## OUTDOOR LP HOT WATER HEATER CARE, USE AND SAFETY INSTRUCTIONS

Model HWD10





- To the installer or person assembling this appliance: Leave this manual with this appliance for future reference.
- To consumer: Keep this manual for future reference. This instruction manual contains important information necessary for the proper assembly and safe use of this product.

Read and follow all warnings and instructions before assembling and using the appliance.

Follow all warnings and instructions when using the appliance.

## DO NOT DISCARD THIS INSTRUCTION MANUAL.

For outdoor use only.

CALIFORNIAPROPOSITION65WARNING

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

## **FREEZE WARNING**

If the outside temperature is near or below freezing 32F (0C) ensure that the system is properly drained. See instructions inside.

## WARNING

Use two wrenches when connecting the gas regulator hose to the appliance or damage to the gas valve may occur.

0711-HWD10-INSTRUCTIONS



3985 N. 75 W. • Logan, UT 84321 • 1.800.650.2433 • www.campchef.com

# DANGER

Install and properly vent the water heater. Failure to properly install the water heater 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 flueterminalforproperinstallation at initial start-up; and at least annually thereafter. Refer to the Care and Cleaning section of this manual for more information regardingflueterminalinspection.

Use only in areas where there is adequate ventilation.

# DANGER

- 1. Never operate this appliance unattended.
- 2. Never operate this appliance within 3 ft (1 m) of any structure, combustible material or other gas cylinder.
- 3. Never operate this appliance within 25 ft (7.5 m) of any flammable liquid.
- Do not leave this appliance unattended while in use. The user must remain in the immediate area of the product and have a clear view of the product at all times during operation.
- 2. Keep children and pets away from the burner at all times.
- 3. The use of alcohol, prescription

or non-perscription drugs may impair your ability to properly assemble or safely operate this appliance.

- 4. For OUTDOOR use only. Do NOT use in a building, garage or any other enclosed area. NEVER use this appliance as a heater.
- 5. Do not operate appliance under ANY overhead construction. Keep a minimum clearance of 3 feet (1 m) from the sides, front and back of appliance to ANY construction. Keep the area clear of all combustable material and flammable liquids, including wood, dry plants, grass, brush, paper and canvas.
- 6. Keep the fuel supply hose away from any heated surfaces.
- 7. To prevent accidental fires, before using the appliance check that the hose is not damaged and all joints and connections are not leaking by turning on the cylinder valve, and applying a soapy solution to the joints and connections. If a continuous hissing sound is heard, or if the soapy solution bubbles, there is a leak. Do not use the appliance if there is a leak. Replace the faulty parts.
- 8. Extinguish all open flames before connecting the gas supply to the appliance and before checking for leaks.
- Do NOT move the appliance when in use. Allow unit to cool to 115°F (45°C) before moving or storing.
- In case there is a fire, call the local fire department or dial 911. Stay clear from flames.
- 11. This product is not intended for commercial use.
- 12. Should overheating occur or the gas supply fails to shut off turn off the gas supply at the tank.

- Do not obstruct flow of combustion and ventilation to or from the appliance.
- 14. This appliance will be hot during and after use. Use insulated oven mitts or gloves for protection from hot surfaces.
- 15. Always allow the appliance to cool before covering.
- 16. Always cover the appliance when not in use.

### **Installation Safety Precautions**

- Use appliance only with LP (propane) gas and the regulator valve assembly supplied.
- Installation must conform with local codes, or in their absence with National Fuel Gas Code, NFPA 54/ ANSI Z223.1. Handling and storage of LP cylinders must conform to LP Gas Code NFPA/ANSI 58.
- Do not modify this appliance. Modifications will result in a safety hazard. Questions regarding certification in other areas may be addressed to 1-435-752-3922.
- Apartment Dwellers: Check with management to learn the requirements and fire codes for using an LP Gas appliance at an apartment. If allowed, use outside on the ground floor with a 3 foot clearance from walls or rails. Do NOT use appliance on or under any apartment, condominum balcony or deck.
- Before opening LP tank valve, check the coupling nut for tightness. When appliance is not in use, turn off LP tank valve on supply cylinder.
- Never use LP tank if visibly rusted, damaged, or out of date.
- The regulator may make a humming or whistling noise during operation.
- Clean and inspect the hose before

each use of the appliance. If there is evidence of abrasion, wear, cuts or leaks, the hose must be replaced prior to the appliance being put into operation. See product sheet for hose & regulator information.

• Do not block holes in bottom, top or sides of appliance.

# WARNING

Combustion by-products produced when using this product contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

- Never operate appliance with LP tanks out of correct position specified in assembly instructions.
- Always close LP tank valve and remove coupling nut before moving LP tank form specified operating position.

WARNING: HOSE IS A TRIP HAZARD



• NEVER store a spare LP tank under or near appliance or in enclosed areas. NEVER fill the cylinder beyond 80% full. An overfilled spare LP tank is hazardous

due to possible gas released from the safety relief valve. Failure to follow these instructions exactly could



cause a fire resulting in death or serious injury.

• If you see, smell, or hear escaping gas, immediately get away from the LP tank/ appliance and call your fire department. • All spare LP tanks must have safety caps installed on the LP tank outlet.

## LP Tank Removal, Transport and Storage

- Turn OFF all LP tank valve. Turn coupling nut counterclockwise by hand only – do not use tools to disconnect. Install safety cap onto LP tank valve. Always use cap and strap supplied with valve. Failure to use safety cap as directed may result in serious personal injury and/or property damage.
- A disconnected LP tank in storage or being transported must have a safety cap installed (as shown). Do not store an LP tank in enclosed spaces such as a carport garage, porch, covered patio or other building. Never leave an LP tank inside a vehicle, which may become overheated by the sun.
- Do not store LP tanks in an area where children play.
- Storage of an appliance indoors is permissible only if the cylinder is disconnected and removed from the appliance.

## LP Tank

The LP tank used with your appliance must meet the following requirements:

- Purchase LP tanks only with these required measurements: 12" (30.5cm) (diameter) x 18" (45.7cm) (tall) with 20 lb. (9 kg.) capacity maximum.
- LP tank must be constructed and marked in accordance with specifications for LP tank of the U.S. Department of Transportation (DOT) or the National Standard of Canada, CAN/CSA-B339, Cylinders, Spheres and Tubes for the Transportation of Dangerous Goods.
- The propane cylinder used with this appliance must include a collar to

protect the cylinder valve.

## LP tank valve must have:

• Type 1 outlet compatible with regulator or appliance.



- Safety relief valve.
- UL listed Overfill Protection Device (OPD). This OPD safety feature is identified by a unique triangular hand wheel. Use only tanks equipped with this type of valve.

LP tank must be arranged for vapor withdrawal.

# LP (Liquefied Petroleum Gas)

- LP gas is non-toxic, odorless and colorless when produced. For Your Safety, LP gas has been given an odor (similar to rotten cabbage) so that it can be smelled.
- LP gas is highly flammable and
- LP TANK FILLING
- Use only licensed and experienced dealers.
- LP dealer must purge tanks before filling.
- Dealer should NEVER fill LP tank more than 80% of LP tank volume. Volume of propane in tanks will vary by temperature.
- A frosty regulator indicates gas overfill. Immediately close LP tank valve and call local LP gas dealer for assistance.
- Do not release liquid propane (LP) gas into the atmosphere. This is a hazardous practice.
- To remove gas from LP tank, contact an LP dealer or call a local fire department for assistance. Check the telephone directory under "Gas companies" for nearest certified LP dealers.

### LP Tank Exchange

• Many retailers that sell appliances offer you the option of replacing your empty LP tanks through an exchange service. Use only those reputable exchange companies that inspect, precision fill, test and certify their cylinders. Exchange your tank only for an OPD safety featureequipped tank as described in the "LP Tank" section of this manual.

- Always keep new and exchanged LP tanks in upright position during use, transit or storage.
- Leak test new and exchanged LP tanks BEFORE connecting to appliance.

### LP Tank Leak Test For your Safety

- Leak test must be repeated each time LP tank is exchanged or refilled.
- Do not smoke during leak test.
- Do not use an open flame to check for gas leaks.
- Appliance must be leak checked outdoors in well-ventilated area, away from ignition sources such as gas fired or electrical appliance away from open flames or sparks. Use a clean paintbrush and 50/50 soap and water solution. Use mild soap and water. Do not use household cleaning agents. Damage to gas train components can result. Brush soapy solution onto all weld seams and entire valve area.

# WARNING

If "growing" bubbles appear, do not use or move the LP tank. Contact an LP gas supplier or your fire department.

## Setup Using Mounting Brackets

This appliance must be mounted to a non-combustible surface. Mount to a non-combustible surface using the supplied hardware. For a temporary mount the unit may be suspended from the top bracket. If mounting permanently the appliance should be mounted using both the bottom and top tabs.

# WARNING

Hot exhaust gases exit from the top of the appliance. The unit should not be installed where these hot gases could start a fire.

#### Outlet Hose and Shower Head Assembly

Attach the shower nozzle to the hose.

Make sure to insert the supplied rubber gasket at the connection. Connect the opposite end of the hose to the brass fitting on the bottom of the appliance labeled water output. Make sure to insert the





supplied rubber gasket at this connection. Hand tighten only.

### (Optional Garden Hose Connector To Output)

An additional brass fitting for connecting a standard garden hose to the outlet of the appliance is included. If connecting

a garden hose to the output first connect the brass fitting using the supplied gasket to the brass fitting on the bottom of the



appliance labeled water output. Hand tighten only. Attach the garden hose to this connection. Make sure the garden hose has a rubber gasket inserted in the connector.

Water Supply Input Assembly Attach standard



garden hose to the fitting on the bottom of the appliance labeled water input. Make sure to insert the supplied rubber gasket at the connection.

### **Battery Installation**

Install 2 "D" cell batteries in the compartment on the bottom of the appliance. Make sure the batteries are installed in the correct direction. Clean the battery contacts and also those of the device prior to battery installation. Always purchase the correct size and grade of battery most suitable for the intended use.

Do not mix new and used batteries. Replace all batteries at the same time.

#### Instructions For Connecting Regulator To Appliance

# WARNING

Attempting to tighten the hose fitting to the appliance without using a wrench on the brass adapter fitting on the bottom of the appliance could damage the product and cause a gas leak. Two wrenches must be used to avoid putting too much torque on the appliance. Damage may occur to the unit if tightened improperly.

• Attach gas regulator to the appliance. The regulator will attach the brass fitting

on the bottom of the appliance labeled Gas Input. Tighten the fittings using wrenches on both the brass adapter fitting on the appliance and the brass fitting on the end of the hose.



• Use two adjustable wrenches or 3/4" and

7/8" wrenches for tightening the hose to the brass valve of the appliance.

#### Instructions For Connecting Regulator To The Tank

Only use the pressure regulator & hose supplied with this appliance. Replace only with low pressure regulator model RA328.

- 1. Place LP tank on a secure, level, and stable surface.
- 2. Turn off water supply to the appliance.
- 3. Turn LP tank OFF by turning hand wheel clockwise to a full stop.
- 4. Remove the protective cap from LP tank valve. Always use cap and strap supplied with valve.
  Do not use a POL transport plug (plastic part with external threads) It will defeat the safety feature of the valve.
- 5. Hold regulator, insert nipple (B) into LP tank valve. Hand tighten coupling nut, holding regulator in a straight line (C) with LP tank valve so as not to cross thread the connection.
- 6. Turn the coupling nut clockwise to tighten to a full solid stop. The regulator will seal on the back-check feature in LP tank valve, resulting in some resistance. An additional one-half to three quarters turn is required to complete connection. Tighten by hand only – do not use tools.



(B) Nipple has to be centered into the LP tank valve



(C) Hold coupling nut and regulator as shown for proper connection to LP tank valve

NOTE: If you cannot complete connection, disconnect regulator and repeat steps 5 and 6. If you are still unable to complete the connection, do not use this regulator!

• Do not insert any foreign objects into the valve outlet. You may damage the valve

and cause a leak. Leaking propane may result in explosion, fire, severe personal injury, or death.

• Never attempt to attach this appliance to the self-contained LP gas system of a camper or trailer or motor home.

# WARNING

Leak test must be done without the unit being connected to the water.

## Instructions For Leak Testing

- 1. Turn off water supply to the heater.
- 2. Be sure regulator is tightly connected to LP tank.
- 3. Completely open LP tank valve by turning hand wheel counter clockwise. If you hear a rushing sound, turn gas off immediately. There is a major leak at the connection. Correct before proceeding.
- 4. Brush soapy solution onto indicated connections shown at right.
- 5. If "growing bubbles appear, there is a

leak. Close LP tank valve immediately and retighten connections. If leaks cannot be stopped,



do not try to repair. Call for replacement parts. Order new parts by giving the serial number, model number and name of the items needed to the Service Center 1.435.752.3922.

 Always close LP tank valve after performing tank leak test by turning hand wheel clockwise.

# WARNING

- Do not use appliance until leak checked.
- If you cannot stop a gas leak, immediately close LP tank valve and call LP gas supplier or your fire department.

IF THE FLAME IS ACCIDENTALLY EXTINGUISHED TURN OFF THE FLOW OF THE WATER AND WAIT 5 MINUTES BEFORE RESUMING THE FLOW OF THE WATER.

# CAUTION

All cleaning and maintenance should only be done when the appliance is cool and with the fuel supply turned off at the LP cylinder. DO NOT clean any part in a selfcleaning oven. The extreme heat will damage the finish. Also check for leaks at connection of hose to appliance.

### Hose Check

 Before each use, check to see if hoses are cut or worn. Replace damaged hose assembly before using appliance. Use only valve/ hose / regulator specified by manufacturer. See product sheet for hose & regulator information.

# WARNING

This appliance is capable of producing scalding water. Extreme caution should be used when using the appliance.

## Using The Appliance

This appliance is equipped with a Hi/ Low switch. This switch can be used to increase or decrease the heating capacity on the appliance. For colder incoming water temperature, switch should be set to Hi. For warmer temperatures, the switch should be set to Low.

- 1. Turn on the gas supply at the tank. (Open valve slowly.)
- 2. Turn the water valve on the front of the appliance to high. Turn the heat valve on the front of

the appliance to low. (This is the lowest temperature setting)

- 3. Turn the water supply on. (If water flows through the shower hose the appliance will ignite.) If water is not flowing through the shower head the shower nozzle can be rotated to the desired setting.
- 4. Once water is flowing through the system the appliance will ignite. During ignition there will be a series of audible clicks and then the burner will ignite. If the burner does not ignite after 5 seconds see the section on troubleshooting. Adjust the temperature of the water by first increasing the heat valve. If a hotter temperature is desired decrease the water flow by adjusting the water valve.

# WARNING

The temperature of the water is dependent on the incoming water temperature and flow and the amount of heat. Use extreme caution when adjusting the water and heat settings. There is a potential scalding hazard!

## **Cleaning and Maintenance**

Correct care and maintenance will keep your appliance operating smoothly. NOTE: Clean the entire appliance each year and tighten all hardware on a regular basis (1-2 times a year or more depending on usage).

### Using with a pump

If using the appliance with a pump a minimum 3.5 GPM on demand diaghram pump is recommended. Any typical on demand RV pump should work. Most bilge pumps will not pump the necessary flow at the required pressure for the appliance to function properly. A minimum sustained pressure of 35 psi is required.

If the appliance is not working properly when attached to a pump try connecting the appliance to a pressurized water source (garden hose from house. If appliance works properly the pump being used is probably not adequate.

## Draining the system

The appliance must be properly drained if exposed to freezing temperature. To drain first disconnect the water inlet and the shower hose from the bottom

of the appliance. Second remove the drain valve from the bottom of the water heater. Failure to properly drain the



appliance will cause damage that may not be repairable. Damage due to freezing is not covered by the warranty.

# Troubleshooting

**Unit will not ignite** (There are no audible clicks at start up)

- 1. Make sure batteries are installed correctly or replace old batteries with new one.
- 2. Adjust tabs inside of battery compartment to ensure circuit is complete.
- 3. Make sure there is an adequate supply of water flowing through the system. The appliance requires a minimum of 5 quarts of water per minute flowing through the system at a minimum pressure of 35 psi before it will ignite the burners.
- 4. Make sure that the water inlet is connected to the correct fitting. The water inlet should be connected to the fitting on the right side closest to the battery compartment.
- 5. A wire has become disconnected on the inside of the unit. Make sure the gas

is OFF. Remove the two knobs from the front of the appliance. Remove 1 screw from the bottom of the water heater going through the tab on the front cover. This is the only screw you need to remove. Make sure that the wire terminals are connected to the top of the battery compartment and all other wires are connected. (Call Technical Support at 1.800.650.2433)

6. Debris may have entered into the water regulator. Reverse the flow of water by connecting the water source to the outlet of the water heater and run water in reverse through the system. This back flushing will remove the debris.

### Unit will not ignite

(There are audible clicks at startup but the burner does not ignite)

- 1. Make sure propane tank is full and tank is turned on.
- 2. Make sure there is an adequate supply of water flowing through the system. The appliance requires a minimum of 5 quarts of water per minute flowing through the system at a minimum pressure of 35 psi before it will ignite the burners.
- 3. Check gas connections for leaks using the soapy water test. If leaks are found make sure the problem is resolved before attempting to ignite the appliance. A gas leak will cause the regulator to reduce the gas flow. When turning on the LP gas tank open the valve very slowly.
- 4. Remove regulator hose from fitting on appliance and ensure there is no obstruction in the fitting on the appliance.

### Unit ignites and then shuts off

1. Make sure there is an adequate supply of water flowing through the system. The appliance requires a minimum of 5 quarts of water per minute flowing through the system at a minimum pressure of 35 psi before it will ignite the burners.

- 2. Excessive winds may blow the flame out.
- 3. Make sure propane tank is full and tank is turned on.
- 4. The ignition sensor may not be adjusted properly. These wires are located directly above the burner. The wires should be bent at 90 degrees and approximately 1/4" above the burner. Use a pair of pliers to bend the wires as needed.
- 5. The thermocouple on the heat exchanger may need adjusted. The thermocouple should be centered in the hole on the heat exchanger.
- 6. There may be a problem with the thermostat. Call customer service at 1.800.650.2433.

## LIMITED WARRANTY

The manufacturer warrants heater components (except paint and finish) to be free from defect in materials and workmanship for 1 year from the date of purchase. All accessories (included with shower or purchased separately) are warranted from defect in materials and workmanship for 90 days from the original purchasing date. Within these periods, the manufacturer will replace or repair defective parts deemed unusable from its original intent by making available the parts thereof FOB 3985 N. 75 W. Logan, UT 84318.

Product paint and finish is not warranted. The exterior finish of the product will wear down over time.

Clean the unit after each use to maintain the finish and prolong the life of your product.

Warranty does not cover normal wear of parts or damage caused by misuse, abuse, overheating and alteration. Repairs or alterations made by anyone other than Camp Chef are not covered in this Warranty. Manufacturer will not be held liable for any losses due to neglectful operation. Furthermore, this Warranty does not cover damaged caused by natural disasters such as earthquakes, hurricanes, tornadoes, floods, lightning, fires,

etc. Upon the expiration of this warranty all such liability will terminate.

No other warranties are expressed or implied. Keep all original sales receipts. Proof of purchase is required to obtain Warranty services. Prior written approval and a Return Authorization Number must be obtained. Returned items will be accepted for repair or replacement only. Returns must be shipped prepaid. Collect shipment or shipments without a Return Authorization Number will not be accepted. To obtain Warranty services call 1.800.650.2433. \*Warranty applies to the contiguous US states only.

#### The Triton portable gas powered water heater heats water in seconds Automatically ignites when water is turned on

- · Easy turn brass garden hose connector
- Fully adjustable heat and water flow
- 4 settings shower head: off, mist, shower, and jet.
- Includes regulator hose for bulk propane tank
- Includes 8 feet/96" shower hose
- · Comes with garden hose adapter
- 2.6 gallons per min.
- Adjustable water temp. Increase up to 80°F
- Wallmount
- 25 lbs
- 13.5 x 8.5 x 31"
- For outdoor use only
- Uses 2 D batteries for ignition (not included)
- 1 standard LP tank is good for approx. 7 hrs. of continuous use, depending on set temperature

#### **Maximum Flow**

2.6 Gallons/Min (Raises water temperature 35°F

#### **Minimum Flow**

1.1 Gallon/Min (Raises water temperature 81°F





