

Challenger

Continuous Flow Hot Water Heaters

Operating Manual



For Challenger LPG Water Heaters:

- Challenger 5L Portable
- Challenger 5L
- Challenger 6L
- Challenger 6L Stainless Steel
- Challenger 7L
- Challenger 8L
- Challenger 10L
- Challenger 12L
- Challenger 16L

Important

This appliance must be installed in accordance with:

- Manufacturers installation instructions
- Current AS/NZS 3500, AS/NZS 5601.1 and G12/AS1

For use with Natural Gas or Universal LPG as indicated on the appliance.

Not suitable as a spa or swimming pool heater.

Not suitable for commercial or solar applications.

Appliance must be installed, commissioned and serviced by an authorised person, being in New Zealand a licensed gasfitter, in accordance with these instructions and all applicable local rules and regulations.

Warning

Improper installation, adjustment, alteration, service and maintenance can cause property damage, personal injury or loss of life

For more information about buying, using and servicing a Challenger Appliance call: 09 8200 500

Challenge Yacht Limited

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PO BOX 68480, Wellesley Street, Auckland 1141

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Limited Warranty

Challenger Califont Water Heaters

Challenge Yachts Warranty Summary

This warranty is applicable to all Challenger Califont Water Heaters manufactured from onwards. All terms of the warranty, subject to the conditions below, are effective from the date of purchase. Proof of purchase will be required.

General Warranty Terms

Challenge Yachts reserves the right to make modifications and change specifications and its parts without notice.

For the purposes of the Consumer Guarantees Act 1993, Challenge Yachts only guarantees the availability of repair facilities and spare parts for the express warranty periods recorded in the 'Warranty Summary'.

Warranty Terms and Conditions

1. All terms of this warranty are effective from the date of purchase. The attending service person reserves the right to verify this by requesting a copy of the certificate of compliance prior to commencement of any warranty work. Certificate of compliance must be issued by the installer by law in New Zealand
2. All Challenger products must be installed, commissioned, serviced, repaired and removed in accordance with the manufacturer's installation instructions, local regulations, and municipal building codes by persons authorised by local regulations to do so
3. All appliances must be operated and maintained in accordance with the manufacturers operating instructions
4. The warranty applies only to the components supplied by Challenge Yachts. It does not apply to components supplied by others, such as, isolating valves, pipe work, and where applicable flue systems supplied by others, but not limited to these.
5. Where a failed component is replaced under warranty, the balance of the original warranty will remain effective
6. Challenge Yachts reserve the right to transfer functional components from defective appliances if they are suitable
7. Challenge Yachts reserve the right to have the installed product returned to a designated service centre for repair

Warranty Exclusions

The following exclusions may cause the warranty to become void and will result in a service charge and costs of parts (if required).

- 1) Accidental damage and acts of God
- 2) Failure due to abuse or misuse, improper maintenance or improper storage
- 3) Failure due to incorrect or unauthorised installations
- 4) Failure or damage caused by alterations, service or repair work carried out by persons other than Challenge Yachts service persons or service centres
- 5) Where it is found that there is no fault with the appliance and the issue is related to the installation or is due to the failure of gas supply
- 6) Subject to any statutory provisions to the contrary, Challenge Yachts does not accept:
 - a. Liability for consequential damage or any incidental expenses resulting from any breach of warranty
 - b. Claims for damage to building or any other consequential loss either directly or indirectly due to leaks from the appliance or any other faults



CHALLENGER APPLIANCES

Alternative Energy Appliances

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Installation Guide

Before Installation

- **Check for damage:** Unpack the appliance and check for damage. DO NOT install any damaged items
- **Check components and gas type:** Check all components have been supplied and that you have the correct gas type
- **Reach these instructions:** Get an overview of the steps required before starting that installation. Failure to follow these instructions could cause a malfunction of the appliance. This could result in serious injury and property damage
- **Check your water flow:** There are minimum and maximum water flow requirements for each of the Challenger Water Heaters models. Please refer to the specifications displayed on the side of your appliance

Appliance Location

The appliance **MUST BE** mounted on a vertical structure with the water and gas connections on the underside pointing downwards.

The appliance **MUST BE** placed as close as practicable to the most frequently used hot water outlet or outlets to reduce the delay time for hot water delivery. Alternatively multiple appliances can be strategically placed to serve outlets with minimal delay time

All appliances **MUST BE** installed to ensure access can be gained without hazard or undue difficulty for maintenance and servicing. Sufficient clearances shall allow access and removal of all serviceable components.

Appliances should not be mounted more than 2.5m above the ground or floor level unless the customer can arrange permanent and safe access, or can provide another means of safe access.

General Safety Information

Securing the Challenger Califont Water Heater

The wall or structure on which the units are mounted **MUST BE** capable of supporting the weight of the appliance and associated pipe work.

Ensure that suitable fixing screws or bolts are used to secure the unit to the wall, in accordance with AS/NZS 5601 section 6. Wooden plugs should not be used.

The appliance can be mounted directly against the wall or structure. There is no need to use non-combustible sheeting between the appliance back panel and the wall or structure for the purposes of meeting the temperature hazard requirements of AS/NZS 5601.

Pipe Sizing

If the gas pipe sizing is insufficient the appliance won't perform properly. Gas pipe sizing must consider the gas input into this appliance as well as other gas appliances in the premises.

Water pipe sizing and layout should be performed in accordance with AS/NZS 3500.

All hot water pipe work should be insulated to optimise performance and energy efficiency.

Connections and Fittings

A non-return valve is not required unless required by local regulations.

Purge gas and cold water supply lines to remove air and swarf before final connection. Swarf in the gas or water supplies may cause damage, a common problem, which is not covered by warranty.

Commissioning

AS/NZS 5601.1, clauses 2.6.8 and 6.11.2 states that every part of a gas installation shall be commissioned prior to initial use. It is the installer's responsibility to ensure all current AS/NZS 5601 requirements are met.

The appliance must be tested after installation. Ensure that the building occupants do not have access to hot water outlets during this procedure.

If the appliance cannot be adjusted to perform correctly call Challenge Yachts (09 8200 500) for assistance.

Steps to commissioning a Challenger Califont Water Heater

1) Purge water pipes and gas line

Before final connection of the water heater purge the gas, hot and cold water supply lines. Swarf in the gas or water supplies may cause damage, a common problem, which is not covered by warranty.

2) Connect gas line

3) Purge the gas line of air

4) Final connection test

5) Check supply pressure

Operate ALL other gas appliances at their maximum gas rate. With all gas appliances on maximum the supply pressure must read between 1.13-3.0 kPa on Natural Gas. On LPG the pressure must be 2.75-3.0 kPa

If the pressure is lower, the gas supply is inadequate and the appliance will not operate to specification. It is the installer's responsibility to check the gas meter, service regulator and pipe work for correct operation and sizing and rectify as required

6) Operate and test for gas leaks

Operate and test for gas leaks using an electronic leak detector

7) Check cold water inlet filter

Inspect and clean the water inlet filter. This may need to be repeated to ensure the filter remains clear, especially on new installations

If you feel the customer is capable of doing this check it would be beneficial to show them how to inspect and clean the filter

8) Customer Handover

After testing is completed, explain to the customer the functions and operation of the water heater

Operation Guide

About Your Califont Water Heater

Before using or operating your water heater ensure your installer talks to you about the use and care of this appliance, and that you understand these instructions.

Principles of operation

The burner lights automatically when the hot water tap is opened, and goes out when the tap is closed. Ignition is electronic, so there is no pilot light. When the hot water tap is off, no gas is used.

Water Flow

There is a minimum flow rate required for your appliance to start, so if a hot water tap is only opened a fraction, there may not be enough flow to start the unit.

Warning about Hot Water

Excessively hot water is dangerous. Challenger Califont Water Heaters allow you to control the temperature of hot water to safe levels.

Always

- Test the water temperature with your elbow before placing your child in the bath, and feel the water yourself before bathing or showering
- Supervise children whenever they are in the bathroom
- Make sure the hot water tap is turned off when not in use

Consider

Installing child proof tap covers or child resistant taps, both will prevent a child from being able to turn on a tap

Never

Leave a toddler in the care of another child. They may not understand the need to have the water temperature at a safe level

Safety and Important Messages

This appliance is not intended for use by persons (including children), with reduced physical sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure they do not play with the appliance.

Do Not:

- Touch the unit when it is in operation
- Insert foreign objects into the unit
- Spray aerosols in the vicinity of the appliance when it is in operation
- Use or store flammable materials near the appliance
- Modify the appliance

Keep trees, shrubs etc. well clear of the appliance

Check the gas pipe and fittings regularly for corrosion or any signs of wear, as this may cause a gas leakage

If the appliance is not used on a regular basis check and ensure that foreign materials have not entered your appliance. This could create a fire

General Information

Frost protection

If the Califont Water Heater is not going to be used for a period of time, turn off the water and gas supplies.

If the Califont Water Heater is subject to frost or freezing ensure that the water is drained when not in use.

Draining your Califont Water Heater:

1. Turn off cold water supply to appliance
2. Open hot tap to drain water from system
3. Remove drain plug from inside the unit to drain remainder of water inside of the unit.

Installation by a licensed tradesperson

Only a licensed tradesperson can install, maintain and service this water heater. Any work carried out by a non-licensed tradesperson is illegal and will void any warranty

Safety Devices

Your Challenger Califont Water Heater has the following safety devices

- Flame Failure
- Overheat protection
- Battery Operated Automatic Ignition
- 20 minute built-in timer
- Pressure release and drain valve

Discolouration of Appliance

The colour of the appliance may change over time due to New Zealand's harsh environment. This is normal. The discolouration will not damage the unit and will not affect the performance of the water heater

Trouble Shooting

Fault	Causes	Remedies
Unsuccessful ignition	Lack of water flow, or Lack of gas supply, or Insufficient power	Open cold water tap And/or turn on gas supply And/or replace batteries.
	Flat batteries	Replace the batteries
	Gas pipe is full of air	Turn tap off and on.
	Lack of gas supply (less than 0.3 bar)	Replace the LPG bottle or regulator on bottle.
Heater does not start	Water inlet filter is clogged	Clean the filter
Flame goes out during operation	Gas cock is half open. Gas pressure is too low. Batteries are flat. Lack of water flow and pressure.	Turn the gas bottle on fully. Replace battery Check your water supply.
If water heater lights and is immediately extinguished	Lack of water pressure and supply.	Check your water supply. Check water filter. Ensure your water supply is to the specifications displayed on data label on water heater or in the manual.
Abnormal flame and smell	Blocked burners caused by creepy crawlies.	Deliver it to the nearest authorised service center.
	Lack of air supply.	
	Blocked exhaust outlet.	Check your flu system.
<i>For any other issues please contact your water heater supplier.</i>		

Proof of Purchase

Record your details of purchase below:

Retailer: _____

Retailer Address: _____

Date of Purchase: _____

Invoice Number: _____

Installer Details

Record your details of installer below:

Company Name: _____

Installer Name: _____

Address: _____

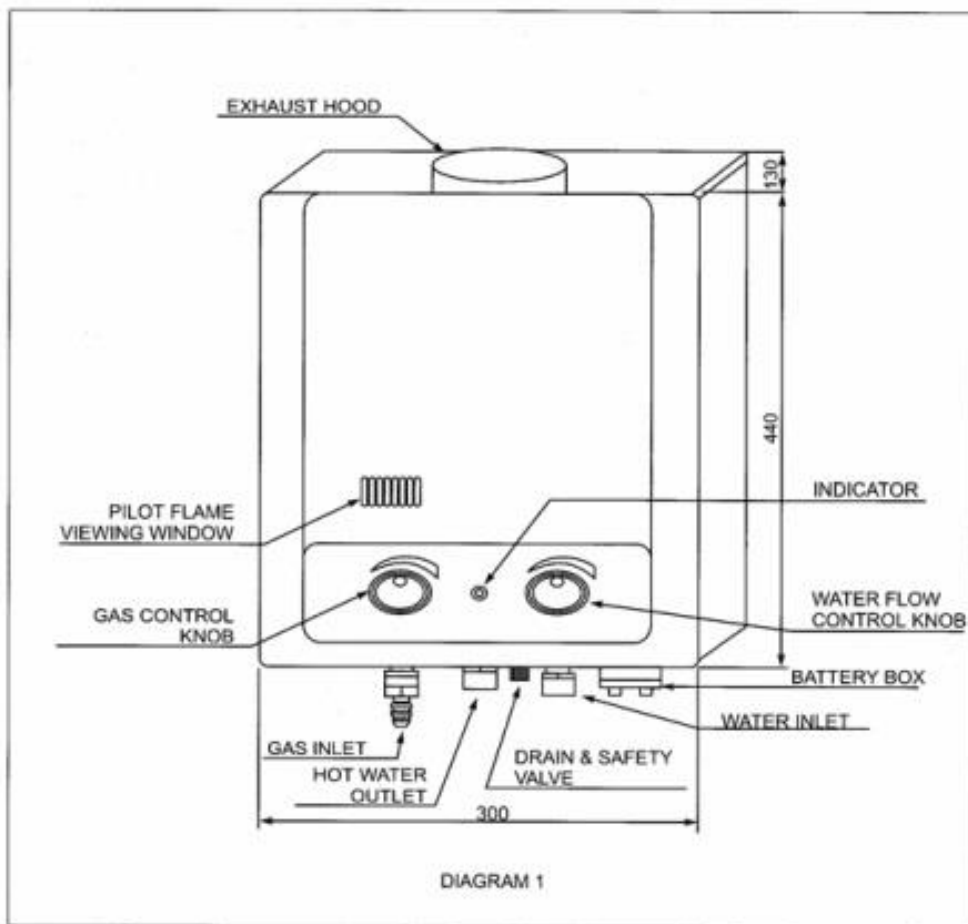
Phone: _____

Certificate of compliance number for installation: _____

Signed: _____

Dated: _____

Diagram 1



- | | |
|------------------------|---------------------|
| 1 Gas Control Knob | 5 Water Inlet |
| 2 Water Control Knob | 6 Hot Water Outlet |
| 3 Viewing Window | 7 Battery Indicator |
| 4 Gas Connection Inlet | 8 Exhaust Hood |

Diagram 2

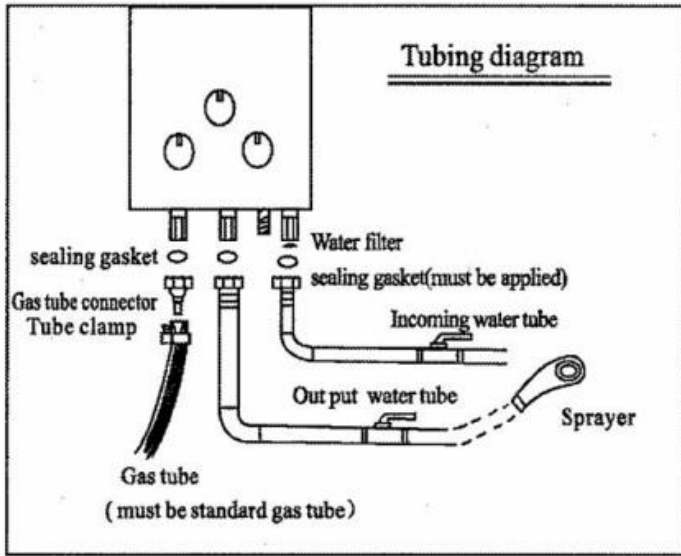


Diagram 3

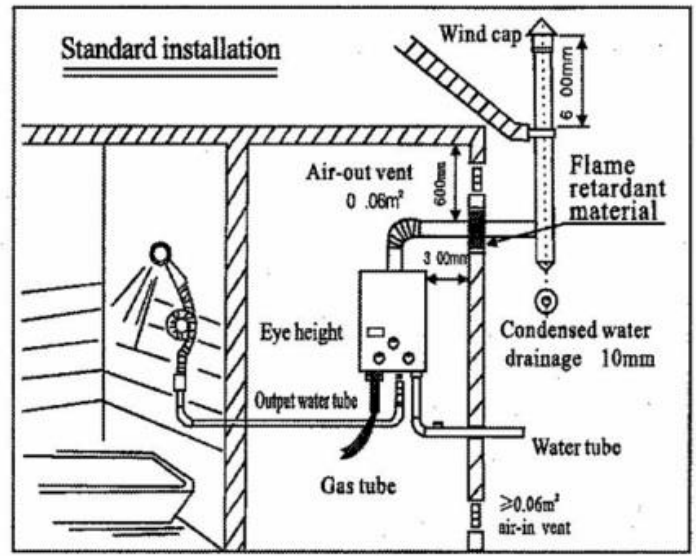
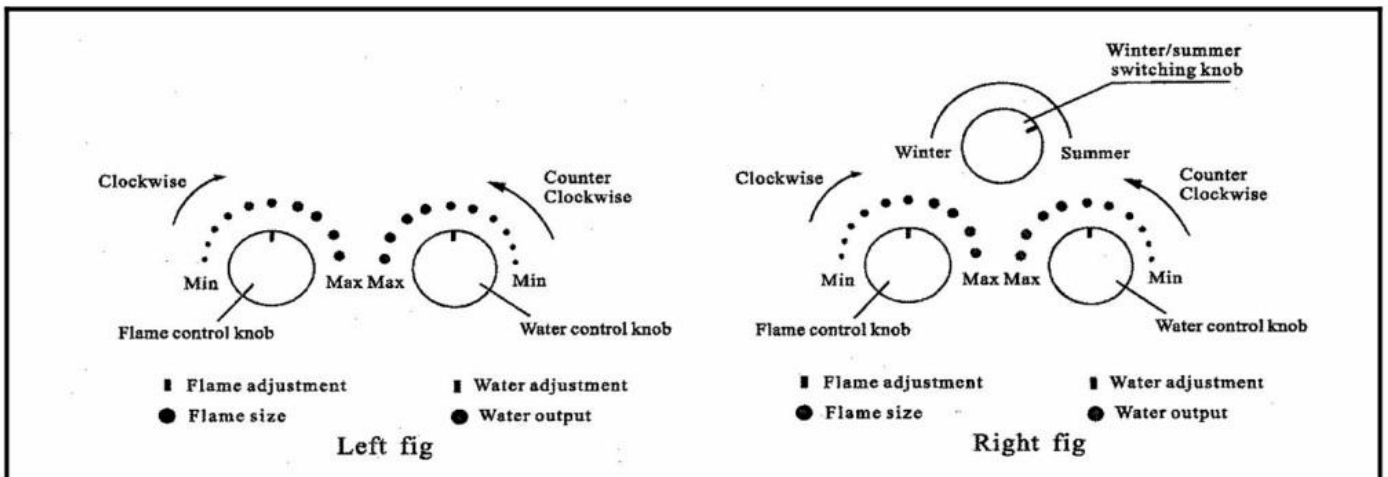
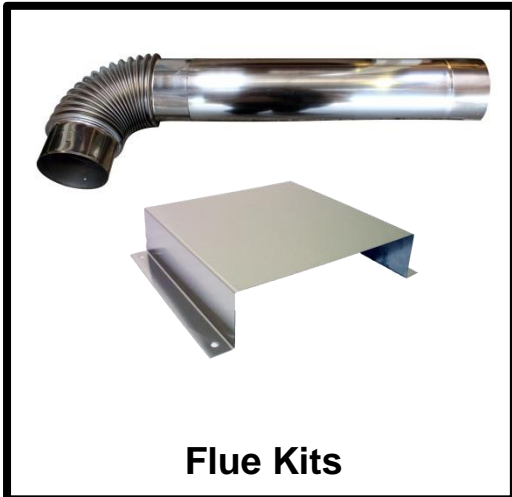


Diagram 4

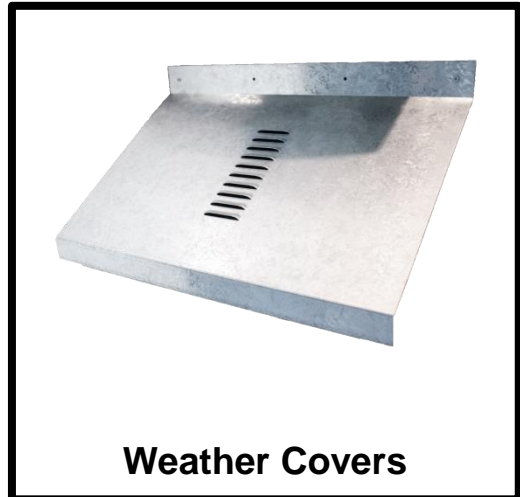


Califont Water Heater Accessories

Flue Kits | Gas Hose & Regulator Kits | Weather Covers | Pumps
Ignition Conversion Kits | Plumbing Fittings



Flue Kits



Weather Covers



Gas Hose & Regulator Kits



Ignition Conversion Kits



Pumps



Plumbing Fittings



Gas Water Heaters | Gas Fridges | DC Fridges | Stoves & Hobs
Ice Makers | Pumps | Diesel Heaters | Taps | Lights | Accessories



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