



***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. At the same time, the assembly should be relatively near the faucet to maximise flow rate.*
- The storage tank can be placed on its side without affecting the performance of the system. If there is insufficient room under the sink, the tank may be located in an adjacent cupboard.*

Installation of Water Supply Connector

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

- 1. Turn off the water connection under your sink or the main water supply. Open the tap to release the pressure.*
- 2. Cut into the mains to insert the 'tee'. Attach and tighten the 'tee'.*
- 3. Thread tape the stem of the 'bush' and screw on the 'tee' tightly.*
- 4. Thread tape the ball valve and screw it firmly into the bush.*
- 5. Undo the nut on the ball valve. Slide the nut over the tube and then push the tube firmly onto the ball valve and tighten the nut firmly.*
- 6. Then connect the tube to the inlet side of the RO system (This is the sediment cartridge side of the RO system)*
- 7. Cut the tube and connect the inlet side of the PLV. Connect the other piece of tube to the outlet side of the PLV, ensuring the flow of the water will go in the same direction as on the PLV.*



Installation of Faucet

1. Using a small drill bit, drill a pilot hole.
2. Then using a 3/8" drill bit, drill a hole through the base metal. Operate the drill slowly and carefully, especially when the drill is about to penetrate the metal. If necessary use a drop or two of oil in the hole.
3. Mount the Faucet in the hole and using an adjustable wrench (or hand) to hold the Faucet, tighten the 9/16" nut.



Installation of Drain Saddle



1. The Drain Saddle should be installed above the s-trap on the vertical or horizontal tailpiece.
2. Drill a 1/4" hole into the drainpipe observing the above position.
3. Mount Drain Saddle aligning holes. (Drill bit may be left in saddle hole for alignment)
4. Carefully tighten both screws on drain saddle until snug. Do not over tighten.

Installation of Storage Tank

1. Hand tighten plastic Isolation Valve to Tank (Firm but not over tight).
2. Standard Tanks should come from the factory with 8 to 10psi of air when measured empty. Larger Tanks should measure around 20psi.

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



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



- B. Connect tubing from the Postfilter to the Faucet. Following installation procedure on the Faucet Carton



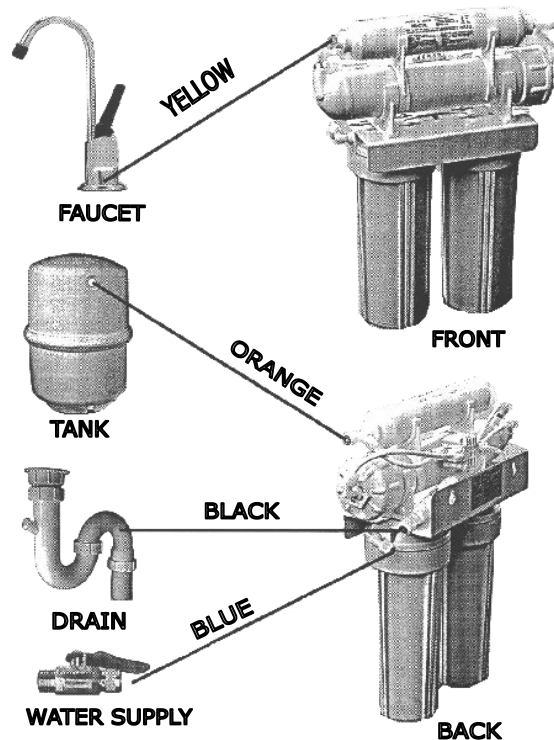
- C. Connect tubing from the Membrane reject outlet to the Drain Saddle. Pushing approximately 30cm into the drain.



- D. Connect tubing from the Tee piece on the Postfilter to the Tank.

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

INSTALLATION DIAGRAM



Start Up Procedure

1. Flush Carbon Fines from Chemical Filter. See Appendix (i)
2. Flush preserving agent from Membrane. See Appendix (ii)
3. Flush Tanks & Postfilter. See Appendix (iii)
4. Turn off Faucet and allow Tank to fill. Check for leaks.

Appendix (i)

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 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 10 to 20 minutes. This process will flush any carbon fines from the Carbon filter. Turn Mains Connector off and reconnect Tube from the Shut Off Valve to the Chemical Removal Sump.

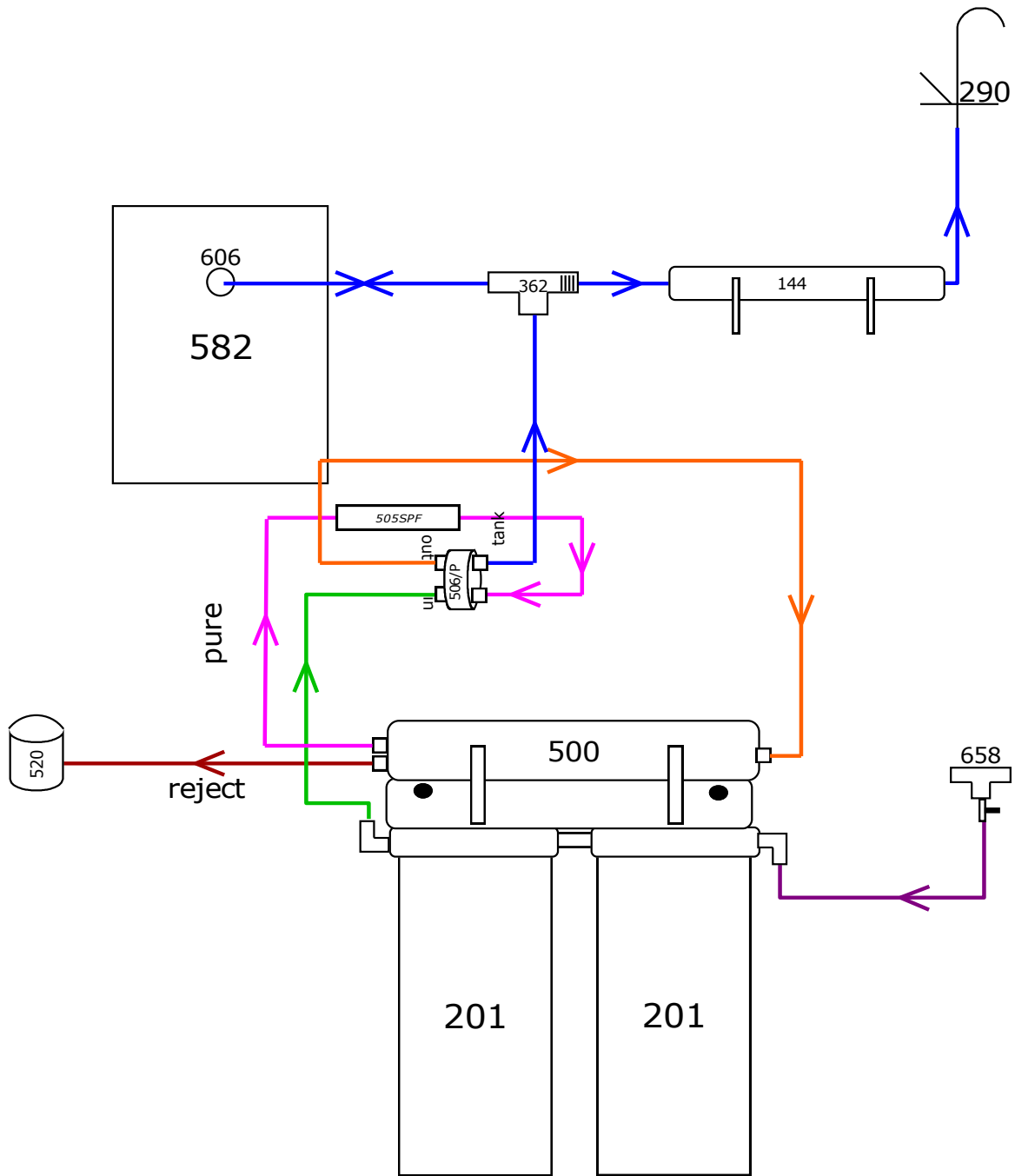
Appendix (ii)

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. 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, connect waste water elbow directly to drain, 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.

Appendix (iii)

Make sure Faucet is closed and the Tank isolation valve is open. Turn Mains Connector on and allow the tank to fill (this generally takes 2 to 3 hours). Then, open the Faucet and allow the whole Tank to empty. Repeat this step 2 or 3 times. This process will flush the post filter.

SET UP DIAGRAM



- 658: Mains supply ball valve
- 201: Filter housing
- 506/P: Shut off valve
- 505/SPF: Check valve
- 500: Membrane housing
- 520: Drain clamp
- 362: Tee
- 606: Ball valve
- 582: Storage tank
- 144: Inline filter
- 290: Faucet

FILTER AND MEMBRANE CHANGING PROCEDURES

All three Filters 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 Prefilters

See Appendix (i) of Start Up Procedure

Carbon Postfilter

Unscrew white plastic nut from fittings on both ends of post filter. Remove white plastic tubes. Unscrew and remove plastic fittings. Discard old Filter. Wrap fittings with Teflon tape and re-install into new post filter. Tighten white plastic nuts to the ends of the new Filter. Then approximately turn 1 1/2 to 2 more full turns. Do Not Over Tighten. Make sure arrow on new Filter is going with flow of water toward the Faucet.

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.*
- Automatic icemakers require water in the line to work properly. If you are draining the Tank or have no water during initial start up turn off the Icemaker until the Faucet has a steady flow.*
- Use only cartridges suitable for this appliance.*
- Empty Tank and flush system for 30 minutes after a period of non-use exceeding 30 days.*
- 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. Drain all water out of R.O. Tank. 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 10mL per 10L. Reassemble pre-filter Housings without Filters.*
- 2. Turn Mains Connector back on to about 30% of maximum flow rate and let Tank slowly fill with tap water (approximately 10 minutes).*
- 3. Shut off Mains Connector. Let entire system sit for about 2 hours to thoroughly sanitise.*
- 4. Open Faucet and let Tank drain until empty. Shut off Faucet when empty. Turn on Mains Connector. Allow Tank to fill with water. Again, turn off the Mains Connector and drain the Tank. With the Mains Connector off, install the new Filters and/or Membrane. This is when you will change the Postfilter also. 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 Reduction

(Depending on filter selection our systems reduce these contaminants)

Inorganic

Aluminium

Arsenic

Barium

Cadmium

Calcium

Chloride

Chromium III

Copper

Fluoride

Iron

Lead

Magnesium

Manganese

Mercury II

Nitrate

Potassium

Selenium IV

Silver

Sodium

Strontium

Sulfate

Zinc

Total Dissolved Solids

Asbestos

Organic

Chlorine

Herbicides

Pesticides

DDT

Endrin

Lindane

Aldrin

Benzene

VOCs

Adrazin

Fluorathene

Phenol

Trihalomethanes

Toxaphene

Dichloromethane

Chloroform

Trichlorethylene

Perchlorethylene

Tannic Acids

Methoxychlor

PCB

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
<i>Cloudy ice cubes or milky coloured water.</i>	<i>Bad membrane.</i>	<i>Replace Membrane and sanitise when below 75% rejection</i>
	<i>Water supply.</i>	<i>High oxygen content</i>
		<i>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.</i>
	<i>System is still new.</i>	<i>This is normal and should clear up in two weeks</i>
<i>Noisy drain or faucet. (Air Gap faucets only)</i>	<i>Air gap faucet.</i>	<i>A little noise is common with air gap faucets. Allow two weeks for air to work out of system.</i>
	<i>Drain tube.</i>	<i>Check that drain tube from faucet is continuously down hill to drain. Loops or dips will cause noise.</i>
<i>Filter Housing Leak</i>	<i>O-ring not sealed properly.</i>	<i>If damaged, replace. If dirty, clean, lubricate and re-tighten filter housing. Hand tighten firmly.</i>
<i>Hole on faucet is leaking.</i>	<i>Drain clamp slipped.</i>	<i>Align hole in drain clamp with hole in drainpipe.</i>
	<i>Drain tube loops or dips.</i>	<i>Shorten drain tube from faucet until smooth down hill flow to drain.</i>
	<i>Restriction in drain tube.</i>	<i>Disconnect drain tube and clean out restriction. (Food particles from garbage disposal).</i>
	<i>Restriction in faucet holes.</i>	<i>The drain hole in the base and on the rear of the faucet must <u>both</u> be clear and unrestricted. Clean as necessary.</i>
<i>Water does not taste or smell right.</i>	<i>Bad membrane.</i>	<i>Replace membrane when below 75% rejection and sanitise.</i>
	<i>Filters have expired.</i>	<i>Replace filters. Should be replaced every 6 to 12 months.</i>
	<i>Little water use.</i>	<i>Drain entire tank. Should be done every 2 weeks.</i>
	<i>System needs sanitising.</i>	<i>Sanitise (see Sanitising Instructions) and replace filters.</i>

TROUBLE SHOOTING CONTINUED

<i>Little water from faucet.</i>	<i>Over pressurised tank.</i>	<i>When empty, tank pressure should be between 5 - 12 psi.</i>
	<i>Incoming water pressure is below 40 psi.</i>	<i>Increase pressure to 40 psi.</i>
		<i>System takes 6 to 10 hours to completely fill.</i>
	<i>Bad check valve</i>	<i>Replace check valve.</i>
	<i>Tank valve not open.</i>	<i>Open valve</i>
	<i>Bad storage tank.</i>	<i>Faulty diaphragm check that tank air pressure is between 5 - 12 psi when empty. Press Air valve; if water comes out diaphragm is faulty, replace tank.</i>
		<i>Faulty pressure valve, replace valve only</i>
	<i>Filters clogged.</i>	<i>Replace filters.</i>
	<i>Kinked tube.</i>	<i>Un-kink tube. If damaged, replace tube.</i>
<i>System is continually running.</i>	<i>Shut off valve not working.</i>	<i>Replace shut off valve.</i>
	<i>Bad check valve</i>	<i>Replace check valve.</i>
	<i>Low water pressure.</i>	<i>Increase water pressure to 40 psi</i>
	<i>System is new.</i>	<i>Allow 2 weeks for air to bleed.</i>
<i>Produces water slowly.</i>	<i>Normal R.O. process.</i>	<i>Your R.O. system makes water a drop at a time. 3 gallons storage tank should be full in 6 - 10 hours.</i>
	<i>Low water pressure.</i>	<i>Increase to 50 psi. Check for kinked tubes.</i>
	<i>Filters plugged</i>	<i>Replace filters.</i>
	<i>Fouled membrane.</i>	<i>Replace membrane.</i>

System Limitations

<i>Pressure:</i>	<i>100psi max</i>	<i>40psi min</i>
<i>Flow Rate:</i>	<i>3Lpm max</i>	<i>1.5Lpm min</i>
<i>Temperature:</i>	<i>38°C max</i>	<i>5°C min</i>
<i>Total Dissolved Solids:</i>	<i>500ppm max</i>	

WARRANTY

TERMS AND CONDITIONS

Any contract of sale, order, or quotation made or accepted by or on behalf of The Supplier is subject to these terms and conditions of sale.

WARRANTY

The Supplier 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 The Supplier.

The Supplier's obligation under this Warranty is limited to The Supplier's own option, to either repair or replace the Product, once The Supplier has deemed that the Product is defective or The Supplier may, at its own discretion, refund to the Buyer the purchase price paid for the defective goods.

The Supplier reserves the right in instalment sales to grant credit for the value of any Product found to be defective under this Warranty.

The Supplier 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 local 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 site of its original installation.

All replaced or exchanged parts taken out under this warranty become the property of The Supplier.

This Warranty is subject to the Product being properly installed, maintained, being used for its intended purpose and operated strictly in accordance with The Supplier's recommendations.

The Warranty will be void if the Products have found to be tampered with or if the goods have not been operated or maintained strictly in accordance with The Supplier's recommendations.

This Warranty does not cover the normal wear 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 The Supplier's express consent.

The Warranty does not cover any malfunction or failure resulting from neglect, use of unauthorised parts and accessories or use with higher water pressure than indicated on the Product.

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 The Supplier 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 or repair of the Product whether based upon warranty, contract, tort or strict liability.

All Conditions and Warranties implied by law or statute are hereby expressly negated so far as they lawfully can be.

ACCEPTANCE AND CLAIMS

Acceptance of the Products shall be deemed for all purposes to have taken place at the expiration of seven (7) from the date of each delivery

Any faulty systems must be returned with the Pressure Limiting Valve

In the event of a Warranty Claim, the Product must be forwarded at the Buyer's own risk and expense to The Supplier, together with proof of purchase. Any damage caused during or as a result of transit will not be the responsibility of The Supplier.

This limited Warranty is void if the Product under Warranty is presented without the said original invoice.

The Supplier 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 Buyer.
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 event/s.
8. The date and time The Supplier was first notified of the Product malfunction.

A failure by the Buyer to submit the said Statement within 28 days, after such request is made by The Supplier, will automatically void the Warranty.

A failure to answer truthfully or to answer in a way that is misleading, entitles The Supplier 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 The Supplier's premises for delivery to the place designated by the Buyer.

RETENTION OF TITLE

The Supplier will retain title to (but not risk in) a Product delivered to the Buyer until The Supplier has received payment in full for such Product from the Buyer.

Until such payment, the Buyer holds the Product as bailee for The Supplier and may not sell or otherwise dispose of the Product unless authorised by The Supplier. If the Product is sold, the proceeds of sale will be placed in a separate trust account pending payment to The Supplier. The Buyer will store the goods in such a way as to enable them to be separately identified and will keep them insured at its own expense with The Supplier'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 The Supplier 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.

RIGHTS FORFEITED

The buyer forfeits any right or claim against The Supplier if:

1. The system is not turned off when the residents are away for over 24 hours
2. The system is not serviced by a Licensed Plumber every 12 months. i.e. replacement of filters, PLV check and assessment of general condition of system.
3. Product damage results from water hammer, freezing, neglect or is not installed by a licensed plumber in accordance with the installation plan
4. The product is operated with a water temperature higher than 38° Celsius.
5. The product is subject to water pressure that exceeds 700kpa
6. The system is not installed with an Australian Standards approved Pressure Limiting and Dual Check Valve

SEVERENCE

If any of these terms or conditions or becomes for any reason wholly or partly invalid, that term or condition shall to the extent of the invalidity be severed without prejudice to the to the continuing force and validity of the remaining terms and conditions

JURISDICTION

The Supplier and the buyer agree that this agreement and its provisions shall be construed in accordance with the laws of the State of South Australia and be resolved by a South Australian Court.

SERVICE RECORD

Installation Date: ____/____/____

Next Service Due: ____/____/____

1st Service: ____/____/____

Serviced By: _____

Next Service Due: ____/____/____

2nd Service: ____/____/____

Serviced By: _____

Next Service Due: ____/____/____

3rd 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: ____/____/____

7th Service: ____/____/____

Serviced By: _____

Next Service Due: ____/____/____