms

SAFETY

2.1 Basic Safety Instructions

2.2 Repair instructions

COMPONENTS AND FUNCTION

3.1 Layout and burner power

3.2 Operating the gas burners

3.3 Main switch (depending on model)

3.4 Electric hotplate (depending on model)

3.5 Suitable cooking receptacles and accessories

3.6 Defendi burners

3.7 3.3 kW Defendi wok burner

3.8 4 kW Defendi wok burner

3.9 5 kW Defendi wok burner

3.10 Ignition system: Ignition switch, transformer and spark plugs

3.11 Safety system: Thermocouple and electromagnet

3.12 Gas taps CAL22100

FAULT DIAGNOSTICS

4.1 Faults shown in the operating instructions

4.2 Complaints about trivets

4.3 Complaints about stains and cleanliness

4.4 Continuous or sporadic ignition

4.5 Problems with the flame aspect/poor combustion

4.6 Flame goes out

4.7 Ignition fault

CHECK AND REPAIR

5.1 Installation of the appliance

5.2 Gas transformation

5.3 Nozzle table for gas conversion

5.4 Removing the hob sheet

5.5 Changing spark plugs and thermocouples

5.6 Changing the gas taps

5.7 Care and cleaning

5.8 Levelness of the pan supports
1 INTRODUCTION

1.1 Purpose of the document

The repair manual provides support for the official technician to help diagnose faults and repair the electrical appliances.

Apart from the repair manual, the technician may also use the following documents:
- Blow-up diagram of parts of the appliance.
- Diagrams
- List of parts
- Associated technical reports on specific occasions

The diagnosis of faults plus their repair should only be carried out by an officially authorised technician.
1.2 Pictograms

Warning!

Components sensitive to electrostatic shock:
Respect EGB reference

Sharp edges:
Use protective gloves!

Information or advice

Electrical hazard!
2 SAFETY

2.1 Basic Safety Instructions

Danger!

Before commencing repairs, ALWAYS disconnect the appliance from the power supply!

If tests have to be conducted while the appliance is live, ALWAYS use a residual-current-operated circuit-breaker!

Repairs may be carried out by a qualified gas engineer only!

The user may be put at risk and injured by improper repairs!

Exercise special care when working on and testing gas appliances!

After working on gas-conducting connections, conduct a leak test!

Observe national regulations for the connection and installation of the appliances!

Gas appliances which have relevant malfunctions (e.g. leaks) must not be operated.

Gas appliances may be repaired only with original parts which have been tested for this application.

Gas appliances require in the gas connection a shut-off device which must be situated near the appliance and be easily accessible.

If the appliance has not been installed safely, this must be pointed out to the user and corrected (acknowledgement of information). If there are safety concerns, the appliance must be disconnected.

If the appliance is faulty, the housing or frame may be live!

Do not touch components in the appliance. Even the modules can be live!

The protective conductor connection must not exceed the standardised values! This is essential for personal safety and appliance function!

When repairs are complete, perform a test in accordance with VDE 0701 or the appropriate national regulations.

When repairs are complete, perform a function test!
2.2 Repair instructions

**Caution!**

NEVER attempt repairs by randomly replacing components!

ALWAYS proceed systematically and comply with the technical documentation for the appliance!

As a rule, printed-circuit boards are not repaired but are completely replaced by original spare parts. Exceptions are documented separately.

**Electrostatic sensitive devices:**
Comply with ESD information (see “General repair instructions”!)

**Sharp edges:**
Wear protective gloves!
3 COMPONENTS AND FUNCTION

3.1 Layout and burner power

3.1.1 60 cm appliances with knobs on the front

3.1.2 70 cm appliances with knobs on the front

3.1.3 75/76 cm appliances with knobs on the front
3.2 Operating the gas burners

There are indications to show which burner each control knob operates:

It is essential to ensure that all the burner parts and the pan supports are correctly installed for the appliance to work correctly.

3.2.1 Switching on manually

1. Press the chosen burner control and turn it anticlockwise to the required setting.
2. Use any type of lighter or flame (cigarette lighter, matches, etc.) and bring it close to the burner.
3.2.2 Switching on automatically

If your hob features the automatic ON function (ignition sparkers):

1. Press the chosen burner control and turn it anticlockwise to the maximum power setting. While the control is still pressed down, sparks are produced on all burners. The flame ignites (it is no longer necessary to press down the control).

2. Turn the control to the required setting. If it does not come on, turn the control to the off setting and repeat the steps above. This time, press and hold the control for longer (up to 10 seconds).

Warning!

If after 15 seconds have elapsed, the flame does not ignite, switch off the burner and open a nearby window or door. Wait at least one minute before trying to switch the burner back on.

3.2.3 Safety system

Depending on the model, your hob may have a safety system (thermopar) that prevents the flow of gas if the burners accidentally switch off. To ensure that this device is active, switch on the burner as usual and, without releasing the control, press and hold it down firmly for 4 seconds after lighting the flame.

3.2.4 Switching off a burner

Turn the corresponding control clockwise to the 0 setting.

3.2.5 Power levels

The progressive controls can be used to control the power needed, from minimum to maximum power.
3.2.5.1 Double flame Wok burners

For dual double flame burners, the inner and outer flames can be controlled separately.

- Inner and outer flame on full power.
- Outer flame on minimum, inner flame on full power.
- Inner flame on full power.
- Inner flame on minimum.
### 3.3 Main switch (depending on model)

Depending on the model, the hob may feature a main switch which interrupts the main gas flow and simultaneously switches off all burners.

![Main switch illustration]

### 3.3.1 Locking the appliance (stopping gas supply)

- Press main switch.

The ignited burners are switched off. The hob is locked.

### 3.3.2 Unlocking the appliance (restoring gas supply)

1. Set all switches to the Off position.
2. Press main switch and turn it all the way clockwise. The main gas supply is opened.

The hob can be used again normally.
3.4 Electric hotplate (depending on model)

These plates are controlled via an energy controller which you can use to adjust the power to the food you are cooking.

![Diagram of an electric hotplate control knob.](image)

Turn the operating toggle left to the required power setting. The operating display lights up. To switch off the hotplate, turn the operating toggle to position 0. The indicator light switches off.
3.5 Suitable cooking receptacles and accessories

3.5.1 Suitable cooking receptacles

<table>
<thead>
<tr>
<th></th>
<th>Min. diameter (cm)</th>
<th>Max. diameter (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wok burner</td>
<td>22</td>
<td>-</td>
</tr>
<tr>
<td>High-capacity burner</td>
<td>22</td>
<td>26</td>
</tr>
<tr>
<td>Standard burner</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Pilot burner</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Electric hob</td>
<td>18</td>
<td>-</td>
</tr>
</tbody>
</table>

The use of cooking utensils with a different diameter may result in the following fault patterns:

- **Unwanted cooking result** (uneven heat distribution, lower heat transfer efficiency, etc.)
- **Excessive heating of different appliance parts**: if excessively large pans are used on the front burners, the heat is radiated onto the operating buttons, possibly resulting in excessively high temperatures on these parts.
- **Poor burning behaviour**: excessively large pans impede the air supply to the burners, possibly resulting in “soft” (yellow) flames and affecting the function of the thermocouple.

3.5.2 Accessories

**Note:**
The auxiliary trivets described here are enclosed at the factory for some models. For all other models the customer can purchase it as an accessory or from customer service (see Quickfinder).

¡ATENCIÓN!
Manufacturer is not liable for defects caused as a result of not using or improperly using of accessories.

3.5.2.1 Additional support for wok

This special trivet must always be used if a wok or a cooking receptacle with a diameter larger than 26 cm is used on the wok burner. If this additional support is not used in these cases, the previously described fault patterns may occur (unwanted cooking result, excessive heating of different appliance parts, poor burning behaviour).
3.5.2.2 Additional support for coffee maker

To be used only on the economy burner and with cooking receptacles which have a diameter less than 12 cm.

3.5.2.3 Simmer Plate

This accessory has been designed to reduce the level of heat at the lowest power setting.

Place the accessory directly on the pan support with the cones facing upwards, never directly over the burner. Centre the pan over the accessory.

3.5.2.4 Simmer Cap

This is a burner which is exclusively suited for cooking over a low heat.

In order to use it, it is necessary to remove the auxiliary burner and replace it with the Simmer Cap burner.
3.6 Defendi burners

The burners that are installed on IH5 steel hobs are made by the manufacturer “Defendi” and are very similar to the Sabaf-burners in terms of technology and design.

The different Defendi burner types used in IH5 are: Fish, High capacity, Standard and Pilot burner, besides the WOK type burners. The burner body is the same as the one from a High capacity burner, but it uses a different nozzle, appropriate for its long form.

The burners come outfitted with a white, water-tight gasket that ensures a hermetic seal with the hob top.

If this gasket is removed, the burner looks as follows:

- Burner body
- Nozzle
- Spark plug
- Thermocouple
- Spring
- Burner gasket
### 3.6.1 Ignition plug

The ignition plug is fastened to the body of the burner by a spring fastener, which can be easily removed using a screwdriver.

![Ignition plug](image)

The ignition plugs have a ceramic body, and as a spare part for all Sabaf burners, the ignition plug is delivered with a longer cable length, except for the Wok burner, which will have the original ignition plug as the spare part.

**CAUTION!**

When replacing the ignition plug, take into account that the gasket may also have to be replaced, since it is subjected to high heat variations.

### 3.6.2 Thermocouple

Unlike the ignition plug, the thermocouple is fastened to the body of the burner by a screw. As a spare part for all Defendi burners, the thermocouple will be delivered with a longer cable length, except for the Wok burner, which will have the original thermocouple as the spare part.

![Thermocouple](image)

**CAUTION!**

When replacing the thermocouple, take into account that the gasket may also have to be replaced, since it is subjected to high heat variations.

### 3.6.3 Burner screws

The screws that fix the Burner body to the hob top often have to be changed because of oxidation, heat influence etc.

![Burner screws](image)
Therefore these screws are available as spare parts:

**417788**  Set of 10 screws for Sabaf burners mounted on stainless hob top

**603292**  Set of 10 screws for Sabaf burners mounted on enamelled supports (tempered glass hobs or enamelled hob tops)
3.7 3.3 kW Defendi wok burner

This is a 3.3 kW wok burner with a single gas supply line (single flame).

When the burner covers have been removed, the single nozzle of this wok burner can be accessed:

**WARNING!**

The seal has a fixed position. When removing the burner or changing the seal, always ensure that the seal is attached correctly.

### 3.7.1 Spark plug

The spark plug is responsible for generating the sparks to ignite the burner.

The spark plug is attached to the burner body with a spring which can easily be removed by hand or with a screwdriver.
3.7.2 Thermocouple

The thermocouple is responsible for converting flame heat into a voltage difference which keeps the electromagnet of the gas tap open. If the flame goes out, the voltage drops to zero and the electromagnet closes the gas flow.

The thermocouple is also attached with a spring to the burner body.

WARNING!
When changing the spark plug, check the condition of the seal (is exposed to high temperature fluctuations) and, if required, change.

WARNING!
When changing the thermocouple, check the condition of the seal (is exposed to high temperature fluctuations) and, if required, change.

3.7.3 Burner screws

The screws, which attach the burner body to the drip tray, are subject to high temperature fluctuations, detergents, corrosion, etc.

For this reason these screws must be replaced for many repairs. They are available as the following spare parts:

417788 Set with 10 screws for Defendi burners on stainless steel hob

603292 Set with 10 screws for Defendi burners on enamelled steel (hard glass hob or enamelled hob top)
3.8 4 kW Defendi wok burner

This is a 4 kW wok burner with a single gas supply line (single flame).

When the burner covers have been removed, the single nozzle of this wok burner can be accessed:

3.8.1 Spark plug

The spark plug is responsible for generating the sparks to ignite the burner.

The spark plug is attached to the burner body with a spring which can easily be removed by hand or with a screwdriver.
3.8.2 Thermocouple

The thermocouple is responsible for converting flame heat into a voltage difference which keeps the electromagnet of the gas tap open. If the flame goes out, the voltage drops to zero and the electromagnet closes the gas flow.

The thermocouple is attached with a screw to the burner body. To remove the thermocouple, the burner must be unscrewed from the appliance housing (access from below) and easily lifted off. Then the thermocouple can be removed from below.

**WARNING!**

When changing the spark plug, check the condition of the seal (is exposed to high temperature fluctuations) and, if required, change.
WARNING!
When changing the thermocouple, check the condition of the seal (is exposed to high temperature fluctuations) and, if required, change.

3.8.3 Burner screws

The screws, which attach the burner body to the drip tray, are subject to high temperature fluctuations, detergents, corrosion, etc.

For this reason these screws must be replaced for many repairs. They are available as the following spare parts:

| 616507 | 3 screws in the set for 4 kW Defendi wok burners on stainless steel drip trays |
3.9 5 kW Defendi wok burner

This is a 5 kW wok burner with two gas supply lines (double flame).

When the covers and the distributor have been removed, the three nozzle of this wok burner can be accessed:

3.9.1 Spark plug

The spark plug is responsible for generating the sparks to ignite the burner.

This double wok burner has only one spark plug which is attached to the burner body with a fixing sleeve. When the sleeve has been removed, the spark plug can be removed from above.
3.9.2 Thermocouple

The thermocouple is responsible for converting flame heat into a voltage difference which keeps the electromagnet of the gas tap open. If the flame goes out, the voltage drops to zero and the electromagnet closes the gas flow.

The thermocouple is attached with a screw to the burner body. To remove the thermocouple, the burner must be unscrewed from the appliance housing (access from below) and easily lifted off. Then the thermocouple can be removed from below.

3.9.3 Burner screws

The screws, which attach the burner body to the drip tray, are subject to high temperature fluctuations, detergents, corrosion, etc. For this reason these screws must be replaced for many repairs. They are available as the following spare parts:

**616507**  Set with 3 screws 5 kW Defendi wok burner on stainless steel hob
3.10 Ignition system: Ignition switch, transformer and spark plugs

The function of the ignition system is to generate the spark which ignites the burners when the operating buttons are actuated.

The ignition switches are connected directly to the 220 V cable so that when the operating button is actuated (depressed or turned) the circuit is closed and a spark is generated:

![Ignition System Diagram]

The main elements of this circuit are the following:

- Connection to the power supply system
- Ignition switches
- Ignition transformer
- Spark plugs

3.10.1 Ignition switches

The ignition switches which are usually connected in parallel are mounted on the spindles of the gas taps and close the circuit when the operating buttons are actuated.
Depending on the model, two types of ignition switches are used:

- **Pushbutton switch**: The circuit is closed by depressing the operating button.
- **Rotary switch**: The circuit is closed by rotating the operating button.

### 3.10.2 Ignition transformer

The ignition transformer generates the voltage which is required for the spark to jump from the spark plug. This is a special transformer with its own primary input connected to the mains voltage (230 V 50 Hz) and as many secondary outputs (with voltages from 5 to 20 kV) as there are spark plugs.
3.10.2.1 Technical Data

Typical figures are:

<table>
<thead>
<tr>
<th>DENOMINATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Load frequency (230 V)</td>
<td>3 Hz. +50% / -10%</td>
</tr>
<tr>
<td>Voltage (1, 2)</td>
<td>220-240 V. +10% / -15%</td>
</tr>
<tr>
<td>Frequency</td>
<td>50-60 Hz.</td>
</tr>
<tr>
<td>Absorption power</td>
<td>max. 0.8 VA.</td>
</tr>
<tr>
<td>Work temperature</td>
<td>-10 C / +120 C</td>
</tr>
<tr>
<td>Temperature max</td>
<td>+150 C</td>
</tr>
<tr>
<td>Weight</td>
<td>Ca. 85 g.</td>
</tr>
<tr>
<td>Discharge Distance</td>
<td>4x max. 4 mm.</td>
</tr>
<tr>
<td>Reliability</td>
<td>minimo 1,500,000</td>
</tr>
<tr>
<td>Anstess Reference</td>
<td>FZ4 3005</td>
</tr>
<tr>
<td>Colour</td>
<td>Grey</td>
</tr>
</tbody>
</table>

3.10.3 Spark plugs

3.10.3.1 Mode of operation

The spark plug generates the spark which ignites the gas coming out of the burner nozzle. When the ignition switch is actuated, the voltage (between 5 and 20 kV) generated by the ignition transformer is
applied to the metallic tip of the spark plug. The burner is earthed via the appliance housing. The potential between the spark plug and the burner ring causes the spark to jump and ignite the escaping gas.

Nota:
Spark plugs are fixed to the burner through a spring. Therefore they are easily to remove without manipulating the burner.
3.11 Safety system: Thermocouple and electromagnet

The safety system prevents the escape of unignited gas by stopping the gas flow if the burner goes out unintentionally (draught, liquids, etc.).

The main elements of this system are the following:

- Thermocouple
- Electromagnet (or magnet group)
3.11.1 Thermocouples

3.11.1.1 Mode of operation

The function of the thermocouple is to detect the absence of the flame on the burner. To do this, the thermocouple converts the temperature difference into a voltage: when the thermocouple is exposed to a flame, a thermoelectric voltage (from 5 to 30 mV) occurs between the two connections. This voltage supplies the magnetic coil on the gas tap and so keeps the gas flow open. If the flame goes out, the differential power drops to almost zero, at which point the electromagnet stops the gas flow.

To prevent activation of the thermocouple while there is a flame on the burner, ensure that the thermocouple is correctly heated by the flame at any moment.

Correct position of thermocouple and flame aspect

Note:
Thermocouples are fixed to the burner through a spring. Therefore they are easily to remove without manipulating the burner.
The connection with the solenoid valve can be also loosen just pulling out the metal cap.
The flame always must heat enough the tip of thermocouple.
3.11.2 Solenoid valve

The electromagnet or the magnet group is connected to the thermocouple and has the function of stopping the gas flow if the flame on the burner goes out. The solenoid valve is attached to the gas tap and keeps the flow of gas to the burner closed in the rest position (no flame). This occurs with the aid of a spring which presses the seal onto the gas outlet on the gas tap. When there is a flame on the burner, the thermocouple generates a voltage and therefore a magnetic field on the coil; the magnetic field keeps the outflow from the gas tap open.

**Note:**
Solenoid valve is hosted on the gas tap under a threaded brass bushing.
3.12 Gas taps CAL22100

A new family of gas taps (CAL22100) will be introduced with the IH5 project. Externally the only discernible difference is the lower cover made of aluminium. Internally the opening mechanism of the electromagnet has been simplified and is therefore less susceptible to potential blockages.

In the IH-5 project the handles are screwed to the housing with Torx 20 (T20 with central pin) safety screws. The appropriate bit insert can be ordered by quoting mat. no. 340867.

In addition a sticker is placed over the screws:

This sticker is available as a spare part in the QuickFinder.

**IMPORTANT!**

Stickers which are removed to access the screws must be re-attached following the repair.

**IMPORTANT!**

For reasons of safety do not open or dismantle gas taps when carrying out repairs. If the gas tap is defective, always change the complete gas tap. Defective solenoid valves are an exception if these are listed as a separate spare part in the Quickfinder.
4 FAULT DIAGNOSTICS

4.1 Faults shown in the operating instructions

<table>
<thead>
<tr>
<th>What's wrong</th>
<th>Possible cause</th>
<th>Solution</th>
</tr>
</thead>
</table>
| ...if none of the electrical system works? | - Faulty fuse.  
- The automatic circuit breaker or mains differential has been triggered. | - Check the fuse in the main fuse box and replace it if it is faulty.  
- Check to see if the circuit breaker or a differential has been triggered in the mains supply box. |
| ...if the electric ignition system does not work? | - There may be food or cleaning product particles between the spark plugs and the burners.  
- The burners are wet.  
- The covers on the burners are not in the right position. | - The gap between the spark plug and the burner needs to be cleaned carefully.  
- Dry the burner covers and spark plugs carefully.  
- Check that the covers have been put in the proper position. |
| ...if the flame on the burners is not evenly distributed? | - The burner components have not been assembled properly.  
- The gas outlets on the burners are dirty. | - Put the components in their correct positions.  
- Clean the gas outlets on the burners. |
| ...if the gas flow does not seem normal or there is no gas flow at all? | - The gas flow has been cut at an intermediate stopcock.  
- If the gas is supplied from a gas bottle, it may be empty. | - Open any intermediate stopcocks.  
- Replace the gas bottle with a full one. |
| ...if the kitchen smells of gas? | - One of the valves has been left open.  
- Possible leak on the gas bottle coupling. | - Check to see if a valve has been left open.  
- Check that the coupling on the gas bottle is in order. |
| ...if the safety devices on the different burners do not work? | - The control knob has not been kept pressed in for long enough.  
- The outlets on the burners are dirty. | - Once ignited, keep the control knob pressed in for a few seconds.  
- Clean the gas outlets on the burners. |
4.2 Complaints about trivets

4.2.1 Identifying the cause of the problem

If complaints are about pan stability (pan rocks, wobbles, is not straight) the cause of the problem must be identified first:

► **Pan is inclined** (the frying oil is not distributed evenly):
  – The cooking utensil is deformed.
  – Hob is not aligned
  – Hob is warped (steel hobs)
  – Trivet is inclined on the hob (contact surfaces, rubber feet)
  – Trivet is not adequately level (on support surface on hob or on support area of the pan): maximum permitted deviation: 0.8 mm for trivets made of cast iron or 1 mm for trivets made of enameled steel). Check levelness of the trivet in the area of the support feet, see also “levelness of the trivets”.

► **Trivet rocks** (check stability of the trivet without cooking utensil):
  – Hob is warped or uneven
  – Rubber feet
  – Trivet is not adequately level (support area on hob (maximum permitted deviation: 0.8 mm for trivets made of cast iron or 1 mm for trivets made of enameled steel). Check levelness of the trivet in the area of the support feet, see also “levelness of the trivets”.

► **Pans rock on trivet** (complaint that pan “wobbles” when touched or by itself during cooking):
  – Pan is uneven
  – Trivet fingers (support points for pan not in one plane (maximum permitted deviation: 0.8 mm for trivets made of cast iron or 1 mm for trivets made of enameled steel). See also “Levelness of the trivets”.)
4.3 Complaints about stains and cleanliness

4.3.1 Stains on the hob sheet

4.3.1.1 Yellowing of the hob sheet

Due to the high temperatures near the burner, the stainless steel surface may rust, resulting in an optical colour change to the material (according to the user “the hob top is burnt or yellow”).

This process is completely normal and does not indicate a fault or poor steel quality. To remove these optical changes, it is recommended to use the reference 311413.

4.3.1.2 Rust spots

These spots are produced by a surface reaction of the stainless steel with food remnants or cleaning agents. They do not represent a faulty appliance and can easily be removed with CeraClen (mat. no. 464524).
4.3.2  Stains on trivets

4.3.2.1  Stains on the supporting surface of the containers

These stains are usually produced by abrasion of the material on the underside of the pan and can be removed without special cleaning agents.
4.4 Continuous or sporadic ignition

4.4.1 Description of the problem

If liquid is spilled or boils over, the liquid may reach the ignition switches. This closes the switching circuit, possibly causing continuous or sporadic ignition. Occasionally a short-circuit may occur and cause the fuse to activate.

4.4.2 Causes

As optimised seals are currently used in all new gas appliances (see “New seals for ceramic hobs”), the causes of the problem may be the following:

► One of the seals is missing (possibly removed by the customer himself).
► The seals are damaged or incorrectly installed.

4.4.3 Solving the problem

Proceed as follows:

5. Change ignition switch.
6. Insert new seals. The exact part no. for the particular appliance and Kl can be found in the QuickFinder.
4.5 Problems with the flame aspect/poor combustion

4.5.1 Properties of the combustion process

Incorrect setting or supply with primary air causes the following fault mechanisms:

► Too much primary air:
  – At full power: flame hisses or lifts off, flame ignites poorly.
  – Small flame: flame may backfire (if liquid gas, especially butane is used, the flame goes inside the burner towards the nozzle and goes out with a “pop” or may continue burning on the nozzle, especially if the burner parts have been assembled incorrectly).

► Too little primary air: Flame burns soft and yellow, flame is sooty (residue on pans, flame ignites poorly, unsatisfactory exhaust gas values (CO content increases), too low burner power.

Further information can be found in “general gas repair instructions”

4.5.2 The flame is yellow or too weak

This symptom usually is accompanied by a coloration of containers ("blackened") and is due to a lack of primary air that causes generation of soot. This absence of air can have several causes:

► Incorrect setting of primary air at burners. See “Conversion of gas”.

► Incorrect assembly of burner parts (the burner caps are not well mounted). See “Sabaf High Efficiency burners”, “Wok Defendi burner 3.3 Kw” and “Wok Defendi burner 4 Kw”.

► Blockage or fair inlets to the top or lack of lower ventilation at the hob top.

► The combustion air is low in oxygen (the space is too small, there is no airflow through the side walls or pots used are too big).

► Overloading of burner (wrong nozzle and kind of gas used). See “Conversion of gas”.

4.5.3 The flame fluctuates or raises

Possible causes:

► Too much primary air due to a wrong setting or assembly at (the burner mixer pipe inlet is too far away of the nozzle)
(entrada del tubo mezclador demasiado lejos del inyector). See “Conversion of gas”, “Wok Defendi burner 3.3 Kw”, “Wok Defendi burner 4 Kw” and “Sabaf High Efficiency burners”.

► Too much gas pressure.
► Too much amount of gas (wrong nozzle). See “Conversion of gas”.

4.5.4 The flame goes back (molten burner parts)

Practically occurs only when using liquid gas (butane / propane), mainly at minimum power or changing the burner power (by turning the knob).

Possible causes:
► Too much primary air (incorrect setting, especially when the burner parts have not been mounted correctly.

4.5.5 Only there is flame by one side

Possible causes:
► A deviated path of the flame support results in poor combustion in the burner.
► Holes / channels diverted at the top of the burner result in overloading the rest of the holes, the flame is irregular.

Clean the burner parts or replace fault part (diffuser, nozzle).

4.5.6 Asymmetric flame

Possible causes:
► The gas flow is not centered until the mixing tube (the nozzle cap on the nozzle head or nozzle hole are not straight).
► Mixing tube or dirty burner are degraded (corrosion).
4.6 Flame goes out

4.6.1 Burner small flame goes out:

Possible causes:

► **Small flame setting too low:** Bypass nozzle or small flame channel incorrectly positioned in the gas tap, bypass nozzle incorrect or incorrectly adjusted, heating bore for the thermocouple barely supplied, ... See “Gas conversion”, clean burner parts.

► **Small flame does not reach the thermocouple:** weak supply to the heating bore or unfavourable = too deep position of the thermocouple with respect to burner and the flame.

► **Thermocouple has brief heating fault:** This may have the following causes:
  - **Draught above the hob:** e.g. through window or extractor hood or as a result of the operation of other burners with pans on them = flue effect. See “Installing and connecting the appliance”
  - **Draught inside the hob (primary air intake):** e.g. by opening or closing a drawer or door under the hob. See “Installing and connecting the appliance”
  - **Poor primary air supply to the hob base at same time as other burners operating:** rail for primary air supply covered?

4.6.2 Burner large flame goes out:

Possible causes:

► **Flame lifts off due to air setting:** too much primary air, incorrect nozzle. See “Gas conversion”.

► **Flame lifts off due to flue effect:** thermocouple does not heat correctly if several pans are on burners, possibly only occurs if pan with cold contents is placed on burner). Remedial action: optimise heating of thermocouple.

► **Flame lifts off due to humidity evaporating on the burner:** occurs only occasionally if water comes into contact with the burner and evaporates for several minutes during the heating process.

► **Thermocouple too high in flame:** when the pan is on the burner, flame passes flat under thermocouple tip or even heats the cold solder joint. Remedial action: optimise heating of thermocouple by position.

► **Flame “swims” due to inadequate secondary air supply:** Remedial action: install appliance according to specifications, optimise primary air, optimise thermocouple position.

► **Flame does not burn sharply due to gas leaks in the hob:** if the gas system in the hob leaks, the amount of leaking gas flows into the intake area of the primary air (greater amount of gas, less air) and impairs the flame.

► **Flame “swims” (does not burn sharply) due to inadequate primary air supply:** primary air supply into the hob impeded (e.g. by incorrectly fitting hob seal, user shifts primary air supply with tea towel or other parts). Remedial action: ensure primary air supply, optimise heating of thermocouple.
4.7 Ignition fault

4.7.1 No spark is generated

The following cases may occur:

► **No spark is generated on any of the spark plugs:** Ignition device is defective.

► **No sparks are being generated by one spark plug only:** Either the cable has been punctured (ignition spark to the housing, also possible on the body of the plug) or a coil in the ignition device is defective.

4.7.2 Burner does not ignite even though there is a spark

The causes may be the following:

► **Gas amount:** Lower amount of gas ignites better, adjustment by customer, advise customer. Also ensure that the bores in the area of the ignition gap are free and correct (flame aspect).

► **Air setting, nozzle:** High primary air setting ignites worse, however also an excessively “rich” gas-air mixture with low air content. See also section “Gas conversion”.

► **Direction of the ignition gap (spark jumps correctly to the correct place on the burner):** If the ignition gap is too large or the ceramic body of the plug is damaged, the ignition spark may not jump correctly to the burner, but to wrong burner parts or to other metallic parts. See also section “Spark plugs”.

► **Length of the ignition gap:** If the ignition gap is too short, the ignition energy is lower and ignition propensity less. Check position of the spark plug.

► **Burner temperature:** Cold burners frequently ignite worse, impeding the assessment as to whether a repair procedure was successful.

4.7.3 Incorrect installation of the burner parts: The correct installation of the burner parts (cap, diffuser, etc.) affects the length of the ignition gap. See also section “Position of the burner parts”.

203_58300000138796_ARA_EN_E Page 40 of 64
5 CHECK AND REPAIR

5.1 Installation of the appliance

The appliance must only be installed and connected by a technician of the manufacturer's Official Service, thereby following all safety legislation in force and all gas company regulations.

Once the appliance has been installed, it must be verified that the electric and gas supply connections operate correctly. The technician who performs the installation is responsible for the perfect operation of the appliance at the place where it is installed.

Likewise, the technician must teach the user how to disconnect the electricity and gas when it may be necessary.

Caution!

Before connecting the appliance, verify that all local connection conditions, the type of gas, the gas pressure and the electric power supply coincide with the appliance settings.

Important!

When performing any operation, the gas and electric power supplies to the appliance must be shut off. Before connecting the appliance to the installation, it must be verified that it is prepared for the kind of gas that is going to be supplied. The cooktop comes factory-adjusted to operate with the kind of gas that is indicated on the specification plate.

It is essential that the place where the appliance is installed have the mandatory ventilation.

5.1.1 Fitting measures

Cut a gap of the required size in the work surface.
5.1.2 Furniture

- The panels located above the work surface, directly next to the cooking hob, must be made of non-flammable material. Both the stratified surfacing and the glue used to secure it should be heat resistant, to prevent deterioration.

- No electrical cables should come into contact with hot areas.
- The power cable must be secured to the kitchen unit to prevent it from touching any hot parts of the oven or the cooking hob.
- The wood fibres that have been used to make the cooking hob modules tend to swell quite quickly when they come into contact with moisture. We therefore recommend that the cut edges are treated with a special glue to protect them from steam or any condensation that might drip down beneath the work surface of the cooker unit.
- If the oven is not mounted below the hob, we recommend that you place a separator below the hob to ensure that access cannot be gained to the underside. To install the hob over an oven, check the dimensions given in the installation manual.

5.1.3 Installation of the appliance

Depending on the model, the clips and the watertight seal (underside of the cooking hob) may already be fitted; if this is the case, do not under any circumstance remove them. The seal ensures that the entire work surface will be watertight, and prevents water seepage.

If this item has not been fitted in the factory:
- remove the pan supports and the gas burners covers and diffusers from your cooking hob, and turn it upside down.
- fit the adhesive seal supplied with the appliance onto the lower edge of the cooking hob.

- remove the clamps from the attached accessories bag and secure them into the lateral orifices that are provided for this purpose.

5.1.4 Gas connection

The end of the gas hob's inlet collector has a 1/2" elbow.
This elbow allows for:

► **A rigid connection**: A copper pipe, a bolt and a watertight seal are supplied together with the cooking hob.

► **Connection using a metal pipe**: With this option, you must prevent the tube from coming into contact with moving parts of the insertion unit (for example, a drawer) or access to any spaces which might become obstructed.

Whatever the type of connection, do not move or turn the elbow from the position in which it left the factory.

In order to use this appliance in France, you must use the elbow that is included in the bag of accessories, and remember to fit the seal.

If for any reason the elbow is turned, you must ensure that the area is sealed correctly.

---

**5.1.5 Electrical connection**

The following must be checked on the specifications plate: the voltage and the total power.

This appliance must be earthed. Always make certain that all connections have been installed are in accordance with national legal requirements. Observe all the local electricity supply company regulations.

In order to meet standard safety regulations, the installation technician must provide an omnipolar cut-off switch with a contact separation of at least 3 mm. This is not necessary if the connection is made via a plug, so long as the user has access to it.

All appliances fitted with plugs should only be connected to sockets which have been correctly earthed.

This appliance is type "Y", which means that the supply cable MUST NOT BE REPLACED BY THE USER; this can only be performed by the manufacturer's technical services department. The cross section and cable type must always be maintained.

**TYPES OF CABLES:**

Power cable for cooking hob:

► All gas: 3 x 0,5 mm²
► Electric cooking plate: 1 kW 3 x 0,75 mm²
► Electric cooking plate: 1,5 kW 3 x 1
Attention!
Before connecting the power supply cable to the wall socket, be sure that all gas taps and knobs are closed.
5.2 Gas transformation

**CAUTION!**
All operations pertaining to the installation, adjustment and adaptation of another kind of gas must be performed by authorised personnel from our technical service, and all legislation in force and gas company codes must be respected.

**IMPORTANT!**
When performing any operation, shut off the gas and electric power supplies to the appliance.

Before connecting the appliance to the installation, verify that it is prepared for the kind of gas that is going to be supplied.

In general, the gas cooktops come factory-adjusted to operate with the kind of gas that is indicated on the rating plate.

To the extent allowed by the legislation in force in the country (see the rating plate), the cooktop can be adapted to operate with other gases. To do so, the following operations must be performed:

### 5.2.1 Authorisation of the appliance for different gas types

Our proprietary appliances operated by gas are authorised only for those countries and gas types which are indicated on the rating plate. **An appliance which is not indicated on the rating plate must never be converted to other gas types.**

![Gas types for which the appliance is authorised](image)

The parts (injectors and bypass) required to convert the appliance to another gas type are available as spare parts and are supplied in certain cases (for the most common gas types) together with the appliance.
Attention!
Only the nozzle sets for which the appliance is authorised can be found in the QuickFinder. Never install nozzle sets which are not allocated to the appliance in the QuickFinder.

5.2.2 Replacement of the injectors

1. Remove the grills, covers and body of the burner.

2. Replace the injectors using a 7-mm socket wrench (340847), and be sure that they are tightened fully in order to guarantee air-tight integrity.
To know which nozzle must be mounted in each burner please follow the table that is delivered with the nozzles spare part set.

5.2.3 Low flame adjustment

In order to adjust the flame of each burner at the low position of the control knob, take the following steps:

1. Place the control knobs in the low position and remove the control knobs from the gas taps.

2. Take off the seal from the gas taps.

3. Adjust the by-pass screw.
If the by-pass screw cannot be accessed, disassemble the hob top, which is fixed to the rest of the hob using a clip and screw mounting system.

Depending on the gas to which your appliance is going to be adapted (see following table), carry out the corresponding action:

A- firmly tighten the by-pass screws.

B- loosen the by-pass screws until the gas flow from the burners is correct: when adjusting the control knob between maximum and minimum, the burner does not go out, nor is there a flame backdraught created.

C- the by-pass screws need to be changed by an authorised engineer.

D- do not touch the by-pass screws.

<table>
<thead>
<tr>
<th></th>
<th>G20/20</th>
<th>G25/20</th>
<th>G25/25</th>
<th>G30/29</th>
<th>G30/50</th>
<th>G31/37</th>
</tr>
</thead>
<tbody>
<tr>
<td>G20/20</td>
<td></td>
<td>D</td>
<td>D</td>
<td>A</td>
<td>C</td>
<td>A</td>
</tr>
<tr>
<td>G25/20</td>
<td>D</td>
<td></td>
<td>D</td>
<td>A</td>
<td>C</td>
<td>A</td>
</tr>
<tr>
<td>G25/26</td>
<td>D</td>
<td>D</td>
<td></td>
<td>A</td>
<td>C</td>
<td>A</td>
</tr>
<tr>
<td>G30/29</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td></td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>G30/50</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td></td>
<td>C</td>
</tr>
<tr>
<td>G31/37</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>D</td>
<td></td>
<td>C</td>
</tr>
</tbody>
</table>

4. Re-install the knobs on the gas tap shafts.

**IMPORTANT!**

Place the label that indicates the gas for which the appliance has been transformed on top of the existing natural gas label.
### 5.3 Nozzle table for gas conversion

<table>
<thead>
<tr>
<th>GAS</th>
<th>mbar</th>
<th>Qa (Kw)</th>
<th>m³/h</th>
<th>g/h</th>
<th>Qt (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G20</td>
<td>20</td>
<td>0,95</td>
<td>27</td>
<td>0,33</td>
<td></td>
</tr>
<tr>
<td>G20</td>
<td>25</td>
<td>0,95</td>
<td>27</td>
<td>0,33</td>
<td></td>
</tr>
<tr>
<td>G25</td>
<td>20</td>
<td>1,11</td>
<td>27</td>
<td>0,33</td>
<td></td>
</tr>
<tr>
<td>G25</td>
<td>25</td>
<td>1,11</td>
<td>27</td>
<td>0,33</td>
<td></td>
</tr>
<tr>
<td>G30</td>
<td>28</td>
<td>1,00</td>
<td>-</td>
<td>73</td>
<td>27</td>
</tr>
<tr>
<td>G30</td>
<td>50</td>
<td>1,00</td>
<td>-</td>
<td>73</td>
<td>24</td>
</tr>
<tr>
<td>G31</td>
<td>37</td>
<td>1,00</td>
<td>-</td>
<td>71</td>
<td>27</td>
</tr>
<tr>
<td>G20</td>
<td>20</td>
<td>1,75</td>
<td>30</td>
<td>0,35</td>
<td></td>
</tr>
<tr>
<td>G20</td>
<td>25</td>
<td>1,75</td>
<td>30</td>
<td>0,35</td>
<td></td>
</tr>
<tr>
<td>G25</td>
<td>20</td>
<td>1,75</td>
<td>30</td>
<td>0,35</td>
<td></td>
</tr>
<tr>
<td>G25</td>
<td>25</td>
<td>1,75</td>
<td>30</td>
<td>0,35</td>
<td></td>
</tr>
<tr>
<td>G30</td>
<td>29</td>
<td>1,75</td>
<td>30</td>
<td>0,41</td>
<td></td>
</tr>
<tr>
<td>G30</td>
<td>50</td>
<td>1,75</td>
<td>30</td>
<td>0,41</td>
<td></td>
</tr>
<tr>
<td>G31</td>
<td>37</td>
<td>1,75</td>
<td>30</td>
<td>0,41</td>
<td></td>
</tr>
<tr>
<td>G20</td>
<td>20</td>
<td>3,00</td>
<td>39</td>
<td>0,50</td>
<td></td>
</tr>
<tr>
<td>G20</td>
<td>25</td>
<td>3,00</td>
<td>39</td>
<td>0,50</td>
<td></td>
</tr>
<tr>
<td>G25</td>
<td>20</td>
<td>3,00</td>
<td>39</td>
<td>0,50</td>
<td></td>
</tr>
<tr>
<td>G25</td>
<td>25</td>
<td>3,00</td>
<td>39</td>
<td>0,50</td>
<td></td>
</tr>
<tr>
<td>G30</td>
<td>29</td>
<td>3,00</td>
<td>39</td>
<td>0,6</td>
<td></td>
</tr>
<tr>
<td>G30</td>
<td>50</td>
<td>3,00</td>
<td>39</td>
<td>0,6</td>
<td></td>
</tr>
<tr>
<td>G31</td>
<td>37</td>
<td>3,00</td>
<td>39</td>
<td>0,6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GAS</th>
<th>mbar</th>
<th>Qa (Kw)</th>
<th>m³/h</th>
<th>g/h</th>
<th>Qt (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>G20</td>
<td>20</td>
<td>3,30</td>
<td>0,314</td>
<td>-</td>
<td>55</td>
</tr>
<tr>
<td>G20</td>
<td>25</td>
<td>3,30</td>
<td>0,314</td>
<td>-</td>
<td>55</td>
</tr>
<tr>
<td>G25</td>
<td>20</td>
<td>3,30</td>
<td>0,366</td>
<td>-</td>
<td>55</td>
</tr>
<tr>
<td>G25</td>
<td>25</td>
<td>3,30</td>
<td>0,366</td>
<td>-</td>
<td>55</td>
</tr>
<tr>
<td>G30</td>
<td>29</td>
<td>3,30</td>
<td>240</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>G30</td>
<td>50</td>
<td>3,30</td>
<td>240</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>G31</td>
<td>37</td>
<td>3,30</td>
<td>236</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>G20</td>
<td>20</td>
<td>4,00</td>
<td>0,381</td>
<td>-</td>
<td>55</td>
</tr>
<tr>
<td>G20</td>
<td>25</td>
<td>4,00</td>
<td>0,381</td>
<td>-</td>
<td>55</td>
</tr>
<tr>
<td>G25</td>
<td>20</td>
<td>4,00</td>
<td>0,443</td>
<td>-</td>
<td>55</td>
</tr>
<tr>
<td>G25</td>
<td>25</td>
<td>4,00</td>
<td>0,443</td>
<td>-</td>
<td>55</td>
</tr>
<tr>
<td>G30</td>
<td>29</td>
<td>4,00</td>
<td>290</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>G30</td>
<td>50</td>
<td>4,00</td>
<td>290</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>G31</td>
<td>37</td>
<td>4,00</td>
<td>285</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>G20</td>
<td>20</td>
<td>5,00</td>
<td>0,476</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>G20</td>
<td>20</td>
<td>5,00</td>
<td>0,476</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>G20</td>
<td>25</td>
<td>5,00</td>
<td>0,554</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>G20</td>
<td>25</td>
<td>5,00</td>
<td>0,554</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>G30</td>
<td>29</td>
<td>5,00</td>
<td>365</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>G30</td>
<td>29</td>
<td>5,00</td>
<td>365</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>G31</td>
<td>37</td>
<td>5,00</td>
<td>357</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>G31</td>
<td>37</td>
<td>5,00</td>
<td>357</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
5.4 Removing the hob sheet

To access the inner parts of the gas hob, perform the following steps:

1. Remove burner covers and diffusers from the burners:
2. Remove screws from all burners
3. Remove knobs from the gas taps
4. Remove hob sheet

5.4.1 Special cases

5.4.1.1 Siemens and Neff appliances with front knobs

The Siemens and Neff “Medium Steel” appliances have 2i additional attachments on the hob top to prevent the edge of the hob top from bending upwards:

- 1) At the rear the edge of the hob base was extended to hold down the curved cover of the hob:
- 2) Two springs are attached to the front of the appliance and grip under the edge of the hob top:

To remove the hob sheet, proceed as follows:

1. Remove burner covers and diffusers from the burners:
2. Remove screws from all burners
3. Remove knobs from the gas taps

4. Remove hob sheet from the housing: loose the hob top from the front springs (use tool 483196). Raise hob top slightly by the front side and push backwards to loose the rear spring. Then remove completely.
5.4.1.2 Neff steel 60 cm with 3 burners

In addition to the attachments described above, a fixing bracket is attached to the underside of the hob sheet of these models and is screwed to the hob base. On these appliances this screw must be unscrewed from below.

5.4.1.3 Siemens “diamond” and “flag”

Diamond design
These very wide models with high burner capacities on the right and left have two side sheets which hold down the edge of the hob top. To remove the hob sheet, the appliance must be lifted out of the furniture.

1. Open the springs with help of the tool 483196 how it is shown on previous page
2. Pull up hob top until the lateral sheets (brownish on drawing) get detached from hob top

Caution!
Heavy force is necessary

3. After this the sheets have to be prepared for new glueing with a double layer tape (Ex. 158680)
5.5 Changing spark plugs and thermocouples

5.5.1 Fastening of spark plugs and thermocouples

5.5.1.1 Rapid, semi-rapid and auxiliary burners

In the rapid, semi-rapid and auxiliary Defendi burners, both the spark plug and the thermocouple are fastened to the body of the burner by *springs*. Therefore, it is not necessary to disassemble the burner or use any special tool to disassemble them.

5.5.1.2 Defendi 3.3 kW Wok Burner

In the Defendi 3.3kW Wok burner, both the spark plug and the thermocouple are fastened to the body of the burner with *springs*.

5.5.1.3 Defendi 4 kW Wok Burner

In this Wok, the spark plug is secured by a spring, but the thermocouple is fastened to the body of the burner with a *screw*. To disassemble the thermocouple, it is necessary to unscrew the burner from the carcase of the apparatus (access from below) to raise it slightly and extract the thermocouple below.
5.5.1.4 Defendi 5 kW Wok Burner

In the 5 kW Wok burner, both the spark plug and the thermocouple come fastened with upper screws. Once unscrewed, the spark plug can be extracted from above. The thermocouple, however, must be taken out from below the burner. To do this, unscrew the burner from the carcase (access from below) and raise it slightly.

Delivered as replacement part, depending on the type of burner:

- For rapid, semi-rapid and auxiliary burners: The spark plug or thermocouple with the longest cable for the apparatus.
- For Wok burner: The original spark plug and thermocouple of the Wok.

The cables for the spark plugs and thermocouples have a specific guidance inside the apparatus, which must be left unchanged when one of these components is changed.

5.5.2 Guidance of the cables for spark plugs and thermocouples
IMPORTANT!

Do not allow the cables for spark plugs and thermocouples to make contact with high-temperature areas (burners, electric plates).

Be careful to not lodge the when mounting the dripping pan or the glass.

It is recommended that plastic flanges be used (ref. 041270) to fasten the position of the cables.
5.6 Changing the gas taps

On IH-5 appliances the gas taps are attached to the housing with safety screws (T20 with pin). This prevents unauthorised persons from tampering with the taps. The appropriate bit insert for these screws can be ordered by quoting part no. 340867.

In addition a sticker is placed over the screws:

This sticker can be found as a spare part in the QuickFinder as a component of the specific appliance accessory.

**IMPORTANT!**
Stickers which are removed to access the screws must be re-attached following the repair.

**IMPORTANT!**
Gas taps must not be lubricated, neither manipulated and neither greased. When the gas tap is faulty exchange the full gas tap.
5.7 Care and cleaning

In general, the appliance must be cleaned periodically after it has cooled by using a sponge, soap and water.

When cooking, it is advisable to clean spilled liquids immediately, thereby preventing them from drying and becoming encrusted, which makes subsequent cleaning difficult.

In order to keep the burners and grills clean, they must be periodically soaked in soapy water and scrubbed with a non-metallic brush so that the holes and grooves remain perfectly clean to provide the right flame.

After cleaning and drying the burners, ensure that the covers are correctly installed on the burner’s flame diffuser.

When cleaning the grills, be sure not to damage or take off the rubber protectors that sit on the cooktop, given that the grill pan of the same could become scratched.

After washing the grills, it is advisable to dry them completely before cooking on them again, given that the presence of drops of water or moist areas at the start of cooking could cause points where the enamel may become damaged.

CAUTION!

Do NOT use abrasive products, objects that cut, steel scrubbers, knives, etc., to remove encrusted food remains from the grill pan, the grills or the burners.

Do NOT use steam cleaning machines that the could damage the cooktop.

Do NOT dump acid liquids (lemon juices, vinegar, etc.) on the cooktop.

5.7.1 Yellowing and discoloration of the hob top

Due to the high temperatures sustained by the cover of the triple-flame burner ring and in the stainless steel zones such as the grill pan, around the burners, etc., they eventually discolor over time, which is a NORMAL process.

The grill pan and other cooktop components must be cleaned with soap and water after each use. Afterwards, and in order to prevent the grill pan from yellowing or eliminate this change in color, use CeraClen (VitroClen) for vitroceramics and stainless steel (311413):

CAUTION!

Cleaning products must not be used in the area around the buttons. The indications (printing) may be erased.
5.7.2 Surface stains

Sometimes customers claim for aesthetic defaults of surface stains that can’t be removed with soapy water:

As solution for these cases, recommend the using of the product 311413:
5.7.3 Recommendations for clearing burners and pan supports

The burners and pan supports have to be cleaned after every use. To do so, follow this cleaning instructions:

7. Place the burners and pan supports in hot, soapy water.

8. Using a non-metallic scouring pad, rub to remove any incrusted dirt caused by use. For the less accessible areas we recommend using a non-metallic brush. Do not insert sharp objects in the holes of the burner.

9. Once all burners and pan supports are clean and rised, dry them thoroughly and place them on the appliance ensuring that they are correctly fitted.
5.8 Levelness of the pan supports

5.8.1 Tolerance specifications

As a result of the manufacturing process, the pan supports cannot have absolute geometric levelness (0 mm deviation). These tolerance ranges may affect the stability of the pan supports or pans.

► **Tolerance of the feet (A, B, C):** This dimension affects the stability of the pan on the pan support.

► **Tolerance of the installation surface (D):** This dimension affects the stability of the pan support on the appliance.

Depending on the model and design of the pan support, the maximum permitted deviations (tolerance ranges) are as follows:

5.8.1.1 Cast iron pan supports:

► Tolerance of the feet (A, B, C): **0.8 mm**

► Tolerance of the installation surface (D): **0.8 mm**

5.8.1.2 Steel pan supports:

► Tolerance of the feet (A, B, C): **1.0 mm**

► Tolerance of the installation surface (D): **1.0 mm**

5.8.1.3 Concept of pan supports with 6 support fingers

This concept of pan supports with 6 support fingers has been designed to avoid all complaints regarding the lack of stability of the pan caused by deviations on the pan support.

This concept consists in supporting the pan with the minimum number of points that determine one plane, that are three. By this way, it is clear that it is impossible the swinging of the pan.

There are other three support points placed on the bisectors of the angles formed by the three main support fingers. This secondary plane is parallel to the main one and 0.5 mm down. The finality of this secondary plane is to avoid overturning of pans when these are not well centered.

**Gas hob with 6 support fingers**
5.8.2 Measurement of flatness

Method 1: with normalized pan and thickness gauge
This type of measurement is recommended for interventions in which the main claim is the swinging of pans and if the technician has visited the customer previously. With this method, the technician will check if the pan support is in/out of tolerances and he will can show to the customer by a visual way the real status of the pan support (with a normalized pan).

¡IMPORTANT!
With this measurement it is not possible to diagnose where is the deviated area

Check as follows:
► Place the normalized pan with diameter base of 18 cm (341235) WELL CENTERED on the pan.
► Press softly on the pan to force the support with three fingers if there is not an exact flatness between the four support fingers.
► Check with the gauge (341572) the thickness of the gap between pan and finger of pan support.

The maximum thickness sheet of the gauge that fits between pan and finger of pan support will determine the maximum swing of the pan. Check if this measure is in/out tolerances on chapter “Tolerance specifications”

5.8.2.1 Measuring the deviation on the installation surface D (if the pan support wobbles)

Place pan support with attached rubber feet onto a level base and press lightly on the corners to check the stability. Measure deviation with caliper gauges and check whether the deviation is within the permitted tolerance (0.8 mm for cast iron or 1.0 mm for pan supports made of enamelled steel).

5.8.2.2 Measuring the deviation of the feet A, B, C (if the pan wobbles on the pan support)

¡IMPORTANT!
¡¡¡Never file the three main support fingers to try to get a flatness with the secondary plane. It breaks with the aim of this concept and it is impossible to get a perfect flatness with 6 support fingers!!!

¡IMPORTANT!
The following described methods can only be carried out on pan supports with 4 support fingers

Thickness gauge 341572
Normalized pan 444210
Method 2: with calliper

This method is recommended to check by an accurate way the deviations on pan support in its different points of support fingers and find out which is the deformed area if there is. As the arms are frequently lowered towards the burner centre to ensure stability, only positions at the same distance from the burner centre may be considered for a comparison of the level.

► Place pan support on a level base.
► Using a calliper gauge, measure the distance between the base and the feet of the pan supports (at the same distance from the burner centre). Note: If required, measure at different distances
► Note distance measures of a diameter and compare differences

The maximum difference between the heights at the respective diameters (difference e.g. between X1, X2, X3 and X4) must not be greater than 0.8 mm for cast iron pan supports or 1 mm for pan supports made of enamelled steel.

It is recommended to use a calliper gauge for the measurements:
► *Gas hobs with steel hob top*: Place pan support on a level surface.
Gas hobs with glass surface: Measure directly on the plate.

5.8.3 Subsequent need for action

- If the measurements are within the specified tolerance, the appliance is not defective. In this case present the evidence to the customer:
  - Pan unevenness,
  - Position of the pan (centred, not centred?),
  - Tolerances unavoidable,
  - BSH has narrow tolerance limits,
  - Distortion unavoidable due to extreme temperature load.

- If the measurements are outside the specified tolerance, refer complaint to the factory by means of FSB.