

AUTOMATIC WATER DISTILLER

Use and Care Guide

**TO PREVENT PERSONAL INJURY OR PROPERTY DAMAGE,
READ AND FOLLOW THE INSTRUCTIONS AND/OR WARNINGS
IN THIS USE AND CARE GUIDE.**

Congratulations!

Your decision to purchase an automatic water distiller is an intelligent choice in providing the best for you and your family. Your distiller will provide clean, good tasting water for drinking and for making juices, coffee and tea. You can be confident of the quality of the water you use for cooking, watering plants, and for appliances requiring distilled water. Your automatic distiller will provide you with peace of mind knowing you have a durable appliance capable of reducing many impurities which can be found in tap water. With minimum maintenance your distiller will provide convenient trouble-free operation.

Distillation... Naturally Dependable

Using nature's own design for recycling water, distillation reduces impurities through the process of evaporation and condensation. As the water is heated it turns into vapor which rises, leaving most impurities behind in the boiling chamber or discharged through the volatile gas vent. As the water vapor cools, it condenses into a liquid state. A final polishing takes place as the water passes through the post carbon filter. The result? Water quality that is dependable for you and your family.

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IMPORTANT SAFEGUARDS

For use with distiller models A30D and A50D.

- Read all instructions before using.
- Use electricity safely and wisely, and observe safety precautions when using your distiller.
- Be sure power and fan switches are OFF before plugging power cord into outlet.
- Distiller should always be unplugged and allowed to cool completely before cleaning.
- Do not let cord touch hot surfaces or hang over the edge of a countertop, tabletop, or other surface areas.
- Plug distiller into a household grounded outlet ONLY. The cord has a three prong plug which mates with a standard three prong grounded wall outlet. If there is any doubt as to whether the outlet is properly grounded, check with a qualified electrician.
- Make sure gasket, boiling chamber and lid are properly secured before the distiller is plugged in (see instructions). No part of the distiller should be removed during the distillation cycle or until the distiller has completely cooled. Scalding could occur.
- The distiller, its cords and plugs should not be used outdoors or immersed in liquids.
- Do not distill salt water as this will damage certain distiller components and void the warranty.
- Do not touch distiller when it is hot.
- This appliance is not intended for use by young children or infirm persons without supervision.

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- Young children should be supervised to ensure that they do not play with the distiller.
 - Use your distiller only for the use described in this booklet. Do not use attachments with your distiller unless recommended by your authorized distributor.
 - Do not use your distiller if it or its cords are damaged or not working properly. Contact your authorized distributor for examination and/or repair.

SAVE THESE INSTRUCTIONS

Your distiller requires no special care other than cleaning and occasional filter replacement. If servicing becomes necessary, please contact your authorized distributor. See warranty on page 18 for service details.

**This distiller is designed and intended for
indoor use only.**

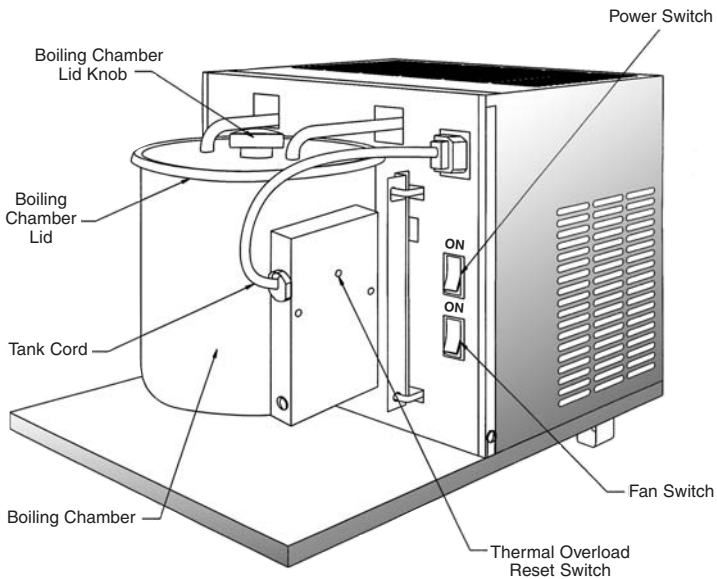
KNOWING YOUR DISTILLER

UNPACKING

Your distiller has been securely packed to prevent damage during the shipping process. After removing the distiller and reservoir from the box, open the boiling chamber cover and remove all packing material. Properly dispose of all packing material. Pull down firmly on float ball located underneath the distiller base to fully extend rod from the locked shipping position.

Your distiller is constructed of durable stainless steel. Take a few moments now to identify the parts of your distiller, reservoir and accessories.

The rear of the distiller is enclosed for your safety and contains no user serviceable parts.



Your distiller is capable of producing at least 9 gallons of distilled water a day.

PREPARING YOUR DISTILLER AND RESERVOIR

CAUTION: To prevent personal injury or property damage, do not plug distiller into wall outlet until all parts have been cleaned and properly installed.

INITIAL CLEANING

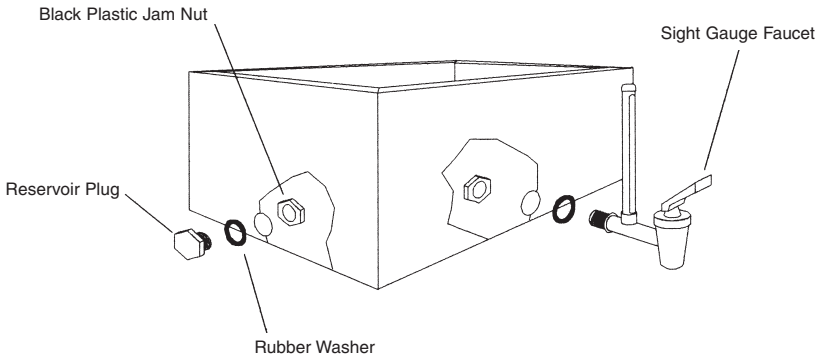
Do not immerse boiling chamber in water or other liquid for cleaning.

Using a sponge or cloth, clean the interior of the boiling chamber with hot soapy water. Rinse thoroughly with fresh water.

To remove any traces of manufacturing oils, clean the inside of the reservoir tank with either vinegar or a paste made of baking soda and water. Rinse thoroughly with fresh water.

RESERVOIR ASSEMBLY — AR18

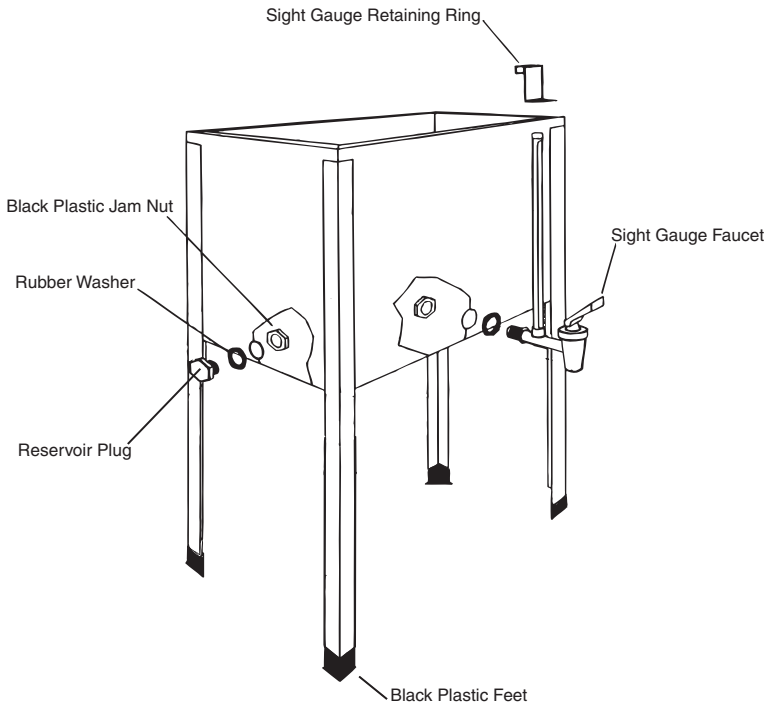
- 1) Position reservoir so that it sits open side down. Install black adhesive-backed feet to bottom corners of reservoir. Turn reservoir so that it sits open side up.
- 2) Decide if you wish to mount the sight gauge faucet on either the wide or the narrow face of the reservoir. Install the sight gauge faucet by placing one rubber washer onto the threaded end of the faucet and inserting the faucet through the mounting hole in the reservoir. From inside the reservoir securely tighten in place using the black plastic jam nut. Do not over-tighten jam nuts. Inspect to make sure that the sight gauge is straight.



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- 3) Install the reservoir plug by putting a rubber washer over the threaded end of the plug and inserting it into the remaining hole in the reservoir. From inside the reservoir, tighten into place using a black plastic jam nut. Do not over-tighten jam nuts.
 - 4) Install the post carbon filter cup by following the instructions on page 7.

RESERVOIR ASSEMBLY — ARS 2000

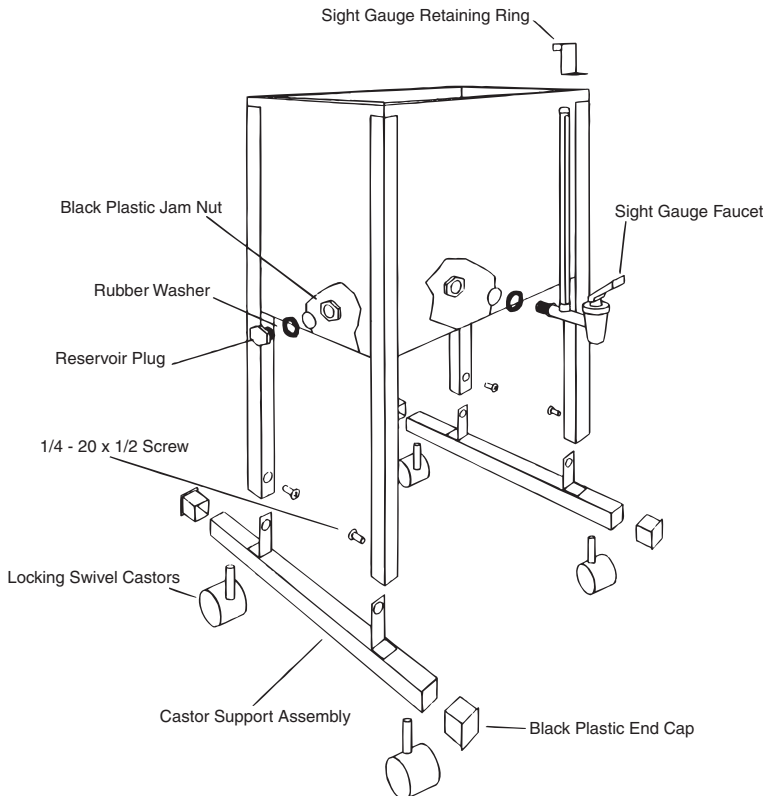
- 1) Place the reservoir on the floor, open side down.
- 2) Install a plastic foot on the bottom of each leg. Turn the reservoir over so that it sits open side up.
- 3) Decide if you wish to mount the sight gauge faucet on either the wide or the narrow face of the reservoir. Install the sight gauge faucet by placing one rubber washer onto the threaded end of the faucet and inserting the faucet through the mounting hole in the reservoir. From inside the reservoir securely tighten in place using the black plastic jam nut. Do not over-tighten jam nuts. Avoid squeezing out rubber washer. Inspect to make sure that the sight gauge is straight. Position the sight gauge retaining ring over the sight gauge and hook it over the edge of the reservoir.



- 4) **Note:** If installing an AP2000 Pump Box, please refer to the Pump Box Use and Care Guide in order to complete the assembly of the reservoir. Install the reservoir plug by putting a rubber washer over the threaded end of the plug and inserting it into the remaining hole in the reservoir. From inside the reservoir, tighten into place using a black plastic jam nut.
- 5) Install the post carbon filter cup by following the instructions provided on page 7.

RESERVOIR ASSEMBLY — ARS 3000

- 1) Place the reservoir on the floor, open side down, so that the legs are standing straight up.
- 2) Install the two castor support assemblies onto the reservoir legs by inserting the raised steel tabs on the castor support assembly into the open end of the legs. Securely fasten the castor support assemblies in place using the four 1/4" – 20 x 1/2" screws.

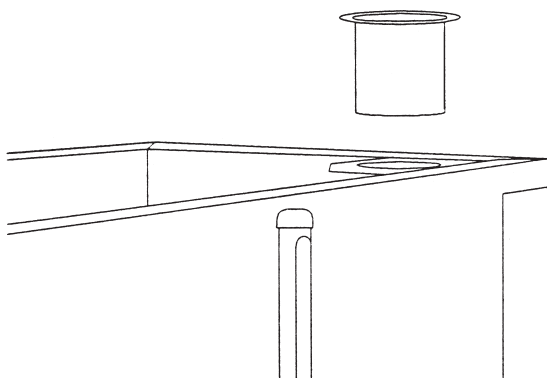


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- 3) Install the four black plastic end caps by inserting an end cap into each open end of the castor support assembly by hand and then tapping into place using a mallet.
 - 4) Install the four castors into the holes provided on the castor support assembly. Tighten securely. Turn reservoir over so that it stands open side up.
 - 5) Decide if you wish to mount the sight gauge faucet on either the wide or the narrow face of the reservoir. Install the sight gauge faucet by placing one rubber washer onto the threaded end of the faucet and inserting the faucet through the mounting hole in the reservoir. From inside the reservoir securely tighten in place using the black plastic jam nut. Inspect to make sure that the sight gauge is straight. Position the sight gauge retaining ring over the sight gauge and hook it over the edge of the reservoir.
 - 6) **Note:** *If installing an AP2000 Pump Box, please refer to the Pump Box Use and Care Guide in order to complete the assembly of the reservoir.* Install the reservoir plug by putting a rubber washer over the threaded end of the plug and inserting it into the remaining hole in the reservoir. From inside the reservoir, tighten into place using a black plastic jam nut. Do not over-tighten jam nuts. Avoid squeezing out rubber washer.
 - 7) Install the post carbon filter cup by following the instructions provided below.

INSTALLING POST CARBON FILTER CUP

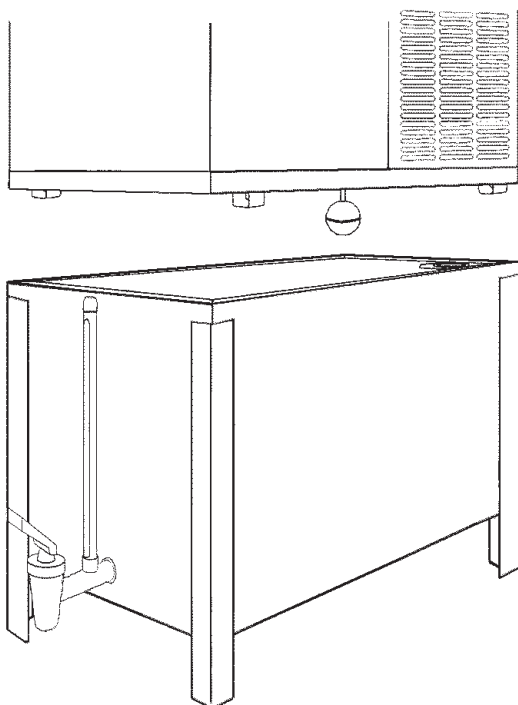
Your distiller uses a granular activated carbon (GAC) filter as a final polishing agent to ensure clean, fresh tasting drinking water.

- 1) To prepare the filter cup place it in boiling water for 5 minutes. Drain excess water from filter.
- 2) Place filter cup into the supporting bracket in the corner of the reservoir.
- 3) Replace the post carbon filter cup **every two months** or whenever an unusual taste is detected in the distilled water. The same cleaning process should be used whenever a new filter is installed. Do not attempt to reuse the old filter. **Note:** *This distiller meets the listing requirements of Underwriters Laboratories Inc. but they have not investigated the physiological effect of the use of these carbon filters, beneficial or otherwise.*



MOUNTING DISTILLER TO RESERVOIR

Simply set the distiller on top of the reservoir tank. Your distiller has been engineered to provide a secure fit. When mounting the distiller to the reservoir tank, make sure that the water outlet tube, located underneath the distiller base, is directly above the post carbon filter cup. This will allow distilled water to flow through the filter cup as it enters the reservoir tank. Do not install distiller closer than four (4) inches (10 cm) to any vertical surface. Maintain a minimum clearance of fourteen (14) inches (36 cm) to the top of the distiller.

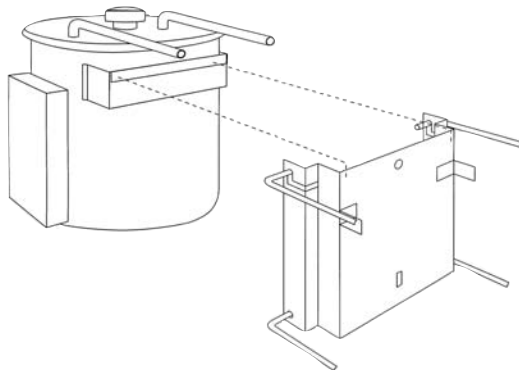


INSTALLING THE BOILING CHAMBER

Your distiller has been shipped with the boiling chamber already in place. If it has been disturbed during shipping follow these simple steps to reinstall the boiling chamber.

CAUTION: To avoid personal injury or property damage, be certain distiller is unplugged.

- 1) Place the hook of the boiling chamber over the bracket located in the front half of the distiller.
- 2) Be sure the gasket on the boiling chamber is securely in place.
- 3) Fit the lid with the attached tubes over the gasket and onto the boiling chamber making sure that the threaded center support protrudes through the hole in the lid. Ensure that the tubes are centered in the distiller openings.
- 4) Secure the lid by turning the cover knob clockwise.
- 5) Make sure that the boiling chamber moves freely up and down by pressing down on the top of the boiling chamber. The boiling chamber should lift when it is released. If the boiling chamber does not move freely, recheck all connections.
- 6) Fully insert the boiling chamber power cord into the receptacle. **A loose connection may damage the power cord and result in failure of the distiller. Be sure the plug is fully inserted into the socket.**



WATER SUPPLY CONNECTION

The following instructions are for installation on copper tubing. If you have iron, steel, brass, PVC or other pipe providing the cold water supply in your home, consult a qualified professional for installation.

All state, provincial and local laws and regulations must be followed in the installation and use of your distiller.

It is advisable to first connect the prefilter to the distiller, then finish the connection to the saddle valve.

Your distiller should be installed on a level surface in a well ventilated area near a water supply line and a standard household grounded electrical outlet.

Do not connect to a water supply that is under 20 lb (138kPa) or over 120 lb (828kPa) pressure and under 36°F (2°C) or over 100°F (38°C).

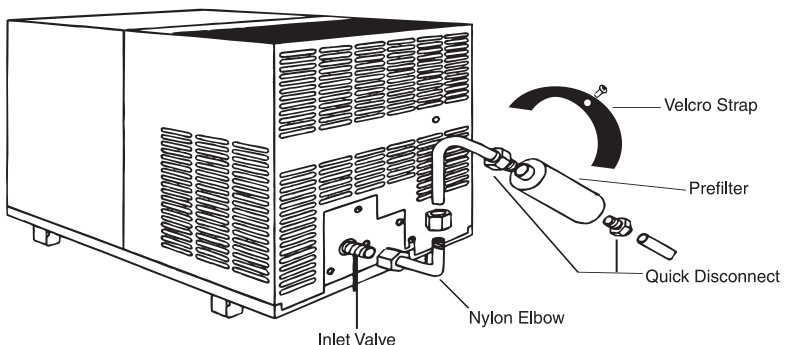
You will need an adjustable wrench and a flathead screwdriver to hook up the distiller to the water supply.

Do not install distiller closer than four (4) inches (10cm) to nearest vertical surface.

INSTALLING THE PREFILTER

A length of food-grade tubing and the required fittings have been packed with your distiller.

- 1) Cut a short piece approximately 12 inches (30.5cm) long from the supplied roll of tubing. Insert one end of the piece into the smaller hole in the nylon elbow and tighten.



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- 2) Take the other end of the elbow and turning clockwise, attach to the inlet valve at the rear of the distiller.
 - 3) Insert the other end of tubing as far as possible into the quick disconnect at the outlet end of the prefilter. Make sure that the arrow on the prefilter is pointing in the direction of the water flow. It should not be possible to remove the tubing unless the grey release collar is pushed into the quick disconnect.
 - 4) Attach the remaining piece of plastic tubing to the quick disconnect at the inlet end of the prefilter.
 - 5) To change the prefilter periodically, turn off the water supply at saddle valve and disengage tubing from the quick disconnects and repeat steps 3 and 4 to install the new prefilter. **Note:** *The quick disconnects must be removed from the old prefilter and added to the new one using new Teflon tape.*
 - 6) Screw the velcro strap onto the distiller and attach the prefilter using the velcro.
 - 7) There is no need to disassemble the nylon inlet elbow to change the prefilter. Periodically, however, the inlet elbow should be removed and the small cone shaped screen at the mouth of the inlet valve should be cleaned or replaced (see cleaning instructions on page 16).

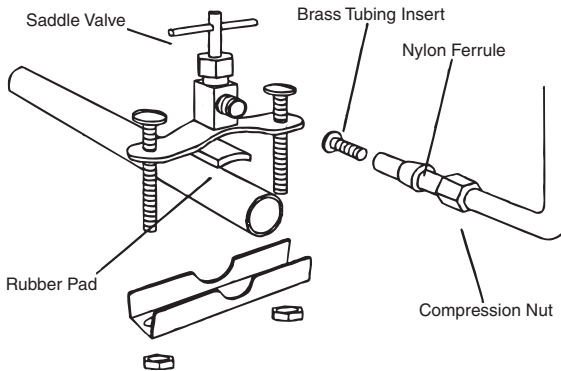
INSTALLING SADDLE VALVE CONNECTION

- 1) Locate the other end of the long tube and slip on the brass compression nut, threaded toward the cut end of the tube.
- 2) Slip on the nylon ferrule, narrow end toward the cut end of the tube. The nylon ferrule should be about 1/4 inch down the tube. Discard the brass ferrule which is not needed for use with plastic tubing.
- 3) The tubing provided is thick-walled and will provide you with trouble-free service for many years. You may, if you wish, insert the brass tube into the tube to prevent possible collapse of the tube.
- 4) Locate the cold water supply line near the place you are installing your distiller. **Note:** *Be sure the length of food-grade tubing will reach from your supply line to the distiller location before proceeding. If additional tubing is needed, contact your authorized distributor.*

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- 5) Turn the wing on the saddle valve counter-clockwise to insure the lance is fully retracted.
 - 6) Position the saddle valve assembly to straddle the copper pipe of the supply line. Tighten securely, making sure the rubber gasket is in place and slightly compressed to form a good seal between the valve bracket and the copper pipe.
 - 7) Insert the cut end of the food-grade plastic tube into the saddle valve opening and securely tighten the compression nut, turning clockwise.

Note: *If you have used the brass tubing reinforcer, be certain it is secured in the tube and does not slip into saddle valve assembly.*

- 8) When all connections are secure, turn the wing on the saddle valve clockwise as far as it will go. The saddle valve is now in the closed position. To begin the flow of water to the distiller, turn the wing counter clockwise. **Note:** *In areas where saddle valves are not permitted by law, your distributor can provide the appropriate installation fittings.*



DISTILLER OPERATION

Your distiller is easy to use. The water level in the boiling chamber is controlled automatically. When connected to the cold water supply line the water will automatically feed into the boiling chamber and shut off when the proper water level is achieved. The condensing fan and the heating element of the boiling chamber are also controlled automatically, resulting in worry-free operation.

When the reservoir tank reaches its full level a float switch will shut off the unit. When water is drawn from the reservoir the unit will restart automatically, assuring you of a continuous supply of clean distilled water.

It is suggested that you steam clean your distiller prior to using it for the first time following the directions below. This is a disinfecting procedure.

- 1) Remove the post carbon filter.
- 2) Be certain that the FAN switch is in the OFF position, then turn ON the switch for the POWER only. You should hear the water begin to fill the boiling chamber.
- 3) When sufficient water fills the boiling chamber the heating element will turn on automatically. After 15 minutes you should notice steam beginning to appear in the sight gauge.
- 4) Continue steaming the unit for approximately 20 minutes.
- 5) Turn OFF the POWER switch and allow the unit to cool completely.
- 6) When the unit has cooled completely, put the post carbon filter back in place.
- 7) Check all components, then turn ON both the FAN and POWER switches. You are now producing clean, distilled water.

MAINTENANCE

CAUTION: To prevent personal injury or property damage, always unplug distiller from the wall outlet before beginning any maintenance procedures.

Your distiller has been designed to require minimal maintenance. The exterior of the distiller and reservoir tank may be wiped with a soft cloth or sponge dampened with warm soapy water. A commercial glass or stainless steel cleaner may be used to maintain the lustre of the exterior. Care should be taken so no cleaners used on the exterior can find their way into the reservoir tank.

Periodic cleaning of the boiling chamber is essential to the efficient operation of your distiller. Because local water quality varies from place to place, your cleaning schedule may vary from once or twice per month to once every three months. It is suggested that you check the boiling chamber after the first week of use and once per week thereafter, until you determine the cleaning schedule that is right for you. The boiling chamber should be cleaned when you see accumulated mineral deposits and debris collect in the chamber — visible proof that your distiller is removing unwanted water contaminants.

Connecting your distiller to a softened water supply can greatly reduce the need for boiler cleaning.

Follow these easy steps to clean your distiller.

BOILING CHAMBER

- 1) Turn both the POWER and FAN switches to the OFF position, then unplug the distiller cord from the wall outlet. Allow the unit to cool completely before handling (approximately three hours).
- 2) When the unit is cool, unplug the boiling chamber power cord from the receptacle, remove the lid cover knob and detach the lid from the boiling chamber. Lift the boiling chamber off of the bracket.

CAUTION: To prevent personal injury or property damage, only unplug boiling chamber power cord after POWER and FAN switches are turned OFF, distiller is unplugged from the wall outlet and the unit has completely cooled.

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- 3) Remove the rubber gasket from the boiling chamber. Clean the gasket with a mild detergent, rinse and dry thoroughly.
 - 4) Dispose of the water and residue from the boiling chamber and wipe with a cloth and clean water. **To avoid risk of electrical shock, do not immerse the boiling chamber in water or any other liquid for cleaning.**
 - 5) Clean the boiling chamber by combining two cups of white vinegar and enough warm water to fill the boiling chamber. Allow this solution to sit in the boiling chamber for at least six hours, or preferably overnight. Commercial descalers or kettle cleaners may be used in place of the vinegar following the manufacturer's instructions.
 - 6) Dispose of the cleaning solution and rinse the boiling chamber thoroughly with clean water. **DO NOT IMMERGE.** If stubborn scale deposits remain they may be removed with a nylon scouring pad. Then wipe the boiling chamber thoroughly with a cloth and clean water. Do not tap on the heater to remove deposits. Tapping on the heater may damage it.
 - 7) Replace the gasket on the boiling chamber and reassemble to the distiller unit, tightening the lid with the lid cover knob. Plug the boiling chamber power cord into the receptacle and then plug the distiller back into the wall outlet. Your distiller is now ready to continue providing you with clean distilled water.

CARBON FILTERS

- 1) Approximately every two months discard the used post carbon filter cup and replace it with a new one. See procedure on page 7. Do not attempt to reuse the old filter cup. **Note:** *The effective life of the post carbon filter will vary depending on the amount of distilled water your family uses. If you notice a change in the taste of the distilled water, clean the reservoir and replace the post carbon filter cup.*
- 2) The carbon prefilter attached to the distiller should be replaced approximately every six months.

These filters may be ordered from your authorized distributor.

INLET VALVE SCREEN AND RESERVOIR

Turn OFF fan and power switches and disconnect power cord from outlet. Then turn off water supply to the distiller. Disconnect water inlet and water outlet hoses. Remove the cone-shaped screen from the solenoid inlet port, using a pencil tip or similar pointed object. Remove any sediment or debris from the screen by rinsing with clean water. Reassemble the filter and reconnect to the distiller. Turn on the water supply and recheck connections.

If your distiller has a pump it will need to be removed prior to cleaning the reservoir. To remove the pump, first make sure that the power cord is unplugged from outlet. Next, disconnect the water inlet tube from the reservoir. Remove the screws that secure the pump box to the reservoir. Then carefully slide the pump box from the slide rails and set aside. To reinstall, reverse this procedure.

To clean the reservoir, empty any water and clean with either hydrogen peroxide or a paste of baking soda and water. Rinse thoroughly. The higher the room temperature, the more often the reservoir should be cleaned; however, the reservoir should be cleaned at least two times per year.

NOTE: *Periodic cleaning of the condensing coil and fan of the distiller unit will ensure a more efficient operation. You may do this using compressed air or contact your authorized distributor for assistance.*

TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SOLUTION
<i>Distiller will not operate.</i>	POWER switch is not in the ON position.	Make sure that the POWER switch is in the ON position and that the unit is plugged into the wall outlet.
	Boiling chamber not seated properly on tank bracket.	Reinstall boiling chamber on tank bracket and make sure that it moves freely up and down.
	Float in reservoir is in the UP position.	Draw sufficient water out of the reservoir to activate the float switch.
		Make sure that the float rod is not lodged in its recessed shipping position.
<i>Fan does not operate.</i>	FAN switch is not in the ON position.	Make sure that the FAN switch is in the ON position.
<i>Heating element does not work.</i>	Unit not plugged into wall outlet.	Make sure that the unit is plugged into the wall outlet.
	Boiling chamber power cord not plugged in.	Ensure that boiling chamber power cord is plugged into receptacle, then push the thermal overload reset switch on the side of the boiling chamber.
	Thermal overload switch needs resetting.	Press thermal overload switch reset button on side of boiling chamber.
<i>Distilled water has an unusual taste.</i>	The carbon filter is contaminated.	Replace the pre and post carbon filters.
	The reservoir needs cleaning.	Clean the reservoir following the instructions on page 16.

NOTES