



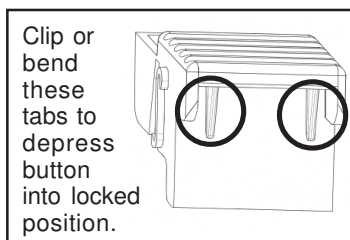
AccuDose Series Proportioner Models 3874GB-2 & 3875GB-2

Package Contains:

1. Proportioner unit.
2. Chemical inlet tubing .
3. Foot valves (4) and weights (4).
3. Discharge tube.
4. Metering tip kit.
5. Mounting hardware.
6. Hook for discharge tube (Model 3874GB-2 only).
7. Instruction sheet.

Installation and Operation:

1. Remove cabinet cover. Drill holes for the three wall anchors with a 7mm drill bit, using the cabinet back as a template for correct spacing of the mounting screws. Install mounting anchors, and then screws in top two anchors. Slide key holes in cabinet back over screw heads, tighten screws, then install bottom screw. Do not mount more than 1.8 metres above the bottom of the concentrate container, nor below the highest concentrate level (never mount concentrate higher than the proportioner).
2. Select metering tips (up to 4) for the selector valve (see next two sections). Push each tip firmly into a separate hose barb extending from the selector valve. A tip with no hole (clear plastic) can be used to block any valve port not being used. (This may be used for dispensing water only.)
3. Cut tubing supplied for chemical inlet (6mm ID) into lengths required so that tubes will reach from barbs on selector valve to bottom of concentrate containers. For each inlet tube, slide a weight over one end and slip end over the barb on a foot valve. Slide weight down to foot valve and attach opposite end of each tube over one of the hose barbs on the selector valve.
4. Push tubes from each side through the notches in the cabinet.
5. Place foot valve end of supply tubes into concentrate containers. REMEMBER TO CHECK FOOT VALVE STRAINERS PERIODICALLY FOR CLOGGING: CLEAN IF NECESSARY.
6. A short discharge tube is used with a 4 LPM (grey) eductor – Model 3875GB-2 ; minimum tube length is 20 cm for correct operation. A longer tube (1.2 m) is used with a 16 LPM (yellow) eductor – Model 3874GB-2. Slide end of tube over eductor discharge outlet. The hose hook supplied with Model 3874GB-2 may be installed on the long tube to allow it to hang from dispenser when not in use.
7. 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.
8. Connect water supply hose of at least 13mm ID to water inlet swivel. (Minimum 1.76 Bar pressure, **with water running**, is required for correct operation.) Connect opposite end of hose to water supply. Turn water supply on.
9. Purge air from the system by depressing the buttons briefly.
10. 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:** Clip or bend the two tabs behind the lower front portion of the button. (See diagram below.) This allows the button to be fully depressed and allows it to latch in the "on" position. **TO UNLOCK PULL BUTTON OUT.**



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 4 LPM eductor is grey; a 16 LPM eductor is yellow. Refer to parts diagram if unfamiliar with names of system components.

Measurement of Concentration:

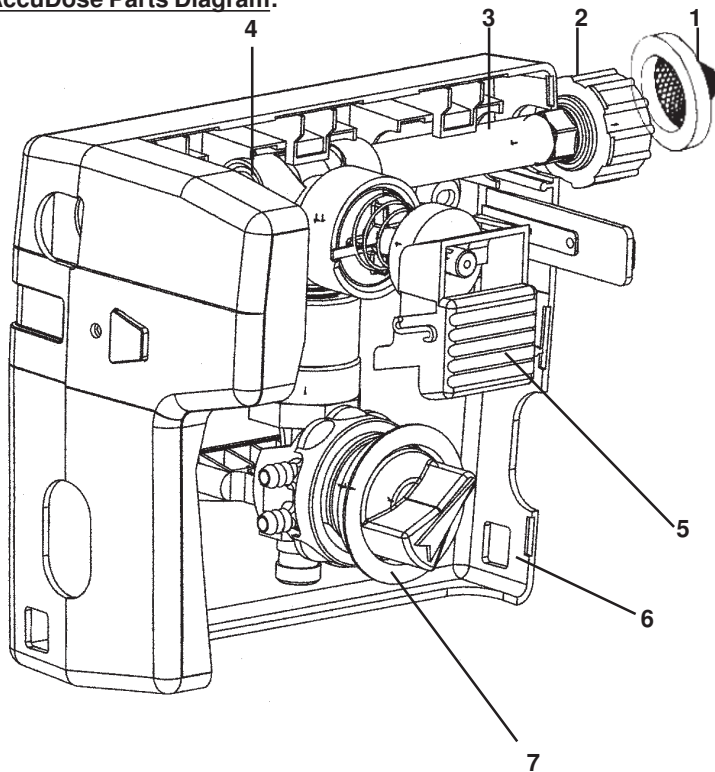
You can determine the dispensed water-to-product ratio for any metering tip size and product viscosity. All that is required is to operate the primed dispenser for a minute or so and note two things: the amount of dispensed solution, and the amount of concentrate used in preparation of the solution dispensed.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

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

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.

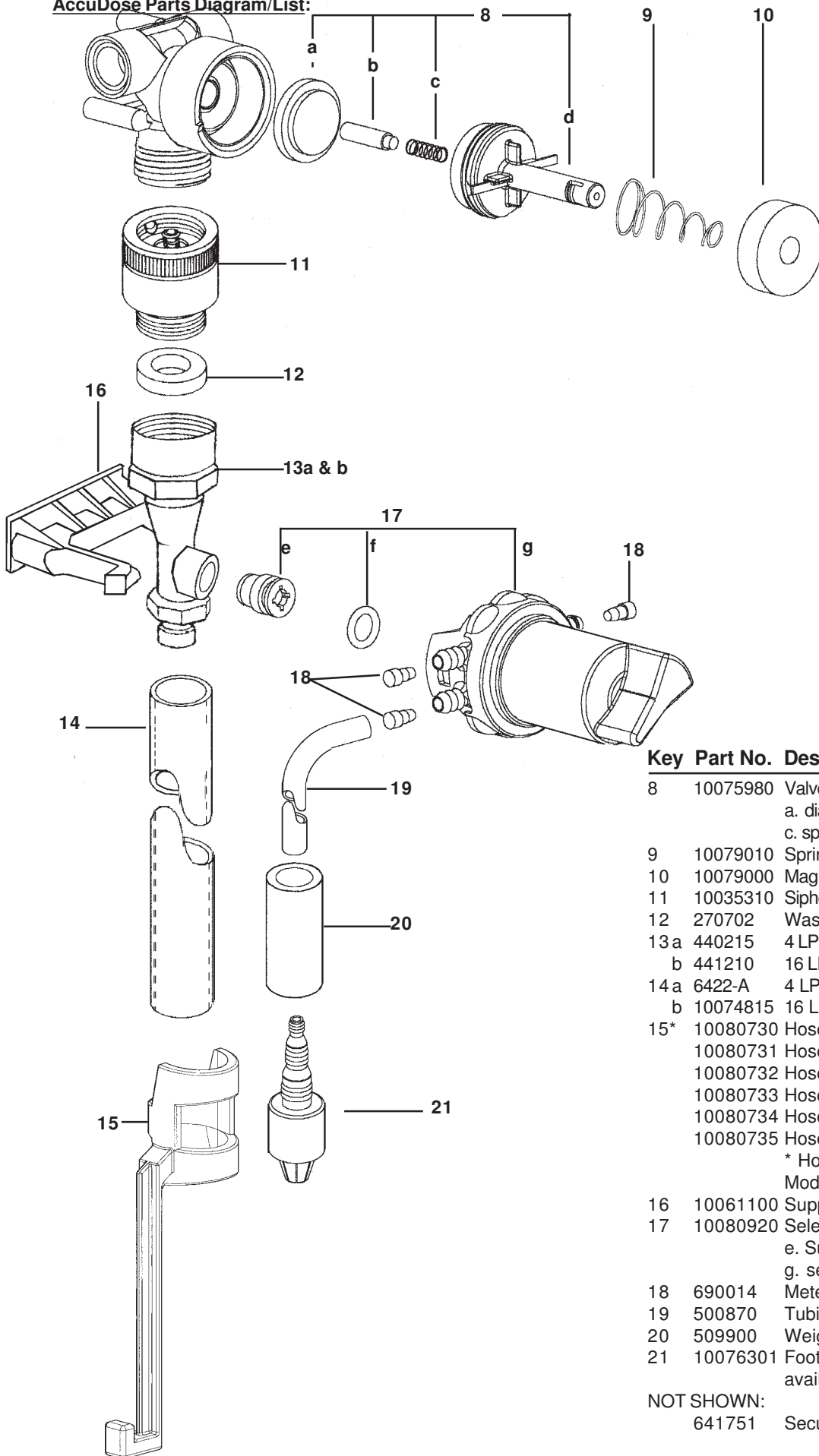
APPROXIMATE DILUTIONS AT 2.86 BAR FOR WATER-THIN PRODUCTS (1.0 CP)				
Tip Color	Orifice Size	Std. Drill Number	Ratio (per Eductor Flow)	
			4 LPM	16 LPM
No Tip	.187	(3/16)	2:1	3:1
Grey	.128	(30)	2:1	3:1
Black	.098	(40)	2:1	4:1
Beige	.070	(50)	3:1	8:1
Red	.052	(55)	4:1	14:1
White	.043	(57)	5:1	20:1
Blue	.040	(60)	6:1	24:1
Tan	.035	(65)	8:1	30:1
Green	.028	(70)	12:1	45:1
Orange	.025	(72)	16:1	56:1
Brown	.023	(74)	18:1	64:1
Yellow	.020	(76)	24:1	90:1
Aqua	.018	(77)	32:1	128:1
Purple	.014	(79)	45:1	180:1
Pink	.010	(87)	128:1	350:1

AccuDose Parts Diagram:



Key	Part No.	Description
1	238100	Strainer washer
2	10082835	Swivel collar
3	10082816	Swivel stem
4	10075950	O-ring (stem /valve connection)
4	10075925	Pipe plug
5	10080710	Button, dark grey (standard)
5	10080711	Button, sky blue
5	10080712	Button, red
5	10080713	Button, green
5	10080714	Button, light grey
5	10080715	Button, yellow
6	10080894	Cabinet
7	10020700	Selector valve grommet
7	10020900	Back up ring for grommet

AccuDose Parts Diagram/List:



Key Part No. Description

8	10075980	Valve parts kit a. diaphragm, b. armature, c. spring, d. valve bonnet
9	10079010	Spring
10	10079000	Magnet
11	10035310	Siphon breaker
12	270702	Washer
13a	440215	4 LPM Eductor kit (grey)
b	441210	16 LPM Eductor kit (yellow)
14a	6422-A	4 LPM outer discharge tube
b	10074815	16 LPM outer discharge tube
15*	10080730	Hose hook, dark grey (std)
	10080731	Hose hook, sky blue
	10080732	Hose hook, red
	10080733	Hose hook, green
	10080734	Hose hook, light grey
	10080735	Hose hook, yellow
		* Hose hook provided with Model 3874GB-2 only
16	10061100	Support
17	10080920	Selector valve replacement kit: e. Suction stub, f. O-ring, g. selector valve assembly
18	690014	Metering tip (kit)
19	500870	Tubing, 6mm x 2.1 m
20	509900	Weight
21	10076301	Foot valve -- Viton (EPDM also available. Order 10076302.)
NOT SHOWN:		
	641751	Security screws (cabinet sides)

Troubleshooting Chart:

Problem	Cause	Solution
1. No discharge	<ul style="list-style-type: none"> a. No water b. Magnetic valve not functioning c. Excessive water pressure d. Eductor clogged 	<ul style="list-style-type: none"> a. Open water supply b. Install valve parts kit c. Install regulator if water pressure exceeds 4.28 Bar (flowing) d. Clean* or replace
2. No concentrate draw	<ul style="list-style-type: none"> a. Clogged foot valve b. Metering tip or eductor has scale build-up c. Low water pressure d. Discharge tube(s) not in place or flooding ring missing e. Concentrate container empty f. Inlet hose barb not screwed into eductor tightly g. Clogged water inlet strainer h. Selector out of position 	<ul style="list-style-type: none"> a. Clean or replace b. Clean (descale)* or replace c. Minimum 1.76 Bar (with water running) required to operate unit properly d. Push tube firmly onto eductor discharge hose barb; ensure discharge tube has a flooding ring. e. Replace with full container f. Tighten, but do not overtighten g. Disconnect inlet water line and clean strainer h. Ensure selector is in position desired
3. Excess concentrate draw	<ul style="list-style-type: none"> a. Metering tip not in place b. Chemical above eductor 	<ul style="list-style-type: none"> a. Press correct tip firmly into barb on eductor b. Place concentrate below the eductor
4. Failure of unit to turn off	<ul style="list-style-type: none"> a. Water valve parts dirty or defective b. Magnet doesn't fully return c. Push button stuck 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> a. Air leak in pick-up tube 	<ul style="list-style-type: none"> 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 which 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.

