

**DOMESTIC INSTANTANEOUS GAS WATER HEATER**

**USER'S MANUAL**

**G\Fgwzg**

**Read the technical instructions before installing the appliance.  
Read the user's instructions before lighting the appliance.**

**Thank you for purchasing our automatic gas water heater. Read this Manual before installing and operating. Keep it for future reference.**

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### **Special Advice**

Since the combustion of the gas will consume a large amount of air and produce Monoxide while the heater working, however, if human inbreathe too much Monoxide it will cause danger or even death. Therefore, the users are requested to install and use this heater strictly according to this manual to avoid Monoxide toxicosis. The manufacturer or its authorized distributors will not be held responsible for any danger resulted from installation and operations not in accordance with this manual.

**This product can only be used after an efficient exhaust pipe connected to outdoors be installed. When the outdoors temperature is less than 0 , the residual water inside the heater must be drained after use.**

**EN26 : 1997**

### **Features**

This product is gas water heater for forced exhaust and air-supply type. It's said that this way is one of the most safety two construction of the international It is suitable for showering, washing hands and clothes and for other washing use. This product use the international technology to design and manufacture, completely function, safe and reliable.

Suitable for bathroom installation

Since this product adapt the method of forced exhaust and supply combustion, the air needed by combustion is completely from outdoor, and the waste gas produced by combustion is forcedly discharged to outdoor, therefore, the air indoor wouldn't be consumed and polluted, it remove the dangerous factor of insufficient oxygen and monoxide toxicosis. So this product can be installed in bathroom and not confined

to the installation place and ventilation condition.

Easy operation

Fully automatic ignition by water control, the hot water will flow out only after open the water supply tap.

Convenient adjustment

Water volume and firepower adjusted independently, very convenient to regulate the water temperature.

High efficiency, energy saving

Both the burner and heat exchanger are designed by using international advanced combustion theory, with the feature of high efficiency and quality combustion performance.

Low water pressure ignition

In order to meet the need of high building users, we specially design a low water pressure ignition for this product, it can work under 0.02Mpa water pressure.

Computer control

Electric control system adapts imported computer chip, advanced and reliable.

Multiple safety protection

With multiple safety protection like unexpectedly power off, unexpectedly flameout, dry-burning etc., safer for use.

Suitable for four season use

Broad adjusting range of heat input makes temperature regulation range much wider.

Advanced digital constant temperature technology

Adapts the "proportional control valve for electricity and gas". According to the parameter's change of the temperature sensor in hot water outlet, the chip automatically outputs the electric signal to control the proportional valve to adjust the gas volume, keep the hot water

temperature constant.

Water temperature set up by key-touch

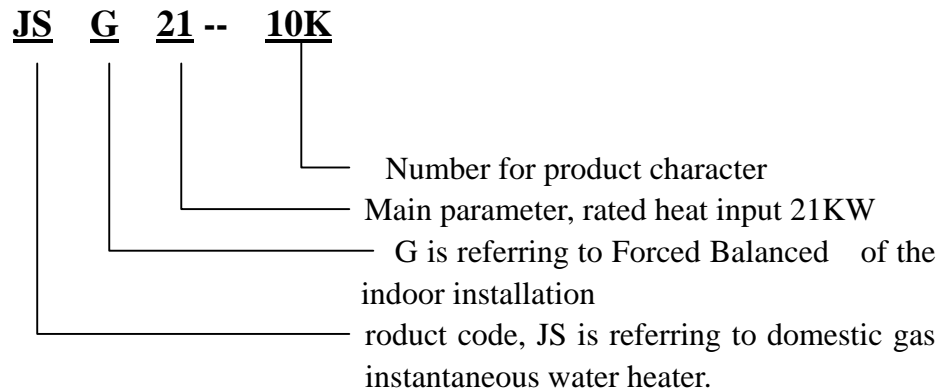
Key design, can preset the water temperature by a slight touch before use, more convenient for use.(Normal bath water temperature is 40 around, just for your reference.)

Notes: features with a is a special function just for JSG21-10K

**Attention:**

This product’s safety function is concluded by the lab test, it will be influenced by the environment in the practical use; Please use it in the reasonable situation and without any ruinous use.

**Model instruction**



Parts Name

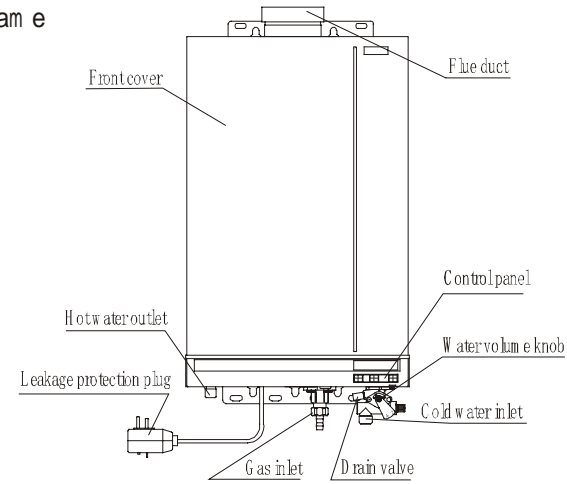


Fig.1(c)10K L、12K L、super thin model

Parts Name

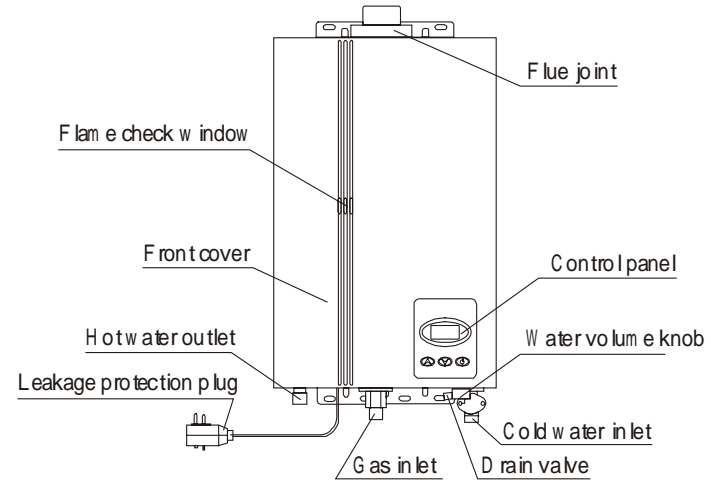


Fig. (e)10K、12K、common model

Dimension

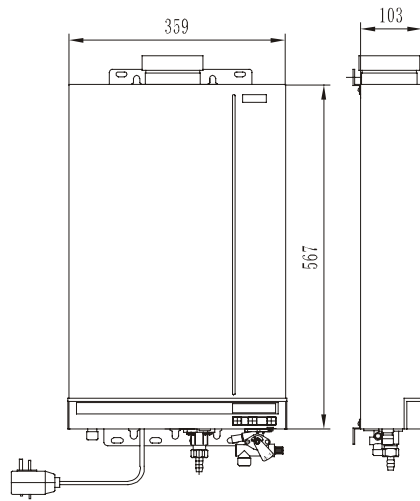


Fig. 2(c) 10KL、12KL、super thin model

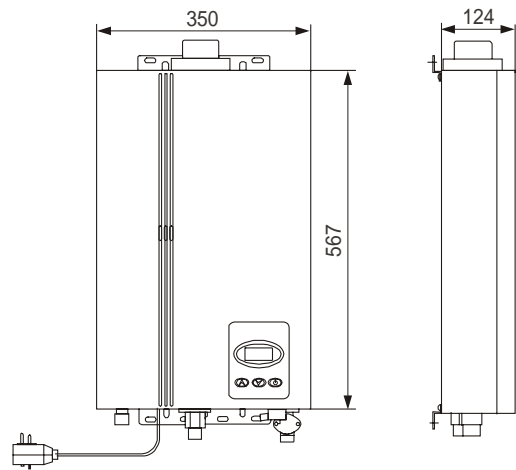


Fig 2(e) 10K、12K、common type

(All the figures are just for reference, see the product for real appearance)

## Specifications

Name	Gas-fired instantaneous water heater	
Model	JSG25-12K	
Type	C	
Gas type		2H – G20 – 20 mbar
Category		I2H
Rated gas pressure	mbar	20
Nominal heat input (temperature rise 25°C) $Q_n$	kW	25
Nominal useful output $P_n$	kW	22
Nominal water supply	Kg/min	12
Application water pressure	Bar	0.1-10
Max. start water pressure	Bar	0.6
Min. start water pressure	Bar	0.2
Electricity power supply	V, Hz	230V ~ 50Hz
Maximal input power	W	48
Over current protection fuse	V, A	250V, 2A
Insulation grade		Class I
Electricity and water protection grade		IP44
Ignition method		Water control automatic pulse ignition
Temperature control method		Gas proportional valve automatic control
Temperature display		VFD display
Overall dimensions	mm	567X350X124
Packing dimensions	mm	755X430X230
Countries of destination		AT-CZ-DK-EE-FI-GR-IE-IT-LT-LV-NO-PT-SK-SI -ES-SE-CH-GB
Pipe joint	Gas inlet	G1/2 or G4/3
	Water inlet	G1/2
	Water outlet	G1/2
	Exhaust duct	Φ100(external), Φ60(internal)

**WARNING:**

- Read the technical instructions before installing the **gas water heater**.
- Read the user's instruction before lighting the appliance.



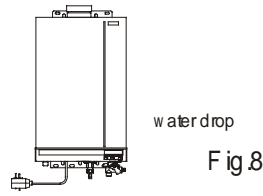
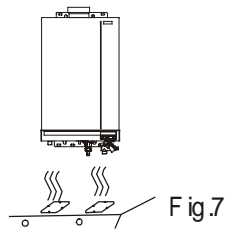
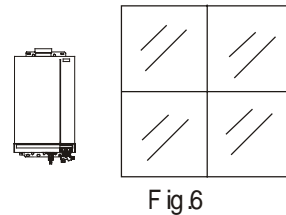
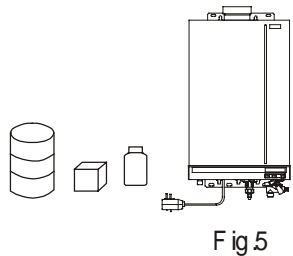
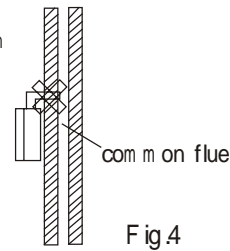
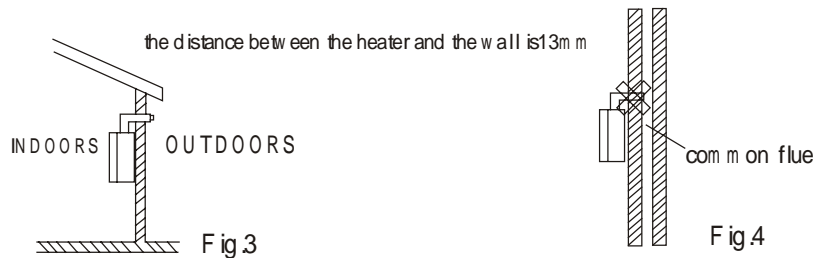
**S/N: XXXXXXXX**

## **Installation**

Contact the local gas dealers or gas management department for qualified engineer to install the gas water heater (users are recommended not to install by themselves).

### **Installation place**

The flue of the gas water heater should be installed through an external wall, the heater can't be installed in outdoors. (Fig.3)



- The flue of the heater can't be connected to a common flue (Fig. 4).

Please don't install the heater in places where special chemical is used, like the laundry or factory etc., otherwise it will cause the metal rusted, shorten the lifetime of the heater, or even can't work normally.(Fig. 5)

Try not to install the flue of the heater through the wall whose window wouldn't be open. Because the waste gases may flow back into indoors if open the window during using process.(Fig. 6)

Don't install the heater above the gas stove or other heat sources.(Fig. 7)

The power of the heater is 230V, 50Hz/AC, the power socket must have a reliable ground wire, and with a switch is much better. If there has a water leakage near the power cord, move it to a suitable place. (Fig. 8)

### **Installation methods**

- Drill holes on the wall according to the dimension of Fig.2, fix with expansion bolts in the upper hole and fit the lower hole with plastic cock, hang up the heater and use a self-tapping screw fix the lower hole of the heater.
- The height is suitable when the flame check window is in the same level with eyesight (1.5 ~ 1.65m above the ground) (Fig. 10)
- No visible electric wire and electric appliance is permissible above the heater, the horizontal distance between the heater and the electric appliance should be more than 400mm. The distance between the heater and the flammable subject should not be less

than the dimension shown as Fig. 11.

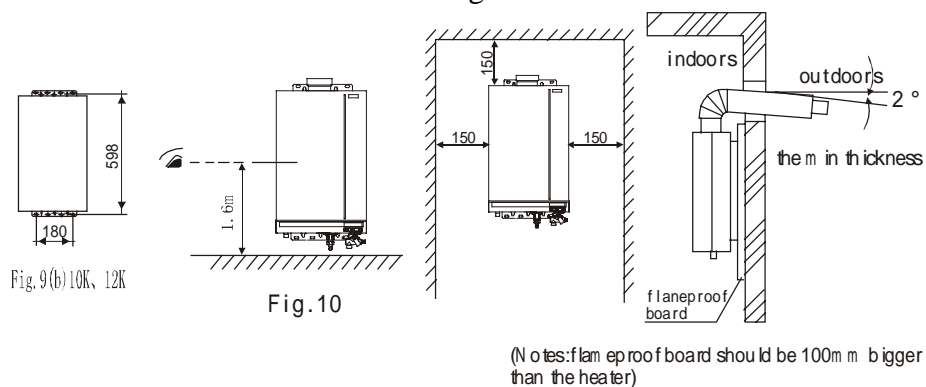


图11

#### ■ Installation of flue

This product is Forced Exhaust and supply gas water heater, it can be used before exhausting the waste gas to the outdoor according to the requirement strictly. It's not allowed to use the gas water heater without operating the flue correctly.

- Fix the elbow and the straight pipe together, and wrap and seal the joint by aluminum foil sticker. (Fig. 12)
- Install the flue after the heater body is fixed. First, put the fixed flue through the hole in the wall, then insert the elbow into the exhaust outlet of the heater smoothly, the flue end should have a 2° downward inclination (Fig. 12b), otherwise the rain may flow into the heater and damage it.

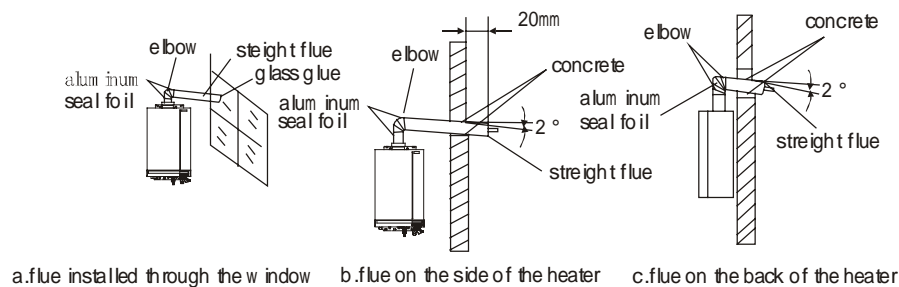


Fig.12

- Use concrete to seal the gap between the flue and the wall. If the flue is installed through the glass, use the glass glue to seal the gap tightly.
- **Cautions for flue installation**
- Please use the flue supplied by our company, Other flue with different model and specification is strictly prohibited. Don't change the specification of the flue.
- The whole length of the flue (A+B+C) should be less than 2m, and the number of the elbow should not be more than 3, otherwise it will cause results like explosive combustion, flame out etc.. (Fig. 13)

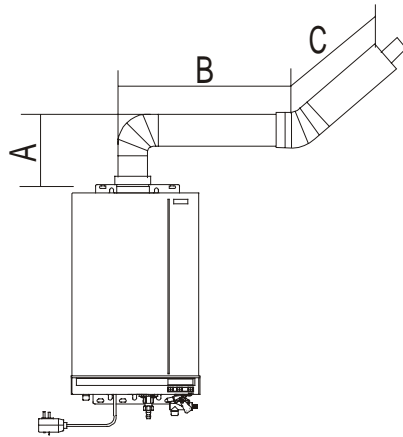


Fig.13

- The installation of the flue must be correct, otherwise the waste gases will flow back and cause danger.( Fig. 14)

w rong installation	problem caused	correct installation
	exhaust gas leak into room	
	abnom al com bustion	
	w ork abnorm ally	

Fig14

The 10K、12Kvery thin model has the flue connection, so it won't be install the flue.

#### ■ Installation of water and gas pipe (Fig. 15)

It can be used when the flue system can insure that the provided gas pressure can reach the lowest requirement. If gas water heater reach the rated heat input, the gas pressure must reach the rated heat input in the technologic parameter form. Gas rated pressure bellows:

Natural Gas 20mbar

Gas inlet

- (1) For LPG, use a gas rubber pipe with inner diameter 9.5mm to connect, put one end into the gas inlet of the heater, the other into the reducer outlet of the gas tank, insert the pipe into the inlet and outlet completely and use a clip to tight it.
- (2) For TG, ask gas dealer to connect a suitable gas rubber pipe according to the character of the gas used.
- (3) After connecting rubber pipe, check leakage with soapsuds.

Cold water inlet

Use flexible or rigid pipe to connect with the water inlet. Install a water valve before the water inlet. (Fig. 15)

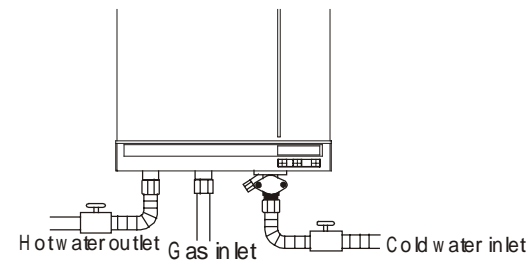


Fig.15

Hot water outlet

Use a flexible or rigid pipe to connect with the sprayer without valve. If a valve or switch is connected to the sprayer, the outlet pipe shall not use heat and pressure unendurable material like plastics, aluminum pipes, so as to avoid the pipe break and scald user.

**Using methods**

■ For type A and C

1. Preparation before ignition

Make sure that the gas used is in accordance with the gas stipulated in the label.

Insert the plug, and then switch on the power.

Open the water valve, turn the water valve to get suitable water volume if necessary.

Turn on the gas valve.

Press the “on/off” key on the control panel, the screen display “setup” and the designed hot water temperature. Press Up or Down to set the hot water temperature as desired. The lowest hot water temperature of this product is 35 , highest is 65 , minimum adjusting range is 1 , the normal shower water temperature is 40 around.(Fig.16/ Fig.17)

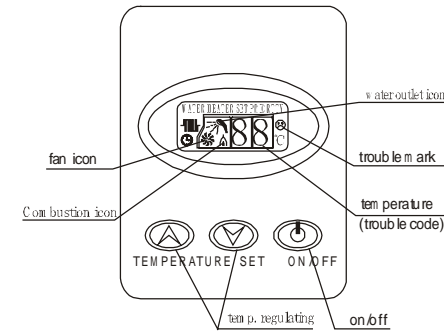


Fig.16 10K、12K、common model

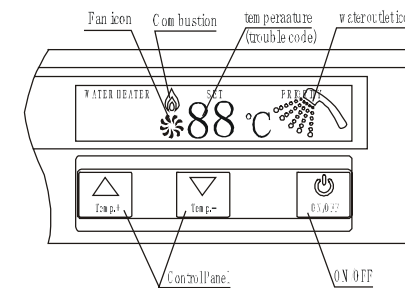


Fig.17 10KL、12KL、Super thin model

2. Ignition and water outlet

Open the water valve, the screen display the sprayer with water flowing out, the running fan, then the heater is ignited, a flame indicates on the screen, the water become hot, the screen indicate the hot water temperature.

If the heater has some trouble, the screen will display trouble code, please close down the water valve, then reopen it, or press the “on/off” key to “off”, then press it to “on”, if the heater still has trouble, please close down the gas valve, switch off the

power, ignites again after a while.

Adjust the water volume and temperature according to need during using process, the way is as described above.

It might take several trial ignition right after installation or the first use after recharge the gas tank to push out all the air remained in the gas pipe.

When the valve is open, while the switch is on “off” position, the heater doesn’t work, only cold water flows out, if hot water is needed, press the switch to “on” position.

Close down the water valve, the heater stops working, but the fan will continue blowing the chamber for several seconds. If you don’t turn off the power, then next time when you open the water valve, the heater will work according to the water temperature set up last time.

Every time when using, observe the temperature on the screen, use after the temperature is near the setup value to avoid scald.

Turn off the gas valve and power after every use.

#### ■ Frozen prevention

Drain the residual water inside the heater to prevent frozen after every use when the environment temperature is near or under 0 , do as followed (Fig. 18)

- Close down the cold water valve , if a valve is installed on the hot water circuit, open it.
- Turn the water temperature knob to “low” position, or turn the water volume button knob to “large” position (level).
- Turn the drain valve and take off, replace it after the residual water is completely discharged.
- It’s not good for using the water heater over 15 minutes in every

continuing use. If you would like to continuing use in a long time, you must close it in 5 minutes after 15 minutes use, and then restart in case of influencing the product’s life.

#### **CAUTIONS:**

If you open the water valve first, and then open the power, the machine will not start automatically.

When you shower, avoid put the water on your head and body in case of scald. You should use your hand to detect the water temperature before shower.

After using the high temperature water, because of high temperature is still in the pipe, please use your hand to detect the temperature before your shower in case of scald.

## Cautions for safety

### Gas accident prevention

Check if the flame of burner is out after use and do not forget to turn off the gas valve (Fig 19) and power.

Always check the gas connectors for gas leakage with soapsuds. If any gas leakage is detected, open the room window and door. At that moment, do not ignite or operate the switch of electric appliances or plug or unplug, because the flame or electric spark can result in explosive accidents. (Fig. 20)

Heaters which use NG and TG must use the gas type which the heater is designed to use,

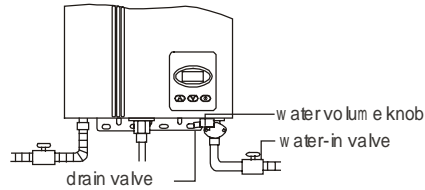
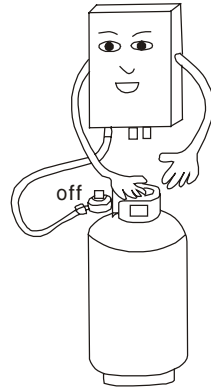
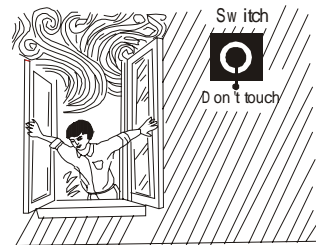


Fig. 18



Turn off gas after use.

Fig 19.



Open the window in case smelling

Fig 20.

different type of gas or the same gas in different place must not be used confusedly

Always check the gas rubber pipe and change the pipe every year to avoid gas leakage due to crack.

If the flame goes unsteadily, stop using the water heater and contact the qualified service facility for repair or adjustment.

Handling articles Wrong

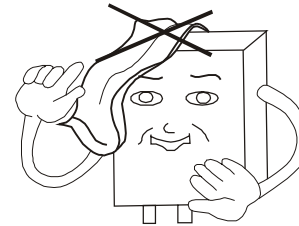


Fig 21.

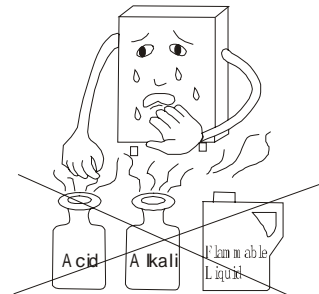


Fig 22

### Fire prevention

Do not leave alone the water heater still in operation.

In case of power failure or water failure, turn off the gas valve and water inlet valve.

Do not place towel or clothes on top of the water heater.(Fig. 21)

Do not store inflammables, explosives or volatiles near the water

heater. (Fig. 22)

Never incline the gas tank or make it upside down, the fluid gas is easy to flow into the heater and cause fire accident.

### **Monoxide toxicosis prevention**

.This product is forcedly exhaust the combustion product and inhale the air needed for combustion through the flue, so a flue must be installed in the outlet of the heater to completely discharge the combustion product to outdoors and inhale combustion air from outdoors so as to keep the indoors air fresh and prevent incomplete combustion. Otherwise, it will cause danger or even death.

Too low or too high gas pressure leads to abnormal combustion. At that moment, stop using the water heater until the gas pressure is normal.

Dust and accelerated carbon would block the heat exchanger due to long time use, and affect the combustion performance, cause the monoxide increase obviously. So, contact the qualified person to clean and clear the dust and accelerated carbon every half year to ensure the combustion product discharged smoothly.

The heater must be installed vertically, if inclined, it will make the flame touch the heat exchanger and cause monoxide increase obviously.

### **Don't drink water in the heater**

The water in the heater is not suitable for drink because it always has storage water.

### **Handle with abnormal conditions**

In case of abnormal burning (fire back, flame lift, yellow tip or black smoke, etc), smell or noise, or other emergent situations, keep calm and shut off the gas supply valve and power switch, and contact the service facility or gas dealers for repair or adjustment

### **Scald prevention**

Do not watch closely at the flame check window when igniting so as to avoid burn eyes. Keep 300mm away from the it.

- When use the heater discontinuously, pay attention to not be scalded by the over high temperature hot water at the start and stop moment.
- During using process and right after use, Don't touch any places especial the surround of the flame check window of the front cover except the knob and control panel so as to avoid scald.

### **Maintenance**

Always check the gas supply rubber pipe for cracks.

Clean the filter in the water inlet faucet monthly.

Always check water leakage phenomenon.

Ask qualified technician to examine the burner, flue and fan every half year.

Always check the flame inside the water heater for any abnormal conditions.

Clean the ignition needle completely when it has accelerated carbon so as to ensure efficient ignition.

Keep the cover of the water heater clean.

This product is use the water pressure to open the channels. When the water pressure is lower than 0.01Mpa, the heater cannot be ignited.

The drain valve is dripping. When the water pressure is too high, the drain valve will release the water so as to reduce the pressure to protect the heater.

When the heater is supplying hot water to several points at the same time, the hot water flow would be reduced, or even no hot water will issue at all.

When the temperature outside is too low, the exhausted gas meet the cold air, it will be coagulated in white fog, it's normal.

When the water temperature is too high, set the low temperature and the water tap close too small, the water temperature outlet is too high, please open the tap widely, the temperature can be down.

When the water temperature is too low, and the hot water volume is too large that over the heater's heating power, the outlet water will be not hot enough, please close the water volume smaller..

In order to ignite immediately, the fan in the appliance will delay running for a long time and then stop automatically, it's normal.

When you use the multi-function shower, the resistance will be too large, and the water inlet pressure will be too low or the water inlet volume will be too little(below the starting –up water volume), it will be flameout or can not be ignite, please choose the suitable shower function.

The residual water in the heater will be frozen in the winter, it's bad for the heater, so you must exhaust the water after use.( Please refer the exhaust methods in the usage).

In order not to scale, please close the gas valve after use the heater, let the hot water out of the appliance. When the outlet of the hot water be cold, close the cold water valve.

## **Fault Codes**

### **C SUPER THIN GAS WATER HEATER**

Fault Codes	Symptoms
E0	Thermostat fault
E1	Ignition failure, unexpectedly flame out
E3	Flue clogged or over high wind pressure
E4	Fan or its circuit fault
E5	Over-high temperature protection
E6	Fault from the temperature sensor of water outlet
E8	Gas-type switch fault

## Trouble Shooting

Problems		Reasons										Solutions
		Flam e out in use	No ignition after turning on the water valve	Explosive combustion	Yellow tip	Odour	Abnormal ignition sound	On high, water cold	On low, water too hot	Water valve	Flame on after turning off water valve	
Gas valve not open			●									Open the gas valve or recharge gas
Gas valve half open		●						●				Open the valve completely
Air in rubber gas pipe			●									Keep turning on and off the water valve till ignition
Abnormal pressure	high			●		●						Contact repairer.
	low	●						●				
Water valve not open completely			●									Open it completely
Insufficient fresh air		●				●						Improve ventilation till fresh air is enough
Too high outside wind pressure (B type)		●	●	●								Stop using temporarily
Frozen			●									Use after melt
Insufficient water pressure		●	●									Ask repairer to check water pressure
Wrong temperature Regulation								●	●			Turn the temperature knob properly.
Power failure or not switched on		●	●									Wait for power supply or switch on it
Burner clogged					●	●	●					Contact service.
Heat exchanger clogged		●			●	●						i.b.
Failure in water control		●	●					●	●	●		i.b.
Unsuitable Ignition needle position			●	●								i.b.
Too much elbow		●		●								Select a reasonable installation place

### **Accessories( See the product for real appearance)**

No.	Names	Quantity
1	Water heater	1 set
2	Gas inlet hose	1 piece
3	Water inlet hose	1 kit
4	Expansion bolts (M6)	1 kit
5	Mounting screws	4 piece
6	Customer advice	1 piece
7	Self-tapping screws	4 pieces
8	Flue is packed in another carton	1 kit

### **CAUTIONS FOR LEAKAGE PROTECTION PLUG USE**

- 1. The leakage protection plug is a safety measure for leakage protection, when there has a electricity leak, it will cut off power immediately, make the heater stop working, efficiently ensure the safe use of the heater.**
- 2. keep the plug and it's socket dry to avoid electricity leakage.**
- 3. Use electric wire in conformity with the safety standard and ask qualified electrician to connect.**
- 4. Use quality power socket so as to avoid the plug temperature rise too high and damaged. The socket must be grounded reliably.**
- 5. The heater can work normally only after the “reset” button of the plug is pressed down and the indication lamp is on.**
- 6. Check the validity of the plug once or twice for each month. Checking methods: press “test” button in power on status, if the plug cut off immediately, and the indication lamp become off, it means the plug is working, otherwise it is out of work. Stop using it immediately and repair it.**
- 7. Don't use the “test” button as a power switch to avoid damage.**
- 8. Don't use the heater when there is no leakage protection plug or when it is out of work.**
- 9. When you want to change the power wire, please go to the appointed maintain place of our company.**
- 10. When the “reset” button jump up and cut off the power, make the heater unavailable to use, contact the qualified electrician to check, Don't repair it by yourself.**

**If change, No special advice!**

**YG01**