





This product is not suitable for primary heating purposes

FOLDING MOBILE GAS HEATER

MODEL NO: MGH2

PART NO: 6920028

USER INSTRUCTIONS



ORIGINAL INSTRUCTIONS

GC03/23

INTRODUCTION

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.

GUARANTEE

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.

ENVIRONMENTAL RECYCLING POLICY



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
Fuel			
LPG butane Gaseous G30			
Space Heating Emission(*)	No _X	62	mg/kWh
Indirect heating fuctionality: (yes/no)			No
Heat Output			
At nominal heat output	Pnom	4.2	kW
At minimum heat output (indicative)	Pnom	1.5	kW
Auxiliary electricity consumption		•	
At nominal heat output	el _{max}	N/A	kW
At minimum heat output	el _{min}	N/A	kW
In standby mode	el _{SB}	N/A	kW
Useful Efficiency (NCV)			
At nominal heat output	nth, nom	100	%
At minimum heat output	nth, nom	N/A	%
Type of heat output/room temperature control (select one)		•	
Single stage heat output, no temperature control			Yes
Two or more manual stages, no temperature control		No	
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
Other control options (multiple selections possible)			
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

- ALWAYS read and ensure you fully understand the following precautions and the hazards associated with this type of heater.
- 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
 CLARKE 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 CLARKE dealer.
- 5. **NEVER** move the heater when it is lit.
- 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.
- ONLY use in well ventilated areas. Provide a ventilation opening to fresh outside air.
- 10. **ALWAYS** locate the heater on a stable, firm level surface.
- 11. **ALWAYS** ensure that ample ventilation is present if the heater is being lit following a long period without use.
- 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 carayans.
- 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 page 9.
- 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 HAZARDS



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 1m and 3m 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 MGH2 HEATER

The MGH2 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 LPG/Butane gas bottle between 5 and 15kg capacity. Gas bottles are not supplied, but are readily available from builders merchants or gas suppliers etc.

The minimum surrounding air temperature rating for the heater is min 5° C - maximum +40°C.

IGNITION COMPONENTS

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 10) 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_2 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.

PREPARATION

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 heater is supplied with the following fittings;

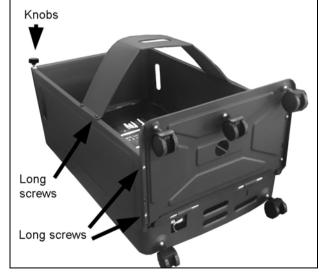
- 500mm Gas hose
- Jubilee clips
- 21mm snap-fit regulator
- Screws
- Round thumb screws
- Castor wheels & fittings
- Spanner

ASSEMBLING THE CABINET/HOUSING

The castor wheels are supplied loose and require fitting.

- 1. Attach the wheels to the base of the heater and tighten the nuts.
 - A spanner is supplied for this purpose.
- Fold the side panels into position and align with the base and top panels.
 Secure in position at the top and bottom using the long machine screws at the base. Add the hand-knobs at the top.
- Fit the gas bottle retainer to the cabinet using the short screws.

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.

INSTALLING THE GAS 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 preset at the factory to provide safe and correct operation.

Twist Valve to Open

Connect

to cylinder

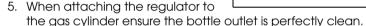
Hose

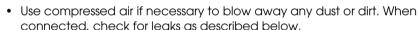
Clip

Press to

release clasp

- 1. Remove the bottle retainer from the back of the heater.
- Secure the gas regulator to the gas hose with the screwed hose clip supplied.
- Place the filled gas bottle in 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.





6. Secure the gas bottle in position 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:

- 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.
- 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.

 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.

POSITIONING THE HEATER

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

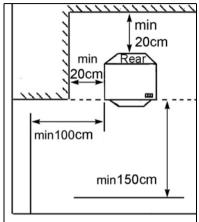
The heater must be located such that it will not be exposed directly to sources of water. Use of this heater in a drafty area decreases its efficiency. If possible, operate the unit in a draft free area.

MATERIAL CLEARANCES

It is recommended that the heater be positioned with at least 20cm clearance to the sides and rear.

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



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

The heater must only be positioned in a room which is well ventilated. DO NOT operate in a caravan, boat, or any room of less than 40m³ in volume. Ventilation is essential to reduce the dangers of carbon monoxide poisoning, and from oxygen depletion.

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.

Room size	Ventilation		
	Low Level	High Level	
84 m ³	105 m ²	105 m ²	

OPERATION

This heater, including the hose and regulator assembly, must be inspected before each use and at least annually. If the hose shows evidence of damage or if the hose is cut, it must be replaced prior to the heater being put into operation. The replacement hose shall be that specified by CLARKE International.

LIGHTING THE HEATER

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

- Open the valve on the gas regulator.
- 2. Press down and turn the control knob to LOW position.
 - DO NOT release the control knob.
- After 10 seconds press the ignition button until the pilot light (at the bottom of the burner) ignites.
- 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.

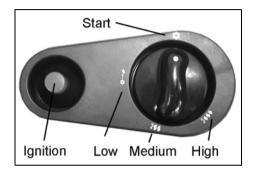
NOTE: The first time you use a new heater, it may be necessary

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.

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

 To select the desired heating level, press the control knob down and rotate until the knob locks at the desired position (Low, Medium, High). DO NOT operate between the locked positions.

TURNING THE HEATER OFF

- 1. Set 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 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 o hose. 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.
- 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

- 1. Turn heater off and let cool down before cleaning.
- 2. 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.
- 3. Clean inside heater using compressed air where possible, in which case, eye protection should be worn. Blow air back and forth along the entire burner face and ceramic plates until all dust has been dislodged from surface. Take care not to knock the ceramic plates which can become fragile in use. Use compressed air to clean the gas outlets.
- 4. Wipe the heater completely dry before use, ensuring that no water gets into the burners.
- 5. Never use abrasive cleaners as they may damage the paint finish.

GENERAL MAINTENANCE

- Inspect the 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 tubing 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.

STORAGE

- 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.
- 2. With no gas bottle in the heater, the unit can take up less space in storage by removing the gas bottle retainer and the other fixings described on page 7 and the panels of the cabinet folded together.

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 are OK and the 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 burners alight, one or more 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 draught directed away from first nozzle. Position of the pilot flame incorrect.	 a) Relocate the heater so that it is not affected by draughts. b) Request service technician to adjust pilot so that flame is closer to bottom corner of the second burner as well as first burner.
Smell of gas	Gas leakage from hose or tube connection	Carry out leak test to determine source as described on page 8.
Pilot flame appears	Dirt in gas nozzle	Clean out any dust with compressed air

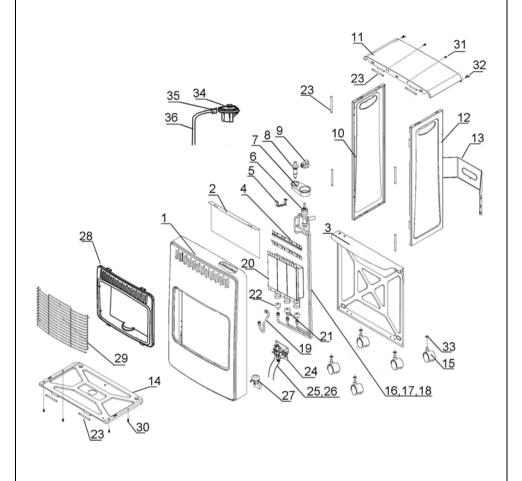
PROBLEM	CAUSE	REMEDY
Smell of burning	Missing piece of ceramic plate.	Inspect perimeter of each ceramic plate and locate position of missing material. Repair with fire cement and leave to set for 24 hours.
Patchy combustion on ceramic plates	Dirty gas outlets. Grime on ceramic plates	Clean out any dust with compressed air

SPECIFICATIONS

Model Number	MGH2
Dimensions (WxDxH) mm	460 x 420 x 740
Weight	8.2kg
Fuel	LPG/Butane G30 Gas
Max Gas Consumption (kg/hr)	305 g/h
Max Rated Input	4.2 kW (14330 btu)
Heat settings	High - 4.2 kW Med - 2.8 kW Low - 1.5 kW
Operating temperature	Min 5°C / Max 40°C
Supply pressure	30 mbar
Gas container size	5kg to 15kg (max 32cm dia x 55cm high)

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.

COMPONENT PARTS



COMPONENT PARTS

No	Description
1	Panel
2	Lower thermal baffle
3	Top thermal baffle
4	Ceramic tile holder
5	Base bracket
6	Gas valve
7	Switch mounting
8	Igniter
9	Control knob
10	Left side panel
11	Top panel
12	Right side panel
13	Cylinder holder
14	Bottom panel
15	Caster wheel
16	Gas pipe assembly (burner 1)
17	Gas pipe assembly (burner 2)
18	Gas pipe assembly (burner 3)

No	Description
19	ODS gas pipe assembly
20	Burner assembly
21	Nozzle assembly
22	Nozzle assembly
23	Hinge pin
24	ODS pilot
25	Ignition cable
26	Thermocouple cable
27	Anti-tilt switch
28	Front panel
29	Front grill
30	Screw
31	Screw
32	Thumb screw
33	Nut
34	Gas regulator valve
35	Hose clip
36	Connecting hose

DECLARATION OF CONFORMITY - UKCA





Hemnall Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following legislation:

Regulation 2016/426 on Gas Appliances and Miscellaneous Amendments

The Eco-Design for Energy Related Products and Energy Information (Amendment) Regulations 2019

The following standards have been applied to the product(s):

EN 449:2002+A1:2007.

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned legislation has been compiled and is available for inspection by the relevant enforcement authorities. Notified Body: DBI Certification, Jernholmen 12, 2650 Hvidovre Denmarkie C Type-Examination Surveillance Certificate No.: 2531-GAR-CGC10404, Date of Issue: 08/07/2022. Notific Body No.: 2531.

The UKCA mark was first applied in: 2023

Product Description: Folding Mobile Gas Heater

Model number(s): MGH2

Serial / batch Number: Refer to product/packaging label

Date of Issue: 30/01/2023

Signed:

J.A. Clarke

Director

MGH2 UKCA Clarke DOC 0130233

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DECLARATION OF CONFORMITY - CE





Fitzwilliam Hall, Fitzwilliam Place, Dublin 2

EU DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following legislation:

2016/426 Regulation (EU) Appliances Burning Gaseous Fuels.
2009/125/EC Eco-Design Directive Annex I (EU 2015/1188, 2015/1186).

The following standards have been applied to the product(s):

EN 449:2002+A1:2007

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned legislation has been compiled and is available for inspection by the relevant enforcement authorities. Notified Body: DBI Certification, Jernholmen 12, 2650 Hvidovre Denmark. EC Type-Examination Surveillance Certificate No.: 2531-GAR-CGC10404, Date of Issue: 08/107/2022. Notified Body No.: 2531.

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Signed:

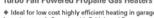
J.A. Clarke Director

MGH2 CE Clarke DOC 0130233

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OTHER HEATERS FROM THE CLARKE RANGE





 Ideal for low cost highly efficient heating in garages, workshops, warehouses, factories etc. Comply with British and European standards Propane gas fired Fuel safety cut out in the event of overheat, flame or power failure

 Portable and extremely durable
 Complete with regulator and gas hose Variable output on all machines except Little Devil,









A SELECTION FROM THE VAST RANGE OF





WOODWORKING Saws, sanders, lathes, mortisers

and dust extraction. **HYDRAULICS**

Cranes, body repair kits, transmission jacks for all types of workshop use.

WATER PUMPS

Submersible, electric and engine driven for DIY, agriculture and industry.

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Angle grinders, cordless drill sets, saws and sanders.

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All sizes for car and commercial use.



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