

- 1) PLEASE READ ALL INSTRUCTIONS THOROUGHLY BEFORE ASSEMBLING AND OPERATING YOUR NEW UNIT. KEEP THESE INSTRUCTIONS FOR FUTURE USE.
- 2) It is important to fill out and return the warranty card which is included with your instructions. This information is very helpful to us should you ever need parts or repairs for your machine.
- 3) Your distiller has been checked at the factory for leaks, proper working procedure, etc. Therefore, it may have a water ring.
- 4) The tank is heliarc welded and as you distill water, the mineral content may cling to the heliarc weld and will appear to be rust. This is T-304 Stainless Steel and what may appear to be rust is the mineral content clinging to the seams.
- 5) DO NOT subject your unit to misuse or abuse. Proper cleaning is very important and instructions are included as a part of this booklet.
- 6) When some people start drinking distilled water, they seem to think it has a taste; usually, this is not taste but a lack of taste. The taste buds will become accustomed to this the same as they did to the water in your area.
- 7) PLEASE GIVE CLOSE ATTENTION TO THE FOLLOWING ELECTRICAL PRECAUTIONS:
 - a. Never immerse the unit in water or any other liquid.
 - b. Never operate an appliance with a damaged cord. Do not let the cord hang over a sharp edge, such as a counter top or table, or be exposed to hot surfaces.
 - c. Do not use an extension cord.
 - d. The unit should not be operated outdoors or be exposed to the natural elements (rain, snow, and so forth).
 - e. THIS ELECTRICAL APPLIANCE, LIKE ALL OTHERS, SHOULD BE GROUNDED!

LIKE ALL OTHER ELECTRICAL APPLIANCES, THIS UNIT SHOULD NOT BE OPERATED AND FILLED DIRECTLY FROM THE KITCHEN SINK WITH THE UNIT CONNECTED TO AN ELECTRICAL SOURCE AS AN EXTRA PRECAUTIONARY MEASURE.

- 8) You will notice that the condensing coil, located inside the unit at the left (as you face the front of the unit), will have one small hole drilled in its top. This hole is not a defect, rather, it is provided to release certain volatile gases. Should some steam escape from this hole, this should be of no alarm to you.
- 9) Although we inspect these machines before leaving the factory, we are subject to human error. So, should there be any defects or missing parts to your machine, correspond directly with Pure Water Society, Inc., 3725 Touzalin, P.O. Box 83226, Lincoln, NE 68501.

THE INSTRUCTIONS WHICH ARE GIVEN BELOW AND ON THE FOLLOWING PAGES SHOULD BE FOLLOWED CLOSELY IN ASSEMBLING AND PREPARING THE UNIT FOR OPERATION.

ASSEMBLY

The M-6D Aqua Still will be shipped in two (2) separate boxes. One box contains the top "Distiller Portion" of the unit. The other box contains the "Storage Tank and Stand." When unpacking the boxes, save everything until the unit is in operation.

A. Assembling the unit — begin by unpacking the "Storage Tank and Stand." In addition to the "Storage Tank and Stand" you will find the following parts packed in a small box (FIG 2)

4 Casters
1 Storage tank drain valve

1 3/8" Wood dowel

1. Install the Casters (FIG 2-11). Turn the "Tank and Stand" upside down. Push the metal stem of the casters into the plastic insert at the bottom of each leg.

2. Install Storage tank drain valve (FIG 2-13). Turn unit back in upright position. Thread the storage tank drain valve into the coupling (FIG 2-10) (DO NOT REMOVE THE WHITE THREAD TAPE FROM THE THREADS.) Using the 3/8" wood dowel (FIG 2-13), insert it into the drain valve outlet and tighten snugly.

B. Unpack the top distiller portion of the M-6D Aqua Still. When opening the box you will find the following parts (FIG 3):

1 Boiling tank lid
1 Boiling tank drain extension tube

1. Assemble Top Portion of Distiller to Storage Tank and Stand (See FIG 6)

a. The base of the distiller has one (1) short round leg at each corner (FIG 4-6). These round legs are to be inserted into the square tube legs at each corner of the stand. Put back leg in first and then guide condensing coil extension tube (FIG 4-7) into opening in storage tank as front legs are placed in top of stand.

b. Remove tape holding gasket and washer (FIG 4-8) and slip down tube to cover opening where tube is inserted. (FIG 6) shows distiller portion with condensing coil extension tube and gasket and washer installed. Control cord from top portion of unit to the storage tank located in rear of unit. (FIG 15).

2. The Boiling tank lid (FIG 3-15) will not be used until the unit is filled with water. You may note that by loosening the black knob (FIG 3-6) on top and then tipping the lid, the bar at the bottom slips under the opening in the top of the unit. Center the lid over the opening and tighten the black knob. This lid will need to be removed each time the unit is filled with water.

3. Install Boiling tank drain extension tube (FIG 5-17). The boiling tank drain extension tube will allow the user to drain the boiling tank into the sink more conveniently. To assemble, remove the compression nut and brass sleeve from the boiling tank drain valve; take the end of the tube with the 90° bend and do the following:

a. Slip the compression nut (FIG 5-21) over the tube, small opening first; then, slip on the brass sleeve (FIG 3-20)

b. Push the tube into the opening of the drain valve (FIG 5-19)

c. Next, thread the nut onto the boiling tank drain valve.

d. Push the tube firmly into the tube opening and using a wrench tighten the compression nut.

e. FIG 6-17 shows boiling tank drain extension tube installed.

Prior to using, it might be well to place water in the boiling tank and open drain valve to make sure that there are no leaks and that the connection is tight enough.

NOTE:

1. If unit is to be used as a MANUAL FILL, stop here and go to page entitled "Operation of the Unit."
2. If the unit is to be used as a DIRECT WATERLINE HOOKUP, proceed with the following directions for assembling.

Open the waterline kit bag which contains the plastic tubing and Saddle Clamp Kit.

NOTE: 1 Brass Compression Ring is included with the Saddle Clamp Kit; it will not be used.

1. Take the flexible tubing and run to your existing water supply pipe.
2. At the backside, bottom of the unit, remove white Compression Nut (FIG 10-31).
3. Remove Compression Sleeve and "Grey Plug" from Compression Nut by inserting plastic tube (FIG 9-32) through small end of Compression Nut (FIG 9 & FIG 10).
4. Discard "Grey Plug." (FIG 11-34)
5. Push Plastic Sleeve (FIG 11-33) back into Compression Nut, large end first.
6. Push Tube back through small end of Compression Nut. (FIG 12)
7. Push tube into bottom of fitting from which Nut was originally removed.
8. Push tube up into opening and tighten Compression Nut snugly.

IMPORTANT: If a "SADDLE TAPPING VALVE" is included with your kit, follow the directions on the package, then go to step Number 12. If the SADDLE TAPPING VALVE is not included, proceed with Steps 9 through 11.

9. Select existing water supply pipe which you wish to use and turn the water off in this line. Then, drill a 1¼" diameter hole into the waterline, preferably on top or on the side of a horizontal line.

CAUTION: Care should be taken not to get water into the power drill or electrical lines when drilling this hole.

10. The 90° valve (FIG 13-36) must be screwed into the saddle and the rubber washer (FIG 13-37) placed on the underside which will fit next to the water pipe. (See FIG 13)

12. Remove the Compression Nut (FIG 13-33) from the 90° valve which is part of the saddle clamp. (When flexible tubing is used, the metal compression rings are not needed.)

13. Perform the following: (FIG 13)

- a. Slide the Compression Nut over the flexible tubing.
- b. Slide the nylon compression ring (FIG 13-34) over the flexible tubing, large end first.
- c. Push the metal insert (FIG 13) into the end of the flexible tubing. Thread compression nut onto valve and while pushing tubing into fitting, tighten nut snugly.

14. Turn the existing water supply on and open the saddle clamp assembly valve completely.

15. Check for leaks at the following locations:

- a. Where saddle clamp is attached to existing waterline
- b. Where the waterline connection is made at the rear of the distiller
- c. Should leaks occur, additional tightening may be necessary

16. UNPLUG THE UNIT.

17. Fill the boiling tank manually until water is just above the heating element. Leave the boiling tank lid off.

18. Plug unit in. Turn Main switch to "Auto" position. The boiling tank will stop filling when the water level is approximately 1½" above heating element.

19. Holding a container under the drain valve, open the drain SLOWLY, and as the water level lowers to approximately 1" over the heating element — the unit should again allow water to refill the boiling tank.

CAUTION: DO NOT OPERATE UNIT IF THE WATER GOES BELOW THE HEATING ELEMENT BEFORE THE UNIT ALLOWS WATER TO COME INTO THE BOILING TANK AGAIN.

DISTILLATION — MANUAL FILL ONLY

1. Remove lid and fill with water until the water just touches the water level gauge.
2. Replace the lid and tighten the knob (FIG 6-16)
3. Place the fan switch in the "ON" position (FIG 6-5)
4. Plug cord into electrical outlet (120 Volt AC, Single Phase).
5. Turn timer knob left, counterclockwise, to the "ON" position. (FIG 6-4) and main switch to the timer position. (FIG 6-39)
6. This cycle will take approximately 4½ hours.
7. The boiling tank must be refilled before each distillation cycle.
8. Should your unit fail to run, refer to trouble shooting guide at back of instructions.

NOTE: FILLING WATER ABOVE BOTTOM OF LEVEL GAUGE MAY ALLOW UNDISTILLED WATER TO FLOW INTO THE CONDENSING COIL AND OUT INTO USER'S CONTAINER. DO NOT OVERFILL!

THIS UNIT SHOULD BE OPERATED IN A SPOT AWAY FROM OTHER HEAT SOURCES. THE LOWER THE TEMPERATURE OF THE ROOM THE BETTER FOR DISTILLATION.

OPERATION OF UNIT

This unit has been run several times at the factory in order to test its operation, parts, and assembly. However, the user is encouraged to run the unit through a steam sterilization cycle and two distillation cycles prior to distilling water for usage.

STEAM STERILIZATION

1. Remove Boiling Tank Lid (FIG 16-15), fill with water until the water touches the water level gauge. (water level gauge is located just to the rear, inside of tank opening. FIG 1-1).
2. Replace lid and make sure it fits in proper groove so that steam does not escape. Tighten lid knob (FIG 6-16).
3. Place the fan switch (FIG 6-5) in the "OFF" position. This will allow steam to pass through the condensing coil and sterilize the unit.
4. Open storage tank drain valve (FIG 6-14) and place container under opening. Although mostly steam is produced, some condensation may occur. After initial sterilization this cycle may be run periodically without storage tank drain valve open.
5. Plug the cord into an electrical outlet (120 Volt AC, Single Phase).
6. Turn the timer knob (FIG 6-4) left, counter-clockwise, to the "ON" position, and with the Main switch on the "Timer" position. (FIG 6-39)
7. Allow machine to run 15 to 20 minutes after water has come to full boil. Drain and rinse the boiling tank.
8. Should your unit fail to run, refer to trouble shooting guide at back of instructions.

CAUTION: DO NOT plug unit into electrical outlet unless the water in the boiling tank is at the proper depth; to do so would shorten the life of the heating element unnecessarily.

DISTILLATION

1. Remove boiling tank lid and fill with water until the water just touches the water level gauge, for manual operation.
2. Replace the lid and tighten the knob. (FIG 6-16)
3. Place the fan switch in the "ON" position. (FIG 6-5)
4. Plug cord into electrical outlet (120 Volt AC, Single Phase).
5. Turn timer knob left, counter-clockwise, to the "ON" position (FIG 6-4) with the main switch to the timer position or main switch to "Auto" position for direct water hookup (FIG 6-39)
6. A full cycle will take approximately 4½ hours for manual operation.
7. The boiling tank must be refilled before each distillation cycle.
8. Storage tank sight gauge (FIG 6-11) shows amount of distilled water in storage tank.
9. Should your unit fail to run, refer to trouble shooting guide at back of instructions.

NOTE: FILLING BOILING TANK WITH WATER ABOVE BOTTOM OF LEVEL GAUGE MAY ALLOW UNDISTILLED WATER TO FLOW INTO THE CONDENSING COIL AND STORAGE TANK. DO NOT OVERFILL!

THIS UNIT SHOULD BE OPERATED IN A SPOT AWAY FROM OTHER HEAT SOURCES. THE LOWER THE TEMPERATURE OF THE ROOM THE BETTER FOR DISTILLATION.

CLEANING INSTRUCTIONS

PROPER CLEANING IS IMPORTANT. Improper cleaning may shorten the life of the unit and particularly that of the heating element. We recommend draining the boiling tank of your unit after approximately every 3rd distillation cycle. This will prevent a concentration of chemicals, pollutants and other materials from building up in the bottom of the boiling tank.

Your unit should be cleaned whenever there is a noticeable amount of mineral build up around the outside of the heating element. The frequency in which the unit is cleaned will vary from one area to another, depending upon the mineral content present in that area.

For cleaning we suggest that you use either a solution of white vinegar and water, our industrial grade cleaner called Lumen No. 2 (which may be purchased through your distributor), or a cleaner of your choice. DO NOT USE AN ABRASIVE CLEANER OR STEEL WOOL CLEANING PADS.

Use the following procedure for cleaning:

1. Make sure the unit is turned "OFF" and disconnected from electrical source.
2. Drain the boiling tank.
3. Fill boiling tank half full of water.
4. Add cleaning solution — white vinegar, Lumen No. 2, or cleaner of your choice.
 - a. If white vinegar is used, add 1 to 1½ quarts of vinegar to water.
 - b. If lumen No. 2 is used, add 6 to 9 tablespoonsful to water.
 - c. If cleaner of your choice is used, use manufacturer's recommended dosage.

(The amount of cleaner you use may need to be increased depending upon the kind and type of mineral deposits in your boiling tank.)

5. Mix well.
6. Fill boiling tank with water to the bottom of the water level gauge.
7. Let solution stand overnight or until the mineral content softens. UNDER NO CIRCUMSTANCES SHOULD THE CLEANING SOLUTIONS BE HEATED AND RUN THROUGH A STEAM STERILIZATION OR DISTILLATION CYCLE.
8. The next morning drain and rinse the boiling tank thoroughly.
9. Following every second cleaning of the boiling tank, it would be advisable to drain the storage tank and run the unit through a "Steam Sterilization Cycle" to sterilize the storage tank. Leave storage tank drain valve (FIG 6-14) "OPEN".
10. Be sure to refill the unit with water before beginning to distill water again.

TROUBLE SHOOTING

A. Should your unit not run, do the following:

1. Reset may have "kicked" off. (FIG 6-3)

a. If unit is hot, allow to cool down. Cooling may be hastened by draining the boiling tank and refilling with cold water.

b. Fill with water to water level gauge, for manual operation, or fill water until water is just above the heating element for direct water hookup.

c. When the unit is cool, take a pencil, use the eraser end and push firmly against the reset button. Listen for a "click." If you do not hear a "click," it may be necessary to let the unit cool down a little longer.

2. Plug the unit in.

3. Turn fan switch to "ON" position. (FIG 6-5)

4. Turn timer lift, counter-clockwise to the "ON" position with main switch on the timer position or main switch to "Auto" position (FIG 6-4) (FIG 6-39)

5. Should the above fail, check to make sure you have power to the electrical wall outlet. A good check for this is to take an appliance or lamp you know works and plug it into the wall outlet.

6. Should a leak appear at one of the drain valves it may be necessary to wrap "Male" threads with additional "Teflon Thread Tape."

B. Should it ever be necessary for you to install parts, always disconnect the unit from the electrical wall outlet.

C. Do not use an extension cord.

D. This machine, like all electrical appliances, should be properly grounded.

E. Should a leak appear where the condensing coil and condensing coil extension tube are joined together, this is not a defect in the machine but rather an indication of a low spot somewhere in the coil or at the condensing coil extension tube. To correct this problem, place the extension tube on the condensing coil as for normal use and push down on the end of the extension tube which will in turn raise the back of the coil. There must be gravity or downward flow from where the condensing coil hooks to the boiling tank to where the distilled water is collected.

M 6-D AQUA STILL PARTS

PART #	DESCRIPTION
628	Bib washers(4pak)
636	Cap Nuts(4pak)
641	Castors w/inserts(set of 4)
606	Condensing coil w/fittings
324-0037	Condensing coil extension tube(per ft)
6010	Cover Gasket fr boiling tank
9508	Drain Valve, side
518	Drain valve extension tube
639	Fan blade w/fastener
653	Fan motor w/blade & connectors
642	Fan switch, plastic
71	Fan switch, toggle style
9505	Faucet, Tomlinson-Storage Tank*
9570	Faucet, storage tank w/5gal. site glass
9575	Faucet, storage tank w/10gal. site glass
645	Float w/ o-ring kit & actuating arm
4508	H-frame, 5 & 10 gal No longer availabe**
634	Heating element w/gasket & u clamp
642	Heating element switch, plastic
605	Level guage, plactic-Storage Tank
409	Lid complete
408	Lid complete storage tank
610	Lid knob w/gasket, washer & o ring
402	Lid crossbar w/stud
646	Microswitch-boiling tank
654	Microswitch-storage tank
601	Reset
603	Relay
638	Screws, sheetmetal(12pak)
635	Solenoid complete w/nuts
637	Speed clips(12 pak)
80	Switch, three-way, toggle
602	Switch, three-way, plastic
640	Timer w/ connectors

*Storage tank faucets are note interchangeable with each other, if needed replace with original style.

