Instruction manual

**NKB 645.., NKC 645.., NKD 645..,
NKE 645..P, NKF 645.., NKN 645..,
NKE 645..E**

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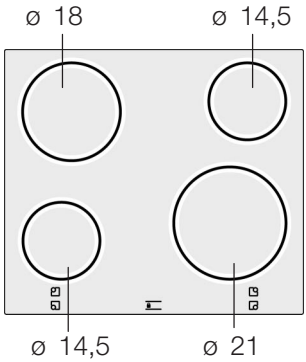
NKE 645..P



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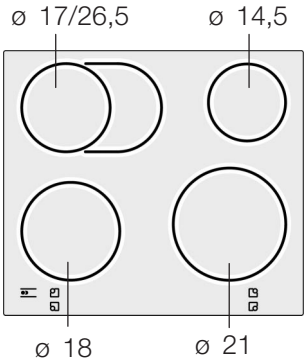

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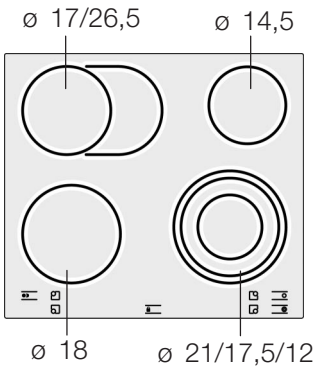

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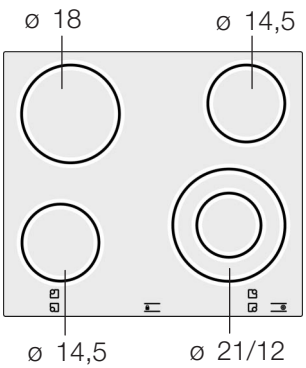
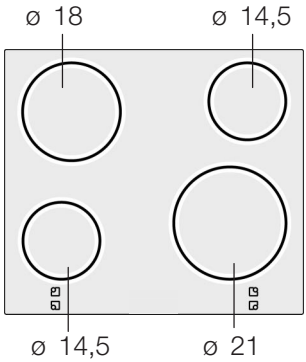


Ø = cm

NKE 645..E



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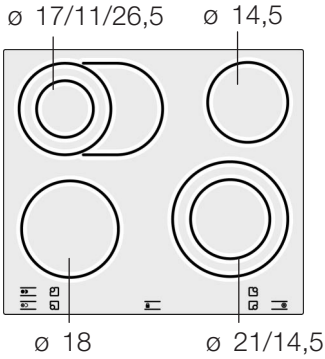

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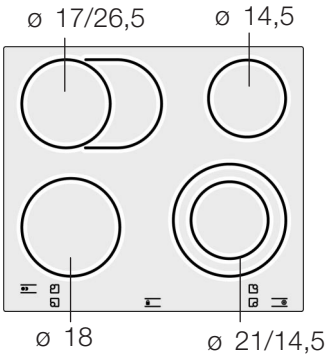

Ø = cm

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Important information

Read this instruction manual carefully. Only then will you be able to operate your hob safely and correctly.

Keep the instruction and installation manual and the appliance pass in good condition. Please pass on these documents to the new owner if you sell the appliance.

Before installation

Transport damage

Check the hob after unpacking it. Do not connect the appliance if it has been damaged in transport.

Electrical connection

The hob may only be connected by a licensed specialist. Damage due to the appliance being connected incorrectly will invalidate the guarantee.

Safety information

This appliance is intended only for domestic use.
Only use the hob for food preparation.

Overheated oil and fat

Overheated oil or fat can ignite very quickly.
Risk of fire!
Never leave heating oil or fat unsupervised.
Should the oil ignite, do not try to put it out by pouring water on it.
Cover the pan with a lid or plate immediately.
Switch off the hotplate.
Leave the ovenware on the hotplate to cool down.

Hot hotplates

Do not touch hot hotplates. There is a risk of burning. Children must be kept at a safe distance from the appliance. The residual heat indicator warns you that the hotplates are hot.

Never place combustible items on the hob.
Risk of fire!

The service cables from electrical appliances must not touch the hot hotplates. This could cause damage to the hob and the cable insulation.

Wet saucepan bases and hotplates

Steam pressure can be generated from the liquid between the base of the saucepan and the hotplate. The steam pressure could cause the pan to jump suddenly. There is a risk of injury.
Always keep the hotplate and the bases of saucepans dry.

Cracks in the glass ceramic

If there are fractures, flaws or cracks in the ceramic, there is a risk of electric shock.
Switch off the appliance immediately.
Isolate the appliance from the power supply at the fuse box.
Call after-sales service.

Incorrect repairs

Incorrect repairs are dangerous. There is a risk of electrocution.
Repairs may only be carried out by one of our experienced after-sales engineers.

Reasons for damage

Saucepan and pan bases

Rough pan bases scratch the glass ceramic. Check your ovenware.

Avoid cooking on the hob with an empty pan, especially with enamel and aluminium pans. This could cause damage to the saucepan bases and glass ceramic.

Observe the manufacturer's instructions when using special ovenware.

Hot pans and saucepans

Never place hot pans or saucepans on the control panel, display area or the frame.
This could cause damage.

Salt, sugar and sand

Salt, sugar and sand cause scratches on the glass ceramic. Do not use the hob as a work surface or storage space.

Hard and pointed objects

Damage can occur if hard or pointed objects fall on the hob.
Do not store such objects above the hob.

Food spills

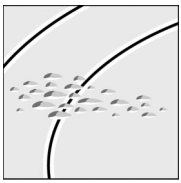
Sugar and food with a high sugar content damage the hob. Remove food spills immediately with a glass scraper.
Caution The glass scraper has a sharp blade.

Foil and plastic

Aluminium foil or plastic containers melt on hot hobs. Oven protective foil is not suitable for your hob.

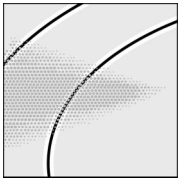
Examples of possible damage

The following types of damage affect neither the cooker's function nor the stability of the glass ceramic.

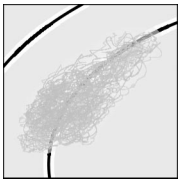


Blisters
caused by melted sugar or food with a high sugar content.

Scratches
caused by salt, sugar or sand particles or from rough pan bases.



Shimmering metallic discoloration
caused by pan abrasion or the use of unsuitable cleaning agents.



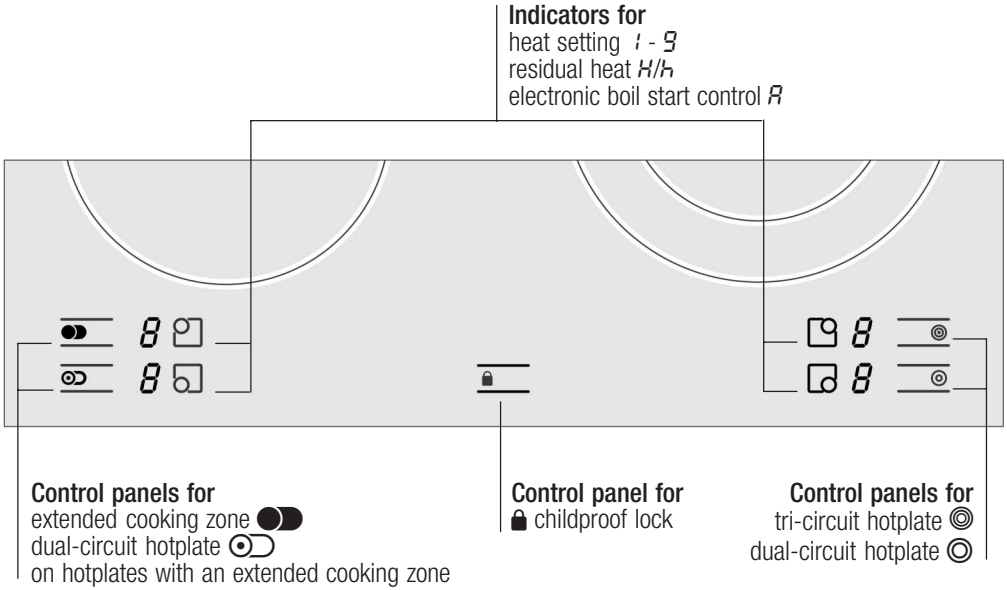
Scuffed surface caused by using unsuitable cleaning agents.

Getting to know the appliance

The instruction manual applies to various hobs. An overview of models with dimensions is given on pages 2 and 3.

The control panels, hotplates and indicators are described in this section. They are shown by appliance model.

The control panel



Control panels

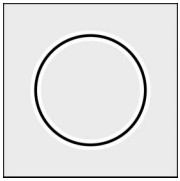
When you touch a symbol, the respective function is activated.

Example: Touch the ◎ symbol.
The outer filament circuit in the dual-circuit hotplate is switched on.

Always keep the control panels clean and dry. Moisture and dirt may impair function.

The hotplates

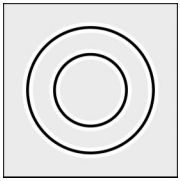
Single circuit hotplate



The cooking surface size of these hotplates cannot be altered.

Select the correct hotplate.
The saucepan and hotplate sizes should match.

Dual-circuit hotplate

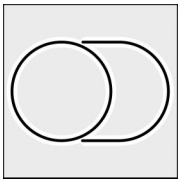


The size of these hotplates can be altered. The hotplate must be switched on.

Switching on the outer filament circuit:
Touch the ◎ symbol. The indicator light lights up.
Switching off:
Touch the ◎ symbol again. The indicator light goes out.

The size last set will be selected automatically when you switch on the hotplate again.

Extended cooking zone

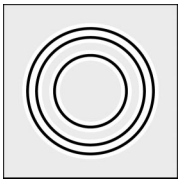


The extended cooking zone can be switched on when using these hotplates. The hotplate must be switched on.

Switching on the extended cooking zone:
Touch the ⊂⊃ symbol. The indicator light lights up.
Switching off:
Touch the ⊂⊃ symbol again. The indicator light goes out.

The size last set will be selected automatically when you switch on the hotplate again.

Tri-circuit hotplate



You can also switch on the medium and large filament circuits when using this hotplate. The hotplate must be switched on.

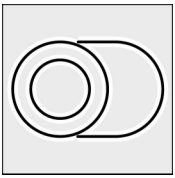
Switching on the medium filament circuit:
Touch the ◎ symbol. The indicator light lights up.

Switching on the large filament circuit:
Touch the ◎ symbol. The indicator light lights up.

Switching off the filament circuits:
Touch the appropriate symbol. The indicator light goes out.

The size last set will be selected automatically when you switch on the hotplate again.

Dual-circuit hotplate, hotplate with extended cooking zone



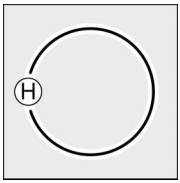
The size of these hotplates can be altered. The hotplate must be switched off.

Switching on the extended cooking zone:
Touch the ◗ symbol. The indicator light lights up.
If you have selected the small hotplate, the outer filament circuit will automatically switch on at the same time.
Switching off:
Touch the ◗ symbol again. The indicator light goes out.

Switching on the outer heating ring:
Touch the ⊙ symbol. The indicator light lights up.
Switching off:
Touch the ⊙ symbol again. The indicator light goes out.

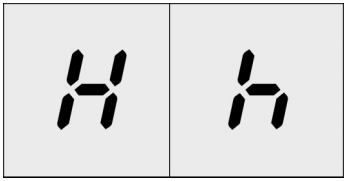
The size last set will be selected automatically when you switch on the hotplate again.

Halogen hotplate



With these hotplates, the heating system reaches full power after just a few seconds.
The halogen heating ring lights up very brightly.
Please do not look at the halogen light since it could blind you.

Residual heat indicator



The hob has a residual heat indicator for each hotplate. It shows which hotplates are still hot. The residual heat indicator has two levels.

If an H appears in the display, the hotplate is still hot. You can, for example, keep a small meal warm or melt chocolate using this heat.
As the hotplate cools down further, the display changes to h. The display remains lit until the hotplate has called down sufficiently.

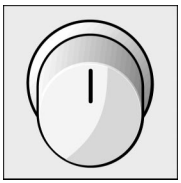
Power failure

The residual heat indicator will automatically come on after a power failure. The display flashes for approximately 30 minutes.
The flashing stops when you briefly switch on the hotplate again.

Cooking

This section describes how to adjust the hotplates. The table shows the heat settings and cooking times for various food dishes. The following tips help to save energy.

Setting procedure



Adjust the heat setting of the hotplate using the hotplate control.

0 = hotplate off
hotplate 1 = lowest setting
hotplate 9 = highest setting

Table

The following table provides a few examples.
The cooking time may vary depending on the type of food, its weight, and quality. Deviations are therefore possible.

	Quantity	Heat setting 9	Ongoing cooking	Ongoing cooking time
Melting				
chocolate, chocolate coating, butter, honey	100 g	-	1 - 2	-
gelatine	1 pck.	-	1 - 2	-
Heating				
canned vegetables	400 g - 800 g	2 - 4 mins.	1 - 2	3 - 6 mins.
clear soup	500 ml - 1 ltr	3 - 4 mins.	7 - 8	2 - 4 mins.
thick soup	500 ml - 1 ltr	2 - 4 mins.	2 - 3	2 - 4 mins.
milk	200 ml - 400 ml	2 - 4 mins.	1 - 2	2 - 3 mins.
Heating and keeping warm				
stew (e.g. lentil stew)	400 g - 800 g	2 - 3 mins.	1 - 2	
milk	500 ml - 1 ltr.	3 - 4 mins.	1 - 2	
Defrosting and heating				
frozen spinach	300 g - 600 g	4 - 5 mins.	2 - 3	5 - 15 mins.
frozen goulash	500 g - 1 kg	4 - 5 mins.	2 - 3	20 - 30 mins.
Simmering				
dumplings, meatballs (1 - 2 ltr. water)	4 - 8 pieces	8 - 12 mins.	4 - 5*	20 - 30 mins.
fish	300 g - 600 g	5 - 8 mins.	4 - 5*	10 - 15 mins.
Cooking				
rice (with double the amount of water)	125 g - 250 g	3 - 4 mins.	2 - 3	15 - 30 mins.
rice pudding (500 ml - 1 ltr. milk)	125 g - 250 g	4 - 6 mins.	1 - 2	25 - 35 mins.
potatoes boiled in their skins with 1 - 3 cups of water	750 g - 1.5 kg	5 - 7 mins.	4 - 5	25 - 30 mins.
boiled potatoes with 1 - 3 cups of water	750 g - 1.5 kg	5 - 7 mins.	4 - 5	15 - 25 mins.
fresh vegetables with 1 - 3 cups of water	500 g - 1 kg	4 - 5 mins.	2 - 3	10 - 20 mins.
pasta (1 - 2 ltr. water)	200 g - 500 g	8 - 12 mins.	6 - 7*	6 - 10 mins.

	Quantity	Heat setting 9	Ongoing cooking	Ongoing cooking time
Roasting				
roulade	4 servings	5 - 8 mins.	4 - 5	50 - 60 mins.
pot roast	1 kg	5 - 8 mins.	4 - 5	80 - 100 mins.
goulash	500 g	6 - 11 mins.	4 - 5	50 - 60 mins.
Roasting				
pancakes (Fladle, Swabian pancakes)		2 - 4 mins.	6 - 7	constant roasting
cutlet, breaded	1 - 2 pieces	2 - 4 mins.	6 - 7	6 - 10 mins.
steak	2 - 3 pieces	2 - 4 mins.	7 - 8	8 - 12 mins.
fish fingers	10 pieces	2 - 4 mins.	6 - 7	8 - 12 mins.
Deep-fat frying (in 1 - 2 ltr. of oil)				
deep-frozen foods	200 g per serving	10 - 15 mins.	8 - 9	constant deep-fat frying
others	400 g per serving	10 - 15 mins.	4 - 5	constant deep-fat frying

* Ongoing cooking without lid

Tips on saving energy

Use saucepans and pots with thick, even bases. Uneven bases increase the cooking time.

The correct saucepan size

Select the correct saucepan size for each hotplate. The diameter of the bases of the saucepans and pots should match the size of the hotplate.
Note: Ovenware manufacturers often give the diameter of the top of the saucepan. It is usually larger than the diameter of the base of the saucepan.

Use a small saucepan for small quantities. A larger, less full saucepan requires more energy.

Using a lid

Saucepans and pots should always be covered with a suitable lid. Cooking without a lid requires much more energy.

Cooking with small quantities of water

Cook with small quantities of water This saves energy and helps vegetables to retain vitamins and minerals.

Lowering the heat setting

Switch down to a lower heat setting in good time.

Using residual heat

For longer cooking times, switch off the hotplate 5 to 10 minutes before the end of the cooking time.

As long as the residual heat indicator H is lit, you can still use the hotplate, which has already been switched off, for warming up or melting food.

Cooking with the electronic boil start control

All four hotplates have an electronic boil start control.

It is no longer necessary to switch on the hotplate, wait for the pan to boil and then change the setting. You simply start with the heat setting you require for simmering.

The hotplate initially heats up using the highest heat setting, and then automatically switches back to the heat setting selected.

The time taken for the hotplate to heat up depends on the simmer setting selected.

Setting procedure

1. Set the desired ongoing cooking level using the hotplate control, e.g. 4.
2. Press the hotplate control.
   The electronic boil start control is activated. A and the ongoing cooking level e.g. 4 flash alternately in the indicator.

After bringing to the boil, the hotplate automatically switches back to ongoing cooking. Only the ongoing cooking level, e.g. 4 remains lit in the indicator.

Time restrictions

To prevent the electronic boil start control from being operated inadvertently, it can only be switched on within 10 seconds of switching on the hotplate.
If you wish to switch it on later:
switch off the hotplate and reset the electronic boil start control.

Tables

Refer to the following table for which appliances the electronic boil start control is suitable for.

The smaller amounts specified are suitable for the smaller hotplates, the larger amounts for the larger hotplates. The values specified are guidelines only.

Appliances with electronic boil start control	Quantity	Heat setting	Cooking time in minutes
Heating			
canned vegetables	400 g - 800 g	A 1 - 2	5 - 10
clear soup	500 ml - 1 ltr.	A 7 - 8	4 - 7
thick soup	500 ml - 1 ltr.	A 2 - 3	3 - 6
milk	200 ml - 400 ml	A 1 - 2	4 - 7
Heating and keeping warm			
stew (e.g. lentil stew)	400 g - 800 g	A 1 - 2	-
Defrosting and heating			
frozen spinach	300 g - 600 g	A 2 - 3	10 - 20
frozen goulash	500 g - 1 kg	A 2 - 3	20 - 30
Simmering			
fish	300 g - 600 g	A 4 - 5*	20 - 25
Cooking			
rice (with double the amount of water)	125 g - 250 g	A 2 - 3	20 - 35
boiled potatoes with 1 - 3 cups of water	750 g - 1.5 kg	A 4 - 5	30 - 40
boiled potatoes with 1 - 3 cups of water	750 g - 1.5 kg	A 4 - 5	20 - 30
fresh vegetables with 1 - 3 cups of water	500 g - 1 kg	A 2 - 3	10 - 20
Roasting			
roulade	4 pieces	A 4 - 5	50 - 60
pot roast	1 kg	A 4 - 5	80 - 100
Roasting			
fish fingers	10 servings	A 6 - 7	8 - 12
pancakes (Fladle, Swabian pancakes)		A 6 - 7	constant roasting
cutlet, breaded	1 - 2 servings	A 6 - 7	8 - 12

Tips on electronic boil start control

Food does not come to the boil using electronic boil start control.

The electronic boil start control is designed for cooking using small quantities of water to preserve nutrients.
Add only approximately 3 cups of water to the food for large hotplates and approximately 2 cups of water for small hotplates.
Cook rice in double quantities of liquid.
Place a lid on the saucepan
Electronic boil start control is not suitable for food which is cooked in large quantities of water (e.g. noodles).

Milk or highly frothy food boils over.

Use a taller saucepan.

Milk burns.

Wash the saucepan out with cold water before filling it.

When frying, the food sticks to the frying pan.

Place food in a pan pre-heated to a sufficient temperature. If the fat is hot enough, it runs in streaks over the sloping base of the pan. Do not add food too early. Meat or potato fritters will break into pieces after a while.

Childproof lock and pause function

Childproof lock

You can lock the hob to prevent children from switching on the hotplates.

Locking the hobs

All hotplates must be switched off. Touch the 🔒 symbol until the indicator light next to the symbol lights up. This takes approximately 4 seconds (switch on time). The indicator light goes out after approximately 10 seconds.

Unlocking

Touch the 🔒 symbol until the indicator light goes out. This will take approximately 4 seconds. The hob is unlocked.

Warning Locked hob

The following happens if you adjust a hotplate on a locked hob:
A 0 flashes in the hotplate indicator, or the residual heat indicator and a 0 flash alternately. The indicator light above the 🔒 symbol lights up.
Switch the hotplate off. Release the lock.

Note

The residual heat will still be displayed even if you have locked the hob.

Reducing the switch on time

You can reduce the switch on time of the child proof lock from 4 to 1 seconds:

The hotplates must be switched off.

1. Set all 4 hotplates to heat setting 2.
2. Switch off all the hotplates one by one from right to left.
3. Select a heat setting on any hotplate and press the hotplate control.
4. Switch off the hotplate control. All the indicators light up briefly. The switch on time has been reduced.

You can also increase the switch on time to 4 seconds again. Proceed in the same manner as for reducing.

Pause function

If you need to go out for a short while, you can interrupt the cooking procedure.

Activating the pause function

Touch the 🔒 symbol briefly. The selected heat setting flashes in the hotplate indicator. Heating is interrupted.

Resuming cooking

Touch the 🔒 symbol again within 3 minutes. The hotplates heat up again.

Exceeding the pause time

A 0 flashes in the indicator after 3 minutes. Switch off the hotplates and reset.

Important

The child-proof lock/pause function could be activated or deactivated unintentionally when the appliance is cleaned using water or as a result of spillages or objects covering the 🔒 symbol.

Automatic time restrictions

If a hotplate is in constant use for a long time without the setting being changed, the automatic time restriction will be activated.

The hotplate heating is interrupted.
0 flashes in the hotplate indicator.

Switch off the hotplate.

The time at which the time restriction is activated depends on the heat setting (1 to 10 hours).

You can switch the hotplate on again at any time.

Care and cleaning

Do not use high pressure cleaners or steam jets.

Care

Clean your hob using a protective/care product for glass ceramic. It coats the cooking surface with a glossy, dirt-repellent film. Your hob will continue to look good for a long time. It makes cleaning easier.

Cleaning glass ceramic

Clean the hob after each use. This prevents food from being burnt into the hob surface.

Cleaning agents

Only use cleaning agents which are suitable for glass ceramic, e.g. CERA CLEAN, cera-fix, Sidol for ceran + steel.

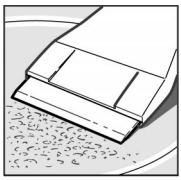
Water marks can also be removed using lemon juice or vinegar.

Unsuitable cleaning agents

Do not use:
Abrasive sponges, scouring pads or aggressive cleaning agents, such as oven spray or stain remover.

Glass scraper

You can remove thick dirt best with a glass scraper.



Remove the protective cover from the glass scraper. Only use the blade to clean the glass ceramic surface. The casing may scratch the ceramic surface.

The blade is very sharp. There is a risk of injury. Cover the blade after cleaning.

Replace damaged blades immediately.

How to clean the glass ceramic cooking surface

Use the glass scraper to remove food residues and grease splashes.
Use a cleaning product and kitchen towel to clean the surface when it is luke warm. If the surface is still too hot it can become stained.
Wipe the surface and rub dry with a soft cloth.

Shimmering metallic discoloration

Discoloration is caused by pan abrasion or the use of unsuitable cleaning agents. This is very difficult to remove. Use Hob Clean or Sidol for ceran + steel. Our after-sales service can remove discoloration, but will charge for this service.

Control panels

Always keep the control panels clean and dry. Food residues and spills can impair the function of the control panels.

Cleaning the hob surround

Only use warm soapy water.
Do not use anything which is sharp or abrasive. The glass scraper is unsuitable. The hob surround could be damaged.

Neither lemon juice nor vinegar should be used for cleaning the hob surround.
This could result in matt patches.

Troubleshooting

Malfunctions often have simple explanations. Please read the following instructions before calling the after-sales service:

The hob does not work

Check that the fuses for the hob are okay. Check if there is a power cut.

0 flashes in the display

The automatic time limiter was activated. Switch off the hotplate.

The indicator light in a control panel is flashing

The control panel is very dirty or there is an object on the control panel. Wipe the control panel thoroughly or remove the object.

Repairs

Repairs should only be carried out by fully trained after-sales service technicians.

Incorrect repairs may result in serious injury to the user.

If an F and a figure flash alternately in the display, your hob has detected a fault. The following table contains the remedies.

Display	Fault	Action
F0	The display is faulty.	Switch the oven off and back on again using the household fuse or the circuit breaker in the fuse box. Call the after-sales service if the display appears again.
F4 All hotplates are switched off	The childproof lock is faulty.	Switch the oven off and back on again using the household fuse or the circuit breaker in the fuse box. Call the after-sales service if the display appears again. You can still use the oven if the childproof lock is faulty.
F5	The poly box is faulty.	Switch the oven off and back on again using the household fuse or the circuit breaker in the fuse box. Call the after-sales service if the display appears again.

Notes:

The hotplate temperature is controlled by switching the heat on and off, this means that it is not always possible to see the red, glowing heat. If you select a low heat setting, the heat will switch off more often than at higher heat settings. The heat also switches on and off at the highest setting.

There may be a gentle buzzing as the hotplates heat up.
The heat may show differently on the individual hotplates. Depending on the angle of vision, the heat may appear to spread beyond the marked boundary of the hotplate.
These are technical features and do not influence quality or function.

Depending on the surface area of the plate, a small, uneven gap may form between the plate and the hob. For this reason, the hob has an elastic seal all the way round.

Glass ceramic may display surface area irregularities inherent to the material. The glassy surface area of the hob means that tiny blisters with a diameter of less than 1 mm appear with varying intensity. They do not affect the function or the durability of the glass ceramic hob.

Packaging and old appliances

Disposing in an environmentally-responsible manner

Unpack the appliance and dispose of the packaging in an environmentally-responsible manner.

This appliance is labelled in accordance with the European Directive 2002/96/EC concerning used electrical and electronic appliances (waste electrical and electronic equipment – WEEE).

The guideline determines the framework for the return and recycling of used appliances as applicable.

After-sales service

Our after-sales service is there for you if your hob should need to be repaired. You will find the address and telephone number of your nearest after-sales service centre in the phone book. The after-sales service centres listed will also be happy to advise you of a service point in your local area.

E number and FD number

Please quote the E number (product number) and the FD number (production number) of your appliance when contacting the after-sales service.
The rating plate bearing these numbers can be found in the appliance booklet.

Acrylamide in food

Experts are currently discussing how dangerous acrylamide in food can be. We have compiled this information sheet for you on the basis of current research.

Where does acrylamide come from?

Acrylamide in food does not come from external contamination. It is formed in the food itself during preparation - provided that the food contains carbohydrate and protein. Exactly how this happens has not yet been completely explained. However, it appears that the acrylamide content is strongly influenced by:

high temperatures
a low water content in food
intensive browning of the food.

What sort of foods are affected?

Acrylamide forms mostly in grain and potato products that are prepared at high temperatures, e.g.:

crisps, chips,
toast, rolls, bread,
baked goods made from shortcrust pastry (speciality biscuits and cakes).

What can you do?

You can avoid high levels of acrylamide when baking, frying and grilling.
The following recommendations were published by AID[1] and BMVEL[2] to help you minimise acrylamide levels:

In general:

If possible, use fresh potatoes for roasting and frying. They should not have any green or sprouting areas. Do not store potatoes below 8 °C.

Cook food only until it is golden brown - "brown rather than burn"

Bake, fry or deep-fry for as short a time as possible.

The larger and thicker the food is, the less acrylamide it contains.

Deep–fat frying

The frying temperature should not exceed 175 °C. Check the temperature using an external fat frying thermometer.

Only deep-fat fry for a short time (until the food is golden brown).

Be aware of the fried product to fat ratio. It should be 1:10 to a maximum of 1:15, e.g. approx. 100 g chips to 1.5 l cooking oil.

Soak fresh potato pieces for one hour before deep-fat frying.

Shallow frying

Make fried potatoes using cooked potatoes. If you fry raw potatoes, use margarine instead of oil, or oil with a little margarine.

A surface thermometer is useful for checking the surface temperature in the frying pan (e.g. order number 0900.0519 from Testo). Our advice: Heat the frying pan on heat setting 9. When the pan has reached a temperature of 150 °C, switch back to the required high heat setting.

[1] AID "Acrylamide" information leaflet, published by AID (German Evaluation and Information Service for Nutrition, Agriculture and Forestry) and BMVEL (German Federal Ministry for Consumer Protection, Food and Agriculture), as at 12/02, Internet: http://www.aid.de.

[2] BMVEL press release 365, 4.12.2002, Internet:http://www.verbraucherministerium.de.

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