

4400 SERIES RO MEMBRANE HOUSINGS & END CAPS

The 4400 Series Reverse Osmosis machines have utilized several styles of membrane housings and end caps over the years as the machine has evolved. A matrix outlining the membrane, membrane housings, and end caps used on the 4400M RO is listed below. This Tech Note includes information on the End Caps cracking issue and contains latest membrane housing details.

Date of Manufacture	Replacement Membrane Kit	Replacement Membrane	Membrane End Adapter	Membrane Housing	End Cap (sold individually unless noted)	O-Rings
Prior 9/28/2004 Pre-BM# 5-031 (Housing length 42 5/8")	W3T578136 Includes membrane & adapters.	W2T912013	W2T914191 Includes inner o-ring, sold as a kit of 2 adapter (requires 1 per housing).	W3T578352 Housing, end caps, o-rings, adapters, & membrane W2T912013. Old style p/n 486-40-328 obsolete.	W2T911928	W2T911972 (Outer o-ring) W2T913204 (Inner o-ring) W2T913204 (Adapter o-ring)
Prior 8/12/2009 Pre-BM# 9-104 (Housing length 42 7/8")	W3T577596 Includes membrane & adapters.	W2T912013	W3T572480 Requires inner o-ring, sold individually, P/N W2T913204 (requires 2 per housing).	W2T914200 Housing with end caps, o-rings, less membrane. Old style p/n 486-40-312 obsolete.	W2T912035 (Includes o-rings, seal and clamp set) Old style p/n 486-40-360 obsolete.	N/A
Prior 1/1/2011 Post-BM# 9-104 (Housing length 40 7/8")	Not Applicable	W2T912013	Not Applicable	Verify with Tech Support.	W2T912035 (Includes o-rings, seal, and clamp set) Old style p/n 486-40-360 obsolete.	N/A
After 1/1/2011	Not Applicable	W2T912013	Not Applicable	W2T912091 Housing with end caps, o-rings, less membrane.	W2T912032 (Includes (1) end caps, (2) outer o-rings (2) inner o-rings, and (1) clamp sets w/hardware)	W2T912092 (Outer o-ring) W2T912093 (Inner o-ring)

Note: Effective October 4, 2010, all new 4400M series ROs will utilize a full-fit style membrane (P/N W2T912013). It is the same dimensions as the discontinued CMED membrane (P/N 1230048) and utilizes the same end adapters.

4400 Series Cold RO End Cap Cracking Issue

To replace cracked end caps, use P/N W2T912035. It contains all o-rings, seals, and (1) clamp set. This replaces P/N 486-40-360.

Note: For installing stainless thread connections into the plastic end cap, be sure to use PTFE tape, approximately 4 wraps on the male connector and a thin layer of liquid PTFE over the sealing surface. Do not use excessive tape. Tape is wrapped in a clockwise direction. The wrap is tightened to the threads, clearly showing the thread form. Tightening 2 turns after finger tight should be sufficient to seal the metal male connector into the end cap. 70% ($\pm 5\%$) of the male thread should be engaged. Do not over tighten.

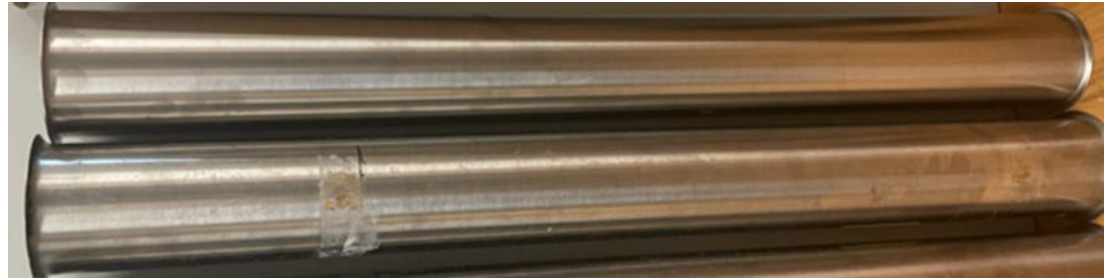
Membrane Housing for 4400 Cold Series RO and 4100/4400HX Hot Series RO

The VSH model housings and end caps are being replaced due to product availability. Implementation occurred on or before January 1, 2011, of all newly manufactured 4400M, C, and B machines including 4100/4400HX hot series ROs.

Housing:



Note: As of March 1, 2023, there was a change in the supplier of the housing. Consequently, the newer housing is slightly shorter (see picture below). Due to the smaller length, it can be difficult to plumb housings of the different sizes together. If a housing needs to be replaced, any interconnecting housings should be replaced at the same time.

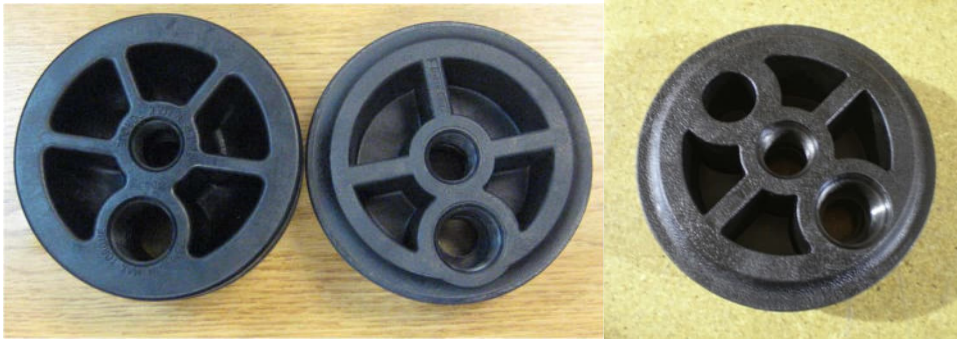


As of Dec. 30, 2024, housing W2T912091 can be replaced with housing W2T926343 due to W2T926343 showing better field performance. Cap kit W2T911929 must accommodate housing W2T926343. If two different housings are plumbed together, due to differences in height, U-tube W2T948051 can be used for 5/8" OD assemblies, and W2T948052 for 3/4" OD assemblies.



Reference only.

End Cap for 4400 Cold Series RO: Thicker Wall Geometry vs. Contoured



New Style End Cap
(From Kit P/N
W2T912032)

Obsolete End Cap
(P/N 486-30-360)

Replacement End Cap
for P/N 486-30-360
(P/N W2T912035)

Dual O-ring vs. Single O-ring



New Style End Cap
(From Kit P/N
W2T912032)

Obsolete End Cap
(P/N 486-30-360)

Replacement End Cap
for P/N 486-30-360
(P/N W2T912035)

Note: The new style end cap on the left has four spokes vs. the three spokes on the VSH style on the right. The height difference and clamp size/location are also different. The new style end caps will NOT fit the older style housings.