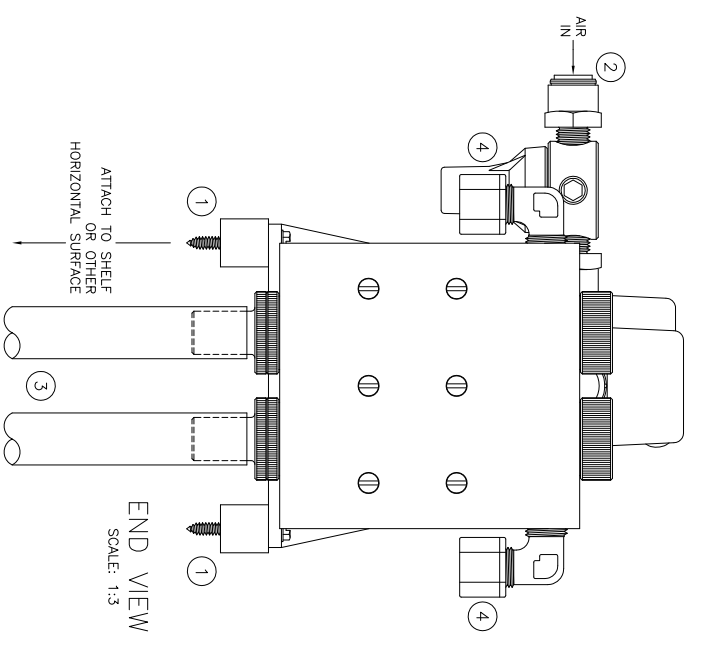


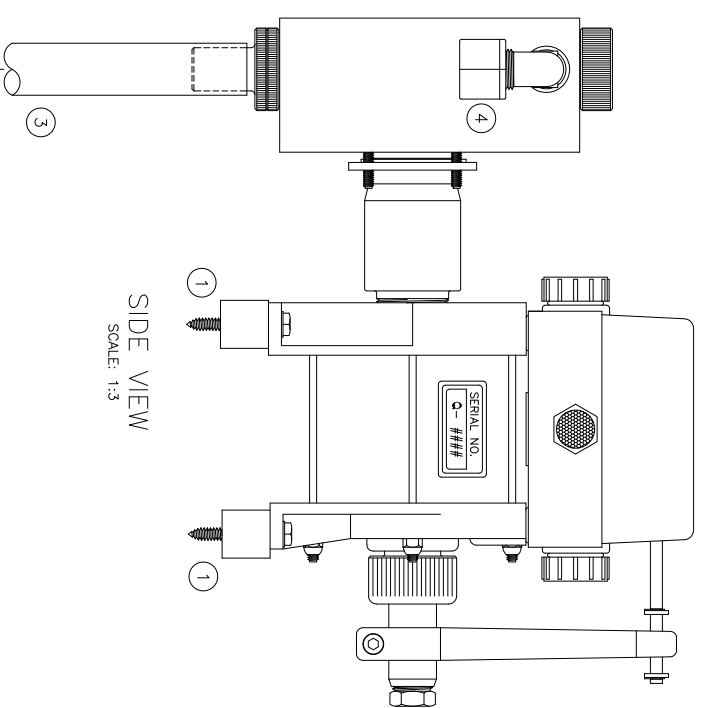
DUAL AIR PUMP
 MODEL # 093-AIRFP6100-DI-PVC-V, HM
 HM = HORIZONTAL MOUNT

INSTALLATION INSTRUCTIONS:

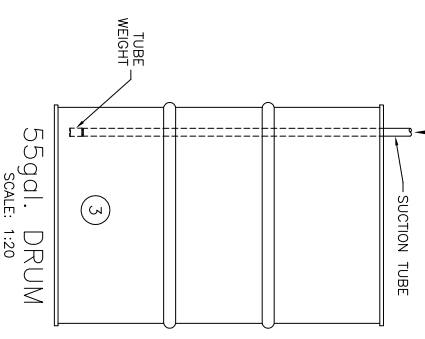
- ① MOUNT TO A HORIZONTAL SURFACE (I.E. A SHELF).
- ② AIR INLET - 3/8 O.D. TUBE COMPRESSION FITTING (INSTALLATION OF A VALVE FOR TURNING THE PUMP ON AND OFF IS RECOMMENDED).
- ③ CHEMICAL CONCENTRATE - ATTACH SUCTION TUBES TO LOWER VALVE SCREW NIPPLES, DROP OPPOSITE ENDS (WITH TUBE WEIGHTS ATTACHED) INTO THE CONCENTRATE.
- ④ CHEMICAL CONCENTRATE OUTLETS - (3/8 O.D. x 1/4 I.D. SEMI-RIGID HOSE SUPPLIED BY THE CUSTOMER).
- ⑤ START UP OPERATION - OPEN AIR VALVE (SEE STEP #2) SLOWLY UNTIL PUMP STARTS TO ACTUATE, THE CHEMICAL CONCENTRATE WILL BE DRAWN UP THE SUCTION TUBES AND EXIT THROUGH CHEMICAL CONCENTRATE OUTLETS.



END VIEW
 SCALE: 1:3




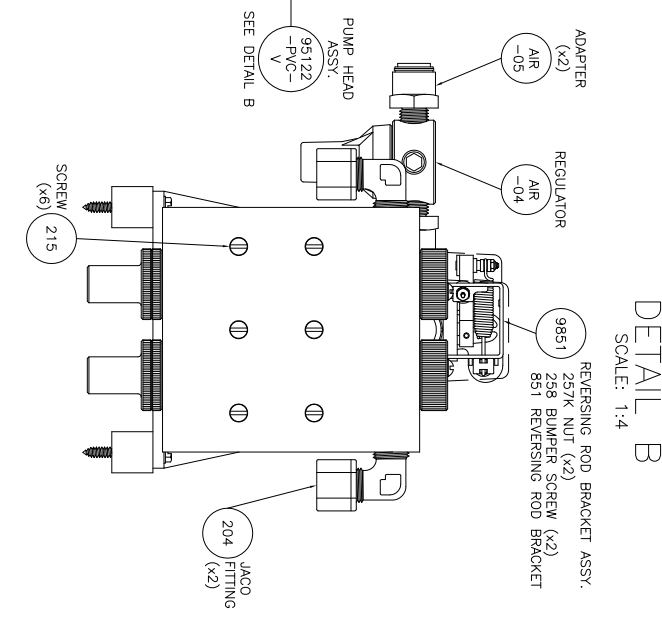
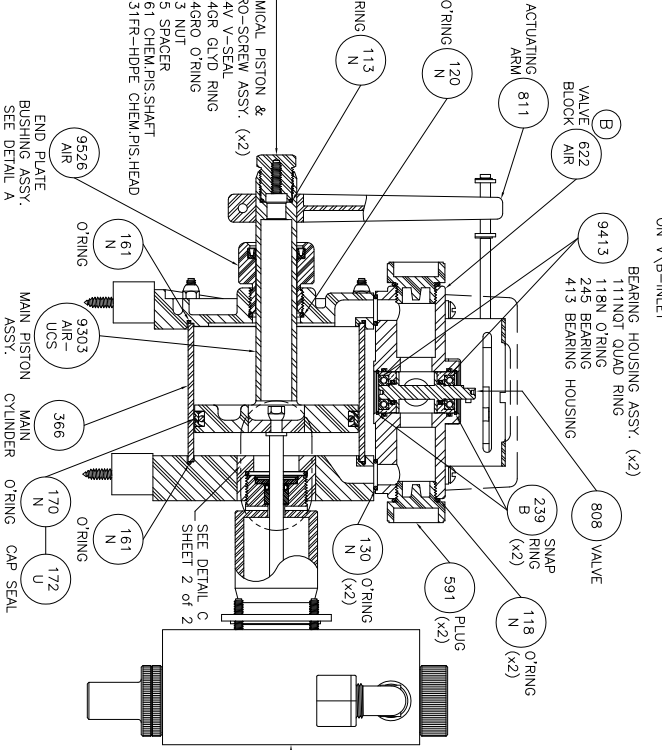
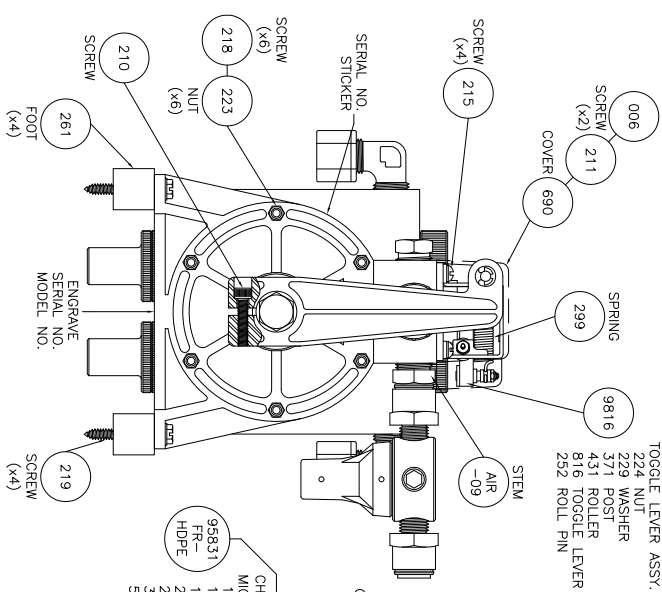
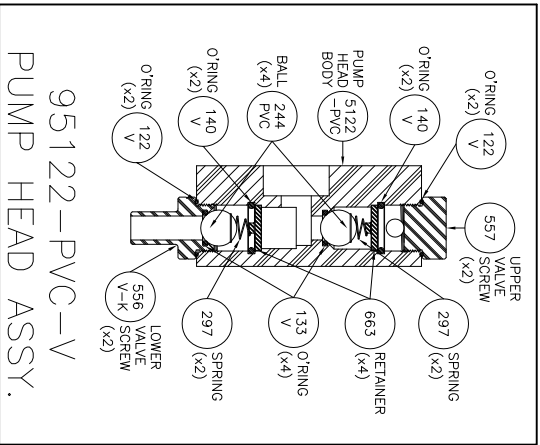
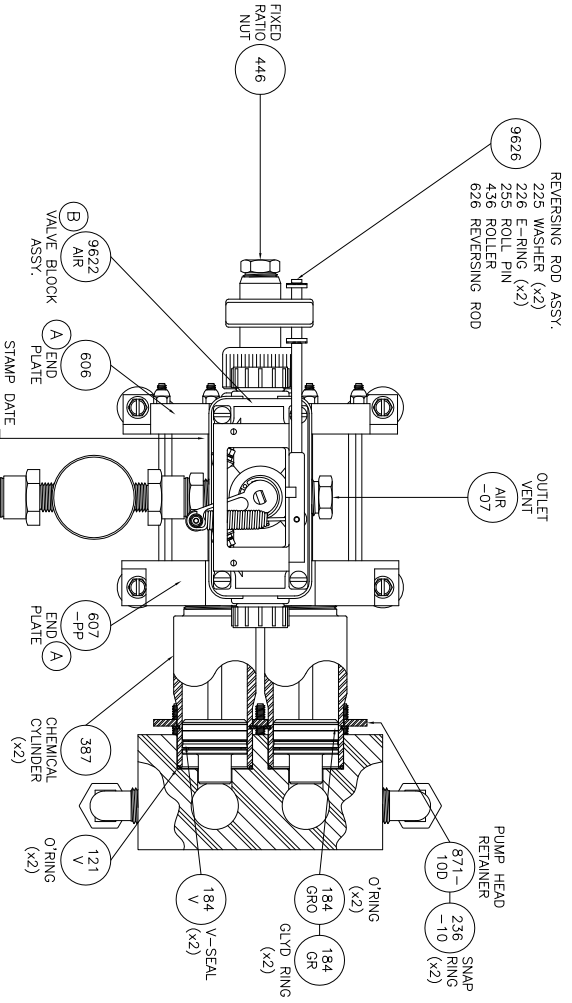
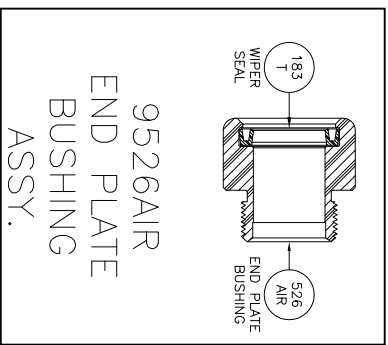
SIDE VIEW
 SCALE: 1:3



55gdl. DRUM
 SCALE: 1:20

NOTE: THIS UNIT IS CONFIGURED TO MOUNT ON A HORIZONTAL SURFACE. (I.E. A SHELF)

SCALE:	SHEET:	DATE:	C:\AUTOCAD\GROWM\Paper-www\093-AIRFP6100-DI-PVC-V\HM Operating Instructions.dwg	
NOTED	1 of 1	02/14/07		
DRAWN BY:	CHECKED BY:			
SC	DK			
SERIES:	DESCRIPTION:			
AIR	10oz. Dual Fixed Ratio			
REVISION:	REvised BY:	DATE:		
	SC	07/20/09		
		5301 SAWYER AVENUE BOISE, ID 83714 PHONE: (208) 375-5000 www.hydroblend.com		
		093-AIRFP6100-DI-PVC-V, HM OPERATING INSTRUCTIONS		



REVISION:
SEE SHEET 2 of 2

SHIPPING INFORMATION:
SMALL SYSTEM BOX = 001-5
(20 x 15 x 15)
FOAM PACKAGED
HYDRO-BLEND STAMP LOGO
MODEL NO. SERIAL NO. STICKER
LOWER LEFT HAND CORNER OF BOX

INJECTION TUBE = 269-12,000 (X2)
TUBE WEIGHT NO. = 402-625 (X2)
SUCTION TUBE NO. = 288-10FT (X2)
093 PUMP PACKET REQUIRED

SCALE	SHEET	DATE
1:3.5	1 of 2	05/22/06
DESIGNER:	CHECKED BY:	DATE:
SC	DK	
DESCRIPTION:	10oz. Dual Fixed Ratio	
REVISION:	REVISION BY:	DATE:
B	SC	07/20/09

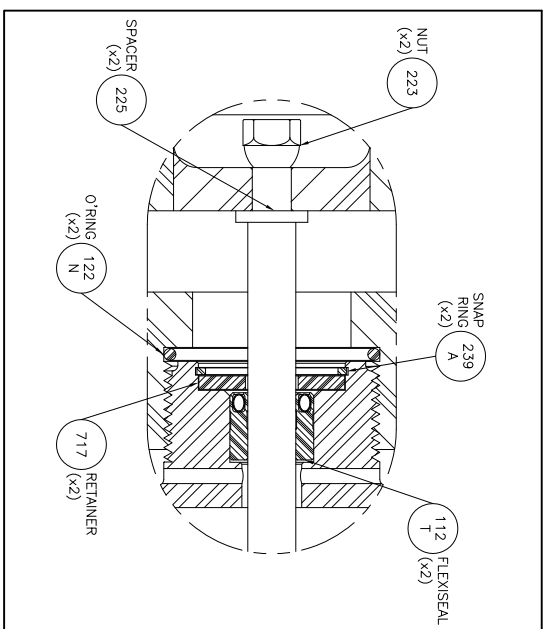


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PHONE: (208) 375-5000 www.hydroblend.com
PART NUMBER: 093-AIRFP6100-DI-PVC-V, HM

© AUTOMATIC DISPENSING SYSTEMS 103-448994-100-DI-PVC-V, HM.dwg

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

C:\AUTOCAD\GROWNS\Systems\093-AIRFP6100-DI-PVC-VHM.dwg

SHIPPING INFORMATION: SMALL SYSTEM BOX = 001-5 (20 x 15 x 15) FOAM PACKAGED		INJECTION TUBE = 269-12,000 (x2) TUBE WEIGHT NO. = 402-625 (x2) SUCTION TUBE NO. = 288-10FT (x2) 093 PUMP PACKET REQUIRED	
HYDRO-BLEND STAMP LOGO		MODEL NO. SERIAL NO. STICKER LOWER LEFT HAND CORNER OF BOX	
SCALE:	NOTED	SHEET:	2 of 2
DATE:	05/22/06	CHECKED BY:	DK
DESIGNER:	SC	DESCRIPTION:	10oz. Dual Fixed Ratio
REVISION:	B	REMOVED BY:	SC
DATE:	07/20/09		



5301 SAWYER AVENUE BOISE, ID 83714
PHONE: (208) 375-5000 www.hydroblend.com
PART NUMBER: 093-AIRFP6100-
DI-PVC-VHM

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.