

GAS 6L & 10L FLOW

G6FLP - G6FNG | G10FLP - G10FNG

INSTRUCTIONAL MANUAL

GAS TANKLESS WATER HEATER



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

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Congratulations! You've just purchased a new Marey Gas Flow tankless water heater and will soon begin to enjoy the benefits of "going tankless".

The availability of instant hot water, combined with the unit's outstanding energy efficiency and space saving design, will quickly convince you that you've made the best decision for meeting your home's hot water needs.

Take the time to thoroughly read and understand this safety and installation manual in its entirety before you attempt to install your new gas tankless water heater, as it contains important safety tips and instructions.

Please carefully read all instructions and warnings. Should you have any questions, please visit www.marey.com for installation videos and FAQ. Please keep this manual for future reference.

WARNING: Units should always be installed by a licensed plumber or electrician and said installation must always conform to all local building codes. Under no circumstances should you attempt to install, repair, or disassemble the Marey gas water heater without first shutting off any gas supplied to the unit.





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GAS MODELS

WARNING

Working with gas can be dangerous. Please employ a professional to install your water heater in order to comply with local building codes.

1. Securely mount the water heater to the wall in an appropriate location using the supplied hardware.

2. Install the venting per local building codes and the instructions supplied.

3. Connect the ½" gas line and secure the gas valves with the provided rubber seal. Use two wrenches to tighten the gas inlet during installation. It is highly recommended to avoid Teflon tape, as it can ignite in case of gas leaks. It is crucial to check for gas leaks using detergent bubbles after making connections.

4. Connect the water lines (all connections are ½"). Use ½" or ¾" pipe or tubing for the water supply and return. If water pressure or flow rates are questionable use ¾" lines to ensure maximum flow. You MUST use copper, CPVC or appliance tubing intended for use in hot water applications for all hot water lines.

5. Check for and correct water leaks as necessary.

6. Install the batteries in the battery compartment. Be sure the polarity of the batteries is correct.

7. Turn on the faucet and adjust the water and gas settings on the water heater as needed for your specific environment and comfort. **USE CAUTION NOT TO GET SCALDED WHILE ADJUSTING YOUR SETTINGS** Remember that more water flow will usually result in less heating, and vice versa. Higher gas settings result in more heating, and vice versa.

8. Begin enjoying instant, energy efficient hot water for years to come!

Disclaimer: This page is intended as a quick reference only and does not contain all of the important safety warnings and other information necessary to safely operate your heater. For a complete list of safety warnings and instructions please reference the complete instruction manual before operating your water heater.

- 1. WATER HEATER QTY 1
- 2. OPERATING INSTRUCTIONS QTY 1
- 3. MOUNTING SCREWS 4 SETS



- You MUST install this water heater according to all directions and specifications contained in this manual. Failure to properly install the heater can result in property damage or severe injury or death by burning, explosion, or asphyxiation due to carbon monoxide. Neither manufacturer nor brand are responsible for any property or personal damages.

- You MUST check the exhaust flue for obstructions at the initial installation and at least annually thereafter.

- You MUST check all connections for gas leaks with soapy water before firing the unit. This must be done at the initial install and after every propane bottle change if using an LP model. If you detect a gas leak of any kind, DO NOT fire up your unit.

- You MUST check for gas leaks by smell. Understand that LP is heavier than air and may sink to ground level. If you detect a gas leak of any kind, DO NOT fire up your unit.

- You MUST observe the unit in operation for several cycles before leaving it unattended.

- Unit MUST be hung vertically, with the water and gas connections at the bottom and the exhaust at the top. Unit must be properly vented according to instructions in this manual.

- You MUST use a carbon monoxide detector in conjunction with this, or any, gas burning appliance.

- Do NOT expose the water heater to strong wind (including that from fans) or rain.

- Do NOT install the water heater near flammable or volatile substances. Do not handle or store these substances near the heater (gasoline, acetone, motor oil, paint thinners or any other flammable or volatile substance).

- Do NOT use tubing or piping that is aging or cracked in any way.

- Do NOT use this appliance with any type of gas other than that indicated on the data plate located on the side of the unit. Death or severe injury may result.

- Do NOT install the water heater in a sealed room or in a room with poor air circulation.
- You MUST install the exhaust venting pipe to properly discharge the exhaust gases.

- Do NOT block the exhaust pipe or the air inlet at any time. This can cause incomplete combustion and can lead to gas poisoning.

- When the water heater is in use, do NOT touch the body of the heater. Touch the knobs only, as the body of the heater can become very hot to the the touch.

- Prevent scalds! While using the water heater, always check the water temperature and adjust as needed before use.

WARNING! There is water contained in the coils of your water heater at all times. If your water heater is exposed to freezing temperatures, the water in the coils could freeze, causing a break in the heat exchanger of the unit, or the supply and return lines. This kind of damage will result in water running freely into the space where the water heater is located, which can cause flooding. If your water heater is installed in a geographic location that sees very low sustained temperatures, you MUST install a back-flow preventer on your heater's vent pipe. This will ensure that cold air cannot fall down into the water heater and cause freezing damage. DO NOT install this water heater where it may be subjected to a freeze. If your water heater is in an area where freezing is a possibility, you must turn off the water to the heater and drain it of any water by using the valve stem at the bottom of the unit and disconnecting the warm water line. Leave the valve stem and the warm water line disconnected until you intend to use the water heater. **DAMAGE DUE TO FREEZE IS NOT COVERED UNDER THE WARRANTY**

FUNCTION AND FEATURES

1. Water - controlled automatic ignition:

When water flow is detected, heating is provided immediately with a double ignition device. The flame is sensed by ions. This sensitive control makes the unit easy and convenient to operate.

2. Auto - cut off protection:

The auto-cut-off protection will shut off the gas supply immediately if the flame goes out for any reason.

3. Energy savings:

The advanced combustion system comes with a Winter/Summer switch. In winter, when incoming water temperatures are lower, the winter setting increases the size of the flame to compensate with extra heating. In summer, when incoming water temperatures are higher, the summer setting reduces the flame. This provides more comfort and energy savings in the form of lower gas consumption in warmer months.

4. Low water pressure start up function:

These unit requires 2 - 2.9 PSI to activate, making it suitable for users with low water pressure, or those who are using it to supply hot water to upper floors. Please note that the water flow and water pressure are not the same. Sufficient flow is always required to keep the overheat safety sensor from shutting the unit off.

5. Anti - freezing protection:

When the temperature is below freezing, remove the water discharge valve to discharge accumulated standing water inside the internal pipes. This will keep the unit from freezing. Freeze damage to the unit is NOT covered under the warranty.

6. Anti-dry combustion protection:

Should dry combustion occur for any reason, the gas supply will be immediately and automatically shut off.

7. Over-pressure protection:

When water pressure is over 145 PSI, the unit will automatically relieve the excessive pressure to avoid damage to its internal components.

PRECAUTIONS

1. The water heater must be installed in a well-ventilated area. An exhaust pipe of double walled construction for category 1 heating appliances, i.e. B-vent or Z-vent if excessive condensation is a concern must be installed to discharge the exhaust from the flame (venting supplies can be located at most home improvement stores in the water heater section). During operation, the water heater consumes a lot of oxygen, so the exhaust pipe and outlet hole must be properly installed. Refer to exhaust vent pipe section for details.

Failure to properly install the room intake and exhaust vent pipe will cause oxygen depletion in the area around the water heater, which can cause incomplete combustion. Carbon monoxide poisoning, death and serious accidents can occur due to incomplete combustion. ALL USERS OF GAS APPLIANCES OF ANY TYPE SHOULD EMPLOY THE USE OF A CARBON MONOXIDE DETECTOR. ALL GAS APPLIANCES SHOULD BE INSTALLED BY A LICENSED PLUMBER AND COMPLY WITH ALL LOCAL BUILDING CODES.



- 2. Don't expose the water heater to the strong wind or rain.
- 3. Use only the type of gas that is specified on the name plate.

4. All gas connections should be made by a licensed professional and comply with all the local building codes.

5. Don't use pipes, tubing or other connections that are aging or cracked.

6. Do not use with water pressures lower than 8 PSI. Do not use with lower GPM's than indicated on the flow chart for your unit.

7. The water heater shouldn't be installed above cooking appliances, such as ovens or stoves.

8. The water heater should be installed a minimum of 15 feet from any stairs or emergency exits.

9. The water heater must be installed vertically, according to the mounting instructions.

10. The water heater must not be installed near flammable or volatile substances.

INSTALLATION INSTRUCTIONS

MOUNTING YOUR WATER HEATER

a) Please consult all venting requirements in the "Installing the Exhaust Pipe" section of the manual before choosing the final place to mount the heater.

b) When possible, your water heater should be mounted directly to studs. There should be a screw in every available mounting location on the heater. If studs are not available, do NOT hang unit directly from sheetrock without utilizing expansion screws.

c) When utilizing expansion screws for sheetrock mounting, hold the unit on the wall where you want it mounted. Mark with a pencil the (4) mounting holes. Remove the unit from the wall, and drill 3/8" holes on each mark. (See drawings below).

d) Install the expansion bolt into the drilled hole. Hang the unit utilizing the screws supplied.



WATER SUPPLY

Connect the cold water inlet supply

Note: Use white Teflon tape at all threaded water connections

- The cold water inlet joint is ½" NPT threaded pipe.

- The water inlet should be connected by using flexible heavy duty tubing or rigid PVC pipe. If you choose flexible tubing, you will need a ½" threaded male to ½" hose barb adapter. Tubing should be secured with properly sized hose clamps. Rigid pipe should be ½" male threads. Teflon tape should be employed with any threaded fittings.

- The inner diameter of the inlet pipe (including the valve) should not be less than 3/8". Larger diameter pipe is acceptable with the appropriate adapters to reduce to ½" at the inletjoint.

-The cold water valve must be installed inline with the water inlet pipe.

- Always flush a new unit with water to clear out any collected deposits or debris prior to installation. The supplied screen filter must be correctly installed in the cold water inlet to prevent mineral deposits from your water supply from building up in the unit's water valve assembly. After flushing with cold water and confirming that there is no residue in the pipe, install the rubber gasket and tighten the water inlet joint.

HOT WATER OUTLET

- The hot water outlet joint is 1/2" NPT pipe thread.

- The hot water outlet should be connected by flexible tubing or rigid PVC intended for use with hot water.

- The inner diameter of the water outlet pipe (including the valve) shouldn't be less than 3/8". Larger diameter pipe is acceptable as long as the appropriate adapters are used.

- After connecting, fully open the cold water supply to confirm the flow of water and to check for leaks. Correct leaks as necessary.

INSTALLING THE GAS SUPPLY

The gas inlet joint is 1/2" NPT pipe thread. Very Important: Do not use Teflon tape for gas or gas pipe paste between the unit and the gas inlet pipe connector. Teflon can ignite in case of gas leaks resulting in undesired combustion.

- For small bottle Liquid Propane installations: Connect the gas supply to your propane bottle using a standard rubber Liquid Propane hose and low-pressure regulator. Optimal pressure for your unit is .41-.5 PSI, the same as a typical gas grill. Pressures set outside this range may result in inconsistent behavior from your water heater.

- For whole house Liquid Propane or Natural Gas Installations: The unit should be connected directly to the home gas supply using black iron gas pipe or the braided metal gas appliance hoses located in the water heater section of your local home improvement store. WARNING: THIS TYPE OF CONNECTION SPECIALLY MUST BE MADE BY A PROFESSIONAL. Please note that Natural Gas units require .25-.5 PSI for your unit to operate correctly. If you are unsure of your gas pressure, contact your gas company.

After the gas inlet is connected, open the gas supply valve and check for gas leaks at all connections by spraying with soapy water and watching for bubbles. Do not skip this step! Adjust or repair leaks as needed. Remember that the rubber seals provided in the installation kit must be used in order to secure the thread and connector well.

- All gas connections must be made by a licensed professional in accordance with local building codes and regulations.

INSTALLING THE EXHAUST PIPE

WARNING! There is water contained in the coils of your water heater at all times. If your water heater is exposed to freezing temperatures, the water in the coils could freeze, causing a break in the heat exchanger of the unit.

This kind of damage will result in water running freely into the space where the water heater is located, with can cause flooding. If your water heater is installed in a geographic location that sees very low sustained temperatures, you MUST terminate vent stack with a properly rated wind and rain cap. This will help prevent cold air from falling down into the water heater and causing freeze damage. Damage to the unit or residence caused by freezing is not covered under warranty and responsibility for this type of damage is disclaimed by Marey Heater Corporation.

- All venting must be done in accordance with local codes and regulations. Local building codes from city to city and state to state will vary. Some jurisdictions may allow venting material not allowed by other jurisdictions.

- ALL jurisdictions in North America allow for Z-Vent material to be used for venting tankless hot water heaters. The condensation of a tankless water heater is slightly more acidic than that of a standard water heater. Z-Vent is double walled stainless steel vent pipe made speci[®] cally for venting tankless heaters. Z-Vent is intended for lifetime use and will never corrode or rust.

- MOST jurisdictions in North America allow for B-Vent to be used for category 1 heating appliances. Round B Vent is ideal for Category 1 draft hood appliances. It uses a double wall construction with the inner Due of polished aluminum or aluminum alloy and an outer casing of galvanized steel. If venting is done correctly then the exhaust gasses should be carried out before it has a chance to condensate. Before deciding what material to use, you MUST check your local building codes to see what is allowed in your jurisdiction. If you choose to use B-Vent, you MUST check it at least monthly for corrosion and replace vent pipes immediately if corrosion is detected.

The proper venting Materials and procedure for the venting of this Natural Rise Gas Series model are as follow: subject to local building codes.

- The preferred material for these heaters is B-Vent (doubled walled, galvanized metal outside, polished aluminum inside). The unit requires 4" venting.

- You must establish an 18" collar rise before installing any bends or condensation catches. Never install a 90 degree bend directly on top of the heater.

- The minimum height allowed is 6 feet, this is to allow enough pipe to heat up to properly vent the gases and moisture from combustion. A straight vertical run is preferable.

- If horizontal runs are necessary then they must always be sloped up at least .25" for every foot and must be kept shorter than 75% of the total vertical length. Never terminate the venting horizontally, you need the last bit of vertical run to "pull" the remaining gasses that may have cooled in the horizontal run.

- If venting through the roof then the termination height will depend on your roof pitch (consult with an HVAC tech if unsure of needed length). If condensation is a concern for a specific installation then other more specialized materials should be used most common is Z-Vent (double walled stainless steel on both in and outside layers).

- Fresh air intake: The room in which the heater is located must have an air inlet not less than .75 square feet (roughly 9" x 12" or larger).

- If there are any deviations from these guidelines then please seek the help of a qualified HVAC technician. Improper venting could be hazardous or even deadly.



DRAWING 04

OPERATING INSTRUCTIONS

Install two D Cell batteries. Check the door of the battery compartment for correct battery position.

- Open the hot water on a nearby faucet. Confirm proper water flow through the unit and out of the faucet. (You should hear a "clicking" sound from the unit. This is the ignitor activating). Turn the water back off.

- Start the gas supply. Check again for gas leaks using soapy water and correct as necessary.

- Open the hot water faucet. You should hear the ignition clicking, and hot water should begin flowing. Sometimes, if there is air in either the water or gas supply lines, you will not get immediate combustion. If this is the case, turn the water on and off several times to clear the water and gas lines of any air pockets that may be present.

- All water heaters have a seasonal summer/winter switch to meet your water temperature needs. This is because extra heating may be required when incoming water temperatures are lower (winter), and less heating is required when incoming water temperatures are higher (summer). Use the summer setting when incoming water temperatures are a little higher. Use the winter setting when incoming water temperatures are a little higher.

- When the water supply is turned off, the water heater will stop working. When you turn the water back on, the water heater will reignite. Please note that if you use the hot water multiple times in quick succession, the water may be excessively hot for one or two seconds. Please wait for the temperature to adjust before using.

- If you close the water inlet valve or the water outlet valve, the water heater will shut off immediately. Shut off the gas supply after use.



1. If a gas leak is detected at any time, close the main gas valve immediately. The Marey service center or your local gas company shou Id be contacted for repair.

2. Do not block the exhaust pipe or the air inlet. This can cause incomplete combustion and lead to gas poisoning.

3. During operation, check the flame through the sight glass for normal combustion. Check for a compact, blue flame. Tall or excessively orange flames indicate abnormal combustion. If there is abnormal combustion, close the gas valve immediately and contact the Marey service center or your gas company for maintenance.

4. When outdoor temperatures are below 32 degrees F and pipe freezing may occur, any water remaining in the unit after use should be discharged to avoid freezing. Water should be discharged in the following manner:

a) Turn off the gas supply valve, turn off the tap water supply valve, and turn the water temperature adjusting switch to the low temperature position. Turn on the hot water supply valve and remove the water discharge valve to discharge the water remaining in the unit. Reinstall the water discharge valve.

INSTRUCTIONS FOR DAILY MAINTENANCE

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

Check regularly for water or gas leaks and correct immediately.

Regularly clean the surface of the water heater to remove dirt or dust with a wet cloth, and then use a dry cloth to remove moisture. For hard to remove dirt, please use a mild spray cleaner or detergent.

Do NOT use strong detergents, benzene, gasoline, or other flammable agents to clean the unit.

Regularly remove and wash the stainless steel filter in the cold water inlet.

During operation, take note of the flame and discontinue use if abnormal combustion is detected.

Avoid accidents. DO NOT modify this unit in any way.

ON/OFF SWITCH

The ON/OFF Switch is an additional feature to prolongue the battery life of the units.





DRAWING 08 - G10L

NOTE: The switch may be left on ON position permanently, but this may affect the battery life of the units.

DESIGN AND COMPONENT IDENTIFICATION

6L:



DRAWING 09 - G6L

10L:



DRAWING 10 - G10L

EXPLODED VIEW



N°.	NAME	QTY.	REMARKS
1	Gas controlling knob	1	
2	Winter and summer knob	1	
3	Front case	1	
4	Hot and cold water switch	1	
5	Water outlet fixing bracket	1	
6	Pulse igniter bracket	1	
7	Pulse igniter	1	
8	Induction needle	1	
9	Gas valve assembly	1	
10	Inlet connector bracket	1	
11	Inlet connector	1	

N°.	NAME	QTY.	REMARKS
12	Ignition needle	2	
13	Battery box heat shield	1	
14	Battery case	1	
15	Battery box bracket	1	
16	Bottom case	1	
17	Water flow sensor	1	
18	Burner	1	
19	Thermostat	1	
20	Heat exchanger	1	
21	Fume hood	1	
22	Flame baffle	1	

DRAWING 11



N°.	NAME	QTY.	REMARKS
1	Gas controlling knob	1	
2	Winter and summer knob	1	
3	Front case	1	
4	Hot and cold water switch	1	
5	Flame baffle	1	
6	Pulse igniter	1	
7	Pulse igniter bracket	1	
8	Water outlet fixing bracket	1	
9	Gas valve assembly	1	
10	Inlet connector bracket	1	
11	Inlet connector	1	

N°.	NAME	ΔΤΥ .	REMARKS
12	Body Bracket	1	
13	Battery box	1	
14	Battery box heat bracket	1	
15	Battery box heat shield	1	
16	Bottom case	1	
17	Water flow sensor	1	
18	Burner	1	
19	Heat exchanger	1	
20	Fume hood	1	
21	Thermostat	1	
22	Induction needle	1	
23	Ignition needle	2	

DRAWING 12

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IUAL	ГАЛА		END

TECHNICAL SPECIFICATIONS	GAS 6 FLOW	GAS 10 FLOW		
Gas Type	Liquid Propane or Natural Gas	Liquid Propane or Natural Gas		
Heat Loss	42,000 BTU/h	65,000 BTU/h		
Maximmum Flow Rate	1.58 GPM - 6 LPM	2.64 GPM - 10 LPM		
Exhaust Discharge Mode	Flue Duct Type	Flue Duct Type		
Ignition	2D Cell Battery Powered	2D Cell Battery Powered		
Activation Pressure	2.5 PSI	2.5 SPI		
Safe Operating Water Pressure	2.5 PSI -116 PSI	2.5 PSI - 116 PSI		
Hot Water Output per Minute	6L/min	10L/min		
Min & Max Gas Inlet Pressure	Natural Gas: 0.87kPa - 2.61 kPa Liquid Propane: 1.99kPa - 3.23kPa	Natural Gas: 0.87kPa - 2.61 kPa Liquid Propane: 1.99kPa - 3.23kPa		
Water Connections	1/2" NPT	1/2" NPT		
Dimensions	17.3" X 11.8" X 5.1"	21.65" X 12.9" X 7.28"		
Weight	10 lbs	24 lbs		
U.E.F.	Natural Gas: 0.867	Natural Gas: 0.823		
	Liquid Propane: 0.823	Liquid Propane: 0.823		

* No need for electricity, starts with pulse ignition, powered by 2 D cell batteries. Not included.

TEMPERATURE INCREASE CHART

	TEMP. INCREASE PER GPM										
		GAS 6	FLOW	GAS 10 FLOW							
		Highest	Lowest	Highest	Lowest						
	0.5	126°F	34°F	-	68°F						
Z	1.0	64°F	17°F	100°F	34°F						
ש	1.5	43°F	11°F	67°F	23°F						
	2.0	32°F	9°F	50°F	17°F						
	2.5	-	-	40°F	14°F						
	2.7	-	-	37°F	13°F						
	3.0	_	-	30°F	9°F						

*Highest gas setting: set Winter/High

*Lowest gas setting: set for Summer/Low

This information is intended as a guideline based on typical residential environments. Temperature increases will vary depending on the environment in which the heater is used. Variables such as very low incoming water temperature or higher than average gas pressure can result in higher temperature increases. Higher incoming water temperature or lower than average gas pressure can result in higher temperature temperature or lower than average gas pressure can result in be the lower temperature increases. ALWAYS test the water with your hand to confirm suitable temperature before use.

Temperature increases listed are based on use of the water heater under optimal conditions with an incoming water temperature of 48°F. Variable factors such as incorrect or imperfect installation or warmer incoming water temperature may yield different results.

TROUBLESHOOTING GUIDE

CASE	ROUBLE- HOOTING	Flameout 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	Flameout when at ' Low Temperature' position	Flame can't be extinguished after closed the water heater	SOLUTIONS
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 th	e gas pipe											Continuosly open and close the hot water valve until the flame is ignited.
Gas pressure is not suitable	High						•					Ask maintenance personnel to check the water supply valve and water pressure adjusting valve
Main cold wat oper	er supply not ned											Fully open the main water supply valve.
Freez	zing											The water heater can be used only after the ice is melted.
Cold water p suffic	oressure not ient											Ask maintenance personnel to check the water pressure.
Improper op water tempera	peration for ture adjusting											Turn the water & gas controlling valves to the right position.
Lack of f	resh air											Ventilate the room immediately.
Safety device	e is working											Re-start the water heater. If still doesn't work, contact the customer service dept.
Malfunction controlled	of electric d system											Contact the customer service dept.
Combusto	r clogged											Same as above.
Heat exchang	ger clogged											Same as above.
Malfunction controlled	n of water d device	•										Same as above.
Positional c ignition c	hanger of distance											Adjust the ignition distance.
Cold water sup is too	oply pressure high											Adjust the cold water supply valve.
Not enough through	water flow the unit											Increase water flow through the unit.

Please feel free to contact us if you have any questions about our products, warranty service, or if you need assistance installing a unit.



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