

Mega-ClassicTM



Operator's Manual



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Important Safety Information

- ◆ If you are not sure that your electrical outlet is properly grounded or that the circuit protection is correct, have it checked by a qualified electrician.
- ◆ Operate indoors only.
- ◆ The area **MUST** be well ventilated.
- ◆ **WARNING:** Disconnect the distiller from the power supply before assembling, adjusting or servicing the distiller.
- ◆ **NEVER** immerse the distiller in water or any other liquid.
- ◆ **NEVER** operate the distiller with a damaged cord or allow the cord to become exposed to hot surfaces.
- ◆ **DO NOT** use an extension cord or adapters.
- ◆ **DO NOT** let children play with the distiller.
- ◆ **DO NOT** touch the top of the distiller when it is operating because it becomes very hot.
- ◆ Exercise care when removing the boiling tank lid and never remove it when the distiller is operating.
- ◆ The installation and use of this product must comply with all applicable state and local laws and regulations.
- ◆ **IMPORTANT:** This distiller is designed to be used only with Pure Water, Inc. accessories and replacement components.
- ◆ This distiller is equipped with fused pump circuitry. In the event of pump failure, check the pump fuse located on the panel under the switches. Replace only with a 1 amp Slo-Blo fuse. Never use any fuse larger than specified.
- ◆ **NEVER** have the unit in the Auto Drain mode if an auto drain connection is absent.
- ◆ The physiological effects of the operation of this distiller, beneficial or otherwise have not been investigated by U.L.
- ◆ This distiller conforms to ANSI/NSF Standard 62 for the following reduction claims:

TDS Reduction	Arsenic Reduction
Fluoride Reduction	Barium Reduction
Lead Reduction	Cadmium Reduction
Mercury Reduction	Chromium (hexavalent) Reduction
Selenium Reduction	Chromium (trivalent) Reduction
Copper Reduction	
- ◆ Operating Pressure 30-100 PSI
- ◆ Mega-Classic produces 12 gallons per day (.5 gallons per hour) under normal operating conditions

Introduction

Congratulations on purchasing the finest home water distillation system on the market. With proper care and attention, the Mega-Classic will give you many years of top performance and high-quality drinking water. Please read this manual thoroughly before installing and operating your Mega-Classic.

Record Important Information

The model and serial number are found on the back panel. You should record the serial number below for future references.

Date of Purchase: _____

Model: **Pure Water Mega-Classic** _____

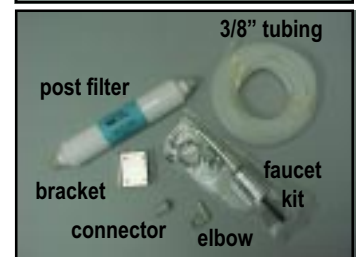
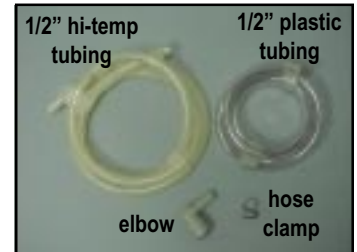
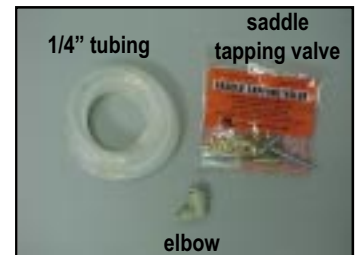
Serial Number: _____

Purchased from: _____

Included With Your Distiller

In addition to your Mega Classic distiller, your box will contain the following:

- ◆ *Incoming Water Hook-up Kit. Includes:*
 - Saddle tapping valve
 - 3/8" T x 1/4" T speedfit elbow
 - 15 feet of 1/4" food-grade tubing
- ◆ *Drain Water Hook-up Kit. Includes:*
 - Hose clamp
 - 1/2" T x 1/2" STEM speedfit elbow
 - 12 feet of 1/2" food-grade tubing
 - 12 feet of 1/2" high-temperature tubing
- ◆ *Distilled Water Hook-up Kit. Includes:*
 - Post filter
 - 3/8" T x 3/8" STEM speedfit elbow
 - Filter bracket
 - 25 feet of 3/8" food-grade tubing
 - 6" faucet kit
 - 3/8" T x 1/4" F speedfit connector
- ◆ *Owners Manual and Warranty Card*
- ◆ *Storage Tank Faucet*
- ◆ *Power Cord*



Optional Accessories

The following are optional accessories or maintenance items for the Mega-Classic. They may be purchased from your Dealer or Distributor, or directly from Pure Water, Inc.

- ◆ Mega-Classic Cart/Floor stand with castors for ease of use, cleaning and service. Also allows for proper positioning for draining the boiling and storage tanks. Stock #36996.
- ◆ Auxiliary hook-up kit for running distilled water to your refrigerator or icemaker. Stock #4540.
- ◆ Pressure tank hook-up kit to protect the pump when using with multiple dispensers. Stock #19001(tank) and #9523 (fittings).
- ◆ Lumen™ cleaner and descaler for cleaning the boiling tank. Stock #6603.
- ◆ Stainless steel polish. Stock #6606.
- ◆ Post-filter replacement cartridge. Stock #32513.
- ◆ Extended-reach faucet for your sink (an option from the standard 6" faucet). Stock #95304K.

How Your Distiller Works

The Mega-Classic is designed to produce approximately one gallon of high-quality, pure distilled water every two hours, or up to twelve gallons in a 24-hour period.

The Mega-Classic is a fully automatic unit. The water level in the boiling tank and storage tank are controlled by individual floats and a set of microswitches.

The boiling tank operates on a *modified batch* approach. Feedwater is automatically added until a high level is reached and this triggers the heating element and fan to operate. This begins the distillation cycle.

As the unit distills, the water level in the boiling tank falls. When the water level gets close to the heating element, the low-level microswitch is triggered, causing feedwater to be added until the high level is reached. If, for some reason, no water enters the boiling tank when needed, the fan and heating element will remain off until the condition is corrected.

Once the storage tank is full of distilled water, the unit will automatically shut down and the contents of the boiling tank are drained by the automatic drain valve, thereby flushing out most of the contaminants from the boiling tank. If a drain is not available for automatic draining, the unit can be set to drain manually.

The Mega-Classic will begin distilling again once the water level in the storage tank drops to approximately 3/4 full. It continues to operate until the storage tank is full again.

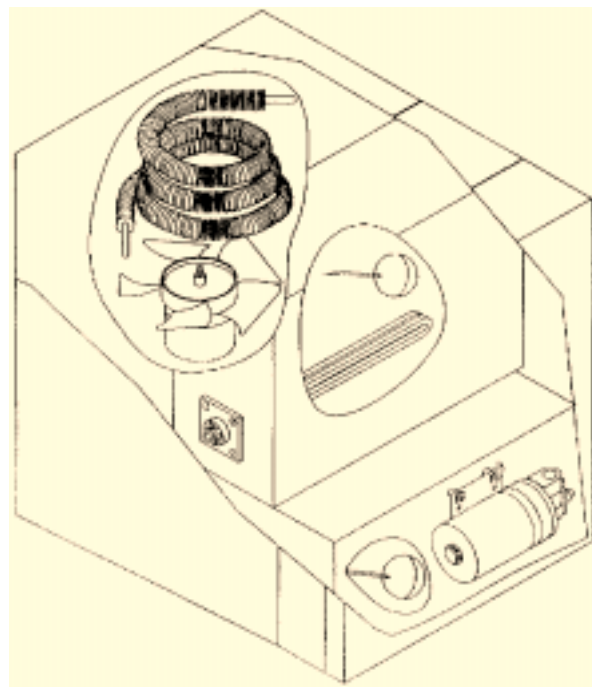
The built-in demand pump allows distilled water to be delivered to a faucet, chilled/hot water dispenser, refrigerator, icemaker or other locations as desired.

Safety Feature

An overflow sensor is installed in the drip tray of your distiller in the unlikely event that a leak or an overflow situation occurs in your distiller. Your unit will automatically shut down when the switch senses a certain level of water in the drip tray.

Special Feature

An Hour Meter is installed on your Mega-Classic. This will allow you to track the operation and assist with scheduling maintenance.



Preparing For Installation

Before proceeding with the installation, you must determine the mode of operation (Auto Drain Mode or Manual Drain Mode). Pure Water, Inc. recommends that your Mega-Classic be operated in the Auto Drain Mode, but we recognize that all locations may not have an adequate drain available.

Note: The use of softened water is recommended to minimize scale build-up in the automatic drain valve.

Auto Drain Mode: This allows the boiling tank of the distiller to drain automatically when the storage tank is full or when there is a power interruption. In the Auto Drain Model, the Mega-Classic needs to be installed in a location with an appropriate drain and drain connections, as explained in the *Connecting the Boiling Tank Drain Line* section on page 10 of this manual. **The Drain Operation Switch is preset at the factory to the “Auto” mode.**

Manual Drain Mode: This allows the boiling tank to be drained manually. This is ideal for locations that do not have an appropriate drain or connection. Manual Drain Mode will not allow the unit to drain the boiling tank automatically. If you wish to set your drain mode to manual, you must remove the side panel and locate the Drain Operation Switch on the side of the unit and change it to “Manual”. **Note:** When draining the boiling tank manually, you must depress and hold the Drain Switch in the “Override” position. This switch is located under the top panel. You must also turn the Function Switch to “Clean”. Make sure you return the Function Switch to “Distill” once manual draining is complete.

Other things to consider when installing your Mega-Classic:

- ◆ Select an area that will allow the distiller to remain level. Improper leveling could affect the production rate.
- ◆ The distiller must be located in close proximity to a water supply, floor or other drain and appropriate electrical supply source. The distiller should also be located in a well ventilated room.
- ◆ The Mega-Classic should be installed at least two feet above the floor. This is for several reasons:
 1. Easier position to observe and maintain.
 2. Better drainage from the boiling tank when it dumps the residue water.
- ◆ Electrical requirements: Isolated 115 VAC, 20 amp circuit (220 VAC, 10 amp). Check the electrical rating on the label on the rear of the distiller.
- ◆ When connecting the tubing into the quick-connect fittings, it is critical the tubing be inserted fully! The tubing should insert into the fitting 1/2” to 3/4”. Failure to do so could cause water damage. We recommend that prior to inserting the tubing, you mark the tubing 1/2” from the end being inserted into the fitting, then pull back on the tubing to verify it is attached securely. This should ensure the tubing is properly and fully installed. Also, make sure the tubing is cut squarely and is free of rough edges.

Installation

Caution: The Mega-Classic is heavy. Please use caution during installation.

CAUTION: The Mega Classic weighs approximately 75 lbs. Follow these instructions to prevent injury.

1. Open the carton from the bottom by cutting along the dotted line with a utility knife.
2. Carefully slide the carton up so the distiller is in the upright position when the carton is removed.
3. Remove and identify all parts kits as listed on page 4.

Connecting the Incoming Water Line

Notes and Cautions:

Note: The use of softened water for the raw water supply is recommended to minimize scale build-up in the boiling tank and automatic drain valve.

Note: The Mega-Classic comes standard with a saddle tapping valve. In some areas a saddle tapping valve may not be permitted. In such instances, contact your authorized Pure Water, Inc. Distributor for other water line connection options.

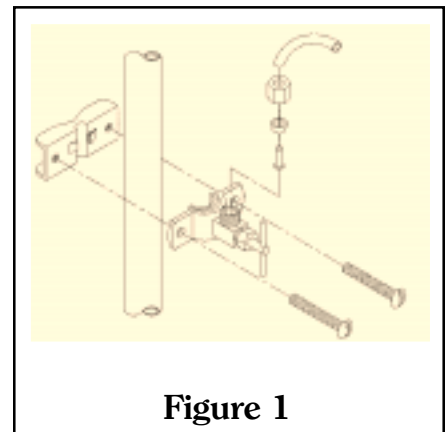
CAUTION: DO NOT use a hot water line for your supply line.

CAUTION: DO NOT turn the saddle tapping valve handle before or during installation. Be sure the piercing lance does not protrude beyond the rubber gasket. Failure to do this may result in damage to the piercing needle.

Note: The use of softened water is recommended to minimize scale build-up in the boiling tank.

To hook-up the Incoming Water Line:

1. Locate the parts kit bag identified "Raw Water Hook-Up Kit".
2. Turn the household water supply OFF.
- 3a. For installation on **copper pipes**:
 - a. Assemble the saddle tapping valve on the cold water pipe so the outlet is in a convenient direction. See figure 1.
 - b. Tighten the screws evenly. The brackets should be parallel. Tighten firmly, but do not overtighten.



Caution: Never use the hot water line for your incoming water.

- c. Connect the 1/4" plastic tubing to the saddle tapping valve.
- d. Coil a minimum of 8 feet of tubing behind the distiller to allow it to be moved away from the wall for cleaning or service.
- e. Cut the required length of tubing to run from the saddle tapping valve to the distiller.
- f. Install the speedfit elbow onto the fitting marked "Raw Water In". Pull to test.
- g. Connect the other end of the 1/4" plastic tubing to the elbow. Pull to test.
- h. Turn the saddle tapping valve handle clockwise until you feel it is firmly seated. **Note:** You have now pierced the water supply line and the valve is closed.
- i. Turn the handle counterclockwise to open the valve. Turn on the household water supply and check the connections for leaks. Tighten where required.

3b. For installation on **brass, steel, or PVC pipes:**

Note: Make sure the water supply is turned off and drain the line. Make sure you are using the COLD water line.

- a. Drill a 3/16" hole in the pipe. Use a hand drill to avoid shock hazard.
- b. Turn the saddle tapping valve handle to expose the lance beyond the rubber gasket no more than 3/16".
- c. Assemble and place the body of the valve over the hole so the lance fits into the hole. Make sure the outlet is in a convenient direction. See figure 1.
- d. Tighten the screws evenly. The brackets should be parallel. Tighten firmly, but do not overtighten.
- e. Turn the saddle tapping valve handle clockwise to close the valve.
- f. Connect the 1/4" plastic tubing to the saddle tapping valve.
- g. Coil a minimum of 8 feet of tubing behind the distiller to allow it to be moved away from the wall for cleaning or service.
- h. Cut the required length of tubing to run from the saddle tapping valve to the distiller.
- i. Install the speedfit elbow onto the fitting marked "Raw Water In". Pull to test.
- j. Connect the other end of the 1/4" plastic tubing to the elbow. Pull to test.
- k. Turn the handle counterclockwise to open the valve. Turn on the household water supply and check the connections for leaks. Tighten where required.

Caution: Never use the hot water line for your incoming water.

Connecting the Boiling Tank Drain Line & Overflow Drain Line

Notes and Cautions:

CAUTION: The boiling tank drain line delivers water in excess of 160° F to drain when actuated. Caution should be used when running this line to ensure safe placement of the tubing. The end of the tube should be secured to prevent movement during the draining cycle. If young children might be around the system, it is desirable to run the drain line through a large diameter piece of CPVC tubing which serves as a shield/insulator.

Note: Do not connect the drain line directly to a waste water drain, sewer or trap. Always allow an air gap between the drain line and the waste water to conform with local codes, and to prevent the possibility of waste water being forced back into the distiller. See figure 2.

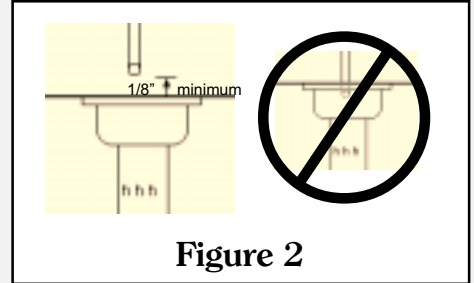


Figure 2

Caution: Always allow an air gap between the drain line and the waste water drain.

Note: If you are draining into plastic pipe, it must be rated CPVC at a minimum to handle the temperatures of boiling water. PVC is **unacceptable**.

Note: This unit, under normal operating settings, should be self draining. It is recommended that the distiller be installed with a proper drain. The location of the boiling tank drain outlet on the rear of the machine **MUST** be higher than the household drain. We recommend that you install your distiller on the custom designed stand available through Pure Water, Inc. (part #36996). Failure to install the distiller properly could result in the unit draining hot water onto the floor. If your installation plans do not call for installing with a drain, you can manually override the auto drain function by setting the unit to the Manual Drain Mode (see page 7). Pure Water, Inc. cannot be responsible for any damage resulting from improper installation.

To hook-up the Boiling Tank Drain Water Line & Overflow Drain Line:

1. Locate the parts kit bag identified “Drain Water Line Hookup Kit”.
2. Insert one end of the 1/2” high-temperature tubing into the 1/2” x 1/2” speedfit elbow. Press in firmly. Pull to test.
3. Insert the elbow into the red fitting on the back of the Mega-Classic marked “Boiling Tank Drain”. Press in firmly. Pull to test.
4. Slide the 5/8” hose clamp onto the end of the clear, flexible 3/8” tubing. Install the tubing onto the elbow marked “ Overflow Drain” on the lower rear of the unit. Tighten the hose clamp securely with a screwdriver.

5. Run the overflow drain line to the same location as the boiling tank drain line. Secure together if desired.

Connecting the Distilled Water Line and Faucet

Notes and Cautions:

Note: Always use food-grade tubing (as included with the kit) for plumbing distilled water. **NEVER** use copper, as it can *leech* into the distilled water.

To hook-up the Distilled Water Line:

1. Locate the parts kit bag identified “Distilled Water Line Kit”.
2. Insert the elbow into the blue fitting on the back of the unit marked “Distilled Water Out”. Press in firmly. Pull to test.

Note: If you purchased a pressure tank for your Mega Classic, please take note of installation instructions included with our Pressure Tank Kit now. If no pressure tank will be used, please proceed.

Caution: Never use copper tubing to run your distilled water line. It can leech into the distilled water.

To hook-up the Faucet:

1. Locate the faucet included in the Distilled Water Line Hook-Up Kit.
2. Wrap the stem of the faucet with Teflon Tape and install the faucet at the desired point of dispensing as shown in figure 3. **Note:** The channel washer and stem nut should be tightened fully and be flush to the bottom of the sink top to hold the faucet in place.

3. Install the 3/8” speedfit connector onto the bottom of the threaded stem of the faucet.
4. Determine the correct length of 3/8” tubing needed to connect the outlet of the Distiller to the faucet. Cut and route the tubing to desired locations. We recommend that you secure the 3/8” waterline to the floor joists or other structure of the house to prevent the tubing from moving during water dispensing.

Note: Leave enough extra tubing to install the filter and to move the unit for cleaning.

5. Insert one end of the routed 3/8” tubing into the speedfit connector on the bottom of the faucet and the other end into the elbow labeled “Distilled Water Out” on the back of the distiller. Press in firmly. Pull to test.

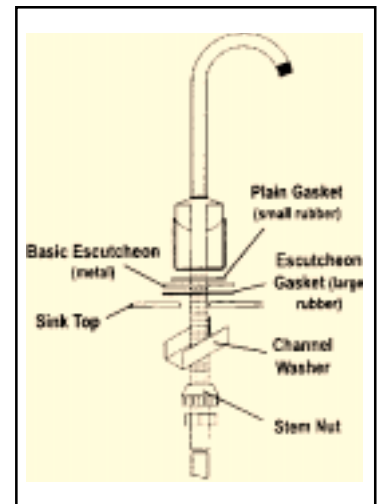


Figure 3

Notes and Cautions:

Note: Open the boiling tank lid and remove the wire tie restraining the float. This is used to prevent damage during shipment.

Note: This system must be fully grounded at all times. The electrical receptacle you use must be a fully grounded, single phase, AC 115-120 volt, 20 amp minimum circuit. If a two-pronged wall receptacle is encountered, it is the personal responsibility and obligation of the customer to contact a qualified electrician and have it replaced with a properly grounded three-pronged wall receptacle or have a grounding adaptor properly grounded. If an extension cord must be used, it should be a 3-wire, 20-amp minimum cord.

CAUTION: Do not, under any circumstances, cut or remove the round grounding prong from the electrical plug.

First-Time Start-Up, Rinsing, Sterilizing, and Filter Installation

Tools/Items Needed: 5 gallons of Distilled water at room temperature
 Liquid chlorine bleach
 Phillips screwdriver
 Utility knife
 Adjustable wrench

We recommend that you sterilize your Mega Classic before putting it into use in order to eliminate any microorganisms that may have collected in the storage tank.

To sterilize your Mega-Classic:

1. Lift the access panel from the top of the unit. See figure 4.
2. Plug power cord into the machine, then plug into the power supply.
3. Remove the top right vented panel by removing the three screws with a phillips screwdriver. See figure 4.
4. Remove the storage tank lid and set aside.
5. Pour in 2 1/2 gallons of Distilled water from the 5 gallon bottle into the storage tank.
6. Add 1 teaspoon of liquid bleach to the storage tank and mix well.



Figure 4

Caution: Do not add more than 1 teaspoon of liquid bleach into the storage tank.

Usage of safety glasses and rubber gloves is strongly recommended.

7. Replace storage tank lid and vented cover.

8. Plug power cord into the machine and plug the distiller into the power supply.
9. Turn the main power switch ON.
10. Open the faucet for 15 to 20 seconds ensuring there is a steady stream of water, then close the faucet.



Figure 4a

Caution: Do not install carbon filter until solution is completely drained.

Caution: Do not consume this solution.

11. Check water line for leaks. Tighten where required.

Caution: If a leak is present, the pump may start automatically.

12. Allow the solution to remain in the system for 10-15 minutes.
13. Open the faucet and pump the remaining water from the storage tank. When the pump shuts off, press the “PUMP OVERRIDE” switch until no water is present. See figure 4a. Close the faucet.
14. Turn the function switch to DISTILL and the fan switch to STERILIZE. The fan will shut off. See figure 4a.
15. Allow to steam sterilize for 45 minutes to 1 hour.

CAUTION: For proper sterilization, unit must run for at least 45 minutes, but longer than 1 hour may harm the distiller.

16. Switch the main power to OFF. Unplug the distiller from the power supply.
17. Remove the top, right vented panel and the storage tank lid.
18. Pour the remaining 2 1/2 gallons of distilled water into the storage tank.
19. Replace the storage tank lid and vented panel.
20. Install the carbon filter.

20.a At a location close to the Mega-Classic, install the post filter bracket using the tape installed on the bracket, or use a nail or a screw to affix to a wall.

20.b Place the post filter into the bracket and ensure it is secure.

20.c From the existing, distilled water line, cut the desired length of tubing to run from the back of the machine to the filter. Insert the tubing from the back of the machine to the inlet on the post filter. Insert the tubing from the faucet to the outlet of the post filter. Press in firmly. Pull to test.

21. Plug the unit into the power source and turn the main power switch ON.
22. Open faucet and pump out water from the storage tank until the pump shuts off. DO NOT CONSUME THIS SOLUTION.

23. Turn the fan switch to DISTILL. See figure 4a.
24. Allow distiller to operate and fill up the storage tank. Distiller will shut off automatically. This will take approximately 24 hours.
25. Open the faucet and allow to run for 3 to 4 minutes to flush out the system. DO NOT CONSUME. Close the faucet. The pump should shut off and the machine will start-up.

NOTE: If pump does not shut off, you may have a leak in your water line.

26. You now have approximately 5 gallons of water in the storage tank for consumption.

Maintenance and Cleaning

If operated in the recommended automatic drain mode, the Pure Water Mega-Classic is designed for low maintenance performance. The Mega-Classic has a built-in drain valve that flushes the contaminants and residue out of the boiling tank after each full tank of distilled water is produced. This minimizes the build-up of scale in the boiling tank.

Overall Maintenance Requirements

The following guide should be used for the maintenance of your distiller. The timing will vary according to your local water conditions. It is your responsibility to maintain your equipment. Without proper maintenance, your distiller may not produce optimum results. The following times may be far too long for your particular area, so keep track of the average time and adjust the schedule below:

Every month or every 30 gallons* : Clean the boiling tank (see below).

* More frequent if water is hard

Every 3 months: a) **Change the post filter** (see page 15).

- b) **Clean the exterior.** Use Stainless Steel Polish & Cleaner (stock #6606). It is available from your Dealer or Distributor or from Pure Water, Inc.

Every 6 months: a) **Sterilize** (see page 12).

Cleaning the Boiling Tank

Notes and Cautions:

Note: If operating in the manual drain mode, you will need to drain the boiling tank once per week.

Caution: Under no circumstances should the cleaning solution be heated and run through a distillation cycle.

Note: Failure to clean the interior can result in:

- a) Scale build-up causing premature heating element or drain valve failure.
- b) Reduced purity of the distilled water due to the possibilities of *splash over* of contaminants from the boiling tank.

To clean the boiling tank:

1. Open the auxiliary faucet at the sink and remove enough water to restart the unit. This will be evident because the fan will turn on.
2. Open the top cover and move the function switch to “Clean”. The fan will stop.
3. Carefully feel the boiling tank lid and check the temperature. If it is hot, wait at least 30 minutes for the unit to cool.
4. After the unit is cool, remove the boiling tank lid.
5. Add Lumen™ by following the directions on the package.
6. Add additional water using a jar or pitcher until the water level inside the boiling tank is above the scale line. **CAUTION:** Do not overfill.
7. Let the solution stand overnight.
8. After the scale has softened, push down and hold the Drain Switch to “Override”. This will allow the boiling tank to drain. Once the boiling tank has drained, release the Drain Switch. Rinse the tank and repeat draining procedure.
9. Return the function switch to “Distill”. The unit is now ready for normal operation.

Note: If cleaning the unit without the automatic drain connections, ensure that you have a 3-gallon container or other method of catching the drain water.

Changing the Post Filter

1. Turn the main power switch to “Off” and open the auxiliary faucet at the sink to bleed the line of pressure. Close the faucet.
2. Have a bucket available to catch any excess water in the line. Remove the post filter by releasing the fittings on each end. Use care when removing the filter because you

will need to reuse the fittings. Push in on the grey ring in the fitting, while pulling the tube out with the other hand.

3. Remove the fittings from each end of the post filter (see figure 5). Wrap the threads of each fitting with new Teflon tape, and install in the new filter cartridge. Tighten securely.



Figure 5

4. Connect the inlet side of the filter to the waterline.
5. Using a bucket, hold the filter outlet over the bucket. Turn the main power switch to “On” and allow water to flush the carbon fines out of the new filter. If the storage tank is low, depress the pump switch to “Override” to flush the filter.
6. Once flushed, turn the main power switch to “Off”.
7. Reconnect the outlet side of the filter to the waterline and turn the main power switch to “On”.

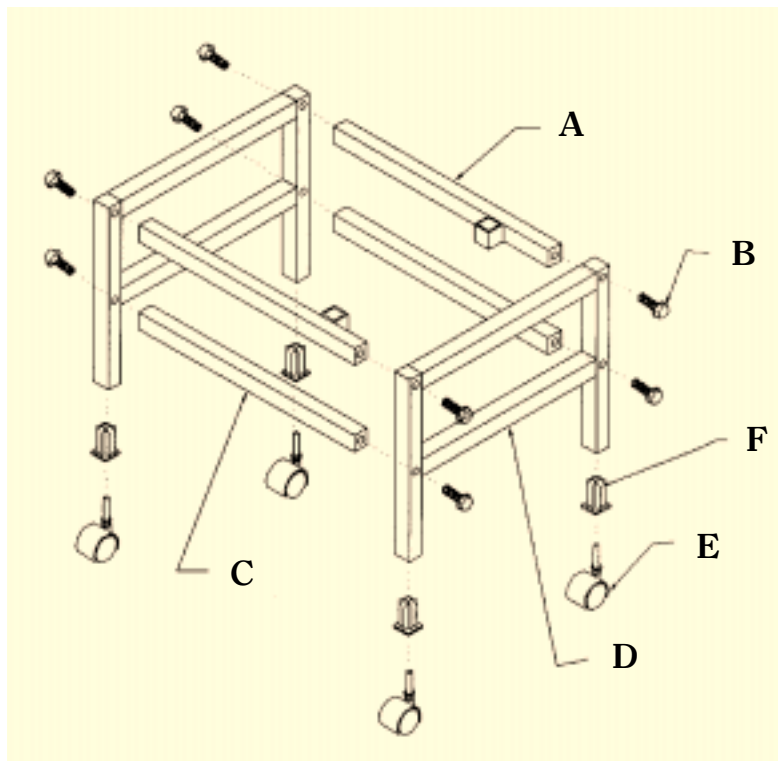
Assembly of the Optional Cart/Floor Stand

This cart is a custom fabricated accessory designed especially for the Mega-Classic. It allows for the distiller to be positioned correctly for ease of operation, draining and maintenance. It also allows for the use of a manual drain valve or faucet on your distilled water storage tank.

To assemble the Floor Stand/Cart:

1. Connect pieces (D) with pieces (A), and (C) with the bolts (B) provided. Piece (A) should be positioned on top as shown in the drawing.
2. Insert the Castor Inserts (F) into the legs of Piece (D).
3. Insert the Castors (E) into the legs. Make sure that the Castor Inserts and Castors are inserted completely into the legs.
4. Place the distiller on top of the cart, ensuring that the legs on one side of the Mega-Classic are inserted into the Leg Catchers.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
A	Side Brace with Leg Catcher	2
B	Bolt, 3/8"-16 x 1-1/2" Hex Head	8
C	Side Brace	2
D	End Frame, Welded	2
E	2" Castors	4
F	Plastic Inserts for Castors	4





The machine will not operate at all.

Note: The water level in the storage tank must be below 3/4 full before the distiller can be restarted.

- ◆ Make sure the power cord is plugged into the wall outlet and the outlet is working properly.
- ◆ Make sure the main power switch is ON. If it is, the switch may be defective and needs to be replaced. Check with a volt/ohm meter.
- ◆ Make sure the function switch is in the “Distill” position. If it is, the switch may be defective and needs to be replaced. Check with a volt/ohm meter.
- ◆ Make sure the incoming water supply is turned on and is flowing into the boiling tank.
- ◆ Check for excessive water in the drip tray. Drain if necessary.



The boiling tank will not fill with water automatically.

Note: Make sure the saddle tapping valve or utility hook-up valve is turned ON to supply the feed water.

- ◆ If the float ball inside the boiling tank is resting against the support arm and is fully depressing the low-level microswitch, you probably need to replace the microswitch. Check with a volt/ohm meter.

If the microswitch checks out ok, and the heating element and fan come on, then you need to replace the heating element relay. Another indication of a bad heating element relay is the reset will pop.

- ◆ If the solenoid is making a buzzing noise, your feed water supply line may be clogged or you may have a defective solenoid valve. Check it with a volt/ohm meter.



The fan will not operate or is making excessive noise.

- ◆ If the fan is mounted properly on the storage tank, the fan blade is not loose around the motor shaft and the blade spins freely when turned by hand without hitting anything, then you may have a defective fan motor. Check with a volt/ohm meter.
- ◆ If the fan switch is in the “On” position, you may have a defective switch. Check with a volt/ohm meter.
- ◆ If the function switch is in the “Distill” position and the heating element is not operating either, you may have a defective function switch. Check with a volt/ohm meter.



The distiller fills to normal operating level, but the heating element will not heat or bring water to a boil.

- ◆ If the reset is not popped or the fan is running and the boiling tank is full of water, you may have a defective heating element.
- ◆ If water continues to fill the boiling tank after draining the tank, and the fan isn't operating, then you may have a defective high-level boiling tank micro-switch. Check with a volt/ohm meter.
- ◆ If the function switch is in the "Distill" position, the fan is not operating, you may have a defective function switch. Check with a volt/ohm meter.



The boiling tank overflows with water.

Note: If your machine is new, make sure you have removed the wire tie used to restrain the float during transit.

- ◆ If the float actuating arm is depressing the high-level microswitches (the bottom ones) and the float rod is moving freely and floats accordingly with the water level, you may have a defective microswitch. Check with a volt/ohm meter.

If the microswitches check out ok, and the heating element and fan come on, then you need to replace the heating element relay. Check with a volt/ohm meter.

- ◆ If the microswitches and heating element relay check out ok, then you may have a defective solenoid. Turn the main power switch to "Off". If water continues to flow into the boiling tank, then you need to replace the solenoid.
- ◆ If the float is not moving freely, you may need to install a new bushing and o-ring float repair kit.
- ◆ If the float ball is full of water, replace the float ball.



Machine does not shut off when storage tank is full.

- ◆ If the storage tank high-level microswitch is fully depressed, then you may have a defective microswitch. Depress both the boiling tank and storage tank high-level microswitches. If the unit does not shut down, remove one wire from the boiling tank microswitch. If the unit shuts down, replace the boiling tank microswitch. If the machine does shut down, leave the wire off and remove one wire from the storage tank high-level microswitch. If the unit shuts down, replace the storage tank microswitch.
- ◆ If the unit does not shut down when removing the wires from testing the boiling tank and storage tank microswitch wires, then you need to replace the main control relay.



The boiling tank automatic drain valve does not open or shut.

- ◆ Check the Drain Operation Switch to verify that it is in the “Auto” mode.
- ◆ If water continues to drain during operation of the distiller, you may have a defective drain valve. Heavy scale may be preventing the drain valve from closing completely. Clean the boiling tank or replace the drain valve.
- ◆ If there is no water coming from the drain valve or it is draining slowly, you may have scale build-up in the drain valve or a defective drain valve. Clean or replace the drain valve.

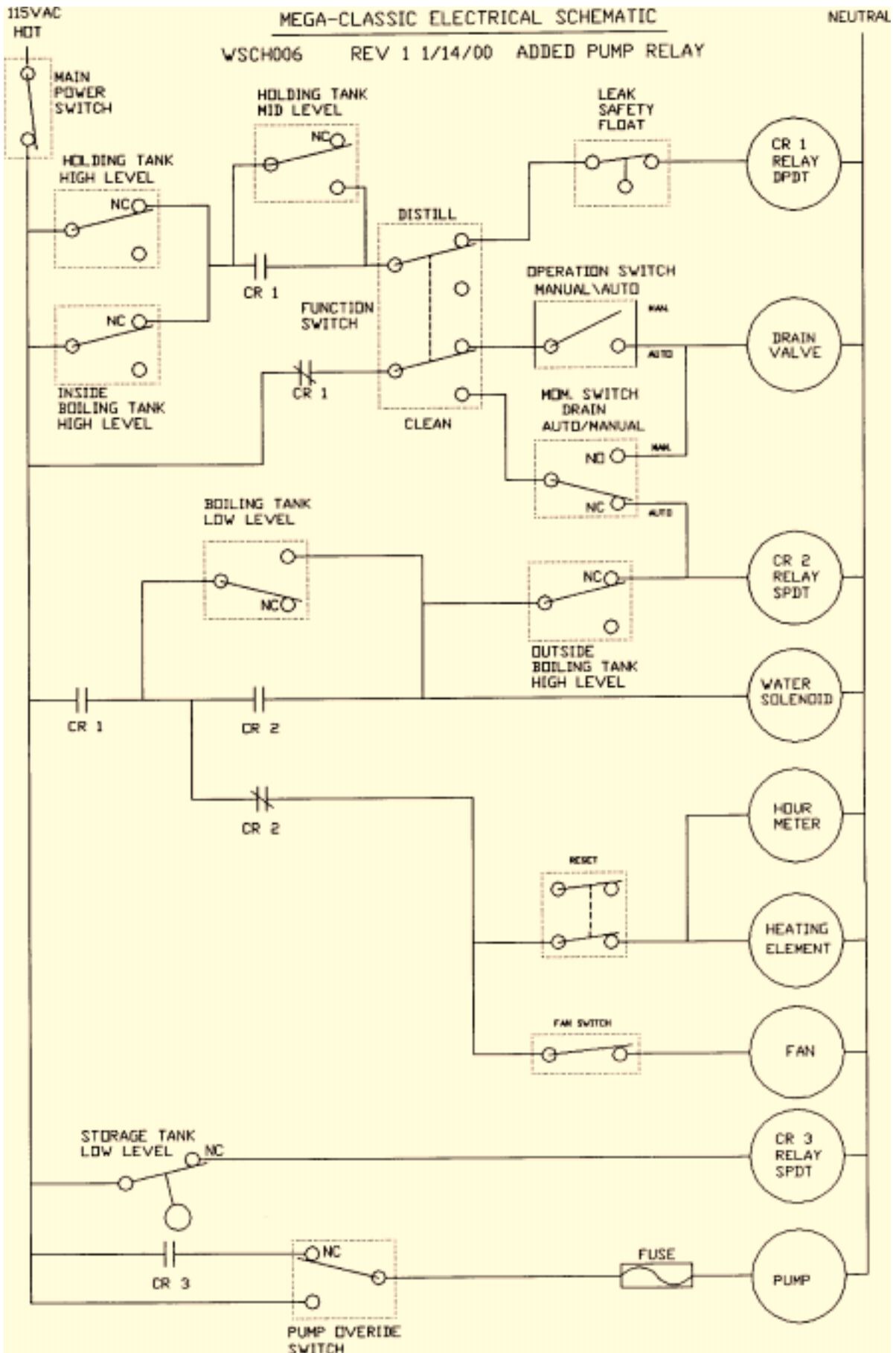


The demand pump does not work properly or not at all.

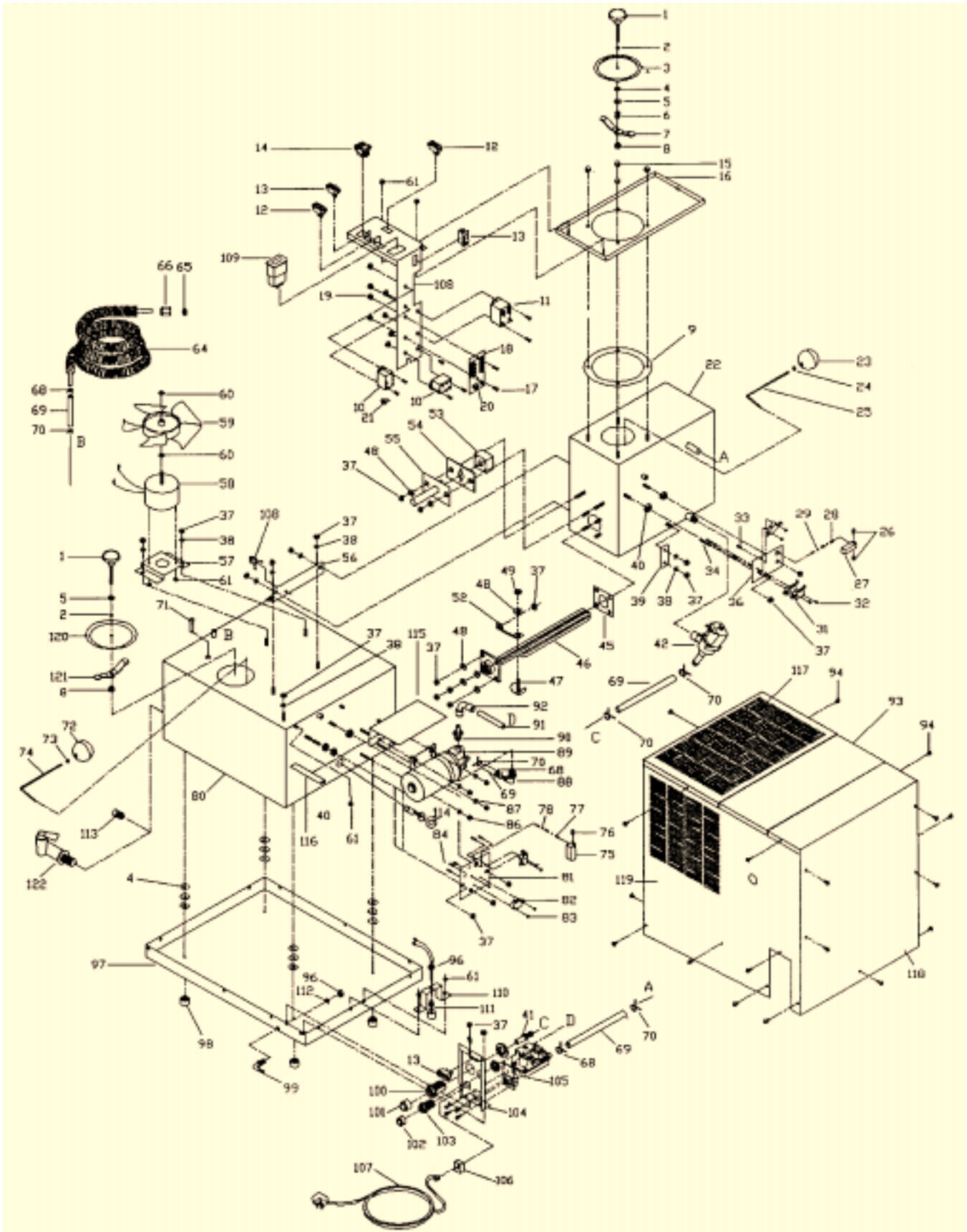
Note: The storage tank must be at least 1/4 full for the pump to operate.

- ◆ If the unit is plugged in and the main power switch is “On”, you may have a blown fuse, defective pump switch, defective pressure switch or defective pump. Check with a volt/ohm meter.
- ◆ If pump cycles on and off, but no water is delivered or it will not shut off after you close the faucet or cycles on and off when not in use, you may have leaks in your water line, a defective pressure switch, or defective pump.
- ◆ If pump does not deliver water to the faucet at a steady pressure, you may have a defective pump.

Electrical Schematic



Exploded View



Parts Listing

Key #	Part #	Description	Key #	Part #	Description
1	8009	Lid knob w/stud	64	9513	Condensing coil
2	6022	Lid o-ring	65	9530	Compression ring, 3/8"
3	519	Lid disc	66	9510	Compression nut, 3/8"
4	6049	Gasket	67*	626	Condensing Coil Kit (incl. #64-#66)
5	9009	Flat washer, 1/4"	68	9922	Hose clamp, 19/32"
6	9085	Lid spring	69	9541	Silicone tubing
7	402B	Lid crossbar w/nut	70	9921	Hose clamp, 5/8"
8	224-0003	Locknut, 1/4-20	71	8014	Air Filter
*	409	Lid Assembly (includes #1-#8)	72	9519	Float ball
9	6010	Boiling tank gasket	73	9018	Hex nut, 6-32
10	7206	Relay, heating element	74	525	Float rod
11	7280	Relay, storage tank	75	9091	Storage tank actuating arm
12	7227	Momentary water switch (2 each)	76	9024	Set screw
13	7228	ON/OFF switch (2 each)	77	9080	Float bushing
14	7221	Function switch	78	6021	Float o-ring
15	9039	Cap Nut, 1/4-20	79*	655	Float Kit (includes #72-#79)
16	32028-02	Tray, boiling tank, studded	80	36519	Storage tank, studded
17	9095	Screw, 8-32 x 1/2"	81	32022	Switch mounting plate
18	7215	Terminal strip	82	7209	Microswitch
19	9043	Hex Nut, 8-32	83	9041	Hex nut, 4-40
20	7217	1 amp slo-blo fuse	84	9001	Screw, 4-40 x 5/8"
21	7127	3/16" terminal tab	85*	660	Microswitch Kit (includes #82-#84)
22	32501B-02	Boiling tank, studded	86	9070	Lock nut, 10-24
23	9519	Float ball	87	9094	Flat washer, #10
24	9018	Hex nut, 6-32	88	9573	Nylon hose BARB elbow
25	514	Float rod	89	32505	Demand pump
26	9024	Set screw	90	9606	Stem adaptor
27	9098	Actuating arm	91	9577	3/8" tubing
28	9080	Float bushing	92	9615	Speedfit union elbow, 3/8"
29	6021	Float o-ring	93	32033	Cladding access door
30*	659	Float Kit (includes #23-#29)	94	9029	Sheet metal screw
31	7201	Microswitch	95	9047	Speed clip nut
32	9041	Hex Nut, 4-40	96	9048	Nut, hex, 1/8"
33	9001	Screw, 4-40 x 5/8"	97	32037W-02	Stainless steel tray, studded
34	9030	Screw, 4-40 x 1-1/8"	98	8011	Appliance feet
35*	654	Microswitch Kit (includes #31-#33)	99	95504	Nylon elbow
36	32023	Boiling tank switch plate	100	9611	Bulkhead union, 1/2"
37	9045	Hex nut, 1/4-20	101	9617	Red collet cover, 1/2"
38	9032	Lock washer, 1/4"	102	9618	Blue collet cover, 3/8"
39	32006	Boiling tank mounting bracket	103	9612	Bulkhead union, 3/8"
40	8070	Nylon spacer	104	32036	Pan, connection, SS
41	9633	Adaptor, STEM to BARB	105	7219	Solenoid
42	7256	Automatic drain valve, NC	106	7275	IEC Female connector
43	7230	Cable holder, w/latch	107	7276	IEC Power cord
44	9046	Star washer, #10	108	32035I	Plate, switch, electrical
45	6005	Heating element gasket	109	219-0227	Hour meter
46	7070	Heating element	110	32029	Bracket, safety float
47	400A-02	U-clamp w/stud	111	213-0037	Switch, level, safety
48	9009	Flat washer, 1/4"	112	9627A	O-ring, 3/8"ID x 9/19"ID
49	9061	Hex nut, 10-24	113	9624	Plug, 3/8"-16, NPT, SS hex head
50*	634	Heating Element Kit (incl. #45-#49)	114	110-9057	Float, level control
51*	661	U-Clamp Kit (includes #47-#49)	115	32039	Pump cover bracket
52	508	Heat tab	116	6070	Grommet protector strip
53	7069	Reset	117	32034	Top Cladding w/slots
54	510	Reset retainer board	118	36031	Cladding, right side panel
55	32520-02	Plate, reset retainer, studded	119	36032	Cladding, wrap around
56	32007	Boiling tank mounting angle	120	548	Lid, storage tank
57	541	Fan motor mounting bracket	121	402C-01	Lid Crossbar, w/nut, storage tank
58	32504	Fan motor	122	95315	Faucet, Black, lock open
59	7010	Fan blade	*	410A	Storage Tank Lid Assembly
60	9092	Push nut	**	32050	Boiling tank side insulation
61	9003	Lock nut, 8-32	**	32051	Boiling tank bottom insulation
62*	653	Fan & Motor Kit (includes #58-#61)			
63*	639	Fan Blade Kit (includes #59-#60)			

* parts kit ** not shown on exploded view

