

# **Manual for Sand Filter/Pumps Combo's**

## **MODELS:**

## CC2027/CC2028/CC2029/CC2042/CC2043



## **MODELS:**

## CC2058/CC2059/CC2060/CC2072/CC2073/CC2074



#### **SAFETY INFORMATION**

The sand filters are designed to work with water at temperature>than  $0^{\circ}$ C and <than  $45^{\circ}$ C. The filter should never be operated outside of these temperatures or damage may occur.

The installation should be carried out in accordance to the safety instructions of swimming pools and the specific instructions for each facility

The user should make sure that the installation is carried out by qualified authorized persons and that these persons have first carefully read the following instructions. Incorrectly installed equipment may fail, causing severe injury or property damage

The operating safety of the filter is only guaranteed if the installation and operation instructions are correctly followed.

To reduce the risk of injury, do not permit children to use this product.

Chemical spills and fumes can weaken Swimming Pool/ Spa. Corrosion can cause filters and other equipment to fail, resulting in severe injury or property damage. Do not store pool chemicals near your equipment.

Any modification of the filter requires the prior consent from the supplier's original replacement parts and accessories authorized by the manufacturer ensure a high level of safety. The supplier assumes no liability for the damage and injuries caused by unauthorized replacement parts and accessories.

In the event of defective operation or fault, contact the supplier or nearest authorized service agent.

#### **Sand Filtration**

Incoming water from the piping system is automatically directed by the Multiport Valve to the top of the filter bed. As the water is pumped through the filter sand, dirt and debris are trapped by the filter bed, and filtered out. The filtered water is returned from the bottom of the filter tank, through the Multiport Valve and back through the piping system

## **Preparation before installation**

Position the filter as close to the Swimming Pool/ Spa as possible.

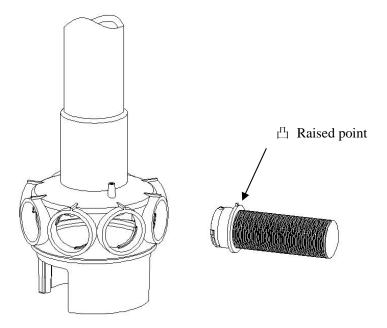
The filter should be placed on a level concrete slab, very firm ground, or equivalent. Ensure that the ground will not subside, preventing any strain from the attached plumbing.

Position the filter under consideration of the piping connections, so that it is convenient for operating and servicing.

Ensure that the compliance label is facing the front to allow easy identification in the case of service difficulties.

#### How to install the filter tank

- 1. Put the filter tank on the base, turn right to tight up. Position the outlet drain plug is facing outside for easy operation.
- 2. Before filling the filter media into the filter vessel, do a visual check of the laterals. Replace the broken or loose laterals if necessary. (The laterals of side-mount valve sand filter are all installed). And then install the laterals, match the Raised Point of laterals to Folding Umbrella lateral holder, insert the laterals and turn 90°clockwise, after hearing the sound, the lateral is well installed. Please refer to the following picture.



- 3. Check the air release hose are fixed well on the body of lateral holder, and another end of the air release hose must be out of the sand. **DO NOT** embed the air release hose in the sand.
- 4. To eliminate stress on the laterals, fill the filter vessel with enough water to provide a cushioning effect when the filter sand is poured in.
- 5. Using the clear clamshell cover to protect the filter top mount and make sure the central stem pipe had been fully covered.
- 6. Carefully pour the sand into the filter vessel and make sure to prevent sand from entering the stem pipe. And meantime do not damage the filter top mount or it will cause the leakage. And please pour the quantity of sand according to the filter tank label.
- 7. Cleaning the filter top mount put the O-ring on the top mount valve and then installs the valve on the filter vessel. Make sure that the stem pipe had fixed well with the top mount valve, and tight the flange clamp to fix the valve. NOTE: the flange clamp should be well fixed, or it will cause the people injures.
- 8. Using screws from the pump hardware pack to fix the pump on the base, please reference the pump installation to operate the pump.
- 9. Adjust the valve position, using the white pressure hose to connect the pump output and input of the top valve ("TO PUMP" are written on the valve of input end).
- 10. The other two connection ends of the valve, one is connection to swimming pool (written "TO POOL" on it) and another one is connect with drain outlet hose.

## **INSTALLATION NOTES:**

- 1. Make sure the filter is worked under the work pressure, and using a pressure control valve when the system is using a booster pump.
- 2. If the pump position is higher than the water level, it is requires that a one-way valve is installed with models CC2027/CC2028/CC2029 & CC2058/CC2059/CC2060. Models: CC2042/CC2043 & CC2072/CC2073/CC2074 are "self" Priming and can be used above water line.

- 3. If the pump position is lower than the water level, it is recommended that an isolation valve is installed. This would stop the water returning back to the pool when general inspection/maintenance is carried out.
- 4. Reducing the connection adaptors and hose bending as much as possible. Will maximise flow effect.

Ensure solvents are not excessively applied to fittings as this could run into O-ring and create sealing problems.

Do not over tighten fittings or adapters

#### **HOW TO USE**

- 1. Inspect all the connections have been made correct and are secure.
- 2. Depress top mount valve handle and rotate to BACKWASH position.
- 3. Prime and start pump according to pump instructions.

NOTE: ALL SUCTION AND DISCHARGE VALVES MUST BE OPEN WHEN STARTING THE SYSTEM. FAILURE TO DO SO COULD CAUSE SEVERE PERSONAL INJURY.

MAKE SURE THE FILTER VESSEL IS FULL WITH WATER BEFORE START UP OF THE PUMP, OR IT WILL CAUSE THE PUMP DAMAGE.

- 4. Once water flow is steady out the waste line, run the pump for at least 2 minutes. The initial back-washing of the filer is recommended to remove any impurities of fine sand particles in the sand media.
- 5. Turn pump off and set valve to RINSE position. Start pump and operate until water in sight glass is clear----about 1/2 to 1 minute. Turn pump off, set valve to FILTER position and restart pump. Your filter is now operating in the normal filter mode, filtering particles from the pool water. NOTES:
- 1. Note the initial pressure gauge reading when the filter is clean. (it will vary from pool depending upon the pump and general piping system). As the filter removes dirt and impurities from the pool water, the accumulation in the filter will cause the pressure to rise and flow to diminish. When the pressure gauge reading is 8-10 PSI (0.55-0.69 BAR) higher than the initial "clean" pressure you noted, it is time to backwash (clean) the filter.
- 2. IMPORTANT: To prevent unnecessary strain on piping system and valve assemblies, always shut off pump before switching filter control valve position.
- 3. To prevent damage to the pump and filter and for proper operation of the system, clean pump strainer and skimmer baskets regularly.

### FILTER CONTROL VALVE FUNCTIONS:

#### Filter

FILTER - Set valve to FILTER for normal filtering. Also use for regular vacuuming.

## **Backwash**

BACKWASH – For cleaning filter. When filter pressure gauge rises 8-10 PSI (0.55-0.69 BAR) above start-up (clean pressure):

Stop the pump, set valve to BACKWASH. Start pump and backwash until water in sight glass is clear. Approximately 2 minutes or less depending on dirt accumulation. Proceed to RINSE.

### Rinse

RINSE – After backwashing, with pump off, set valve to RINSE. Start pump and operate for about

1/2 to 1 minute. This ensures that all dirty water from backwashing is rinsed out of the filter to waste, preventing possible return to the pool. Stop pump, set valve to FILTER and start pump for normal filtering.

## Waste

WASTE – To bypass filter for draining or lowering water level and for vacuuming heavy debris directly to waste.

## Re circulate

RECIRCULATE: Water is recirculated through the pool system, bypassing the filter.

### Closed

 $CLOSED-Shuts\ off\ flow\ from\ pump\ to\ filter.$ 

Ref No	Part No	Description	REQ'D
1		Pressure Gauge	1
2		Multiport Valve	1
3		Valve/Tank O-Ring	1
4		Air release assembly	1
5		Flange clamp	1
6		Filter tank	1
7		Central stem pipe	1
8		Lateral	8
9		O-Ring	1
10		Drain plug	1
11		System base	1
12		Connection union fitting	1
13		O-Ring	1
14		PVC connection pipe	1
15		Bolt	4
16		Pump	1

