



**TUCKER®**  
DESIGNED FOR THE PRO

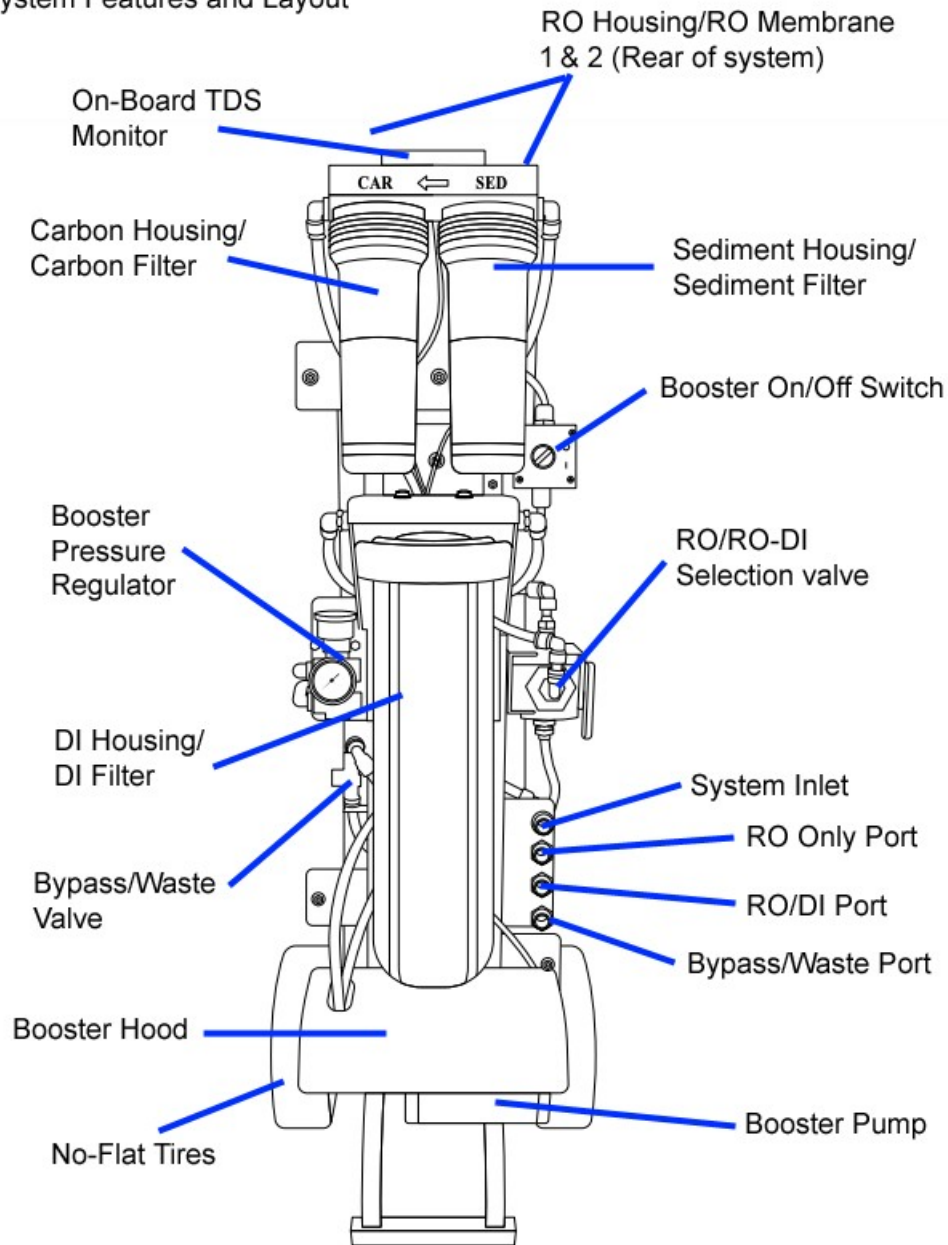


# Tucker® Pole Systems 5-Stage MAXOUTPUT RO/DI Cart User Manual

RHG Products Company  
[www.rhgproducts.com](http://www.rhgproducts.com)  
303-663-1779

# Max Output

## System Features and Layout



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# 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 within 24 hours to the supplier of your system.
4. Your Tucker® MaxOutput is shipped complete in 1 box.
5. **Install your DI filter. It has been bagged separately for protection.**

For MaxOutput Kit Owners:



**YOUR 3/8" YELLOW HOSE IS A PURE WATER HOSE.  
USE A LARGER DIAMETER GARDEN  
HOSE TO SUPPLY YOUR SYSTEM.**



# **Operation Instructions**

## **First time use:**

1. Attach a garden hose to the inlet of your system.
2. Attach a hose (pole hose or hose reel) to the outlet of your system.
3. Attach Bypass extension hose to bypass port.
4. Turn tap water supply on. Start your system with the bypass valve fully open.
5. Allow system to flush for 15 minutes, then close the bypass valve all the way. Although the valve is fully closed, water will still flow out of it. This is normal.
6. It will take a few minutes for all of the air to purge out of your system before water makes its way out of the reel.
7. After the initial 'air purge' you will not need to purge air again unless you replace a filter.
8. You are now fully operational.

## **Every day use:**

1. Attach your tap water supply and hoses as you did on set up.
2. Turn tap water supply on. Always start your system with the bypass valve fully open.
3. Allow system to flush for a few moments before beginning production.
4. Attach cleaning equipment to system and close bypass valve to begin production

# **Shutdown Procedure**

1. Open the bypass valve fully to flush the system.
2. Flush the system for 4 to 5 minutes at the end of the job.

\*\*If you leave the unit inoperative for longer than 2 weeks, switch to RO ONLY mode and run the RO in flush mode for 4 minutes and RO production mode for 10 minutes.

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.**

# **Features**

## **TDS Monitoring**

Water quality during purification may be continuously monitored with the Dual Probe TDS Meter.

The IN reading shows water purity after RO purification, measured in Total Dissolved Solids, parts per million. A properly functioning RO should be rejecting greater than 90% of solids. Compare your RO TDS against your tap water to ensure proper performance. This is best done when changing DI.

The OUT reading measures water purity after DI filtration. A new DI should produce water of 0ppm TDS. This will slowly climb as the DI media is spent. You should be able to clean glass spot-free with water of up to 10ppm TDS.

## **RO Only Option**

MaxOutput Pure Water Systems come equipped with a RO Only feature.

RO filters greatly reduce water TDS without the aid of DI filters. Under pump pressure this reduction will be greater than under tap pressure. Windows can be washed spot free with water up to 10ppm TDS. Non-Glass surfaces can typically be washed with water up to 40ppm TDS.

1. To run your system in RO Only Mode turn your selection valve to the RO position. Connect your hoses to the RO Only outlet.
2. If the system is not producing water of acceptable purity in RO Only Mode for your application, switch to DI mode by turning your selection valve to the RO/DI position. Connect your hoses to the RO/DI outlet.

### **Electric Motor Operation**

MaxOutput RO/DI systems come with 110v electric pumps to boost water production. An on/off switch is mounted to the face of the systems. 110v models come with a GFCI with TEST and RESET buttons, an electric motor and pump. Simply connect to power to run pump. Only turn on your pump after you have begun production and the system is producing a pure water stream free from air bubbles.

## **Maintenance**

It is important to check the TDS level of the water coming from your system before cleaning to ensure a proper clean. This can be done with your Dual Probe TDS meter. Check water purity after flushing and a few moments after starting production.

Once the TDS levels rise above 10 parts per million you will begin to see spotting on windows and should consider changing your DI Filter.

The carbon and sediment cartridges need to be replaced after approximately 5000 gallons to protect the RO membranes. Failure to do so will void your warranty. The job of the sediment is to remove heavy particulate from the source water. The job of the carbon filter is to remove the chlorine. It is possible to check to see if your carbon filter is still working efficiently with a chlorine test kit.

Your Tucker® MaxOutput is a water purification system and as such it needs to be maintained. Running water through the RO membranes every 2 weeks will help to keep the ROs working at peak performance. Do not ever drain your system as it is important to keep the filters hydrated.

### **Filter Replacement Schedule & Procedure**

Your carbon filter protects your system from damaging chlorine and water disinfection agents. It is recommended that you change your carbon filter cartridge every 5000 gallons. Failure to do so will void your warranty. Order RHG #20026. It is recommended that you change your sediment filter when you change your carbon or should you experience a reduction in water production before your carbon has reached the end of it's life. Order RHG #20025.

Your DI filter has a limited lifespan based on the amount of dissolved solids it is removing from the water. DI filter cartridges need to be replaced as needed for your cleaning application.  
Order RHG #20015

To remove these filters, slide the correctly sized provided plastic wrench over the filter housing from the bottom up. Once snug, turn the filter counter-clockwise (as viewed from the bottom of the filter) to break any seal that may have formed. Once the housing is loose, continue unthreading housing sump from the housing head. Remove spent filter and replace. Ensure the rubber washers provided with your replacement filter are correctly placed and aligned. All rubber seals, including the large diameter O-ring around the mouth of the housing, should be lubricated at this time.

RO membranes have a much longer service life and in the experience of RHG may last the life of the system. However ROs are only warrantied for factory defect and may eventually diminish in performance or fail. If you experience a reduction in RO performance in your Tucker® Cart, contact RHG directly to troubleshoot.

To change your filter cartridge, first disconnect any hoses from the elbow in the insert at the top of the filter housing. Remove the stainless steel retaining clamps. Pry the filter insert from the housing. A small slot is present at the rim of each insert should you need the aid of a flat head screw driver. Remove the spent filter cartridge and replace. Reassemble filter housing and reconnect hoses. Flush new carbon filter cartridge if needed.



To install the new filter, you may need to relubricate your filter housing insert which also ensures a tight seal. The white nipples on each end of the membrane will likely need to be lubricated to seat into the O-rings in the top and bottom of the housing. Use a silicone valve stem lubricant. RHG uses Dow Molykote 111. Put the new filter into the housing the same way the previous one was installed. There is a white O-ring on the membrane. This O-ring should go at the top end of the housing. Insert the membrane from the opposite end first.

Be sure to run water through the system without any booster motor/pump assembly powered on to purge all air out of the system before or you risk damaging the filters.

Reassemble filter housing and reconnect hoses.

RO MEMBRANES SHOULD NOT BE ALLOWED TO DRY OR COLLECT STAGNANT WATER IN THE BOTTOM OF THE MEMBRANE. THIS WILL DIMINISH PERFORMANCE, POTENTIALLY TO THE POINT OF FAILURE. TO PREVENT THIS, ROs SHOULD BE RUN ON A REGULAR BASIS, AT LEAST EVERY TWO WEEKS, AFTER FIRST USE, EVEN DURING "OFF-SEASON".

**Any alterations to your system will void its warranty.**