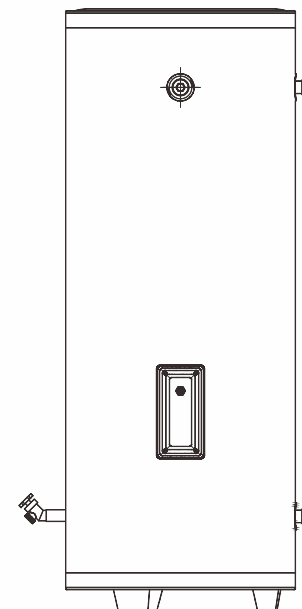


Electric Water Heater Instruction Manual



Maintenance Record Collection

Maintenance Record Table					
Record No.	Service Date	Troubleshooting	Replaced Parts	Service Site	Service Personnel
1					
2					
3					

Note:all content on basis of within free warranty

Foreword

The electric water heater products is particularly applicable to the different needs of users, available for electric household appliances, cleaning kitchens, bathrooms, factories, hospitals, beauty salon and hotels and other departments, mainly for bathing, washing and other needs of the local, meanwhile you are fully aware of the use of new technology adding warmth for your life .

Catalogue

After-sales Service

THERMOTECH users to buy electric water heater with quality warranty card can enjoy my company to provide warranty service for one year.

- Please fill in after-sales service card and send it to our service department as required, we will create a user profile on the computer based on your return card.
 - Please keep the invoice offered in purchase of electric water heaters.
 - The decorative appearance subject to change without notice.
 - Any of the following situations occur, chargeable repair could be offered.
- i. Product expires from warranty.
 - ii. No invoice and warranty card.
 - iii. Product damaged because of transport, improper storage or failure to obey manual operation.
 - iv. Installation without professional installer, not in accordance with provisions warranty procedures.
 - v. Private repair or dismantled by non-appointed after service repairman.
 - vi. After installation, damage by moving or falling caused by failure.
 - vii. The "warranty card" model incorrect with the product to be repaired or altered by deliberate.
 - viii. Due to unexpected disasters (floods, fires, accidents and other gas).

Please write 《install approved list》 and 《user tracking card》 content in neat block letters, in order to avoid misunderstandings when we contact you.

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Features

- A. PROE range of products without operator control panel, simple and convenient.
- B. high quality alloy steel plate lined with imported blue glasslined special high density coating layer, energy saving, durable and anti-corrosive.
- C. King independent outfall, particularly strong protective effect, extending the life of the water heater.
- D. Thick CFC-free insulation layer, overall polyurethane foaming, reducing heat loss.
- E. Adapt to a wide pressure range, large-capacity hot water, which can supply multiple water points with hot water.
- F. Over temperature protection, anti-dry protection, over voltage protection, double leakage protection, safe and reliable.

Technical Parameter

MODEL NO.	Capacity	Voltage/ Power	Product Size mm	N.W	G.W
FJF3.0-200G2E	200L	220V 3000W	Φ570x1250	56	60
FJF5.0-300G3E	300L	220V 5000W	Φ650x1440	78	82

Table 2.1

Maintenance

- To ensure the high efficiency of electric water heater, it is best way to regularly clean up the heating element and remove scale deposited on the heating element and the bottom of the tank.
- Unscrew the nuts of drain outlet, mixing valve is adjusted to a high temperature, water bled off, repeat this once again for a second cleaning, until satisfied.
- Do periodic inspection for magnesium rod once a year, if magnesium rod has been exhausted, you can replace the same type size of magnesium rod, the replacement, tighten the magnesium rod with drainage nut.
- In areas of high scale, the user can install cleaning devices before entering in the cold water inlet pipe , to extend the service life of the heating element, long-term out of use, the electric water heater in the water discharged, in order to avoid damage to the internal components.

Note:

- The maintenance services of water heater should be carried out by professional personnel., Incorrect methods may cause serious injury or property damage, before servicing, be sure to disconnect the air switch.
- The electric water heater safety useful life of FIVE years.
- The line is subject to change without notice.
- If in need of repair for damaged electrical water heater, please press the "Warranty Card" to apply.

Packing List

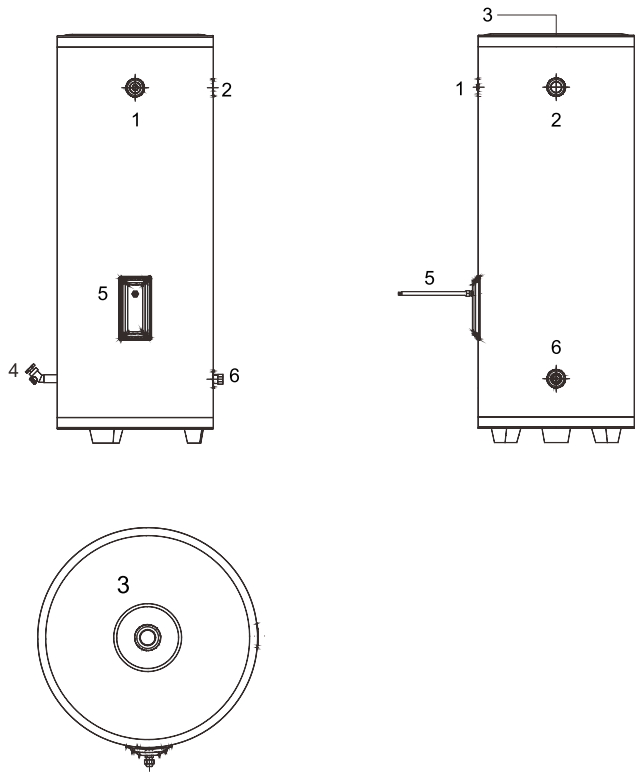
Shooting and Solution

Symptom	Cause	Treatment
Display/power indicator is not light	Power is not on	Check connection of power socket and power supply
	Poor internal wire connection	Ask for maintenance service
	Control board failure	Ask for maintenance service
	Thermal-cut works	Ask for maintenance service
	Power switch failure	Ask for maintenance service
	Thermostat failure	Ask for maintenance service
The outlet water temperature too low	Overflow of cold water inlet	Regulate mixing valve properly
	Heating element failure	Ask for maintenance service

Products Index

1	2	3	4	5	6	7
MAG anode nut	Hot outlet	Discharge hole	Drain hole	Maintenance Cover	Cold inlet	

Table 3.2



Safety Warning

- Must use the 220V -, 50Hz power source.

- The water heater must be attached to a reliable ground.
- The electric water heater must be with leakage protection air switch (not less than 30A) access instead of power and a line heater cable specifications should not be less than 2.5mm²
- In the cold water inlet of the unit, it must be installed on the original one-way valve.
- In first time use, tank must be fully filled with water before heating with keeping at least one outlet valve on to discharge air inside tank and off when tank full.
- During heating, temperature and pressure relief valve may drop water dripping, treat this as normal phenomenon and forbidden drive this port blocked to avoid accidents.
- If the setted temperature exceeds 50 °C, it can cause serious burns, and even death due to burns. Highest risk being scalded happens for children, the disabled and the elderly in hot water before bathing,so be sure to use the mixing valve to adjust the appropriate temperature.
- 1.4 m distance above ground should be guaranteed when it comes to installing air switch to ensure safety in insulating water from air switch.
- The child must be under the guidance of an adult when operating the water heater using a shower or wash.

!Notice:

2. Install in the following locations may cause the machine to malfunction (if unavoidable, please contact us)
3. There are places such as cutting oil and other mineral oil.
4. The local with air containing more salt (such as the sea, etc.).
5. The presence of corrosive gases (such as sulfur gases, etc.).
6. Factories and other places supplied with unstable power voltage with serious fluctuation.
7. Cars or compartments and other places.
8. Places full of oil, gas and oil slick (such as the kitchen, etc.).
9. The existence of a strong electromagnetic waves occurs.
10. The presence of flammable gases or local materials.
11. The presence of an acidic gas evaporation or emotional place.
12. Other special environmental conditions.

Installation Environment and Installation Method

Site selection of electric water heater

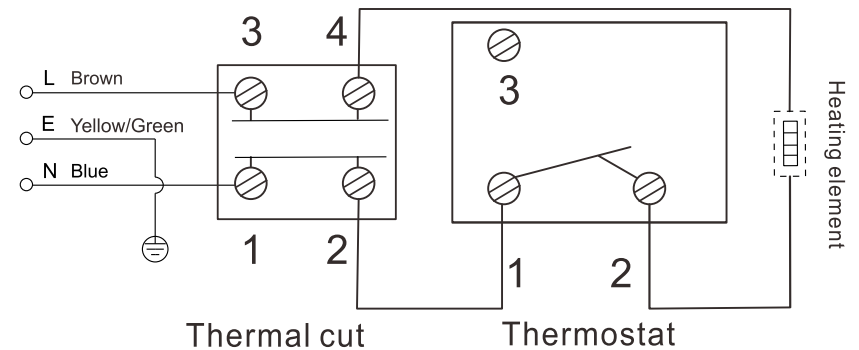
- 1) to provide sufficient space for installation and maintenance.
- 2) flat supporting surface can withstand the full weight of the machine, and the machine can be put in place in the vertical direction.
- 3) non-corrosive gas leak.

Particular Advice

- A. First, you must first make electric water heater filled with water, then power is allowed on.
- B. this product needs a separate wiring, do not share a line with other appliances, its capacity should be 1.5 times greater than the rated capacity of the water heater.
- C. If this electric water heater parts damage, please ask for professional maintenance and replace with the company's dedicated repair parts.
- D. When there is no water supply, do not use electric water heaters.
- E. In freezing regions, when heater will be held on for a long time, the water inside heater should be emptied. When emptied, unscrews outfall nuts, put hot and cold water mixing valve in the open position.
- F. If mains power cord is damaged, you must use a dedicated power cord provided by the manufacturer and replaced by a professional maintenance staff.

Trouble Shooting and Solution

Electric Wiring Diagram



Until the water flows from outlet valve, then turn off the outlet valve. In normal use the inlet valve should keep open.

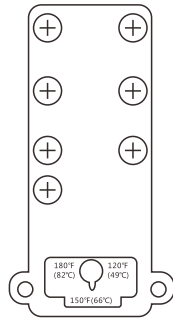


Table 7.3

Particular Advise

2.Before electricity power on,plumbers can operate setting of electric water heater temperature and power as follows:
Use screwdriver to open a maintenance cover,to see the power board has three temp options,Temp option one is 32°C Temp option two is 52°C,Temp option three is 66°C(Table 7.3).

Heating function going with set temperature: If the current temperature less than setting water temperature, the heating element would heat water to set temperature, once it reaches the set temp, heating element power is cut off ,then it starts on again once water temperature in tank drops below a certain value to the set heating temperature, and so on, it cultivates that water supply. After setting operation, fix the maintenance cover back as it is installed originally.

3,Connect the power cord to the air switch with leakage protection function. After turning on electricity power, electric water heater system goes into work state, when hardly needing to use electric water heater, turn off the air switch.

4, When electric water heater work, a few drops of water will flow out from one-way valve, this is a normal phenomenon, plastic drain pipe could be used to evacuated .

5, the mixing valve can be adjusted to fit your water temperature, after adjusting the water temperature, it is substantially constantly stable, without having to frequently adjust the mixing valve, only when the tank is about to run out, slightly adjusting the angle of the handle mixing valve is available.

- 4) easy to install connections plumbing and electrical connections.
- 5) working hours to facilitate the relief valve discharge of water into the sewer smoothly.
- 6) ensure the safety valve when the discharged water does not splash wood furniture, be sure to install effective drainage in place.

!Caution:

- Choose the right path to carry in water heater.
- Try to transport the machine in the original case.
- Install electric water heater accessories according to the instructions required.
- Please install the unit upright to in the dumping places (such as the corner of the balcony, etc.),

Pipe Connection

(See Figure 6.1,Figure 6.2)

- All pipe threads (except drain outfall / pressure relief valve outlet) are G3/4 " and properly connect one way valve, inlet and outlet as shown in Figure 6.1 Figure 6. 2.Also,all interface connection adopts seal, then check if one-way valve inlet filter is applied at the gasket connection. open either inlet valve or outlet valve to fill tank with water and shuts it off once water is full.
- It needs more PPR pipe to connect.
- Connect one-way valve with the water inlet, and also attach filter gasket between one-way valve and water inlet.

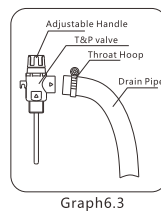
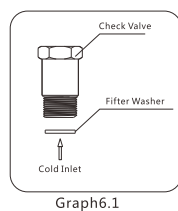
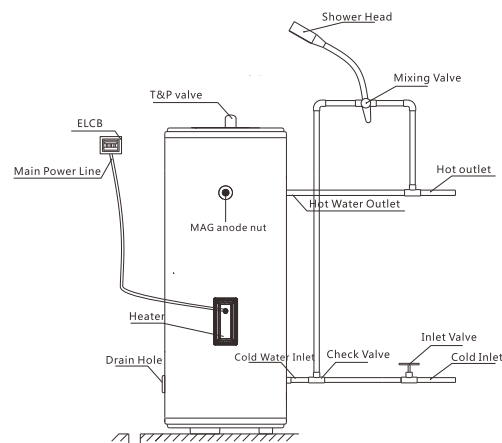
!Notice:

- Pressure must be measured prior to installation to ensure that 1.5 BAR < the water pressure tank <5 BAR. Pressure relief valve must be added if pressure more than 5 Bars ,and pressure pump must be added if pressure less than 1.5 Bars. Otherwise, the safety valve in the hot water will be drained during non-braking pressure relief.
- The connection to the discharge pipe should be kept on the pressure relief openings downwardly installed in a frost-free environment, and keep open to atmosphere; near the discharge pipe, there must be sufficient displacement of the floor drain, so drainage can not properly secured to prevent discharge of hot water or steam burns if touched; and regular action to remove the deposition of calcium carbonate to prevent clogging.
- Meanwhile, Retaining washer filters need regular cleaning.

T&P Relief Valve Connection

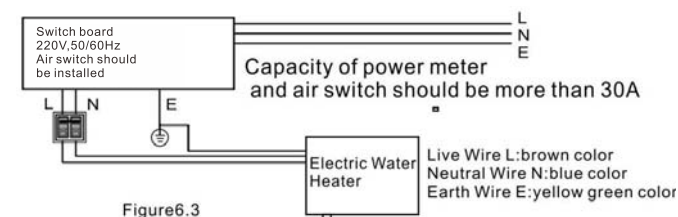
(see Figure 6.2, Figure 6.3)

- Not only when the general safety valve pressure reach certain degree it can open, but also when temperature reaches the set value, this safety relief valve could open automatically.
- Since the temperature of the pressure relief is realized by the thermal expansion of the material, even if the spool has a scale from clogging the pressure relief valve can be opened with high safety factor of approximately 100%.
- Temperature pressure relief valve must meet GBT20910-2007 standards.
- Please make temperature and pressure relief valve installed in the inlet end of the host, the maximum tightening torque of not more than 80N.M, and holding down the drain valve, connect to the discharge pipe with a Phillips screwdriver supplied throat hoop fastened.
- The discharge pipe must be installed below the valve body, end-to-drain distance should be greater than 150mm, the discharge pipe can not be connected directly to the terminal end of the outfall track.
- Each year user must tilt valve handle at least once, in order to ensure the smooth flow of water valve, before operated handle should the exhaust duct of the valve body be checked, to ensure that water can drain to the outfall track.



Power Connections

- Near the water heater (on more than 1.4 meters from the ground), install an air switch with leakage protection, which is crossed with main wire of electric water heater; in socket installation forbidden to unite the zero line, the ground connection together. To live online is strictly prohibited, otherwise electrical shock happens.
- As shown in Figure 6.3, wiring as follows:



- Main power of the product requires copper wire nominal area greater than 4.0mm².
- **Before** using the machine, go for detailed examination of coordination among current meter and wires area, air switch.

Note: The water heater can not be heated unless tank full of water.

- After the water heater is installed, you should check the installation work, pay special attention to:
 - a) pipe connections, to be reasonable, each connection is free of water leakage;
 - b) electrical configuration should be safe, correct, power cord of water heaters and air switch to be close;
 - c) mechanical connection should be solid and reliable;
 - d) product the function should work well, the control section works well;

Instruction for Use

Instruction

FJI-F2:

1, water filling, first turn on any outlet valve connected with electric water heater, adjust mixing valve to the water temperature position, then open inlet valve, then it starts filling water tank.