

DEMA BLEND CENTER

MODEL: 633-163H-DT

INSTALLATION INSTRUCTIONS

1. PARTS:

- A. Blend Center assembly.
- B. 1 pc. 3/8"ID x 8 ft. long vinyl supply tubing & foot valve.
- C. 1 pc. 1/2"ID x 6 ft. long vinyl outlet tubing.
- D. 2 pcs. #8 pan head 1-1/2" long mounting screws & anchors.
- E. 1 pc. label card.

2. INSTALLATION:

Note: All installations must conform with local plumbing codes and use approved backflow preventers.

A) Mounting & Water Supply:

Remove the two cover retainer screws and the cover from the blend center assembly. Any number of blend centers can be coupled together by first removing the pipe plugs in all but the last unit, then connecting the one unit to the other. Mount the unit(s) in position on the wall and locate the position for the mounting screws. Only two screws are necessary to mount up to four units coupled together. Mount the units(s) to the wall and replace the covers and screws.

B) Chemical Supply:

Place the chemical containers in a convenient location not more than 6 feet below the blend center (greater lifts will reduce injection capacities). Insert the ends with the foot valves of the 8 foot 3/8"ID vinyl tubing into the chemical containers. Cut the vinyl tubing to any convenient length that will allow them to extend from the bottom of the chemical container to the proportioner inlet barbs (See Figure 1). Gummed labels are provided for labeling chemicals.

C) Outlet:

Cut the 1/2"ID outlet tubing to the desired length and attach it to the proportioner outlets. Note: Do not cut tubing to less than 18" (to insure priming). Longer lengths may be used up to 10 feet.

D) Chemical Injection Adjustment:

WARNING: USE CARE WHEN HANDLING HAZARDOUS CHEMICALS.

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

3. OPERATION:

The blend center is now ready for use. Depressing a push button opens the valve, allowing water to flow through the chemical proportioner that mixes chemical at the desired rate. The buttons are spring loaded to prevent accidental overflow if unattended, but may be converted to locking buttons by cutting off the tab, at the notch. (See Figure 2). Pushing the button and turning it a 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 counter clockwise direction will release it, allowing the valve to shut off.

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Table 1
163CH (2.5 GPM Flow rate, 3/8" 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
Clear	0.66	195-1	.027	470-1	.14	903-1
Purple	1.01	127-1	.041	315-1	.33	393-1
Yellow	1.53	83-1	1.03	124-1	.86	148-1
Green	2.52	51-1	1.64	78-1	1.44	89-1
Pink	3.53	36-1	2.04	63-1	2.09	61-1
Turquoise	5.73	22-1	3.24	40-1	2.92	44-1
Black	6.72	19-1	3.88	33-1	3.34	38-1
Gray	8.95	14-1	4.98	26-1	4.04	32-1
Red	12.34	10-1	6.22	21-1	4.67	27-1
Blue	14.00	9-1	7.28	18-1	4.99	26-1
Brown	18.68	7-1	9.02	14-1	5.35	24-1
White	24.45	5-1	10.35	12-1	5.53	23-1
Orange	30.97	4-1	11.86	11-1	5.88	22-1
Light Blue*	38.26	3-1	13.31	10-1	6.22	21-1
Tan*	53.96	2.5-1	15.21	8-1	6.49	20-1
No Tip	66.07	2-1	18.61	7-1	7.07	18-1

Note: All induction rates are based on a water pressure of 40 psi.

- **These tips are not included in the standard tip pack.**

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 most dishwashing detergents.

Injection rate can be doubled with no tip by using 1/2 in. I.D. inlet tubing. Use a short piece of 3/8 in. I.D. tubing on proportioner and foot valve barbs for a bushing.

4. 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.

B. Proportioner stops drawing chemical:

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

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- C. Proportioner continues to draw chemical after water valve closes:
Chemical supply is higher than bottom of discharge tube creating a natural siphon. Lower the supply vessel or hang up outlet tube after use.
- D. Valve Malfunction:
Check that the button moves freely up & 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 impending 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.

CAUTION: When servicing unit, be sure that replacement parts have been installed according to drawing.

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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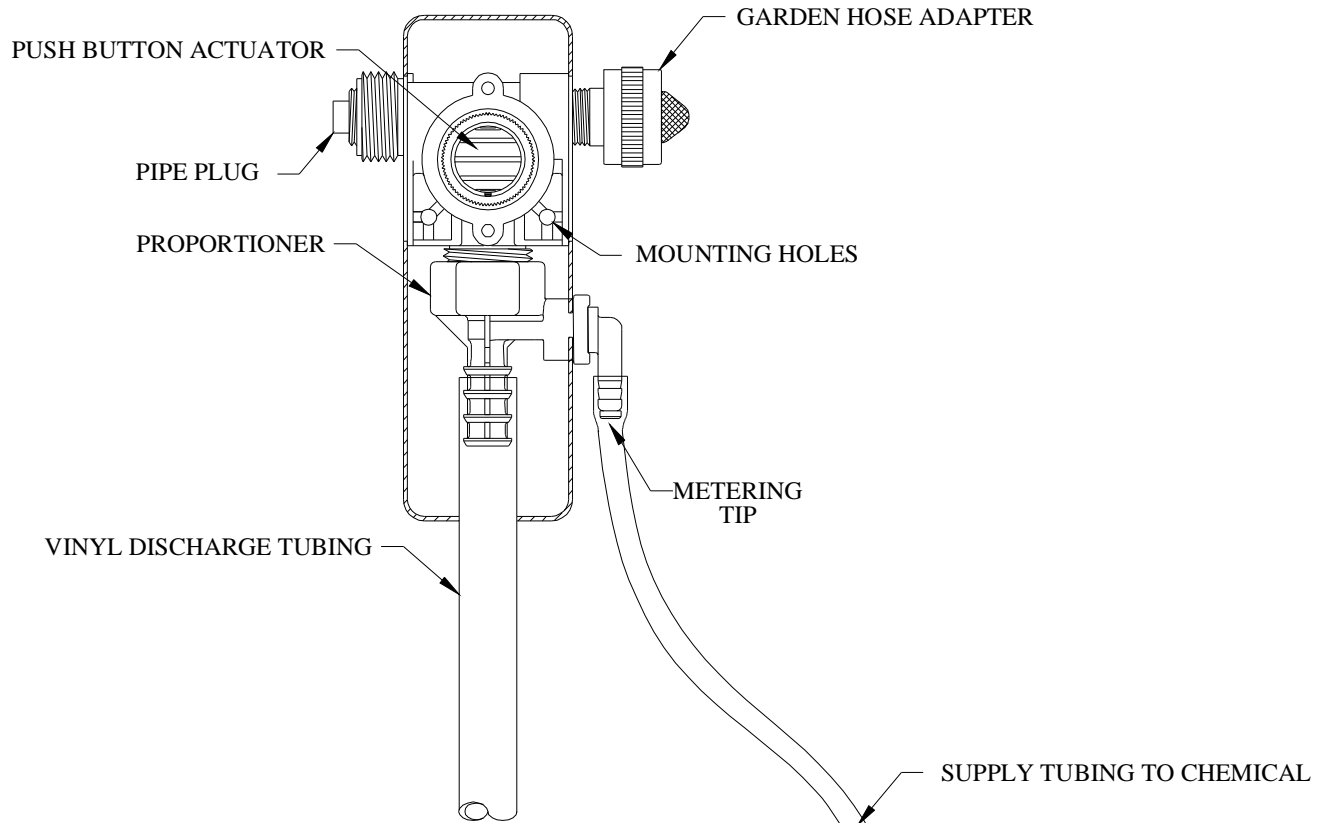


FIGURE 1

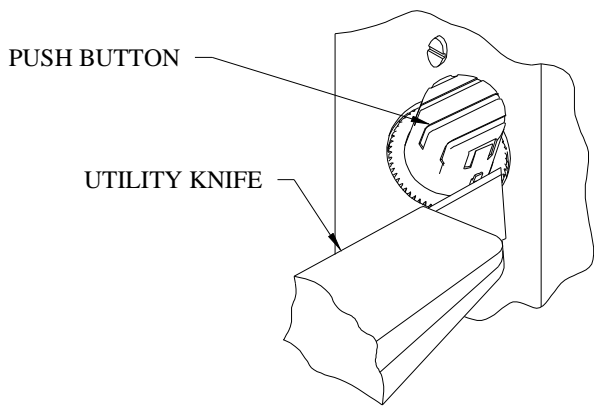
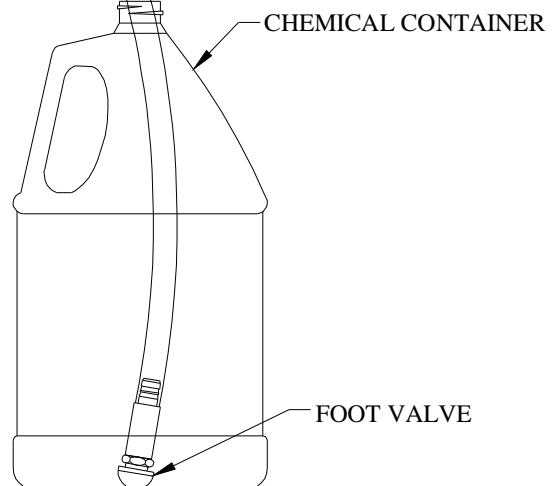
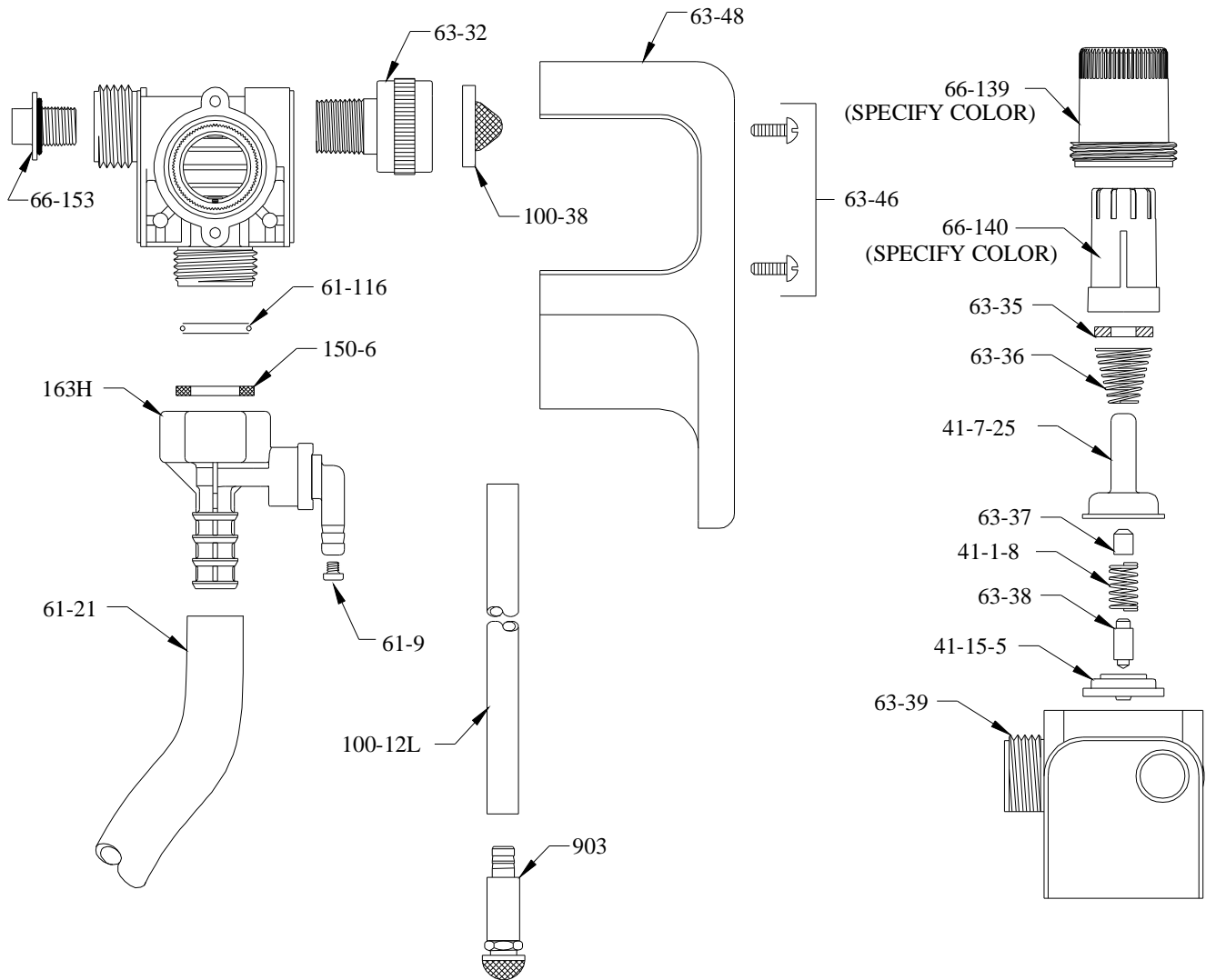


FIGURE 2



BLEND CENTER, MODEL 633-163H-DT



PART NO.	DESCRIPTION
41-1-8	KICK-OFF SPRING
41-7-25	ENCLOSING TUBE
41-15-5	DIAPHRAGM
61-21	VINYL TUBE (1/2 ID X 6' LG.)
61-116	O-RING
63-32	HOSE ADAPTER
63-35	MAGNET
63-36	SPRING
63-37	SPACER
63-38	PLUNGER
63-39	VALVE BODY
63-46	SCREW
63-48	COVER

PART NO.	DESCRIPTION
66-139	MAGNET HOUSING (SPECIFY COLOR)
66-140	PUSH BUTTON (SPECIFY COLOR)
66-153	PIPE PLUG
100-12L	VINYL TUBE (3/8 ID X 8' LG.)
100-38	INLET SCREEN
150-6	GARDEN HOSE RUBBER WASHER
163CH	PROPORTIONER-HIGH CAPACITY
903	FOOT VALVE

ACCESSORIES

61-9K	METERING TIP KIT
61-25-2	FRESH WATER OUTLET KIT
61-32	1 GPM PROPORTIONER
163CB	MEDIUM CAPACITY PROPORTIONER

