

# PORTABLE GAS WATER HEATER USER'S MANUAL

CampChamp by EZ Tankless, Inc.

Thank you for purchasing our instant gas water heater. Read this manual before installing and operating, and keep it for future reference.

## Contents

General Safety.....	1
Features.....	6
Specifications.....	7
Parts Name and Dimensions.....	8
Installation.....	20
Operation Method.....	25
Parts Replacement.....	27
Cleaning.....	28
Maintenance.....	29
Accessories List.....	29
Trouble Shooting.....	30
Circuit Diagram.....	31

## READ THE SAFETY INFORMATION

All safety messages will follow the safety alert symbol and the words: “**DANGER**”, “**WARNING**”, “**CAUTION**” or “**NOTICE**”.

These words mean:



**DANGER** - An imminently hazardous situation that will result in death or serious injury.



**WARNING** - A potentially hazardous situation that could result in death or serious injury and/or damage to property.



**CAUTION** - A potentially hazardous situation that may result in minor or moderate injury.



**NOTICE**: Attention is called to observe a specified procedure or maintain a specific condition.



## DANGER



## CARBON MONOXIDE HAZARD

This appliance can produce carbon monoxide which has no odor.

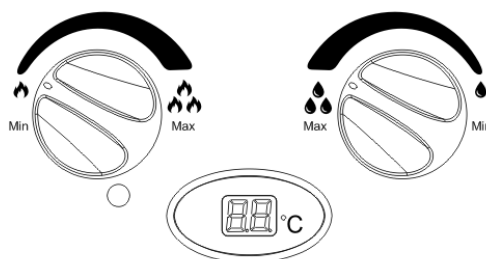
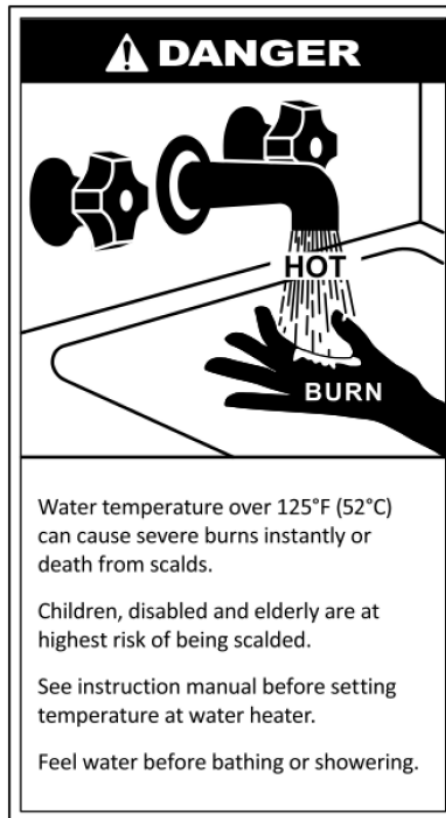
Using it in an enclosed space can kill you.

Never use this appliance in an enclosed space such as a camper, tent, car or home.



**⚠ WARNING**

**Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.**



**Please noted that the appliance will protect and shut down automatically when outlet water temperature is  $\geq 125^{\circ}\text{F}$  ( $52^{\circ}\text{C}$ ). Before turning on the appliance, it is suggested to rotate the gas knob to MIN and the water knob to MAX (as the above picture shows). After the outlet water temperature becomes stable, you can regulate gas knob and water knob gradually so as to achieve your ideal temperature.**



**⚠ DANGER**

If you smell gas:

1. Shut off gas to the appliance.
2. Extinguish any open flame.
3. If odor continues, keep away from the appliance and immediately call your fire department.

Failure to follow these instructions could result in fire or explosion which could cause property damage, personal injury or death.



**DANGER**



**⚠** Vapors from flammable liquids will explode and catch fire causing death or severe burns.

Do not use or store flammable products such as gasoline, solvents or adhesives in the same room or area near the water heater.

Keep flammable products:

1. far away from heater,
2. in approved containers,
3. tightly closed and
4. out of children's reach.

Water heater has a main burner flame.

The main burner flame:

1. can come on at any time and
2. will ignite flammable vapors.

Vapors:

1. cannot be seen,
2. are heavier than air ,
3. go a long way on the floor and
4. can be carried from other rooms to the main burner flame by air currents.

**Installation:**

Do not install water heater where flammable products will be stored or used unless the main burner flame is at least 18" above the floor. This will reduce but not eliminate the risk of vapors being ignited by the main burner flame.

Read and follow water heater warnings and instructions. If owners manual is missing, contact the retailer or manufacturer.



## **WARNINGS**

- ✧ Do not leave unattended.
- ✧ The exhaust gas and top of the portable gas water heater is HOT!  
Do not place hands or any foreign object near the top of the heater.
- ✧ Turn off power, gas valve and water valve after use.
- ✧ If stored indoors, detach and leave cylinder outdoors.
- ✧ Do not use in high wind conditions.
- ✧ If the smell of gas is detected, turn off the gas valve at the tank immediately! Do not use flame for leak detection.
- ✧ Use only Liquid Propane.
- ✧ Use only outdoors.
- ✧ Do not drink the water in the heater.
- ✧ Do not connect to a remote gas supply
- ✧ Do not over tighten the gas regulator connection to the portable gas water heater with a wrench. This may cause a crack in the gas regulator.
- ✧ This appliance must be protected from rain.
- ✧ Gas is supplied from a standard 20 pound propane cylinder (not included) such as used with outdoor grills. A regulator with hose is furnished with the heater.
- ✧ LP-gas cylinders must either be designed, fabricated, tested and marked (or stamped) in accordance with the regulations of the U.S. Department of Transportation (DOT) or for use in
- ✧ Canada, cylinders must be constructed and marked in accordance with the specifications for cylinders, Spheres, and Tubes for the Transportation of Dangerous Goods, CSA B339.
- ✧ Only cylinders marked with the proper fuel type approved for the appliance must be used.
- ✧ The gas cylinder must be disconnected when the water heater is in storage.
- ✧ Check whether the flame is extinguished after each shower and do not forget to turn off the gas valve.
- ✧ Always check all the gas pipe connections with soapsuds to see whether there is any gas leakage. In case of gas leakage, please shut off the gas supply. Under such condition, actions such as ignition, switching on/off the electric power supply are strictly prohibited to avoid explosion and fire.
- ✧ Keep on using one type of gas, never mixing using them.
- ✧ Check the gas tube regularly in case of aging or crack after long period of usage. Replace it if cracked tubes are found.
- ✧ For users, 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. In that case, stop using the heater immediately and contact a service technician.
- ✧ Make sure that the flame of the heater has extinguished after each shower.
- ✧ Turn off the main gas valve and the water inlet valve in case of water shortage.



## **WARNINGS**

- ✧ The gas must be turned off at the LP-gas supply cylinder when the water heater is not in use.
- ✧ When the LP-gas supply cylinder is not disconnected from the water heater, the water heater and cylinder must be stored outdoors, in a well ventilated space, out of the reach of children, and must not be stored in a building, garage or any other enclosed area.
- ✧ Storage of the water heater indoors is permissible only if the cylinder is disconnected and removed from the water heater.
- ✧ Cylinders must be stored outdoors, in a well-ventilated space, out of the reach of children, and must not be stored in a building, garage or any other enclosed area.
- ✧ Should overheating occur or the gas supply fail to shut off, turn off the manual gas control valve to the appliance.
- ✧ Make sure that the gas cylinder stands vertically and will not be knocked over when in use.

## **ADDITIONAL WARNINGS**

### ■ **Prevent Eyes from Getting Hurt**

Keep eyes away from the flame indicator window at a minimum safety distance of 300mm during ignition. If the first attempt of ignition fails, wait 10-20 seconds before the next attempt.

### ■ **Prevent No-Water Burning in The Heater**

After each shower, make sure that the flame is extinguished when the valve is closed. If the flame still exists after the water valve is closed, something must be wrong with the heater. Switch off the gas valve immediately and contact the service center. Otherwise the heater may be damaged by overheating and then may cause fire accident.

### ■ **Do Not Use The Heater Water for Drinking**

As there is always residue in the heater, the water supplied by the heater is only for general usage, not for drinking.

### ■ **Dealing With The Abnormal Conditions**

- Stop the heater when there is strong adverse wind blowing. Otherwise, the heater unable to operate.
- In case of abnormal burning (e.g. flame-back, flameout, yellow flame or black smoke, etc.), unusual smell, noise or other abnormal situations, keep calm and turn off the gas valve and contact the service center or the gas dealer.



### **NOTICE**

#### ■ **Reduce The Chance of Getting Furred**

After shower, please turn off the gas valve and drain out the hot water in the water heater until cool water is out. Then turn off the water inlet valve.

#### ■ **Freezing Prevention**

Under the circumstance of low temperature, please drain the water remaining in the heater completely after each use. Otherwise the water may freeze and cause damage the heater.

#### ■ **The following phenomenon are normal:**

- When the water pressure is lower than 3psi, the heater cannot be ignited.
  - The drain valve is dripping. When the water pressure is too high, the drain valve will release water so as to reduce the pressure to protect the heater.
  - When the heater is supplying hot water to too many points at the same time, the hot water flow would be reduced, and under exceptional circumstances no hot water will come out at all.
- The gas water is for point of use, for temporary water heating and not for connection to a permanent inlet water connection or for connection to a water distribution system to supply multiple outlets.

## **Features**

### 1. Automatic Operation

- Turn on the hot water tap, and then hot water will come out. When the tap is turned off, the flame will automatically go out.
- Independent control of water and gas makes it easy to adjust the water temperature.

### 2. Innovative Design

- Ultra-thin appearance, beautiful design and convenient to install.
- Advanced energy-saving combustion technology greatly improves burning efficiency.
- The heater is able to ignite at low water pressure (3psi), which fulfills the needs of more users.

### 3. Complete Safety Functions

- Sensitive IC flame sensor will cut off the gas supply if flame goes out unexpectedly.
- Insufficient water flow pressure protection.
- The gas valve will automatically turn off when dry burning happens.

### 4. A shower nozzle with on/off switch and multiple spray patterns is included.

### 5. Ideal operating use with water pressure between 20-120 PSI.



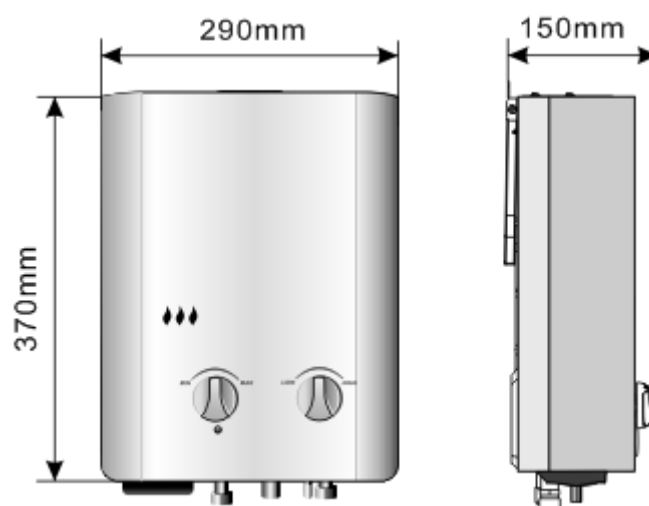
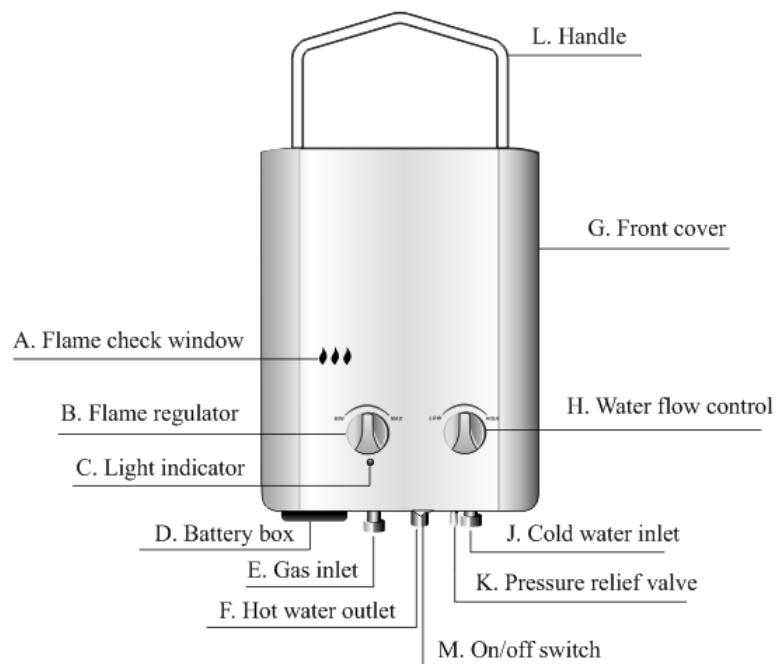
## Specifications

Name	Gas Instantaneous Water Heater	
Model	CampChamp by EZ Tankless, Inc.	
Rated Heat Input	37500BTU	
Capacity	1.45GPM	
Gas Type	Propane	
Rated Gas Pressure	11"W.C.	
Applicable water pressure	20-120PSI	
Power Supply	3V	
Waste Air Exhaust	Direct discharge	
Ignition	Water Control Automatic Ignition	
Safety Devices	1.Flame out protection 2.Over heat protection 3. Anti-blockage protection 4.Dry burning protection	
Pipe joint	Gas Inlet	G 1 / 2
	Cold Water Inlet	G 1 / 2
	Hot Water Outlet	G 1 / 2
<b>Warning:</b> <ul style="list-style-type: none"> <li>● Read the technical instructions before installing the appliance.</li> <li>● Read the use's instructions before lighting the appliance.</li> <li>● This appliance shall only be installed outdoors.</li> </ul>		



## Parts Name and Dimensions

### CampChamp by EZ Tankless, Inc.



All dimensions are for reference only. Specifications are subject to the final product.



## Installation

During using, please keep the heater vertically. Otherwise, it will affect the safety use of the heater or even cause damage.

### Installation Requirements

- The heater should be installed outdoors.
- Do not install the water heater in bedroom, basement, bathroom, or rooms with bad ventilation condition. (Fig.3)
- The heater shall not be installed in the exhaust fan and the exhaust port of the lampblack machine. (Fig.4)
- The flame-check window of the water heater shall be at the level of eyes (suggested height is about 0.6m above the floor, Fig.5), in case of any inflammable accidents.
- Neither lines nor electric equipment could be put overhead of the water heater. The heater shall be kept at least 400mm far from electronics horizontally.
- Make sure to keep the safety distance according to Fig. 6 and Fig. 7 when installing the heater, and keep away from the flammable materials.
- Do not install the heater where flammable materials or liquid will be stored or used. (Fig. 8)
- Do not install the heater where strong wind blows, or it can cause flameout or incomplete combustion.
- Do not use the heater when it's raining
- The water heater is for point of use, for temporary water heating and not for connection to permanent inlet water connection or for connection to a water distribution system to supply multiple outlets.

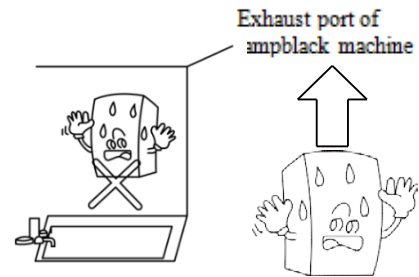


Fig.4

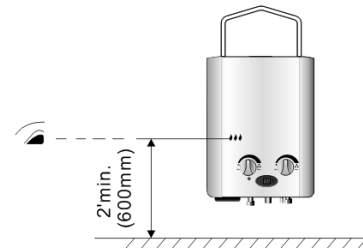


Fig.5

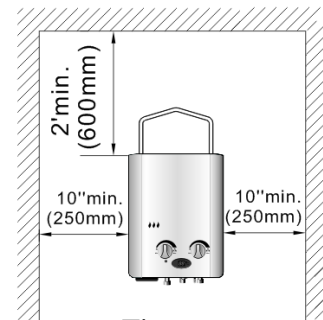


Fig.6

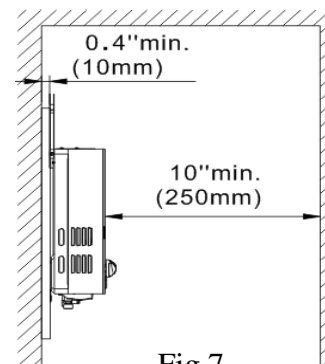


Fig.7



Fig.8



## Installation Method

- Installation

Way 1:

- (1) Drill three  $\Phi 6\text{mm}$  holes in the wall according to Fig.9 then put three expansion bolts in the corresponding holes. Put a self-tapping screw into the upper hole and drill it into the wall and keep 3mm away from the wall.
- (2) Mount the heater vertically on the self-tapping screw in upper hole then screw the remaining two self-tapping screws into the lower holes. Tighten three holes so that the heater is fixed on the wall. (Fig. 10)

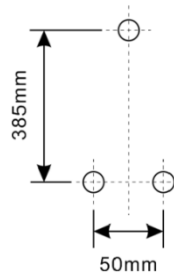


Fig.9

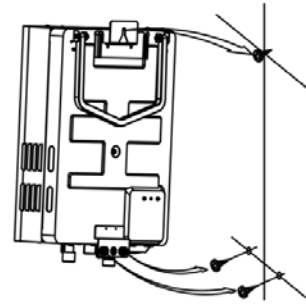


Fig.10

(2) Way 2:

When installing, please pull up the handle and hang the heater in a stable place which can bear weight at least 30 pounds in order to avoid fall-down. Keep the product in vertical status.

- Piping

Install the pipes according to Fig. 11.



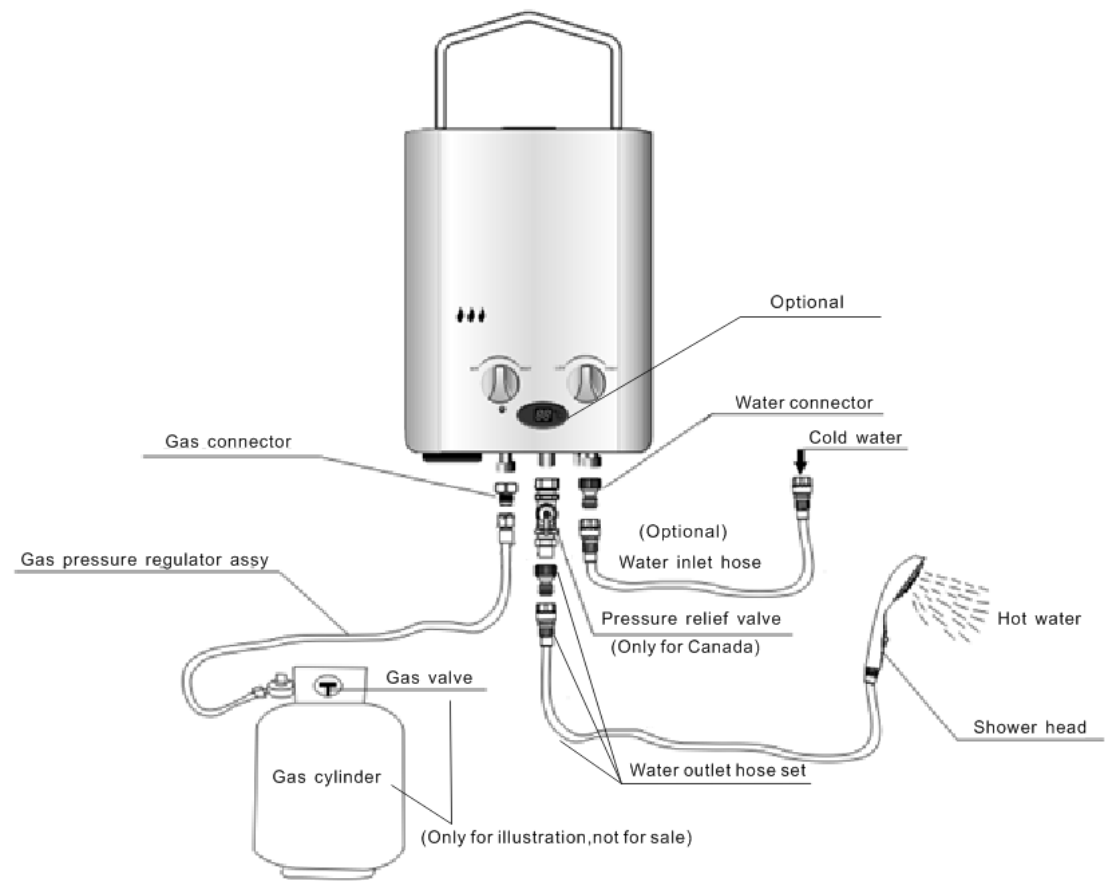


Fig.11

The illustration is based on model with display and only for reference.

- Gas Inlet installation

- (1) Attach gas regulator with hose to the gas cylinder. Use hand pressure only on the plastic connector, then, Attach gas regulator with hose to the portable gas water heater.
- (2) After connecting the pipes, please check the connections with soapsuds for gas leakage.
- (3) Gas tube should be oil-proof, anti-corrosion, and not more than 2 meters long as per gas authority specifications.

- Water Inlet installation

There is an accessory of 3/4"NPT fitting for garden hose. It is suggested to use the fitting to connect the water inlet point and your garden hose as above Fig.11 shows.



- Hot Water Outlet

- (1) It's suggested to use the providing hose and shower.
- (2) Connect water outlet connector and water outlet hose as below (Fig.12)



Fig.12

- (3) Remove water outlet hose as below (Fig. 13):

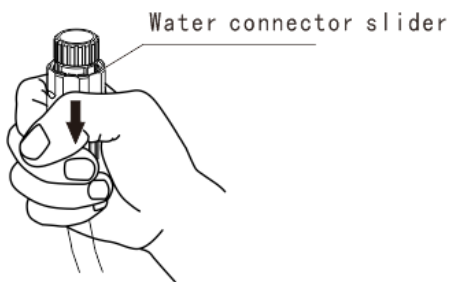


Fig.13

- Connection of water outlet tube and shower head (Fig. 14)

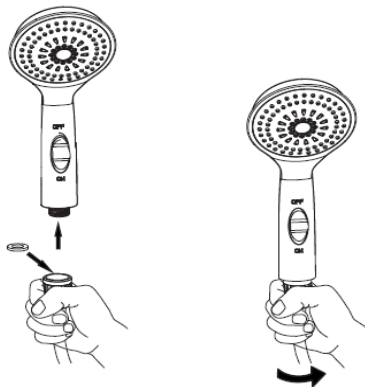


Fig.14



- Installation of shower base (Fig. 15)

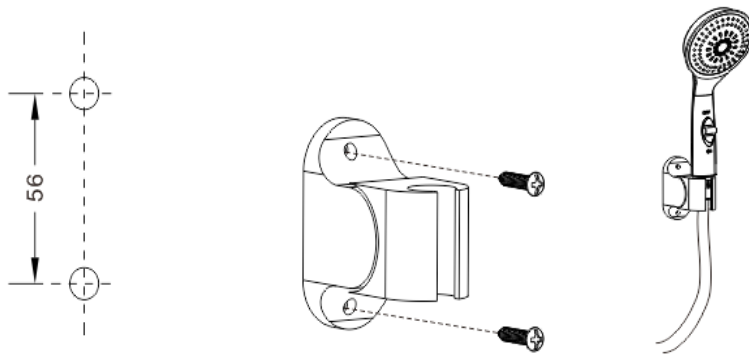


Fig. 15

- Battery Installation

Put 2 pieces of 1.5V size battery into the battery box. Make sure the polarity is correct. Close the battery cover. (Fig.16)

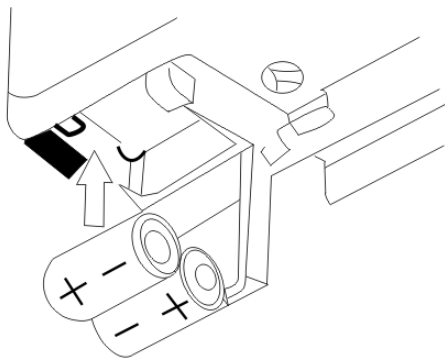


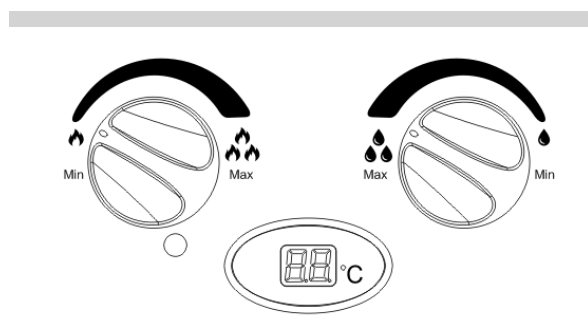
Fig.16



## Operation Method

### Preparation before Ignition

- Make sure the gas type used complies with what stipulated in the label.
- Turn on the gas inlet valve.
- Turn on the water valve (make sure there is water flowing out of the shower), and then the water heater with “clicking” ignition sound. The burner is ignited and hot water flows out instantly. If the water pressure is too low, or the power is not connected, the water heater will not operate normally.
- Check whether there is anything on the exhaust port. If yes, clean it.
- After initial installation or change of gas cylinder, air may remain in the gas pipe and it requires several ignition attempts to push the air out before the gas can be ignited. If a problem comes up after normal operation, turn off the water immediately. Try to re-ignite 10-20 seconds later to avoid blast burning.
- Water Temperature Control
  - (1) Turn the water temperature regulator knob to control the water flow and its temperature. Turn the gas regulator knob to control the flame of the burner thus controlling the hot water temperature. (Fig. 16)



The illustration is based on model with display and only for reference.

Fig.16

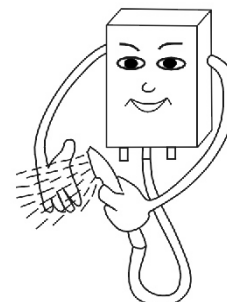


Fig.17

### Gas control knob

- Turn the gas control knob clockwise to increase the gas supply and anti-clockwise to decrease the gas supply to main burner.
- (2) Turn the water inlet knob to control the water temperature: decreasing the water flow to make the water temperature higher (Please adjust it slowly, if the flame extinguished then re-ignite before increasing the water flow), and increasing the water flow to make the water temperature lower.
- Turn off the hot-water outlet valve and the water heater will stop working automatically, re-start hot water valve, heater will be re-ignite automatically and start working.
  - Test water temperature with your hand before shower, so as to avoid scalding.(Fig.17)
  - When the water pressure is too low, it's suggest to turn the water flow control



knob to “min” position in order to make the ignition more smoothly. After working, increasing the water flow in order to get the suitable water temperature.

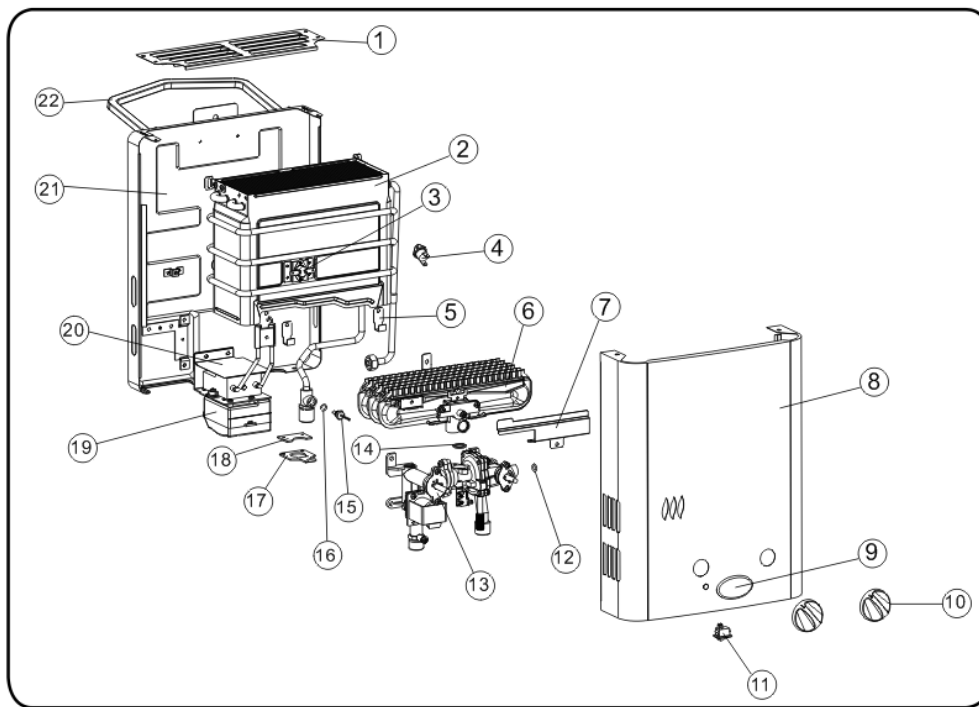
- Turn off the gas valve after each shower.
- In cold winter times, the water heater must be drained after each shower as follows:
  - (1) Turn off the water heater.
  - (2) Remove water inlet hose
  - (3) Turn the water flow control knob to “max” position.
  - (4) Vertically place the shower head about 300mm below the gas water heater ,then turn on the shower switch till the water is drained.
  - (5) Remove water outlet hose and shower head.



## Parts Replacement

**⚠ WARNING:** For your safety, DO NOT attempt to disassemble, repair, or replace any portion of this unit. Refer all repairs, service, and or adjustments to qualified service personnel.

**⚠** Please call customer support at: (219)369-4781 or e-mail us at: support@eztankless.com



(The illustration is based on model with display and only for reference. If the actual product you buy is model without display, the model dose not have ref#9,15,16.)

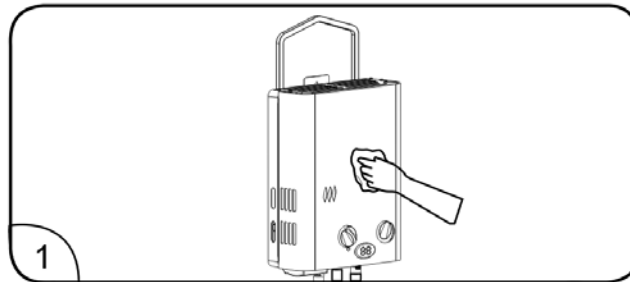
Ref #	Description	Ref #	Description
1	Smoke guider	12	Cold-hot water switch
2	Heat exchanger assy	13	O Type sealing ring
3	Thermostat 284°F ( 140°C )	14	Rectangular seal ring
4	Thermostat 113°F ( 45°C )	15	Temp.sensor assy
5	Burner bracket	16	O Type sealing ring
6	Burner assy	17	Water outlet orientation board
7	Fire baffle	18	Water outlet fixing board
8	Front Cover	19	Pulse ignition system
9	Temperature display	20	Heat shield
10	Knob assy	21	Handle
11	Cold-hot water switch	22	Back cover



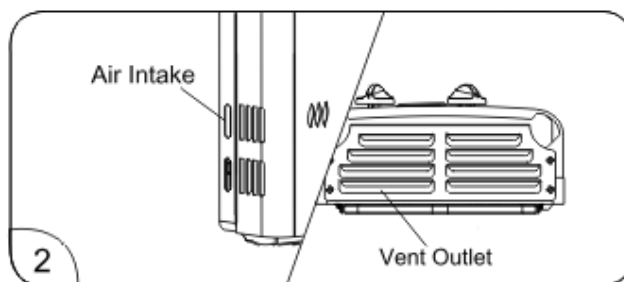
## Cleaning

**⚠ WARNING:** All cleaning to and around the water heater should only be performed with the water heater turned off .

### Surface Cleaning:

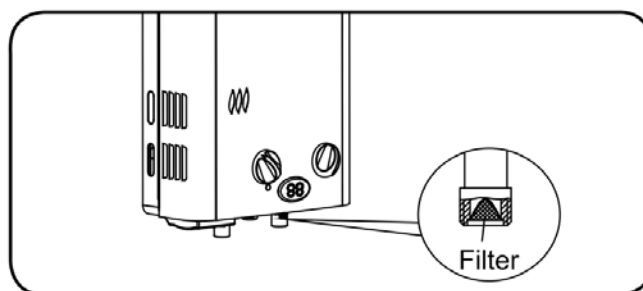


Clean the water heater with a damp soft cloth and mild detergent. Gently wipe and completely dry all surfaces.



Check the air intake and vent outlet for blockage and/or debris.

### Water Filter Cleaning:



You can reverse the hookup by taking your water source and hooking it up to the water outlet side and back flushing the system

**Notice:** If you need to clean the injectors, please contact service center for professional technician










## Maintenance

- Check the gas tube/pipe regularly for any defect. Contact service center for any doubt.
- Clean the water filter regularly.
- Check the water leakage regularly.
- Keep the water heater area clean and free from combustible materials, gasoline and other flammable vapors and liquids.
- Do not obstruct the flow of combustion and ventilation air.
- Visually check burner flams, with an explanation of proper operating characteristics.
- Clean the water heater, including special surfaces with a non-corrosive cleaning agents, if necessary.
- Contact qualified professionals regularly to check whether the heat exchanger and burner are clogged.
- Installer should be called on to install and adjust the appliance, forbid any interference with a sealed component.
- Appliances should be checked and maintained periodically by a competent person.

## Accessories List

- Please remove all packages before installation.
- Verify that all included supplied parts are present as shown.

N0.	Description of Goods	Quantity (PCS)	Illustration	Remarks
1	Manual	1		Please Keep It Properly
2	Shower head set	1		For Water Outlet Installation Uses
3	Gas connector (With Rubber Seal Gasket)	1		For Gas Pipeline Installation Uses
4	Gas pressure regulator assy	1		For Gas Pipeline Installation Uses
5	Garden hose adaptor (water inlet, female G1/2"to male NPT 3/4")	1		For Water Pipeline Installation Uses
6	Fixing screws bag	1		For Water Heater Installation Uses
7	Pressure relief valve	1		For Water Outlet Installation Uses (Only for Canada)



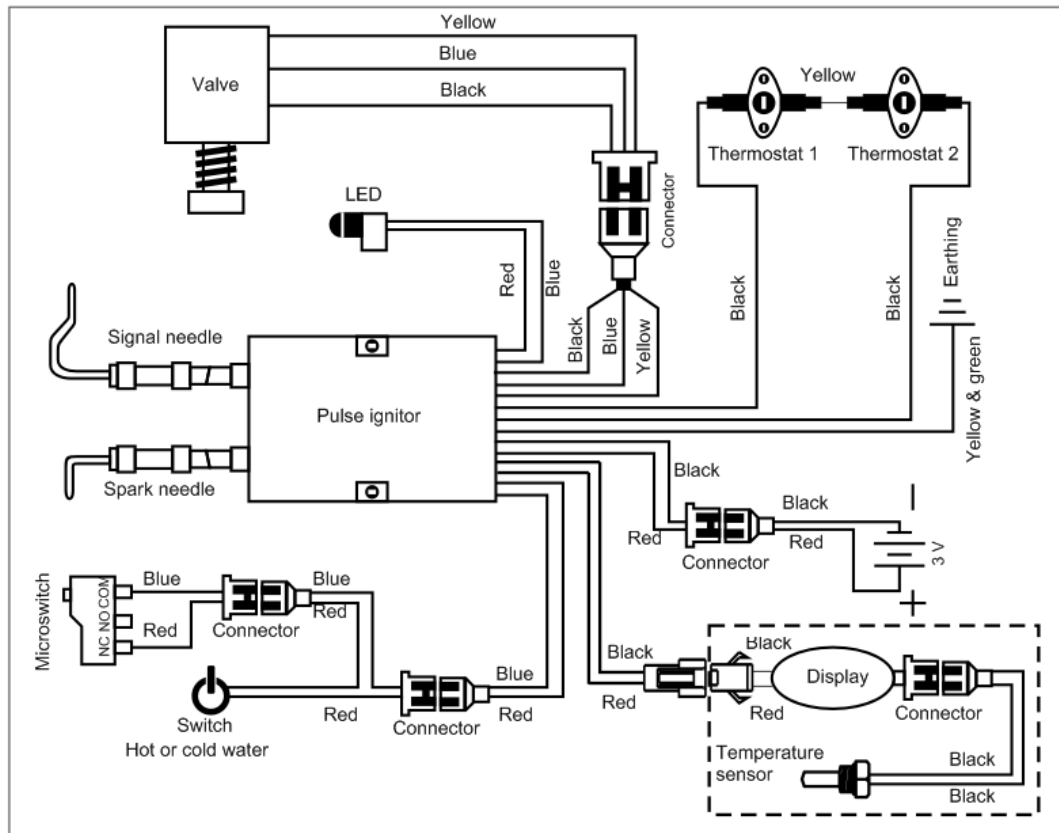
## Trouble Shooting

<div>Troubles</div> <div>Reasons</div>		No ignition after opening water valve	Fail to light or stay lit after 10 cycles	The flame goes out during using	The water does not get hot enough	When the flame turns from blue to yellow with black smoke	Burning after closing the water valve	Solutions
Water inlet pipe and water outlet pipe is on the wrong position		•						Properly connect the water inlet pipe and water outlet pipe
Gas valve not open			•	•				Turn on the main valve
ON/OFF switch is not turned on.		•		•				The On/Off switch should be with the“-” sign pushed down.
Air in the gas pipe			•	•				Several opening the water inlet valve until ignition
Unsuitable Pressure Gas	High		•					Contact the repairer to check the gas pressure valve
	Low			•	•			
Water inlet clogged		•		•				Check and clean the filter
Inadequate water supply		•		•				Call repairer to check water pressure
Power shortage		•	•	•				Replace the batteries
Thermostat mistake		•		•			•	Contact the service center
Burner clogged			•	•	•	•		Contact the service center
Heat exchanger clogged			•	•	•	•		Contact the service center
Water control unit failure		•		•			•	Contact the service center
Solenoid valve failure			•	•				Contact the service center
Ignition needle movement			•	•				Contact the service center

**NOTE: Please call customer support at: (219)369-4781 or e-mail us at: [support@eztankless.com](mailto:support@eztankless.com)**



## Circuit diagram



**⚠ CAUTION:** Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.

**⚠** Verify proper operation after servicing.