

Clarke®



Bore Hole Pump

Model Nos: CBB75 • CBB100
Part Nos: 7150710 • 7150715



USER INSTRUCTIONS

0506

Thank you for purchasing this CLARKE Bore Hole Pump, which is designed for use in a domestic environment only.

Please read this instruction leaflet thoroughly and follow the instructions carefully, in doing so you will ensure the safety of yourself and that of others around you, this will also ensure that the Bore Hole Pump will give you long and satisfactory service.

Please keep these instructions in a safe place for future reference.

CLARKE GUARANTEE

This CLARKE product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt 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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Please Note that details and specifications herein, are correct of time of going to print.
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GENERAL SAFETY PRECAUTIONS

WARNING:

As with all machinery, there are certain hazards involved with their operation and use. Exercising respect and caution will considerably lessen the risk of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator or damage to property, may result.

- **ALWAYS** learn the machine's applications, limitations and specific potential hazards peculiar to it. Read and become familiar with the entire operating manual.
- **ALWAYS** ensure that the local supply voltage corresponds with the supply information on the machine's data plate.
- **ALWAYS** check for damage before use, any damaged part should be checked to ensure that it will operate properly and perform its intended function. Check for alignment of moving parts, breakage of parts, mountings, and any other condition which may effect the machine's operation. Any damage should be properly repaired or the part replaced . If in any doubt DO NOT use the machine. Consult your local CLARKE dealer.
- **ALWAYS** keep children away. All visitors should be kept at a safe distance from the work area, especially whilst operating the machine.
- **ALWAYS** maintain machine in top condition. Keep the machine clean for best performance. Follow maintenance instructions.
- **ALWAYS** handle with extreme care, do not carry the machine by its electrical cable, or yank the cable to disconnect it from the power supply.
- **ALWAYS** concentrate on the job at hand, no matter how trivial it may seem. Be aware that accidents are caused by carelessness due to familiarity.
- **ALWAYS** wear proper apparel. Loose clothing or jewellery may get caught in moving parts. Wear protective hair covering to contain long hair.
- **ALWAYS** remove plug from the electrical outlet when adjusting, changing parts, or when working on the machine.
- **ALWAYS** use recommended accessories, the use of improper accessories could be hazardous.
- **ALWAYS** guard against electric shock. Safety can be further be improved by using a residual current device (RCD).
- **ALWAYS** ensure that the power supply used to power the machine is connected to an efficient grounding system.
- **ALWAYS** store the machine out of the reach of children, DO NOT allow children to operate the machine.
- **NEVER** operate the machine when under the influence of drugs, alcohol or any medication.
- **NEVER** leave the machine running unattended. Turn power OFF. Do not leave the machine until it comes to a complete stop.
- **NEVER** force the machine, it will do a better and safer job at the rate for which it was designed.
- **DO NOT** use the machine if the electrical cable, plug or motor is in poor condition.

SAFETY PRECAUTIONS FOR BORE HOLE PUMPS

- **ONLY** use the pump for it's intended applications (refer to setup & operation).
- **ALWAYS** protect the power supply plug from getting wet, the plug must be accessible when the pump is running.
- **ALWAYS** ensure that nobody is in contact with the water in which the pump is submerged.
- **ALWAYS** protect the pump and pipe from frost, drain the pump and pipe and store in a protected location.
- **ALWAYS** ensure that the weight of the pump is borne by the rope and not the main supply cable or the delivery pipe.
- **DO NOT** carry the bore hole pump by the mains supply cable.
- **DO NOT** make any modifications to the pump, or tamper with it in any way.
- **NEVER** operate the pump with the delivery port closed or obstructed.

TECHNICAL SPECIFICATION

Model No: Part No:	CBB75 7150710	CBB100 7150715
Supply Voltage/Frequency:	230V/50Hz	230V/50Hz
Input Wattage:	750W	1000W
Mains Supply Cable Length:	15M	15M
Flow Rate:	60 litres/min	80 litres/min
Max. Immersion Depth:	15M	15M
Max Head:	55M	60M
Max. Temperature:	35°C	35°C
Max. Sand Content:	90g/m ³	90g/m ³
Max. Size of Suspended Particles	2mm dia	2mm dia
Number iof Impellers:	7	8
Delivery Diameter:	1 inch	1 inch
Pump Diameter:	98mm	98mm
Rope Length:	15M	15M
Weight	10.3kg	10.8kg


ELECTRICAL CONNECTIONS

This product is provided with a standard 13 amp, 230 volt (50Hz) BS1363 plug, for connection to a standard, domestic electrical supply. Should the plug need replacing at any time, ensure that a plug of identical specification is used.

⚠ WARNING: ⚠

Should it ever be necessary to change the plug, the wires in the mains lead should be wired according to the following colour code:

BLUE - NEUTRAL
BROWN - LIVE
GREEN & YELLOW - EARTH

- Connect the BLUE coloured wire to the plug terminal marked with a letter 'N' or coloured BLACK.
- Connect the BROWN coloured wire to the plug terminal marked with a letter 'L' or coloured RED.
- Connect the GREEN & YELLOW coloured wire to the plug terminal marked with a letter 'E' or  or coloured GREEN or GREEN & YELLOW.

IMPORTANT!

If this appliance is fitted with a plug which is moulded on to the electrical cable (i.e. non-rewireable) please note:

- The plug **MUST** be thrown away if it is cut from the electric cable. There is a danger of electric shock if it is subsequently inserted into a socket outlet.
- **NEVER** use the plug without the fuse cover fitted.
- Should you wish to replace a detached fuse carrier, ensure that the correct replacement is used (as indicated by marker or colour code).
- The fuse in the plug **MUST** be replaced with one of the same rating (**13amps**) and this must be approved to BS1362.

IMPORTANT!

If the pump's power supply cable is damaged it **MUST** be replaced by the manufacturer or an authorised service centre.

IMPORTANT!

If in any doubt, do not attempt any electrical repair yourself. Consult a qualified technician.

IMPORTANT!

Always use an approved cable extension suitable for the power rating of this tool (see specifications), the conductor size should also be at least the same size as the machine, or larger. When using a cable reel, **ALWAYS** unwind the cable completely.

SETUP AND OPERATION

This bore hole pump is designed to pump soft water from bore holes, wells, underground springs or storage tanks to supply single sprinkler or irrigation systems. The pump is watertight and must be submerged in water (max depth 15m).

Suitable pumping liquids are:

- Clear water.
- Rain water.

The pump must **NOT** be used to pump:

- Salt water.
- Liquid foods.
- Corrosive or chemical substances.
- Flammable, explosive or volatile liquids.
- Sandy or abrasive liquids.
- Sewerage.
- Liquids containing textile materials or paper fragments.

SETUP:

- Attach the delivery pipe to the delivery port.
NOTE: DO NOT install a non-return valve on the pump delivery side, as one is already built into the pump. The non-return valve prevents the pump from draining when stopped.
- Secure the supply cable to the delivery pipe.
- Secure the rope, and lower the pump into the bore hole.
NOTE: the rope should bare the weight of the pump, NOT the delivery pipe or the supply cable.
- The pump must be positioned at least one metre above the bottom of the bore hole. Sand and other material found in pumped liquid will cause rapid deterioration of the pump and reduce it's efficiency.
- Before starting the pump, make sure that the delivery pipe is unobstructed and the delivery port is open.
- To start the pump insert the plug into the mains supply, to stop the pump remove the plug from the supply.
NOTE: the pump is equipped with a thermal-amperometric motor protector. In case of overload, the motor protector shuts down the pump automatically. When the motor has cooled the pump starts up again automatically. If the motor protector steps in, it is absolutely necessary to locate and eliminate the cause of the malfunction. (refer to trouble shooting on page 6).
NOTE: pumped liquid may become contaminated by the lubrication contained in the pump.

MAINTENANCE

⚠ **WARNING: ELECTRIC SHOCK HAZARD!** ⚠

Before carrying out any maintenance or cleaning operations, disconnect the pump from the power supply.

This pump does not require any particular maintenance and all repairs must be carried out by an authorised service centre only, however:

- After removing the pump from the water, drain and rinse with clean water.
- To clean the suction filter, use a jet of clean water.
- If the pump's turbines need replacement, take the pump to an authorised service centre.
- If the pump's power supply cable is damaged it **MUST** be replaced by the manufacturer or an authorised service centre.

TROUBLE SHOOTING

PROBLEM: The pumps motor does not start or stops suddenly after a few seconds.	
CAUSE:	TROUBLE SHOOTING:
No power supply. The thermal-amperometric motor protector has deactivated the pump due to overload. Solid particles have obstructed the suction filter.	Check the electrical connections. Unplug the pump and clean it. Check the water temperature (max 35°C). Unplug the pump and clean it.
PROBLEM: The pump is running but no water is being delivered.	
CAUSE:	TROUBLE SHOOTING:
The pump is not sufficiently submerged. Clogged suction filter. There is no outflow of air because the delivery pipe is obstructed.	Lower the pump deeper in the water. Unplug the pump and clean it. Remove obstructions from the delivery pipe.
PROBLEM: The flow rate is insufficient.	
CAUSE:	TROUBLE SHOOTING:
Clogged suction filter. Diameter of external pipe is too small. Too high head.	Unplug the pump and clean it. Use a larger diameter pipe. Reduce the head.