

OWNER'S MANUAL



onga[®]

Pentair Water



Pantera Cartridge Filter II PCF-II

Should the installer or owner be unfamiliar with the correct installation or operation of this type of equipment you should contact the distributor/manufacturer for the correct advice before proceeding with the installation or operation of this product.

Relax - you've bought an **ongá** ...

Congratulations on your decision to purchase an Onga product. Onga is one of the best know brands in its field, with a proud local and international reputation.

Onga is a brand for reliability, value for money and technological innovation. You will find Onga product wherever people need to move water in 3 broad markets covering:



Residential

Technologically advanced solutions for moving and treating water in the home, garden and pool.



Agricultural

Innovative stock and crop water management solutions for primary industries.



Process

Water movement products for building services, emergency services and original equipment manufacturers.

1. Continual Product Improvement

We employ the best engineers both in Australia and around the world to develop new and better ways to take water further.

2. Operational Excellence

There is only one standard that we set ourselves for both product quality and the quality of our service. That standard is excellence... to have no-one better than us at what we do... nothing short of that is acceptable. Our commitment to quality is reinforced with our ISO 9001 accreditation.

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4. Our Team of Dealers

The hand picked authorised Onga dealer network throughout Australia and worldwide are second to none. We invest considerable time and resources training and supporting them through the Onga Training Academy.



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Model Data

The operator must be provided with the owner’s manual. This must be read before operation and followed during operation.

These instructions are a guide only. Users not familiar with pool equipment should seek advice for suitably qualified persons with experience in pool equipment installation.

Manufactured in New Zealand, the Onga Pantera Cartridge filter is made from UV stabilised ABS. The reputation of durability and performance makes the Pantera cartridge filter a great choice for pools of all sizes.

Model		PCFII-075	PCFII-100	PCFII-150	PCFII-200
Filter Area (sq.ft/sq.m)		75/7.0	100/9.3	150/13.9	200/18.6
Design Flow Rate (lpm)		300	370	410	600
Max Working Pressure (psi/kPa)		40/280	40/280	40/280	40/280
Clearance	Cartridge Diameter	185mm	185mm	185mm	185mm
	Cartridge Height	495mm	495mm	745mm	745mm
	Filter Height	690mm	690mm	940mm	940mm
	Filter Width	285mm	285mm	285mm	285mm
Replacement Element Part No.		PCFII-RC075	PCFII-RC100	PCFII-RC150	PCFII-RC200

*Pool sizes given as a guide only- in general, a larger filter is better as it has a lower pressure drop, and requires less maintenance.



Due to excessive cycling, This filter is not suitable for use on the pressure circuit of inbuilt in-floor cleaning systems.

Filter Application - General Information

This filter is designed for use in domestic/residential swimming pool installations with correctly sanitised fresh or salt chlorinated water.

1. Locate the filter system as close to the pool as practical.
2. Place the filter on a level stable foundation, preferably a concrete pad or paving.
3. Position all equipment to provide ease of access for future servicing
4. Protect the filter and pump from weather and direct sunlight by ensuring that they are properly housed.
5. Ensure there is sufficient space to provide adequate ventilation to the electric pump motor
6. Clean a new pool as well as possible before filling pool and operating filter. Excess dirt and large particles of foreign matter in the system can cause serious damage to the filter and pump.
7. Ensure pump is compatible with filter specifications

Installation



Hazardous Pressure

Incorrectly installed or tested equipment may fail, causing severe injury or property damage. Read and follow instructions in owner's manual when installing and operating equipment. Have a trained pool professional perform all pressure tests.



All glued fittings and pipe work should be allowed to dry to atmosphere for 24 hours before closing installation. Failure to do so could cause injury or installation failure.



The filter owner and operator must be provided with this owner's manual by the installer. This must be read before installation and followed during operation. Users not familiar with pool equipment should seek advice from suitably qualified persons.

	⚠ DANGER	BEFORE WORKING ON THE FILTER:
	<p>Hazardous Pressure! Can cause severe injury or major property damage from tank explosion.</p>	<p>1. Stop Pump 2. Release all pressure from system, by turning valve handle to waste.</p>

	⚠ WARNING	BEFORE WORKING ON THE PUMP OR MOTOR:
	<p>Filter pumps require hazardous voltage which can shock, burn, or cause death.</p>	<p>Disconnect power to motor.</p>

Installation & Assembly of Filter

Installation of filter should be carried out by qualified personnel.

1. Select the filters location. Ensure that the filter does not restrict the airflow from the pump's motor, and ensure that there is enough room above the filter to enable the cartridge to be removed.
2. Select whether 40mm or 50mm PVC is required. Blank off the one inlet and one outlet that will not be used with the supplied bungs/reducers.
3. Glue PVC fittings from the pump to the inlet of the filter.
The adhesive needs to be either PVC type P pipe adhesive or a suitable ABS plastic adhesive like Durapipe specifically suited to ABS parts .
Please ensure that all glued connections are left for 24 hours or as per instructions on glue label to ensure proper water tight bond.
4. If a chlorinator is to be used, glue a PVC line from the filter outlet to the chlorinator cell. Ensure that a gas trap is installed in accordance with the chlorinator manufacturer's instructions. Failure to install a gas trap may mean that chlorine gas accumulates inside the filter housing, with risk of explosion or asphyxiation.
5. Ensure cartridge is in place, the lid is properly seated, and the locking ring screwed hand tight only.

Startup

1. Ensure pool is filled to three quarters of the way up the skimmer opening.
2. Open manual air bleed on the lid of the filter, so that the filter fills with water from the pool. Air will be expelled as it fills. Close the manual air bleed when it starts to release water.
3. Open all valves and start the pump. Ensure that water is flowing from the skimmer or other pool outlet and is returning into the pool. Ensure there are no leaks in the system.
4. Record the startup pressure. This reading will be used to decide when to clean the cartridge.
5. If you notice a leak around the locking ring area after 15-30 minutes of running, stop the pump. Release system pressure using the manual air bleed, and remove the lid. Ensure all valves are closed to ensure that the pool water does not flow out through the filter housing. Clean the seal area and the o-ring and replace.

Operation



The filter operator or owner must be provided with this owner's manual. This must be read before operation, and followed during operation.



Incorrectly installed or tested equipment may fail, causing severe injury or property damage. Read and follow instructions in owner's manual when installing and operating equipment. Have a trained pool professional perform all pressure tests.



Hazardous pressure to avoid explosion and possible severe or fatal injury, filter system pressure must not exceed 40psi (280kPa) under any circumstances. NEVER test this filter system with compressed air; never operate system with water temperature above 35°C.



To prevent equipment damage and possible injury, turn pump OFF before adjusting or opening filter.



Do not add chemicals directly into the pool skimmer. Adding undiluted chemicals may damage equipment and void warranty.

1. The filter should require no intervention during operation, except to clean or replace the cartridge.
2. When the pressure gauge shows a reading 70kPa higher than the startup reading taken in item (4) above, the cartridge requires cleaning. See below for cleaning procedure.
3. If the time period between filter cleans gets progressively shorter, it may be necessary to soak the filter in a proprietary cleaner. See your pool shop or technician for advice. This is because the build up of debris that cannot be washed away with normal methods.
4. If the filter material is torn, it will be necessary to replace the cartridge.

Cartridge Maintenance

General: Wash outside of filter with a mild detergent and water.
Rinse off with hose.

⚠ IMPORTANT DO NOT use solvents to clean filter, solvents may damage components in system.

1. On a weekly basis, check pressure during operation. When pressure is 70kPa higher than clean operating pressure, clean the filter cartridge.
2. Except during hot weather with heavy skimmer loads, operating filter 6 to 12 hours per day should be sufficient. Carefully monitor water chemical balance and follow recommendations of your local pool professional.

Cartridge Cleaning

1. Switch off pump, release system pressure using the air bleed on the filter lid. Close all valves, remove locking ring from filter, remove lid.
2. Lift the cartridge out of the filter housing.
3. Inspect for damage (rips in the filter material). Replace if ripped.
4. Using a garden hose with a high pressure nozzle sweep debris from the cartridge pleats. When all pleats are clean, the cartridge is ready to be placed back in the filter.
5. Replace filter. Ensure that it is correctly seated. Replace lid, ensuring that the o-ring and sealing surface are clean, and correctly in place. Replace the locking ring. Open all valves and bleed the air from the housing.
6. Restart the pump.

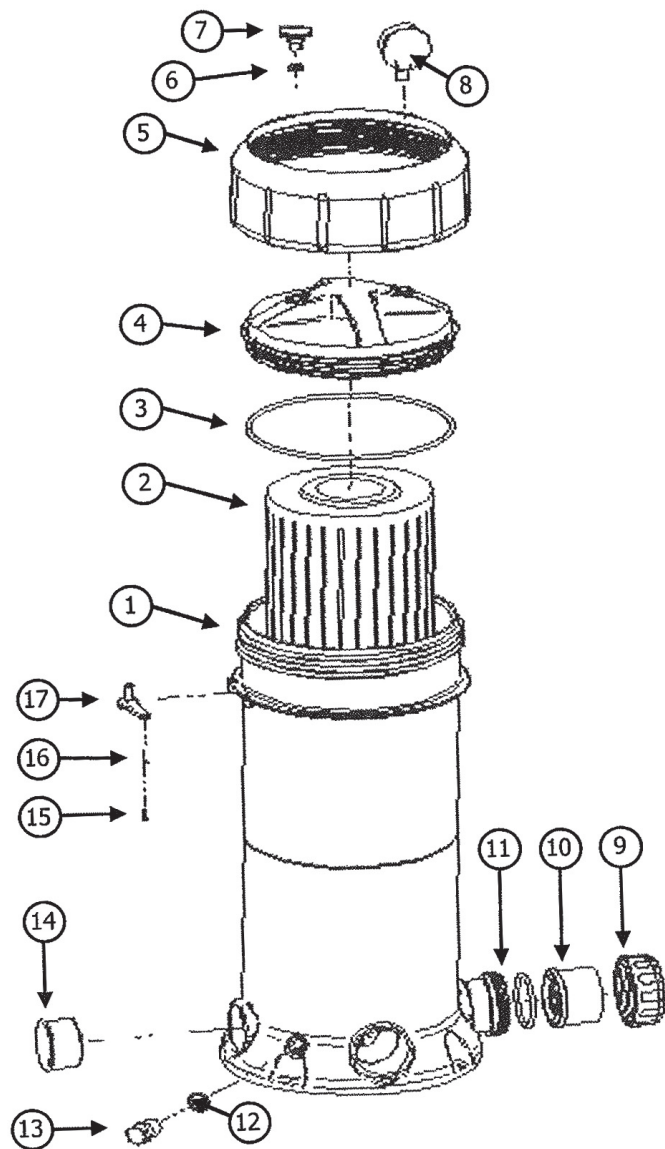
Water Maintenance

Keep water level at least 2" (50mm) above bottom of skimmer opening. Failure to do so can allow air to enter system, causing pump to lose prime and air to enter filter.

Maintain pH between 7.2 and 7.6 in pool.

⚠ WARNING To prevent damage to system components, keep water temperature below 45°C at all times.

Tank Assembly



Item	Title	Quantity	Item	Title	Quantity
1	Tank Base	1	10	Mac Union Tail	2
2	Element	1	11	Mac Union O-Ring	2
3	Lid O-Ring	1	12	Drain Bung O-Ring	1
4	Lid	1	13	Drain Bung	1
5	Lock Ring	1	14	Blank cap	1
6	Air Bleed O-Ring	1	15	Safety Lock Lever Screw	1
7	Air Bleed	1	16	Safety Lock Lever Washer	1
8	Pressure Gauge	1	17	Safety Lock	1
9	Mac Union Nut	1			

Trouble Shooting

Symptom	Cause	Remedy
No Water Discharge	Pool water level too low	Fill pool to correct level
	Air leaks in inlet fittings to pump.	Check and tighten all connections. Teflon tape fittings
Short Filter cycles	Filter Dirty	Clean filter cartridge
		Replace filter cartridge
	Algae present in Pool water.	DON'T RUN FILTER WITH LIVE ALGAE IN POOL. Check the chemical condition of pool water and refer to Pool Water Chemical Treatment. Note: Incorrect chemical treatment will greatly shorten filter cycle.
Filter startup pressure high and water flow low	Filter requires cleaning	Follow filter cleaning procedure in this manual
	Return line restricted	Check for flow at return
Filter startup pressure low and water flow high	Skimmer basket full of leaves or debris	Clear Skimmer Basket of all foreign matter and debris
	Pump strainer lid not sealed correctly	Refer to pump owners manual for correct procedure for sealing strainer lid correctly
	Pool water level too low	Fill pool correct level
	Pump impeller blocked	Call an authorised service agent to service pump
	Blockage in suction line	
Air leak in suction line		
Leaking from filter tank joint	Tank O-ring dirty	Call an authorised service agent to service pump
	O-ring incorrectly fitted	
	O-ring damaged (pinched)	

Should problems persist, contact your nearest Pentair Water Service Agent.

Notes

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Notes

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IMPORTANT

Please attach your sales invoice/docket here as proof of purchase should warranty service be required.

Please do not return Warranty Form to Pentair Water Australia - please retain for your records.

Purchased From

Purchase Date..... Serial No..... Model No.....



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