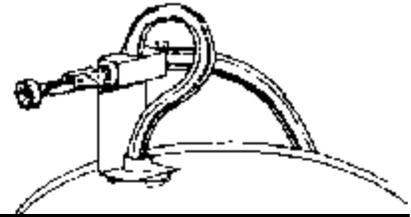


# HYDROMASTER MODEL 220



**Package Contains:**

1. Drum proportioner.
2. Suction tube (4 feet) with foot valve.
3. Discharge tube (4 feet).
4. Metering tip kit.
5. Product information 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.  
 \*\*\*\*\* NOTE \*\*\*\*\*

<b>WEAR</b>	protective clothing and eyewear when dispensing chemicals or other materials.
<b>ALWAYS</b>	observe safety and handling instructions of the chemical manufacturers.
<b>ALWAYS</b>	direct discharge away from you or other persons or into approved containers.
<b>ALWAYS</b>	dispense cleaners and chemicals in accordance with manufacturer's instructions. Exercise <b>CAUTION</b> when maintaining your equipment.
<b>CLEAN</b>	equipment after each use in accordance with instruction sheet.
<b>WEAR</b>	protective clothing and eyewear when working in the vicinity of all chemicals, filling or emptying equipment or changing metering tips.
<b>ALWAYS</b>	re-assemble equipment according to instruction procedures. Be sure all components are firmly screwed or latched into position.
<b>ATTACH</b>	only to tap water outlets - 85 PSI maximum.

**Installation and Operation: (see parts drawing to identify names of parts)**

1. Select a metering tip (see next section). Thread metering tip into the suction stub. Slide the open end of the suction tube through the bung adapter, then over the suction stub.
2. Slide end of discharge tube over the eductor discharge outlet.
3. Remove the bung from an upright drum.
4. Insert the foot valve end of the suction tube into the drum.
5. Swivel the drum adaptor several turns in the bung opening until the bracket is secure.
6. Install minimum 1/2" ID water hose between the inlet swivel and water supply spigot. (Minimum 25 PSI flowing water pressure is required to operate the unit.)
7. Attach end of discharge tube with clamp to discharge end of eductor. Secure with clamp
8. Turn on water supply. To begin dispensing solution, place discharge tube into container, then open ball valve at inlet to unit. Turn ball valve off to stop flow of solution. Hang discharge tube end up using hook provided.

**Metering Tip Selection:**

The final concentration of the dispensed liquid is related to both the size of the metering tip opening (orifice) and the viscosity of the liquid being siphoned. If product viscosity is noticeably greater than that of water, consult the procedure for Measurement of Concentration on the next page to achieve your desired water-to-product ratio. For water-thin products, use the chart below as a guideline. Because such factors as inlet water pressure and temperature can affect dilution ratios, the figures listed below are only approximate. Test the actual dilution you are achieving using the Measurement of Concentration procedure for best results. Two undrilled, clear tips are supplied for drilling sizes not listed.

Tip Color	Orifice Size Standard Drill	Approximate Dilution Ratio at 40 PSI, water-thin viscosity (1.0 cp)	Approximate Per Cent
No tip	---	8:1	11.0
Grey	30	12:1	8.5
Black	40	18:1	5.0
Beige	50	32:1	3.0
Red	55	48:1	2.0
White	57	64:1	1.5
Blue	60	80:1	1.0
Tan	65	136:1	0.7
Green	70	208:1	0.5
Orange	72	256:1	0.4
Brown	74	296:1	0.35
Yellow	76	344:1	0.3
Purple	80	656:1	0.15
Pink	87	1136:1	0.1

