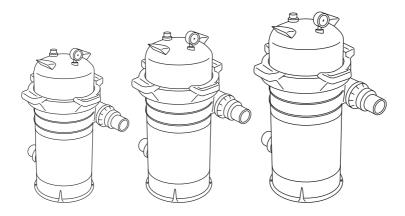
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Single Element Cartridge Filters HCF-SE-100, HCF-SE-150, HCF-SE-200

INSTALLATION & OWNER'S MANUAL







CAUTIONS AND WARNINGS:

Failure to follow these instructions and comply with all applicable codes may cause serious bodily injury and/or property damage.

The installation of this product should be carried out by a qualified pool technician.

Failure to follow the instructions in this manual may result in serious adverse health effects or even serious or fatal injury.

Failure to follow the instructions in this manual will in all cases invalidate all guarantees and liability on the part of the manufacturer.

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Single Element Cartridge Filters HCF-SE-100, HCF-SE-150, HCF-SE-200

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INSTALLATION

Warning: This filter operates under high pressure

- Position the Cartridge filter on a level concrete slab or other solid base.
- Using Pressure Glue, connect the pipe from the pump to the filter inlet.

Handy Tip!

Ensure the filter is positioned so that the piping connections and winter drain are convenient and accessible for operation, service,

maintenance, and winterising. Ensure the location is in a

> well-ventilated area and is protected from the elements.

Handy Tip!

Do not locate pump controls over or near the filter.

Using pressure glue, connect the pipe returning to the pool to the filter outlet.



Warning: Ensure water discharge from the manual air relief valve is directed away from electrical devices.

BEFORE STARTING THE PUMP

- Check that all unions, clamps, fasteners, lids and accessories are properly fitted. Ensure any glued fittings have had enough time to cure.
- Ensure that the pressure gauge, air relief valve and drain plug are installed. Note: each of these contains a sealing o-ring.
- Verify the air relief valve is in lock position. To do this, loosen and re-tighten the filter lock ring, ensuring that the latch clicks into the locked position.

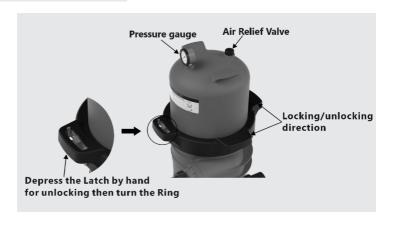
NOTE: Depress the latch by hand for unlocking then turn the ring.



Close the filter drain. Note: Drain plug requires an O ring seal.



- Open the air relief valve by loosening it one and a half turns. Do not remove the valve completely.
- Place the air relief valve in an OPEN position.



OPERATION



Warning: Compressed air. Lock-out source and bleed off pressure before servicing equipment.



Warning: Pool and spa circulation systems operate under high pressure. When any part of the circulating system (i.e. lock ring, pump, filter, valves, etc.) is serviced, air can enter the system and become pressurised. Filter tank Lid and pre-filter cover must be secured to prevent violent separation. Place the filter air relief valve in an open position and wait for all pressure in the system to be relieved before removing the lid to access the element for cleaning.



When starting the pump, do not stand over or near the filter.



If water leakage appears at the lock ring, turn off all system circulation pumps and all electrical power immediately. Do not return to the filter until all water leakage has stopped.



Only return to filter to close air relief valve when leak stops.

OPERATION

Filtration starts as soon as the flow is steady through the filter. As the filter removes dirt from the pool water, the accumulated dirt causes a resistance to flow. As a result, the pressure will rise and the flow will decrease.

- Record the initial starting pressure which is the initial pressure reading when a new filter element is working under filtration conditions. This measurement should be taken once all air is bled from the filtration system.
- Each time the filter element is cleaned or replaced, the gauge ring should be adjusted to align the needle with the "Start" marking, once all air is bled from the system.
- Monitor the pressure over time and when the needle reaches the "Clean Filter" mark (170kPa) or above, follow the steps on page 9 to clean the filter element.

SPECIFICATIONS

MODEL	HENDEN SINGLE ELEMENT CARTRIDGE FILTER 100	HENDEN SINGLE ELEMENT CARTRIDGE FILTER 150	HENDEN SINGLE ELEMENT CARTRIDGE FILTER 200
Effective Filtration Area m² / ft²	9.29m² /100ft²	13.94m2 / 150ft ²	18.58m2 / 200ft ²
Filtration Flow Rate m³/h / GPM	22.7m³/h 375lpm	27.3m³/h 455lpm	27.3m³/h 455lpm
Max Working Pressure Bar/PSI	3.5 Bar / 50 PSI	3.5 Bar / 50 PSI	3.5 Bar / 50 PSI
Horizontal Clearance cm	46.4cm	46.4cm	46.4cm
Vertical Clearance cm	45cm	45cm	45cm
Max Temperature °C	43°C	43°C	43°C
Replacement Element Reece Code	914100004	914100005	914100006

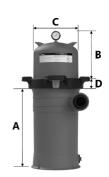
SPECIFICATIONS

Operating Conditions - Water Chemistry

SUGGESTED 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 (stabilized)	1.0 to 3.0 ppm	
Chlorine stabilizer (cyanuric acid)	60 to 80 ppm	

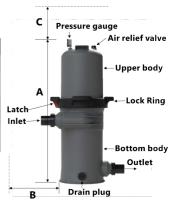
Product Dimensions

MODEL	Α	В	С	D
Single Element Cartridge Filter 100	53.05cm	23cm	46.40cm	8.20cm
Single Element Cartridge Filter 150	53.05cm	31.50cm	46.40cm	8.20cm
Single Element Cartridge Filter 200	53.05cm	43.80cm	46.40cm	8.20cm



Clearance dimensions

	REQUIRED CLEARANCE		
Model	Α	B side	C above
Single Element Cartridge Filter 100	82.7cm	46.4cm	45cm
Single Element Cartridge Filter 150	91.2cm	46.4cm	45cm
Single Element Cartridge Filter 200	103.4cm	46.4cm	45cm



MAINTENANCE

Cleaning the Single Element Cartridge Filter

You should clean the Single Element Cartridge Filter when the clever gauge reads 170kPa or higher.

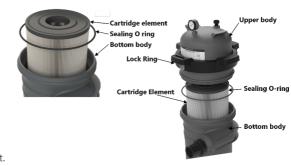
To clean the cartridge filter, follow the steps below:



- Turn off all pumps and power to the pool pad. Set any pool system valves in a position that prevents water from flowing to the filter.
- Loosen the air relief valve approximately one and a half turns.
- Remove the filter drain plug to release all water from the filter.
- Depress the latch and unscrew the lock ring counter clockwise.
- Lift and remove the upper body with the attached lock ring. Do not hold the pressure gauge to lift the upper body.
- Remove the filter cartridge by using a slight rocking motion and lifting.
- Using a hose, spray out the cartridge element.
- Re-install the filter drain plug.

NOTE: From time to time, the filter element will require a deep clean using a purpose-specific cleaning solution that can be purchased from most Reece Irrigation & Pools. Follow the instructions provided by the pool shop or solution manufacturer to achieve the best result.

- Place the clean filter element back in the filter body.
 - NOTE: DO NOT hit or strike the clamp with a hammer or metal tools.
- Clean the lower and upper body 10 o-ring by wiping a clean cloth over them, then use a silicon based grease to lubricate the upper body o-ring.
- Grab the upper body and push down on the o-ring until it seals.
- Install the lock ring by tightening clockwise until the latch clicks into position.
- Open all pool valves previously shut off. Switch on the filter pump.



Warning: When the pump starts, do not stand over or near the filter.

REPLACING THE CARTRIDGE FILTER ELEMENT

You should replace the filter element if

- When after cleaning the filter element, the pressure is reading 70kPa higher than the initial 'start' reading when the element was new, or is reading over 205kPa.
- When the filter element is broken, or the layers are peeling.
- When the pressure or flow rate is below the desired rate of the system.

VACUUMING THE POOL

Vacuuming can be performed directly into the filter whenever needed. Clean cartridge after vacuuming if required.

REMOVING THE AIR RELIEF VALVE

The cartridge filter comes with a pre-installed manual air relief valve. To service the air relief valve follow the steps below.

NOTE: this should only be carried out by a pool professional.

- Turn off all system circulation pumps and all-electric power on the pool pad.
- Turn off all pool system valves to stop water from flowing to the filter.
- Ensure the air relief valve is placed in the OPEN position (i.e. the valve has been loosened one and a half turns).
- Wait until all water has left been evacuated.
- Remove the air relief valve by unscrewing it using your hands.

RE-INSTALLATION OF THE AIR RELIEF VALVE

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

WINTERISING THE SINGLE ELEMENT CARTRIDGE FILTER

If freezing conditions are expected, take the following steps to shut down your filter system and reduce the risk of freeze damage.

- Follow the steps in 'Cleaning the Single Element Cartridge Filter'.
- Fully tighten the lock ring while storing.
- Be sure to leave the drain plug unattached during the winter season to avoid cracking the filter body.

Troubleshooting

PROBLEM	REMEDY
Low water flow	Check the skimmer and pump strainer for debris.
	Check for restrictions in intake and discharge lines.
	Check for air leak in intake line by bubbles returning to the pool.
	Remove and clean the filter element. View page 9 for steps.
Short filter cycles	Check for algae in the pool and super chlorinate as required to remove algae.
	Check water chemistry. Ensure the chlorine and pH levels are within the operating range. See page 8 for details.
Pool water is cloudy	Check the chlorine, pH and total alkalinity levels are inline with operating range. See page 8 for details.
	Check the flow rate through the filter is sufficient.
	Operate the filter for longer periods of time.

Henden Cartridge Filter Warranty

Reece Australia Product Quality Guarantee

You have purchased a quality product from Reece Australia Pty Ltd ABN 84 004 097 090 ("Reece Australia").

Warranty Terms & Conditions

These Warranty Terms and Conditions ("Warranty") constitute your agreement with Reece Australia and will apply to your service order. The benefits given by this Warranty are in addition to all consumer guarantees and other rights and remedies prescribed by the Australian Consumer Law and any other applicable laws.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

In addition to your rights and remedies under the Australian Consumer Law, Reece Australia provides consumers with a Warranty which covers faults in product construction, materials and assembly in the following applicable warranty periods:

RESIDENTIAL	WARRANTY		
APPLICATION*	Cartridge Filter	Cartridge Element + Internal Components including o-rings, gaskets and gauges	Labour
Henden Single Element Cartridge Filter 100	5 Year	1 Year	1 Year
Henden Single Element Cartridge Filter 150	5 Year	1 Year	1 Year
Henden Single Element Cartridge Filter 200	5 Year	1 Year	1 Year

COMMERCIAL	WARRANTY		
APPLICATION*	Cartridge Filter	Cartridge Element + Internal Components including o-rings, gaskets and gauges	Labour
Henden Single Element Cartridge Filter 100	1 Year	6 Months	6 Months
Henden Single Element Cartridge Filter 150	1 Year	6 Months	6 Months
Henden Single Element Cartridge Filter 200	1 Year	6 Months	6 Months

^{*}Residential Application defined in line with Australian Standard AS 3633 - 1989 Private swimming pools - Water quality, 1.4.20 Swimming pools, private—any swimming pool located in the grounds of a private dwelling and intended to be used by members of the household and their invited guests.

Warranty Periods

The Warranty Periods commence from the date the customer purchased the product from Reece Australia. Within the Warranty Periods, products which are found upon inspection by an authorised Reece Australia representative or an associated licenced technician supplied by either Reece Australia or a relevant supplier ("Service Agent") to be defective in construction, material, or assembly, will be repaired or exchanged with an equivalent product at no cost to the customer.

Parts of products found upon inspection by a Service Agent to be defective in construction, material, or assembly, will be replaced at no cost to the customer. The labour for the replacement of products and parts to which this Warranty applies will be carried out by a Service Agent. Where the Service Agent is unable to identify any fault in the product, Reece Australia may require the consumer to provide proof that the product is defective.

^{*}Commercial Application defined as any other use of the product other than defined in the domestic application is considered to be a commercial application.

Warranty Conditions

This Warranty applies only if the following conditions are met:

- > The Cartridge Filter has been installed by a fully qualified technician.
- > The Cartridge Filter has been installed for and subjected to domestic residential use only subject to local building a municipality guideline.
- > Failure is due to a fault in the manufacture of the project. In this case, proof of purchase, date of purchase and serial number is required.
- > Proof of purchase (including the date of purchase) is provided
- > The consumer has operated and maintained the product in accordance with the operating instructions.

This Warranty does not cover faults caused by:

- > Failure to adhere to the conditions above.
- > Normal wear and tear.
- > Damage by foreign objects.
- > External damage caused by exposure to pool chemicals.
- > Inadequate or complete lack of maintenance.
- > Installation or part installation by the purchaser or any person other than a tradesperson licensed to install this product.
- > Faults or substandard performance caused by any product or part which has not been supplied by or purchased from Reece Australia.
- > Faults or substandard performance caused by vermin, misuse, negligence, vandalism, storm, flood, fire, earthquake, force majeure, war, foreign matter entering the air conditioner (e.g. detritus; dirt and moisture) or any other outside agency.

This Warranty does not cover 'ex display' products where the ex-display products have not been checked and certified for sale by the manufacturer prior to purchase.

For the avoidance of doubt, defective items become Reece Australia's property.

Claim Procedure

In order to claim the Warranty, you must cease using the product when a fault arises, contact the Reece Australia branch where the product was purchased to report the issue and follow Reece Australia's directions regarding what to do next. The relevant Reece Australia branch details can be found on your purchase invoice. You must also provide the product serial number.

Reece Australia's general contact details are as follows:

For a complete list of Reece Irrigation & Pools branches visit our website reece.com.au/storefinder or contact:

Technical and after sales support:

1300 HENDEN (1300 436 336)

Mailing/manufacturer address:

The Reece Group, 57 Balmain Street, Cremorne, VIC, 3121, Australia.

If applicable, all replacement products will be available for collection at no cost to the customer at the nearest Reece Australia branch to the customer's location, or elsewhere as agreed between the customer and Reece Australia.

Labour

Warranty for installation labour is twelve (12) months from date of purchase. Any product found to be faulty due to installation/labour fault shall be covered under warranty and will be repaired or replaced by Reece Australia at their cost for a period of twelve (12) months from date of installation.

All replacement parts / components will be supplied direct by Reece Australia. Should the buyer purchase parts / components from their own supplier the company may at their own discretion reject or reimburse the cost to which the company can purchase the part for.

Costs

The customer will be responsible for any ancillary costs associated with making a warranty claim, such as:

- > Any travel outside of the area normally serviced by Reece Australia or any associated repair agent authorised by Reece Australia
- > All costs related to gaining access to unsafe (e.g. high) or restricted locations
- > Any and all arrangements required to create safe access for the Service Representative to service the product; this includes making clear access to and from the unit (e.g.moving furniture etc.)

Excessive labour costs due to job conditions that make the equipment unusually inaccessible or otherwise difficult to source is NOT covered under this policy. The equipment must be readily accessible to the service men, that no special scaffolding, ladders or lifting equipment other than that which is normally carried in a service vehicle is required, and that the conditions or working meet the requirements of local authorities having justification on conditions of work and safety.

A service fee may be charged to the customer if an aftersales service call is attended, and the fault is deemed to be a result of incorrect installation, or the points outlined below. Please note the site environment and associated product must be accessible and safe workplace for the service agent.

If applicable, Reece Australia will also provide information regarding how to claim back any expenses the consumer may incur.

Exclusions

Except to the extent required by law, all consumer guarantees, representations, warranties, terms and conditions in relation to the products (whether implied or otherwise) are hereby excluded to the maximum extent permitted by law.

To the fullest extent permitted by law, Reece excludes all liability for damage or injury to any person, damage to any property, and any indirect consequential or other loss or damage.

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