

## Assembly, installation and operation instructions – CA005 Gravity water filter system

Thank you for buying Coldstream. Our mission is to make the very highest standard of drinking water filters and systems, capable of providing you with clean, safe drinking water that tastes great straight from the tap, or from a gravity fed supply. In addition all Coldstream filters are made at our renewable energy powered (Solar and Wind) manufacturing facility in King's Lynn in the UK helping to further protect the environment.

### Tools required:

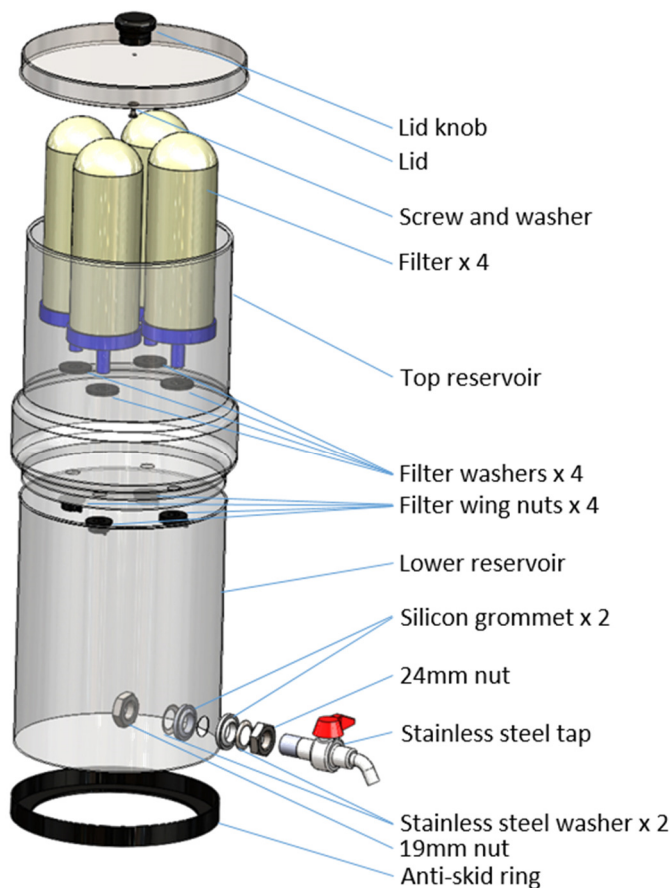
To assemble your water filtration system you will need the following tools

- Phillips (cross head) screw driver
- 19mm spanner or socket
- 24mm spanner

The gravity water system is optimised for use with four CF163W filters to achieve a maximum flow rate of 4 L/hr, however 2 or 3 filters can be used if desired, reducing the flow rate to 2 L/hr or 3 L/hr, in which case the rubber bungs can be used to block the unused holes in the top reservoir. The CF163W is a high performing filter which has a leading contaminant removal performance as seen in appendix 1.

### Assembly Process:

During assembly cleanliness is paramount. Insure that you wash your hands or wear rubber gloves before commencing.



- Step 1    Unpack the box and familiarise yourself with all the components.
- Step 2    Drop the lower reservoir into the anti-skid ring.
- Step 3    **1) Unscrew the outer 19mm nut from the stainless steel tap, remove the outer stainless steel washer and outer silicon grommet leaving the other stainless steel washer and silicon grommet in place.**  
**2) From the outside, insert the tap thread through the hole in the lower reservoir below the Coldstream Logo.**  
**3) From the inside of the reservoir replace the silicon grommet back over the thread followed by the stainless washer.**  
**4) Finger tighten the 19mm nut onto the thread.**  
**5) Using the 24mm spanner to hold the outside tap nut in place, **tighten the 19mm nut inside until the silicon grommets match the shape of the reservoir inside and out. See fig 1 and 2. Do not overtighten beyond this point.****
- Step 4    **1) Using the Philips screw driver carefully unscrew the screw and washer from the black knob.**  
**2) From the underside of the lid (see fig 3) inset the screw and washer through the hole.**  
**3) While holding the screw, screw the knob onto the thread protruding from the top side of the lid.**  
**4) Tighten the screw using a Philips screw driver.**
- Step 5    **1) Fit the filter washer over the thread of each filter cap.**  
**2) Insert the filter cap thread through one of the holes in the base of the top reservoir.**  
**3) While holding the filter, screw the filter wing nut onto the filter thread until tight to hold it in place.**  
**4) Repeat the above for all filters.**
- Step 6    **1) Assemble the lid, lower and top reservoir as shown.**  
**2) Position the assembly out of direct sunlight**  
**3) Ensure the tap is off and fill the top chamber and allow time for the water to flow through. NB – this can take longer on first use as the air clears out of the filters. Refill and empty 2-3 times to flush out the filters.**  
**4) The water filtration system is now fully prepared and ready for operation.**



Fig 1 Outside fitting



Fig 2 Inside fitting



Fig 3 screw and washer in underside of lid



**Operation**

- Ensure that the tap is in the closed position
- Fill the top reservoir with water
- Check for leaks from the housing
- To remove any loose materials, open the tap and pass water through the filter for 10 to 15 minutes and then discard
- The maximum flow rate will be achieved when the filter has become completely saturated. The ceramic contains many air pores after manufacture and it will take up to 5 complete cycles for the trapped air to completely escape and the maximum flow rate to be achieved
- When refilling the top reservoir be careful not to overfill. The water level in the top reservoir should not exceed the empty volume of the lower reservoir to prevent over spill from the join between reservoirs
- If the filter is not used for 5 days it is recommended that water be run to waste for 2 to 3 minutes before using

**Cleaning the filter**

- If after months of usage the flow rate falls then it may be possible to extend filter life and improve the flow rate
- Remove the filter from the housing
- Carefully clean the outer surface with a scouring pad or soft brush in cold running water
- Refit as above. Always wash your hands before and after cleaning your filter

**Appendix 1: Coldstream CF163W Filter Data Sheet**

		8" CF163W	
<b>Operating performance</b>			
<b>Working parameters</b>			
	Working temperature range		5 - 30°C
	Working ph range		5.5 - 9.5
	Suitable for gravity filters		Yes
	Recommended change frequency		6 months
<b>Nominal Flow rate**</b>			
To achieve maximum performance In Gravity Mode	Litres / hour		1
	US gallons / hour		0.26
<b>Contaminant Removal</b>			
<b>Pathogenic Organisms</b>			
% Bacteria Removal Rate	E.coli / Cholera / Shigella / Typhoid / Klebsiella Terrigena		99.9999%
% Cyst Removal	Cryptosporidium / Giardia		99.9999%
<b>Trace Organics Removal***</b>			
Volatile Organic Contaminants			94% - 99%
Lead , Antimony, Cadmium, Selenium, Zinc removal			100.00%
Heavy Metal Contaminants <sup>a</sup>			99.30%
Pesticide Contaminants			99.90%
Herbicide Contaminants			99.90%
<b>Inorganics Removal</b>			
Free Chlorine Removal	@ 2 ppb presence		99.9%
Chloramine Removal	@ 3 ppb presence		99.9%
Fluoride removal	@ 2 ppb presence		97%
<b>Size</b>			
length			8"
Diameter			2.9"
Fitting			1/4" BSP LM
Fitting Length			26mm



\*\* (defined as >90%, Typical range +100% -20%)  
 \*\*\* Product tested by Envirotech Laboratories inc to NSF53 standard  
<sup>a</sup> Arsenic, Beryllium, Chromium, Manganese, Nickel