

# OPERATOR'S MANUAL

# HD1044S5XXXXXXX

**INCLUDING: OPERATION, INSTALLATION AND MAINTENANCE.**

RELEASED: 5-12-10  
(REV. 01)

INCLUDE MANUALS: AF1044SXXXXXX-XX-X Pump manual(pn 97999-1522), 66516-X Follower Assembly (pn 97999-854), 67195-X Follower Assembly (pn 97999-841), RM552H-XX Heavy Duty Two Post Lift / Ram (pn 97999-1445), & S-636 General Information (pn 97999-636).

**10" AIR MOTOR**  
**44:1 RATIO**  
**6" STROKE**

## HD1044S5XXXXXXX EXTRUSION PUMPING SYSTEM

For use with 55 gallon drums



**READ THIS MANUAL CAREFULLY BEFORE INSTALLING,  
OPERATING OR SERVICING THIS EQUIPMENT.**

It is the responsibility of the employer to place this information in the hands of the operator. Keep for future reference.  
The original language of this manual is English.

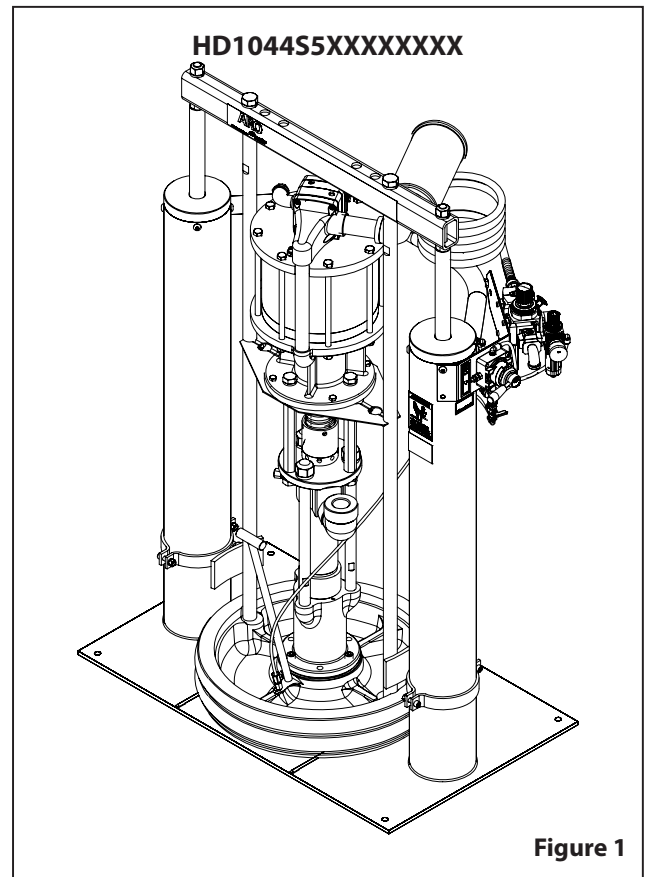
### SERVICE KITS

Use only genuine ARO® replacement parts to assure compatible pressure rating and longest service life.

- 104468** for repair of P39124 -100 filter / regulator.
- 104302** for repair of regulator section of P39124-100 filter / regulator.
- 104326** for repair of filter section of P39344 -100 filter/regulator.
- 104327** for repair of regulator section of P39344 -100 filter/regulator.
- 637489** for repair of air motor section.
- 637472** for repair of lift / ram seals.
- 637348-XXD** for repair of lower pump end.

### MODEL DESCRIPTION CHART

| HD 10 44 S 5 XXXXX XX X                                                                  |  |
|------------------------------------------------------------------------------------------|--|
| <b>Package</b><br>HD -Two Post Heavy Duty                                                |  |
| <b>Air Motor Size</b><br>10 - 10"                                                        |  |
| <b>Pump Ratio</b><br>44 - 44:1                                                           |  |
| <b>Check Type / Wetted Materials</b><br>S - Primer Piston, Carbon Steel<br>Nickel-Plated |  |
| <b>Mount Style</b><br>55 gallon (400 lbs)                                                |  |
| <b>Lower Pump End Options</b><br>Refer to pump model operator's manual                   |  |
| <b>Follower Assembly</b>                                                                 |  |
| AC - 66517      TB - 66517-7      TN - 67196-6                                           |  |
| AA - 66517-1    AM - 67196-1      TV - 67196-7                                           |  |
| AB - 66517-2    AN - 67196-2      AS - 67196-8                                           |  |
| TC - 66517-5    AV - 67196-3      TS - 67196-9                                           |  |
| TA - 66517-6    TM - 67196-5                                                             |  |
| <b>Package Options</b>                                                                   |  |
| 0 - None - Basic control for Ram only                                                    |  |
| 2- Advanced Ram and Pump Controls                                                        |  |



### GENERAL DESCRIPTION

By delivering a smooth, continuous bead of the proper size, an ARO® system helps the operator maintain both production rate and produce high quality standards. Maintained quality standards assures that the material benefits are realized. To further maximize operator production time, the ARO system has a built-in lift / ram feature for quick and easy drum changeover and easy lifting of the pump assembly from the container.

ARO systems are totally enclosed, sealing the material in the system from air and moisture, preventing premature cure-out of the material. This allows for either continuous or intermittent use of the system and allows the need for daily system clean-up.

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# ARO

**IR** Ingersoll Rand  
Industrial Technologies

## INSTALLATION

The HD1044S5XXXXXXX Extrusion System comes completely assembled. Remove the unit from the crate and place on a level surface. Install the material hose and dispensing device as required. When the following instructions are observed, heavy paste materi-

als can be pumped directly from their original drum without air inclusion or excessive waste. The follower plate creates an air tight seal as well as clean-wiping action in its progressive downward movement into the drum.

## OPERATING INSTRUCTIONS

### OPERATING INSTRUCTIONS / INITIAL SET-UP PROCEDURE

**⚠ WARNING** Stand clear when raising or lowering the lift. Read the warnings on page 3 of RM552H-XX Two Post Lift / Ram Operator's Manual.

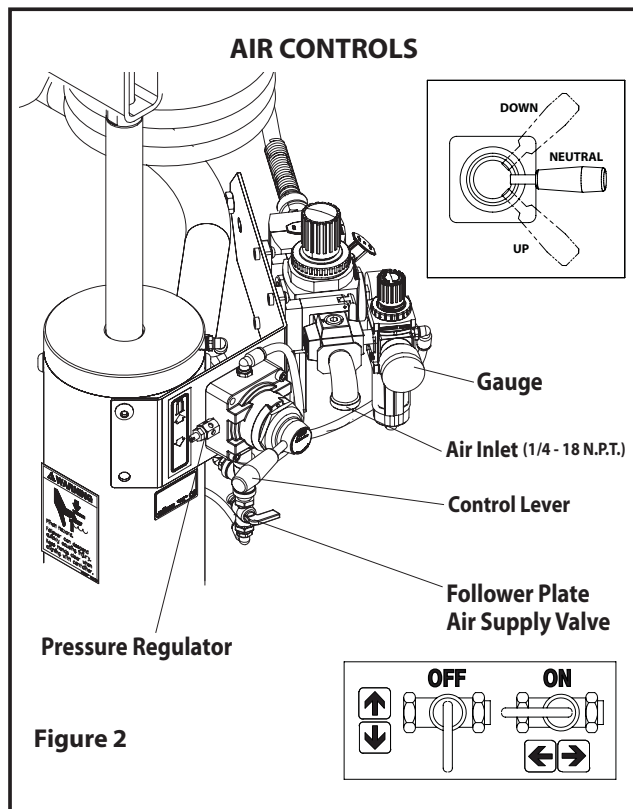


Figure 2

#### TO RAISE THE LIFT, (the first time):

1. Take note of the pump / drum clearance above. Be certain the lift / ram is clear of any objects above. Also, refer to "Operating and Safety Precautions" found on page 3 of RM552H-XX Two Post Lift / Ram Operator's Manual.
2. Connect the air supply (100 p.s.i. max.) to the air inlet. Adjust the air pressure on the lift / ram pressure regulator (turn the knob clockwise) to 30 - 40 p.s.i. (2.1 - 2.8 bar).
3. Shift the control valve lever to the "up" position.
4. Raise the lift / ram high enough to clear the height of the drum. Stop the lift upward travel by moving the control valve lever to the "neutral" (center) position.
5. Once the lift / ram assembly and pump are in the "up" position,

place and center an opened drum of material on the lift / ram base and securely against the barrel guides, adjusting if necessary.

6. Lubricate the lower follower wiper plate seal with grease. NOTE: Make certain the grease is compatible with the material being dispensed. This ensures a smooth fit into the drum, as well as prevents curing type compounds from bonding to the seal.
7. Check the vent plug on the follower plate to be sure it easily threads in and out. It is recommended to lubricate the threads of the plug to help prevent possible set-up of the compound at this point.

#### TO LOWER LIFT:

**⚠ WARNING** PINCH HAZARD. Follower can descend quickly, causing injury. Keep hands clear when aligning with container. Read the warnings on page 3 of RM552H-XX Two Post Lift / Ram Operator's Manual.

NOTE: Be certain the follower plate vent plug has been removed so that the air trapped between the follower and the material is allowed to escape from this vent.

NOTE: The lift / ram may hesitate momentarily before starting downward. The air pressure inside the post air chamber must decrease before it will begin to descend.

1. Shift the control valve lever to the "down" position and proceed to lower the pump.
2. Replace the vent plug once the material begins to ooze from the vent opening.
3. The unit is now ready for operation. Adjust the air pressure on the pump filter / regulator (turn the pump regulator knob clockwise) until the pump begins to cycle.
4. Trigger the gun to prime the pump with material.

#### TO RAISE LIFT, (normal operation):

1. Adjust the follower plate air valve pressure up to approximately 8 p.s.i.g. (0.55 bar). DO NOT OVER PRESSURIZE THE DRUM to avoid damage. NOTE: Air from this valve will only pass when the control lever is in the "up" position.
2. Shift the control valve lever to the "up" position.
3. Raise the lift / ram high enough to clear the height of the drum. Stop the lift upward travel by moving the control valve lever to the "neutral" (center) position.

#### TO CHANGE THE DRUM:

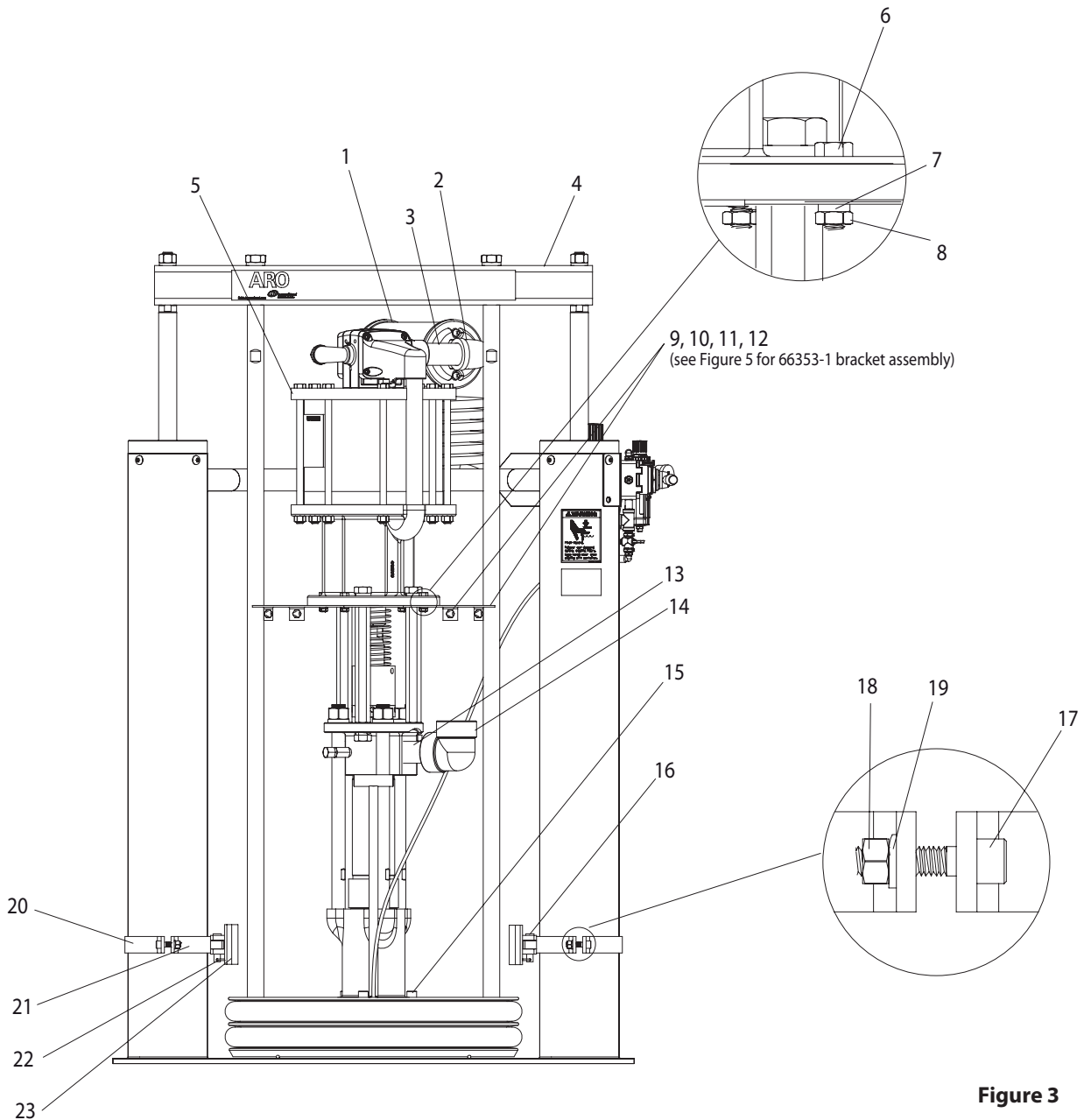
NOTE: The control valve lever must be in the "neutral" position.

1. Remove the old drum.
2. Place and center a new drum into position.

## PARTS LIST / HD1044S5XXXXXXX

| Item | Description (size)                 | Qty | Part No.       |
|------|------------------------------------|-----|----------------|
| 1    | Muffler                            | (1) | 94810          |
| 2    | Reducing Elbow                     | (1) | 96927          |
| 3    | Nipple                             | (1) | Y44-65-C       |
| 4    | Two Post Lift / Ram                | (1) | RM552H-XX      |
| 5    | Pump Assembly                      | (1) | AF1044S1XXXXXX |
| 6    | Cap Screw (3/8" - 16 x 1-1/4")     | (4) | Y6-66-C        |
| 7    | Lock Washer (3/8")                 | (4) | Y14-616        |
| 8    | Nut (3/8" - 16)                    | (4) | Y12-106-C      |
| 9    | Cap Screw (3/8" - 16 x 1")         | (4) | Y6-65-C        |
| 10   | Nut (3/8" - 16)                    | (4) | Y12-6-C        |
| 11   | Lock Washer (3/8")                 | (4) | Y14-616        |
| 12   | Support Bracket                    | (2) | 92362          |
| 13   | Nipple (1 - 1/4 - 11-1/2" N.P.T.F) | (1) | 96614          |
| 14   | 90° Elbow (1-1/4 - 11-1/2 N.P.T.)  | (1) | Y43-317-C      |
| 15   | Cap Screw                          | (4) | Y99-63-C       |

| Item     | Description (size)                                        | Qty | Part No.           |
|----------|-----------------------------------------------------------|-----|--------------------|
| 16       | Clamp Pin                                                 | (2) | 97191              |
| 17       | Cap Screw                                                 | (4) | Y99-64             |
| 18       | Nut (3/8" - 16)                                           | (4) | Y12-6-C            |
| 19       | Lock Washer (1/4")                                        | (4) | Y14-616            |
| 20       | Clamp Bracket                                             | (2) | 95353              |
| 21       | Clevis Bracket                                            | (2) | 95354              |
| 22       | Hair Pin Clip                                             | (2) | 97192              |
| 23       | Clamp Shoe                                                | (2) | 97190              |
| 24       | Tubing (5/16" o.d. x 44")                                 | (1) | 94980-( <b>1</b> ) |
| 25       | Connector (1/4 - 18 N.P.T. x 5/16" o.d. tubing)           | (1) | 59474-158          |
| 26       | Follower Assembly (see "model description chart", page 1) | (1) |                    |
| 27       | Bushing                                                   | (1) | Y45-9-C            |
| 28       | Street Elbow (3/4 - 14 NPT)                               | (1) | Y43-5-C            |
| <b>1</b> | Bulk Tubing (5/16" o.d. x 100')                           | (1) | 94980-100          |



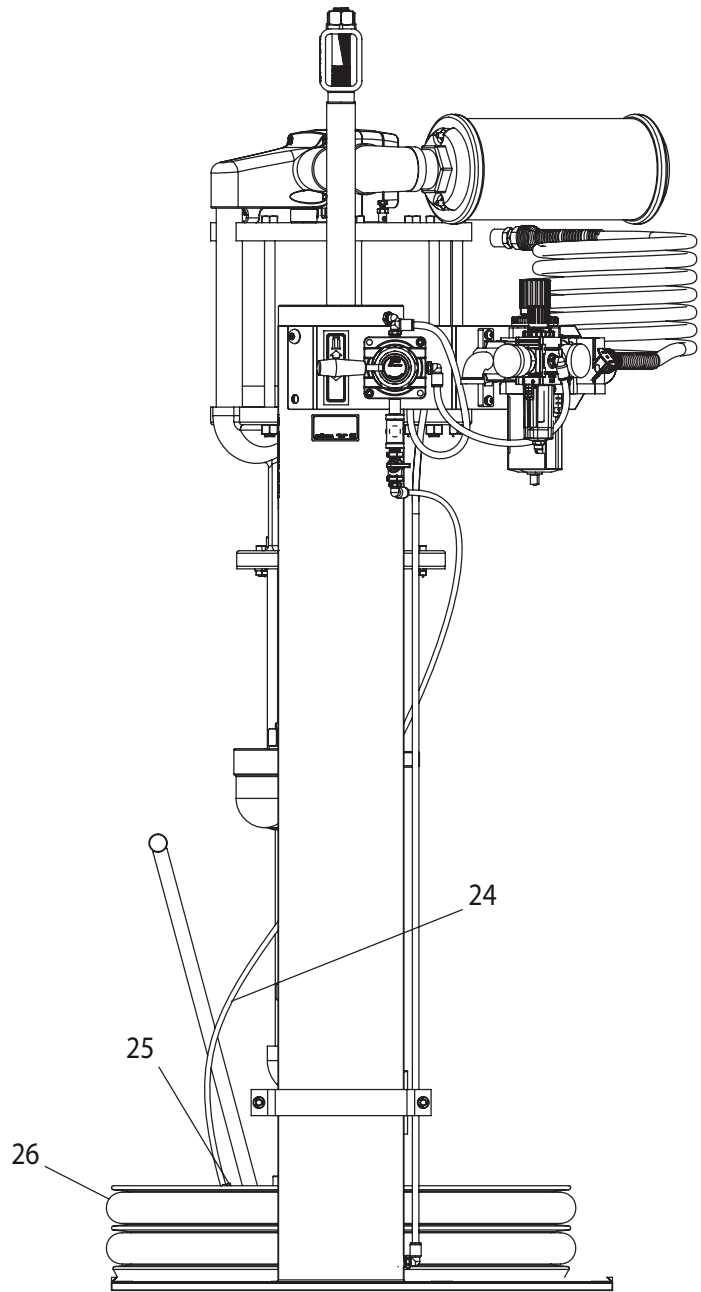
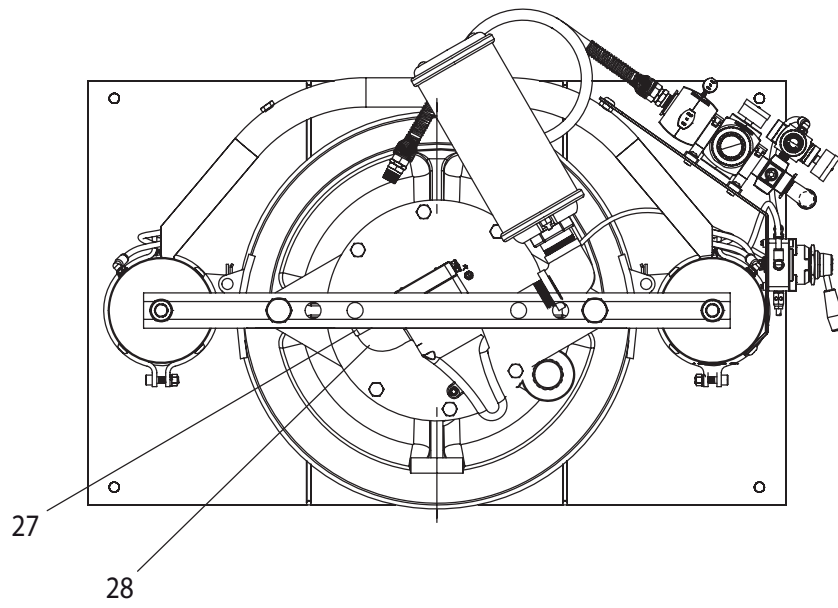


Figure 4

66353-1 Bracket Assembly

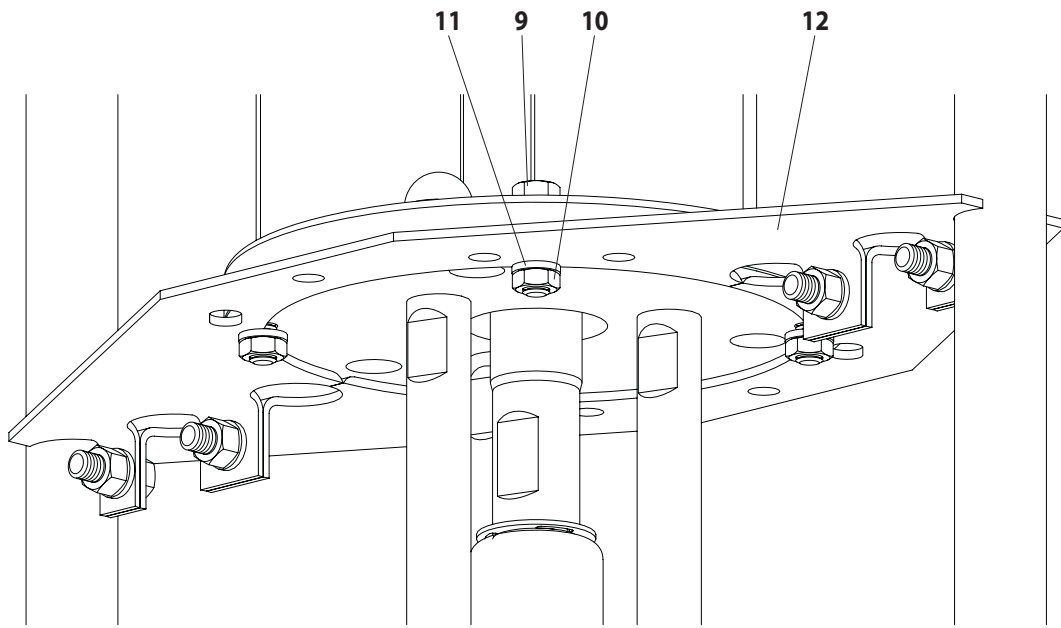


Figure 5

# DIMENSIONS

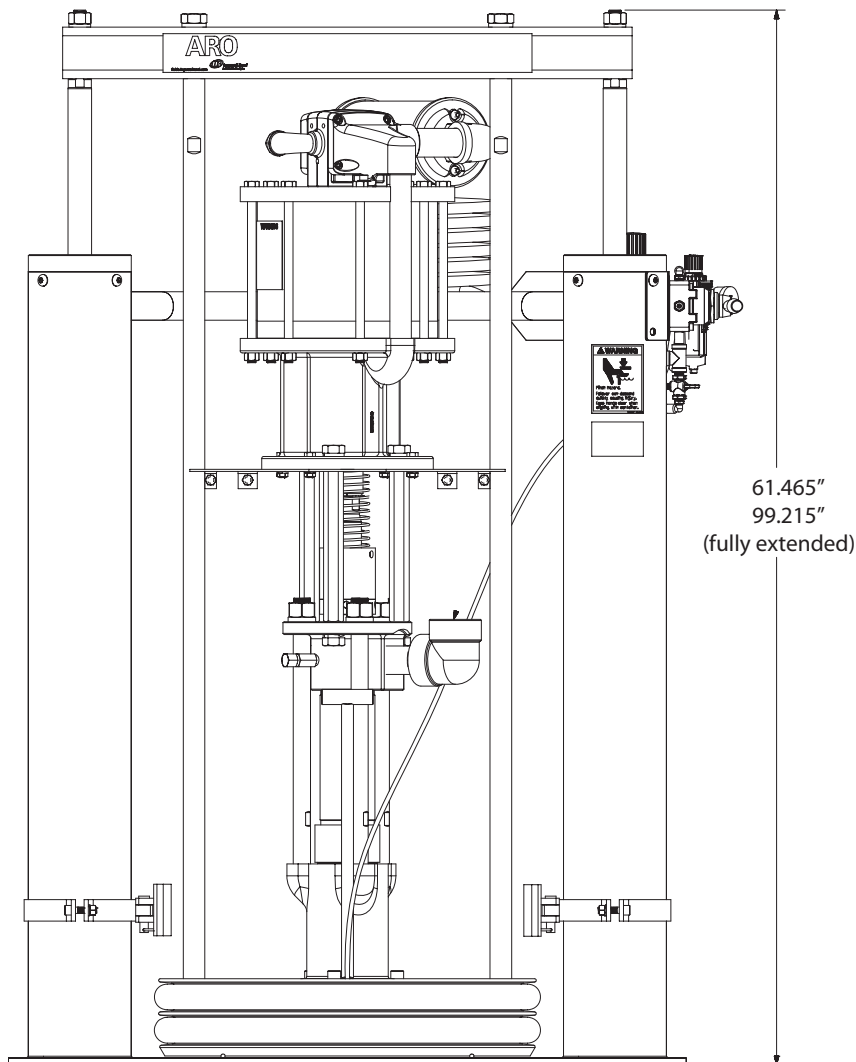
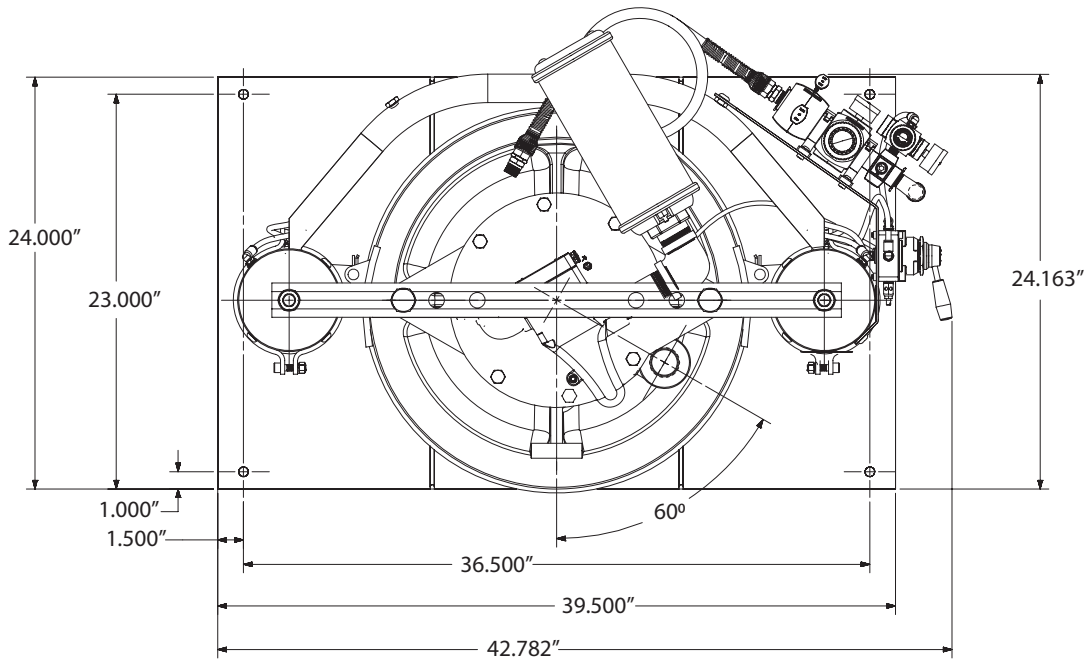


Figure 6

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## NOTES

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