

'Reach' R3 MAX 12 volt Cart

NEW MACHINE SETUP PROCEDURE

1. Unpack unit and inspect for any damage that may have occurred during shipping.
2. Be sure to inventory all items that were to be included with your order.
3. Any damage or missing components must be reported immediately to the supplier of your system.
4. Your 'Reach' RO/DI Cart is shipped with the filters, membranes, and DI cartridges all preloaded into the machine to ensure proper installation.

OPERATION INSTRUCTIONS

STARTUP PROCEDURE

1. Check battery for secure connections
2. Connect water supply using a garden hose into the inlet of the sediment pre-filter.
3. Open the waste water valve (located on the rear of the machine) and the pure water valve (located on the bottom of the DI Cartridge).
4. Turn water supply on.
5. Turn on the pump/motor assembly via the switch on the back of the unit.
6. As water begins to flow out of waste hose (red hose), slowly close waste valve until 150PSI is achieved on the pressure gauge on the rear of the system.
(Working at a lower PSI will preserve battery life while in the field)
NEVER CLOSE THE WASTE VALVE COMPLETELY WHILE IN OPERATION. THIS WILL DAMAGE THE SYSTEM.
7. The system has a built in self-regulating feature that helps to maintain constant pressures.
8. Connect a hose to the pure water hook up and you are ready to work.
9. Note, when you turn off the pole, the pump will still run. This is normal.

SHUTDOWN PROCEDURE

1. Turn the pump/motor assembly switch to the off position.
2. Open the waste valve fully to flush the system.
3. Turn off the water supply to the unit.
4. Disconnect the water supply.

It is important to always flush the system after each use. Failure to do so will decrease the filters life.

MAINTENACE

There are multiple gauges and instruments on your RO/DI cart that help you monitor the performance of the machine. The following is a recommended sequence of events to help ensure proper performance.

1. Check the gauges above the sediment and carbon pre-filters. The PSI readings should be within 15PSI of one another. If the PSI between the sediment and carbon filter is above 15 you should change the sediment and carbon filters.
2. Your RO/DI cart is equipped with a dual TDS monitor. This monitor measures the water quality coming out of the 2nd RO and the DI part of the machine.
3. The 1st reading your TDS meter gives is the water quality coming out of your RO membrane. It is important to monitor the water quality coming out of the RO so that you know how your system is performing. The RO membranes are rated to remove 95-98% of all TDS in the inlet water. If your membrane is not removing this level of impurities then it is best to replace them with a new membrane. The higher the level of impurities coming out of your RO membrane the less volume of water your DI will purify.
4. The 2nd reading your TDS meter gives is the water quality coming out of your DI and on to your pole. If the TDS rises above 000 it is best to replace the DI cartridge.
5. IMPORTANT: Your TDS meter is water resistant, not water-proof, so avoid getting water on the meter.
6. It is important to replace the filters and other components on your 'Reach' RO/DI cart with replacement filters from Reach Higher Ground.

REMOVAL AND INSTALLATION OF COMPONENTS

PREFILTER CARTRIDGE INSTALLATION:

Filter Location: When facing the unit from the front, there are 2 pre-filters. The filter on the right is the sediment filter. The filter on the left is the carbon filter.

1. Slide the filter housing wrench up from the bottom of the big gray housing and turn counter clock wise to loosen. Remove tool and spin housing completely off.
2. Remove old filter and replace with new filter. Be sure to remove plastic wrapping from the filter before installing.
3. Screw housing into base and lightly tighten with wrench.

DEIONIZATION RESIN CARTRIDGE INSTALLATION:

Resin Cartridge Location: When facing the unit from the front, the resin cartridge is located on the right.

BEFORE REMOVING OR TAMPERING WITH RESIN CARTRIDGE, ENSURE THERE IS NO PRESSURE BUILDUP IN THE HOUSING.

1. Using your fingers, remove the white plastic ring on top of the pressure vessel.
2. Rock the top back and forth to unseat cap. Lift up and remove cap and o-ring.
3. Remove the resin cartridge from the housing and insert new resin cartridge in its place.
4. Push the resin cartridge down to ensure it is properly seated.
5. Firmly press cap down into top of housing until it is seated.
6. Replace white plastic ring into groove.

RO MEMBRANE INSTALLATION:

RO Membrane Location: When facing the unit from the front, the RO membrane is located on the left.

BEFORE REMOVING OR TAMPERING WITH RO MEMBRANE HOUSING, ENSURE THERE IS NO PRESSURE BUILDUP IN THE HOUSING.

1. Using your fingers, remove the white plastic ring on top of the pressure vessel.
2. Rock the top back and forth to unseat the cap. Lift up and remove cap and o-ring.
3. Remove the RO Membrane from the housing and insert new housing in its place.
4. It is important to insert the RO Membrane with the white rubber seal towards the bottom.
5. Push the RO Membrane down until it is properly seated.

Firmly press cap down into top of housing until it is seated.

6. Replace white plastic ring into groove.

Any alterations to your system will void its warranty.

