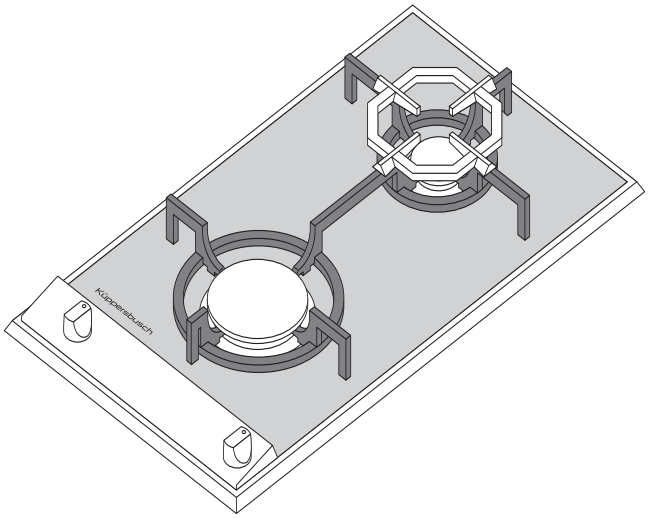
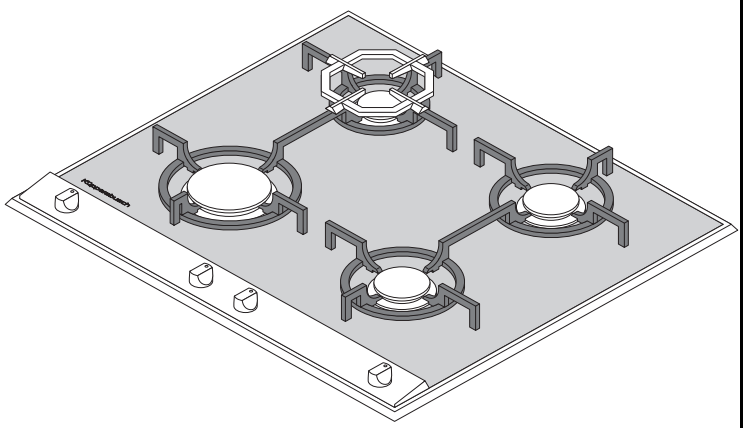




Glass Ceramic Gas Hob

GKS 324.0-54
GKS 644.0-54

Küppersbusch
THE HEART OF A GOOD KITCHEN

GB

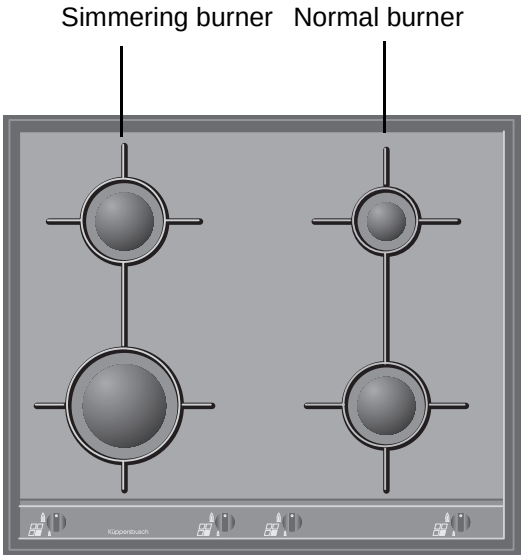
Service Manual: H2-120-01-01

Responsible:	N. Kirchmair	KÜPPERSBUSCH HAUSGERÄTE AG
Tel.:	(0209) 401-718	Kundendienst
Fax:	(0209) 401-743	Postfach 100 132
Date:	17.07.2001	45801 Gelsenkirchen

Contents

1. General Technical Data

1.1 Built-in Glass Ceramic Gas Hob GKS 644.0



GKS 644.0 M E natural gas
in metallic design (stainless steel look)

GKS 644.0 J E natural gas
in jet black design (black)

Features: “Hardline” design

Built-in glass ceramic gas hob with 4 cooking zones:

- Low-emission gas burners, integrated in the glass ceramic surface
- 1 high-speed burner 2.8 kW
- 2 normal burner 1.9 kW, each
- 1 simmering burner 1.1 kW

Full safety.

Electric one-hand spark ignition.

Technical data:

- Gas connection 7.7 kW
- Electric connection 0.1 kW, ready to plug in
- Appliance dimensions:
  W x D approx. 589 x 519 mm
- Installation height approx. 42 mm
- Recess dimensions:
  W x D approx. 560 x 490 mm
- Gas connection R ½"

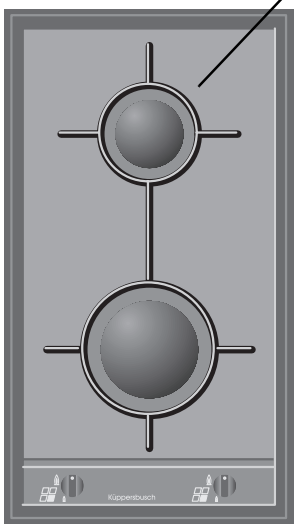
Special accessories:

LPG injector kit 50 mbar	acc. No. 701
LPG injector kit 30 mbar	acc. No. 702
Injector kit natural gas NL	acc. No. 704
Injector kit natural gas LL	acc. No. 703

The new built-in glass ceramic gas hobs with open burners:

- Modern look thanks to “Hardline” design
- The burners integrated in the glass ceramic surface heat up less which results in a considerably longer life.
- The glass ceramic surface does not get hot. It is especially easy to clean as food that might boil over cannot get burnt.
- The electric one-hand spark ignition and the high-precision regulation of the individual cooking zones offer maximum user convenience.

1.2 Built-in Glass Ceramic Gas Hob GKS 324.0-54



GKS 324.0 M E natural gas
in metallic design (stainless steel look)

GKS 324.0 J E natural gas
in jet black design (black)

Features: “Hardline” design

Built-in glass ceramic gas hob with 2 cooking zones

- Low-emission gas burners, integrated in the glass ceramic surface
- 1 high-speed burner 2.8 kW
- 1 simmering burner 1.1 kW

Full safety.

Electric one-hand spark ignition.

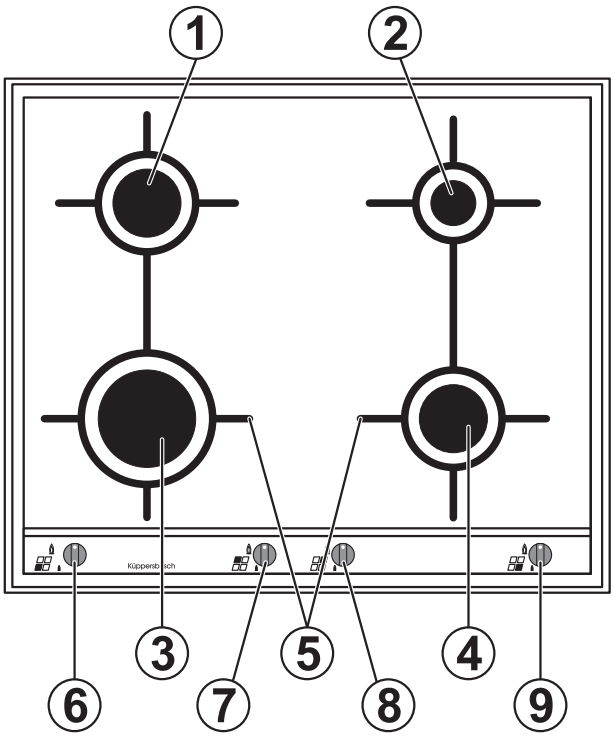
Technical data:

- Gas connection 3.9 kW
- Electrical connection 0.1 kW, ready to plug in
- Appliance dimensions:
  W x D approx. 294 x 519 mm
- Installation height approx. 42 mm
- Recess dimensions:
  W x D approx. 265 x 490 mm
- Gas connection R ½"

Special accessories:

LPG injector kit 50 mbar	acc. No. 701
LPG injector kit 30 mbar	acc. No. 702
Injector kit natural gas NL	acc. No. 704
Injector kit natural gas LL	acc. No. 703

1.3 Appliance Illustration GKS 644.0-54

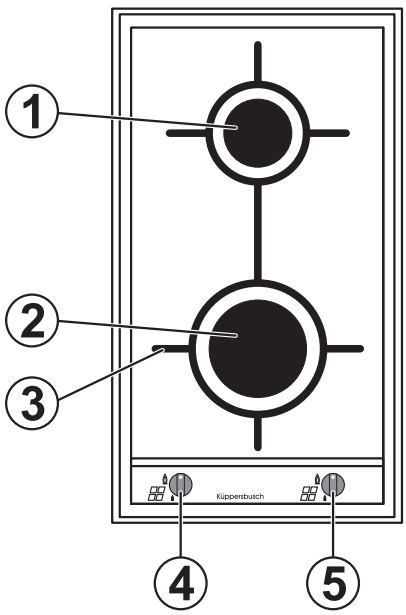


1. Simmering burner
2. Normal burner
3. High-speed burner
4. Normal burner
5. Pot grids
6. Control for high-speed burner
7. Control for simmering burner
8. Control for right-hand top normal burner (position 2)
9. Control for right-hand bottom normal burner (position 4)

Accessory supplied:

Cross support for small pots

1.4 Appliance Illustration GKS 324.0-54



1. Simmering burner
2. High-speed burner
3. Pot grids
4. Control for simmering burner
5. Control for high-speed burner

Accessory supplied:

Cross support for small pots

2. Installation Conditions and Assembly

2.1 Notes regarding Installation

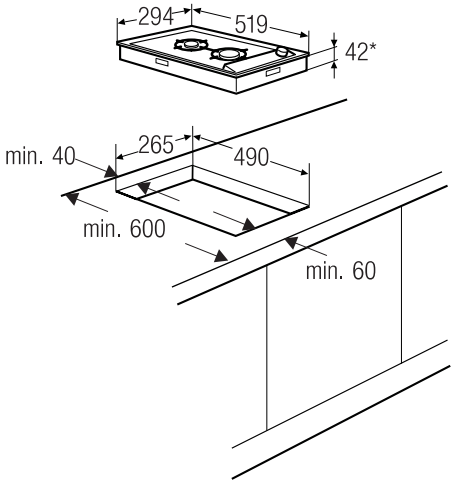
- The room where the appliance is installed should have a volume of at least 20 m^3 and it must be possible to ventilate it by a window or a door opening out into the fresh air.
- The hob is built into an opening in the worktop. This opening must be prepared according to the installation dimensions specified below.
- The worktop must be aligned horizontally. Make a clean cut into it for the opening.
- There must be no cross bars beneath the opening. They should be cut back to at least the size of the opening in the worktop.
- The distances at the front, rear and sides of the hob opening must conform to the measurements shown in the drawing. The edges at the front and the rear are based on a worktop depth of 600 mm. The rear edge will be wider for worktops with a greater depth.
- We recommend protecting the cut surfaces of the worktop opening with a coat of waterproof paint.
- To ensure ease of operation at the hob, tall cupboards at the side should be at least 300 mm away.
- The air for the burner is supplied through ventilation slits at the back of the control panel.
- Additional space for the gas connection is required below the hob.
- The wall connection strip must be made of heat-resistant material and must have no sockets in the area around the hob. We recommend using a support strip made of plastic with a covering strip made of aluminium. The lateral part on the worktop must not be longer than 30 mm.
- The wall above the wall connection strip in the area around the appliance must be made of non-inflammable material. Wood, plastic, PVC foil etc. are not suitable.
- In normal use very high temperatures may act on the surrounding items of furniture. The plastic finish or the veneer of built-in kitchen furniture must be protected by a heat-resistant adhesive (100 °C).
- Cooker hoods and wall cupboards above the hob must be installed at a minimum distance of 650 mm.
- Before installing the hob and any time that the hob is removed, the gasket should be checked for signs of damage and to ensure that it fits perfectly. Fit a new gasket if necessary. Do not use any additional adhesives such as silicone, as there is a danger that plastic-coated worktops could be damaged when the hob is removed.
- **Exception**: Uneven worktops (e.g. worktops with ceramic tiles) require a gasket made of a heat-resistant, permanently elastic sealing material (e.g. with silicone, suitable for ceramic surfaces). Only apply this sealing material around the edge of the hob, never underneath it!

2.2 Assembly

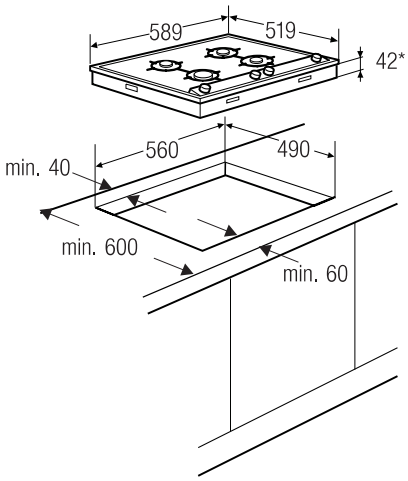
KÜPPERSBUSCH built-in hobs can and may be exclusivley combined with KÜPPERSBUSCH built-in ovens with appliance ventilation. The use of other brands excludes any liability by KÜPPERSBUSCH. The granted test marks and approvals become void in the case of disregarding of this instruction!

2.3 Installation Dimensions

GKS 324.0-54



GKS 644.0-54



*Appliance height

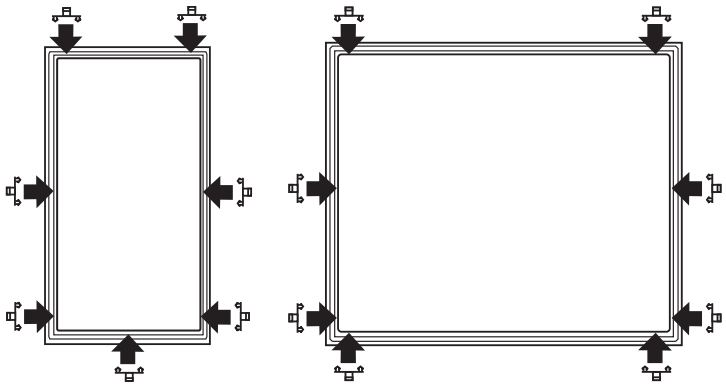
2.4 Installation

Using clips makes it easier and quicker for you to install these units. You can carry out the complete installation work from above.

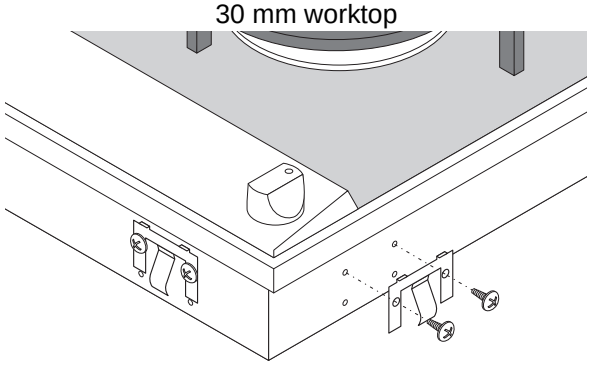
- First of all make a clean cut into the worktop observing the indicated dimensions (see “Installation Dimensions”).
- Make sure that the gasket of the hob is properly seated. If the worktops are uneven (tiles etc.), you must also apply a temperature-resistant sealing mass around the edge of the hob.
- Do not apply the sealing mass underneath the hob onto the worktop as the work surface will be damaged when the hob is removed.
- Now convert the hob - if necessary - to a different type of gas.
- Then insert the clips on the cooking area worktop cut-out as shown in the figures on the previous page, observing the clearances indicated.

The clips are screwed in different heigth to the hob, according to the thickness of the worktop (30 or 40 mm).

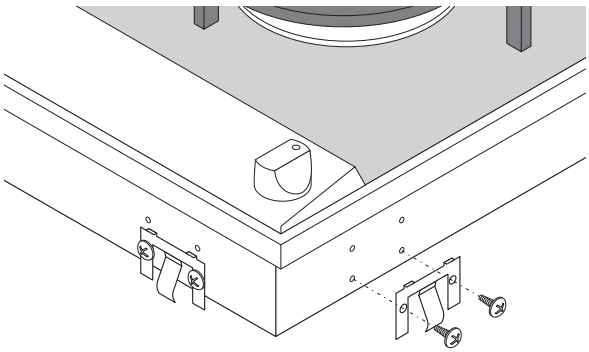
GKS 324.0-54 GKS 644.0-54



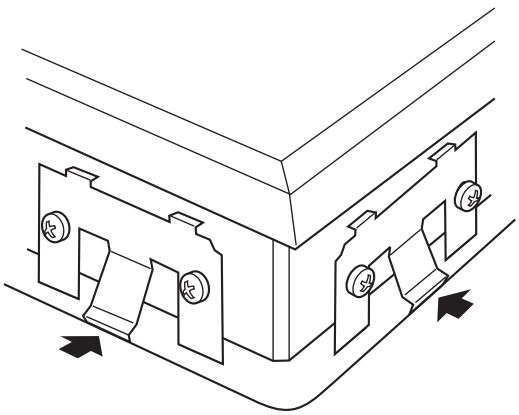
30 mm worktop



40 mm worktop

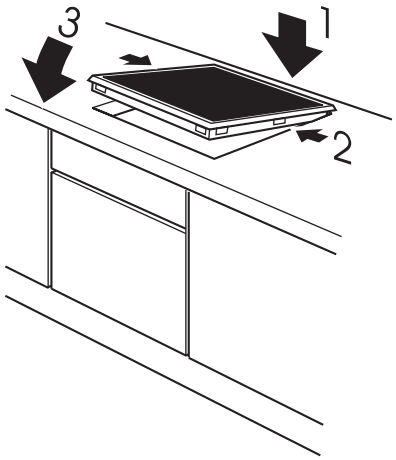


Fixing the hob



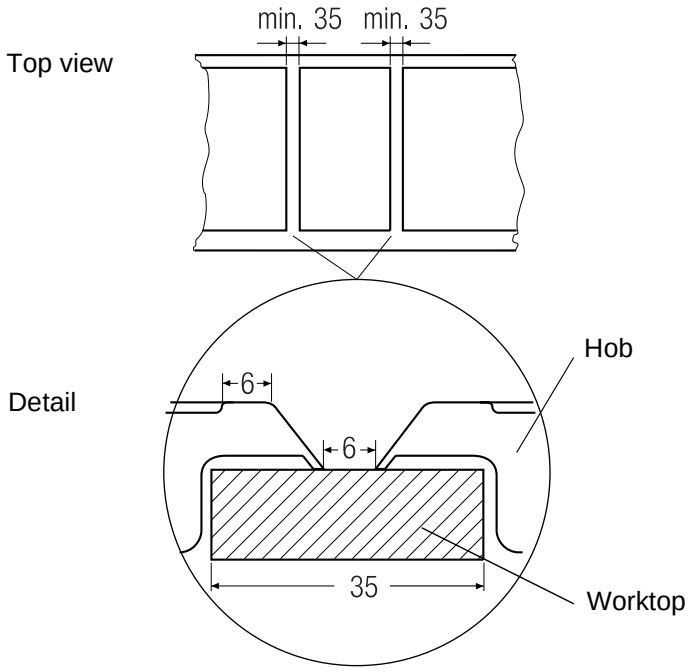
Insert the rear edge of the hob and carefully lower it. At the same time press in the clips with both hands.

Press hob downwards until it rests completely on the worktop.



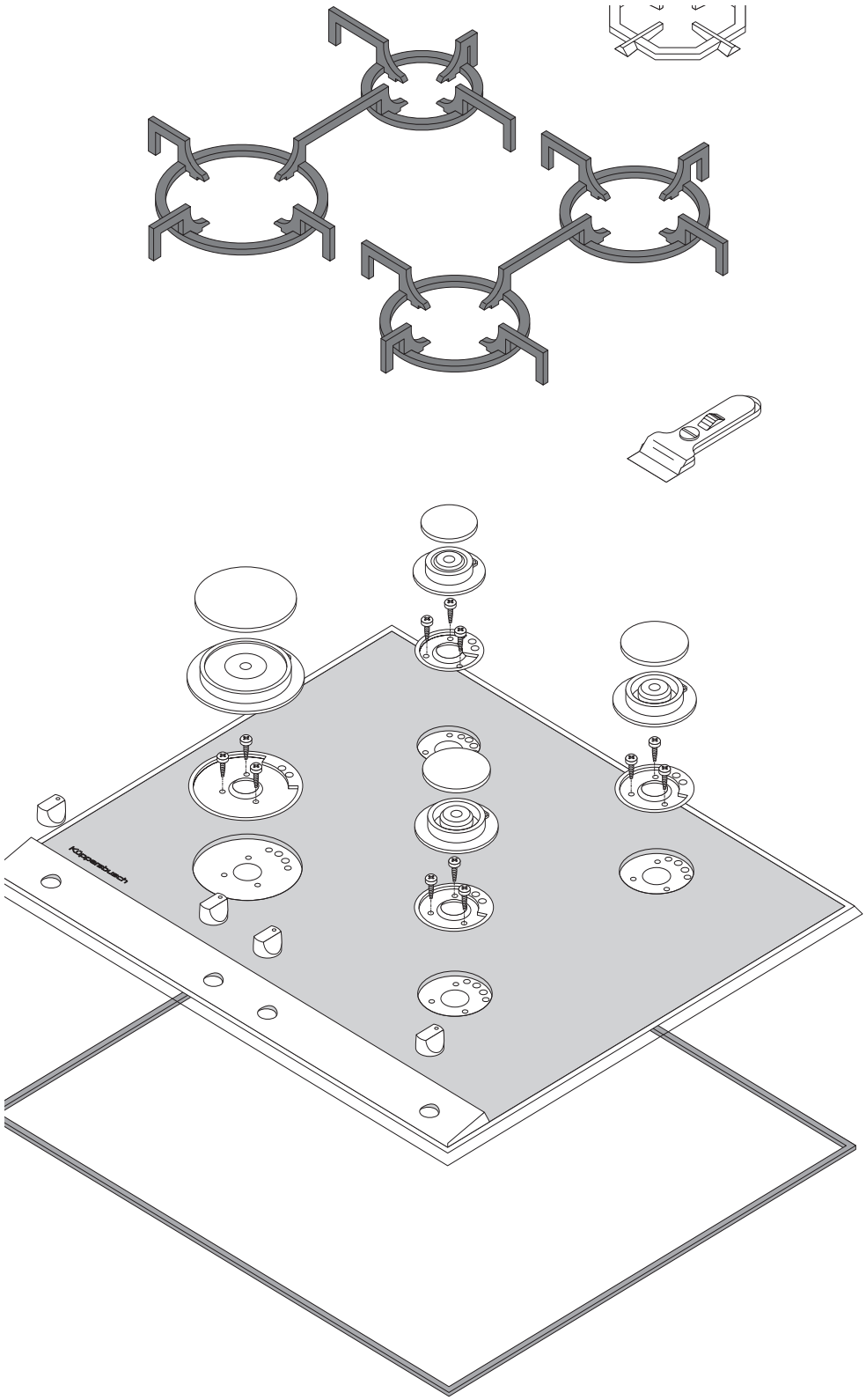
If the worktop cut-out should be a little too large, it is possible to increase the preliminary spring tension of the clips by screwing them down.

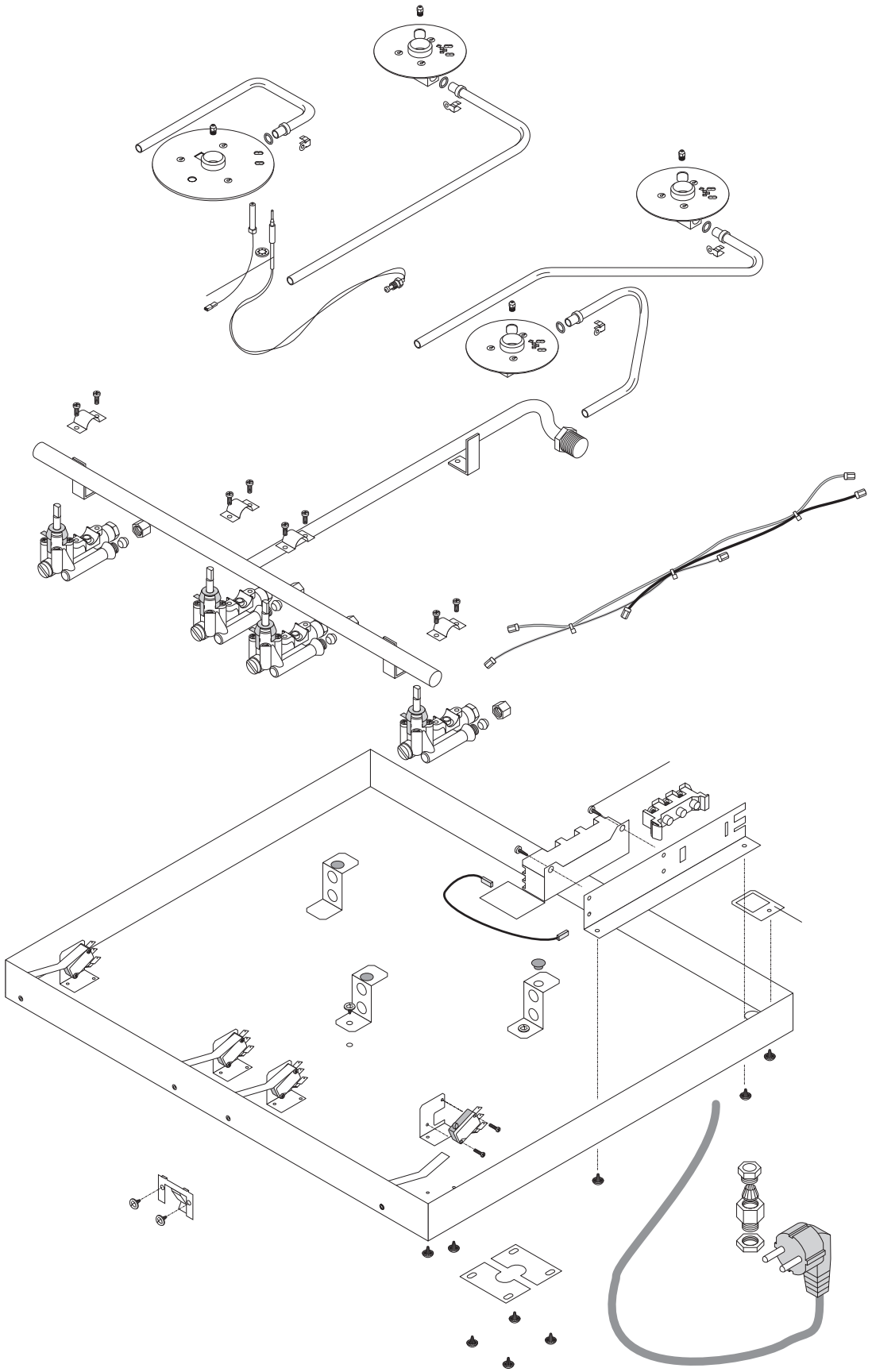
In case several hobs are installed next to each other the minimum distances indicated in the following drawing have to be observed.



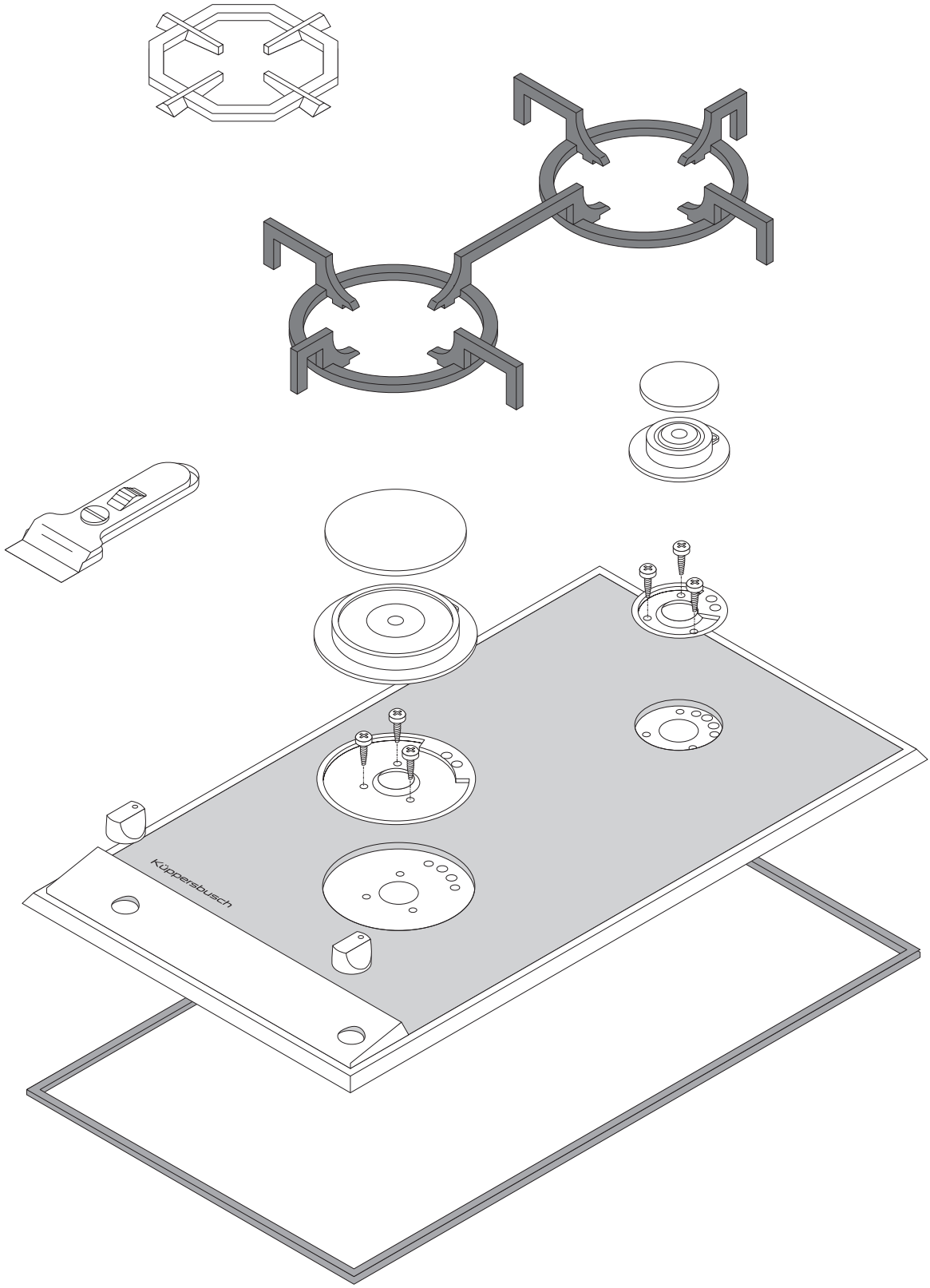
3. Technical Components (Exploded View)

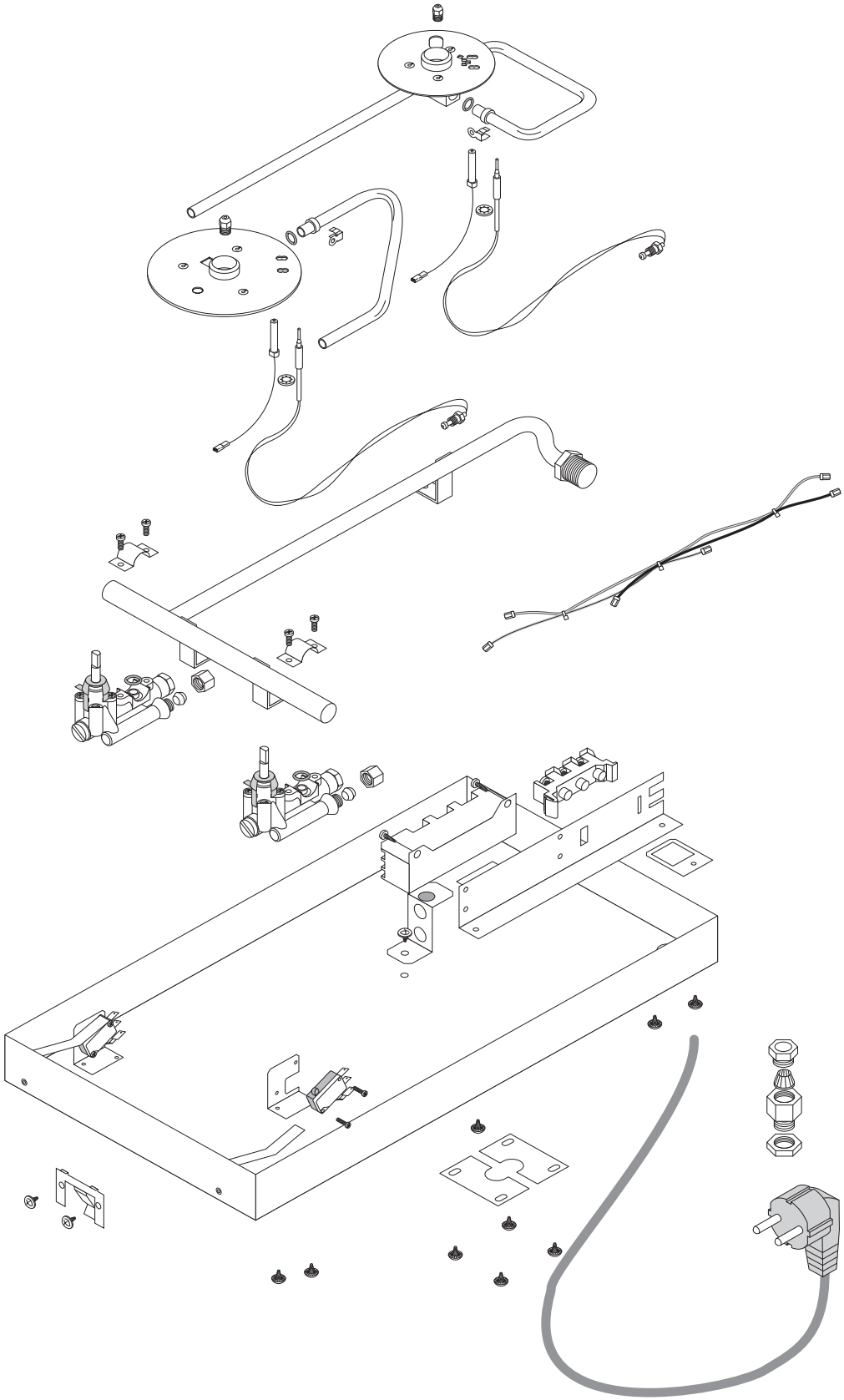
3.1 GKS 644.0-54





3.2 GKS 324.0-54





4. Changing of Components

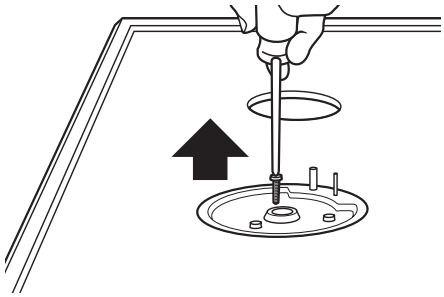
4.1 Disassembly of the Hob

Press the hob out of the worktop from below and remove it.
Do not lever the hob out of the recess with a screwdriver - you could damage the frame of the hob.

Remove the control knobs.

Remove burner covers, the saucepan support(s) and unscrew burner flange (see illustration).

Loosen the srews on the side of the case and remove the glass ceramic plate. Now all internal technical components are accessible.



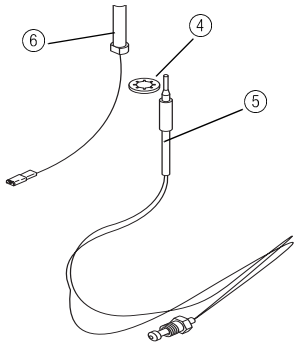
4.2 Changing of Temperature Sensors

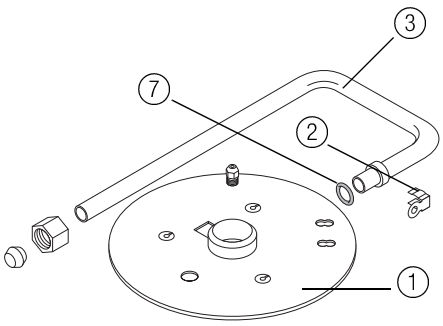
1. Remove hob.
2. Undo sensor at the gas tap.
3. Remove burner ① by lifting the holder ② from burner pipe ③.
   Carefully lever connection ring ④ from below the burner and pull out thermostat sensor ⑤.

4.3 Changing of Spark Plugs

1. Remove hob.
2. Remove burner ① by levering the holder ② from burner pipe ③. Carefully lever connection ring ④ from below burner and pull out spark plug ⑥.
   Remove ampere plug at ignition transformation.

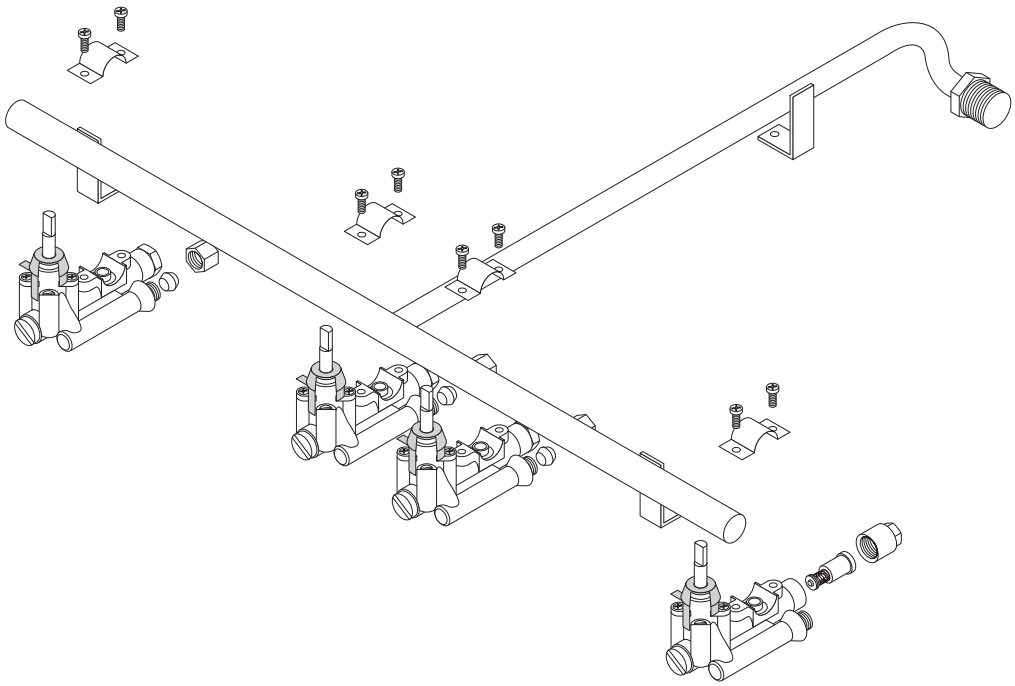
Assembly is done in reverse order.





Connection ④ must be pressed on firmly, otherwise spark plug and thermostat sensor will be too low. When assembling take special care with O-ring ⑦. CHECK FOR GAS LEAKS!

4.4 Renewing Magnet Insets GKS 324.0-54 and GKS 644.0-54



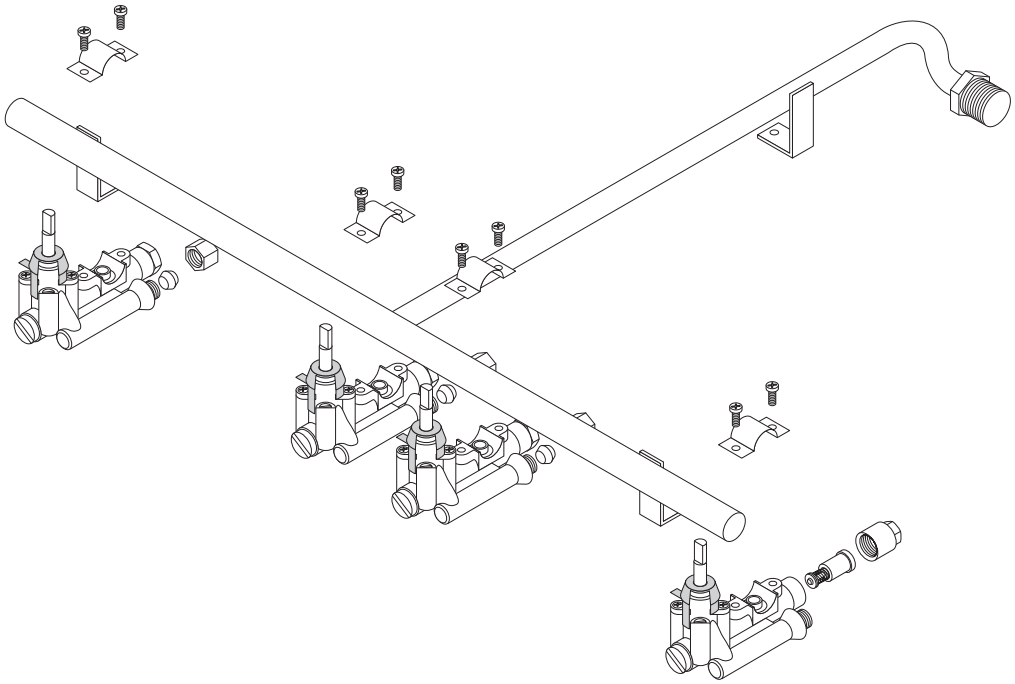
GKS 644.0-54

1. Disassemble hob.
2. Undo thermostat sensor at gas tap.
3. Undo aluminium nut.
4. Pull magnet inset from the gas tap to the back.

Assembly is done in reverse order.

When assembling CHECK FOR GAS LEAKS!

Gas Fittings
GKS 324.0-54 and GKS 644.0-54



GKS 644.0-54

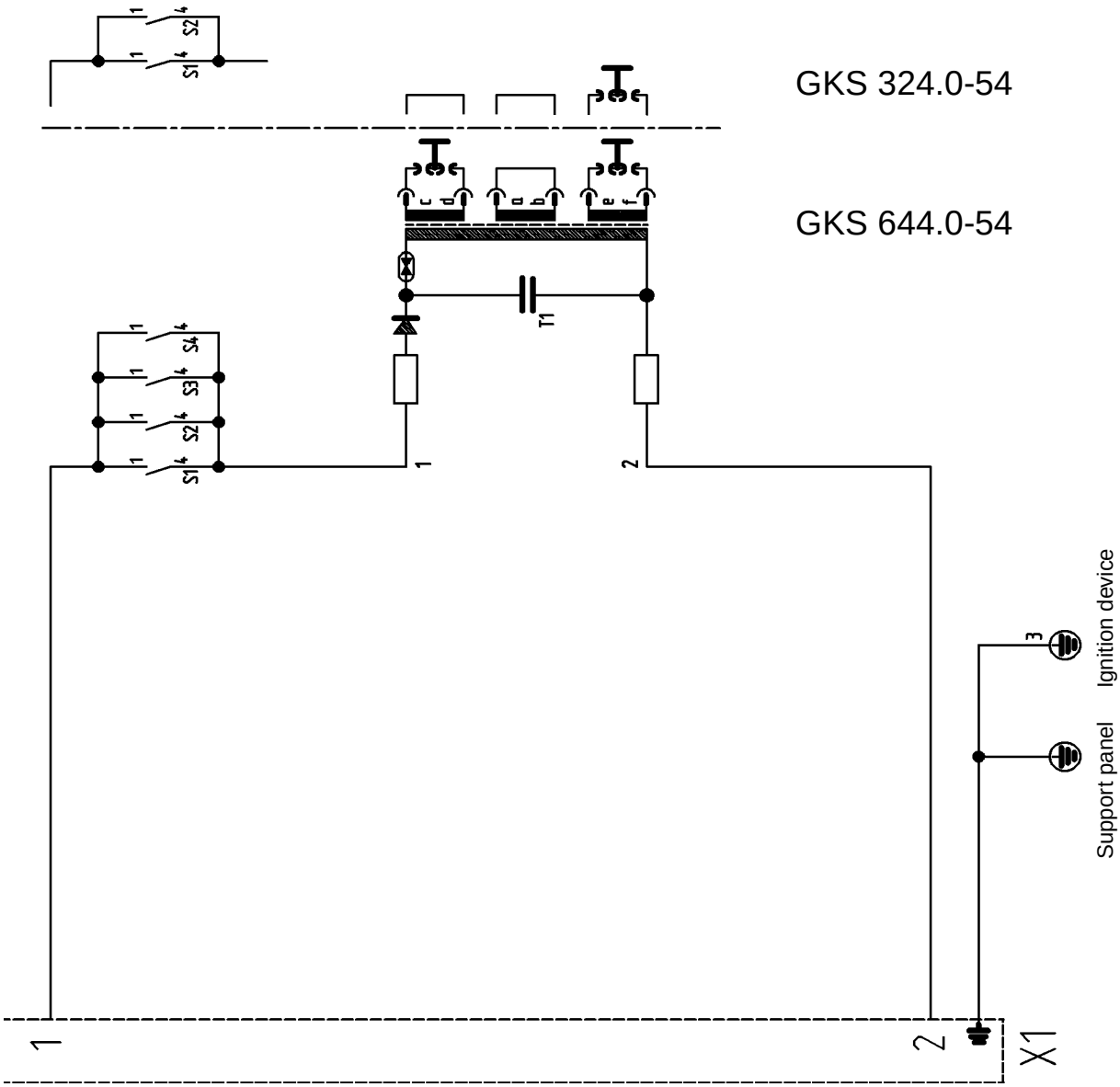
4.5 Renewing Gas Tap of the Cooking Zones

1. Disassemble hob.
2. Undo gas tap gallery from floor.
3. Undo thermo element from gas tap.
4. After unscrewing nut, pull burner pipe out of gas tap.
5. Undo fixing bolts. Remove clamps, then remove gas tap from gas tap gallery.

Assembly is done in reverse order

When assembling take special care with O-rings. CHECK FOR GAS LEAKS!

5. Wiring diagram GKS 644.0-54 / GKS 324.0-54



S1-S4 Micro-switch
T1 Intermittent spark igniter
X1 Mains connection terminal

6. Conversion to a Different Gas Type - Table of Injector Diameters

The appliance has been factory-set to natural gas G20, 2H, 2E, 2E+.

All appliances marked with G20 are to be operated in the Wobbe index range (Wo) from 11.3 kWh/m^3 to 15.2 kWh/m^3 without changing the setting.

If the setting is changed, the new setting has to be marked.

6.1 Accessory Numbers of the Injector Conversion Kits

Gas type, pressure	Injector kits
Natural gas H, E, E+ G 20 (20/25 mbar)	
Natural gas LL G 25 (20 mbar)	acc. No. 703
Natural gas NL G 25 (25 mbar)	acc. No. 704
LPS Butane/Propane G 30 (50 mbar)	acc. No. 701
LPG Butane/Propane G 30 (28-30/37 mbar)	acc. No. 702

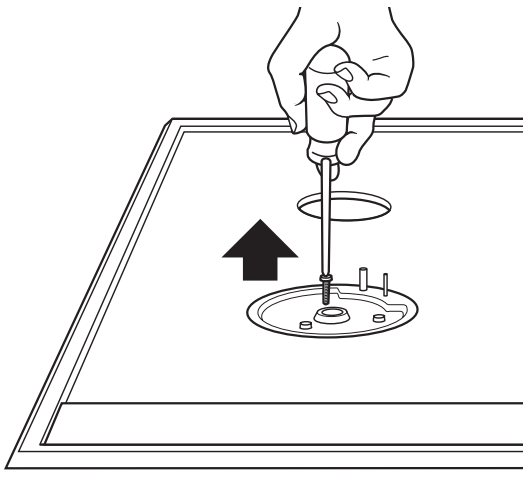
6.2 Changing the Main Injectors

Close the gas tap! Pull out the mains plug!

Check the replaceable injectors according to table “Table of injector diameters”! Make sure that the correct injector is used for each burner.

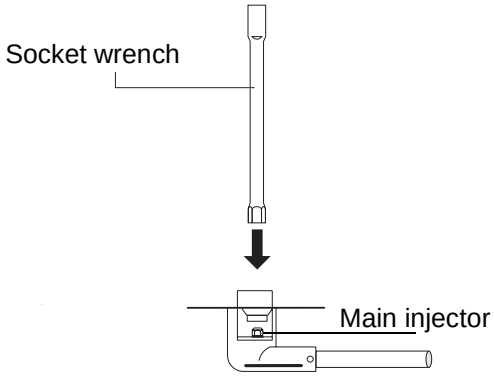
Dismantle hob and remove glass ceramic plate

- Press the hob out of the worktop from below and remove it.
- Remove knobs.
- Remove burner covers, the saucepan support(s) and unscrew burner flange.
- Loosen the srews on the side of the case and remove the glass ceramic plate.



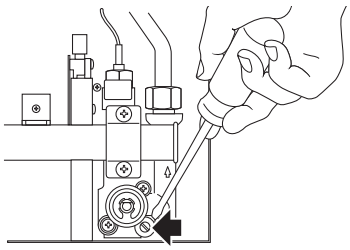
Changing the main injectors

- Through the mixing pipe of the burner mount the socket wrench onto the injector and unscrew the injector using a screwdriver.
- Place the new injector into the socket wrench and screw it in as far as it will go.



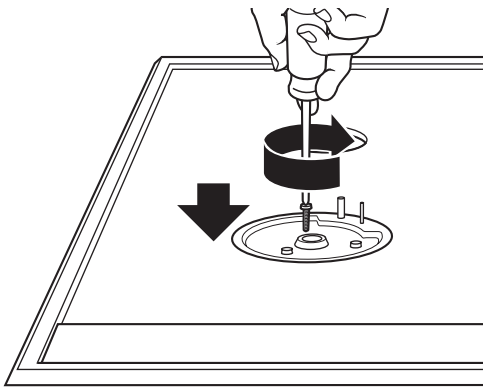
Changing the low-flame injectors

- Using a suitable screwdriver, remove the low-flame injectors located on the right side of the axis of the gas tap.
- Fit the new low-flame injectors.



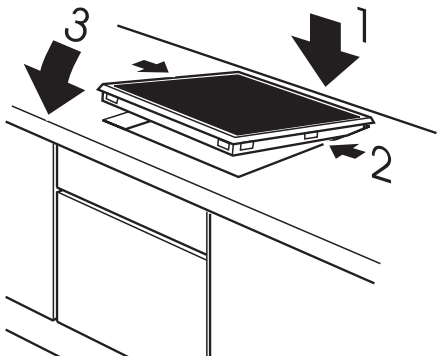
Assembling the hob

- Mount glass ceramic hob and, while doing so, pass the spark plugs, temperature sensors and control knob pins through the appropriate openings.
- Mount burner flange and screw tight.
- Insert screws on the housing side again and tighten the screws evenly and alternately.
- Make sure that the changement is clearly marked on the model identification plate!



Reinstalling the hob

- Check gasket.
- Insert the rear edge of the hob and carefully lower it. At the same time press in the clip with both hands.
- Press hob downwards until it rests completely on the worktop.
- Place the burner cover, the saucepan support(s) and attachment carefully in the correct position.
  The pivot must click into the notch.



6.3 Functional Testing

After the appliance has been completely re-assembled a functional testing is to be performed!

Put the appliance into service in accordance with these operating instructions.

Check the appliance for gas leakage (see DVGW working sheet G600 / DVGW TRGI/ 1986 / TRF 1988).

Check burners for overignition and regular flame aspect (also in low setting).

Provide respective nameplates for the newly set gas type in an appropriate location.

6.4 Injector Diameter

Injector marking main injector/low setting-injector			
Gas type	**High-speed burner**	**Normal burner**	**Simmering burner**
Natural gas H, E, E+ G 20 (20/25 mbar)	125/56	93/45	72/41
Natural gas LL G 25 (20 mbar)	145/62	117/50	79/47
Natural gas L G 25 (25 mbar)	118/57	104/47	78/43
LPG Butane/Propane G 30 (50 mbar)	75/33	60/27	47/24
LPG Butane/Propane G 30 (28-30/37 mbar)	83/39	70/31	53/28
LPG Propane G 31 (50 mbar)	79/34	67/29	51/26

7. Gas Connection Values

7.1 Table of Permissible Types of Gas and Pressures

Country (ISO country codes)	Natural gas H, E (G 20) mbar	Natural gas LL (G 25) mbar	Natural gas L (G 25) mbar	Pressure couple Natural gas (G 20/25) mbar	Propane (G 31) mbar	Pressure couple (Butane/ Propane) (G 30/31) mbar	Butane (Butane/ Propane) (G 30) mbar	Category mbar
Germany (DE)	20	20					50	$II_{2ELL3B/P}$
Denmark (DK) Finland (FI) Sweden (SE) Iceland (IS) Norway (NO)	20						28-30	$II_{2H3B/P}$
Netherlands (NL)			25 25		50		28-30	II_{2L3P} $II_{2L3B/P}$
France (FR) Belgium (BE)				20/25		28-30/37		II_{2E+3+}
United Kingdom (GB) Spain (ES) Italy (IT) Portugal (PT) Ireland (IE) Greece (GR)	20					28-30/37		II_{2H3+}
Austria (AT)	20						50	$II_{2H3B/P}$
Luxembourg (LU)	20					28-30/37		I_{2E}, I_{3+}

7.2 Gas Connection Values

Burner		Natural gas 20 mbar 25 mbar	Butane/Propane	
		Input kW	Input kW	Gas rate g/h
Simmering burner	large	1.1	1.1	79
	small	0.3	0.3	22
Normal burner	large	1.9	1.9	137
	small	0.38	0.38	27
High-speed burner	large	2.8	2.8	202
	small	0.56	0.56	40

GKS 324.0-54

Total nominal heat output = 3.9 kW

Connected load of the appliance = 281 g/h

GKS 644.0-54

Total nominal output = 7.7 kW

Connected load of the appliance = 555 g/h

7.3 Cross Calorific Values according to EN 437

Gas type	Caloric value H_S 15 °C			
	MJ/m^3	kWh/m^3	MJ/kg	kWh/kg
Natural gas H (G 20)	37.78	10.5		
Natural gas L (G 25)	32.49	9.03		
Butane (G 30)			49.47	13.75
Propane (G 31)			50.37	14.00

The HSB calorific value can be obtained from the relevant gas supply company upon installation.

The flow rate is calculated as follows:

$$\text{Flow rate l/min} = \frac{\text{Heat input kW x 1000}}{\text{Gross calorific value kWh/m}^3 \text{ x 60}}$$

7.4 Table of Gas Connection Pressure Ranges

Gas type	**P_n /mbar**	**P_{min} /mbar**	**P_{max} /mbar**
Natural gas	20 25	17 20	25 30
Pressure couple Natural gas	20 25	17 17	25 30
LPG	28 - 30 50	25 42.5	35 57.5
Pressure couple LPG	28 - 30 37	20 25	35 45

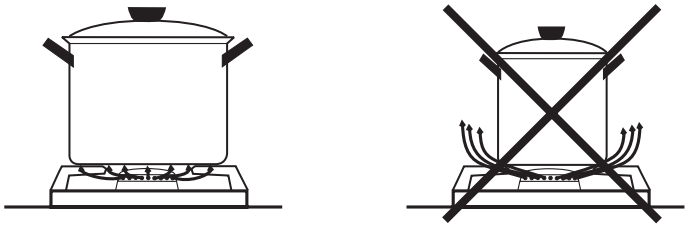
The gas appliance must not be put into service if the gas connection pressure is outside the specified ranges.

8. Further Technical Information

8.1 Notes regarding the Correct Pot Sizes

Using the correct pot sizes saves cooking time and energy.

Select the pot diameter in accordance with the burner size.



Recommened pot diatmeters:

High-speed burner:	22 - 24 cm
Normal burner (only GKS 644.0-54):	18 - 20 cm
Simmering burner*:	12 - 16 cm

*Smaller saucepans can only be used on the simmering ring with the aid of the cross support for small pots.

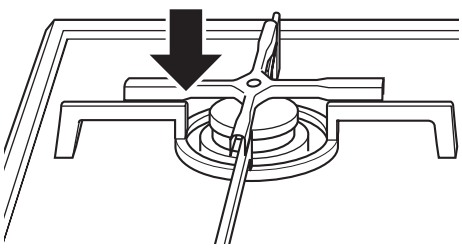
Notes on use

- For gas-technical reasons it is not allowed to use disks on the burners.
- Using pots with appropriate diameters prevents the pots from getting to near to the control knobs which could result in heating up or damage of the knobs.
- Do not use small saucepans on a ring which is too large for them. In many cases this leads to unnecessary energy consumption.
- After the flame has ignited, keep the control knob depressed for a short time (max. 10 seconds), until the flame burns automatically when the control knob is released.

Cross support for small pots

The cross support for small pots can be placed over the simmering ring onto the saucepan support so that small pots can be safely used.

The ventilation slits of the hob must not be covered over!



8.2 Cleaning and Care

- Normally it is sufficient to clean the appliance with a damp cloth and some detergent after every use. Wipe dry afterwards.
- Do not use any abrasive or aggressive cleaning or scouring agents such as steel wool, soap-impregnated steel wool, metal or plastic sponges or similar agents with an abrasive surface.
- Incrustation due to boilied over foods are best presoftened with a wet cloth. Then remove them with a glass scraper. Sugar and melted plastic should be removed while the cooking area is still hot.
- Care for your glass-ceramic cooking area once a week. Regular care builds up a protective layer and also eases day-to-day cleaning. Please follow the instructions of the cleanser or cleanser manufacturer concerned. Even heavy soiling can be cleaned with a cleanser and enough water. Wipe dry with a cloth.

8.3 Burner Covers and Saucepan Supports

- Do not use any abrasive or aggressive cleaning or scouring agents such as steel wool, soap-impregnated steel wool, metal or plastic sponges or similar agents with an abrasive surface.
- Let the burner components cool down before cleaning them.
- Clean the burner covers and the saucepan supports in warm water. Then carefully rub them dry.
- Never use soda or cleaning agents that contain chlorine to clean any parts of the burners. Alkaline cleaning agents and oven sprays can damage the surfaces.
- When you replace the burner covers, make sure that the pins lock into the grooves.
- Avoid dirt burning and becoming permanent. More stubborn dirt and food remains which have burned and become stuck should be soaked before the items are cleaned.