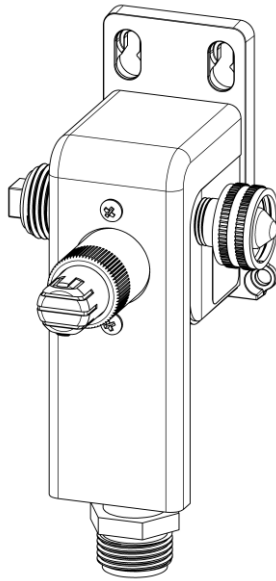


MiniMix

633MB3 Dispenser



Overview

The DEMA MiniMix is a compact, wall-mounted chemical dispenser built on the proven 633 water valve platform, one of the most trusted dispensing technologies in the industry, with decades of reliable performance. The MiniMix's modular design lets you easily couple together any number of stations to create a system that meets your specific needs.

- Compact and modular design allows for quick installation.
- Included metering tip makes it easy to reach target dilution (See **Table 1 and 2**)
- Utilizes garden hose fittings on the inlet and outlet for easy installation.
- Durable plastic housing
- Repair kits available (see parts diagram)

Warnings



WARNING: INSTALLATION OF DEMA PRODUCTS MUST MEET ALL APPLICABLE PLUMBING CODES AND REGULATIONS ESTABLISHED BY NATIONAL, CITY, COUNTY, PARISH, PROVINCIAL OR OTHER AGENCIES. IT IS POSSIBLE THAT PLUMBING CODES AND REGULATIONS REQUIRE THAT A CERTIFIED INSTALLATION CONTRACTOR OR ENGINEER PERFORM THE PLUMBING INSTALLATION.

ALWAYS TURN OFF THE WATER TO THE DISPENSER WHEN NOT IN USE.



READ ALL PRODUCT SAFETY DATA SHEETS (SDS) AND USE PERSONAL PROTECTIVE EQUIPMENT AS DIRECTED BEFORE INSTALLING OR DISPENSING ANY CHEMICAL FROM THIS DISPENSER

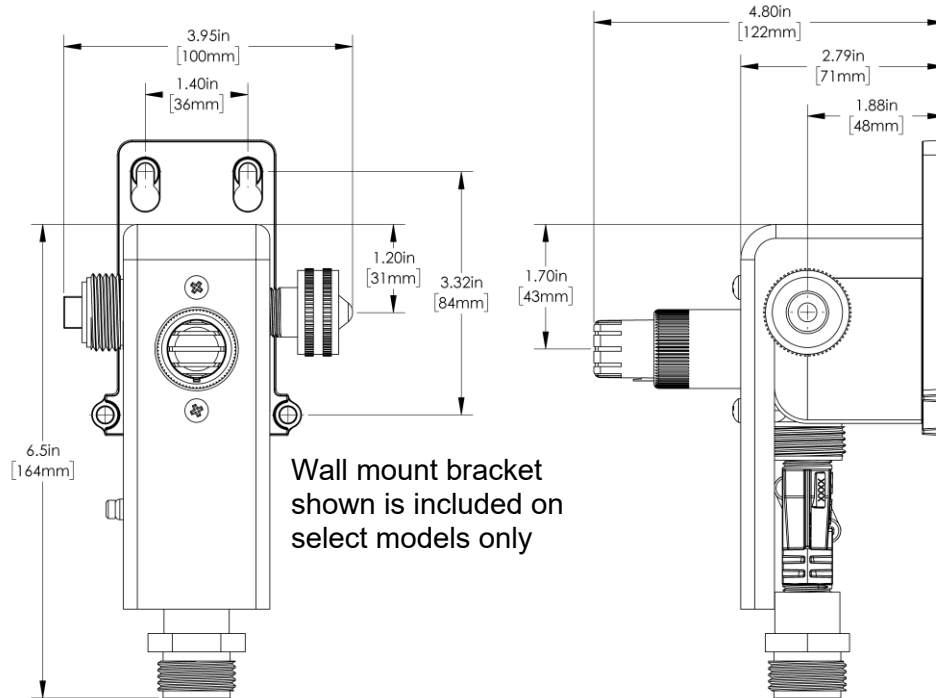
Operational Requirements

Water Supply Requirements

	Minimum	Maximum
Water Pressure	20 psi (1.38 bar)	125 psi (8.62 bar)
Water Temperature	-	150°F (65.5°C)

** Recommended water pressure is between 20 psi (1.38 bar) and 80 psi. (5.52 bar). If pressure exceeds 80 psi, it is recommended that a P/N 66.43 regulator is used.

Overall Size



Installation and Servicing



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1. Mounting and Water Supply:

- Remove the two cover retainer screws and the cover from the blend center assembly.
- Any number of MiniMix dispensers can be coupled together by first removing the pipe plugs in all but the last unit, then connecting the male hose thread of one unit to the female inlet hose adapter of the next unit.
- Hold the unit to the wall and locate the positions for the mounting screws.
- Mount the unit to the wall using 2 mounting screws and anchors if your unit does not include the wall bracket kit. Then replace the dispenser cover and 2 screws.
- If the wall mount bracket is attached, mount the unit to the wall using 4 mounting screws and anchors. All 4 screws must be used.

Installation and Servicing Continued...

- f. Any number of MiniMix dispensers can be coupled together by first removing the pipe plugs in all but the last unit, then connecting the male hose thread of one unit to the female inlet hose adapter of the next unit.
- g. The water inlet is equipped with a female garden hose fitting (with strainer washer) for attaching a water supply hose. The unit is designed so water can be supplied to either side by interchanging the pipe plug and the female hose fitting. Note: Apply pipe dope, hand-tighten, and then turn 1-1/2 times with a wrench.
- h. DO NOT OVERTIGHTEN.

2. Chemical Injection Adjustment:

- a. WARNING: USE CARE WHEN HANDLING HAZARDOUS CHEMICALS.
- b. Chemical feed rates are controlled by a metering tip screwed into the injector barb. Select a tip for the barb using **Table 1 or 2** as a guide.

3. Chemical Supply:

- a. Place the chemical container in a convenient location not more than 6 feet below the blend center (greater lifts will reduce injection capacity). Slip ceramic weight over tubing and insert the end with the foot valve into the chemical container. Cut the tubing to any convenient length that will allow it to extend from the bottom of the chemical container to the injector inlet barb (**See Figure 1**).

4. Outlet:

- a. Screw outlet hose onto outlet of injector. Squeeze hose clamp around hose. Locate position for mounting screw and mount hose clamp to wall using remaining screw and anchor.

Metering Tip Kits

INDUCTION RATES BASED ON WATER THIN PRODUCTS (1 cps)
INDUCTION RATES VARY PRODUCT TO PRODUCT.
FIELD TESTS ARE RECOMMENDED.

Metering Tip Color	(TABLE 1) METERING TIP SELECTION CHART					
	1 cps		80 cps		210 cps	
	Oz/Gal	Ratio	Oz/Gal	Ratio	Oz/Gal	Ratio
Tan	0.65	196-1	0.29	447-1	0.37	343-1
Orange	0.71	181-1	0.43	297-1	0.40	318-1
Turquoise	0.91	140-1	0.47	270-1	0.44	289-1
Pink	1.61	79-1	0.82	157-1	0.79	162-1
Lt. Blue	1.82	70-1	1.25	102-1	1.14	112-1
Brown	2.07	62-1	1.33	96-1	1.21	105-1
Red	2.32	55-1	1.49	86-1	1.79	71-1
White	2.43	52-1	1.90	67-1	1.88	68-1
Green	3.70	34-1	2.04	63-1	2.01	63-1
Blue	4.22	30-1	2.32	55-1	3.43	37-1
Yellow	7.74	16-1	3.44	37-1	4.21	30-1
Black	8.76	14-1	3.89	33-1	6.12	21-1
Purple	16.90	7-1	5.55	23-1	8.76	14-1
Gray	19.40	6-1	6.37	20-1	10.06	13-1
No Tip	24.33	5-1	7.93	16-1	12.52	10-1

All injection rates shown on (Table 1) are based on 40 PSI inlet water pressure, a water flow rate of 2.5 GPM, and a 25ft x 3/4" ID hose with the 29.QD spray gun

Metering Tip Color	(TABLE 2) METERING TIP SELECTION CHART					
	1 cps		80 cps		210 cps	
	Oz/Gal	Ratio	Oz/Gal	Ratio	Oz/Gal	Ratio
Tan	0.57	224-1	0.32	405-1	0.38	339-1
Orange	0.62	207-1	0.42	308-1	0.41	313-1
Turquoise	0.91	140-1	0.46	280-1	0.45	285-1
Pink	1.59	80-1	0.85	151-1	0.79	162-1
Lt. Blue	1.80	71-1	1.30	98-1	1.15	112-1
Brown	2.25	57-1	1.38	92-1	1.22	105-1
Red	2.52	51-1	1.55	82-1	1.81	71-1
White	2.64	48-1	1.86	69-1	1.90	67-1
Green	3.72	34-1	1.99	64-1	2.03	63-1
Blue	4.25	30-1	2.28	56-1	3.37	38-1
Yellow	7.90	16-1	3.07	42-1	4.14	31-1
Black	8.94	14-1	3.48	37-1	6.16	21-1
Purple	17.49	7-1	4.97	26-1	9.30	14-1
Gray	20.08	6-1	5.70	22-1	12.39	10-1
No Tip	26.98	5-1	7.60	17-1	16.51	8-1

All injection rates shown on (Table 2) are based on 40 PSI inlet water pressure, a water flow rate of 2.5 GPM, and a 6ft x 1/2" ID hose with the 29.QD spray gun

Troubleshooting

Symptom	Probable Cause	Remedy
The unit fails to draw chemical.	The hose is too long or too narrow	See Table 2 to confirm hose is the correct length and diameter
	The metering tip is blocked	Remove tip and clear blockage.
	The hose is kinked or otherwise obstructed	Verify hose is free from any restrictions
Unit Stops Drawing Chemical	Foot strainer is clogged	Clean foot strainer
	Metering tip is blocked	Remove tip and clear blockage.
	Injector check valve is clogged	Remove barb to inspect check valve ball, spring and O-ring.
Injector continues to draw chemical after water valve closes	Chemical supply is higher than bottom of discharge hose creating a natural siphon	Lower the supply vessel or hang up outlet hose after use
Valve malfunction	Clogged bleed holes in diaphragm assembly	Check that the button moves freely up and down and that a “click” can be heard when the button is pushed and released, indicating that the magnet is activating the plunger properly. Remove cover. To inspect internal parts, unscrew magnet housing and carefully pull off the enclosing tube so as not to drop the plunger, kick-off spring and spacer. Check for dirt or damage impeding plunger and kick-off spring movement. Inspect the diaphragm, making sure the two small pin holes (bleed holes) in the diaphragm convolution are clear to allow the valve to close.

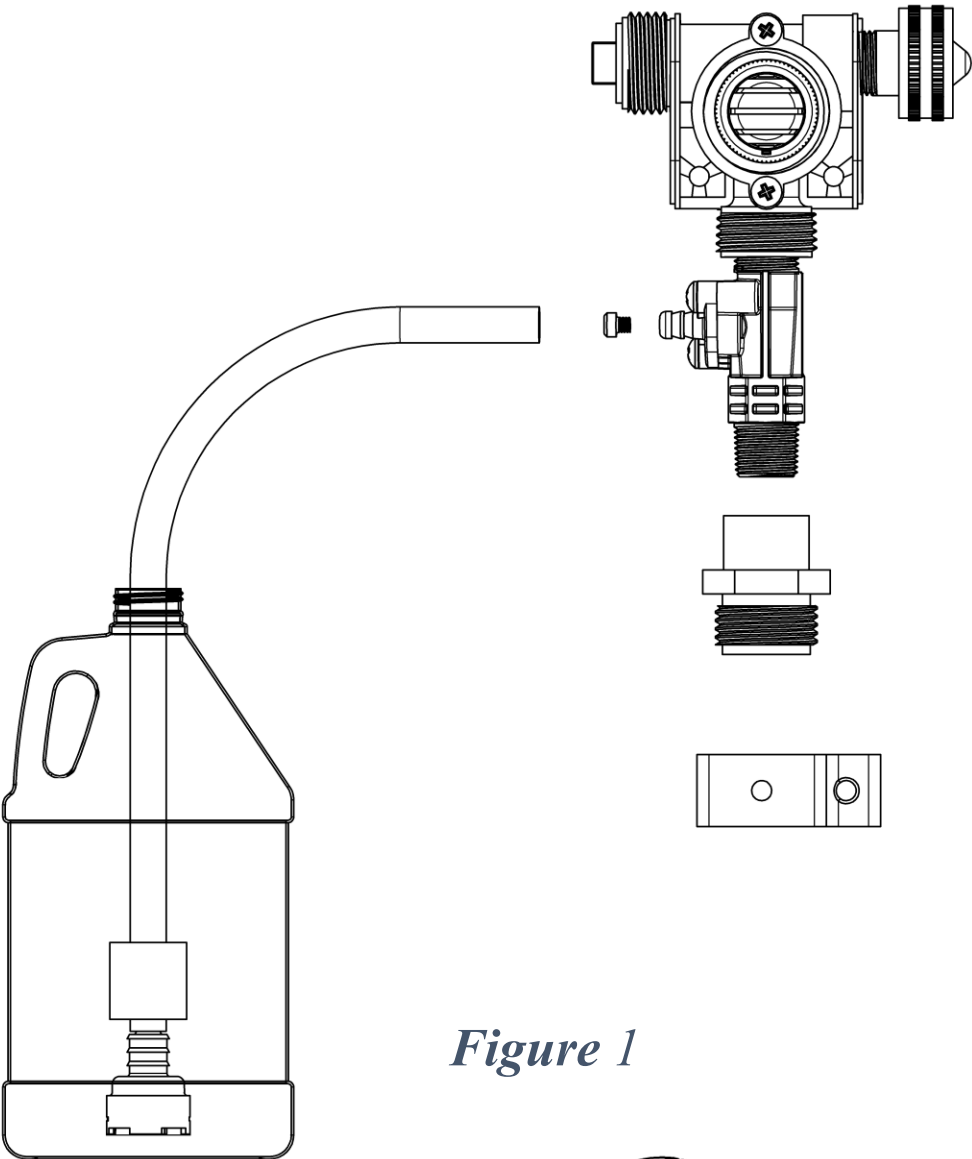
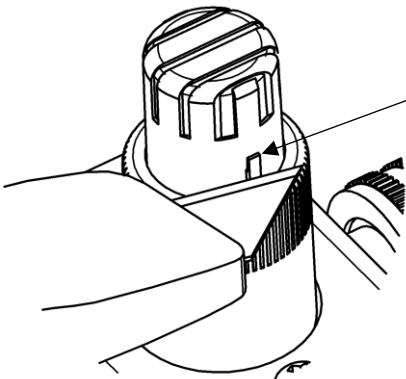


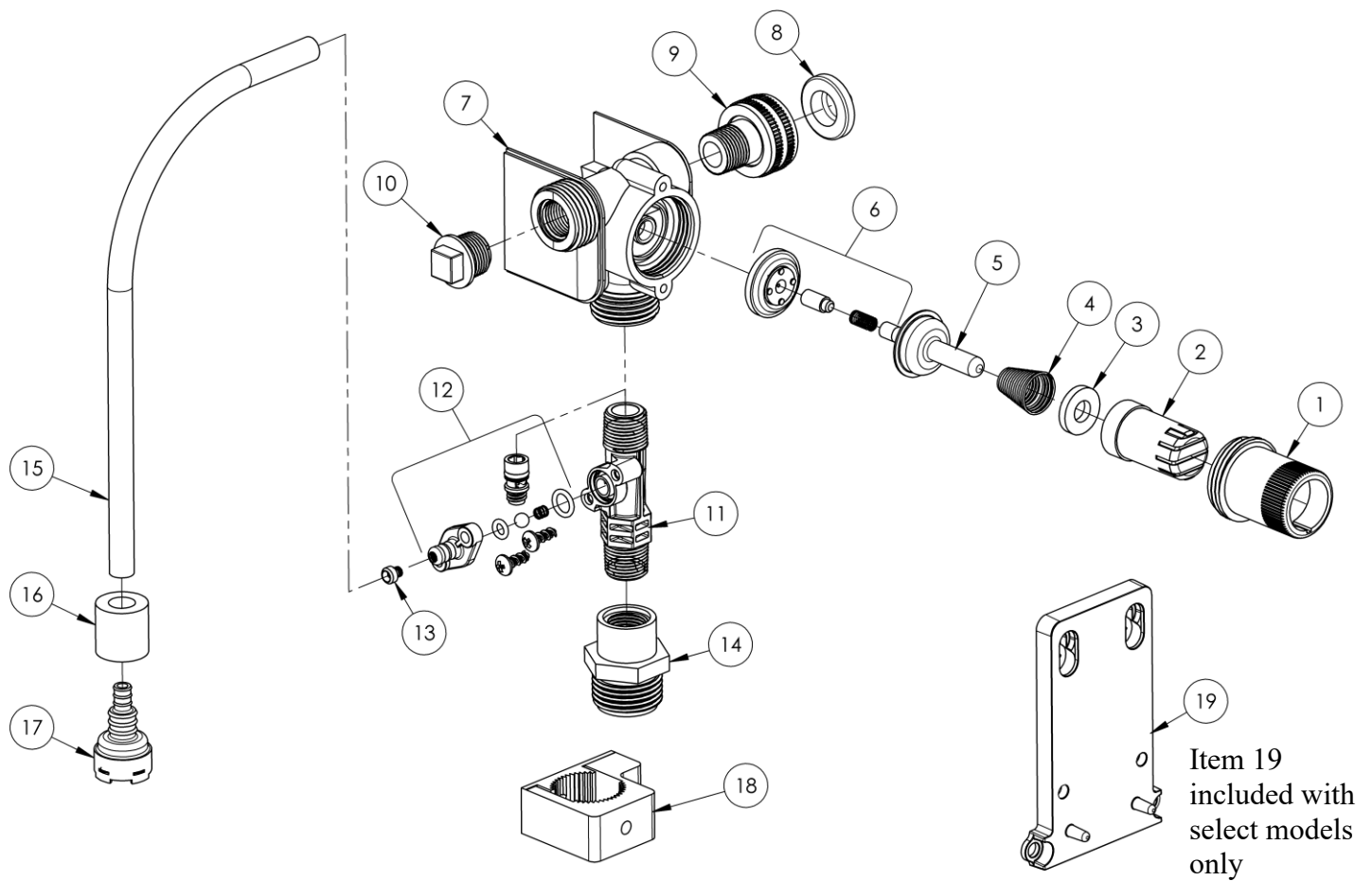
Figure 1



Remove small tab by cutting to make the push button able to be locked in the on position

Figure 2

Parts Diagram



ITEM NO.	DEMA NO.	DESCRIPTION	ITEM NO.	DEMA NO.	DESCRIPTION
1	66.139	Magnet Housing (Specify Color)	14	41862.1	Fitting 3/8 FNPT
2	66.140	Push Button (Specify Color)	15	100.12	Vinyl Tube (1/4 id x 8ft long)
3	63.53	Magnet	16	61.107.2	Ceramic Weight
4	63.36	Spring	17	100.16E	Foot Valve
5	41.7.25	Enclosing Tube	18	60.43	Hose Clamp
6	63.87	Valve Repair Kit	19	63.3.KIT	Wall mount bracket w/ screws & anchors kit
7	63.39	Valve Body			
8	100.38	Strainer Washer			
9	63.32	Pipe to Garden Hose Adapter			
10	66.153	Pipe Plug w/ O-Ring			
11	211P.125	Rocket Injector Assy .125	ACCESSORIES		
12	21.125	Nozzle & Barb Repair Kit	ITEM NO.	DEMA NO.	DESCRIPTION
13	100.15	Metering Tip (Specify Color)	19	100.15K	Metering Tip Kit (14 Colors)

Warranty

Merchandise Returns

***No merchandise will be returned for credit without DEMA'S written permission.
Returned merchandise authorization number is required in advance of return.***

Product Warranty

DEMA products are warranted against defective material and workmanship under normal use and service for one year from the date of manufacture. This limited warranty does not apply to any products that have a normal life shorter than one year or failure and damage caused by chemicals, corrosion, physical abuse, or misapplication. Rubber and synthetic rubber parts such as "O"-rings, diaphragms, PVC tubing, and gaskets are considered expendable and are not covered under warranty. This warranty is extended only to the original buyer of DEMA products. If products are altered or repaired without prior approval of DEMA, this warranty is void.

Defective units or parts should be returned to the factory with transportation prepaid. If inspection shows them to be defective, they will be repaired or replaced without charge, F.O.B. factory. DEMA assumes no liability for damages. Return merchandise authorization number must be granted in advance of returned units for repair or replacement (See "Merchandise Returns" above).