



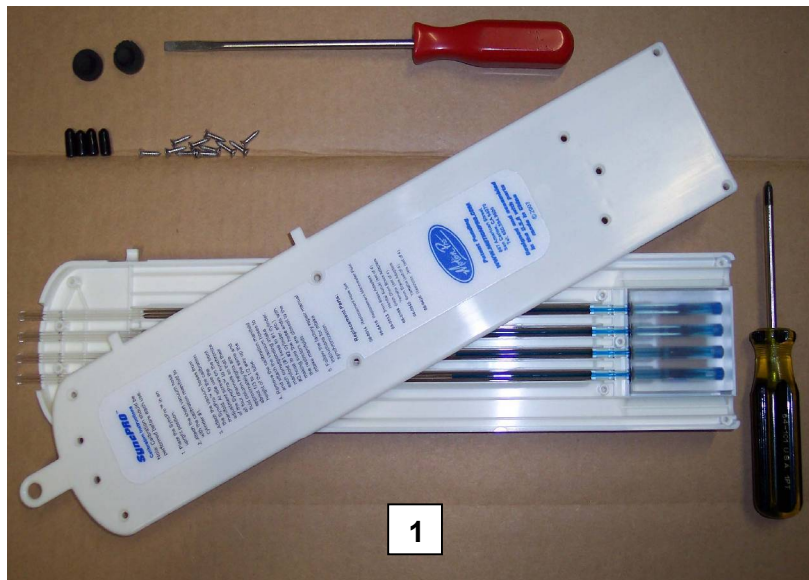
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INSTRUCTIONS

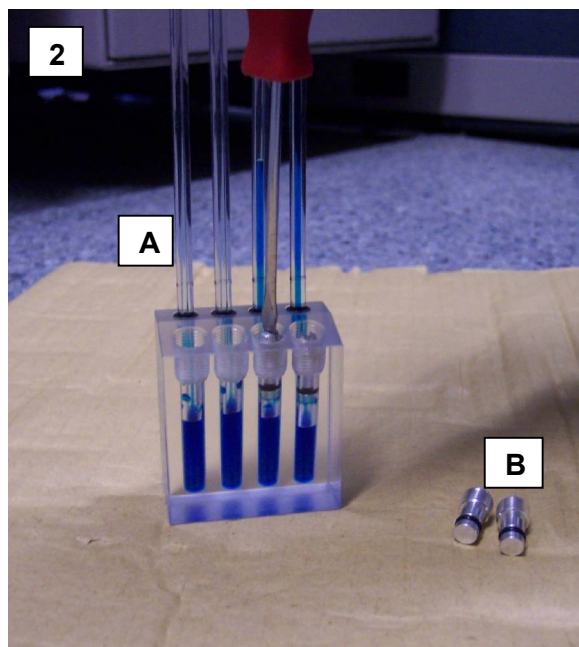
08-0415 SyncPRO™ Manometer Fluid Refill Instructions

Thank you for purchasing Motion Pro SyncPRO™ Replacement Manometer Fluid. In the event excess vacuum was placed on the SyncPRO™, fluid from all four chambers may be drained from the reservoir. (NOTE: If you experience fluid loss from only one chamber, please contact Motion Pro to determine if there is a problem with your SyncPRO™ before refilling it.) The following steps will guide you through the procedure for replacing fluid that was lost during calibration or synchronization.

Have the following items handy before you begin: #1 Phillips screwdriver, a small flat blade screwdriver, running water, paper towels and compressed air.



1. Place the SyncPRO™ face down on a clean non-scratch surface with ample working space. It is important to **keep your work area clean** so you don't introduce debris into the unit during reassembly. Turn the four calibration screws clockwise until they stop turning. Remove the rubber feet and eleven screws that hold the two-piece housing together. Separate the housing.



2. Remove the reservoir with tubes still in place (A). Remove the four calibration screws (B) and place them aside in a clean area.



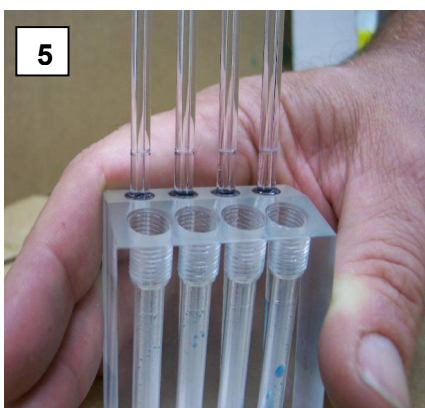
3. Hold the reservoir under running water to flush the fluid from the four chambers. While supporting the reservoir, hold the tops of the tubes under the running water to flush the remaining fluid down through the tubes and out of the chambers. Repeat this process until the water runs clear. You will get some fluid on your hands, but it is non-toxic and easily washes off with soap and water. Wipe off the outside of the reservoir and tubes with a clean paper towel and use compressed air to **gently** blow water out of the four chambers. You **will** need to force air down through the tops of the tubes to blow out any remaining water. Repeat this process until all of the water is removed. A very small amount of residual moisture is acceptable if it can't be completely removed.

4. Remove the o-rings from the four aluminum pistons taking care not to scratch the o-ring gland. Clean the pistons thoroughly using a clean paper towel. Install the new greased o-rings supplied in the rebuild kit.

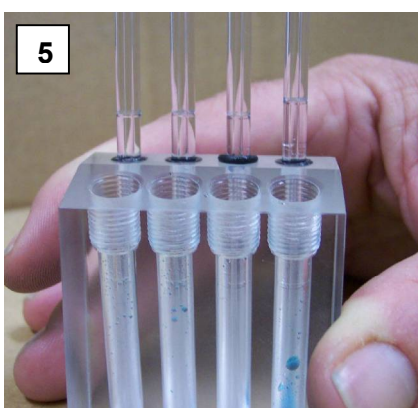


5. **Before going to the next step, make sure that the tubes and o-rings are still fully seated in the reservoir.** If an o-ring pops loose, remove the tube, re-seat the o-ring and re-insert the tube. The tubes are tightly fitted, so apply some additional grease to the beveled end of the tube (as shown in step 6) and force it through the o-ring with a twisting motion until the tube can not be pushed in any farther. When finished, all of the notches on the tubes should line up.

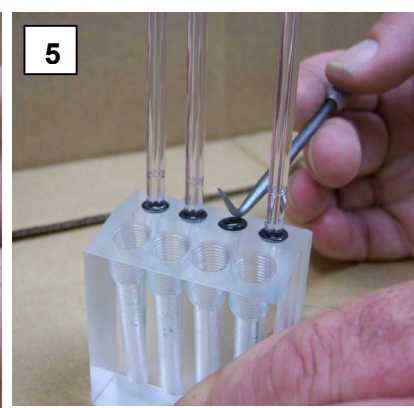
O-rings seated properly

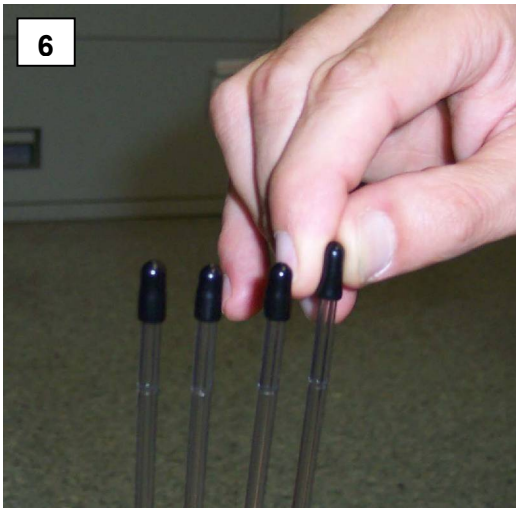


O-ring popped out of place



Re-seating o-ring with tube removed



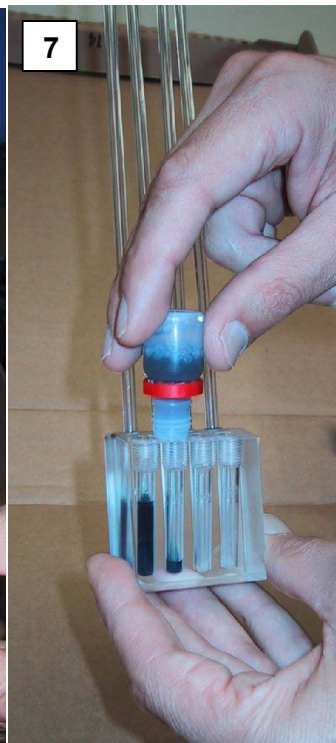
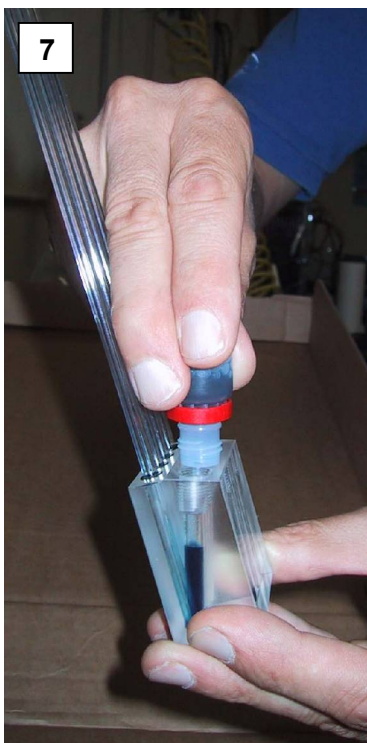


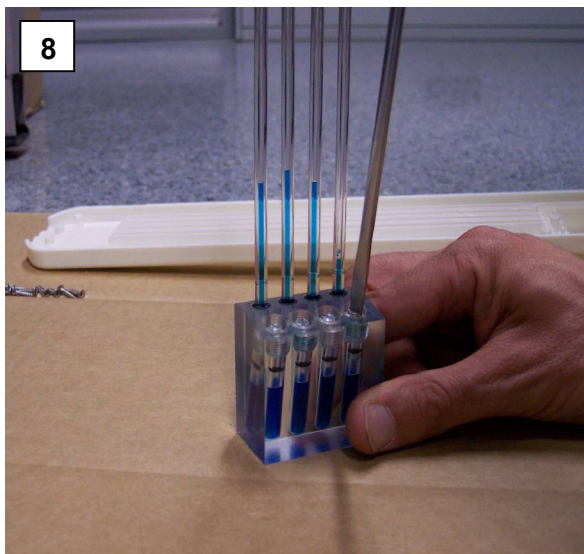
6. Install the vacuum caps about halfway down onto the tubes to create an air seal.

7. To refill your SyncPRO™, hold the reservoir upright so that the chambers are vertical. Insert the tip of the refill bottle all the way in past the threads of the first chamber and place 35 drops of manometer fluid into the chamber. This should result in a fluid level measurement of approximately 5/8" down from the top front edge of the reservoir. (Note: It is important to keep the fluid off the threads.)

Fill each of the remaining chambers using the same method until the fluid level is equal to the first chamber (**NOTE:** filling of remaining chambers may take more or less than the 35 drops to be equal in height to the first chamber).

When finished filling, perform a visual check to make sure the fluid levels in the four chambers are the same height. If the fluid levels are not the same height, add a drop of fluid to the chambers that are low until they are all approximately the same. If you overfill a chamber or get fluid on the threads you can use a lint-free cloth to wick up or wipe away any excess fluid. If there is fluid in the threads, make sure to wipe them dry before installing the piston.





8. Make sure the calibration screws and o-rings are free of debris and then thread them down gently by hand until they bottom out. They do not need to be tight.

9. Place the reservoir in the housing, and check one last time that the o-rings and tubes are still fully seated before you put the housing back together. Starting with the innermost screws and working outward, gently hand-tighten each screw until the housing is closed around the entire perimeter. Replace the rubber feet. Your SyncPRO™ is now ready for use. Remember to check and set your engine idle to the proper RPM before hooking up the SyncPRO™ for its next use.

