

Operator's Manual

Models: 8G, 10G, 12G





Table of Contents

Important Safety Information	3
Introduction	4
Record Important Information	4
Included With Your Distiller	4
Getting to Know Your AquaNui Distiller	5
How Your Distiller Works	6
Installation	
Storage Tank and Optional Pump	7
Unpacking and Installing the AquaNui Distiller	8
Connecting the Raw Water Line	9
Connecting the Power Cord	10
Start-Up	10
Maintenance and Cleaning	
Overall Maintenance Requirements	11
Cleaning the Exterior	11
Draining the Boiling Tank	11
Cleaning the Boiling Tank	11
Changing the Pre Filter	12
Tank Sterilizing	13
Troubleshooting	14
AquaNui Distiller Parts List	16
AquaNui Distiller Exploded View	17
Storage Tank and Pump Parts List	18
Storage Tank and Pump Exploded View	10



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** let children play with the distiller.
- **DO NOT** touch the top of the distiller when it is operating because it may be hot.
- Exercise care when removing the boiling tank and/or the boiling tank lid.
- Never remove boiling tank or lid when the distiller is operating.
- **DO NOT** use an extension cord, power strip, or adapter.
- **IMPORTANT:** This distiller is designed to be used only with AquaNui brand accessories and replacement components.



Introduction

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

Record Important Information

The serial number is found on the back panel. You should record all of the information below for future reference.

Date of Purchase:		_
Model:	Pure Water AquaNui	
Production Rate (80	G, 10G OR 12G):	_
Storage Tank Size:		_
Serial Number:		

Included With Your Distiller

In addition to your Pure Water AquaNui distiller, the distiller box contains:

- 1/4" compression nut (#9550)
- 15' of 1/4" food-grade tubing (#9526-15R)
- VOC Pre-filter (#21048)
- Drain extension tube (#518)
- Owners Manual
- Warranty Card
- Power Cord*

The AquaNui Storage Tank box contains:

- Spigot (#95315)
- Spigot Seal (#144)
- Storage Tank Gasket (#6010)



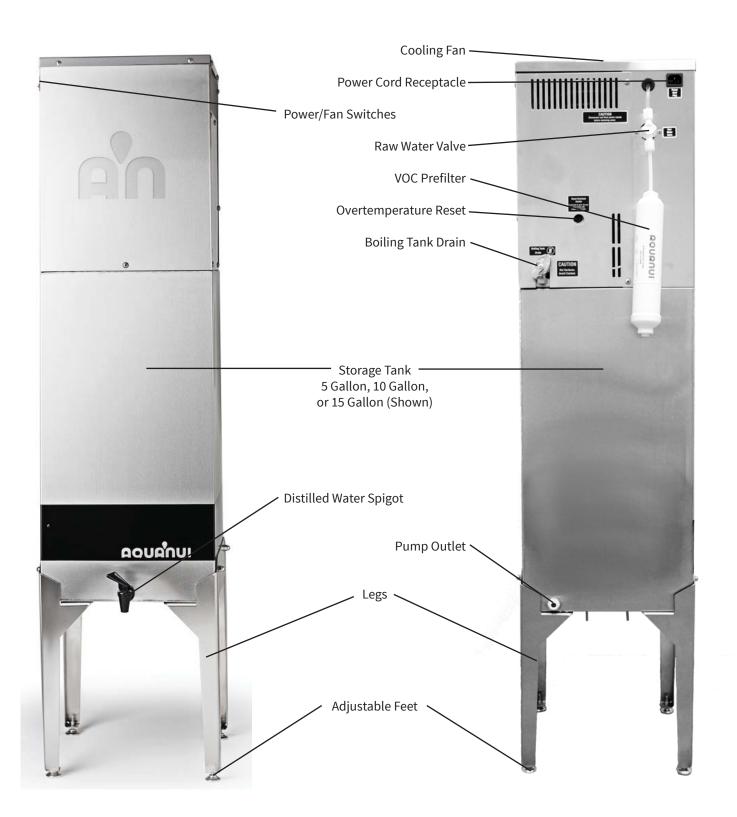






^{*} power cord may not be included in some 240V units.

Getting to Know Your AquaNui Distiller





How Your Distiller Works

The Pure Water AquaNui is designed to produce high purity distilled water. There are three production levels depending on the model that was ordered:

1000 Watt Heating Elementapproximately 8 gallons per day.

1200 Watt Heating Elementapproximately 10 gallons per day.

1500 Watt Heating Elementapproximately 12 gallons per day.

The Pure Water AquaNui is a fully automatic unit. The water level in the boiling tank is controlled by a float and microswitches and the storage tank is controlled by level sensing probes.

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 turn off until the condition is corrected.

Once the storage tank is full of distilled water, the unit will automatically shut down. The AquaNui will begin distilling again once the water level in the storage tank drops by approximately 1.5 Gallons. It continues to operate until the storage tank is full again.

There are various storage tank options available. The standard sizes are 5 gallon capacity, 10 gallon capacity and 15 gallon capacity. Other specialty tanks are available. If additional storage is desired then additional tanks can be added to increase the total storage amount.

The distilled drinking water is drawn from the storage tank through a faucet on the front of the tank or through the optional pump.

The AquaNui is equipped with a manual drain valve, which allows the residue from the boiling tank to be drained periodically.



Installation

Special Feature

The AquaNui is designed with a removable boiling chamber. It can be removed for cleaning or servicing.

Things to consider when installing your Pure Water AquaNui:

- Select an area that will allow the distiller to remain level. (The feet are adjustable to help level the unit.) Improper leveling could affect the production rate.
- 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, 15 amp circuit (220 VAC, 7.5 amp). Check the electrical rating on the label on the rear of the distiller.

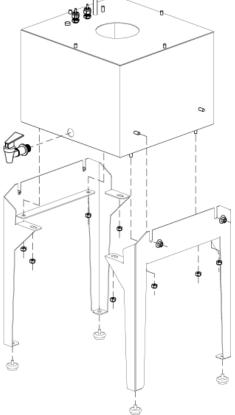
CAUTION: The Pure Water AquaNui is a heavy system. Please use caution when removing it from the carton to prevent injury.

Storage Tank and Optional Pump:

- Remove the storage tank from the packaging.
- 2. Place the unit in the desired location.
- 3. Slide a leg onto the storage tank from the bottom.

Each leg is held on by 4 nuts on the bottom of the storage tank, and 2 cap nuts on the side of the tank.

- 4. Screw in the adjustable feet.
- 5. Install the faucet with the gasket.
- 6. <u>Optional</u> Pump Installation:
 - a. If you have the optional pump, install it at this time. It is designed so that the end with the fittings extends to the rear of the storage tank. See diagram.
 - b. Push the pump onto the 4 studs on the bottom of the storage tank. Secure the pump by installing the 4 washers and 4 locking nuts.
 - c. Install the fittings on the inlet and outlet of the pump.
 - d. Remove the plug from the storage tank outlet. Install the elbow in the fitting.
 - e. Cut 18" of 3/8" tubing and install it between the storage tank outlet elbow and the pump inlet elbow. The tubing should be positioned so that it loops below the pump.

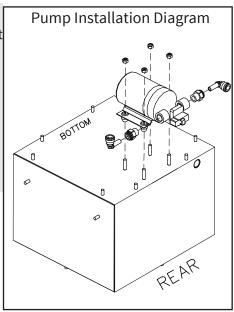




f. Once the storage tank and distiller are completely connected and installed, connect 3/8" tubing to the outlet of the pump and run the tubing to the desired location.

Note: Do not plug the pump into the wall outlet until the storage tank is full of water. If you drain the water down, unplug the pump so that it does not run dry.

- 7. Place the storage tank upright on the floor. Adjust the feet so that the unit is level.
- 8. Center the storage tank gasket over the hole in the top of the tank. This gasket will seal the tank to the bottom of the distiller.



Unpacking and Installing the AquaNui Distiller:

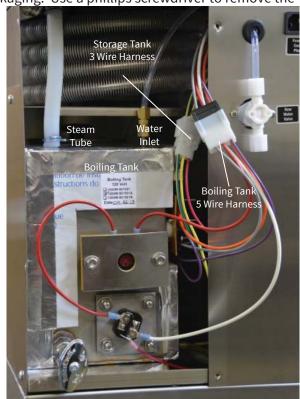
Installing the distiller consists of a couple

of steps. First, the distiller and storage tank need to be connected for the distilled water, as well as the wire harness for the floats in the storage tank. Second, the fan blades were secured for shipment, and must be released before the distiller is usesd.

Remove the distiller from the packaging. Use a phillips screwdriver to remove the

back panel.

- 2. Disconnect the water inlet and steam tubes to the boiling tank.
- 3. Disconnect the two plastic parts of the Boiling Tank 5 Wire Harness electrical connection to the boiling tank.
- 4. Remove the boiling tank.
- 5. Place the distiller onto the storage tank with the AN embossing on the same side as the faucet on the storage tank. Make sure that the wires and connectors for the probes in the storage tank come through the hole in the distiller bottom pan.

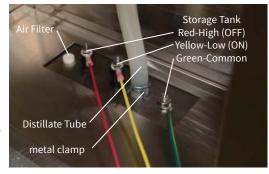






Note: The float ball in the boiling tank is tied down for shipping. The tie must be removed before the distiller is used.

- 6. Install the nuts onto the 4 positioning studs on the storage tank. Tighten to connect the storage tank and distiller together.
- Remove the boiling tank lid. Remove the wire tie that is holds the float during shipping. Replace the boiling tank lid.
- 8. Connect the Distillate Tube (silicone tubing from the condensing coil outlet) to the storage tank inlet tube. Use the metal clamp to secure the connection.



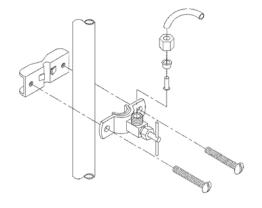
- 9. Connect the 3 pin connectors together. This will allow the distiller to read the probes in the storage tank.
- 10. Install the boiling tank into the distiller.
- 11. Connect the Steam Tube.
- 12. Connect the Water Inlet tubing and fitting.
- 13. Connect the Boiling Tank 5 Pin Harness.
- 14. Place the back panel onto the distiller and secure with the 4 screws.

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

Connecting the Raw Waterline:

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 for the raw water supply is recommended to minimize scale build-up in the boiling tank and drain valve.

Note: The Pure Water AquaNui comes standard with a saddle tapping valve. In some areas a saddle tapping valve may not be permitted. In such instances, contact your authorized AquaNui Sales Associate, Pure & Secure, or go to www. myaquanui.com for other water line connection options.

Note: Do not plug the unit into the power source until instructed to do so.

- 1. Install the saddle-tapping valve per the instructions on the bag.
- 2. Cut a 5" piece of the 1/4" tubing.



- 3. Connect the 5" piece of tubing to the outlet of the Carbon Filter.
- 4. Connect the remaining 1/4" tubing to the saddle tapping valve.
- 3. Connect the 1/4" tubing from the saddle tapping valve to the inlet of the carbon filter.
- 4. Rinse the carbon filter:
 - a. Hold the outlet end of the carbon filter over a drain or bucket.
 - b. Turn the water on at the saddle-tapping valve.
 - c. Cycle the water on and off until the water exiting the carbon filter is clear.
 - d. Turn the water supply off at the saddle-tapping valve.
- 5. Install 1/4" tubing from the carbon filter outlet to the solenoid valve inlet on the back of the distiller.
- 6. Turn the water supply on at the saddle-tapping valve.

Connecting the Power Cord

Note: On some 240V units, the power cord may be sold separately and is not included in the parts kit bag.

- 1. Ensure the Power Switch is turned to the OFF position.
- 2. Locate the power cord in the parts kit bag. Install the female end of the power cord into the outlet on the back of the unit.

Start-Up

Notes and Cautions:

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 (220 VAC, 7.5 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, 15-amp minimum cord.

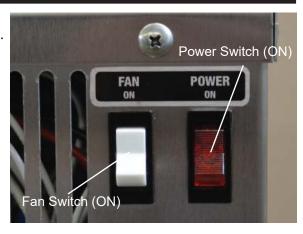
CAUTION: Do not, under any circumstances, cut or remove the round grounding prong from the electrical plug.

Your unit now has:

- A raw waterline connected and turned on.
- A VOC prefilter installed
- A complete boiling tank with both water and electrical connections.
- The storage tank faucet is installed.
- Optional Pump: Should not be plugged in until the storage tank is full.



- 1. Turn the main power switch to ON.
- Open the faucet on the storage tank and place a cup or small bucket under the faucet.
- Turn the fan switch to OFF. This will start a "Steam Sterilization" cycle. Steam will now be produced in the boiling tank. The steam will pass through the coil,



but since the fan is turned off, the steam will not be cooled. The steam will heat up and sterilize the storage tank. Allow the distiller to run for 30-45 minutes.

- 4. Turn the fan switch to ON.
- 5. Close the faucet on the storage tank.
- 6. Allow the unit to fill the storage tank and shut off.
- 7. Optional Pump: Plug the pump into the wall outlet.
- 8. Check for leaks.

The unit will now run automatically based on the water level in the storage tank.

Maintenance and Cleaning

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 is an average guide to maintenance:

When Needed: Clean the Exterior.

CAUTION:

Storage tank will be very

hot. DO NOT TOUCH.

Cleaning the Exterior

Use Stainless Steel Polish & Cleaner (stock #6606). It is available online at www. MyAquaNui.com.

Every 2 Weeks: Drain the boiling tank.

Draining the Boiling Tank

The AquaNui has a manual drain valve that discards the contaminants and residue out of the boiling tank when opened. This minimizes the build-up of scale in the boiling tank.



Important Note: If the unit is hot, turn the power OFF and allow it to cool before draining the boiling tank.

- 1. Turn the Power Switch to OFF.
- 2. Turn the valve on the back of the AquaNui and allow the residue to drain into a sink, drain or bucket.
- 3. Close the valve.
- 4. Turn the Power Switch to ON.

Every 3-6 Months: Change the VOC Filter.

Changing the VOC Filter

- 1. Turn the Power Switch to OFF.
- 2. Turn the water off at the wall valve.
- Disconnect the filter from the tubing.
- 4. Connect the inlet tube to the inlet side of the new filter.
- 5. Hold filter over a bucket or drain.
- 6. Cycle water on and off several times until water fromt he outlet of the filter is clear.
- 7. Connect outlet of filter to tubing.
- 8. Turn water and power ON.

Every 3 Months: Clean the boiling tank.

Cleaning the Boiling Tank

Notes and Cautions:

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

Note: Failure to clean the boiling tank can result in scale build-up causing premature heating element failure, as well as 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. Turn the Power Switch to OFF. If needed, allow the unit to cool.
- 2. Drain the boiling tank (see instructions above).
- 3. Remove the back panel of the distillation unit.
- 4. Disconnect the boiling tank wire harness, inlet tube, and steam tube. Remove the boiling tank.
- 5. Manually fill the boiling tank until the scale is covered by water.
- 6. Add 2 Tablespoons of Lumen® descaler to the boiling tank. Allow to sit overnight.
- 7. Drain all of the water from the boiling tank.



- 8. If needed, use a wet/dry vacuum to remove any remaining debris from the tank.
- 9. Rinse the inside of the tank with fresh water.
- 10. Reinstall the boiling tank and turn the power ON.

When Needed: Sterilize the Storage

Tank Sterilizing

Steam Sterilization is a method of disinfecting your storage tank. <u>The storage tank</u> must be empty before starting. To sterilize the storage tank:

- 1. If you use the optional pump: Unplug the pump cord from the wall outlet.
- 2. Use the storage tank faucet to completely drain the storage tank.
- 3. Make sure the main power switch is ON.
- 2. Place a cup or small bucket under the storage tank faucet, open faucet.
- 3. Turn the fan switch to OFF. This will start a "Steam Sterilization" cycle. Steam will now be produced in the boiling tank. The steam will pass through the coil, but not be cooled. The steam will heat up and sterilize the storage tank. Allow the distiller to run for 30-45 minutes.
- 4. Turn the fan switch to ON.
- 5. Close the faucet on the storage tank.
- 6. Allow the unit to fill the storage tank and shut off.
- 7. Optional Pump: Plug the pump into the wall outlet.



Troubleshooting



The machine will not operate at all.

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

- Make sure the power cord is plugged into the wall outlet and inserted fully into the "Power Cord Plug" outlet. Make sure the outlet is working properly.
- Make sure the power switch is ON. Note: The power switch has a light to indicate that
 power is on to the unit. If the switch is ON and the power switch light is not luminated,
 the ON/OFF switch may be defective and needs to be replaced.
- If the power light is luminated, check to see if the heater reset on the back of the unit has popped. If it has, press the reset button with the eraser end of a pencil.
- Make sure the incoming water supply is turned on and is flowing into the boiling tank.
- Check all wiring connections on the control relay. Ensure you have voltage to the relay using a volt/ohm meter.



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.

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

- If the float ball inside the boiling tank is resting against the heat tab and is fully
 depressing the low level (top) 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
 may need to replace the relay. Another indication of a bad relay is the heater reset will
 likely be popped.
- If the float inside the boiling tank is not moving freely, install a new float repair kit, with bushing and o-ring.



The unit boils the water, but the fan is not working.

- Make sure the fan switch is set to "ON".
- The fan switch may be defective. Check with a volt-ohm meter.
- The fan motor may be defective. Check with a volt-ohm meter.

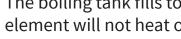


The fan will not operate or is making excessive noise.

• Make sure the fan switch is in the ON position. If so, then you may have a defective switch. Check with a volt/ohm meter.







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

- If the heater 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 either, then you may have a defective outside boiling tank microswitch. Check with a volt/ohm meter.
- Make sure the float is operating correctly and not stuck at bottom of tank.
- Check all wiring connections on the control relay. Inspect for any burnt or damaged wires on the relay. Check the relay with a volt/ohm meter.

The boiling tank overflows with water.

- If the float actuating arm is depressing the inside microswitch 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 microswitch checks out ok, and the heating element and fan come on, then you need to replace the relay. Check with a volt/ohm meter.
- If the microswitch and relay check out ok, then you may have a defective solenoid. Turn the power switch to "OFF". If water continues to flow into the boiling tank, then you need to replace the solenoid.
- If the float ball is heavy and has scale build-up, clean the boiling tank and, if necessary, replace the float.
- If the float is not moving freely, you may need to install a new bushing and o-ring or 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.

- Check that the Storage Tank 3 pin wire harness is properly connected.
- Connect the 3 storage tank probes together. If the unit does not shut down, then replace the level control circuit board.

The unit runs a short time and the heater reset pops.

Note: If the reset is popped, use the eraser end of a pencil to reset it.

- If the boiling tank water level is below the heating element, the float may be sticking and you may need to adjust the float or install a new bushing and o-ring or float repair kit.
- If the unit starts up after it is cooled, you may have a faulty reset.







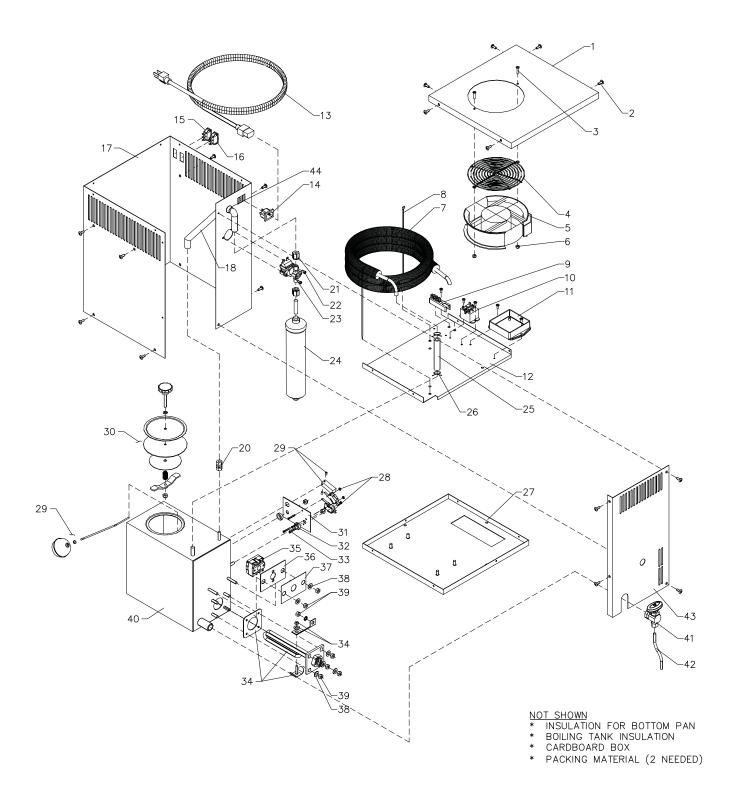


Aqua-Nui Distiller Parts List

Item #	100V	120 V	240V	Description
1	21005	21005	21005	PANEL, TOP, AQUANUI
2	9029	9029	9029	SCREW, #10-16 X 1/2", SHT.MTL.
3	9019	9019	9019	SCREW, #8-32 X 3/4",PHD, PLPS
4	9342	9342	9342	GUARD, FAN, 6", METAL
5	9344BJ	9344B	9344B	FAN, AXIAL, 170CFM, 110/220V
6	9003	9003	9003	NUT, #8-32, NYLOCK, HEX, S.S.
7	21020	21020	21020	COIL, CONDENSING, AQUANUI
8	7246	7246	7246	TIE, CABLE, HIGH TEMP 14.7" BLK
9	9111	9111	9111	BLOCK, TERMINAL, 3 X 2 X 4
10	7206	7206	7206V	RELAY, POWER, SPDT, 120VAC 15A
11	9106	9106	9106	RELAY, LIQUID LEVEL CONTROL
12	21503J	21503	21503V	TRAY, ELECTRICAL, AQUANUI, COMPLETE
13	7276	7276	7276	CORD, POWER, IEC, 15 AMP
14	7275	7275	7275	CONNECTOR, IEC FEMALE, SNAP-IN
15	7232	7232	7232	SWITCH, LIGHTED, RED
16	7228	7228	7228	SWITCH, ON/OFF, W/O BEZAL, 15A
17	21006	21006	21006	CLADDING, WRAPAROUND, AQUANUI
18	21059	21059	21059	TUBING, HIGH TEMPERATURE, 1/4"
20	63419	63419	63419	UNION, BRASS, 1/4" COMP (USE DELRIN SLEEVES)
21	9550	9550	9550	NUT, COMP, 1/4", PLASTIC
22	9019	9019	9019	SCREW, #8-32 X 3/4",PHD, PLPS
23	7197	7231	70106	VALVE, SOL, 1/4"COMP, N/C
24	21048	21048	21048	FILTER, VOC, AQUANUI PREFILTER
25	9541	9541	9541	TUBING, 5/8" OD x 3/8" ID
26	9921	9921	9921	CLAMP, HOSE, WIRE SPRING, 5/8"
27	21007-02	21007-02	21007-02	PAN, BOTTOM, STUDDED
28	654	654	654	MICROSWITCH KIT
29	21063	21063	21063	FLOAT AND ACTUATING ARM KIT
30	406	406	406	BOILING TANK LID KIT
34	633J	633	633V	1000 WATT HEATER KIT
34	738J	738	738V	1200 WATT HEATER KIT
34	764J	764	764V	1500 WATT HEATER KIT
35	7069	7069	7069	RESET, 66T, 220F(+8F/-0)
36	510	510	510	PLATE, RETAINER, RESET, PC
37	424A	424A	424A	ASSY., RESET RETAINER PLATE
38	9009	9009	9009	WASHER, 1/4" X 5/8"OD, FLAT
39	9045	9045	9045	NUT, 1/4-20, HEX, S.S.
40	21501-02	21501-02	21501-02	TANK, STUDDED, BOILING AQUANUI
41	9508	9508	9508	VALVE, DRAIN, BRASS STEM, 1/2"
42	611	611	611	TUBE, DRAIN EXTENSION
43	21009	21009	21009	PANEL, BACK, AQUANUI
44	21041	21041	21041	GROMMET, 1/2" ID BLACK RUBBER



AquaNui Distiller Exploded Drawing

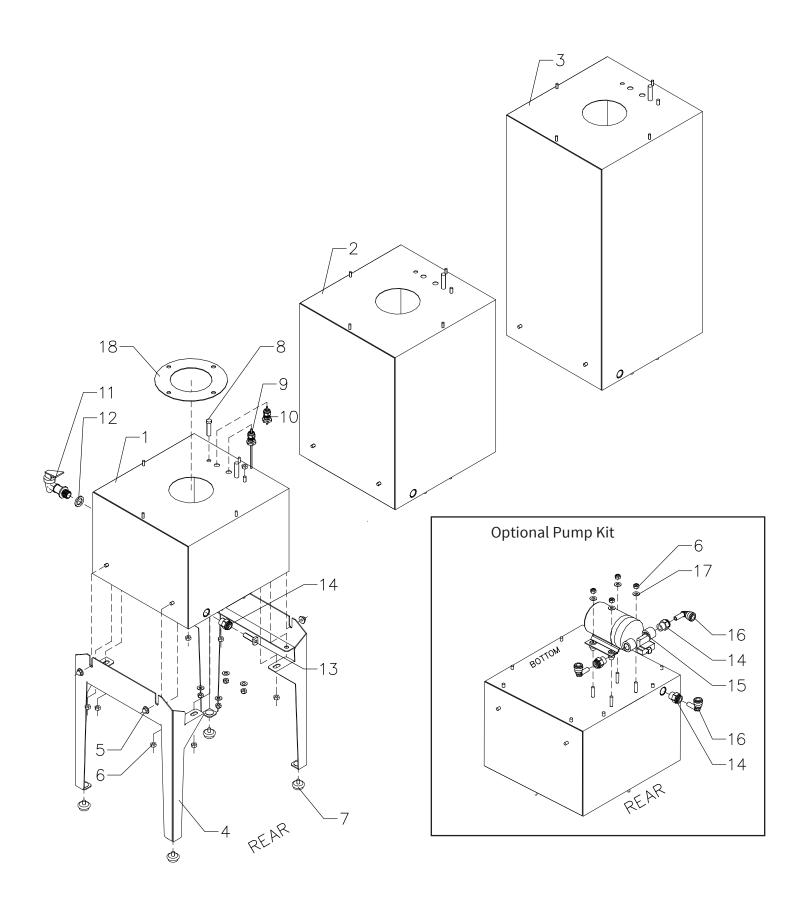


Storage Tank and Pump Parts List

Item #	100V	120 V	240V	Description
1	21508-02	21508-02	21508-02	TANK, STORAGE, STUDDED, 5 GAL
2	21509-02	21509-02	21509-02	TANK, STORAGE, STUDDED, 10 GAL
3	21510-02	21510-02	21510-02	TANK, STORAGE, STUDDED, 15 GAL
4	21016-01	21016-01	21016-01	LEG, STORAGE TANK, ULTIMA 2
5	9039	9039	9039	NUT, 1/4-20, ACORN, HEX, S.S.
6	9045	9045	9045	NUT, 1/4-20, HEX, S.S.
7	9592	9592	9592	LEG, LEVELER, DISPENSER
8	8014	8014	8014	FILTER, AIR, 80 MICRON, HDPE
9	21025	21025	21025	PROBE, ASSY, MID, AQUANUI
10	21021	21021	21021	PROBE, ASSY, HIGH, AQUANUI
11	95315	95315	95315	FAUCET, PLASTIC, 3/8"" NPT
12	144	144	144	WASHER, RUBBER (FOR MS FAUCET)
13	221-0056	221-0056	221-0056	PLUG, SPEEDFIT, 3/8"STEM
14	9607	9607	9607	CONN., SPEEDFIT, 3/8"T X 3/8"M
15	21051	21051	21051	PUMP, 120V, AQUANUI, WITH CORD
16	9614	9614	9614	ELBOW, SPEEDFIT, 3/8"T X 3/8"S
17	9094	9094	9094	WASHER, #10, FLAT, S.S."
*	21512J	21512	21512V	KIT, PUMP, COMPLETE



Storage Tank and Pump Exploded Drawing





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