



Tommy Car Wash Systems | 648 S Point Ridge | Holland, MI 49423 | Tommycarwash.com/Support

This document will go through step by step the process of replacing the RO Membrane Filters. If any further assistance is needed, please call into Support.

It is highly recommended to do this with 2 people.



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Tools Recommended:

- Small Ladder
- Large Flathead Screwdriver
- Crowbar
- Ratchet Strap
- Rubber Mallet
- 3oz. of Silicone Grease

Parts Needed:

- 2x RO Membranes (P-WAT-2402)

Parts Recommended (but not required):

- 2x Membrane Upflow Adapters (P-WAT-2403)
- 2x Membrane Downflow Adapters (P-WAT-2404)

Steps:

1. Turn RO into OFF mode (or Bypass if you are still running cars)
 - If you want to ensure the RO doesn't get turned by anyone accidentally while working on the unit, turn the Red Disconnect switch to the OFF position.
2. Open the bleeder valves at bottom of each membrane.
3. Remove snap rings from the top of the membrane caps.
4. Using a crowbar, remove both black membrane caps to access the membranes.
5. Remove the membranes by the adapter stem using a ratchet strap. It will be easier to physically position yourself on the frame of the RO unit to get the angle to fully pull out the membrane. (Note: the membrane is quite heavy and will require a significant amount of strength and maneuvering to remove).



6. Once removed, grab the new membranes and install new adapters on the top and bottom (or swap out with original adapters if you don't have new ones). You should hear a "click" when the adapters are fully seated on the membrane.
7. Using silicone grease, grease all rubber O-rings and the exterior rubber seal on the outside of the membrane itself.
8. Once completed, slowly and gently, place the membrane inside the housing using the strap for more control. (Note: Make sure the "Direction of Flow" is pointed down when installing the membrane. The water enters the right most membrane, goes down and into the top of the 2nd membrane, and down again to be recirculated into the system.)
9. Once membranes have been installed, put some extra silicone grease around the exterior of the membrane cap, where it touches the inside of the membrane housing, to ensure a sealed fit when reinstalling. (Note: the membrane cap should be seated and aligned on the stem of the adapter.)
10. Once membrane cap has been seated on adapter, reinstall the snap ring as flush as you can get it. Ensure the membrane cap and snap ring are as flush as you can get it. (Note: Use the butt end of a mallet to help ensure the membrane cap is fully seated as you reinstall the snap ring.)
11. At this point, we can now close the bleeder valves at the bottom of the membrane housings and prepare to purge the system for air bubbles.
 - If unit was shut off in the beginning, restore power to the unit by turning the Red Disconnect switch to the ON position.
12. Before turning the RO into Purge mode, ensure all connections removed are tightly seated. Then proceed to apply pressure to the Sediment Filter release valve cap (the red cap on the Sediment Filter) until water is released from it.
13. Now we can begin to purge the system. Run the Purge for about 5 minutes. During the purge continue pressing the red Sediment Filter release valve until water only is coming out. At the same time, open both RO pump and Repress pump bleeder valves until water only is coming out. (NOTE: When the air bubbles make its way out of the membranes, you will hear a very loud "popping" noise that may startle some people.)



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14. After this, we are now OK to turn the RO unit back into Auto and resume its normal functionality.