

# OPERATOR'S MANUAL

# SP1020S5XXXXXXX

## INCLUDING: OPERATION, INSTALLATION AND MAINTENANCE.

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

INCLUDE MANUALS: AF1020SXXXXX-XX-X Extrusion Pump (97999-1521), 66517-X Follower Assembly (pn 97999-854), 67195-X Follower Assembly (pn 97999-841), 651614-X Single Post Lift / Ram (pn 97999-594) & S-636 General Information (pn 97999-636).

**10" AIR MOTOR**  
**20:1 RATIO**  
**6" STROKE**

## SINGLE POST RAM PACKAGE 55 GALLON



**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.**

### SERVICE KITS

- Use only genuine ARO® replacement parts to assure compatible pressure rating and longest service life.
- **RK2425-10** cylinder rebuild kit.
- **104158** for repair of R37121-100 regulator.
- **116772** for repair of E512LM valve.
- **637489** for repair of AF1060-XX air motor section.
- **637128-XX4-B** for repair of 66236-XXX-B lower pump section.

### MODEL DESCRIPTION CHART

SP 10 20 S 5 XXXXX XX X	
<b>Package</b> SP - Single Post	
<b>Air Motor Size</b> 10 - 10"	
<b>Pump Ratio</b> 20 - 20:1	
<b>Check Type / Wetted Materials</b> S - Primer Piston, Carbon Steel Nickel-Plated	
<b>Mount Style</b> 5 - 55 gallon (400 lbs)	
<b>Lower Pump End Options</b> Refer to pump model operator's manual	
<b>Follower Options</b> AC - 66517      AN - 67196-2 AA - 66517-1    AV - 67196-3 AB - 66517-2    TM - 67196-5 TC - 66517-5    TN - 67196-6 TA - 66517-6    TV - 67196-7 TB - 66517-7    AS - 67196-8 AM - 67196-1    TS - 67196-9	
<b>Package Option</b> 0 - None	

### SP1020S5XXXXXXX RAM PACKAGE

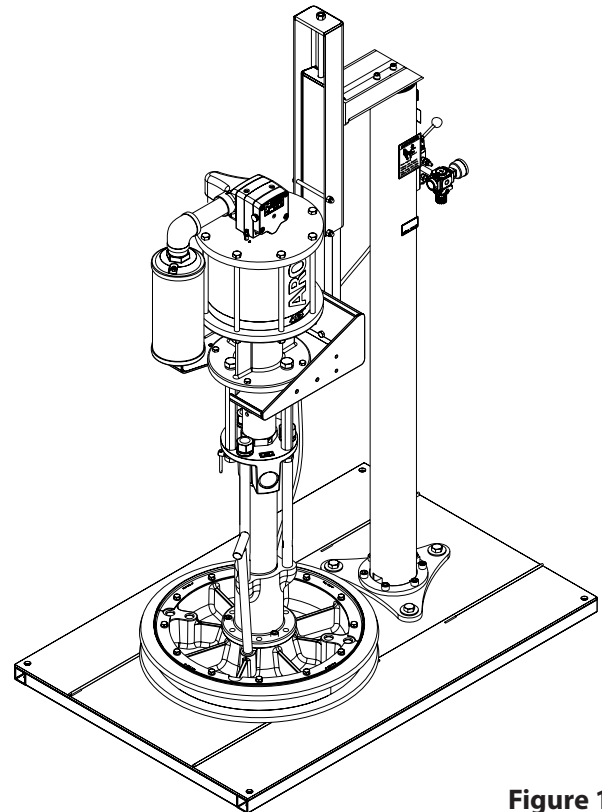


Figure 1

### GENERAL DESCRIPTION

**WARNING** DO NOT EXCEED MAXIMUM OPERATING PRESSURE OF 2,250 P.S.I. (155.2 BAR) AT 90 P.S.I. (6.2 BAR) AIR INLET PRESSURE.

**WARNING** REFER TO GENERAL INFORMATION MANUAL INCLUDED FOR OPERATING AND SAFETY PRECAUTIONS AND OTHER IMPORTANT INFORMATION.

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 reduces the need for daily system clean-up.

**airpumping.co.uk**

Unit 16, Upminster Trading Park, Warley St., Upminster, Essex, RM14 3PJ, ENGLAND

**ARO**  **Ingersoll Rand**  
Industrial Technologies

## INSTALLATION

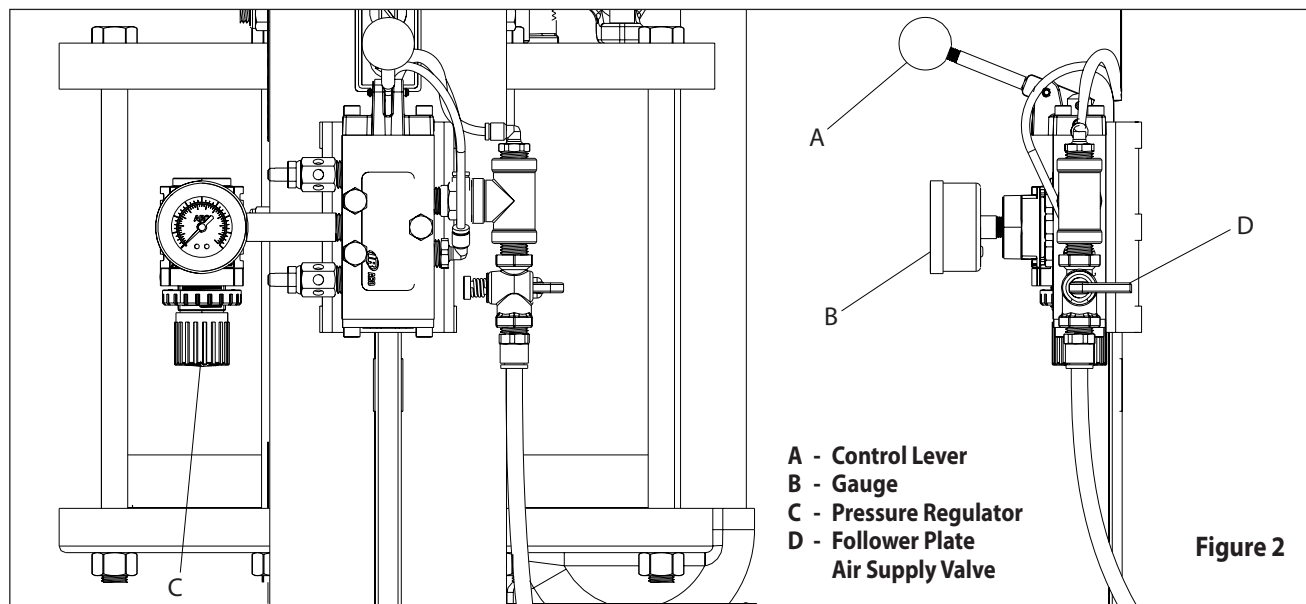
The SP1020S5XXXXXXX Extrusion System comes completely assembled. Remove the unit from the crate and place on a level surface. Install the material hose and dispensing device as required.

When the following instructions are observed, heavy paste

materials 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

### AIR CONTROLS



### OPERATING INSTRUCTIONS / INITIAL SET-UP PROCEDURE

**⚠ WARNING** Stand clear when raising or lowering the lift. Read the warnings on page 2 of 651614-X Single Post Lift / Ram Operator's Manual (pn 97999-594).

#### 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 in "Lifts and Rams General Information Manual" (pn 97999-635).
2. Connect the air supply (150 p.s.i. / 10.3 bar maximum) to the air inlet. Adjust the air pressure on the lift / ram pressure regulator (turn the knob clockwise) to 50 p.s.i. (3.4 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 / ram's upward travel by moving the control valve lever to the "neutral" (center) position.

#### REFER TO PAGE 3:

1. Once the lift / ram assembly and pump are in the "up" position, place and center an opened 55 gallon drum of material on the lift / ram base.
2. Lubricate the lower follower wiper plate seal with grease. This ensures a smooth fit into the drum, as well as prevents curing type compounds from bonding to the seal. NOTE: Make certain the grease is compatible with the material being dispensed.
3. 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 (see Follower Assembly Operator's Manual).

#### TO LOWER LIFT:

**⚠ WARNING** PINCH HAZARD. Follower can descend quickly, causing injury. Keep hands clear when aligning with container. Read the warnings in "Lifts and Rams General Information Manual" (pn 97999-635).

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. Captured air between the follower plate and drum will escape.

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 valve 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 / ram's 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. Place and center a new drum into position. Remove the cover.

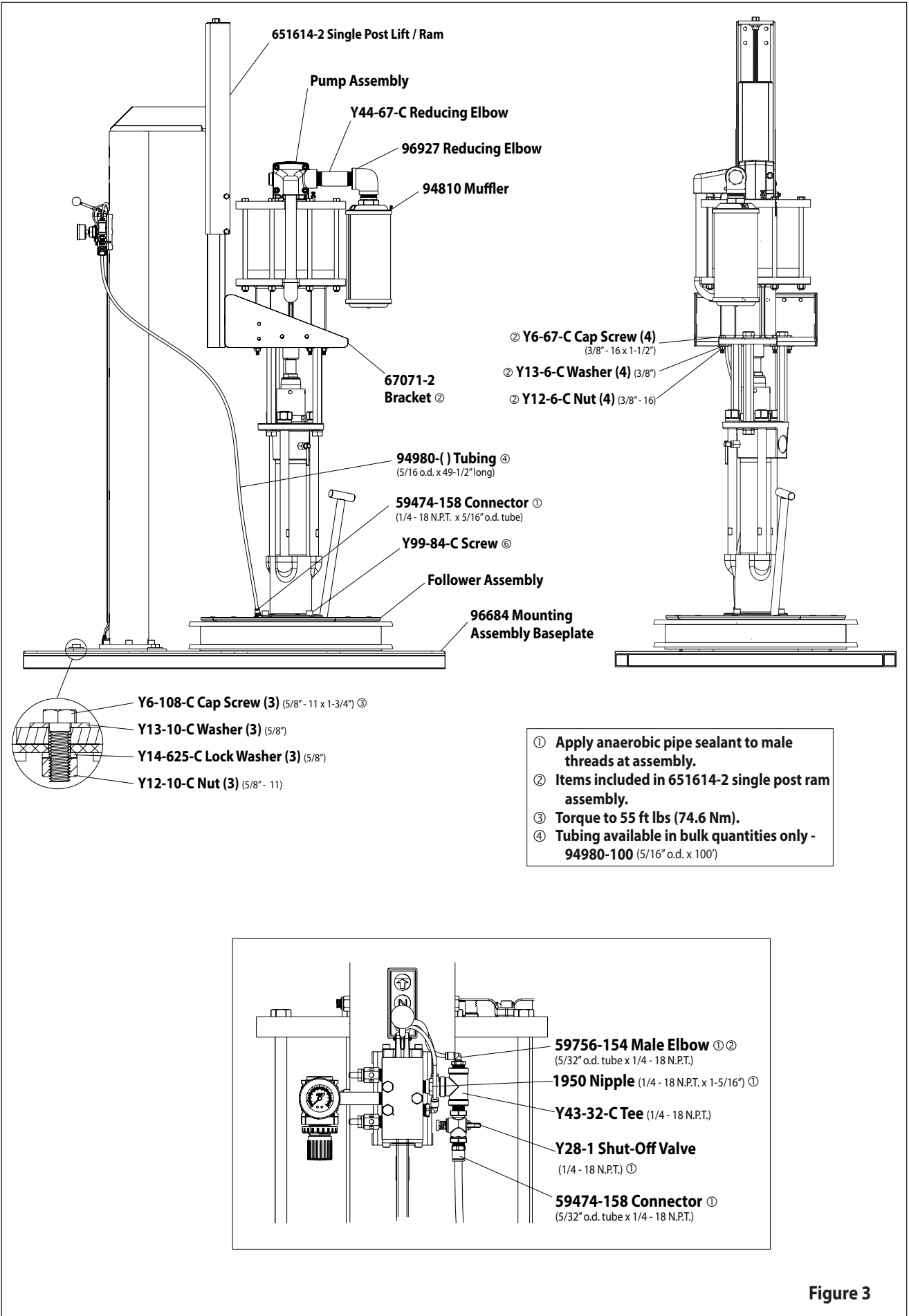
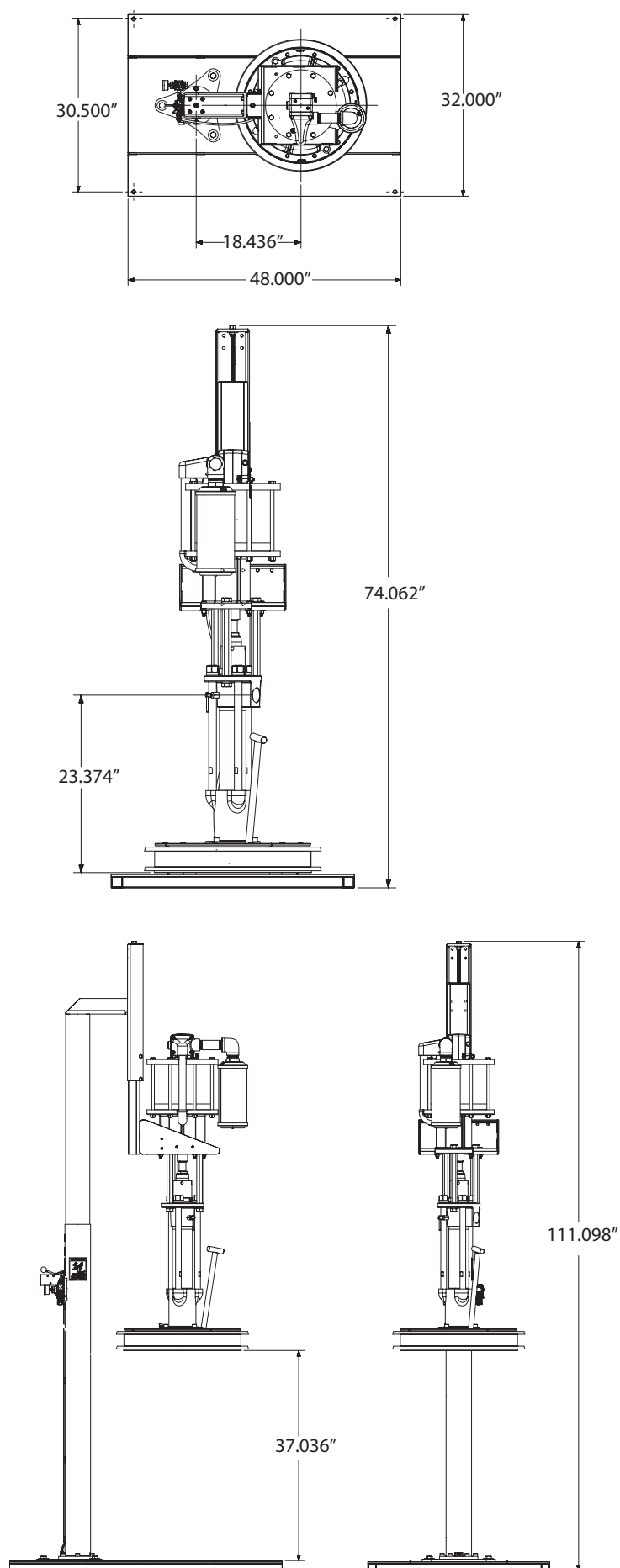


Figure 3

## DIMENSIONAL DATA



**Figure 4**