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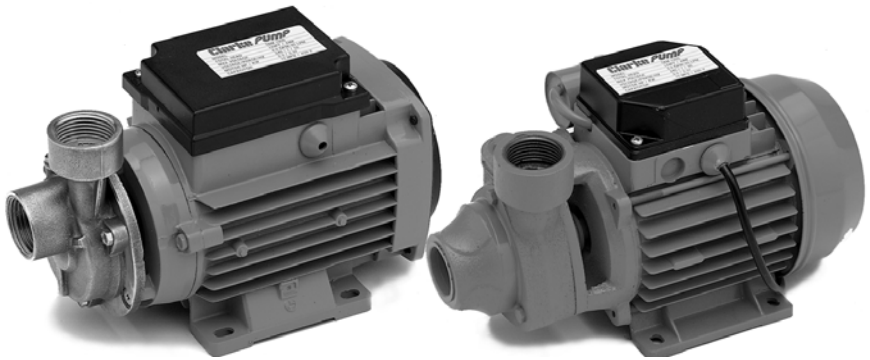
All sizes for car & commercial use.

Clarke INTERNATIONAL
For spare parts and servicing, please contact your nearest dealer, or Clarke International on
020 - 8988 - 7400
e-mail: Parts@clarkeinternational.com e-mail: Service@clarkeinternational.com

Clarke™ PUMP



TAM100 & CEB101

Part Nos. 7230035 & 7230020

OPERATING & MAINTENANCE INSTRUCTIONS

CE

0800

Thank you for purchasing this CLARKE Water Pump, which is a general purpose pump, suitable for a variety of applications involving the transfer of clean, cold water ONLY.

The CEB101 differs from the TAM 100 model in that it has a brass body designed for longer life, and an increased resistance to corrosion.

To help ensure long, trouble free performance and the protection afforded by the warranty, please follow carefully all the instructions and recommendations given in this booklet.

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.

SAFETY PRECAUTIONS

1. Ensure the pump is installed in a horizontal position with the outlet facing vertically upwards, and that it is firmly anchored via its fixing screws.
2. Ensure there is an adequate air flow around the pump. DO NOT mount it in an enclosed atmosphere.
3. Ensure all water pipes - supply or discharge, are adequately supported where necessary, so as not to put a strain on the pump connections.
4. DO NOT allow the pump to run dry, as this will cause serious damage to the pump seals.
5. Ensure the inlet to the pump is completely unrestricted.
6. Ensure the pump is protected from the elements, neither the motor nor the electrical terminal box is intended to be waterproof.
7. Ensure that all pipes are protected against damage where necessary, and that they are suitably lagged to avoid the possibility of freezing during cold weather.

ACCESSORIES

1" Foot Valve Filter	7950561
1" BSP Spigot Hose Connector	7950210
1" I.D. Reinforced Hose for suction and delivery.	7955010
1" I.D. Layflat Hose for delivery only.	7955110

SPECIFICATIONS

	TAM100	CEB101
Motor	230V 50Hz 1ph	230V 50Hz 1ph
Power	0.5HP	0.5HP
Speed	2800 RPM	2800 RPM
Max. Head	44M	40M
Max. Lift (Suction)	8M	8M
Bore Size	1"BSP	1"BSP
Max. Output	40 litres/min	38 litres/min
Weight	5.8kg	6.25kg
Part Number	7320035	7230320

NOTE: As the pumping head is increased, so the flow rate of water will decrease.

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 pump's data plate

PARTS & SERVICE

Please contact your nearest dealer, or
CLARKE International, on one of the following numbers.

PARTS & SERVICE TEL: 020 8988 7400

PARTS & SERVICE FAX: 020 8558 3622

or e-mail as follows:

PARTS: Parts@clarkeinternational.com

SERVICE: Service@clarkeinternational.com

1. With the pump, all pipes/hoses and the foot valve in position, unscrew the priming plug (small hexagon nut on top of pump body, adjacent to the pump outlet) and fill to capacity with clean water. Replace the priming plug.

NOTE: As the filler hole is quite small, it is recommended that you fill the inlet pipe with water before it is connected to the pump, and top up through the filler plug once the pipe is connected.

2. Adjust any device which may be fitted to the outlet side of the pump, so as to ensure as great a flow as possible.

3. Switch on the pump. Water should start to flow through the system. Check for leaks and adjust the flow if necessary using the gate valve (or other type of restriction) on the delivery side of the pump. Remember that some resistance (head) is required on the outlet side of the pump to prevent motor overload.

TROUBLE SHOOTING

If the system is set up properly, there is little likelihood of problems arising, but if water will not flow as it should then check the following points:-

1. The suction hose and connections including the filler plug need to be completely air tight, otherwise air will be drawn in and either reduce or completely stop the flow of water.

2. Ensure that the system has been fully primed with water up to the level of the filler plug.

3. Check to see that no foreign matter is fouling the intake system and check the filter is not blocked or obstructed.

4. Check that the vertical height between the level of the water intake and the ultimate discharge point does not exceed 38 metres. If this should be the case then the height must be reduced.

Should you still experience problems, then contact your Clarke dealer, or CLARKE International Service Department for advice.

Clarke INTERNATIONAL

ELECTRICAL CONNECTIONS

WARNING: THIS MACHINE MUST BE EARTHED.

Installation should be carried out by a qualified electrician in accordance with I.E.E. Regulations. However, in the further interests of safety we would emphasise the following :-

This pump should be connected to a standard domestic 13 amp, 230 volt (50Hz), electrical supply and we strongly recommend that the connection be made via a Residual Current Device (RCD).

IMPORTANT: Should the supply be taken from a normal 13 amp socket, then the plug used must be to BS 1363 standard, and the wires should be wired up in accordance with the following colour code:

Green & Yellow ..... Earth or marked with a letter "E" or Earth symbol "⏚".
Blue ..... Neutral or terminal marked with a letter "N"
Brown ..... Live or terminal marked with a letter "L"

FUSE RATING

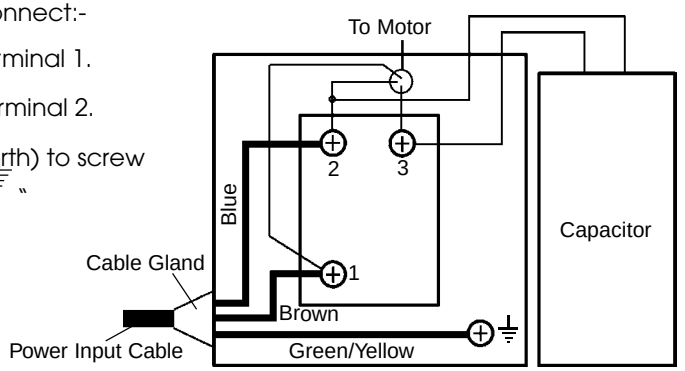
The fuse in the plug must be rated at **5 amps**

WIRING CONNECTIONS FOR TAM100

Make electrical connections inside the terminal cover in accordance with the instructions below:

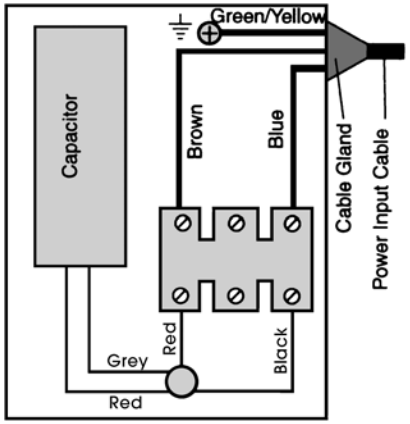
From mains supply, connect:-

1. BROWN (Live) to terminal 1.
2. BLUE (Neutral) to terminal 2.
3. YELLOW/GREEN (Earth) to screw terminal marked "⏚"



WIRING CONNECTIONS FOR CEB101

Make electrical connections inside the terminal cover in accordance with the diagram opposite:



WARNING

Do not attempt electrical installation work if you are in any doubt as to how it should be done properly. Consult a qualified electrician.

WATER CONNECTIONS

IMPORTANT: The pump must not be connected to the power supply until the hose/pipe installation is completed.

If any part of the system is to be connected to the mains water supply, do ensure that you comply with your local water authority regulations.

Because of the variety of possible installations, no plumbing accessories are supplied as standard with your pump. However, accessories designed specifically for this range of pumps are available from your CLARKE dealer and are listed on page 7.

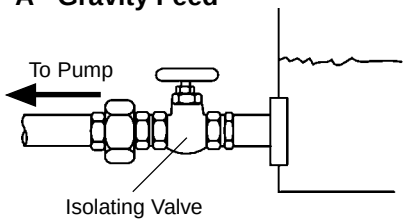
The pump must always be installed and operated in a horizontal position i.e. with the outlet port facing vertically upwards. The fixing holes in the base should be used as necessary to secure the pump firmly in its operating position. Also, ensure that there is adequate air circulation around the motor.

Avoid situations where there is the risk of water coming into contact with the outside of the pump. Neither the motor or the terminal box are intended to be waterproof.

These notes are for guidance on how to achieve a proper working system.

The schematic diagrams illustrate possible methods of pipework installation. Water

A - Gravity Feed



intake can be by means of either:- ***A. Gravity Feed*** or ***B. Suction Lift.***

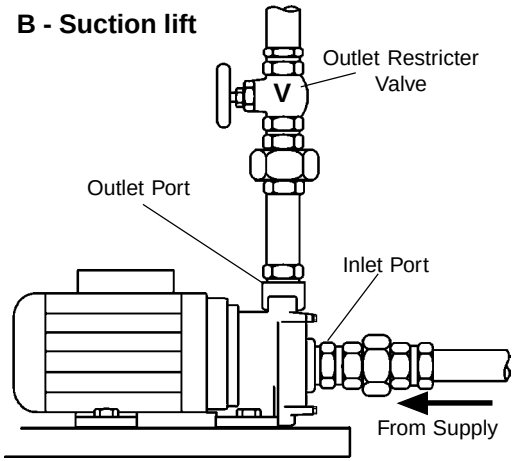
Water being taken in by the pump should, whenever possible, be fed by means of gravity (Method A). However, if this is not possible then water may be drawn from a lower level by means of suction (Method B).

The suction lift i.e. the vertical distance between the water level and the pump should not exceed distance specified for your pump (see Specifications on page 7).

When using this method, a foot valve, must be fitted to the lower end of the suction hose, (as illustrated below), so as to help retain water in the suction system.

The delivery head i.e. the vertical distance between the pump and the point of discharge should be at least 5 feet. If this cannot be achieved naturally, then it can be simulated by restricting the outlet flow from the pump.

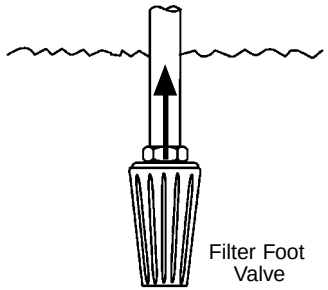
B - Suction lift



The illustration shows a gate valve (V) installed in-line on the delivery side of the pump which can be set as required to regulate the flow of water.

Do not place any such restriction on the suction side of the pump unless it serves only to isolate a gravity fed water supply.

To prevent unnecessary strain or possible distortion to the pump, ensure that adequate support is provided to the hoses and/or pipes. Remember they will be considerably heavier when filled with water.



Should sand, chemical or other contaminant come into contact with the pump, flush through with cold clean water as soon as possible.

Protect the pump and pipework from freezing. The formation of ice may cause serious damage.

PRIMING

When suction lift is used to draw water into the pump it is essential that all connections and hoses are completely air tight, otherwise the system will not work.

Before pumping will start it is necessary to completely fill the suction side with water. This is known as priming the pump and is carried out as follows :-