

# Liberty-Classic™



## Operator's Manual

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# Important Safety Information

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- 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 should 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 accessories and replacement components.
- **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.
- Operating Pressure 30-100 PSI
- Liberty Classic produces 10 gallons per 24 hours of operation under normal operating conditions.

# Introduction

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

## Record Important Information

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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 Liberty Classic    

Serial Number: \_\_\_\_\_

Purchased from: \_\_\_\_\_  
\_\_\_\_\_

## Included With Your Distiller

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

Incoming Water Hook-up Kit. Includes:

- Saddle tapping valve
- 1/4" T x 1/4" T speedfit elbow
- 25 feet of 1/4" food-grade tubing
- Waterline Strainer and Compression Nuts.



Drain Water Hook-up Kit. Includes:

- Hose clamp
- 1/2" T x 1/2" STEM speedfit elbow
- 12 feet of 1/2" flexible 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
- 3/8" Tube x 2/8" Stem Extended Elbow
- 12" of 5/8" Silicone Tubing



Owners Manual and Warranty Card

Distilled Water Outlet Faucet

Power Cord

# Optional Accessories

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

- Auxillary Tank Stock #35509. Add additional storage to the distiller by adding as many tanks as desired. Each tank adds 18 gallons of storage.
  - Emergency Hand Pump. Allows you to draw water from the auxillary tank when the power is out. To be used only for emergencies. (Note: Requires an auxillary Tank)
- Pump Kit Stock #35050. By adding a pump to the system, water will automatically be pumped to a faucet that you install at a desired location.
  - Auxiliary hook-up kit for running distilled water to your refrigerator or icemaker. Stock #19009. (Note: Requires a pump)
  - Pressure tank hook-up kit to protect the pump when using with multiple dispensers. Small size pressure tank. 19009B. (Note: Requires a pump)
  - Extended-reach faucet for your sink (an option from the standard 8" faucet). Stock #95304K. (Note: Requires a pump)
- Lumen™ cleaner and descaler for cleaning the boiling tank. Stock #6603.
- Stainless steel polish. Stock #6606.
- Post-filter replacement cartridge. Stock #9406A.
- If the saddle-tapping valve is not allowed in your location, then a Utility Hook-up Kit Stock #42 or an Angle-Stop valve Stock can be used.

# How Your Distiller Works

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

The Liberty 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.

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 reaches the “low level”, a 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 turn off until the condition is corrected.

Once the storage tank is full of distilled water, the unit will automatically shut off.

The Liberty Classic will begin distilling again once the water level in the storage tank drops by 1 to 1.5 Gallons. It continues to operate until the storage tank is full again.

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

Additional Storage can be added by the Auxillary Storage Tank(s). The auxillary storage tanks do not contain any additional floats, but are controlled by the internal storage tank controls.

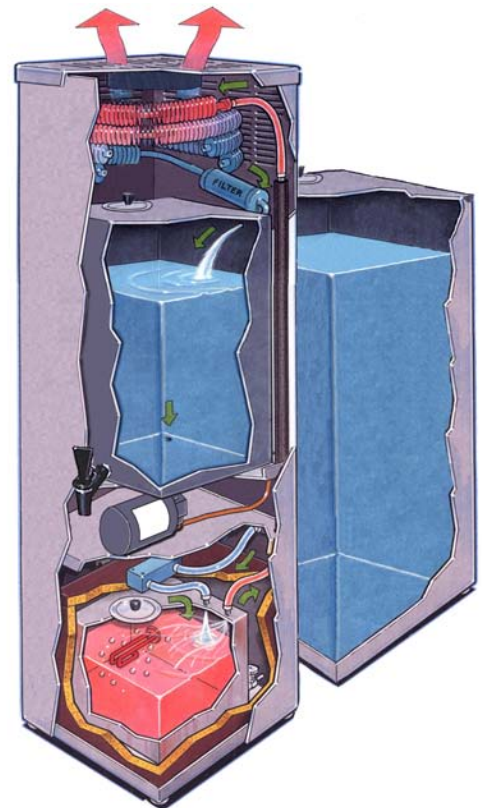
**Note:** Scale Buildup in the boiling tank is to be expected. This scale does not affect the quality of distilled water, but can affect the efficiency and life of the heating element. The unit has a removable boiling tank for ease of cleaning.

## 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.

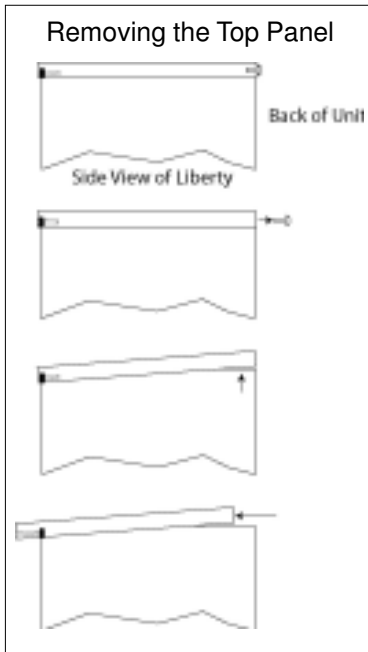
## Special Feature

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



## Accessing the Inside of the Distiller

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The Liberty Classic is designed so that there are no exterior screws on the front and sides of the unit. The access point for the unit is at the back of the unit. 2 panels on the back can be removed to service the unit. The top panel of the unit (with fan attached) can be removed. To attach the top panel to the unit, two threadless pins are used. To remove the top panel, you should:

1. Remove the 2 screws from the back of the unit.
2. Lift the back of the top panel so that it clears the top of the side panels.
3. Slide the top panel forward so that the pins completely clear the front panel.
4. Disconnect power, and disconnect fan wires if necessary.

**Note:** When putting the top panel back on the unit, apply a small amount of lubricant to the pins so that they slide through the holes smoothly.

**Warning:** Failure to remove the top panel using this method could result in damage to the unit.

## Preparing For Installation

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Things to consider when installing your Liberty Classic:

- Select an area that will allow the distiller to remain level. Improper leveling could affect the performance. If auxiliary storage tanks are installed with this unit, they MUST be on the same level as the Liberty Classic.
- The distiller must be located in close proximity to a water supply and an appropriate electrical supply source. The distiller should also be located in a well ventilated room.
- 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! Make sure the tubing is cut squarely and is free of rough edges. 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.

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

**CAUTION:** The Liberty Classic weighs approximately 70 lbs. Follow these instructions to prevent injury.



# Basic Installation

## Connecting the Incoming Water Line

**If you are installing an optional pump or an optional auxiliary tank, complete the Basic Installation first, then proceed to the additional installation sections.**

**Caution: The Liberty Classic is heavy. Please use caution during installation.**

### **Notes and Cautions:**

**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 Liberty 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 Distributor for other water line connection options.

### **Before Installation:**

1. Remove the bottom panel on the back of the unit and remove the boiling tank. Remove the bubble wrap.
2. Open the boiling tank lid and remove the tie holding the float in the shipping position. Make sure that the float moves up and down freely.
3. Insert the boiling tank into the Liberty and connect the hoses to the top of the tank. Connect the wire assemblies together. The boiling tank has a 2-pin and a 3-pin connector. If a pump is installed in the distiller, do not connect the pump electrical connection until the storage tank is full of distilled water.
4. Remove the 2 shipping ties that are installed on the fan. If you have to remove the top panel, then follow the instructions on page 7.

### **To hook-up the Incoming Water Line:**

1. Install the Saddle Tapping Valve per the directions on the bag.  
**Note:** Do Not pierce the pipe until all of the raw water connections have been made.
2. Connect the 1/4" plastic tubing to the saddle tapping valve.
3. 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.
4. Cut the required length of tubing to run from the saddle tapping valve to the distiller.
5. Install the in-line strainer from the parts kit. Make sure that the direction arrow corresponds with the flow of water.
6. Install the speedfit elbow onto the fitting marked "Raw Water In". Pull to test.
7. Connect the other end of the 1/4" plastic tubing to the elbow. Pull to test.

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

8. Turn the handle counterclockwise to open the saddle tapping valve. Check the connections for leaks. Tighten where required.

## Connecting the Distilled Water Faucet

1. Install the Gasket onto the threads of the faucet. If the teflon tape becomes bunched, then replace the tape.
2. Slowly screw the faucet into the threads on the front of the distiller. If the faucet tilts, then you are cross-threading! Unscrew the faucet and start over.
3. Tighten the faucet until it is firm, and the gasket cannot be rotated around the faucet, and the orientation is correct to allow water to flow out of the faucet.

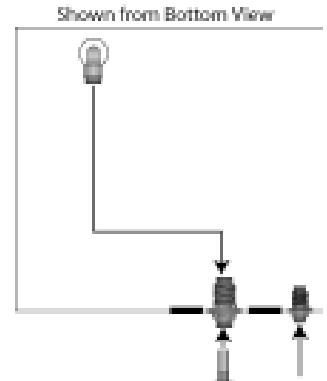
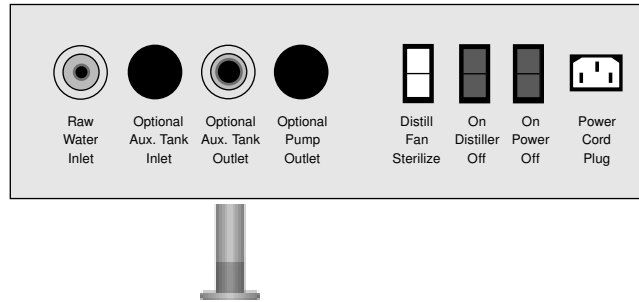


# Additional Installation Information

**The Liberty Classic is designed to be the most versatile steam-distillation system on the market. The standard unit can be upgraded so that a pump and/or additional storage can be added. With each of these options, the unit must be configured specifically for these options.**

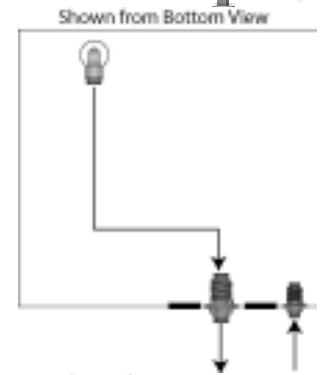
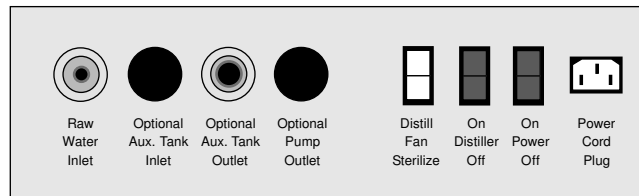
### Standard Configuration:

The unit has a gravity line from the storage tank to one bulkhead on the back of the unit.



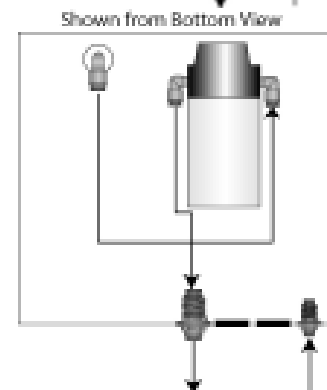
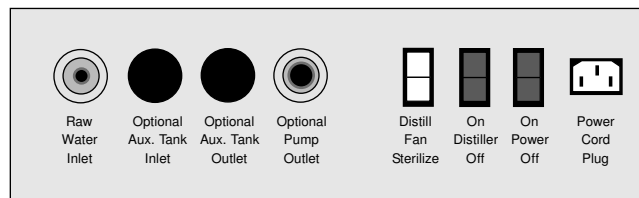
### Auxillary Tank Configuration:

The unit has a gravity line from the storage tank to one bulkhead on the back of the unit. This is connected to the Auxillary Tank.



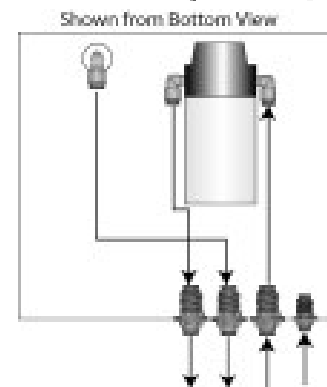
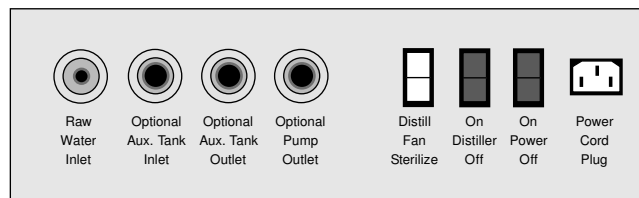
### Pump Configuration:

The unit has a gravity line from the storage tank to the Pump. Then a pressurized line to one bulkhead on the back of the unit.



### Pump and Auxillary Tank Configuration:

The unit has a gravity line from the storage tank to one bulkhead on the back of the unit. This goes to the top connection on the Auxillary Tank. The bottom connection on the Auxillary Tank goes to the unit and to the pump inlet. Then the final pressurized line is from the pump to the final bulkhead fitting on the back of the unit.



# Additional Installation for an Optional Auxillary Tank

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**Complete the Basic Installation Section Before Continuing to this section.**

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

## To hook-up the Auxillary Tank(s):

1. Turn the Liberty Classic off, and drain any distilled water out of the storage tank before installation.
2. Place the Auxillary tank next to or behind the Liberty Classic. The base of the Liberty Classic and the Auxillary Tank must be the same. They must be on a level surface.
- 3a. If the Liberty Classic does not have a pump, then:
  - a. Connect 3/8" tubing from the Optional Aux. Tank Outlet on the Liberty Classic to the Bottom Fitting on the Auxillary Tank. 3/8" Elbows are included and can be used if needed.
  - b. Put a plug in the top fitting on the Auxillary Tank.

**Note:** When using an auxillary tank and no pump, the top 10 Gallons of the auxillary tank will be usable from the distilled water faucet on the front of the unit. A hand pump must be used to draw the remaining 8 gallons out of the tank in the event of an emergency.

- 3b. If the Liberty Classic does have a pump, then:
  - a. Connect 3/8" tubing from the Optional Aux. Tank Outlet on the Liberty Classic to the Top Fitting on the Auxillary Tank. 3/8" Elbows are included and can be used if needed.
  - b. Connect 3/8" tubing from the Optional Aux. Tank Inlet on the Liberty Classic to the Bottom Fitting on the Auxillary Tank. 3/8" Elbows are included and can be used if needed.

**Note:** The distilled water will travel from the internal storage tank to the auxillary tank. When the pump draws water it will be drawn from the bottom fitting on the Auxillary Tank.

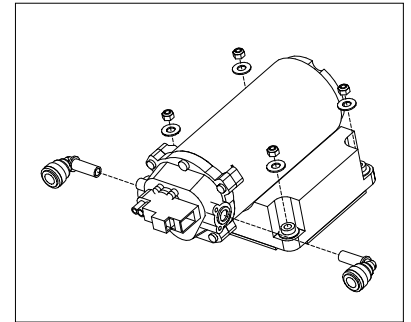
**Gravity ensures that the internal and Auxillary Storage Tanks will fill at the same rate, and maintain the same water level.**

## Additional Installation for an Optional Pump

*This page is installation instructions for adding a pump in a Liberty Classic. If your machine was ordered with a pump already installed, please proceed to Page 13.*

***If you would like to add a pump to your Liberty Classic, please contact your local distributor and ask for part # 35050.***

1. Drain the Storage Tank completely. This can be done through the distilled water faucet in the front of the machine, and then draining water from the bulkhead fitting labeled "Aux Tank Outlet" on the back of the unit. If you have a clean container, the distilled water can be saved and used to refill the storage tank.
2. Unplug the distiller from the power source and allow to cool if the unit is hot.
3. Disconnect and remove the boiling chamber so that there is adequate room to work.
4. Install the 2 elbow fittings into the pump.
5. Install the pump on the 4 studs on the underside of the Liberty Mid Shelf. Use the 1/4" washers and #10 Locknuts to secure the pump. Make sure to tighten the locknuts to that the rubber feet on the pump are compressed.
6. Install the 3/8" bulkhead fitting into the "Opt. Pump Outlet" location on the back of the unit.
7. Remove the tubing that is from the storage tank outlet fitting to the "Aux Tank Outlet" fitting.
8. Install 3/8" tubing from the storage tank outlet fitting to the pump inlet elbow.
9. Install 3/8" tubing from the pump outlet elbow to the bulkhead fitting in the "Opt. Pump Outlet" location.
10. Fill the storage tank with the water that you have saved, or allow the unit to run until the storage tank is full.
11. Connect the electrical 3-pin connectors together.
12. Check for leaks.



## Additional Installation for a Remote Pump Faucet

The pump that is used on the Liberty Classic is different from the pumps on other Pure Water Brand Products. If this pump runs for more than 10 minutes continuously, then the pump will turn off. This is a safety feature. **TO START THE PUMP AGAIN, UNPLUG THE UNIT AND PLUG IT BACK IN.**

**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.

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

**Note:** If you purchased an icemaker Hook-up Kit for your Liberty Classic, please take note of installation instructions included with the Kit.

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

1. Locate the faucet in the Parts 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.

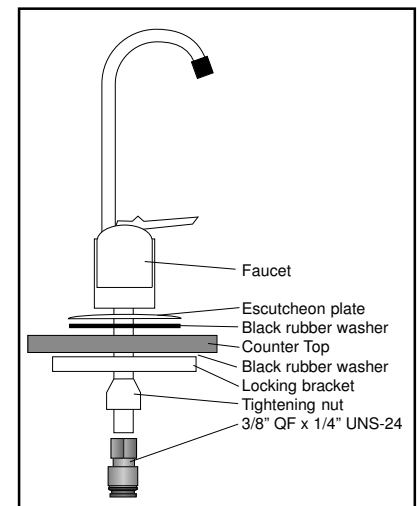


Figure 3

**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 "Optional Pump Outlet" on the back of the distiller. Press in firmly. Pull to test.

## **Notes and Cautions:**

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

**Note:** Open the boiling tank lid and remove the wire tie restraining the float. The wire tie 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, 15 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.

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

We recommend that you sterilize your Liberty Classic before putting it into use in order to eliminate any microorganisms that may have collected in the storage tank. Steam-Sterilization should be done every 6-12 months, or if you have not used any distilled water for more than 4 weeks at a time.

To steam-sterilize we will allow the boiling tank to heat the water and make steam. Instead of cooling the steam and making distilled water, we turn the fan off and allow hot steam to pass through the condensing coil, through the high-temperature silicone tube, and into the storage tank. We allow the tank to heat to a temperature that would kill any potential biological organisms.

**Caution:** The post-filter cannot be installed on the distiller when you steam sterilize. The filter is made from plastic that is not designed to reach high temperatures. Install the high-temperature silicone tube in place of the filter.

1. Place the silicone tube between the condensing coil outlet and the storage tank inlet.
2. Turn the Power Switch On, The Distiller Switch On, and the Fan Switch Off. The boiling tank will automatically fill with water, and the heating element will turn on.
3. 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.

4. Switch the Power Switch to OFF. Unplug the distiller from the power supply.

**Note:** Unit will become hot during steam sterilization.

**Note:** After completing a steam-sterilization, a new filter should be installed on the unit. If this is the first-time startup, then the installation of the post-filter will happen on the next page.

5. Remove the top panel (Follow Instructions on page 7).
6. Pour the a 5 gallon bottle of distilled water into the tank.
7. Replace the storage tank lid and top panel.
8. Install the carbon filter.
  - a. Before Installing on the machine, run distilled water through the post-filter. This will remove any carbon dust from the filter.
  - b. Install the 2 elbow fittings into the filter. The extended elbow will connect to the higher tube.
  - c. Remove the Silicone Tube and install the filter between the condensing coil outlet and the storage tank inlet.
9. Plug the unit into the power source and turn the main power switch ON.
10. Turn the Fan switch to ON. The distiller will now run automatically and fill the storage tank. If you do not have a pump, then the unit is fully installed.

**If you have a pump installed on your Liberty Classic:**

1. If you have a pump installed in the Liberty Classic, connect the pump 3-Pin electrical connection. The pump will turn on and start pumping water from the distilled water storage tank.
2. Open the remote faucet allow water to flow until there is a steady flow of distilled water. Close the faucet.
3. Check all plumbing connections for leaks. Fix if necessary.



# Maintenance and Cleaning

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## 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:

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

- Every 4-6 months:**
- a) **Change the post filter** (see page 16).
  - b) **Clean the exterior.** Use Stainless Steel Polish & Cleaner (stock #6606). It is available from your Dealer or Distributor or from Pure Water.
  - c) **Clean the boiling tank.** The boiling tank needs to be cleaned more often in areas that have hard water. (#6603)

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

## Cleaning the Boiling Tank

**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 failure.*
- b) *Reduced purity of the distilled water due to the possibilities of splash over of contaminants from the boiling tank.*
- c) *Reduce the efficiency of the heating element.*

### To clean the boiling tank:

1. Turn the Distiller Switch to OFF. If the unit is operating, allow the unit to cool.
2. Remove the Bottom Back Panel from the unit.
3. Disconnect the Boiling tank 2-pin and 3-pin electrical connector connections.
4. Disconnect the Silicone tubing from the inlet and outlet connections on the top of the boiling tank.
5. Remove the Boiling Tank from the Liberty.
6. Clean the tank using the Pure Water cleaning agent Lumen. Follow instructions on the Lumen container.
7. When clean, rinse the inside and reinstall. Turn the distiller Switch to ON.

## Changing the Post Filter

1. Turn the Distiller Switch to Off. If hot, allow unit to cool.
2. Using Distilled water, run water through the post-filter. This will remove any carbon dust from the filter.
3. Remove the old filter and install the 2 elbow fittings from the old filter into the new filter. The extended elbow will connect to the higher tube.
4. install the new filter between the condensing coil outlet and the storage tank inlet.
5. Turn the Distiller Switch to On.

## Troubleshooting

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### The machine will not operate at all.

**Note:** If the Liberty Classic storage tank is more than 3/4 full, then the unit will not start until the water level lowers.

**1**

- Make sure the power cord is plugged into the wall outlet and the outlet is working properly.
- Check for excessive water in the drip tray. Drain if necessary.
- Make sure the main power switch is ON. If it is lit, then power is going through the switch. Check with a volt/ohm meter.
- Make sure the Distiller Switch is ON. The lighted switches should be on. If the Distiller Light is out, then the Machine is not calling for water and the storage tank microswitches and/or the relay. Check with a volt/ohm meter.
- Make sure the incoming water supply is turned on and is flowing into the boiling tank.

### 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.

**2**

- 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.

**3**

### The fan will not operate or is making excessive noise.

- Check that the light on the Distiller Switch is ON. If it is not, then the fan should not be running.
- If the fan switch is in the ON position, you may have a defective switch. Check with a volt/ohm meter.

# 4

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 microswitch. Check with a volt/ohm meter.
- If the distiller switch is On and lit, the fan is not operating, you may have a defective fan switch. Check with a volt/ohm meter.

# 5

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.

# 6

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. Check with a volt/ohm meter.
- If the unit does not shut down, then you need to replace the main control relay.

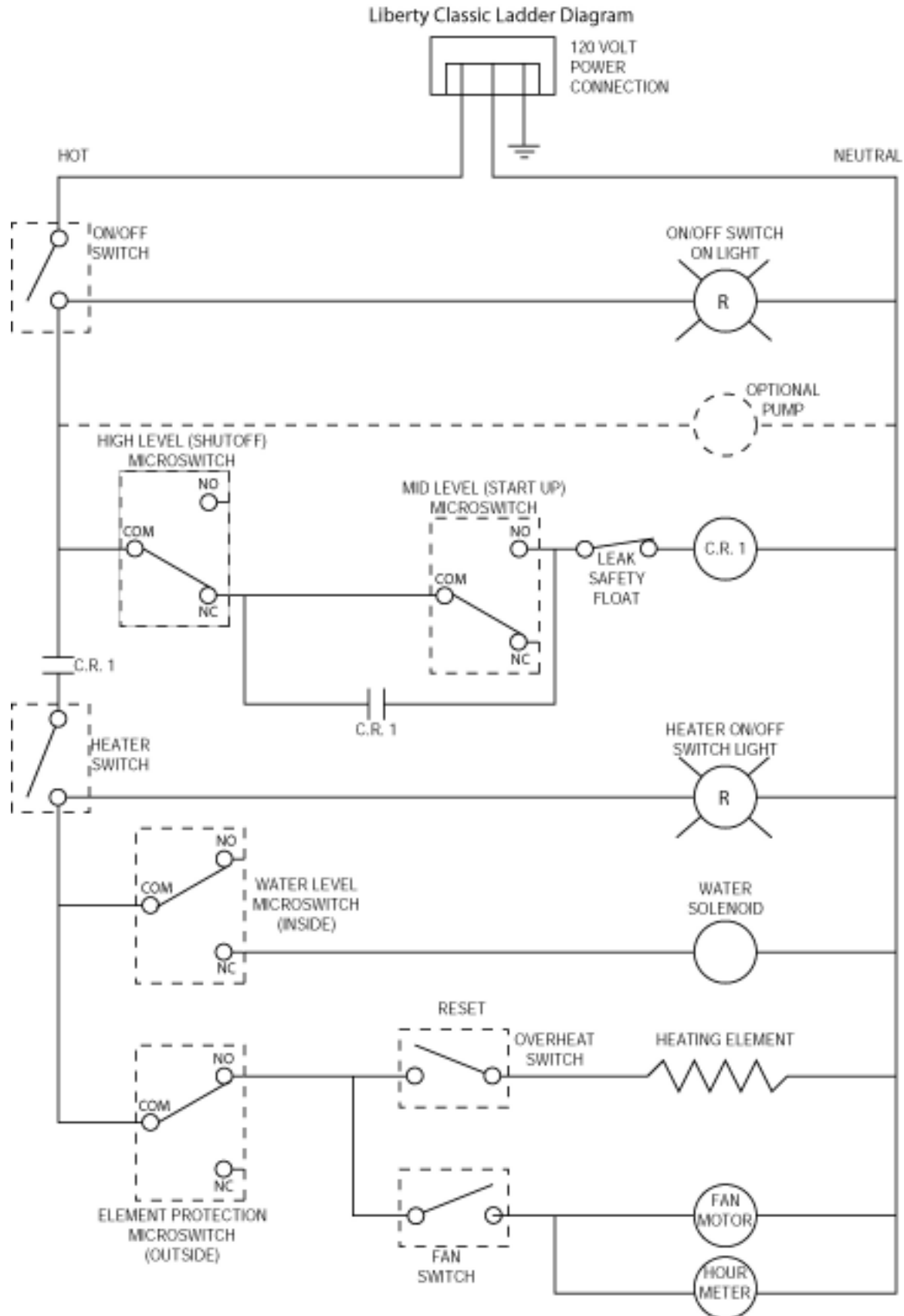
# 7

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

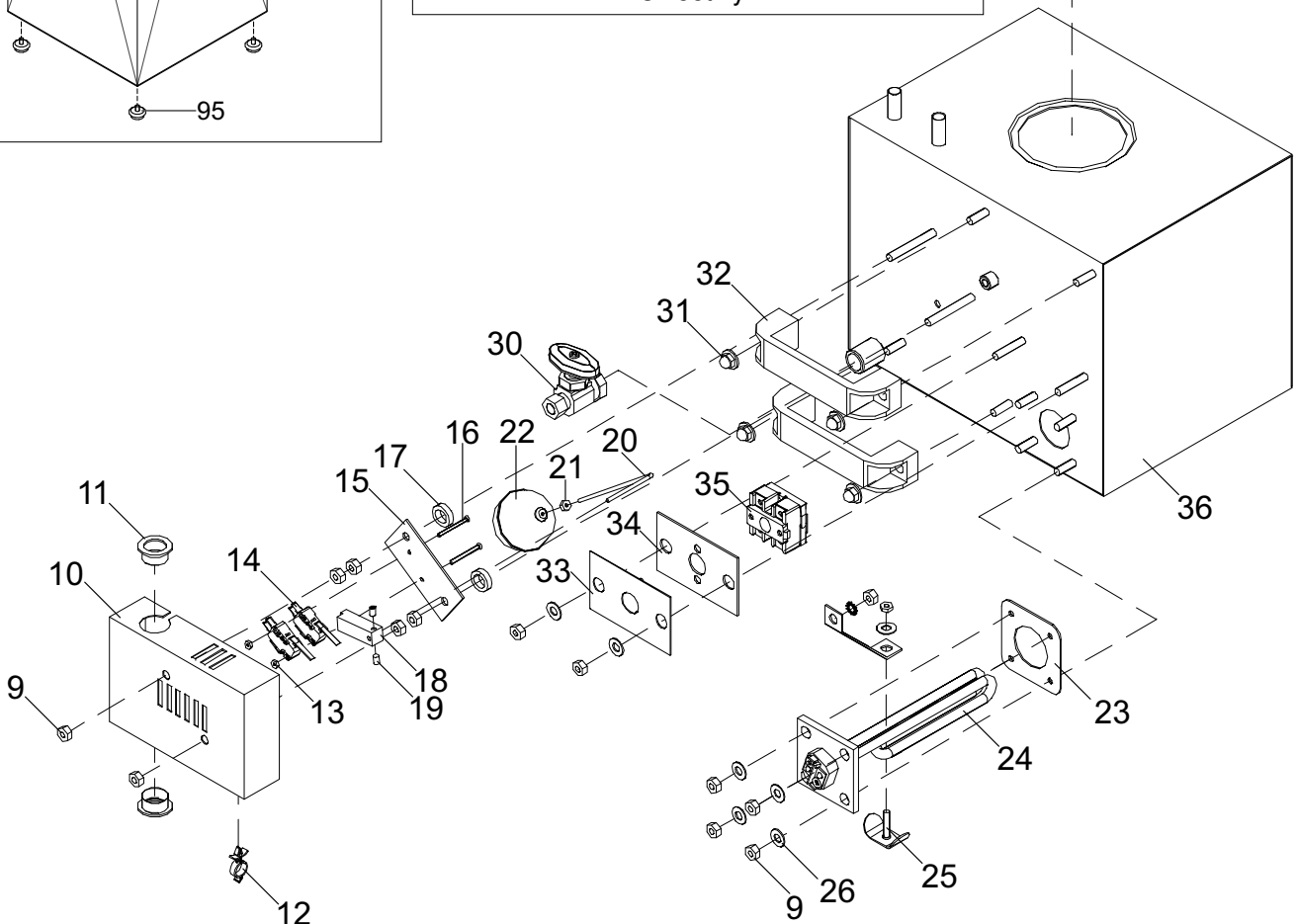
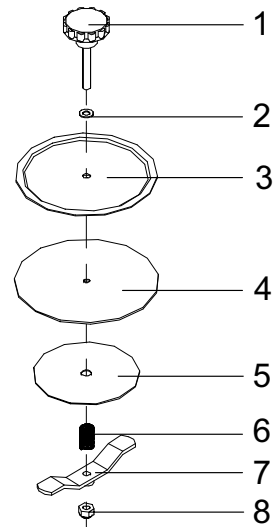
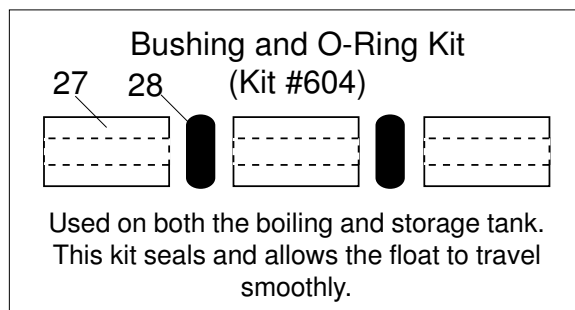
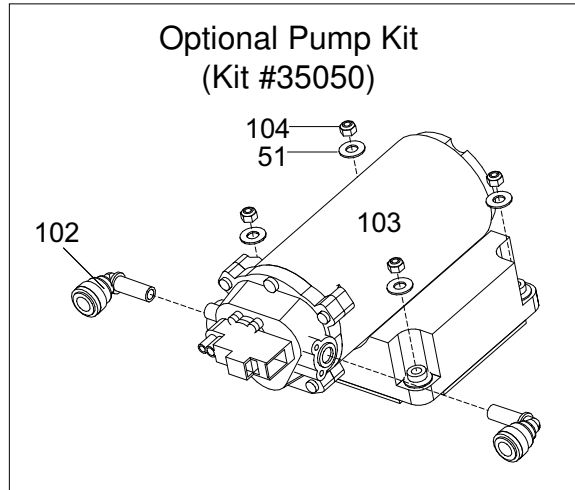
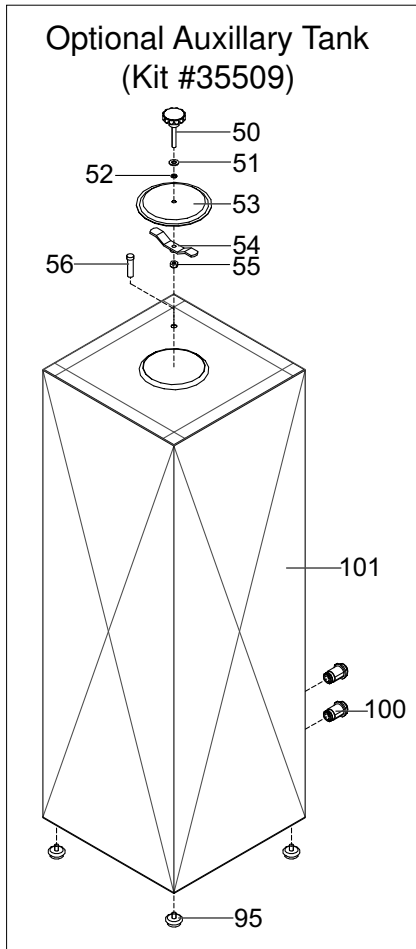
**Note:** *If the pump runs for more than 10 minutes continuously, then the internal circuitry will turn the pump off until the unit is unplugged and then plugged back in. This is to protect the pump from running when there is no water in the storage tank and burning out completely.*

- 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, or are running the pump on too long a run of tubing. Install a pressure tank.

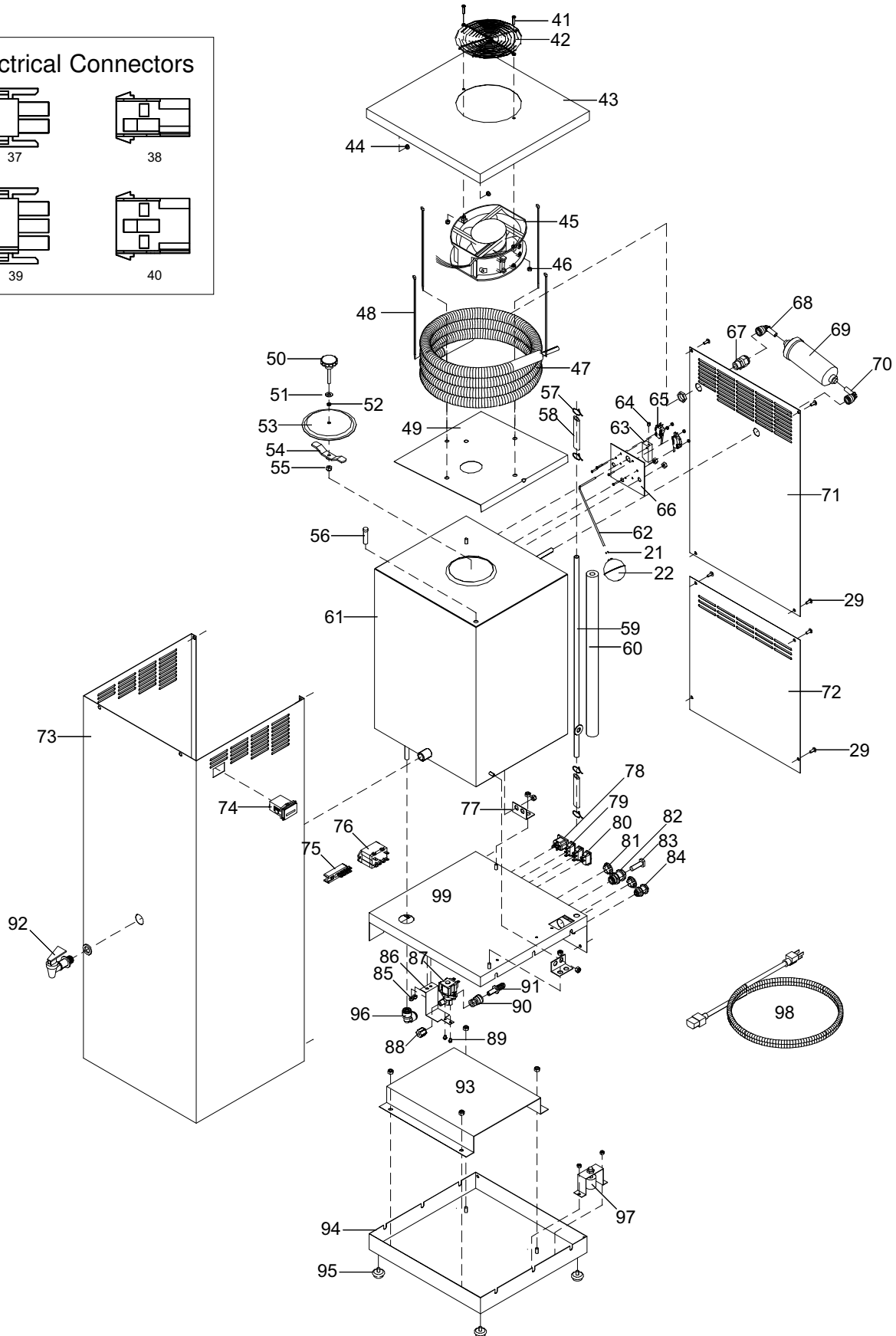
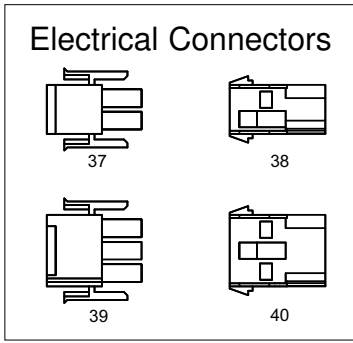
# Electrical Schematic



# Exploded View



# Exploded View



# Parts Listing

Key #	120V P/N	240V P/N	Description
1	8009	8009	Lid knob with stud
2	6022	6022	Lid o-ring
3	519	519	Lid disc
4	69	69	Gasket
5	533	533	Gasket Retainer
6	9085	9085	Lid Spring
7	402B	402B	Lid Crossbar
8	224-0003	224-0003	Locknut, 1/4-20
*	406	406	Lid Assembly
9	9045	9045	Nut, 1/4-20
10	48003	48003	Switch Cover
11	9220	9220	Bushing, 1" Plastic
12	7230	7230	Wire Holder
13	9041	9041	Hex Nut, 4-40
14	646	646	Microswitch (7200)
15	516	516	Switch Plate
16	9030	9030	Screw, 4-40 x 1-1/8"
17	8070	8070	Nylon Spacer
18	9082	9082	Actuating Arm
19	9024	9024	Set Screw
20	513	513	Float Rod
21	9018	9018	#6 Hex Nut
22	9519	9519	Float Ball
*	644	644	BT Float Kit (#18-22, 27,28)
23	6005	6005	Heating Element Gasket
24	9303	9303V	1200W Heating Element
*	727	727	Element Kit (#23 & #24)
25	661	661	Element Clamp Kit
26	9009	9009	Washer, Flat, 1/4"
27	9080	9080	Float Bushing, Teflon
28	6021	6021	Float O-Ring (includes 27 & 28)
*	604	604	Bushing/O-Ring Kit
29	9029	9029	Sheet Metal Screw
30	9302	9302	Drain Valve
31	9079	9079	Acorn Nut
32	9108	9108	Polymide Handle
33	424A	424A	Reset Plate
34	510	510	Reset Insulation plate
35	7069	7069	Element Reset (Kit #601)
36	48502B	48502B	Boiling Tank Studded, No Lid
37	7132	7132	2 Pin Male Connector
38	7136	7136	2 Pin Female Connector
39	7134	7134	3 Pin Male Connector
40	7133	7133	3 Pin Female Connector
41	9019	9019	Screw, #8-32 x 3/4"
42	9342	9342	Fan Guard
43	35009-02	35009-02	Studded Top Panel
44	9151	9151	Grmmet, 3/16 ID
45	9344B	9344B	Axial Fan
46	9003	9003	Nut, 8-32" Nylock
47	9304	9304	Condensing Coil
48	7246	7246	14.7" High Temperature Ties
49	35005	35005	Condensing Coil Rest Plate
50	8009	8009	Lid Knob with Stud
51	9009	9009	Washer, Flat, 1/4"
52	6022	6022	Lid O-Ring
53	548	548	Lid, Storage Tank
54	402C-01	402C-01	Crossbarr
55	224-0003	224-0003	Locknut, 1/4-20
*	410A	410A	Storage Tank Lid Kit
56	8014	8014	Air Filter
57	6103	6103	Hose Clamp, Plastic
58	9541	9541	Silicone Tubing 3/8" x 5/8"
59	37501	37501	Steam Tube

Key #	120V P/N	240V P/N	Description
60	9313	9313	Steam Tube Insulation
61	35510-02	35510-02	Storage Tank Studded
62	514	514	Float Rod, Long
63	9091	9091	Actuating Arm, ST
64	9024	9024	Set Screw
*	719	719	ST Float Kit (#18-19,21-22,27,28,62)
65	660	660	Microswitch (7209)
66	32022	32022	Microswitch Plate
67	7026	7026	Connector, Grey, 3/8"
68	9681	9681	Elbow, Extended 3/8" x Slip
69	9406A	9406A	VOC Post Filter
70	9614	9614	Elbow, 3/8" x Slip
71	35007	35007	Cladding, Back Top
72	35008	35008	Cladding, Back Bottom
73	35002-02	35002-02	Cladding, Wrap-around
74	219-0227	219-0227	Hour Meter 120/240V
75	9150	9150	Terminal Block, 8 Position
76	7208	7208	Power Relay
77	35014	35014	Storage Tank Bracket
78	7275	7275	IEC Power Cord Connector
79	648	648	Red Lighted Switch (7232)
80	642	642	On/Off Switch (7228)
81	6069	6069	Bulkhead Plug
82	9612	9612	3/8" Bulkhead
83	221-0056	221-0056	3/8" Stem Plug
84	221-9000	221-9000	1/4" Bulkhead
85	9003	9003	Nut, #8-32
86	35010	35010	Solenoid Bracket
87	635	635V	Solenoid Valve (7231)
88	9550	9550	1/4" Compression Nut, Plastic
89	223-7013	223-7013	Screw, #8-32 x 1/4"
90	9608	9608	Connector, 3/8" x 7/16-24 UNS
91	9637	9637	3/8" Stem x 3/8" Barb Adapter
92	9555	9555	Faucet with Rubber Washer
93	35006	35006	Boiling Tank Support Plate
94	35003-02	35003-02	Welded Bottom Plate
95	9592	9592	Leveling Leg
96	9620	9620	Elbow, Superseal
97	213-0037	213-0037	Leak Safety Float
98	7276	7276	Power Cord
99	35004-02	35004-02	Mid-Plate Studded
100	9607	9607	3/8" MPT x JG Fitting
101	35509	35509	Auxillary Tank
102	9614	9614	3/8" Elbow, JG x Slip
103	217-0092	217-0092	10 Min Demand Pump
104	9070	9070	Nut, #10-24, Nylock

