



PUMPS

PUMP MANUAL

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10 inch Air Cylinder	9
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OPERATOR'S MANUAL

55 GALLON PUMP ASSEMBLY

IMPORTANT: READ THIS MANUAL CAREFULLY BEFORE INSTALLING, OPERATING, OR SERVICING THIS EQUIPMENT

When repairing the Pump Turn off the Air Supply and bleed the material pressure from the pumping system.

SPECIFICATIONS

Air Motor and Pump Tube Assembly

10in. 44:1 650880-J3D

12in 65:1 650990-J3D

Air Motor Assembly

10in. 637358

Repair Kit 10in. 637346RK

12in 637345

Repair Kit 12in. 637346RK

Air Valve Assembly for 10-12in.

637347RK

Air Inlet Port Size 3/4" NPT

Exhaust Port Size 3/4" NPT

Minimum Air Supply 3/4" NPT

Pump Tube Assembly

67301-J3D

Repair Kit 637349-J3D

Air Pressure Operating Range 20 PSI (1.36BAR)
to 100 PSI (6.8 BAR)

WARNING:

DO NOT OPERATE AIR MOTOR AT PRESSURES ABOVE 100PSI (6.8 BAR).

INSTALLATION

- 1) Locate the pump so that one can work around it.
- 2) Secure the elevator base to the floor.
- 3) Leave 10 inches in-between elevator bases.
- 4) Connect Pneumatic crossover hoses. See 900-058 & 900-059 manual.
- 5) Install a shut off valve in-between the air supply and filter (customer supplied).
- 6) Install a 3/4" NPT air supply to the inlet.
- 7) Depending on the style of the drum, the barrel clamps may need adjustment.
- 8) Connect the Material supply hose to the outlet port of the side port check valve.

Elevator
Pneumatics
900-004
Empty Drum
900-059 &
900-059
Automatic
Cross-over

Elevator
900-124 HDE
900-135 PDE

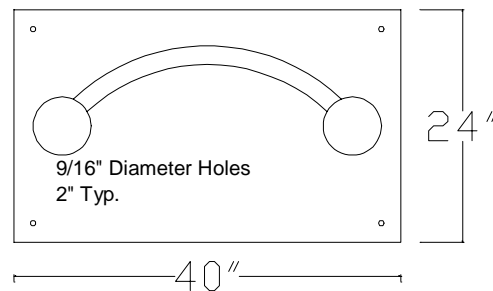
Air Motor
10 in. 637358
12In. 637345

Side Port Check
Valve
300-442S

Pump Tube
67301-J3D

Barrel Clamps
HDE 900-012
PDE 900-015

Follower Plate
HDE 900-130JR
PDE 900-016ARO



Elevator
Height
Down 5 ft. 0 in.
Up 8 ft. 6 in.

- 9) Support the material at the top of the elevator support. Unistrut clamp (403-300).
- 10) Raise the elevator up and down and ensure that the hoses will not be damaged.
- 11) Set the Elevator and Air Motor Pressures.

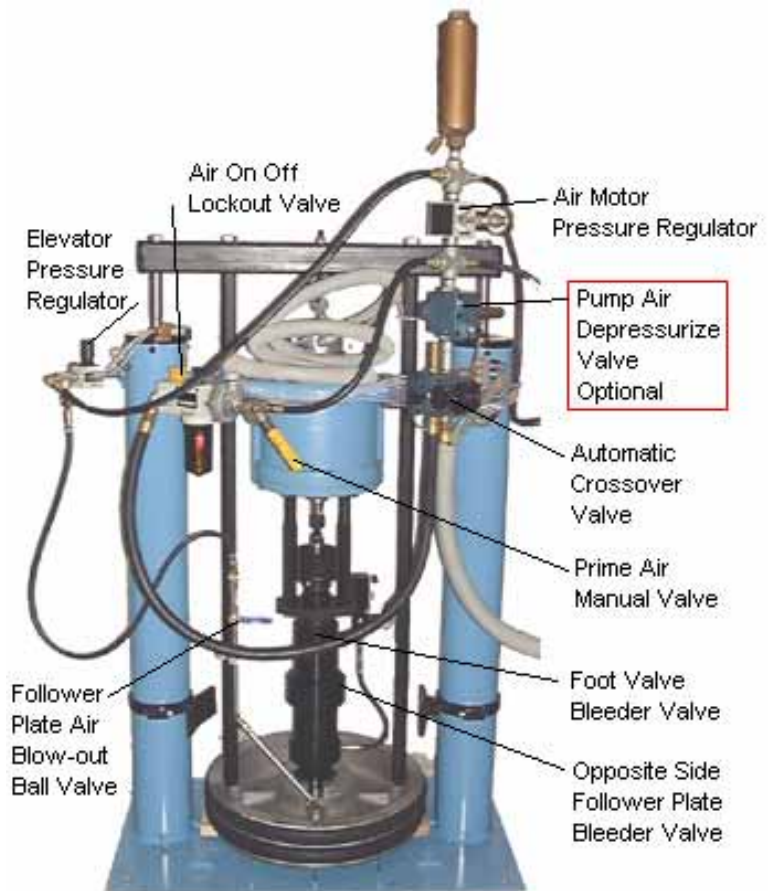
55 GALLON PUMP ASSEMBLY

ELEVATOR DRUM LOADING PROCEDURE

- 1) Close the Air Motor On-Off Lock-Out Valve.
- 2) Raise the Elevator by turning the hand valve to the up position.
- 3) Disconnect the follower plate air hose assembly and close the manual ball valve.
- 4) Lubricate the Follower Plate Seals.
- 5) Slide the drum into the elevator. The drum should be located in the center of the elevator base plate. Adjust the Barrel Clamps if it is not. (See Elevator Manual)
- 6) Lower the pump into the barrel by **slowly** moving the hand valve to the down position. When the follower plate reached the drum move the hand valve to the **stop** position.
- 7) Remove the Follower Plate Bleeder Valve and lower the pump into the drum by **slowly** moving the hand valve to the down position. When material starts coming out of the Bleeder valve port put the hand valve in the stop position
- 8) Thread the Follower Plate bleeder valve into the follower plate port.
- 9) Put the Elevator Hand Valve in the down position.
- 10) Place a container under the Foot Valve Bleeder Valve and open it several turns.
- 11) **Slowly** open the Prime Air Manual Valve and the pump will run and material will start coming out. Continue bleeding until all of the air bubbles have stopped.
- 12) Release the Prime Air Ball Valve and close the Foot Valve bleeder Valve.
- 13) Open the Air On-OFF Lock-Out Valve
- 14) The Pump is ready for operation (Check for Leaks).

ADJUSTING ELEVATOR PRESSURES

- 1) The elevator must always have down pressure on it to prevent air from entering the pump.
- 2) To set the air pressure run the pump and increase the pressure if the elevator raises when the pump is in the down direction.



ADJUSTING PUMP PRESSURES

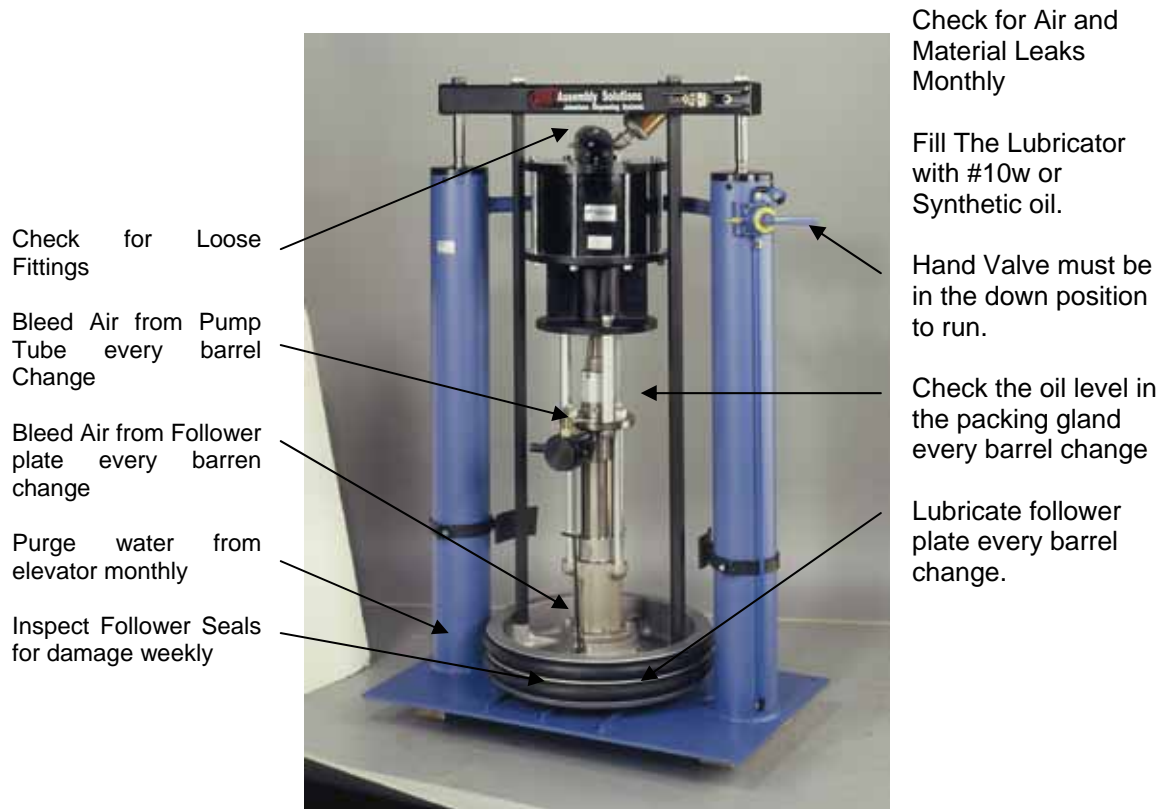
Turn up the Air Motor Pressure Regulator until the desired pressure is achieved.

DRUM UNOLADING PROCEDURE

- 1) Close the Air On-Off Lock-Out Valve.
- 2) Connect the Follower Plate blow out fitting and open the ball valve.
- 3) Put the Elevator hand valve in the Stop position and wait until the elevator stops exhausting air.
- 4) Use air pressure to raise the follower plate out of the drum. Depress the follower manual air valve (located by the elevator regulator) until the follower plate reached the top of the drum.
- 5) Slowly move the hand valve to the up position and raise the pump out of the drum.

55 GALLON PUMP ASSEMBLY

MAINTENANCE SCHEDULE



PUMPS

DAILY:

1. Assure that the packing oil cup is filled with oil.
2. Recommended Lubricant Diisodecyl Phthalate (D.I.D.P)
3. Clean material from packing cut if necessary.
4. Assure hand valve for elevator is in down position.
5. Lubricate Follower Plate wiper ring every barrel change.
7. Bleed Air from Follower Plate every barrel change.
6. Bleed Air from Foot Valve every barrel change.
7. Verify the operation of the pump every barrel change.

WEEKLY:

1. Assure that the airline lubricators are filled with #10 oil.
2. Check follower plate wiper ring and replace if damaged

MONTHLY:

1. Check airline filters.
2. Clean or replace filter element as required.
3. Check for loose gaskets on air valve and air motor, tighten or replace.
4. Purge water from elevator.
(Open valve at base of elevator tube)

300-442S 1 ¼ INCH SIDE PORT CHECK ASSEMBLY

IMPORTANT: READ THIS MANUAL CAREFULLY BEFORE INSTALLING, OPERATING, OR SERVICING THIS EQUIPMENT

NOTE: WHEN REPAIRING THE SIDE PORT CHECK TURN OFF THE AIR SUPPLY AND BLEED THE MATERIAL PRESSURE FROM THE PUMPING SYSTEM.



Repair Kit 300-442RK Includes:

300-847 Bleeder Valve
350-028 1 ½" Ball
350-129V O-Ring
350-216V O-ring
401-158 Valve Ball Seat
401-162 Spring

OPERATION

The Side Port Check Valve prevents the back flow of material from the output header or hose. The valve is required if more than one pump is connected to the same output. This allows the pump to be isolated from the header for bleeding and maintenance purposes.

DISASSEMBLY INSTRUCTIONS

- 1) Hold the Cap in a vice.
- 2) Remove the Bleeder valve from the Plug.
- 3) Unscrew the Plug. The Spring, Ball and O-ring can be removed from the valve body.
- 4) Remove the JIC Fitting from the valve body.
- 5) Unscrew the Valve Body from the Cap.
- 6) Remove the O-ring from the Cap.
- 7) The Valve Seat can now be removed.
- 8) Inspect and clean all parts.

ASSEMBLY INSTRUCTIONS

- 1) Hold the Cap in a vice.
 - 2) Install the valve Seat.
 - 3) Install the O-ring in the Cap and lubricate.
 - 4) Thread the Valve body into the Cap and tighten to 40 Ft. Lbs.
 - 5) Install the Ball then Spring into the Valve Body.
 - 6) Install the O-ring into the groove in the valve Body and lubricate.
 - 7) Thread the Plug into the Valve Body and tighten to 40 Ft. Lbs. (The pilot goes into the spring).
 - 8) Lubricate the JIC fittings O-ring and thread it into the valve body.
 - 9) Apply thread sealant to the bleeder valve and install it so that the outlet hole faces down.
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