MaxiMizer II Series Proportioner

with E-gap Eductors

Package Contains:

1. Proportioner unit.
2. Supply tubes
3. Footvalves, check valves and weights.
4. Discharge tubes
5. Metering tip kits.
6. Mounting anchor kit.
7. Drip trays

Installation and Operation:

1. Unlock the front door panel and open it.

2. To mount the unit to a wall, drill mounting holes and insert the plastic toggle anchors provided into the holes. Use the screws provided to secure the unit to the wall.

3. Connect water supply hose of at least 13mm ID to water inlet swivel at left side of manifold, through the hole in the cabinet. (Minimum 1.76 Bar pressure, **with water running**, is required for proper operation.) Attach hose to water supply source. Turn water supply on.If needed, the front panel can be removed by loosening the two screws inside the bottom edge and then lifting the front off.

5. Insert a metering tip into each eductor hose barb.

6. Install the suction tubes (having first fitted the footvalve and weight) to the inline checkvalves using the “Y” valves provided.
   - Place footvalve end of tubes into the concentrate container. REMEMBER TO CHECK STRAINER PERIODICALLY FOR DEBRIS, CLEAN WHEN NECESSARY. Place concentrate containers into cabinet.

7. Close front door panel and lock. Make sure a drip tray is in its place at the bottom of the shelf, below concentrate container.

8. Write product name on the label on the front of the cabinet door.

9. Push button to start flow of desired solution and hold until solution starts to be discharged. (Make sure there is a bottle or other receptacle under the discharge tube.) Prime each of the supply tubes in this way then push the button whenever dispensing is desired. To stop flow of solution release the button. Buttons may be converted to twist-to-latch locking buttons by installing the latch spring provided (see parts diagram for placement). This allows continuous dispensing without holding button.

Measurement of Concentration:
To determine the dispensed water-to-product ratio for any metering tip size and product viscosity, operate the primed dispenser for a minute or so and note the amount of dispensed solution, and the amount of concentrate used in preparation of the solution.

APPROXIMATE DILUTIONS AT 2.85 FOR WATER-THIN PRODUCTS (1.0 CP)

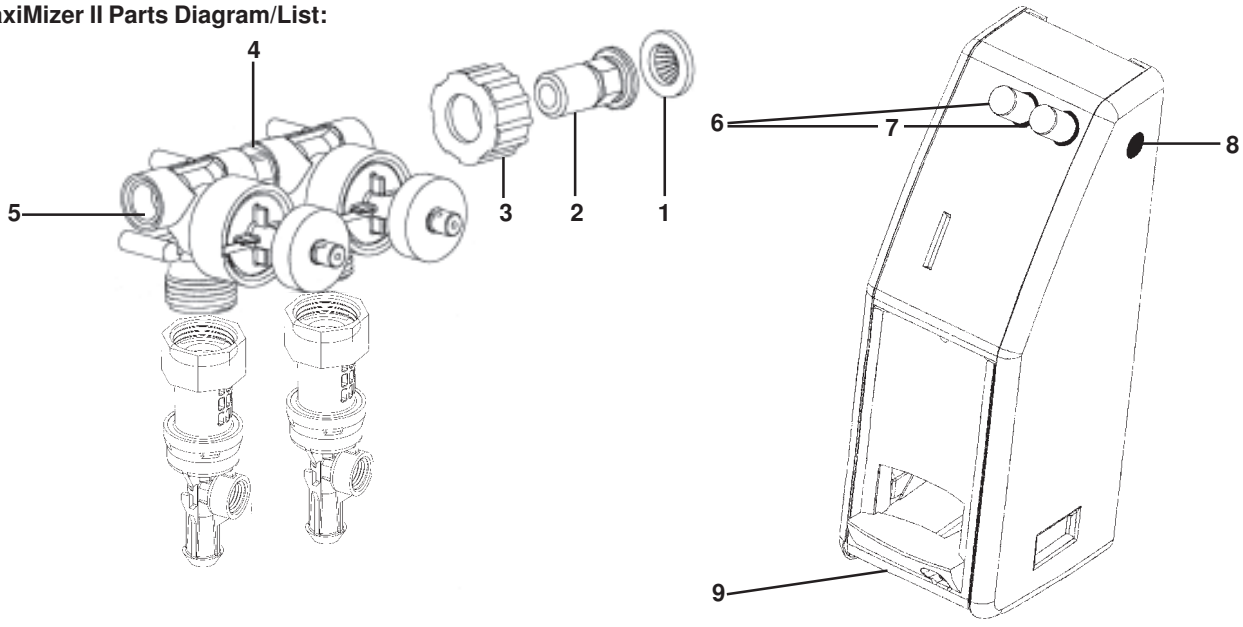
Tip Colour	Orifice Size / Std. Drill Number)	Ratio (per Eductor Flow) 4 PM	14 PM
No Tip	.187 (3/16)	3:1	3.5:1
Grey	.128 (30)	3:1	4:1
Black	.098 (40)	3:1	4:1
Beige	.070 (50)	4:1	8:1
Red	.052 (55)	5:1	14:1
White	.043 (57)	7:1	20:1
Blue	.040 (60)	8:1	24:1
Tan	.035 (65)	10:1	30:1
Green	.028 (70)	16:1	45:1
Orange	.025 (72)	20:1	56:1
Brown	.023 (74)	24:1	64:1
Yellow	.020 (76)	32:1	90:1
Aqua	.018 (77)	38:1	128:1
Purple	.014 (79)	64:1	180:1
Pink	.010 (87)	128:1	350:1

Dilution Ratio (X:1) where

$$X = \frac{\text{Amount of Mixed Solution - Amount of Concentrate Drawn}}{\text{Amount of Concentrate Drawn}}$$

Dilution Ratio 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.

MaxiMizer II Parts Diagram/List:



Key	Part No.	Description
1	238100	Strainer washer
2	10082806	Swivel stem (3/8" NPT)
3	10082835	Swivel Collar
4	10075912	Nipple (between valves)
	10075950	O-ring (2 required)
5	10075925	Pipe plug
6	10077480	Button, dark grey
	10077481	Button, blue
	10077482	Button, red
	10077483	Button, green
	10077484	Button, yellow
	10077485	Button, light grey
	10082750*	Button, dark grey locking
	10082751*	Button, blue locking
	10082752*	Button, red locking
	10082753*	Button, green locking
	10082754*	Button, yellow locking
	10082755*	Button, light grey locking
		* Locking button parts kits include grommet and spring/screw
7	10068810	Grommet
8	10068885	Hole plug (for side cabinet opening)
9	10075160	Drip Tray

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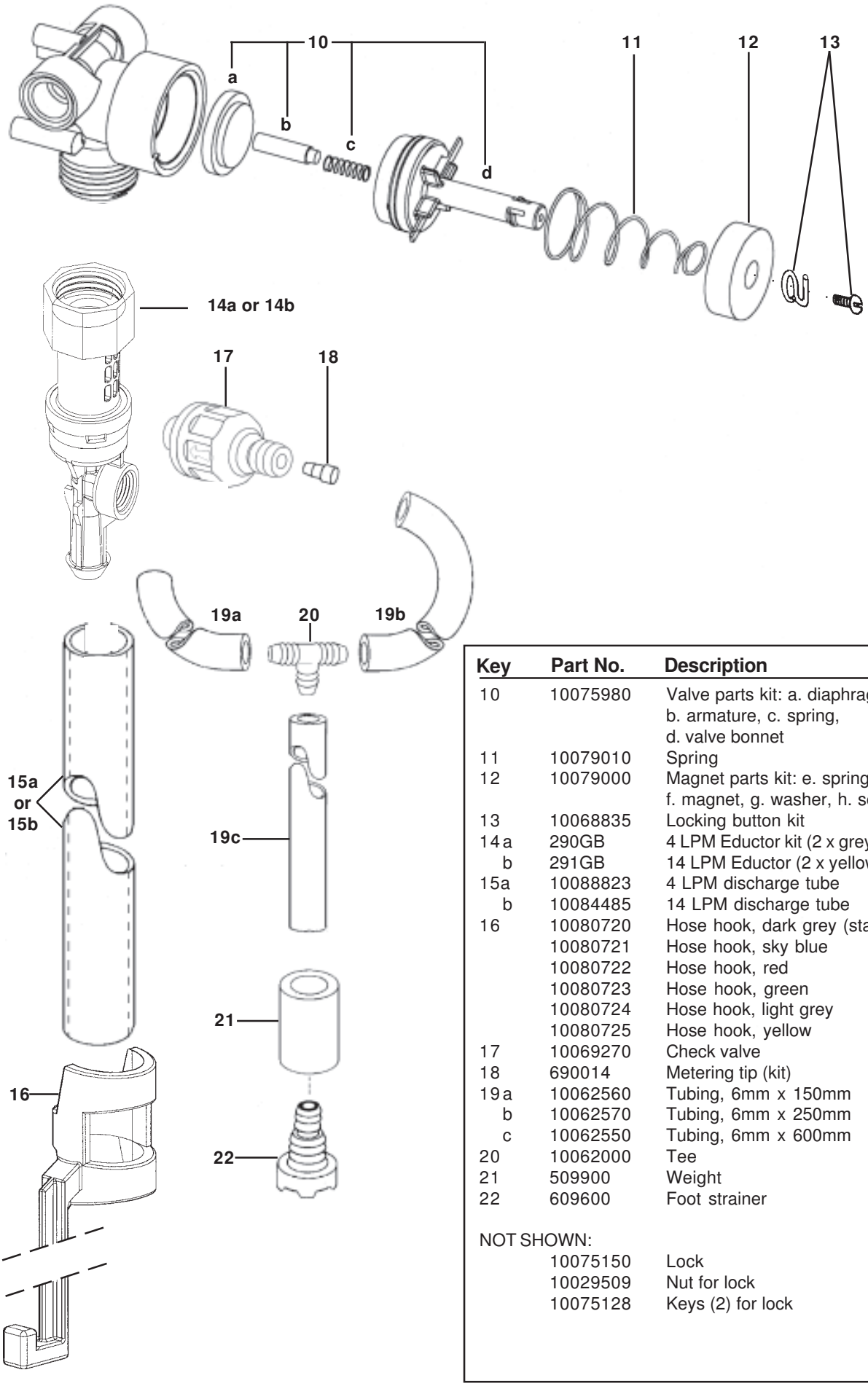

Key	Part No.	Description
10	10075980	Valve parts kit: a. diaphragm, b. armature, c. spring, d. valve bonnet
11	10079010	Spring
12	10079000	Magnet parts kit: e. spring, f. magnet, g. washer, h. screw
13	10068835	Locking button kit
14a	290GB	4 LPM Eductor kit (2 x grey)
b	291GB	14 LPM Eductor (2 x yellow)
15a	10088823	4 LPM discharge tube
b	10084485	14 LPM discharge tube
16	10080720	Hose hook, dark grey (standard)
	10080721	Hose hook, sky blue
	10080722	Hose hook, red
	10080723	Hose hook, green
	10080724	Hose hook, light grey
	10080725	Hose hook, yellow
17	10069270	Check valve
18	690014	Metering tip (kit)
19a	10062560	Tubing, 6mm x 150mm
b	10062570	Tubing, 6mm x 250mm
c	10062550	Tubing, 6mm x 600mm
20	10062000	Tee
21	509900	Weight
22	609600	Foot strainer
NOT SHOWN:		
	10075150	Lock
	10029509	Nut for lock
	10075128	Keys (2) for lock

Troubleshooting Guide:

Problem	Cause	Solution
1. No discharge	a. No water b. Magnetic valve not functioning c. Excessive water pressure d. Eductor clogged	a. Open water supply b. Install valve parts kit c. Install regulator if water pressure exceeds 4 Bar d. Clean* or replace
2. No concentrate draw	a. Clogged foot stainer 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. Check valve not screwed into eductor tightly g. Clogged water inlet strainer h. Air leak between tee and pick-up tubing	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, 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. Make sure tubing is secured on tee barbs: try clamps on tee barbs, or replace tee
3. Excess concentrate draw	a. Metering tip not in place	a. Press correct tip firmly into checkvalve barb
4. Failure of unit to turn off	a. Water valve parts dirty or defective b. Magnet doesn't fully return c. Push button stuck d. Excessive water pressure	a. Clean* or replace with valve parts kit b. Make sure magnet moves freely. Replace spring if short or weak c. Realign cabinet or clean grommet that button passes through d. Install regulator if pressure exceeds 6 Bar
5. Supply water in concentrate or unit won't hold prime	a. Check valve inoperable	a. Replace check valve
6. Excessive foaming in discharge	a. Air leak between tee and pick-up tubing b. Turbulence in discharge	a. Be sure tubing is secured on tee barbs: try clamps on tee barbs, or replace tee b. Hold spray bottles at an angle to discharge tube

* 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 vacuum breaker and unthread eductor. Replace in same manner. This will avoid loosening the vacuum breaker. 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.

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