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IMPORTANT INFORMATION FOR CORRECT DISPOSAL OF THE PRODUCT IN ACCORDANCEWITH EC DIRECTIVE 2002/96/EC.

At the end of its working life, the product must not be disposed of as urban waste.
It must be taken to a special local authority differentiated waste collection centre or to a dealer providing this service.
Disposing of a household appliance separately avoids possible negative consequences for the environment and health deriving from inappropriate disposal and enables the constituent materials to be recovered to obtain significant savings in energy and resources. As a reminder of the need to dispose of household appliances separately, the product is marked with a crossed-outwheeled dustbin.

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SINCE 1982

Gas Water Heater

INSTRUCTION MANUAL

Read this manual carefully before operation
Pictures in this manual are for reference only, the product in kind prevail.

Model: CGGWH6B, CGGWH6S

This instruction manual contains important information & recommendations that we would ask you to comply with to obtain best results form your products.

CG CHAUDHARY® GROUP
Touching life everyday

Our company is deeply indebted to your choice of our product household gas quick water heater! This product is designed and manufactured specially based on our national standard GB6932-2001 and its performance index agrees with the requirement of the national standard. Read this instruction carefully before installation and use to grasp the correct way of installing and using so as to enjoy fully its superior performance which will bring convenience and new enjoyment to your life.

Please keep this instruction well for future reference

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Special advice

While working, the burning of gas in the water heater will consume a lot of air to produce carbon monoxide and the inhale of excessive carbon monoxide will cause damage to the human body. Therefore, the user must install and use it strictly based on the requirements in this instruction to achieve the effect of safety. Any bad results due to installation and use in disagreement with this instruction will not produce any legal responsibility in the part of our company.

Performance and characteristics

◆ Common characteristics

This series of products is characterized by its simple appearance and easy operation with clean energy as the fuel which can provide continuously comfortable hot water to be suitable for washing such as shower or rinsing.

Performance and characteristics:

1.Automatic water control: it will light automatically as soon as the water is infused and shut automatically as soon as the water is closed. The water temperature can be adjusted freely, which is operated conveniently and simply.

2.High-efficiency burning system: Both the burner and the heat exchanger have innovative designs with a good burning performance and a high heat efficiency.

3.Double needle lighted: the rate of being lighted is high and the flame can spread quickly.

4.Light-delaying design: the structure of the valve and the lighting controller are both designed with discharging and lighting before infusing gas and burning, which can avoid explosion while burning.

5.Season shift design: with the changing season, different firepower can be chosen to get more suitable temperature so as to save gas.

6.Low water pressure start: when the water pressure is too low or the flux is a little small, it can start dependently to be more suitable for high-storey buildings and low water pressure area.

7.Flux stabilizing device: in the process of using the flux of hot water is not affected by water pressure and the water temperature and flux can be stable.

8.Temperature display function: it can display temperature to make you understand your requirement.

9.Perfect safety protection measures

Common troubles and trouble-shooting

Troubles / Cause	Fire goes out in application	Not lighted after opening infall valve	Explosion when igniting	Yellow flame with smoke	Abnormal flame with strange smell	Fire with abnormal sound	Water not hot in high temperature position	Water too hot in low temperature position	Fire goes out in low temperature position	Fire does not go out when shutting the hot water valve	Trouble-shooting methods
Gas overall valve is not opened		●									Turn on the gas overall valve or change new gas container
Gas valve is half opened	●		●				●				Turn on the gas overall valve
There is air in the gas pipe		●									Turn on hot water valve with intervals until it ignite
Gas supply pressure too high			●			●		●			Check gas source adjustm ent valve
Gas supply pressure too low	●						●				
Water supply valve is not opened		●									Turn on the water supply overall valve
Freeze		●									Reuse until it melts
Insufficient cold water supply pressure	●	●							●		The maintenance man check water pressure
Wrong water temperature adjustment method							●	●			Turn the water temperature and firepower knob
Insufficient fre sh air supply				●	●						Improve ventilation to ensure fresh air
Dry battery power off		●									Change batteries
The burner blocked				●	●	●					Contact after-sale service center
The heat exchanger blocked	●			●	●						Ibid.
Trouble with water control device	●	●					●	●		●	Ibid.
Wrong position of electri city discharge needle		●	●								Ibid.
Too high infall pressure							●				Adjust infall valve
Inserter not inserted well		●									Insert the inserter
Safety device functions	●	●									Refer to protection device action phenomenon
Power supply not turned on		●									Switch on the power supply
Smoke discharge pipe blocked	●										Remove the blocks
Too high wind pressure	●										Wait to use till the wind pressure decreases
Continuous use of 20 minutes	●										Restart to use after good ventilation

1.While igniting, before it is lighted, do not watch around the fire-watching hole or window shutter to avoid burns
2.When the water heater is used with intervals or the knob is in the high temperature area, pay attention to the initial hot water which may have such a high temperature as to burn your skin.
3.In the process of using or it has just been used, do not touch with hands the crust of the water heater except for the knobs, especially the fire-watching window to prevent burns.

Avoid electric shock

1.Do not spill water over the power supply plug.
2.The power supply wire must be changed by professionals by using the special wire provided by our company.

The following phenomena are normal and should not be regarded as troubles:

1.The gas channel of this water heater is opened by water pressure. It is normal that the water heater will not be lighted when the water pressure is lower than 0.02MPa.
2.The gas channel of this water heater is opened by water pressure. It is normal that the water heater will not be lighted when the water pressure is lower than 0.02MPa.
3.When the hot water is supplied for several places, the amount of hot water will decrease or even hard to supply.
4.After being used for 20 minutes, the water heater will stop working. It is the 20 minutes timed shut function which is used to remind users of ventilation. What you need do is start again to go on to work.
5.Protection device action phenomena:
●When the outfall water temperature is higher than the overheat protection device action temperature, it will shut off automatically, which is normal. At this time, adjust the outfall water temperature to be lower and start again.
●When the smoke channel is blocked or the wind pressure is too high, the protection device action will cause shut-off automatically, which is normal. At this time, the smoke channel should be cleaned or restart after the strong wind is over.

Daily maintenance requirements

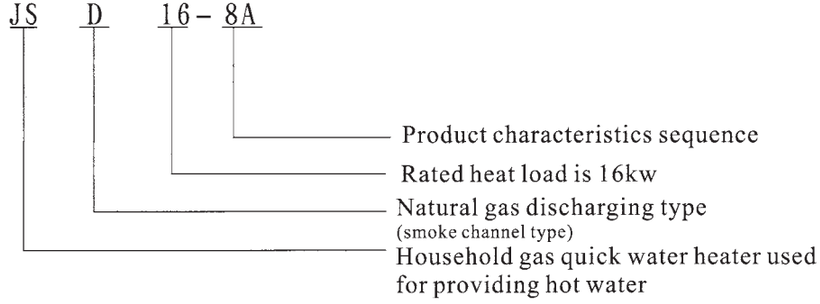
◆Check frequently the gas supply pipe (rubber hose) to see whether it is aged, crippled, or cracked. When there is anything abnormal, change it immediately.
◆Clean regularly the water sieve.
◆Check frequently to see whether there is any leakage of water.
◆Assign the qualified professionals to check the burner and heat exchanger to see if there is any accumulation of carbon and blocks. If any, clean it in time to guarantee the normal functioning of the water heater.
◆Observe the flame frequently. If the flame turns from blue to yellow with black smoke, contact the maintenance department in time for repair.
◆When there is accumulation of carbon in the ignition needle, clean it to ensure the ignition quality.
◆Keep the face cover clean.

●Shut protection: it is equipped with IC ion sensor device with high sensitivity which can cut off the gas source when the machine is shut suddenly to prevent from the leakage of gas.
●Anti-dry burning protection: when the water heater burns dry, the gas valve will shut automatically.
●Anti-too hot safety device: when the inhaling water pressure is too low or the flux is too small, the hot water will tend to have a high temperature when the device will take effect to stop the water heater.
●20 minutes time shut function: when it is used continuously for 20 minutes, it will shut automatically to remind you of ventilation and if you want to use it again, shut the water valve and turn it on again.
●Too high water pressure protection: when the water pressure is too high, the safety valve will turn on automatically to discharge water and pressure.
●Anti-freezing protection: when the temperature of the environment is below 0℃, after using it , turn on the water discharging valve to discharge the surplus water in case it should freeze to crack the water heater.
●Anti-backflow of wind device.

Compulsory discharge characteristics

1.Compulsory smoke discharge: smoke is discharged outdoors compulsorily by dynamical device of the water heater to ensure that air indoors is not polluted.
2.Too high wind pressure or smoke channel block protection device: when the wind pressure outdoors is too high or the smoke channel is blocked so that the smoke can not vent outdoors, the water heater will stop automatically.
3.Water temperature and operation state display function: while working, the display will show the temperature and the states of burning, outfall and timed shut.
4. Cleaning function when shutting the machine: when the water valve is shut, the wind machine will continue to operate for a while to decrease the temperature of the machine.

Model Introduction



Name of the parts and its outer size

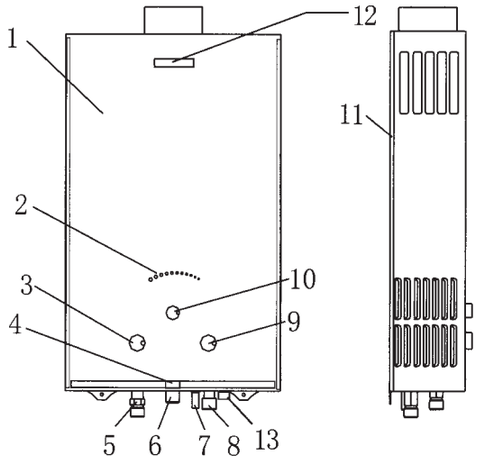


Fig.1

Flue duct type:

1.Face shell
2.Fire watching hole
3.Firepower adjustment knob
4.Temperature display
5.Gas infall
6.Hot water outfall
7.Water discharge valve/safety valve
8.Cold water infall
9.Water temperature adjustment knob
10.Season shift knob
11.Bottom shell
12.Brand
13.Cold and hot water switch

2.Do not store flammable, explosive, or volatile things near the place where the water heater is installed.
3.For users of liquefied petroleum gas, do not put the liquefied gas container upside down or sideways, otherwise, the accumulated liquid fuel in the container can be easily carried to the water heater to cause fire.

Avoid carbon monoxide poisoning and oxygen-shortage poisoning

1.If the wind blows at a high speed, even it is equipped with wind cap, it may lead to the backflow of the smoke or good smoke discharge. So please stop, otherwise it may lead to dangers. When the gas burns, it needs a lot of air to lead to oxygen-shortage indoors to injure human body. The smoke from the combustion is harmful gas with a certain amount of carbon monoxide. Therefore, there must be enough air convection in the room where the water heater is installed. The smoke can not accumulate in the room. When using the non-compulsory providing and discharging type water heater, the gas infall and gas outfall must be opened to ensure the fresh air indoors (the air-through entry must be open and closed doors or windows can not be regarded as effective air infall).
2.The smoke joint of the water heater must be connected with smoke discharge pipe so as to discharge outdoors the combusted exhaust to keep the air in the room clean to avoid incomplete combustion, other wise it may threaten safety and health.
3.For users of manpower coal gas and natural gas, if the pressure of gas supply is not sufficient, it may lead to backflow of the fire to cause accumulation of carbon inside the burner which may affect the normal function of the water heater. At this time, the flame will turn from blue to yellow to cause a sharp increase of the discharge of carbon monoxide, which will damage seriously the machine. Then it should be stopped temporarily and contact the gas company or service agents to deal with it.
4.Due to long time use or accumulation, the burner and heat exchanger are blocked to affect the burning condition and lead to the sharp increase of carbon monoxide, assign qualified professionals to clean regularly the burner or carbon accumulation and dirt on the heat exchange piece to guarantee the good discharge of smoke.
5.The water heater should be installed vertically. If it is installed slantingly, the flame may touch the heat exchanger to increase sharply carbon monoxide and damage the machine seriously.

Prevention of freezing

When it is very cold in winter, the water accumulated in the water heater will freeze to expand the water heater. Therefore, after using, it must be discharged (refer to the □water discharge method□ in the instruction of application method for detailed operation).

Decrease the chance of forming furring

To decrease the chance of forming furring, after using the water heater, shut off the gas valve to let the hot water completely flow out of the machine and wait till cold water flow from the hot water outfall before shutting off the cold water valve.

Not suitable for supplying drinking water

Since there has long been accumulated water in the heater, the hot water supplied by the water heater is not suitable for drinking and it is only suitable to be used for washing.

Dealing with abnormal conditions

If the burning is found to be abnormal (backflow of fire, dropping off of fire, yellow flame or black smoke), have strange smell or abnormal sounds or other emergency, keep calm and turn off the gas source overall valve and contact the service department or gas company.

Avoid burns of too hot water

Stop application:

1.Shut off the cold water valve and the water heater will stop working automatically.
2.Each time after using the water heater, the gas valve should be shut off and the power supply should be cut off.

Drainage in winter:

In cold seasons, after each use or it is not to be used for a long time, the water heater must be discharged in the following method:
1.Shut off the infall valve and turn on the control valve (if it is equipped with hot water outfall).
2.Adjust the water temperature adjustment knot to the position of □low□.
3.Remove the discharge valve (the discharge valve is a combination of screw thread and water valve body and it can be removed by turning counterclockwise in the same way as removing a screw) to discharge the accumulated water inside the machine. After the accumulated water is discharged, fix the discharge valve.

Change the batteries

After the batteries are used, (for normal use about half a year), the voltage of the batteries may be insufficient and the water heater can not be ignited, please change the batteries (for the change of batteries, please refer to □Batteries installation□ on page 8 in this instruction).

Points for attention in safety

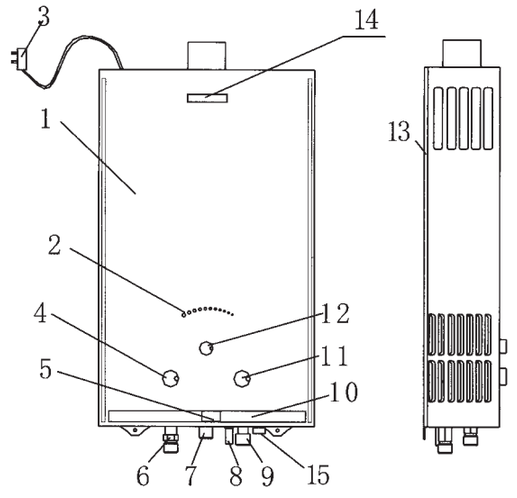
Avoid gas accidents

1.You must make sure that the type of gas actually used agrees with the type of gas designated on the water heater tag instead of any other unspecified types. When the water heater uses manpower coal gas or natural gas, it must be the type specified in that area and different types of gas can not be mixed in areas with different types of gas.
2.After using the water heater, check to see whether the burner is shut off and make sure to shut the overall gas valve.
3.Check frequently with soap water to see whether all gas joints have leakage. If any, shut off the gas supply immediately, open the doors and windows. At this moment, any lighting or touching the switch of electric appliance like air discharging fan is forbidden, it is also forbidden to plug in or out various kinds of power supply plug and do not turn on or off the infall and outfall valves of the water heater, otherwise, the fire or sparkle may ignite the gas to cause a fire.
4.Make sure you do not go out or go to sleep when the water heater is still on.
5.The rubber pipe which delivers gas (or liquefied petroleum gas) may crack to lead to leakage due to long time use. Therefore, check it frequently and if there are any cracks in the rubber pipe, change it immediately. Normally, it should be changed once a year.
6.For users of liquefied petroleum gas, if the burning flame of the water heater is high and low now and then, maybe it is because the pressure-decreasing valve near the outfall of the gas bottle stops functioning. Then it should be stopped immediately to wait for repair by professionals.
7.For users of pipeline gas or natural gas, if the burning flame of the water heater is high and low now and then, maybe it is because of the unstable pipeline pressure. At this moment, the water heater should be paused. If it is used forcefully, it may damage the water heater and even cause an accident.

Prevention of fire

It is forbidden to put flammable things like towel or clothes near the gas discharge exit of the water heater

Name of the parts and its outer size



Compulsory discharge type:

1.Face shell
2.Fire watching hole
3.Power plug
4.Firepower adjustment knob
5.Temperature display
6.Gas infall
7.Hot water outfall
8.Water discharge valve/safety valve
9.Cold water infall
10.Ornament strip
11.Water temperature adjustment knob
12.Season shift knob
13.Bottom shell
14.Brand
15.Cold and hot water switch

1.Technical performance parameters for flue duct gas water heater

Name of the product	Household gas quick water heater					
Model	JSD15.5A	JSD126A	JSD147A	JSD168A	JSD2010A	JSD2412A
Rated heat load (KW)	11	12	14	16	20	24
Output ratio of water	5.5kg/min	6kg/min	7kg/min	8kg/min	10kg/min	12kg/min
Rated gas pressure	Liquefied petroleum gas 2800 Pa	Natural gas 2000Pa	Manpower coal gas			1000Pa
Way of gas discharging	Natural gas discharging type					
Ignition mode	Water-controlled automatic pulse lighting					
Power supply used	Two pieces of No. 1 dry batteries					
Applicable water pressure	0.021.0 (Mpa)					
Joint specifications	G1/2gas infall adopts G3/4					
Outer size a*b*c	430*280*120	500*300*150 (525*325*180)		600*325*180	650*335*185	

Table 1

Application method

Preparation before lighting:

1.Check again whether the type of gas agrees with what is specified on the tag of the water heater. The smoke channel type water heater should be installed with two pieces of No. 1 batteries. The compulsory discharge type water heater should be connected to the power supply.

2.Switch on the infall and outfall.

3.Turn on the gas switch.

Application in lighting:

Turn on the hot water valve (make sure that water flows out of the shower) and the water heater will light automatically with the sound of □PaPa□. After it is lighted, the hot water will flow continuously. When the hot water begins to flow, try it with hand first to test the water temperature in case too high temperature should burn the skin.

1.If the water supply pressure is too low, turn the water temperature adjustment knob to the position of □high□. If there is no sound of ignition, the water supply pressure may be too low or the batteries are not fixed well so that the water heater can not work.

2.If it can not be ignited when it is used for the first time after installation or changing the container, that is because there is air in the gas pipe. You need to switch on and off several times to discharge the air in the pipe (until it can be lighted).

3.After normal use, if it can not be lighted for the first time, shut off the water valve immediately and wait for 10-20 seconds to ignite to avoid explosion.

Water temperature adjustment:

1.Turn the water temperature adjustment knob to change the flux and outfall temperature.

2.Turn the firepower adjustment knob to change the firepower of the burner to control the outfall temperature.

3.Subsection firepower adjustment method (suitable for winter and summer type or four season type water heater).

●In cold seasons, the firepower shift knob is put in the position of □winter□ to make all the burners work.

●In spring and autumn, the firepower shift knob is put in the position of □spring and autumn□ to make part of the burners work.

● In hot seasons, the firepower shift knob is put in the position of □summer□ to make part of the burners work.

4.The shift of cold and hot water (suitable for products with cold and hot water shift button)

● If you want cold water, flip the end with red point of the cold and hot water shift button and then cold water will flow out of the water heater, and if you want hot water, press the end with red point of the cold and hot water shift button so as to get hot water.

Pause in application:

In the process of application, shut off the hot water outfall valve when the water heater will stop working and the burning indication light will go out. When it is used again, it will do to open the hot water valve. When it is started again, the initial outfall temperature is too high, try it with hand first before taking a shower to avoid burns. Make sure the time interval is longer than 10 seconds.

Installation method of this series of water heater batteries:

● Turn counterclockwise on the face the battery box knob to the position of □ON□, drag the box cover downward, put in 1-2 pieces of No. 1 (large number) dry batteries (pay attention to the positive and negative poles), fix back the box cover and turn the knob to the position of "OFF".

4.Installation of smoke discharging pipe (refer to Fig.1 and Fig.2)

● The smoke discharging pipe should be installed based on the requirements to discharge the smoke outdoors before the water heater is used. When the smoke discharging pipe is not installed based on this instruction, it is forbidden to use this water heater. (Make sure the smoke is not discharged into others' rooms).

The installation of smoke channel type smoke discharging pipe should be done in the following requirements:

● The main body of the smoke discharging pipe should be made of stainless metallic material.

● The upper vertical part of the smoke discharging mouth should have a height of no smaller than 200mm. The horizontal part length of the smoke discharging pipe should be no longer than 3 meters with a sloping toward outdoors of 1:100 and no more than 3 turns. The outdoors vertical smoke channel bottom should be equipped with a hole Φ 10mm in diameter to discharge frozen water.

● The mouth of smoke discharging pipe should be equipped with wind cap. The end with wind cap should be in a place with good outdoors air ventilation and avoid the affect of wind pressure. Make sure the wind cap is not blocked with snow or bird's nest.

● Installation method of smoke discharging pipe (Fig.7)

★ Based on the outer size of the pipe and the actual condition of the wall, drill a hole in the proper position of the wall.

★ Fix the horizontal smoke pipe inside the hole with inflammable material. The space between the smoke pipe and the bricks should not be stuffed with things like cement, and otherwise it is not good for repair and maintenance. (Note: when the wall is made of flammable material, use inflammable material with a thickness of more than 20mm around the smoke pipe which is going through the wall for heat insulation.)

★ While connecting common smoke channel, the wind cap is not needed, but the inner part of the horizontal smoke pipe should be as short as possible and the place where it is connected with common smoke pipe should be closed without leakage of gas.

After installing smoke discharging pipe for the smoke channel type water heater, in the process of using it, it is forbidden to start mechanical air exchange device such as a lampblack extracting machine and an air exchange fan in the room where the water heater is installed or the nearby room.

5..Special demands for the installation of compulsory gas discharging type

● Smoke discharging pipe equipped with the machine must be adopted instead of remaking it or using smoke discharging pipe of other specifications. While installing, the outdoors should be a little lower than indoors to prevent the backflow of frozen water. The smoke discharging pipe and the smoke discharging mouth of the water heater must be fixed after connection.

● The power supply of the compulsory water heater should have dependable grounding measures.

2. Technical performance parameters for forced exhaust gas water heater

Name of the product	Household gas quick water heater				
Model	JSQ12-6A	JSQ14-7A	JSQ16-8A	JSQ20-10A	JSQ24-12A
Rated heat load (KW)	12	14	16	20	24
Output ratio of water	6kg/min	7kg/min	8kg/min	10kg/min	12kg/mi
Rated gas pressure	Liquefied petroleum gas 2800Pa	Natural gas 2000Pa		Coal gas 1000Pa	
Way of gas discharging	Compulsory gas discharging type				
Ignition mode	Water-controlled automatic pulse lighting				
Application input power	28W				
Power supply used	AC.220V/50Hz				
Applicable water pressure	0.02-1.0 (Mpa)				
Joint specifications	G1/2 gas infall adopts G3/4				
Outer size a*b*c	430*280*120	500*300*150 (525*325*180)	600*325*180	650*335*185	

Table 2

Requirements and method for installation

◆ Requirements for installation

1.Before installing the water heater, contact the local coal gas company or gas management department to assign qualified professional workers to install (the user can not install by himself because improper installation will affect the safe use to threaten human body).
2.The water heater had better be installed in such a position that human line of sight is even with the flame fire-watching hole (i.e., it is about 1.45-1.65 meter from the ground) and it is not too close to the flammable substance. Also, on the top of the water heater there should not be any electric wire, electric appliance and the horizontal distance between the water heater and electric appliance should be greater than 400mm.
3.It is forbidden that the water heater is installed in bedroom, basement, cupboard or closed rooms. It should be installed in a non-living room with good ventilation. To get good ventilation, in the room where the water heater is installed, there should be a gas infall and a gas outfall with an area of no smaller than what is shown in Table 1 which is connected to the outdoors. The outfall should be installed higher than the top of the water heater and near it. The infall should be installed in a lower position. The room where the water heater is installed should be equipped with sink on the ground. The water heater is forbidden to be installed in the room with wooden ground. (refer to Fig.3).

heat load(kW)	gas providing and discharging area
12 ~ 16	130 cm^2
16 ~ 20	160 cm^2
20 ~ 30	220 cm^2

Table 3

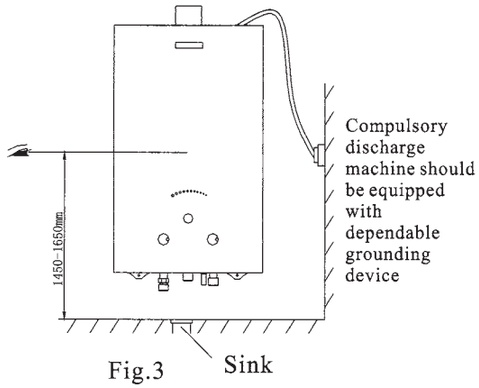


Fig.3

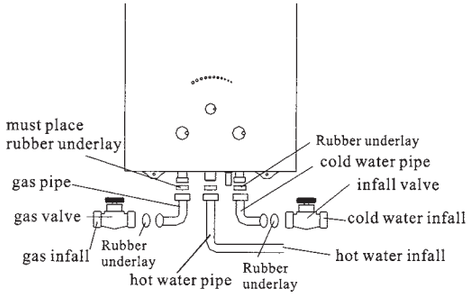


Fig.4

Installation method

1.Installation of the main body: based on the requirements in Fig.3 and Table 3 or the size of actual object, draw lines and drill holes on the wall with Φ8 hole on the upper part, drive in expanding screw and drill Φ6 hole on the bottom to drive in plastic stopper, and then hang the water heater vertically (no leaning). Fix with screws the upper part of the water heater before fix the lower part with self-tapping screws.
2.Installation of water and gas pipeline (Fig.4)
● For users of liquefied petroleum gas, 1.2m^3/h pressure-decreasing valve is suggested for 16-20kw water heater. 0.6m^3/h pressure-decreasing valve is suggested for 10-14kw water heater. The pressure decrease valve outfall of the gas container should be tightened with pipe clamps.

Installation size table

Item Number	Size (a×b×c)
JSD12-6A	160×160×440
JSD14(16)-7(8)A	170×160×530
JSQ12(14、16)-6(7、8)A	170×160×530
JSD(Q)20-10A	190×180×640
JSD(Q)24(28)-12(13.8)A	220×220×660
JSD16(20)-8(10)B	171.5×60 × 585
JSD(Q)32-16A	130×130×770

Table 4

(There may be updated installation size of the product. If there is any change, the structure may be changed without further notice. Please refer to the product.)

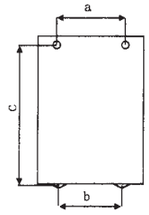


Fig.5

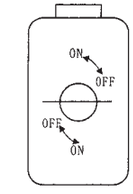


Fig.6

● When using pipeline gas, ask the gas company to use proper gas meter based on the characteristics of the gas and connect to gas pipe with corresponding diameter and connect gas control valve before the gas infall.
● After finishing connecting the pipes, start the gas source to check with soap water to see whether there is any leakage of gas in the connection parts.
● Installation of infall pipe (Fig.4)
For the infall pipe, apply stainless steel wave pipe or pressure-endurable hose or rigid water pipe. The water supply control valve is necessary to be fixed before the cold water pipe. (Fig. 4)
(Note: there is a sieve inside the cold water infall of this machine and when installing cold water pipe, do not throw away the sieve).
● Installation of outfall (Fig.4)
When there is outfall control valve, any pressure-unbearable or heat-nonresistant hose should not be used before the control valve in case any breaks should burn the body. If there is not outfall control valve, connect with heat-resistant hose or metallic pipe. Remove the outfall valve before connection to avoid breaks and install it back after finishing the connection.

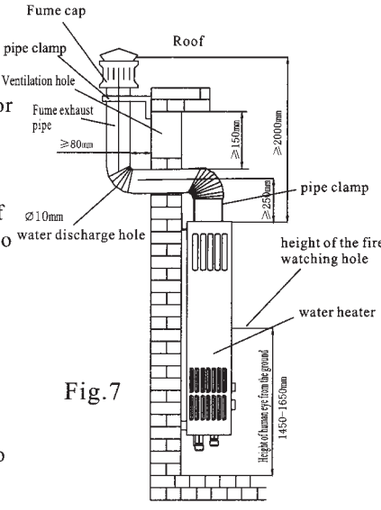


Fig.7

3.Installation of smoke channel type water heater batteries (Fig.6)
(The battery box is in the lower bottom of the water heater)