

## Soliflow Compact filtration unit

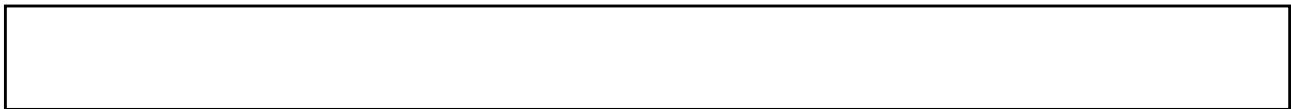


**Installation and operating instructions**  
***To be read carefully and kept for future reference.***

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***Thank-you for choosing SOLIFLOW, an efficient and reliable compact filtration unit. Please read these instructions carefully before installing or operating your SOLIFLOW, they contain important information concerning handling and use. Keep these instructions in a safe place for future reference.***

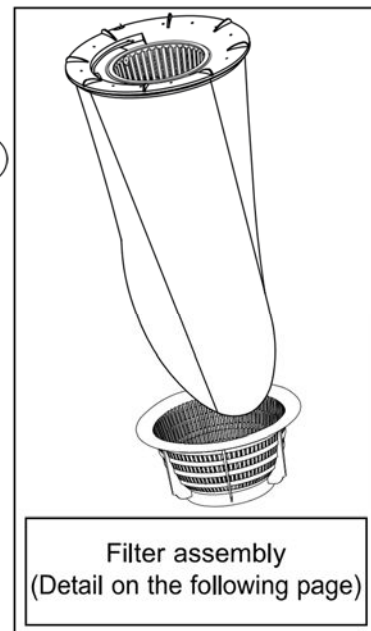
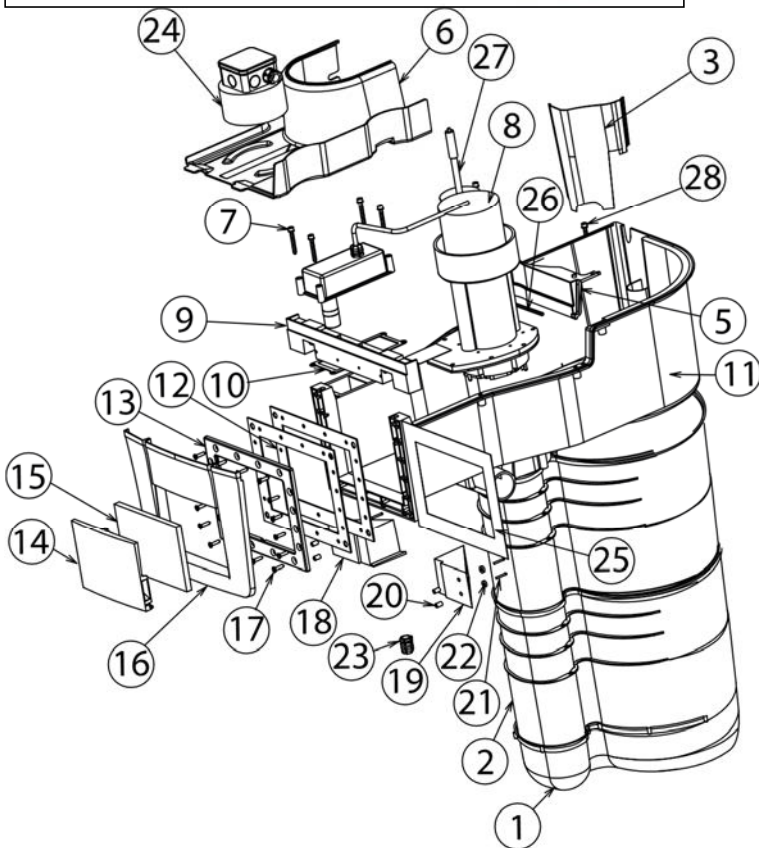
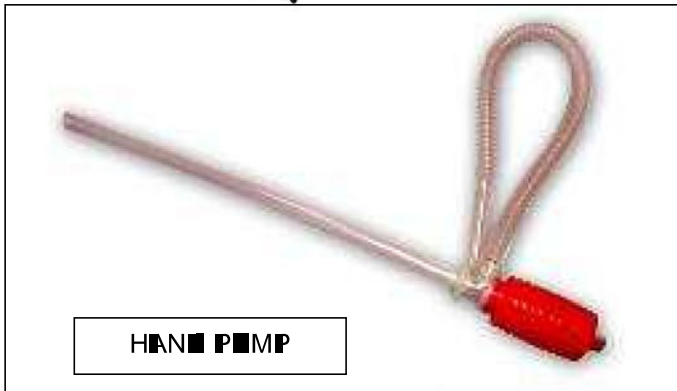
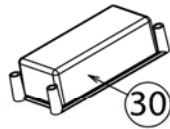
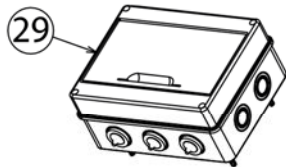


Index	Nbr	Component description
1	1	Lower filter body
2	2	Intermediate filter body
3	1	Splash p
5	1	Central brace
6	1	Plate
7	12	Thermoplast screw Ø7x50 washer
8	1	Pump
9	1	Front brace
10	1	Winterizing cover sea
11	1	ousing
12	2	Range gasket
13	1	Range
14	1	Skimmer flap
15	1	Coam flap
16	1	m
17	16	Self tapping countersunk pos screw 5.5 x 25 A4 driv
18	1	Angle bracket
19	1	Angle bracket

20	4	Spacer Ø8 x Ø4 3 x 13
21	4	Self tapping machine screw 3.9 x 25 A2
22	4	Spacer Ø12 x Ø4 3 x 4
23	1	Cable gland, Capr 11g11 nut
24	1	Isolation transformer option
25	1	Works test protective cover
26	1	Long hex head key
27	1	Logging indicator
28	2	Thermoplastic screw Ø7x20 washer
29	1	Control panel, 50
30	1	Winterizing cover

# EXPLODED VIEWS

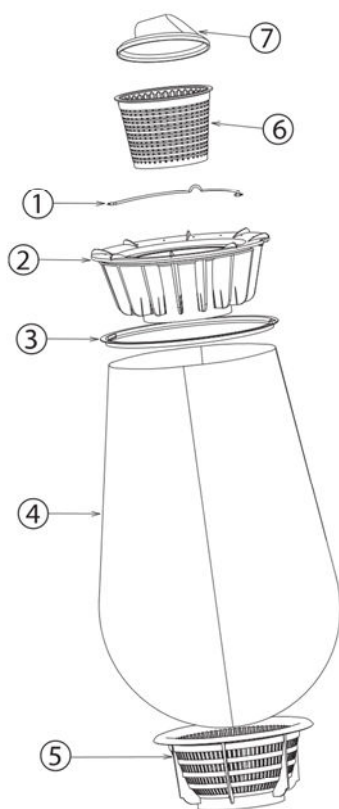
## THE HOUSING



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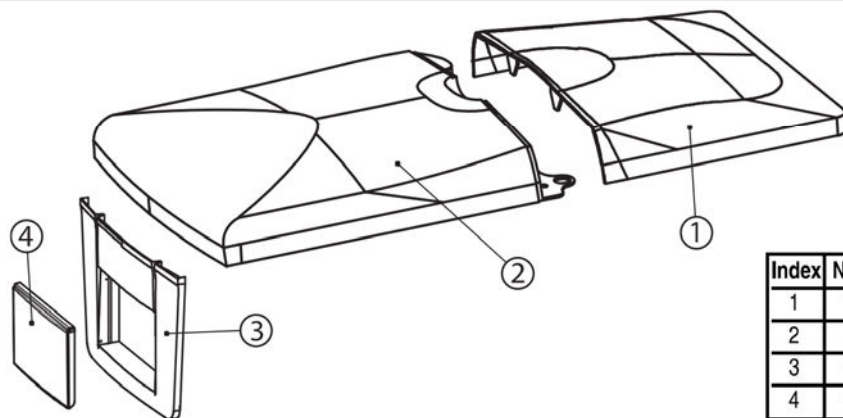
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## FILTER ASSEMBLY



Index	Nbr	Component description
1	1	Handle
2	1	Cyclone
3	1	Flow Lock
4	1	Multiflow
5	1	Filter bottom basket
6	1	Prefilter basket
7	1	Skim vac SV 200

## THE LIDS



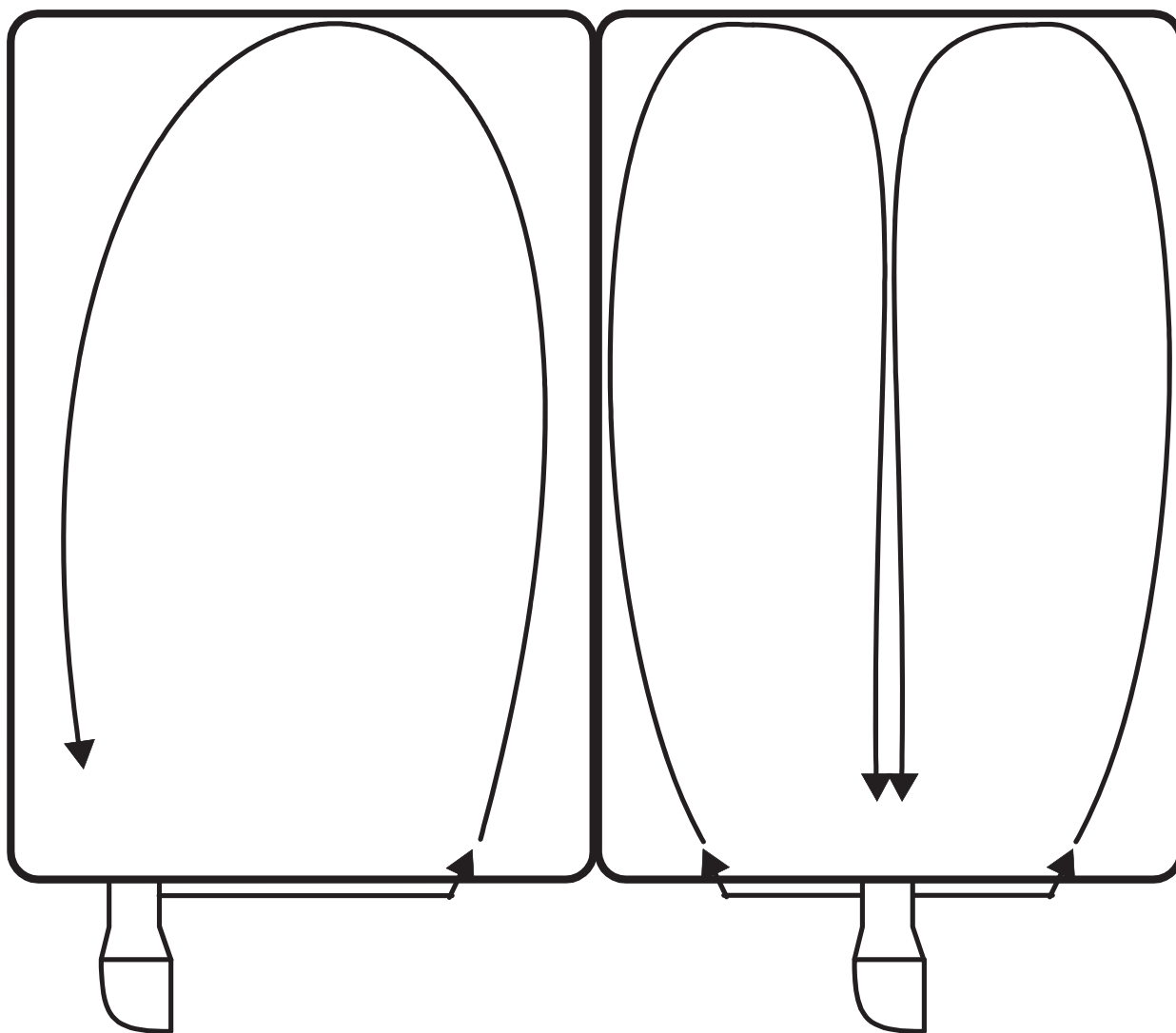
Index	Nbr	Component description
1	1	Rear lid
2	1	Front lid
3	1	Flange trim
4	1	Flap

### INSTALLATION TOOLS

- Phillips screw driver
- Electrician's flat head screw driver
- Stanley knife
- Spirit level
- Metal saw
- Screw clamp
- Tape measure
- Drill with Ø6 mm bit
- Teflon tape
- PVC glue and solvent
- PVC pipe and unions (Ø50 mm)

## SITING

SOLIFLOW may be installed with one or two return fittings.



INSTALLATION WITH ONE RETURN FITTING

INSTALLATION WITH TWO RETURN FITTINGS

The use of 2 return fitting is recommended to limit pressure drops and improve water circulation. For maximum efficiency, and to avoid accumulation of debris in the swimming pool, SOLIFLOW should be positioned facing the prevailing wind.



# INSTALLATION RECOMMENDATIONS

## IMPORTANT!

To optimise the efficiency of SOLIFLOW's constituent parts, particularly the over-flow, the unit must be perfectly level.

### CONCRETE STRUCTURES

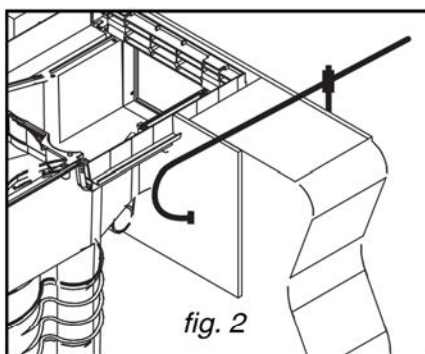
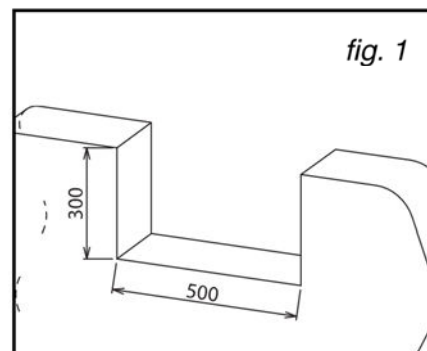
Create an opening 500 mm wide and 300 mm high (height measured from the top of the pool wall) fig 1.

Check that the front brace and flange are correctly mounted on the SOLIFLOW unit.

Line the top of the brace up with the top of the pool wall to establish the vertical position.

The horizontal position will be determined by the flange that must be flush with the pool waterproofing.

The upper reinforced concrete belt should be continuous, thus it should either pass around or underneath SOLIFLOW.



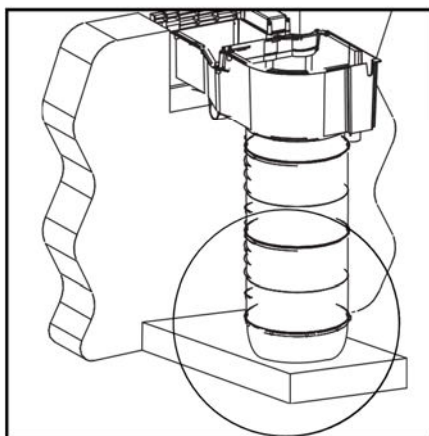
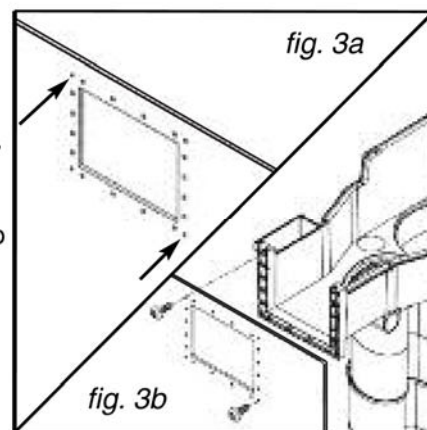
To seal the unit in position, place one board in front of the opening and another between the wall and SOLIFLOW (fig 2) and hold them in position using a clamp.

### THIN WALLS - PREFABRICATED STRUCTURES

Mount the front brace on SOLIFLOW (a few dots of PVC glue will help). Line the top of the brace up with the top of the pool structure to establish the vertical position.

Using the flange as a template, make a cut-out in the structure. Drill two additional holes for the pre-fix screws (fig 3a).

Position a gasket on the suction mouth and attach SOLIFLOW to the structure using the pre-fix screws (fig. 3b).



### BLOCKING

Position SOLIFLOW on a supporting concrete base (fig. 4).

The area 40 cm around the soliflow unit should be back filled with stabilised sand.

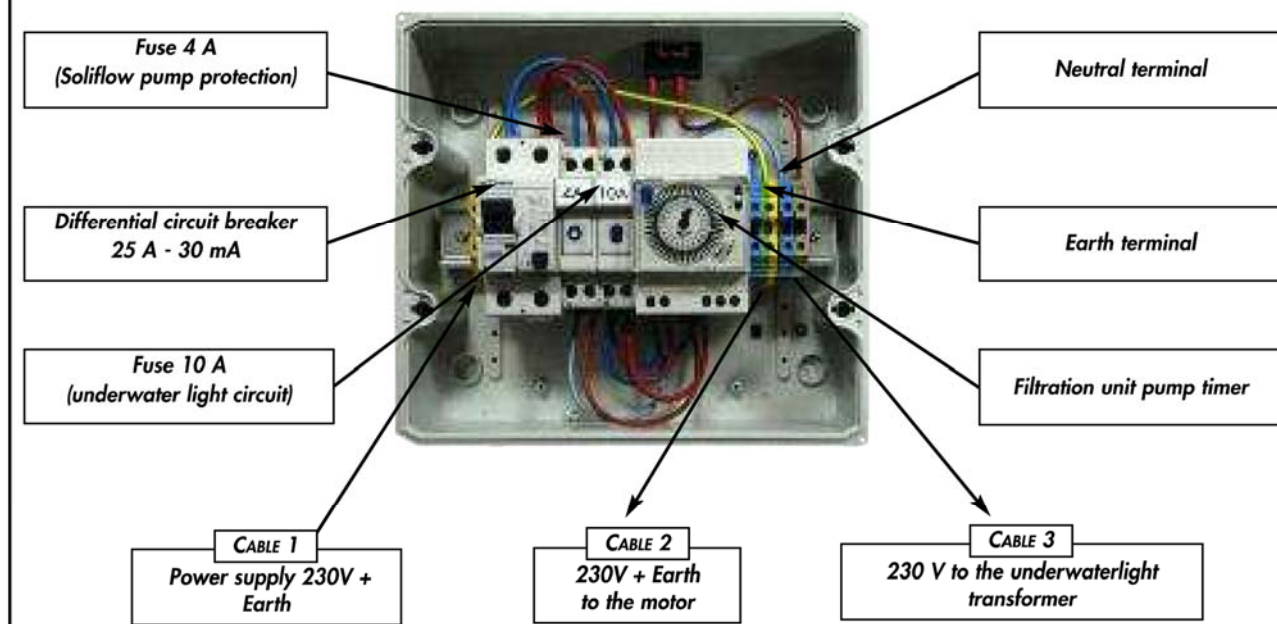


# PRE-WIRING

CAUTION! WIRING SHOULD BE CARRIED OUT ACCORDING TO THE RULES OF THE ART.

THE CONTROL PANEL SHOULD BE INSTALLED IN A PROTECTED LOCATION CLOSE TO SOLIFLOW (HOUSE, GARAGE, POOL HOUSE)

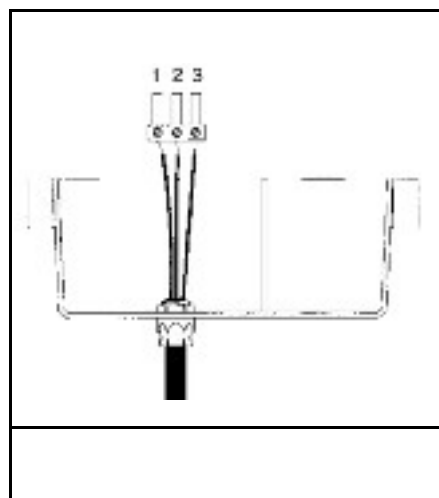
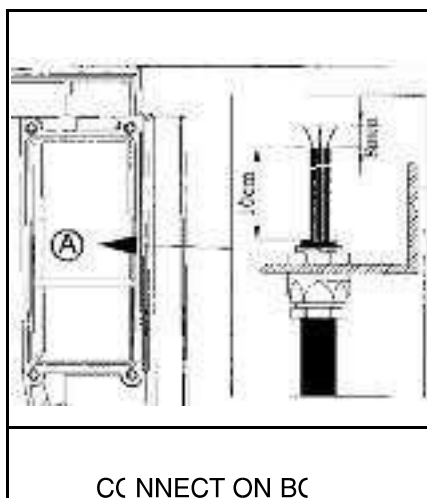
## FILTRATION UNIT ELECTRICAL PANEL



Cables 2 and 3 should be routed to the SOLIFLOW connection box (see below).

Although cable 3 is only needed if an underwater light is installed, we recommend that you lay it now to facilitate retrofitting of an underwater light at a later date.

The cable cross section should be 3 x 2.5<sup>2</sup> for the motor power supply and 2 x 2.5<sup>2</sup> for the underwater light.





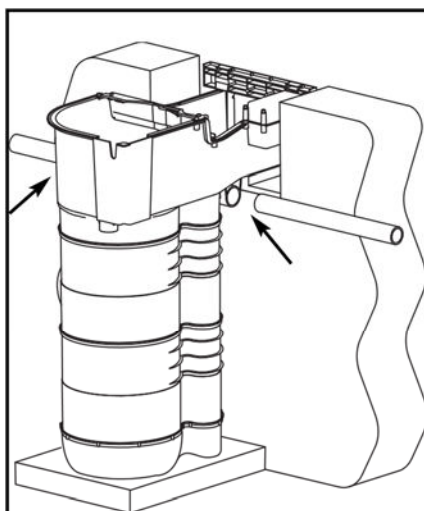
3 Phase supply 3 Wires out

CONNECT TO THE  
CONNECTOR

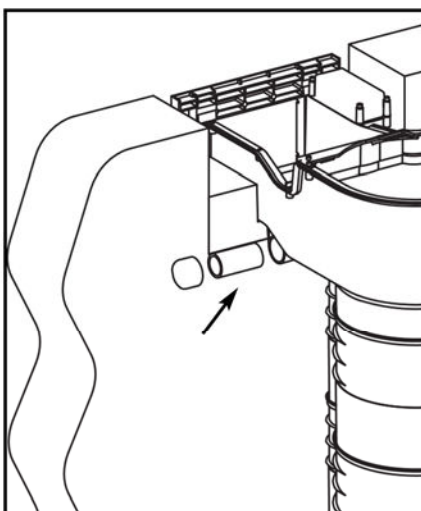
Motor power supply      neutral  
Earth

3 Motor power supply      live

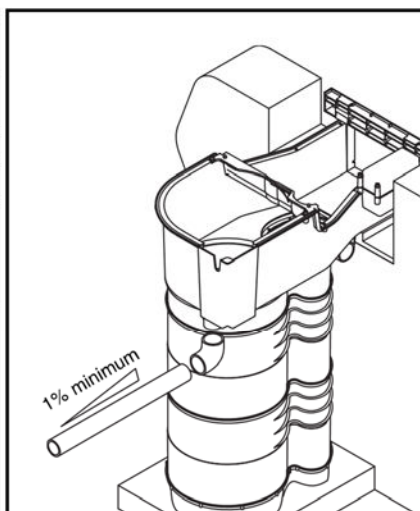
# PLUMBING



Connect the return fittings to the outlets on SOLIFLOW.



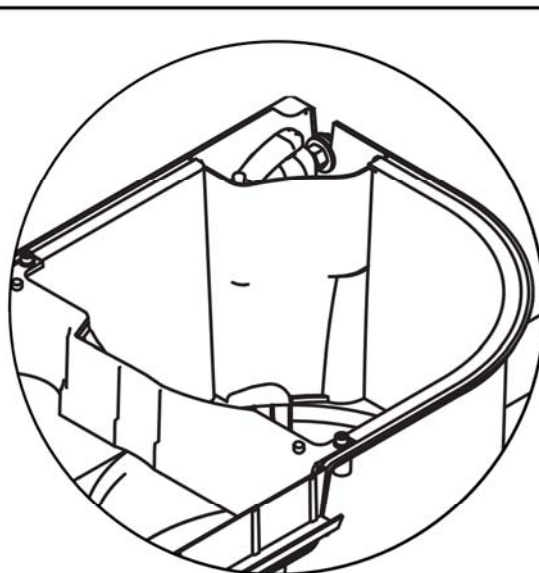
In the case of a single return fitting configuration, blank the outlet that is not in use.



Using Ø 50 mm pipes and fittings, connect up the overflow, a slope of at least 1 % is mandatory.

## CAUTION

If the overflow is installed incorrectly (or not at all) the water level can rise too high, even to the point of flooding the motor and other electrical components. This type of incident is not covered by any guarantee.



Insert the splash lip.

INSTALLATION OF THE CLOGGING INDICATOR



Remove the protective cap from the access opening



Insert the clogging indicator into the access opening

WIRING



Connect the motor cable to the power supply coming from the control panel



Place the motor



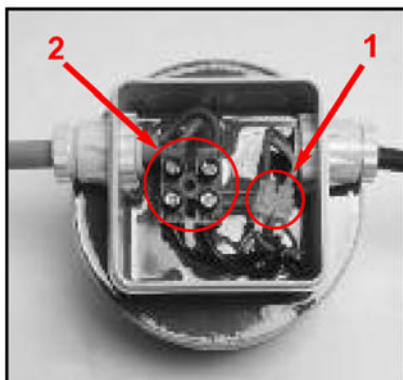
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put the d on the c nnect c  
using 4 thermoplast sc

ice and in good cond t on  
on box and fix t n post on  
rews Ø7 x50 washer

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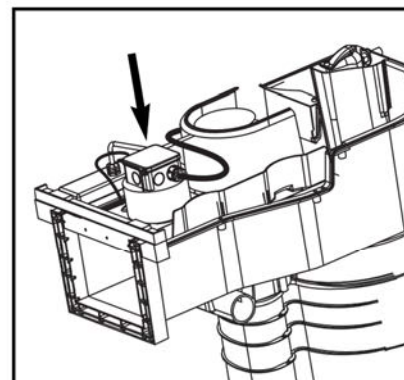
## UNDERWATER LIGHT OPTION



Using the insulating screw joints provided, connect the transformer. The 230 volt input should be connected to the thinner wire (1) and the underwater light to the thicker wire (2).

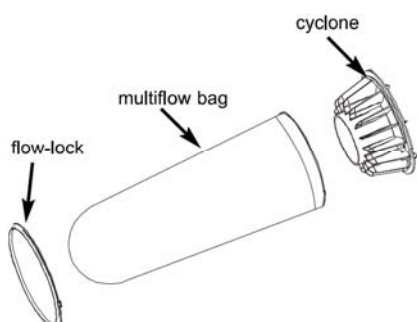


Pour the packet of resin into the junction box and replace the lid. Caution: Once this is done, no further interventions on the junction box will be possible



Place the transformer in its niche on the plate.

## INSTALLATION OF THE CYCLONE



Fit the cyclone into the filter bag. Fasten with the flow-lock. Make sure that the plastic tab on the flow-lock clips into the depression on the cyclone.



Position the basket in the base of  
the SOW (Unit)

Check that the basket is correctly  
centred

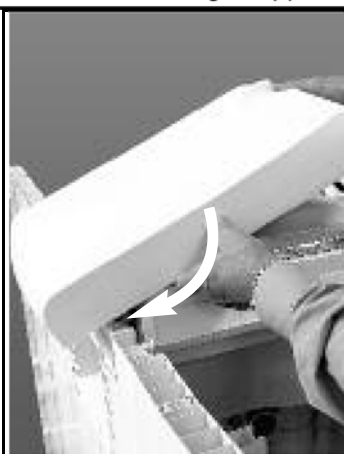
Lower the cyclone and then place  
into SOW



## ***FITTING THE LIDS***

### ***SKIMMER FLANGE AND FLAP***

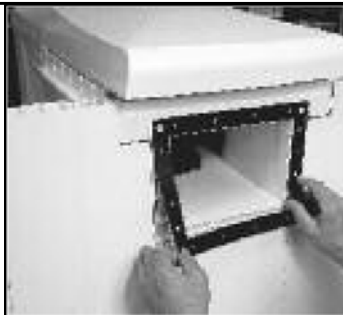
Caution: the flange absolutely must be mounted, even in the case of tiled concrete pools.  
The flange supports both the trim and the skimmer flap.



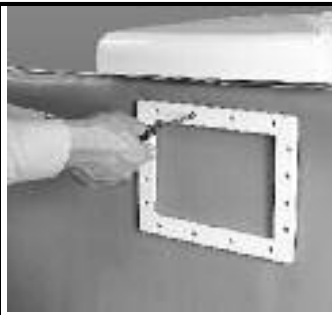
Place the front cover on the skimmer



Place the cover on the flange



Mount the access ves-  
sel to the cabinet



Mount the fan-  
coil to the cabinet

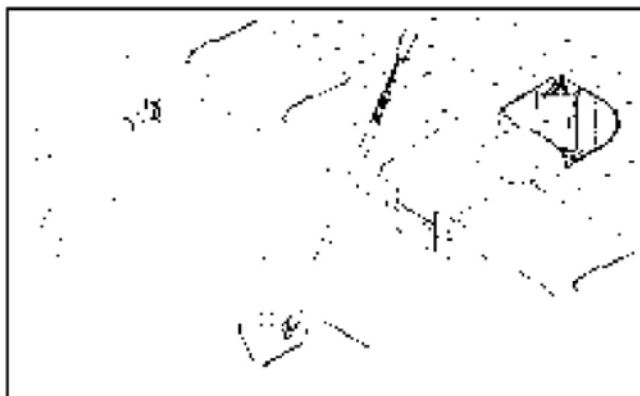


Put the trim with  
the fan-coil

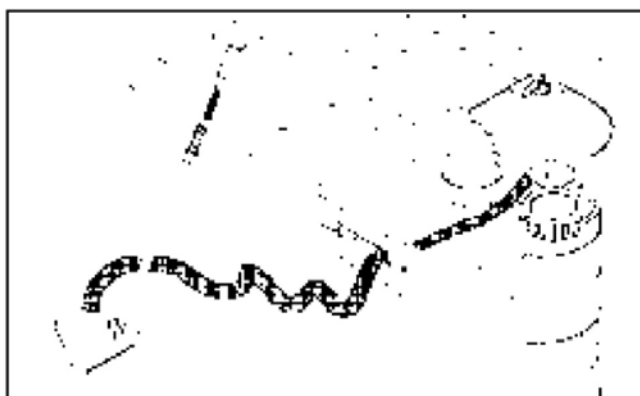
Before the water proofing is done, the second connection of the water proofing is done. Connect the

## CONNECTING A VACCUM CLEANER

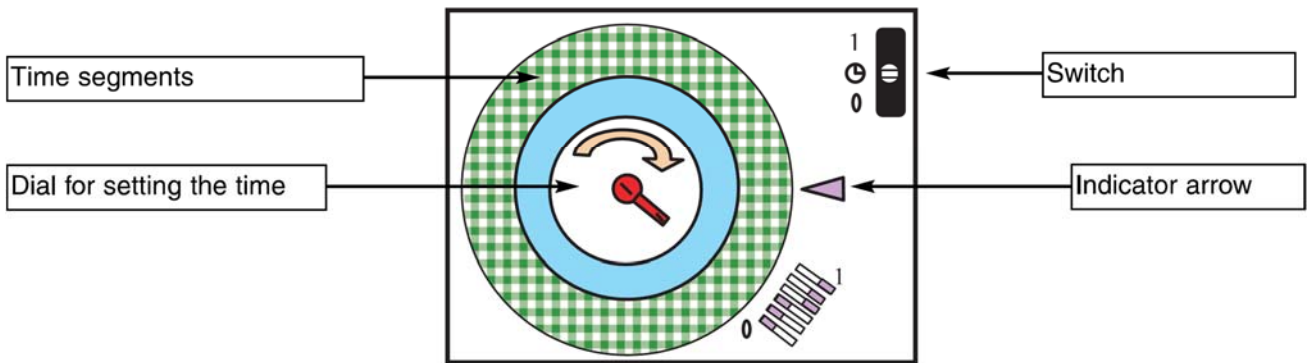
- Remove the rear lid from SOLIFLOW
- Switch filtration on.
- Hold the end of the vacuum hose in front of a return fitting until all the air is purged.



- Keeping the hose under water, insert it through the SOLIFLOW suction mouth.
- Insert the hose into the skim-vac and place it in the prefilter basket. Suction holds it in position.
- Pass the cleaner slowly over the bottom of the pool. Once the pool is clean, stop the filtration to facilitate removal of the skim-vac. Be careful not to damage the skimmer flap when withdrawing the hose.



# TIMER OPERATION



## POSITION OF THE SELECTOR

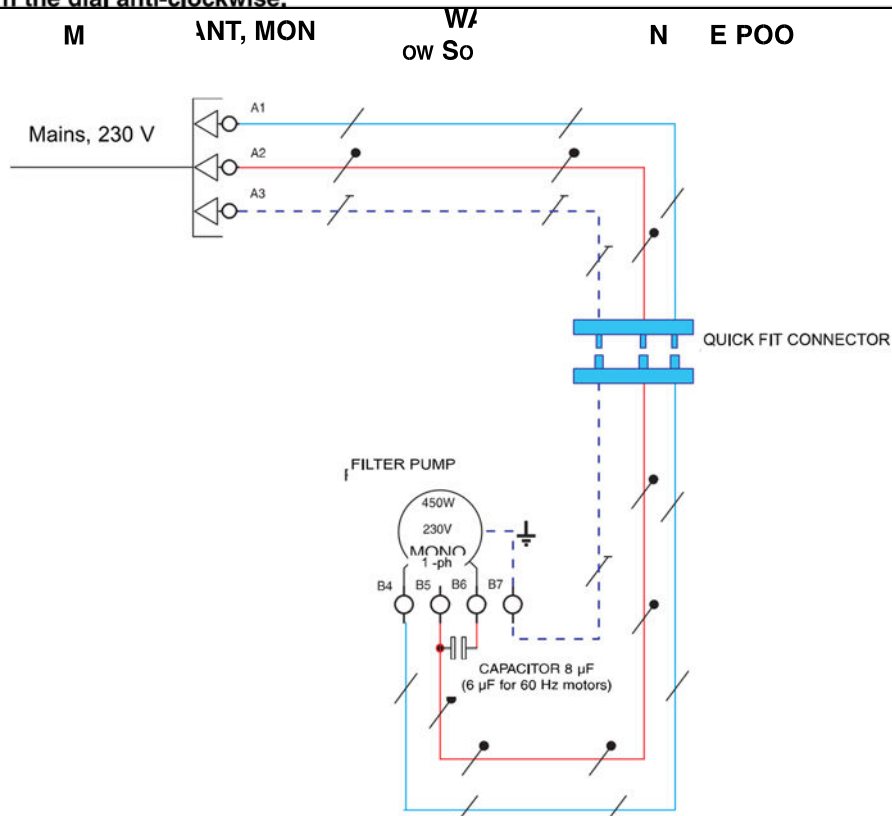
Central position : Operation according to the timer programme  
 Position "1" : Filter runs continuously  
 Position "0" : Total stop

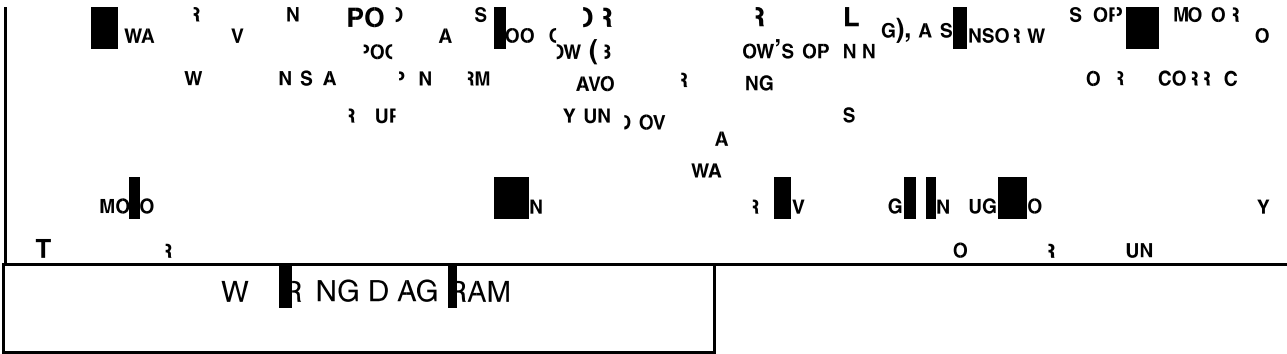
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## PROGRAMMING

- Lift up the transparent flap to gain access to the dial.
- Programme the run time by pushing segments of the dial towards the exterior. Each segment represents 30 minutes.  
 For example: To programme the filter to run between 1300 and 1600 hours (1 pm to 4 pm), push the 6 corresponding segments towards the exterior.
- Set the time by turning the dial in the direction indicated by the arrow until the correct time is shown opposite the indicator arrow. For more precise time setting, turn the minute hand only. The small hand of the clock is printed on the inner dial (see the sketch above).

**CAUTION! Never turn the dial anti-clockwise.**





# MAINTENANCE

## CLEANING THE MULTIFLOW BAG

Inspect the interior of the cyclone regularly and remove any leaves or other debris. This will improve the filtration flowrate and prolong the service life of the multiflow bag. The frequency of inspections will depend on the pool environment.

## REPLACING THE MULTIFLOW FILTER BAG



Remove the debris from the

The multiflow bag should be replaced every 4 to 5 weeks on average. The actual replacement frequency will be determined by the pool volume and the level of pollution.

A drop in the return flow rate and/or turbulence in the Cyclone indicates that the filter bag is clogged.

To facilitate removal of the multiflow bag, empty it following the instructions provided below:

- raise the multiflow bag slightly and twist the long hex head key towards the interior of SOLIFLOW
- rest the multiflow bag on the long hex head key.
- using the hand pump, remove water from the multiflow bag.
- once the water level has dropped sufficiently, remove the bag and Cyclone.

Replace the bag.

Put the Cyclone and the level regulator splash lip back in position.

SOLIFLOW is ready to go again.

## WINTERIZING

- Disconnect SOLIFLOW's power supply. If the pool is fitted with other optional accessories (underwater lights or heating), disconnect the power supply to these items also.
- Withdraw the Cyclone. Remove and dispose of the multiflow bag.
- Loosen the 4 screws to remove the lid from the connection box, disconnect the quick disconnect fittings.
- Unscrew the 8 self-tapping screws Ø 7x50 holding the pump in position and remove it.
- Place the winterizing cover over the connection box, first making sure that the seal is in position. Fix it in position using 4 Ø 7x50 self-tapping screws.
- Place a plastic bottle containing 10 cm of sand in the filter body, the sand ballast will keep it partially submerged.
- Slide a partially inflated ring or inner tube into the skimmer mouth.
- Fill the pool up to the overflow and shut off the water supply to the level regulator.
- Put the lids back on the SOLIFLOW unit.
- Store all the items removed somewhere dry.

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# ***TROUBLESHOOTING***

**PROBLEM:** Air bubbles rise from the return fitting(s)

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**PROBLEM:** Significant drop in SOLIFLOW's flow rate with no air bubbles rising from the return fitting(s)

**PROBLEM:** Dirt is being returned to the pool through the return fitting(s).

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<b>FILTER</b>	
<b>Cause</b>	<b>Solution</b>

The filter bag is clogged (So flow's flow rate has dropped significantly)	Filter bag replace the bag Cartridge clean or replace the cartridge
Motor is faulty (the flow rate is clogging and rate is normal)	Replace the clogging and motor
<b>Cause</b>	<b>Solution</b>
The pump turbine is obstructed	<ul style="list-style-type: none"> <li>□ Disconnect the power supply</li> <li>□ Shut down the pump and clean the turbine</li> <li>□ Release the pump and reconnect the power supply</li> <li>□ Do not forget to reset the timer</li> </ul>
<b>Cause</b>	<b>Solution</b>
The filter bag is clogged (too clogged)	Replace the filter bag or cartridge
The filter bag is incorrectly positioned	Adjust the position of the filter bag or cartridge
After this type of problem, check the pump turbine for debris (see the previous section)	

## WATER LEVEL

**PROBLEM:** The pool is too full and overflowing over the coping.

Cause	Solution
The overflow has not been connected	Connect the overflow to a gravity drain
The overflow is clogged	Remove the obstruction
<b>Caution</b> Usually when a pool overflows the pump is flooded. Disconnect the power supply and call a qualified electrician to check SW and carry out the necessary repairs.	

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PUMP

PROBLEM: The pump does not start.

PROBLEM: The pump runs intermittently. This is caused by overheating of the motor.

Cause	Solution
The fuse protecting the motor is faulty	Replace the fuse with a fuse that has the same rating as the original
There is no power supply to the motor	Check the power supply from the control panel

The motor capacitor is faulty	<p>[ ] Disconnect the power supply</p> <p>[ ] Replace the capacitor</p> <p>[ ] Reconnect the power supply</p> <p>[ ] Do not forget to reset the timer</p>
<p>Blocked by debris</p> <p>The pump turbine is blocked by debris or some other object</p>	<p>[ ] Disconnect the power supply</p> <p>[ ] Stop the pump and clean the pump and turbine</p> <p>[ ] Do not forget to reset the timer</p> <p>Reconnect the power supply</p> <p>Restart the pump turbine</p> <p>Do not forget to reset the timer</p>

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Cause	Solution
The water level in the pools is too low	<p>Empty the pool See the sections dealing with water level issues</p> <p>Drain the water level issues</p>
The pump turbines blocked by debris	<p> <input type="checkbox"/> Disconnect the power supply  <input type="checkbox"/> Disconnect the pump and clean  <input checked="" type="checkbox"/> Clean the pump and  <input type="checkbox"/> Forget to reset the timer         </p> <p>           Disconnect the power supply            Clean the pump and reconnect the power supply            Do not forget to reset the timer         </p>
The pump turbines broken	<p> <input type="checkbox"/> Disconnect the power supply  <input type="checkbox"/> Disconnect the pump and replace  <input checked="" type="checkbox"/> Clean the pump and reconnect  <input type="checkbox"/> Do not forget to reset the timer         </p> <p>           Replace the turbine            Reconnect the power supply            Do not forget to reset the timer         </p>

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**PROBLEM:** The underwater light does not turn on

**Careful! These interventions must be carried out by a qualified electrician**

## UNDERWATER LIGHT

Cause	Solution
<p>The transformer is not supplied with 230 V</p>	<p>Transformer input terminals in the control panel</p> <p>Check the voltage at the transformer Check the condition of the fuse Reconnect the power supply</p>



the transformer is faulty	replace it with a transformer that has the same rating
the 12 V current does not arrive at the bulb	Check the connection between the transformer and the bulb Check the electrical connection underwater
the 12 V current arrives at the bulb but the bulb does not light up	replace the faulty bulb

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