

TECHNICAL NOTE 88

CARE AND USE OF 384 BUBBLE PADDLE RESERVOIRS AND MOTOR/MAGNETIC CLUTCH UNIT

- 1. The VP 755C-384B Bubble Paddle Reservoir is made from delrin and **cannot** be sterilized by autoclaving or hot air oven. We suggest you sterilize it by treatment with 10% bleach for 5 minutes followed by rinsing with sterile H₂O, then alcohol and air drying. To just clean, use mild detergent, H₂O and alcohol.
- Place the VP 755C-384B Bubble Paddle Reservoir into the VP 768B Motor/Magnetic Clutch/Heater/Chiller unit. Align the pins on the VP 768B to the registration holes on the VP 755C-384. Make sure the Bubble Paddle Reservoir is setting flat in the unit.
- 3. The VP 768B unit has a feature on the bottom that will fit into a standard SBS footprint. Use this feature to locate and register the unit to a robotic platform or to a feature we make for attaching it to a Beckman FX ALP.
- 4. Check to be sure the protective metal shim is in place between the wall of the reservoir and the bubble paddle magnetic clutches. The magnetic clutch stabilizing bar should be in place above the magnetic clutches. Orient as per picture.
- 5. Connect the inlet and outlet tubing to the reservoir nipples and adjust the reservoir height level with the delrin dam blocks. If you are not going to be continuously adding solution then set the dam blocks to the maximum height.
- 6. Connect the inlet, outlet, heating/chilling tubing to the base nipples.
- 7. Plug the Control Unit into a 120 Volt outlet. Connect the Stirring Unit to the Control Unit with the supplied control cord.
- 8. Set the Speed Control Knob to 0. Turn on the power switch. Slowly increase Knob to 15.
- 9. 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. However the inlet flow rate can be matched to the pipetting rate and the over flow can just be used as an emergency measure.
- 10. The optimal mixing speed will have to be determined for your application. In most cases this speed will be between 40 and 75 on the Speed Control Knob. The maximum recommended speed is 90. At higher speed settings or with more viscous solutions the magnetic clutches will decouple. It is best to always gradually increase the speed to the desired setting rather than jump to the predetermined setting using the On/Off switch. Always turn the Control Unit off with the power switch. Always turn the Stirring Unit off with the Speed Control Knob. Never leave the Control Unit on with the power switch

9823 Pacific Heights Boulevard, Suite T, San Diego, CA 92121 (858) 455-0643 • Fax: (858) 455-0703 • email: sales@vp-scientific.com turned to 0 for long periods of time.

11. The reservoir is made from delrin, the paddles from parylene coated stainless steel with PTFE and delrin bushings. 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.



NOTE THE ORINTATION OF THE STABILIZING BAR



TROUBLE SHOOTING

PROBLEM : Unit will not run and light is on in control box.

- 1. Check the control cord
- 2. Check for a bad fuse.

Remove 2 screws from top of speed control panel and remove top panel. Examine the left fuse (2amp), If bad, replace with a new 2A fast fuse. If the fuse looks good, test with a new fuse or test with an Ohm meter. Reinstall cover.

PROBLEM : Unit will not run and light is out in control box.

- 1. Check the Power Cord.
- 2. Check for a bad fuse.

Remove 2 screws from top of speed control panel and remove top panel. Examine the right fuse, (12amp), if bad, replace with a new 12A fast fuse, If the fuse looks good, test with a new fuse or test with an Ohm meter. Reinstall cover.

We have provided spare fuses for this unit, a 2 amp motor fuse and a 12 amp line fuse.

If this does not solve the problem, call V&P Scientific at 1-800-455-0644 and ask for technical service.

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