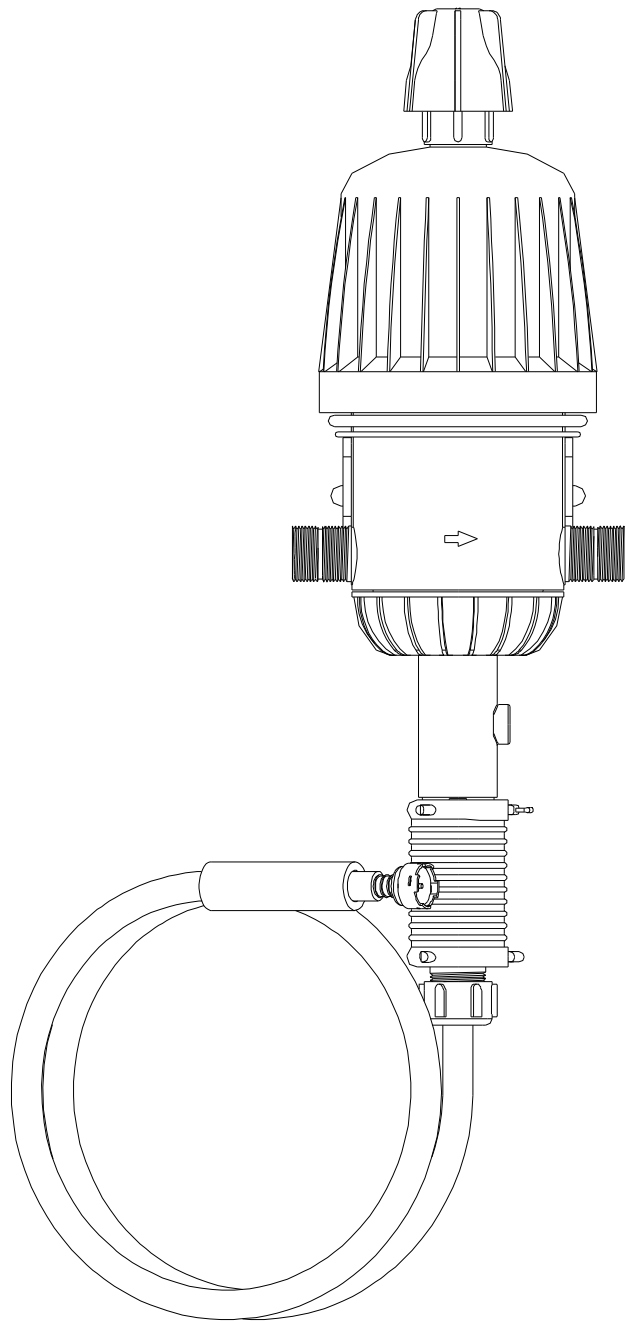




**DEMA MIXRITE PROPORTIONING PUMP
MODELS 576IN, 577IN, 578IN & 579IN
INSTALLATION INSTRUCTION**

2% & 4% -- *Internal Bypass* -- MixRite Pumps



MODELS 576IN, 577IN, 578IN & 579IN



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TECHNICAL DATA TABLE

MODEL #	INDUCTION RANGE%*	INDUCTION RANGE RATIO*	Ability to turn off the chemical flow while water is running	BYPASS FEATURE	OPERATING TEMPERATURE	WATER PRESSURE
576IN	0.2% to 2%	500/1 to 50/1	NO	YES	39°F to 122°F (4°C to 50°C)	2.9 to 85 PSI (0.2 to 6 Bar)
577IN	0.2% to 2%	500/1 to 50/1	YES	YES	39°F to 122°F (4°C to 50°C)	2.9 to 85 PSI (0.2 to 6 Bar)
578IN	0.4% to 4%	250/1 to 25/1	NO	YES	39°F to 122°F (4°C to 50°C)	2.9 to 85 PSI (0.2 to 6 Bar)
579IN	0.4% to 4%	250/1 to 25/1	YES	YES	39°F to 122°F (4°C to 50°C)	2.9 to 85 PSI (0.2 to 6 Bar)

* Induction % and induction ratios are based on a water thin product viscosity of 1Centipoise (1Cps).

FOR ALL MODELS

Flow Rate: 0.09-11GPM (0.34 to 41.6 L/M)

Maximum Suction Height: 10 Ft. (3 Meters)

Weight: 2.75 lb. (1.25 kg)

1. PURPOSE:

The DEMA MixRite proportioning pump allows a chemical product to be pumped at a preset constant mix ratio over a flow range of 0.09 to 11GPM (0.34 to 41.6 L / M).

It is a reciprocating piston powered pump that mixes a measured amount of chemical with each return stroke of a large “engine” piston. A smaller chemical piston that is attached by a rod to the “engine” does the actual pumping of the chemical.

The amount of chemical drawn on each return stroke is regulated by a Proportioning Adjuster which lengthens or shortens the chemical reservoir that the chemical piston plunges into on each intake stroke. The Proportioning Adjuster has a percent scale on one side and a ratio scale on the other and is easy to set by turning it either clockwise or counterclockwise to match up with the desired scale.

Features of the DEMA MixRite

- The DEMA MixRite can be disassembled with bare hands.
- It can be serviced while attached to a wall.
- All seals are easily replaceable.

2. PARTS / COMPONENTS:

- A. DEMA MixRite
- B. Pickup tube and foot valve assembly
- C. Ceramic weight
- D. 3/4” hose barbs, couplings & washers (2 sets)



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3. MOUNTING THE DEMA MIXRITE:

1. Prepare the DEMA MixRite Site.
 - a) Ensure that the DEMA MixRite intake and outlet ports can reach the supply and outlet hoses.
 - b) The DEMA MixRite should be positioned no more than 10 ft above the liquid chemical container (see Fig. 1)
2. Screw the DEMA MixRite bracket into a wall or any stable vertical base.
3. Press the DEMA MixRite onto the bracket. The nipples on the DEMA MixRite must click into the holes in the side of the bracket.

4. INSTALLATION: Installing the DEMA MixRite on a Direct Line (see Fig.1 & 2) or a Bypass Line (see Fig. 3).

1. Install a 3/4" hose barb kit (included) to the inlet and another to the outlet of the MixRite or attach a 3/4" garden hose to the inlet and outlet.
2. Install a 200 mesh (80 micron) filter (DEMA P/N 50-41-1) prior to the MixRite intake hose barb.
WARNING: Do not overtighten and be careful not to strip the threads.
3. Attach any shutoff valves you may require to obtain an inline or bypass (off line) configuration (see Figures 1, 2, & 3 below).
4. Position the liquid chemical container no more than 10 ft beneath the pump.
5. Check to insure that the suction tube is not bent.
6. Slip the ceramic weight over one end of the suction tube and then attach the foot valve to the same end. Put the foot valve end of the tube into the chemical container and attach the other end to the MixRite.

NOTE: Ensure that the water flows into the DEMA MixRite in the direction indicated by the arrow printed on the DEMA MixRite body.

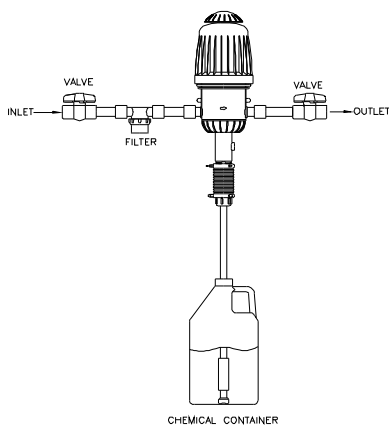


Figure 1

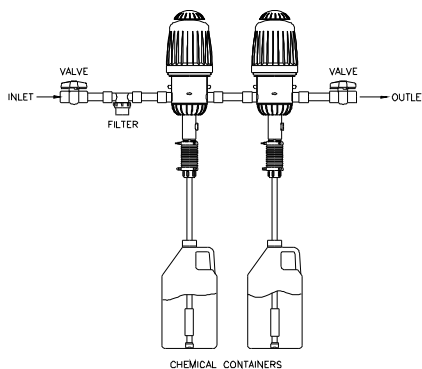


Figure 2

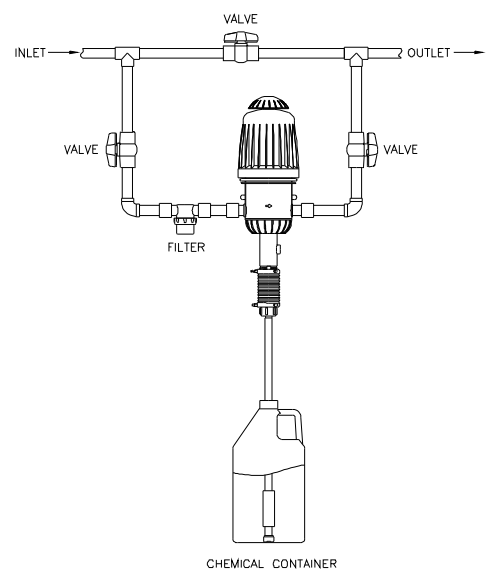


Figure 3

**DEMA MIXRITE PROPORTIONING PUMP
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5. OPERATION:

The MixRite will operate as soon as water is allowed to flow through it. If the pump is operating but not drawing, check #7 below if you have model 570 or 572 and check #8 below if you have model 571 or 573.

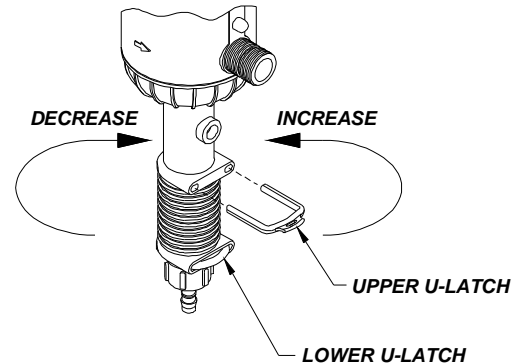
6. ADJUSTING THE DEMA MIXRITE:

Directions to adjust for the volume (ratio) of the liquid chemical.

Remove the **upper** U-latch from the Proportioning Lock Latch.

NOTE: Do not remove the lower U-latch unless you are servicing the unit.

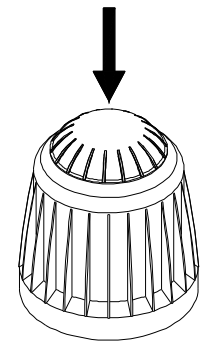
1. Preset the amount of the chemicals according to the Percent to Water Scale that is found on the proportioner. **Do not adjust past the last marking.**
2. Turn the Proportioning Adjuster clockwise to increase the amount of chemicals (the Adjuster will go **UP** the scale).
3. Turn the Proportioning Adjuster counterclockwise to decrease the amount of chemicals (the Adjuster will go **DOWN** the scale).
4. Turn the Proportioning Adjuster slightly, until the U-latch holes of the Proportioning Lock Latch align with the notches in the Proportioner.
5. Push the upper U-latch into the U-latch holes of the Proportioning Lock Latch until it is firmly in place.



7. AIR-RELEASE VALVE FOR MODELS: 570 & 572

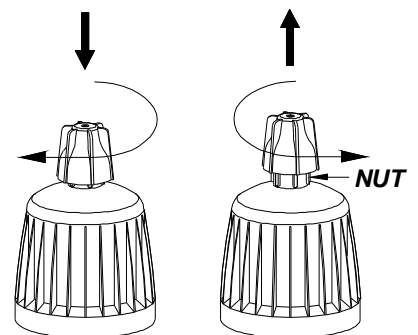
To release air from the DEMA MixRite, apply pressure to the cap (Air Release Valve) for several seconds to open valve that allows trapped air to escape. This air release is accompanied by a slight loss of water.

**PRESS TO
RELEASE AIR**



8. ON/OFF AND AIR-RELEASE VALVE FOR MODELS: 571 & 573

1. To turn the unit **off** (pumping stops but there is still free flow of water through the MixRite):
 - Push the handle in and turn it clockwise so that it is in the closed state.
2. To turn the unit **on** (pumping action resumes as water still flows through the MixRite):
 - Turn the handle counterclockwise and pull it out so that it is in the opened state.
3. To **release air** from the DEMA MixRite:
 - Turn the handle and pull it out so that it is in the opened state.
 - Locate the nut beneath the handle.
 - Turn the nut counterclockwise until the two bleed holes are exposed.
 - After the air is bled off turn the nut clockwise until it is tight again.





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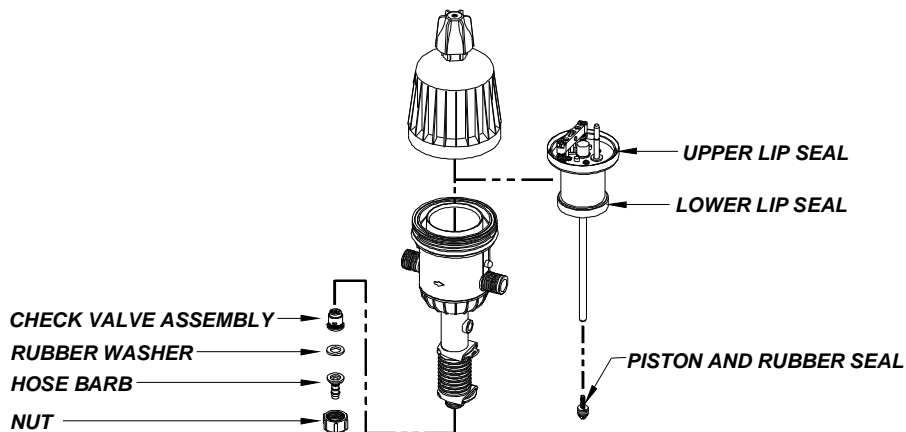
9. RINSING AND CLEANING THE UNIT:

After pumping:

1. Rinse the unit by pumping clean water through the chemical suction line. Caustic, chlorinated, corrosive chemicals should be rinsed out after use from the chemical container. Also fertilizers need to be rinsed out after use.
2. Wash the external surface of the unit with clean water.

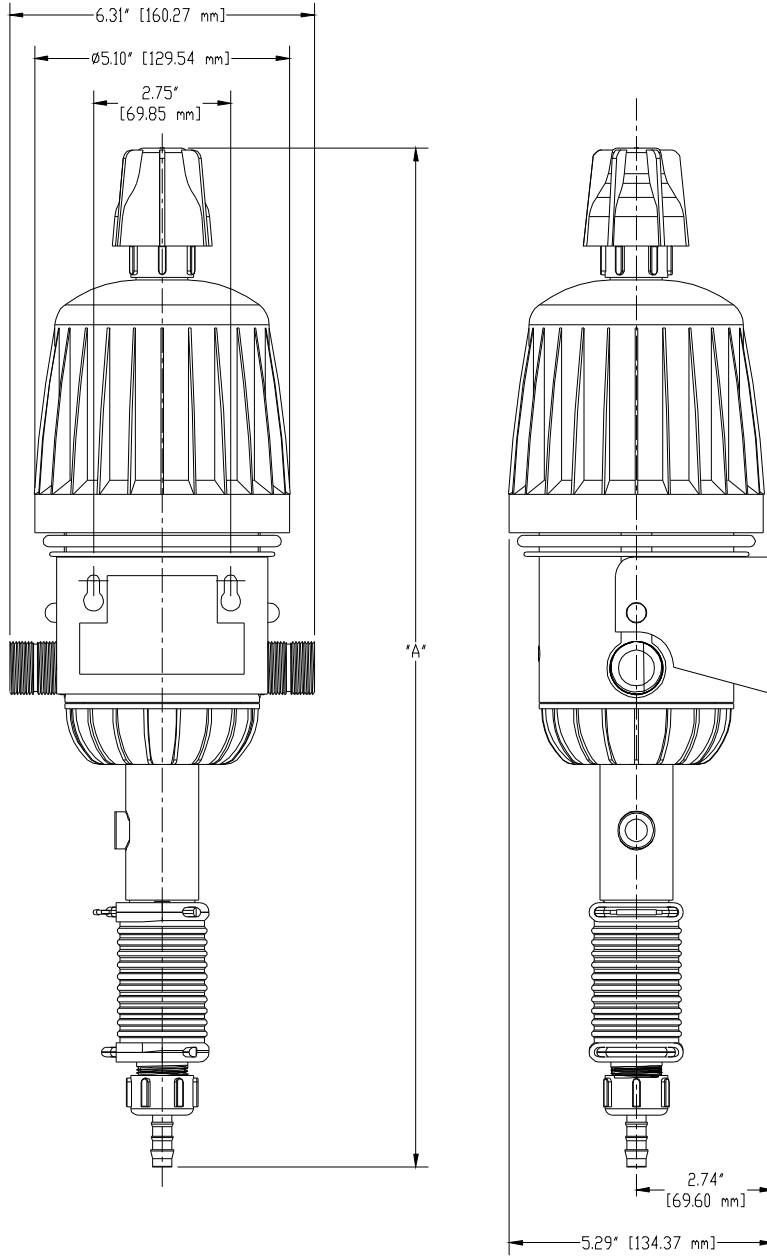
10. TROUBLESHOOTING: Caution: Turn off water supply before troubleshooting.

PROBLEM	CHECK	SOLUTION
MixRite does not operate. (No clicking noise)	<ol style="list-style-type: none"> 1. Check that the intake and outlet valves are open. 2. Check that the water filter is not clogged. 3. Check that the water is flowing in the line. 4. Check that the springs are not broken. 5. Check that the cylinder (# 7) is not scratched. 6. Check that the piston upper and lower lip seals are not damaged. 	<ol style="list-style-type: none"> 1. Open the valve. 2. Clean the filter. 3. Open main and or outlet valve. 4. Change the broken spring. 5. Change the cylinder. (# 57-10-7-2 for 576 & 577) (# 57-10-7-4 for 578 & 579) 6. Change the lip seals Kit NOs. 57-K02-005 (2%) 57-K04-012 (4%)
MixRite does not draw.	<ol style="list-style-type: none"> 1. Dismantle the chemical suction pump and check the suction seal for damage. 	<ol style="list-style-type: none"> 1. Turn the chemical piston ¼ turn to disconnect it from the bar. Replace it with kit: (# 57-K2B-222 for 576 & 577) (# 57-K4B-244 for 578 & 579)
The MixRite makes scratching noises.	<ol style="list-style-type: none"> 1. Check if there is liquid in the proportioning container. 2. Check if suction tube is immersed and not folded. 3. Check suction filter to see if it is blocked and if it is immersed in the proportioning liquid. 	<ol style="list-style-type: none"> 1. Add liquid to the container. 2. Straighten or change the tube. 3. Clean and rinse suction filter by filling liquid into tank to cover filter.





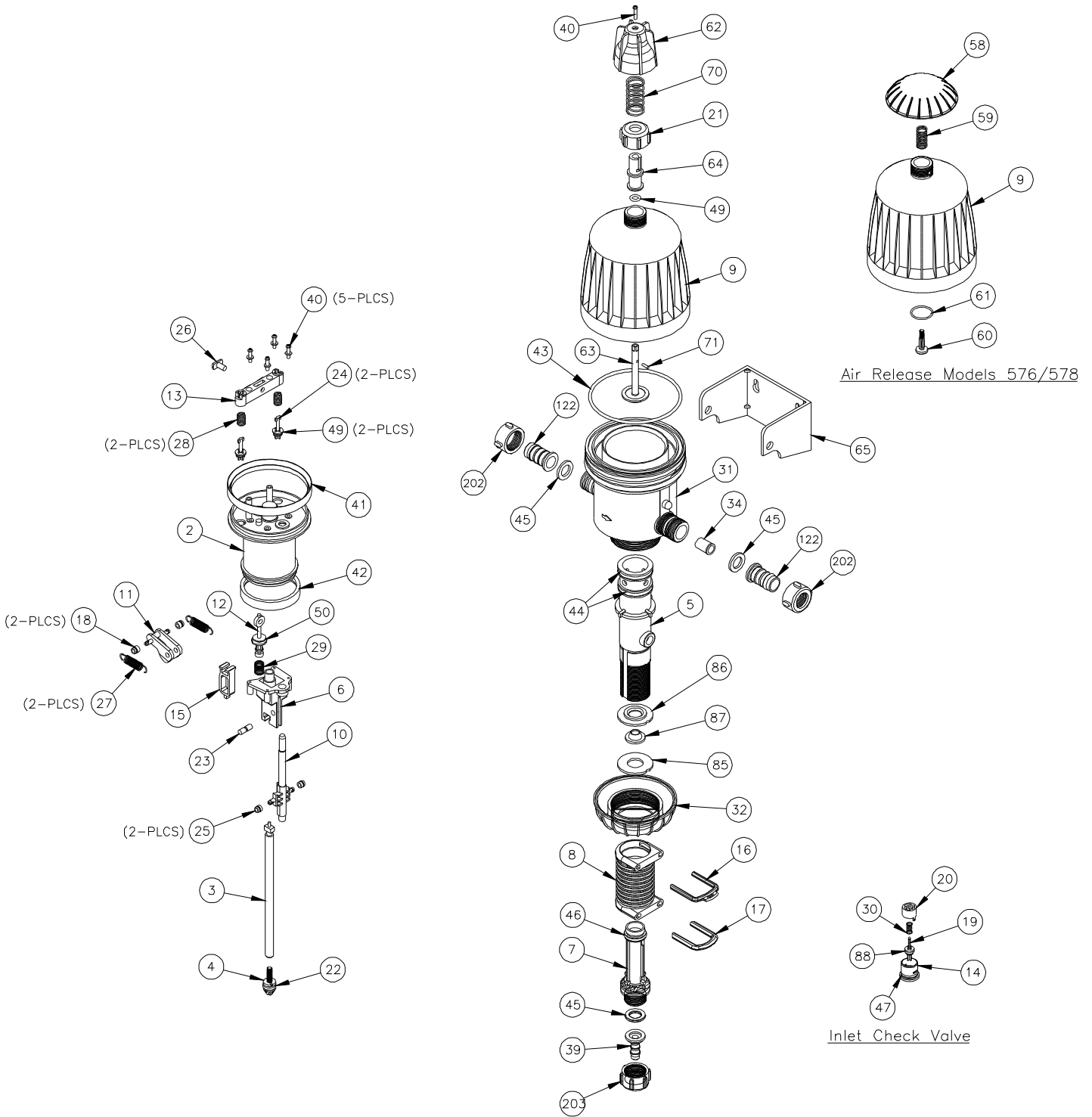
**DEMA MIXRITE PROPORTIONING PUMP
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Weight: 2.75 lb. (1.25 kg)	MixRite Models	Height "A"	
		Minimum	Maximum
	576 & 577	18.25" [463.55 mm]	19.75" [501.65 mm]
	578 & 579	20.00" [508.00 mm]	21.50" [546.10 mm]



DEMA MIXRITE PROPORTIONING PUMP MODELS 576IN, 577IN, 578IN & 579IN INSTALLATION INSTRUCTION



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NO.	DESCRIPTION	NO.	DESCRIPTION
2	Piston Body	41	Upper Lip Seal
3	Bar	42	Lower Lip Seal
4	Piston	43	Cover O-Ring
5	Cylinder Support	44	Cylinder Support O-Ring
6	Base	45	Washer Flat
7	Cylinder (576, 577) Cylinder (578, 579)	46	Cylinder Support O-Ring (576, 577) Cylinder Support O-Ring (578, 579)
8	Adjustment Sleeve (Yellow)	47	Check Valve Lower O-Ring
9	Cover	49	Outer Cylinder O-Ring
10	Ejector Pin	50	Outer Valve O-Ring
11	Cylinder Toggle	58	Air Release Cover (576, 577)
12	Center Valve	59	Air Release Spring (576, 577)
13	Valve Bridge	60	Air Release Screw (576, 577)
14	Check Valve	61	Air Release O-Ring (576, 577)
15	Cylinder Frame	62	Rinse On/Off Knob (578, 579)
16	Latch - Upper	63	Push Rod
17	Nut Latch - Lower	64	Top Valve (578, 579)
18	Cylinder Toggle Slide	65	Mounting Bracket
19	Check Valve Pin	67	O-Ring
20	Check Valve Lid	69	Nut
21	Nut (577, 579)	70	Compression Spring (578, 579)
22	Seal	71	Locking Pin (578, 579)
23	Cylinder Axle	79	By-Pass Tube
24	Outer Cylinder Valve	80	By-Pass Body
25	Ejector Sled	81	Check Valve
26	Pin	82	Check Valve Spring
27	Cylinder Spring	83	Check Valve Sleeve
28	Outer Cylinder Valve Spring	84	Check Valve O-Ring
29	Center Valve Spring	85	Flat Washer
30	Check Valve Spring	86	Terraced Adapter for Conical Seal
31	Body	87	Conical Seal for Bypass Bar
32	Cylinder Support Nut	88	O-Ring 2-108 Viton
34	Tube For Internal Bypass	122	3/4" Hose Barb Connector
39	3/8" Barb Hose Connector	202	3/4" BSP Hose Nut (water in and out)
40	Hi-Lo Screw	203	3/4" BSP Hose Nut (chemical in)



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AVAILABLE REPLACEMENT PARTS		
NO.	PART NO.	DESCRIPTION
3	57-10-3-B	Bar
7	57-10-7-2	Cylinder (576, 577)
	57-10-7-4	Cylinder (578, 579)
8	57-10-8IN	Adjustment Sleeve – Yellow (Internal Bypass Units Only)
22	57-10-22-2	Seal (576, 577)
	57-10-22-4	Seal (578, 579)
31	57-10-31-B	Body
32	57-10-32	Cylinder Support Nut
43	57-10-43	Cover O-Ring
44	57-10-44	Cylinder support O-Ring
45	57-10-45	Rubber Washer
46	57-10-46	Cylinder O-Ring
47	57-10-47	Chk. Valve Lower O-Ring
49	57-10-49	Outer Cylinder O-Ring
50	57-10-50	Center Valve O-Ring
65	57-10-65	Mounting Bracket
88	57-10-88	O-Ring 2-108
210	100-12L	3/8" I.D. x 8' Lg. Tubing
211	61-107	Ceramic Weight
212	100-16V	Foot Valve

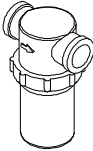
RETURNS: NO MERCHANDISE MAY BE RETURNED FOR CREDIT WITHOUT DEMA'S WRITTEN PERMISSION. RETURN MERCHANDISE AUTHORIZATION NUMBER REQUIRED IN ADVANCE OF RETURN.

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.



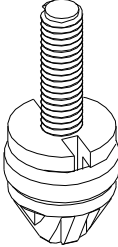
**DEMA MIXRITE PROPORTIONING PUMP
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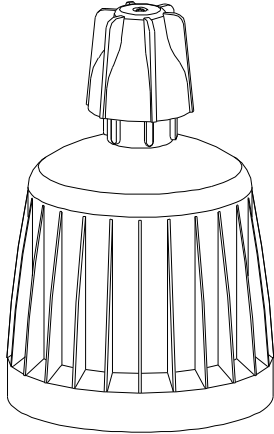
WATER INLET FILTER		
P/N 50-41-1		
NO.	DESCRIPTION	
N/A	Accessory	

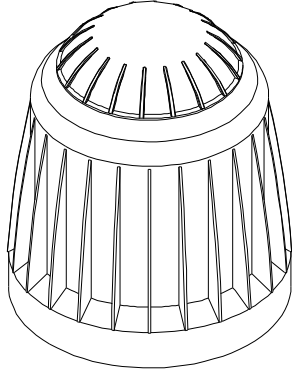
KIT NO. 57-2B-BP		
ENGINE REPAIR KIT		
NO.	DESCRIPTION	
2	Piston Body	
3	Bar	
6	Base	
10	Ejector Pin	
11	Cylinder Toggle	
12	Center Valve	
13	Valve Bridge	
15	Cylinder Frame	
18	Cylinder Toggle Slide	
23	Cylinder Axle	
24	Outer Cylinder Valve	
25	Ejector Sled	
26	Pin	
27	Cylinder Spring	
28	Outer Cylinder Valve Spring	
29	Center Valve Spring	
40	Hi-Lo Screw	
41	Upper Piston Seal	
42	Lower Piston Seal	
48	O-Ring (2-108)	
49	O-Ring (2-109)	
50	O-Ring (10 mm X 3 mm)	



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KIT NO. 57-K2B-222 (2%) KIT NO. 57-K4B-244 (4%)		
CHEMICAL PISTON KIT		
NO.	DESCRIPTION	
4	Chemical Piston	
22	Rubber Seal	

KIT NO. 57-1		
RINSE ON/OFF COVER KIT FOR MODELS 577IN & 579IN		
NO.	DESCRIPTION	
9	Cover	
21	3/4 Nut	
40	Hi-Lo Screw	
49	Outer Cylinder O-Ring (2-109)	
62	Knob	
63	Push Rod	
64	Top Valve	
70	Compression Spring	
71	Locking Pin	

KIT NO. 57-4B		
AIR RELEASE COVER KIT FOR MODELS 576IN & 578IN		
NO.	DESCRIPTION	
9	Cover	
58	3/4 Nut	
59	Hi-Lo Screw	
60	Outer Cylinder O-Ring (2-109)	
61	Knob	



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KIT NO. 57-15-V		
CHEMICAL INLET TUBING KIT		
NO.	DESCRIPTION	
203	Male Connector	
39	Hose Connector	
45	Washer Flat	
210	3/8" I.D. X 8' Long Tubing	
211	1/2" I.D. Ceramic Weight	
212	100-16V Umbrella Foot Valve	

KIT NO. 57-11-1		
METERING TIP KIT		
(for use with 2% model)		
(For dilutions of 750:1, 1000:1, 1500:1 & 2000:1)		
NO.	DESCRIPTION	
220	Metering Tip - Tan	
221	Metering Tip - Burgundy	
222	Metering Tip - Amber	
223	Metering Tip - Copper	
224	3/8" I.D. X 3" Long Tubing	
225	1/4" Barb X 3/8" Barb Adapter	
226	1/4" I.D. X 8' Long Tubing	



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KIT NO. 57-5V (Viton) KIT NO. 57-5B (Buna)		
CHEMICAL CHECK VALVE KIT		
NO.	DESCRIPTION	
14	Check Valve Base	
19	Check Valve Pin	
20	Check Valve Lid	
30	Check Valve Spring	
203	Hose Nut	
39	3/8" Hose Barb Connector	
45	Rubber Washer	
47	Check Valve Base O-Ring (2-114)	
88	Check Valve Pin O-Ring (2-108)	

KIT NO. 57-K02-005 (2%) KIT NO. 57-K04-012 (4%)		
LIP SEAL & PISTON SEAL KIT		
NO.	DESCRIPTION	
41	Upper Piston Seal	
42	Lower Piston Seal	
22	Chemical Piston Seal (2% chemical seal is black) (4% chemical seal is brown)	



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NOTES

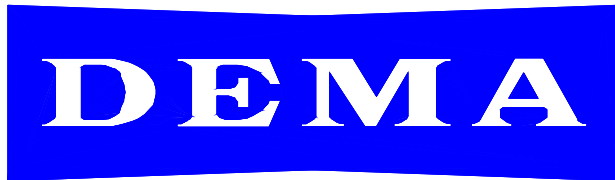


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NOTES



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