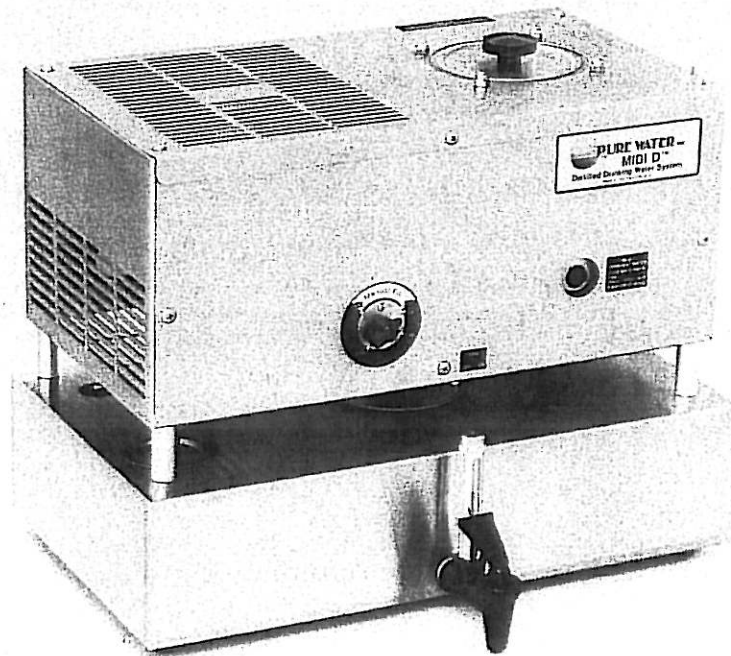


Midi D™ Water Treatment System

Instructions For Assembly And Operation



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Introduction

Congratulations on purchasing the finest home water purification system money will buy. With proper care and attention this system will give you many years of reliable performance.

How Your Midi D™ Works

This system operates using the combined technology of distillation and activated carbon filtration. This combined technology produces consistently high quality water.

Distillation is a time honored, extremely reliable method of water treatment. Your Midi D™ System utilizes an activated carbon filter to "polish" the distilled water - resulting in the best protection for you.

The principle of distillation is quite simple and is one you can easily understand:

The raw water is taken into the machine where it is heated and boiled. As the water boils, it kills virtually all bacteria and other biological contaminants. The steam then rises leaving behind essentially all the contaminants in the raw water. The steam enters a condenser where cool air reduces the temperature of the steam, converting it to high purity distilled water. As a final step this water passes through a small activated carbon filter to reduce residual contaminants. This water is stored in the storage tank until you are ready to use it.

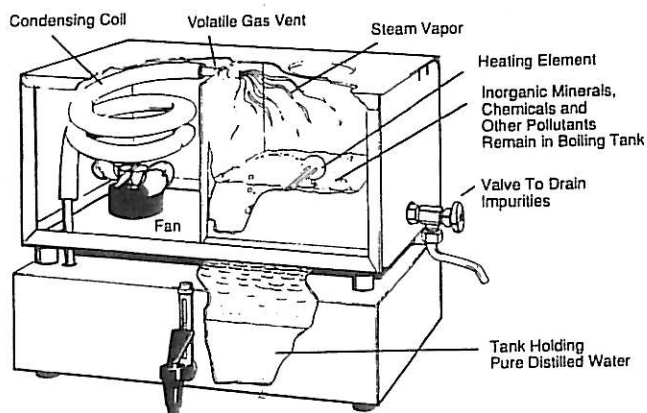


Figure #1

Important Cautions

- *Unplug the system from the electrical outlet before assembling, disassembling, repairing or adjusting the system.*
- *Don't let children play with the system.*
- *Avoid touching the top surface of the system when it is operating. It will become very hot.*
- *Always exercise care when removing the lid from the distiller. Never remove the lid of the distiller when it is operating.*
- *Never drain the boiling tank while the system is operating. Wait thirty minutes after the system has shut down before draining.*

Getting to Know Your Midi D™ System

Your Midi D™ Water Treatment System is shipped to you with the following:

- a. Midi D™ Distillation System (to treat the raw water).
- b. Four Gallon Storage Tank (to store the distilled water you produce).
- c. A faucet to access distilled water and a post-filter cartridge (Parts kit #3990). This kit allows you to hook this system directly into a waterline.
- d. Owner's Manual and Warranty Card.

Front View

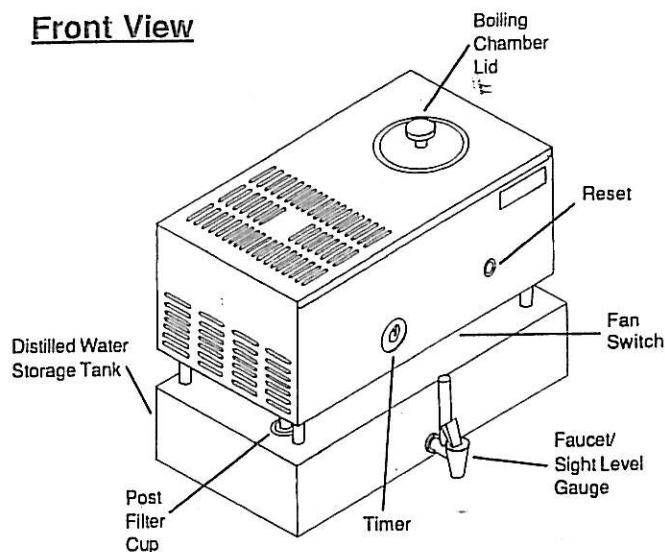


Figure #2

Rear View

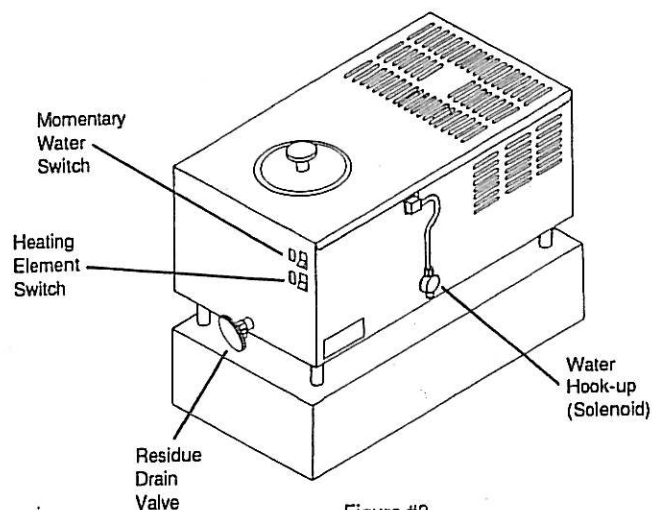


Figure #3

Optional Accessories for Your Midi D™ Water Treatment System

For your convenience, you can purchase the following items for your Midi D™ Water Treatment System:

- Stand with castors (stock #3996).
- Lumen™ cleaner and descaler (stock #6603) for cleaning the boiling tank.
- Stainless Steel Polish (stock #6606) for optimum exterior care.
- Post-filter replacement cartridges (stock #9590) for the storage tank.

Unpacking and Assembling the System

- Carefully open the carton at the top.
- Remove the styrofoam packing blocks.
- Remove the Owner's Manual.
- Carefully lift the storage tank from the box and remove the protective plastic bag.
- Remove the adhesive tape holding the post-filter cup and cover.
- Carefully lift the distiller system from the box and remove the protective plastic bag.
- Open the distiller lid by unscrewing the black knob counter-clockwise 3-4 turns, moving the lid gently sideways and lifting one side.
- Twist the drain valve extension tube around so that it protrudes out slightly from the system.
- Remove the protective packing around the timer switch.

- Remove the parts kit from the bottom of the shipping container.
- The parts kit contains a direct waterline hook-up kit, post-filter cartridge and a faucet for the storage tank.

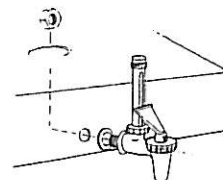


Figure #4

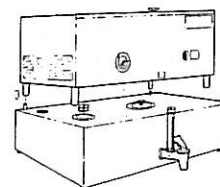


Figure #5

- Remove the lid on the storage tank by unscrewing 3-4 turns, moving the lid gently sideways and lifting one side.
 - Insert the threaded portion of the faucet through the hole in the front of the tank. From inside the tank, screw the plastic nut on and hand-tighten ensuring that the sight glass is in a 10 o'clock position. Carefully twist the faucet to a vertical position.
- Caution:** Never twist the faucet assembly by the sight-glass as it is fragile and could be easily broken.

- Check for leaks around the faucet by partially filling the tank with water. Should leaks occur, additional tightening may be necessary.
- Wash tank with a warm water and baking soda solution, rinse and drain thoroughly.
- Replace the storage tank lid and tighten.
- Place distiller on tank as shown.
- Check to ensure the condenser extension tube from the distiller is positioned directly

over the charcoal post-filter in the tank.

NOTE: There should be a 1/16" to 1/8" gap between the condenser extension tube and the post-filter cartridge to prevent possible overflow.

- Install the #6009 inlet gasket on the post-filter lid, install the #9099 stainless washer on top of the inlet gasket, ensure that the condenser extension tube is aligned with the stainless steel washer and inlet gasket.

Operating the System for the First Time

Manual Operation

We recommend that the system be operated manually for the first distillation cycle. Distilled water produced from the first cycle should then be discarded.

- Remove the lid from the distiller.
- Clean the boiling chamber thoroughly with a mild detergent solution.
- Drain and rinse with water by opening up the boiling chamber residue drain valve.
- Close the boiling chamber drain valve.
- Pour water into the boiling chamber up to the "Maximum Level Indicator" inside the boiling chamber. **DO NOT OVERFILL AS RAW WATER WILL ENTER THE CONDENSER.**
- Replace the lid, finger-tighten the black knob to ensure a complete seal. **NOTE:** At this point, ensure the post-filter cartridge is **NOT** in the storage tank.
- Plug system into an electrical outlet.
- Turn "FAN" switch to "OFF" position.
- Turn "Heating Element" switch to "ON" position.
- Open the storage tank faucet and place a container under the faucet to catch any water that may condense.
- Turn the timer knob to approximately 1/2 gallon. System will operate without the fan. Run the system for at least 20 minutes after the water starts boiling - but not over 1 hour.
- After steam sterilization, turn the fan switch to "ON" position, replace the post-filter cartridge. (please refer to Fitting the Post-Filter on page 4) and close the faucet in the storage tank.
- Refill boiling chamber to the "Maximum Water Level Indicator."
- Turn the timer dial to the left to approximately 3/4 gallon.
- The system will start and will automatically stop when the set amount of water is produced.
- The distilled water will accumulate in the storage tank.
- The first cycle of distilled water should be discarded.
- The system can continue to be operated in this mode. This is called "manual operation."

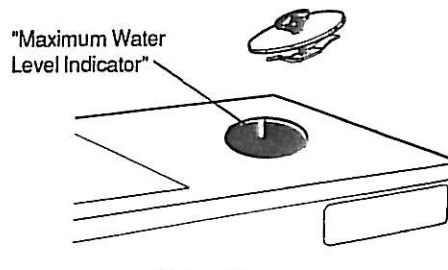


Figure #6

NOTE: If more than 3/4 gallon is dialed when operated manually you may damage the heating element. For satisfactory operation, the heating element must be covered with water at all times.

Assembling the System for Automatic Water Feed

For added convenience you can operate the system with automatic water feed.

- Decide where to locate the system.
- Remove the water-line hook-up parts from the parts kit.
- Take the 1/4" diameter flexible tubing and run it to your existing cold water supply pipe.
- Remove the white plastic "blind nut" from the back of the system (if desired, retain for future use on the Midi D™ in the manual mode).

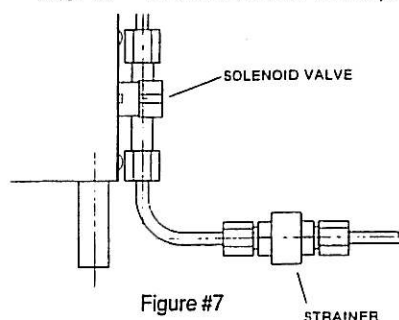


Figure #7

- Install water line and strainer to back of distiller as shown in Figure #7 and #8.
- Shut the household water supply off.
- Connect saddle tapping valve to home water supply. See Figure #9.

Caution: Do not turn handle before or while installing the "Saddle Tapping Valve." Be sure the piercing lance does not protrude beyond the rubber gasket. Failure to do this may result in damage to the piercing lance.

Assembling the System for Automatic Water Feed (cont'd)

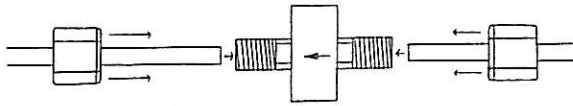


Figure #8

- Install the "Saddle Tapping Valve" on the cold water copper tubing so that the outlet is in a convenient direction.
- Tighten screws evenly-brackets should be parallel. Tighten firmly - Do not over tighten.
- Connect plastic tubing to "Saddle Tapping Valve" outlet.
- Coil a minimum of 8 ft. tubing (3 turns - 10 in. diameter) behind water distiller. This will allow distillation system to be moved away from wall for cleaning or service.
- Cut the tubing to the required length and make connection at distillation system.
- Turn the Saddle Tapping Valve Handle clockwise until you feel it is firmly seated. Note: *You have now pierced the copper tube and the valve is closed.*
- Turn the handle counter-clockwise to open the valve.
- Turn household water supply on.
- Check all connections for leaks.

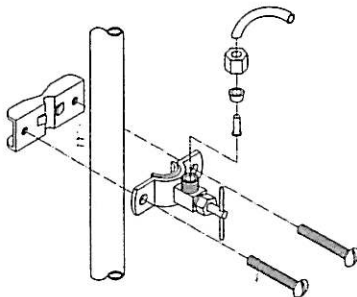


Figure #9

Note: If you have a water softener, you can use the water line from the softener. A softener will reduce maintenance on your distiller by removing the hardness minerals (calcium and magnesium) but will in the process add sodium to the water. The distiller will remove virtually all the sodium from the water.

- Be sure that the boiling chamber residue drain valve is closed.
- Open the saddle-tapping valve completely. Recheck the line for leaks, tighten fittings where required.
- Turn the fan switch "ON", turn the heating element switch "OFF". Dial the amount of water needed by turning the knob counter clockwise to the desired

number of gallons. Since this is your first cycle, you can set the timer up to 3-1/2 gallons.

- Depress the momentary water switch until the water has covered the heating element. Now turn the heating element switch "ON".

The system will fill automatically, operate and stop when the set amount of water has been produced.

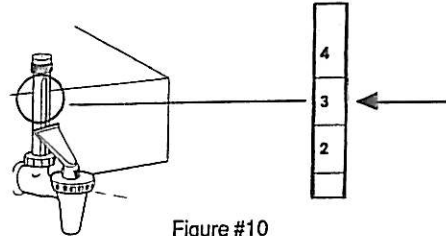


Figure #10

Note: The calibration on the faucet Sight Level Gauge indicates the amount of water remaining in the 4 gallon storage tank. (Figure #10 indicates 3 gallons remaining)

Fitting the Post-Filter Cartridge

Improper preparation and installation of the post-filter cartridge could result in poor water flow which can cause overflow and flooding.

The following steps should be followed for the proper procedure:

*Remove the blue stickers from each end of the post-filter cartridge. Note that one end of the post-filter cartridge has a lip around the outside. This should be considered the bottom.

*Submerge the post-filter cartridge completely in distilled water with the bottom up and soak for 5 minutes.

*Remove the post-filter cartridge and turn over. This is very important.

*Place the black "O" ring (provided) around the outside, close to the bottom edge of the post-filter cartridge.

*Firmly push the post-filter cartridge down into the filter cup. The ring should now be visible just below the top of the post-filter cartridge.

*Replace the filter cup lid, gasket, washer and extension tube. Leave a 1/16" to 1/8" gap between the tubing and the top of the post-filter cartridge.

The post-filter cartridge is now in place and you may proceed with the distillation cycle.

NOTE: Remember not to steam sterilize with the post-filter cartridge in place.

Periodic Maintenance

This system will normally require very little maintenance.

As the system shuts off, it leaves a small amount of water along with most of the contaminants in the boiling tank. These must be drained periodically otherwise the contaminant level will rise and scale will build up, similar to what you may find inside a tea kettle. Operating the system in this condition can reduce the purity of the water you produce and require more electricity to produce distilled water.

1. Draining the boiling chamber (Recommended Weekly)

Caution: Use care when draining the boiling water. Steam may escape during draining.

- Be sure the equipment is not operating and has not operated for at least thirty minutes.
- Place a glass or plastic container under the Residue Drain Valve.
- Open the valve by turning clockwise and catch the draining water in the container.
- Discard the drained material.
- Close the Residue Drain Valve by turning counter-clockwise.
- Start the system as described in previous sections.

2. Removing Hard Water Scale from the Boiling Tank (As Required)

In hard water areas of the country, where the boiling chamber is not drained frequently enough, a scale can build up inside the boiling chamber. Over a period of time this scale can coat the heating element and reduce the life of the element.

- Be sure the equipment is not operating and has not operated for at least thirty minutes.
- Fill the boiling chamber half-full with water by depressing the momentary water switch (if operating with water-line feed) or pour sufficient water in if you are operating it manually.
- Add two to three level tablespoons of Lumen™ and stir until dissolved.
- Fill the boiling tank until it reaches the "Maximum Water Level Indicator".
- Leave overnight or until scale softens.
- Place a container under the Residue Drain Valve, open valve and let the contents drain.
- Rinse thoroughly.
- Start the system up as described in previous sections.

3. Steam Sterilization (Every 30 days)

Distillation is the only process that gives you the option to steam sterilize your system. Steam sterilization is generally required every 30 days.

- Unplug the system from power source.
- Drain the storage tank.
- Remove the boiling chamber lid.
- Fill with water until it reaches the water "Maximum Water Level Gauge".
- Replace lid and secure.
- Remove the post-filter in the top of the storage tank.
- Put the fan switch in the "OFF" position.
- Plug the power cord into the electrical outlet.
- Open the storage faucet and place a container under the faucet to catch any water that may condense.
- Turn the timer knob to 1/2 gallon. System will operate without the fan. Run the system for 1 hour.
- After steam sterilization, turn the fan switch to "ON" position, replace the post-filter and close the faucet in the storage tank.

4. Cleaning the Exterior Surfaces of the System (As Required)

Properly maintained stainless steel will retain its beauty for years.

- Ensure the equipment is not operating and has not operated for at least an hour.
- As needed, clean the exterior surfaces with Pure Water Stainless Steel Polish (stock #6606) available from your dealer, taking care to follow the directions provided.

5. Changing the Activated Charcoal Post-Filter (3 months)

Your system is equipped with an activated carbon post-filter which is positioned in the top of the holding tank. This post-filter should be changed about every three months. Failure to change the filter could result in water of low purity in the holding tank. The system is equipped with a post-filter before it leaves the factory.

- Unplug the system from power source.
- Lift the distiller system from the storage tank.
- Remove the filter cup from the storage tank and remove the filter cup lid.
- Pry out the filter.
- Remove the "O" ring from the filter cartridge.
- Carefully dispose of the used cartridge.

Periodic Maintenance (cont'd)

- Install the new post-filter (please refer to Fitting the Post Filter on page 4).
- Drop the cartridge into the filter cup and press down firmly on each side of the cartridge to ensure it seats into the holder. The "O" ring should be visible just below the surface.
- Replace the cup assembly in the storage tank.
- Replace distiller on storage tank.

Caution: Always remove the post-filter cartridge prior to steam sterilizing the storage tank.

Warranty

Your Pure Water, Inc. Midi D™ is covered by a comprehensive warranty - please refer to the enclosed warranty card for full details. If your warranty card is missing, or if this is a replacement manual, please contact your dealer for full details. In order for the warranty to be initiated you must return the warranty card within 10 days of purchase.

If your Midi D™ System requires repair under warranty contact your dealer for instructions. Provided you have met your conditions under the warranty, the system will be repaired free and returned to you. You are responsible for freight both to and from the service location.

Troubleshooting

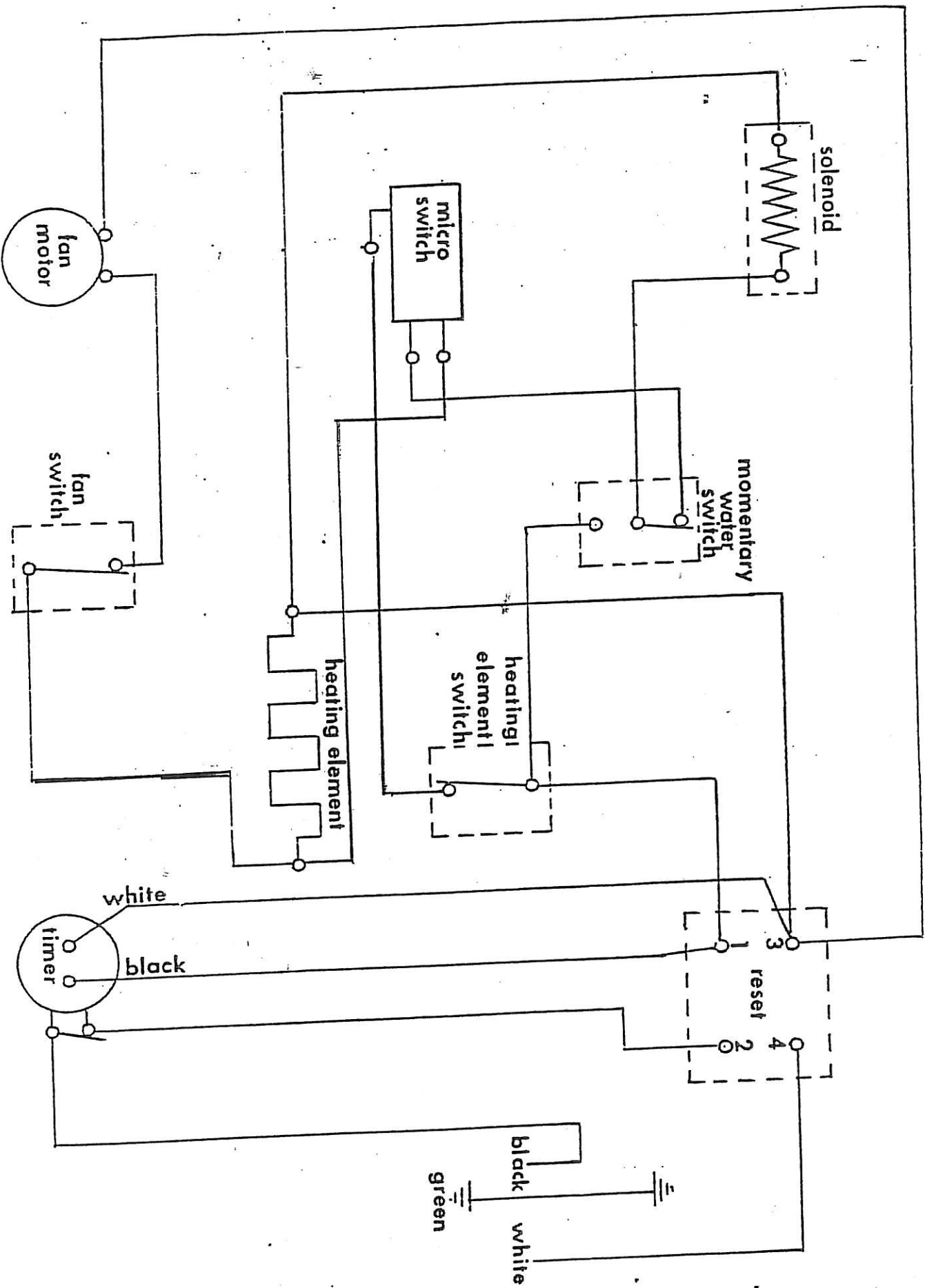
Pure Water, Inc. recommends that you have your dealer inspect the system if it fails to operate correctly. If it is your preference to troubleshoot the problem yourself the following guide is offered.

1. **Fan operates but system does not heat up.**
 - heating element burned out.
2. **Fan or heating element does not operate.**
 - check the outlet has power using another portable appliance or lamp.
 - check timer has been turned "on".
 - check "reset" has not opened by pushing the red plunger with the eraser end of a pencil. A click can be heard if it has opened and now reset.

NOTE: The reset will only open when the heating element has been exposed to the air due to insufficient water in the boiling tank. If it opens check out the water supply and connections.



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Rev. 2/90



Midi Still-D With Momentary Water Switch

Wiring Diagram

Midi-D

HOW TO ORDER REPAIR PARTS

When ordering repair parts, always give the following information:
Part number, Part name, Model number.

PART NUMBER

PART NAME

611	Boiling tank drain extension tube with fittings
517	Condensing coil extension tube
509	Bottle hook
8010	Midi leg
19005	Strainer
9550	1/4" Plastic nut
9514	Saddle tapping valve
9526-25R	1/4" O.D. water line tubing-25ft.
9508	R-17 drain valve
640	Timer assembly
642	Fan switch
7039	Reset
607	Condensing coil with fittings
639	Fan blade
653	Fan motor
635	Solenoid water valve
633	Heating element 1000 Watts
646	Micro switch
609	Actuating arm with set screws
643	Momentary water switch
642	Heating element switch
3506	Power cord
519	Lid disc
610	Lid knob
6049	Crossbar gasket
402	Lid crossbar with stud
604	Float "O" Ring kit
644	Short float rod assembly with "O" ring kit
68	Bib washer (for boiling tank drain valve)

***** ALL RETAIL ORDERS MUST PREPAY OR BE SHIPPED C.O.D. WITH AN ADDITIONAL CHARGE