maytronics | *Exceptional Experience*



ecoclear®

CARTRIDGE FILTER

ECO100P | ECO150P | ECO200P

Installation & Operation

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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IMPORTANT SAFETY INSTRUCTIONS

Read and follow all instructions before installing, operating, or servicing this product. Failure to do so may result in **serious injury, death, or property damage** and will void the manufacturer's warranty.

⚠ GENERAL SAFETY

- Installation must be performed by a **licensed electrician or qualified pool technician** in accordance with local codes.
- Do not allow children to use this product.
- Operate only when the system is properly installed and maintained.
- Replace worn or damaged components immediately with genuine Maytronics Ecoclear parts (e.g. O-rings, gauges, valves).

⚠ PRESSURE HAZARD

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 pressurised. Pressurised air can cause the lid or valve to be blown off, which can result in severe injury, death, or property damage. Always release air from the filter after servicing any part of the circulating system.

Before servicing:

- Turn **OFF** the pump and isolate power
- Shut off automatic controls
- Open the **air relief valve**
- Wait until all pressure is released

Never:

- Adjust clamps, lids, or bolts while the system is pressurised.
- Exceed maximum operating pressure
- Stand near equipment during pressure testing

⚠ ELECTRICAL HAZARD

- Disconnect power at the circuit breaker before servicing
- Ensure power is locked out or tagged
- Keep electrical equipment clear of water discharge
- Do not install controls near the filter

⚠ INSTALLATION & OPERATION

- Read the full Installation and Operation Manual before use
- Follow all installation and start-up instructions exactly
- Ensure the filter is correctly mounted and secured

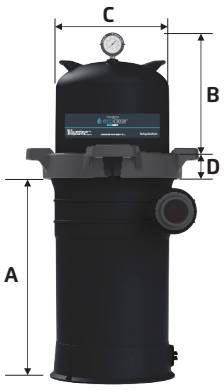
IMPORTANT: Never operate the system outside recommended limits.
Sudden pressure release or component failure may result in serious injury or death

OVERVIEW

Ecoclear© Cartridge Filters combine superior water filtration with ease of operation and corrosion-free construction. With filtration flow of 22,710 ~ 27,250 litres per hour, they are designed for continuous or intermittent operation, for installation above or below the pool waterline, for fresh or saltwater swimming pools or spas. Ecoclear© Cartridge Filters use a single polyester cartridge element to provide a high degree of water clarity and long filter cycles with minimal maintenance.

PRODUCT SPECIFICATIONS

MODEL	CODE	FILTRATION AREA		MAX FLOW RATE	DIMENSIONS (MM)			
		sq.ft.	M^2	LPM	A	B	C	D
ECO100P	10-420-1018	100	9.29	379	531	230	464	82
ECO150P	10-420-1019	150	13.94	455	531	315	464	82
ECO200P	10-420-1020	200	18.58	455	531	438	464	82

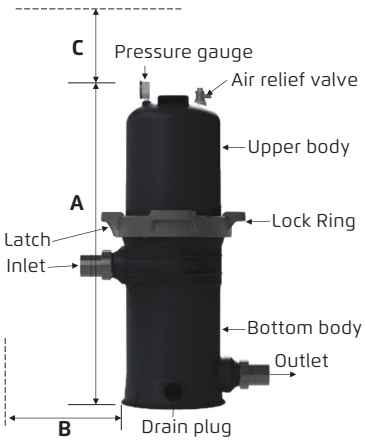


INSTALLATION

This product should be installed and serviced only by a qualified pool professional.

1. The filter system should be installed on a level concrete slab or another rigid base. Select a well-drained and vented area, that does not flood when it rains. Position the filter so that the piping connections and winter drain are convenient and accessible for operation, service, maintenance, and winterising.
2. Position the filter body so that the tank is visible.
3. Position the filter so the filter will drain by gravity.
4. If practical, place the pump and filter in the shade to shield it from direct sunlight.
5. Connect the pool suction plumbing between the skimmer, the pool outlet (from the pool), and the pump.
6. Install the plumbing from the filter to the pool (return to the pool)
7. Do not locate pump controls over or near the filter.
8. Verify water discharge from the manual air relief valve is directed away from electrical devices.

MODEL	A	REQUIRED CLEARANCE	
		"B" side	"C" above
	MM	MM	MM
ECO100P	827	464	450
ECO150P	912	464	450
ECO200P	1034	464	450



STARTING THE PUMP AND FILTER SYSTEM

BEFORE STARTING THE PUMP

1. Ensure the upper and lower filter bodies are correctly aligned and secured. Tighten the lock ring fully before operating the system

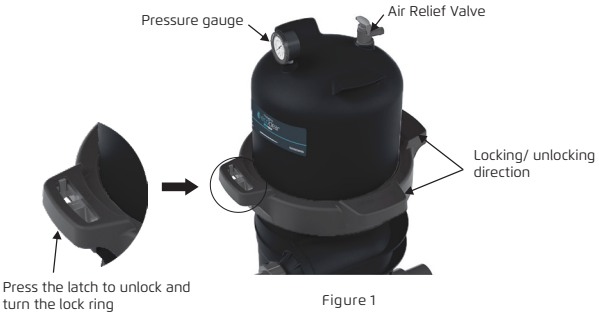


Figure 1

2. Close the filter drain.

Note: The drain plug requires an O ring seal.

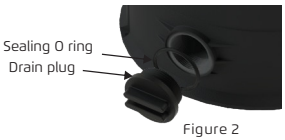


Figure 2

3. Open all system valves to allow water from the pool to the filtration system and from the filter to return to the pool.

4. Place the air relief valve in an OPEN position.

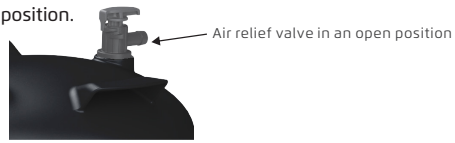


Figure 3

STARTING THE PUMP

STAND CLEAR OF PUMP DURING START-UP

Pool and spa circulation systems operate under high pressure. When any part of the system (e.g. lock ring, pump, filter, valves) is serviced, air can enter and become pressurised.

The filter lid and pump strainer (pre-filter) cover must be properly secured to prevent sudden seperation.

Before opening the system, open the air relief valve and wait until all pressure has been released. Only then remove the lid to access the basket for cleaning.

STARTING THE PUMP

Stand clear of the pump during start-up. Do not stand over or near the filter when starting the system.

If water leakage occurs at the lock ring:

Turn off all pumps and electrical power immediately. Do not return to the filter until the leakage has stopped.

Only return to close the air relief valve once water begins to discharge steadily.

OPERATION

Filtration begins once water flow through the filter is steady. As the filter removes dirt from the water, resistance increases, causing pressure to rise and the flowto decrease.

1. Record the initial starting pressure when a new filter element is working.

2. After installing a new or cleaned filter cartridge, ensure the system is running then align the START indicator on the pressure gauge with the current pressure reading.

3. Periodically monitor the pressure. When the pressure reading is over the CLEAN FILTER arrow, refer to the instructions on how to clean the cartridge.



Figure 4

REPLACING THE FILTER CARTRIDGE

Replace the filter cartridge element if:

- 25 PSI higher than the initial starting pressure
- Above 40 PSI
- The filter element is damaged or the layers are deteriorating.
- The pressure or flow rate is below the desired system performance.

MAINTAINING YOUR FILTER

FILTER DISASSEMBLY

1. Turn off all pumps and all electrical power.

2. Set all valves in a position to prevent water from flowing to the filter.

3. Remove the filter drain plug, and allow water to drain from the filter.

4. Press the latch and unscrew the lockring counterclockwise.

5. Lift the upper filter body with the lock ring attached. *Do not hold the pressure gauge to lift it.*

REMOVING THE CARTRIDGE

1. Remove the filter cartridge by using a slight rocking motion and lifting.

2. Clean filter cartridge element.

CLEANING THE CARTRIDGE

The cartridge can be cleaned using a hose to rinse inside and out. Some debris may remain trapped in the pleats after rinsing. For best results, gently brush the pleated surface to remove fine particles.

Do not use high-pressure water as it may damage the filter element.

FILTER REASSEMBLY | RE-INSTALLING THE CARTRIDGE

1. Flush and drain any dirt or debris from the bottom of the lower filter body.

2. Flush any dirt or debris from the upper filter body and from around the air release area.

3. Carefully replace the cartridge over the hubs on the bottom manifold.

4. Place the upper body securely on top of the cartridge.

CLEAN SEAL RING AND SEAL SURFACE

1. Remove filter tank sealing O-ring.

2. With a clean cloth, wipe the lower filter body seal surface and clean seal of all dirt and debris. Do not use any solvent.

3. With a clean cloth wipe the upper body seal surface.

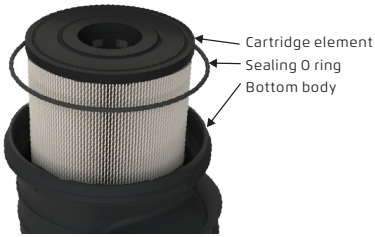


Figure 5

BODY AND LOCK RING REASSEMBLY

1. Place the sealing O-ring on the bottom body. Place the upper body on the O-ring and the bottom body.

2. Use the lock ring system only, tighten the lock ring (clockwise) until the latch is locked on position

3. Ensure that upper and bottom bodies are properly secured with the lock ring.

NOTE: DO NOT HIT OR STRIKE THE CLAMP WITH A HAMMER OR METAL TOOLS

4. Ensure that the air relief valve assembly is OPEN and no components are damaged or missing.

5. Ensure the drain plug is closed.

6. Open all system valves to allow water from the pool to the filtration system and from the filter to the pool.

7. Wait for the water to come out from the air relief valve and then turn it to fully CLOSE.

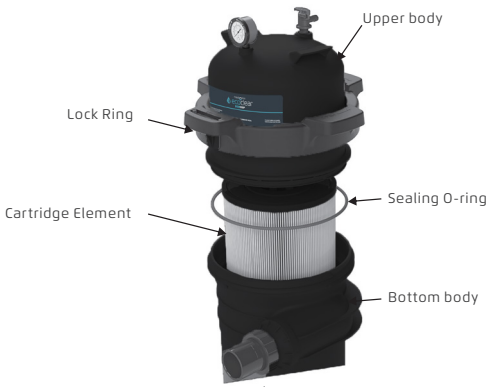


Figure 6

VACUUMING THE POOL

Vacuuming can be performed directly into the filter whenever needed.
If required clean the cartridge after vacuuming.

REMOVING THE AIR RELIEF VALVE

The filter comes with a preinstalled manual Air Relief Valve. Servicing the Air Relief Valve should be carried out by pool professionals only, follow instructions carefully.:

1. Turn off all pumps and power on the pool system equipment.
2. Set all system valves in a position to prevent water from flowing to the filter.
3. The Air Relief Valve must be placed in the OPEN position.
4. Wait until all water leakage has stopped.
5. Grasp the Relief Valve Nut at the release position, and turn the Nut counterclockwise until the Air Gauge Indicator is at the "0" position on the upper filter body.
6. Keep on turning the Nut of the release valve until it leaves the upper filter body.

RE-INSTALLATION OF THE AIR RELIEF VALVE

1. Check the condition of the O-ring, replace it as necessary.
2. With a clean cloth, wipe the upper filter body and O-ring groove. Remove all dirt and debris.
3. Twist the air relief valve with the tool until it's tightened on top of the upper filter body.
4. Make sure the nut of the release valve is tight.
5. Verify the air relief valve discharge points away from all electrical connections.

WINTERISING THE FILTER

In areas where sub-freezing temperatures can be expected, the filter should be drained to protect the filter from damage.

1. Follow the steps in "FILTER DISASSEMBLY" to remove and clean the cartridge.
2. Reinstall the cartridge in the filter.
3. Fully tighten the lock ring while storing.
4. Reassemble per "FILTER REASSEMBLY" instructions.
5. Be sure to leave the drain plug unattached during the winter season to avoid cracking the filter body.

TROUBLESHOOTING

	LOW WATER FLOW	SHORT FILTER CYCLES	POOL WATER REMAINS CLOUDY
REMEDY	1. Check skimmer and pump strainer basket for debris 2. Check for restrictions in intake and discharge lines 3. Check for air leak in intake line indicated by bubbles returning to pool. 4. Clean Filter Cartridges	1. Check for algae in the pool and super-chlorinate as required. 2. Be sure chlorine and pH levels are in a proper range (adjust as required).	1. Check chlorine, pH and total alkalinity levels and adjust as required. 2. Be sure the flow rate through the filter is sufficient 3. Operate filter for longer periods

WATER CHEMISTRY

RECOMMENDED POOL CHEMISTRY LEVELS	
pH LEVEL	7.2 to 7.8
TOTAL ALKALINITY	80 to 120 ppm
CALCIUM HARDNESS	200 to 400 ppm
COMBINED CHLORINE	0.2 ppm Maximum
CHLORINE (STABILISED)	1.0 to 3.0 ppm
CHLORINE STABILISER (Cyanuric Acid)	60 to 80 ppm

SPARE PARTS LIST



Key No.	Part No.	Description	QTY
1	20-420-1073	Pressure gauge 60psi, plastic casing	1
2	20-420-1074	Upper Body ECO100P	1
2	20-420-1075	Upper Body ECO150P	1
2	20-420-1076	Upper Body ECO200P	1
3	20-420-1077	Nut D22X15	1
4	20-420-1078	Lock Ring	1
5	20-420-1079	Latch	1
6	20-420-1080	O-ring D306Xd7.5	1
7	20-420-1081	Union nut 2"	1
8	20-420-1082	Union 2inch/2.5inch ANSI	2
9	20-420-1083	O-ring D77Xd62X8	2
10	20-420-1084	Ecoclear ECO100P/150P/200P Bottom Body	2
11	20-420-1085	End cap with O-ring	1
12	20-420-1086	Air Relief Valve with O-ring	1
13	20-420-1087	Nut D31X20 14G	1
14	20-420-1088	ECO100P Element	1
14	20-420-1089	ECO150P Element	1
14	20-420-1090	ECO200P Element	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 further information please visit maytronics.com.au.

If you require assistance please contact the Maytronics customer service team during standard business hours. P 1300 693 657 | E: infoau@maytronics.com

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