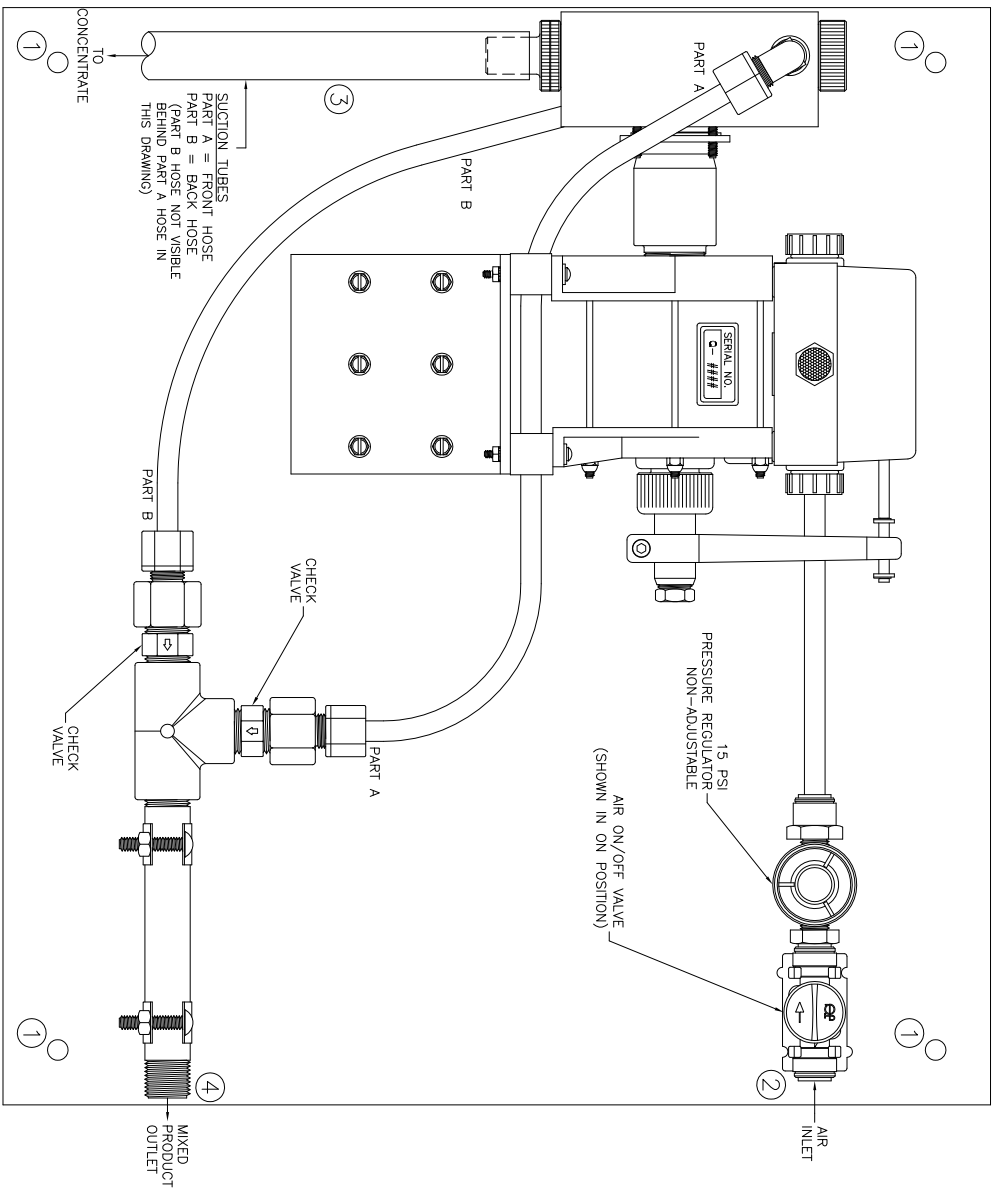

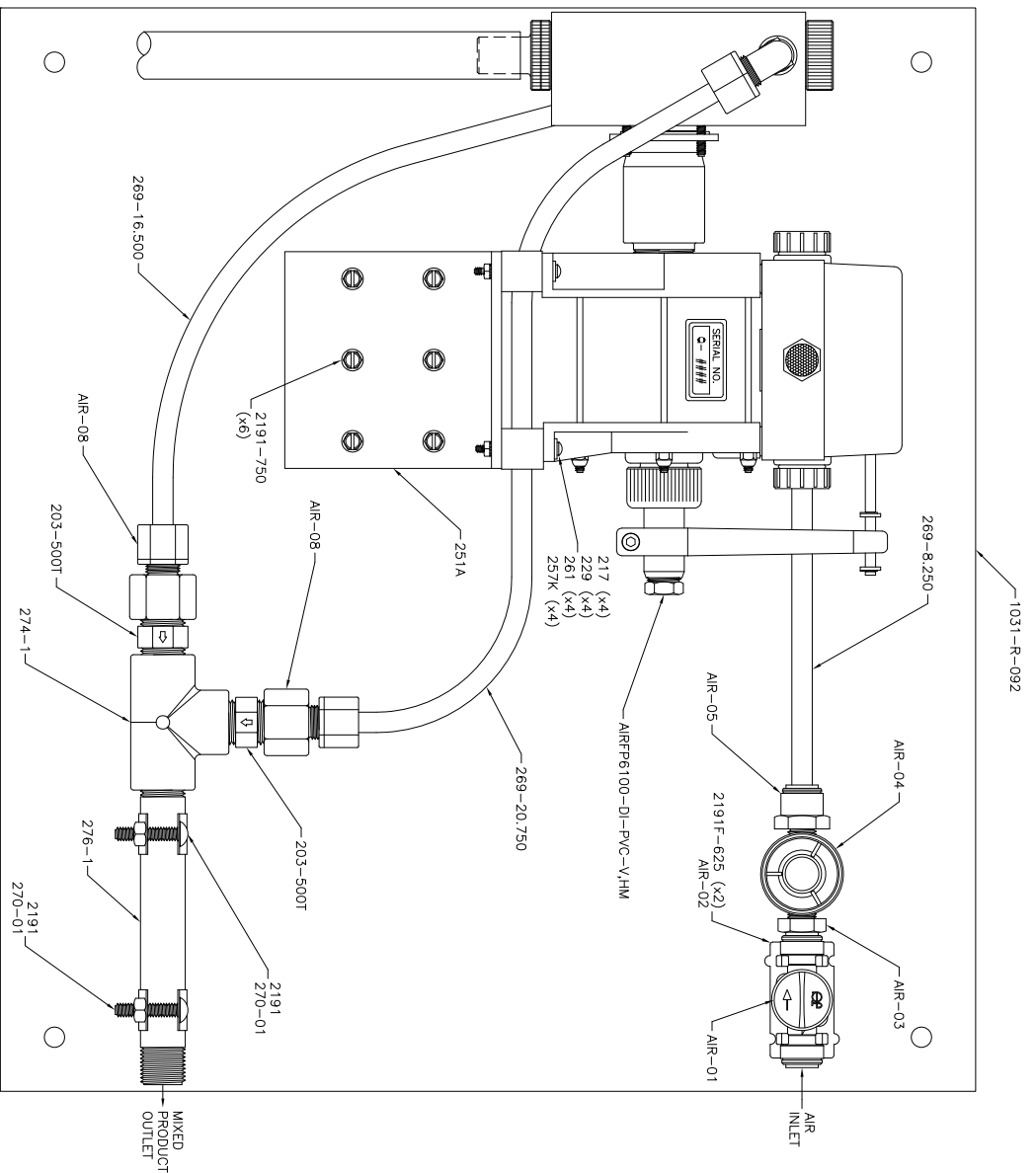


## SYSTEM INSTALLATION

- ① MOUNTING HOLES FOR VERTICAL SURFACE (I.E. A WALL).
- ② AIR INLET VALVE IS OFF WHEN INSTALLING).
- ③ CHEMICAL CONCENTRATE PART A & PART B-ATTACH HOSES TO LOWER VALVE SCREW NIPPLES. DROP OPPOSITE ENDS WITH TUBE WEIGHTS INTO CONCENTRATE.
- ④ MIXED PRODUCT OUTLET 1/2 NPT MALE CONNECTION FOR OUTGOING PLUMBING.
- ⑤ START-UP OPERATION OPEN AIR VALVE ② SLOWLY UNTIL PUMP STARTS TO ACTUATE. CHEMICAL WILL BE DRAWN UP SUCTION TUBES.



SCALE:	SHEET:	DATE:	C:\AUTOCAD\GROWM\System\Media\092-48RFP6100-DI-PVC-V,VM.dwg	
1:3.5	1 of 2	09/19/00		
DRAWN BY:	CHECKED BY:			
SC	DK			
SERIES:	DESCRIPTION:			
AIR	Aicide System			
DESIGNER:	DATE:			
REVISION:	06/19/13			
SC				
			5301 SAWYER AVENUE BOISE, ID 83714 PHONE: (208) 375-5000 www.hydroblend.com	
PART NUMBER: 092-AIRFP6100- DI-PVC-V,VM				



PART NO.	DESCRIPTION	QTY.
203-500T	Check Valve - 1/2 MNPT - Viton Seal - Teflon Check Ball - Hastelloy Spring - Kynor Body	2
217	Screw - 6-32 x 1-1/2 - Round Head SLTD - 18-8 SST	4
229	Washer - .174 ID x 3/8 OD x .031 Thick - SST	4
251A	Shaft - (Anodized, Black) - Aluminum	1
257K	Nut - Hex Keeps with Tooth Washer - Wd 5/16 x Ht .105 - 6-32 - Plated	4
261	Foot - Rubber	4
269-8.250	Injection Tube	1
269-16.500	Injection Tube	1
269-20.750	Injection Tube	1
270-01	Clamp, Pipe - 1/2 Dia. - Plated	2
274-1	Tee - 1/2 FNPT x 1/2 FNPT x 1/2 FNPT - Sch 80 PVC	1
276-1	Nipple - 1/2 MNPT - 6.0 Long - Sch 80 PVC	1
1031-R-092	Backplate - 18.0 x 20.0 x .500 Thick - Polypro	1
2191	Screw - #14 x 1/2 - Hex Washer Head SLTD - Plated	2
2191-750	Screw - #14 x 3/4 - Hex Washer Head SLTD - Plated	6
2191F-625	Screw - #8 x 5/8 - Flat Head PLPS - Plated	2
AIR-01	Valve, Air - 3/8 Tube - Acetal	1
AIR-02	Bracket, Mounting - Air Valve - Acetal	1
AIR-03	Adaptor, Stem - 1/4 MNPT x 3/8 Stem - Acetal	1
AIR-04	Regulator, Air Pressure - 1/4 FNPT - 15PSI - (Non-Adjustable)	1
AIR-05	Adaptor, Straight - 1/4 MNPT x 3/8 Tube - Acetal	1
AIR-08	Connector, Female - 1/2 FNPT x 3/8 Tube - Acetal	2
AIRFP6100-DI-PVC-V,VM	Hydro-Blend Proportioner	1

REVISION:

SHIPPING INFORMATION:  
 SYSTEM BOX = 001-4  
 FOAM PACKAGED (25 x 25 x 20)  
 HYDRO-BLEND STAMP LOGO  
 MODEL NO. SERIAL NO. STICKER  
 LOWER LEFT HAND CORNER OF BOX

FOOT VALVE NO. = 402-625 (x2)  
 SUCTION TUBE NO. = 288-10.0 FT (x2)  
 SYSTEM INSULATION SCHEMATIC  
 PACKET REQUIRED  
 PUMP SCHEMATIC REQUIRED  
 SYSTEM SCHEMATIC REQUIRED

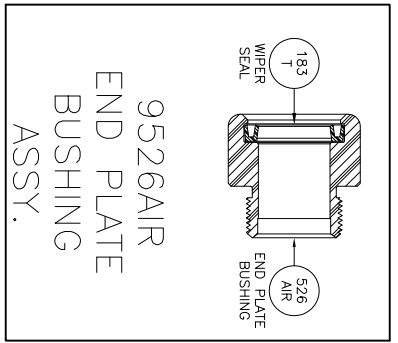
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1:3.5	2 of 2	09/19/00
DESIGNER:	CHECKED BY:	DATE:
SC	DK	
DESCRIPTION:		
AIR	Acide System	
REVISION:	REVISION BY:	DATE:
SC		06/19/13

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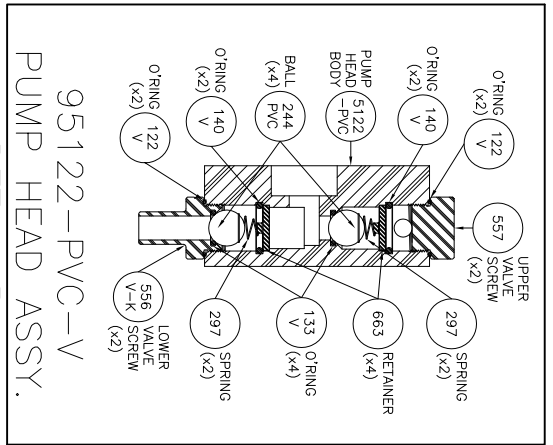
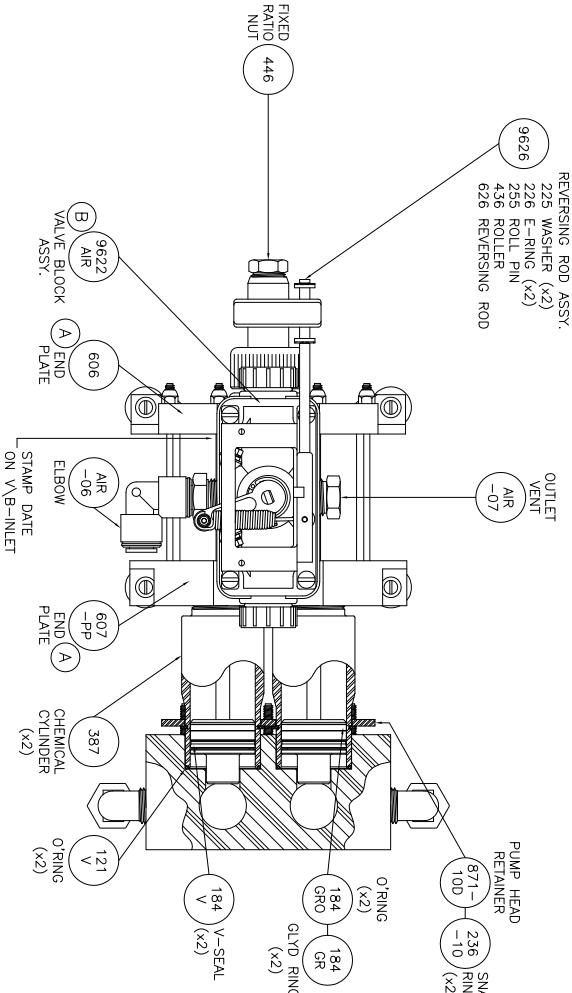
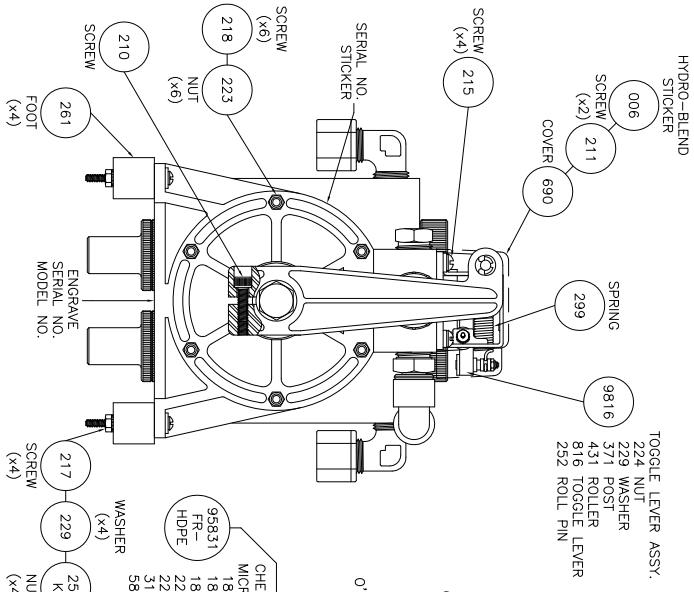
5301 SAWYER AVENUE BOISE, ID 83714  
 PHONE: (208) 375-5000 www.hydroblend.com

**HYDRO-BLEND**

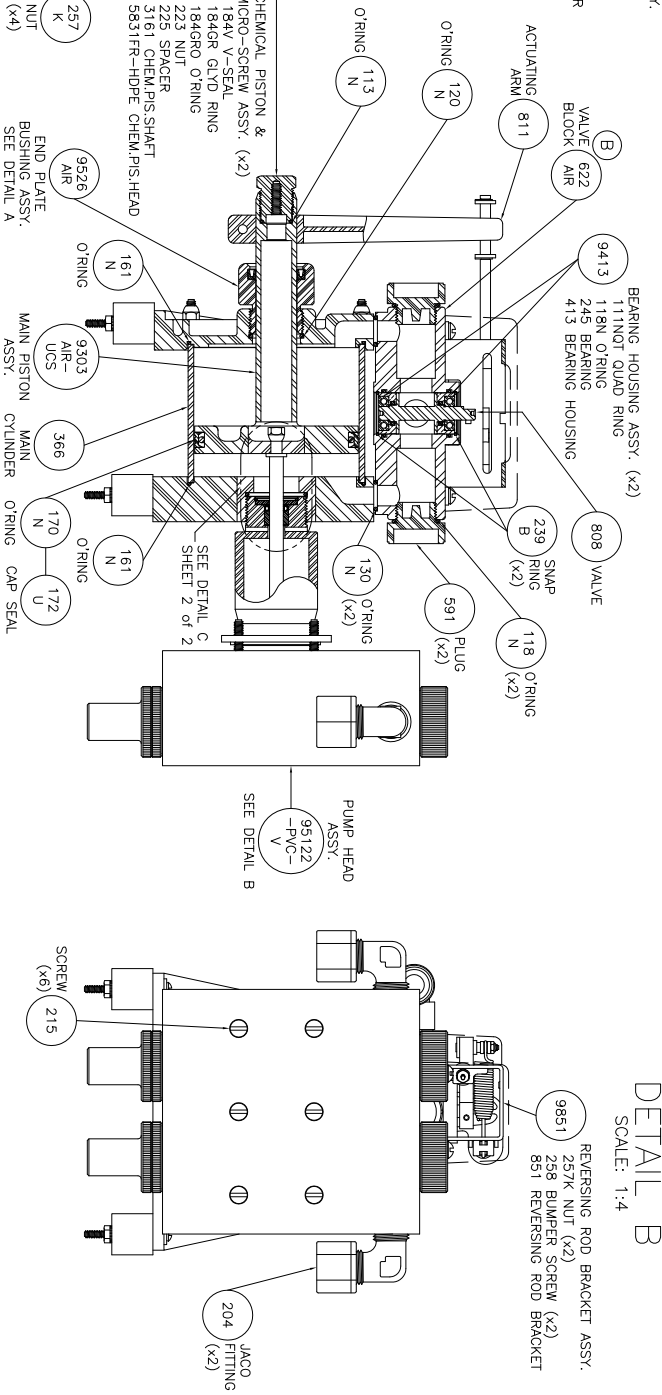
092-AIRFP6100-DI-PVC-V,VM



9526AIR  
END PLATE  
BUSHING  
ASSY.  
DETAIL A  
SCALE: 1:2



95122-PVC-V  
PUMP HEAD ASSY.  
DETAIL B  
SCALE: 1:4



REVISION:  
SEE SHEET 2 of 2

SHIPPING INFORMATION:  
LARGE BOX = 001-2  
TOP INSERT = 001-2A  
MIDDLE INSERT = 001-2B  
BOTTOM INSERT = 001-2C  
HYDRO-BLEND STAMP LOGO

TUBE WEIGHT NO. = 402-625 (x2)  
SUCTION TUBE NO. = 288-10FT (x2)  
SEE SYSTEM PART NO. FOR SCHEMATIC PACKET  
PUMP SCHEMATIC REQUIRED

MODEL NO. SERIAL NO. STOKER  
LOWER LEFT HAND CORNER OF BOX

SCALE	SHEET	DATE
1:3.5	1 of 2	10/28/03
FORMA BR:	CHECKED BR:	
SC	DK	
SERIES:	DESCRIPTION:	
AIR	10oz. Dual Fixed Ratio	
DESIGNER:	DATE:	
B	04/06/09	

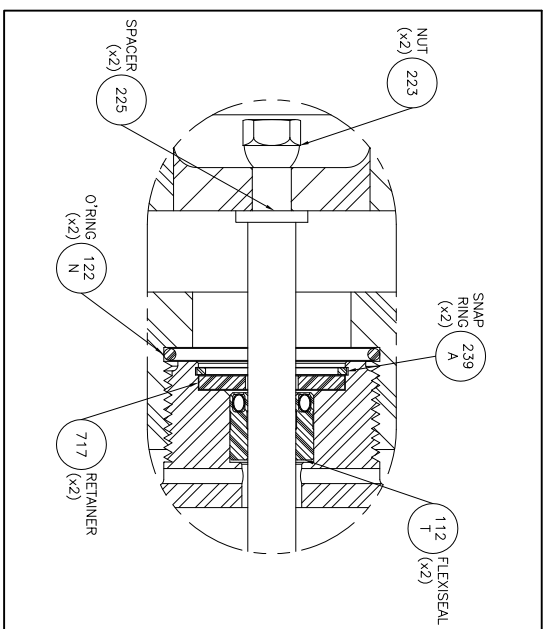
© AutoCAD/FORMA 5-Series-Pump/Air/Qual/10/Ver/01-00-0-PVC-V-Mk49

**HYDRO-BLEND**  
5301 SAWYER AVENUE BOISE, ID 83714  
PHONE: (208) 375-5000 www.hydroblend.com

**AIRFP6100-DI**  
-PVC-V, HM

REVISION:

- (A) ADDED O-RING COUNTER BORE TO TOP OF ENDPLATE, 10/17/07.
- (B) REDUCED O-RING COUNTER BORE DEPTH ON BOTTOM OF VALVE BLOCK, 11/07/07.



DETAIL C  
SCALE: 1:1

SHIPPING INFORMATION:

LARGE BOX = 001-2  
 TOP INSERT = 001-2A  
 MIDDLE INSERT = 001-2B  
 BOTTOM INSERT = 001-2C  
 HYDRO-BLEND STAMP LOGO

TUBE WEIGHT NO. = 402-625 (x2)  
 SUCTION TUBE NO. = 288-10FT (x2)  
 SEE SYSTEM PART NO. FOR SCHEMATIC PACKET  
 PUMP SCHEMATIC REQUIRED

MODEL NO. SERIAL NO. STICKER  
 LOWER LEFT HAND CORNER OF BOX

SCALE	SHEET	DATE
NOTED	2 of 2	10/28/03
DESIGNER:	CHECKED BY:	
SC	DK	
SERIES:	DESCRIPTION:	
AIR	10oz. Dual Fixed Ratio	
REVISION:	REvised BY:	DATE:
B	SC	04/06/09

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5301 SAWYER AVENUE BOISE, ID 83714  
 PHONE: (208) 375-5000 www.hydroblend.com  
 PART NUMBER: AIRFP6100-DI  
 -PVC-V, HM

## AIR PUMP SUGGESTED MAINTENANCE PROGRAM

### AIR SIDE OF PUMP-

1. Pumps require a non-adjustable 15 PSI pressure regulator. Make sure this is installed and working. The target speed the pump is designed to run at is about 1 stroke per second. (A stroke is defined as 1 stroke of the main piston forward and back).
2. Clean the air vent if needed, located on the valve block opposite of the regulated air inlet. This can be removed and cleaned with soap and water and blown out. Make sure when re-installing vent not to thread into the valve block too far. This will make contact with the valve and stall pump.

### CONCENTRATE SIDE OF PUMP-

1. Flushing concentrate out of complete system by running warm water through the pump on a periodic basis is recommended. To perform this task make sure air is turned off. Remove suction tubes from concentrates and place them into a warm bucket of water. Turn air on slowly and let pump draw and run warm water through it. This may take several buckets of water before you see clean water coming out of mixed product outlet.
2. Wear Points: Ball O-Ring seals in pump head will become flattened out over time and will not seal correctly. Chemical piston v-seals will become worn over time as well. The time frame in which these need to be replaced is based on how much use the pump gets. You can determine when these seals are worn by the amount of suction the pump creates. Also, if the pump doesn't hold prime in the suction tubes. Both of these seal sets can be replaced. Please refer to your pump schematic to reference part numbers.

TROUBLESHOOTING-SEE PAGE 2

# TROUBLESHOOTING

## COMPLAINTS:

1. Air motor will not run.

## CAUSES:

- A. Air turned off to unit.
- B. Discharge lines shut off or clogged.
- C. Proportioner stalled; proportioner operates intermittently-then stalls.
- D. Weak or broken toggle lever spring.
- E. Actuating arm out of adjustment.

## CORRECTIONS:

- A. Turn air on to unit.
- B. Check to be sure lines are clear and all system valves are open and working.
- C. Air inlet pressure has dropped. Relieve downstream back-pressure: if unit restarts, there is no problem. If unit does not restart, there may be valve block failure.
- D. Replace spring (part # 299)
- E. Relocate actuating arm to .400" from back of chrome shaft.

2. Will not draw chemical.

- A. Air motor not working.
- B. Pump head seals dry.
- C. Upper or lower valve screws sucking air.
- D. Pump head screws loose. Sucking air.
- E. Foreign material on ball seat. Concentrate has caused balls to stick.
- F. Excessive discharge back-pressure.

- A. Check motor per item 1 above A through E.
- B. Remove top valve screw, flood cavity with water. Replace spring and valve screw carefully. Start unit.
- C. Tighten fittings-hand tighten only.
- D. Tighten 6 screws located on pump head face.
- E. Remove valve balls carefully, flush and clean valve seats and balls, springs and valve screws.
- F. Relieve downstream back-pressure until unit is primed.