Package Contains:

HydroPump Models 616 and 617

1. HydroPump

- 2. Suction tubing
- 3. Hardware kit: 2 long screws and anchors; 2 short screws; ³/₄oz stroke adjuster; ¹/₂oz stroke adjuster; flow restrictor
- 4. Mounting plate
- 5. Directional spout (Model 616 only)
- 6. Instruction sheet

THANK YOU FOR YOUR INTEREST IN OUR PRODUCTS

Hydro Systems manufactures quality chemical proportioners. Please use this equipment carefully and observe all warnings and cautions.				
WEAR	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			
ALWAYS	observe safety and handling instructions of the chemical manufacturers.			
ALWAYS	direct discharge away from you or other persons or into approved containers.			
ALWAYS	dispense cleaners/chemicals in accordance with manufacturer's instructions. Exercise CAUTION when maintaining equipment.			
CLEAN	equipment after each use in accordance with instruction sheet.			
ALWAYS	re-assemble equipment according to instruction procedures. Be sure all components are firmly screwed or latched into position.			

Installation and Operation:

For Model 616 (with directional spout), screw the spout into the larger elbow on the pump.

- 1. Remove the skirt by unscrewing the nut holding the plunger. Caution: the plunger is spring-loaded and will come out forcefully when this nut is removed. Be careful not to get dirt on the red O-ring seal on the plunger, or the pump may not seal correctly, resulting in leaking.
- 2. The HydroPump should be mounted at a convenient height, ideally so that inlet and discharge tubing will be 6 feet or less in length. Note: The arrows on the pump show the direction product will move through the pump.
 - a. Select a reasonably flat area on which to mount the HydroPump. Concentrate should be located below the end of the discharge tube. Note: Never mount Concentrate higher than the dispensing unit.
 - b. Use a 3/16" diameter bit to drill holes centered as indicated on the template on the back of these instructions. (You may wish to copy the template instead of cutting these instructions.) Install anchors provided into the holes, then use the screws provided (long screws) to attach the pump to the surface selected.
 - c. If you are replacing an old pump, the mounting plate included may be used so you do not have to drill new holes for the anchors. Use the screws from the old pump to attach the mounting plate, then attach the new pump with the screws provided (short screws).
- 3. Replace the skirt and attach the plunger to the pump with the nut. The nut should be hand tightened. Note: Included with the pump are 2 stroke adjusters. They can be used to change the amount the pump dispenses with each push. With no adjuster, the pump will dispense 1 oz (30cc). The short adjuster reduces this to ³/₄ oz (22cc), while the longer reduces this to ¹/₂ oz (15cc) per push. These adjusters are placed on the post on the inside of the plunger. Attach the adjuster, if desired, to the plunger before re-assembling the plunger to the pump.
- 4. Install the inlet tubing:
 - a. From the tubing that is provided, cut a length that will reach from the bottom of the liquid container to the supply inlet. Be sure that the suction tube is near the bottom of the liquid container in order to fully empty the container, and be sure that the liquid container is vented.
 - b. Slide tubing onto inlet elbow and swivel the inlet elbow as desired.
 - c. Elbows and tees may be used in the installation of the pump, but keep in mind that they introduce extra resistance to the flow of the liquid being dispensed.

Note: Included with the pump is a flow restrictor. This will delay the recovery of the plunger after it is pushed to prevent multiple strokes, if desired. It will also prevent any residual discharge of product that may occur at the end of the stroke. If desired, press the restrictor into the inlet elbow before you attach the inlet tubing.

- 5. The remaining length of tubing may be used as a discharge tube (not needed on the model 616, which includes the discharge spout). Slide tubing onto the discharge elbow and swivel discharge elbow to direct tubing as desired.
- Press the HydroPump pusher firmly several times to prime. Product will move through the pump in the direction shown by the arrows on the pump.
- 7. Once the pump is primed, each push will dispense one ounce of concentrate (or ¾ oz or ½ oz, if stroke adjuster is used). Dispense the concentrate into an empty container by pushing the required number of times, then fill the container with water to the desired level. When correctly installed, the HydroPump will not lose its prime overnight.

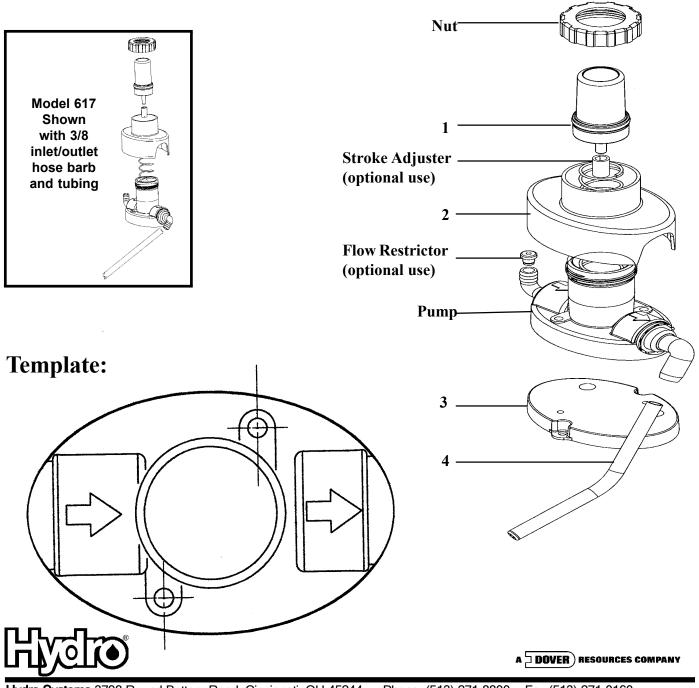
Parts Diagram/List:

<u>KEY NO.</u>	PART NO.	DESCRIPTION
1	10083246	Plunger kit, red
2	10083207	Skirt
3	10083222	Mounting plate
4	10083260	Mounting plate Spout (model 616)

Not shown:

-	-	10044300	
		10044304	

Suction tubing, 6 feet, model 616 Suction tubing, 8 feet, model 617



Hydro Systems 3798 Round Bottom Road, Cincinnati, OH 45244 s Phone: (513) 271-8800 s Fax:(513) 271-0160 10083264 Rev. E 9/05