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ecoclear®

ECO100

User Manual

The installation of this product should be carried out by a person knowledgeable in swimming pool plumbing requirements, following the installation instructions provided in this manual. Please pass these instructions on to the owner of this equipment.

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OVERVIEW

Congratulations on your purchase of a quality product from the Maytronics **Ecoclear**® range of pool and spa equipment. You are assured of many years of reliable and efficient performance from your **Ecoclear**® filter backed by a 2-year tank warranty.

Ecoclear® cartridge filters have been specifically designed for the filtration of spa and swimming pool water.

Ecoclear® cartridge filters provide high performance and convenience in a well designed pressure filter. The polyester element can be removed quickly for rinse cleaning without water loss.

Ecoclear® cartridge filters feature large filter areas, for which ensure even water distribution, peak filtration performance and longer filter cycles.

The corrosion-resistant construction of **Ecoclear**® cartridge filters provides long life and durability. **Ecoclear**® cartridge filters are capacity matched with the Maytronics range of pool pumps, forming a total pool filtration system built to last. Take care to match the pump and filter capacities to gain maximum performance and efficiency.

THE SPARKLING CLEAR WATER DIFFERENCE

Cartridge filtration is an effective trouble-free proven method of filtration. Pool water enters the filter and passes through a polyester single element cartridge. Suspended particles are trapped and the water is returned to the pool. As the build-up of dirt in the element increases, so the water pressure rises and the flow decreases. When the pressure reaches an unacceptable level, the element must be removed and cleaned (spray washing with a common garden hose is generally sufficient).

WARNING

- This filter operates under high pressure. When any part of the circulating system (e.g., Clamp, pump, filter, valves, etc.) Is serviced, air can enter the system and become pressurized . Pressurized air can cause the lid or valve to be blown off which can result in severe injury, death, or property damage.
- Turn pump off before changing valve position.
- To prevent damage to the pump and for proper operation of the system, clean pump strainer and skimmer baskets regularly.
- Do not unscrew screws of flange clamp while pump is running.

INSTALLATION INSTRUCTIONS

LOCATION

The filter should be placed in its permanent location , preferably as close to the pool or spa as practical. Position the filter tank and pump on a level concrete slab or similar base. Allow sufficient space around the filter for routine maintenance and provide for adequate ventilation and drainage. Place the pump in position on the slab and locate the filter alongside with the appropriate pump inlet connection orientated towards the pump. Refer to the 'Specifications' section for the minimum clearance measurements required for each model.

WEATHER PROTECTION

Ecoclear® cartridge filters are constructed of corrosion resistant materials. However, to ensure years of reliable performance, it is recommended that the filtration system be adequately protected from the weather.

ASSEMBLY

Assemble the pressure gauge to the filter lid using teflon tape on the male thread. Do not over tighten.

PIPE CONNECTIONS

Piping should be supported independently and not impose heavy loads on the filter or pump. Use 40mm or 50mm PVC pipe for pump and pool return lines. 50mm should always be used if length of piping is over 15mm. **Ecoclear**® cartridge filters are supplied with quick connect couplings suitable for 40mm L.D.PVC pipe or 50mm O.D fittings.

If the pump and filter are located below pool water level, it is necessary to fit isolating valves in the pipe between the pump and the pool, and in the return line from the filter to the pool.

1) Pump to filter - **Ecoclear**® cartridge filters are equipped with two inlet ports marked 'INLET'. Select the inlet port most suitable for the installation and plug the other inlet port with blanking cap provided. Using quick connect couplings, connect the pool pump delivery piping to the selected inlet port couplings, connect the pool pump delivery piping to the selected inlet port. Tighten by hand only. Ensure the o'ring lubricant and in the correct position.
2) Filter to pool Return - Using quick connect couplings, connect the pool return piping to the filter fitting marked 'OUTLET' Tighten the fitting by hand only. Ensure the o'ring on the fitting is clean, lubricated with o'ring lubricant and in the correct position. The filter base is provided with four mounting holes to enable it to be secured, if required.

OPERATION INSTRUCTIONS

FILTER OPERATION

1) Make sure the pump is primed according to manufacturer's directions.
2) Be sure all valves are open on suction and discharge lines. Ensure the air bleed valve on the filterlid is open and the lid lock rig is in place and secure.
3) Start the pump. Close the air bleed valve when water is expelled.
4) To determine the correct operating conditions with a clean filter, check that the pressure gauge reading is 80kpa or below.
5) Record the pressure gauge reading or mark the needle position on the face of the pressure gauge.
6) Operate the filter for a sufficient time to circulate the total pool water volume daily. The filter should also be operated at all times the pool is in use and for about one hour afterwards. During winter, the running time may be reduced. Filter operatingrequirements will vary for spa applications. Depending upon the system design, type and size of spa. Consult your builder or spa supplier.
7) When the pressure gauge reading is 50-70kpa higher than the 'clean filter' reading as in (4)above, it is time to clean the cartridge element (see' Cartridge Cleaning Procedure).

CARTRIDGE CLEANING PROCEDURE

When the filter gauge reading is 50-70kpa above the clean filter gauge reading cleaning the single element cartridge is required. To perform the cleaning procedures -

1) Switch off the pump.
2) Close isolating valves on suction and discharge lines where fitted.
3) Open the air bleed valve on the filter lid. unscrew the lock ring and remove the filter lid.
4) Lift out the cartridge element .
5) In most cases the element can be easily cleaned with a garden hose, using good velocity sprayed directly on the pleats.

CARTRIDGE RE-ASSEMBLY INSTRUCTION

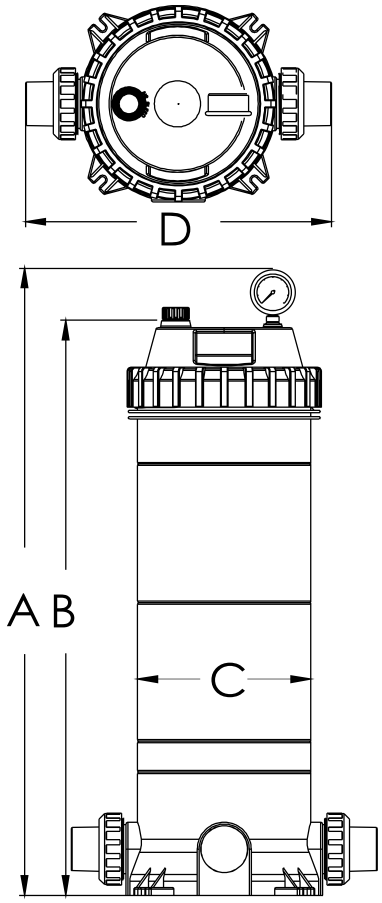
1) Install the cartridge/s and center pipe so that it is located in the bottom spigot.
2) Ensure the filter lid o' ring is clean, lubricated with o' ring lubricant and located in the bottom groove.
3) Replace the lid and press firmly in place. Screw down the lock ring , hand tight is sufficient

DO NOT OVERTIGHTEN.

4) Make sure the pump is primed according to manufacturer's directions.
5) Ensure all valves are open on suction and discharge lines.
6) Start the pump.
7) Close the air bleed valve when all air has been expelled.

NOTE | Algae, calcium, clay, suntan oil and body oils can form a coating on the element which may not be easily removed with normal hosing . These materials can be removed by soaking the element in a de-greaser and /or descaler. Your local Ecoclear® dealer will be able to recommend suitable products.

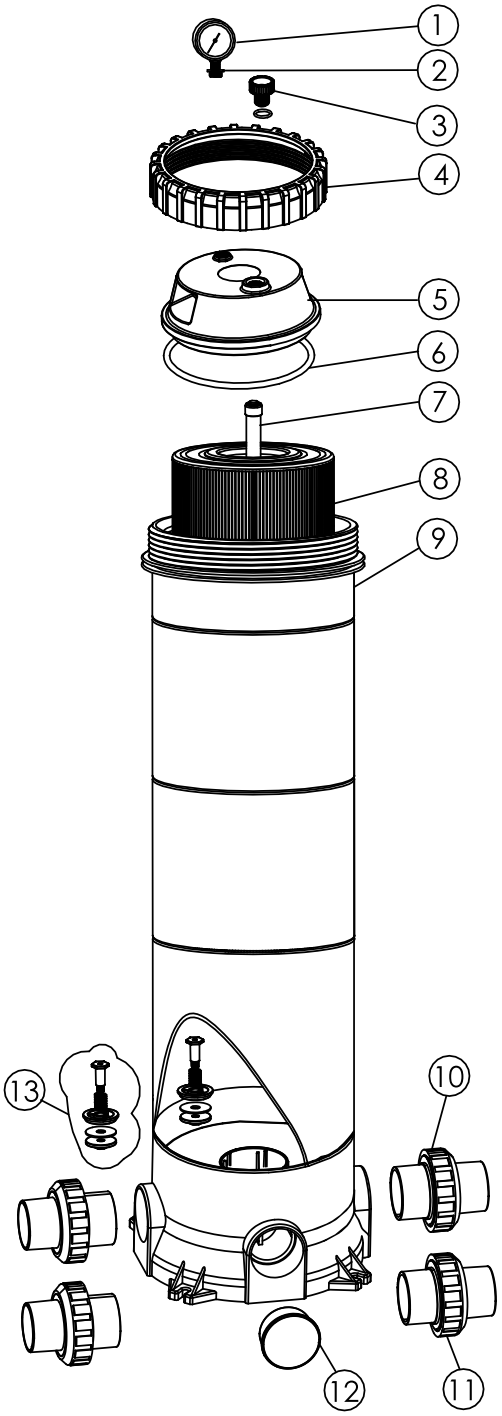
SPECIFICATIONS



Height (mm) A	Height (mm) B	Diameter (mm) C	Diameter (mm) D	Filtration Area (m^2)	Design Flow (m^3/h)
985	**927**	**225**	**397**	**9.38**	**22.9**

REPLACEMENT PARTS

Key No.	Replacement Parts No.	Description	QTY
1	20-420-1021	Maximum 40PSI Indication, Stainless Steel Casing	1
2	20-420-1022	Connector for Pressure Gauge	1
3	20-420-1023	Air Release Valve with O-Ring	1
4	20-420-1024	Ring Lock for Cartridge Filter	1
5	20-420-1025	Cartridge Filter Lid	1
6	20-420-1026	O-Ring for Lid	1
7	20-420-1027	CF100 PVC Air Vent Pipe with cover	1
8	20-420-1028	Element for CF100	2
9	20-420-1029	CF100 Cartridge Filter Body	1
10	20-420-1030	1.5” Union for Cartridge Filter	2
11	20-420-1031	2.0” Union for Cartridge Filter	2
12	20-420-1032	Plug	1
13	20-420-1033	Pressure Release Valve	1



WARRANTY

The Ecoclear® Cartridge Filters are covered by a manufacturers' warranty from date of purchase against defects in materials and workmanship which is 2 years for the filter tank and 1 year for all other parts.

Component	Warranty Period	Labour Cover	Warranty Type	Description
Cartridge Filter	Tank: 2 Years All other parts: 1 year	1 Year	Infield	2 years full replacement warranty on the tank. 1 year warranty on all other parts.

IMPORTANT
Please attach your sales invoice/docket here as proof of purchase should warranty service be required. Please do not return warranty form to Maytronics Australia – Retain for your records.

PURCHASED FROM:
PURCHASE DATE:
SERIAL NO:
MODEL NO:

For more information visit maytronics.com.au

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