BLUE LINE

CO_2 REGULATOR

IMPORTANT SAFETY and OPERATING INSTRUCTIONS

FOR YOUR SAFETY ... PLEASE READ CAREFULLY

EVERY TIME this regulator is attached to a cylinder the following safety and operational precautions **MUST BE PRACTICED!** Deviation from the following safety and operation instructions may result in fire, explosion, damage to the regulator, or injury to the operator.

CYLINDER CARE

1. Secure cylinders so that they will not tip or fall.

2. Inspect the cylinder valves for damaged threads, dirt, dust, oil, or grease. Remove dust and dirt with a clean cloth. **DO NOT ATTACH THE REGULATOR IF OIL, GREASE, OR DAMAGE IS PRESENT!** Inform your gas supplier of this condition. Oil or grease in the presence of high pressure oxygen is explosive.

3. Crack open the cylinder valve for an instant and close quickly. This will blow out any foreign matter that may be inside the valve port.

4. Teflon tape the threads on the cylinder before attaching the regulator. Failure to do this can result in the loss of gas.

REGULATOR USE...

1. Attach the regulator to the cylinder valve placing the supplied O-ring (I) between the regulator and the tank and tighten with a wrench.

2. Unscrew the large brass ring (G) from the bubble counter (H) and fill the bubble counter half way with fresh water. Be sure the needle valve (B) is closed before filling with water. Once filled, replace the brass ring (G).

3. Before opening the cylinder valve, turn the regulator adjustment knob (E) counter-clockwise until tension is no longer felt on the knob. **DO NOT FULLY REMOVE THE KNOB**. **IF THE CYLINDER VALVE IS OPENED WITH THE REGULATOR KNOB TURNED IN, DAMAGE TO THE REGULATOR CAN RESULT !**

4. **CAREFULLY** and **SLOWLY** open the cylinder valve **COMPLETELY** to seal the valve packing. The amount of gas in the cylinder can now be read on the high pressure gauge (D).

5. Plug the solenoid (C) into a suitable, grounded, AC outlet. The solenoid uses slightly more than 6 watts and it is normal for it to feel warm during operation.

6. Open the needle valve (B) by turning counter-clockwise.

7. Turn the adjustment knob (E) clockwise until you get a reading on the low pressure gauge (F) of approx. 10 lbs. on the inside set of numbers (use the numbers on the inside (tan) row). You should now see bubbles in the bubble counter.

8. Unplug the solenoid (C) and attach one end of the supplied tubing to the nipple (A) , and the other end to the reactor check valve. Unscrew the compression fitting on the nipple (A) and slide the fitting on to the CO2 tubing. Insert tubing on the nipple (A) and tighten compression fitting on to the nipple. **MAKE SURE THE TUBING FITS TIGHTLY ON BOTH ENDS!** Failure to do so can result in the loss of gas and difficulty in adjusting the regulator. Tubing can be cut to desired length before attaching.

9. Plug the solenoid (C) into outlet and adjust the bubble count on your reactor using the needle valve (B). Fine tuning the bubble count can be accomplished with either the needle valve (B), or by slightly varying the regulator output pressure with the adjustment knob (E) as done in step 7. The more you increase the pressure as indicated on the low pressure gauge (F) using the regulator adjusting knob (E), the more difficult it will be to fine tune your bubble count using the needle valve (B). Therefore,it is more desirable to keep the pressure indicated on the low pressure gauge (F) low, and adjust your bubble count using the needle valve (B).