

# **INSTRUCTION MANUAL**

## **INSTANT GAS WATER HEATER**

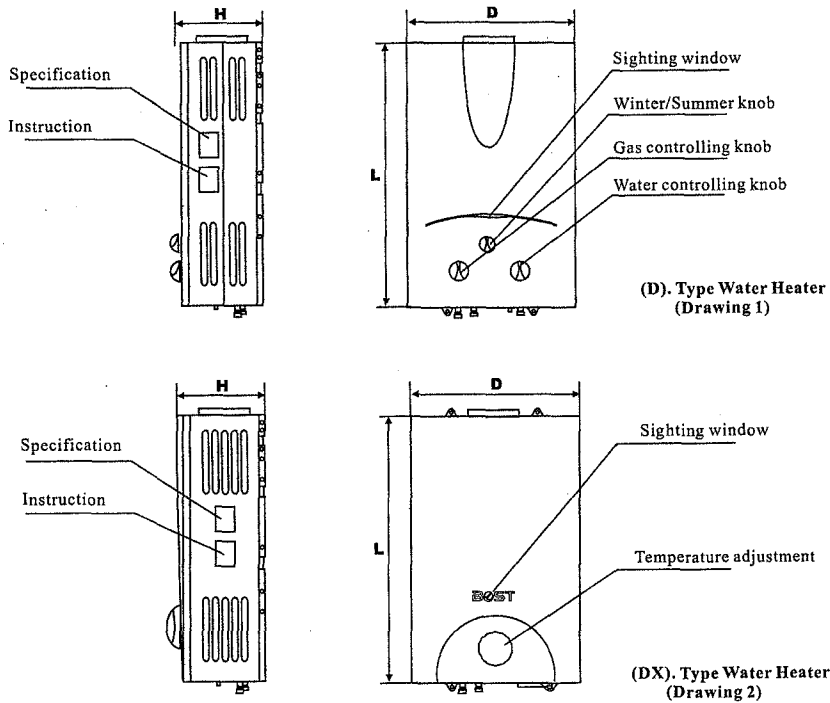


*Thank you for choosing our Gas Water Heater.  
Please read this instruction manual carefully  
before installation and operation.*

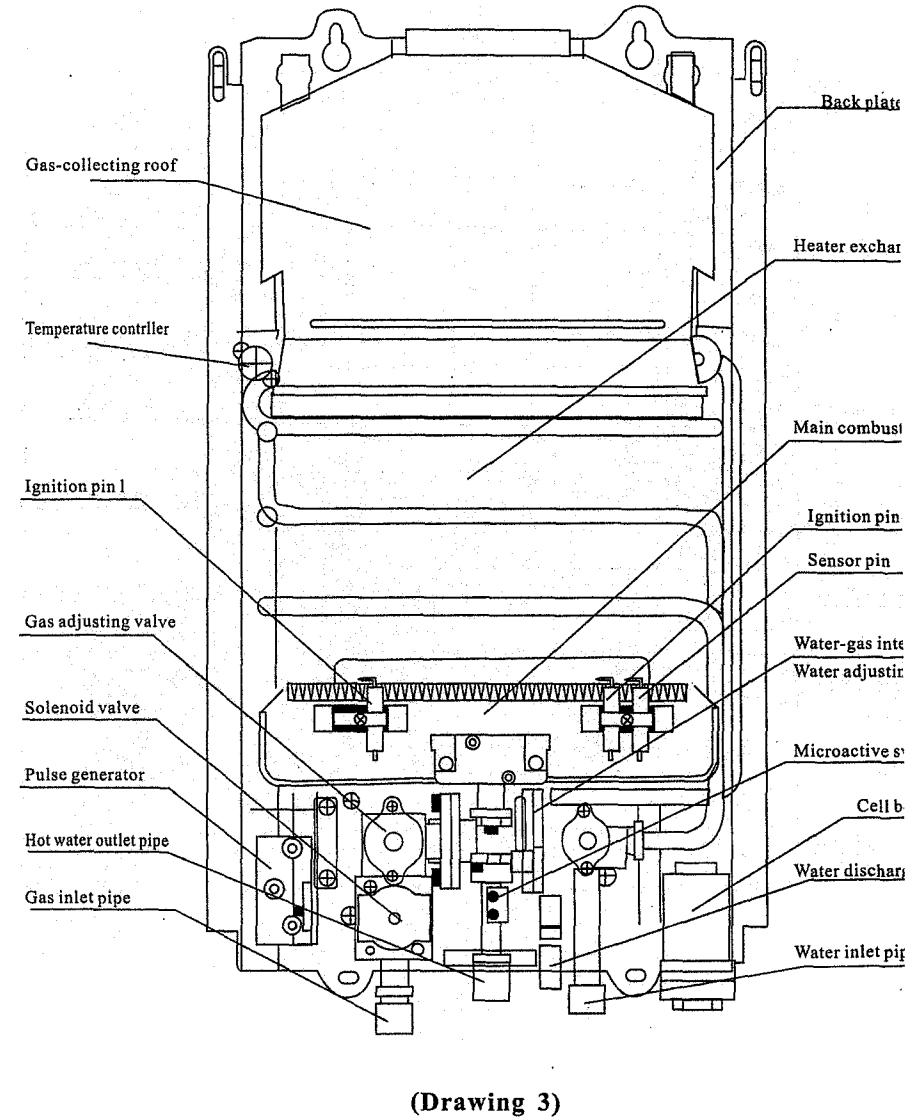
## Functions & Features

- **Water-controlled automatic ignition:** The water-controlled automatic ignition is applied for the unit, double-ignition device with high rate, the flame is sensed by ion, this sensitive control can be achieved, easy and convenient to operate.
- **Auto-cut-off protection:** Numerical control automatic ignition, the auto-cut-off protection will shut off gas supply immediately once flameout accidentally and no gas leakage.
- **Energy saving:** Advanced combustion system with the Winter/Summer switch, in winter strengthen flame and in summer reduce flame, hence more comfortable and energy saving.
- **Low water pressure startup function:** When water supply pressure is lower to 0.025Mpa, the unit can also startup, suitable to the user living in high floor or lower water supply pressure.
- **Anti-freezing protection:** When temperature is very low, remove the water discharge valve to discharge cumulative water inside water pipe to avoid the damage caused by freezing.
- **Anti-dry combustion protection:** Once dry combustion occurs, the protection device will shut off gas supply automatically.
- **Over-pressure protection:** Once water pressure is over 1.0Mpa, the unit will relieve the pressure automatically to avoid damage.

Please see the outline appearance as follows :

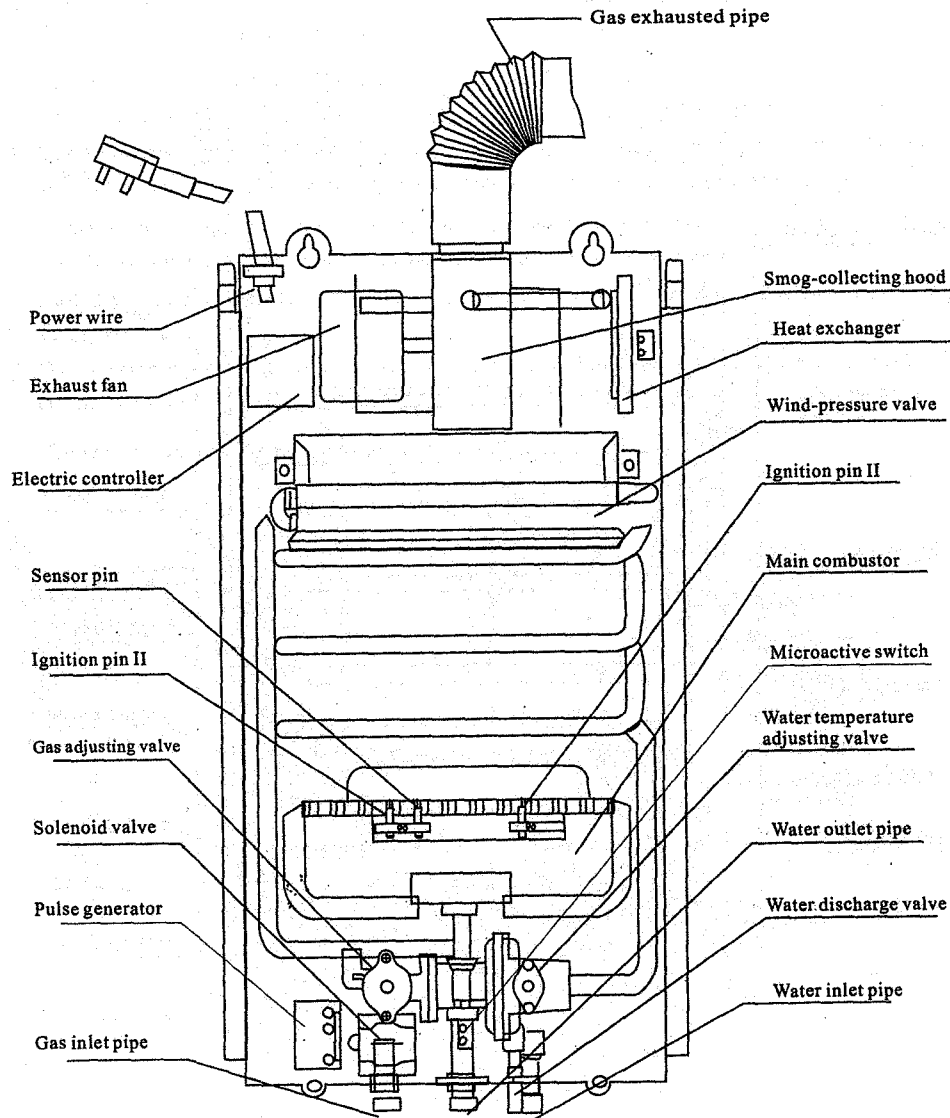


## Construction & name of each part — Flue Duct Type



## Construction & name of each part

### — Forced Exhausted Type



(Drawing 4)

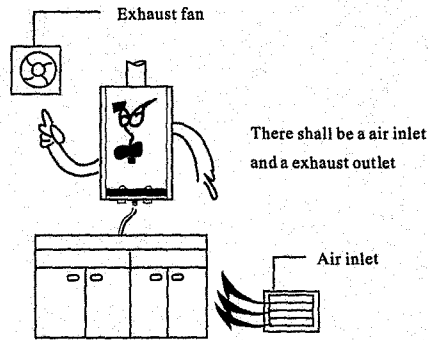
## Technical Parameters

Model	Type of Gas	Rated Gas Pressure	Heat Load	Exhaust Discharge Mode	Control Model	Ignition Mode	Safety Device	Applicable Water Pressure	Hot Water Outlet Per Minute	Gas Pipe				
10-D (W/K/G/DX/F)	LPG	2800Pa	36.5 MJ/h	Flue Duct Type	Water-Pressure Controlled	Pulse Double Ignition	10-layer Safety Protection	0.025-1.0Mpa	5L/min	Φ 9.5mm Rubber Hose				
	N.G	2000Pa	44 MJ/h						6L/min					
12-D (W/K/G/F)	LPG	2800Pa	50 MJ/h						7L/min					
	N.G	2000Pa	59 MJ/h						8L/min					
14-D (W/K/DX/F)	LPG	2800Pa	73 MJ/h						10L/min					
	N.G	2000Pa	88 MJ/h						12L/min					
16-D (W/K/G/F)	LPG	2800Pa	94 MJ/h						13L/min					
	N.G	2000Pa	118 MJ/h						16L/min					
20-D (W/K/G/F)	LPG	2800Pa	36.5 MJ/h						Force Exhaust Type		Natural Exhaust Type	5L/min		
	N.G	2000Pa	44 MJ/h									6L/min		
24-G	LPG	2800Pa	50 MJ/h									7L/min		
	N.G	2000Pa	59 MJ/h									8L/min		
26-G	LPG	2800Pa	73 MJ/h									10L/min		
	N.G	2000Pa	88 MJ/h									12L/min		
32-G	LPG	2800Pa	94 MJ/h									13L/min		
	N.G	2000Pa	118 MJ/h									16L/min		
Q10-D (W/K/G/F)	LPG	2800Pa	36.5 MJ/h									Natural Exhaust Type	Natural Exhaust Type	5.5L/min
	N.G	2000Pa	44 MJ/h											6L/min
Q12-D (W/K/G/F)	LPG	2800Pa	50 MJ/h											7L/min
	N.G	2000Pa	59 MJ/h											8L/min
Q14-D (W/K//F)	LPG	2800Pa	73 MJ/h	10L/min										
	N.G	2000Pa	88 MJ/h	12L/min										
Q16-D (W/K/G/F)	LPG	2800Pa	94 MJ/h	13L/min										
	N.G	2000Pa	118 MJ/h	16L/min										
Q20-D (W/K/G/F)	LPG	2800Pa	36.5 MJ/h	Natural Exhaust Type	Natural Exhaust Type	5.5L/min								
	N.G	2000Pa	44 MJ/h			6L/min								
Q24-G	LPG	2800Pa	50 MJ/h			7L/min								
	N.G	2000Pa	59 MJ/h			8L/min								
Q26-G	LPG	2800Pa	73 MJ/h			10L/min								
	N.G	2000Pa	88 MJ/h			12L/min								
Q32-G	LPG	2800Pa	94 MJ/h			13L/min								
	N.G	2000Pa	118 MJ/h			16L/min								
11-N	LPG	2800Pa	36.5 MJ/h			Natural Exhaust Type	Natural Exhaust Type	5.5L/min						
	N.G	2000Pa	44 MJ/h					6L/min						

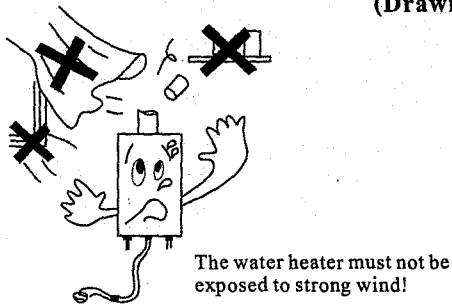
## Installation Instructions

### A. Cautions:

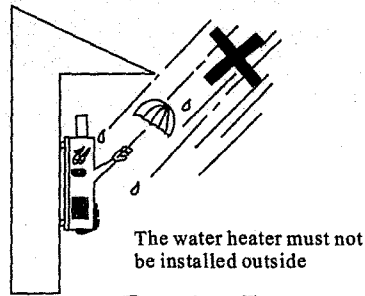
- The water heater shall be installed in the well-ventilated place and mount the exhaust pipe to discharge exhaust gas. During operation the water heater consumes lots of oxygen, so the air inlet hole should be made in the room above 0.06 square meters and the exhaust pipe shall be mounted.
  - Poor air circulation and no exhaust pipe will cause lack of oxygen. Carbon monoxide poisoning, death and all such serious accidents can arise since incomplete combustion.
- Don't expose the water heater to the strong wind or rain.
- Only appointed gas on the nameplate or specification shall be used.
  - The misusing of gas can cause deflagration or fire. Carbon monoxide poisoning, death and all such serious accidents can arise since incomplete combustion.
- Coal gas users shall be pipeline by professional.
- Don't use aging or cracking rubber pipe.
- The water heater shall not be installed near combustible or volatile substances.
- Be sure the water pressure not lower than 0.025Mpa.
- The water heater shouldn't be installed above burning appliances, such as the cooking oven.
- The water heater shouldn't be installed near the stairs and the safety exit (except for beyond 5m).



(Drawing 5)



(Drawing 6)

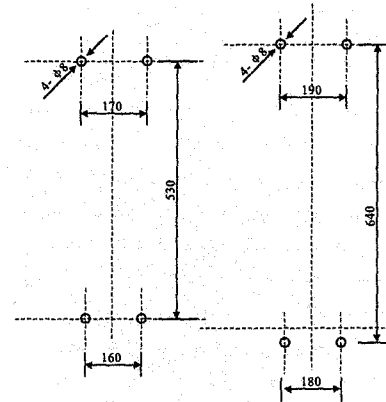


(Drawing 7)

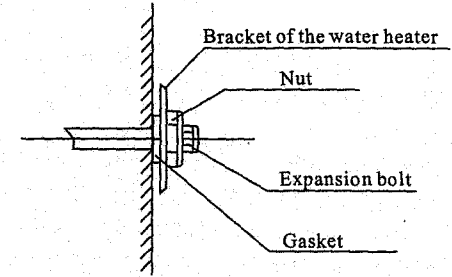
### B. Installation Instructions:

#### 1. Installation of the water heater body

- Drill for 8mm holes according to the dimension shown on the drawing8, and put in 6mm expansion bolt. (If the dimension is changed, please do as the real stuff.)
- Hang the water heater, then fix it with expansion bolt at the hole of lower bracket. See the drawing9.



(Drawing 8)



(Drawing 9)

#### 2. Installation of pipes

##### (a) Connection of the cold water supply pipe

- The cold water inlet joint is G1/2 pipe thread.
- The water inlet pipe had better be connected by using flexible metal tube, or by rigid water pipe.
- The inner diameter of the inlet pipe (including the valve) shouldn't be less than 8mm.
- The cold water valve shall be installed with the water inlet pipe.
- Please pay attention whether the filter in the cold water inlet is mounted well or not. There are always many impurities in the new pipe, so please get rid of them by water before connecting. Make sure there is no impurity in it, then install the rubber gasket and fix the water inlet joint tightly.

##### (B) Connection of the hot water supply pipe

- The hot water outlet joint is G1/2 pipe thread.
- The hot water outlet pipe should be connected by flexible metal tube or by rigid water pipe or by rubber pipe with sprayer directly.
- The inner diameter of the hot water outlet pipe (including the valve) shouldn't be less than 8mm.

##### (c) After installation, please open the cold water valve to the maximum to test the flowing of water and check whether there is water leakage so as to make timely treatment.

##### (d) Installation of the gas supply pipe

- The gas inlet joint is G1/2 pipe thread. The gas inlet pipe joint and rubber gasket are attached. The spec soft rubber tube can be used according to the technical parameters. Fix it tightly with pipe clip

while being connected. Note: gasket must be installed, otherwise the water heater will be burnt out because of gas leakage.

- After the gas inlet joint is connected, open the gas supply valve, and check whether there is gas leakage at the joint by soap water so as to make timely treatment.
- The liquefied petroleum gas users should use the low pressure adjusting valve of high quality with the flux above 0.6m/h.

### 3 Installation of exhaust device

(a) According to the outline dimension of the attached flue pipe, make a hole with the diameter a little larger than the flue pipe at the suitable position to install the flue pipe horizontal easily.

(b) The installation of the flue is shown in the drawing 10.

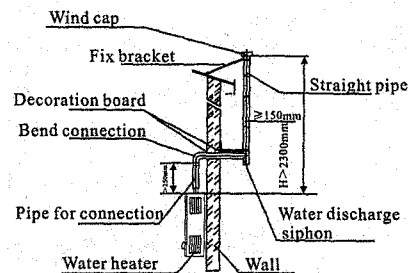
The total height of exhaust pipe should be more than 2.3 meters and the horizontal length shall not exceed 3 meters. There shall be a vertical ascending flue pipe and the hole should not be less than 250mm above the exhaust pipe cover. The gap between the flue pipe and the hole should not be filled with cement, otherwise the repairing would become difficult.

(c) Install a exhaust fan not lower than the top of the water heater.

(d) Make a air inlet door not less than 0.06 square meters on the downside of the wall.

(e) When the wall is made of inflammable material, the clapboard shall be installed between the flue pipe of the water heater and the wall. (The thickness is about 20mm)

(f) If the flue pipe is connected with public funnel, the entry part of the flue pipe should be as short as possible and the joint with the public funnel shall not leak at all.



(Drawing 10)

### C. Operating Instructions:

#### 1 Operation

- Open the cell box and put in two batteries of 1.5V AA correctly.
- Open both the cold water valve and hot water valve. Close the water inlet valve after you make sure the cold water is flowing out through the water outlet and the ignition pins discharge.
- Start gas supply.
- Open the water inlet valve or outlet valve again and then the combustor can be ignited right away. The hot water flows out immediately. Sometimes because there is air in pipe, the combustor may not be ignited at the first time. So try two or three times.
- All the F, D type water heaters have the seasonal switching operation to meet your requirement of suitable temperature.
- Close the water inlet or water outlet valve, the water heater will stop working. If needed again, just re-open the water inlet valve or water outlet valve. Please note that the temperature of hot water flowing out is higher at that moment, so please wait for the suitable temperature.

(g) Close the water inlet valve or water outlet valve, the water heater will be turned off immediately, the shut off the main gas supply.

#### 2. Cautions

- Don't use the water heater in the sealed room or poor air circulation place.
  - The exhaust pipe shall be installed to discharge exhaust gas outside.
  - During operation, if you find out there is gas leakage, you should close the gas valve immediately. If the room is full of gas, you should not turn on/off power switch, nor use so as to avoid explosion. An the cause for that should be checked out and the service center or gas company should be contacted for the treatment.
  - Before leaving the house or going to sleep, please be sure to shut off the gas supply.
  - Do not put any stuff at the exhaust port or air inlet so as to avoid poisoning caused by incomplete combustion.
  - During operation, please pay attention to combustion situation. If there is abnormal combustion, you should close the gas valve right away and then contact the service center or gas company for maintenance.
  - When the outdoor temperature goes down below zero and freezing may occur, the remained water should be discharged out of heater after using it. Water should be discharged in the following steps: turn off the gas supply valve → turn off the tap water supply valve → turn the water temperature adjustment knob to low temperature position → turn on the hot water supply valve → remove the water discharge valve to discharge remained water entirely → re-install the water discharge valve.
  - The body of the water heater can be very hot during operation, so please don't touch any part of the water heater except for the switches.
  - While using the water heater discontinuously, please pay attention to the temperature of the water flowing out initially so as to prevent from getting scalded.
  - Check the gas pipe and rubber hose regularly. If you find out joints are not in tight condition or there crack on the hose, you should stop using and make timely maintenance or replace with a new one.
- #### D. Instruction for daily maintenance
- Check the gas supply pipe (rubber hose) regularly to see if it is in good condition, or there is aging, crack, leakage or bend on the hose so as to make timely treatment.
  - Please regularly check if there is water leakage or gas leakage so as to make timely treatment.
  - Please regularly clean surface of water heater body to remove dirt or dust with wet cloth, and then use dry cloth to wipe off moisture. If not easy to remove, please use neutral detergent to wipe off.
  - For the plastic part, printing surfaces and spraying surfaces, it is not suitable to use strong detergent, benzene or gasoline to clean them.
  - Please use dry cloth to clean the dirt on the ignition electrode so as to ensure the ignition quality.
  - Remove and wash the stainless steel filter in the cold water inlet regularly.
  - During the operation, please pay attention to the flame to see if it is in normal condition. Check the heat exchanger and combustor whether there is dust or dirt every half a year. Clean up should be done by professionals.

8. Don't modify the water heater by yourself so as to avoid accident.

Case	Troubles Shooting							Solutions	
	Flameout during usage	Ignition failed after opening the water heater	Deflagration symptom during ignition	Yellow flame with smog	Abnormal smell	Abnormal sound during ignition	Water not hot enough when turned to High temperature position		
Main gas valve not opened	●							Flame can't be extinguished after closed the water heater	Completely open the gas valve, or replace the gas tank with a new one
Main gas valve half opened	●		●			●		Flameout when at Low' Temperature position	Fully open the gas valve
Air inside the gas pipe		●						Flameout when at Low' Temperature position	Continuously open and close the hot water valve until the flame is ignited
Gas pressure is not suitable	High		●			●		Water still too hot when at Low Temperature position	Asked maintenance personnel to check the water supply valve and water pressure adjusting valve
	Low	●				●		Water not hot enough when turned to High temperature position	
Main cold water supply not opened		●						Abnormal sound during ignition	Fully open the main water supply valve
Freezing		●						Abnormal sound during ignition	The water heater can be used only after the ice is melted
Cold water pressure not sufficient	●	●						Flameout when at Low' Temperature position	Asked maintenance personnel to check the water pressure
Improper operation for water temperature adjusting						●	●	Water not hot enough when turned to High temperature position	Turn the water & gas controlling valves to the right position
Lack of fresh air				●				Abnormal sound during ignition	Ventilate the room immediately
Safety device is working	●	●						Water not hot enough when turned to High temperature position	Re-start the water heater. If still doesn't work, contact the maintenance dept.
Malfunction of electric controlled system	●	●						Water not hot enough when turned to High temperature position	Contact the maintenance dept.
Combustor clogged				●	●	●		Abnormal sound during ignition	Same as above
Heat exchanger clogged	●			●	●			Abnormal sound during ignition	Same as above
Malfunction of water controlled device	●	●				●	●	Water not hot enough when turned to High temperature position	Same as above
Positional changer of ignition distance			●					Abnormal sound during ignition	Adjust the ignition distance
Cold water supply pressure is too high						●		Water not hot enough when turned to High temperature position	Adjust the cold water supply valve

After-sales service

If abnormal situation occurs and your water heater couldn't operate normally, please check item by item according to the section Troubles Shooting. If there is any problem you cannot handle or you cannot understand, please do not handle it yourself, and contact our appointed service points. You can also directly contact the customer service department of our company. Thanks for your cooperation!

Packing list

The whole of package of the water heater includes

- |                             |          |
|-----------------------------|----------|
| 1. Water heater             | 1 set    |
| 2. Gas inlet hose connector | 1 piece  |
| 3. Rubber gasket            | 2 pieces |
| 4. Sprayer                  | 1 set    |
| 5. Operating instructions   | 1 set    |
| 6. Mounting screws          | 4 sets   |