

REVERSE OSMOSIS UNIT

SUITS RON, RONS, ROP AND ROPS UNITS



PH: (07) 5443 3130 WEB: <u>www.sentrywaterfilters.com.au</u> Sales/Warranty: <u>marlon@sentrywaterfilters.com.au</u> Technical Assistance: <u>will@sentrywaterfilters.com.au</u>

IMPORTANT

Read through the <u>entire instruction manual before beginning installation.</u> Sentry is not responsible for any damage, injury, or monetary loss incurred from failure to read and follow the instructions explicitly. The installation of your system must be done by a local certified plumber who has knowledge of your water conditions and local council bylaws if applicable.

IMPORTANT NOTES [REQUIRED BY AUSTRALIAN AND NEW ZEALAND STANDARDS:

- For the correct operation of this appliance it is essential to follow these instructions during installation and use.
- All water filter and reverse osmosis systems must be installed by a suitably qualified and licensed plumber.
- To be AS/NZ compliant this system needs to be installed using a Watermark or AS/NZ certified pressure limiting and backflow prevention device. We also require that a leak detection shut-off device is fitted to these systems.
- This system should be mounted <u>vertically</u> and be positioned to allow easy access for servicing and filter changes.
- System is not UV resistant and is not designed for outdoor use, install only under cover and out of direct sunlight.
- Once the installation is complete the installer should inspect for leaks at threads and tube fittings before leaving.
- Flush system and drain tank after a period of non-use exceeding 7 days to reduce possible bacteria colonisation.
- Use only certified cartridges suitable for this appliance and tighten housings very firmly using spanner provided.
- Systems installed under constant feed water pressure have a recommended maximum service life of 10 years.
- Do not use with water that is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts [all reverse osmosis systems are certified for the removal of cysts].
- Where advertised that a system has a standard 12 or 24 month warranty, the following applies:
 - System must be installed by a qualified and licensed plumber according to the above.
 - System must be installed with a certified pressure limiter and leak detection device.
- Where advertised that a system has a life-time warranty, the following applies:
 - \circ System must be installed by a qualified and licensed plumber according to the above.
 - Wherever the term "lifetime" is used it is based on the maximum lifetime of 10 years.
 - System must be installed with a certified pressure limiter and leak detection device.
 - Unit to be serviced with our filters at least annually and evidence of purchases shown.

SYSTEM CODING

System codes are used to identify the type of system you have and the filter cartridges that are and should be used in your system. Below is a description and an example of the system coding:

Example: RON-7-MAN

- The "RON" Prefix stands for Reverse Osmosis Unit with no pump (ROP is a system with a pump).
- The central number refers to the total number of filter stages, including pre-filters, membrane and post-filters. The example has 7 stages.
- The final letters in the code refer to the types of post-membrane filters used on your system. These can include but are not limited to the below:

М	Mineral filter, to add back trace minerals removed during purification.
А	Alkalising filter, to increase the pH of the water.
G	Granular carbon filter, to improve the final taste of the water.
U	Ultra-Violet Unit, to Sterilise water/treat for bacteria, algae, fungi and viruses.
Ν	Nano-silver, to sterilise water/treat for bacteria, algae, fungi and viruses.

In most instances you will be able to order replacement filters and spare parts for your unit by simply quoting or searching your systems model number.

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PRE-INSTALLATION CHECK LIST

- Read through and familiarize yourself with these instructions and the installation process. This will ensure you have the proper tools, parts & abilities to install the system. A firm understanding of the process prevents mistakes.
- Check local plumbing codes and follow any that apply to your installation. Going against plumbing codes is illegal and can cause problems. We are not responsible for any problems resulting from improper installation. If your unit requires a licenced plumber to install, you should always use one.
- Determine the locations that you will be installing each component. These include the feed water supply, drain outlet, faucet, filter system, and storage tank. Ensure you have room for everything, and plan room for future filter changes. Should you have space constraints, smaller storage tanks are available.
- Familiarize yourself with Quick-fit fittings. Your system uses Quick-fit fittings throughout and a firm knowledge of how to use them is important. This manual includes instructions on how to use quickfit fittings. Improper use of these fitting can result in compromised seals and potential leaks.
- □ Familiarize yourself with any upgrades that you have purchased for your unit. If you ordered any upgrades for your system, be aware that installation of these components may vary from the instructions in this manual. Parts that vary should have their own instructions included. These types of parts include but are not limited to different faucets/mixer taps and stand-alone UV steriliser units and chiller units.
- Check to ensure there are no missing parts. Use the parts checklist on the following page to make sure all the parts listed are present. If anything required is missing, call us or email us and we will get replacements out to you as soon as possible.
- □ Acquire the tools you will need to install. Depending on where the system is being installed and the type of plumbing, the tools needed may vary. A good start includes adjustable spanners, open ended spanners, screw-drivers, a drill and ½" bit and a Stanley knife.
- Ensure that the minimum and maximum operational requirements are met. If your application is outside of the stated ranges, please enquire with our staff about different parts or units that would be more suited to your application. These specifications are included in our sales listings to prevent units having to be returned because they are not suitable. If you think that your water is outside of these ranges, contact us before purchasing a unit.

Feed Water Condition	Minimum	Maximum
Inlet Pressure	40 psi	80 psi
Temperature	5°C	40°C
pH Level	3	11
TDS Level	0 ppm	1000 ppm

PARTS CHECKLIST

In addition to the main RO system, faucet and storage tank, you should have the following parts. Pictures the most common style of parts, actual style may vary depending on stock. If any parts are missing contact us for and we will send out the missing parts.

	TANK VALVE The tank valve is a white & blue plastic valve with ¼" female thread and compression fitting. This valve is Installed on the top of the storage tank. Valve is open when handle is in-line with tubing, shut-off when handle is across tubing.
	SLIP-JOINT AND BALL VALVE The slip joiner is a metal fitting with a male thread at the top & female thread at the bottom. It is designed to fit into most standard 1/2inch braided flexi-hoses for easy feed water installation. A 3/4inch adapter is also available on request. This fitting may be supplied as a two-piece or one-piece fitting depending on stock levels.
	DRAIN SADDLE/WASTE CLAMP This fitting is used to connect the waste water outlet of your unit into your drain pipe. One of two types is normally supplied depending on what is requested. Either a black plastic 40mm clamp with a compression or quick-fit tube fitting or a 50mm adjustable metal ring clamp with quick-fit tube fitting.
	SPARE QUICK-FIT CONNECTORS These loose fittings are supplied as spare fittings in case one is broken during delivery or installation. These fittings may also be used if a different fitting is required than what is fitted to the unit during installation of your system.
9	HOUSING WRENCH/SPANNER This plastic wrench/spanner is used for loosening and tightening the vertical pre-filter housings on your unit. The wrench is included with all kits and should always be used when tightening the pre-filter housings. Loose housings can cause leaks.
	THREAD TAPE A roll of thread tape will be included with your unit. This tape should be used wherever you are threading a fitting into the unit to prevent leaks.
	ROLL OF TUBING A roll of ¼" tubing will be included with your unit. This tubing is used to install the unit and should be cut to length as required. The standard amount of tubing included with the unit should be enough, however in some installations extra tubing is required. Extra tubing can be ordered from our shop-front or our online store if required.
	PRESSURE LIMITING VALVE A limiting valve will be included with the system, this must be fitted when the system is installed. Failure to fit this valve will void warranty.

USING QUICK-FIT FITTINGS

Quick-fit fittings are a simple and quick way of creating secure, leak-free connections between tubing and system parts. Quick-fit fittings do not require the use of olives or inserts like most compression style connection fittings and are much faster to connect and disconnect when required.

CONNECTING

Connecting tubing to a quick-fit fitting is about as simple as it gets. Simply follow the below instructions and should be able to quickly and efficiently form a connection without any trouble.

- Cut your tubing to the length you need it. You should always cut your tubing with a razor blade/Stanley knife or similar so that you have a clean, straight cut with no burrs. Once you have cut the tube, if the end of the tube has flattened out at all, roll the end between your fingers until it is round again. Make sure there is no scoring or cuts down the side of the tube.
- 2. Push the tubing into the quick-fit fitting as per **Figure 1**. You will feel the tube hit resistance about 1cm into the fitting, this is the sealing O-ring. Push the tube a little harder and you will feel the tube push through the O-ring about another 5mm and hit the stopper inside the fitting. Your connection is now made and sealed.
- 3. Check for leaks when you turn your water back on. If the fitting leaks the tube may not be pushed in enough, or the end of the tube may be damaged/not cut properly.

DISCONNECTING

Disconnecting tubing from a quick-fit fitting isn't quite as simple as connecting the tubing, however it is still a simple process once you know what you are doing. Simply follow the instructions below and you should be able to quickly and easily disconnect tubing from a quick-fit fitting.

- 1. Locate the locking collar on the quick-fit fitting. The locking collar is the small round collar that the tubing goes into on the end of the fitting as per **Figure 2**.
- 2. Push the locking collar flush against the fitting as per **Figure 3** and whilst firmly holding the locking collar back against the fitting, gently pull the tube out from the fitting. The tube should slide easily from the fitting. If you find yourself using quite a bit of force, try pushing the tubing back into the fitting, holding the collar back against the fitting even firmer and pulling the tube out again. Sometimes you can use a pair of pliers or a fork to hold the collar back if you find it difficult to do with your fingers.



INSTALLATION

It is recommended that you thoroughly read through the entire installation manual to gain a basic understanding of the installation process before commencing with the installation of the system.

The installation process for this system is broken into a number of different sections to make the process a little easier. The first three sections outline how to install all of the inlet and outlet connection points, the fourth section outlines how to install the tank and the last section outlines how to connect your system to these points and the tank. These sections are ordered as per below:

- 1. PRODUCE (Faucet installation).
- 2. INLET (Feed water installation).
- 3. WASTE (Drain saddle outlet installation).
- 4. TANK (Storage tank installation).
- 5. SYSTEM (Main system installation connecting unit to above points).
- 6. PRESSURE LIMITING VALVE.
- 7. LEAK DETECTOR (Optional extra).

Note that these installation instructions are for systems that have been supplied with standard parts. If your system has been supplied with non-standard parts or you have requested changes to the way that your unit is built, the installation process may vary from these instructions. Normally, when non-standard parts are supplied, they will include their own set of installation instructions specific to that part.

Where there are multiple options for standard fittings these installation instructions will include a description of each type of fitting that may be supplied as standard.

It is recommended that you select a location for the system under your sink that is easily accessible for servicing your unit.

Once fully installed, the plumbing for your unit should resemble the diagram/schematic below:



PRODUCE (FAUCET INSTALLATION)



Be careful when choosing the location on your bench-top to install the faucet. If your sink does not already have a hole for a secondary faucet, you will need to drill one.

It is best to install the faucet on a flat surface, if the faucet is installed on an uneven surface it will not seal properly against your sink/bench and water on your bench-top could leak through to the cupboard beneath.

It is best to install the faucet on a surface no more than 50mm (2 inches) thick. If the surface is too thick the faucet shank will not reach all the way to the under-side.

Make sure that there is nothing underneath the chosen location that will interfere with installing the faucet such as pipes, brackets or shelves.

Position the faucet so that it points into the sink, this way if you spill any water or accidentally turn the faucet on it will go down the sink rather than all over your bench.

If you intend on mounting your faucet on a stone top bench of any kind it is recommended to have a professional cut/drill the hole for you as it is possible to crack the bench-top if drilled incorrectly.

Note: Air gap faucets are sometimes required by some local plumbing codes.

Note: The diagram is for the standard faucet, some faucets may look different to the one pictured, but parts should be similar. If a faucet is significantly different, it will include its own diagram/instructions.

- 1. Slide the chrome plate onto faucet shank, followed by the thin rubber washer and place the faucet in the mounting hole that you drilled in your sink/benchtop.
- 2. On the underside of the mounting hole, slide the hard plastic washer and locking washer in place, then thread on the faucet nut and tighten in place until the faucet is firmly secure.
- 3. Cut a short piece of tubing long enough to reach from the bottom of the faucet to where you intend on mounting your system, this tubing will form your "PRODUCT" line to the faucet from the system.
- 4. Attach the tubing to the faucet. Cut the end of the tube off smoothly with a sharp blade, slip the line nut over the tube with the open threaded side facing the end of the tube. Slide the plastic olive over the end of the tube and push it down about 20mm. Push the insert piece inside the end of the tube until the head of the insert is flush against the end of the tube. Once all three parts are fitted to the tube, push the end of the tube into the hole in the bottom of the faucet shank. It should slide between 10-15mm into the shank before stopping. Slide the plastic olive up the tube until it sits within the groove at the bottom of the faucet shank. Slide the line nut up to the shank and tighten firmly.

TANK (STORAGE TANK INSTALLATION)

RO systems produce water at a very slow flow-rate. To compensate for this, many under-sink RO units are supplied with a storage tank. As the RO system produces water it pushes the water into the storage tank under pressure, when you open your faucet the water comes from the tank under pressure, these tanks normally give a few litres of pure water at a high flow rate and will slowly refill when not in use. These tanks are available in a number of different volumes.

Because of the way that the tanks are designed, they only have a single shared inlet/outlet and only require one length of tubing to connect them to the rest of the system. This connection point is in the form of a 1/4 inch male thread on the top of the tank.

There is also a small air valve similar to a bike or car tire valve (usually covered with a blue screw-on cap) which can be found on either the side or the bottom of the tank depending on its volume. This valve is used **only** for checking and pressurising the air bladder in the tank. **DO NOT TOUCH THIS VALVE**, the tank will come pre-pressurised and if you release or add any air the unit may not work properly.

If your tank loses pressure or stops working properly for any reason, contact us and we will send you trouble shooting instructions which will lead you though re-pressurising and testing the tank.

Note: These instructions cover standard 2, 5, 8 and 12 litre holding tanks, larger tanks may vary. Note that 2 and 5 litre tanks come with a small black stand that requires you to remove the blue air valve cap so that the valve will locate in the centre of the stand.

- 1. Tightly wrap the 1/4inch male thread on the top of the tank with sufficient thread tape (13-15 laps) to create a good seal. Be careful not to over-tape the fitting as it is possible to crack the ball valve.
- 2. Install the tank ball valve on the prepared thread (hand tight only).
- 3. Cut a short piece of tubing long enough to reach from the top of the tank to where you intend on mounting your system, this tubing will form your "TANK" line to the storage tank from the system.
- 4. Attach the tubing to the tank valve. Cut the end of the tube off smoothly with a sharp blade, slip the plastic lock nut over the tube 30mm with the open threaded side facing the end of the tube. Push the end of the tube into the hole within the thread in the tank valve. It should slide between 10-15mm into the valve before stopping. Slide the plastic locking nut up to the tank valve and tighten firmly.



INLET (FEED WATER INSTALLATION)



The standard fittings supplied with the RO unit are designed to fit into a standard $\frac{1}{2}$ " braided flexible water line – typically running from the mains to your mixer tap. The standard fitting consists of a chrome 1/2" slip joint and a steel ball valve. This valve is sometimes supplied as a two-piece valve requiring assembly and sometimes supplied as a single piece valve that does not require assembly.

If you have copper piping the slip joint can usually still be used on any $\frac{1}{2}$ " joint in your pipe, however in some cases this isn't possible and cases you may need an extra T-piece fitting from a local plumbing shop to complete the install. It is best to have this type of fitting fitted by a plumber

On request we can supply a $\frac{3}{4}$ " slip joint to suit a dishwasher feed line or similar.

The angle ball valve should be installed into the thread on the side of the slip joint adapter before connecting the assembly to the feed water line (Note: Teflon tape must be used on angle valve to prevent leaks). If there is not enough room to fit the slip joiner to the cold water line with the ball valve fitted, you must fit the ball valve once

the joiner is installed.

- 1. Locate the water shut-off valve for your house and turn it off. Open your mixer tap to release all of the pressure in the piping. If the cold water line under your sink has its own shut-off valve, you can use this instead of shutting off water to the whole house.
- 2. Locate the braided flexible hose under your sink that runs from your mains to the mixer tap. There should be two hoses, one for cold water and one for hot water, make sure you select the cold water hose, sometimes the hot and cold hoses can be identified with a blue and red stripe (Blue being cold).
- 3. Loosen the nut on the bottom end of the braided line where it connects to a joiner or the solid water pipe and completely separate the hose from the thread.
- 4. Thread the slip joiner onto the thread from the mains. If the thread from the mains isn't long enough to reach the washer inside the slip joint you may need to use thread tape to get a seal. Tighten firmly.
- 5. Reconnect the braided line to the male thread on the top of the slip joint. Do not use thread tape on the braided hose connection, these hoses have their own inbuilt seal.
- 6. Cut a piece of tubing long enough to reach from the bottom of the steel ball valve to where you intend on mounting your system, this tubing will form your "INLET" line from the ball valve to the system.
- 7. Attach the tubing to the ball valve. Cut the end of the tube off smoothly with a sharp blade, slip the steel lock nut over the tube with the open threaded side facing the end of the tube. Push the end of the tube onto the barb on the ball valve. Slide the steel lock nut up to the ball valve thread and tighten firmly.

WASTE (DRAIN SADDLE INSTALLATION)

Drain saddles are used to connect the waste water line from the RO unit into the under-sink drain pipe.

The drain saddle is normally supplied as one of two styles. The first type is a stainless steel ring-clamp with a brass stem, a tube connector and rubber seal that suits a 50mm pipe. The other type consists of two black plastic halves (one half has a compression fitting on it), two bolts and a rubber seal that suits a 40mm pipe. If a particular size is required it should be requested when ordering the system, otherwise the saddle will be supplied according to stock levels.

NOTE: Depending on where the saddle is located, you may hear water running down the drain when the system is making water, this is normal.

- Select a location to mount the drain saddle. The drain saddle should be installed above the U-Bend (Trap) and either high up on the vertical down pipe or on the horizontal tailpiece between two sinks. Do not install the waste saddle on or below the U-bend to prevent the fitting and tube end sitting in dirty water.
- 2. Drill a 6mm hole into the drain pipe where you want to mount your waste saddle. If you are mounting on a horizontal pipe, ensure the hole is drilled on the top side of the pipe, so that standing water in the pipe will not sit on the hole. Be careful that you only drill through one side of the pipe.
- 3. Take the backing paper off of the round rubber seal, centre the hole in the rubber seal over the hole you just drilled in your drain pipe, and stick the seal in place around the hole.
- 4. Mount the drain saddle onto the drain pipe.
 - a. If using the black plastic saddle, position the half of the drain saddle with the tube fitting over the hole in the drain pipe so that the tube fitting aligns with the hole, then position the other half (the back half) of the drain saddle on the opposite side of the drain. Push the bolts through and tighten the saddle down do not over tighten.
 - b. If using the steel ring-clamp style saddle, unscrew/loosen the ring clamp and place around the pipe, line the brass stem up with the hole and tighten the ring clamp into place so that it compresses the rubber seal. Take the white connector fitting and push the larger side onto the brass barb until it is sealed on.
- 5. Cut a piece of tubing long enough to reach from the saddle to where you intend on mounting your system, this tubing will form your "WASTE" line from the drain saddle to the system.
- 6. Attach the tubing to the saddle. Cut the end of the tube off smoothly with a sharp blade. If you have the plastic saddle, slip the lock nut over the tube with the open threaded side facing the end of the tube. Push the end of the tube into the male thread on the saddle. Slide the lock nut up to the saddle thread and tighten firmly. If you have the steel clamp push the tube into the quick-fit to seal it in place.





PRESSURE LIMITING VALVE

A pressure limiting value is a legal requirement when installing any system permanently under constant hydrostatic pressure. These values are designed to protect the filter unit, failure to fit this value will void warranty of the unit and will make the installation non-compliant to Australian standards. These values serve multiple functions to protect the system as listed below:

1. CAP THE MAXIMUM PRESSURE

The valve will limit the maximum amount of pressure that a system is exposed to, this will prevent damage caused by sudden pressure spikes or constant elevated feed water pressure.

2. PREVENT CONSTANT PRESSURE CYCLING

By acting as a check value it will prevent constant pressure drops when a tap is used elsewhere in the house. Constant cycling of pressure can fatigue the housings and can result in cracks/leaks.

3. PREVENT BACKFLOW INTO THE MAINS

The valve will prevent water from running back into the mains supply if pressure is lost, this helps to prevent contamination of both the mains supply the filter unit.

4. HELP TO PREVENT WATER HAMMER

By preventing back flow from the unit and limiting the maximum pressure feeding into the unit the valve will help to prevent water hammer associated with the filter unit.

INSTALLATION

- 1. Cut the inlet line before the filter unit, leaving a minimum of 15cm of tubing either side of the cut. Ensure that you cut the tubing cleanly with no burrs, if the tube is flattened out at all roll the end between your thumb and finger to round it out again.
- 2. Connect your tubing to the pressure limiting valve taking care to observe the flow arrow on the valve, the arrow should point towards the filter system. The valve has quick-fit fittings, simply push the tube into the fittings until it drops in and seals fully. If the fitting leaks you may need to push it in further. The connection points should be plumbed as per the diagram below.



LEAK DETECTOR (OPTIONAL EXTRA)

Leak detection valves are not included in a standard kit but are offered as an optional extra that may be fitted during installation or fitted at a later date. These valves are recommended as cheap protection against potential leaks. These valves use a compressed absorbent pad which expands when wet, pressing onto the valve which cuts off the feed water to the unit. With proper installation, in the unlikely event of a leak the detector valve should cut off the feed water to the unit, preventing flooding in the property.

INSTALLATION

NOTE: Leak-stop devices should not be installed before pressure limiting valves. Pressure limiting valves should be the first device inline before any other component of the system.

1. Place the device below and to the side of your system as per Figure 1 and screw it down using the two screws which go into the screw holes on either side of the device (Figure 2).



2. Connect your tubing to the device. This device should be installed on the inlet line before the filter unit as per Figure 1, the connection points should be plumbed as per Figure 3. This device is fitted with quick-fit fittings, simply cut the tubing cleanly and push the tube into the fittings until it drops in and seals fully. If the fitting leaks you may need to push it in further.







3. Remove the plastic wrapping from the trigger pad/tablet and insert into the device. To do this, lift the trigger lever on the end of the unit (Figure 4), place the pad in the hole below the lever in the end of the device and push the lever back down to set the device.

It is best if the device is not located directly below the filter unit to avoid accidental triggering during filter changes. If the surface below the system is sloped, make sure the device is fitted downslope from the unit so that water will reach it if there is a leak.

If the valve is triggered, you will need to repeat STEP 3 above to replace the trigger pad. Be careful to dry the device off fully before fitting a replacement pad.

SYSTEM (MAIN SYSTEM INSTALLATION)

Once the faucet, tank, feed and drain saddle are in place/installed the system is ready to be installed. Prior to installing all of the connection points you should have chosen the location to fit the system under your sink so that future filter changes and servicing are easy. All of the sections of tubing that are connected to each of the connection points that you have installed should be long enough to reach the system.

Before installing the unit, you should install the sedimentary and carbon pre-filters.

- 1. Unwrap the SEDIMENTARY and CARBON pre-filters (Figure 1). Check that two flat silicon washers at either end of the carbon filter/s are in place and have not fallen out during unwrapping.
- 2. Insert the SEDIMENTARY and CARBON pre-filters into the pre-filter housings. Make sure the filters sit on the central locating ring at the bottom of the housings (Figure 2).
- 3. Screw the housings onto the housing caps on the unit. This should be done whilst the housings are vertical to make sure that the filters locate centrally within the housing. Installing whilst laying flat can cause the filters to jam in on an angle and not seal properly. Take note of the labelling on the system, the sedimentary filter should be in the left-hand housing and the carbon filter/s should be in the right-hand housing/s (**Figure 2**). You should be able to screw the housings most of the way by hand, if you are unable to screw the housings by hand it may indicate that one of the filters is not straight.
- 4. Tighten housings firmly with spanner (Figure 3) and you should apply O-ring lubricant or vegetable oil lightly around the O-rings (don't use Vaseline).



Once the filters are installed, mount the system. The system may free-stand or be hung by the bracket. Once mounted/positioned connect all of the tubing from the connection points as below:

INLET (Feed Water Line)

This is the tube connected to the ball valve on your main cold-water line. Take the end of the line and connect it to the fitting on the left side of the system which is labelled with a sticker that says "**INLET**".

TANK (Storage tank line)

This is the tube connected to the ball valve on-top of your holding tank. Take the end of the tube and connect it to the fitting on the top of the system which is labelled with a sticker that says "**TANK**".

PRODUCE (Faucet Line)

This is the tube connected to the bottom of the faucet. Take the end of the tube and connect it to the fitting on the top of the system which is labelled with a sticker that says "**PRODUCE**".

WASTE (Drain line)

This is the tube connected to the drain saddle. Take the end of the tube and connect it to the fitting on the top/front or top/right of the system which is labelled with a sticker that says "**WASTE**".

FLUSHING THE SYSTEM

Before the system can be used the filters and housings must be flushed. Failure to flush the system may result in a poorer than expected water quality and can affect the taste/appearance of the water.

- 1. Double check all of the tube connections, ensure they are all connected and secure in the quick-fit fittings, and that all compression fittings are done up firmly.
- 2. Ensure all of the pre-filter housings are fitted and tightened firmly using the plastic housing wrench included with the system. The gap between the sump and the cap of the housing must not be more than 1mm.
- 3. Open the valve on the faucet. On a standard black-lever style faucet this can be achieved by lifting the lever up. On premium 90 degree turn type faucets simply turn the lever.
- 4. Close the plastic ball valve on-top of the holding tank so that the lever is across the tubing NOT in-line with it.
- 5. Slowly open the steel ball valve on the feed water connection/slip-joint. Water will begin to flow into the system and fill the pre-filter housings. After a minute or so water should start flowing from the waste line into the drain, water should start flowing from the faucet at a slow trickle soon after.
- 6. Allow the system to run/flush like this for 60 minutes. During this period check all connections for leaks. If any leaks become apparent, turn off the water and fix accordingly.
- 7. After 60 minutes, open the plastic ball valve on-top of the holding tank so that the lever is in-line with the tube and close the faucet, this will allow the tank to start filling.
- 8. Allow the system some time to fill the holding tank. Depending on the size of the tank and the feed water pressure it normally takes between 30 and 120 minutes to fill the tank. The easiest way to tell If the tank is full is that it is heavy and the waste water stops flowing down the drain.
- 9. Open the faucet when the tank is full and allow the tank to drain completely, this may take a minute or two. When the water first comes out it may be black/grey as the carbon fines in the post-membrane filters rinse out, this is normal.
- 10. Close your faucet once the tank is empty and the faucet begins to trickle again. Allow the tank to refill again. If there is still black carbon fines in the water the tank may need to emptied one more time.

Once the tank has fully refilled and the waste water has stopped flowing, the system is ready for normal use. Simply open and close the faucet as you need water.

NOTE: The system will automatically turn on when water is drawn out of the tank. When the system is on & making water there will be a trickle of water going down the drain, this is normal. Once the tank is full, pressure build up in the system will activate the auto shut off valve, cutting the water supply to the membrane and stopping the flow of water down the drain. Depending on how much water was taken from the tank the unit may run for between 5 and 120 minutes to refill.

SYSTEM MAINTENANCE

Once installed, your unit will require periodic filter changes and servicing to maintain an optimum water quality. These filter changes must also be undertaken at specified maintenance intervals as described in this system manual. You should not stray from the recommended intervals as this could void your warranty, unless otherwise directed by one of our sales representatives. If you are unsure about your usage and best service interval, give us a call and we can advise you on any changes that need to be made.

1. PRE-FILTERS

The pre-filters are the two or three vertical housings on the bottom of your unit. Pre-Filter maintenance will vary depending on water quality and water usage. We recommend changing pre-filters every 6 months with normal system use on average town water.

Pre-filters may last longer if your system sees low usage or has exceptionally good feed water quality. Filters must be changed no less frequently than once every 12 months to maintain warranty. Failure to change pre-filters early enough can damage your RO membrane.

2. RO MEMBRANE

The RO membrane is the larger horizontal housing mounted on-top of the unit. RO membrane maintenance will vary depending on feed water quality and water usage. We recommend changing the membranes every 3 years with normal system use on average town water.

The RO membrane may last longer if your system sees low usage or has exceptionally good feed water quality. The RO membrane must be changed no less frequently than once every 4 years to maintain warranty. Reduced water production or quality may indicate a fouled or ruptured membrane. A TDS meter can be used to monitor the health of the membrane.

3. POST-FILTERS

The post-filters are the thinner horizontal filters mounted on-top of the unit. We recommend changing pre-filters every 12 months with normal system use on average town water. Filters must be changed no less frequently than once every 12 months to maintain warranty.

System with UV sterilisers fitted should also have the UV bulbs changed as soon as they blow or every 12 months to maintain effectiveness.

4. CLEANING

It is recommended that the filter housings are cleaned/sanitized when filters are changed to help prevent bacterial build up or colonisation within the housings and to ensure a clean system after every service.

Replacement filter kits are available through our shop front and through our online store. Simply search or quote your systems model number which can be found on both your invoice and on a sticker on the front of your unit, and we will direct you to the suitable filter kit for your unit.

We offer these kits in 6 and 12 monthly service kits, as well as complete filter change kits. We also sell the filters and RO membranes individually if only one filter should be required.

If required we also offer full instructions on request on how to change filters and membranes. We also offer a number of different specific manuals including trouble-shooting, part replacement and accessory manuals that are also available on request.

SYSTEM SCHEMATIC

Below is a typical system lay-out. Note that this may vary from your unit and this schematic is a representation of the most common lay-out for a system.



REVERSE OSMOSIS LIMITED WARRANTY

1. What Does This Warranty Cover?

This warranty covers the replacement of any defective parts which may have been supplied with your Reverse Osmosis system. This includes filter housings, membrane housings, brackets, membranes, fittings, transformers, clips, check valves, flow restrictors, ball valves, storage tanks, faucets, adapters, drain valves, filter housing wrenches, tubing, O-rings and accessories included in your original order.

2. What Does This Warranty NOT Cover?

This warranty does not cover replaceable filters or other consumables (excluding membranes). This warranty does not cover defects resulting from improper installation or installation contrary to printed instructions. This warranty does not cover defects that are the result of abuse, misuse, misapplication, improper maintenance, neglect, alteration, accidents, casualties, fire, flood, freezing, environmental factors, natural occurrences, unnatural occurrences, or acts of God. For warranty claims, call 07 5443 3130 for your warrantee claim number [WCN] and to discuss any warrantee issues before returning any items. No credits or exchanges will be given without a valid WCN number. To obtain your WCN, you will need to provide us with the reason and details of your claim and your sale or invoice number. All accepted returns must be received within 15 days of the WCN number being issued.

3. What is the Length of This Warranty?

This warranty is good for two (2) years on all parts of the system, excluding consumables as set forth above and consumable items only carry a 30 day money back guarantee. Warranty coverage begins on the date of purchase, and expires on the same date 2 years later. The purchase date is the date your order was placed, as dictated by our records.

4. What are the Limitations of This Warranty?

This warranty is applicable to the original purchaser and original installation only. Resale or relocation of the System nullifies any warranty, written or implied. Systems purchased for commercial use are also excluded from this warranty.

5. Failure to meet the following conditions will void this warranty:

i] The Reverse Osmosis System must be connected to a potable cold water supply. Ii] The ph of the water must not be lower than 4 or higher than 11. iii] The water pressure must be between 40 and 80 pounds per square inch. iv] Incoming water temperature cannot exceed 105' F (40.5' C). v] Incoming TDS/Total Dissolved Solids not to exceed 1500 PPM. vi] Filters must be changed at least once per year using Splish replacement filters. vii] Use of Vaseline or petroleum based lubricants on O-rings and seals will also void the warranty, only silicone lubricants are permitted.

6. How Do I Receive Warranty Service?

If your system is found to be defective, first call for a warrantee claim number (WCN). Please provide a reason for the return and a date of purchase or invoice number if available. Returns must be received within 15 days of the WCN issue date. The buyer will be responsible for shipping costs to our warehouse, if a defect is found Sentry Water Filters will pay for return shipping, if no defect is found buyer will be responsible for return shipping as well. Upon inspection, Sentry Water Filters will replace or repair, at our option, any parts found to be defective according to the terms of this warranty. If we choose to replace the equipment, we may replace it with reconditioned equipment. Parts used in repairing or replacing the equipment will be warranted for 90 days from the date the equipment returned to you or for the remainder of the original warranty period, whichever is longer. Returns received without a WCN number shall become the property of Sentry Water Filters. Customers who return items without a WCN and contact us with details about the return will be responsible for return shipping, regardless of warranty covered defects.

LIMITATIONS AND EXCLUSIONS:

Sentry Water Filters will not be responsible for any implied warranties, including those of merchantability or fitness for a particular purpose or application. The purchaser and installer are responsible for checking fittings, lines, parts, and equipment for defects before installation. Sentry Water Filters will not be responsible for any incidental or consequential costs or damages incurred by installation of the system or loss of function of the system, including, but not limited to, water damage, leaks, inconvenience, travel expenses, telephone charges, loss of revenue, loss of time, loss of equipment usability, loss of life, property damage, or loss of finances. The purchaser and installer are responsible for checking the system for leaks or defects after installation. All responsibilities of Sentry Water Filters regarding this equipment are set forth in this warranty.