

Department	HydroLogic		Doc #	SOP - Membrane Replacement	
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Standard Operating Procedure (SOP); HGC741671 Membrane Replacement

1. Purpose

The purpose of this SOP is to aid users in the general maintenance replacement of the HyperLogic membrane; Hawthorne HGC741671

2. Applicable To

This SOP is applicable to all HyperLogic Commercial Series RO systems [1-12 membranes] which feature the stainless-steel membrane housings, utilizing the 4x38" membrane element; Hawthorne HGC741671

3. Prerequisites

Ensure you follow all state & federal guidelines for personal workplace safety prior to disassembly and/or maintenance of your HyperLogic equipment & related consumables. Be sure to dispose of unwanted goods appropriately.

4. Materials/Reference

Suggested tools/materials required for this operation include, but may not be limited to, the following:

- Replacement Membrane HGC741671
- Pliers/Wrench
- Towels
- Ref. HyperLogic 'Owner's Manual'
- DOW Molykote 111 Lubricant
- Membrane Endcap Extractor Tool
- HyperLogic Maintenance Log sheet
- Teflon Tape

5. Procedure

The general steps for HyperLogic RO membrane replacement (Hawthorne item HGC741671) are as follows:

- a. Place RO in 'Standby' or disconnect from power. Shut off feed water source to RO.
 - i. Ensure that all Pressure and Flow Gauges on the RO read '0'.
- b. Remove U-Pin and slide end cap from stainless-steel membrane housing.
 - i. Removal of the Permeate tube/manifold and/or center Permeate fitting may be required. If required, thread in membrane end cap extractor tool to aide in end cap removal. Teflon tape may be used on threaded fittings during reassembly.
- c. Remove new HGC741671 membrane from packaging and prepare for installation by lightly lubricating the membrane brine seal & both Membrane Adapter ends with DOW Molykote 111 lubricant. Refer to 'Figure 1'.
- d. Remove existing RO membrane from the stainless-steel vessel & dispose of properly.
- e. Gently clean the inside of the stainless-steel membrane vessel where the end cap makes internal contact.

- f. Match the FLOW arrow on the membrane to the FLOW arrow direction on the stainless-steel membrane housing. Make sure the brine seal is on the FEED end of the housing and gently put it into the membrane vessel making sure not to roll or fold the seal in the process. Press into place until lower Membrane Adapter Fitting mates with lower membrane vessel end cap inner seal. Refer to 'Figure 2' below.
- g. Clean & inspect membrane end cap O-rings [replace if damaged] & apply DOW Molykote 111 lubricant as required; Refer to SOP – Membrane End Cap Inspection for additional details.
- h. Install membrane end cap in stainless-steel membrane housing and reinsert U-pin fully.
- i. Reassemble Permeate fitting and/or tubing if removed in Step 5b.
- j. Restore Power and Water to RO. Adjust System/Concentrate Pressures and Flows to proper operating conditions and inspect for leaks. Record membrane change date on 'HyperLogic Maintenance Log' sheet.

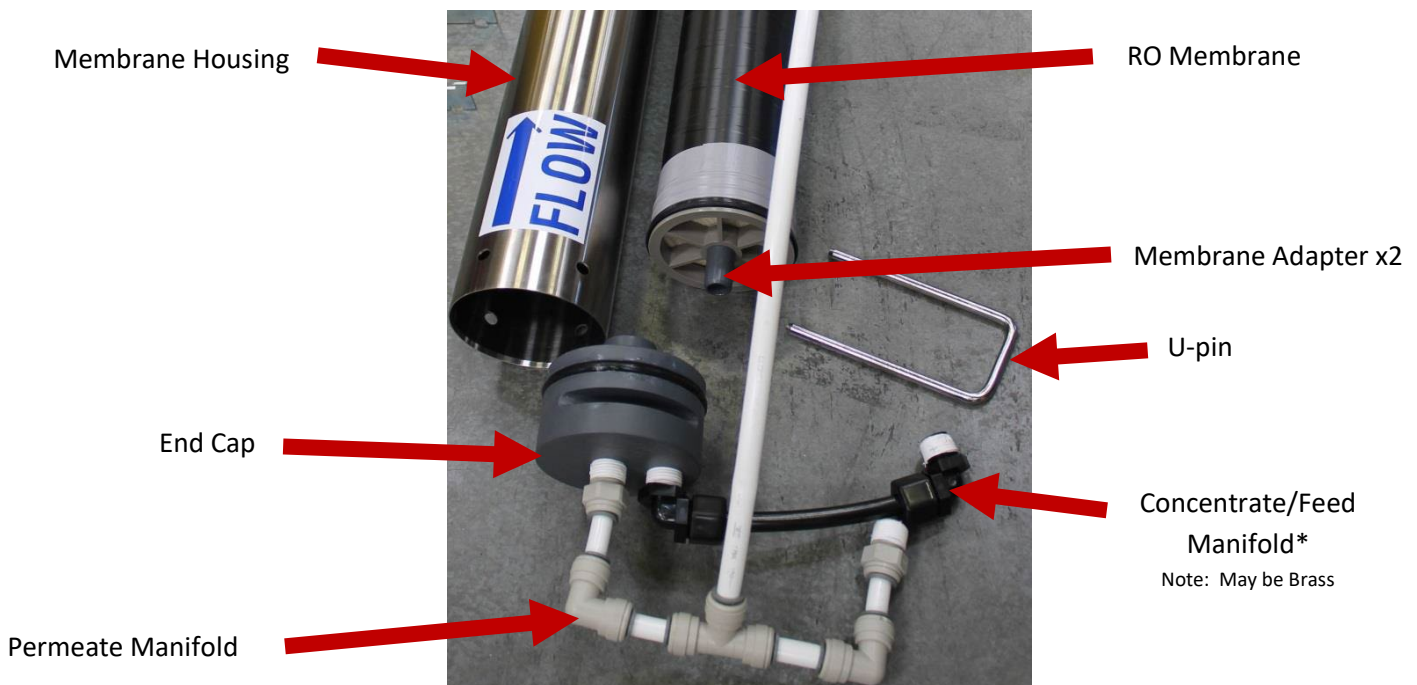


Figure 1

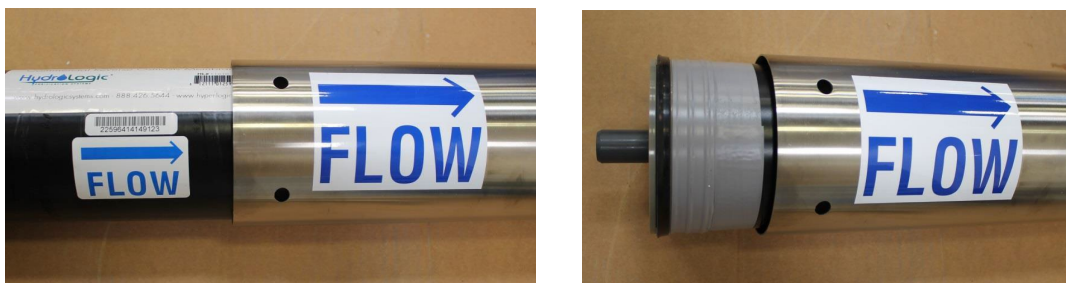


Figure 2

END OF SOP DOCUMENT

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