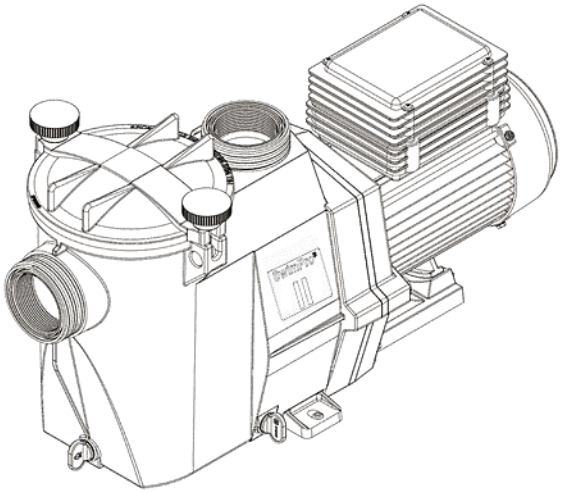
SwimPro®

II

SWIMMING POOL PUMP



INSTALLATION & OPERATING INSTRUCTIONS

Warning

The Pump Motor is an electrical device and as such should not be disassembled or serviced by anyone other than an authorised Hayward Service Technician or qualified Electrical Service Company. An experienced Pool Service Technician should attend to any other problems that cannot be corrected by routine maintenance.

INTERMARK

8175 W. Buckeye Rd. Phoenix, AZ 85043 USA

WARNING: Electrical Hazard. Failure to follow instructions can result in serious injury or death. FOR USE WITH SWIMMING POOLS

WARNING: Read and follow all instructions in this manual and on the equipment. Failure to follow instructions can cause serious injury or death.
WARNING: Electrical Hazard. Failure to follow Instructions can result in serious injury.
WARNING: Appropriately qualified and licensed personnel should install the pump and carry out the electrical connections.
WARNING: All electrical connections must be done by a qualified electrician according to local electrical standards.
WARNING: Pump should be wired to the main supply through an approved and correctly rated contactor and GFCI.
WARNING: Children and persons with reduced physical, sensory or mental capabilities, or lack of experience should not handle and operate the pump. Fingers and foreign objects should be kept away from the openings and moving parts.
WARNING: Motor must be suitably grounded.
WARNING: The motor must be connected with other bonded parts using appropriately sized conductor using the bonding lug.
WARNING: Power supply voltage required by motor should correspond to that of the network and correctly sized cables should be used to connect the pump motor.
WARNING: Disconnect the pump from the main power supply completely before servicing.
WARNING: Ensure that the appropriate precautions have been taken to prevent suction entrapment. A minimum of two correctly sized suction points are required for each pump.
WARNING: Never run the pump dry! Running the pump dry damages the seals and bearings and can cause leakage and flooding.
WARNING: Do not try to open the lid or service the pump while it is in operation.
WARNING: Do not use petroleum based lubrication for the plastic and rubber components as they will damage the components and lead to failure.

WARRANTY

The SwimPro II pump is warrantied against defects in materials and workmanship for a period of **180 days from the date of purchase**. The warranty does not apply to components like gaskets, seals, bearings etc, that wear during the course of normal operation as these require routine replacement in a timely manner.

Parts which fail or become defective during the warranty period, except as a result of negligence, improper storage, transportation, installation and operation, use or care, shall be repaired or replaced at the point of purchase only. No returns may be made directly to the manufacturer.

Any claim against the warranty should be made at the point of purchase only.

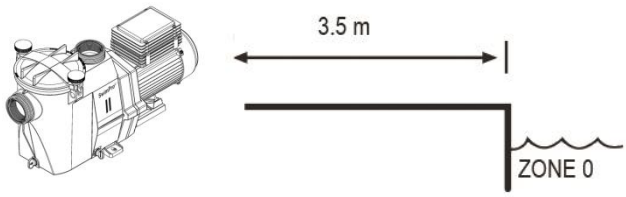
Any remedy under warranty shall not exceed the return of the amount of the purchase price paid by Buyer, and under no circumstances is the manufacturer or supplier liable for any special or consequential damages, including, but not limited to, personal injury, property damage, damage to or loss of equipment, lost profits or revenue, costs of renting replacements, and other additional expenses.

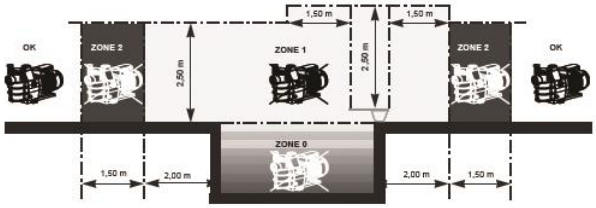
GENERAL POINTS

Install the pump at a suitable distance from the pool to reduce the distance between the suction point and the pump as much as possible to avoid pointless excessive pressure drops on the hydraulic circuit.

However, it is essential to comply with the safety distance required by the current installation standard (3.5 metres minimum).

Install and use the product at an altitude less than 2000m.





Install the pump in a dry, well-ventilated place. The motor requires the air to circulate freely around it to allow natural ventilation. Check regularly that no objects, leaves or other debris are blocking the motor cooling system.

The pump must be installed to ensure that the external disconnection switch incorporated into the fixed unit is visible and easily accessible. The switch must be located near to the pump.

The pump must be permanently installed on a concrete base using 8mm lag screws suitable for concrete, screwed into drilled implantation holes. Lock washers must be used to prevent the installation lag screws working loose over time. If the pump has to be mounted on a wooden board, Ø 8mm hexagonal wood screws must be used combined with lock washers to prevent the screws working loose over time.

Necessary measures:

- Connect the pump to the earth: Never operate the pump unless it is connected to the earth.
- Connect the pump with a suitably sized cable. Insufficient cable size can lead to voltage drops and affect pump performance.
- Include a 30mA differential protection to protect people against electric shocks which may be caused by a breach of the equipment's electrical insulation.
- Include short-circuit protection (the rating is determined according to the value given on the nameplate on the motor).
- Include a means of disconnection from the power supply having an opening distance on the contacts of all the poles ensuring the power supply is completely cut off under the conditions of a category III overvoltage.

Single phase electric motor:

The single phase motors fitted to our pumps are provided with thermal protection. This protection operates on an overload or in the event of abnormal heating of the motor coil and is reset automatically when the winding temperature drops.

Three phase electric motor:

On three phased motors the internal heat protection (screw terminal blocks) is to be connected serially in the pump's power contactor command line.

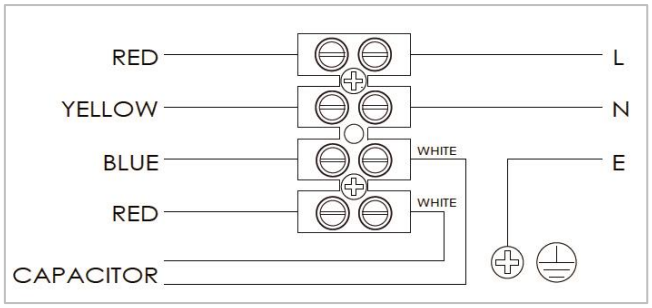
Check the running direction of the pump motor (a label is provided on the motor housing to indicate the motor running direction).

If so required by regulations and whatever the motor type, in addition to the devices mentioned above, it is also necessary to install a magneto-thermal protective device calibrated in accordance with the indications on the motor name-plate.

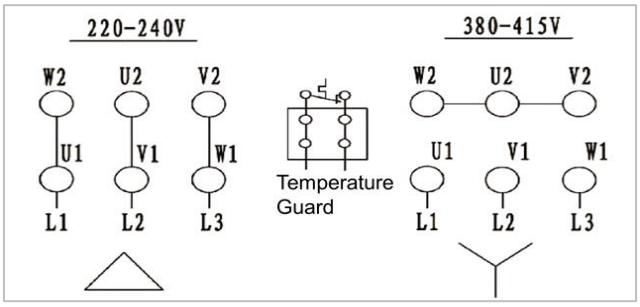
ELECTRICAL CONNECTION:

- Make sure that the power supply voltage required by the motor corresponds to that of the distribution network and that the power supply cables matches the power and current of the pump.
- All the electric connections of the pump and the possible change of power supply cable must be hand-led by a qualified professional so as to avoid all possible danger.
- When making these electrical connections, refer to the diagram given under the lid of the motor terminal box.
- Be sure to check the electric connections are tight and sealed before powering up.
- The pre-wiring that might be included on some of the pumps must be removed for final connection of the pump to the electric power supply. This pre-equipment is only used for works testing during the manufacturing phases.

ELECTRICAL WIRING DIAGRAM - Use Copper Conductors only



Single Phase



Three Phase

INSTALLATION:

Install the pool pump so as to reduce pressure drops to a minimum whilst complying with the distances specified in the installation standard, namely 3.5m minimum between the pump and the pool. The suction pipe must be installed with a slight uphill incline towards the pump axis. Ensure that the connections are correctly tightened and watertight. However, avoid excessively tightening the pipes. For plastic materials, use Teflon only to ensure water - tightness. The diameter of the suction pipe shall depend on that of the discharge pipe. Avoid damp or non-ventilated locations. The motor requires the cooling air to circulate freely.

IMPORTANT: Check the direction of rotation before permanently connecting the motor.

INSTRUCTIONS FOR START-UP AND PRIMING:

Fill the body of the strainer with water up to the level of the suction pipe.

Never run the pump without water, as the water is necessary for cooling and lubrication of the mechanical shutter. Open all the suction and discharge pipe valves and the filter air purge valve if there is one. (Any air in the suction pipes must be eliminated). Start up the generator and wait a reasonable time for priming. Five minutes is not excessive for priming (this time depends on the suction head and the length of the suction pipe). If the pump does not start or does not prime, please refer to the troubleshooting guide.

MAINTENANCE

1. Completely disconnect the pump from the mains power supply before opening the cover and cleaning the strainer. Clean the strainer basket regularly. Do not bang on the basket to clean it. Check the seal on the cover of the strainer and replace it if necessary.
2. The motor shaft is mounted on self-lubricating bearings which do not require any subsequent lubrication.
3. Keep the motor clean and dry and ensure the ventilation openings are not blocked.
4. The mechanical shutter occasionally starts to leak and must then be changed.
5. Apart from cleaning the pool, all repairs, servicing and maintenance must be carried out by a Hayward-approved agent or a qualified person.

WINTERIZING

1. Empty the pump by removing all the drain plugs and store them in the strainer basket.
2. Disconnect the pump, remove the pipe connectors and store the entire unit in a dry, well-ventilated place or at least take the following precaution: disconnect the pump, remove the bolts attaching the pump housing to the motor bracket and store the unit in a dry, well-ventilated place. Then cover the pump housing and strainer to protect them.

N.B.: Before re-commissioning the pump, clean all the internal parts to remove dust, lime scale etc.

TROUBLESHOOTING

A) The motor does not start

1. Check the electrical connections, switches or relays, and the circuit breaker or fuses.
2. Ensure that the motor turns freely by hand.

B) The motor stops, check

1. The cables, connections, relays etc.
2. Voltage drop on motor (frequently caused by cables that are too small).
3. That there is no seizing or overheating (by reading the absorbed current).

N.B.: The motor on your pump is fitted with a thermal protection which, in the case of overload, will automatically cut the circuit and avoid the motor being damaged. This triggering is caused by abnormal usage conditions which need to be checked and corrected. The motor will restart without any intervention as soon as normal operating conditions are restored.

C) The motor growls but does not start, check that a phase is not cut, the capacitor is not damaged.

D) The pump does not prime

1. Ensure the strainer housing is filled with water, that the cover seal is clean and correctly positioned and that no air can enter. If necessary, tighten the cover lock screws.

2. Ensure that all the suction and discharge valves are open and not blocked and that the suction outlets in the pool are fully submerged.

3. Check that the pump draws by freeing the suction as close as possible to the pump:

a) if the pump does not draw despite being sufficiently full of priming water

1. Tighten the bolts and pipe accessories on the suction side.
2. Check the voltage to ensure that the pump is rotating at the correct speed.
3. Open the pump and check that nothing is blocking it inside,
4. Replace the mechanical shutter.

b) If the pump is drawing normally, check the suction pipe and strainer which may be blocked or be allowing air to enter.

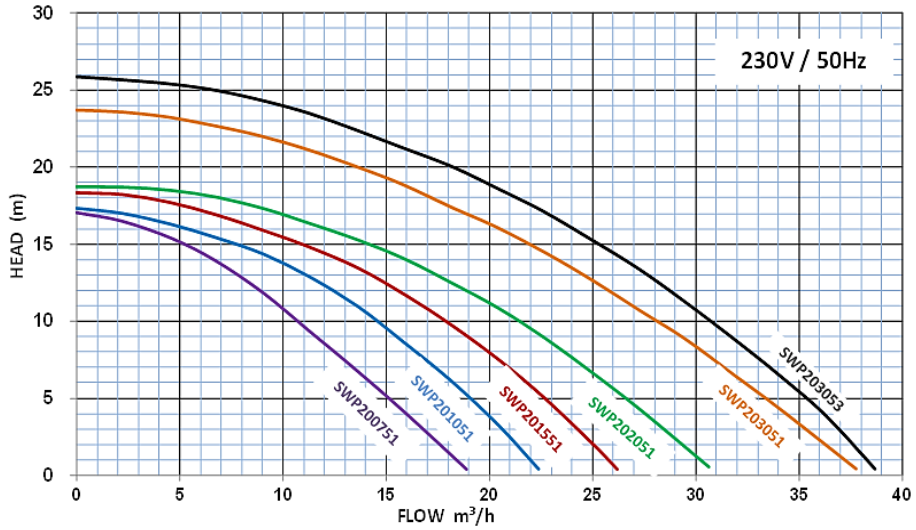
E) Low flow - Generally, Check for :

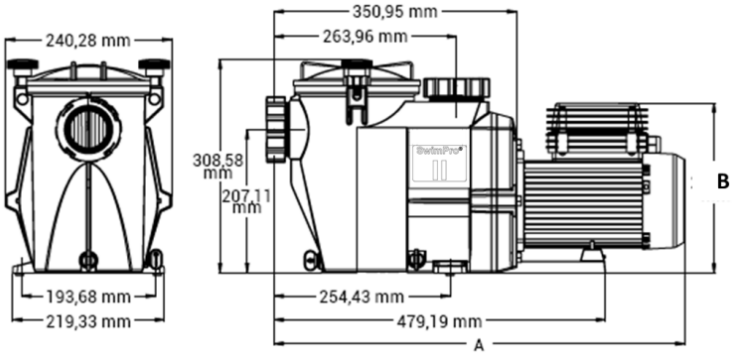
1. Clogged or restricted strainer or suction line; undersized pool piping.
2. Plugged or restricted discharge line of filter (high discharge gauge reading).
3. Air leak in suction (bubbles issuing from return fittings).
4. Pump operating under speed (low voltage).
5. Plugged or restricted impeller.

F) Noisy pump, check

1. That no air is entering the suction side and causing dull crackling in the pump.
2. That there is no cavitation caused by insufficient diameter or a restriction in the suction tube. An over-sized discharge pipe can also cause cavitation. Use pipes of the correct size or purge the pipes if necessary.
3. That no vibration is occurring due to incorrect fitting.
4. That there are no foreign bodies in the pump housing.
5. That the motor bearings have not seized due to excessive clearance, rust or prolonged overheating.

PUMP DATA AND PERFORMANCE

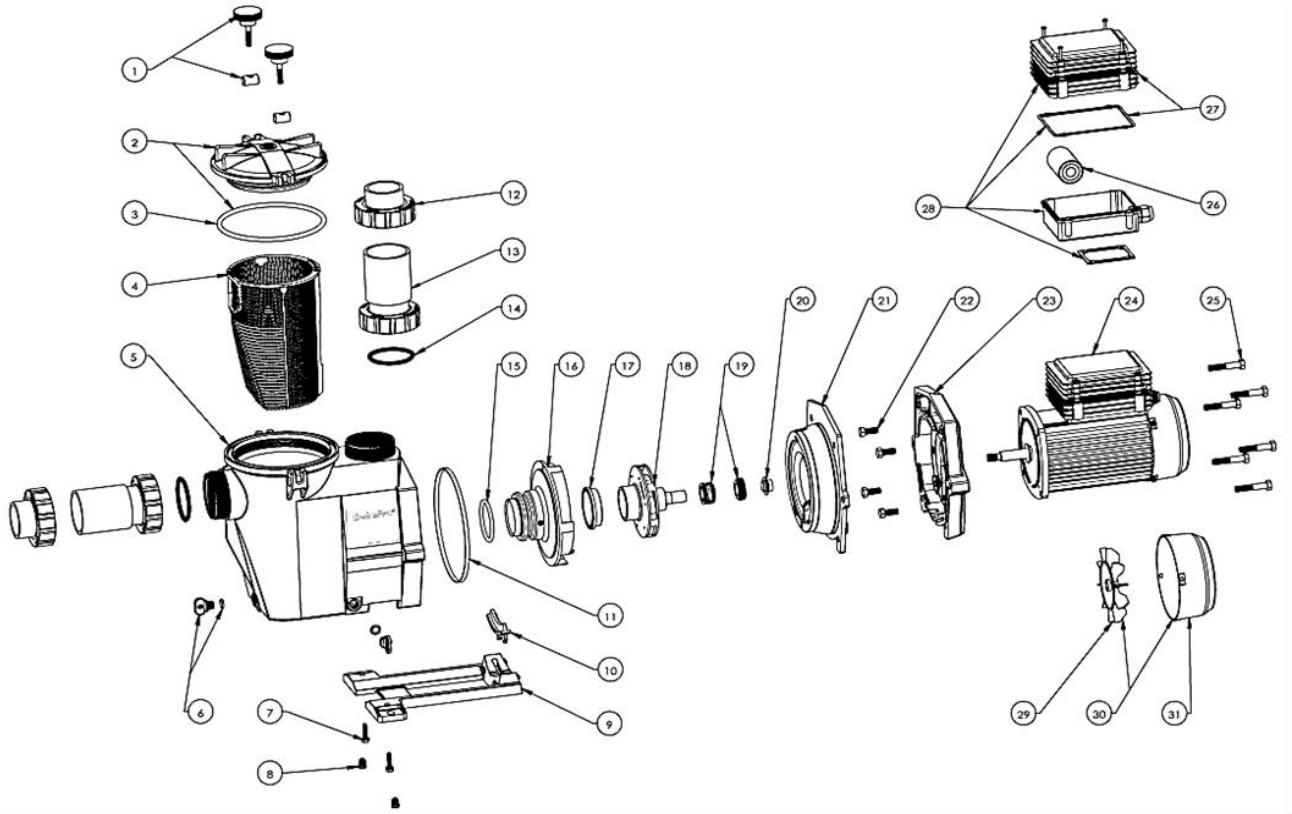




Model No.	Rated Power	Flow Rate*	Input Power P1	Output Power P2	Voltage / Phase /Freq.	Amps	In/Out	Weight	Dim A	Dim B
SWP200751	¾ Hp	12.5 m^3/h	800 W	570 W	230V/1ph/50Hz	3.60 A	50mm/1 ½ ”	13.2 kg	569 mm	246 mm
SWP201051	1 Hp	16.5 m^3/h	930 W	690 W	230V/1ph/50Hz	4.20 A	50mm/1 ½ ”	13.2 kg	569 mm	246 mm
SWP201551	1 ½ Hp	20 m^3/h	1100 W	810 W	230V/1ph/50Hz	5.30 A	63mm/2”	15.3 kg	594 mm	246 mm
SWP202051	2 Hp	24 m^3/h	1400 W	1050 W	230V/1ph/50Hz	6.50 A	63mm/2”	15.0 kg	594 mm	246 mm
SWP203051	3 Hp	30.5 m^3/h	2330 W	1850 W	230V/1ph/50Hz	10.50 A	63mm/2”	20.5 kg	618 mm	263 mm
SWP203053	3 Hp	32.7 m^3/h	2560 W	2200 W	400V/3ph/50Hz	4.70 A	63mm/2”	20.2 kg	630 mm	254 mm

* At 8m Total Head .

REPLACEMENT PARTS



No	Description	Part Number
1	Swivel nut + Hand knob	SWX1600PN
2	Strainer cover with O-ring	SWX3000DS
3	Lid with O-ring	SWX3000S
4	Strainer basket	SWX3000MDI
5	Pump Housing/Strainer	RSX750A2EDISW
6	Drain Plug with O-ring	SWX4000PO
7	Cap screw	SWX1600Z5
8	Plug	RSX111490
9	Mounting bracket	SWX3000GDI
10	Spacer	
	SWP200751/SWP201051/SWP201551/SWP202051	SWX3000QDI1
	SWP203053	SWX3000QDI2
11	Housing gasket	SWX3000T
12	Union connector kit 50mm	
	SWP200751/SWP201051	RSX750EPAKDI
13	Union connector kit 63mm	
	SWP201551/SWP202051/SWP203051/SWP203053 (63 mm)	RSX750EPAK
14	Gasket	RSX750N
15	Diffuser O-ring	SWX4000Z1DI
16	Diffuser	
	SWP200751/SWP201051/SWP201551/SWP202051	SWX3200B3DI
	SWP203051/SWP203053	SWX3021BDI
17	Ring for impeller	SWX3021R
18	Impeller	
	SWP200751	SWX3008CDIE
	SWP201051	SWX3011CDIE
	SWP201551	SWX3012CDI
	SWP202051	SWX3015CDI
	SWP203051	SWX3030CDI
	SWP203053	SWX3030CDIE
19	Seal assembly	SWX1600Z2
20	Slinger	SWX1500Q6DI
21	Seal Plate	SWX3020EDI
22	Motor cap screw	SWX0125Z4
23	Motor mounting plate	SWX3000FDI

No	Description	Part Number
24	Motor	
	SWP200751	SWX3007Z1CASW
	SWP201051	SWX3010Z1CASW
	SWP201551	SWX3012Z1CASW
	SWP202051	SWX3015Z1CASW
	SWP203051	SWX3030ZICASW
	SWP203053	SWX3030Z1CASWT
25	Housing screw	SWX1600Z4
26	Capacitor	
	SWP200751	SWX3000Z1CCA1
	SWP201051	SWX3000Z1CCA1
	SWP201551	SWX3000Z1CCA2
	SWP202051	SWX3000Z1CCA2
	SWP203051	SWX3000Z1CCA3
	SWP203053	-
27	Junction box (Cover + gasket)	SWX3000Z1CCG
28	Junction box assembly	SWX3000Z1CWBG
29	Fan	
	SWP200751/SWP201051/SWP201551/SWP202051	SWX3000Z1CF1
	SWP203051	SWX3000Z1CF3
	SWP203053	SWX3000Z1CF2
30	Fan + Fan Cover	
	SWP200751/SWP201051/SWP201551/SWP202051	SWX3000Z1CECF1
	SWP203051	SWX3000Z1CECF3
	SWP203053	SWX3000Z1CECF2
31	Fan cover	
	SWP200751/SWP201051/SWP201551/SWP202051	SWX3000Z1CEC1
	SWP203051	SWX3000Z1CEC3
	SWP203053	SWX3000Z1CEC2

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