

ALVA

PORTABLE GAS WATER HEATER
FOR USE AS AN OUTDOOR SHOWER OR WATER HEATER
PERFECT FOR ALL CAMPING, FISHING, BOATING
AND 4x4 EXCURSIONS

GW205



Your world is better with Alva

- THIS IS A LOW PRESSURE APPLIANCE TO BE USED ONLY WITH A 2.8kPa SANS 1237 APPROVED REGULATOR. REGULATOR FITTED AND SUPPLIED.
- FOR YOUR OWN SAFETY, PLEASE READ THIS MANUAL CAREFULLY AND ALWAYS OPERATE THIS PRODUCT ACCORDING TO THE INSTRUCTIONS
- IT IS ILLEGAL AND DANGEROUS TO CHANGE OR MODIFY ANY PART OF THIS APPLIANCE



APPROVED FOR USE IN
SOUTH AFRICA

Manufactured for
and distributed by:

ALVA

A division of Stingray Accessory Manufacturers (Pty) Ltd | P.O. Box 30014, Tokai, 7966
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TOLL FREE NUMBER: 086 100 ALVA (2582)

 /AlvaGas  /alvagas

IMPORTANT SAFETY INFORMATION

As with all gas appliances, misuse of this appliance or failure to fully follow these instructions may cause fire, injury or death.

Please read all the instructions before using your gas water heater.

- FOR OUTDOOR USE ONLY
- Never use this appliance in an enclosed area such as a camper, tent, car or home.
- THIS UNIT MUST BE THOROUGHLY CHECKED BEFORE USE.
- Ensure that all the gas fittings are correctly and firmly fitted before every use.
- DO NOT use this appliance if you do not clearly understand the instructions and/or how to operate the controls.
- Phone the customer care line at 086 100 ALVA (2582) or email info@stingray.co.za for assistance.
- DO NOT leave the appliance unattended while in use.
- Ensure that the gas supply is turned OFF after use and while the appliance is unattended.
- DO NOT move the appliance while in use.
- DO NOT place objects on or against the appliance.
- DO NOT use a naked flame to test for leaks. Follow the Leak Testing procedure outlined under 'LEAK TEST'.
- NEVER use this appliance with a cylinder other than the size recommended
- DO NOT unscrew the regulator while the appliance is on or if the cylinder valve is open.
- DO NOT use an appliance you suspect is faulty.
- When turning the appliance off, first turn the gas off at the control valve (on the heater) and then make sure to close the cylinder valve.
- For safety reasons, only a qualified technician may execute maintenance and repairs. The warranty for the heater will be rendered void if the heater is serviced or repaired by any one other than an Alva appointed technician.
- The appliance should be inspected once a year by a qualified technician, to make sure the unit is safe and fault free.
- The operator is responsible for the safety of all third parties while the appliance is in use.
- DO NOT store or use gasoline or other liquids with flammable vapours in the vicinity of this or any other appliance.
- If used on boats, use only above deck. (Outdoor use only)
- Always use the appliance in an upright position.
- Water may freeze in the pipes/unit. Ensure all water is purged from the system when not in use.



Please read the instructions carefully before use.

Retain this manual for future reference.

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KEY



Important information



Cautions and warnings.



Danger



Contact an approved ALVA technician.



Do It Yourself

WARRANTY

PLEASE RETAIN YOUR PROOF OF PURCHASE FOR WARRANTY CLAIMS.

ALVA warrants this appliance to be free of defects in material and quality for a period of 12 months from date of original purchase. This warranty covers the intended use of this appliance – within a domestic setting and not for commercial or industrial purposes. Any damage caused by wilful abuse, tampering, modification or unauthorized repair will not be warranted.

Please retain all packaging material, as items returned without original packaging material may be subject to a withholding fee. Where this appliance is found to be defective, damaged, broken, or does not work correctly for the intended purpose, you must return the appliance to the retailer where it was purchased. The warranty will only be effected with valid proof of purchase. Failure to provide the proof of purchase will most likely result in the repair or service required being chargeable.

If you have any questions while setting up or using this heater, please visit www.alva.co.za or call 086 100 ALVA (2582) or e-mail info@stingray.co.za

GENERAL INFORMATION

Before using this appliance, please read through this manual and make sure you understand everything. If you are not sure, please call 086 100 2582 or visit www.alva.co.za for help.

This appliance is a safe and efficient form of heating when used according to these instructions.

Keep this manual for future reference. This manual should be read in conjunction with labeling on the product.

If this product is not what you want or need, please help Alva and the environment by not damaging or destroying any part of the packaging, the manual or the Styrofoam inserts. Always keep your proof of purchase.

Keep these instructions for future use. If you lose this copy, you can obtain a new copy from your dealer or online at www.alva.co.za

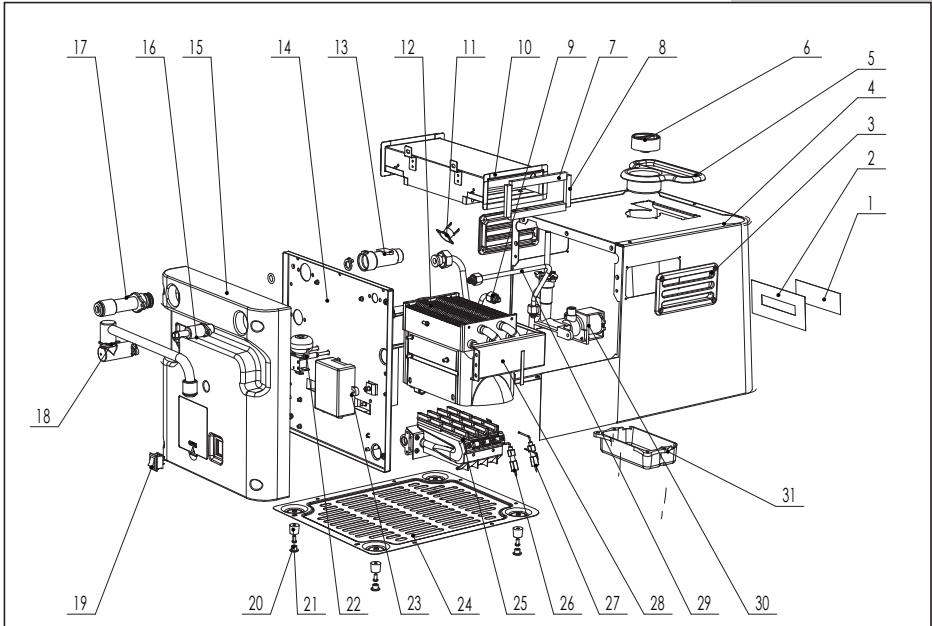


Thank you for your purchase of this portable water heater. Please read these instructions carefully before use and keep them in a safe place, for future reference.



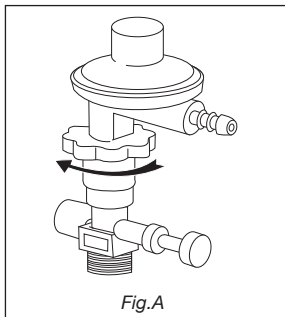
Not using gas and/or gas appliances according to the instructions is extremely dangerous and can lead to property damage, injury or death.

STRUCTURE VIEW



- | | |
|-----------------------------------|------------------------------------|
| 1. Fire viewing window mica sheet | 20. Foot base |
| 2. Aluminum foil | 21. Foot |
| 3. Vent | 22. Anti-off- balance sensor |
| 4. Upper cover | 23. Ignitor |
| 5. Handle | 24. Bottom board |
| 6. Knob | 25. Burner |
| 7. Exhaust sealing strip 1 | 26. Flameout protection sensor pin |
| 8. Exhaust sealing strip 2 | 27. Ignition pin |
| 9. Gas inlet pipe 1 | 28. Gas valve bracket |
| 10. Chimney | 29. Gas inlet pipe 2 |
| 11. Thermostat | 30. Gas valve |
| 12. Heat exchanger | 31. Handle seat |
| 13. Water flow sensor | |
| 14. Bottom panel | |
| 15. Plastic base board | |
| 16. Gas input connector | |
| 17. Water input connector | |
| 18. Water output connector | |
| 19. ON/OFF Switch | |

METHOD OF ASSEMBLY

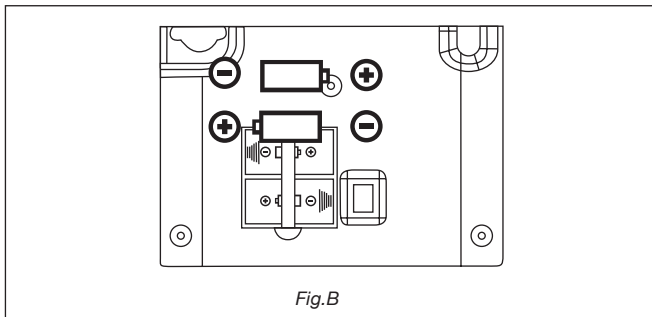


This heater makes use of a domestic cylinder (3kg, 4.5kg or 5kg ALVA cylinder recommended) with a 3/8" BSP thread vertical exit valve. The L-shape regulator supplied with the heater tightens to the left hand side (clockwise). (Figure A)

If you have bought a new gas cylinder, the cylinder needs to be purged (cleared out), before its first use. If it is not purged of air, the heater will not work properly. This should happen at the gas filling station when you fill up the cylinder. Always check this with your gas supplier.

WATER HEATER SET UP

Unpack the appliance from the carton and ensure all the parts are present.



Battery assembly

Place two 1.5V DC, size D batteries into the battery case.

Batteries are not included. Follow the polarity markings in the case to avoid malfunction.

Alkaline batteries are recommended.



WARNING

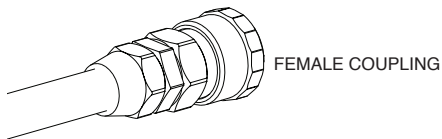
This heater operates directly on a cylinder with a 3/8" VERTICAL exit valve. (ALVA 3kg, 4.5kg or 5kg domestic size)

It is NOT to be used on a cylinder with a 5/8" HORIZONTAL exit valve.

Water input assembly

This water heater has three possible water sources:
You may connect the unit to a water mains using the supplied 13mm tap connector (you can replace this with another suitable connector), use the 12V pump (included) or the gravity fed bag (included).

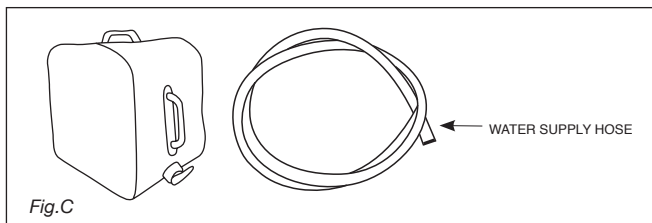
The interchangeable female coupling is used to connect the water source to the heater and is supplied attached to the pump hose when this product is purchased.



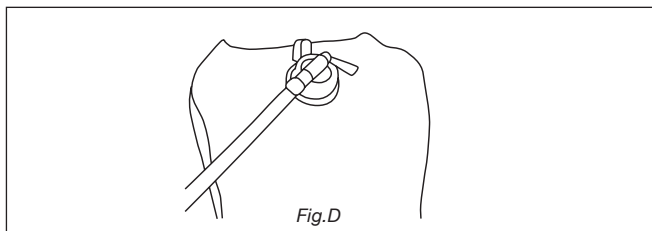
Do not apply unnecessary or excessive pressure (opening tap too much) when connected to mains. The heat output of this unit will be compromised and you may damage the unit. Always increase the water flow from the mains at a moderate rate.

Water bag

- A 10L water bag with cap, tap and one water supply hose, (see Fig.C). These are included with the heater package.



- Remove the cap (with tap) from the water bag, and close the tap.
- Remove the interchangeable female coupling from the pump hose and attach to the one end of the water supply hose.
- Connect the water hose to the tap firmly.
- Place the water bag on a level surface and fill the bag with potable water.

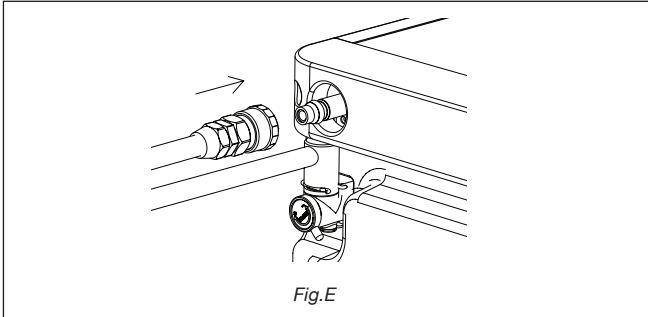


DO NOT let the 12V pump run dry.

The unit must be connected to a portable water source.

Never use water from a lake or stream that has not been purified. DO NOT run any other liquid through the unit.

- Fix the cap (with tap) to the water bag (Fig.D)

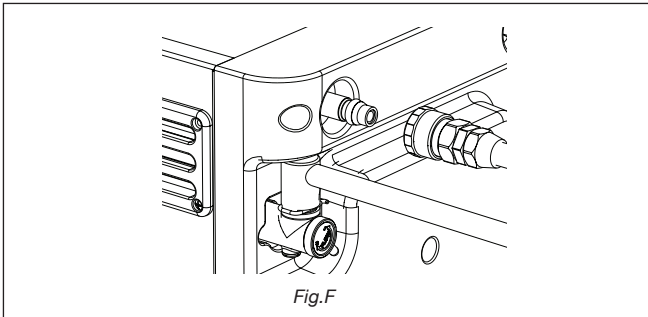


- Connect the water hose to the heater (Fig.E). Fasten it by clipping over the heater inlet stud.
- Hang the water bag up or place the water bag at a higher level than the water heater.

Water mains

- Using the supplied tap connector, connect the cold water pipes to your tap. Open the tap slowly with the shower head running to gauge water flow.
- When a steady water flow is achieved you begin using your water heater

If the supplied tap connector does not fit , then please replace with a suitable sized connector from any hardware store.



Pump

The unit is supplied with an independent 12V pump (fully submersible).

This pump can be used with the supplied 10L water bag or can be used independently with an independent water source (Fig.G). (A filled container or bucket)



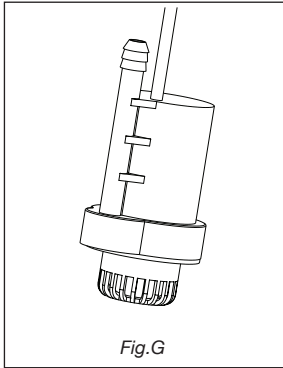
Empty all water from the system when not in use as possible freezing of the water in the pipes and unit could occur in cold conditions.

Keep the water bag mouth facing up while filling it with water.

Make sure the water bag tap is closed

Make sure the water bag is at least 50cm higher than the water heater.

DO NOT apply excessive water pressure from the tap source, you may develop a leak and may damage the unit.



Shower head

The shower head has 3 settings; medium and full, as well as a close position. The switch is located on the top front section of the shower head. Always make sure that the water flow is set to one of the open positions when using water-mains or the pump. When using the gravity feed bag keep the shower head closed/off until you are ready to shower.



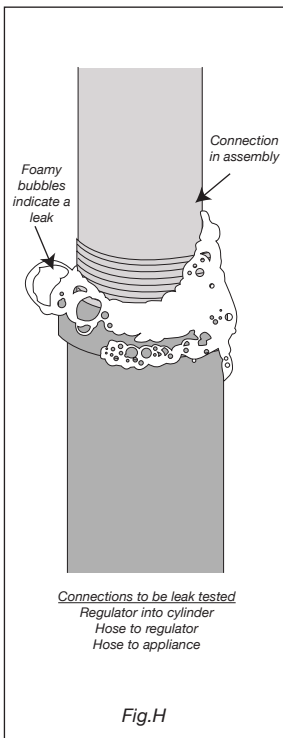
DO NOT let the pump run dry - you may damage the pump and/or unit.

Pull the hot water output pipe out before you install the LPG cylinder.

Make sure the gas flow control knob is at the "MIN" position.

LEAK TEST

The leak test must be carried out in a well-ventilated area, free from any flames or other sources of ignition.



- With the cylinder connected to the water heater. Open the cylinder valve.
- Brush the connections (water heater to cylinder) with an equal parts soap and water solution (make sure it's foamy).
- A stream of bubbles forming indicates a gas leak. (See Fig.H)
- If bubbles appear, turn the cylinder valve OFF (clockwise) and disconnect the water heater from the gas cylinder.
- Tighten the connection and retry the leak test.
- If you are unsure or if you cannot tighten the connection, place the cylinder outside in a cool, well-ventilated area and contact Alva on **086 100 ALVA (2582)**.
- A leak between the water heater and cylinder can lead to a high pressure fire, which is very dangerous and can result in extensive injury or even death.



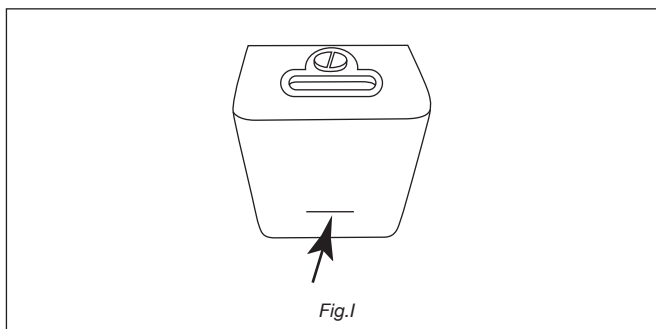
How to do a leak test



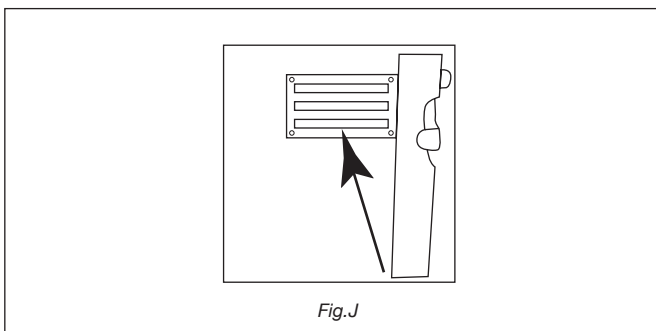
<http://www.youtube.com/watch?v=8LpZ1B0m23Y&feature=plcp>

USING YOUR WATER HEATER

1. Push the ON/OFF switch to the ON position.
2. Open the water tap or valve.
3. The ignition will start automatically, and the burner will light.
4. Turn the gas flow adjustment knob either clockwise or anti-clockwise to control the desired water temperature. (turn clockwise for higher temperature; turn anti-clockwise for lower temperature).
5. You can view the flame condition through the flame view hole. The flame should be blue under normal conditions. If the flame is yellow, the cylinder may be low on fuel, change the gas cylinder as soon as possible.



6. The exhaust gas is vented from the openings at both sides. The temperature of exhaust gas is very hot, to avoid serious injury never touch these openings. Keep the tube and hole clear to make sure the exhaust gas can be vented smoothly.



7. Hot water will flow from the pipe, the water may be used for washing hands, showering, dishes, etc. (Will NOT reach boiling point).
8. After using the unit, shut off the water sources first and then turn the power OFF.



Take note: On first lighting a new cylinder or connecting a cylinder after it has been refilled; you may have to depress the control valve for a longer period of time.

The ignitor will be started only when the water flow is 2L/min or more.

Change the batteries if you cannot hear a continuous operational sound from the heater.



Never attempt to remove the regulator if the water heater is on or if the cylinder valve is not properly closed.

Keep children away to avoid injury.

Should excessive amounts of black smoke be vented from the holes, shut off the water heater.

Clean the unit before use. Fill the water bag or water pot with potable water, turn the flame adjustment knob to "MAX" position, let the unit run for about 2 minutes, do not use the hot water produced during this time.

FLASHBACK (FLAME IN BURNER TUBE)

In the event of flash back whilst the appliance is in use, turn all the controls and the cylinder valve to the 'OFF' position. Wait 5 minutes before attempting to relight the appliance.

If the problem persists, check for blocked venturi ports by removing the burner and cleaning with compressed air or with a pipe cleaner. Replace burner correctly.

If problem persists do not try to rectify the problem yourself as this could result in serious injury and/or property damage.

Store the appliance in a clean and dry environment. Do not store your gas cylinder indoors. Store in a well ventilated area away from direct sunlight or an electrical source.

DISASSEMBLY

After using the unit,

1. Shut off the water (bag) tap.
2. Turn the power off and close the gas supply at the cylinder valve.
3. Wait for about 6 minutes to let the water heater cool down. Do not touch it until it has cooled down.
4. Disconnect the water supply hose (reverse of assembly).
5. Disconnect the gas cylinder (reverse of assembly).
6. Push the tap back to cover position.
7. Take the batteries out of the unit.
8. Drain all water from the unit.

STORAGE

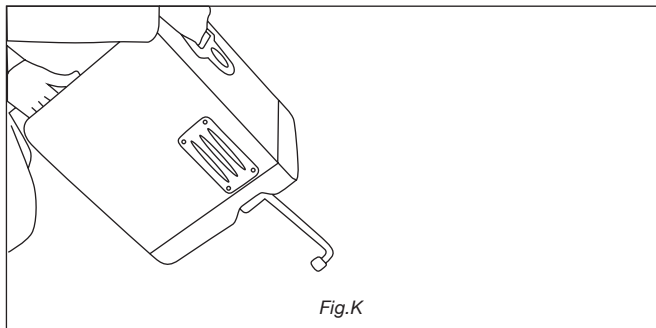
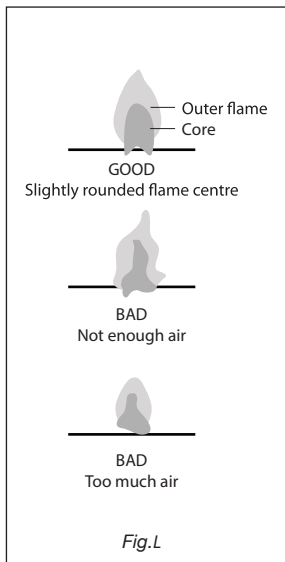


Fig.K

Drain the unit before storing. Tilt or tip the unit over to drain water out of it.

Put the water heater into its storage bag when not in use. The water heater can be stored inside your house. Store the water heater on a level surface and out of reach of children.

MAINTENANCE



- Always make sure the water heater is OFF and cool, with the cylinder valve closed, before conducting any maintenance.
- Your heater should be checked once a year by a qualified technician.
- If faults are suspected or detected, stop using the heater and contact ALVA.
- Clean the exterior and storage area of your heater when required to remove dust and prevent lint build up.
- DO NOT use abrasive products to clean the heater; these may damage the paint work.
- Clean the exterior body with a damp cloth.

If any part of the heater is in need of replacing, use only original Alva parts. Using any other spare parts is dangerous and will void the warranty.

FREQUENTLY ASKED QUESTIONS

Q: Why is there an odour when I use a gas appliance?

A: All gas appliances give off an odour. This could be harmful if inhaled for extended periods of time. This “smell” is normal, and it does not mean that you have a gas leak. The smell of raw gas (just before you ignite the appliance) differs to the smell coming from the appliance when it is in use. The odour is added to allow easy gas detection.



IF YOU SMELL GAS

1. Do not attempt to light appliance
2. Extinguish any open flame
3. Disconnect from fuel supply

Q: Why must there be ventilation when using a gas appliance?

A: Whenever fuel (LP Gas in this case) is burned, ventilation is needed. Any fire needs oxygen to burn. Think of a fireplace, you require a chimney or flue for the smoke to exit the house. Even though a gas appliance does not generate smoke, it still generates carbon monoxide and carbon dioxide, which can be dangerous if not diluted by fresh air. Always ensure adequate ventilation by leaving a door or window open in the same room.

Q: How long will the gas in my cylinder last?

A: This depends on how you use your appliance. It is easy to calculate your gas consumption. Take the capacity of the gas cylinder in grams (i.e. 3000g for a 3 kg cylinder) and divide it by the gas consumption of the heater, on your desired setting (*refer to the Specifications section in this manual below (page 11)*). The answer to the calculation is the approximate number of hours that your heater will burn for.

Q: What do I do if I have an over-filled cylinder?

A: The best method to determine if your cylinder is overfilled is to weigh it. Subtract the 'tare' mass from the cylinder weight – this gives you the weight of your gas. If this gas weight exceeds your cylinder design weight (3kg) then return the cylinder to your gas supplier.



How to test if your cylinder is overfilled



<http://www.youtube.com/watch?v=YaVsYE8nzCw&feature=plcp>

SPECIFICATIONS

Model	ALVA GW205
Type of Gas	LPG
Operating pressure	2.8kPa
Injector size	0.6mm
Gas Consumption	287gr/hr
Heat output	5.3 kW / 18000 BTU
This heater has been tested and is LPGSASA approved under specifications SANS 1539 (appliance), SANS 1237 (regulator) and SANS 1156 (hose).	

TROUBLE SHOOTING GUIDE

TROUBLE	CAUSE	REMEDY
Odour	Combustion	N/A - The combustion process will always cause an odour
Strong odour	Incorrect gas mixture	Obtain LPG only from reputable LPG dealers
	Unburned gas leak	Perform a leak test Always ensure there is proper ventilation
Burns then dies	Over-filled cylinder	Return to gas supplier
	Inadequate water flow	Ensure water flow is adequate and unobstructed
	Empty cylinder	Replace with a full cylinder

AFTER SALES SERVICE

MANUFACTURED FOR AND DISTRIBUTED BY ALVA
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 Tokai, 7966
 Tel: 021 442 1540
 E-mail: info@stingray.co.za
www.alva.co.za
 @alvagas
 www.facebook.com/AlvaGas

TOLL FREE NUMBER 086 100 ALVA (2582)

***SPARES** are available from our online store
www.stingray.co.za



If you are still unable to correct the problem with the information in this guide, then you need to contact your nearest dealer or manufacturer.



Should you experience problems with this gas water heater, carry out the necessary checks as per the Trouble Shooting Guide. If you are still unable to correct the problem with the information in this guide, then you need to contact your nearest dealer or manufacturer.