

PORTABLE WATER HEATER

OPERATION GUIDE



MODEL NUMBER: PWH5L

CUSTOMER SERVICE ON THIS APPLIANCE

AUSTRALIA 1300 669 500

WWW.JOOLCA.COM.AU

Joolca

IAPMO-R&T



GasMark

CERT: GMK10121

IMPORTANT!

It is IMPORTANT that you read these instructions carefully and understand the operation and safety features of this appliance. Familiarise yourself with the appliance before connecting it to the gas container. Keep these instructions for future reference.

IMPORTANT!

This appliance is designed to be used with a source water temperature of 20°C or below. If the temperature of the outlet water exceeds 50°C the burners will shut off. You will be required to turn the water flow off and back on to reignite the burners.

CAUTION! THIS APPLIANCE IS NOT INTENDED FOR THE SUPPLY OF DRINKING WATER.

WARNING! THIS APPLIANCE IS INTENDED FOR THE SUPPLY OF HEATED WATER FOR THE PURPOSE OF WASHING AND CLEANING ONLY.

WARNING! CHECK AND CONFIRM SAFE WATER TEMPERATURE BEFORE USING THIS APPLIANCE. WATER FROM THIS APPLIANCE MAY BE VERY HOT.

CAUTION! THIS APPLIANCE MUST BE PROTECTED FROM RAIN

GENERAL WARNINGS

This appliance shall only be used with the Australian Approved 1200mm Propane gas hose & regulator assembly supplied with the appliance and must be connected only to a Propane gas cylinder certified to AS2469 standards fitted with POL connections only.

This appliance is to be stored in a dry & well-ventilated location free from direct sunlight. Do not store when still connected to the cylinder. Make sure that the cylinder is disconnected and is stored in a well-ventilated area, free from direct sunlight, heat and ignition sources. If being stored indoors, ensure that the location complies with the standard AS/NZS1596.

This appliance must only be serviced by an authorized service agent, return to your place of purchase for service & repair.

DANGER!

- USE OUTDOORS ONLY
- ONLY USE IN WELL- VENTILATED AREAS
- IT MAY BE HAZARDOUS TO ATTEMPT TO FIT OTHER TYPES OF GAS CONTAINERS.
- CAUTION: ACCESSIBLE PARTS MAY BE VERY HOT. KEEP YOUNG CHILDREN AWAY.
- Do not use the appliance if it has a leak, or has worn, deteriorated or damaged seals.
- This appliance shall only be used in an above ground open-air situation with natural ventilation, without stagnant areas, where gas leakage and products of combustion are rapidly dispersed by wind & natural convection.
- Do not use adaptors or modify the appliance to fit other connectors or cylinders
- When using this appliance children must be supervised by an adult at all times
- Never leave appliance unattended when operating.
- Do not use as a cooking appliance or modify for any other reason.

CARBON MONOXIDE HAZARD

THIS APPLIANCE CAN PRODUCE CARBON MONOXIDE, WHICH HAS NO ODOUR. USING IT IN AN ENCLOSED SPACE (FOR EXAMPLE, CARAVAN, TENT, CAR, MOBILE HOME) MAY CAUSE DEATH.

IMPORTANT

- Avoid twisting & kinking the Propane Gas hose.
- If there is a leak on your appliance (smell of gas), immediately attempt to turn off the cylinder valve. Remove the appliance to a well-ventilated location away from any ignition source. Check for leaks using soapy water. Do not try to detect leaks using a flame.
- Do not attempt to move or relocate the appliance when it is operating. Extinguish the burner & allow to cool. Disengage the gas cylinder then move the appliance.

CHECKING FOR GAS LEAKS

- Check that all connections are tight and that the gas cylinder connection has been tightened before you turn the cylinder gas valve on.
- **NEVER** check for leaks with a flame or pilot light.
- Using soapy water coat all connections, if bubbles appear turn the cylinder gas control off and retighten the connection before re-testing.
- Inspect the appliance regularly for signs of wear, leaks or incorrect operation. If symptoms such as flaring of the burners, issues with lighting, damages to hoses or connections or leaks from seals or gas controls are identified do not attempt to repair, contact customer service on 1300 669 500.
- To check if gas remains in the cylinder, disconnect from the appliance and hold the cylinder in a vertical position then shake from side to side, if there is a sound or feel of liquid movement inside the cylinder contains gas.

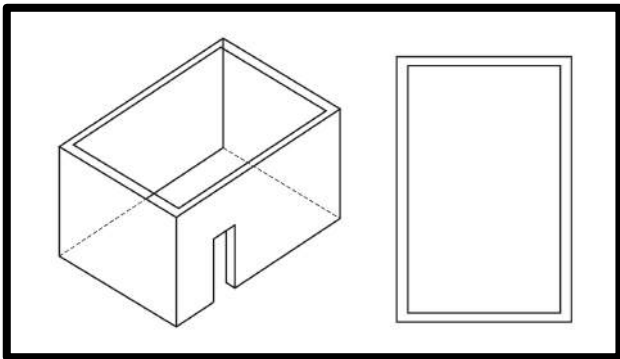
- When changing gas cylinders ensure this is conducted outside in a well-ventilated location free from people, animals & ignition sources such as naked flames, pilot lights & electrical equipment such as heaters or elements.

SAFETY INSTRUCTIONS

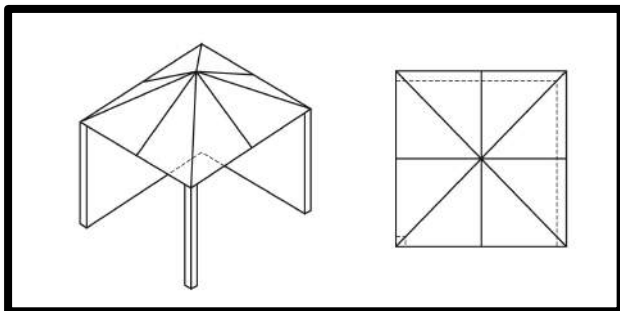
This appliance must only be used in an above ground open-air situation with natural ventilation, without stagnant areas, where gas leakage is rapidly dispersed by wind and natural convection.

The following figures are diagrammatical representations of outdoor areas suitable for use with this appliance. Rectangular areas have been used in these figures – the same principles apply to any other shaped areas.

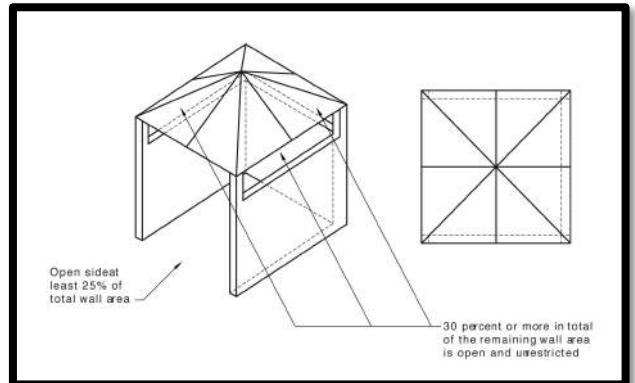
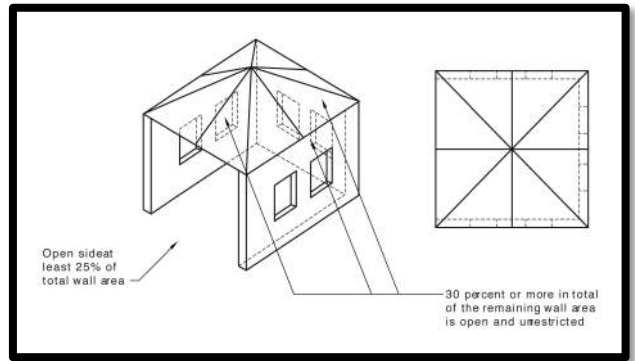
Any enclosure in which the appliance is used shall comply with one of the following:



A) An Enclosure with walls on all sides, but with no overhead cover.



B) Within a partial enclosure that includes an overhead cover and no more than two walls.



C) Within a partial enclosure that includes an overhead cover and more than two walls, the following shall apply:

- 1) At least 25% of the total wall area is completely open
- 2) 30% or more in total of the remaining wall side, back and front wall areas is open and unrestricted.
- 3) In the case of balconies, 20% or more of the total wall area shall remain open and unrestricted.

HANGING THE APPLIANCE

USE OUTDOORS ONLY – The appliance must be used outdoors only and is to be operated no closer than 500mm from the sides and 1000mm from above to all combustible surfaces, fabrics, flammable materials & people

The appliance is designed to be hung upright against a non-combustible vertical surface. Do not operate from a non-upright position. Doing so can be dangerous and will damage the appliance.

During operation ensure that both air inlets and the top exhaust are kept free from obstructions and closure

Air inlet – Left side



Air inlet – Right side



Air Exhaust – Top Side



APPLIANCE PERFORMANCE

Important – This appliance is designed to be used with a source water temperature of 20°C or below. If the temperature of the outlet water exceeds 50°C the burners will shut off; you will be required to turn the water flow off and back on to reignite the burners.

This appliance is designed to raise the outlet water temperature by a maximum (average) of 25°C above the source water temperature and can be adjusted by the gas regulator and water regulator control knobs located at the front of the device.

SAFETY FEATURES

The appliance is equipped with the following safety features:

Over temperature sensor – the appliance will not allow the burner to remain in operation once the outlet water temperature reaches 50°C. To relight the burner you will need to turn the water flow off and back on.

Water flow sensor – water must be flowing through the system to allow the burner to ignite. In the case that the water supply is restricted or ceases, for example if you close the water flow at the shower nozzle, the burner will be extinguished and will not relight until the water flow recommences.

PREPARING THE APPLIANCE

Before using the appliance, it is important to prepare the appliance by installing the proper adaptors to suit our intended use. In this example, we will be preparing the portable water heater to be used with a garden hose water input. The only tool required to follow these instructions is a spanner.

To use with other water input sources such as a low voltage pump, please consult the pump instruction manual or call customer service on 1300 669 500 for advice.

Included Parts:

1. Joolca Portable Hot Water Heater.
2. Instruction Manual.
3. Regulator & Hose Assembly.
4. Shower Head along with 2m hose and showerhead holder.
5. One set of mounting screws for appliance and showerhead holder.
6. One set of washers to fit water outlet hose connections.

1) Remove the heater along with all the components from the box and place them on a table in front of you. Remove any transit protection. Notice that there is a gas input, hot water output, cold water Input as well as a battery box.



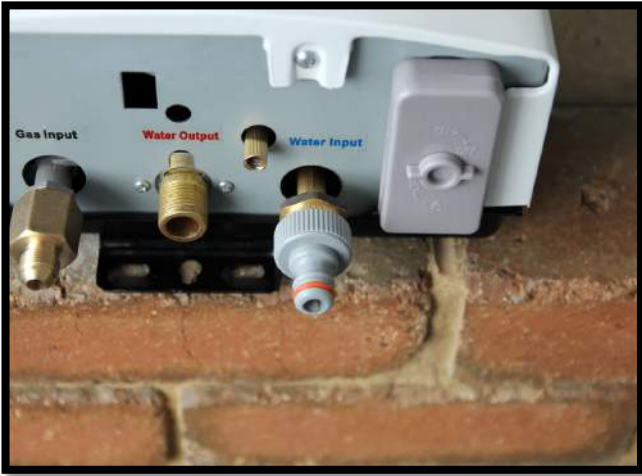
2) Insert two 'D' batteries into the 'battery box' and close the battery box lid.



3) For garden hose water supply use, install a male garden hose attachment to allow for a 'snap on' connection to a garden hose. First, install a reducer fitting to increase the 'water input' size from 1/2" to 3/4" to suit the 'quick fitting' attachment.



4) Wrap the 'water input' thread with two rotations of Teflon tape before installing the reducer fitting. Tighten the adapter connection with a spanner taking care not to over tighten as this could break or crack the inlet pipe. Finally, connect the male garden hose attachment.



OPERATING THE APPLIANCE

Now that the appliance has been prepared with the proper adapter fittings and connections for our intended use (with a garden hose water supply) we can set it up for operation.

To use with other water input sources such as a low voltage pump, please consult the pump instruction manual or call customer service on 1300 669 500 for advice.

5) Attach the showerhead to the supplied 2m flexible shower hose. Find the two supplied washers. Place the first washer in one end of the threaded fitting of the included 2m flexible hose. The second washer will be kept for later.

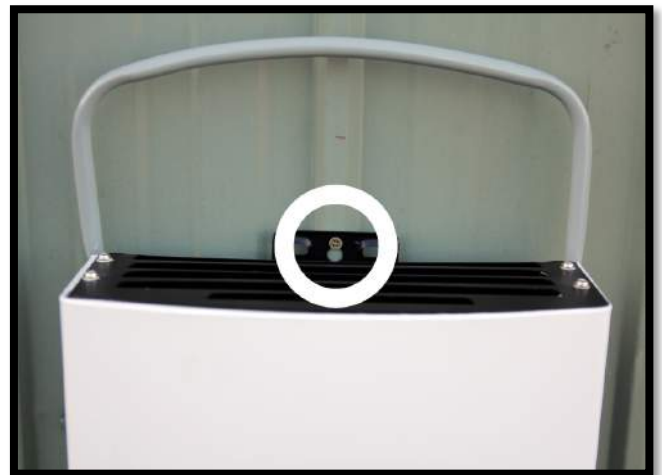


6) Attach to the included hand shower nozzle. Note that you can also apply Teflon tape to this threaded connection to avoid leaks.



1) Find a suitable sturdy, non-combustible vertical surface to hang the appliance. The surface should be at least 500mm clear from the sides and 1000mm from the top of all combustible surfaces, fabrics, flammable materials & people.

Hang the appliance on a suitable vertical surface by the top tab attached to the back cover of the heater.



The appliance is ready to be connected to gas and water hoses.

Note: that there is also a bottom tab available to hang the appliance from if needed.

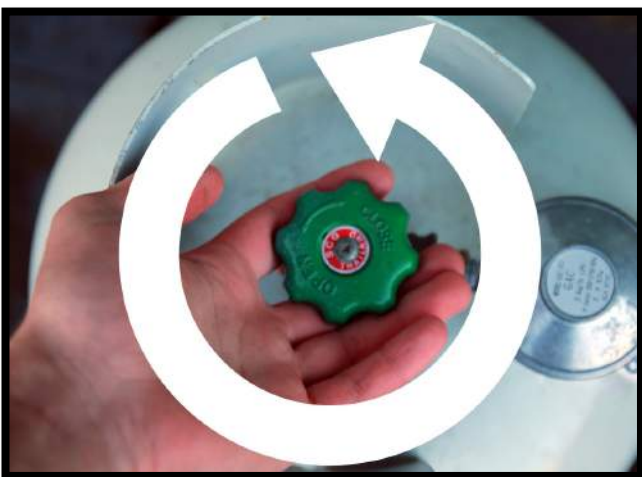
2) Attach the flexible hose and regulator to the 'gas inlet'. Tighten this connection with a spanner, taking care not to over tighten as doing so may damage the pipe.



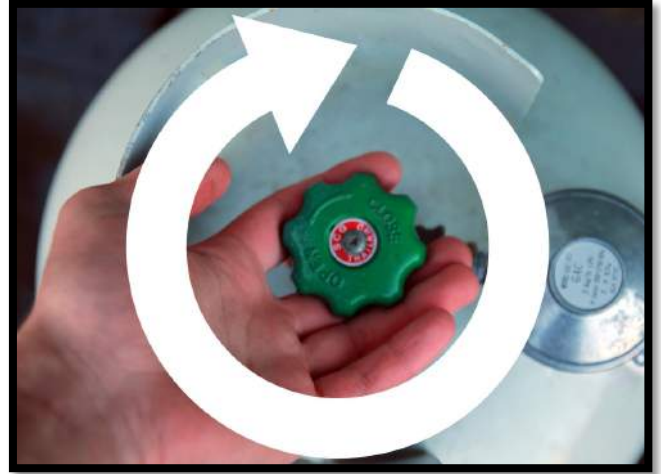
3) Connect the other end of the flexible hose and gas regulator to the POL Propane gas cylinder. Hand-tighten the connection in an anti-clockwise direction.



4) Turn the gas cylinder on (open) in an anti-clockwise direction one full turn, and then check the connections for leaks with soapy water. **DO NOT use a flame.** If a leak is detected, turn the cylinder valve off (close) and retighten all connections and retest.



5) Once you determine that there are no leaks present with the gas valve open, turn the cylinder valve to the off (close) position.



6) Take the second washer from earlier and place it inside the threaded fitting on the loose end of the shower nozzle hose. Attach this fitting to the 'water outlet' connection. You may use Teflon tape to avoid leaks.

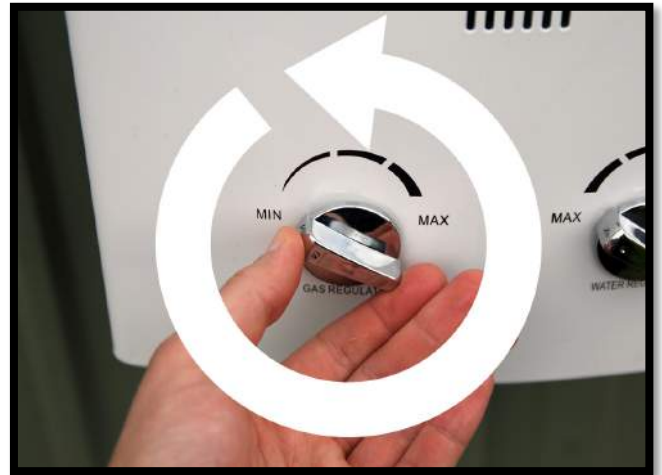


7) Prepare a garden hose with a 'quick fitting' plug and attach to the male garden hose fitting already installed on the 'water inlet' pipe.

This appliance is also compatible with other forms of water supply including low voltage water pumps. For information on how to connect to this please consult your pump accessory instruction manual or contact customer service on 1300 669 500.

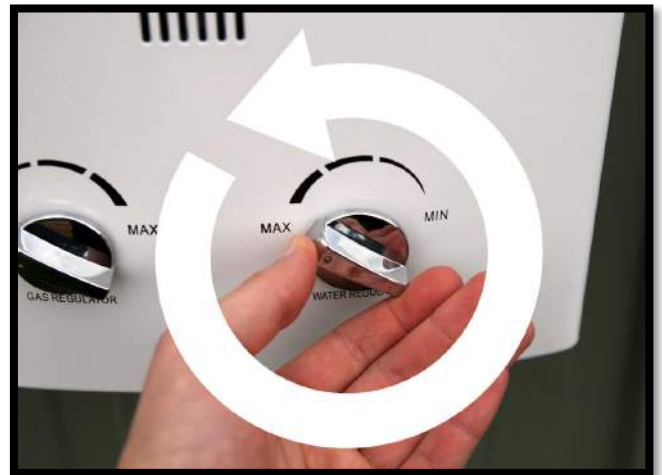


9) IMPORTANT: It is important that when starting the appliance that the gas regulator is set to the 'min' position.



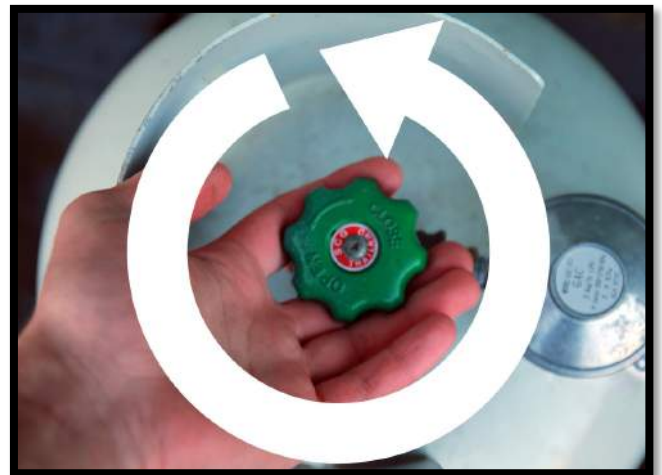
Our heater is now set up and ready for use. **Notice:** the positioning of the gas cylinder away and to the side of the appliance; never place the gas cylinder directly below the appliance and ensure there is always at least 500mm clearance between the cylinder and appliance.

10) IMPORTANT: It is important that when starting the appliance that the water regulator is set to the 'max' position.



8) Ensure that the flow regulation switch on the shower nozzle handle is in the 'off' position.

11) Turn the gas cylinder on in an anti-clockwise direction one (1) full turn

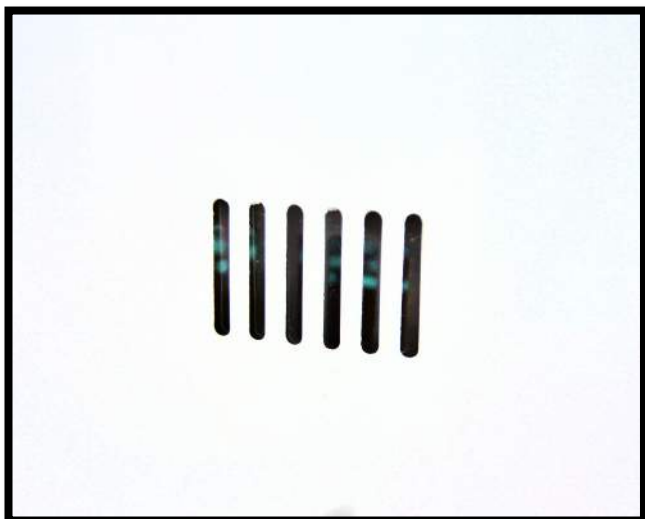


12) Open the garden hose tap. Water should not start to flow out of the shower nozzle as it is still in the 'off' position.

13) When ready, slide the flow regulation switch on the shower nozzle to the 'on' position. Water will start to flow through the nozzle within a few seconds.



Note: You should hear a series of clicks and then the burner should ignite. The burner flame can be seen operating through the 'viewing window' located at the front of the appliance.



14) Adjust the temperature of the water flowing from the showerhead by turning the 'gas regulator' and 'water regulator' knobs.

Note: For higher temperatures increase the gas regulator control and decrease the water regulator control



Warning! Take care to test the temperature of the water flowing from the showerhead, as it may be hot enough to cause injury.

The water flow can be stopped at any time by sliding the regulation switch on the showerhead to the 'off' position. The burner will extinguish.

To reignite the burner, slide the flow regulation switch to the 'on' position, water will commence to flow and the burner will ignite within 5 seconds

STORING THE APPLIANCE

1. With the appliance operating turn the cylinder gas valve in a clockwise direction to the 'off' (close) position. The burner will continue to operate until all gas has been bled from the hose and regulator assembly.
2. Turn off the water supply at the garden hose tap. Disconnect the 'quick fitting' garden hose attachment from the 'water inlet'
3. Disconnect the regulator and hose assembly from the appliance and gas cylinder and store away
4. Disconnect the showerhead and hose from the 'water outlet', hold the shower head approximately 1 metre from the ground and allow all water to drain out before rolling up and storing away

5. To ensure the draining of water after use, open the drain valve (ribbed cylindrical stem next to the water input valve). Make sure to close the drain valve once water has been drained.



DISCONNECTING FROM CYLINDER

1. Check that the appliance is fully extinguished, the gas cylinder control valve is in the fully 'off' position and all surfaces are cool
2. Loosen the connection to the gas cylinder in a clockwise direction.

CARE INSTRUCTIONS

Using warm soapy water with a mild detergent wipe down all surfaces and areas of the appliance, taking care not to allow water to enter the burner outlets

Before each use, check that the screen filter on the 'gas inlet' and 'water inlet' pipes is in place and cleaned of any particles.

- **DO NOT** submerge the appliance in a sink or bowl.
- **DO NOT** use abrasive cleaners or bleach.

TROUBLE SHOOTING

This guide should be followed in case of failure of the appliance to operate correctly. If symptoms persist contact Customer Service on 1300 669 500

DO NOT ATTEMPT TO REPAIR OR MODIFY THE APPLIANCE

| Problem | Cause |
|--|---|
| <p>The Appliance will not light at all.</p> | <p>Make sure you have new batteries installed in the correct position. Check the cap of the battery case for instructions on how they should be installed.</p> |
| | <p>Check for sufficient water pressure. The unit must have a minimum of 40 kPa of sustained water pressure to activate the burners.</p> |
| | <p>There is the possibility of finding some kind of epoxy or debris within the water regulator. Check that the water inlet filter screen is clean. To flush the system you can reverse the hookup by taking the water inlet pipe and hooking it up to the water outlet side and back. If the gas cylinder is contaminated by air, turn the unit on and off several times to purge the air from the gas.</p> |
| | <p>Check that the shower flow water regulator is in the open position</p> |

| | |
|---|---|
| <p>Water flows through the unit, but is not hot!</p> | <p>New batteries may be required for the ignition switch. Verify that the batteries are aligned in the proper polarity (+/-). Check the battery case for instructions on how to install the batteries properly.</p> |
| | <p>Check that the water pressure is at least 40 kPa to activate the burners</p> |
| | <p>Ensure that the Liquid Propane regulator is threaded all of the way to the unit and that you have an adequate amount of gas in your propane bottle.</p> |
| | <p>Verify that you have hooked up both the incoming and outgoing water supply properly. The showerhead should be attached to the water outlet (located at the center) and the water inlet should be attached to your incoming connection (located at the far right) as labeled.</p> |

| | |
|--------------------------------|---|
| Water is not hot enough | Adjust the gas regulator and water regulator to meet your desired temperature. To Increase temperature; turn the gas regulator control from minimum to maximum and turn the water regulator control from maximum to minimum. |
| | Check source water temperature. If the source water temperature is too cold then you may need to 'cycle' the water through the system back into the source reservoir then through the appliance again to meet your desired temperature. |
| | Check if there is a blue flame in the 'viewing window'. If you see a yellow flame it could mean a breakdown in the gas regulator. Please call Joolca Customer Service directly if this happens, do not attempt to use it. |

| | |
|--|--|
| The unit starts for a short amount of time and then shuts off | Check your Gas Cylinder to ensure it is not empty. If using a new cylinder; try to cycle the unit on and off by using the showerhead switch several times to purge the air from the gas lines. |
| | Do not expose the water heater to strong winds. |
| | This unit activates at a sustained water pressure of 40 kPa. If your supply water pressure is below the minimum the unit will not ignite. |

SPECIFICATIONS

| | |
|----------------------------|-----------------|
| Model Number | PWH5L |
| Injector Size mm | 0.62 |
| Total NGC MJ/h | 28 |
| TPP kPa | 2.75 |
| Min. Water Pressure | 40 kPa |
| Max. Water Pressure | 900 kPa |
| Size mm | 400 x 395 x 130 |
| Weight | 4.2 kg |



GasMark

CERT: GMK10121

This Portable Water Heater is distributed by Joolca Pty Limited

CUSTOMER SERVICE ON THIS APPLIANCE

AUSTRALIA 1300 669 500

WWW.JOOLCA.COM.AU

The Joolca logo consists of the word 'Joolca' in a bold, sans-serif font. The 'J' is blue, the 'o's are red, and the 'lca' is blue.