



FSA

FILTER SYSTEMS AUSTRALIA



Single/Twin/Triple Undersink Water Filter Master Copy Instruction Manual

Warning:

For Correct Operation of this system it is essential to observe the manufacturer's instructions.

This system is not UV resistant and will require installation out of direct sunlight.

This system must be mounted in a vertical position and must be installed to allow the system to either be serviced in its fixed position, or easily removed from its fixings. The installation should be conducted as close to the faucet tap as possible to maximise water flow and pressure to the tap.

Fittings should be sealed using thread tape only. 6 – 10 Wraps of standard white thread tape should be adequate for fittings to seal – do NOT use liquid thread sealants. Filtration tubing should be cut only with a sharp Stanley knife or tubing cutter to ensure the tubing is cut neatly at a 90° angle to avoid any sharp or jagged edges.

WaterMark

This Water Filter System is certified to WaterMark Standards AS/NZS 3497 Under the Certificate number 23247. WaterMark is the standard that is required by law for a qualified plumber in Australia to install any item on municipal town water. All products used under this certification will give you peace of mind knowing that your water filter complies with Australian Plumbing Codes.

Our WaterMark filtration systems are hand assembled here in Australia and are batch tested to ensure quality and workmanship for your filtration products.

Installation:

As per Australian Plumbing Standards, this unit must be installed by a Qualified Plumber in accordance to the manufacturer's instructions and requirements. Failure to follow these guidelines may void warranty and insurance.

Please Note:

All components that come pre-assembled will require tightening and checking before installation. Due to transit conditions, fittings and other components may be loosened or unsealed.

Warning – Do not overtighten filter housings. Tighten by hand first and use the opening spanner to further tighten to provide a seal. The lip of the housing sump does not have to meet the cap of the filter housing. Check all components including but not limited to; Tubing, Fittings, Connectors, O-rings and Housings.

Installation

Connecting to Cold Water Inlet:

NOTE: Any connection put onto a mains supply line must be completed by a Qualified Plumber.

1. Turn off the water connection under the sink (For older homes the water may require shutting off at the water main).
2. Disconnect the cold-water line from your taps flex line. If the connection is copper straight through, modifications to the plumbing may be required. The plumber will make these modifications in compliance with Australian Plumbing Codes.
3. Install the provided Tee Valve (GT14-14S) between the cold-water inlet and the flex line from the mixer tap.
4. The Pressure Limiting Valve is an inline valve. Place the PLV inline from the entry Tee Valve to the water filter system inlet. This valve will limit the pressure to 500 kPa to protect the filter system in compliance to Australian Plumbing Codes.
See Example installation below.



Working with Quick Connect Fittings AKA “John Guest” Fittings

This water filtration system uses quick connect fittings. To use these fittings correctly, you need to firmly insert the tubing into the fitting until you feel a ‘click’ which signifies that the tubing has pushed through the internal O-ring in the fitting. If leaking occurs in the fitting join, it is highly likely due to the tubing not being seated correctly, or the tubing has a rough or angled thread preventing a clean seal.

To remove tubing from quick connect fittings, depress the floating collet (shown below), then pull the tubing out.

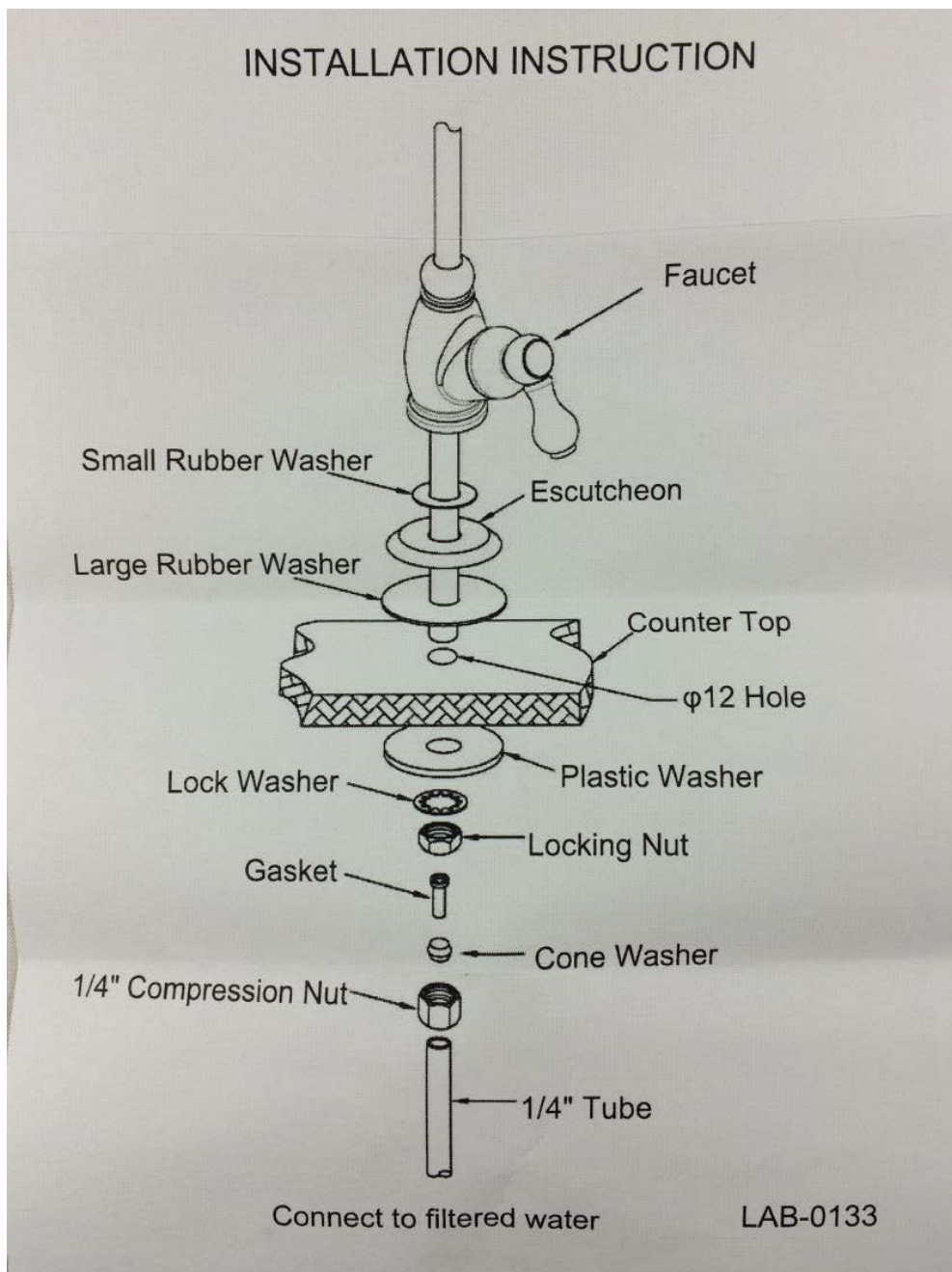


Mounting the Filter System:

1. Mark Screw locations at the desired position. Use the holes on the mounting bracket as a guide.
2. Use wood screws (not supplied) into the marked position, leaving them slightly out to allow the system to be 'hung'.

Faucet Installation:

1. Using a 5-6mm drill bit, drill a pilot hole.
2. Using a 12mm (1/2") drill bit, drill a hole through the base metal. Operate the drill slowly and carefully, if necessary, use a small amount of oil in the hole.
3. Mount the faucet on the sink and secure in position as per the below instruction guide.
(NOTE: The below instructions are a guide only, the supplied tap may have slightly different components. Always refer to the instructions supplied with the tap where applicable.)
4. Connect tubing to the faucet and run it to the 'outlet' of the filter system.



System Start Up

Once the system has been inspected thoroughly and determined to be free of defects, assembled correctly and ready for operation, follow the below procedures.

1. Check the filter cartridges to ensure they are installed correctly and not damaged due to transit.
2. Open the faucet on the sink to allow air to escape when water is turned on.
3. Turn on the inlet water at the entry tee valve and allow the system to fill with water, check for any leaks occurring during this stage. If leaks are found, turn off the water and fix leaks.
4. Water will begin to come out of the faucet tap, sputtering during this is common, you may also notice that the water comes out cloudy or discoloured. – This is normal and is part of the flushing procedure.
5. Allow the water to flow until it becomes clear (5-10 minutes).
6. It is common for the water to appear 'milky' when it is first installed, this is caused due to air pockets in the system and filters. Residual small air bubbles may stay in the system for up to a week but they can be easily removed more quickly with flushing.
7. When the water is clear, shut off the faucet and check the system for leaks while the unit is under pressure. It is recommended to wait 15 minutes while the system is under pressure to identify if there are any slow 'bleed' leaks in the system.

Filter Protection Devices

Pressure Limiting Valve:

Pressure limiting valves are supplied with FSA Undersink filter kits and should always be used when installing to mains water. Due to the working mechanical parts of the valve is susceptible to 'wear and tear' and should be replaced as a preventative measure every 2 years. Failure to replace this fitting as per the manufacturer's recommendations may cause damage to the filter system and in some cases may void warranty and insurance.

Water Hammer Arrester:

A Water hammer arrester is a filter protection device that absorbs the pressure spikes in water caused by quick shut solenoid valves. Most houses have water hammer although it is not always auditable. Water hammer arrestors should be installed before a water filter system to absorb any water hammer and help protect the structural integrity of the filtration systems. If water hammer is suspected or a know issue it may void future warranty unless a water hammer arrester is installed.

Leak Detecting Shut Off Kit:

This device is very simple in design and yet is one of the most important features of an Undersink water filter. In the event that there is an issue with the system or an external force causes a housing to leak or rupture, this device can detect a leak and shut off the incoming water supply to prevent flooding damage. This item has a mechanical valve that sits on top of a textile pad/capsule that will rapidly expand when it absorbs water. As the capsule expands it pushes the flick valve shut and prevents further water damage due to excessive leaks. It is recommended to always install an Undersink filter with a leak shut off device to prevent damage in the case of a leak.

Pressure Relief Kit:

The Pressure Relief Kit is designed to release pressure within a closed circuit caused by several factors including Water Filtration, Pressure Limiting Valves, Chillers, Boilers and 1 Way Valves.

The most common cause is through thermal expansion as the water cools to near freezing temperatures however it is also common to see pressure build in a water filter due to water hammer. Pressure Limiting Valves are resistant to water hammer but they will not stop it from causing issues, water hammer can travel through a PLV and as PLV's are a one-way valve, the water hammer gets trapped in the filter which causes several impact spikes but also increases the static pressure built up in the filter system. This is why it is recommended to turn off your water filter during periods of non-use to avoid high static pressure build up within the filter system. The alternative is to install a pressure relief kit. This valve is designed to open once the pressure exceeds 115 psi which will briefly send a small amount of water and pressure to the drain and avoid building up within the system.

When installing this device, it is recommended to install it onto the 'outlet' line connecting the faucet to the system. The Pressure relief kit comes fitted with a 50mm drain saddle for easy installation of the waste line. This device must always be installed in conjunction with a PLV.

Ongoing Maintenance

Filter cartridges will require replacement ongoing and can vary between filtration systems. Refer back to your specific product listing on our website to see the filter replacements suitable to your filtration system.

As a general rule, filters must be changed every 12 months or sooner if required. To maintain warranty always use the recommended products as supplied by FSA including cartridges, fittings and seals unless otherwise stated by FSA.

The system should be flushed for 5 minutes if it has been idle for longer than 7 days.

The filter system should be turned OFF at the entry tee when there are no occupants in the house this filter is installed in. Failure to do this may cause damage to the system and in worst cases cause failure due to a high build up in static pressure. It is the responsibility of the buyer to ensure the filter is shut off during extended periods of no use exceeding 72 hours. If the system is not going to be used regularly, it is recommended to fit a Pressure Relief Kit and Leak Shut Off Kit.

Changing Sediment & Coconut Carbon Filters:

1. Turn off the Entry Tee to stop water to the system. Open the faucet tap of the sink to release pressure, then close.
2. Lay a towel down below the system as dripping and spilling is common when changing filters.
3. Unscrew filter housings using the spanner supplied with the kit in original purchase. When facing the system front on, turn the spanner to the left to loosen.
NOTE: Twin O-Ring housings can be very hard to open after 12 months of being sealed. You may find it is easier to disconnect the tubing from the filter and bring the system up onto the sink to gain better leverage on the opening spanner.
TIP: A trick to opening the housings when they are sealed is to lay the system down, place the spanner over the housing sump and firmly strike the spanner with the ball of your palm. A sharp jolt can help to dislodge the seal on the O-rings and allow the housing to open.
4. Once the housings have been opened, discard the used filters in the bin.
SANITATION: When the filters are being changed, it is recommended to clean the filter housings to remove any bacteria or debris left behind by the external surface of the filter. The housings can be washed in warm soapy water then thoroughly rinsed with clean water.

The best way to sanitise a system is to firstly follow the above method, but then add a cap

full of HydroSil-ULTRA into the first filter housing. Screw the housings back onto the system and turn the water on, filling the entire system with water. This will flush the entire system out and also sanitise it. Leave the system sitting full of water for 15 minutes then open the tap and allow to flush for 5 minutes.

5. Unwrap the new filter cartridges and install them 1 at a time. When handling the carbon filters, only touch them by the plastic end caps to avoid contaminating the carbon.
6. When you install a filter cartridge, the system must be in a vertical position so the filter aligns correctly with the guiding ports in the filter system. Once the filter is tightened by hand and the cartridge can no longer move, you can lay the filter down and tighten with the spanner. Do not overtighten housing.
7. Re-connect the filter system to the water and follow the 'Start Up' Instructions.

Specifications:

Housing Size	10" x 2.5"
Ports	¼" to ½" NPT (GT8-0S, GT8-0S1/2)
Max Pressure	125 psi
Working Pressure	70 psi
Operating Temperature	1°C – 38°C

Replacement Parts:

Housings

GT8-0S	10" x 2.5" Housing ¼" Ports
GT8-0S1/2	10" x 2.5" Housing ½" Ports

Housing Kits

GT1-21	10" x 2.5" Single Undersink System with Stainless bracket ¼" Ports
GT1-22W	10" x 2.5" Twin Undersink System with White Bracket ¼" Ports
GT1-22S	10" x 2.5" Twin Undersink System with Stainless Bracket ¼" Ports
GT1-3	10" x 2.5" Twin Undersink System with White Bracket ½" Ports
GT1-38	10" x 2.5" Triple Undersink System with White Bracket ¼" Ports

Pressure Limiting Valve (PLV) – 2 Years or Sooner if Required

GT18-13	500 kPa (70 psi) PLV (1/4" Tube)
GT18-6S	350 kPa (50 psi) PLV (1/4" Tube)
GT18-133/8	500 kPa (70 psi) PLV (3/8" Tube)
GT18-133/8-350	350 kPa (50 psi) PLV (3/8" Tube)

O-Rings – Replace Every 2 Years or Sooner if Required

GT23-16	Suit GT8-0S, GT8-0S1/2
GT23-7LS	Suits GT8-0G (Pre-2017)

Common Fittings – Replace When Required

GT10-22LS	Inline ¼" Tube to ¼" Male Thread Straight Fitting
GT10-23LS	¼" Tube to ¼" Male Elbow
GT10-79LS	3/8" Tube to ½" Male Straight Fitting
GT10-30LS	3/8" Tube to ½" Female Straight Adaptor
GT10-78LS	3/8" Tube to ½" Male Elbow
GT14-14S	Entry Tee

Tubing – Replace Every 3-5 Years or as Required

GT20-16GW ¼" White Water Filtration Tubing
GT20-14GW 3/8" White Water Filtration Tubing

Consumables

GT44-0 25g Silicone Lubricant
GT21-0 12mm x 0.76mm Thread Tape (10m Roll)
GT26-0 1L HydroSil-ULTRA Water Sanitiser
GT17-0 Opening Spanner Suit Undersink Filter 10" x 2.5"
GT20-0 Tube Cutter Suit ¼" to 12mm Tubing



WaterMark



Single, Twin, Triple Undersink Kit Specific Warranty

All FSA Filter Kits designed for Undersink installation are subject to a conditional 'Lifetime Warranty'.

Warranty

Filter Systems Australia (FSA) warrants each new product to be free from defects in material and workmanship for a period of 1 year from date of tax invoice issued by FSA. During this 12-month period FSA may cover freight expenses for a faulty item. After this 12-month period elapses, it is the responsibility of the buyer to arrange freight and cover expenses to return the item to FSA. Any damage that occurs to items during this transit is not the responsibility of FSA.

Filter Systems Australia's exclusive obligation under this Warranty is, at FSA's own option, to either repair or replace the Product, once FSA has deemed that the Product is defective.

Filter Systems Australia will not cover any labour charge incurred by the buyer for the replacement or repair of any product.

This warranty applies only to the original retail purchaser of the product – Non-Transferable.

This warranty does not cover any product that is relocated from the site of its original installation.

All replaced or exchanged parts taken out under this warranty become the property of Filter Systems Australia.

Qualification for Warranty

As per Australian Plumbing Codes, all systems must be installed by a qualified plumber. The buyer 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 FSA recommendations including the use of replacement filters, fittings and components supplied by FSA. Failure to maintain the filtration system using FSA approved products may void warranty.

Filtration systems must be fitted with the supplied Pressure Limiting device to limit the pressure to 500 kPa or lower.

FSA does not take responsibility for retaining customer records, it is the buyer's responsibility to retain all tax invoices from the original sale and ongoing maintenance purchases as proof of upkeep on the system.

Limited Warranty

Due to the many working parts of Undersink Water Filters, there are some components that fall under 'regular wear and tear' which are not covered under a 'lifetime warranty'.

Items including but not limited to; Valves, Taps, Seals, Adaptors, and Fittings are subject to a 2-year defect warranty from date of invoice.

Please refer to the product listing to see the recommended replacement times for valves and other components.

'Lifetime Warranty'

This warranty covers the following components in Undersink Filter Kits:

- GT8-0S 10" x 2.5" Filter Housings
- GT8-0S1/2 10" x 2.5" Filter Housings

In the event of a housing failure in the form of a crack, leak or rupture to one of the above components that is not deemed to be an external cause (e.g. impact, freezing, neglect or if installation is not done by a qualified plumber), FSA will replace the component(s) under a 'Lifetime Warranty' if the buyer has followed all things outlined in 'Qualification for Warranty'.

If this warranty claim happens outside the initial 12-month period, the buyer is responsible for the freight as per the previously stated 'Warranty'.

For further Warranty Terms & Conditions, please view our full warranty as outlined on our website.

FSA

FILTER SYSTEMS AUSTRALIA

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