

REVERSE OSMOSIS UNIT

PRO3-DJ, PRO4-DJ + PRO5-DJ UNITS

These instructions cover the initial installation, flushing and use of the system.
Further instructions are available should they be required.



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NOTES AND WARNINGS

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.

Waste water from all RO units is considered non-potable. It may be used for many purposes in the interest of saving water but must not be consumed.

Read through the entire instruction manual before beginning installation or use of the unit. Sentry Water Filters is not responsible for any damages, injury, or monetary loss incurred from failure to read and follow the included instructions.

We recommend that the installation of any mains water systems that will be under constant feed water pressure is done by a local certified plumber and that any systems exposed to constant hydrostatic feed pressure are fitted with a watermark certified pressure limiting or regulating valve. Although not a legal requirement, leak-stop devices are also strongly recommended.

Take care to follow all instructions regarding system flushing. Flushing is an essential stage of installing any system. Flushing is essential to the removal of any manufacturing by-products and preservation products applied to RO membranes.

Use only cartridges and parts that are suitable/recommended for your unit as indicated by the manufacturer. Using non-genuine cartridges or parts may void your system warranty.

Observe the maximum maintenance interval of 6 months on all units. Failure to comply with maintenance procedures as outlined in this manual unless otherwise stated by the manufacturer may void warranty.

Note that your system should be labelled to indicate all connection points. You should familiarise yourself with these connection points to aid in installation.

SYSTEM REQUIREMENTS

Maximum feed TDS (Total Dissolved Solids)	500ppm*
Minimum Feed Pressure	40psi*
Maximum recommended feed pressure	90psi
Operating temperature range	5C-40C
pH Range	3.5-10.5

*Figures may vary when using specialised membranes.

- Protect the system from constant sunlight to prevent UV damage to housings.
- Take care whilst using the system to prevent damage.
- Do not block any of the system outlets. Waste flow is essential to membrane health.
- Use system only with fresh water.
- Do not dry the RO membrane.

FILTER INSTALLATION

1. REVERSE OSMOSIS MEMBRANE

The reverse osmosis membrane/s should be installed when the unit is built and shouldn't require any further attention. If you are replacing a membrane or you ordered your membrane separately, contact us and we will send you instructions on installing a new membrane.

2. SEDIMENT AND CARBON PRE-FILTERS

Note that the pre-filters are shipped inside the housings already on most systems, however they will not be unwrapped and will not be fully installed yet.

- a. Unscrew the three large pre-filter housings from the bottom of your system.
- b. Unwrap your SEDIMENT and CARBON pre-filters (**Figure 1**). Check that the two flat rubber/silicon washers at either end of the carbon filter are in place and have not fallen out during unwrapping. Note that some systems use two different carbon filters instead of a sediment and carbon filter.
- c. Insert the SEDIMENT and CARBON pre-filters into the two left hand pre-filter housings. Make sure the filters sit on the central locating ring at the bottom of the housings.
- d. Screw the housings back 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 block should be in the right hand housing (**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. If you have two carbon filters, they may be fitted to either housing.
- e. Tighten the housings **firmly** with the housing spanner (**Figure 3**) and you may need to apply O-ring lubricant or vegetable oil lightly around the O-rings (don't use Vaseline).
- f. Re-fit the third housing to the unit empty, leave the filter out of this one for now.



SEDIMENT CARBON

Figure 1.



Figure 2.



HOUSING SPANNER

Figure 3.

CONNECTING YOUR SYSTEM

The PRO (Portable RO) systems are supplied with three connection points. These points are the feed water inlet which is labelled “INLET”, the pure water outlet which is labelled “PRODUCE” and the contaminated/waste water outlet which is labelled “WASTE”.

The PRO systems are supplied with a single coil of ¼” (6mm) tubing approximately 3 meters in length which may be cut to length as needed to suit each of the three connection points. These connection points should be used as follows.

1. INLET

The inlet connection of the unit feeds the unfiltered water into the unit. The PRO units are supplied with one of two connection fittings, a chrome diverter valve for a standard kitchen mixer **OR** a set of poly-fittings for a standard garden tap or hose.

a. DIVERTER - Kitchen mixer adapter (also fits many bathroom taps):

This valve allows you to divert water to the filter unit from your mixer tap by twisting a small lever on the front of the valve.

- a. Locate the aerator on the end of your tap (**Figure 4**) and unscrew it.
- b. Ensure that the black rubber seal is fitted inside the top of the diverter valve.
- c. Take the diverter valve (**Figure 5**) and screw it back up in place of the aerator, tighten firmly by hand. If your tap has a female thread you will need to use the included metal adapter nipple – make sure the rubber seal is in the top of the adapter and screw it into the end of the mixer tap and then screw the diverter valve onto the adapter.
- d. Cut a piece of tube for the inlet line and connect it to the compression fitting on the side of the diverter valve. To do this, unscrew the small compression nut on the side of the diverter valve, slide it over the end of the tube, push the tube onto the barb/hose-tail on the valve until it is fully seated and screw the compression nut back on firmly.
- e. Connect the other end of the tube to the quick-connector on the system labelled “INLET”. The inlet fitting should be on the left hand side of the system. To do this, simply push the tube into the fitting until it drops all of the way in and seals itself.

Note: These diverter valves are designed to fit standard male and female mixer taps, some brands and/or styles of mixer taps may have an unusual/different thread size that you will not be able to adapt the valve too – depending on your tap, we may stock an adapter.



Figure 4.

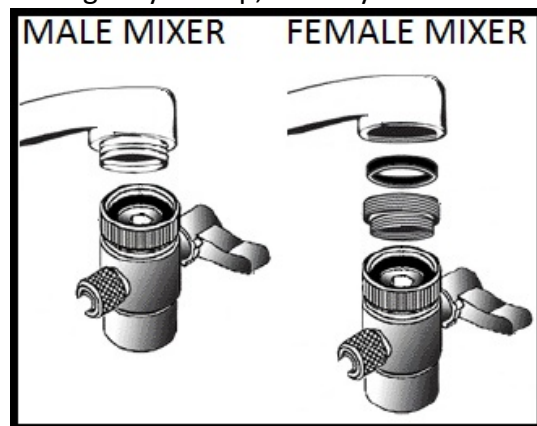


Figure 5.

- b. GARDEN – Tap and hose adapter (also fits most washing machine and dishwasher taps):**
This type of adapter is normally supplied as a set of plastic fittings (**Figure 6**) designed to fit onto standard $\frac{1}{2}$ " and $\frac{3}{4}$ " threads and includes a standard garden hose clip. These fittings allow you to screw directly onto many standard threads.

To use the $\frac{1}{2}$ " or $\frac{3}{4}$ " threaded adapters, simply screw them onto the tap/thread that you want to use by hand. Do not use a tool to tighten the fitting, they are designed to be tightened by hand and may break if you use a tool.

Cut a piece of tube for the inlet line and connect it to the quick-connector on the bottom of the threaded adapter that you are using (either the $\frac{1}{2}$ " or $\frac{3}{4}$ "). Connect the other end of the tube to the quick-connector on the system labelled "**INLET**". To do this, simply push the tube into the fitting until it drops all of the way in and seals itself.

If you have a thread that these adapters do not match up too, we have various other sizes available in our store which can be ordered individually.



Figure 6.

2. PRODUCE

This is the pure water that you use.

Cut a piece of tube for the product line and connect it to the quick-fit fitting that is labelled "**PRODUCE**". This fitting is on the outlet of the final stage DI filter, normally found on the right hand side of the system. Pure water may be collected from the end of this piece of tubing.

3. WASTE

This line should run down the drain or onto another non-potable use.

- a. Cut a piece of tube for the waste line and connect it to the quick-fit fitting on the top/front of the unit that is labelled "**WASTE**".

SYSTEM FLUSHING

Portable style RO systems are not supplied pre-flushed and the membrane will have to be flushed properly before you are able to use the unit. The membrane is supplied in a preserved/dried state and needs flushing time to remove any preservative and rehydrate properly. All water from “**PRODUCE**” and “**WASTE**” outlets should be discarded during the flushing process.

Once your pre-filters have been installed and your unit has been set up/connected as per the instructions on the previous pages, you are ready to commence with flushing of the unit as per the following instructions.

Note that it is important to leave the final stage DI resin filter out of the system during flushing, as preservative from the membrane can exhaust this filter if it is run through the unit during the flushing. The third large vertical filter housing should be empty.

1. MEMBRANE FLUSHING

It is best to stand the unit in a sink or near a drain during flushing just in-case there are any leaks. It is a good idea to slowly open the tap so that pressure builds slowly in the unit, this will allow you to make sure that the pre-filter housings are done up properly and that your inlet line is connected properly and not leaking before the unit gets to full pressure.

- a. Turn the water on to the unit and allow the water to flow through your unit. It may take a couple of minutes for water to fill all of the housings and start flowing from the outlets. You should eventually get a steady trickle out of both the ‘**WASTE**’ outlet and the ‘**PRODUCT**’ outlet of the system.
- b. Tilt the system to the left (anti-clockwise) until it is nearly horizontal for about 10 seconds (**Figure 7**), this will help to purge any air that is in your membrane housing and will help to maximise the effectiveness of the unit.

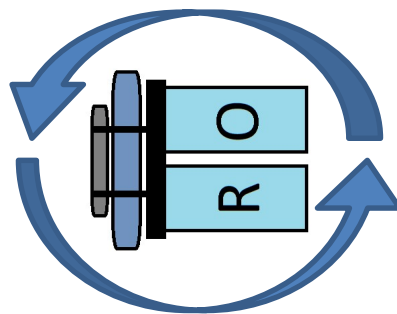


Figure 7.

- c. Allow the water to trickle out of the unit for 30 minutes. This time allows the membrane to remove all of the preservative. The quality of the product water will improve during this flushing, and should reach its normal operation quality by the end of 30 minutes. If the unit is not flushed for long enough it will likely affect the quality of your pure water. During flushing it is a good idea to check for any leaks at the connection points.

2. FIT THE POST-MEMBRANE DI RESIN FILTER

Following flushing of the membrane, the DI resin filter should be fitted.

- a. Remove the right hand vertical filter housing.
- b. Pour the water inside the housing down the drain.
- c. Insert the DI resin post-filter so that the rubber/silicon seal is at the top of the filter.
- d. Refit the filter housing to the system and tighten.

3. FINAL FLUSH

Once the post-membrane filter is reconnected the final stage DI resin filter will need to be flushed before you can use the system.

- a. Flush the system for a further 5-10 minutes or until the TDS reading drops to an acceptable level.

Once the above steps are complete you are free to use your system as necessary by simply turning the feed water on and collecting the pure water that trickles from the '**PRODUCE**' outlet.

SERVICING/FILTER CHANGES

With normal operation the sediment and carbon pre-filters should be changed every 6 months and the membrane every 2-3 years. The post-membrane DI resin filter should be changed or refilled at least every 12 months or as necessary as the TDS readings begin to climb when the resin is exhausted.

Varying water quality and system usage may affect the lifespan of filter cartridges and require more frequent filter changes. If you anticipate heavy usage of your system please contact us as we can advise on alternative service periods.

High capacity pre-filters are available for some units if the unit is likely to experience heavy usage, these filters do not last longer than the 12 month period, but are capable of filtering a greater volume of water within this same period.

With the exception of the RO membrane no filters should be used for longer than 12 months. Please note that failure to service the unit within recommended guidelines may void warranty.

Replacement filter cartridges may be purchased online or over the phone at 07 5443 3130. Please have your model number or serial number on hand when ordering filters to ensure that you receive the correct cartridges.

Reverse Osmosis System 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 1 year 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 coverage.

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

i] The Reverse Osmosis System must be hooked up to a potable cold water supply. ii] The ph of the water must not be lower than 3 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 2000 PPM. vi] Filters must be changed at least one a year using Sentry replacement filters. vii] Use of Vaseline or petroleum based lubricants will also void the warranty.

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 Splash Water Filters regarding this equipment are set forth in this warranty.