

Troubleshooting Chart:

Problem	Cause	Solution
1. No discharge	a. No water b. Magnetic valve not functioning d. Eductor clogged e. Clogged water inlet strainer	a. Open water supply b. Install valve parts kit d. Clean* or replace e. Disconnect inlet water line and clean strainer
2. No concentrate draw	a. Clogged foot valve b. Metering tip or eductor has scale build-up c. Low water pressure d. Discharge tube and/or flooding ring not in place e. Concentrate container empty f. Inlet hose barb not screwed into eductor tightly g. Clogged water inlet strainer h. Air leak in chemical pick-up tube	a. Clean or replace b. Clean (descale)* or replace c. Minimum 25 PSI (with water running) required to operate unit properly d. Push tube firmly onto eductor discharge hose barb, or replace tube if it doesn't have a flooding ring. e. Replace with full container f. Tighten, but do not overtighten g. Disconnect inlet water line and clean strainer h. Put clamp on tube or replace tube if brittle
3. Excess concentrate draw	a. Metering tip not in place b. Chemical above eductor	a. Press correct tip firmly into barb on eductor b. Place concentrate below the eductor
4. Failure of unit to turn off	a. Water valve parts dirty or defective b. Magnet doesn't fully return c. Push button stuck	a. Clean* or replace with valve parts kit b. Make sure magnet moves freely. c. Remove button and clean cabinet/button to remove any dirt lodged in slide recess
5. Excess foaming in discharge	a. Air leak in pick-up tube	a. Put clamp on tube or replace tube if brittle

* In hard water areas, scale may form inside the discharge end of the eductor, as well as in other areas of the unit that are exposed to water. This scale may be removed by soaking the eductor in a descaling solution (deliming solution). To remove an eductor located in the cabinet, firmly grasp water valve and unthread eductor. Replace in same manner. Alternatively, a scaled eductor can be cleaned (or kept from scaling) by drawing the descaling solution through the unit. Operate the unit with the suction tube in the descaling solution. Operate the unit until solution is drawn consistently, then flush the unit by drawing clear water through it for a minute. Replace concentrate container and put suction tube into concentrate.



**Series Proportioner
For 1 & 2 Button Units
with HydroGap™ Air Gap Eductor
(ASSE 1055 Approved)**

Package Should Contain:

1. Proportioner unit.
2. Supply tubing.
3. Foot valve assembly & weight for each eductor.
4. Discharge tube for each eductor.
5. Metering tip kit(s).
6. Mounting anchor kit.
7. Hook(s) for discharge tube(s) -- Models with 3.5 GPM eductors only.
8. Instruction sheet.

THANK YOU FOR YOUR INTEREST IN OUR PRODUCTS
Please use this equipment carefully and observe all warnings and cautions.
*****NOTE*****

WEAR	protective clothing and eyewear when dispensing chemicals or other materials or when working in the vicinity of all chemicals, filling or emptying equipment, or changing metering tips.
ALWAYS	observe safety and handling instructions of the chemical manufacturer. direct discharge away from you or other persons or into approved containers. dispense cleaners and chemicals in accordance with manufacturer's instructions. Exercise CAUTION when maintaining your equipment. reassemble equipment according to instruction procedures. Be sure all components are firmly screwed or latched into position.
KEEP	equipment clean to maintain proper operation.
ATTACH	only to water tap outlets (85 PSI Maximum).
NOTE	if the unit is used to fill a sink, or the discharge hose can be placed into a sink. The unit must be mounted so that the bottom of the cabinet is above the overflow rim of the sink.

Installation and Operation:

1. Remove cabinet cover. Install the short, whitish inner discharge tube on the outlet of the eductor. It goes over the smaller barbed part on the bottom of the eductor. This tube must be in place for the eductor to function. The inner discharge tube for a 3.5 GPM (yellow) eductor has a yellow flooding ring inside it. The inner discharge tube for a 1.0 GPM (grey) eductor has a grey flooding ring inside of it. Install the end of the tube nearest the flooding ring on the eductor's inner discharge barb. **To ensure the IDT is on correctly, see that the metal ring gets positioned above the small barb.** (Repeat for all eductors).
2. Find suitable place close to water source for unit. Mounting bracket should be installed approx. 5' from the floor. Level bracket and mark holes. Drill 9/32" holes and install mounting anchors and screws in bracket.
3. Remove cabinet cover and hang cabinet on bracket. Mark hole for lower cabinet screw. Remove cabinet and drill 9/32" hole. Install anchor and screw in lower cabinet hole. When mounting unit, do not mount more than 5 feet from the floor. Also, never mount your concentrate container higher than the unit. Keyhole slots are also provided in the cabinet back if the mounting bracket won't be used.
4. Select a metering tip (see next section), and insert into hose barb on eductor body. (Repeat for all eductors.)
5. Supply tube should reach from hose barb on eductor to bottom of the concentrate container. Cut supply tube provided to length required. Slide a ceramic weight over one end of tube and slide a foot valve into the same end of the tube. (Prepare a tube for each eductor.)
6. Slip other end of supply tube through an opening in either side of the cabinet and push over the hose barb/metering tip on the eductor. (Repeat for all eductors.)
7. Place foot valve ends of supply tubes into concentrate containers. **REMEMBER TO CHECK FOOT VALVE STRAINERS REGULARLY FOR CLOGGING: CLEAN IF NECESSARY.**
8. A short discharge tube is used with the 1GPM eductor; minimum tube length is 8 inches (20cm) for proper operation. Longer tubes (4 feet) are used with a 3.5 GPM eductor. Slide end of tube over eductor discharge outlet. (Repeat for all eductors.) Hooks may be installed on longer tubes to allow discharge tube to conveniently hang from dispenser when not in use.
9. Replace cabinet cover. Push the sides in, behind the latch holes, to snap the cover in place. The two screws provided may be installed in the holes in the cabinet sides to prevent easy removal of cover.
10. Connect water supply hose of at least 3/8" ID to water inlet swivel. (Minimum 25 PSI pressure, with water running, is required for proper operation.) Connect opposite end of hose to water supply. Turn water supply on.
11. Purge air from the system by depressing the buttons briefly. There may be some water discharge from the eductor vents until the air is purged.
12. Push button to start flow of desired water/concentrate solution, and hold until supply tube is primed (filled). Then push the button whenever dispensing is desired, and release button to stop flow of solution. **If you wish to be able to lock the button in the "on" position:** Depress button and slide button lock up. **To unlock, depress button and release.**
13. **It is essential that the discharge hose not be obstructed. If discharge is restricted, water will flow out the eductor vents. Do not start to operate the dispenser with liquid in the discharge tube.**

Metering Tip Selection:

The final concentration of the dispensed solution is related to both the size of the metering tip opening and the viscosity of the liquid being siphoned. For water-thin products, the chart at right can be used as a guideline. If product is noticeably thicker than water, consult the Measurement of Concentration Procedure below to achieve your desired water-to-product ratio. Because dilution can vary with water temperature and pressure, actual dilution achieved can only be ascertained by using the Measurement of Concentration Procedure. The clear, undrilled tip is provided to permit drilling to size not listed should you need a dilution ratio that falls between standard tip sizes.

NOTE: A 1 GPM eductor is grey; a 3.5 GPM eductor is yellow. Refer to parts diagram if unfamiliar with names of system components.

Measurement of Concentration:

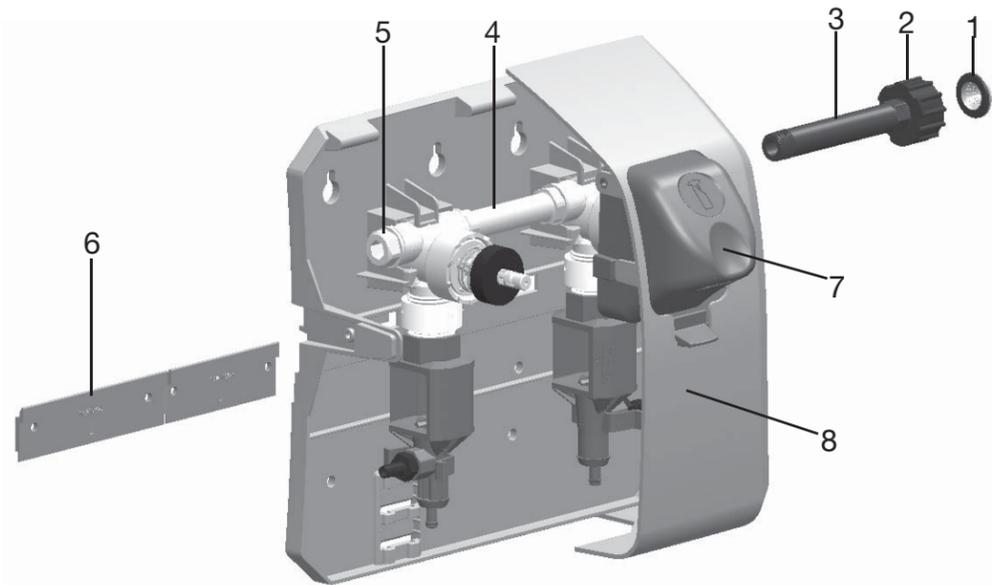
You can determine the dispensed water-to-product ratio for any metering tip size and product viscosity. All that is required is to operate the primed dispenser for a minute or so and note two things: the amount of dispensed solution, and the amount of concentrate used in preparation of the solution dispensed. The water-to-product ratio is then calculated as follows:

APPROXIMATE DILUTIONS AT 40 PSI FOR WATER-THIN PRODUCTS (1.0 CP)			
Tip Color	Orifice Size	Ratio (per Eductor Flow)	
		1 GPM	3.5 GPM
No Tip	.187	2.6:1	4:1
Grey	.128	2.6:1	4:1
Black	.098	2.5:1	5:1
Beige	.070	3:1	8:1
Red	.052	5:1	13:1
White	.043	7:1	22:1
Blue	.040	9:1	26:1
Tan	.035	11:1	34:1
Green	.028	17:1	52:1
Orange	.025	19:1	64:1
Brown	.023	22:1	71:1
Yellow	.020	32:1	102:1
Aqua	.018	39:1	128:1
Purple	.014	64:1	213:1
Pink	.010	128:1	447:1

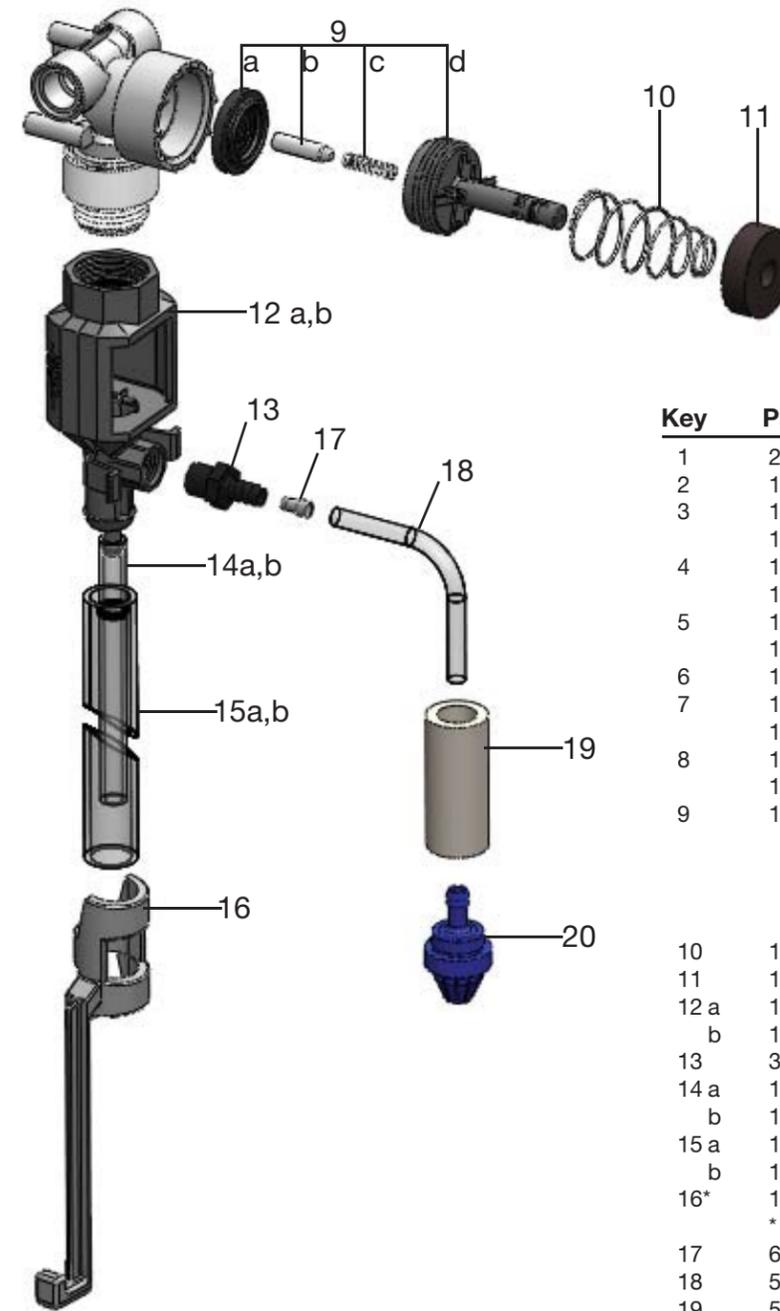
$$\text{Dilution Ratio (X:1) where X} = \frac{\text{Amount of Mixed Solution} - \text{Amount of Concentrate Drawn}}{\text{Amount of Concentrate Drawn}}$$

Dilution Ratio, then, equals X parts water to one part concentrate (X:1). If the test does not yield the desired ratio, choose a different tip and repeat the test. Alternative methods to this test are 1) pH (using litmus paper), and 2) titration. Contact your concentrate supplier for further information on these alternative methods and the materials required to perform them.

AccuMax Parts Diagram:



AccuMax Parts Diagram/List:



Key	Part No.	Description
1	238100	Strainer washer
2	10082830	Swivel collar (molded)
3	10082802	Swivel stem 1 btn (molded)
	10082811	Swivel stem 2 btn (molded)
4	10075902	Nipple (2-button unit only)
	10075950	O-ring (two required per nipple)
5	10075926	Plug, hex
	10075950	O-ring
6	10091035	Wall bracket
7	10098215	Button, Bottle fill
	10098216	Button, Bucket fill
8	1009xxxx	Cabinet set, 1-button unit
	1009xxxx	Cabinet set, 2-button unit
9	10075980	Valve parts kit
	a.	diaphragm
	b.	armature
	c.	spring
	d.	valve bonnet
10	10079010	Spring
11	10079000	Magnet
12 a	160	1 GPM Eductor assembly
b	161	3.5 GPM Eductor assembly
13	3401-R	Eductor hose barb only
14 a	10070170	1 GPM inner discharge tube
b	10070470	3.5 GPM inner discharge tube
15 a	10064794	1 GPM outer discharge tube (7")
b	10077310	3.5 GPM outer discharge tube (4')
16*	10080720	Hose hook, dark grey (standard)
	* Hose hooks are for 3.5 GPM discharge tubes	
17	690014	Metering tip (kit)
18	500870	Tubing, 1/4" x 7'
19	509900	Weight
20	10089410	Foot valve -- Viton (EPDM also available. Order 10076302.)
NOT SHOWN:		
	641751	Security screws (for cabinet sides)