



DEMA 652AG DUO-FEED INSTALLATION INSTRUCTIONS

I. PARTS:

- A. Dispenser assembly
- B. 1 pc. 9/16 in. I.D. X 6 ft. vinyl outlet tubing.
- C. 2 pc. 3/8 in. O.D. X 8 ft. vinyl supply tubing, foot valve & ceramic weight.
- D. 4 pc. #10 pan head 3/4 in. long mounting screw.
- E. 4 pc. 7/8 in. long plastic mounting anchor.
- F. 1 pc. Metering tip kit.

II. INSTALLATION: (See Figure 1 for setup diagram)

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

A. Mounting and Water Supply:

Locate mounting holes on a permanent surface above sink. Drill holes about 1” deep and insert mounting anchors. Mount the unit using screws inserted through the keyholes in the case. Secure unit by inserting screws into the lower 2 holes. The unit needs to be mounted high enough that the sink does not interfere with the outlet tubes, putting a strain on the proportioners. If this is not possible, tie the outlet tubes together approximately 4” below where the tubes attach to the proportioners.

The water inlet is equipped with a female garden hose adapter to permit connection to the right hand side of the unit. The water supply can be attached to the left side of the unit by interchanging the plug in the left-hand side with the garden hose adapter. **Note: The water supply pressure should not exceed 150 psi.**

B. Chemical Supply:

Place the chemical containers in a convenient location not more than 6 ft. below the dispensing unit. **Note: greater lifts will reduce injection capacities.** Insert the ends with the foot valves of the 8 ft long, 3/8 in. O.D. vinyl tubes into the chemical containers. Cut the vinyl tubes to any convenient length that will allow the tubes to extend from the bottom of the chemical container to the proportioner inlet barb. Slide the ceramic weights over the 3/8 in. O.D. tubing and down to the foot valves. Repeat this procedure for both containers.

DEMA 652AG DUO-FEED INSTALLATION INSTRUCTIONS

C. Outlet:

For each of the proportioner outlets: Cut a piece of the 9/16 in. I.D. outlet tubing into the desired lengths and attach to the proportioner outlet. **Note: To insure priming, do not cut tubing to less than 18 in.**

Caution: To prevent continuous siphoning, the outlet of the discharge tubing should not be below the level of chemical in the container.

Outlet tubes may be tie-wrapped to each other or anchored to the wall or faucet to prevent damage to proportioners. (Tie-wraps not included.)

D. Injection Adjustment:

WARNING: USE CARE WHEN HANDLING HAZARDOUS CHEMICALS.

Chemical feed rates are controlled by metering tips screwed into the proportioner barb. Use Table 1 as a guide for tip selection.

Note: 1 cps (centipoise) is equal to the viscosity of water, 75 cps is approximately equal to the viscosity of 10 weight motor oil, and 200 cps is approximately equal to the viscosity of many dishwashing detergents.

III. OPERATION:

The model 652AG is activated by turning one of the two on-off ball valves fully counter-clockwise. When the desired amount of chemical water solution has been obtained turn the ball valve fully clockwise. Note: Do not use ball valves to throttle chemical water flow rate; this will result in inconsistent induction rates.

IV. SERVICING:

CAUTION: TURN OFF WATER SUPPLY BEFORE SERVICING.

A. Proportioner fails to draw chemical:

1. Proportioner outlet tubing cut too short for priming. Pinch outlet tube to create back pressure which will cause unit to prime. The foot valve will keep the inlet tube primed thereafter.
2. Insufficient water supply pressure. 20 psi is the minimum allowable pressure.

B. Proportioner stops drawing chemical:

1. Inspect foot valve for dried chemical or dirt. Soak in hot water to clean.
2. Proportioner inlet clogged with dried chemical. Remove metering top and try injecting in hot water. If there is no suction, remove proportioner and soak in hot water to clear interior passages.

DEMA 652AG DUO-FEED INSTALLATION INSTRUCTIONS

1 cps (centipoise) is equal to the viscosity of water
 75 cps is approximately equal to the viscosity of 10 weight motor oil
 200 cps is approximately equal to the viscosity of most dishwashing detergents

TABLE 1
 (163BAG - 4 GPM FLOW RATE PROPORTIONER, 1/4" BARB AND TUBING)

Metering Tip Color	Injection Rates For Viscosities Shown					
	1 cps		75 cps		200 cps	
	Oz./Gal.	Ratio	Oz./Gal.	Ratio	Oz./Gal.	Ratio
Tan	0.30	427-1	0.20	640-1	0.15	853-1
Orange	0.40	320-1	0.30	427-1	0.25	512-1
Turquoise	0.50	256-1	0.40	320-1	0.30	427-1
Pink	0.75	170-1	0.50	256-1	0.40	320-1
Clear	1.00	128-1	0.70	183-1	0.45	284-1
Brown	1.12	114-1	0.80	160-1	0.50	256-1
Red	1.50	85-1	0.90	142-1	0.60	213-1
White	1.75	73-1	1.10	116-1	0.70	183-1
Green	2.00	64-1	1.25	102-1	0.80	160-1
Blue	2.50	51-1	1.50	85-1	0.85	151-1
Yellow	3.75	34-1	1.85	69-1	0.90	142-1
Black	5.00	26-1	2.00	64-1	0.95	135-1
Purple	8.50	15-1	2.50	51-1	0.98	131-1
Gray	11.50	11-1	2.70	47-1	1.00	128-1
None	16.25	8-1	3.00	43-1	1.20	107-1

**Note: Special tips and proportioners are available to achieve higher and lower dilutions.
 All dilutions based on 4 GPM flow at 40 psi. water pressure.**

DEMA 652AG DUO-FEED

INSTALLATION INSTRUCTIONS

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

MASSACHUSETTS INSTALLATIONS The following applies to dispensers installed in the Commonwealth of Massachusetts:

1. Chemical Dispensers shall be installed by a Massachusetts licensed plumber.
2. Chemical Dispensers shall be hard piped using Product Approved materials.
3. The Public Water Supplier shall be contacted regarding the proper backflow prevention device to be installed.

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.

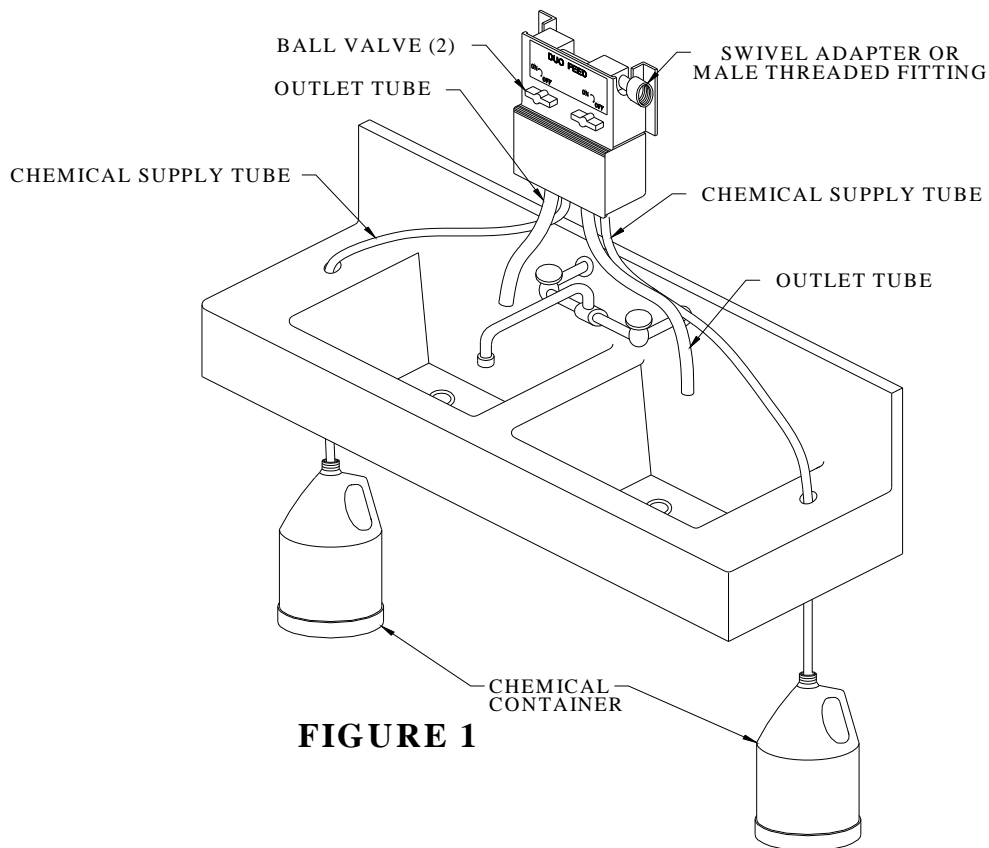
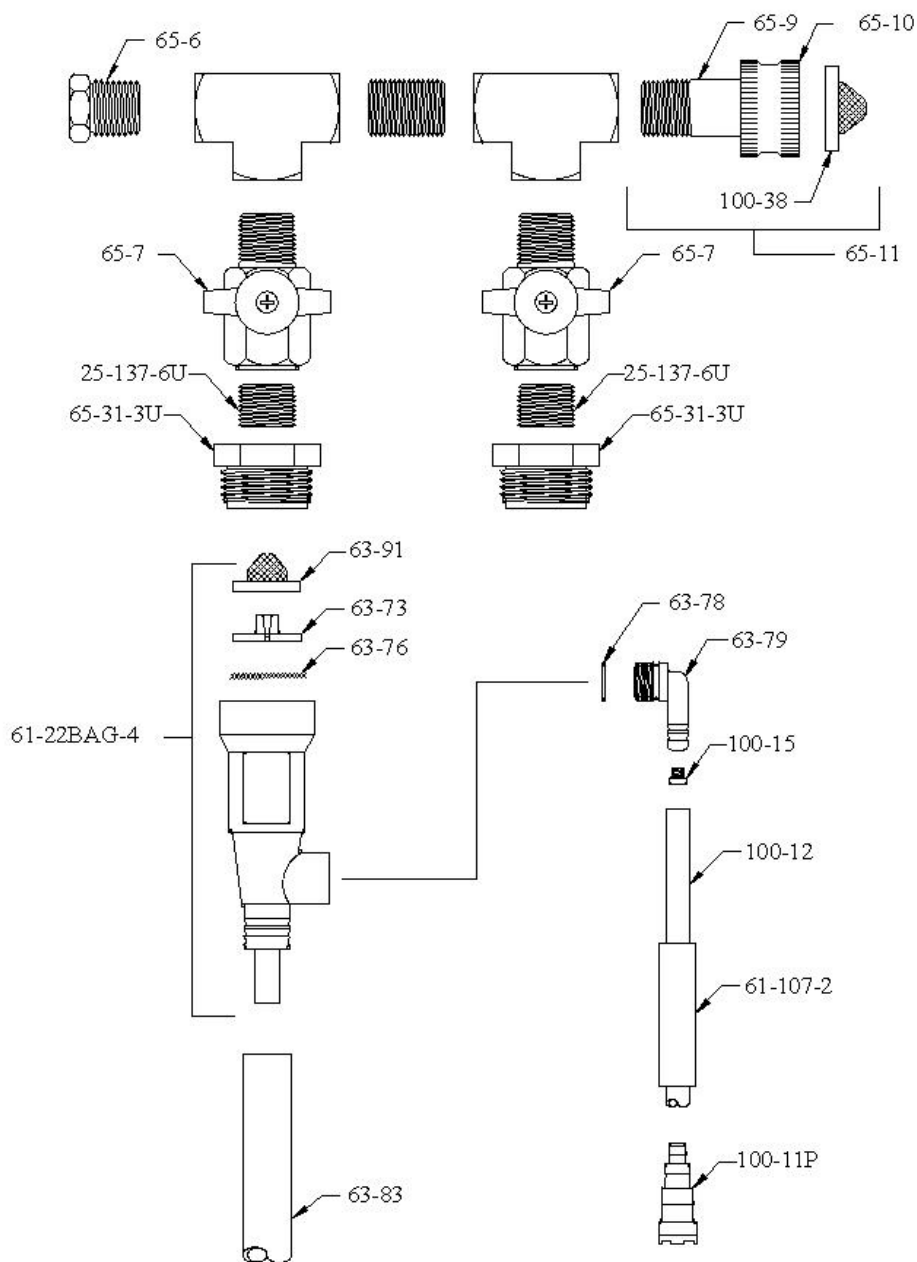


FIGURE 1

DEMA 652AG DUO-FEED



PART NO.	DESCRIPTION
61-22-3BAG	4 GPM (1/4" BARB) PROPORTIONER
61-107-2	CERAMIC WEIGHT (1/4" TUBE)
63-73	NOZZLE (4 GPM)
63-76	SCREEN
63-78	O-RING
63-79	INLET BARB (1/4" BARB)
63-83	VINYL TUBE (9/16 I.D. X 6' LG.)
63-91	STRAINER WASHER
65-6	PLUG

PART NO.	DESCRIPTION
65-7	1/4" BALL VALVE
*65-31-3U	ADAPTER
65-9	GARDEN HOSE ADAPTER STEM
*65-10	HOSE COUPLING
*65-11	SWIVEL ADAPTER KIT
100-11P	FOOT VALVE
100-12	VINYL TUBE (1/4" I.D. X 8' LG.)
*100-38	STRAINER WASHER
25-137-6U	1/4" NPT NIPPLE

ACCESSORIES | 100-15K | METERING TIP KIT-14 SIZES (1/4" BARB)

*OMITTED ON 652AG-MHF; USES 25-137-6U AND 65-31-3U INSTEAD.