Ultra Pure Systems BATTERY

module installation instructions

1. Bolt battery/pump assembly onto cart with 2 bolts, 4 flat washers and 2 Nylock nuts.



2. Disconnect the hose from the bottom of the flow meter.





4. Connect long hose from pump outlet to bottom of flow meter.

Pump control switch

Battery level indicator





1. Remove 1/2" npt brass 2. Disconnect the hose from plug from the front side of the the bottom of the flow meter. waste water outlet tee fitting.



5. Slide battery case into battery cradle. Angle battery to get over lip on left side of cradle.



6. Connect electrical connection from battery.



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5. Attach hose from pump outlet to bottom of flow meter.

6. Attach recirculation water hose from pump to waste water outlet tee fitting.



Ultra Pure Systems ELECTRIC module installation instructions



3. Bolt electric motor/pump assembly onto cart with 2 bolts, 4 flat washers and 2 Nylock nuts.



4. Attach hose from prefilter to the pump inlet.



Operating instructions inside

7. Remove the 4 outer screws from prefilters mounting bracket and attach the electrical switch box



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HydroCart Electric Operating Instructions

SETUP

1. The machine may be operated standing upright or lying down. Choose the position that offers the most stability at the job site.

2. Chose a location close to the water supply tap if possible. Additional extension garden hoses may decrease system volume production rate.

STARTUP

1. Connect water supply garden hose to feed water inlet connection.

2. Connect the yellow 100 ft hose to pure water outlet connection.

3. Connect wash pole hose to the other end of the 100 foot hose.

4. Plug GFCI into a properly grounded 115 volt outlet. Test and reset the GFCI. When using an extension cord, make sure the cord is the correct size gauge and suitable for outdoor usage. We recommend the following length and size.

- 1st 50 ft. use a 3 wire, 14 gauge cord.

- From 50 to 150 ft, use a 3 wire, 12 gauge cord Note: If using a generator, it must be a 3500 watt peak power or larger.

5. Direct waste water hose to an area that can accept the water such as shrubs, trees, grass or drainage that leads to a storm drain. Attach an extra garden hose if needed to reach the desired area. **Note:** The waste water will not harm any plant life. It is just tap water with a higher total dissolved solids content.

6. Turn on water supply.

- 7. Open the flush valve to bleed air from system.
- 8. Turn motor switch ON by pressing the BLACK push button.
- 9. Close the flush valve when air has been cleared from system.
- 10. Check pressure on gauge. Normal operating pressure is 120 150 psi.
- 11. Test pure water quality using the handheld TDS meter. Water should be less than 10 ppm.
- 12. Use the ball valve at the pole to adjust desired amount of pure water flow supplied to brush. SHUTDOWN
- 1. Open the flush valve to allow water to flush out the RO membranes for 1 minute.
- 2. Turn motor switch **OFF** by pressing the **RED** push button.
- 3. Turn supply water off.
- 4. Open pure water ball valve to relieve pressure in the line. Close valve.
- 5. Close flush valve after pressure has bled off.

Setup & Charging Procedure for HydroCart Battery

1. The following items are included with the battery powered unit: Qty. 1 - 12 volt Deep cycle type, sealed, maintenance free gel battery. Qty. 1 - Battery charger for gel type battery only. ٠

2. Join together the quick-connect coupler from the battery to the quick-connect coupler from the pump control box. See drawing on next page.

3. The switch on the pump control box is a circuit breaker type switch. In the event of a pump circuit overload, the breaker can be reset by turning it to the OFF position and then restarting.

Battery System Operation

To obtain optimum battery life, each battery should be discharged down to 30% of capacity before being placed on the charger. The control box has a battery level indicator that will illuminate GREEN until the remaining charge drops below 40%. Then it will change to **YELLOW** until the charge drops to 30% remaining and will then change to **RED**, indicating that the battery needs to be recharged immediately. The unit run time is approximately 12 hours on a fully charged battery.

Battery Charging

1. Plug charger into a 115 VAC outlet.

2. Disconnect the battery connector from the control box and connect it together with the quick-coupler on the charger.

There are 3 indicator lights on the charger. RED - First phase of charge in progress. YELLOW - Second phase of charge in process. GREEN - End of charge cycle.

Note: Battery charge cycle takes approximately 5 hours. Do not remove from charger until charge cycle is complete as indicated by the Green light on the charger. Short cycle charging will cause permanent damage to the gel battery and will affect the useful life. The charger will never overcharge the battery. Only use the gel battery charger supplied with machine.

Operating Instructions for HydroCart Battery

The operation and maintenance for the HydroCart Battery unit is exactly the same as the HydroCart unit as explained on page 6 of this manual. The pump operational instructions are as follows:

1. After the RO system is up and running, turn the pump control switch ON. Note: The pump motor has a built in pressure switch that will automatically stop the pump when the system pressure reaches 100 psi and will restart when the pressure drops.

2. When shutting down at the end of the job, turn the pump control switch to the OFF position.

3. Open the ball valve and relieve all the pressure from the hose.