

# REVERSE OSMOSIS INSTALLATION BOOKLET

## INSTALLATION INSTRUCTIONS

**WARNING:** 

For correct operation of this appliance it is essential to observe the manufacturer's instructions.

This system is not UV resistant. Install only out of direct sunlight.



• This system must be mounted in a vertical position and must be positioned to allow access for service and filter cartridge changing.

## Installation of Water Supply Connector

NB. Any connection put into a mains supply should be done by a licensed plumber.

- 1. Turn off the main water supply. Make sure you are connecting up to the cold water.
- 2. Assemble the Mains Connector by screwing the ¼" male x ¼" compression Ball Valve into the side of the Water Supply Connector using 3 to 4 wraps of teflon tape.
- 3. To install the Mains Connector, 1/2" male x 1/2" female, simply disconnect cold water line from angle stop or from faucet stud. Complete with conewasher and seal.
- 4. Disconnect the water supply line from the cold water faucet underneath the sink or from the washing machine. Attach and tighten Mains Connector assembly being careful not to pinch or crimp any tubing or water supply line while tightening.

# Mounting the Purification System

- 1. Mark screw locations at the desired positions. Use the two holes on back of purification assembly mounting bracket for marker guides.
- 2. Drill a suitable sized hole to insert the Wall Plugs supplied with unit.
- 3. Insert Wall plugs and screws. Leave screw heads out a little.
- 4. Mount Purification System onto screws.

## Connecting the Tubing

Blue
A. Connect tubing from the Mains Connector to the Housing inlet.

Yellow
B. Product water

Black
C. Reject water

NB: When using Jaco style fittings, place nut over the tube, put insert into the tube, then tighten nut to fitting.

## Start Up Procedure

- 1. Flush Carbon Fines from Chemical Filter. See Appendix (i)
- 2. Flush preserving agent from Membrane. See Appendix (ii)
- 3. Check for leaks.

#### <u>Appendix (i)</u>

Make sure Mains Connector is off. Remove Tube from elbow of chemical removal sump, connect elbow to spare Tube. Turn Mains Connector on and allow water to flow through the sumps (Dirt & Sediment and Chemical) to drain for 5 to 10 minutes. This process will flush any carbon fines from the Carbon filter. Turn Mains Connector off and connect Tube from the membrane to the Chemical Removal Sump.

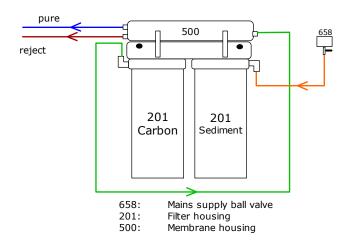
#### <u> Appendix (ii)</u>

Make sure Mains Connector is off. Insert new Membrane. The end with the two small "O" rings goes in first. The end with the large rubber ring goes in last, next to the end cap. Push firmly.

Remove the Payne type flow restrictor from the Membrane housing, turn Mains Connector on and allow Membrane to flush directly to drain for 20 to 30 minutes. This process will flush the preserving agent from the Membrane. Turn Mains Connector off and reconnect the Payne type flow restrictor to the waste water elbow on the Membrane Housing.

## SET UP DIAGRAM

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## FILTER AND MEMBRANE CHANGING PROCEDURES

Both prefilters should be changed every 12 months or 8 000 Litres. The Membrane should be changed every 3-5 years (dependant on TDS). Not changing your Filters regularly can cause bacteria to grow and contaminate the water.

#### Sediment and Carbon

See Appendix (i) of Start Up Procedure

### R.O. Membrane

Make sure Mains Connector is off. Isolate Tank by turning Tank Valve off. Depressurise system by opening the Faucet and allowing water to drain out. Remove tubing from Membrane Housing inlet (cap end). Unscrew cap and allow water to drain from Housing. Remove the old Membrane and if necessary sanitise the Housing (follow Sanitising Procedure). Replace with new Membrane and follow Start Up Procedure Appendix (ii).

## Caution For Your Safety

- Change Filters regularly every 6 to 12 months and have the Membrane and System checked annually by a Licensed Plumber.
- Use only cartridges suitable for this appliance.
- Membranes should be refrigerated if not used for longer periods of time.

## Recommended Sanitising Procedure

The best time to sanitise is when changing all the Filters and/or when changing the Membrane. It is recommended to sanitise the whole R.O. systems a minimum of once a year.

- 1. Shut off Mains Connector valve. Remove Prefilters and Membrane even if not replacing. Reassemble Membrane Housing without Membrane inside. We recommend you use Micropur to disinfect your system. Add Micropur into each of the empty pre filter Housings. Recommended dosage is 1g per 10L. Reassemble pre-filter Housings without Filters.
- 2. Turn Mains Connector back on to about 30% of maximum flow rate. Until water comes out of the product and waste tubes.
- 3. Shut off Mains Connector. Let entire system sit for about 2 hours to thoroughly sanitise.
- 4. Turn on Mains Connector. Flush the system thoroughly. With the Mains Connector off, install the new Filters and/or Membrane. Then follow normal system start up procedures.

## **PERFORMANCE SHEET**

Production rate 50 GPD under the following conditions: 100psi
Water temperature 21°C
500ppm TDS
Nominal rejection rate over 96%
TFC Membrane

## **Contaminant**

<u>Inorganic</u>		<u>Organic</u>		
Aluminium	<i>98%</i>	Chlorine	Over	98%
Arsenic	<i>98%</i>	Herbicides	Over	98%
Barium	95%	Pesticides	Over	98%
Cadmium	<i>95%</i>	DDT	Over	98%
Calcium	<i>98%</i>	<i>Endrin</i>	Over	98%
Chloride	<i>95%</i>	Lindane	Over	98%
Chromium III	<i>98%</i>	<i>Aldrin</i>	Over	98%
Copper	<i>98%</i>	Benzene	Over	98%
Fluoride	<i>95%</i>	<i>VOCs</i>	Over	<i>98%</i>
Iron	<i>98%</i>	Adrazin	<b>Over</b>	98%
<i>Lead</i>	<i>98%</i>	Fluorathene	Over	98%
Magnesium	<i>98%</i>	Phenol	Over	98%
Manganese	<i>98%</i>	Trihalomethanes	<b>Over</b>	98%
Mercury II	<i>85%</i>	Toxaphene	<b>Over</b>	98%
Nitrate	<i>90%</i>	Dichloromethane	Over	98%
Potassium	<i>95%</i>	Chloroform	Over	98%
Selenium IV	<i>95%</i>	Trichlorethylene	Over	98%
Silver	<i>98%</i>	Perchlorethylene	Over	98%
Sodium	<i>95%</i>	Tannic Acids	<b>Over</b>	98%
Strontium	<i>98%</i>	Methoxychlor	Over	98%
Sulfate	<i>98%</i>	PCB	<b>Over</b>	98%
Zinc	<i>98%</i>			
Total Dissolved Solids	<i>95%</i>			
Asbestos	99%			

#### CAUTION

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.

#### WARNING

This system must be installed in conjunction with a dual check and pressure limiting valve which complies with Australian Standards. No warranty will apply to a system installed without such a valve.

# TROUBLE SHOOTING

PROBLEM	CAUSE	SOLUTION
Cloudy ice cubes or milky coloured water.	Bad membrane.	Replace Membrane and sanitise when below 75% rejection
	Water supply.	High oxygen content
		Some refrigerators freeze differently, leaving the ice cube looking cloudy. Let cube dissolve in glass of water. If just air, will float to surface and dissipate.
	System is still new.	This is normal and should clear up in two weeks
Filter Housing Leak	O-ring not sealed properly.	If damaged, replace. If dirty, clean, lubricate and re-tighten filter housing. Hand tighten firmly.
Water does not taste or smell right.	Bad membrane.	Replace membrane when below 75% rejection and sanitise.
	Filters have expired.	Replace filters. Should be replaced every 6 to 12 months.
	Little water use.	Drain entire tank. Should be done every 2 weeks.
	System needs sani- tising.	Sanitise (see Sanitising Instructions) and replace filters.
Little water outlet	Over pressurised tank.	When empty, tank pressure should be between 5 - 12 psi.
	Incoming water pressure is below 40 psi.	Increase pressure to 40 psi.
	Filters clogged.	Replace filters.
	Kinked tube.	Un-kink tube. If damaged, replace tube.
Produces water slowly.	Normal R.O. process.	Your R.O. system makes water a drop at a time. 3 gallons storage tank should be full in 6 - 10 hours.
	Low water pressure.	Increase to 50 psi. Check for kinked tubes.
	Filters plugged	Replace filters.
	Fouled membrane.	Replace membrane.

# System Limitations

Pressure: 100psi max 40psi min Total Dissolved Solids: 500ppm max Temperature: 38°C max 5°C min

#### **AQUA WISE**

#### TERMS AND CONDITIONS

Any contract of sale, order, or quotation made or accepted by or on behalf of Aqua Wise purification systems (and agents & suppliers) is subject to these terms and conditions of sale.

#### WARRANTY

Aqua Wise warrants each new product to be free from defects in material and workmanship for a period of 1 year from the date of retail sale established by the date of the original invoice issued by Aqua Wise.

The product must be forwarded at the buyer's own risk and expense to Aqua Wise, together with proof of purchase. Any damage caused during or as a result of transit will not be the responsibility of Aqua Wise.

Aqua Wise's exclusive obligation under this warranty is, at Aqua Wise's own option, to either repair or replace the product, once Aqua Wise had deemed that the product is defective.

Aqua Wise may, at it's own discretion; refund to the buyer the purchase price paid for the defective goods.

Aqua Wise reserves the right in instalment sales to grant credit for the value of any product found to be defective under this warranty.

Agua Wise will not cover any labour charge incurred by the buyer for the replacement or repair of any product.

The buyer is responsible for freight and labour charges for products the subject of this warranty.

This warranty applies only to the original retail purchaser of the product.

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

All replaced or exchanged parts taken out under this warranty become the property of Aqua Wise.

#### LIMITED WARRANTY

Aqua Wise's liability for any breach of this warranty shall be limited solely to replacement or repair at the sole option of Aqua Wise, of any part or parts found to be defective during the warranty period.

In no event will liability extend beyond the purchase price of the product.

This warranty is subject to the product being properly installed and maintained and being used for its intended purpose.

The warranty will be void if the goods have been found to be tampered with.

This warranty does not cover the normal ware and tear of the product, or damage caused by misuse, abuse or vandalism.

This warranty does not extend to a product that has been modified in any way unless with Aqua Wise's express consent.

The warranty does not cover any malfunction or failure resulting from neglect or use of unauthorised parts and accessories, improper water pressure etc.

The warranty does not extend to damage caused by rain, fire, earthquake or other natural causes or acts of nature.

It is expressly agreed that this shall be the sole and exclusive remedy of the buyer stated herein, and under no circumstances shall Aqua Wise be liable for any costs, loss, expense, damages, special damages, incidental damages or consequential damages arising directly or indirectly from the design, manufacture, sale, or use of repair of the product whether based upon warranty, contract, tort or strict liability.

The warranty limits Aqua Wise's liability and is in lieu of all other warranties and liabilities expressed or implied.

All implied warranties of merchantability and fitness for a particular purpose are hereby disclaimed by Aqua Wise (agents & suppliers) and excluded from the warranty.

#### WARRANTY PROCEDURE

Goods damaged during transit must be reported within 5 working days of delivery.

A copy of the original invoice must be presented for any warranty claim as proof of purchase.

The faulty item must be returned to Aqua Wise if such a request is made.

This limited warranty is void if the product under warranty is presented without the said original invoice.

Aqua Wise may request that a statement accompany the original invoice, signed by the buyer, setting out the following terms.

- 1. The name and address of the buver.
- 2. The date and by whom the product was purchased.
- 3. The date and by whom the product was installed.
- 4. The location where the product was installed.
- 5. The date and time the product first appeared to malfunction.
- 6. The nature of the problem with the product.
- 7. The date and time of any and all loss / events.
- 8. The date and time Aqua Wise was first notified of the product malfunction.

A failure by the buyer to submit the said statement within 21 days, after such request is made by Aqua Wise, will automatically void the warranty. A failure to answer truthfully or to answer in a way that is misleading, entitles Aqua Wise to void the warranty and to notify the police in the event of suspected fraudulent conduct.

#### RISK

The risk in the product will pass to the buyer immediately upon the product leaving Aqua Wise or (agents & suppliers) premises for delivery to the place designated by the buyer.

#### RETENTION OF TITLE

Aqua Wise will retain title to (but not risk in) a product delivered to the buyer until Aqua Wise has received payment in full for the product and all other sums owing to it by the buyer. Until such payment, the buyer holds the product as bailee for Aqua Wise and may not sell or otherwise dispose of the product unless authorised by Aqua Wise. If the product is sold, the proceeds of sale will be placed in a separate trust account pending payment to aqua Wise. The buyer will store the goods in such a way as to enable them to be separately identified and will keep them insured at it's own expense with Aqua Wise's interest noted on any such insurance cover. If the buyer fails to make any payment when due or becomes bankrupt or becomes insolvent, or has a judgement entered against it in any court or enters into any scheme of arrangement, composition, or assignment or is in receivership or voluntary administration or liquidation, the buyer grants Aqua Wise licence to enter any of the buyer's premises where the product is stored, and without notice, to re-take possession of and remove, at the buyer's cost and expense, the product in respect of which title has not passed to the buyer.

#### THIS WARRANTY IS VOID IF

The system is not turned off when residents are away for over 24 hours.

The system is not serviced every 12 months.

Product damage results from water hammer, freezing, neglect or is not installed by in accordance with the installation plan.

The water temperature exceeds 40 degrees Celsius.

The pressure exceeds 350 kpa.or as per manufactures warrenties

All filter housings and systems are not installed with an Australian Standards Approved Pressure Limiting and Duel Check Valve.

# **SERVICE RECORD**

Installation Date:	/
Next Service Due:	/
1st Service:	/
Serviced By:	
Next Service Due:	/
2 <sup>nd</sup> Service:	/
Serviced By:	
Next Service Due:	/
3 <sup>rd</sup> Service:	/
Serviced By:	
Next Service Due:	/
4th Service:	/
Serviced By:	
Next Service Due:	/
5th Service:	/
Serviced By:	
Next Service Due:	/
6th Service:	/
Serviced By:	
Next Service Due:	/
7 <sup>th</sup> Service:	/
Serviced By:	
Next Service Due:	/
8th Service:	/