

Important Safety Instructions

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

Read & Follow All Instructions First

WARNING — Do not permit children to play with this product.

A qualified electrician in accordance with applicable electrical codes must carry out all electrical wiring. Before working on any motor be certain that the electrical source is switched off.

Location of Pump

Locate the pump as close to the pool or spa as practical and plumb the suction line as direct as possible. This will reduce line loss or friction through pipe and fittings. Suction lines should be installed with a gradual incline toward the pump to prevent air lock.

Provide the necessary space around the pump for future inspection and maintenance. If the pump is installed outside we recommend a slatted cover to protect exposed motors from the sun and rain.

Installation

The pump suction line should not be smaller than that for which the pump is made. All pipe work must be airtight; especially the suction pipe. Allow 300mm minimum of straight vertical pipe between the pump discharge port and the first elbow fitting.

Tighten the pump fittings only as much as is required to insure a tight connection. Excessive torque is unnecessary and may cause damage to the pump.

The weight of the pipe work should be supported independently and not carried by the pump.

The pump motor must be wired for the proper voltage, and rotation, in accordance with the wiring diagram supplied with the motor.

Voltage, phase, ampere draw and cycles are given on the motor spec. Plate.

Starting & Priming

Do not run the unit dry this will damage the pump seals.

Always be certain that the strainer housing is filled with water before starting the unit.

Certikin pumps prime and reprime themselves providing the strainer housing is filled with water. Should you loose this liquid from the housing accidentally or by draining the system it will be necessary to refill the housing before starting the pump again.

Allow a reasonable amount of time for priming. High suction lifts, or long suction lines, require additional time and reduce the performance of the pump.

After the pump has been filled with water, and the motor started, allow a few moments for the pump to start delivering liquid. If flow does not start within ten minutes, stop the motor and refer to the trouble shooting guide.

Maintenance

Never work on pump without turning the power off!

The strainer basket should be inspected and cleaned frequently. After cleaning inspect the cover and oiring to check for damage; if damaged replace before restarting the motor. Tighten the cover by hand only.

If your pool is winterised until next season, care must be taken to protect the pump from frost damage. Drain the pump completely by removing the two drain plugs at the bottom of the casing. Do not replace plugs store them in the basket over the winter.

Fluid Temperature

Temperature range for fluid passing through the pump is 0 deg C — 40 deg C.

Trouble Shooting

Problem	Problem Causes	Recommended Action
Pump motor will not start	No power to motor. Incorrectly connected. Incorrect power supply. Defective capacitor. Pump jammed.	<ul style="list-style-type: none"> • Check all power is on. • Be sure fuse or circuit breaker is properly set. • Correct power supply. • Change capacitor. • With power off turn shaft- it should spin freely. If not call engineer to disassemble and repair.
Pump will not prime.	Suction air leak. No water in pump. Closed valves / blocked lines.	<ul style="list-style-type: none"> • Make sure water in pool is high enough to flow through skimmer. • Make sure strainer basket is clean and positioned properly. • Hand tighten strainer cover snugly. • Check all pipe work and fittings on suction are sealed. • Make sure strainer basket is full of water. • Open all valves in system. • Clean skimmer and pump strainer baskets.
Motor does not turn.	No power to motor. Pump jammed.	<ul style="list-style-type: none"> • Check that all power is on. • Be sure fuse or circuit breaker is properly set. • Timer properly set? • Check wiring at terminals. • With power off turn shaft - it should turn freely. If not call engineer to disassemble and repair.
Low flow.	Dirty filter. Dirty skimmer basket and pump basket. Suction air leak. Closed valve / blocked lines. Low speed motor setting (2-speed motors).	<ul style="list-style-type: none"> • Back wash filter when filter pressure is high. • Clean skimmer and pump strainer baskets. • (See problem 1) • (See problem 1) • Switch to high speed.

Problem	Problem Causes	Recommended Action
Motor runs hot.	<p>These motors will run "hot" to the touch. However, this is normal, they are designed this way. Thermal overload protector will function to turn them off if there is an overload or high temperature problem. Excessive heat can be caused by:</p> <p>Low voltage or incorrect voltage. Unit installed in direct sun light. Poor ventilation.</p>	<ul style="list-style-type: none"> • Wiring to be corrected by licensed electrician. • Shield motor from sun. • Do not tightly cover motor.
Noisy operation of motor.	Worn bearings.	<ul style="list-style-type: none"> • Have an electrician replace bearings in motor.
Noisy operation of pump.	<p>Air leak in suction line- bubbles in water returning pool at inlet.</p> <p>Restricted suction line due to blockage or undersize pipe. Indicated by high vacuum reading at pump suction. Foreign matter (gravel, metal, ect.) in impellor.</p> <p>Cavitation.</p>	<ul style="list-style-type: none"> • Repair leak. • Check suction pipe, strainer cover in place? Cover o'ring clean and undamaged. • Remove blockage or increase suction pipe size. Make sure strainer basket is clean and all suction vales are fully open. • Have engineer disassemble pump and remove foreign matter. • Improve suction conditions. (Reduce suction lift or increase pipe size). • Increase discharge pressure and reduce flow by throttling discharge valve.
Motor overload protection "kicks out"	<p>Motor is improperly connected.</p> <p>Low voltage due to undersized wire or low incoming voltage.</p> <p>Overload due to binding in pump or wrong size impellor.</p>	<ul style="list-style-type: none"> • Have electrician check wiring diagram on motor. • Have electrician check with voltmeter. Increase size of supply wire. Report low voltage to power company. Voltage must be within 10% of motor nameplate. • Indicted by high amperage readings on motor, binding shaft. • Have electrician disassemble unit and repair.

Pump Limited Warranty

The company warrants its new products to be free from defects in workmanship and material for a period of twelve months from date of initial installation or eighteen months from the date of shipment from the factory, whichever comes first. Performance of new products is further warranted to be in accordance with ratings stated in the literature or specification furnished by the Company when properly installed under normal conditions of operation.

This warranty does not extend to anyone except the first purchaser at retail. ANY IMPLIED WARRANTY WHICH THE PURCHASER MAY HAVE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE APPLICABLE WARRANTY PERIOD. IN NO EVENT SHALL THE COMPANY BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

The Company will not be responsible for any damages or losses, direct or indirect, arising in contract or in tort from any cause whatsoever including abrasives, corrosion and/or electrolysis, improper voltage supply, lightning, improper installation or modification, accident, misuse, abuse, alterations, misapplication or careless handling, nor for labour, transportation or other charges incurred in the replacement or repair of defective parts, and there are no warranties or conditions, expressed or implied, under the Sales of Goods Act or otherwise applicable except as expressly stated herein. The Company will not be responsible for any statements that are made or published, written or oral, which are misleading or inconsistent with the facts as published in the literature or specification furnished by the Company.

WARRANTY CLAIM PROCEDURES: To obtain warranty service, you must contact the retailer from which the equipment was purchased. Written permission must be obtained from the Company before any equipment claimed defective is returned for inspection.

Any new equipment that proves defective within the warranty period will, if returned to the factory with transportation charges pre-paid, be repaired or replaced, free of charge, F.O.B. factory, Witney, Oxfordshire. The Company may issue credit in the amount of the invoice value of the defective equipment in lieu of repair or replacement. The Company reserves the right to substitute new or improved equipment on any replacements.

The provisions of this additional written warranty are in addition to and not a modification of or subtraction from the statutory warranties and other rights and remedies provided by any provincial law.