OPERATION MANUAL FOR
VP 416-ALE-384 Plate Sealing System

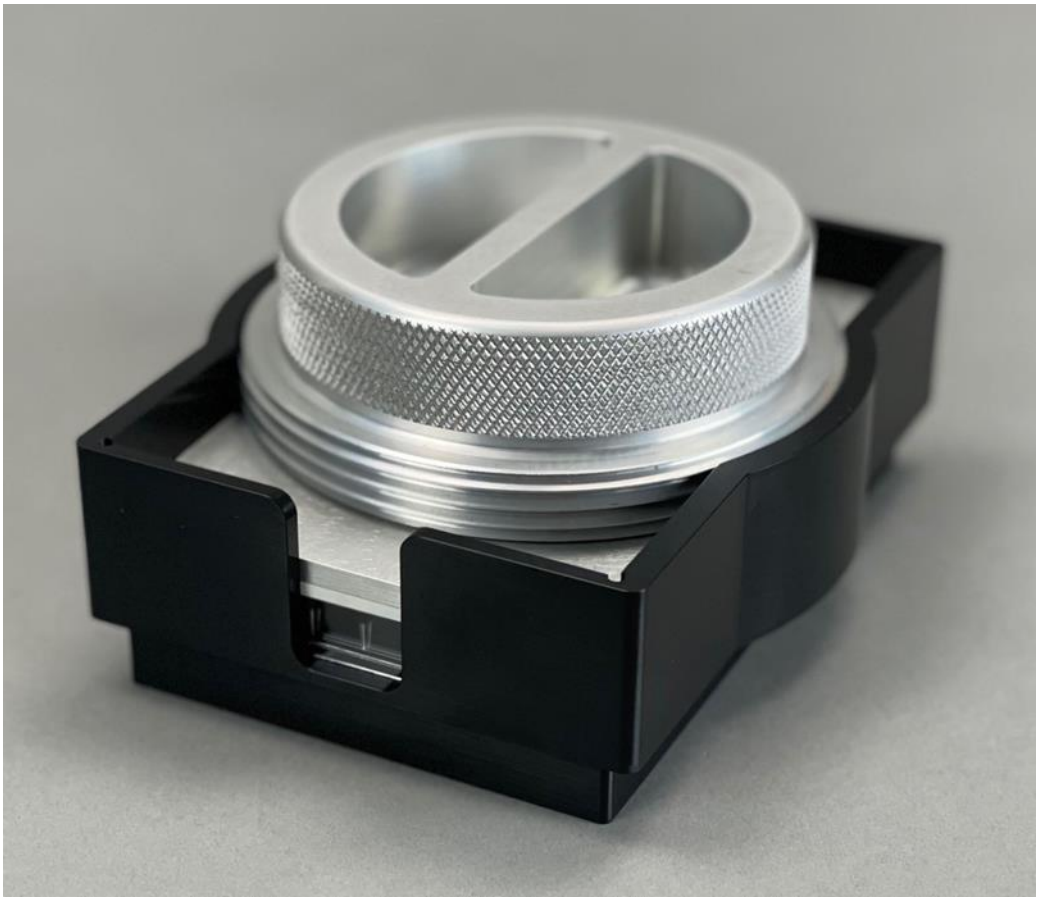

Figure 1. Assembled VP 416-ALE-384 Plate Sealing System with V&P rubber mat,† microplate† and V&P PFA film†
† sold separately

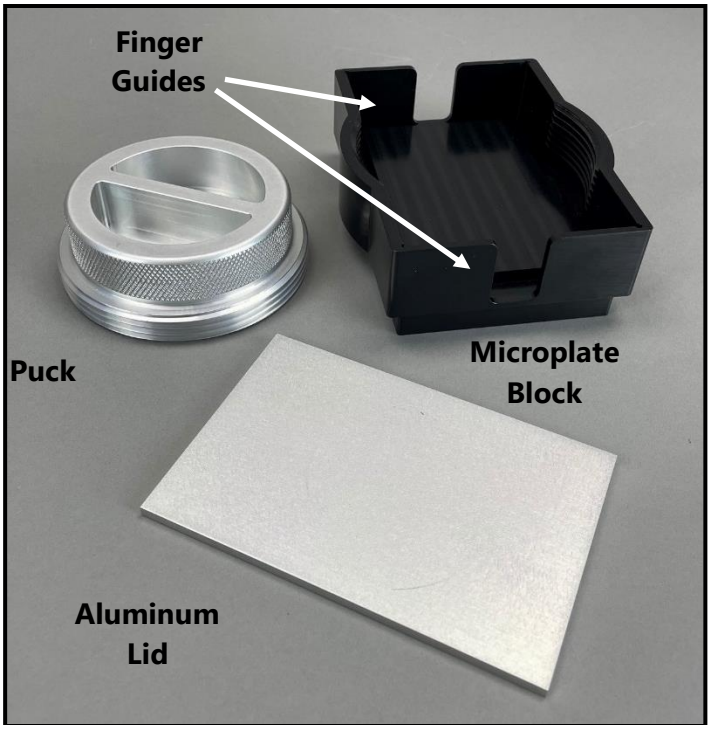

Figure 2. Disassembled view of tightening Puck, Microplate Block and Aluminum Lid

SET-UP

Sealing microplates with VP 416-ALE-384 plate sealing system

1. Examine each component of the sealing system, **Figure 2** and ensure that they are free from dust or debris that will prevent seating of the microplate flush with the raised base (see **Figure 3a**) built into the microplate block. Unevenness may cause a poor seal and loss of solvent as a result.

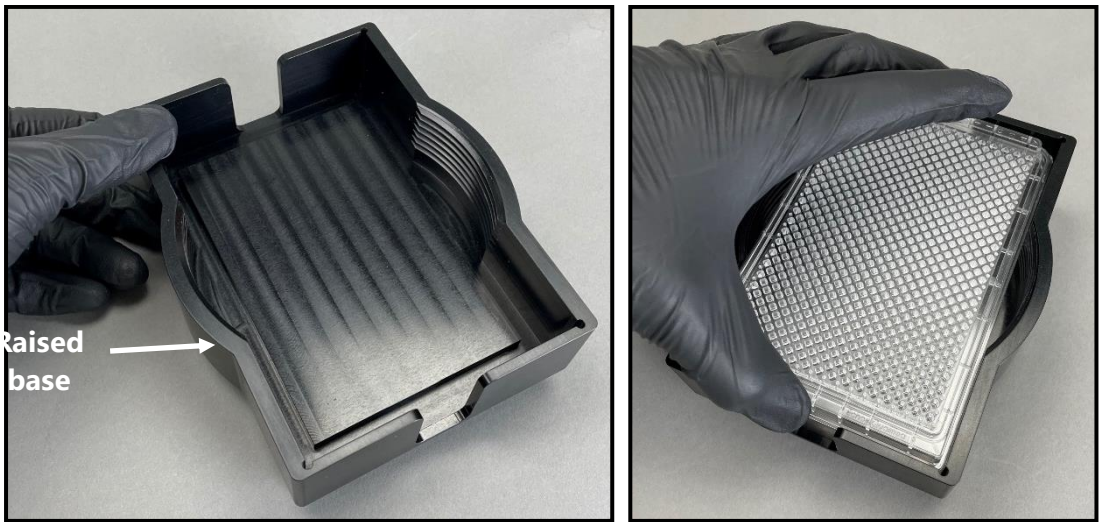

Figure 3. (a) Microplate block: smooth, flat and debris-free
(b) Using finger guides to lower microplate into base

2. Once reaction microplate (384, 1536, etc.) is charged with reactants, solvent and stir elements (if applicable), use the finger guides/slots to lower the microplate down into the block as seen in **Figure 3b**.

3. With the microplate seated as shown in **Figure 4a** ensure that it is flat and flush by moving the plate back and forth, listening and feeling for any debris caught between the microplate block and the microplate. If you do feel anything caught, lift the microplate out of the block, wipe down the back of the microplate and the block and re-position.

4. A single PFA film, VP 416-96-FILM-MP (sold separately), is then placed over the microplate (see **Figure 4b**). Ensure that the film is covering all the wells of the microplate.

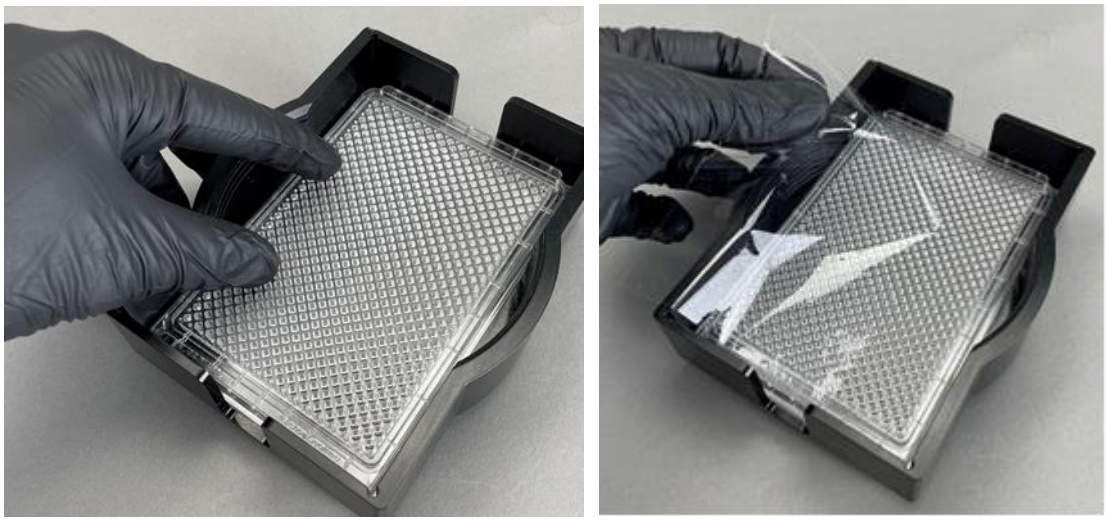

Figure 4 (a). Seating microplate flat and flush with raised base
(b) Placing PFA film over microplate

5. A single rubber mat, VP 416-96-MAT-MP (sold separately), followed by the aluminum lid complete the required component assembly prior to tightening everything with the puck (see **Figure 5**).

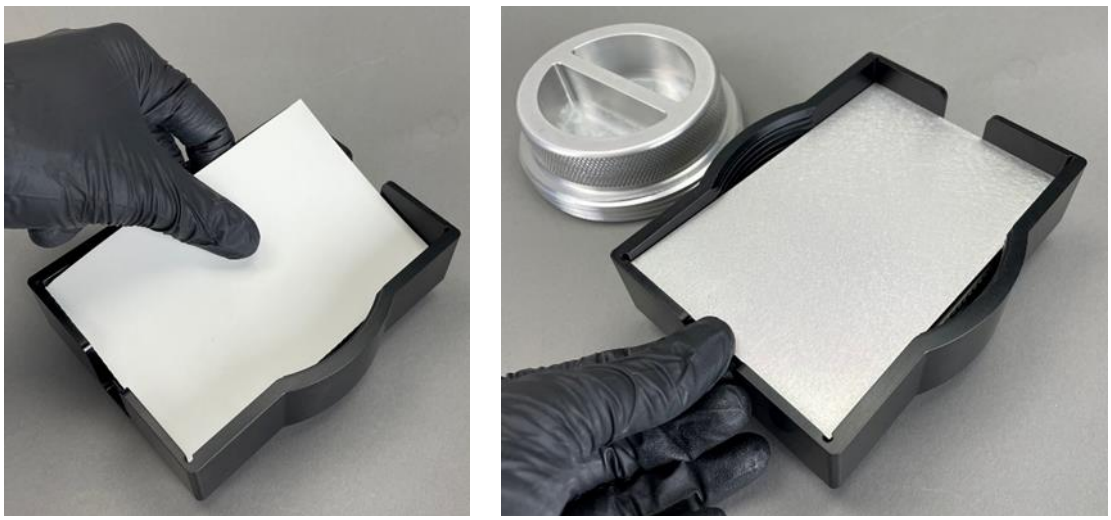

Figure 5. (a) Placing rubber mat on top of PFA film.
(b) Placing aluminum lid on top of film and mat

6. Sealing of the system is accomplished by aligning the threads visible on the side of the tightening puck (see **Figure 6a**) and the threads on the curved walls of the microplate block (see **Figure 6b**).

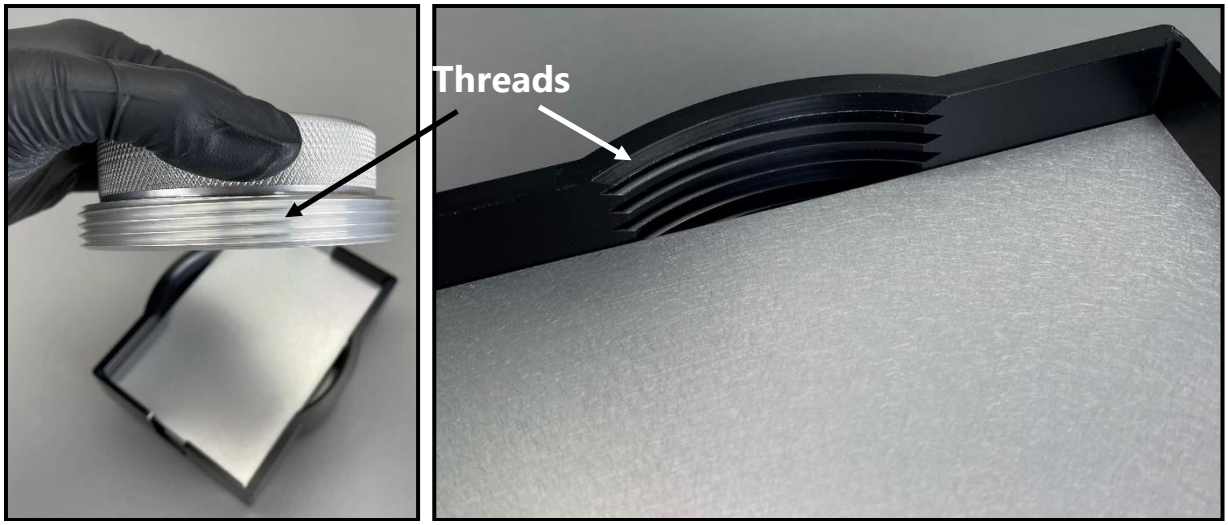

Figure 6. (a) Close up view of threads on tightening puck.
(b) Close up view of threads of microplate block

7. Start slowly to engage threads evenly (**DO NOT CROSS THREAD PUCK AND BASE – THIS MAY CAUSE IRREPARABLE DAMAGE**) then screw down the puck until it engages the aluminum lid. Once this is felt, hand-tighten as much as possible (see **Figure 7**).

Figure 7. Views of tightening puck being aligned, screwed down until engaging the aluminum lid and final tightening

PRODUCT MAINTENANCE

GENERAL PRODUCT CARE

After every use, wipe down exterior of Block and Aluminum Lid with wet paper towel or soapy water followed by a quick rinse with acetone or alcohol and allow to dry.

WARRANTY

V&P Scientific, Inc. warrants this product to be free from defects in material and workmanship when used under normal laboratory conditions for one year. This warranty begins on the date of delivery from V&P Scientific.

In the event this product fails under normal laboratory conditions within the specified period of time because of a defect in material or workmanship, V&P Scientific will, at its option, repair or replace the product. Damage to the product caused by user negligence is not covered.

Please keep the special shipping carton in case the unit needs to be shipped back to V&P Scientific. Please contact V&P Scientific at the above address for return authorization and shipping instructions.

This warranty is made in lieu of other warranties expressed or implied including the warranties of merchantability and fitness for a particular purpose. V&P Scientific shall not be liable for loss or damages arising from the use of these products nor for consequential damages of any kind.

TECHNICAL ASSISTANCE

If technical assistance is required, contact: V&P Scientific, Inc. at 858-455-0643 or sales@vp-sci.com