

# Clarke®



Only suitable for well insulated areas and not  
designed to be the primary heat source

## MOBILE GAS HEATER MODEL NO: MGH1B

PART NO: 6920022

### USER INSTRUCTIONS

UK | CE



ORIGINAL INSTRUCTIONS

GC-1224

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## INTRODUCTION

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Thank you for purchasing this CLARKE Mobile Gas Heater. This portable gas heater is designed to give safe, efficient and reliable operation, and is for use with LPG/Butane gas only. Gas bottles are not supplied with the unit, but are readily available from builders merchants or gas suppliers.

Before attempting to use this product, please read this manual thoroughly and follow the instructions carefully. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to your purchase giving you long and satisfactory service.

Read these instructions carefully. Do not allow anyone who has not read these instructions to light, adjust or operate this heater.

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## GUARANTEE

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This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission. This guarantee does not effect your statutory rights.

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## ENVIRONMENTAL RECYCLING POLICY

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Through purchase of this product, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery and environmentally sound disposal of the WEEE.

In effect, this means that this product must not be disposed of with general household waste. It must be disposed of according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

If disposing of this product or any damaged components, do not dispose of with general waste. This product contains valuable raw materials. Metal products should be taken to your local civic amenity site for recycling of metal products.

**THE FOLLOWING TABLE ADDRESSES THE INFORMATION REQUIREMENTS OF REG.2015/1188 & ERP COMPLIANCE**

Item	Symbol	Value	Unit
<b>Fuel</b>			
LPG butane Gaseous	42	[mg/kWh <sub>input</sub> ] (GCV)	
Space Heating Emission(*)			No <sub>X</sub>
Indirect heating functionality: [yes/no]			No
<b>Heat Output</b>			
At nominal heat output	P <sub>nom</sub>	4.2	kW
At minimum heat output (indicative)	P <sub>nom</sub>	1.4	kW
<b>Auxiliary electricity consumption</b>			
At nominal heat output	el <sub>max</sub>	N/A	kW
At minimum heat output	el <sub>min</sub>	N/A	kW
In standby mode	el <sub>SB</sub>	0	kW
<b>Useful Efficiency (NCV)</b>			
At nominal heat output	nth, nom	100	%
At minimum heat output	nth, nom	N/A	%
<b>Type of heat output/room temperature control (select one)</b>			
Single stage heat output, no temperature control			No
Two or more manual stages, no temperature control			Yes
With mechanical thermostat temp control			No
With electronic temperature control			No
Electronic temperature control with day timer			No
Electronic temperature control with week timer			No
<b>Other control options (multiple selections possible)</b>			
Room temperature control with presence detection			No
Room temperature control with open window detection			No
Room temperature control with distance control option			No
Room temperature control with adaptive start control			No
Room temperature control with working time limitation			No
Room temperature control with black bulb sensor			No

## GENERAL SAFETY PRECAUTIONS

1. **ALWAYS** read and ensure you fully understand the following precautions and the hazards associated with this type of heater.
2. **ALWAYS** check for damage before using the heater. Check for broken parts or anything that may affect its function. Any damage should be properly repaired or the part replaced. If in doubt, **DO NOT** use. Consult your local dealer.
3. **ALWAYS** keep children and animals well away from heater at all times.
4. **NEVER** carry out any modifications to this product. If experiencing difficulty of any kind consult your local dealer.
5. **NEVER** move the heater when it is lit.
6. Use **ONLY** LPG/Butane gas. Ensure the gas bottle is correctly installed and check for leaks following replacement, using soapy water. **NEVER** use a naked flame to test for leaks.
7. **ALWAYS** ensure all gas hose and regulator connections are **GAS TIGHT**, and the hose is not kinked.
8. **NEVER** use the heater where gasoline, paint thinner or other highly flammable vapour or high dust content is present.
9. **ONLY** use in well ventilated areas. Provide a ventilation opening to fresh, outside air. **ALWAYS** ensure that ample ventilation is present if the heater is being lit following a long period without use.
10. **ALWAYS** locate the heater on a stable, firm level surface.
11. **NEVER** cover while in use. Keep all combustibles at least 1m from the front.
12. Use heater in accordance with any applicable fire regulations.
13. **NEVER** use the heater in high-rise flats, in basements living or sleeping areas, in vehicles or caravans.
14. **NEVER** leave a heater unsupervised when lit - someone should always be responsible for monitoring it. **NEVER** leave the heater alight while sleeping.
15. **NEVER** move, handle, replenish gas supply or service the heater when it is hot, or operating. Turn it off and wait for it to cool down first.
16. Use **ONLY** the regulator supplied with the heater.
17. **ALWAYS** ensure that the heater is positioned as described on pages 7/8.
18. **NEVER** store gas cylinders any closer than 2 m from open drains, gullies or openings to cellars. LPG is heavier than air and can collect at low levels.
19. This heater will be hot when in operation and due care should be taken.

# CARBON MONOXIDE WARNING



## **WARNING: LACK OF VENTILATION CAN CAUSE CARBON MONOXIDE POISONING WHICH CAN BE FATAL.**

Carbon Monoxide is a highly toxic, odourless, colourless and tasteless gas, created by the incomplete combustion of carbon compounds due to a lack of available oxygen in an enclosed space.

The signs of carbon monoxide poisoning are, headaches, dizziness and/or nausea. Should anyone show these signs, they must **GET FRESH AIR IMMEDIATELY**. Turn off the heater and have it serviced before using again.

Pregnant women, persons with a heart or lung condition, anaemia or under the influence of alcohol, or those living at high altitudes, are more likely to be effected by carbon monoxide than others.

## **CARBON MONOXIDE ALARMS**

Due consideration should be given to the dangers of carbon monoxide poisoning following incomplete combustion in an enclosed space. Carbon monoxide detectors to BS EN 50291 are available for use in domestic premises.

Where a new appliance is installed in a dwelling, a carbon monoxide alarm should be provided in the room where the appliance is located.

Carbon monoxide alarms should comply with BS EN 50291:2001 and be powered by a battery, designed to operate for the working life of the alarm. The alarm should incorporate a warning device to alert users when its working life is due to pass. Mains-powered BS EN 50291 Type A carbon monoxide alarms with fixed wiring (not plug-in types) may be used as alternative applications, provided they are fitted with a sensor failure warning device.

The carbon monoxide alarm should be located in the same room as the appliance:

- On the ceiling at least 300 mm from any wall or, if located on a wall, as high up as possible (above any doors and windows) but not within 150 mm of the ceiling; and
- Between 1 m and 3 m horizontally from the appliance.

**NOTE:** Further guidance on the installation of carbon monoxide alarms is available in BS EN 50292:2002 and from manufacturers instructions. Provision of an alarm should not be regarded as a substitute for correct use and regular servicing.

# FEATURES OF THE MGH1-B HEATER

The MGH1B gas heater comprises three groups of components:

## GAS SUPPLY COMPONENTS

The gas supply to the machine is by means of a high pressure hose, connected to a gas cylinder via a pressure regulator.

When the gas valve is opened, gas will flow to the control valve and finally the burner. The heater can be operated at one of 3 settings using 1, 2 or all 3 burner plates.

This heater is designed only to be used with a 15 kg LPG/Butane gas bottle. Gas bottles are not supplied, but are readily available from builders merchants or gas suppliers etc.

## IGNITION COMPONENTS

An igniter is positioned beside the Pilot Light. When the ignition button is pressed, a spark is generated which ignites the gas. Heat from the flame is sensed by a thermocouple which is connected to the Flame Failure Valve. As the thermocouple heats up, a low voltage is fed to the Safety Cut-Off Valve, causing the valve to open, so that after a short period, the Control Valve (see 'Lighting the Heater' on page 9) may be released, and the pilot flame is established.

## SAFETY COMPONENTS

The heater incorporates the following safety devices that will cause it to shut down in unsafe conditions.

The Flame Failure Valve will shut off the gas if the flame extinguishes for any reason. When the thermocouple quickly cools down, the gas supply is shut off so that the heater will shut down automatically.

The Oxygen Depletion Sensor will shut off the gas if the CO<sub>2</sub> concentration in the air supply to the heater exceeds a pre-set value. The room should therefore be well ventilated at all times.

**NOTE:** The Anti-Tilt Switch will turn off the heater if it is tipped over. If this activates, set the heater upright, check for obvious damage and wait 5-10 minutes before attempting to re-light the heater. This device may also operate if the heater is knocked against or bumped.

## SPECIFICATIONS

Model Number	MGH1B
Dimensions (LxWxH) mm	420 x 450 x 745
Weight	7.95 kg
Fuel	LPG/Butane Gas (15kg bottle)
Max Gas Consumption (kg/hr)	305 g/hr
Max Rated Output	4.2 kW (14350 Btu/hr)
Heat settings	High - 4.2 kW Med - 2.8 kW Low - 1.4 kW
Operating temperature	Min 5°C / Max 40°C
Supply pressure	28 mbar

**NOTE:** Please note that the details and specifications contained herein are correct at the time of going to print. However CLARKE International reserve the right to change specifications at any time without prior notice. Always consult the heater's data plate

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## INSTALLATION

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When unpacking, check the heater for any damage that may have occurred in transit and notify your Clarke dealer immediately should any be apparent.

The only assembly required is to connect the gas supply. **DO NOT** attempt to operate the heater with any gas other than LPG/Butane. You should have purchased a suitable 15 kg gas bottle for use with this heater.

This heater, including the hose and regulator assembly, must be inspected before each use and at least annually by a qualified service person. If the hose shows evidence of excessive wear or if the hose is cut, it must be replaced prior to the heater being put into operation.

## POSITIONING THE HEATER

The heater must be located on a hard, flat, level surface to minimise the risk of accidental tipping and the gas bottle should be held by the bottle retainer. **DO NOT** operate this heater with the supply bottle in any other than the upright position.

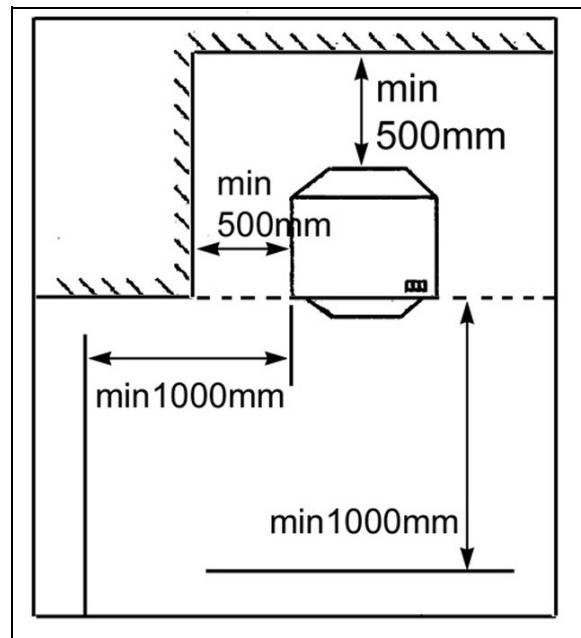
The heater must be located such that it will not be exposed directly to sources of water. Use of this heater in a drafty area decreases its efficiency. If possible, operate the unit in a draft free area.

## MATERIAL CLEARANCES

It is recommended that the heater be positioned with at least 500 mm clearance to the sides and rear and 1000 mm to the front.

However, any household furnishings should be a safe distance away as they could be adversely affected by heat.

ALWAYS position the heater facing the centre of the room and positioned as shown in the diagram. NEVER place objects on, or against the heater.



## VENTILATION

This heater must only be installed in a room which is well ventilated. **DO NOT** operate in a caravan, boat, or any room of less than 40 cu/m in volume. Ventilation is essential to reduce the dangers of carbon monoxide poisoning, and from oxygen depletion.



**WARNING: IF FRESH, OUTSIDE AIR VENTILATION IS NOT PROVIDED, CARBON MONOXIDE POISONING COULD OCCUR.**

Adequate ventilation should also considerably reduce the possibility of condensation occurring and lessen the dangers from the presence of any undetected gas leakage. The following table shows the smallest sizes of room suitable for each heat setting and the ventilation which should be provided.

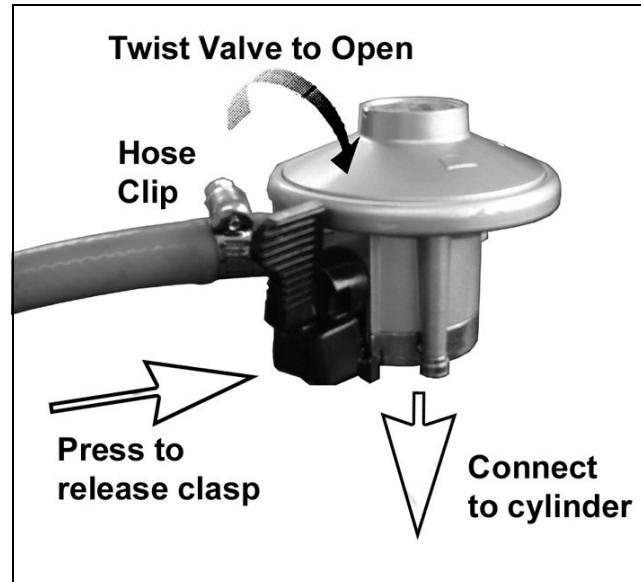
Number of ceramic burners in use	Room size	Ventilation	
		Low Level	High Level
1	40 m <sup>3</sup>	40 m <sup>2</sup>	40 m <sup>2</sup>
2	70 m <sup>3</sup>	70 m <sup>2</sup>	70 m <sup>2</sup>
3	105 m <sup>3</sup>	105 m <sup>2</sup>	105 m <sup>2</sup>

# PREPARATION

## INSTALLING THE BOTTLE

The connection to the gas bottle must be carried out in a well ventilated area, using the regulator and hose assembly supplied with the heater. **DO NOT** attempt to adjust this regulator. It has been pre-set at the factory to provide safe and correct operation.

1. Remove the bottle retainer from the back of the heater.
2. With the hose connected to the heater, fix the gas regulator to the gas hose, securing it with the screwed hose clip supplied.
3. Place the filled gas bottle into the back of the heater with the valve outlet facing outwards.
4. Connect the gas regulator onto the outlet of the gas bottle using the integral clasp.
  - When attaching the regulator to the gas cylinder ensure the bottle outlet is perfectly clean.
    - Use compressed air if necessary to blow away any dust or dirt. When connected, check for leaks using soapy water or liquid soap as described below.
5. Secure the bottle with the bottle retainer.



## TESTING FOR LEAKS

This must be carried out in a well ventilated area, free from any open flame or other sources of ignition. With the regulator connected to the cylinder, slowly turn on the regulator and proceed as follows:

1. Brush all hose connections including pipe connections to the gas valve, regulator connection to the bottle and gas bottle valve with a 50:50 solution of soap and water.
2. A stream of bubbles forming is an indication of a leak. If a leak is found, turn off the valve on the regulator, disconnect the regulator from the gas bottle and remove the gas bottle to a cool, outdoor well-ventilated area. Contact your Clarke dealer or gas supplier for assistance



**CAUTION: DO NOT USE IF A LEAK IS FOUND. DO NOT USE A NAKED FLAME FOR TESTING. DO NOT OPERATE ANY ELECTRICAL EQUIPMENT IN THE PRESENCE OF A GAS LEAK.**

3. After leak-testing is satisfactorily carried out and no leaks found, it may be necessary to twist the cylinder slightly to allow the regulator and hose to fit Inside the heater casing without kinking the hose.

## **LIGHTING THE HEATER**

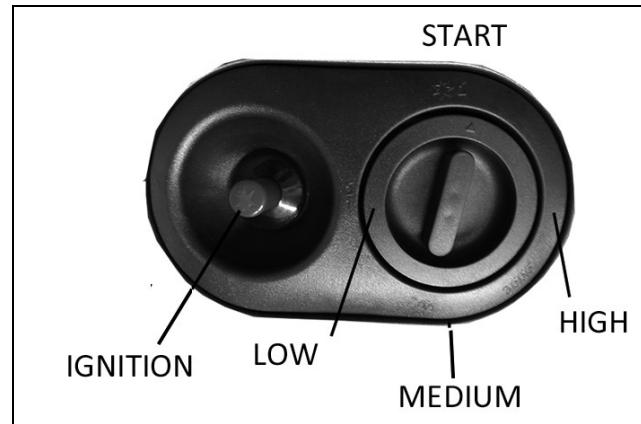
The heater can be regulated to one of three different heat settings: LOW, MEDIUM and HIGH. To light the heater:

1. Open the valve on the gas regulator.
2. Press down and turn the control knob to LOW position.
  - **DO NOT** release the control knob.
3. After 10 seconds press the ignition button until the pilot light (at the bottom of the burner) ignites.
4. Continue to hold the control knob down for 10-15 seconds after ignition. If the pilot flame goes out when releasing the button, repeat the above operation.

**NOTE:** The first time you use a new heater, it may be necessary to hold the control knob down for a longer time in order to purge air from the system.

5. When the heater is in operation, watch the pilot light and check that it is burning steadily. If it flickers or has a yellow flame, the heater should be checked by your dealer.
6. Leave the heater burning at the LOW setting for approx 5 minutes before turning to a higher setting.
7. Once the heater is alight, turning the control knob to MEDIUM or HIGH will light the second and third panel automatically.

The heater can also be started at any of the 1 (LOW), 2 (MEDIUM) or 3 (HIGH) positions but this is not recommended.



## CHANGING THE SETTING

1. To select the desired heating level, press the control knob down slightly and rotate until the knob locks at the desired position. **DO NOT** operate between the locked positions.

## TURNING THE HEATER OFF

1. Turn and press the control knob to the START position.
2. Turn off the regulator valve on the gas bottle, and if placing the heater into storage, disconnect the bottle.

## CHANGING THE BOTTLE

**ALWAYS** allow the heater to cool down before removing and replacing the bottle. **NEVER** attempt to remove the regulator while the heater is operating.

Disconnect the gas regulator from the cylinder and remove the bottle after releasing and removing the bottle retainer from the back of the heater.

## POSSIBLE FAULTS ON STARTUP

### THE HEATER DOESN'T LIGHT

- Check the gas bottle is full. Removing and tilting the bottle should reveal the presence of LPG.
- Check the regulator is properly attached to the bottle and the valve on the regulator is turned on.

If this happens after the bottle has been changed, it could be:

- The bottle may have been excessively cold. Allow the bottle to reach room temperature before attempting to start the heater.
- Air in the bottle. Hold the control knob down for a longer period of time until the pilot and main burner light.

### THE HEATER TURNS OFF BY ITSELF

- If the heater turns off by itself after continuous working, repeat the lighting operation, following the instructions faithfully.
- If it goes out soon after lighting, check for drafts or for the gas bottle running out of gas.
- If it goes out after about 30 minutes, it is an indication that ventilation in the room is inadequate. If so, the heater may have been shut off by the Oxygen Depletion Sensor. Open a window or door to ventilate the room and re-ignite.

## CLEANING AND MAINTENANCE



**WARNING: NEVER ATTEMPT TO SERVICE THE HEATER WHILE IT IS CONNECTED TO THE GAS SUPPLY. ALLOW TO COOL BEFORE SERVICING/CLEANING.**

### CLEANING (annually or as required)

1. Use a damp cloth wrung out in a solution of soapy water to clean the exterior and bottle storage area of the heater. Use household cleaners on difficult spots.
2. Clean inside heater using compressed air where possible. Blow air back and forth along the entire burner face and ceramic plates until all dust has been dislodged from surface. ALWAYS wear eye protection if using compressed air. Take care not to knock the ceramic plates which can become fragile in use. Use compressed air to clean the pilot light opening and the gas outlets.
3. Wipe the heater completely dry before use, ensuring that no water gets into the burners or pilot light area.
4. **NEVER** use abrasive cleaners as they may damage the paint finish.

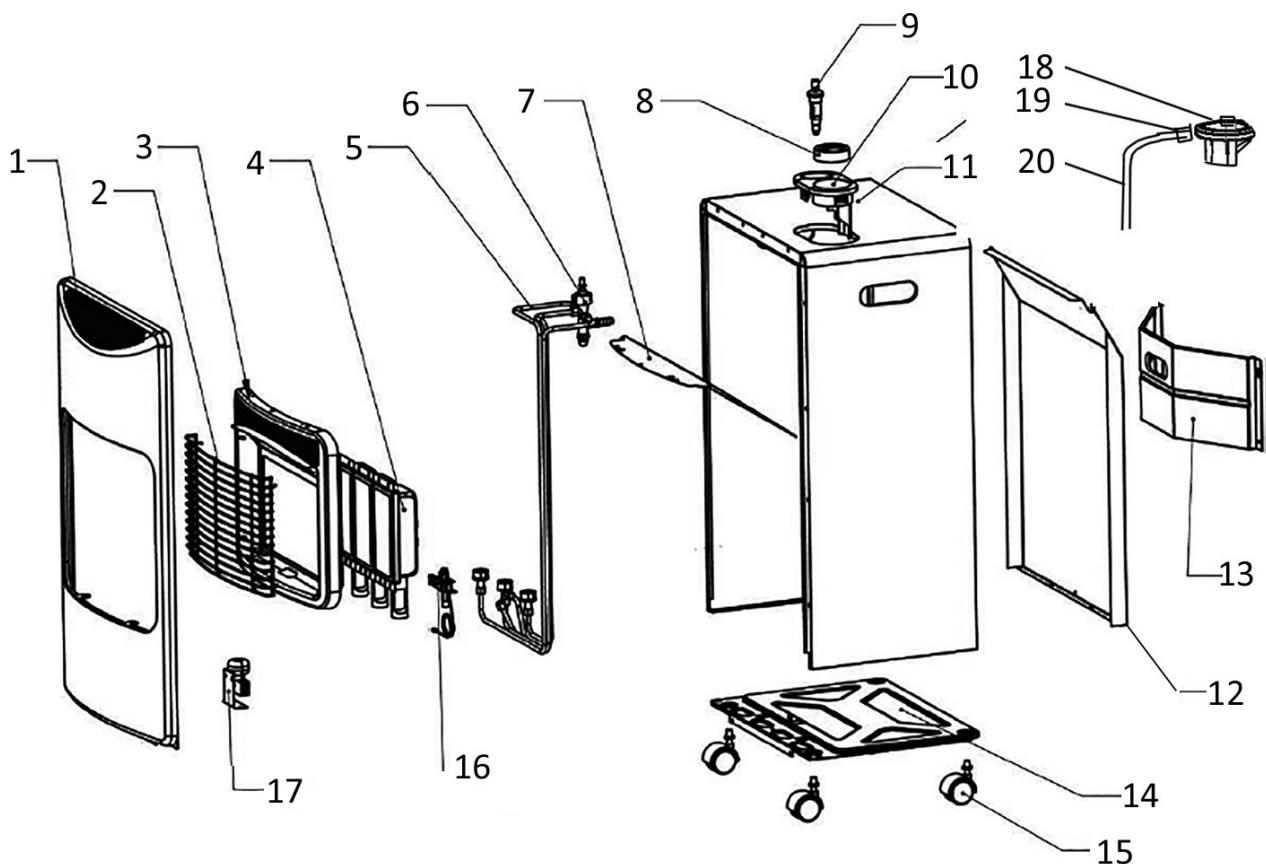
### GENERAL MAINTENANCE

1. Inspect heater before bringing back into use. Check connections for leaks by applying a mixture of liquid soap and water to hose connections. Any bubbles forming show a leak, which must be corrected before use.
2. Regularly check the flexible hose between the regulator and heater and replace if cracked. In the event of damage or broken components, replacements should only be obtained from **Clarke Parts & Service**.
3. Have the heater inspected yearly by a qualified service agent.
4. For long term storage, always disconnect the bottle and store the heater in a well ventilated area away from combustible materials. The bottle is best kept in an outbuilding and preferably not in a basement or indoors. Cover the heater in its original packing and keep the unit dry and dust free.

## TROUBLESHOOTING

PROBLEM	CAUSE	REMEDY
Pilot light will not light automatically.	No spark across electrode gap.	Request service technician to check the piezo-electric switch is functioning correctly. Check the electrical lead to the pilot light is not damaged.
Pilot light will not light automatically but switch/lead OK & pilot will light using a match.	Incorrect position of spark in relation to gas flow.	Request service technician to re-position spark plug electrode so that spark jumps across gas flow.
Heater will not remain alight when pressure is released from the control knob.	Electro-magnetic contact closes while heater is alight.	Request service technician to: a) ensure that the thermocouple probe is located in the pilot flame. b) ensure good connection between thermocouple and valve. c) check thermocouple d) check electromagnetic valve
After changing to maximum position with all 3 flames alight, one or more flame appears below normal intensity.	a) blocked jets b) partially blocked supply tube c) gas running out.	Request service technician to: a) remove and clean blocked jet b) remove the supply tube and jets and blow through tube.
Difficulty in changing from LOW/Medium/ High	Air draft directed away from first nozzle. Position of the pilot flame incorrect.	a) Relocate the heater so that it is not affected by drafts. b) Request service technician to adjust pilot so flame is closer to bottom corner of the second nozzle as well as first nozzle.
Smell of gas	Gas leakage from hose or tube connection	Carry out leak test to determine source
Smell of burning	Missing piece of ceramic plate.	Inspect perimeter of each ceramic plate and locate position of missing material. Repair with fire cement and leave to set for 24 hours.
Pilot flame appears red.	Dirt in gas nozzle	Clean out any dust with compressed air
Patchy combustion on ceramic plates	Dirty gas outlets. Grime on ceramic plates	Clean out any dust with compressed air

## COMPONENT PARTS



No	Description
1	Front panel
2	Grill
3	Outlet panel
4	Burner
5	Aluminium pipe
6	Valve
7	Burner cover
8	Switch
9	Strike
10	Switch base

No	Description
11	Side panel
12	Back panel
13	Bottle protection panel
14	Base panel
15	Wheel
16	ODS
17	Anti-tilt device
18	Gas regulator
19	Hose clip
20	Gas hose

# DECLARATIONS OF CONFORMITY

UK  
CA

Clarke®  
INTERNATIONAL

## DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following legislation: The following standards have been applied to the product(s):

The Gas Appliances (Enforcement) and Miscellaneous Amendments Regulations 2018

EN 449:2002+A1:2007, EN 16129:2013, IEC 62321-7-1:2015, IEC 62321-7-2:2017,

The Ecodesign for Energy-Related Products Regulations 2010

IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-6:2015, IEC 62321-8:2017

The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

This declaration is issued, in accordance with legislation (UK) The Gas Appliances (Enforcement) and Miscellaneous Amendments Regulations 2018, under the sole responsibility of the manufacturer.

The UKCA mark was first applied in: 2024

Manufacturer:	Clarke International Ltd, Hemnall Street, Epping, Essex, CM16 4LG, United Kingdom	Notified Body:	DBI Certification A/S (ID Number: 2531), Jernholmen 12, 2650 Hvidovre, Denmark
Product Description:	Space Heater	GAR Certificate Number:	2531-GAR-CGC10094, ITS-2575-SRV-2233292-R2
Model Number(s):	MGH1B	GAR Certificate Issue:	11/04/2023, 22/12/2023
Serial/Batch Number:	Refer to product/packaging label	GAR Certificate Expiry:	21/04/2028, 29/08/2025
Date of Issue:	22/07/2024	Signed:	 J.A. Clarke Director

MGH1B UKCA Clarke DOC 072224

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CE

Clarke®  
INTERNATIONAL

## DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following legislation: The following standards have been applied to the product(s):

2016/426 Gas Appliance Regulation

EN 449:2002+A1:2007, EN 16129:2013, IEC 62321-7-1:2015, IEC 62321-7-2:2017,

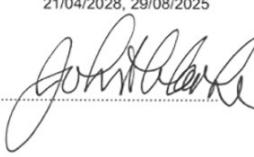
2009/125/EC Ecodesign Directive

IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-6:2015, IEC 62321-8:2017

2011/65/EU Restriction of Hazardous Substances (RoHS) Directive

This declaration is issued, in accordance with legislation (EU) 2016/426, under the sole responsibility of the manufacturer.

The CE mark was first applied in: 2024

Manufacturer:	Clarke International Ltd, Fitzwilliam Hall, Fitzwilliam Place, Dublin 2, Republic of Ireland	Notified Body:	DBI Certification A/S (ID Number: 2531), Jernholmen 12, 2650 Hvidovre, Denmark
Product Description:	Space Heater	GAR Certificate Number:	2531-GAR-CGC10094, ITS-2575-SRV-2233292-R2
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Date of Issue:	22/07/2024	Signed:	 J.A. Clarke Director

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# A SELECTION FROM THE VAST RANGE OF

## Clarke® QUALITY PRODUCTS

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# PARTS & SERVICE: 0208 988 7400

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**Parts@clarkeinternational.com**

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**Clarke® INTERNATIONAL** Hemnall Street, Epping, Essex CM16 4LG  
[www.clarkeinternational.com](http://www.clarkeinternational.com)