RUNNING WATERS, INC. DISTILLATION SYSTEMS DESCRIPTION OF PARTS



- 1. **Vents-** This permits an air intake and exhaust. Providing cooling on air intake from the fan blower condensing radiator.
- 2. **Boiler drain** This provides a drain to remove separated minerals and metals, which are being removed by the boiling process.
- 3. Dispensing valve- This delivers pure distilled water as required.



- 1. Power Cord- 110V- 60 Hertz. (220V also available)
- 2. **Solenoid Shut off Valve-** This serves as a safety feature so that water cannot enter the boiler when the distilled water tank is full.
- 3. Insulated Boiler- To improve the heat transfer into the fluid and reduce heat loss to atmosphere.
- 4. **Temperature Control** Should the water not enter the boiler, the element may burnout. This control turns off the element when the temperature reaches 200 F. It turns on again when temperature is 195 F. Continues this sequence until water is restored.
- 5. **Steam line-** Showing exit from the boiler and entrance to the cooling condenser.



- 1. Cooling Condenser- Returns hot steam vapor to pure water.
- 2. Cooling Fan- Aids in the cooling process.
- 3. **MHD Scale Control Unit** Using the science of Magnetohydrodynamics action, hard scale is reduced to soft scale and sludge. Thereby prolonging the time of internal inspection of the boiler. We are the only distillation company to use this science.
- 4. **Tilt Switch** Water in bottom storage tank rises as it fills slowly changes the angle of the switch at the predetermined level. This switch shuts the unit down when the distilled water tank is full.
- 5. **Toggle Switch** This switch controls the heating element. When it's time to inspect the boiler, this switch can be turned off cutting power to the heating element. The boiler can be opened, activated the tilt switch and water will flow into the boiler for it's rinsing cycle.
- 6. Electrical Cover- This cover protects the exposed wires on the back of the heating element.



- 1. Spring Clips- Fastens boiler cover with enough pressure to seal in the generated steam.
- 2. Loose Steam Line- This permits the lid to swing wide providing clear access to boiler components.
- 3. **Cold Water Line** As shown the cold incoming water parallels the hot steam line. Two-fold reacting absorbs some heat and cools steam line for more efficient cooling.



- 1. Float Control- Maintains the proper water level above the element, aprox 1.5 inches.
- 2. Boiler Drain Outlet- leads to exterior valve shown on page 1.
- 3. **Heater Element-** 1500 watts with a surface area of aprox 100% larger than conventional single loop elements. This reduces the watts per square inch, thereby increasing the element life.
- 4. Water Inlet Valve- Permits the water to enter the boiler.