



Owner's Manual

This Manual is for the installation, operation, and maintenance of the

A-LIFE WATER SYSTEMS

Reverse Osmosis Drinking Water Appliance



AQUA-LIFE
아쿠아라이프

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Warning - Please read carefully before proceeding with installation. Your failure to follow the instructions or operating parameters may lead to the product's failure and possible damage to property.

NOTE: This manual is used for several variations of the same system. Your system may vary slightly from the pictures or descriptions contained in this manual. It is the end user's responsibility to ensure that this system is installed according to all local codes and regulations.

Thank you for your purchase of A-life Reverse Osmosis (RO) water treatment system.

Water quality concerns are becoming more of a focus for the public. This A-life water treatment system has been designed and tested to provide you with high quality water for years to come. The following is a brief overview of the system.

Your Reverse Osmosis System:

Reverse Osmosis is the process of water passing through a semi permeable membrane in order to balance the concentration of contaminants on each side of the membrane. A semi permeable membrane is a barrier that will pass some substances like clean water, but not other substances such as salts and minerals.

By applying pressure across the membrane this process concentrates contaminants on one side of the membrane to produce clean water on the other. This is why RO systems produce both clean drinking water and waste water, the latter which is flushed from the system.

Your system is a Five Stage RO, which is based upon five separate treatment segments within one complete water filtration system. These stages are as follows:

Stage 1 – Sediment filter, recommended change every 6 months.

The first stage of your RO system is a five micron sediment filter that traps sediment and other particle matter like dirt, silt and rust which affect the taste and appearance of your water.

Stage 2 – Pre-Carbon filter, recommended change every 6 months.

The second stage contains a carbon block filter. This helps ensure that chlorine and other materials that cause bad taste and odor are greatly reduced.

Stage 3 - Pre-Carbon filter, recommended change every 6 months.

The third stage also contains a carbon block filter. Once more this helps ensure that chlorine and other materials that cause bad taste and odor are greatly reduced.

Stage 4- Membrane, recommended change every 2~3 years.

Stage three is the heart of the reverse osmosis system, the RO membrane. This semi-permeable membrane will take out salts, minerals, metals, bacteria, virus, cysts, and much more. Because the process of extracting this high quality drinking water takes time, your RO water treatment system is equipped with a storage tank.

Stage 5- Post Carbon Filter, recommend change every 12 months.

The post carbon filter is a granular activated carbon (GAC) cartridge using coconut shell carbon. This filter provides final polishing and assures fresh drinking water.

System Maintenance

Contaminants such as lead, chromium, VOC's and arsenic are undetectable to the taste. Additionally, over time if you do not replace the filter elements, other bad tastes and odors will be apparent in your drinking water.

Hence it is important to change out your filter at the recommended intervals as indicated in this system manual. Should you have any further questions please contact us at (1-877-723-8080).

With proper installation and maintenance, this system will provide you with high quality water for years to come. All of A-life water enhancement products are rigorously tested.

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Operational Parameters

Operating Temperature	Maximum 85°F (37.8°C)	Minimum 40°F (4.4°C)
Operating pressure	Maximum 80 psi (6.0 kg/cm ²)	Minimum 40 psi (2.80 kg/cm ²)
pH Parameters:	Maximum 11	Minimum 2
Iron	Maximum 0.2 ppm	
TDS	< 1800 ppm	
Turbidity	< 5 NTU	

Hardness: Recommended hardness should not exceed 10 grains per gallon, or 170 ppm. The system will operate with hardness over 10 grains but the membrane life may be shortened. (Addition of a water softener may lengthen the membrane life.)

Note: Reverse Osmosis water should not be run through copper tubing. The purity of the water will leach copper to cause an objectionable taste in water and may cause damage to copper tubing. A-life supplies specialty medias that can be used if copper tubing is down stream of the RO. Be sure to follow any state or local regulations.

Contents of Reverse Osmosis (RO) System

- 1 Tank • 1 RO System
- 1 Faucet Box
- 1 Parts bag



If any of the items are missing please contact us. 1-877-723-8080

Tools Recommended For Installation

- 1 1/4" Hole Saw Bit for Faucet opening and/ or
- Round Knock out Punch for Stainless Sinks 1 1/4"
- Adjustable Wrench
- Sharp Knife
- 1/2"- 13/16" Open End Wrenches
- Phillips Screw Driver
- Needle Nose Pliers- Adjustable Pliers
- Electric Drill



Drill a Hole for the Faucet in a Porcelain Sink

Note: Some sinks are predrilled with a 1 ½" or 1 ¼" diameter hole that you can use for your RO faucet. (If you are already using it for a sprayer or soap dispenser, see step 1). Porcelain sinks are extremely hard and can crack or chip easily. Use extreme caution when drilling. A-life accepts no responsibility for damage resulting from the installation of faucet.

- 1 Determine desired location for the faucet on your sink and place a piece of masking tape where the hole is to be drilled. Mark the center of the hole on the tape.
- 2 Using a variable speed drill on the slowest speed, drill a 1/8" pilot hole through both the porcelain and metal casing of the sink at the center of the desired location. The drill bit gets hot it may cause the porcelain to crack or chip. Use lubricating oil or liquid soap to keep it cool.
- 3 Using a 1 ¼" hole saw, proceed to drill the large hole. Keep drill speed on the slowest speed and use lubricating oil or liquid soap to keep the hole saw cool during cutting.
- 4 Make sure the surroundings of the sink are cooled before mounting the faucet onto the sink after drilling. Remove all sharp edges.



Punch a Hole for the Faucet in a Stainless Steel Sink

Note: If you are mounting the faucet onto a Stainless Steel Sink, you will need a 1 ¼" Hole Punch. The faucet opening should be centered between the back splash and the edge of the sink, ideally on the same side as the vertical drain pipe.

- 1 Drill a ¼" pilot hole. Use a 1/2" hole Punch and an adjustable wrench to punch the hole in the sink. Change to the 1 ¼" Hole Punch to enlarge the hole. The faucet can now be installed.

A-LIFE Chrome (Top Mount) Faucet Installation

- 1 Remove the faucet base & faucet spout from their box. From above the sink, feed the faucet tubing & toggle bolt down through the 1¼" mounting hole in the sink. Ensure that the soft rubber gasket is uniformly positioned in between the base and the top of the sink.

- 2 Align the faucet base so that the handle is on the right side. Turn the handle down (towards you) to the "ON" position to reveal the tightening screw (located where the spout will be inserted). Using a phillips head screwdriver, turn the screw clockwise until the toggle bolt snugly secures the faucet base onto the sink top. Do not over torque toggle bolt (5lb. in. max)
- 3 Once the faucet base is securely fastened to the sink top, insert the faucet spout into the faucet base until it is fully seated. Turn the handle up (away from you) to the "OFF" position.
- 4 Completion of faucet installation (tubing connections) will be done later in this manual.



(Red) 1/4" tubing from R/O drain (Blue) 1/4" tubing from R/O (Black) 3/8" to drain saddle valve

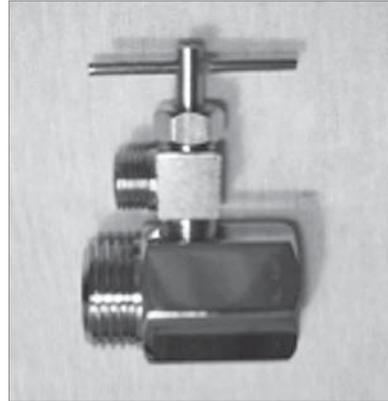
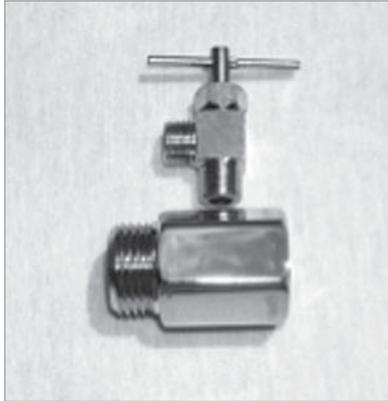
Non Air Gap Faucet Style Installation

- 1 For installation of non air gap faucet, make a 1/4" hole with the tile bit (on porcelain sink) or drill with the step bit (on stainless steel sink)
- 2 Remove the faucet base & faucet spout from their box. From above the sink, feed the faucet tubing & toggle bolt down through the 1/4" mounting hole in the sink.
- 3 Align the faucet and the base so that they are sitting on the sink top. Turn the handle down (towards you) to the "ON" position to reveal the tightening screw located where the spout will be inserted). Turn the screw clockwise until the toggle bolt snugly secures the faucet base onto the sink top. Do not over torque toggle bolt (5lb. in. max)
- 4 Refer above for the method of drilling a hole and faucet installation



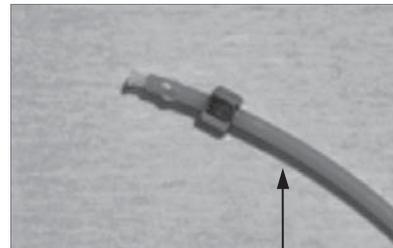
(Blue) 1/4" tubing from R/O

Adapter Valve Installation

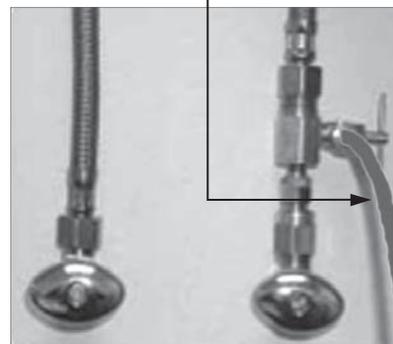


< Configuration for 1/2" compression fittings >

- Locate the cold water supply under the sink.
- 1 Turn off the cold water supply to the faucet by turning the angle stop valve completely off.
 - 2 Attach adapter valve as illustrated in the photos above. When attaching the adapter valve to straight pipe threads, use Teflon tape on the threads. The orange tube from the inlet side of RO module will be cut to length and attached later in the installation.
 - 3 Remove a brass nut, plastic sleeve and brass insert from the parts bag. Place nut on the tube first, then the sleeve (small taper end of sleeve must point to the end of tube) and then insert the brass insert into the end of the tube.
 - 4 Insert the orange tube into the 1/4" opening on the adapter valve until it stops. Slide nut and sleeve down and thread onto the male pipe threads. Use a 1/2" wrench to securely tighten. Run the tube to the inlet on the back of the RO system. Leave enough of the tube so it is not kinked and then cut the tube to desired length.



1/4" orange tubing to adapter valve



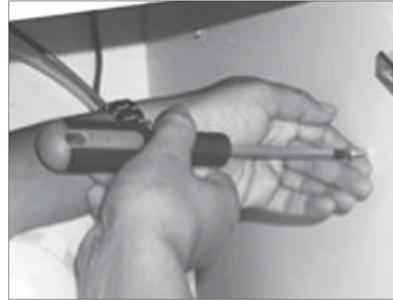
Note: If your cold water pipe thread doesn't fit to the adapter, you should buy right adapter fitting to the pipe thread size.

Caution: Water supply line to the system must be from the cold water supply line only. Hot water will severely damage your system.

Reverse Osmosis Module Mounting

- 1 Determine the best mounting location for the RO module to be mounted to allow for future system maintenance.
The parts bag has 2 self tapping screws. Using a Phillips screwdriver, screw them into the cabinet wall 10 1/2" apart and 16" from the bottom of the cabinet.

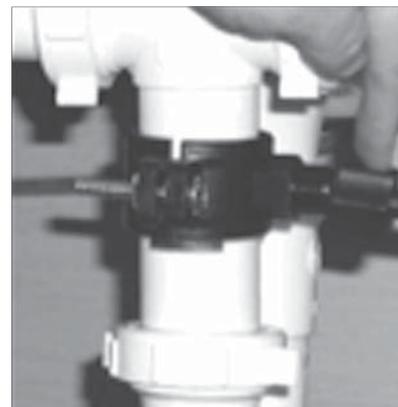
Note: Do not cut any RO system tubes at this time.



Drain Saddle Installation

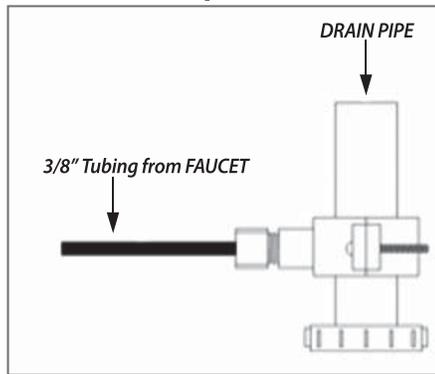
Drain Saddle fits standard 1 1/4" – 1 1/2" drain pipes

- 1 Gather the pieces of the drain saddle
 - 1 Black compression nut
 - 1 Semicircle bracket with opening
 - 2 Screws
 - 1 Foam washer
 - 2 Nuts for screws
 - Semicircle bracket
 - 1 3/8 or 1/4" Tube Insert
- 2 The small, square, and black foam gasket with a circle cut out of the middle must be applied to the inside of the drain saddle. Remove sticky tape backing and stick to the drain saddle as shown.
- 3 Drill a 1/4" hole through the drain pipe at least 1 1/2" above the nut of the P-trap to allow for the removal of the P-trap if necessary. Assemble the drain saddle around the drain pipe. Position the drain saddle over the drilled hole in pipe. Insert screw driver into the opening of the drain saddle and align with drilled hole in drain pipe. Using Phillips screw driver tighten screws evenly and securely on both sides of the drain saddle.
Attach black compression nut, but do not tighten at this time. The black tubing will be installed later.

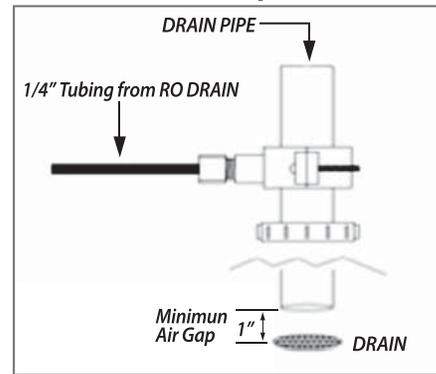


Caution: Do not over tighten the screws.
It may crack the drain saddle.

Air Gap Faucet



Non-Air Gap Faucet



Tank Valve Installation - (Metal Tanks)

- 1 Wrap 3 to 4 turns of Teflon tape clockwise around the male pipe threads coming out of the top of the tank. Do not over tighten or the valve may crack.
- 2 Tank valve can be opened and closed by blue valve switch.



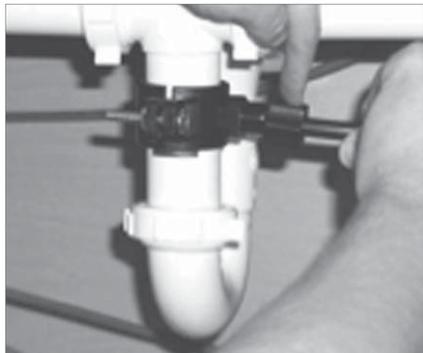
Connect Yellow Tube from TANK Port on RO Module to the Tank.

- 1 Position the tank in the desired location. Stand it upright or lay it on its side (using the black plastic stand).
- 2 Place the 1/4\" plastic insert in the tubing. Push the tubing into the tank ball valve.

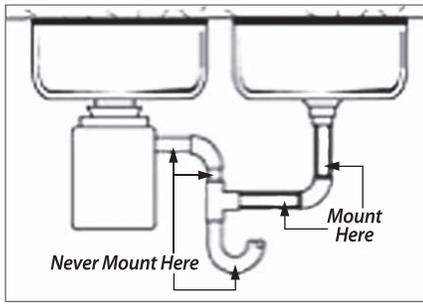
3/8" Black Tube Connection to drain pipe

Note: The tubing must be as **SHORT** and as **STRAIGHT** as possible to the drain saddle, making a downward slope from the faucet to the drain saddle to allow for proper drainage.

- 1 Measure the black tube from the faucet to the black drain saddle and make a straight cut through the tube.
- 2 Remove the black plastic nut from the drain saddle. Slip the black tube through the black nut. Press the plastic insert into the end of the tube. Insert the black tube into the opening in the drain saddle, hand tighten the black nut, and add a 1/4 turn with a wrench.



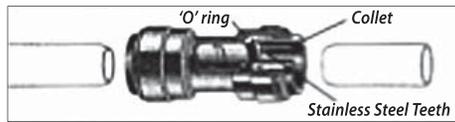
Note: This is a gravity feed line, so if there is any bend or dip in the tube the rinse water will not flow into the drain properly. Water may back up and come out of the air gap hole in the back of the faucet base.



How To Use the Quick Connect Fittings on the RO Module

To make a connection, the tube is simply pushed into the fitting.

1 Cut tube square



It is essential that the outside diameter be free of score marks and that burrs and sharp edges be removed before inserting the tube into the fitting

2 Insert tube



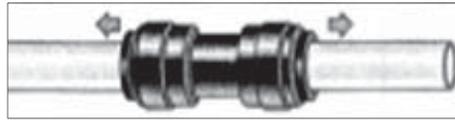
The fitting grips before it seals. Ensure that the tube is pushed into the tube stop.

3 Push up to tube stop



Push the tube into the fitting, to the tube stop. The collet (gripper) has stainless steel teeth which hold the tube

4 Pull to check secure



Pull on the tube to check that it is secure. It is a good practice to test the system prior to leaving site and /or before using

To disconnect, ensure that the system is depressurized before removing the tube. Push in the collet squarely against the face of the fitting. With the collet held in this position, the tube can be removed. The fitting can then be reused.

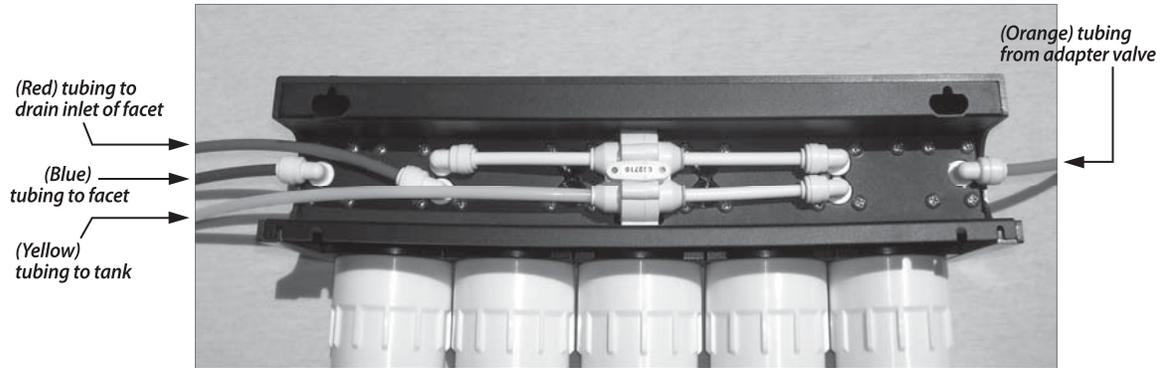
Disconnecting Push in collet and remove tube



Connect the Tubes to RO Module

- Insert each colored tubing into the right hall on the back of the unit (*Refer below pictures*).

1 Air Gap Faucet Type



2 Non Air Gap Faucet Type



Install the flow restrictor

- 1 For air gap faucet
insert the flow control between 1/4" red tubing from R/O and to drain inlet of faucet
- 2 For non air gap faucet
insert the flow control between 1/4" black tubing from R/O and to drain pipe

Note: keep the direction like below picture



Install the Cartridges

- 1 Identify each cartridge and the proper location on the system by matching the colors and description.
- 2 Insert each cartridge with a 1/4 turn in the clock wise direction. The cartridge is installed properly when the label is facing toward the front of the unit.



Note: The cartridge head swivels up and down for easy access.

Start up Instructions

- 1 Turn on the incoming cold water at the angle stop valve. Open the needle valve on the brass Adapter Valve by turning it counter clockwise. Check the system for leaks and tighten any fitting as necessary. (Check frequently over the next 24 hours to ensure no leaks are present).
- 2 If system is connected to an ice maker or refrigerator, turn the ice maker off (or do not allow water to flow to refrigerator) until Step 5 “flushing” is complete and the tank has been allowed to completely fill. Connection from the RO to the ice maker system should have an in-line valve (stopper) installed before the ice maker so it can easily be closed to prevent water flow to the refrigerator during start up and periodic maintenance. Your RO tank must be allowed to fill up in order for the refrigerator system to work properly. (If you are installing a refrigerator kit from A-life, tee off of the blue line between RO system and faucet).
- 3 Open the RO faucet and leave it open until water begins to trickle out, (it will come out slowly).
- 4 After water trickles out of the faucet, close the faucet so the tank will fill with water. The tank will take 2 to 3 hours to fill completely depending on the production capability of the membrane, local water temperature and pressure.
- 5 After the Tank has filled, open the faucet to flush the tank completely. Repeat this step two more times. The fourth tank can be used for drinking.

Note: The flushing of the tank 3 times is only necessary during initial installation. This should take about a day to complete.

Note: This reverse osmosis system contains replaceable components critical to the efficiency of the system. Replacement of the reverse osmosis component should be with one of identical specifications, as defined by the manufacturer, to assure the same efficiency and contaminant reduction performance. Periodic inspection and following proper system maintenance is critical for continued performance.

Cartridge Replacement

Cartridge replacement is made easy with the A-life Puri5 Change system. Turn off the incoming water supply at the adapter valve. The head is also hinged to allow easy access to the cartridges.

1. Grasp the cartridge and pull it towards you.
2. Rotate the cartridge 1/4 turn counter clockwise.
3. Remove the cartridge and dispose of it.



- ❶ The Sediment cartridge, and pre carbon cartridge should be changed every six months.
- ❷ The RO membrane cartridge should be changed every one or two years.
- ❸ The post carbon cartridge should be changed once a year.

After replace cartridges, Turn on the incoming water supply at the adapter valve

Annual Maintenance

Storage Tank Sanitization

1. Turn off the incoming water supply at the adapter valve.
2. Open the faucet, allow the tank to empty, and then close the faucet.
3. Remove the tubing between the tank and the RO unit.
4. Drain the water from the tubing and pour one teaspoon of household bleach into the tubing.
5. Reinstall the tubing between the tank and the RO unit.
6. Turn on the water supply at the adapter valve.
7. Allow the RO unit to fill the tank overnight.
8. Open the faucet and allow the tank to empty, and then close the faucet.
9. Replace the post carbon filter cartridge.

Drain line flow restrictor

1. Turn off the incoming water supply at the adapter valve.
2. Remove the red tubing from the back of the RO unit.
3. Remove and inspect the orifice in the flow restrictor. Clean if necessary.
4. Reinstall the flow restrictor into the end of the red tubing.
5. Reinstall the red tubing onto the back of the RO unit.
6. Turn on the water supply at the adapter valve.

Tank air pressure

1. Turn off the incoming water supply at the adapter valve.
2. Open the faucet, allow the tank to empty, and then close the faucet.
3. Check the pressure in the tank using a tire pressure gauge on the air valve.
4. The tank pressure should be between 5-7 psi. Use a bicycle pump to add air if necessary.
5. Turn on the water supply at the adapter valve.



Procedure for Extended Non-Use

If the system will not be used for an extended period (more than 2 months) perform the following.

Turn on the water supply at the adapter valve.

- 1 Turn off the incoming water supply at the adapter valve.
- 2 Open the faucet, allow the tank to empty, and then close the faucet.
- 3 Remove and discard the sediment filter, pre-carbon filter, and post carbon filter cartridges.
- 4 Remove the RO membrane cartridge. Place it in a ziplock bag and store it in the refrigerator.
- 5 To begin using the unit again, follow the startup and tank sanitization procedures.

Trouble Shooting

Problem	Cause	Solution
1. Low/Slow Production	Low Water Pressure	Assure a minimum of 40 psi incoming water pressure. You may use a booster pump if home water pressure is low. Make sure water supply is turned on and Adapter Valve is all the way open.
	Crimps in tubing	Check tubing and straighten or replace as necessary.
	Clogged pre-filters	Replace pre-filters.
	Fouled membrane	Replace membrane and clean flow restrictor.
	Tank valve closed	Open valve on storage tank
2. Milky colored Water	Air in system	Air in the system is a normal occurrence with initial start up of the RO system. This milky look will disappear during normal use within 1-2 weeks. If condition reoccurs after filter change, drain tank 1 to 2 times.
3. Water constantly running / unit will not shut off	Low water pressure	See #1 Above
	Fouled membrane	Replace membrane
	High water pressure	Check incoming water pressure to make sure it does not exceed 80psi. A pressure relief valve may be necessary.
	High air pressure in tank	Empty storage tank of water. Set tank air pressure to 5 psi. See Page 15.
4. Noise from faucet or drain	Air gap faucet	Inherent sound with air-gap faucets.
	Location of drain saddle	See diagram for proper location of drain saddle.
	Higher capacity membrane	Normal with high capacity membrane
	High water pressure	Check incoming water pressure to make sure it does not exceed 100psi. A pressure relief valve may be necessary.
5. Faucet leaks from the air gap feature	Crimp or loop in drain line	Straighten black 3/8 drain tube. Cut off any excess tubing
	Drain tube clogged/restricted	Caused from dishwasher or garbage disposal. Disconnect the 3/8" black tube at the drain, clean the 3/8" black tube out with a wire, then reconnect.
6. Small amount of water in storage tank	System just starting up	Normally it takes 6-10 hours to fill tank. Note: Low pressure and/or temperature can drastically reduce production rate.
	Low water pressure	See #1 Above
	Too much air in tank	Add air if below 5 psi and bleed if above 5 psi. Check only when tank is empty of water. See Page 15.
7. Water leaks from the filter housing	Not properly tightened.	Tighten the bowl
	Missing or kinked O-ring	Turn off the water supply. Release the pressure, remove bowl and replace the O-ring. (p/n 113043). Make sure the O-ring is seated in the filter bowl properly before reinstalling the filter bowl.

Limited Warranty

Your Reverse Osmosis System is warranted against defects in material for a period of 12 months from date of Installation, The filter cartridges are not covered in the warranty. This warranty is valid only to the original owner, installed at the original location. R.O. membranes carry a 12 month prorated warranty as follows: Credit 1/12th of replacement cost for each unused month, provided that the system is installed and maintained according to company instructions by qualified personnel.

ANNUAL MAINTENANCE REQUIRED.

Caution: For drinking water application, do not use where the water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after installing the unit. This Reverse Osmosis System must be protected against freezing. Failure to do so may result in cracking of the unit and water leakage. Damage caused by accident, fire, flood, acts of God, mis-use, mis-application, neglect, alteration, installation or operation contrary to our printed instructions is not covered by this warranty.

As the seller, we do not know the characteristics of the water supply where the system will ultimately be installed. Please understand that the quality of water supplies may vary periodically, and that your water usage rate may vary as well. Water characteristics can also change considerably if your R.O. is moved to a new location. For these reasons, we assume no liability for the determination of the proper equipment necessary to meet your requirements, and we do not authorize others to assume such obligations for us. OUR OBLIGATION UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PARTS OF THE R.O., AND WE ASSUME NO LIABILITY WHATSOEVER FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES, WHETHER FROM CORROSION OR OTHER CAUSES.

WARRANTY SERVICE POLICY

In the event that a component breaks down on a system that is still under warranty, we ask that the following policy be followed so we can provide you the necessary service:

- A. Any part that has malfunctioned must be reported to the company with the customer account number, the model number, field or in-house, and proof of purchase for the system it came from.
- B. Upon receipt of these items, an inspection (either field or in-house) and test will be made and a determination will be given as to the repair or replacement of the item under warranty.
 - 1. If the part is under warranty, it will be repaired or replaced at no cost.
 - 2. If the part is not covered by the warranty, it will be repaired or replaced and invoiced for the repair or replacement cost.

WARRANTY VALID ONLY IF OPERATED WITHIN LISTED CONDITIONS

Membrane Type	CTA	TFC
Feed Water Supply	Chlorinated preferred	Non-chlorinated
Water Pressure	40-80 PSI	30-80 PSI
Water Temperature	40 F- 85 F	40 F - 85 F
Ph	5.5 - 9.0	3.0 - 11.0
TDS	<1200 ppm	<1800 ppm

Aqua-Life Water Systems, Inc.
Los Angeles, California

WARRANTY

To ensure your warranty protection, you must complete and return this card along with a copy of your receipt to the A-LIFE, Inc. within 30 days after date of first installation.

MODEL PURCHASER _____ SERIAL NUMBER _____

ADDRESS CITY _____ STATE _____ INSTALLATION DATE _____

Mail to :
A-LIFE, Inc.

PO Box 7187
Los Angeles, CA 90007
TEL: 1-877-723-8080
FAX: 213-747-0121
info@alifeinc.com

<http://www.alifeinc.com>



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