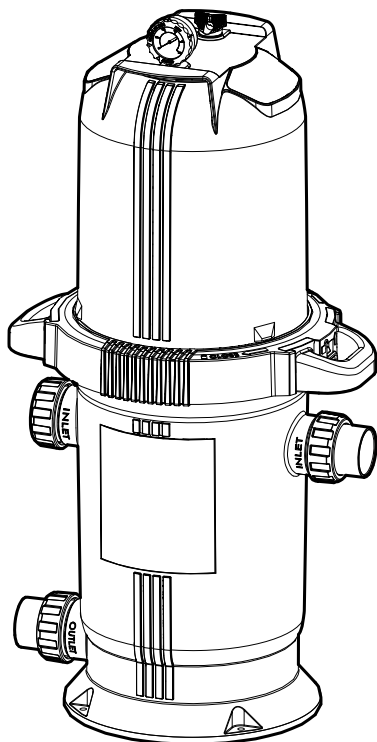
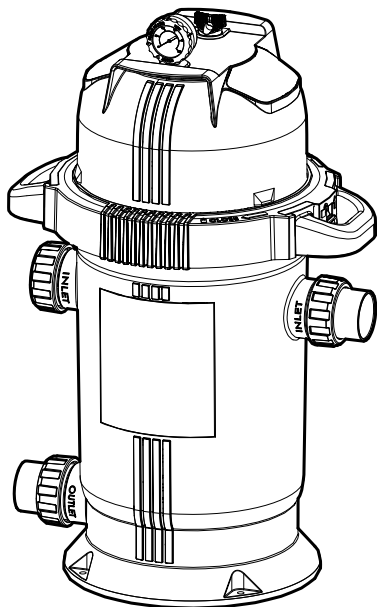




XC-Series Pool & Spa Cartridge Filter

Models: XC50 XC100 XC150 XC250
 XC75 XC150C XC200

⚠ WARNING

FOR YOUR SAFETY – This product must be installed and serviced by a licensed and qualified contractor experienced in pool equipment, in accordance with all applicable local and council codes and standards. Before installing this product, read and follow all warning notices and instructions that accompany this product. Failure to follow warning notices and instructions may result in property damage, personal injury, or death. Improper installation and/or operation may void the warranty.

Improper installation and/or operation can create unwanted hazards which may cause serious injury, property damage, or death.



ATTENTION INSTALLER – This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner/operator of this equipment.

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IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL INSTRUCTIONS

All electrical work must be performed by a licensed electrician and conform to all national, state, and local codes. When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

 WARNING
Do not connect system to an unregulated city water system or other external source of pressurised water producing pressures greater than 250 kPa (36 PSI). Pressurised air in system can cause the filter lid to be blown off which can result in death, serious personal injury, or property damage. Be sure all air is out of system before operating or testing the equipment.
MAXIMUM OPERATING PRESSURE OF THE FILTER IS 250 kPa (36 PSI). NEVER SUBJECT THE FILTER TO ANY OPERATING PRESSURE EXCEEDING 250 kPa (36 PSI). This filter operates under high pressure. When any part of the circulating system, i.e., filter, pump, valve(s), clamp, etc. is serviced, air can enter the system and become pressurised when the system is restarted. Pressurised air can cause the filter lid to be blown off which can result in death, serious personal injury or property damage. To avoid this potential hazard, follow all of the instructions in this manual.
To minimise risk of severe injury or death the filter and/or pump should not be subjected to the piping system pressurisation test. Local codes may require the pool piping system to be subjected to a pressure test. These requirements are generally not intended to apply to the pool equipment such as filters or pumps. AstralPool equipment is pressure tested at the factory. If however this WARNING cannot be followed and pressure testing of the piping system must include the filter and/or pump BE SURE TO COMPLY WITH THE FOLLOWING SAFETY INSTRUCTIONS: Check all clamps, bolts, lids, lock rings and system accessories to ensure they are properly installed and secured before testing. RELEASE ALL AIR in the system before testing. Water pressure for test must NOT EXCEED 250 kPa (36 PSI). Water temperature for test must NOT EXCEED 38°C (100°F). Limit test to 24 hours. After test, visually check system to be sure it is ready for operation. Notice: These parameters apply to AstralPool equipment only. For non-AstralPool equipment, consult equipment manufacturer.
Chemical spills and fumes can weaken pool/spa equipment. Corrosion can cause filters and other equipment to fail, resulting in severe injury or property damage. Do not store pool chemicals near your equipment.
Incorrectly installed equipment may fail, causing severe injury or property damage.
To reduce the risk of injury, do not permit children to use this product.

SAVE THESE INSTRUCTIONS

Section 1. XC-Series Specifications and Dimensions

FILTER MODEL	MODEL NO.	REPLACEMENT ELEMENT CODE	FILTER AREA (M2)	MAX. FLOW RATE (L/MIN)	MAX. FLOW RATE (L/HR)	4 HR TURN OVER (L)	6 HR TURN OVER (L)	MAX. WORKING PRESSURE (KPA)	PUMP SIZE (W)	SHIPPING WEIGHT (KG)
XC50	30040	SP78020	4.7	225	13,500	54,000	81,000	250	550-750	13.6
XC75	30041	SP78021	7.0	290	17,400	69,600	104,400	250	550-1100	14.2
XC100	30042	SP78097	9.3	375	22,500	90,000	135,000	250	750-1100	14.4
XC150C	30046	SP78098	14.0	445	26,700	106,800	160,200	250	750 -1500	15.5
XC150	30043	SP78059	14.0	445	26,700	106,800	160,200	250	750 -1500	16.6
XC200	30044	SP78099	18.6	490	29,400	117,600	176,400	250	750-1500	17.0
XC250	30045	SP78094	23.2	515	30,900	123,600	185,400	250	750-1500	17.5

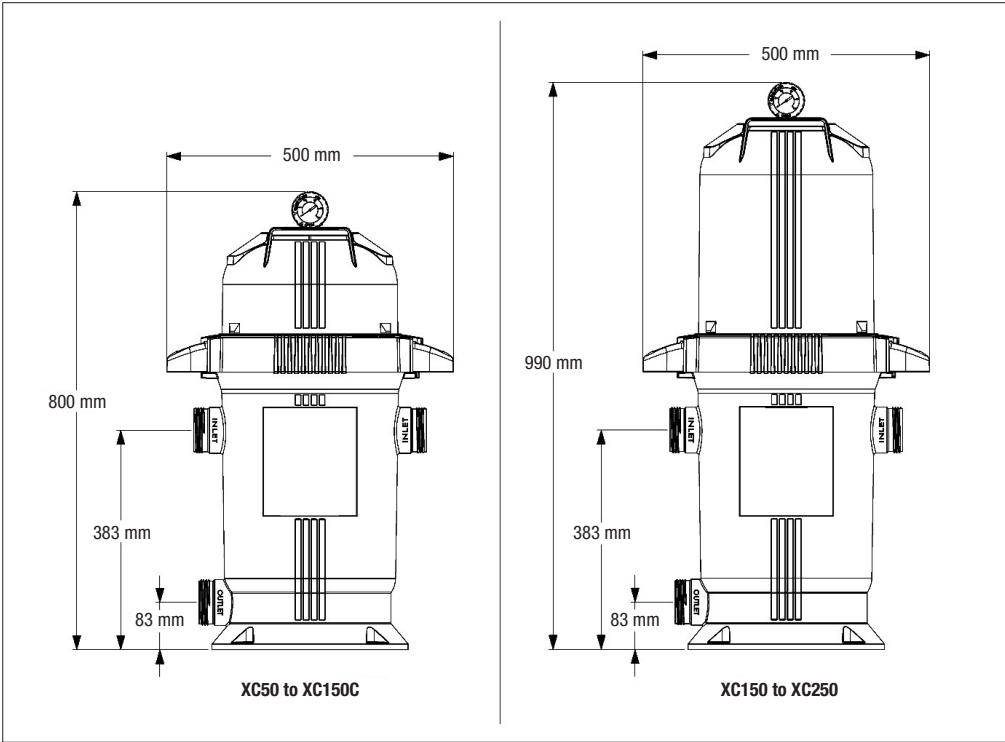


Figure 1. XC-Series Filter Dimensions

NOTE: The XC150C filter is specifically designed for situations where space limitations or installation obstacles necessitate a smaller filter body. The XC150C filter provides a 20% decrease in filtration efficiency relative to the XC150 large body filter.

Section 2. General Information

2.1 Introduction

Congratulations on the purchase of your AstralPool XC-series cartridge filter. The XC-series filters are made to last by utilising the best quality materials available. The tank is made from high quality and high strength glass fibre reinforced plastics, capable of withstanding the harshest environments.

This manual provides installation and operation instructions for the AstralPool XC-series cartridge filter. Read the installation and operation instructions completely before proceeding with the installation.

2.2 Technical Assistance

For technical assistance, in Australia please visit www.astralpool.com.au or call at 1300 186 875, in New Zealand please visit www.astralpool.co.nz or call at 0800 807 665.

2.3 Description

Cartridge filters do not require sand or diatomaceous earth as the filter medium. Instead, the filter contains filter elements which are easily removed for cleaning or replacement.

Dirty water flows into the filter tank through the water line connected to the inlet of the tank body. It is directed through the filter cartridge inside of the filter. The debris is collected in the filter and the clean water flows out of the filter through the outlet on the bottom of the tank body. Clean water is returned through the piping system to the pool.

As debris collects in the filter, the pressure will rise and water flow to the pool will reduce. It is necessary to remove the filter cartridges and clean them with soap and water on a regular basis in order to prevent pressure from rising too high and water flow reducing too low (see *Section 6 Maintenance*).

NOTE: A filter removes dirt and other suspended particles but does not sanitise the pool. Pool water must be sanitised and chemically balanced for clear water. The filtration system should be designed to meet local health codes.

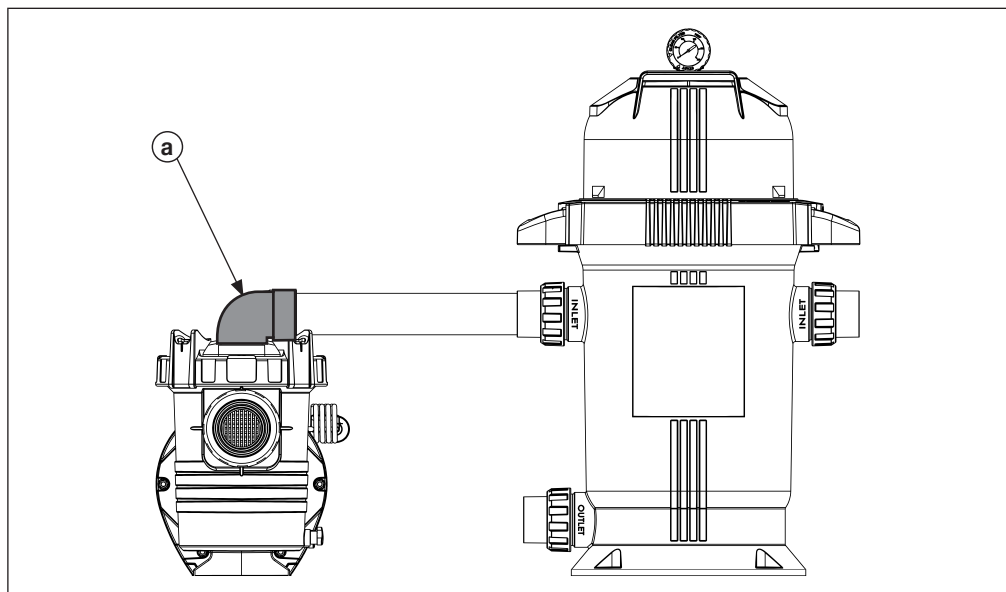


Figure 2. 90-Degree Street Elbow

2.4 Pump Compatibility

A 90-degree street elbow (a), is included with your XC-Series filter to facilitate connection to Astralpool Viron XT, CTX, E-Series and XP pumps (Figure 2).

This low-profile street elbow is beneficial for making a seamless connection from the pump outlet to the filter inlet, particularly in confined spaces.

NOTE: Adhering to the plumbing instructions detailed in the Astralpool pump manual is advised to ensure maximum hydraulic efficiency and optimal performance.

Section 3. Installation Instructions

Follow the step-by-step instructions to avoid any accidents and to ensure proper installation of the filter.

3.1 Inside the Box

Make sure all the parts are included in the product package. If you have a problem with the filter or the parts, contact AstralPool or the retailer for technical assistance.

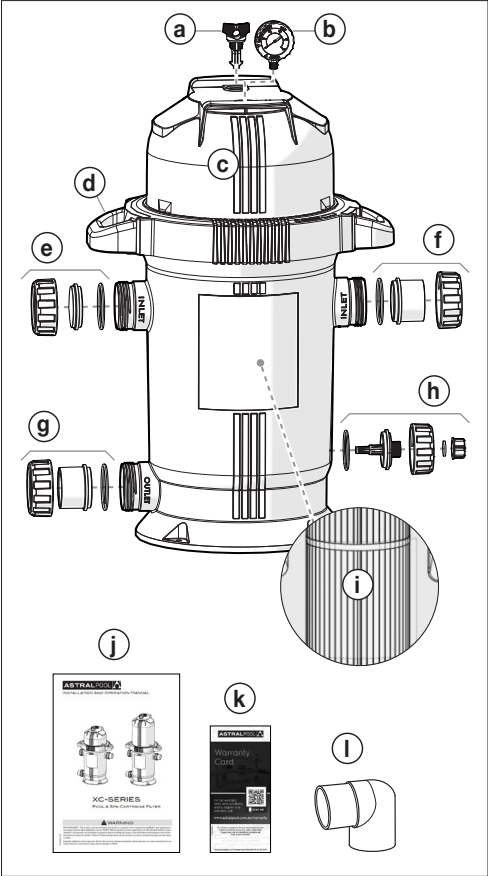


Figure 3. XC-Series Package Contents

XC-Series Package Contents (Figure 3)	
a. Air Relief Valve w/ O-ring	h. Drain Cap Assembly (rear)
b. Pressure Gauge	i. Filter Cartridge (installed)
c. Filter Housing	j. Installation and Operation Manual
d. Handles	k. Warranty Card
e. Blanking Cap w/ Fittings	l. 90-degree Elbow
f. Inlet Fittings	
g. Outlet Fittings	

3.2 Required Tools

Please ensure that the following equipment is available at the time of installation:

- Safety eye wear 
- Gloves 
- Pipe wrench 
- Adjustable wrench 
- Multi grips 
- PVC pipe cutter 
- PVC cement 
- Teflon tape 
- Tape measure 

Section 4. Installation

The cartridge filter must be installed on a clean, stable and level base.

The location of the filter should ideally be under cover away from direct sunlight and away from heat sources. Attach the handles to the filter by sliding vertically into the slots in the locking ring (Figure 4). Press down until you hear the tabs click into place.

NOTE: Each handle fits only one side. Match the handles to the slots.

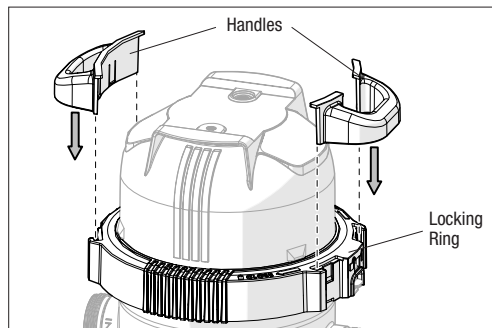


Figure 4. Handle Attachments

The XC-series filter has four ports in total - two inlet ports (from pump), one outlet port (to pool/spa) and one drain port (Figure 5).

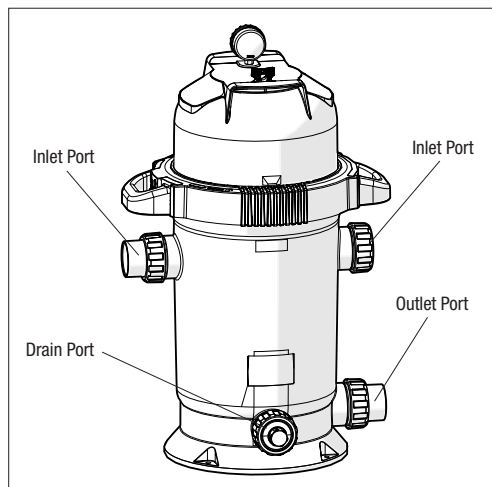


Figure 5. Filter Ports

Either inlet port can be used. While one inlet is in use (active inlet), the other (passive inlet) must be blocked using the blanking cap supplied with the product.

NOTE: Both inlets may be used in an optional configuration (second tail union not included, PN 950920).

Glue the water connection pipe from the pump to the inlet tail union (Figure 6). Glue the pool returns water connection pipe to the outlet tail union. Ensure locking nuts are placed on tail union before gluing connection pipes. Allow 24 hours for glue to dry before subjecting filter to system pressures.

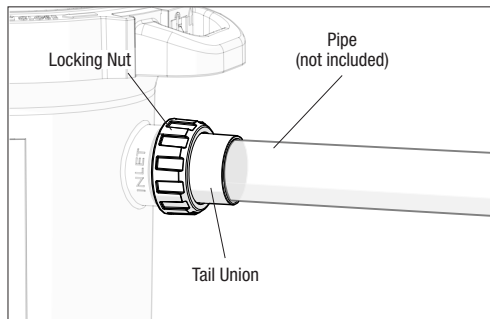


Figure 6. Plumbing Connections

Install the O-ring on the tail union, then screw the locking nut onto the active inlet. The O-ring must be clean and not twisted. Install the tail union on the outlet of the filter in the same manner (Figure 7).

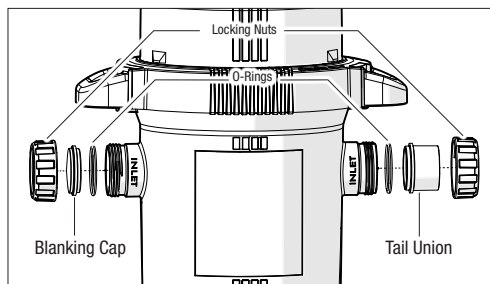


Figure 7. Inlet Fittings

Block the second (passive) inlet using a blanking cap, O-ring and locking nut.

Each inlet is fitted with a water deflector. These deflectors must remain in place to prevent damage to the filter due to high-speed water flow from the pump (Figure 8).

NOTE: Both inlet water deflectors are installed at the factory.

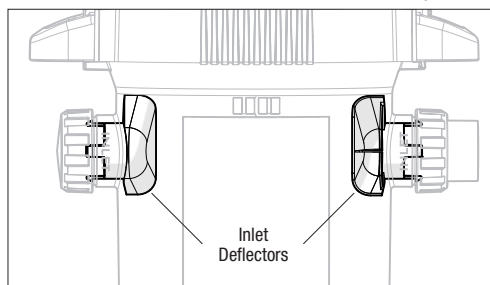


Figure 8. Water Deflectors

Install the drain cap assembly into drain port (Figure 9).

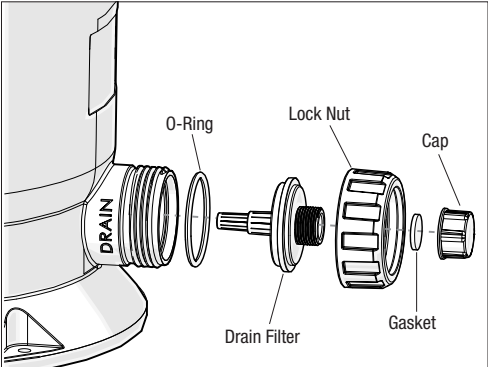


Figure 9. Drain Cap Assembly

Assemble the pressure gauge with front and rear casings (Figure 10).

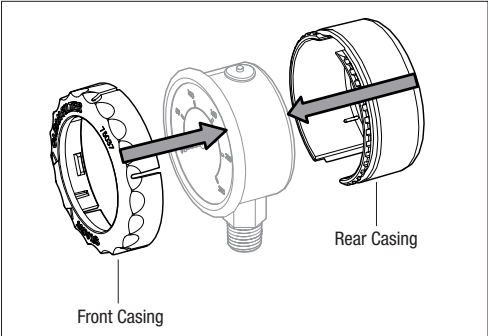


Figure 10. Pressure Gauge Casings

Apply Teflon tape (not included) to the pressure gauge and screw into lid where indicated (Figure 11). Install the air relief valve (also known as air bleed valve) into the lid.

NOTE: The air relief valve is fitted with an O-ring at the factory. Make sure that the O-ring is on the air relief valve, before installing into the lid.

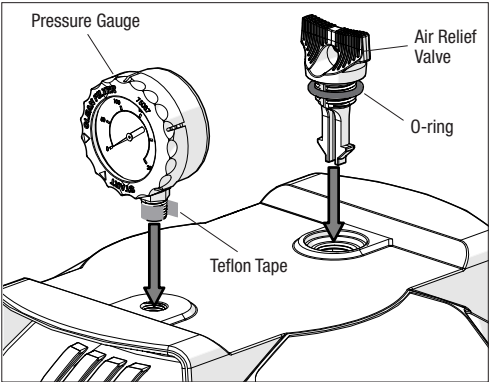


Figure 11. Pressure Gauge and Air Relief Valve Installation

Section 5. Start-Up and Operation

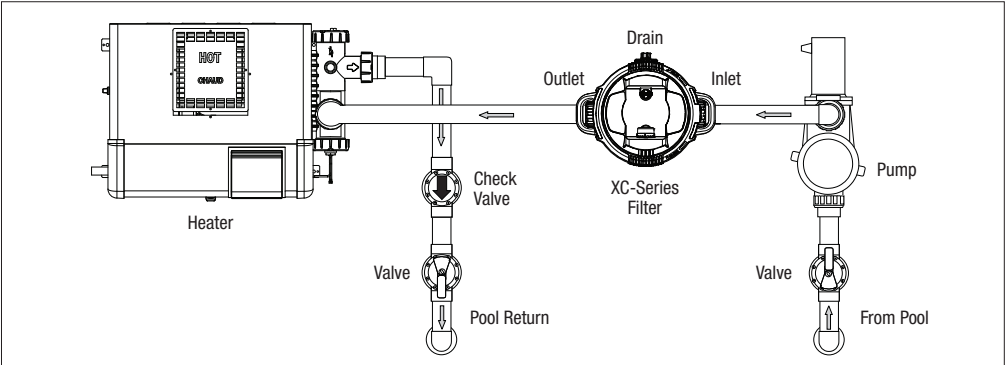


Figure 12. Basic Pool Plumbing

Turn off the pump and disconnect any additional power source that is connected to the system.

Check that the locking nuts on all four ports are in place and tight (inlet, outlet, drain cap and blanking cap). Make sure the filter cartridge is installed in the filter housing.

NOTE: The cartridge is installed at the factory, ready for the first start-up.

Make sure the locking ring is closed tight (fully clockwise) and the locking tab is engaged. When closing the locking ring, the locking tab will “click” as it engages (*Figure 13*).

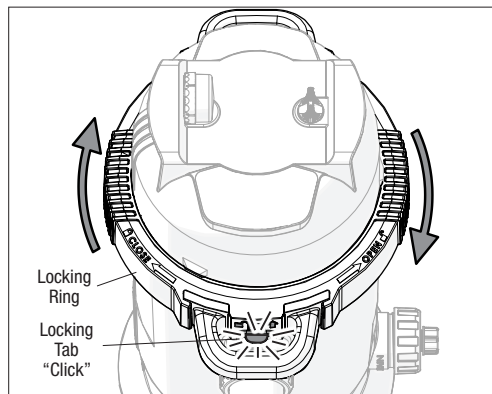


Figure 13. Secure Locking Ring

Open the pump hair/lint pot lid and fill the pump basket with water to prime the system. Replace the lid (you may have to do this several times on new start-ups).

Open the suction and return line valves (if fitted).

Stand clear of the filter. Start pump and open the air relief valve on the filter lid about three-quarter turn – until you hear air being forced from the tank (*Figure 14*).

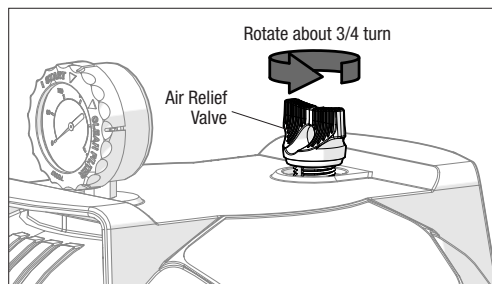


Figure 14. Open Air Relief Valve

Once water begins to flow from the valve, tighten to close. Check there is a good flow of water back into the pool.

Watch the pressure gauge to make sure the pressure stays below 250 kPa or 36 PSI. If the pressure approaches 250 kPa, immediately turn the pump off and clean the filter cartridges (*Section 6 Maintenance*). If the pressure remains high after cleaning the filter, refer to the troubleshooting guide (*Section 7 Troubleshooting*) for possible causes and solutions.

When the filter is first installed, make a note of the pressure gauge reading. Follow the Maintenance Schedule to clean or replace the cartridge when the flow to the pool reduces or the pressure gauge increase is more than 20 kPa. (*Section 6.1, Maintenance Schedule*).

Section 6. Maintenance

Filters incorporate moving parts that withstand high velocity water with chemicals in it. It is important to note that over time some of these parts will wear in the normal course of use and require regular checks, maintenance and possible replacement.

Performing the maintenance checks below will help to identify parts that have worn and require repair/replacement before serious damage is sustained. Please note that repair/replacement of moving parts due to regular wear and tear are the responsibility of the pool owner(s) and are not deemed to be covered under warranty. A small amount of regular care and attention to pool equipment will help ensure long life and trouble-free performance.

6.1 Maintenance Schedule

FORTNIGHTLY
MAINTENANCE CHECK: Check pressure gauge – If pressure increase is greater than 20 kPa, cleaning may be required.
SERVICE ACTION (if needed): Clean elements using a garden hose with nozzle or purpose element cleaner in accordance with instructions.
THREE MONTHLY
MAINTENANCE CHECK: Check inlet/outlet O-rings for leaks.
SERVICE ACTION (if needed): Clean elements using a garden hose with nozzle or purpose element cleaner in accordance with instructions.
MAINTENANCE CHECK: Check operation of pressure gauge – salt water can prematurely reduce the life of a gauge.
SERVICE ACTION (if needed): Replace gauge.
ANNUALLY
MAINTENANCE CHECK: Compare operating pressure of a cleaned filter to initial pressure (when new).
SERVICE ACTION (if needed): If pressure is more than 30 – 40 kPa different from cleaned elements to new filter, replace elements.
MAINTENANCE CHECK: Check for signs of damage to elements.
SERVICE ACTION (if needed): Replace elements.

Important note:

Regular maintenance is important to ensure long life and trouble-free performance of your pool equipment. If unable to perform the maintenance yourself, please contact your local pool professional, or an authorised dealer who will be happy to send a trained service technician to perform the maintenance for you.

For help finding an authorised dealer, use the dealer locator available at:

www.astralpool.com.au/find-a-dealer (Australia)

www.astralpool.co.nz/find-a-dealer (New Zealand)

6.2 Filter Cartridge Cleaning/Replacement

Turn off the pump and any additional power source that is connected to assure the system will not inadvertently start during service.

IMPORTANT

Open the air relief valve (also known as air bleed valve) about three-quarter turn on the filter lid and wait until the pressure gauge reading is zero (0).

Close the filter isolation valves (suction and return) on the system to prevent flooding.

Remove the drain cap located at the bottom of the filter main body to drain water (Figure 15).

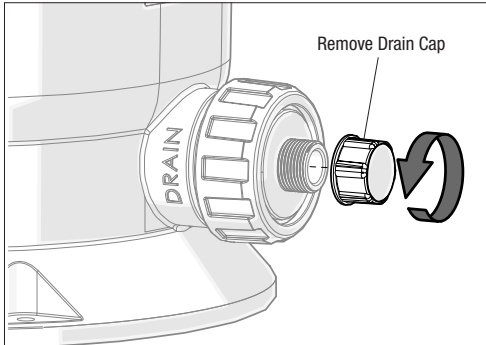


Figure 15. Drain Filter

Replace the drain cap.

Loosen the locking ring on filter. Pull up on the locking ring release tab and hold while turning the locking ring counterclockwise (Figure 16).

NOTE: NEVER LOOSEN THE LOCKING RING WHEN THE PUMP IS ON!

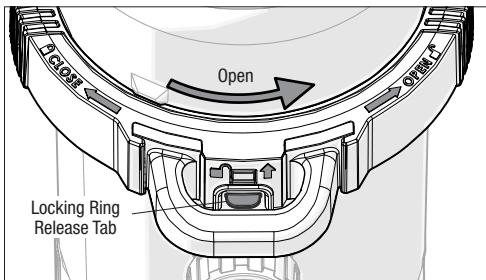


Figure 16. Locking Ring Release Tab

Once lid is free of the body, lift lid and locking ring together and place in a clean location. You can now remove the filter cartridge (Figure 17).

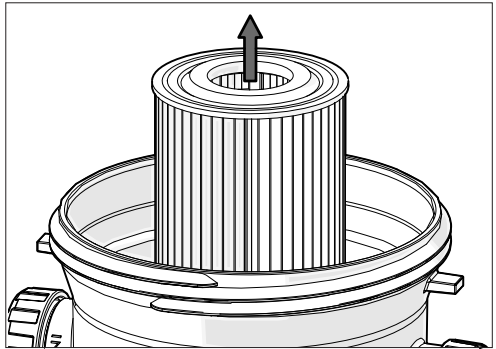


Figure 17. Removing Cartridge

Pull the cartridge out of the filter tank. If replacing the cartridge with a new one, skip this step.

To clean the filter: Spray any debris from the filter with a garden hose. Set your hose to a gentle spray and wash off any large debris that you can see on it.

Spray the filter right away before it dries after you have removed it from the system. Drying will allow the collected debris to set into the filter media, making it more difficult to remove later.

When spraying down the filter, be sure to get in between the pleats on the filter. This is where a lot of large debris can collect.

NOTE: Special formulated filter element cleaning solutions can be purchased from most pool professionals.

NOTE: Do not use high powered water jets to clean the elements, which may cause damage. Using a garden hose with nozzle will do the job safely.

Using a new or cleaned cartridge, place the cartridge into the filter tank. Be sure that the filter cartridge is correctly seated on the cartridge support at the bottom spigot of the filter main body (Figure 18).

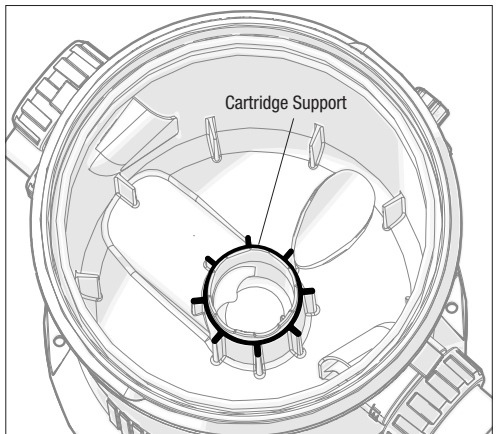


Figure 18. Cartridge Support

Inspect the main O-ring at the lid for cracks and wear marks. Replace if necessary. Use only a non-petroleum based lubricant on all gaskets and lid O-rings.

Replace the lid and locking ring assembly onto the top of the filter tank, ensuring correct alignment with the threads. Tighten the lid locking ring in a clockwise direction. The lid will pull down onto the filter tank until you will hear a “click” sound when the locking tab has engaged (Figure 19).

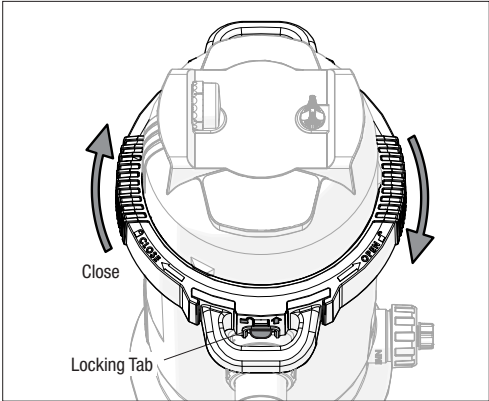


Figure 19. Closing the Locking Ring

Start the system by following the procedures outlined in Section 5 Start-Up and Operation

Section 7. Troubleshooting

For a list of common problems and solutions see the Troubleshooting Guide below.

AstralPool recommends that you call a qualified service technician to do any work on the filter/pump system.

For technical service:

in Australia please call 1300 186 875
in New Zealand please call 0800 807 665

FAULT SYMPTOM	POSSIBLE PROBLEMS	SOLUTIONS
Water is not clear	Insufficient disinfectant level.	Check and adjust disinfectant level.
	Incorrect pool chemistry.	Test and adjust water chemistry.
	Heavy bathing and/or dirt loads.	Adjust filter time and/or water chemistry.
	Insufficient running times.	Increase pump run time.
	Filter is dirty.	Clean filter cartridges per instructions.
	Hole in filter element.	Replace cartridge.
Low water flow	Filter system strainer baskets dirty.	Check and clean strainer baskets.
	Air leaks on suction side of pump.	Check connections between pool intake and pump.
	Restrictions or blockage in either suction or return lines.	Check all lines for debris or partially closed valves.
	Filter cartridges need to be cleaned or replaced.	Clean or replace filter cartridges per instructions.
	Pool water level too low.	Fill pool so level is above pump inlet line.
	Pump not primed.	Fill pump with water at basket and replace lid.
	Pump impeller vanes blocked.	Technician required.
	Strainer baskets not being used and/or broken (Allowing debris into pump).	Replace baskets.
Short filter cycles	Pump operating under speed (low voltage).	Technician or electrician required.
	Presence of algae clogging filter.	Check disinfectant content.
	Incorrect water chemistry.	Check pH, total alkalinity and TDS.
	Pump output exceeds design flow rate of filter.	Check pump performance.
	Ineffective cleaning.	Clean or replace filter cartridge per instructions.
High pressure on start-up	Small eyeball fitting in Pool/Spa.	Replace with larger diameter fitting.
	Partially closed valve on return line.	Check and fully open all valves on return line.
	Pump is too large.	Check pump and filter selection.
	Filter cartridges dirty.	Clean filter cartridges per instructions.
Dirt returns to pool	Hole in filter cartridge.	Replace filter cartridge per instructions.
	Worn o-ring seal inside filter.	Replace o-ring.

WARRANTY REGISTRATION	Record your equipment details here for quick reference: Model No. : _____ Serial No. : _____
	AUSTRALIA WARRANTY: For full warranty terms and conditions and to register your warranty, visit www.astralpool.com.au/warranty and complete your details. ◀ Or scan the QR code to go directly to the registration page.
	NEW ZEALAND WARRANTY: For full warranty terms and conditions and to register your warranty, visit www.astralpool.co.nz/warranty and complete your details. ◀ Or scan the QR code to go directly to the registration page.

