



**HIGH
PERFORMANCE
FILTRATION**



High Flow Inline Undersink Water Filter SKU: H1-CBG-14EP-SS

Please read through the entire instruction manual fully before commencing installation.

IMPORTANT NOTE TO THE PLUMBER BEFORE COMMENCING INSTALLATION OF THIS SYSTEM

CAUTION: DO NOT USE WITH WATER THAT IS MICROBIOLOGICALLY UNSAFE OR WITH WATER OF UNKNOWN QUALITY WITHOUT ADEQUATE DISINFECTION BEFORE OR AFTER THE SYSTEM.

THIS SYSTEM IS NOT CERTIFIED TO BE BACTERIOSTATIC AND WILL NOT REDUCE THE BACTERIAL CONTENT OF THE WATER. BACTERIAL CONTENT MAY INCREASE UNLESS SUPPLEMENTARY TREATMENT IS PROVIDED.

THIS SYSTEM IS CERTIFIED FOR CYST REDUCTION AND MAY BE USED ON DISINFECTED WATER THAT MAY CONTAIN FILTERABLE CYSTS.

A 500 kPa PLV must be installed on the property, or between the Cold Water Stop Valve and the Filter System to limit the incoming pressure to a maximum of 500 kPa (70 PSI). Failure to install a PLV may void warranty. If a Cold-Water Line Stop Tap (Isolation Valve) is not already fitted at the point of installation, the plumber should install one.

This system is designed to be installed under the sink by way of connection between the Cold-Water Inlet and a standard kitchen tap. This system features Stainless Steel Braided Flexi Hose. DO NOT bend, kink or put stress on the Stainless-Steel Braided Flexi Hose or plastic tubing. Ensure the installation location is suitable for both installation and maintenance.

DO NOT USE THREAD SEALANT – ONLY THREAD TAPE OR FITTING WITH O-RINGS ARE PERMITTED.

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Technical Overview

I. Important Notes

For correct operation of this appliance, it is essential to observe the manufacturer's instructions. Installation must be carried out by a qualified plumber or authorised technician to comply with Australian Plumbing Codes. This system is certified to WaterMark Standards AS 3497:2021 under Certificate Number 23247. WaterMark Certification is the level of certification required by law for a licensed plumber in Australia to install a water filter system.

You will find most answers to your queries can be found in this instruction manual – please thoroughly read through this manual from front to back including the troubleshooting page before contacting customer support.

II. Before You Purchase/Open

The system requires specific working conditions to be met before installation, some of which are listed below. If these conditions are not met, the system may not be suitable for the application and may not function as specified.

These systems are designed for use in home applications on Mains Water or Tank Water. For applications where raw water supplies are used (E.g. Bore Water) please contact the manufacture for technical assistance to determine if your application is suitable for this system.

| Feed Water Conditions | Min | Max |
|-----------------------|---------|------------|
| Inlet Pressure | 100 kPa | 800 kPa |
| Temperature | 4.5°C | 38°C |
| pH Level | 2 | 11 |
| TDS | 0 mg/L | 2,000 mg/L |
| Iron | 0 mg/L | 0.3 mg/L |
| Manganese | 0 mg/L | 0.1 mg/L |
| Hardness | 0 mg/L | 300 mg/L |

III. Space Requirements

System Dimensions (Approx): Height: 37cm, Width: 10cm, Depth: 11cm

This system can be mounted onto a wall. The distance between the middle of the mounting screw holes is approximately 6.3 to 6.4cm.



IV. What does this filter do?

The HPF CBG Quick Change Cartridge features a 0.5 Micron rating and is certified for the reduction of waterborne parasitic cysts such as Giardia and Cryptosporidium. In addition, it also contains ScaleStop™ for scale inhibition, and a Carbon Block for the reduction of common water disinfection chemicals such as Chlorine, Tastes and Odours. This system is certified by IAPMO R&T to NSF/ANSI 42 for Material & Safety Requirements, and to NSF/ANSI 53 for the Reduction of Cysts. This system is NOT designed to remove Bacteria, Fluoride or other dissolved salts or minerals from water.

CAUTION: DO NOT USE WITH WATER THAT IS MICROBIOLOGICALLY UNSAFE OR WITH WATER OF UNKNOWN QUALITY WITHOUT ADEQUATE DISINFECTION BEFORE OR AFTER THE SYSTEM.

THIS SYSTEM IS NOT CERTIFIED TO BE BACTERIOSTATIC AND WILL NOT REDUCE THE BACTERIAL CONTENT OF THE WATER. BACTERIAL CONTENT MAY INCREASE UNLESS SUPPLEMENTARY TREATMENT IS PROVIDED.

THIS SYSTEM IS CERTIFIED FOR CYST REDUCTION AND MAY BE USED ON DISINFECTED WATER THAT MAY CONTAIN FILTERABLE CYSTS.

Installation

I. Feed Water Connection

Locate the connection between the kitchen tap & cold-water line. Shut off the incoming water and bleed pressure from the line by opening the kitchen tap. Disconnect the pre-existing kitchen tap's Stainless-Steel Braided Flexi Hose from the Cold-Water Stop Tap (Inlet) and install the ½" Dual Check Valve (supplied) as per Fig.1.

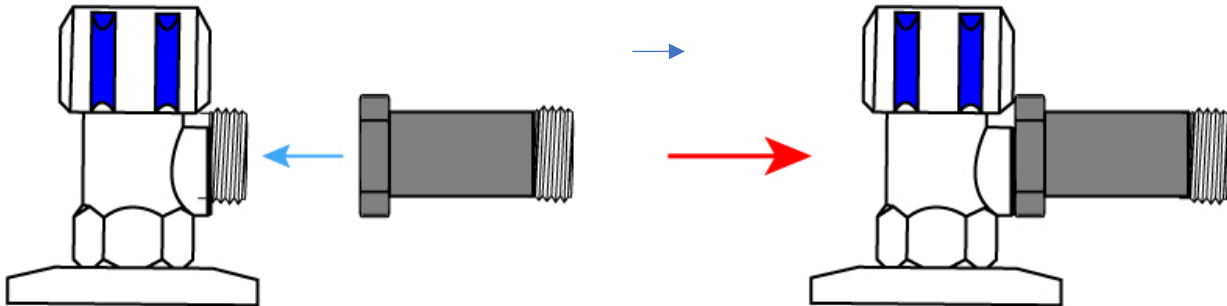


Fig.1 Install Dual Check Valve onto Cold-Water Stop Tap

II. Assembly

- a) Observe the direction of flow on the top of the cap. Use the thread tape (supplied), wrap 8 – 10 rounds of thread tape on the 3/8" male adaptor, then screw this into the left side of the Filter Head Cap. Do the same on the right side with the 3/8" to 1/2" Stainless Steel Hex Nut.

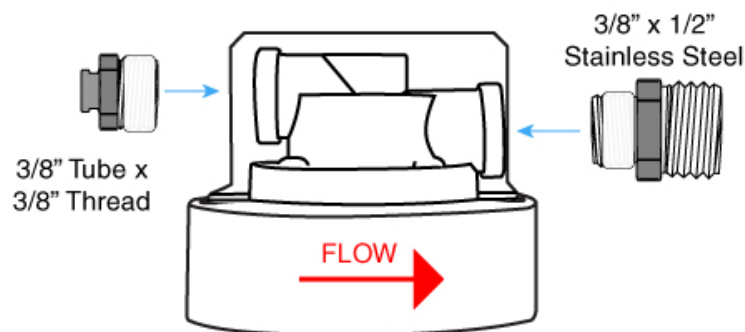


Fig.2 Apply thread tape to fittings as shown and install into head cap

- b) Connect the supplied ½" Female adaptor to the Dual Check Valve, the adaptor uses a washer type seal so no thread tape is required. Measure, cut and install tubing between this point and the PLV as shown in Fig.3.

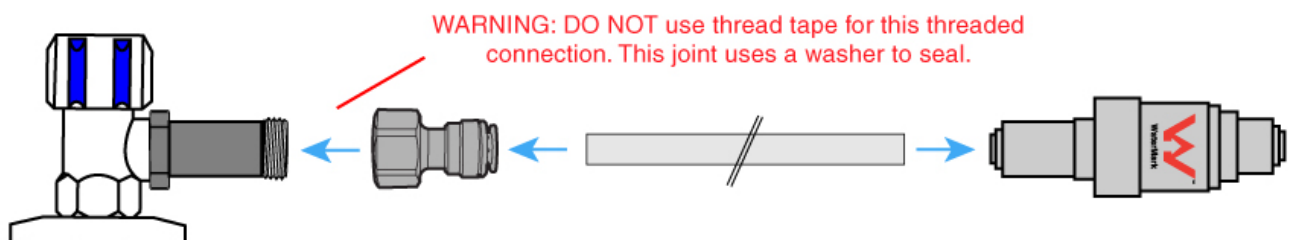
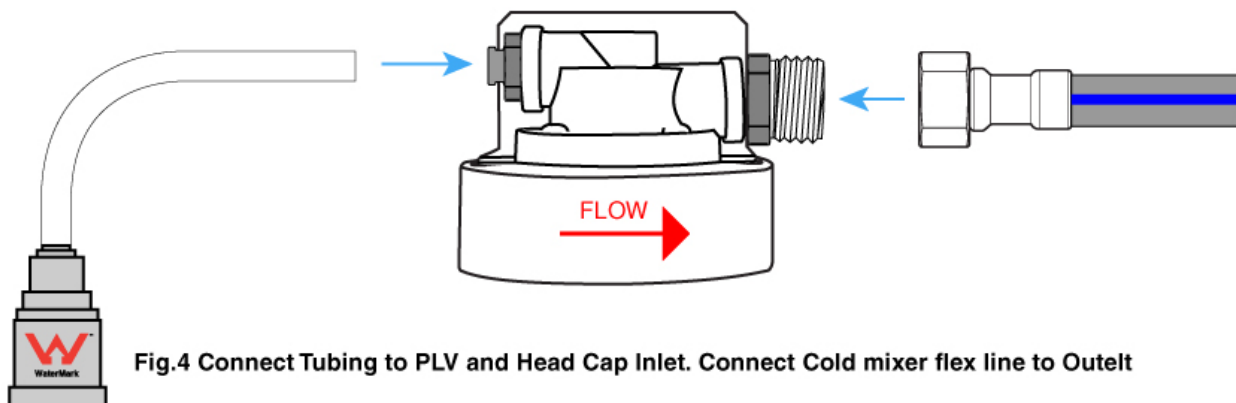


Fig.3 Install 1/2" F to 3/8" Tube fitting to DCV. Install tubing between Fitting and PLV

- c) Measure & cut the required length of 3/8" tubing to fit between the PLV and the Head Cap Inlet. Firmly insert the tubing into the PLV and the Head Cap Inlet. Re-Connect the Cold-Water Flex Hose from the mixer tap to the Stainless-Steel Fitting installed in the Head Cap Outlet as shown in Fig.4.



- d) After the tubing has been installed into the fittings, apply the locking clips to all quick connect fittings. **NOTE: This must be done AFTER the tubing is installed into the fittings.**



Fig.5 Install locking clips between the fitting body and ring/collet where applicable.

- e) Unwrap the filter cartridge and remove the protective plastic cap from the top (if applicable). Align the filter cartridge into the cap and push it in firmly. Then twist the cartridge ¼ rotation to the right as shown below until the filter locks into place. You should feel the cartridge stop turning when the correct position is achieved.



System Start Up & Operation

I. Plumber Commissioning Steps

When you are confident that the system is correctly installed, do the following steps to start up the system and commence the flushing procedure.

1. Turn on the kitchen tap (cold water line) – this helps bleed air from the system when you introduce the feed water.
2. Smoothly turn on the Cold-Water Stop Tap (Inlet) under the sink, allowing water to enter the system. It is common to hear and see sputtering as the water makes its way through the system, forcing out the air. **Check for leaks. If there are leaks, shut off the water, fix them first, then continue.**

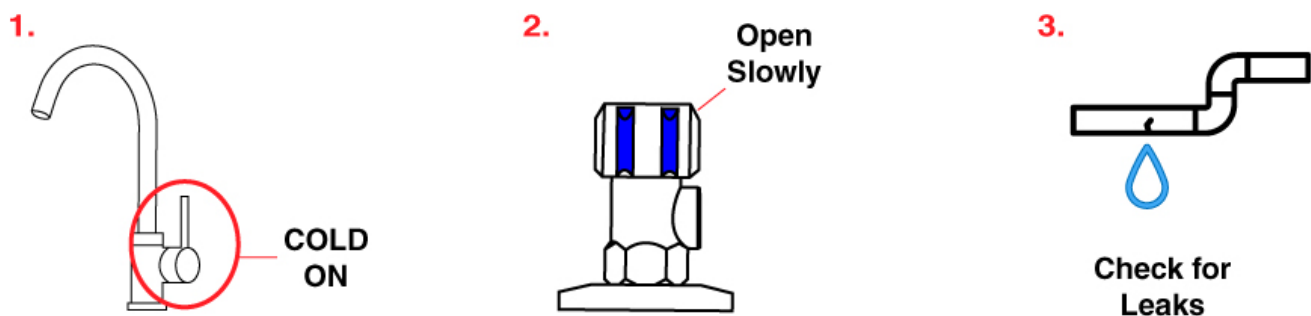


Fig.7 Open Kitchen Tap Cold Line, Turn on Feed Water, Check for Leaks

3. When the water first comes out of the tap, it will be grey and discoloured – this is normal as the carbon fines are flushed out of the dry filters. **NOTE: Air bubbles are also common in the water – it gives the water a ‘milky’ appearance. This will eventually dissipate as the air is flushed from the system – this can sometimes take a few days to stop completely. The water is still safe to drink.**
4. Continue flushing the filter for 10 to 15 minutes or until the water runs clear. The main aim is to ensure there are no particulate in the water (air bubbles are ok). To test if the cloudiness is only air, pour into a clear glass and let it sit for 60 seconds – the water should turn clear without any debris.



Fig.8 Flush the water for 10 - 15 minutes or until the water is clear.

5. While the filter is new, there may be some slight taste issues with the water (such as a metallic or ‘chemical like’ taste). This is normal and is the reaction that activated carbon has with water when the filters are new. Flushing the filters will help reduce the time until the water is back to normal taste. The metallic taste is usually due to the initially high pH – this is only temporary and is usually resolved within 1 week from installation, if not sooner.

II. Turning the System On/Off

If for any reason the system needs to be turned off – for example if leaking occurs or you are going away for over 48 hrs, follow the below steps to shut down the system.

1. Turn off the Cold Water Stop Tap under the sink.
2. Briefly open the Faucet tap to bleed out excess line pressure and then close it again.

To start the system, open the Under Sink Cold Water Inlet. If the system has not been used for over 48 hours, discard the first 45 seconds' worth of water. If the system has been shut down for over 1 week, flush the system for 5 minutes.

Maintenance

I. Replacement Parts

Braided Flexi Hose and tubing should be replaced as a precaution every 3 – 5 years.

II. Replacement Cartridges

Cartridges have a varying life span but generally can be replaced under the following guidelines under normal working conditions: every 16,000 Litres or every 12 months. NOTE: Contaminants such as sediment or excessive hardness may reduce the lifespan of the filter. Usage will also be a factor for filter changes – if your pressure begins to slow down through the filters it can be an indication that the filters are blocking and may be due for a replacement.

III. Testing Filters

Simple Free Chlorine testing can be done after the filters to determine if the filters are still removing chlorine adequately from your drinking water. These types of tests are generally inexpensive however for best results, lab tests are recommended. The filters we use for our Undersink Systems are generally high in volume capacity so you will usually either end up with a blocked filter (from sediment) or at the 12-month mark. You will not normally get to a point that the filter will no longer remove chlorine* to an acceptable standard.

Troubleshooting

| Problem | Possible Cause(s) | Solution |
|---|--|--|
| Water coming out very slowly or not at all | <ol style="list-style-type: none"> 1. Water Supply is off or disconnected 2. Filter has a blockage 3. Insufficient Water Pressure 4. Water Quality | <ol style="list-style-type: none"> 1. Turn on the water supply and ensure there are no obstructions to the water flow. 2. Check the water pressure or replace the filter if it has become blocked. 3. Filtration requires water pressure; we suggest a minimum working pressure of 350 kPa for adequate flow and minimal pressure loss. 4. Ensure that the water quality is suitable for the selected cartridges. These filters are generally not for filtering harsh water such as dam or river water due to organic loading, clay and silt. Low micron filters also are prone to blocking on water supplies that contain high sediment so ensure the filter has adequate pre-filtration. |
| High pH Reading | <ol style="list-style-type: none"> 1. GAC Filter | <ol style="list-style-type: none"> 1. If you have a GAC or Block filter (Carbon), this will naturally increase the pH of the water. pH is the measure of Hydrogen in the water and this hydrogen will vent off the water if you leave it to stand and the pH will then drop back down to the normal level. |
| Strange taste to the water (New System) | <ol style="list-style-type: none"> 1. Residue 2. pH Alteration 3. Contamination | <ol style="list-style-type: none"> 1. Carbon can cause a fine black residue and slightly sweet or astringent flavour when the filter is new. Flush the filter system until the taste and residue issue resolves. 2. As previously stated, Activated Coconut carbon will react with the water when new and will increase the pH. People who are not accustomed to higher pH water may notice a strange taste/sensation due to the large variance of pH. Flushing the system will help stabilise the pH from the system and also allowing the water to stand before drinking can also help allowing the water to 'vent' the pH 3. Bacterial contamination is highly unlikely, but not impossible. If there is a strong 'foul smell' or organic taste to the water, it is possible that there is some form of contamination. Contact us straight away so we can rectify (or diagnose) the problem if there is one present. |
| The TDS Is Higher than the inlet water (or the same). | <ol style="list-style-type: none"> 1. New Filter 2. No Effect on Dissolved salts | <ol style="list-style-type: none"> 1. While filters are new, it is normal for the TDS to be elevated while the system is flushing. Continue flushing the system & contact support if the high TDS persists longer than 1 week. 2. Standard filtration has little to no affect at reducing the salts in the water. In some cases the TDS can reduce however it is not uncommon for the TDS to stay the same or slightly rise (as the system is new) due to the fines from the filter. |
| Flow has suddenly slowed down to a trickle | <ol style="list-style-type: none"> 1. Blocked filters | <ol style="list-style-type: none"> 1. Check the feed water conditions & cartridges and replace the filters if they are passed the recommended change times. |

Filter Protection Equipment

I. Water Hammer Arrestor

Sioux Chief shock arresters are designed for use in hydraulic hammer arresting applications. They are built to reduce or eliminate hydraulic shock, otherwise known as water hammer. They do this by absorbing pressure surges within water or other fluids that are suddenly stopped or forced in other directions by fast closing valves. Sioux Chief shock arresters are best used at the point of shock and should be installed as close to the valve or piping where the shock originates from. Sioux Chief shock arresters are designed with the latest diaphragm technology. A high-grade diaphragm is sealed inside the vessel creating a barrier between fluid and air chambers. The air chamber acts as a cushion which compresses when system pressure suddenly increases or surges because of hydraulic shock.



The water hammer arrestor is installed either at your washing machine or your dishwasher inlet.

II. Replacement Parts

Filter Protection Equipment

| | |
|------------|---|
| GT18-4 | 1/2" Female BSP to 3/8" Male BSP Stainless Steel Dual Check Valve |
| GT18-133/8 | 3/8" Pushfit PLV |

Head Cap

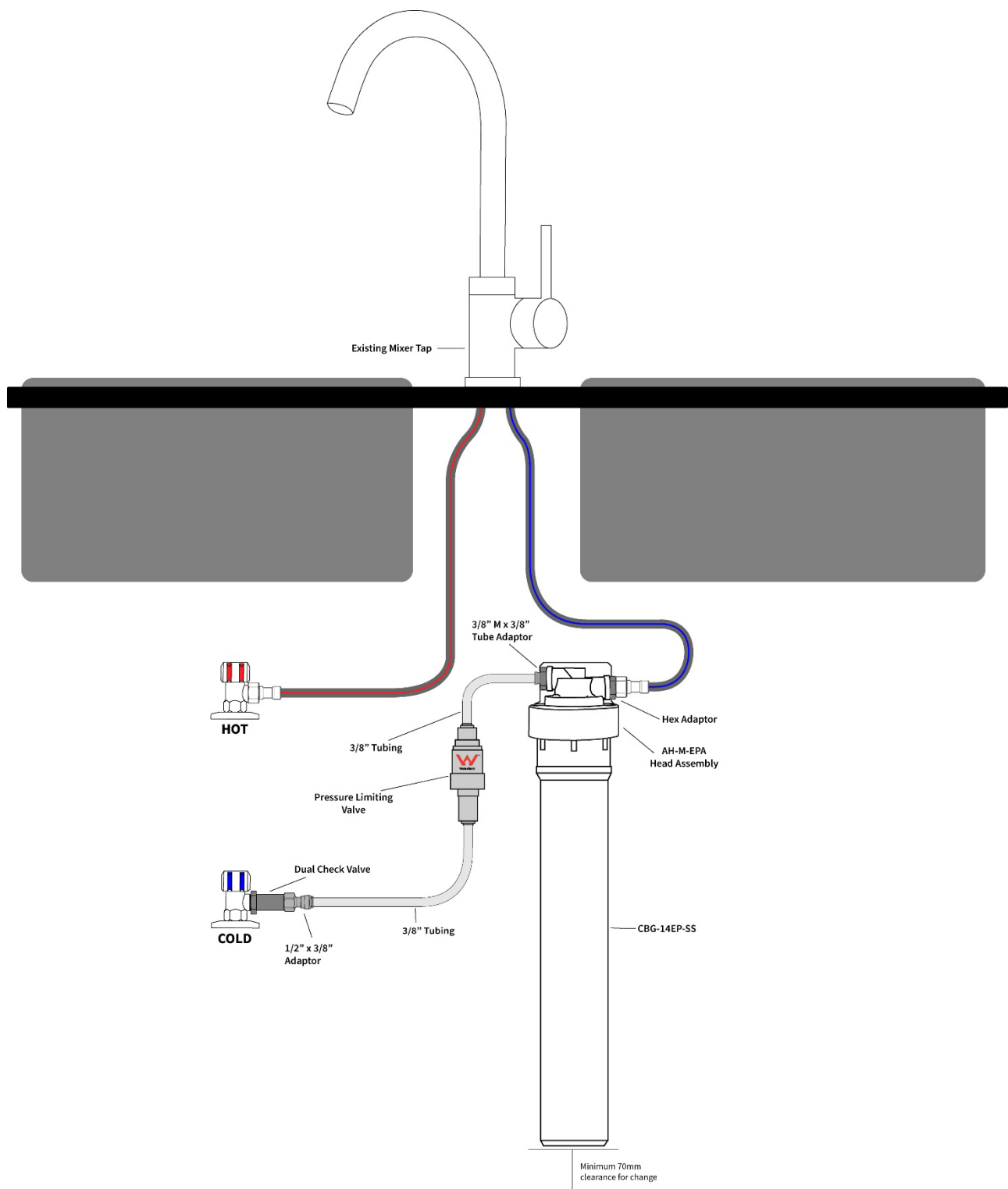
| | |
|----------|---|
| AH-M-EPA | 3/8" NPTF Adaptor Head with Stainless Steel Bracket |
|----------|---|

Consumables/Miscellaneous

| | |
|----------------|------------------------------|
| H1-CBG-14EP-SS | Replacement Filter Cartridge |
|----------------|------------------------------|

This system is certified to WaterMark Standards AS 3497:2021 under Certificate Number 23247. WaterMark certification is the level of certification required by law for a qualified plumber in Australia to install a water filter system.

System Diagram





General Warranty

Water Filter Systems¹ (Excluding consumables) Manufactured or Assembled² by High Performance Filtration (HPF) are covered under a 12-month Warranty Against Defects (Manufacturer's Warranty). This warrants the water filter system to be free from defects in material and workmanship for a period of 12 months from date of sale.

If applicable, may cover the return freight in the form of a re-imbursement after the system has been inspected and confirmed it is a valid warranty claim.

will not cover any labour charge incurred by the consumer for the replacement or repair of a product. The warranty is strictly parts only for the parts supplied by. This warranty only applies to the original consumer of the product and is non-transferable. If you have purchased the system through a re-seller, please contact them to facilitate the warranty on your behalf. All replaced or exchanged parts become the property of.

does not cover the workmanship of the plumber who originally installed the system. Responsibility for damages that occur during installation fall with the plumber.

Qualification for Warranty

As per Australian Plumbing Codes, all filter systems must be installed by a qualified plumber. The consumer is responsible for keeping record and proof of installation in the form of an invoice and/or receipt.

Filter systems must be maintained as per recommendations³ including the use of replacement filters, fittings and components supplied by. Failure to maintain the filtration systems using supplied/approved products may void warranty.

The warranty only applies if the product was used and/or installed in accordance with the user guide and/or installation instructions. This warranty is given in lieu of all other express or implied warranties and manufacturer shall in no circumstance be held liable for damages consequential or otherwise or delays caused or faulty manufacturing except as excluded by law.

Warranties need to be approved by to ensure the product was not incorrectly used, installed or claimed. False and incorrect claims will be pursued at 's discretion including chargeable inspection and transit costs incurred.

does not take responsibility for retaining customer records, it is the consumer's responsibility to retain all invoices or proof of purchase from the original sale and ongoing maintenance records as proof of upkeep.

Warranty Exclusions

Standard Warranty shall be void if the product sustains damage or failure resulting from any of the following:

- If your system(s) fails to be maintained in accordance with recommended servicing and as per the manufacturers operating instructions.
- Unauthorised or abnormal use or operation.
- Exposure to unsuitable environmental conditions*.

Warranty – Australia

This warranty is given by High Performance Filtration (Jacknel Pty Ltd ATF The J & N Family Trust). ABN 64 855 305 562

Located at 7/38 Jade Drive, Molendinar QLD 4214. Ph 07 5597 6142 & email info@iltration.com.au

This warranty is provided in addition to other rights and remedies you have under law. Our products come with guarantees which cannot be excluded under the Consumer Guarantees Act.

Extended Warranty

HPF High Flow Undersink Systems are eligible for an extended 4-year warranty (commencing no later than 12 months from sale date), to provide a total warranty of 5 years. This extended warranty is subject to terms and conditions outlined below. This extended warranty covers the below parts of the system. (Excluding cartridges)

- AH-M-EPA Head Cap Assembly

The following components are also eligible for an extended 12-month warranty (commencing no later than 12 months from sale date), to provide a total warranty of 2 years. This extended warranty covers the below parts of the system.

- GT18-133/8 70 psi Pressure Limiting Valve
- Quick Connect Fittings
- Braided Hose FI x FI 15mm

Extended Warranty Qualification

Extended Warranty is valid only if the following conditions are met:

The System was installed by a licenced plumber – proof of installation required in the form of a receipt or invoice for works. The system was maintained in accordance with our recommendations in Maintenance – Section II. Replacement Cartridges. Cartridges must be purchased through HPF or participating supplier/reseller of HPF products. Proof of purchase for replacement filters required.

Definitions

¹ Water Filter Systems are defined as systems designed for drinking water under our Water filter Systems, Reverse Osmosis Systems & Ultraviolet Sanitation Categories – Excluding Cartridges and Shower Filters.

² Other products not manufactured or assembled by are covered under the applicable manufacturer's warranty.

³ specifies recommended or required filter maintenance – see product information for further details. If a maintenance schedule is not specified, filter maintenance is required at least once per 12-month period.

* Unsuitable environmental conditions include but are not limited to; Excessive hot or cold, Weather extremes.