



# MAREY<sup>®</sup>

HEATER CORP.

GAS TANKLESS WATER HEATERS  
INSTRUCTIONS MANUAL



POWER GAS MODEL

Keep this manual with you after your unit has been installed,  
you may need it for further technical information.





**Congratulations! You've just purchased a new Marey POWER GAS tankless water heater and will soon begin enjoy the benefits of “going tankless”.**

**Having instant hot water and savings in space and electricity will quickly convince you that you have made the best decision for meeting your home's hot water needs.**

**Use this manual to guide you through the installation and operation, as it contains important safety tips and instructions.**

**Please take the time to read and understand the safety and installation manual in its entirety before you attempt to install your new POWER GAS tankless water heater.**

**If you are not familiar with basic plumbing and electricity, we highly recommend that you consult the services of a professional to assist you with this installation.**



## INDEX

FUNCTIONS AND FEATURES.....	04
CONSTRUCTION AND NAME OF EACH PART.....	05
PRECAUTIONS.....	07
INSTALLATION.....	09
OPERATIONS AND WARNINGS.....	12
INSTRUCTIONS FOR DAILY MAINTENANCE.....	14
CUSTOMER SERVICE.....	16
OTHER PRODUCTS.....	17



## 1. Water-controlled automatic ignition:

The water-controlled automatic ignition is provided through a double-ignition high-rating device. The flame is sensed by ions. This sensitivity control makes it easy and convenient to operate.

## 2. Auto cut-off protection:

The auto-cut-off protection will shut off the gas supply immediately if a flameout accidentally occurs, therefore preventing a gas leak.

## 3. Energy savings:

The advanced combustion system comes with a Winter/Summer switch. In winter, it strengthens the flame. In summer, it reduces the flame. This provides more comfort and energy savings.

## 4. Low water pressure start-up function:

When the water pressure is lower than 0.025 Mpa, the unit can still start. This is suitable for customers living in high floors or with low water pressure.

## 5. Anti-freezing protection:

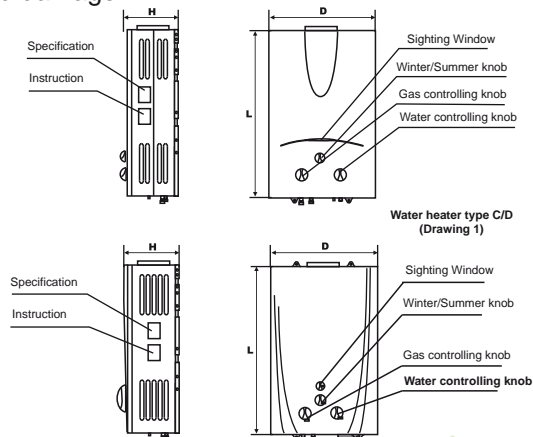
When the temperature is very low, remove the water discharge valve to discharge accumulated water inside the water pipe. This feature prevents damage caused by freezing water.

## 6. Anti-dry combustion protection:

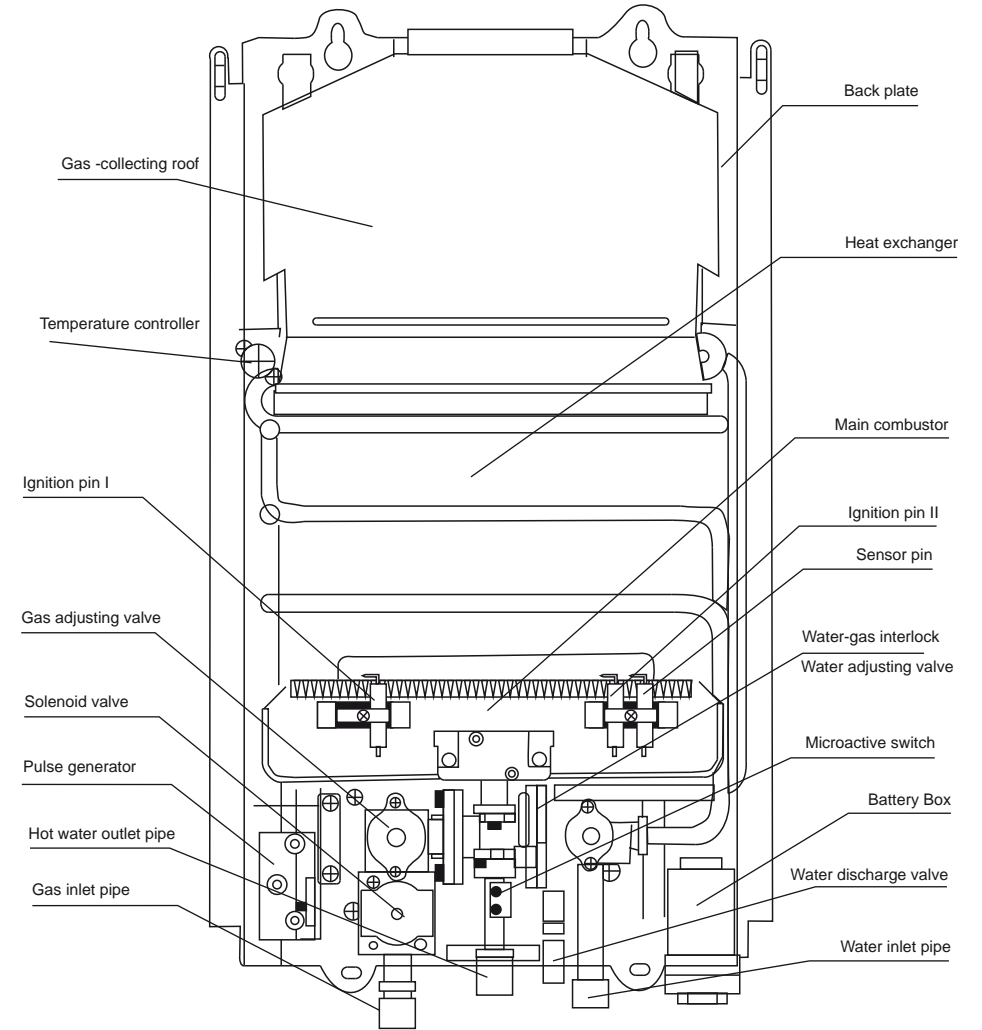
Once dry combustion occurs, the protection device will automatically shut off the gas supply.

## 7. Over-pressure protection:

When water pressure is over 1.0Mpa, the unit will automatically relieve the pressure to avoid damage.



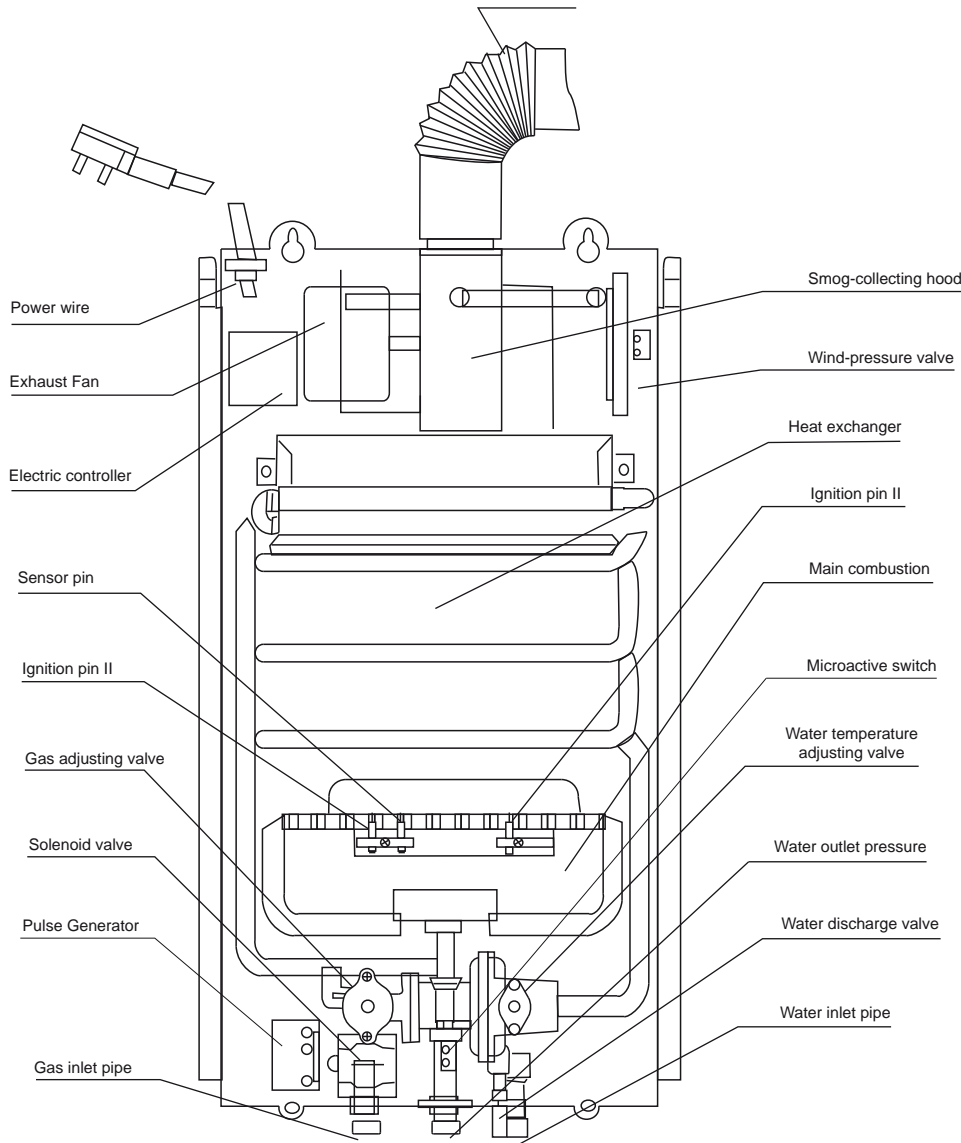
## Flue duct type



(Drawing 2)



## Forced exhausted type



(Drawing 3)

## Technical parameters:

Model	Gas Type	Related Gas Pressure	Heat Load	Exhaust Discharge Mode	Control Model	Ignition Mode	Safety Device	Applicable Water Pressure	Hot Water Outlet Per Minute	Gas Pipe	Cold Water Pipe / Hot Water Pipe
POWER GAS 5L	LPG	0.4 PSI	34,614 BTU/h	Flue Duct Type	Water Pressure Controlled	Pulse Double Ignition	10-Layer Safety Protection	3.6 - 145.0 PSI / 0.25 - 10 bar	5L/min	ø 0.37 inches / ø 9.5 mm Rubber Hose	G1/2 Pipe
	NG	0.3 PSI							1.3Gal/min		
POWER GAS 10L	LPG	0.4 PSI	79,228 BTU/h								
	NG	0.3 PSI							10L/min		
POWER GAS 16L	LPG	0.4 PSI	111,903 BTU/h								
	NG	0.3 PSI							16L/min		
POWER GAS 10L FE	LPG	0.4 PSI	79,228 BTU/h	Force Exhaust Type							
	NG	0.3 PSI		10L/min							



## PRECAUTIONS

1. The water heater must be installed in a well-ventilated area and an exhaust pipe must be installed to discharge the exhaust gas. During operation, the water heater consumes a lot of oxygen, so the air inlet hole should be made of at least 0.06 square meters and the exhaust pipe must be installed.

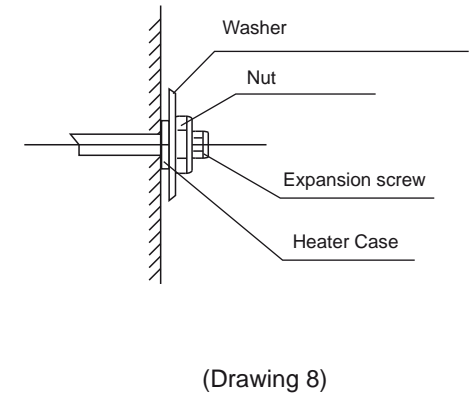
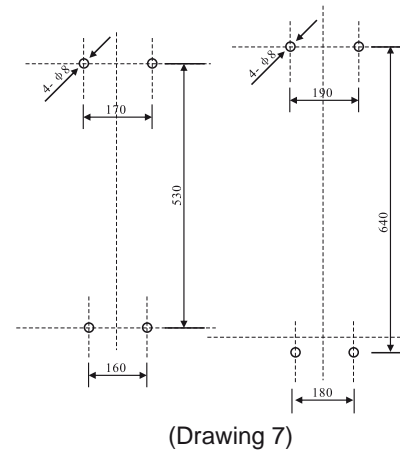
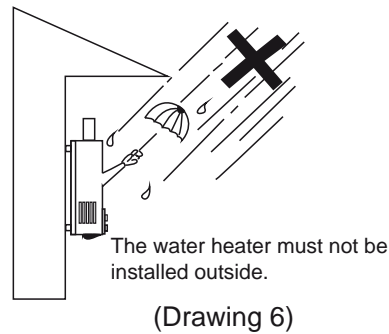
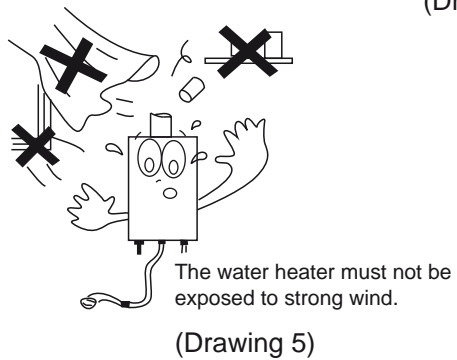
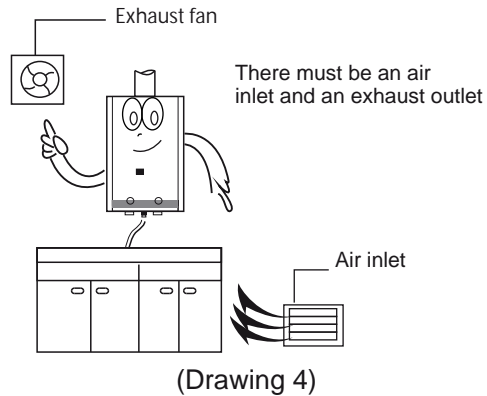
**-Poor air circulation and a lack of an exhaust pipe will cause lack of oxygen. Carbon monoxide poisoning, death and serious accidents can occur due to incomplete combustion.**

2. Don't expose the water heater to strong wind or rain.
3. Only use the type of gas that is specified on the nameplate.
4. Gas connections should be done by a professional.
5. Don't use rubber pipes that are aging or cracked.
6. The water heater must not be installed near flammable or volatile substances.
7. The water pressure should not be lower than 0.025Mpa.
8. The water heater shouldn't be installed above cooking appliances, such as ovens or stoves.
9. The water heater shouldn't be installed near stairs nor safety exits (except beyond 5m).

**1. Heater Installation**

A) Drill 8mm holes according to the dimensions shown on Drawing 7, and put in 6mm expansion screws (If the dimensions are different, please use those instead).

B) Hang the water heater and secure it with the expansion screw at the hole in the lower bracket. See Drawing 8.



**2. Pipe Installation**

A) Connect the cold water inlet pipe.

- The cold water inlet joint is G1/2" threaded pipe.
- The water inlet pipe should be connected by using flexible metal tube or rigid pipe.
- The inner diameter of the inlet pipe (including the valve) should not be less than 8mm.
- The cold water valve must be installed with the water inlet pipe.
- Please make sure that the filter in the cold water inlet is installed correctly. There are always many impurities in the new pipe. Flush them out with water before connecting it. After making sure there is no residue in the pipe, install the rubber gasket and tighten the water inlet join

**B) Connecting the hot water outlet pipe.**

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

**C)** After installation, fully open the cold water valve to test the flow of water and check whether there are any water leaks. Adjust or fix as needed.

**D) Installing the gas supply pipe.**

The gas inlet joint is G1/2" threaded pipe. The gas inlet pipe joint and rubber gasket are already attached together. The special soft rubber tube may be used if it meets technical specifications.

**NOTE:** The gasket must be installed, otherwise, the water heater will burn out. Secure it tightly with the pipe clip while connecting it.

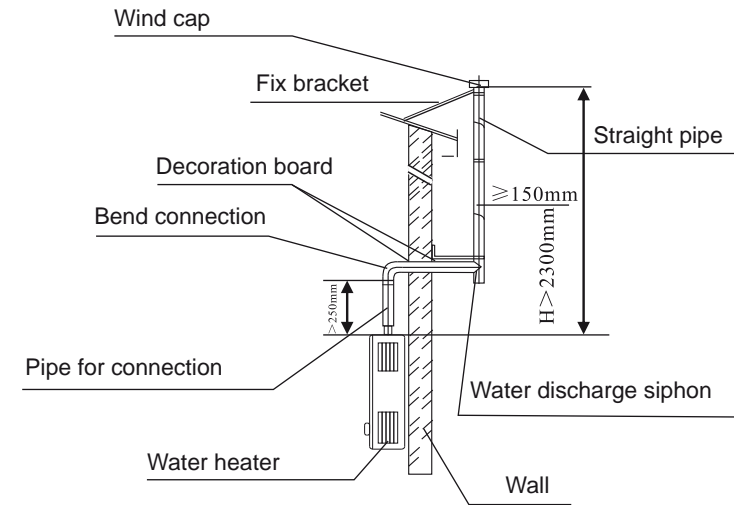
After the gas inlet is connected, open the gas supply valve and check for gas leaks at the joints by using soap water. Adjust or fix as needed.

Liquefied petroleum gas users should use the high-quality, low pressure adjusting valve of with the flux above 0.6m/h.

**3. Installing the exhaust pipe.**

**A)** Following the outline dimensions of the flue pipe as a guide, make a hole with the diameter a little larger than the flue pipe at the suitable position to install the flue pipe horizontally.

**B)** The installation of the flue is shown in Drawing 10. The total height of the exhaust pipe should be more than 2.3 meters and the horizontal length should not exceed 3 meters. There should 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 any repairs would be difficult.



(Drawing 9)

**C)** Make an air inlet door not less than 0.06 square meters at the bottom part of the wall.

**D)** If the wall is made of flammable material, a clapboard needs to be installed between the flue pipe and the wall.

**E)** If the flue pipe is connected to a public chimney, the flue pipe section should be as short as possible and the joint with the public chimney must not leak at all.



## OPERATIONS AND WARNINGS

### 1. Operations

- A)** Open the cell box and put in correctly two D cell batteries.
- B)** Open both the hot water and cold water valves. Close the water inlet valve after you make sure the cold water is flowing out through the water outlet and the ignition pins discharge.
- C)** Start the gas supply.
- D)** Open the water inlet valve or outlet valve again and the combustor will ignite right away. Hot water should flow out immediately. Sometimes, if there is air in the pipe, the combustor may not ignite the first time. So, try two or three times.
- E)** All water heaters have a seasonal Summer/Winter switch to meet your water temperature needs.
- F)** If you close the water inlet or the water outlet valve, the water heater will stop working. If needed, just re-open the water inlet or outlet valve. Please note that the temperature of the hot water flowing out is very high at that moment. Please, wait for the temperature to adjust.
- G)** If you close the water inlet valve or the water outlet valve, the water heater will shut off immediately. Then, shut off the main gas supply.

### 2. Warnings

- A)** Don't use the water heater in a sealed room or in a room with poor air circulation.
- B)** The exhaust pipe must be installed to discharge exhaust gas outside.
- C)** During operation, if you find out there is a gas leak, close the gas valve immediately. The cause of that should be checked out and the service center or gas company should be contacted for repair.
- D)** Before going to sleep or leaving the house, shut off the gas supply.
- E)** Do not block the exhaust pipe or the air inlet. This can cause incomplete combustion and lead to gas poisoning.

**F)** During operation, please pay attention to the combustion. If there is abnormal combustion, close the gas valve right away and contact the service center or gas company for maintenance.

**G)** When the outdoor temperature is below zero and pipe freezing may occur, the remaining water should be discharged after using the heater. Water should be discharged in the following manner:

· Turn off the gas supply valve, turn off the tap water supply valve, turn the water temperature adjusting the switch to the low temperature position, turn on the hot water supply valve, remove the water discharge valve to discharge the remaining water, re-install the water discharge valve.

**H)** The body of the water heater can become very hot during operation, so please don't touch any part of the water heater except for the switches.

**I)** While using the water heater, please pay attention to the initial water flow temperature to prevent getting scalded.

**J)** Check the gas pipes and hoses regularly. If you find joints that are not tightly secured or if there are cracks, you should stop using the heater and perform the necessary maintenance.

**K)** We recommend you use copper pipe to install the heater gas entrance.



## INSTRUCTIONS FOR DAILY MAINTENANCE

1. Check the gas supply pipe (rubber house) regularly to see if it is in good condition. If its aging, cracked, leaking or bent.
2. Check regularly to see if there are water or gas leaks.
3. Regularly clean the surface of the water heater to remove dirt or dust with a wet cloth, and then use a dry cloth to wipe off moisture. For hard to remove dirt, please use a neutral detergent to clean it.
4. For the plastic parts, printing surfaces and sprayed surfaces, it is not suitable to use strong detergent, benzene or gasoline to clean them.
5. Use a dry cloth to clean on the ignition electrode so as to ensure the ignition quality.
6. Regularly remove and wash the stainless steel filter in the cold water inlet.
7. During operation, please pay attention to the flame to see if it is normal condition. Check the heat exchanger and combustor whether there is dust or dirt every half a year. Cleaning should be done by a professional.
8. **Avoid accidents.** Don't modify the water heater by yourself.

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

### Packing list

The whole of package of the water heater includes:

- |                        |          |
|------------------------|----------|
| 1. Installation kit    | 1 set    |
| 2. Shower Heat         | 1 piece  |
| 3. Instructions Manual | 1 pieces |





## CUSTOMER SERVICE

Marey Heater offers an excellent Customer Service. If you have any question about our product, need information about how to install a unit, about our Warranty Services, or if you want to share a suggestion, contact us!



**1-877-727-0277**  
**service@marey.com**

**A Toll Free number for all your needs!**



## OTHER PRODUCTS

Please visit our website to get to know more about other Marey products.



**GAS PORTABLE**



**POWER PAK**



**SANTON**



**AQUAMATIC**



**MINI MAREY**



**POWER GAS**



Delbrey Street, 211  
San Juan, Puerto Rico  
00912  
Tel. 1-787-727-0277  
TOLL FREE  
1-877-727-0277

[www.marey.com](http://www.marey.com)