

Material Number: 9000353880

Version: 01

Production License Code: XK00-005-00419



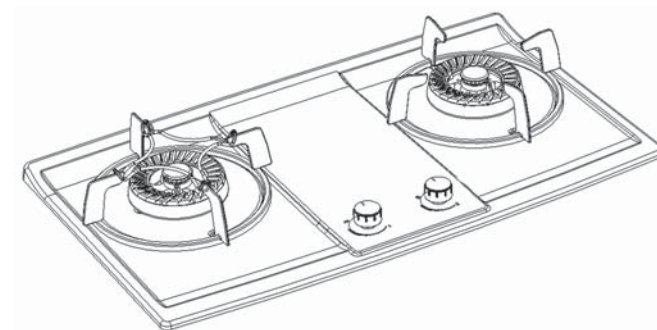
Quality Safety



BOSCH

Built-in Gas Hobs

Operation and Installation Instruction



PED7250Ax

PED7230Ax



Preface

Thank you for choosing Bosch cooking appliance!

Please read this user manual carefully before you use the product.

Any failure or loss derived from the improper use or installation different from that which is stipulated in this user's manual is not covered by our product's warranty. Please keep all documents in a safe place for future reference. If you have any questions, please contact our local service center or Bosch dealer.

Key Information	Packaging of new hob	2
	Disposal of old hob	2
	Before using new hob	2
	Safety precautions	3
	Operation method	4
Product Introduction	Product specifications	5
	Product standards	5
	Product features	6
Installation Instructions	Placement location	7
	Safety precautions	8
	Countertop tapping	9
	Connecting the gas pipeline	10
	Gas leak detection	11
	Installing the battery	11
	Installing the supports, caps and burners	11
	Adjusting the throttle	12
Operation Instructions	Getting familiar with your new hob	13
	Flame power adjustment	15
Cleaning, Care and Maintenance	Cleaning and maintaining your hob	16
	Analysis and remedy of common trouble	17
Customer Service	Tips with good intentions	18
	Warranty statement	19

Attention:

BSH Home Appliances (Jiangsu) Co., Ltd. reserves the right of final explanation of all the contents in the *Operation and Installation Instruction*. The contents of this user manual are subject to change without notice.

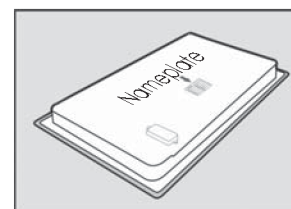
Packaging of new hob

- All the packaging materials are environmental friendly and recyclable. When you are disposing of these packaging materials, please do so in such a way that protects the environment and minimizes waste.
- Do not allow children to play with the thin film or packaging case to avoid suffocation or accidents.

Disposal of old hob

- The old hob should be taken to a recycling center where it can be disposed of in a way which protects the environment.
- Old hobs contain useful materials that can be recycled. Discarded old electrical appliances can be hazardous to the environment. Please do your part to help the environment, take old hobs to your local electronic and battery recycling center to ensure proper disposal.

Before using new hob



- The gas hob is specially designed for the purpose of home cooking, so that it should be installed in the kitchen for personal use.
- If you find the hob is visibly damaged, do not connect it to the gas. Contact your local service center or dealer immediately.
- Please check the nameplate on your gas hob carefully, and make sure that the gas type you intend to use corresponds with that specified on the nameplate (which is located at back of the gas hob). If you have any doubts, please contact our local service center.
- Only technicians who have received professional training and have the proper qualifications for gas hob maintenance can perform the installation and maintenance of the gas hob.
- As the end-user, you are responsible for the regular maintenance and proper use of your gas hob.

Safety precautions

Before first use:

- Please clean the hob and its accessories thoroughly. This will remove the 'new' smell of the hob.
- Before using, ensure the gas pipeline, knobs, burner heads and caps, and supports have been mounted correctly. Then, open the indoor gas valve.
- The first ignition (or the ignition after it has been left unused for a long time) may be difficult, as there is residual air in the gas pipeline, it may be difficult to light the burner. This is a normal phenomenon. Please repeat the igniting operations, until the hob has ignited properly.

When in use:

- When cooking with the gas hob, do not leave it unattended. Be sure to turn it off completely before leaving the room.
- **Gas Poisoning Warning!**
When using the hob, make sure to open the windows or turn on the exhaust fan of the range hood so as to keep good ventilation around the gas hob. The gas hob may cause carbon monoxide poisoning if you are using the gas hob in a closed kitchen with no ventilation for an extended time.
- **Explosion Warning!**
If you detect a gas leakage while operating the gas hob, you should turn off the indoor main gas valve immediately, and then open windows and doors for ventilation. Do not use matches or lighters at this time. Creating a flame at this time may ignite the residual gas in the room and cause an explosion. In the case of a leak, please contact your local service center immediately.
- **Fire Warning!**
Do not ignite the gas hob for heating when no pan is placed on it or there is no food in the pan. This may cause the extraction hood over the gas hob to be damaged by overheating, or cause a fire if the residual grease in the extraction hood is ignited.
- **Burn risk!**
Do not let unattended children use or stand next to the gas hob while it is in use. Once the gas hob has been turned off, it remains very hot and dangerous for several minutes. At this time to avoid burn injury, avoid touching the hot burners, supports and the faceplate around the burners with your hands or other part of your body.

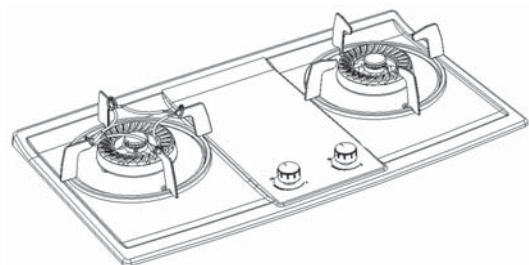
- When using the gas hob, please protect it from external air, which may cause uneven heating or even extinguish the flame.
- When cooking food with vegetable oil and animal fats, you should be careful to avoid fires caused by overheating oil in the pan.
- If fire is caused by overheated oil, immediately use an iron pot lid or other large metal object to cover the fire, in order to cut off the air needed for burning, and then turn off the indoor gas valve. In order to avoid accidents, never use water to put out oil or grease fire.
- Whenever the burner is extinguished for any reason, you should turn it off and wait for at least 1 minute before re-igniting the burner.
- Normal operation of gas hob should not cause any unusual noise. If you have any doubts, please contact our local service center.

After use:

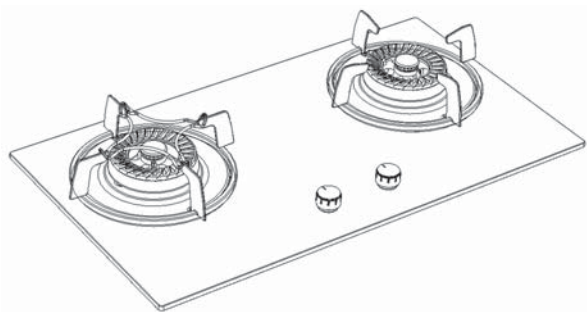
- Remember to close the gas shut-off valve on the indoor pipeline, when you have finished using the gas hob.
- Using a pan with a thick base can improve heat distribution, especially for small flames when the gas is on a low setting. The higher efficiency of gas hob is achieved when the bigger size of pan is used. This can also save energy.
- Each time you move the pan away for a short time, turn the burner to the small-flame position or off. Even when you do other operations near the hob this is a good rule of thumb. Turning the flame down will also reduce the risk of burning, save gas, and reduce pollution.
- When you use a big stove, ensure there is a distance of at least 25 mm between the stove and the surrounding combustible materials. In addition the distance between the knob and the stove should be at least 50 mm.

Operation method

- Product specifications**
- The “x” in the product code E-Number indicates the different gas resources in various districts. Please refer to the corresponding product models and applicable gas types on the nameplate.



PED7250Ax



PED7230Ax

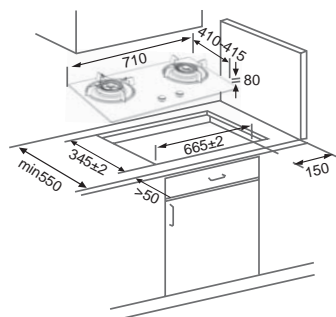
- Product standards**
- The product conforms to the following national standards:
GB 16410-1996 Domestic Gas Appliances

Product features

- **Safety design:**
Each burner of this gas hob is equipped with a safety device for the quick cut-off of the gas.
In the case of a flameout while you are cooking, the safety device will be engaged immediately to cut off the gas supply, thus avoiding any accidents.
- **Easy operation:**
 - 230-degree super-wide range control provides for elaborate cooking of many different styles
 - Processing techniques of Germany, small flame of internal ring, independent burner knobs for increased control
 - Bosch patented design: the support and the hob surface are clipped together securely.
- **Convenient cleaning:**
 - Closed faceplate with exquisite craftsmanship.
 - Through powerful German design techniques all parts around the stove-head can be detached for easy cleaning.
 - Elaborate flame focusing system for burner and cap. Stable flame supports. After cleaning easy-to-install part ensure an efficient cooking design

Placement location

- The gas hob should only be installed in the home kitchen. Do not use it in other rooms.
- Do not place the gas hob in the bathroom, bedroom, basement, or use it where there are flammable, explosive, corrosive materials in close proximity.
- Do not place flammable or explosive objects on or around the gas hob, e.g. curtains.
- If there are flammable materials around the gas hob, e.g. wooden wall, low ceiling etc, then the gas hob should be installed at a distance of at least 150 mm from the wooden wall, and at least 1 m to the kitchen ceiling. Fire-proof materials around the gas hob are not limited by this distance.
- If the gas hob operates at a high flame for a long time, then those appliances without cooling devices such as disinfecting cabinet, baking oven and microwave oven are not allowed to be installed under the gas hob. (Bosch has precisely designed cooling fan devices for all down-placed products, which will be installed under the gas hob. Therefore it is essential to design the placement location and proper ventilation of appliances according to the installation specifications in the operation manual.)
- Do not install the gas hob above an oven, refrigerator, cooler, dish washer or other similar electric kitchen appliances, as all of these provide poor ventilation. Below the gas hob, install only the common drawers made of flame retardant materials. Do not place heat sensitive or inflammable objects in the drawers or cupboards below the hob, e.g. aerosols or shoeshine chemicals.
- If the gas hob is installed in a cupboard, the plastic coating and adhesive bonded panel in it should be subjected to the fire-resistant glue treatment (heat resistant glue); otherwise, deformation or scaling of the surface-layers will likely result, especially on the sides of the cupboard.



- The gas hob should be installed on a solid, flat countertop. Countertop's minimum thickness should be more than 16mm. Countertop's minimum width should be more than 550mm, however the width of 600mm is recommended. For the size of the cutout in the countertop, please refer to the cutout template provided with the gas hob.
- The cupboard should have a tapping size which meets the ventilation requirements with the air opening covers an area of no less than 30cm²; otherwise the lack of ventilation might cause an explosion resulting from the leakage of gas.

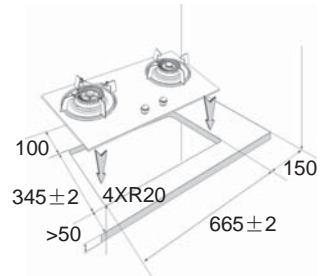
Safety precautions

- The installation, maintenance and gas replacement for the gas hob should be performed by technicians with the proper qualifications for gas maintenance.
- Before installation, please carefully check the nameplate on your gas hob. Make sure that the gas type specified on the nameplate (which is stuck to the back shell) is consistent with the gas that you are currently using. If you have any doubts on whether the gas you are using is consistent, please contact our local service center.
- Install a special gas valve between the indoor gas connecting hose and the gas hob, in order to switch on and off the gas. It should be installed in such a way that in the event an accident occurs during operation period, the user will be able to immediately shut off the gas. In addition, please ensure this gas valve can be accessed at all times.
- Please install the domestic range hood with an exhaust pipe in accordance with the local gas hob installation specifications and guides. This type of range hood should have a distance of at least 750 mm to the gas hob.
- The gas hob has already received a strict gas leakage performance test before leaving the factory. Do not dismantle the faceplate or inner parts during the installation of the gas hob, to avoid later gas poisoning and fire risk resulting from the gas leakage during the operation.
- For the throttle adjustment, it is recommended that the gas burner settings should be adjusted to the optimal condition by the technicians during the installation and debugging period, according to the throttle adjustment method on page 12.
- Please ensure that when the installation is completed, the gas hose connected to the gas hob does not touch any movable object in the cupboard, e.g. drawer, roller etc.
- If your gas hob requires gas replacement, please contact our service center (at least one week in advance), and we will make the proper adjustments to your gas hob as soon as possible.

Or

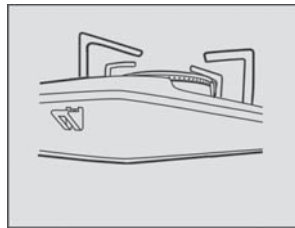
If you move house and intend to reinstall the gas hob to your new house, please check if the gas supply for your new house is consistent with the gas specified on the nameplate. If it is not consistent, then contact our local service center and we will make the proper adjustments to your gas hob as soon as possible.

Countertop tapping



- Please perform the tapping on the countertop according to the tapping template (keeping to the installation size of all the five types of products). To ensure the proper connection of the gas hose, a space of at least 100 mm height should be kept available below the gas hob.

- To ensure the stable placement of the gas hob, please ensure that after the tapping, the vertical sides of the installation site are smooth.



- Follow the method shown in the illustration on the left and clamp the four spring sheets supplied with the product to the corresponding four installation positions on the back shell.

- After installing the spring sheets, push the entire gas hob firmly into the cutout opening in the countertop, until the outside rim of the gas hob is seated closely on the countertop.

Connecting the gas pipeline

- The connection of the gas hob must be performed by a qualified technician, and it must conform with the legal provisions and connection requirements issued by the local gas management department. The indoor gas hose behind the gas meter and the air inlet at the bottom of the gas hob should be connected with a metal bellows and a special rubber hose whose length should not exceed 1.5 m. (Please refer to the appropriate requirements filed by the local gas management department. You can consult and purchase the special hose and hose clip at counters for gas products in hardware stores).

- Attention!** We recommend you to use the metal bellows as the gas connecting hose. If the other appliances are installed under the hob such as a disinfecting cabinet, baking oven and microwave oven etc, a gas rubber hose must not be used for the gas connection.

Using a gas rubber hose for the gas connection

- The two ends of the gas hose are connected to the gas hob and the indoor gas valve (the inside diameter of the gas hose is 9.5 mm).

- When connecting the gas hose, you must insert the gas hose until it reaches the red line on the multi-directional air inlet, and secure it firmly in position with a hose clip.

- After the connection is completed, please make sure that the gas hose is not flattened, twisted or bent by any other objects. Then smear soap suds all over the hose connection part; and check each part of the connection hose carefully to see if there is any leakage.

- We recommend that you perform an airtight test for the gas hob periodically while it is in use, or else replace the gas hose annually.

- Do not leave the gas hose in a high temperature area or put it contact with any high temperature section of the gas hob.

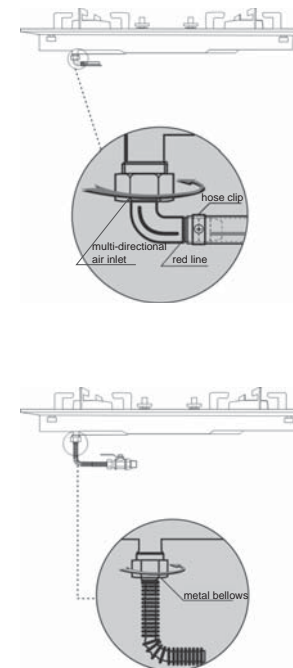
Using metal bellows for the gas connection

- The specification of the external thread of the gas hob's joint is 1/2".

- The two ends of the metal bellows are connected to the gas hob and the indoor gas valve respectively with the mobile nuts. The connection parts are filled with corrosion-resistant rubber-seal rings.

- A special gas valve must be set between the indoor gas hose and the gas hob's bellows for easy operation. After you turn off the gas hob this valve should also be closed.

- After the connection is completed, you should use the soap suds to check each connection part carefully to make sure there is no leakage.

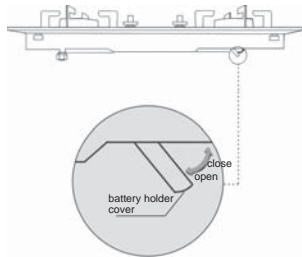


Gas leak detection

- Leak detection by suds
Attention!
After the gas pipeline connection has been completed, the leak detection test must be performed.

Smear the suds on each connection part with a soft brush, and then open the gas valve to check carefully if there are any bubbles along the connection. If bubbles appear, please close the gas valve immediately, and adjust the air inlet connection until no bubbles appear.

Installing the battery

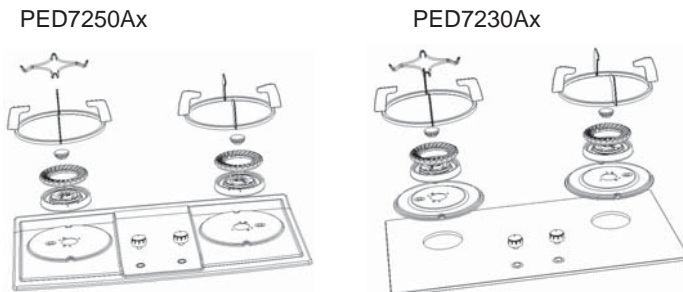


- The battery holder cover is located at the bottom right in the front side of the product's back shell (As shown in the left picture). Put one provided D battery into the holder correctly according to the indication of the positive and negative electrodes. To ensure the ignition system effective for a long term, please use high-energy alkaline batteries. If you find the ignition frequency slows during operation, please replace the battery. The gas hob's battery life depends on the user's habits and battery quality.

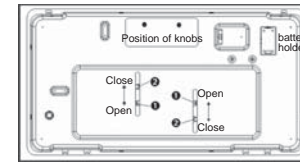
Installing the supports, caps and burners

- As shown in the picture below, please make sure that the knobs, burner heads, caps and supports have been installed correctly. Incorrect installation will seriously affect the normal use of the product and shorten its life-span.

When installing the supports and burners, the user should (especially for PED7250Ax) pay attention that the protruding objects on the bottom of the supports and burners are aligned with the stretching slot on the faceplate, which is used for maintenance. If you place the components randomly or rotate them for hob placement, the stainless steel faceplate may be scratched. The appearance damage of the gas hob resulting from such installation operations is not covered by our warranty.



Adjusting the throttle



- To ensure an optimum burning condition, the primary air throttle handle (located at the back of the hob) should be adjusted until the flame becomes blue.

- Gas hob with two burners
The throttle handle ① controls the external ring caps respectively
The throttle handle ② controls the internal ring caps respectively

- If you are using artificial gas, please make adjustments as below when the following symptoms occur during use.

Symptom	Solution
Backfire noise resulting from turning the gas on and off repeatedly	Turn down the throttle
The internal flame goes out when you adjust the flame from the maximum setting to the minimum setting (no flame on external ring cap and a small flame on the internal ring cap) according to the five-stage flame power indication chart (see page 15).	Turn down the internal ring throttle

- If you are using liquefied gas, please make adjustments as below when the following symptoms occur during use.

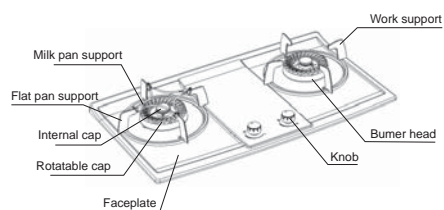
Symptom	Solution
The root of the flame is separated from the flame hole or the inner flame has a yellow or orange flame tip.	Adjust the throttle properly (until the flame turns from yellow to blue).

Operation Instructions

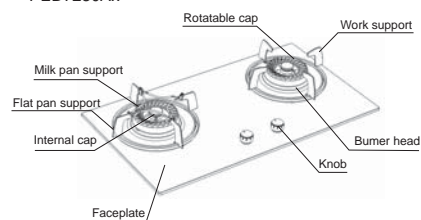
Getting familiar with your new hob

Top view of product

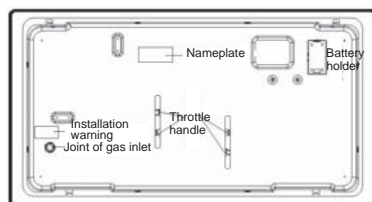
PED7250Ax



PED7230Ax



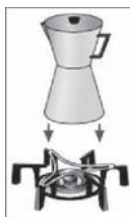
Back view of product



Foam seal

Milk pan support along with the product

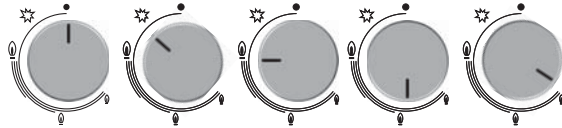
When you use a small pot / pan for cooking, we recommend you to use "milk pan support" which will provide a better cooking effect.



Operation Instructions

Product Code	PED7250Ax				PED7230Ax		
Specification	x means the different gas sources from various areas. Please refer to the corresponding product models and the appropriate types on the nameplate.						
Product appearance							
Model	JZ12T.2-BB13	JZ20Y.2-BB13	JZ12T.2-BB13X	JZ5R.2-BB13X	JZ12T.2-BB13	JZ20Y.2-BB13	JZ12T.2-BB13X
Appropriate gas	Natural gas	Liquefied petroleum gas	Natural gas (Shanghai)	Town gas (Shanghai)	Natural gas	Liquefied petroleum gas	Natural gas (Shanghai)
Gas pressure kPa	2.0	2.8	2.0	1.0	2.0	2.8	2.0
Heat load of burner kW	0.3-3.6						
Dimensions (W x D x H) mm	710X415X155				710X400X155		
Sizes of tapping (W x D) mm	665X345 Fillet 4XR20						
Minimum thickness of installation table mm	> 16						
Specification of external air inlet pipe	ID Φ 9.5mm corrosion-proof rubber hose (special for gas) or 1/2" standard bellows (only for Shanghai)						
Net weight kg	11				15		
Gross weight kg	13				17		
Faceplate	High-quality 240# brushed stainless steel				High-performance toughened glass		

Flame power adjustment ■ To adjust the flame properly, refer to the following five-stage flame power indication chart and function descriptions. Select your flame as desired.



■ To ignite the burner: when the knob is turned to OFF (0 degree), press it down and turn it to the ignition position (30-40 degrees counterclockwise). The flame of the internal ring should ignite; while the flame of the external ring is not yet ignited. Press the knob down, turn it and hold it down for 3-5 seconds before releasing. If the flame goes out after the release, return the knob to the vertical OFF (0 degree) position and repeat the above ignition operations.

■ **Special instructions:**

- The ignition position at - 40 degrees is to prevent any sudden gas release at the moment of ignition, which may briefly cause an excessively high flame, especially with artificial gas.

When the burner head is ignited, first release the knob, and then turn the knob counterclockwise to the maximum flame position (90 degrees). The flame will spread from the internal gas ring to the external ring rapidly.

When the knob is turned counterclockwise from the maximum flame position (90 degrees) to the medium flame position (170 degrees), the small flame of the internal ring will remain unchanged, but the flame of the external ring will gradually be extinguished.

When the knob is turned counterclockwise from the medium flame position (170 degrees) to the minimum flame position (230 degrees), the small flame of the internal ring will gradually be reduced to the lowest setting.

■ **Special instructions**

- The innovative 230-degree dial wide range of flame power adjustment ensures the flame power can be adjusted conveniently and accurately to suit your needs.

After you are finished using the gas hob, please turn the knob clockwise to OFF (0 degree), the flame will then go out. For your safety, please close the gas valve on the indoor pipeline after using the gas hob.

Cleaning and maintaining your hob

■ Before cleaning the gas hob, you must switch off the indoor gas valve, and wait until the gas hob has cooled. When cleaning, do not dismantle the safety device or sealed parts of the hob.

■ Clean the faceplate of the gas hob
Use soft gauze and soap suds (or special cleansers) to clean and maintain the hob faceplate. If you want to remove the fingerprints left on the stainless steel surface, you should use a 3M cleanser. It is best not to use a chloride-based cleanser to clean the glass.

■ Do not use a granular cleanser (decontamination powder) or steel wool to clean the faceplate. These may cause scratches on the surface of the hob.

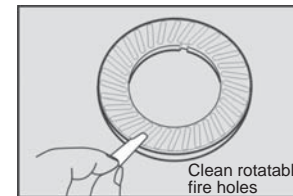
■ Clean the pan supports of the gas hob
Clean the pan supports with a soft, gauze cloth and a solution of cleanser and hot water.

■ Do not use an acid based cleanser (lemonade, vinegar etc.) to wash the enamel surfaces.

■ Attention: When dismantling the cap parts prior to cleaning and re-assembling them after cleaning, take care when touching the ignition needle as it is made of ceramic material which can be easily damaged.

■ Clean the burners of the gas hob (recommended frequency: cleaning at least once a month)
Use a soft brush to remove the dirt on the surface of the burner base, ignition electrodes and thermal couples. (Do not touch ignition electrodes during cleaning)

Do not use a granular cleanser (decontamination powder), sharp objects, steel wool or a knife etc, to remove the dirt left on the burner. These objects and cleaners can damage the safety devices of the gas hob, or may wear down the component surface, thus shortening the life-span of the product.



■ Clean the caps of the gas hob (recommended frequency: cleaning at least once a month)
When you are using the hob, you may find the flame is not uniform or some burner openings have no flame. In such cases, after the hob has cooled, you should take off the cap and use an iron slice and steel needle to remove the dirt and carbon blocking the burner openings.

Do not wash the cap directly with water (as the bubbles may temporarily block the fire holes). Do not use a hard object to wipe the burner surface with an inorganic water-based and temperature-resistant coating, which could result in permanent damage to the black surface.

■ After cleaning is complete, please re-install the supports, burner heads and caps in accordance with the illustration (see page 11). Any permanent scratches on the top sheet surface caused by incorrect installation are not covered by the warranty.

■ Once the surfaces of the products are cleaned, please ensure they are put back correctly, otherwise the electronic ignition devices may not work normally. The heads and caps should be dried completely prior to putting them back.

■ Pan supports must be dried completely prior to putting them back in.

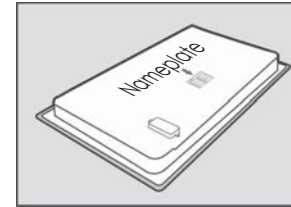
Analysis and remedy of common trouble


Symptom	Cause		Solution
Ignition electrode does not spark	Battery	The dry battery not installed, poor contact or incorrect installation of batteries	Re-install correctly
	Burner	Not installed properly	Re-install correctly
	Ignition electrode	Ignition electrode and ignition position are not aligned	Adjust discharge distance to 3-4mm
The ignition is wet, especially in the rainy season; or due to food overflows		Use a dry, soft cloth to dry the ignition electrode	
Flame goes out when the ignition knob is released	Safety valve	The pressing and holding time was too short for the safety solenoid valve to work properly	Ignite again and hold the knob down for 3-5 seconds after the flame has ignited
When you are using the pulse ignition, the hob is not ignited or has difficulty igniting	Gas valve	Not open or not completely open	Ensure the gas valve is fully open
	Gas pipeline	There is air in the gas pipeline	Repeat the ignition operation until the gas ignites
	Burner	Caps or other components are not installed correctly	Re-install these components correctly
	Burner	The burner holes on the cap are blocked so that the gas cannot flow out normally	Clean the dirt out of the burner holes
	Ignition electrode	It is wet, or dirty due to the overflowing food	Dry the ignition electrode and remove any dirt
	Gas connecting hose	The gas hose is flattened or blocked	Adjust or replace the gas connecting hose
	Battery	Insufficient energy	Replace the battery
A loud noise when igniting/burning	Cap	Not installed properly	Re-install correctly
Gas hob flames out easily or a raised flame	Throttle	Too much air allowed in the inlet	Re-adjust the throttle and flame
Flame out when using the thermal couple	Thermal couple	The protection sensor is dirty	Clean thermal couple
		The fitting position deviates from the small flame range	Adjust the position of thermal couple properly
Short and weak flame	Gas source	Gas in gas cylinder is used up; the opening angle of the pressure reducing valve is too small; otherwise there is a problem with the gas pressure in the pipeline	Replace the gas cylinder or adjust the pressure reducing valve
Long and yellow flames	Throttle	Too small air inlet	Re-adjust the throttle and flame
	Cap	Some flame holes are blocked	Clean out the dirt in the flame holes
Unstable burning	Cap	Not installed properly	Re-install the cap correctly
Smell	Leakage	The gas rubber hose is aging, cracked, fractured or falling off	Replace the gas connecting hose
		The main burner is not igniting	Re-ignite after the smell disappears.

Tips with good intention

Danger!

- Only technicians that have received professional training and have a qualification for gas hob maintenance may carry out maintenance operations for the gas hob. No other person should maintain the gas hob, to avoid serious consequences.
- When your gas hob is malfunctioning, before contacting our customer service, please refer to "Analysis and Remedy of Common Trouble" first. If technicians visit your house and find there is nothing wrong with your gas hob, you will have to pay the relevant cost, even if it is during the warranty period.
- If you cannot find solution to a problem, turn off the gas valve and contact our customer service center.
- When you contact our customer service, please state the product code (E-Number), the type of gas you are using (Gas Type), the model number (Model), the production date (FD) and the serial number (SER No.). This information can help us to offer better service, and save you unnecessary cost. You will find this information on the nameplate of the gas hob, as illustrated below.



		BOSCH		BSH Electrical Appliances (Jiangsu) Co., Ltd	
Production Licence Number			Xk00-005-00419		
Appl. Name		Color/Material			
E- Number		Model			
Gas Type		Gas Pressure (Pa)			
Heat Input (kw)	Left 3.6	Right 3.6	Ignition Power (V)	DC 1.5	
FD		Serial No.			

Warranty statement

- We provide one year warranty on the main components of the gas hob.
- The commodities with a discount sold by the factory or commercial unit have the same warranty as above. However, we do not offer warranty on those components sold at less than retail price.
- During the warranty period, the user must hold the valid purchase invoice and the warranty card specified by the factory for the repairs. The valid warranty period is dated from the issuing of the invoice. The user shall properly keep his/her warranty card and purchase invoice, both of which must be shown for the repair to be completed. If the user has lost his/her purchase invoice, the warranty period will be calculated from the product's production date.
- The following items are not covered by the free warranty, and will be charged for repair:
 - Damage caused by the user's improper transportation, installation, usage and maintenance.
 - The product is disassembled and repaired by the user or a non-factory-specified repair station.
 - Without warranty card and valid purchase invoice.
 - The series number on the warranty card is altered or is not consistent with the product to be repaired.
 - The product is damaged by force.
 - The free warranty period has expired.
 - All damages and losses for the product due to usage conditions, such as: the supply of power and water, temperature and humidity, which are not controllable by our company, shall not be covered by the free warranty.