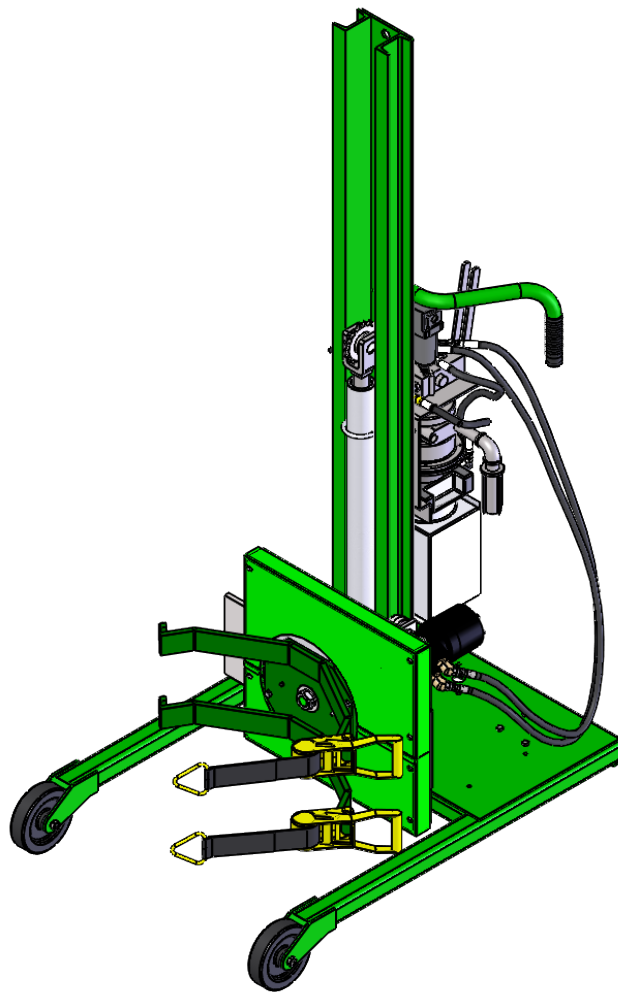




ROTOLIFT AIR POWERED 78/90



Notice to Purchaser

All statements, technical information, and recommendations related to Valley Craft's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must determine if it is suitable for your intended application or situation. You assume all risks and liability associated with such use or implementation.

Product Testing

We perform vigorous in-house safety and durability testing to ensure that the performance of our products meets the demands of the workplace. We also expect the same from manufacturers who supply components for our products. We do this to ensure that Valley Craft is a name that our customers trust and associate with quality.

Publication Revision Notice

Following is a history of changes to this publication, including the current revision.

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■ Table of Contents

| | |
|--|--------------|
| Safety | 4-6 |
| • Safety Overview | 4 |
| • Safety Message Conventions..... | 5 |
| • Safety Data Sheet | 6 |
| • Additional Safety Information..... | 6 |
| Product Description | 7,8 |
| • Features | 7 |
| • Specifications | 8 |
| Unpacking and Assembly | 9 |
| • Receiving and Inspecting | 9 |
| Operation | 9 |
| • Operating Procedures | 9 |
| Maintenance and Adjustments | 10 |
| • Maintenance and Adjustment Procedures..... | 10 |
| Troubleshooting | 11 |
| • Troubleshooting Procedures | 11 |
| Replacement | 11 |
| • Replacement Procedures | 11 |
| Parts List | 12-16 |
| • Isometric ROTO Lift 90 Air SAE | 12 |
| • Parts List | 13 |
| • Isometric ROTO Lift 78 Air SAE | 14 |
| • Parts List | 15 |
| • Parts List Air motor and Hydraulic Pump kit..... | 16 |
| Hydraulic Schematic | 17 |
| • Hydraulic schematic - ROTO Lift Air SAE..... | 17 |

Safety

Read and understand all safety information and become familiar with all safety symbols contained in this section before moving, operating or performing maintenance on this equipment.

■ Safety Overview

The following general safety precautions must be observed during all phases of operation, service, and repair of this equipment. Failure to comply with these precautions or with specific safety messages elsewhere in this manual may impair the protection provided by the equipment. Such noncompliance would also violate safety standards of design, manufacture, and intended use of the instrument.

- Observe all safety signs posted in your facility.
- Observe warnings, cautions, handling information, storage requirements and other information on all container labels.
- Wear safety glasses with side shields.
- Wear the proper protective clothing, gloves and other protective equipment before handling any chemicals.
- Group the containers for the move by Hazard Class. Do not move acids with toxics, or oxidizers.
- Use maximum care and good judgment in preventing accidents and injuries and seeking first aid.
- Report unsafe conditions, equipment, practices, and on-job injuries.
- Understand your supervisor's instructions. Ask questions if you do not know how to do the job safely.
- Do not engage in tasks which you believe might be unsafe without consulting your supervisor.
- Clean up the work area and equipment upon job completion.
- Before you start work on any electrical system or circuit, check all power sources to ensure that the system or circuit is de-energized.
- Know the hazardous or potentially hazardous substances you work with or are present in your work area. Review Safety Data Sheets (SDS) on these substances, or contact your supervisor.

■ Safety Message Conventions

There are three types of safety notices contained in this manual: **Danger**, **Warning** and **Caution** notices. These notices precede the procedural step or portion of text that presents the safety hazard.



DANGER

- **DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.
-



WARNING

- **WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
-



CAUTION

- **CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices
-

Safety Data Sheets (SDS)

A Safety Data Sheet (SDS) provides information on the safe use, handling and potential hazards of a product. This information assists with the proper response in the event of an emergency.

Valley Craft maintains safety data sheets (SDSs) on all our products. You are urged to obtain copies of the relevant SDSs before using our products to protect yourself and others against any known health or safety hazards described in these SDSs. Valley Craft strives to make safety a top priority. Do not hesitate to contact us to discuss any safety aspects of our products.

The relevant SDS codes for Valley Craft products are listed below.

- www.conocophillips.com
Super ATF Transmission Oil, MSDS Code 778846
Super-Sta Grease, SDS Code 775440
- www.batteriesplus.com
Sealed Lead Acid Battery
SLA for English version
SLA Sp for the Spanish version
- [Paint](#)
Contact Valley Craft Customer Service at 1-800-328-1480 or on the Web at customerservice@valleycraft.com

Additional Safety Information

As with any mechanical device, care must be taken during the installation, operation, and maintenance of the device in order to realize the maximum benefit from its ownership.

When raising and lowering the load, be aware of pinch points. Keep hands and feet away from these areas.

When transporting a load, it is recommended that the load is lowered as close to the floor as possible to reduce the chance of accidents during transport.

Do not leave load suspended for an extended period of time or premature wear to the lifting cylinder may occur.

Note: All personnel involved in the use and maintenance of this device should be thoroughly familiar with the information contained in this manual. Furthermore, it is recommended that all personnel be given adequate instruction and a sufficient period of training in its actual use to insure safety of personnel and proper care of the equipment. It is suggested that the units be initially operated empty until becoming familiar with how the unit handles.

Product Description

The **ROTO-Lift** multi-purpose positioner is manually-propelled unit that centers the load between the wheels for maximum balance and safety. Lifts and rotates 360 degrees.

■ Features

The **ROTO-Lift** offers state-of-the-art design with many advanced features.

- Air over hydraulic power unit (PU/GD)
- Hydraulic cylinder for lift function
- Hydraulic orbit motor for rotate functions
- Heavy Duty ratchet straps to secure drum
- Portable design
- Sprint return hand levers for all functions

■ Specifications

The **ROTO Lift-78 air** SAE specifications are shown in Table 1.

Table 1. Specifications

| | |
|----------------------|---|
| Dimensions | 31 in wide x 51.5 in deep x 78 in tall |
| Weight | 490 lbs (straddle lift) |
| Load Capacity | 800 lbs. |
| Power | Air over Hydraulic |
| Lift Travel | 58 in. |

The **ROTO Lift-90 Air** SAE specifications are shown in Table 1.

Table 2. Specifications

| | |
|----------------------|---|
| Dimensions | 31 in wide x 51.5 in deep x 78 in tall |
| Weight | 510 lbs (Straddle style Lift) |
| Load Capacity | 800 lbs. |
| Power | Air over Hydraulic |
| Lift Travel | 71 in. |

■ Receiving and Inspecting

When unpacking the **Versa-Lift**, inspect the equipment for damage or mishandling. If damage is noted, file a damage claim with the carrier within 24 hours and call Valley Craft at 1-800-328-1480. Do not attempt to use the equipment.

Compare the contents of the shipment with the bill of lading. Report any missing items to the carrier and to Valley Craft immediately.

■ Operating Procedures

Only authorized personnel are permitted to use the **ROTO-Lift**. Every load and every situation is different. Every lift must be evaluated and planned. Observe the following procedures when using this equipment.

PRIOR TO OPERATION

- Remove the solid plug on the hydraulic reservoir and install the breather cap attached to the motor for proper air venting.
- Remove the solid plug on the left side of the motor nearest the mast and install the lubricator, regulator, gauge and the filter in this order.

OPERATION PROCEDURE

- Attach air line to unit (100psi @ 50cfm recommended)
- Loosen rotator straps in the following way. A) Depress “finger release” on ratchet and fold handle open. B) Pull strap through ratchet just far enough to unhook metal ring from T-bar at the end of the rotating arm. C) Perform this on both ratchets.
- Move the Roto-Lift forward, straddling the drum, and center the rotating arms to the drum using the appropriate lever.
- After arms are centered on drum, push unit forward the rest of the way so the drum touches the rear of the rotating arms.
- Pull both straps around the front of the drum and hook the metal ring onto the T’bar on the end of the rotating arms.
- By depressing the “finger release” on the ratchet and returning it to the original position, you may now ratchet the straps tight around the drum.
- With BOTH straps tight, raise the drum using the appropriate lever.
- To dump, raise the drum to the desired height and activate appropriate lever

Maintenance and Adjustments

■ Maintenance and Adjustment Procedures

To keep the **ROTO-Lift** operating properly, timely maintenance and adjustments are required. These procedures should be performed only by qualified personnel who are familiar with the equipment.

As with any mechanical hydraulic actuator (piston rods, rotating pump shaft, etc.) the shaft will become coated with a minute amount of oil from the internal high pressure system. The rod protruding from the cylinder and foot pump may feel damp with oil after use. This is desirable because the oil coating serves to lubricate the shaft seal, reducing friction and assuring extended seal life.

Maintenance and adjustment procedures are shown in Table 1.

Table 1. Maintenance and Adjustment Procedures

| Component | Frequency | Operation | Procedure |
|------------------|--|------------------------------|--|
| Cylinder | As required | Leaking hydraulic fluid | Replace seal. Order Z20768A5 Seal Kit See sheet # 10 |
| Air Motor | As required | Maintenance/Trouble shooting | See Air Motor Operation and Maintenance Manual |
| Chain | As required | Lubricate | Oil Chain |
| Hydraulic Fluid | Every 40 hours or after long set-aside periods | Check Fluid | Make sure cylinder is fully retracted. Fill Reservoir to within 1 in. to 2 in. of the fill hole. Use ATF D/M Transmission Fluid. |
| | Yearly | Flush hydraulic system | Drain all hydraulic fluid and replace with 64 ounces of Super ATF Transmission Fluid. Make sure cylinder is full retracted. |
| Hydraulic System | At Start of Shift | Operate | Fully extend lift cylinder to purge oil from rod end of the cylinder |
| Nylon Straps | At Start of Shift | Visually Inspect | Check nylon straps for wear and replace as necessary |

Troubleshooting

■ Troubleshooting Procedures

The **Roto-Lift** is a quality product that is designed and manufactured to provide prolonged service under normal operating conditions. If troubleshooting is required, it should be performed only by qualified personnel who are familiar with the equipment.

■ Replacement Procedures

Occasionally, it will be necessary to replace a part that has been Damaged or worn. Many parts on this Versa-Lift are replaceable. If Replacement of a part is required, it should be performed only by Qualified personnel who are familiar with the equipment.

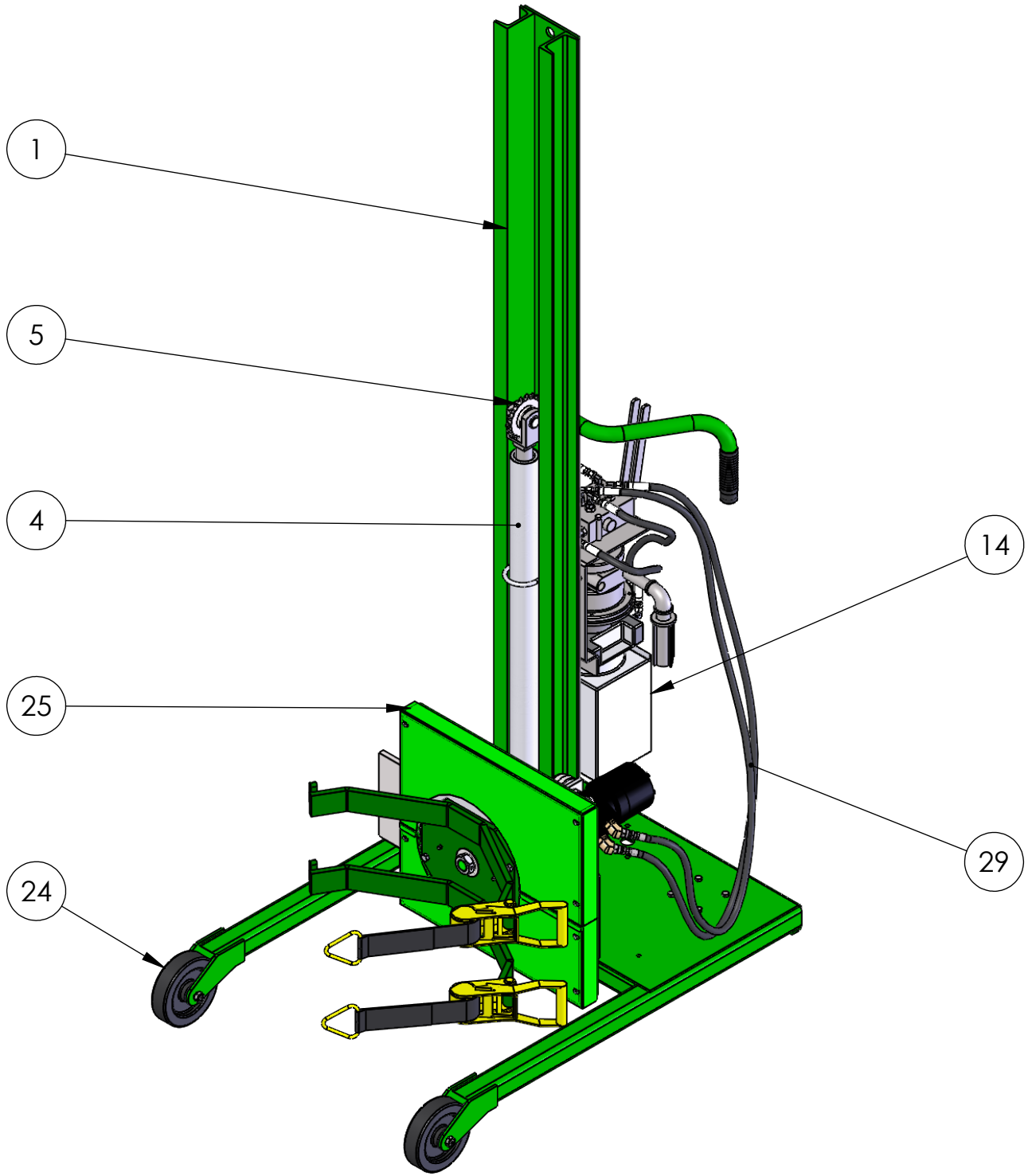
See the following pages for available replacement parts. Identify the part number you need. Contact Valley Craft Customer Service at 1-800-328-1480 or on the Web at customerservice@valleycraft.com.

Information required when contacting Valley Craft:

- A. Company name and address
- B. Contact persons name
- C. Telephone number
- D. E-Mail address
- E. Model Number
- F. Date of manufacture
- G. Part number of Parts ordering

The model number and date of manufacture is stamped on a metal tag located on the frame above the push handle.

F88590B6 - ROTO Lift-90 Air SAE

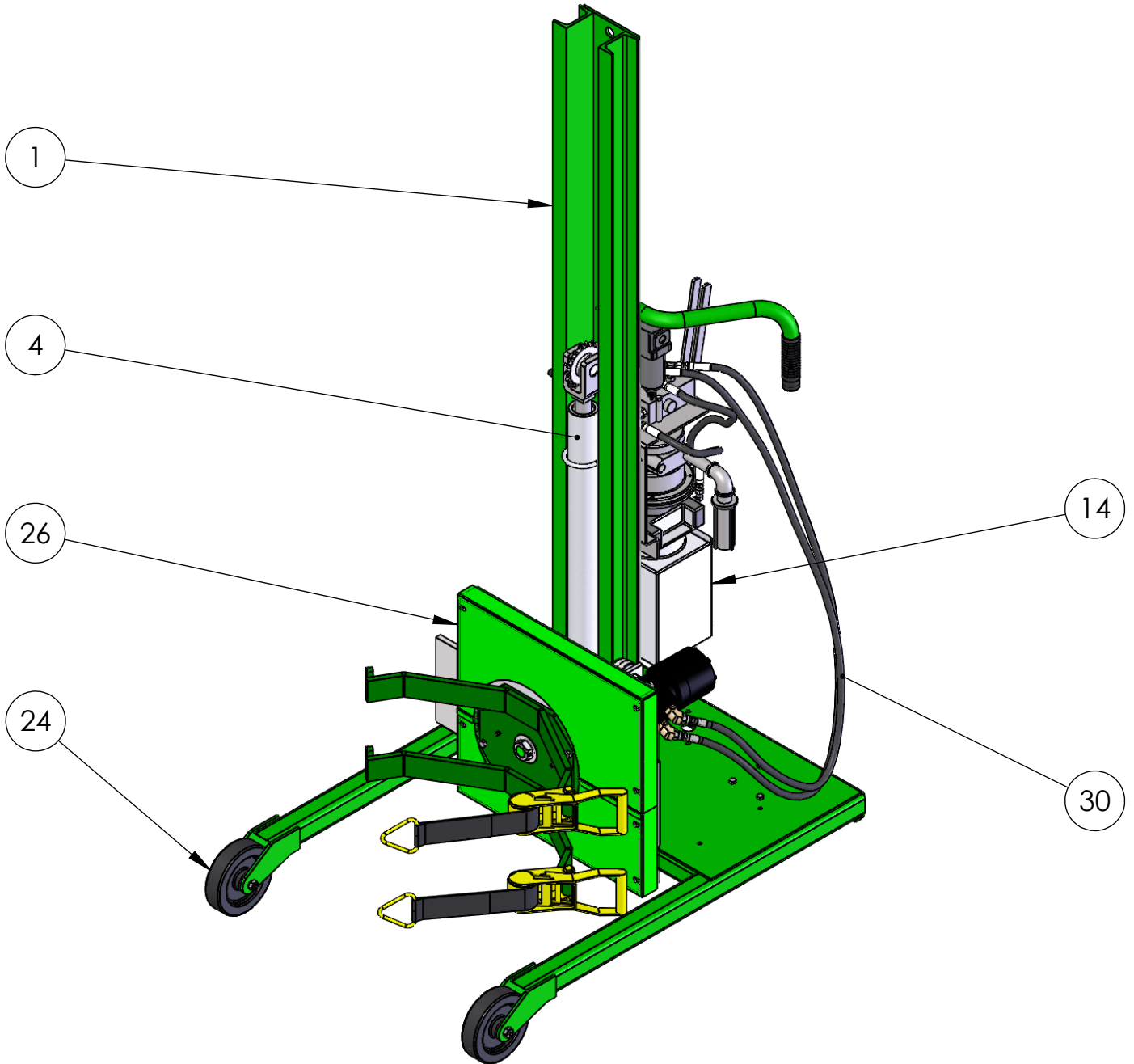


ROTOLIFT-78 AIR

ROTO Lift-90 Air BOM

| ITEM NO. | PART NUMBER | DESCRIPTION | Default/QT Y. |
|----------|-------------|--|------------------|
| 1 | F64328A3 | SL WLDMT-90 | 1 |
| 2 | F64367A4 | BACK PL ASSY | 1 |
| 3 | Z30228A2 | CSTR-4X1-1/2 SWL PCI | 2 |
| 4 | Z20754A9 | CYL ASSY-90 SAE | 1 |
| 5 | F63091A3 | SPROCKET ASSY-50C18 BRG 1.01 (purchased) | 1 |
| 6 | Z10123A0 | S-HHC 5/16-18X1 | 8 |
| 7 | Z10036A6 | NUT-HEX KEPS 5/16-18 | 10 |
| 8 | Z10072A1 | PIN-SPG 1/4X1-1/2 | 1 |
| 9 | F52067A6 | PIN-CLEVIS 1.00X2.375 (KANBAN) | 1 |
| 10 | Z10241A7 | BOLT-U 5/16-18 X 2-1/2 | 1 |
| 11 | Z10113A2 | S-HHC 1/4-20X1-1/4 | 2 |
| 12 | Z10043A7 | NUT-NYL NE 1/4-20 | 2 |
| 13 | Z50085A2 | GRIP-HDL 1-1/4" BLK | 2 |
| 14 | F63165A4 | PUMP ASSY/ROTO AIR | 1 |
| 15 | Z40469A9 | DECAL-LOAD CAP 800 | 1 |
| 16 | Z20734A0 | BREATHER 4 SAE SINTERED--COMES WITH CYLINDERS | 1 |
| 17 | Z40457A3 | DECAL-CAUTION STRADDLE LIFT | 1 |
| 18 | Z40473A3 | TAG/SERIAL NUMBER/PRINT 2 COLORS | 1 |
| 19 | F61446A9 | RLR CHAIN ASSY-84 | 1 |
| 20 | Z10207A9 | WASHER-1/4 LOCK INT TOOTH | 4 |
| 21 | Z10020A4 | NUT-HEX FULL 1/2-13 | 1 |
| 22 | Z10331A8 | WASHER-1/2 FLAT SAE | 1 |
| 23 | Z30476A8 | AXLE BOLT ASSY, GREASE, 1/2" X 3" | 2 |
| 24 | Z31606A9 | WHL-6 x 1-1/2 PCI, W/BUSHING | 2 |
| 25 | F69299A4 | FRT SECT ASSEMBLY/ROTOLIFT | 1 |
| 26 | F57496 | CHAIN SPACER (KANBAN) | 1 |
| 27 | Z11690A5 | S-SHC 1/4-20X1-1/2 ASTM A574 | 4 |
| 28 | Z20729A5 | HOSE-39.50/604/613 | 1 |
| 29 | Z20741A1 | HOSE-66.00/613/682 | 2 |

F88589B9 - ROTO Lift-78 Air SAE

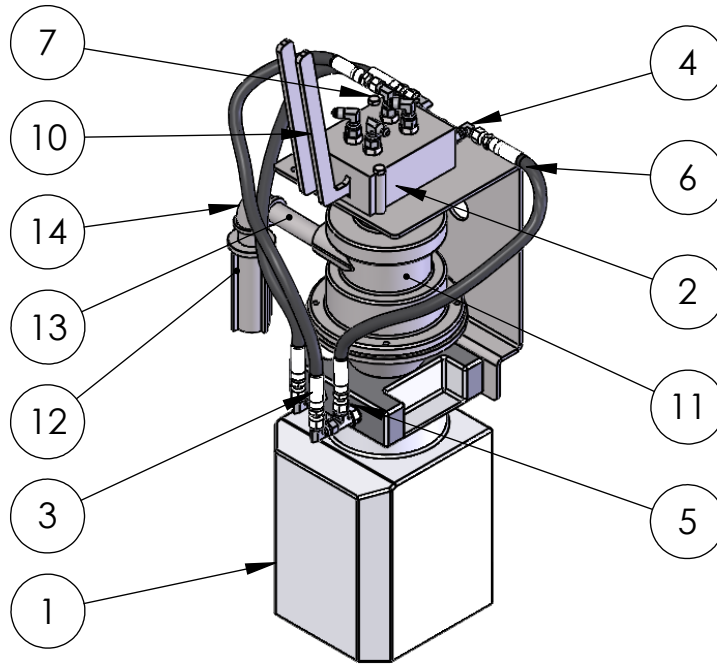


ROTOLIFT-78 AIR

ROTO Lift-78 Air BOM

| ITEM NO. | PART NUMBER | DESCRIPTION | Def ault /QT Y. |
|----------|-------------|---|--------------------------|
| 1 | F64331A0 | SL WLDMT-78 | 1 |
| 2 | F64367A4 | BACK PL ASSY | 1 |
| 3 | Z30228A2 | CSTR-4X1-1/2 SWL PCI | 2 |
| 4 | Z20753A0 | CYL ASSY-78 SAE | 1 |
| 5 | F63091A3 | SPROCKET ASSY-50C18 BRG 1.01 (purchased) | 1 |
| 6 | Z10123A0 | S-HHC 5/16-18X1 | 8 |
| 7 | Z10036A6 | NUT-HEX KEPS 5/16-18 | 10 |
| 8 | Z10072A1 | PIN-SPG 1/4X1-1/2 | 1 |
| 9 | F52067A6 | PIN-CLEVIS 1.00X2.375 (KANBAN) | 1 |
| 10 | Z10241A7 | BOLT-U 5/16-18 X 2-1/2 | 1 |
| 11 | Z10113A2 | S-HHC 1/4-20X1-1/4 | 2 |
| 12 | Z10043A7 | NUT-NYL NE 1/4-20 | 2 |
| 13 | Z50085A2 | GRIP-HDL 1-1/4" BLK | 2 |
| 14 | F63165A4 | PUMP ASSY/ROTO AIR | 1 |
| 15 | Z40469A9 | DECAL-LOAD CAP 800 | 1 |
| 16 | Z20734A0 | BREATHER 4 SAE SINTERED--COMES WITH CYLINDERS | 1 |
| 17 | Z40457A3 | DECAL-CAUTION STRADDLE LIFT | 1 |
| 18 | Z40473A3 | TAG/SERIAL NUMBER/PRINT 2 COLORS | 1 |
| 19 | F60860A8 | RLR CHAIN ASSY-78 | 1 |
| 20 | Z10207A9 | WASHER-1/4 LOCK INT TOOTH | 4 |
| 21 | Z10020A4 | NUT-HEX FULL 1/2-13 | 1 |
| 22 | Z10331A8 | WASHER-1/2 FLAT SAE | 1 |
| 23 | Z30476A8 | AXLE BOLT ASSY, GREASE, 1/2' X 3" | 2 |
| 24 | Z31606A9 | WHL-6 x 1-1/2 PCI, W/BUSHING | 2 |
| 25 | Z20751A2 | FRL COMBINATION | 1 |
| 26 | F69299A4 | FRT SECT ASSEMBLY/ROTOLIFT | 1 |
| 27 | F57496 | CHAIN SPACER (KANBAN) | 1 |
| 28 | Z11690A5 | S-SHC 1/4-20X1-1/2 ASTM A574 | 4 |
| 29 | Z20739A5 | HOSE-39.50/604/613 | 1 |
| 30 | Z20740A3 | HOSE-66.00/613/682 | 2 |

ROTOLIFT-78 AIR



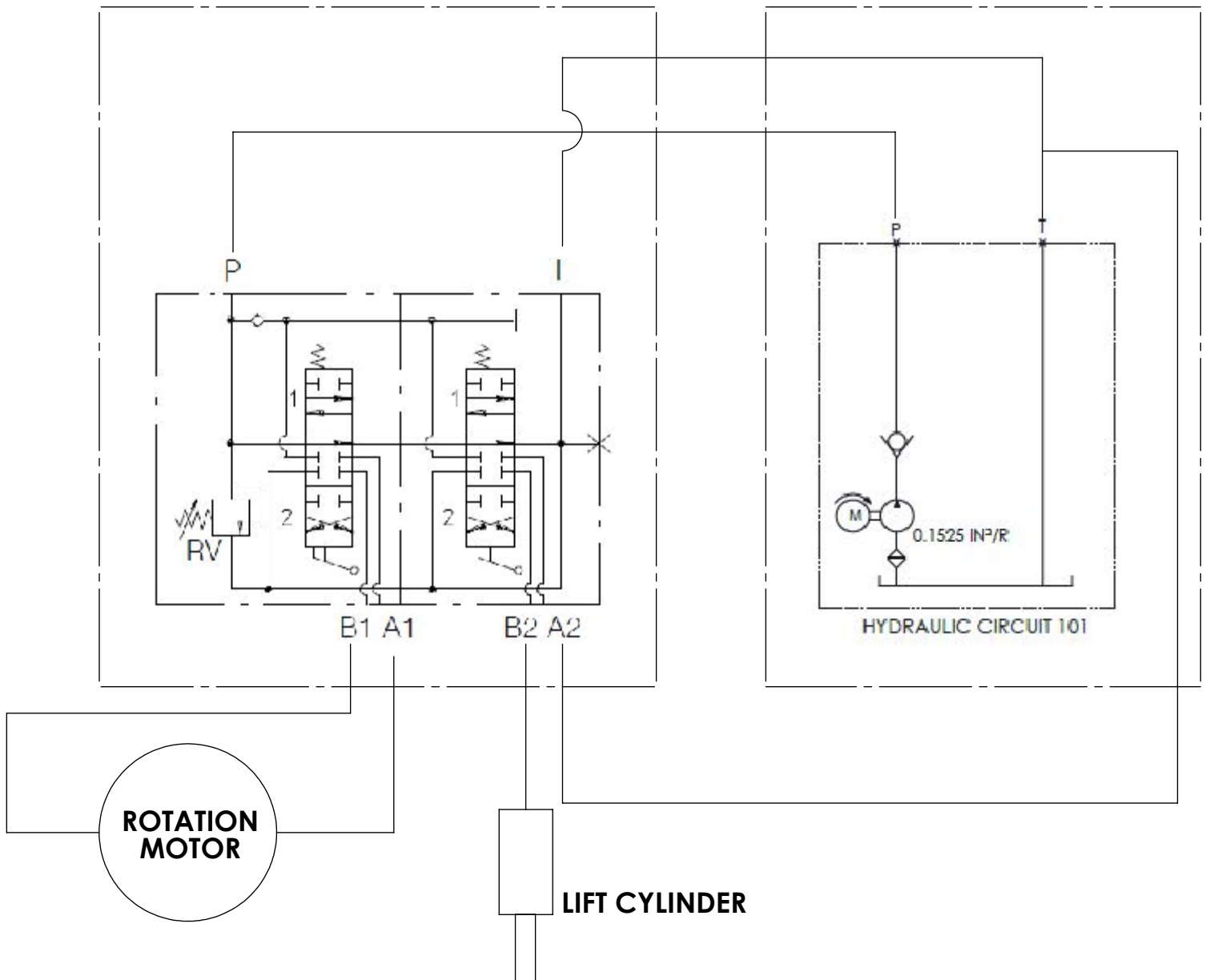
| ITEM NO. | PART NUMBER | DESCRIPTION | QTY. |
|----------|-------------|-----------------------------------|------|
| 1 | Z20890A5 | PUMP AND TANK ASSY | 1 |
| 2 | F57415 | MNT-PUMP/ROTO AIR | 1 |
| 3 | Z20597A5 | FTG STR 6400-4-6-O | 7 |
| 4 | Z20704A0 | FTG 90 6500-4-4 SWL | 8 |
| 5 | Z20681A3 | FTG TEE 6804-4-6-4 | 1 |
| 6 | Z20736A8 | HOSE-20.00/613 | 3 |
| 7 | Z10117A8 | S-HHC 1/4-20X2-1/4 | 2 |
| 8 | Z10571A1 | S-HHC 3/8-16X3/4 | 2 |
| 9 | Z10035A7 | NUT-HEX KEPS 1/4-20 | 2 |
| 10 | Z20888A3 | MANUAL VALVE BODY-DBL HNDL | 1 |
| 11 | Z20153A2 | MOTOR-AIR REV 3HP | 1 |
| 12 | Z20689A5 | MUFFLER, AIR LARGE | 1 |
| 13 | Z20764A9 | NIPPLE-PIPE 1/2X3 GALV | 1 |
| 14 | Z20765A8 | FTG 90 REDUCING 3/4X1/2 NPTGLV | 1 |

ROTOLIFT-78 AIR

HYDRAULI SCHEMATIC (ROTO Lift - AIR)

Z20888A3 (DUAL LEVER VALVE)

Z20890A5 (HYDRAULIC PUMP)



Warranty and Limitation of Liability

Valley Craft products are warranted for a period of one (1) year from date of shipment from Valley Craft's plant to be free from defects in material and workmanship under correct use, normal operation and proper application. However, parts of other than Valley Craft manufacture are subject ONLY to the original manufacturer's warranty. Valley Craft's obligation under warranty shall be limited to repair or exchange, at Valley Craft's option, FOB origin factory, of any Valley Craft product or part which proves to be defective as provided herein. Valley Craft reserves the right to either inspect the product at Buyer's location, or require it to be returned to the factory for inspection. The warranty contained herein does not extend to goods damaged, or subject to accident, abuse or misuse after shipment from Valley Craft's factory, nor to goods altered or repaired by anyone other than an authorized Valley Craft representative.

Buyer or user shall not alter, modify or use a Valley Craft product for anything other than its intended function. Valley Craft shall not in any way be responsible for the consequences of any such alteration, modification or misuse.

VALLEY CRAFT MAKES NO EXPRESS WARRANTIES OTHER THAN THOSE WHICH ARE SPECIFICALLY DESCRIBED HEREIN. Any description of the goods sold hereunder, including any references to Buyer's specifications and any descriptions in catalogs, circulars and other written material published by Valley Craft, is for the sole purpose of identifying such goods and shall not create an express warranty that the goods shall conform to such descriptions.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY STATES VALLEY CRAFT'S ENTIRE AND EXCLUSIVE LIABILITY AND BUYER'S EXCLUSIVE REMEDY FOR ANY CLAIM OR DAMAGES IN CONNECTION WITH VALLEY CRAFT PRODUCTS, THEIR DESIGN. SUITABILITY FOR USE, INSTALLATION OR OPERATION OR FOR ANY CLAIMED DEFECTS. VALLEY CRAFT WILL IN NO EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES WHATSOEVER, NOR FOR ANY SUM IN EXCESS OF THE PRICE RECEIVED FOR THE GOODS FOR WHICH LIABILITY IS CLAIMED.

Technical Assistance/Warranty Procedure

What's Covered:

- Parts and Labor to correct manufacturer's defect within one year of purchase.
- Freight Cost

What's Not:

- Normal wear items (seal kits, bearings, tires, etc.)

What Voids the Warranty:

- Dirt/Grime that directly causes malfunction of product
 - Abuse (i.e. Overloading, damaged, not properly maintained, etc.)
 - Product altered by customer
- *See "Items not Under Warranty" below for items that have the warranty voided.

Items Under Warranty (less than one year old):

- Warranty replacement parts are provided only when the problem can be identified with near certainty. If not, the customer will return item to Valley Craft, freight collect, for troubleshooting and/or repair. When repaired, product will be returned to customer,



Valley Craft is a family-owned company based in Minnesota. Founded in 1953 with the introduction of the first hand truck with a brake, Valley Craft has grown to be a world class manufacturer known for producing material handling, storage, and safety solutions that truly stand the test of time.

Our commitment to building only the most rugged and reliable products - together with a relentless and uncompromising dedication to customer satisfaction is what sets Valley Craft apart.

Through thoughtful and intelligent design, we have helped transform the way people work. Over the years, we have helped solve some of the most complex material handling challenges. We help our customers to become better organized and to work smarter, safer, and more efficiently. As our breadth of products continues to evolve with every new innovation, our core values stay the same:

Professional Grade Quality.... Built to Last.... Made in the U.S.A.

Valley Craft, Inc.

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