

7 Stage High Alkaline Undersink RO Filter SKU: GT1-26-7



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

# IMPORTANT NOTE TO THE PLUMBER BEFORE COMMENCING INSTALLATION OF THIS SYSTEM

This system comes with the following three filters (pictured below), which will need to be MANUALLY INSTALLED by the plumber (in stage "VI. Assembling the System") prior to use. If you fail to install these three filters, the system will not function correctly! These filters may come loose in the box, or seated inside the filter housings for safe-keeping during transit, however YOU MUST PULL THEM OUT AND REMOVE THE PLASTIC WRAPPING ON THESE 3 FILTERS BEFORE RUNNING ANY WATER THROUGH THE SYSTEM!

1. Dirt/Sediment Pre-Filter



3. Reverse Osmosis (RO) Membrane





Note: In addition to the aforementioned three filters, there may be extra filters in the box if the customer has pre-purchased Replacement Filters in advance. These eventually will need to be changed in the future, according to the filter maintenance schedule stated in these instructions.

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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 RO system is certified to WaterMark Standards AS/NZS 3497 Under the 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 <u>most</u> 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 <u>before</u> contacting customer support.

#### II. Before You Purchase/Open

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

| Feed Water Conditions | Min     | Max        |
|-----------------------|---------|------------|
| Inlet Pressure        | 350 kPa | 700 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  | 200 mg/L   |

#### **III. Space Requirements**

System Dimensions (7 Stage): Height: 43cm, Width: 37cm, Depth: 21cm Storage Tank Dimensions (12L): Height (With Stand): 42cm, Height (No Stand): 38.5cm, Width: 27cm

#### IV. Before You Begin Installation

All components that come pre-assembled will need to be thoroughly checked before installation. Due to transit, fittings and other components may be loosened or unseated – ensure fittings, tubing and filters are inspected before continuing.

#### V. What is Reverse Osmosis

Reverse osmosis is a process that uses a semi permeable, spiral wound membrane to separate and remove dissolved solids, organics, pyrogens, colloids and bacteria from water. The Feed water is delivered under pressure at 50psi or above through the permeator where the water permeates the minute pores of the membrane and is split into purified water which is delivered to the tap, and concentrate (reject) water which is sent to waste. Reverse Osmosis is capable of removing 85 – 99.99% of a large range of solids from water (depending on the solid) along with Organics and Bacteria.

#### VI. Automatic 4-Way Shut Off Valve

#### THIS VALVE COMES PRE-INSTALLED, SO THE PLUMBER SHOULD NOT NEED TO TOUCH OR

**TAMPER WITH IT.** This automatic shut off valve is designed so that while the tank is full of water, the system is under pressure – which creates back-pressure on the shut off valve and closes off the production water and stops water flowing to the drain. The RO membrane in this system produces water @ 8L/Hour +/- so if you draw off 1L of water, you can expect the system to run for approx. 5 – 15 minutes to automatically re-fill the tank. Keep this in mind in case you hear running water and think the system is 'leaking' or 'not shutting off'.



## Installation Introductions

#### I. Working with Quick Connect Fittings

If you come across a push-fit fitting, you need to firmly push the tubing into the opening until you feel a "click" which signifies that the tubing has pushed through the internal O-ring and is seated correctly. If leaking occurs, it may be due to roughly cut tubing OR the tubing is not pushed in far enough. To remove tubing from push-fit fittings, depress the floating collet (shown below), then pull the tubing out.



#### II. Flushing

Laws and regulations prevent us from wet-testing these filtration systems prior to sending them out. Therefore, during assembly of these systems they are not pressure tested so it is possible to have a small leak in a connection (which is simply fixed by re-seating the tubing or tightening a fitting). As the filters are dry packed, the systems will require flushing before first use.

## **Installing Connections**

#### I. Feed Water Connection + Pressure Limiting Valve

Using the supplied Feed Water Adaptor Inlet Valve (FWA) (pictured right), locate the connection between the kitchen tap & cold-water line (usually a braided stainless steel flex line). Shut off the incoming water and bleed pressure from the line by opening the tap. Disconnect the flex line from the cold-water inlet and install the Feed Water Adaptor in between.

<u>DO NOT</u> apply thread tape to these connections as they are designed to use the washers only – Thread tape is only required on the male thread of the FWA Inlet Valve if it is not installing to a flex line.

With the blue handle facing in line with the cold-water line (As pictured) the valve is in the off position. During this point, you can turn the water back on to check for leaks in the valve installation.

#### A Pressure Limiting Valve (PLV) must be fitted between the FWA Inlet 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.

#### II. Drain Clamp Connection

The best installation point for the drain clamp is **below the S bend** (**Trap**). The Vertical tailpiece is ideal.

- Mark the position of the hole on the pipe and drill through using a ¼" (6mm) drill bit (One side only).
- 2. Unscrew the clamp and wrap it around the pipe, loosely screw it back up leaving enough slack so you can position the hole with the outlet of the clamp.
- 3. Tighten the clamp to create a seal.

#### III. Drilling Faucet Hole - Stainless Steel Sink

- 1. Drilling through a stainless-steel sink can be achieved by marking the location with a centre punch and drilling a 3/16" Pilot Hole When drilling through stainless steel lower speeds are better with a sharper bit to avoid burning the surface of the sink.
- 2. Using a 1/2" or 7/16" carbide or sharp drill bit, enlarge the hole to fit the stem of the faucet (7/16" Thread). For installation on other types of sinks such as stone, it is best to employ a specialist to drill the hole to ensure it is done correctly where possible it is best to get the sink manufactured with a pre-drilled hole. Alternatively, consider installing a 3 Way Mixer Tap in place of the current kitchen faucet, which alleviates the need to drill altogether.





Figure 2. Drain Clamp Location ENSURE YOU INSTALL AFTER S BEND ON THE DOWNPIPE



#### IV. Mounting the Faucet

- 1. Refer to the below diagram on the components of the faucet
- 2. Remove the required fixings of the faucet and thread the faucet through the hole.
- 3. Re-assemble the faucet fixings in the correct order and tighten into place.
- 4. The Faucet uses a compression fitting to connect to the filtered water tubing. Compression fittings crimp the tubing around a stem (gasket) to seal the water, the compression ring then prevents the tubing from being removed. In this instance, thread the Compression nut over the tubing, followed by the cone washer. Then firmly press the gasket into the end of the tubing. You can then insert the tubing into the base of the faucet and secure it by fastening the compression nut onto the bottom of the faucet thread.

INSTALLATION INSTRUCTION



#### V. Storage Tank Assembly

- 1. Using standard white plumbers' tape wrap the stainlesssteel port (top of tank) with 6 - 8 even rounds of tape.
- 2. Install the 90° Tank Valve Elbow firmly. NOTE: At no point should you need to tamper with the air valve on the tank during new installation - these tanks are pre-set to ~7psi (while empty). This is a bladder tank and the water will go in/out of the tank on the same water line.
- 3. Please note that the 8L and 12L Storage Tanks must sit in an upright position. Only a 6L tank can be seated horizontally.

**DO NOT TAMPER** 

WITH THE AIR VALVE

### **REMOVE THE PLASTIC WRAPPING FROM THE PRE-FILTERS + MEMBRANE**

- 1. Disconnect tubing from the membrane housing cap.
- 2. Unscrew the cap and check the o-rings to ensure they are it working order.
- 3. Unwrap the Reverse Osmosis Membrane and install it into the membrane housing, ensuring that you only handle the membrane by the end stems as shown. The membrane is inserted firmly, o-rings first. Replace the membrane cap – be careful to keep the o-rings lined up correctly to avoid pinching them if they fall out while tightening.
- Firmly hand tightening the cap is usually sufficient - the membrane opening spanner attachment can help nip up the housing further if required.
- Unscrew the vertical pre filter housings and unwrap the sediment + carbon cartridges – maintain minimal contact with the surface of the carbon filter, handle by the end caps only to avoid contamination.
- 6. Screw up the housings while they are in a vertical position to ensure the cartridges remain centered until you begin to feel resistance - if you gently shake the housing, you should not be able to feel/hear the cartridge rattle inside. Hand-tightening is sufficient to seal the housings due to the dual tapered o-ring seal. Only use the opening spanner if the housings need to be tightened slightly to avoid leaks. DO NOT **OVER-TIGHTEN THE HOUSINGS – doing so** causes stress on the caps and may result in a split or crack, causing damage to the housing, leaking and in the worst-case scenario, flooding. NOTE: The rim of the housing and the cap should not be touching - this is too tight. The gap should be approx. 3-4mm between the cap and the rim of the housing.
  - 6 Tightened Correctly with 3-4mm Gap (Should Not Leak)



2 FSA Ш Δ Waterblack

Over-Tightened (Prone to Damage + Leaking)

You are now ready to connect the system.

## Connecting the RO System

#### I. Tubing

- 1. Measure a length of WHITE TUBING (Inlet Tubing) to be installed between the FWA Inlet Valve and the 'Inlet' port on the filter system. Make a clean cut on straight angle using a sharp box cutter, knife or tube cutters. When connecting to the system refer to the 'Quick Connect Fitting' Instructions. To connect to the FWA Inlet Valve, unscrew the lock nut until it hits a stop end. Push the tubing in firmly until you feel it 'seat'. Finally, tighten the locking nut to secure the tubing this will prevent the tubing from releasing.
- 2. Measure a length of **BLUE TUBING** to go between the Storage Tank & the Tank Tee fitting located on the final stage filter.
- 3. Measure a length of **BLACK TUBING** to go between the Drain Clamp & the Flow Restrictor (labelled "Drain Line").
- 4. Measure a length of WHITE TUBING to go between the Faucet & the Final Stage filter (labelled "To Faucet")

## 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. Open the faucet tap to the **ON POSITION** (90°) – This helps bleed air from the system when you introduce the feed water.



2. Close the RO Water Storage Tank Valve (90°) to the **OFF POSITION**– we want the system & filters to be totally wetted down and full of water to allow the air to escape.



3. Smoothly open the FWA Inlet Valve (90°) to the **ON POSITION** allowing water to enter the system, it is common to hear and see sputtering from the faucet tap as the water makes its way through the system forcing out the air.



4. It will take a few minutes for the water to make its way out the faucet due to the low flow rate of the membrane. The drain line however should begin to run as soon as water reaches the membrane. Now, check for leaks. If there are leaks, shut off the water and fix them.



Bad Bad

Good

5. 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.



6. Once the faucet comes to a steady trickle of water and stops sputtering, close the Faucet Tap to the OFF POSITION (90°). This should trigger the system's automatic shut off within 1 minute (water should stop flowing). If the water does not shut off within 60 seconds, it could be due to an air lock in the shut off valve which is common for new installs. If this occurs, repeat the process until fixed.



7. Finally, **open the RO Water Storage Tank Valve to the ON POSITION** (90°) so the tank can begin filling. The tank will take up to 2 hours to fill depending on several factors. You might not get full flow from the faucet tap until the tank is sufficiently full with water.



#### II. Client May Complete Commissioning

Note for Plumbers: At this point, if you are confident that the system is functioning correctly and there are no signs of leaks or any concerns, you can finish your portion of the installation. Ensure that the client is aware of the following steps to conduct next. We suggest that you (as the plumber) understand the remaining portion of the manual in case the client needs help.

- 8. When the tank has had long enough to fill, open the faucet tap on the sink and allow all the stored water to flush out the system. You should notice some discolouration/cloudiness which is normal. Repeat this process to flush the tank at least 2 times to clear the carbon fines from the system. The RO membrane has a small amount of food grade anti-bacterial preserve inside it which will be flushed out during these flushes. Air bubbles are common to remain in the system for up to 2 weeks but they will disappear quicker if the system is flushed more or used frequently. The tank will take up to 2 hours to re-fill each time, and you might not get full flow from the faucet tap until the tank is sufficiently full with water. Generally, water is produced @ 8L/Hour +/- so if you take 1L of water, you can expect the system to run for approx. 5 15 minutes. Keep this in mind in case you hear running water and think the system is 'leaking' or 'not shutting off'.
- 9. This system is an alkaline unit which means minerals are dissolved into the water to balance the pH and 'alkalise' the water. When the system is new the pH can be higher than normal (which is still safe to drink) but you may notice a 'bitter' or 'metallic' taste in the water which is caused by the pH, <u>NOT</u> from any harmful chemicals or plastics. If you are not accustomed to drinking RO water or Alkaline water, you may notice the water may taste 'strange' to your individual palate. This is due to the pH level in the water and once your palette adjusts, you will no longer have an issue with taste.

#### III. 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 FWA Inlet Valve under the sink by turning the blue valve 90°.
- 2. Shut off the Storage Tank by turning the RO Water Storage Tank Valve 90°
- 3. Briefly open the Faucet tap to bleed out excess line pressure and then close it again.

To start the system, open the Feed Water Valve and Storage Tank Valve. If the system has not been used for over 48 hrs – discard the first 45 seconds of water. If the system has been shut down for over 1 week – discard a full tank of water.

#### Maintenance

#### I. Replacement Parts

Filtration tubing should be replaced periodically (about every 3 - 5 years). There is no specific time. Fittings should be replaced every 3 - 5 years due to wear & tear.

We suggest replacing the Pressure Limiting Valve every 2 years. If the system is having issues with the shut off valve and is over 2 years old, the 4-way shut off valve should also be replaced.

#### II. Replacement Cartridges

Cartridges have a varying life span but generally can be replaced under the following guidelines under normal working conditions; Stage 1, 2 – Replace Every 6 Months. Stage 4, 5 – Replace once a year. The Membrane (Stage 3) can vary significantly depending on a range of factors including but not limited to water quality and usage volumes. We generally find that on poor quality water such as Bore water\*, or Mains Water in areas of WA, NT and SA the membranes generally last between 1 - 2 Years. Other areas where the water is less harsh the membrane can last anywhere up to 4 years without requiring replacement.

#### **III. Testing Filters**

Reverse Osmosis membranes have a variance in their filter life and this is affected by several things including water quality, usage, temperature and filter maintenance. As they are the workhorse of the system, they are the most important filters to monitor and keep maintained.

To measure the effectiveness of the RO membrane you will need a TDS test meter. Draw a sample of tap water (to get your base reading), then collect a sample of water directly off the membrane outlet (before it goes through any other filters). This is your 'pure' water. On the GT1-26-4 System, you will need to draw water off the line that would normally plug into the storage tank. To calculate the membrane effectiveness, you will need to subtract the percentage of contaminant reduction from the feed water. E.g. Feed Water 200mg/L TDS – RO Membrane removes 97% (+/-) Therefore, 200 - 97% = 6mg/L. Factors can influence the final TDS of the water and it will depend upon what is in the feed water to begin with. A membrane is deemed to be 'expired' if the overall reduction rate is <85% (as a general rule). To apply this to the above example, 200 - 85% = 30mg/L. So, if your test reading was approaching 30mg/L or higher, it would be time to change the membrane.

| Troubleshooting   |   |  |  |
|---|---|--|--|
| Problem   | Possible Cause(s)   | Solution   |  |
| Leaking between fitting & tubing                                | Unseated Tube   | Check all tubing connections by firmly pushing them into the fitting. Check that there are no kinks or any obvious issues. If the problem persists, remove the tubing and check for a clean cut with no burs. Push the tubing back in and try again. If this does not work, please contact customer support.   |  |
| Leaking from<br>Feed Water Valve                                | <ol> <li>Damaged or<br/>Missing Washer</li> <li>Not Tight<br/>Enough</li> </ol>   | <ol> <li>Check the valve to see if the washer is inside, if it is<br/>damaged it may need replacing – this is a common size<br/>washer and can be purchased from most hardware/plumbing<br/>stores.</li> <li>If the diverter valve is loose (or you can easily swivel the<br/>fitting without resistance, the fitting is not tightened enough. It<br/>may feel like you can't tighten it anymore and it just keeps<br/>spinning but if you use a gripping tool (multi grips) to grab the<br/>collar of the fitting and use your hand to hold the valve itself<br/>steady, you will be able to further tighten the valve. The valve<br/>is tight enough when you feel light to moderate resistance</li> </ol>   |  |
|   | 3. Thread is too<br>Short   | 3. If you screw the valve on and the collar 'bottom's out' on the tap, you may need to add another washer (to bulk up the space).  |  |
| The system is<br>making a loud<br>humming or<br>hammering noise | 1. Membrane NOT<br>installed  | 1. Usually this noise is caused when the installer fails to install<br>the membrane into the housing which causes certain parts of<br>the system to malfunction. Check the box and packaging for<br>any "leftover" or "spare" filters.   |  |
| when running.   | 2. Air Lock   | 2. When the system is newly installed or you have just<br>changed the filters, there is a considerable amount of air in the<br>system. This air can become trapped in air pockets and if they<br>are sitting in just the right spot, they can lock the valve in<br>place. Try tilting the system from side to side, back & forth to<br>shift the air pockets. You can also tap on the 4-way shut off<br>valve (the cube shape fitting on the back) to try and clear the<br>air pocket. If this fails, turn the water off, bleed out the<br>pressure then turn the incoming water back on to try and clear<br>it  |  |
|   | 3. Normal<br>Operation  | 3. It should be noted that in some instances a slight shudder or<br>thud/vibration is common when the system "activates". This<br>will generally occur in situations such as, Pump kicks in, water<br>pressure increases, water is drained from the tank and triggers<br>the valve to refill the tank. If the noise is severe, please contact<br>support for further assistance  |  |
| The unit is not<br>producing any<br>water?                      | <ol> <li>Water Supply is<br/>off or<br/>disconnected.</li> <li>Pre-Filter has a<br/>blockage</li> <li>Insufficient<br/>Water Pressure</li> <li>Water Quality</li> </ol> | <ol> <li>Turn on the water supply and ensure there are no obstructions to the water flow.</li> <li>Disconnect the tube between the membrane and pre-filters and run water at full pressure to see if water comes out of the filter. – If the water does not come out (or is very weak pressure) the filter may need to be changed.</li> <li>Reverse Osmosis required 50psi (Minimum) to operate – 70psi+ is ideal. If you have lower than 50psi pressure this unit may not be suitable for you.</li> <li>Ensure that the water quality meets the feed water requirements outlined previously. High levels of impurity such as hardness and salt can cause the system to block or not produce water.</li> </ol> |  |
| more waste water<br>than filtered water                         |   | water ratio at 70 psi. If your pressure is lower than 70 psi, the<br>production rate may decrease and cause more drain water<br>than filtered water.   |  |

|                                     | 2. Water Quality   | 2. If your inlet water quality is poor and contains higher salts<br>and hardness the filter may produce less water than the<br>specified amount. |
|-------------------------------------|--------------------|--|
|                                     | 3. Blockage        | 3. If you have good pressure, and average water quality it is possible there is a small blockage somewhere in the system.                        |
|                                     |                    | I ry to follow the water flow along the system, disconnecting i  |
| Ligh pH Dooding                     | 1 Alkoling Filter  | Lube at a time to try and phipoint where the water is stopping   |
| High ph Reading                     | T. Alkaline Filler | When the filter is new it will be high but will soon settle to the   |
|                                     | 2. GAC Filter      | 2. If you have a post GAC 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<br>leave it to stand and the pH will then drop back down to the                    |
|                                     | 2 Incufficient     | normal level.  |
|                                     | Testing Equipment  | up to lab grade equipment. Before coming to a conclusion on  |
|                                     |                    | pH issues, it is best to ensure the equipment used to measure<br>the pH of the RO water is of high standards and suitable for                    |
|                                     |                    | reading pH levels in low EC water (i.e. The guy at the pool  |
|                                     |                    | testing equipment and frequently test our units and conduct  |
|                                     |                    | research. If you feel that there is an issue with your pH, please  |
| Strange taste to                    | 1 Alkaline Filter  | CONTACT US.  |
| the water (New                      |                    | adequate flushing before first use. Usually all taste is gone  |
| System)                             |                    | within a week of use. This taste is normal and in most cases is  |
|                                     |                    | your body adjusting to the high pH water (which some people  |
|                                     | 2. Residue         | 2. The filters are dry packed, the carbons, alkaline filters will  |
|                                     |                    | have 'fines' on them as they are granular medias, this will go   |
|                                     |                    | away with flushing. The membrane has a food grade preserve<br>inside it to prevent contamination during storage, this will also                  |
|                                     |                    | flush away quickly.  |
|                                     | 3. Contamination   | 3. Bacterial contamination is highly unlikely, but not   |
|                                     |                    | 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                          | 1. New Filter      | 1. While filters are new, it is normal for the TDS to be elevated  |
| Higher than the inlet water (or the |                    | while the system is flushing. Continue flushing the system & contact support if the high TDS persists longer than 1 week.                        |
| same).                              | 2. Alkaline Filter | 2. Alkaline filters will naturally increase the TDS of the water,  |
|                                     |                    | possible for the TDS level out of the alkaline filter to be higher   |
|                                     |                    | than your inlet water. This is because you are adding minerals   |
|                                     | 3. Expired Filters | 3. If the filters have not been changed as per the   |
|                                     |                    | recommendations, it is likely that the increased TDS is due to   |
|                                     | 4. Mixed Up Drain  | 4. This is common as sometimes the lines may be mixed up.  |
|                                     | Line and Drinking  | Make sure that the tubing connected to the 'Drain Line' flow   |
|                                     | Line               | restrictor is being run to waste, do not use this water for<br>drinking. Your drinking water line should be marked with either                   |
|                                     |                    | 'To Faucet', 'Drinking Water' or 'Aquarium Water'.   |
| Flow has                            | 1. Tank lost air   | 1. Over time, air can slowly leak out of a RO tank. Sometimes  |
| down to a trickle                   | pressure           | indication that this has occurred is that the tank will be very  |
|                                     |                    | heavy (full of water) but no water comes out the tap. The  |
|                                     |                    |  |

|                  | 1                  |   |
|------------------|--------------------|---|
|                  | 2. Tank Diaddar    | solution is to disconnect the tank (after shutting down the system). Then empty all water from the tank, or as much as possible. Add air pressure into the tank equal to 7psi.<br>Reconnect the tank and let it fill and try again. |
|                  |                    | 2. Depress the air valve on the side of the tank – If water   |
|                  | Rupture            | air to the tank and the air comes out the inlet/outlet valve it is  |
|                  |                    | also ruptured. – The tank will need to be replaced.   |
|                  | 3. Blocked filters | 3. It is unlikely that the filters would be totally blocked but it is   |
|                  |                    | possible. Check the feed water conditions and replace the   |
|                  |                    | filters if they are passed the recommended change times.  |
| Water constantly | 1. Air Lock        | 1. When the system is newly installed or you have just  |
| running to waste |                    | changed the filters, there is a considerable amount of air in the   |
|                  |                    | system. This air can become trapped in air pockets and if they  |
|                  |                    | are sitting in just the right spot, they can lock the valve in  |
|                  |                    | place. Try tilting the system from side to side, back & forth to  |
|                  |                    | shift the air pockets. You can also tap on the 4-way shut off   |
|                  |                    | valve (the cube shape fitting on the back) to try and clear the   |
|                  |                    | air pocket. If this fails, turn the water off, bleed out the  |
|                  |                    | pressure then turn the incoming water back on to try and clear  |
|                  | 2 Faulty Shut Off  | II.   |
|                  |                    | the shut off valve. These parts are warranted for 2 years from  |
|                  | valve              | date of purchase. Outside this time, it is recommended to   |
|                  |                    | replace them.   |
|                  | 3. Still Filling   | 3. Ensure that you have allowed the system enough time to   |
|                  | Ŭ                  | replenish the tank. Check with other household members to   |
|                  |                    | see if someone recently drew water from the unit.   |
|                  | 4. Low             | 4. Low pressure can cause the water to continuously run to  |
|                  | Pressure/Blockage  | waste without producing filtered water. Ensure your feed water  |
|                  |                    | pressure is > 50psi. Your pre-filters may also be blocked.  |

### Additional Extras

#### I. Water Hammer Arrester

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 as a result of hydraulic shock.

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

#### II. Leak Shut Off Kit

Highly absorbent capsule sits in place under the shut off lever (like a reverse mouse trap). It quickly absorbs water causing the capsule to expand in an upward direction putting pressure on the shut off valve. When sufficient water has been absorbed, the lever will snap shut, stopping the inlet water flow and saving any possible water damage. (Plastic outer cover needs to be REMOVED).



The Shut off valve should be connected between the FWA Inlet Valve and the Filter System inlet.

This system is certified to WaterMark Standards AS/NZS 3497 Under Certificate number 022780. WaterMark certification is the level of certification required by law for a qualified plumber in Australia to install a water filter system.

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### **Reverse Osmosis Undersink Kits**

### **Twin O-Ring Housings**

### **General Warranty**

Water Filter Systems<sup>1</sup> (Excluding consumables) Manufactured or Assembled<sup>2</sup> by Filter Systems Australia (FSA) 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, FSA 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.

FSA 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 FSA. 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 FSA.

FSA 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 FSA recommendations<sup>3</sup> including the use of replacement filters, fittings and components supplied by FSA. Failure to maintain the filtration systems using FSA 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 FSA to ensure the product was not incorrectly used, installed or claimed. False and incorrect claims will be pursued at FSA's discretion including chargeable inspection and transit costs incurred.

FSA 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

FSA 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\*.

FSA does not cover the work of the plumber who originally installed the system.

#### Warranty – Australia

This warranty is given by Filter Systems Australia (Jacknel Pty Ltd ATF The J & N Family Trust). ABN 64 855 305 562 Located at 1/38 Jade Drive, Molendinar QLD 4214. Ph 07 5597 4585 & email <u>info@filtersystemsaustralia.com.au</u>

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.

#### Definitions

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> Other products not manufactured or assembled by FSA are covered under the applicable manufacturer's warranty.

<sup>&</sup>lt;sup>3</sup> FSA 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.

<sup>\*</sup> Unsuitable environmental conditions include but are not limited to; Excessive hot or cold, Weather extremes.

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### **Extended Warranty**

Filter Systems Australia RO 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.

- GT8-0S Twin O-Ring Housings
- GT8-31 Reverse Osmosis Housing
- GT35-12 <sup>1</sup>/<sub>4</sub>" NPT Stainless Steel Centre Joiner
- GT14-14-DM Inlet Feed Water Adaptor

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.

- GT9- Faucet Tap Supplied by FSA
- GT13- RO Storage Tank Supplied By FSA
- GT13-4S 4 Way Shut Off Valve
- GT18-13 70 psi Pressure Limiting Valve

#### **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.
  - o Cartridges must be purchased through FSA or participating supplier/reseller of FSA products
  - Proof of purchase for replacement filters required.

Definitions

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> Other products not manufactured or assembled by FSA are covered under the applicable manufacturer's warranty.

<sup>&</sup>lt;sup>3</sup> FSA 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.

<sup>\*</sup> Unsuitable environmental conditions include but are not limited to; Excessive hot or cold, Weather extremes.



Black Tubing - Waste Water

Blue Tubing - Drinking Water