



# DEMA BLEND CENTER

## MODELS 633MB, 633MB2

### 1. PARTS:

- |  |   |
|--|---|
| A. Blend Center assembly                   | B. 1 pc. 8' long vinyl supply tubing with foot valve<br>1/4" ID, Model 633MB2; 3/8" ID, Model 633MB |
| C. 1 pc. Ceramic weight                    | E. 1 pc. label card   |
| D. 3 pcs. ea. #8x1-1/2" screws and anchors | G. 1 pc. 1/4" NPT Garden Hose bushing   |
| F. Metering tip kit                        | I. Ball Valve (633MB2 only)   |
| H. 1 pc. Hose clamp                        |   |

### 2. INSTALLATION:

This product is designed only to be used as described in this instruction sheet. Adhere to all warnings and cautions identified in this document.	
	<b>WARNING:</b> Installations must conform to all local and national plumbing codes and use approved backflow prevention and pressure relief devices where required.  <b>ALWAYS DISCONNECT DISPENSER FROM WATER SOURCE WHEN DISPENSER IS NOT IN USE.</b>
	Always read SDS for all chemicals used and follow personal protective guidelines.

#### A) Mounting and Water Supply:

Remove the two cover retainer screws and the cover from the blend center assembly. 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, and replace the covers and screws.

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.

**DO NOT OVERTIGHTEN.**

#### B) Chemical Injection Adjustment:

**WARNING: USE CARE WHEN HANDLING HAZARDOUS CHEMICALS.**

Chemical feed rates are controlled by a metering tip screwed into the injector barb. Select a tip for the barb using Table 1 as a guide.

**633MB2 only: Screw ball valve onto inlet of injector.**

#### C) Chemical Supply:

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). Gummed labels are provided for labeling chemicals.

#### D) Outlet:

Screw outlet hose (not provided) onto outlet of injector using the bushing. Squeeze hose clamp around hose. Locate position for mounting screw and mount hose clamp to wall using remaining screw and anchor.

### 3. OPERATION:

The blend center is now ready for use. Depressing the push button opens the valve, allowing water to flow through the chemical injector that mixes chemical at the desired rate. The button is spring loaded to prevent accidental overflow if unattended, but may be converted to a locking button by cutting off the tab at the notch (See Figure 2). Pushing the button and turning it 1/4 turn clockwise at the end of its travel allows the valve to lock on. This makes it unnecessary for the attendant to hold the button in while filling large containers. Turning the button in a counterclockwise direction will release it, allowing the valve to shut off.

**CAUTION: WHEN SERVICING UNIT BE SURE THAT REPLACEMENT PARTS HAVE BEEN INSTALLED ACCORDING TO DRAWING. BE CERTAIN CHECK VALVE PARTS ARE IN PLACE.**

### 4. SERVICING: CAUTION: TURN OFF WATER SUPPLY BEFORE SERVICING.

- |  |  |
|--|--|
| A. If unit fails to draw chemical.                             | 1. Is the hose too long? (See Table 2)         |
| 2. Is the metering tip blocked? Remove tip and clear blockage. | 3. Is the hose kinked or otherwise obstructed? |

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- B. If unit stops drawing chemical.
1. Is the foot strainer clogged? Lift from drum and clean.
  2. Is the metering tip blocked? Remove and clean.
  3. Is the injector check valve clogged? Remove square, plastic metering knob to inspect check valve ball, spring and O-ring.
- C. 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.
- D. Valve Malfunction:
- 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.

**TABLE 1**

Tip Color	1 cps		75 cps		200 cps	
	Oz/Gal	Ratio	Oz/Gal	Ratio	Oz/Gal	Ratio
Clear	0.89	143	0.39	326	0.23	553
Purple	1.18	109	0.57	225	0.44	293
Yellow	1.93	66	1.17	109	0.88	145
Green	3.17	40	2.26	57	1.79	72
Pink	4.19	31	2.96	43	2.21	58
Turquoise	6.51	20	4.77	27	3.63	35
Black	7.14	18	5.85	22	4.49	29
Gray	9.28	14	7.27	18	5.47	23
Red	12.71	10	9.19	14	6.45	20
Blue	13.96	9	10.31	12	7.11	18
Brown	17.32	7	12.61	10	7.97	16
White	20.34	6	14.31	9	8.61	15
Orange	21.04	5	15.32	8	8.95	14
No Tip	23.94	4	17.02	7	10.61	12

**TABLE 2**

<b>Hose I.D.</b>	3/8"	1/2"	5/8"
<b>Max. Length</b>	15 ft.	50 ft.	100 ft.

**RETURNS:**

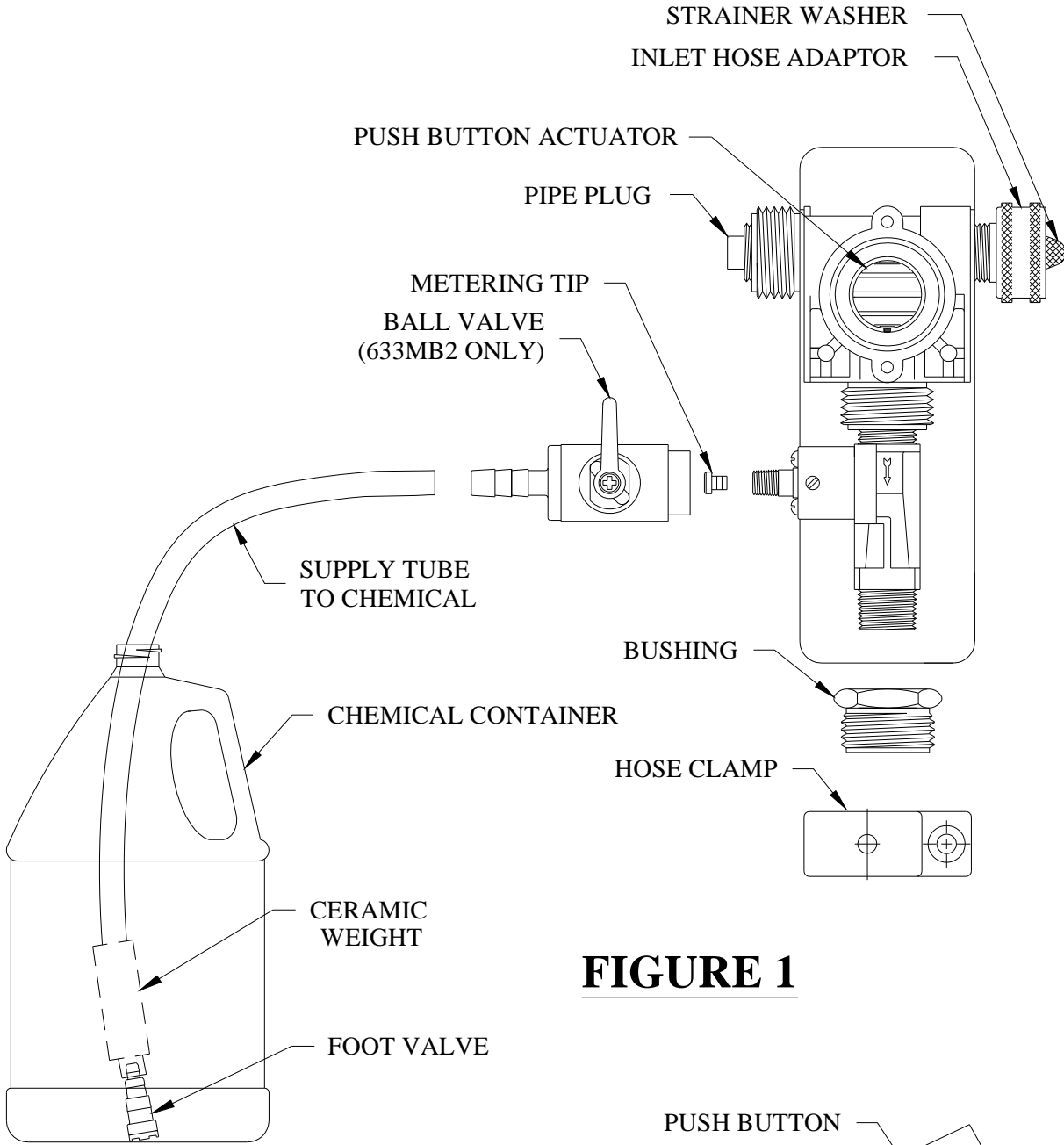
**NO MERCHANDISE MAY BE RETURNED FOR CREDIT WITHOUT DEMA’S WRITTEN PERMISSION. RETURN MERCHANDISE AUTHORIZATION NUMBER REQUIRED IN ADVANCE OF RETURN.**

**WARRANTY:**

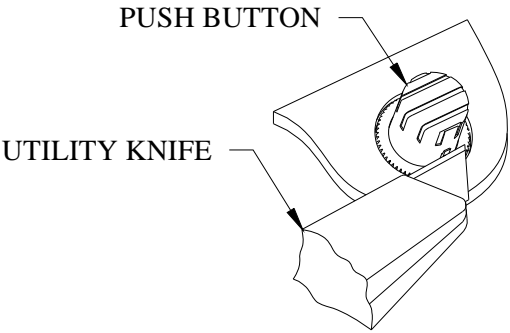
DEMA products are warranted against defective material and workmanship under normal use and service for one year from the date of manufacture. This limited warranty does not apply to any products which have a normal life shorter than one year or failure and damage caused by chemicals, corrosion, improper voltage supply, physical abuse, or misapplication. Rubber and synthetic rubber parts such as “o”- rings, diaphragms, squeeze 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 will be 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, to return units for repair or replacement, must be granted in advance of return.

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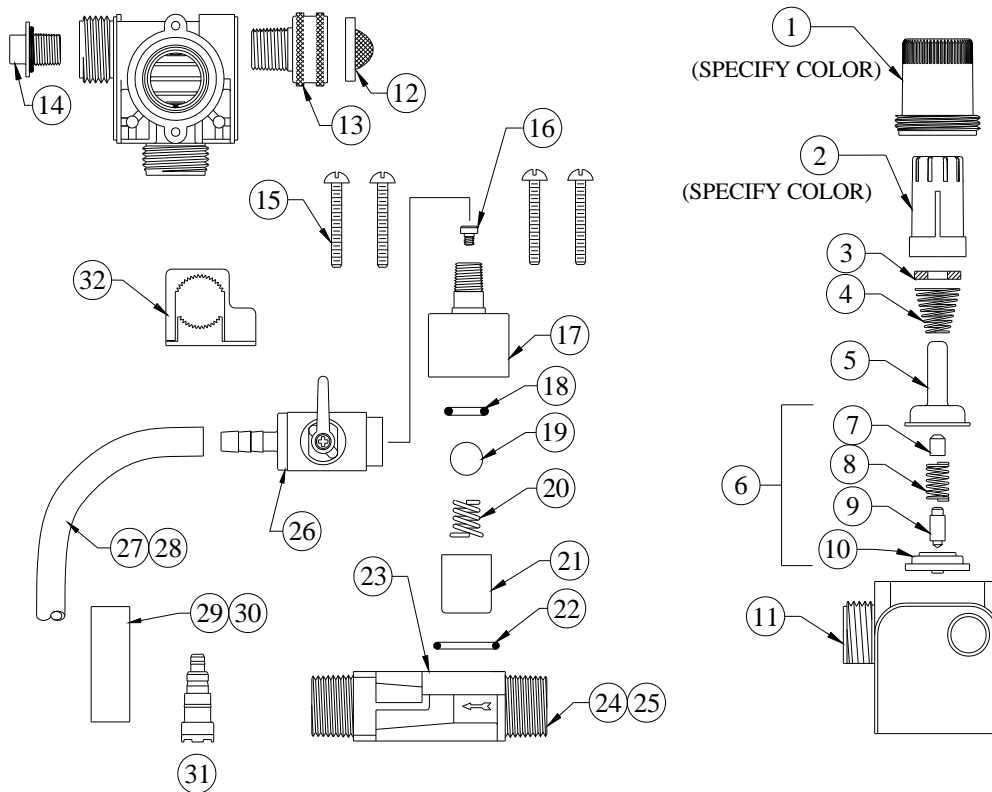


**FIGURE 1**



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NO.	PART NO.	DESCRIPTION	NO.	PART NO.	DESCRIPTION
1	66-139	Magnet Housing (Specify Color)	19	24-24P	Check Valve Ball
2	66-140	Push Button (Specify Color)	20	24-23	Check Valve Spring
3	63-53	Magnet	21	24-34-7	Check Valve Core
4	63-36	Spring	22	25-29	Metering Knob O-Ring
5	41-7-25	Enclosing Tube	23	24-68	Injector Body (P203C Series)
6	63-87	Valve Repair Kit	24	P203CTC-LB	Injector (633MB)
7	63-37	Spacer	25	P203CTC-LB2	Injector (633MB2)
8	41-1-8	Kick-Off Spring	26	44-71-1	Ball Valve (633MB2 Only)
9	63-83	Plunger	27	100-12	Vinyl Tube (1/4 ID S 8' Lg.) (633MB2)
10	41-15-10	Diaphragm	28	100-12L	Vinyl Tubing (3/8' ID X 8' Lg.) (633MB)
11	63-39	Valve Body	29	61-107-2	Ceramic Weight (633MB)
12	100-38	Strainer Washer	30	61-107	Ceramic Weight (633MB2)
13	63-32	Pipe to Garden Hose Adapter	31	100-11P	Foot Valve
14	66-153	Pipe Plug w/ O-Ring	32	60-43	Hose Clamp
15	24-67	Screw (4 Req'd)	<b>ACCESSORIES</b>		
16	61-9	Metering Tip (Specify Size)	<b>NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
17	23-32T	Metering Knob	33	61-9K	Metering Tip Kit (13 Sizes)
18	24-25	Check Valve O-Ring			