

TC-Home SF20250612B08D6FBLVB

TC-Home 10L Propane Gas Tankless Water Heater Instruction Manual

Model: SF20250612B08D6FBLVB

INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your TC-Home 10L Propane Gas Tankless Water Heater. Please read all instructions carefully before installation and use to ensure proper function and safety.

Important Safety Notice: In cold weather conditions, it is crucial to drain all water from the unit after each use. Failure to do so can lead to residual water freezing and cracking the internal components of the heater, causing damage.

PRODUCT FEATURES

- **High Efficiency:** Advanced energy-saving and combustion technology for reduced gas consumption and noise.
- **Low Water Pressure Startup:** Operates effectively even under low water pressure conditions, suitable for areas with limited water supply or high-rise buildings.
- **Manifold Auto Protection:** Integrated safety mechanism for user protection.
- **Ion Flame Inspection:** Automatically shuts off gas supply in case of unexpected flameout.
- **Over Water Pressure Protection:** Automatically reduces pressure when water pressure is excessively high.
- **Temperature Control:** Independent controls for both cold and warm water.
- **Digital Display:** Provides real-time temperature readings.
- **Automatic Ignition System:** Powered by two 'D' batteries (not included), requiring no external electrical hook-up or standing pilot.
- **Flame Failure Protection Device:** Enhances operational safety.
- **Overheating and Pressure Safeguard:** Built-in safety features.
- **20-Minute Off Self-Timer:** Automatic shutdown for safety and energy conservation.

TECHNICAL SPECIFICATIONS

Specification	Value
Model	SF20250612B08D6FBLVB
Capacity	10 Liters
Gas Type	LPG (Liquid Petroleum Gas / Propane)
Thermal Input	20 KW
Thermal Efficiency	≥80%
Temperature Rise	25°C
Working Temperature Range	-8°C to 45°C
Minimum Working Water Pressure	0.025 MPa
Gas Pressure	2800 Pa
Gas Pipe Connection	G 1/2"
Water Inlet Connection	G 1/2"
Water Outlet Connection	G 1/2"
Vent Type	4.3" Flue Duct
Dimensions (L x W x H)	13.4" x 5.7" x 23.2"
Torque Range	3-3.5 N.m
Electrical Requirement	DC3V (2 x 'D' batteries)



Image: TC-Home 10L Tankless Water Heater showing its overall dimensions: 13.4 inches (width), 5.7 inches (depth), and 23.2 inches (height).

SETUP AND INSTALLATION

Proper installation is critical for the safe and efficient operation of your water heater. If you are unsure about any step, consult a qualified professional.

Installation Requirements:

- Ensure adequate ventilation.
- Install in an area protected from freezing temperatures.
- Maintain proper clearances around the unit.
- A gas pressure regulator is recommended to avoid issues caused by excessively high gas pressure.

Connection Points:



Before each use water heater

Please ensure you have turned on the starter switch

Image: Close-up view of the bottom of the water heater, showing the gas inlet (G), water inlet (W In), and water outlet (W Out) connections. The ON/OFF switch is also visible.

Installation Diagrams:



Image: Diagram illustrating the recommended setup for the smoke pipeline (flue duct) installation. It shows minimum distances for the smoke pipeline (greater than 600mm) and the unit's placement relative to the air discharge hole and ground (1400mm-1600mm).

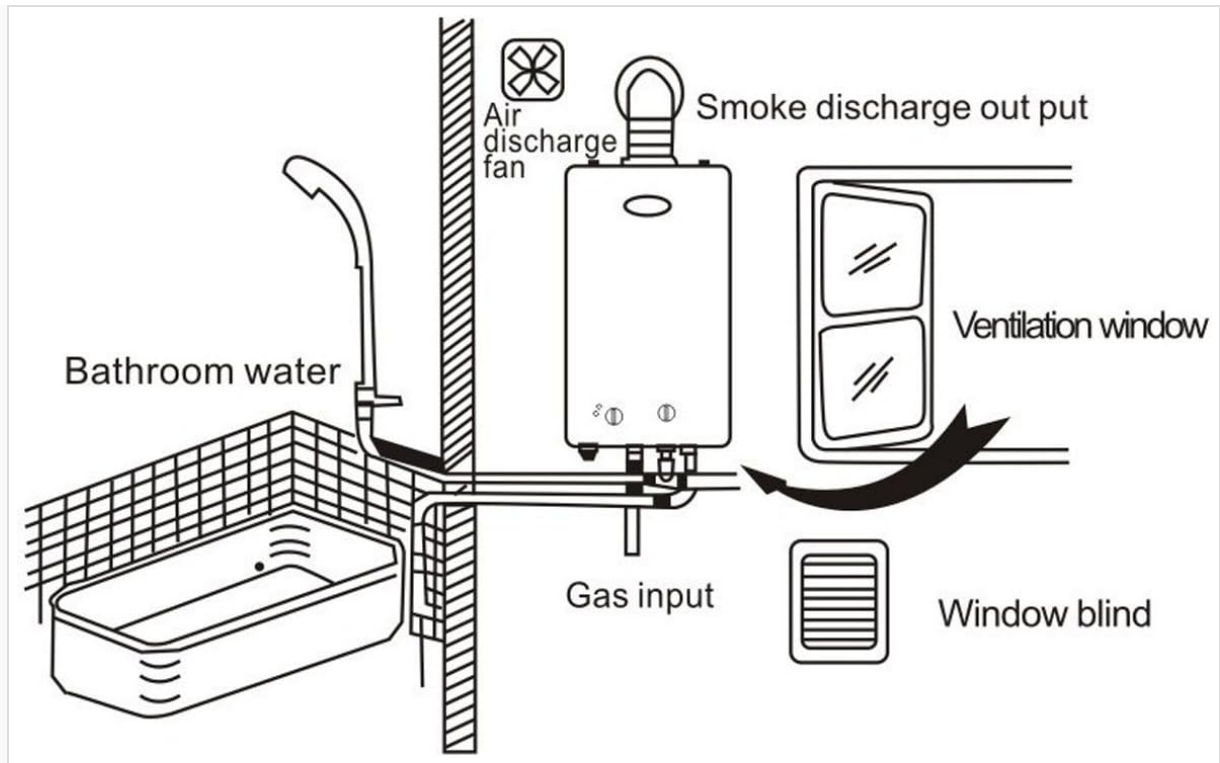


Image: Diagram showing a typical bathroom installation setup for the water heater. It depicts connections for gas input, cold water, and warm water, along with the smoke discharge output and the importance of a ventilation window or air discharge fan.

OPERATING INSTRUCTIONS

Initial Startup:

1. Ensure the unit is properly installed and all connections (gas, water in/out) are secure and leak-free.
2. Install two 'D' size batteries into the battery compartment for the automatic ignition system.
3. Open the gas supply valve.
4. Open a hot water faucet to initiate water flow through the heater. The digital display will activate, and the unit will automatically ignite.

Daily Operation:

10L



Image: Close-up of the water heater's control panel, featuring a digital temperature display and three rotary knobs for 'Winter/Summer' mode, 'Fire Control' (gas flow), and 'Water Control' (water flow).



Image: Close-up of the ON/OFF starter switch located at the bottom of the water heater, near the water and gas connections. This switch must be in the 'ON' position for the unit to operate.

- **Power Switch:** Ensure the main ON/OFF switch located at the bottom of the unit is in the 'ON' position before each use.
- **Water Flow Control:** Use the 'Water Control' knob to adjust the water flow rate. Higher flow rates may result in cooler water, while lower flow rates allow for hotter water.
- **Fire Control (Gas Flow):** Use the 'Fire Control' knob to adjust the gas supply to the burner, which directly impacts the heating intensity and water temperature.
- **Winter/Summer Mode:** The central knob allows selection between 'Winter' and 'Summer' modes, optimizing gas consumption based on ambient temperature and desired water temperature.
- **Digital Display:** The digital display shows the current water temperature.
- To turn off the unit, simply close the hot water faucet. The unit will automatically shut down. For extended periods of non-use, turn the main ON/OFF switch to 'OFF' and close the gas supply valve.

MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your TC-Home water heater.

- **Battery Replacement:** Replace the two 'D' batteries periodically, or when the ignition becomes inconsistent. Ensure correct polarity during installation.
- **Exterior Cleaning:** Clean the exterior of the unit with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Ventilation Check:** Periodically inspect the flue duct and ventilation areas to ensure they are clear of obstructions.
- **Winterization:** As noted in the introduction, it is critical to drain the unit completely if it will be exposed to freezing temperatures. This prevents damage from ice expansion. To drain, turn off the gas supply, disconnect the water inlet and outlet, and allow all water to flow out.
- **Professional Inspection:** It is recommended to have the unit inspected by a qualified technician annually to ensure all components are functioning correctly and safely.

TROUBLESHOOTING

Refer to the table below for common issues and their potential solutions. If the problem persists, contact customer support.

Problem	Possible Cause	Solution
No hot water / Unit does not ignite	No gas supply; Low water pressure; Dead batteries; ON/OFF switch is off; Flame failure protection activated.	Check gas tank/valve; Ensure sufficient water flow; Replace batteries; Turn ON/OFF switch to 'ON'; Reset unit by turning off water flow and restarting.
Water not hot enough	High water flow rate; Low gas setting; Cold ambient temperature; Winter/Summer mode incorrect.	Reduce water flow with 'Water Control' knob; Increase gas flow with 'Fire Control' knob; Select 'Winter' mode if applicable.

Water too hot	Low water flow rate; High gas setting; Overheating protection activated.	Increase water flow with 'Water Control' knob; Decrease gas flow with 'Fire Control' knob; Ensure proper ventilation.
Unit leaks water	Loose connections; Damaged seals; Internal component damage (e.g., from freezing).	Tighten connections; Inspect and replace seals; If internal damage is suspected, discontinue use and contact a professional.
Unusual noises during operation	Air in the system; Sediment buildup; Component malfunction.	Bleed air from water lines; Consider professional descaling; Contact support if noise persists.

SAFETY INFORMATION

- Always ensure adequate ventilation when operating the unit. Never install or operate in an unventilated area.
- Do not store flammable materials near the water heater.
- Regularly check for gas leaks using a soapy water solution on connections. Never use an open flame.
- Keep children and pets away from the unit during operation.
- Do not tamper with safety devices or modify the unit.
- In case of a gas leak, immediately shut off the gas supply, open windows and doors, and evacuate the area. Do not operate electrical switches or phones. Contact emergency services.
- Ensure the water heater is properly grounded if an external power source is used (though this model uses batteries for ignition).

CUSTOMER SUPPORT

For further assistance, technical support, or warranty inquiries, please refer to the contact information provided with your purchase or visit the official TC-Home website. When contacting support, please have your model number (SF20250612B08D6FBLVB) and purchase date available.