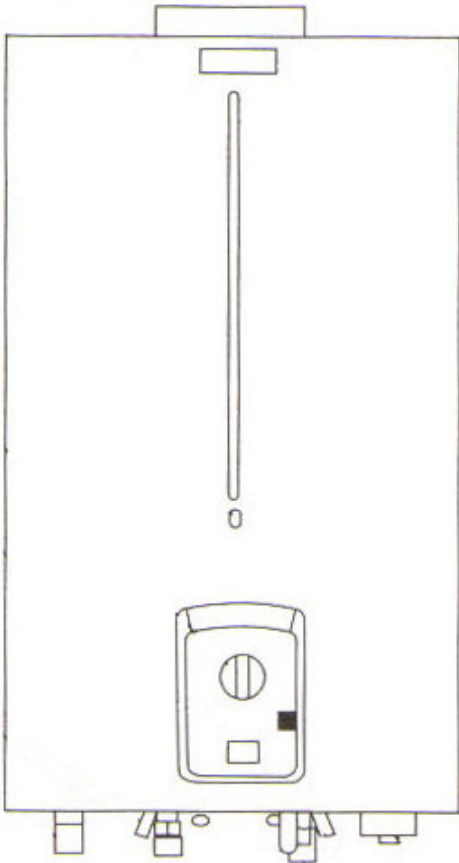


ISO 9001-Certified Large Capacity Automatic Gas Water Heater

USER'S MANUAL

EZTANKLESS MODEL 202



This gas water heater is ISO9001 certified.

Thank you for purchasing our large capacity automatic gas water heater. Please thoroughly read this Manual before installing and operating and keep for future reference.

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Special Advice

The combustion of the gas will consume a large amount of air and produce Carbon Monoxide while the heater is working. **NOTICE:** if humans or animals breathe too much Carbon Monoxide, it will cause danger, injury, or even death. Therefore, the users are requested to install and use this heater strictly according to this manual to avoid Carbon Monoxide toxicosis. The manufacturer or its authorized distributors will not bear responsibility for any damages resulting from installation and operation not in accordance with this manual. If the user has any concerns or questions, please do not hesitate to ask.

Features & Benefits

1. Automatic operation
 - Simply turn on the hot water tap or shower, and hot water will arrive. When the tap is turned off, the flame will automatically go out.
 - Independent control of water flow and gas flow makes it easy to adjust the water temperature.
2. Innovative design
 - Sleek shape and convenient to install.
 - Advanced energy-saving combustion technology greatly promotes burning efficiency.
 - Ignites at low water pressure (35 PSI)
3. Complete safety functions
 - Sensitive IC flame sensor will cut off the gas supply if the flame goes out unexpectedly.
 - Insufficient water flow pressure protection.
 - Anti-freeze function.
 - In case of no-water supply, the gas valve will automatically turn off.

Specifications

Description		Instant Gas Water Heater	
Model		EZ202LP	EZ202NG
Gas Type		L.P.G	Natural Gas
Rated Gas Pressure		2800Pa 0.406 PSI 11.24 WC inch.	2000Pa 0.29 PSI 8.03 WC inch.
Hot-water Out-point		Multi-point Hot-water Outlet	
Combustion product exhaust		Flue Duct 110mm diameter pipe (4.33 inches)	
Ignition		Water Controlled Automatic Ignition	
Power		2 “D” cells batteries (#1)	
Safety Devices		Flame-out Protection No-water cut-off Protection Water Over Pressure Protection etc.	
Suitable Water Pressure		(35 ~ 125 PSI)	
Connections	Gas Inlet	G1/2 or G3/4 inch USA pipe	
	Cold-water Inlet	G1/2 inch USA pipe	
	Hot-water Outlet	G1/2 inch USA pipe	
Appearance Dimensions (mm)		630x360x145	680x 400x 145

Parts Name

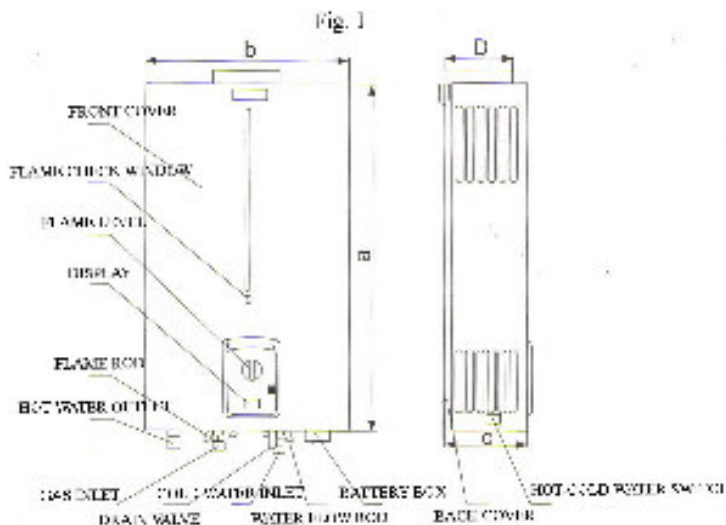


Fig. 2

Ultra-Slim Large Capacity Flow Type Gas Water Heater

(Please refer to Specification table for a, b, c dimension in this picture)

All pictures are just for reference, please see the product for the exact appearance.

Installation

- Before installation, contact the qualified technicians at your local gas dealer or gas management department to do the installation. Any random or improper installation will affect the safe use of the machine or even endanger the users' life.
- If the water heater installation is in a room with other ventilation devices, it is strictly prohibited to operate additional ventilation equipment (like a stove hood or ventilation fan) As this can cause a back draft of the heater. This is why we do not recommend this type of heater to be installed indoors of an occupied building or residence.

Installation requirements

- Do not install the water heater in bedroom, basement, bathroom, kitchen or rooms with poor ventilation. The room for installation shall be well ventilated and above 6m² in area (212 Cubic Feet). A ventilation hole as well as an exhaust hole must be drilled in the wall for proper ventilation purposes. The exhaust flue shall be installed above the water heater, and the ventilation hole shall be at a level lower than the water heater. (Fig.3)
- The flame-check window of the water heater should be at eye level (about 1.55m-1.65m above

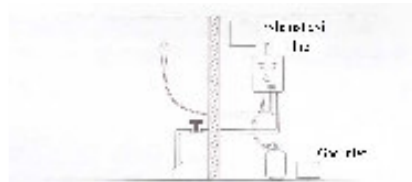


Fig. 3

Water heater
model: JSD12-100

≤12	100
12-16	130
16-20	160
20-26	200

Form

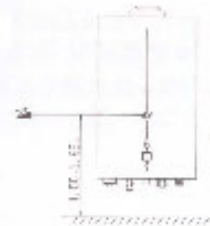


Fig. 4

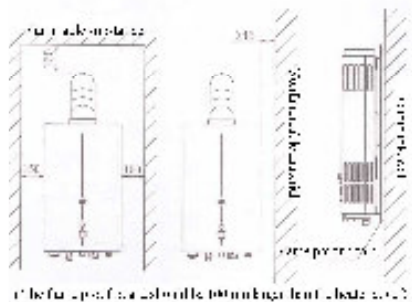


Fig. 5

Unit: mm

exf	JSD20-10A	50×625
	JSD24-12A	
	JSD24-13.8A	50×678
	JSD32-16A	

Fig. 6

Unit: mm

the floor. Fig.4), and always kept well away from inflammable liquids and materials. (Fig. 5). No electric cables or equipment shall be placed above the water heater. The heater shall be kept at least 400mm (16 inches) away from all electronics on sides and bottom.

- Do not install the water heater where strong winds blow, or it can cause flameout or incomplete combustion.

Installation Method

1. Installation

Drill holes in the wall according to Fig.6, Put an expansion bolt into the upper hole and plastic gasket into the lower hole, mount the water heater vertically on the upper bolt without inclination and tighten the lower holes with expansion bolts.

2. Piping

- L.P.G users are recommended to use a standard type regulator.

- Gas Inlet

- (1) After connecting the pipes, check the connections with soapsuds for gas leakage.

- Water Inlet

It's better to use a braided type flexible hose, or you may use rigid pipe as a cold-water connection. A water control valve should be installed before the water inlet (Fig.7). (Note: There is a filter inside the water inlet, do not remove it while installing).

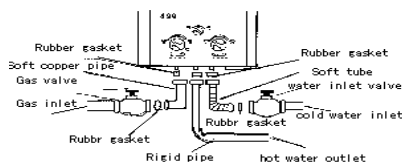


Fig 7

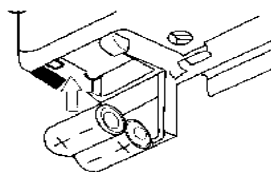


Fig 8

- **Hot Water Outlet**
Remove the drain valve first to avoid breaking the anti-frost screw. If connecting the hot water outlet directly to the shower, you can use tubing or rigid pipe. When installing the control valve or tap to the hot water outlet, or installing the shower with control tap, do not use pipes made of materials pressure-unendurable or temperature-unendurable, such as plastic or, aluminum pipes.

3. Battery Installation

Do not confuse the positive and negative ends of the batteries (See Fig. 8).

4. Flue Duct Installation

As this water heater is flue duct type, the waste air exhaust pipe must be installed.

Basic requirements:

- Flue duct inner diameter: $\phi 110\text{mm}$.
- The main body of the flue duct shall be made of rustproof material.
- The horizontal part of the flue duct shall have a 1:100 down inclination, and there shall be a $\phi 10\text{mm}$ hole at the bottom of the vertical part of the duct outside the room, for the purpose of draining water droplets and condensation.
- The outlet of the flue duct shall have a windproof cap, which should not be clogged.

Installation method:

- Drill proper holes on the wall according to the right dimensions of the heater (See Fig. 9).

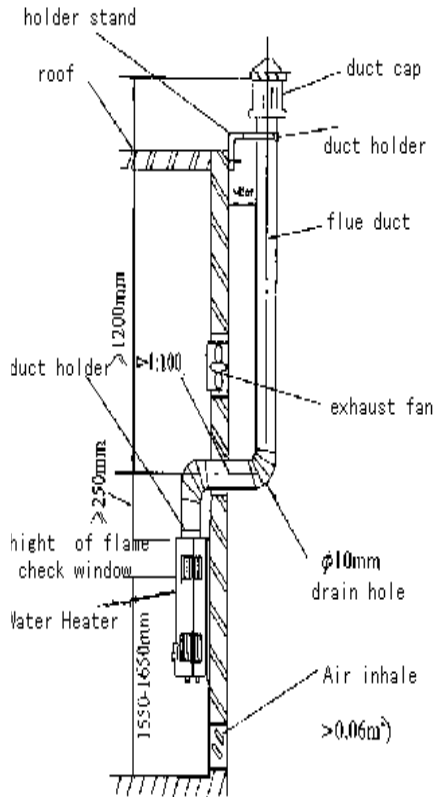


Fig. 9

Operation Method

1. Preparation before Ignition

- Make sure the type of gas used complies with that stipulated on the label. Natural gas or Propane (LPG)
- Turn on the gas inlet valve.
- Turn on the water valve (make sure there is water flowing out, the green indicator light will turn on with a "clicking" ignition sound. The burner is ignited and hot water flows out instantly. If the water pressure is low, or the power is not connected, the water heater will not operate normally.
- After initial installation or a change of gas cylinder, air may remain in the gas pipe. It may require several ignition attempts to bleed the air out of the pipe before the heater can be ignited. If a problem comes up after normal operation, turn off the water immediately. To prevent the possibility of an explosion, allow 10-20 seconds for gasses to clear before attempting to re-ignite the heater.
- Test water temperature with your hand before use to avoid scalding. (Fig.10)
- Turn off the gas valve after each use. (Fig.11)
- In cold winter, the water heater must be drained after each use as follows:
 - 1) Turn off the water control valve.
 - 2) Turn the water flow control knob to "low" position.

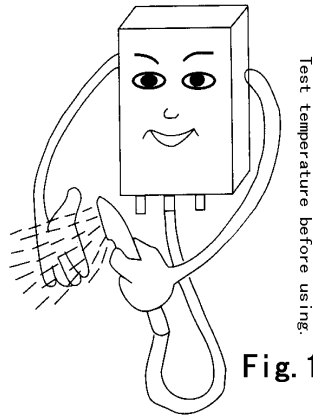


Fig. 10

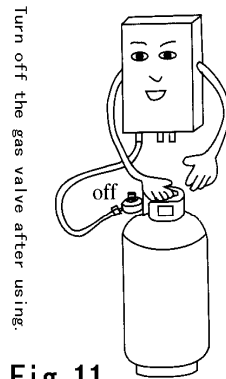


Fig. 11

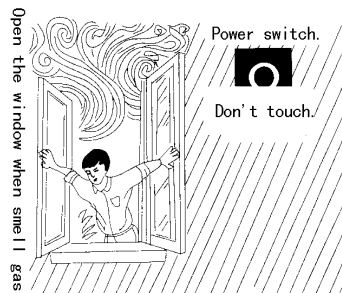


Fig. 12

- 3) Remove the drain cock. (The drain cock is a bolt connected to the valve. Take it off by turning it counter-clockwise to drain the water completely).

Cautions For Safety

- Gas Leak Prevention
 - It's best to install a gas leakage-warning and carbon monoxide detection device.
 - Do not forget to turn off the gas valve after use (Fig. 11)
 - Always check all the gas pipe connections with soapsuds to see whether it has gas leakage. In case of gas leakage, shut off the gas supply and open the windows immediately. Under such condition, ignition, switching on/off the electric power supply are strictly prohibited to avoid an explosion and fire. (Fig.12)
 - Never mix gas types, use the correct fuel, natural gas or Propane (LPG)
 - Check the gas line regularly as it may age and crack after long periods of use. Replace if cracked tubes are found. Under normal operation, the gas tube should be replaced yearly.
 - For L.P.G user, if the flame of the heater is not stable, it may be caused by the breakdown of the pressure reduction valve connected to the outlet of the gas tank. (regulator) In that case, stop using the heater immediately and contact a service technician.
- Fire Accident Prevention
 - Make sure that the flame of the heater has extinguished before leaving the room or going to sleep.
 - Turn off the main gas valve and the water inlet valve in case of a water shortage.
 - Do not place inflammables like towels or clothing onto the heater or exhaust. (Fig.13)

- Do not place inflammable materials, explosives or volatile materials near the heater. (Fig.14)
- For L.P.G users, do not place the tank tilted or inverted, otherwise the liquid in the gas cylinder may flow into the heater, and cause a fire or explosion accident.

■ Carbon Monoxide poisoning Prevention

- The burning of gas consumes large amounts of air and produces some amount of poisonous gases like carbon monoxide. Thus, the heater must be fixed in a very well ventilated location.
- As this water heater is a large volume flue type, the flue duct must be installed to exhaust the combustion by-products out of the room, keeping the air inside the room clean.
- The heater must be installed vertically.

■ Prevent Eye injury

Keep eyes away from the flame indicator window at a minimum safe distance of 300mm (1 foot) during ignition.

If the first attempt of ignition fails, wait 10-20 seconds for the gasses to clear before the next attempt.

■ Freezing Prevention

At low temperatures, completely drain the water remaining in the heater after each use. Otherwise the water may freeze and expand which may damage the heater.

■ Dealing With The Abnormal Conditions

- Stop the heater during high wind conditions Wind may blow into the flue pipe (exhaust) and may render the heater inoperable.

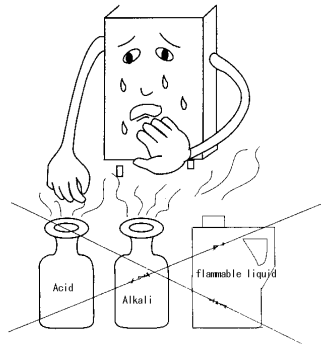


Fig 13

Do not hang things on or overhead.

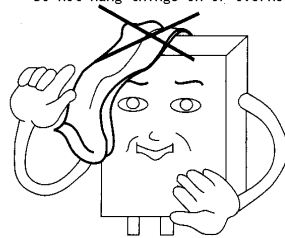


Fig 14

- In case of abnormal burning (e.g. flame back, flameout, yellow flame or black smoke, etc.), an unusual smell, noise or other abnormal matters, keep calm and turn off the gas valve and contact EZTANKLESS.
- Preventing Scalding
 - After repeated use, or when the water temperature control knob is still at “high” position, be careful of the temperature of the water at the beginning and ending of each use, as it may remain high and scald your skin.
 - During or right after use, do not touch any part of the heater other than the control knobs, especially the parts around the flame check window and exhaust.
- The Following Things Are Normal
 - When the water pressure is lower than 35PSI, the heater may not ignite.
 - If the drain valve is dripping the water pressure may be too high. The drain check-valve will release the water so as to reduce the pressure to protect the heater.
 - When the heater is supplying a flow of hot water that exceeds its designed maximum abilities in GPM, the hot water temperature will be reduced.
 - If the heater is operated for more than 20 minutes, the flame will automatically turn off due to the 20-minute timer safety protection function. To re-set the timer, simply turn the faucet off and then back on.
- Maintenance
 - Check the gas tube/pipe regularly for any defects. Contact a service center if you have any doubt.
 - Clean the water filter regularly or install an in-line filter on the inlet pipe.
 - Check for water leaks regularly.
 - If the flame turns from blue to yellow with black smoke, turn off the heater and contact the service center immediately for help.
 - Every six months have your heater professionally serviced.
 - Always keep the heater clean.

Accessories (contents of box)

Item Names	QUANTITY
Water Heater	1
Mounting Screws	4
Manual	1
Gas Connection (with washer)	1
Gas Inlet Connection (with rubber seal gasket)	1
Expansion Bolts (M6)	1

Trouble Shooting

Symptoms		The flame goes out	No ignition after opening water valve	Deflagrate in ignition	Yellow flame	Abnormal smell	Bumpy noise in ignition	Low temperature of water at "high"	High temperature of water at "high"	Burning after closing the water valve	Indicator lights on (red)	Remedies
Gas valve not open			●									Turn on main valve or replace the gas
Gas valve half open		●		●				●				Turn on the main valve
Air in the gas pipe			●									Run water until air clears the gas system and repeat every 20 seconds until ignition
Unsuitable Gas Pressure	High			●			●		●			Contact the repairer to check the gas pressure valve
	Low	●						●				
Cold water valve closed			●									Turn on the water supply main valve
Freezing			●									Use after de-frosting
Inadequate water supply		●	●							●		Clean the filter and then have a professional check the water pressure
Water temperature control mistake								●	●			Adjust the settings properly
Insufficient fresh air		●				●						More ventilation is

											required
Power shortage		●									Replace the batteries
Burner clogged				●	●	●					Contact the service center
Heat exchanger clogged	●			●	●						Contact the service center
Water control unit failure	●	●					●	●			Contact the service center
Ignition needle movement		●	●								Contact the service center
Continuous 20 minutes operation	●										Re-ignite by turning the water valve off and then back on

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