

CARE AND USE OF 96 BUBBLE PADDLE MAGNETIC CLUTCH RESERVOIRS



Figure 1. VP 756C-96B Bubble Paddle Reservoir and VP 763B shown with Tecan Evo plate carrier. Control and Power Supply not shown.

SETUP AND OPERATION

1. Place the VP 756C-96B Bubble Paddle Reservoir onto the VP 763B Motor/Magnetic Clutch/Heater/Chiller unit. Align the pins on the VP 763B to the registration holes on the VP 756CP-96B. Make sure the Bubble Paddle Reservoir is level on the VP 763B. See Figures 1 and 2.
2. The VP 763B unit has a feature on the bottom that will fit into a standard SBS footprint plate holder. Use this feature to locate and register the unit to a robotic deck.
3. Be sure the protective metal shim is in place between the wall of the reservoir and the bubble paddle magnetic clutches. See Figure 2. The metal shim will prevent the magnetic clutch from boring a hole in the reservoir wall.

4. Connect the inlet and outlet tubing to the reservoir fittings and adjust the reservoir liquid level by turning the hollow overflow weir screw up or down with the provided Allen wrench, see Figure 5. If you are not going to be continuously adding solution, adjust the overflow weir to the highest level and place the inlet and overflow covers to prevent particulates from collecting in these areas as shown in Figures 4.

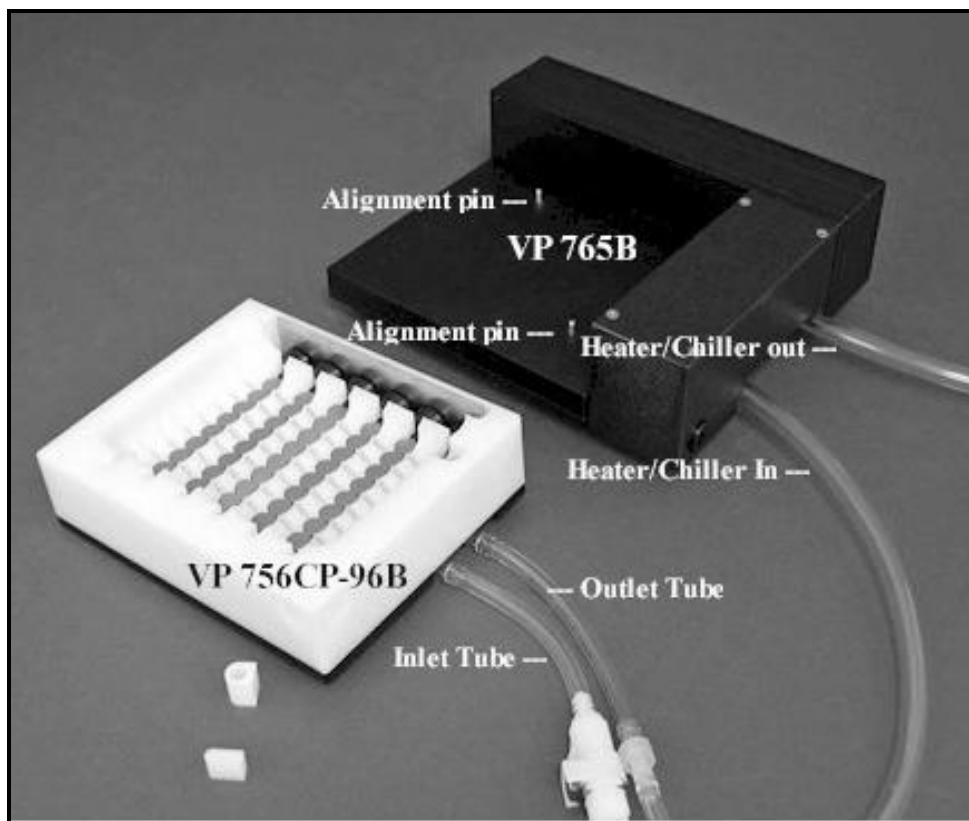


Figure 2. Illustrates the VP 756CP-96B Reservoir and the VP 763B Drive Unit with the alignment pins to register the Reservoir into the correct position

5. Connect the heating/chilling tubing to the base inlet and outlet fittings.
6. Plug the Control Unit into a 100-240 Volts, 50/60 Hz outlet. Connect the VP 763B Drive Unit to the Control Unit with the control cable.
7. Set the Speed Control Knob to 0. Turn on the power switch. Slowly increase Knob to 15.
8. Carefully add the sample liquid to the reservoir after the unit is running. This prevents particulates from settling out. If the reservoir is attached to a peristaltic pump system, have the unit running before the pump is turned on. We recommend running the pump system continuously and recycling the overflow back to the source container. Alternatively, the inlet flow rate can be matched to the pipetting rate and the overflow can be used as an emergency measure.

9. The optimal mixing speed will have to be determined for each application. At higher speed settings or with more viscous solutions, the magnetic clutches will decouple. It is best to gradually increase the speed to the desired setting rather than jump to the predetermined setting using the On/Off switch.
10. To turn off the unit, first turn down the speed control knob and then turn off the power switch. Never leave the Control Unit on with the power switch turned to 0 for long periods of time.
11. The reservoir is made from delrin. The paddles are made from parylene coated stainless steel with PTFE and delrin bearings. The magnets in the clutches are coated with parylene and sealed with a special sealant to prevent them from being corroded. Use mild detergents to clean these parts. Occasionally clean the magnets using tape to remove small bits of ferrous metal that are attracted to the magnet as the ferrous metal bits will rust when in contact with corrosive solutions.

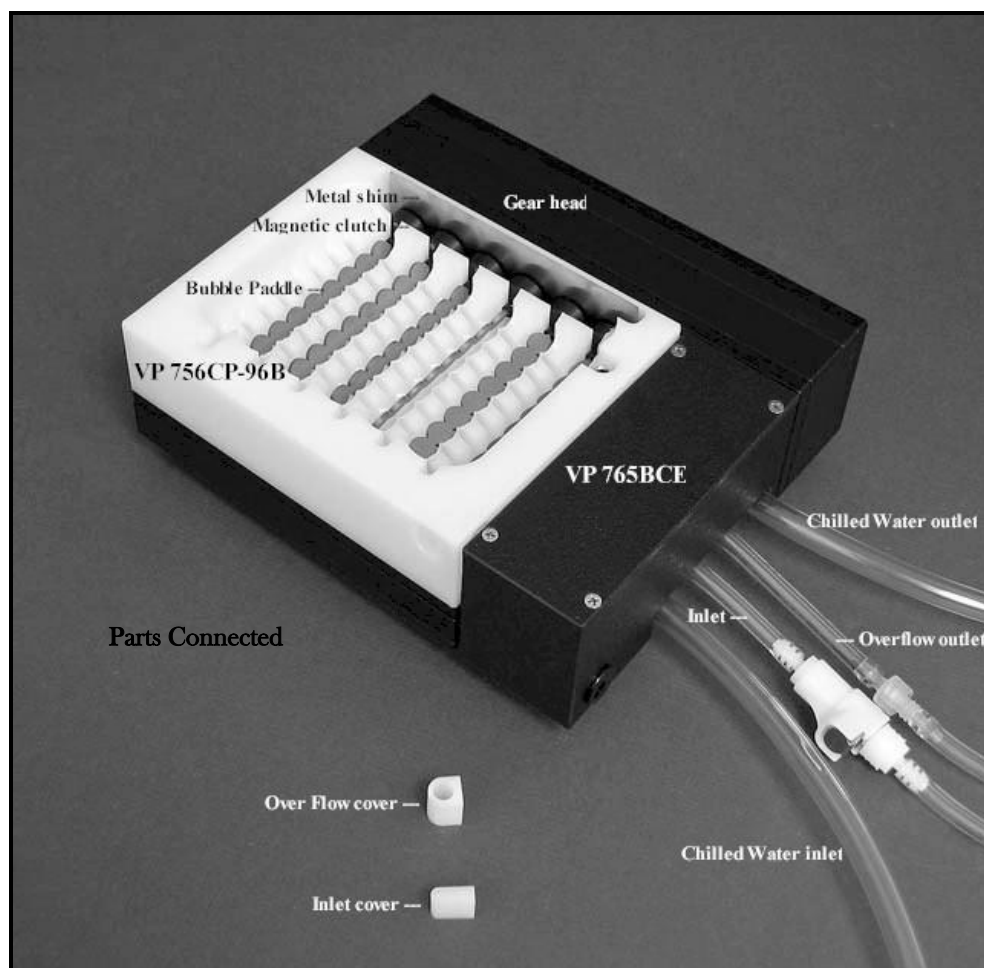


Figure 3. Illustrates the assembled VP 756CP-96B Bubble Paddle Reservoir and the VP 763B motor drive unit. The tubing for filling and draining the reservoir and for chilling or heating the reservoir. Also illustrated are the reservoir inlet and outlet covers used in static operation.

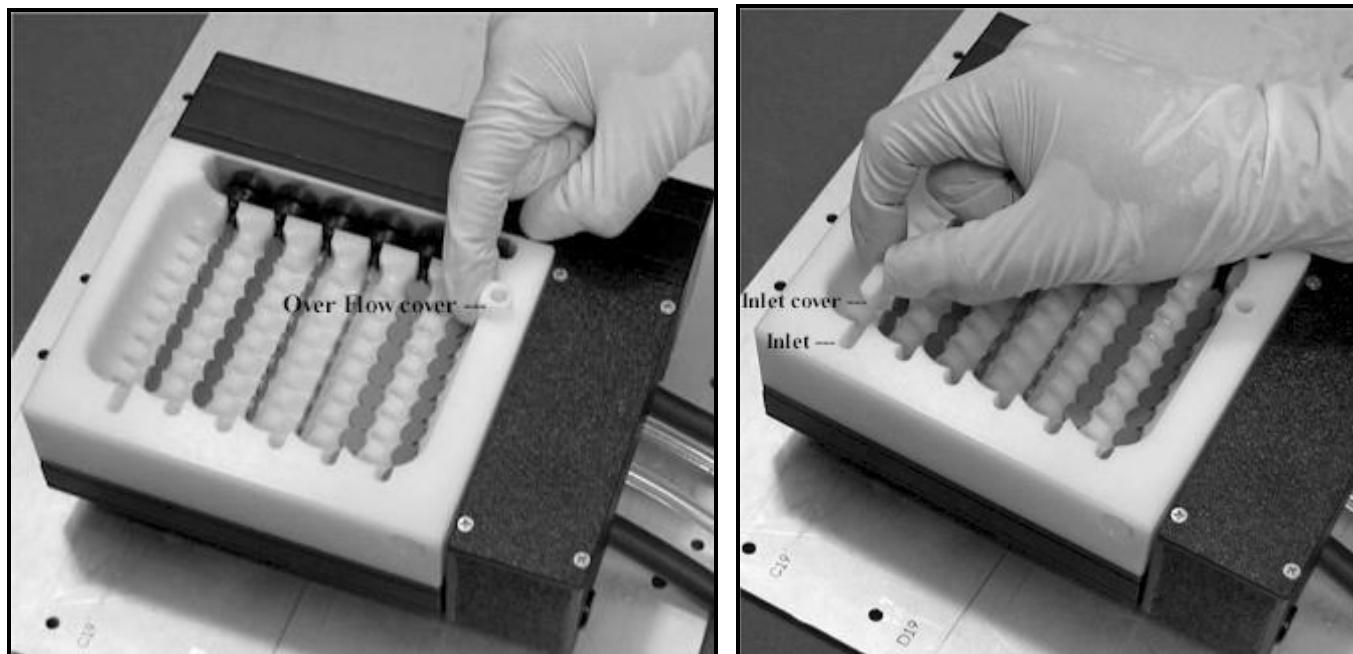


Figure 4. Illustrates the placement of the overflow weir cover on the weir and the inlet cover in the inlet in static operation.

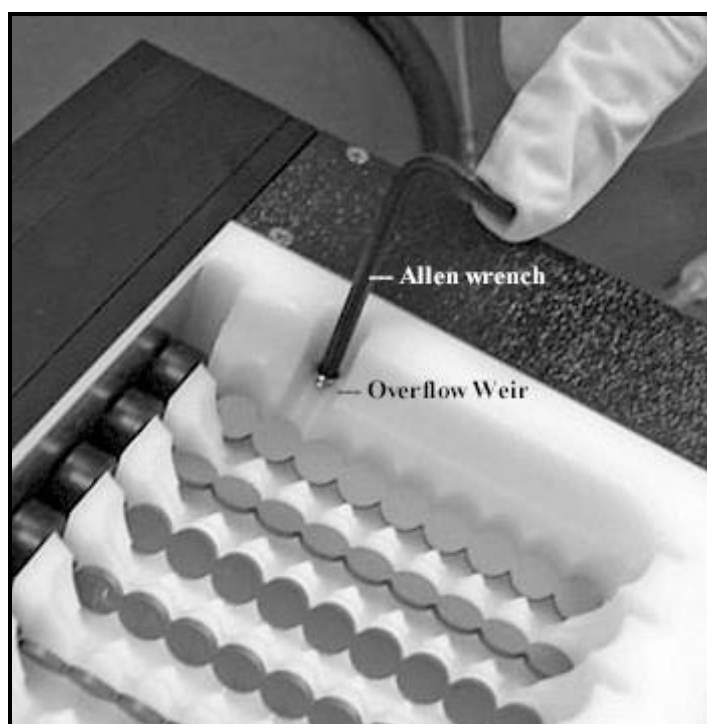


Figure 5. Illustrates how to adjust the fluid level by screwing the hollow overflow weir up or down.

CLEANING AND STERILIZATION

The VP 756CP-96B Bubble Paddle Reservoir is made from Delrin and **CANNOT** be sterilized by autoclaving or hot air oven. Sterilize by treatment with 10% bleach for 5 minutes followed by rinsing with sterile H₂O, then alcohol and air drying. Be sure that the inlet and outlet tubes are thoroughly exposed to the bleach and rinsed well. To clean, use mild detergent, rinse with H₂O and alcohol.

SAFETY PRECAUTIONS

The use of motor controls, like that of all utilization of concentrated power, is potentially hazardous. The degree of hazard can be greatly reduced by proper design, selection, installation, and use, but all hazards cannot be completely eliminated.

The following safety precautions must be observed during all phases of installation, operation, service, and repair of this motor control product. Failure to comply with these precautions or with specific warnings elsewhere in this manual violates safety standards of design, manufacture and intended use of the products. V&P Scientific assumes no liability for the customer's failure to comply with safety requirements and practices.

WARNING
To avoid personnel injury caused by electrical shock, do not remove the cover of the control when the power is ON.

CAUTION
Do not disconnect motor during operation. Otherwise, over-current breakdown may result.

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 from the date of delivery by 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 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.

If assistance is required, contact V&P Scientific, Inc.

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