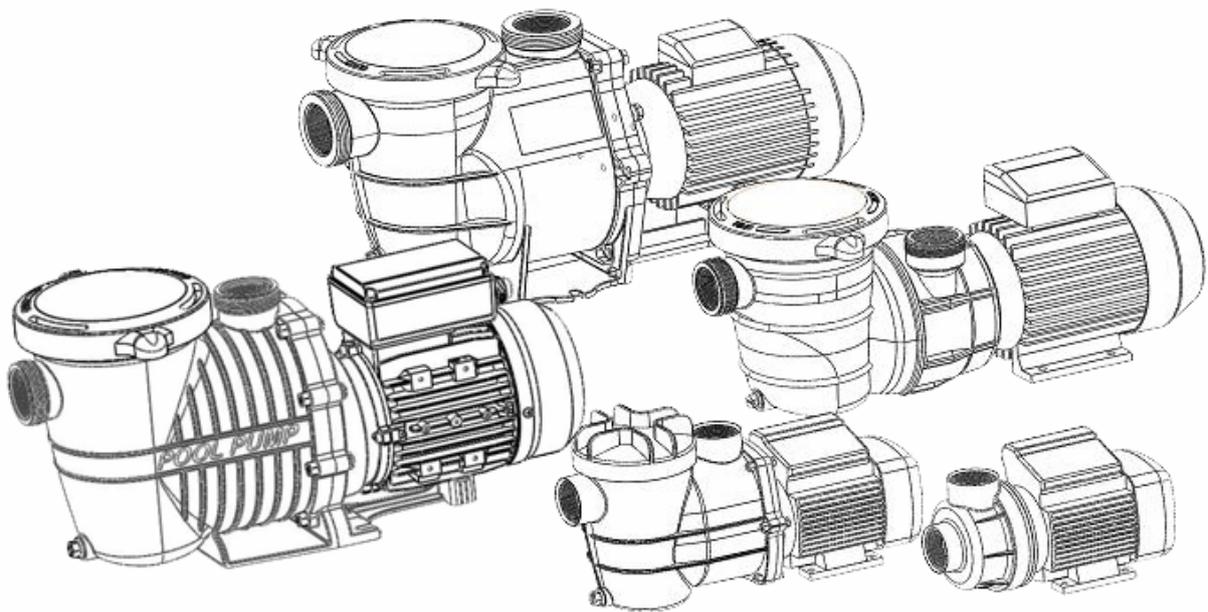




Owners Manual: - Pumps



WARNING

This equipment must be installed and serviced by a qualified technician. Improper installation can create electrical hazards which could result in property damage, serious injury or death. Improper installation will void the warranty.

GENERAL SAFETY RULES

1. The products mentioned in this manual are specially designed for the pre-filtering and re-circulation of water in swimming pools and spas.
2. They are designed to work with clean water at a temperature not exceeding **45 degrees Celsius**.
3. The installation should be carried out in accordance to the safety instructions of swimming pools, **especially Standard HD 384.7.702**, and the specific instructions for each facility.
4. The rules enforce on accident prevention should be carefully followed.
5. Any modification of the pump requires the **prior consent of the manufacturer**. Original replacement parts and accessories authorized by the manufacturer ensure a high level of safety. The manufacturer of the pump assumes no liability for the damage and injuries **caused by un-authorized replacement parts and accessories**.
6. During operation, some parts of the pump are subject to dangerous electric voltage. Work may only be performed on each pump or on the equipment connected to it after **disconnecting them from the mains power, and after disconnecting the starting device**.
7. The user should make sure that assembly and maintenance tasks are carried out by **qualified authorized persons** and that these persons have first carefully read the instructions for service and installation.
8. The operating safety of the pump is only guaranteed if the installation and service instructions are correctly followed.
9. The limit values stated in the technical table **should not be exceeded under any condition**.
10. In the event of defective operation or fault, contact the technical support department of the manufacturer or its nearest authorized agents.
11. If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person to avoid a hazard.
12. The appliance is not intended for use by young children. Young children should be supervised to ensure that they do not play with the appliance.

LOCATION

The pump must be located as close as practical to the pool. The pump must also be in a position that enables easy access for periodic servicing.

Care must also be taken to position the pump in an area that is **free from flooding in a well ventilated and dry area**.

INSTALLATION

Limited use the latest technology when designing and manufacturing our pumps, a few simple precautions during installation will ensure years of trouble free operation.

1. The pump suction line should not be smaller than 1 1/2" (40mm imperial) or 50mm true metric.
2. The suction line is to have, as few bends or elbows as possible. There must not be an air trap on the suction line.
3. Installation shall occur on a solid, flat foundation with the pump bolted securely to it.

4. **The pump electrical cable must be wired for the proper voltage and rotation in accordance with the wiring instructions.**
5. All wiring (electrical) work must be carried out **by licensed electricians** and must be installed in accordance to the local codes.
6. The motor must be grounded.
7. The weight of the plumbing and fittings is to be independently supported and not carried by the pump.
8. The maximum total head (H max) of the pump (in metres) shown on the pump label should be noted by the installer.

~ IMPORTANT ELECTRICAL NOTICE ~

The electrical installation is to be done by a licensed electrician.

*Each pump requires a circuit breaker to separate the pump from the electrical supply.
The open contact distance of the circuit breaker is to be **no less than 3mm**.*

The pump is to be supplied by an isolating transformer, or supplied through a residual current device (RCD) with a rated residual current not exceeding 30mA.

Check the pumps name plate for the following: Voltage, Amp draw and Cycle.

*The power cord, including the ground wire shall have a quality of 245 IEC66 (H07RN-F) for models **greater than 1kW** power input.*

*For models less than 1kW input the quality shall be of 245 IEC57 (H05RN-F).
All installations must comply with local codes, based on IEC 364-7-702 requirements.*

- **RESPECT THE MINIMUM GAUGE GIVEN IN THE CHART OF THE TECHNICAL MANUAL.**

ELECTRICAL CONNECTION

Check that the information on the nameplate corresponds to the power supply. Employ a competent electrician to ensure wiring installation is made in accordance with any local electrical codes. Every motor requires either a **fused disconnect switch or a circuit breaker**.

A SINGLE PHASE MOTOR has a built in thermal overload switch.

PRIMING

The pump will prime and re prime providing the hair and lint pot bowl is full of water and there is sufficient supply from the suction point. (This is for pumps# CC2542-CC2543- CC2544-CC2547- CC2548)

If you lose water from the hair and lint pot bowl it will be necessary to re-fill it before starting.

1. Remove the clear lid and fill the hair and lint pot bowl with water.
2. Replace the lid ensuring **the o-ring is correctly** located and start the pump.

After you have done this allow a **few minutes (maximum)**, for the pump to start delivering water.

WARNING:

High suction lift or long suction lines will require additional time to prime and can severely affect the performance of the pump. If the pump will not prime, (flow) repeat step 1 and 2 above.

The pumps # CC2513-CC2515-CC2527-CC2528-CC2529-CC2530 are required to work or installed below the water level. A Check Valve or “one-way” valve must be used between pool and pump in-let, if pump is to be used above the water line of the pool, (Warranty is void - if a check valve is not used for this operation). After the check valve is fitted, fill pre-filter/pipe work with water, switch pump on and off (couple of seconds), re-fill with water when necessary until pump is primed and flow commences.

WARNING:

Mechanical seals if allowed to run dry can be damaged rapidly and may need to be replaced.

ENSURE that there is always adequate water in the hair and lint pot bowl before you commence start up.

If you are unable to prime the pump please see the trouble-shooting guide.

Ensure all **suction and discharge valves** are open before you start the pump, operating the pump with these valves shut can damage the pump.

MAINTENANCE

The strainer basket in the hair and lint pot bowl should be inspected and cleaned at **regular intervals**.

1. Remove lid and lift out basket.
2. Remove debris and hose off with clean water if necessary.
3. Inspect the lid gasket, lubricate with **SILICON** based grease only if needed. If it is damaged replace.
4. Replace the strainer.
5. Re-prime the hair and lint pot bowl.
6. Correctly locate the o-ring.
7. Replace the lid (**hand tighten**) only.
8. Switch on pump.

In Climates where the pump may be **exposed to frost or freezing**, care must be taken to ensure the pump is protected from damage. (**Warranty Void** if damage occurs)

It is **recommended** that if the pump **is not** used during this winter period it should be **drained completely**.

Do not replace the drain plug. Store it in a safe place until you require the use of the pump. **Store drain plug for example within the hair and lint pot bowl basket.**

If at all possible remove the pump away and store it in a dry location during this period.

When you re-activate the pump, ensure all seals and o-rings are in operational condition, re-grease if necessary (**replace**) if unsure of condition.

Check that the motor shaft moves freely before re-activation.

FLUID TEMPERATURE

The permissible temperature is **> than 0°C and < than 45°C**. The pump should never be operated outside of these temperatures or damage may occur.

WARNINGS FOR INSTALLATION AND ASSEMBLY TASKS

1. When connecting electric cables to the motor of the pump, be careful to correctly arrange them inside the connection box, verify that no bits of cable are left inside the box on closing it. **See that the earth wire is correctly connected.** When connecting the motor, follow the wiring diagram supplied with the pump.
2. Be especially careful **that no water enters the motor or electrical parts under voltage.**
3. In the event that the planned use is not as specified, adaptations and supplementary technical rules may be necessary.

WARNINGS FOR START UP

Before starting the pump, verify the calibration of the electrical protection devices of the motor and that the protections against electrical and mechanical contacts are correctly positioned and attached.

WARNINGS FOR ASSEMBLY AND MAINTENANCE TASKS

1. **Be especially careful that no water enters the motor or the electrical parts under voltage.**
2. Avoid all contact, even accidental, with the moving parts of the pump.
3. Wait until the pump has stopped completely before handling it in any way.
4. **Before carrying out electrical or mechanical maintenance tasks, make sure that the machine has been disconnected from the mains and that starting devices have been locked.**
5. It is advisable to follow the steps listed below before handling the pump in any way.
 - a) Turn off the voltage to the pump.
 - b) Lock starting devices.
 - c) Verify that there is no voltage in the circuits, including ancillary devices and auxiliary circuits.
 - d) Wait until motor stops completely.

The above list should be considered indicative and not binding for the purpose of safety; specific safety rules may exist in particular regulations.

Regularly verify:

1. The correct attachments of the mechanical parts and of the support screws of the pump.
2. The correct position, attachment and condition of the supply cables and of the insulating parts.
3. The temperature of the motor. In the event of any irregularity stop the machine immediately and have it repaired.
4. The vibration of the pump. In the case of any irregularity, stop the machine immediately and have it repaired.

▲ CAUTION

Owing to the complexity of the cases covered, the instructions for installation, use and maintenance contained in this manual do not attempt to examine all possible and imaginable cases of service and maintenance. If supplementary instructions are required or if special problems arise, do not hesitate to contact the distributor or to address directly the manufacturer of the pump.

TECHNICAL DATA

TYPE	72512	72513	72514	72515	72527	72528	72529	72530	72542	72543	72544	72548
Input power	250	250	400	400	550	600	1000	1100	800	1000	1400	1500
H. Max	6M	6.5M	8.5M	9M	7.5M	8M	10M	11M	12M	13M	14.8M	18M
Q. Max/min	132L	125L	170L	166L	240L	265L	280L	296L	250L	300L	360L	380L
V	220~240											
HZ	50											
IP	IPX5											

TROUBLE SHOOTING

SYMPTOMS	PROBABLE CAUSE	WHAT TO DO
Pump will not prime	Suction air leak	Make sure water level is correct through suction points. Ensure baskets and strainers are free of debris. Tighten all fittings/unions on the suction side of the pump, remove and replace mechanical seal.
	No water in the pump	Make sure the filter tank is full
	Closed valves or blocked lines	Open all valves in system, clean skimmer and pump basket, check pump impeller of blockage
Motor will not run	No power to motor	Check that all electrical switches are on. Ensure the circuit breakers are properly set. Check if timer is set properly. Check motor wiring at terminals
	Pump jammed	With power switched off turn pump shaft(should spin freely).
Low flow	Dirty filter	Backwash or clean cartridge.
	Dirty skimmer and pump strainer	Clean skimmer and pump strainer.
	Suction air leak	See 1
	Closed valve or blocked line	See 1
Motor runs hot	Low or incorrect voltage	Supply to be correct by electrician. Motors running hot to touch are normal. Thermal overload protector will function to turn them off if there is an overload or excessive high temperature problem.
	Installed in direct sunlight	Shield from weather
	Poor ventilation	Do not tightly cover or enclose motor
Noise pump operation	Bad bearing	Have electrician replace
	Air leak in suction	See 1
	Suction blockage	Locate and clean blockage
	Disturbance in impeller	Contact supplier
	Cavitations	Improve suction, reduce suction lift, reduce number of fittings, Increase pipe size, increase discharge pressure and reduce flow by throttling discharge valve.
Motor overload cuts out	Motor not connected properly	Have electrician check wiring.
	Low incoming voltage	Voltage at motors should be no more than 6% above or below nameplate voltage. Have electrician check voltage, ensure pump is not running on an extension cord, Report low supply to authorities.
	Over load due to binding in pump or wrong size impeller	Contact supplier

WARNING: If the pump is within the stated warranty period and you experience faults always contact your supplier. Failure to do this may **void warranty**. Pumps are designed for 24/7 operation or when needed. Pumps can be used with salt water but only if left on for 24/7 operation. **Warranty void** if found on inspection that dried salt is the reason for failure (pump switched off then not thoroughly washing the pump parts i. e. impeller, “O” rings and seals, with copious amounts of water) as this will break down seals and “O” rings.

All electrical work is to be carried out by a Qualified Electrician; under no circumstances should you attempt repairs on the electrical components of pumps unless you are qualified to do so.