

**CAUTION**

**TURN OFF THE AIR SUPPLY AND  
DEPRESSURIZE THE LINE CONTAINING  
THE DRYER UNIT BEFORE ATTEMPTING  
TO SERVICE!**

**CAUTION!** When re-installing the bottom plate, the internal retaining ring **MUST BE** securely seated in its mating groove in the bowl, below the bottom plate. Failure to do so could cause air pressure to blow the bottom plate off the bowl, causing serious personal injury or death.

**To replace the membrane module:**

No. 1: The bowl assembly is a bayonet mount, with a safety locking detent. To remove the bowl, push straight UP on the bowl, then rotate counterclockwise (CCW) as viewed from below the bowl. The bowl and membrane module are then separated from the casting body by lowering down until clear of the body. The membrane module can then be removed in the following fashion:

**Models MSD-XX-KA1X and MSD-XX-KA2X:**

(a) Remove the membrane module from the bowl by pulling the module straight out of the top of the bowl. There are O-rings sealing the outside diameter (O.D.) of the module to the inside diameter (I.D.) of the bowl, and turning or twisting the module while pulling upward may facilitate removal.

(b) To replace bottom plate O-ring, and to facilitate replacement of lower module to bowl O-ring, carefully remove the internal retaining ring, using the proper tool. Use a long wooden dowel or a hammer handle to tap the bottom plate out of the bowl from the inside. The lower O-ring can now be replaced.

(c) To install a new membrane module, place a VERY LIGHT FILM of grease (DO NOT OVER-GREASE!) on the O.D. of the plastic end caps of the module, taking care not to contaminate the ends of the module with grease.

(d) Insert the module into the bowl with a turning or twisting motion, taking care not to damage the O-rings that seal the module to the bowl. WHEN PROPERLY INSTALLED, THE MODULE BOTTOMS OUT AGAINST THE BOWL BOTTOM PLATE.

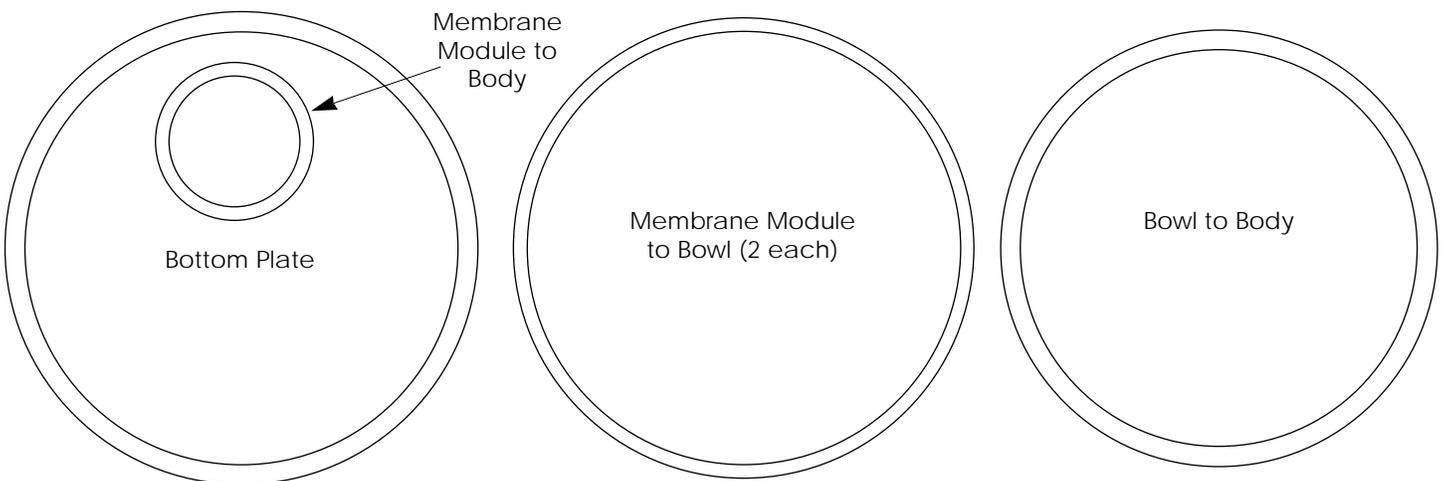
The bowl assembly can then be re-installed into the casting body, by inserting the bowl straight UP into the body, and then rotate clockwise (CW).

**On all models, it is recommended that you replace all O-rings in the unit at the time you replace the membrane module. When servicing unit, take care not to twist, pinch or cut O-rings.**

**Repair Kits and Replacement Parts**

KA1D Membrane Module . . . . .	MSD-97-092
KA1E Membrane Module . . . . .	MSD-97-093
KA2D Membrane Module . . . . .	MSD-97-090
KA2E Membrane Module . . . . .	MSD-97-091
KA O-Ring Kits . . . . .	MSD-97-098
KA Silencer Kit . . . . .	MSD-97-100

**The following O-rings are shown actual size (elements of Replacement Kit MSD-97-098).  
These O-rings are included in each Membrane Module Kit.**



**SEE REVERSE SIDE FOR -KB UNITS**

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**Models MSD-XX-KB1X and MSD-XX-KB2X:**

(a) There is an adapter that is secured to the bowl by 4 (ea) M5 x 0.8 x 20 button socket head cap screws. Remove the screws to allow separation of the adapter from the bowl. The adapter is sealed by an O-ring to the inside diameter (I.D.) of the bowl, so turning or twisting the adapter may facilitate removal.

(b) To replace bottom plate O-ring, and to facilitate replacement of lower module to bowl O-ring, carefully remove the internal retaining ring, using the proper tool. Use a long wooden dowel or a hammer handle to tap the bottom plate out of the bowl from the inside. The lower O-ring can now be replaced.

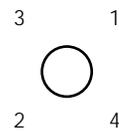
**CAUTION!** When re-installing the bottom plate, the internal retaining ring **MUST BE** securely seated in its mating groove in the bowl, below the bottom plate. Failure to do so could cause air pressure to blow the bottom plate off the bowl, causing serious personal injury or death.

(c) Remove the membrane module from the bowl by pulling the module straight out of the top of the bowl. There are O-rings sealing the outside diameter (O.D.) of the module to the inside diameter (I.D.) of the bowl, and turning or twisting the module while pulling upward may facilitate removal.

(d) To install a new membrane module, place a VERY LIGHT FILM of grease (DO NOT OVER-GREASE!) on the O.D. of the plastic end caps of the module, taking care not to contaminate the ends of the module with grease.

(e) Insert the module into the bowl with a turning or twisting motion, taking care not to damage the O-rings that seal the module to the bowl. WHEN PROPERLY INSTALLED, THE MODULE BOTTOMS OUT AGAINST THE BOWL BOTTOM PLATE.

(f) Re-install the bowl to casting body adapter by twisting in the adapter and aligning the four screw holes. Re-install the four M5 x 0.8 x 20 button socket head cap screws and initially hand tighten in an even pattern. Then tighten screws to 3-5 FT-LBS, using this sequence:



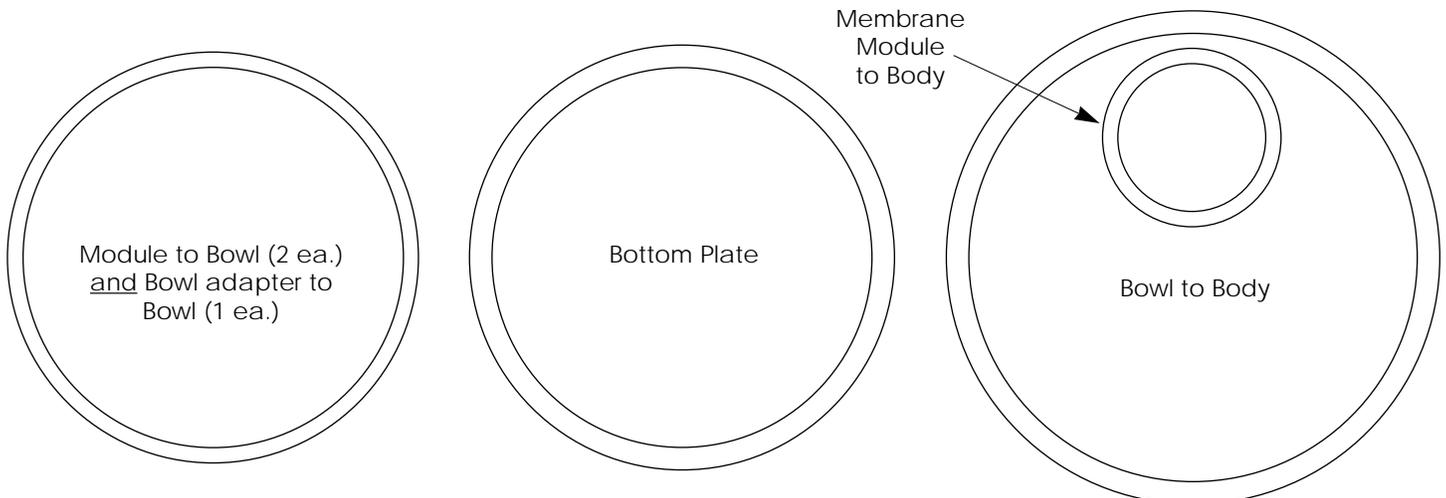
(g) The bowl assembly can then be re-installed into the casting body, by inserting the bowl straight UP into the body, and then rotate clockwise (CW).

**On all models, it is recommended that you replace all O-rings in the unit at the time you replace the membrane module. When servicing unit, take care not to twist, pinch or cut O-rings.**

**Repair Kits and Replacement Parts**

KB1D Membrane Module	MSD-97-096
KB1E Membrane Module	MSD-97-097
KB2D Membrane Module	MSD-97-094
KB2E Membrane Module	MSD-97-095
KB O-Ring Kits	MSD-97-099
KB Silencer Kit	MSD-97-101
KB Bowl Adaptor Screws	MSD-97-102

**The following O-rings are shown actual size (elements of Replacement Kit MSD-97-099).  
These O-rings are included in each Membrane Module Kit.**



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