Training Manual : ALVA Indoor Gas Heaters

SPECIFICATIONS

Model	ALVA GH302
Description	Infrared Heater
Type of Gas	LPG
Operating pressure	2.8kPa
Injector size	0.59
Gas Consumption Position 3 (3 panels) Position 2 (2 panels) Position 1 (1 panel)	265gr/hr 175gr/hr 90gr/hr
Heat output	4.2kW





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Contact Details:

086 100 (ALVA) 2582 e-mail: info@stingray.co.za



Heater FAQ's:

Q: What is a flame failure protection device?

A: If the pilot flame dies, the thermocouple system will cool down instantly. The sensor will close the electromagnetic valve cutting the gas flow off. This will stop the gas from flowing through the system, turning the heater off.

Q: What is infrared heating?

A: Infrared heating systems refer to pieces of equipment or appliances that are placed inside a space to provide heating. Heating occurs due to radiation heat transfer. Radiation heat transfer is the exchange of thermal energy between two or more bodies.

The ceramic panels create infrared heating, heating objects around the heater as well as the air (convection heating).

Q: What is a positive off switch?

A: A positive off switch enables the user to switch the appliance off without having to close the valve on the cylinder (like a stove or BBQ).



Q: What is an ODS (Oxygen Depletion Sensor)?

A: A safety device that activates the heaters' monitoring device in case excessive levels of CO² (carbon monoxide), are detected. Continuous burning reduces the levels of oxygen, causing the pilot flame to become unstable and lift off the thermocouple (flame failure protection device) tip. The appliance then turns off automatically long before the situation becomes dangerous.

Heater FAQ's: (continued...)

Q: What effects do separate burner chambers have on a heater?

A: On older heater models all three ceramic panels were mounted on a single burner chamber. This allowed gas to "drift" to non-burning panels and escape through it, allowing a slight increase in the gas smell and the wasting of fuel. The new generation of heaters have 3 independent gas chambers. This prevents the gas from floating to unused panels and thus reduces gas emission odours.

Q: How long is the heater supposed to burn for?

A: Refer to your instruction manual or technical data sticker on the back of your heater. It will supply the g/h (grams per hour) consumption. Take the weight of your gas cylinder e.g. (9kg = 9000g) and divide it by the g/h of your appliance. The total you get will be the maximum amount of hours the appliance will be able to burn for. (eg. 9000g / 265g/h = 34hrs at max)

Q: Can a cylinder be overfilled?

A: Yes. Cylinders should only be filled to 80% of the cylinder capacity. This allows for gas expansion/ vaporization in the remaining 20% space.

If the cylinder is filled to the top, and then warmed, the liquid will expand and the cylinder can burst open. This is very dangerous and could cause serious damage and probable injury. It should therefore be kept away from extreme heat. Over-filling also causes issues with a gas appliance not functioning correctly as liquid gas is being pumped into the regulator, blocking it up.



Q: Can I see if the cylinder is over-filled?

A: The cylinder neck contains information on the weight of the cylinder. The tare weight (TW) is the weight of an empty cylinder. Add the tare weight to the capacity of the cylinder (e.g. TW – 9.4 and capacity 9 = 18.4kg) and weigh it. If it exceeds the total weight, then your unit is over-filled. In such an instance, the cylinder must be returned to the re-filling station. Users are no longer allowed to purge the excess gas themselves.



GAS CYLINDER:

- A 9kg ALVA gas cylinder with a 5/8 inch BSP left hand thread is recommended.
- This matches the supplied regulator.
- Cylinders must be stored in an upright position, in a well ventilated and damp free area and out of reach of children.
- The cylinder must never be stored where temperatures can reach or exceed 50'C.
- DO NOT store the cylinder near open flames, pilot lights or any other sources of ignition.

A 9kg ALVA gas cylinder • DO NOT SMOKE WHILE HANDLING THE CYLINDER.

Heater Set Up:



This heater makes use of an industrial cylinder (9kg cylinder recommended) with a 5/8" BSP thread; horizontal exit valve. The Bullnose regulator supplied with the heater tightens to the left hand side (anti-clockwise). (Figure A)

If you have bought a new gas cylinder, the cylinder needs to be purged (cleared out), before it's 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.



- 1. Advise customers to be sure that this is the product they need before opening and removing the heater from the packaging.
- 2. Assemble the unit.
- 3. Check if the nose cone is present, secure and in good condition. (Figure B)



- 1. The regulator goes directly into the cylinder valve. Always make sure the regulator bottoms fully. The use of any adaptors is illegal.
- Screw the regulator into the cylinder valve. DO NOT use a tool to tighten the regulator; it is to be hand-tightened only.
- Open the control value 1½ turns to the left (anti-clockwise). (Figure C)
- 4. Push the control knob down for at least 10 seconds, but DO NOT try to ignite the heater. This will allow gas to flow through the heater, making the leak test possible.
- 5. DO THE LEAK TEST (see next page)
- Place the cylinder in the heater cabinet by securing the rear guard in place. (Figure D)



Leak Test:

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









- 1. With the cylinder connected to the heater. Open the cylinder valve.
- Brush the connections (heater to cylinder) with a solution of equal parts soap and water (make sure it's foamy).
- 3. A stream of bubbles forming indicates a gas leak. (See Fig.F)
- If bubbles appear, turn the cylinder valve OFF (clockwise) and disconnect the heater from the gas cylinder.
- 5. 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.
- 7. A leak between the heater and cylinder can lead to a high pressure fire, which is very dangerous and can result in extensive injury or even death.





Using The Heater:



This heater must be turned off using the control knob first (**Figure G**) and only then closing the cylinder valve.

This heater has a positive OFF valve. Use the control knob to turn it OFF before closing the cylinder valve.

Changing The Cylinder:

- This heater can be regulated to three different heat selections: "OLOW" "OMED" and "OHIGH"
- 2. Open the cylinder valve by turning the cylinder valve to the left.
- 3. Press the control knob down at the "OOFF" position. Hold the control knob down for ±10-15 seconds.
- 4. While holding it down, turn the control knob anti-clockwise to Ignite/Low. The heater should make a click sound and you should see a spark. The pilot flame should ignite. Once the pilot flame ignites hold down the knob for another 10-15 seconds.
- Repeat step 3 if the pilot flame does not stay lit. This may require more than one attempt. Once the pilot flame and centre panel are burning, you can select the settings " ● MED" or "●HI" by depressing the knob slightly and turning it to the desired setting.

Make sure you cylinder valve is closed (by turning it clockwise). Allow the heater to fully cool before replacing the cylinder. Open the rear of the heater to expose the cylinder. (Figure L)



Remove and replace the cylinder.

ALWAYS check that the regulator-sealing washer (nose cone) is intact and in place before reattaching the regulator to a cylinder. (Figure B - Page 4)

DO NOT attempt to remove the regulator while the heater is on or if the cylinder valve is not closed.



Using The Heater:



- 1. Always make sure the heater is **OFF** and cool, with the cylinder valve closed, before conducting any maintenance.
- 2. The heater should be checked once a year by a qualified technician.
- 3. If faults are suspected or detected, stop using the heater and contact **ALVA**.
- Clean the exterior and storage area of the heater when required to remove dust and prevent lint build up.
- 5. **DO NOT** use abrasive products to clean the heater; these may damage the paint work.
- While in operation the pilot flame should be steady. If it flickers or is yellow the heater needs to be serviced. (Fig.I)

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

When the heater is not going to be used for an extended period of time, keep it covered or in its box, to prevent dust from settling on the panels. When removing the heater from storage, use a vacuum cleaner to vacuum the panels before reuse.

Important Safety Information:

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 heater in an enclosed area, which could restrict airflow, as this is a flue-less heater (It does not have a fixed chimney). Always make sure there is enough fresh air entering the room, by opening a door or window in the same room.

DO NOT operate this heater in a bedroom, caravan, boat or any area less than 80 cubic meters(roughly 5 x 5 metres).

DO NOT leave the heater unattended while in use.

Ensure that the gas supply is turned OFF after use and while the heater is unattended.

DO NOT move the heater while in use.

DO NOT place objects on or against the heater.

DO NOT use a naked flame to test for leaks. Follow the Leak Testing procedure outlined under 'LEAK TEST'.

Important Safety Information: (continued...)

NEVER use this heater with a cylinder other than the size recommended

DO NOT unscrew the regulator while the heater is on or if the cylinder valve is open.

When turning the heater 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 guarantee for the heater will be rendered void if the heater is serviced or repaired by any one other than an appointed technician.

The heater 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 heater is in use.



Correct Positioning:

DO NOT place the heater near walls, curtains or furniture while in use. The heater should always face the centre of the room.

The recommended positioning of a gas heater in any living environment. Always have a clearance of at least 500mm on the sides and back and ± 1000 mm (1m) in front of it.



24 Month Peace Of Mind Repair Warranty:

- LOGIK Indoor Heaters are warranted to the original purchaser to be free of defects in workmanship and materials for a period of 24 months from the date of purchase.
- The retailer, distributor, or manufacturer will not be liable for incidental or consequential damage, or loss as a result of the installation and/or operation of this product.
- Modifying or tampering with any part of the heater is illegal and unsafe and will void your warranty.

The heater should be serviced annually by a competent registered person.

How Our Service Dept. Attends To Calls Logged:

- If a customer contacts our call centre they will speak to one of our highly trained customer service staff, who will troubleshoot their problem over the phone with them.
- If they are unable to successfully solve the problem telephonically, the customers details are taken and a highly trained ALVA technician is despatched to their premises.
- If the problem is covered under the warranty for that product, then there is no cost to the client for the callout and repair work.
- If the problem is not covered under the product warranty, then the customer is liable for the cost of labour and parts.

