Clarke®

PUMP

HIPPO Jr

OPERATING & MAINTENANCE INSTRUCTIONS

1104

Thank you for purchasing this CLARKE, HIPPO JUNIOR Submersible Pump.
This highly efficient pump is designed for **pumping clean water only,** and is ideally suited for draining ornamental ponds, swimming pools, flooded cellars, etc. It is not suitable for use as a pond pump. Water temperature must not **exceed 35° C.** DO NOT run this pump continuously - see Duty cycle - Specifications.

The HIPPO JUNIOR incorporates a float switch, which automatically switches the pump ON when the water reaches approximately 37mm, and OFF when the level is reduced to approximately 5mm. Levels are adjustable within these limits.

Before attempting to operate your pump, please read this instruction manual thoroughly and follow all directions carefully, paying particular attention to the information contained under 'Electrical Installation'. This is for your own safety and that of others around you, and to help you achieve long and trouble free service from your pump.

GUARANTEE

This product is guaranteed against faults in manufacture for 12 months from purchase date. Keep your receipt as proof of purchase.This guarantee is invalid if the product has been abused or tampered with in any way, or not used for the purpose for which it is intended. The reason for return must be clearly stated. This guarantee does not affect your statutory rights.

Please note that dismantling this pump will invalidate the guarantee

SAFETY PRECAUTIONS

1. These pumps are designed to pump **CLEAN WATER ONLY.** Never use for pumping flammable liquids, chemicals, sewage, salt water, oils or corrosive liquids etc.
2. Never run the pump dry.
3. An approved Residual Current Device (RCD) **MUST** be used when pumping from ponds or swimming pools.
4. Your submersible pump may **ONLY** be used for pumping water from a swimming pool when there is no person or animal in the pool.
5. Always disconnect the pump from the electrical supply before placing it into, or removing it from the water, and before any cleaning or maintenance of the pump.
6. Always use the moulded handle with a rope or cord attached when lifting the pump. **NEVER** lift the pump by the mains cable, or, where fitted, the float switch cable.
7. **DO NOT** run the pump with the body exposed for longer than 10 minutes.
8. **DO NOT** install the pump on ground which is likely to shift.
9. Do not use the pump if the water is liable to freeze, as this can damage the pump. Remove the pump from the water and store it in a frost free location.

ELECTRICAL CONNECTIONS

Connect mains lead to a standard 230Volt (50Hz) electrical supply through a BS 1363 approved, 13 amp plug or a suitably fused isolator switch. Additionally, we strongly recommend that it be connected via a Residual Current Device (RCD).

If used for draining swimming pools or ponds, the pump MUST be fitted with a Residual Current Device (RCD), with a rated residual operating current of no greater than 30mA.

If the pump is to be connected to an outdoor electrical supply, make sure that both the plug and the socket are of a BS approved waterproof design.

In the event that the pump is hard wired into the electrical system, it must be carried out in accordance with IEE regulations.

WARNING: THIS APPLIANCE MUST BE EARTHED

IMPORTANT: The wires in the mains lead are coloured in accordance with the following code:

Green & Yellow	-	Earth
Blue	-	Neutral
Brown	-	Live

As the colours of the flexible cord of this appliance may not correspond with the coloured markings identifying terminals in your plug proceed as follows:

Connect GREEN & YELLOW cord to plug terminal marked with a letter "E" or Earth symbol "⏚ " or coloured GREEN or GREEN & YELLOW.

Connect BROWN cord to terminal marked with a letter "L" or coloured RED

Connect BLUE cord to terminal marked with a letter "N" or coloured BLACK

FUSE RATING

The fuse in the plug for this appliance must be rated at **13 amps**.

If this appliance is fitted with a plug which is moulded onto the electric cable (i.e. non-rewirable) please note:

1. 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.
2. Never use the plug without the fuse cover fitted.
3. Should you wish to replace a detachable fuse carrier, ensure that the correct replacement is used (as indicated by marking or colour code).
4. Replacement fuse covers can be obtained from your local dealer or most electrical outlets
5. The fuse in the plug must be replaced with one of the same rating (**13 amps**) and this replacement must be ASTA approved to BS1362.

IMPORTANT:If you are in any doubt regarding electrical installation, you should consult a qualified electrician.

FEATURES

The pump is of rugged and durable construction, and the motor is provided with a built in overload protector.

The chart on page 7 illustrates the flow rate at various heads. (HEAD is the distance, or height, from the surface of the water to the highest point of discharge)

All models are designed for pumping CLEAN WATER ONLY and will pump down to a water level of 5mm.

As the water level rises, the switch will float, and start the pump. As the water level falls, so will the float switch, until it stops the pump.

The Float switch is factory set to provide the correct ON-OFF switching mode, however, you can adjust the level at which the pump cuts out by sliding the float switch cable, in the clip formed in the handle, to either shorten or lengthen it as the case may be. The shorter it is, the earlier it will cut out and therefore, the deeper will be the water at this point.

Note that this pump is fitted with automatic thermal overload protection. If the pump overheats due to an obstruction in the pump, or pumping warm water for example, it will shut off automatically. Switch the pump OFF and disconnect from the mains supply. Check for blockages and allow the motor to cool (20 minutes) before attempting to re-start.

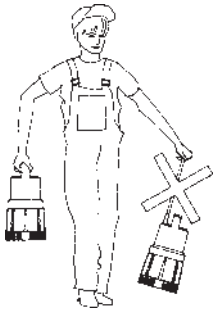
INSTALLATION

The water outlet is provided with a multi hose connector capable of accepting 1" BSP screw adapter (not supplied), or 19mm (¾" dia.) or 25mm (1"dia.) hose.

If you wish to use the 1" BSP screw fitting, you need to cut off the hose fittings, (at the groove provided below the 25mm hose fitting),otherwise, simply attach a ¾" or 1" hose to the respective connector with a worm drive clip.

If the pump is to be used in situations that demand maximum efficiency, we strongly recommend that you use a 1" dia. hose, either directly, on to the adapter supplied, or attached to a 1" BSP screw adapter (not supplied).

The pump should be placed in a vertical position, on a solid flat surface. If this is not available, sit the pump a solid surface, eg. house bricks, but ensure they are not likely to shift.



***IMPORTANT**:*

***ALWAYS** raise and lower the pump using a rope attached to the lifting handle, **NEVER** by the power cable.*

Ensure the pump is placed in a sump with adequate dimensions so as not to restrict the movement of the float switch - recommended minimum dimension - 40 x 40cm

Take all necessary precautions as described on page 3 before plugging in, and switching ON.

WARNING

This pump must NOT be run continuously,

see Duty Cycle - Specifications

TROUBLE SHOOTING

A PUMP WILL NOT START

1. Check to ensure power is switched ON.
2. Check fuse.
3. Internal Thermal Cut-out has activated. Wait for 20 mins and try again.
4. Water level too low - float switch in OFF position - Lift float to check switch.

B. PUMP WILL START BUT NOT PUMP

1. Check to ensure water intake holes, at the base of the pump, are not blocked.
2. Discharge tube clogged or obstructed.
3. The head may be too great, i.e. you are trying to lift the water too great a distance for the pump to cope with. (See specification chart page 7).
4. Impeller may be damaged - Consult your CLARKE dealer

C. PUMP WILL NOT STOP

1. Float switch may be prevented from moving to the fully down position.
2. Float switch may be faulty. Consult your CLARKE dealer for advice.

D. PUMP STOPS RUNNING

1. Thermal overload has operated. If this condition persists, investigate the cause. REMEMBER: DO NOT attempt to pump anything other than CLEAN water.
2. Float switch has cut in.
3. A foreign object has jammed the impeller.

MAINTENANCE

WARNING

Before checking the condition of the pump, ensure it is unplugged from the mains supply. If the unit is hard wired, ensure the circuit breaker is open.

Check the pump installation regularly to ensure the base inlet is clear of leaves or other debris.

These pumps should require no maintenance other than regular cleaning. If the pump starts to show signs of wear or damage, contact your CLARKE dealer for advice. Do not use the pump if there is any damage to the mains supply cable, or to the float switch or its cable. Do not attempt to repair the pump yourself, as you may damage the waterproof seal and invalidate your guarantee. Repairs must be carried out by your CLARKE dealer, or contact the CLARKE Service Department, on 020 8988 7400

SPECIFICATIONS

Motor	230V 50Hz 1Ph.
Motor Output	180Watts
Head Max.	5.5 Metres
Minimum suction level	5mm
Maximum imersion depth	5M
Max. Flow Rate	70 L/min
Max. Water temp.	35°C
Outlet Fittings	1" BSP Threaded
	19mm (¾")
	25mm (1")
Dimensions	160x210mm
Duty Cycle	S3 - 2Hrs*
Part No.	7230490

*** Duty Cycle = 2 Hours ON, followed by 1 hour OFF**