
CAMPLUX
Adventures Enhanced
USER MANUAL
CX SERIES GAS TANKLESS WATER HEATER
OPTIONAL COLOUR
WHITE
BLACK

WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliances.
- WHAT TO DO IF YOU SMELL GAS
  - Do not try to light any appliances.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

CAMPLUX

GAS TANKLESS WATER HEATER

Model No.	CX264WLP		Maximum Input Rating (Btu per hour)	65,000
Voltage	110 Volts		Minimum Input Rating (Btu per hour)	11,800
Frequency	60 Hz		Minimum Input Gas pressure	9.8" w.c (2.45Kpa)
Amps	Less than 12 Amperes		Maximum Input Gas pressure	12.4" w.c (3.10Kpa)
Gas Type	Liquid Propane	Only	Manifold Pressure	6.35" w.c (1.68Kpa)
			Water Operating Pressure	3.6~110 PSI
Serial No.				
Recovery Rating	As used in this standard, the quantity of water obtained by multiplying the manufacturer's input rating in Btu per hour by the thermal efficiency and dividing the product by 825 Btu per gallon. This is based on a 100°F temperature rise, and a nominal specific heat for water of 8.25 Btu per gallon per degree F.			

Not recommended in excess of 2,000 ft. above sea level. | Category III Water Heater

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

For customer service on this appliance contact:
support@camplux.com 1(844)538-7475

The appliance must be installed on a fire retardant area, and must be away from all combustible materials. Minimum clearances from combustible construction, 6 inches sides, 0 inches back and 12 inches top.

The temperature and pressure relief valve provided by the manufacturer shall be installed at the time of installation of the unit in the location specified by the manufacturer. Local codes shall gover installation of relief devices. For safe operation of the appliance , the relief valve must not be removed or plugged.

This appliance requires a special venting system. Refer to the user manual for parts list and method of installation.

CAMPLUX

CAMPLUX

GAS TANKLESS WATER HEATER

Model No.	CX264WLP		Maximum Input Rating (Btu per hour)	65,000
Voltage	110 Volts		Minimum Input Rating (Btu per hour)	11,800
Frequency	60 Hz		Minimum Input Gas pressure	4.0" w.c (1.0Kpa)
Amps	Less than 12 Amperes		Maximum Input Gas pressure	10.5" w.c (2.61Kpa)
Gas Type	**Natural Gas**	Only	Manifold Pressure	3.5" w.c (0.87Kpa)
			Water Operating Pressure	3.6~110 PSI
Serial No.				
Recovery Rating	As used in this standard, the quantity of water obtained by multiplying the manufacturer's input rating in Btu per hour by the thermal efficiency and dividing the product by 825 Btu per gallon. This is based on a 100°F temperature rise, and a nominal specific heat for water of 8.25 Btu per gallon per degree F.			

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This appliance requires a special venting system. Refer to the user manual for parts list and method of installation.

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GAS TANKLESS WATER HEATER

Model No.	CX360WLP		Maximum Input Rating (Btu per hour)	85,000
Voltage	110 Volts		Minimum Input Rating (Btu per hour)	15,600
Frequency	60 Hz		Minimum Input Gas pressure	9.8" w.c (2.45Kpa)
Amps	Less than 12 Amperes		Maximum Input Gas pressure	12.4" w.c (3.10Kpa)
Gas Type	Liquid Propane	Only	Manifold Pressure	6.35" w.c (1.68Kpa)
			Water Operating Pressure	3.6~110 PSI
Serial No.				
Recovery Rating	As used in this standard, the quantity of water obtained by multiplying the manufacturer's input rating in Btu per hour by the thermal efficiency and dividing the product by 825 Btu per gallon. This is based on a 100°F temperature rise, and a nominal specific heat for water of 8.25 Btu per gallon per degree F.			

Not recommended in excess of 2,000 ft. above sea level. | Category III Water Heater

FOR YOUR SAFETY
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For customer service on this appliance contact:
support@camplux.com 1(844)538-7475

The appliance must be installed on a fire retardant area, and must be away from all combustible materials. Minimum clearances from combustible construction, 6 inches sides, 0 inches back and 12 inches top.

The temperature and pressure relief valve provided by the manufacturer shall be installed at the time of installation of the unit in the location specified by the manufacturer. Local codes shall gover installation of relief devices. For safe operation of the appliance , the relief valve must not be removed or plugged.

This appliance requires a special venting system. Refer to the user manual for parts list and method of installation.

CAMPLUX

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GAS TANKLESS WATER HEATER

Model No.	CX360WLP		Maximum Input Rating (Btu per hour)	85,000
Voltage	110 Volts		Minimum Input Rating (Btu per hour)	15,600
Frequency	60 Hz		Minimum Input Gas pressure	4.0" w.c (1.0Kpa)
Amps	Less than 12 Amperes		Maximum Input Gas pressure	10.5" w.c (2.61Kpa)
Gas Type	Natural Gas	Only	Manifold Pressure	3.5" w.c (0.87Kpa)
			Water Operating Pressure	3.6~110 PSI
Serial No.				
Recovery Rating	As used in this standard, the quantity of water obtained by multiplying the manufacturer's input rating in Btu per hour by the thermal efficiency and dividing the product by 825 Btu per gallon. This is based on a 100°F temperature rise, and a nominal specific heat for water of 8.25 Btu per gallon per degree F.			

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GAS TANKLESS WATER HEATER

Model No.	CX422WLP		Maximum Input Rating (Btu per hour)	102,000
Voltage	110 Volts		Minimum Input Rating (Btu per hour)	15,800
Frequency	60 Hz		Minimum Input Gas pressure	9.8" w.c (2.45Kpa)
Amps	Less than 12 Amperes		Maximum Input Gas pressure	12.4" w.c (3.10Kpa)
Gas Type	Liquid Propane	Only	Manifold Pressure	6.35" w.c (1.68Kpa)
			Water Operating Pressure	3.6~110 PSI
Serial No.				
Recovery Rating	As used in this standard, the quantity of water obtained by multiplying the manufacturer's input rating in Btu per hour by the thermal efficiency and dividing the product by 825 Btu per gallon. This is based on a 100°F temperature rise, and a nominal specific heat for water of 8.25 Btu per gallon per degree F.			

Not recommended in excess of 2,000 ft. above sea level. | Category III Water Heater

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

For customer service on this appliance contact:
support@camplux.com 1(844)538-7475

The appliance must be installed on a fire retardant area, and must be away from all combustible materials. Minimum clearances from combustible construction, 6 inches sides, 0 inches back and 12 inches top.

The temperature and pressure relief valve provided by the manufacturer shall be installed at the time of installation of the unit in the location specified by the manufacturer. Local codes shall gover installation of relief devices. For safe operation of the appliance , the relief valve must not be removed or plugged.

This appliance requires a special venting system. Refer to the user manual for parts list and method of installation.

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GAS TANKLESS WATER HEATER

Model No.	CX264WLP		Maximum Input Rating (Btu per hour)	102,000
Voltage	110 Volts		Minimum Input Rating (Btu per hour)	15,800
Frequency	60 Hz		Minimum Input Gas pressure	4.0" w.c (1.0Kpa)
Amps	Less than 12 Amperes		Maximum Input Gas pressure	10.5" w.c (2.61Kpa)
Gas Type	Natural Gas	Only	Manifold Pressure	3.5" w.c (0.87Kpa)
			Water Operating Pressure	3.6~110 PSI
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Recovery Rating	As used in this standard, the quantity of water obtained by multiplying the manufacturer's input rating in Btu per hour by the thermal efficiency and dividing the product by 825 Btu per gallon. This is based on a 100°F temperature rise, and a nominal specific heat for water of 8.25 Btu per gallon per degree F.			

Not recommended in excess of 2,000 ft. above sea level. | Category III Water Heater

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support@camplux.com 1(844)538-7475

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The temperature and pressure relief valve provided by the manufacturer shall be installed at the time of installation of the unit in the location specified by the manufacturer. Local codes shall gover installation of relief devices. For safe operation of the appliance , the relief valve must not be removed or plugged.

This appliance requires a special venting system. Refer to the user manual for parts list and method of installation.

CAMPLUX

YOU'RE ALL SET!

Thanks for purchasing your new CAMPLUX residential tankless water heater. This convenient, safe and high efficiency product will open the doors to enjoying endless hot water.

We highly suggest you take the time to read through all of the safety and installation procedures in this manual, before attempting to install your new residential water heater.

Always remember we're here for you via our online helpdesk located at www.camplux.com, live chat and toll free at (844)538-7475!

READ THIS MANUAL

Inside you will find many helpful hints on how to use and maintain your water heater properly.
A little preventive care on your part can save you time and money over the life of your water heater.
You'll find many answers to common problems in the Troubleshooting Guide. If you review the chart of Troubleshooting Tips first you may not need to call for service.

READ THE SAFETY INFORMATION

To Ensure your safety and the safety of others, we have included important safety warnings throughout this manual.

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

These words mean:

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

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.

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

WARNING

This water heater may not be suitable for use in manufactured (mobile) homes! Please check local code restrictions pertaining to permanent / fixed installations in manufactured homes in your area.

The purpose of this manual is twofold: one, to provide the installer with the basic directions and recommendations for the proper installation and adjustment of the water heater; and two, to the owner-operator, to explain the features, operation, safety precautions, maintenance and troubleshooting of the water heater. This manual also includes a parts list.

It is imperative that all persons who are expected to install, operate or adjust this water heater read the instructions carefully so they may understand how to perform these operations. If you don't understand these instructions or any terms within it, seek professional advice.

Any questions regarding the operation, maintenance, service or warranty of this water heater should be directed to the seller from whom it was purchased. If additional information is required, refer to the section on If You Need Service.

Do not destroy this manual. Please read carefully and keep in a safe place for future reference.

Recognize this symbol as an indication of Important Safety Information!

California Proposition 65 Warning: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

FOR YOUR SAFETY

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury, or death. Refer to this manual. Installation and service must be performed by a qualified installer, service agency or the gas supplier.

DO NOT store or use gasoline or other flammable vapors or liquids or other combustible materials in the vicinity of this or any other appliance. To do so may result in an explosion or fire.

WHAT TO DO IF YOU SMELL GAS

- DO NOT try to light any appliances.
- DO NOT touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- DO NOT return to your home until authorized by the gas supplier or fire department.

FOR YOUR RECORDS

Please Note: In order to file a product warranty claim, the original proof of purchase is required.

Manufacturer: CAMPLUX. Add: 8350 Patriot Blvd STE B, N. Charleston, SC 29418 ·

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IMPORTANT SAFETY INFORMATION
READ ALL INSTRUCTIONS BEFORE USING

Be sure to read and understand the entire Use and Care Manual before attempting to install or operate this water heater. It may save your time and money. Pay particular attention to the Safety Instructions. Failure to follow these warnings could result in serious bodily injury or death. Should you have problems understanding the instructions in this manual, or have any questions, STOP, and get help from a qualified service technician, or the local gas utility.

DANGER

PROPERLY INSTALL WATER HEATER

Failure to properly install the water heater outdoors as outlined in the Installation Instructions in this manual can result in unsafe operation of the water heater. To avoid the risk of fire, explosion, or asphyxiation from carbon monoxide, never operate this water heater unless it is installed properly and has an adequate air supply for proper operation. Be sure to inspect the flue terminal for proper installation at initial start-up and at least annually thereafter. Refer to the Care and Cleaning section of this manual for more information regarding flue terminal inspection.

WARNING

Gasoline, as well as other flammable materials and liquids (adhesives, solvents, paint thinners etc.), and the vapors they produce are extremely dangerous. DO NOT handle, use or store gasoline or other flammable or combustible materials anywhere near or in the vicinity of a water heater or any other appliance. Be sure to read and follow the labels on the water heater, as well as the warnings printed in this manual. Failure to do so can result in property damage, bodily 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
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
4. Can be carried from other rooms to the main burner flame by air currents

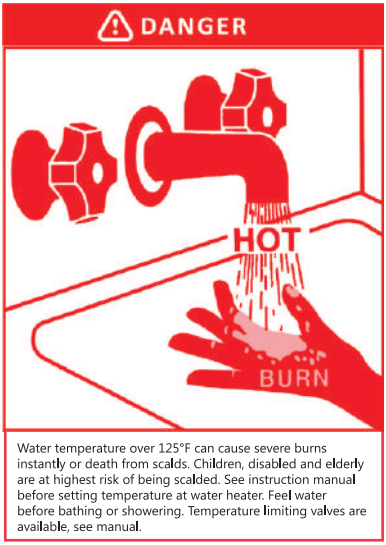
Installation:
Do not Install water heater where flammable products will be stored or used unless the main burner flame Is at least 18" above the floor. This will reduce, but not eliminate, the risk of vapors being ignited by the main burner flame.

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

DANGER

WATER TEMPERATURE SETTING

Safety and energy conservation are factors to be considered when selecting the water temperature setting. Water temperatures above 125°F can cause severe burns or death from scalding. The thermostat is adjusted to its lowest temperature position when shipped from the factory. Be sure to read and follow the warnings outlined on the label pictured below.



Time/Temperature Relationship in Scalds	
Water Temperature	Time To Produce a Serious Burn
120°F	More than 5 minutes
125°F	1 1/2to 2 minutes
130°F	About 30 seconds
135°F	About 10 seconds
140°F	Less than 5 seconds
145°F	Less than 3 seconds
150°F	About 1 1/2 seconds
155°F	About 1 second

Table courtesy of Shriners Burn Institute

The chart shown above may be used as a guide in determining the proper water temperature for your home

DANGER: Households with small children, disabled, or elderly persons may require a 120°F or lower temperature setting to prevent contact with"HOT" water.

Maximum water temperature occurs while burner is on. To find water temperature being delivered, turn on a hot water faucet and place a thermometer in the water stream and read the thermometer.

The temperature of the water at the outlet of the water heater can be regulated by setting the temperature on display located on the front panel. The display located on the front panelwas set at 110°F before it was shipped from the factory.

The illustration to the bottom left illustrates the Panel Display and how to adjust the water temperature.

NOTICE: When this water heater is supplying general purpose hot water requirements for use by individuals, a thermostatically controlled mixing valve for reducing point of use water temperature is recommended to reduce the risk of scald injury. Contact a licensed plumber or the local plumbing authority for further information.

NOTICE: The factory recommended operating temperatures are between 97°F and 140°F.

DANGER

NATURAL GAS AND LIQUEFIED PETROLEUM MODELS

Both propane and natural gas have odorants added to aid in detecting a gas leak. Some people may not physically be able to smell or recognize this odorants. If you are unsure or unfamiliar with the smell of propane or natural gas, ask the gas supplier.

Other conditions, such as "odorants fade", which causes the odorant to diminish in intensity, can also hide or camouflage a gas leak. Always check with commercial leak odorants or soapy water.

- Gas detectors are recommended in propane and natural gas applications and their installation should be in accor dance with the detector manufacturer's recommendations and/or local laws, rules, regulations or customs.
- Water heaters utilizing propane gas are different from natural gas models. A natural gas water heater will not function safely on propane gas and vice versa.
- No attempt should ever be made to convert the water heater from natural gas to propane gas. To avoid possible equipment damage, personal injury or fire, do not connect the water heater to a fuel type not in accordance with the unit data plate; propane for propane units and natural gas for natural gas units. These units are not certified for any other fuel type.
- Propane water heaters should not be installed. below grade (for example, in a basement) if such installation is prohibited by federal, state and/or local laws, rules, regulations or customs.
- Propane or propane gas must be used with great caution. It is heavier than air and will collect first in lower areas making it hard to detect at nose level.
- Before attempting to light the water heater, make sure to look and smell for gas leaks. Use a soapy solution to check all gas fittings and connections. Bubbling at a connection indicates a leak that must be corrected. When smelling to detect a gas leak, be sure to sniff near the floor also.
- It is recommended that more than one method, such as soapy solution, gas detectors, etc., be used to detect leaks in gas applications.

Notice: If a gas leak is present or suspected:

- DO NOT attempt to find the cause yourself.
- DO NOT try to light any appliances.
- DO NOT touch any electrical switch.
- DO NOT use any phone in your building.
- Leave the house immediately and make sure your family and pets leave also.
- Leave the doors open for ventilation and contact the gas supplier, a qualified service agency or the fire department.
- Stay away from the house (or building) until the service call has been made, the leak is corrected and a qualified agency has determined the area to be safe.
- Follow the steps listed under "WHAT TO DO IF YOU SMELL GAS" found on Page 4 of this manual.

FOR YOUR SAFETY READ BEFORE OPERATING

WARNING

For your safety, the information in this manual must be followed to minimize the risk of fire or explosion, electric shock, or to prevent property damage, personal injury, or loss of life.

FOR INSTALLATIONS IN THE STATE OF CALIFORNIA

California Law requires that residential water heaters must be braced, anchored or strapped to resist falling or horizontal displacement due to earthquake motions. For residential water heaters up to 52 gallon capacity, a brochure with generic earthquake bracing instructions can be obtained from: Office of the State Architect, 400 P Street, Sacramento, CA 95814 or you may call 916-445-8100 or ask a water heater dealer.
However, applicable local codes shall govern installation. For residential water heaters of a capacity greater than 52 gallons or tankless style, consult the local building jurisdiction code for acceptable bracing procedures.

SAFETY PRECAUTIONS

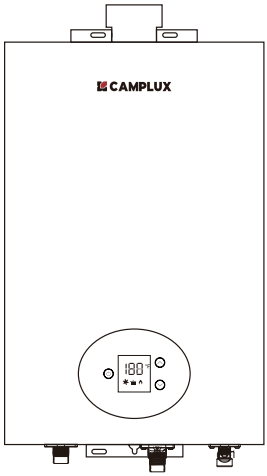
Have the installer show you the location of the gas shut-off valve and how to shut it off if necessary. Turn off the manual shut-off valve if the water heater has been subjected to overheating, fire, flood, physical damage or if the gas supply fails to shut off.

- Read this manual entirely before installing or operating the water heater.
- Use this water heater only for its intended purpose as described in this Use and Care Manual.
- Be sure your water heater is properly installed in accordance with local codes and the provided installation instructions.
- Part of your water heater unless it is specifically recommended in this manual. All other servicing should be referred to a qualified technician.

READ AND FOLLOW THIS SAFETY INFORMATION CAREFULLY .

SAVE THESE INSTRUCTIONS

This water heater must be installed in accordance with these instructions, local codes, utility company requirements, and/or in the absence of local codes, use the latest edition of the American National Standard/National Fuel Gas Code. A copy can be purchased from either the American Gas Association, 400 North Capitol Street Northwest, Washington, DC 20001 as ANSI standard Z223.1 or National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02269 as NFPA 54. In Canada, the latest edition of the CSA B149.1 Natural Gas and Propane Installation, and the Canadian Electrical Code, CSA C22.1Part1, in the absence of local codes.



INSTALLING THE WATER HEATER

Indoor Location

Proper operation of the water heater requires air for combustion and ventilation. Provisions for combustion and ventilation air must comply with referenced codes and standards.

- Installation distances may vary by local code. It is the installer's responsibility to verify installation requirements.
- Make sure before installation that the gas type you will use is the same type on the data plate.
- The water heater unit should be installed by professionals. Improper installation may cause failure or dangerous conditions such as gas leaking or explosion.
- Water heater cannot be installed in an UN-VENTED bathroom, bedroom, basement, living room, closet, outdoor, stairway or an exit area. If installed in an exit area, it must be at least 16.5 ft. or more away from the exit.
- Vent pipe should extend from the wall at least 2". The terminal must be at least 1.64 ft. away from obstruction, and must be well vented.
- Vent pipe should slope 3° downward, to avoid condensing water and protect from rain entering.
- Vent pipe should avoid direct, strong wind because the downdraft will cause malfunction.
- The water heater should be installed far from any blockage, and with plenty of enough space for installation and maintenance. Adequate clearances for servicing must be provided.
- The water heater should not be installed in the same room with a gas stove .
- When determining the floor clearance, a clearance of 6" must be maintained between the vent pipe and combustible material. A side wall clearance of 6" and a top clearance of 12" must be maintained.
- The vent pipe can be up to 32 ft. in length with one elbow.
- The power socket connecting the water heater should be grounded properly with a GFCI circuit protector.
- The water heater should not be located in an area where leakage of the heat exchanger or connections will result in damage to the area adjacent to it or to lower floors of the structure.When such areas cannot be avoided it is recommended that a suitable catch pan, adequately drained, must be installed under the water heater. The pan must not restrict combustion airflow.
- The water heater should be installed as close as practical to the vent termination to minimize vent length and the number of elbows required for venting.
- A gas fired water heater or any other appliance should not be installed in a space where liquids which give off flammable vapors are to be used or stored. Such liquids include gasoline, propane gas (butane or propane), paint or adhesives and their thinners, solvents or removers.
- The water heater should be installed far from heat sources, flammable and dangerous materials. Because of natural air movement in a room or other enclosed space, flammable vapors can be carried some distance from where their liquids are being used or stored. The open flame of the water heater's main burner can ignite these vapors causing an explosion or fire which may result in severe burns, death or property damage.
- Raising the water heater will reduce, but not eliminate the possibility of lighting the vapor of any flammable liquids which may be improperly stored or accidentally spilled .
- If the water heater is installed in a garage, it should be installed so that the direct ignition system and main burner are no less than 18" above the garage floor.
- Hot and cold water lines should be insulated to conserve water and energy.
- The water heater must be located so it is not subject to physical damage, for example, by moving vehicles, area flooding, etc.
- For other than a direct vent appliance, the appliance must be located as close as practicable to a chimney or gas vent.
- DO NOT install water heater where subject to vibrations. or on the road use
- DO NOT install the water heater in Recreational Vehicles, Mobile Homes, Boats and other Watercraft.
- DO NOT install the water heater near vents for heating or cooling. A minimum of 4 feet should be maintained.
- If the clearances stated on the Instruction/Warning Label, located on the front panel of the heater differ, install the water heater according to the clearances stated on the manual.

WARNING: Combustible construction refers to adjacent walls and ceilings and should not be confused with combustible or flammable products and materials. Combustible and or flammable products and materials should never be stored in the vicinity of this or any gas appliance.

Combustion and Ventilation Air

A confined space is one having a volume of less than 50 cubic feet per 1,000 BTU/Hr of the aggregate input of all appliances within that space.

The air must be supplied through two permanent openings of equal area. One is to be located within 12" above the floor and the other is to be located within 12" below the ceiling.

The minimum net free area of each opening must not be less than one square inch per 1,000 BTU/Hr of the total input rating of all the appliances in the enclosure (but not less than 100 square inches), if each opening communicates with other unconfined areas inside the building.

Buildings of unusually tight construction shall have the combustion and ventilation air supplied from outdoors, or a freely ventilated attic or crawl space.

If air is supplied from outdoors, directly or through vertical ducts, there must be two openings located as specified above and each must have a minimum net free area of not less than one square inch per 4,000 BTU/Hr of the total input rating of all the appliances in the enclosure.

If horizontal ducts are used to communicate with the outdoors, each opening must have a minimum net free area of not less than one square inch per 2,000 BTU/Hr of the total input rating of all the appliances in the enclosure. If ducts are used, the minimum dimensions of rectangular air ducts shall not be less than 4".

NOTICE: If the water heater is installed in an unconfined space within a building of conventional frame, masonry or metal construction, infiltration air is normally adequate for proper combustion and ventilation. If the water heater is installed in a confined space, provisions for combustion and ventilation air must be made.

NOTICE: If the duct openings which supply combustion and ventilation air are to be covered with a protective screen or grill, the net free area (openings in the material) of the covering material must be used in determining the size of the openings. Protective screening for the openings MUST NOT be smaller than 1/4" to prevent clogging by lint or other debris.

Corrosive Atmospheres

The air in beauty shops, dry cleaning establishments, photo processing labs, and storage areas for liquid and powdered bleaches or swimming pool chemicals often contain such

An air supply containing halogenated hydrocarbons may be safe to breathe, but when it passes through a gas flame corrosive elements are released that will shorten the life of any gas burning halogenated hydrocarbons appliance.

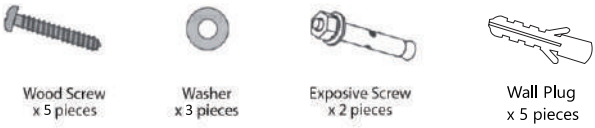
Propellants from common spray cans or gas leaks from A/ C and refrigeration equipment are highly corrosive after passing through a flame.

The water heater warranty is voided when failure of the water heater is due to operation in a corrosive atmosphere.

NOTICE: The water heater should not be installed near an any air supply containing halogenated hydrocarbons.

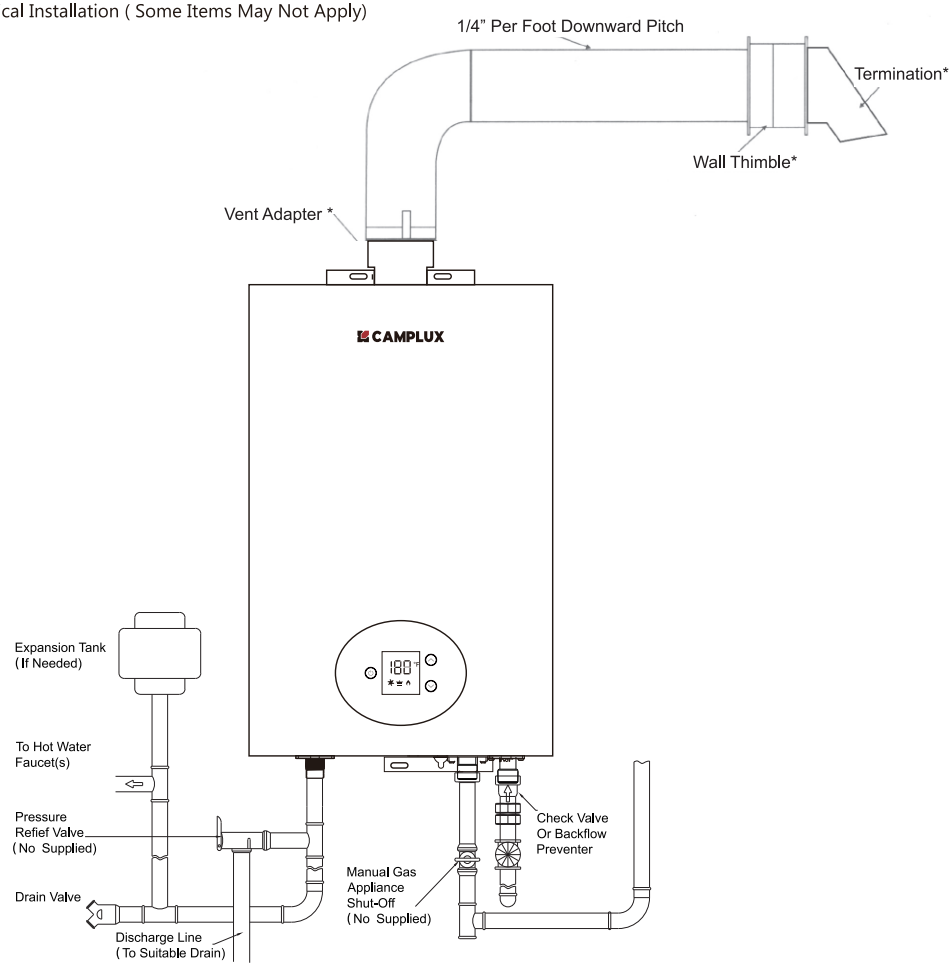
Check the Unit

Inspect the water heater for possible damage. Check the markings on the rating plate of the water heater to be certain the type of gas supplied corresponds to the water heater requirements. Verify all included parts are present (see below).



INSTALLING THE WATER HEATER

Typical Installation (Some Items May Not Apply)



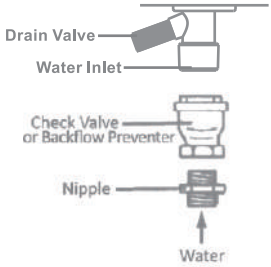
WATER SUPPLY CONNECTIONS

Plumbing should be carried out by a qualified plumber in accordance with local codes. Use approveplumbing materials and tools only.

Install a check valve between the water heater and the water shutoff valve. (See illustration below).
To conserve energy and to prevent freezing, insulate both cold and hot water supply lines. DO NOT cover the drain valves.

Install a shutoff valve near the inlet of the water heater for service and draining purposes. Before connecting the water supply pipe to the water heater, open the shutoff valve ·and clean out sand, debris, air, caulking material, etc. inside the pipe. Connect to the water inlet, then check water flow.

If a water heater is installed in a closed water supply system, such as one having a backflow preventer in the cold water supply line, means shall be provided to control thermal expansion. Contact the water supplier or local plumbing inspector on how to control this situation.



CAUTION

This water heater must only be used with the following water supply system conditions:
- With clean, potable water free of corrosive chemicals, sand, dirt, or other contaminates.
- With inlet water temperatures above 32°F, but not to exceed 90°F.
- Free of lime and scale deposits.
- DO NOT reverse the hot and cold water connections. The water heater will not operate.

To ensure proper operation of the water heater, the following water pressure guidelines should be followed:
- Operation of the water heater requires the minimum water pressure of 14 PSI and a minimum water flow rate of 0.8 GPM.
- Additional water pressure is required for long pipe runs and outlet fitting(s) water pressure drops.
- To maintain proper performance, ensure sufficient water supply pressure. The Required Water Pressure=Min. Operating Water Pressure (14 PSI) + Pipe Pressure Loss + Faucet and Shower Pressure Loss + Safety Margin (more than 5 PSI).
- To supply hot water to upper floors, additional water pressure (0.44 PSI/ft) must be ensured. The measurement should be calculated by the distance between the water inlet of the water heater (ground level) to the hot water faucet (upper floor level).
- Well water systems should be set at a range of 50-60 PSI.
- When the water is supplied from a water supply tank, the height of the tank and the diameter of the pipes and their relation to water pressure, should be taken into consideration. Gravity water pressure is not recom mended.

IMPORTANT: Do not apply heat to the HOT or COLD water connections. Any heat applied to the water supply fittings will permanently damage the internal components of the water heater.

NOTICE: If the water flow resistance of a shower head is too high, the burner in the water heater will fail to ignite. Keep the shower head clean from debris that could cause additional pressure drop.

NOTICE: If using mixing valves on the outlet, choose one which prevents cold water pressure from overcoming hot water line pressure.

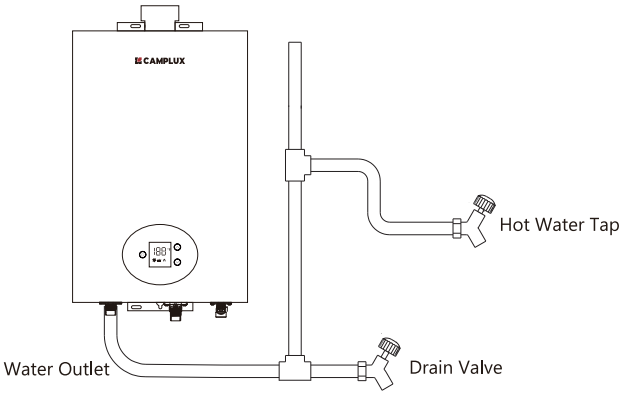
DO NOT use pipes with smaller diameters than the water supply connection of the water heater.

Be sure to connect the water inlet and the hot water outlet as shown on the water heater. If reversed, the water heater will not function.

Installation of unions or flexible copper connections are recommended on the HOT and COLD water lines, so that the water heater may disconnect easily for servicing if necessary.

In Regards to the Hot Water Outlet

- Connections between the water heater and point(s) of use should be as short and direct as possible.
- DO NOT use lead or non-approved plastic pipe.
- To conserve energy and minimize heat loss, insulation of hot water piping is recommended.



NOTICE: The flow rate of hot water many vary when more than two faucets (appliances, fixtures, etc) are being used simultaneously.

NOTICE: The pipes MUST be completely drainable. If the hot water faucets are located at a point higher than the water heater, place a drain valve at the lowest point (see diagram to the left).

GAS SUPPLY

WARNING: Do not attempt to convert this water heater for use with a different type of gas other than the type shown on the rating plate. Such conversion could result in hazardous operating conditions. Please have a professional connect the gas pipe.

The supplied Manual Gas Appliance Shut Off Valve must be installed at the gas connection of the water heater at the time of installation.

The branch gas supply line to the water heater should ben clean black steel pipe or other approved gas piping material.

A ground joint union or ANSI design certified semi-rigid or flexible gas appliance connector should be installe-din the gas line close to the water heater.

The National Fuel Gas Code (NFGC) mandates a manual gas shut-off valve: See (NFGC) for complete instructions.

A sediment trap should be installed at the bottom of the gas line.

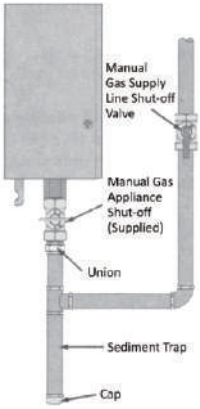
The inlet gas pressure to the water heater must not exceed 10.5" w.c. for natural or 14" w.c. for propane gas.

For purposes of input adjustment, the minimum inlet gas pressure (with main burner on) is shown on the water heater rating plate. If high or low gas pressures are present, contact your gas supplier for correction.

The water heater and its indivdual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ PSI (3.5 kPa). The water heater must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ PSI (3.5 kPa).

DO NOT use excessive force (over 31.5 ft lbs.) in tightening the pipe, particularly if pipe compound is used, as the unit may be damaged.

Compound used on the threaded joints of the gas piping must be of the type resistant to the action of propane gas. Use compound sparingly and use on male threads only.



RELIEF VALVE

A new pressure relief valve, complying with the Standard for relief Valves and Automatic Gas Shut-Off Devices for Hot Water Supply Systems, ANSI Z21.22, must be installed at the hot water outlet connection of the water heater at the time of installation. Local codes shall govern the installation of relief valves.

For safe operation of the water heater, be sure that:

- The pressure rating of the relief valve must not exceed 150 PSI, the maximum working pressure of the water heater as marked on the rating plate.
- The BTU/Hr rating of the relief valve must equal or exceed the BTU/Hr input of the water heater as marked on its rating plate.
- No valve of any type should be installed between the relief valve and the water heater.
- Discharge from the relief valve should be piped to a suitable drain to eliminate potential water damage. Piping used should be of a type approved for the distribution of hot water.
- Hot and cold water lines should be insulated up to the water heater.
- The discharge line must be NO SMALLER than the outlet of the valve and must pitch downward to allow complete drainage (by gravity) of the relief valve and discharge line.
- The end of the discharge line should not be threaded or concealed and should be protected from freezing. No valve of any type, restriction or reducer coupling should be installed in discharge line.

NOTICE

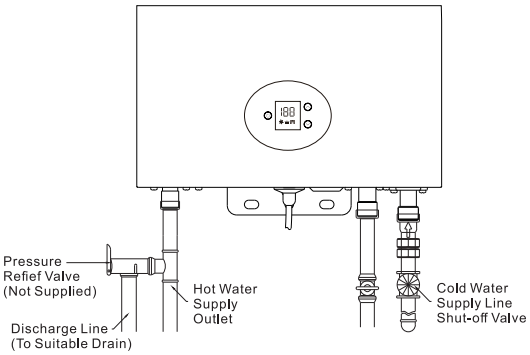
The diagram below illustrates a pressure only relief valve. If local codes require a combination temperature and pressure relief valve be installed, an extension piece may be needed.

Local codes govern the installation of relief valves. If local codes require that a temperature and pressure relief valve should be installed the manufacturer recommends atype 40XL Watts T&P relief valve or an equivalent model be used.

Manual operation of relief valves should be performed at least once a year. Turn off the electrical power and gas shutoff valve. Lift and release lever on the relief valve and check the manual operation of the relief valve.

You should take precaution to avoid contact with the hot water coming out of the relief valve and to prevent water damage.

If the relief valve on the system discharges periodically, this may be due to thermal expansion in a closed water supply system. Contact the water supplier or local plumbing inspector on how to correct this situation. Do not plug the relief valve.



Leak Testing

WARNING: Never use an open flame to test for gas leaks, as property damage, personal injury, or death could result.

The water heater and its gas connections must be leak tested at normal operating pressures before it is placed in operation.

- Turn on the gas shut-off valve(s) to the water heater.
- Use a commercial leak detector or soapy water solution to test for leaks at all connections and fittings. Bubbles indicate a gas leak that must be corrected.

All connections should also be leak tested after the water heater is placed in operation.

Pressure Testing the Gas Supply System

WARNING: Install a gas pressure regulator, in the gas supply line, which does not exceed the maximum supply pressure. DO NOT use an industrial type gas regulator.

The water heater must be isolated from the gas piping system by closing the manual gas shut-off valve during any pressure testing of the gas supply piping at pressures equal to or less than 1/2 PSI (14'w.c.) .

High Altitude

Ratings of gas appliances are based on sea level operation and need not be changed for installations at elevations up to 2,000 feet / 600 meter. Unit not recommended for elevations in excess of 2,000 feet / 600 meter.

DANGER: Failure to install the vent adapter and properly vent the water heater to the outdoors as outlined in the Venting section of this manual will result in unsafe operation of the water heater causing death, serious injury, explosion, or fire. To avoid the risk of fire, explosion,or asphyxiation from carbon monoxide, NEVER operate the water heater unless it is properly vented and has adequate air supply for proper operation as outlined in the Venting section of this manual.

WARNING: Use UL approved Category III Stainless Steel vent material only. No other vent material is permitted. Owner must refer to vent manufacturer's instructions and specifications.

WARNING: Refer to pages 18-19 for clearances to combustible material.

Venting

The installation of venting must comply with national codes, local codes, and the vent manufacturer's instructions. Owner must refer to vent manufacturer's instructions and specifications. **Please visit a local hardware store or online marketplaces to purchase φ3" Category III Stainless Steel Venting for certified installation.**

The water heater must be vented to the outdoors as described in these instructions. DO NOT connect this water heater to an existing Vent or Chimney, it must be vented separately from all other appliances.

All vent components (adapters, pipe, elbows, terminals, etc.) should be UL 1738 Certified Stainless Steel Venting Material (e.g. AL29-4C).

The specified vent termination must be used. The termination should be a 90° elbow type with screen. (Refer to page 18).

Use a vent pipe with an antidisconnection structure.

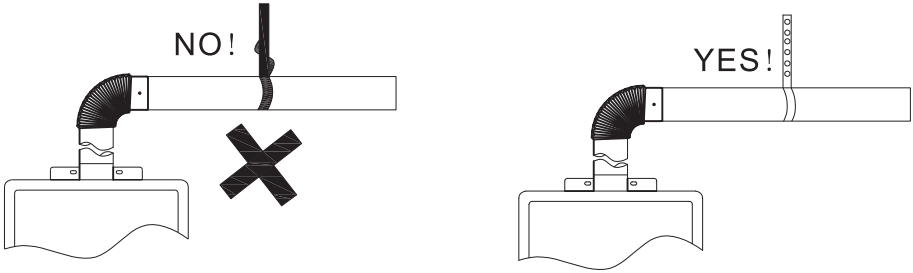
The use of a High Temperature Silicone (500°F) may be required to seal vent connections. To prevent accidental gas exhaust leakage, apply a 1/4" wide bead approximately 1/4" from the end and another bead against the joint side of the stop bead.

Follow vent manufacturer's installation instructions.

The unit can be vented either horizontally or vertically.

Vent pipe runs must be adequately supported along both horizontal and vertical runs.

The maximum recommended unsupported span should be no more than 5 feet. Support isolation hanging bands should be used. DO NOT use wire. (See diagram below).

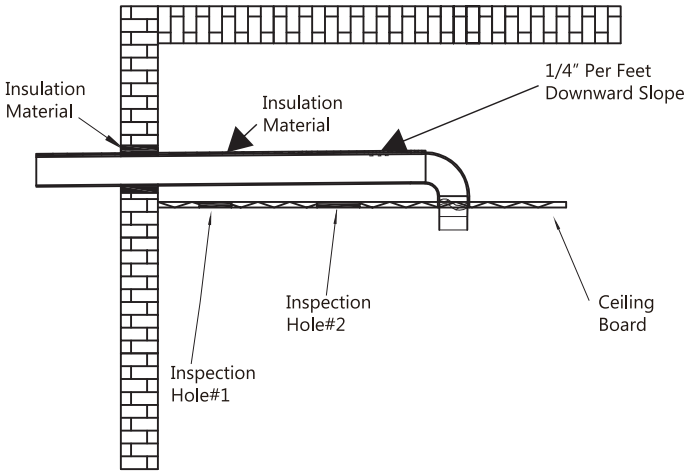


Venting Through Closed Spaces

If the vent piping passes through a closed space, wrap the vent pipe with inflammable insulation material that is at least 3/4" thick. DO NOT let the insulation material make contact with flammable materials. A minimum clearance of 6" between the vent pipe and ceiling should be maintained. Follow local codes.

For maintenance and inspection purposes, the following holes are required to be made:

- Two (2) inspection openings that allow access to venting. One (1) of these openings should be close to where the vent pipe enters the ceiling. The other opening should be near the vent termination.
- A ventilation hole with a 16 sq. in. opening should be made at least every 10 feet.



NOTICE : Vent pipes must be completely insulated with inflammable material when installed in alcoves, closets, and garages and must not touch any flammable material.

VENTING LENGTHS

Maximum Vent Length

Owner must refer to vent manufacturer's instructions and specifications.

The system will not operate if there is excessive restriction (pressure drop) in the venting system. A maximum of 32 feet of vent pipe may be used provided there is only one 90° elbow in the system. If additional elbows are required: two elbows can be used with 27 feet, and three elbows can be used with 22 feet of vent pipe.

A 90° elbow is equivalent to 5 feet of straight pipe. A 45° elbow is equivalent to 2 feet 6 " of straight pipe.

The termination elbow does not count as an elbow when determining total vent lengths.

The vent must be installed with a slight downward slope of 1/ 4" per feet of horizontal run toward the vent terminal (see diagram below). This ensures that any condensate formed during operation of the unit is evacuated from the water heater.

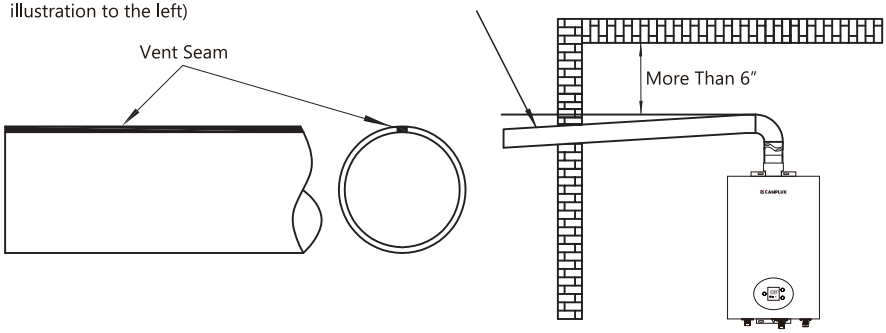
A 1/4" per feet upward slope is acceptable when it is not possible to vent with a downward slope, however, a UL approved Category III Stainless Steel condensate trap MUST be installed at the beginning of the horizontal run (See page 20 "Typical Horizontal Termination w/ 1/4" per foot UPWARD Slope" or page 18, "Standard Vertical Vent Termination" for examples).

Number of 90° elbows(Bends)	Maximum length of straight pipe
1	32"
2	27"
2	22"
One(1)90° elbow is equivalent to 5 feet of straight pipe	

MINIMUM VENT LENGTH

The venting may be as short as 12", provided one vent termination is installed to the outdoors through a sidewall, one 90° elbow is included in the installation, and the wall thimble is installed.

NOTICE: Make sure that the seam of the vent pipe in horizontal runs is toward the top of the installation (see illustration to the left)



Draining the Condensate

In certain conditions, installations in unconditioned space or having long horizontal or vertical runs may accumulate condensate.

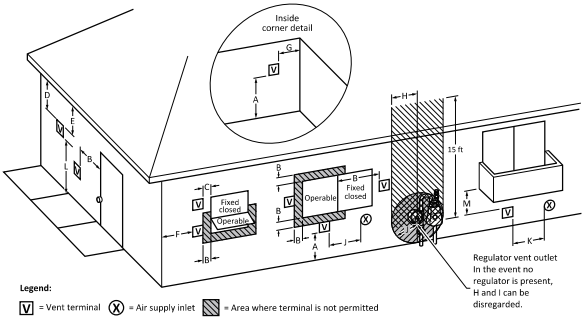
Condensate is known to be acidic; refer to local, state (provincial) or federal codes for proper handling methods.

In order to prevent condensate from draining back into the water heater, we recommend a condensate trap and drain to be installed in a horizontal vent section as close as practical to the water heater vent connection.

Not following proper condensate procedures will void warranty.

VENT TERMINATION CLEARANCES DRAWING

For Non-Direct Vent Installations In The US And Canada



		Canadian installations [1]	US installations [2]
A =	Clearance above grade, veranda,porch,deck,or balcony	12 in (30 cm)	12 in (30 cm)
B =	Clearance to window or door that may be opened	• 6 in (15 cm) for appliances ≤ 10,000 Btuh (3 kW) , • 12 in (30 cm) for appliances > 10,000 Btuh (3 kW) and ≤ 100,000 Btuh (30 kW) • 36 in (91 cm) for appliances > 100,000 Btuh (30 kW)	4 ft (1.2 m) below or to side of opening; 1 ft (300 mm) above opening
C =	Clearance to permanently closed window	As specified by the manufacturer*	As specified by the manufacturer*
D =	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 ft (61 cm) from the center line of the terminal	As specified by the manufacturer*	As specified by the manufacturer*
E =	Clearance to unventilated soffit	As specified by the manufacturer*	As specified by the manufacturer*
F =	Clearance to outside corner	As specified by the manufacturer*	As specified by the manufacturer*
G =	Clearance to inside corner	As specified by the manufacturer*	As specified by the manufacturer*
		Canadian installations [1]	US installations [2]
H =	Clearance to each side of center line extended above meter/ regulator assembly	3 ft (91 mm) within a height 15 ft (4.6 m)	As specified by the manufacturer*
I =	Clearance to service regulator vent outlet	3 ft (91 mm)	As specified by the manufacturer*
J =	Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliance	• 6 in (15 cm) for appliances ≤ 10,000 Btuh (3 kW), • 12 in (30 cm) for appliances > 10,000 Btuh (3 kW) and ≤ 100,000 Btuh (30 kW), • 36 in (91 cm) for appliances > 100,000 Btuh (30 kW)	4 ft (1.2 m) below or to side of opening; 1 ft (300 mm) above opening
K =	Clearance to a mechanical air supply inlet	6 ft (1.83 m)	3 ft (91cm) above if within 10 ft (3 m) horizontally
L =	Clearance above paved sidewalk or paved driveway located on public property	7 ft (2.13 m) †	7 ft (2.13 m) for mechanical draft systems (Category I appliances). Vents for Category II and IV appliances cannot be located above public walkways or other areas where condensate or vapor can cause a nuisance or hazard
M =	Clearance under veranda, porch deck, or balcony	12 in (30 cm) ‡	As specified by the manufacturer*

* The manufacturer shall specify a minimum clearance or state "Not applicable" in the table and/or instructions.

i) The minimum distance from adjacent public walkways, adjacent buildings, openable windows, and building openings shall not be less than those values specified in the National Fuel Gas Code, ANSI Z223.1/NFPA 54, and/or the Natural Gas and Propane Installation Code, CSA B149.1;
ii) Information on preventing blockage by snow; and
iii) Information on protecting building materials from degradation by flue gases.

† A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings.

‡ Permitted only if veranda, porch, deck, or balcony is fully ope n on a minimum of two sides beneath the floor.

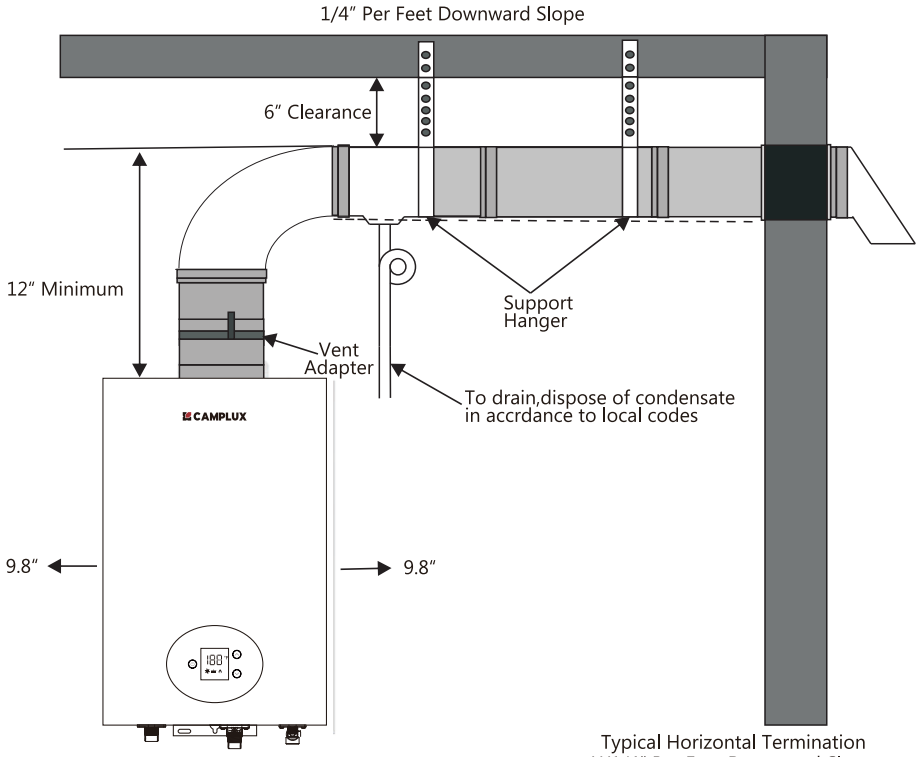
Notes:

1) In accordance with the current CSA B149.1 Natural Gas and Propane Installation Code.

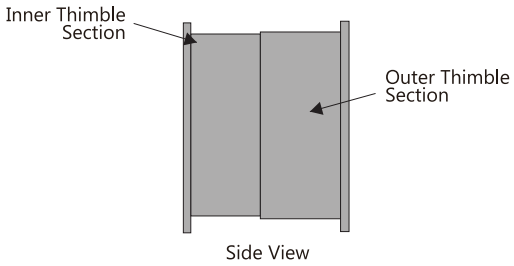
2) In accordance with the current ANSI Z223.1 / NFPA 54 National Fuel Gas Code.

3) If locally adopted installation codes specify clearances different than those illustrated,then the most stringent clearance shall prevail.

INSTALLING THE WATER HEATER,CONTINUED



Typical Horizontal Termination
W1/4" Per Feet Downward Slope



WARNING:
Use UL approved Category III vent material only. Other vent material is permitted. Owner must refer to vent manufacturer's instructions and specifications.
Please visit a local hardware store or online marketplaces to purchase φ3" Category III Stainless Steel Venting for certified installation.
Field wiring connections and electrical grounding must comply with local codes, or in the absence of local codes with the latest edition of the National Electrical Code ANSI/NFPA 70, or in Canada, Canadian Electrical Code, CSA C22.1 Part1.

CAUTION:
Follow the vent manufacturers installation instructions as design might vary om manufacturer to manufacturer.

ELECTRICAL CONNECTION

POWER CORD

- The electric power supply requirement for this water heater is 120 VAC/60HZ, 2 Amps.
- The water heater comes with a three (3) pin power supply cord. Use only a power outlet with a ground terminal.
- The installation of an electric leakage breaker is recommended. (GFCI)
- Keep any excess of the power supply cord on the outside of the water heater.
- If local codes require hardwiring, see instructions for "Hardwiring the Electrical Connections".

WARNING: Shock hazard line voltage is present. Before servicing the water heater, turn off the electrical power to the water heater at the main disconnect or circuit breaker. Failure to do so could result in severe personal injury or death.

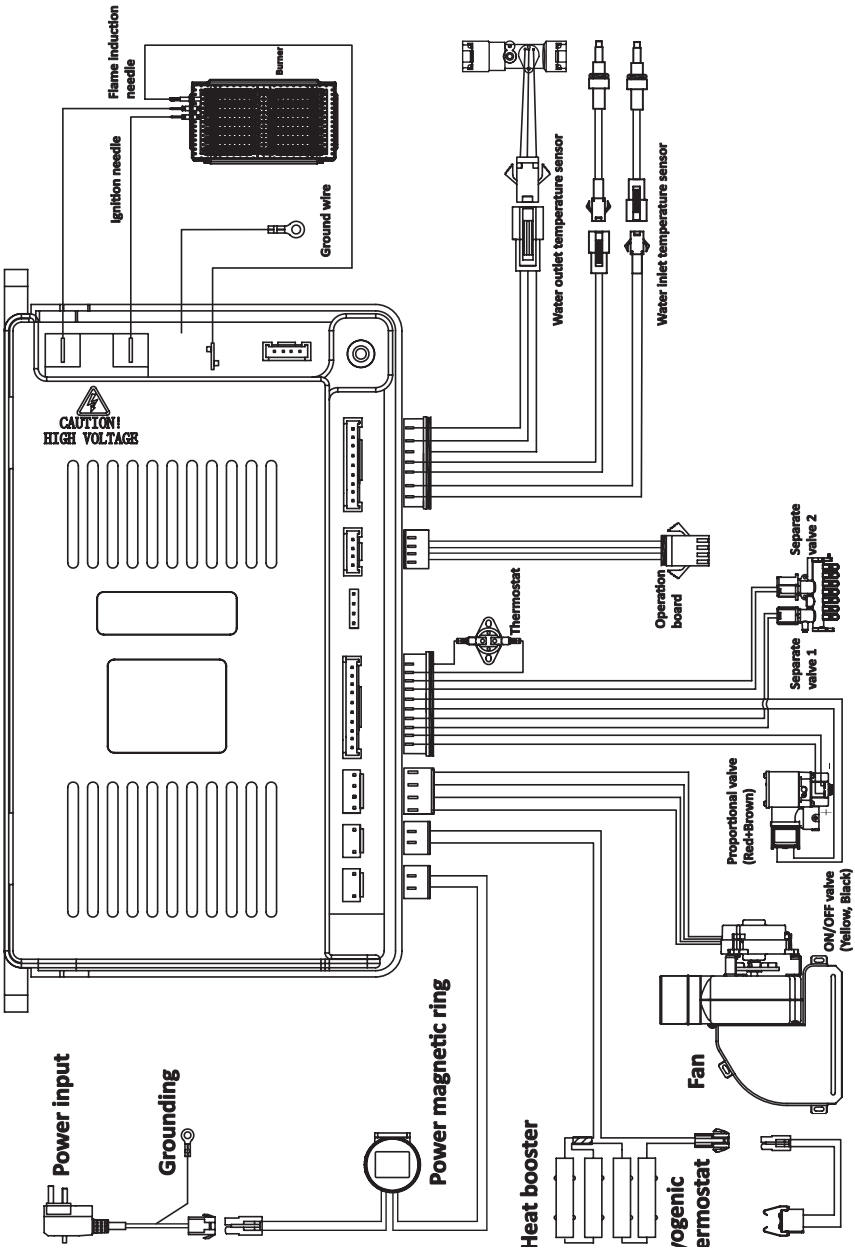
HARDWIRING THE ELECTRICAL

CONNECTIONS

- Wiring should be carried out by a qualified electrician in accordance with local codes.
- The water heater requires 120 VAC/60Hz and should be properly grounded.
- DO NOT connect grounding wire to water pipes, gas pipes, telephone cables, lightning conductor circuits and to grounding circuit of other equipment that carry a ground-fault interrupter.
- An ON/OFF switch must be provided and installed for the incoming 120VAC power.
- Wire the water heater exactly as shown below. A wiring diagram is also found inside of the cover panel.
- A green screw is provided in the junction box for grounding connection.
- Connect the live wire to black leg wire and the neutral wire to the white neutral wire.

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

ELECTRIC WIRING DIAGRAM



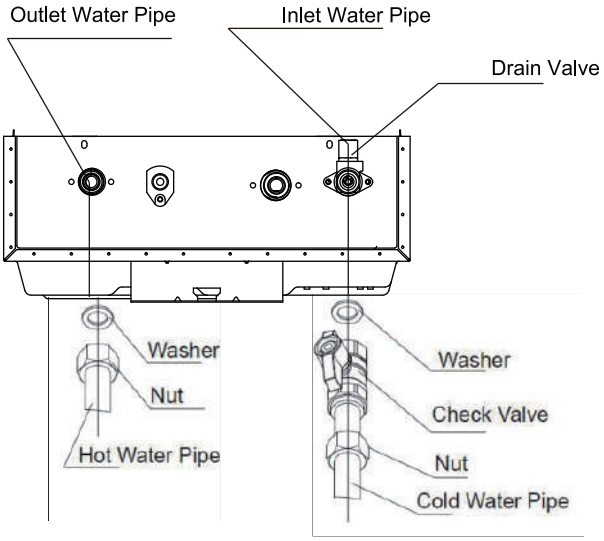
INSULATION BLANKETS

WARNING: If local codes require external application of insulation blanket kits the manufacturer's instructions included with the kit must be carefully followed.

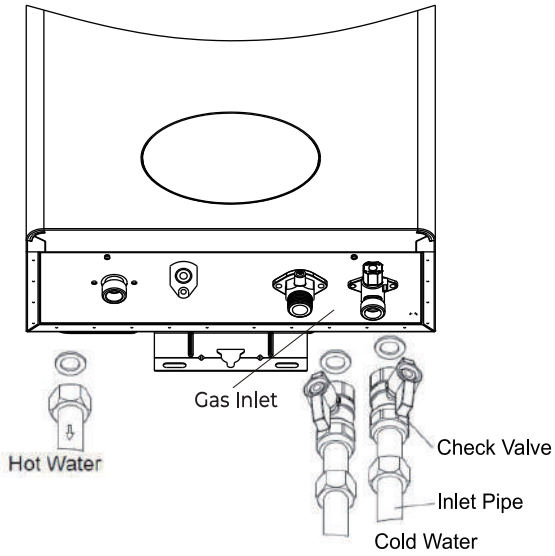
Insulation blankets, available to the general public, for external use on gas water heaters are not necessary. The purpose of an insulation blanket is to reduce the standby heat loss encountered with storage tank heaters. This water heater does not store water making an insulation blanket unnecessary.
The manufacturer's warranty does not cover any damage or defect caused by installation, attachment or use of any type of energy saving or other unapproved devices (other than those authorized by the manufacturer) into, onto or in conjunction with the water heater.
The use of unauthorized energy saving devices may shorten the life of the water heater and may endanger life and property.
The manufacturer disclaims any responsibility for such loss or injury resulting from the use of such unauthorized devices.

PIPE INSTALLATION

Inlet Pipe and Outlet Pipe Installation. Use pressure resistant pipe to connect the inlet and outlet water pipes of the water heater and the local water pipe (Make sure to place the rubber ring).Before connecting the inlet water pipe, flush the inside of the pipe.



Hot and Cold Pipe Insulation Installation .For increased energy efficiency, use pipe insulation. Please install the insulation, according to the illustrations above, making sure to insulate all the way to the top. Do not cover any drain or pressure valve(s).



NOTICE: The hot and cold pipes should be insulated as shown help to provide additional freeze protection.

DURING INSTALLATION OF THIS WATER HEATER

MUST DO
- DO check inlet gas pressure to ensure that it is within the range specified on the rating plate.
- DO provide adequate air for combustion and ventilation as discussed in the Use & Care Manual and the National Gas Code (CAN/CGA B 149 in Canada).
- DO maintain proper clearances to combustibles as specified by applicable code.
- DO ensure that the flue terminal location complies with the guidelines found in the Use & Care Manual and National Fuel Gas Code (CAN/CGA B 149 in Canada).

DO NOT
- DON'T block or restrict Air Intake Opening located on the back side of the water heater.
- DON'T remove the front cover unless absolutely necessary. This should only be done after being examined by a qualified service technician.
- DON'T install this product where standing water may occur.

MOUNTING THE WATER HEATER

Make sure the location of the water heater allows for easy access and operation.

In case of dry wall or concrete wall use dry wall anchors or lag bolts.

The water heater requires 120VAC/ 60Hz. Have a receptacle with ground terminal near the water heater. The length of the powersupply cord is 5 feet.

Drill the holes as per the sizes in the figure to the left, put 2 expansion screws into the top holes, and 2 rubber screws into the bottom holes.

Hang up the water heater unit, tighten the expansion screws, and put 2 wood thread screws into the bottom holes.

CAUTION

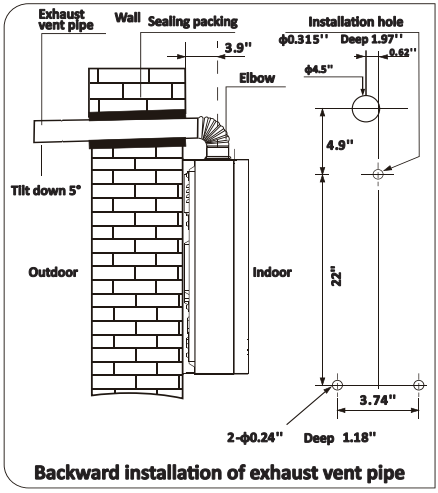
Reinforcement of the wall is required in case the wall is not strong enough to hold the water heater.

Indoor unit must be installed with Category III Stainless Steel vent pipe in accordance with vent supplier/ Manufacturer in accordance with local code. Owner must refer to vent manufacturer's instructions and specifications.

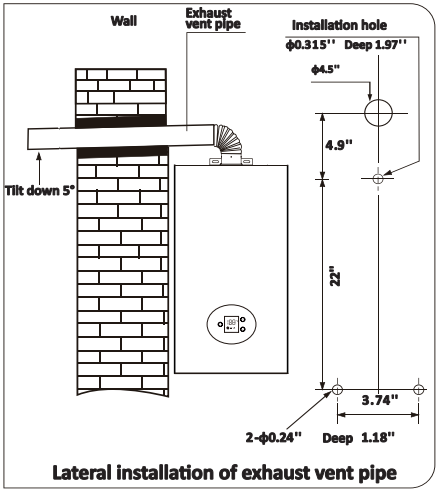
A. BACK INSTALLATION
1. Insert the vent pipe through the installation holes in the wall with the terminal sticking out.
2. Connect the elbow to the vent pipe and water heater, moving straight backwards until the expansion screws go into the holes of the water heater. Screw the nuts tight (pay attention to the direction of the elbow).

B. SIDE INSTALLATION
1. Aim the holes in the water heater onto the expansion screws, hang it up and screw the nuts tightly.
2. Put the vent pipe through the holes in the wall, and connect the elbow with the water heater and vent pipe.

C. VERTICAL INSTALLATION
Please refer to local installation professionalor venting manufacturer:
The installation hole in the wall needs to be sealed by fire-retardant material or wall thimble, making sure the water heater is tight and will not come off.



Backward installation of exhaust vent pipe



Lateral installation of exhaust vent pipe

This picture is for reference only, please refer to the actual product.

Installation Check List

A. Water Heater Location
- Installed indoors.
- Close to area of mostly used outlet.
- Protected from freezing temperatures.
- Proper clearance from combustible surfaces observed.
- Sufficient fresh air supply for proper operation of water heater.
- Air supply free of corrosive elements and flammable vapors.
- Provisions made to protect area from water damage.
- Sufficient room to service heater.
- Combustible materials, such as clothing, cleaning materials, rags, etc. clear of the heater and vent piping.
- Water heater is properly attached to the wall.

B. Water Supply
- Water supply has sufficient pressure.
- Air purged from water heater and piping.
- Water connections tight and free of leaks
- Water filter is clean and in place.
- Materials used are as instructed in this manual.
- Water pipes are insulated.

C. Gas Supply
- Gas type matches rating plate.
- Gas supply pressure is sufficient for the water heater.
- Gas line equipped with shut-off valve, union and sediment trap.
- Approved pipe joint compound used.
- Commercial leak detector or soap and water solution used to check all connections and fittings for possible gas leak.
- Gas Company inspected installation (if required).

D. Relief Valve
- Pressure Relief Valve properly installed and discharge line run to open drain.
- Discharge line protected from freezing.

E . Electrical Wiring
- Voltage matches rating plate.
- Water heater is properly grounded .
- Wiring meets all local codes.
- GFCI Protection where required.

Lighting the Water Heater

Before operating this water heater, be sure to read and follow the instructions on the label pictured below and all other labels on the water heater, as well as the warnings printed in this manual. Failure to do so can result in unsafe operation of the water heater resulting in property damage, personal injury, or death. Should you have any problems reading or following the instructions in this manual. STOP, and get help from a qualified service technican.

FOR YOUR SAFETY BEFORE USING THE WATER HEATER

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This water heater does not have a pilot. It is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.

B. BEFORE OPERATING smell all around the water heater area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor. Test all connections with a commercial leak detector or soapy water.

WHAT TO DO IF YOU SMELL GAS

• **DO NOT** try to light any appliance • **DO NOT** touch any electric switch; **DO NOT** use any phone in your building. • Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions. • If you cannot reach your gas supplier or fire department. • **DO NOT** return to your home until authorized by the gas supplier or fire department.

C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

D. **DO NOT** use this water heater if any part has been under water. Immediately call a qualified service technician to inspect the water heater and to replace any part of the control system and any gas control which has been under water.

OPERATING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. Turn off all electric power to the water heater.
3. Set the thermostat to lowest setting.
4. DO NOT attempt to light the burner by hand.
5. Turn the Gas Shut-off Valve located on the outside of the unit clockwise to the "OFF" position.
6. Wait five (5) minutes to clear out any gas. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
7. Turn the Gas Shutoff Valve located on outside of the unit counterclockwise to the "ON" position.
8. Turn on all electric power to the water heater.
9. Set thermostat to desired setting.
10. If the water heater will not operate, follow the instructions "To Turn Off Gas To water heater" and call your service technician or gas supplier.



TO TURN OFF GAS TO WATER HEATER

1. Turn off all electric power to the water heater if service is to be performed.
2. Turn the Gas Shut-off Valve located on the outside of the unit clockwise to the "OFF" position.

NOTE: CX SERIES IS FOR INDOOR PERMANENT INSTALLATIONS ONLY. THIS MANUAL AND ALL CAMPLUX CONTENT IS SUBJECT TO CHANGE WITHOUT NOTICE. PLEASE VISIT WWW.GASLANDCHEF.COM, CALL SERVICE HOT LINE (844) 538-7475 OR EMAIL TO SUPPORT@CAMPLUX.COM FOR MORE INFORMATION.

OPERATING THE WATER HEATER

Turning on the Water Heater

1. Make sure the gas type you will use is same as the type on the data plate.
2. Turn on the main gas valve, plug in the power cord (be sure the socket is well grounded), and press the "ON/OFF"button on the control panel. Set temperature to 120° F.
3. Turn on the faucet, and the fan will start working. You will hear the ignition sound after a few seconds. The burner will ignite, and hot water will come out. If the burner is not ignited successfully, the ignition click sound will last a few seconds. If the burner still fails to ignite, turn off the faucet and wait for 10-20 seconds, and repeat the above procedures.

For first use and/or if the water heater has not been used for a considerable period of time, the repeat of the above procedures may be required, due to accumulated air inside the gas pipe.

Safety Precautions

If there is any difficulty in understanding or following the Operating Instructions or the Care and Cleaning Section, it is recommended that a qualified person or serviceman perform the work.

- DO turn off manual gas shut-off valve if water heater has been subjected to over heating, fire, flood, physical damage or if the gas supply fails to shut off.
- DO NOT turn on water heater unless water and gas supplies are fully opened.
- DO NOT turn on water heater if cold water supply shut-off valve is closed.
- DO NOT allow combustible materials such as newspaper, rags or mops to accumulate near water heater.
- DO NOT store or use gasoline or other flammable vapors and liquids, such as adhesives or paint thinner, in vicinity of this or any other appliance. If such flammables must be used, open doors and windows for ventilation and all gas burning appliances in the vicinity should be shut off including their pilot lights to avoid vapors lighting.

NOTICE: Flammable vapors can be drawn by air currents from surrounding areas to the water heater.

WATER TEMPERATURE SETTING

DANGER: There is a hot water scald potential if the temperature is set too high. Households with small children, disabled, or elderly persons may require a 120°F or lower temperature setting to prevent contact with hot water.

Water Temperature	Time To Produce a Serious Burn
120°F	More than 5 minutes
125°F	1 1/2to 2 minutes
130°F	About 30 seconds
135°F	About 10 seconds
140°F	Less than 5 seconds
145°F	Less than 3 seconds
150°F	About 1 1/2 seconds
155°F	About 1 second

Table courtesy of Shriners Burn Institute

Output temperature of water is regulated by setting the temperature on the front of the remote control.
Safety factors should be considered when selecting the water temperature setting of the water heater's remote control. The remote control was set at 110°F before the water heater was shipped from the factory. This is the recommended starting point.
Water temperatures above 120°F can cause severe burns or death from scalding. The thermostat is adjusted to its lowest temperature position when shipped from the factory.
Be sure to read and follow the warnings outlined in this manual and on the label located on the water heater.
Mixing valves are available for reducing point of use water temperature by mixing hot and cold water in branch water lines.
Procedures for adjusting the thermostat for energy efficient operation at the minimum water temperature setting consistent with the consumer's needs.

WATER TEMPERATURE SETTING CONTINUED

Set Temprature Memory

- This appliance contains an electronically controlled thermostat. From the factory, the temperature range is between 90°F and 140°F.
- When the appliance is in use, the set temperature can increase to 122°F, but there is no limit to temperature decrease. To increase the temperature more than 122°F, the water will need to be shut off first.

NOTICE: If inlet water temperature is high, and set temperature is low, the actual temperature might be highe rthan the set temperature, and vice versa.

- The display will read the set temperature if the appliance is not in use or there is no water flow. If the appliance is in use or has water flow, the display will read the actual temperature. To view the set temperature in this condition, press UP or DOWN and the set temperature will flash for 3 seconds.
- The hottest temperature water will be at the hot water faucet closest to the appliance, Always remember to test the water temperature with your hand before use and remember that hotter waterincreases the risk of scald injury.
- Always supervise young children or others who are incapacitated. If the appliance has been subjected to fire, flood or physical damage, turn off the manual gas shut-offvalve (s), and do not operate the appliance again until it has been checked by qualified personnel.

⚠ **WARNING:** Should overheating occur or the gas supply fail to shut off, turn off the manual gas control valve to the appliance.

Water Quality

Proper maintenance of the water heater is required to ensure that your water meets EPA quality standards.

- The following table shows the maximum contaminant levels allowed, based on the EPA National Secondary Drinking Water Regulations (40 CFR Part 143.3).

NOTICE: If you suspect that your water is contaminated in any way, discontinue use of the water heater and contact an authorized technician or licensed professional.

Contaminant	Maximum Allowable Level
Total Hardness	Up to 200 mg/l (12 grains/gallon)
Aluminum	0.05 to 0.2 mg/l
Chloride	Up to 250 mg/l
Copper	Up to 1.0 mg/l
Iron	Up to 0.3 mg/l
Manganese	Up to 0.05 mg/l
pH	6.5 to 8.5
Sulfate	Up to 205 mg/l
Total Dissolved Solids (TDS)	Up to 500 mg/l
Zinc	Up to 5 mg/l
Chlorine	Up to 4 mg/l

CARE AND CLEANING OF THE WATER HEATER

Routine Preventative Maintenance

DANGER: Before manually operating the relief valve, make certain no one will be exposed to the danger of the hot water released by the valve. The water may be hot enough to create a scald hazard. The water should be released into a suitable drain to prevent injury or property damage.

DANGER: Hotter water increases the potential for hot water scalds.

DANGER: Failure to perform the recommended Routine Preventative Maintenance can harm the proper operation of this water heater, which can cause carbon monoxide dangers, excessive hot water temperatures and other potentially hazardous conditions.

Properly maintained, your water heater will provide years of dependable trouble-free service. It is recommended that a periodic inspection of the burner, relief valve, water filter and venting system should be made by service personnel qualified in gas appliance repair.

It is suggested that a routine preventive maintenance program be established and followed by the user.

At least once a year, lift and release the lever handle on the pressure relief valve, located in the hot outlet piping of the water heater, to make certain the valve operates freely. Allow several gallons to flush through the discharge line to an open drain.

Rapid closing of faucets or solenoid valves in automatic water using appliances can cause a banging noise heard in a water pipe. Strategically located risers in the water pipe system or water hammer arresting devices can be used to minimize the problem.

Inspect the area around the water heater to ensure a safe operating environment. Keep water heater area clear and free from combustible materials, gasoline, and other flammable vapors and liquids. Ensure the unit has not been damaged. If damage or denting is present, contact a service personnel to verify proper operation.

Check for any abnormal sounds during normal operation of the water heater.

All piping should be checked for gas and/or water leaks. Refer to page 17 of this manual for instructions on leak testing.

The air intake and cold water supply filters should be cleaned monthly. Refer to the "Housekeeping" section for further information.

DO NOT operate the water heater if you feel something is wrong with the water heater.

DO NOT allow children to operate or otherwise handle the water heater.

NOTICE: If the pressure relief valve on the hot water heater discharges periodically, this may be due to a problem in the water system. Contact the water supplier or your plumbing contractor on how to correct this. DO NOT plug the relief valve outlet.

NOTICE: After inspection, maintenance, and/ or cleaning, ensure proper operation by turning on a hot water faucet.

HOUSEKEEPING

6 MONTH CLEANING ROUTINE
To prevent water scale, lime or rust deposit buildup and ensure your gasland tankless water heater is running as efficiently as possible it is highly recommended that you clean your gasland tankless water heater every 6 months. For more information and to purchase please visit us at www.gaslandchef.com or call (844) 538-7890.

Before performing any housekeeping tasks to this water heater, be sure to turn the unit off and disconnect the power supply.

Vacuum around the water heater for dust, dirt and lint on a regular basis. Clean the water heater and remote control by using a damp soft cloth with a few drops of mild detergent and gently wiping the surfaces of the unit. Wipe any remaining moisture with a dry soft cloth.
To ensure sufficient ventilation and combustion air supply, proper clearances must be maintained. The water filters should be cleaned on a monthly basis. Combustion system is fan-assisted.

CLEANING THE WATER HEATER
• Make sure the unit is OFF and the electrical power supply has been disconnected.
• DO NOT scrub the appliance with a brush.
• Use only mild soapy water, other cleaners may damage the surface of the water heater.
• DO NOT remove any label including the rating plate while cleaning or servicing.

DANGER: Shock Hazard. Make sure the electrical power to the water heater is off to avoid potential serious injury or damage to components.

DANGER: Combustible materials, such as clothing, cleaning materials, or flammable liquids, etc., must not be placed against or next to the water heater.

VACATION AND EXTENDED SHUT-DOWN

If the water heater is to remain idle for an extended period of time, the power and water to the appliance should be turned off.
The water heater and piping should be drained if they might be subjected to freezing temperatures.
After a long shut-down period, the water heater's operation and controls should be checked by qualified service personnel.

ANTI-FREEZING

While the Anti-Freezers will help to protect from cold temperatures, they will in no way guarantee protection from freeze damage. DO NOT rely on the anti-freezers to fully protect the unit from freezing, take all precautions to prevent cold damage.

NOTICE: The anti-freezing device works for the water heater unit only, and not for the inlet and outlet water pipes.

* Freezing anywhere in the plumbing system can result in damage to the water heater, such as a rupture in your heat exchanger. All pipes must be adequately protected from freezing.

Units with anti-freezers have an automatic heating device and will help to avoid freeze damage, but the power must be kept on. Freezing will occur with no power. In very cold areas and when the temperature is under 32°F, or in event of an ice storm, freezing will occur as the heating power limit is exceeded.If these conditions take place, please follow the procedures explained below.

DRAINING PROCEDURE

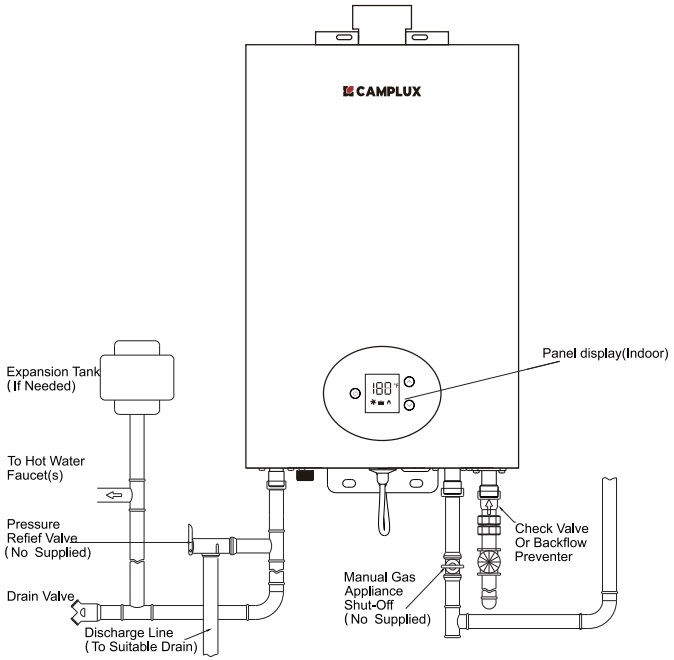
When the temperature falls below 32°F, water in your plumbing system or water heater can turn to ice and then expand causing damage to the water heater. This damage is not covered under the manufacturer's warranty. If these conditions are anticipated, please drain the water heater as follows to help but not guarantee from freezing:

1. Shut off the main gas valve and power.
2. Shut off the inlet water valve.
3. Open all faucets.
4. Take off the drain valve, and allow water to drain for 3 minutes or until the unit is empty.
5. Making sure all water is out, replace the drain valve, and shut off the faucets.

CARE AND MAINTENANCE OF THE WATER HEATER

Draining the Water Heater

WARNING: Failure to follow these instructions while draining the water heater can cause serious damage to the water heater as well as personal injury including scalding.



Below are instructions for draining water out of the water heater.

1. Turn off the switch on the panel display.
2. Close the gas shut-off valve(s).
3. Close the water shut-off valve.
4. Turn the on/ off switch to the OFF position and disconnect breaker at least 10 seconds after step #1.
5. Open drain valve.
6. Open all hot water faucets. Before proceeding to the next step, make sure that COLD water is coming out of all hot water faucets.
7. To put the water heater back into operation after draining, follow the steps below.

8. Remount the water filter. Close the hot water outlet drain valve.
9. Open the water shut-off valve and close again after making sure that water comes out from hot water faucets. (This step is to remove air from the water lines.)
10. Reconnect the breaker and turn the on/off switch to the ON position, fully open the gas shut-off valve and the water shut-off valve.

NOTICE: The water heater may not operate unless the above procedure is followed correctly.

BEFORE YOU CALL FOR CUSTOMER SERVICE

Troubleshooting Tips

Save time and money! Review the charts on the following pages first and you may not need to call for service. This water heater incorporates a variety of shut off devices that prevents the operation of the water heater down if undesirable combustion conditions occur. Such as the presence of a blockage of the combustion air vent insufficient gas or pressure which can impact the safe operation of the water heater. Please contact a Qualified Service Technician if this occurs.

Problem	Possible Cause	What To Do
Not enough or no hot water	Water shutoff valve is not fully opened	Check shutoff valve and open fully
	Hot water faucet is not fully opened	Open hot water faucet completely (The main burner goes off when incoming water volume is inadequate
	Water piping is frozen	Allow piping to thaw
	No electricity or water supply is cut off	Check that proper power is being supplied and/or water supply is adequate
	Unit is not "ON"	Turn the unit "ON" by the button on the panel display.
	The temperature may be set too low	Increase the temperature setting
	Mixing Valve malfunction (if applicable)	Check and replace if necessary
	Error code displayed on panel	See instructions for Error Code and if required, contact a dealer for service
Water not hot enough	The temperature may be set too low	Increase the temperature setting
	The gas valve is not fully opened	Check and open the gas valve fully
Water too hot	The temperature is set too high	Decrease the temperature setting
	Water shutoff valve is not fully opened	Check shutoff valve and open fully
	Small amount of water has been heated	Allow more water to flow
Fan continues to rotate after hot water faucet is closed	This function is to purge unburned gas 10-15 seconds	Normal operation. There is no need to call for service. Check for error code

ERROR CODE GUIDE

When an error code is displayed:
- Close the hot water faucet, turn off the switch on the panel display.
- Wait for about 5 minutes before turning the switch on again.
- Open the hot water faucet.

NOTICE: If an error code other than those listed below is displayed, immediately turn off the hot water faucet, take note of the error code, turn off the switch on the panel display and call the customer assistance number.

If the error code remains shown:
- Close the hot water faucet and turn off the switch on the panel display.
- Take the proper action shown below and attempt to operate of the water heater again.
- If the error code is still shown.
- Turn off the hot water faucet and turn off the switch on the panel display.
- Take note of the error code displayed and call the customer service assistance number in the "if you need service"

Error Code	Error Description	What To Do
A1	Water outlet temperature sensor failure	connect the water inlet temperature sensor
		replace the water inlet temperature sensor
A3	Fan failure	connect the fan
		replace the fan
A4	Ignition failure	Turn off the hot water faucet or turn off the switch on the display
A5	Accidental flameout failure	Turn off the hot water faucet or turn off the switch on the display
A7	Water outlet temperature overtemperature failure	connect the water outlet temperature sensor
		replace the water outlet temperature sensor
A8	Fake flame failure	Turn off the hot water faucet or turn off the switch on the display
A9	The thermostat (overheating) is out of order	connect the thermostat
		replace the thermostat
Ab	solenoid valve failure	connect the valve
		replace the valve
FF	Vent blockage	clean the vent pipe

CAUTION: For your safety DO NOT attempt repair of gas piping, burners , vent connectors or other safety devices. Refer repairs to qualified service personnel.

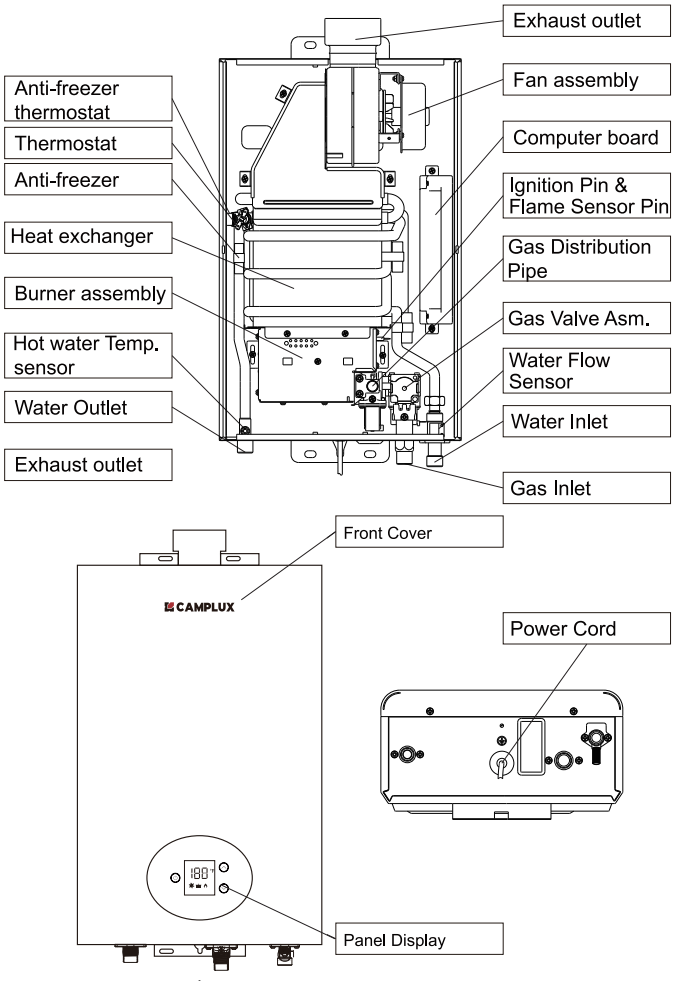
CAUTION: Make certain power to water heater is "OFF" before removing protective cover FOR ANY REASON.

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. VERIFY PROPER OPERATION AFTER SERVICING.

REPLACEMENT PARTS

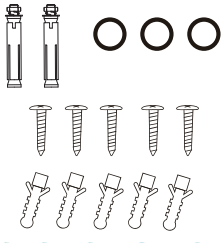
For models using natural or propane gas.

WARNING: For your safety, DO NOT attempt to disassemble this unit for any reason.



Instructions for placing a parts order
Address parts orders to the distributor or store from where the water heater was purchased.
All parts orders should include:
• The model and serial number of the water heater from the rating plate.
• Specify type of gas (natural or propane) as marked on the rating plate.
• Part description (as noted below) and number of parts desired.

IN THE BOX

Item	Description	Identification	Quantity
A	Residential Tankless Gas Water Heater		1 piece
B	Vent Pipe (φ3.0")	**NOT INCLUDED**	N/A
C	Fixing Kits		1 set
D	Manual		1 piece

NOTE: Vent Pipe was not included from the original package. Please visit a local hardware store or online marketplaces to purchase φ3" Category III Stainless Steel Venting for certified installation.

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 adjustment to qualified serviceman. Address all parts orders to the distributor or manufacturer where the water heater was pruchased. All parts orders should be included:
1. The model and serial number of the water heater from the rating parameter.
2. Parts description (as shown below) and number of parts desired.

Reference No.	Description
1	Heat Exchanger
2	Ignition Needle
3	Flame Sensor Needle
4	Gas Distribution Pipe
5	Gas Valve Assembly
6	Gas Inlet
7	Water Inlet
8	Hot Water Temp. Sensor
9	PCB Board
10	Fan Assembly

Reference No.	Description
11	Burner Assembly
12	Anti-Freezer
13	Thermostat
14	Anti-Freezer Thermostat

LIMITED WARRANTY INFORMATION

CAMPLUX hereby warrants this product to be free of material defects in materials and workmanship when installed and operated according to CAMPLUX's installation and operating instructions. This Limited Warranty extends to the original purchaser and subsequent owners, but only while the product remains as the site of the original installation. This Limited Warranty terminates if moved or reinstalled at a new location. There are no warranties, express or implied made or given other than contained in this Limited Warranty. No agent, employee or representative of CAMPLUX has any authority to bind CAMPLUX to any representation or warranty concerning the Product not contained in this Limited Warranty.

Except as expressly set forth herein, THERE ARE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ANY GOODS SOLD HEREUNDER. BUYER'S EXCLUSIVE REMEDY IS LIMITED TO REPAIR OR REPLACEMENT OF THE GOODS SOLD, AT CAMPLUX'S DISCRETION. CAMPLUX'S SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Item Period of Coverage

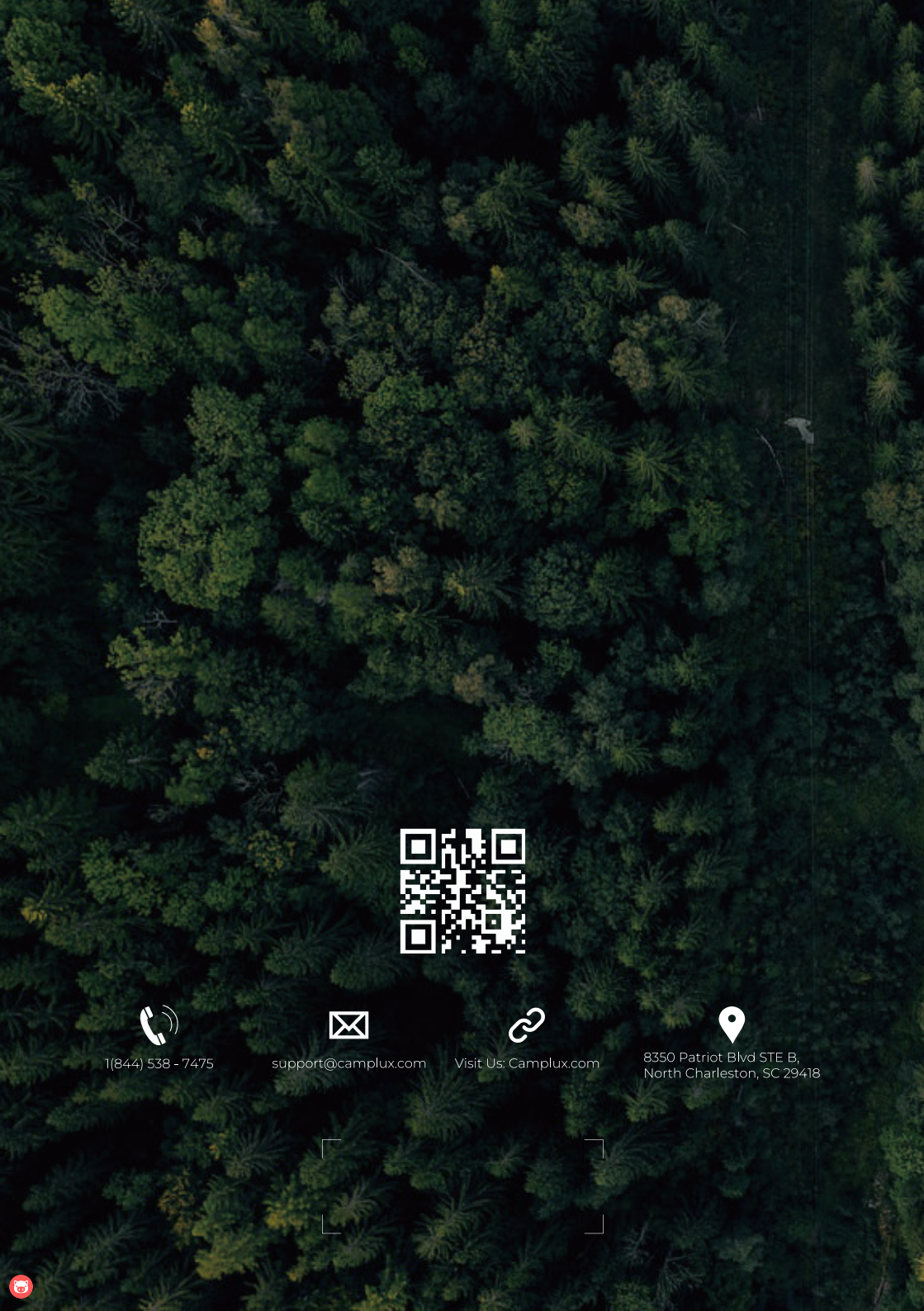
Heat Exchanger 1 year
All other parts 1 year
Free Accessories (Showerhead,hose,regulator etc) 30 days

Coverages are void if the unit is used in a hot water circulation loop, in series with a circulation system or where an on-demand recirculation system is not incorporated.
Owner is responsible for all other costs incidental to repair such as labor, shipping, delivery and permits. Proof of purchase required. Products repaired will be covered under this Limited Warranty for the remainder of term of the original purchase.
This Limited Warranty becomes null and void if any of the following are determined to be a contributing factor to the failure of the product:
1. Abuse, misuse, alteration, neglect or misapplication;
2. Improper or inadequate maintenance;
3. Inadequate water quality;
4. Installation in a corrosive or otherwise destructive environment;
5. Freeze Damage;
6. Scale buildup;
7. Incorrect gas or water pressure;
8. Acts of force Majeure.

This Product is not to be used as a pool or spa heater.
Within the first 30 days of purchase, CAMPLUX will cover all ground shipping costs for warranty related issues, excluding AK, HI, CAMPLUX, and any location outside of the continental US. After the first 30 days of purchase, CAMPLUX will cover all shipping costs to the customer for warranty related issues, excluding AK, HI, Canada, and any location outside of the continental US. After the first 30 days of purchase, the customer is responsible for all shipping to CAMPLUX, regardless of reason or circumstance. The method for warranty related shipping will be Ground equivalent with the provider of CAMPLUX's choosing.

AK, HI, Canada, and any location outside of the continental US, will be responsible for all shipping costs, regardless of reason or circumstance.

All shipments of any type of product coming to CAMPLUX for any reason must have an RGA for any repairs to be made. Please contact CAMPLUX to obtain an RGA number prior to shipping anything to CAMPLUX. Failure to do so could result in loss of product. CAMPLUX will not be responsible for replacement due to loss or damage if these steps are not properly followed.



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