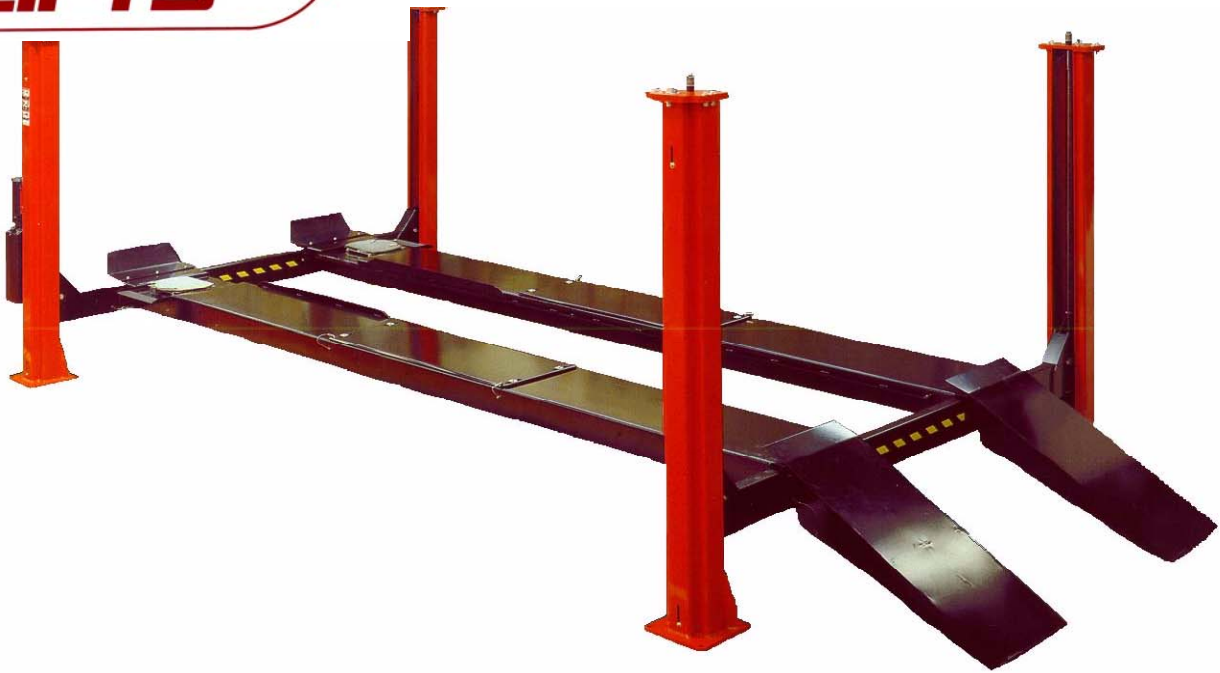




# INSTALLATION and OPERATION MANUAL



**READ and SAVE THIS INSTRUCTION MANUAL**

**18K CLOSED FRONT 4 POST  
210" W/B  
S418CX  0   - A/S, R/B/M, 1/3**



## THE FOLLOWING APPLIES TO ALL LIFTS

### IMPORTANT SAFETY INSTRUCTIONS

1. When using this lift, basic safety precautions should always be followed, including the following:
2. Read all instructions in this manual and on the lift.
3. Inspect lift daily. Do not operate if it malfunctions or problems have been encountered.
4. Never attempt to overload the lift. The manufacturer's rated capacity is shown on the identification label on the power side column. Do not override the operating controls or the warranty will be void.
5. Only trained and authorized personnel should operate the lift. Do not allow customers or bystanders to operate the lift or be in the lift area.
6. **Caution! Never work under the lift unless the mechanical safety locks are engaged.**
7. Always keep the lift area free of obstruction and debris. Grease and oil spills should always be cleaned up immediately.
8. Never raise vehicle with passengers inside.
9. Before lowering check area for any obstructions
10. To protect against the risk of fire, do not operate lift in the vicinity of open containers of flammable liquids.
11. Adequate ventilation should be provided when working on internal combustion engines.

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## 1. GENERAL SPECIFICATIONS

Maximum Capacity:	18,000 lb.	8,165 kg
Overall Length:	304-7/8"	7468mm
Overall Width:	147-1/2"	3797mm
Down Position Height:	9-1/2"	241mm
Maximum Lifting Height:	72"	1829mm
Maximum Wheel Base:	210"	5334mm
Power Requirements:	230 Volts AC, 1Ph., 20 Amp, 60Hz.	
Shipping Weight:	5,465 lb.	2,484 kg

## 2. TOOLS REQUIRED FOR INSTALLATION

ROTARY HAMMER DRILL  
3/4" CONCRETE DRILL BIT  
4' LEVEL  
HAMMER (for anchor installation)  
PRY BAR (for shim installation)  
CHALK LINE (lift location)  
TAPE MEASURE  
ELECTRICAL TAPE  
STEP LADDER (adjusting cables and/or safety ladder in posts)  
SIDE CUTTERS (for cutting shipping straps)  
4 WORK STANDS (set up)  
STANDARD SOCKETS AND WRENCHES  
ALLAN KEY SET  
SCREWDRIVER SET  
FLOOR JACK OR ENGINE HOIST

### **3. CONTENTS**

The lift is packaged to protect it from any damage that may occur during shipping. The two deck assemblies and crossmembers are packaged together with the accessory boxes strapped to them.

#### **Main Structural Components:**

- 1 - Left Side Deck Assembly (complete with hydraulic cylinder, sheaves and cables)
- 1 - Right Side Deck Assembly
- 1 - Front Crossmembers Assemblies (with air cylinder release locks and sheaves)
- 1 - Rear Crossmember Assembly (with air cylinder release locks and sheaves)

#### **Accessory Box Components**

##### **Box 1 Contents:**

- 1 - Power Post (with safety ladder)
- 3 - Post (with safety ladder)

##### **Box 2 Contents:**

- 1 - Hardware Kit (with separate packaging list)
- 2 - Ramp pin
- 2 - Front Wheel Stop
- 4 - Sheave Cover
- 2 - Approach Ramp
- 1 - Coupler, 1/4" NPT
- 2 - Recoil Hose
- 1 - Power Unit 220v/1Ph/3hp
- 10ft - 1/4" DIA. Polytube
- 10ft - 3/8" DIA. Polytube
- 1 - Hose Guard
- 1 - Hydraulic Hose Assembly (16ft. lg.)
- 2 - Cable Tie
- 1 - Air Valve & Filter Assembly
- 1 - Flow Control
- 1 - Installation & Operation Manual
- 1 - Lift it Right Manual "ALI"
- 1 - Lift it Right Safety Tips
- 1 - "ALI" Standards
- 1 - "ALI" Quick Reference Guide
- 8 - Glide Bearing

# GENERAL LIFT SPECIFICATIONS

## FRONT

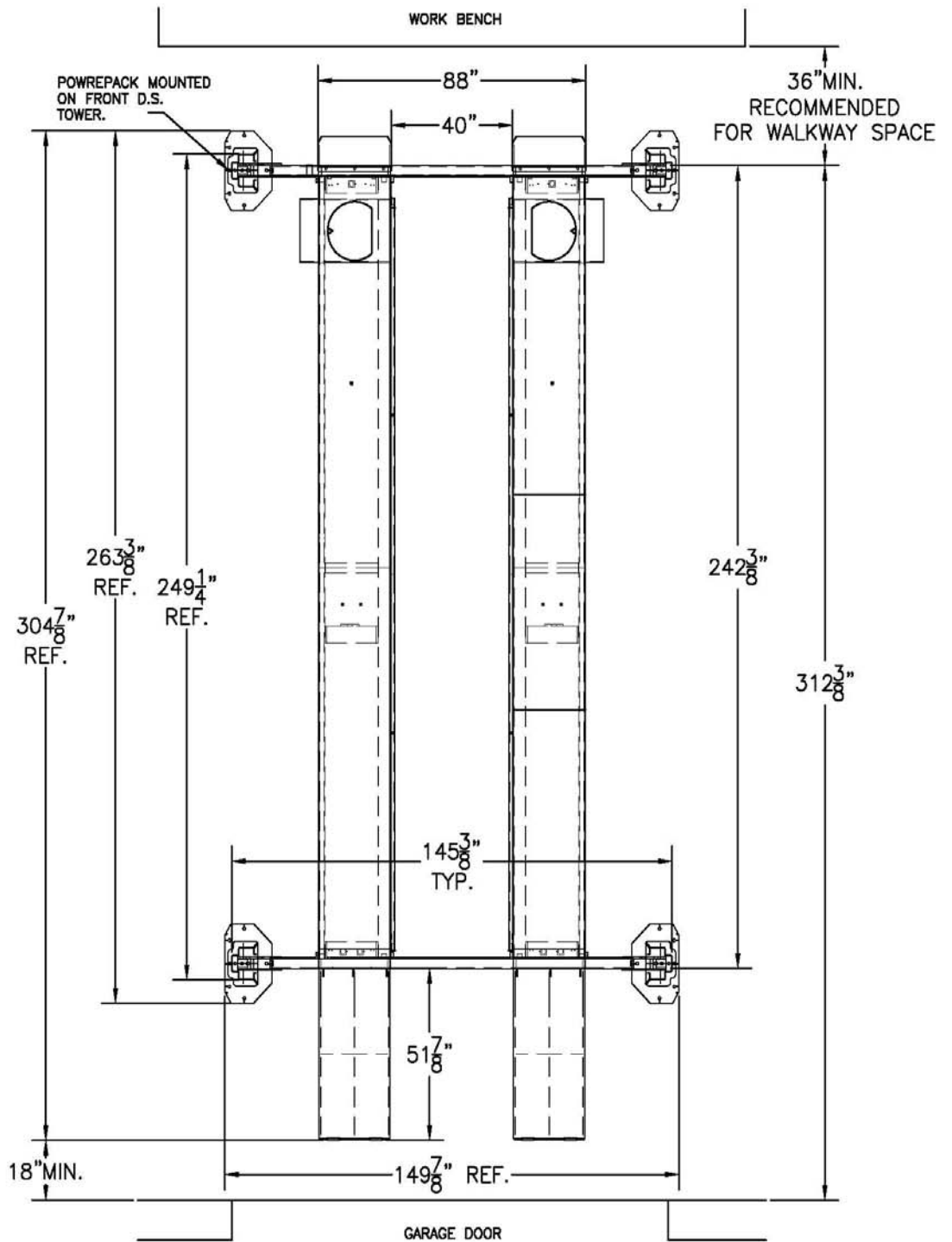


Figure 1

#### 4. INSTALLATION INSTRUCTIONS

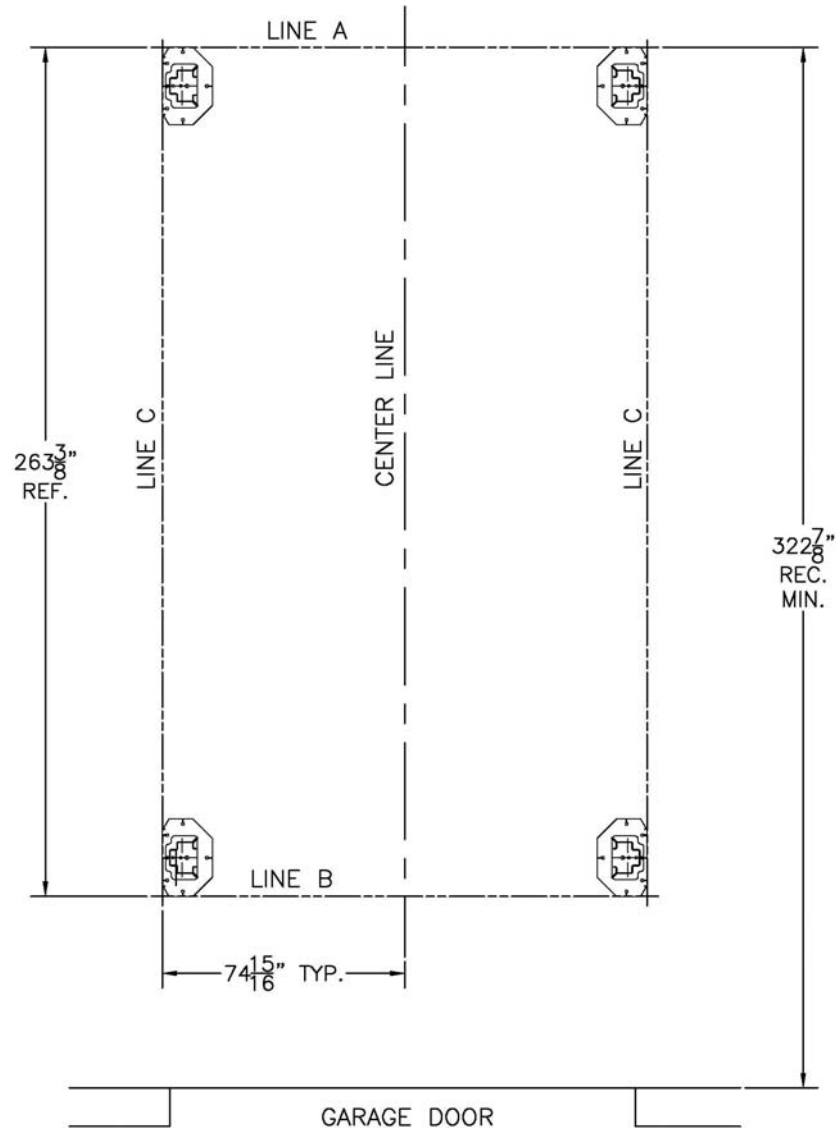
**PLEASE TAKE THE TIME TO READ THESE INSTRUCTIONS COMPLETELY. A QUICK CHECK OF THE CONTENTS OF THE ACCESSORY BOX WOULD ALSO DECREASE THE INSTALLATION TIME.**

- Gather the tools and materials required for the installation.
- Select the location best suited for your lift.

**NOTE:** In determining lift area check for the following:

- Ease of driving a vehicle on and off the lift.
- Overhead obstructions, low ceiling height, overhead doors, overhead heaters etc.
- Floor obstructions, uneven floor in lift area, floor drains, work benches, electrical wiring in floor, etc.
- **Concrete grade:** Lifts should only be installed on level concrete floors with a minimum thickness of five (5) inches. Concrete must have a minimum strength of 4,000 psi. and should be aged 30 days prior to the installation of the lift.
- An outline matching the dimensions shown in Figure 2 will need to be marked on the floor. Refer to Figure 2 for outline dimensions. Refer to General Lift Specifications for overall lift dimensions.

## 4.1 CHALK LINE LAYOUT



**Figure 2**

- **Refer to Figure 2.** Make a chalk line parallel to the doorway at least  $323\text{-}7/8$ " in from the doorway. This will be the location for the front face of the tower baseplate. Call this line "A".
- Determine the center of the doorway and bay. Make a centerline to intersect with line "A".
- Make a chalk line parallel to line "A",  $263\text{-}3/8$ " back toward the door. Call this line "B".
- Make two chalk lines spaced  $74\text{-}15/16$ " to the left and right side of the centerline intersecting line "A" and line "B". Call these lines, line "C". These will be the lines that the outside edge of the tower baseplate runs along.



## FRONT AND REAR CROSSMEMBER ASSEMBLIES

### IMPORTANT

**NOTE:** To determine the front, rear, left side and right side of the decks check the following:

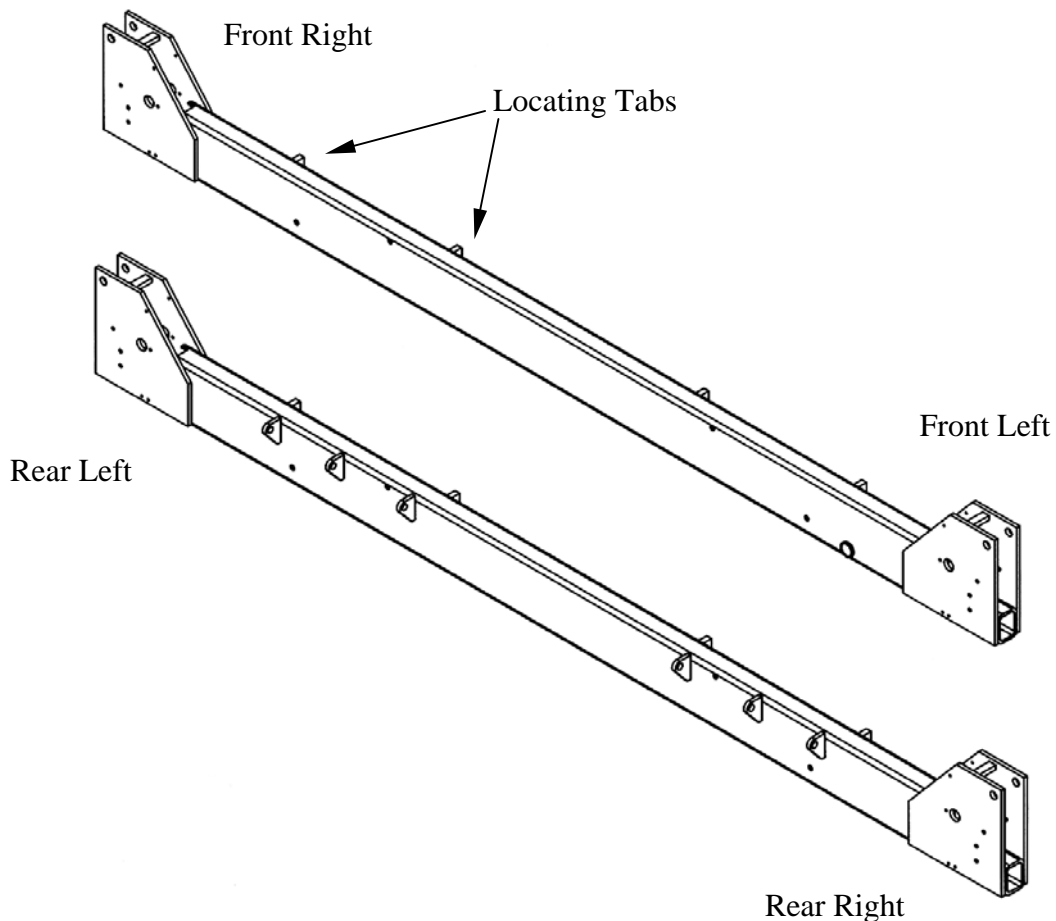
- The left side deck has the hydraulic cylinder mounted to its underside and includes the cables. The work steps, attached to the turn plate pocket cutouts, are located at the front of the lift and should point outward when installed (see Figure 1).

**NOTE:** To determine the front and rear, of the crossmembers check the following:

- The rear crossmember has three ears for attaching the approach ramps. There are 2 locating tabs on each side of the crossmembers for positioning the decks between the crossmembers (see Figure 3).

### FRONT AND REAR CROSSMEMBERS

**Figure 3**



- Remove the left and right deck assemblies from their packaging and place them on axle stands as follows (see Figure 2):
  - Place the left deck assembly so that the inside edge lies along chalk line “B”
  - Place the right deck assembly so that the inside edge lies along chalk line “C”
  - Position both decks so that the front edge lies along chalk line “A”
- Using a floor jack or engine hoist, move the front crossmember into position in front of the lift and the rear crossmember into position at the rear of the lift. Refer to Figure 3 to identify the front and rear crossmembers.

**NOTE: THE PULLEYS (SHEAVES) IN THE DECK ASSEMBLY DO NOT NEED TO BE REMOVED FOR ASSEMBLY.**

- Check the part numbers of the cables (located on each stud) to determine routing.

2-1360	FRONT LEFT
2-1361	FRONT RIGHT
2-1362	REAR LEFT
2-1363	REAR RIGHT

**NOTE: Refer to Figure 4 and the Parts Manual, Cable Routing Diagram for a detailed layout of cable routing.**

- Remove the pulleys (sheaves) from the crossmembers along with the spacers and nylon thrust washers. Place these to the side of the crossmembers.
- Run each cable through the crossmembers and out past the safety lock (see Figure 4).
- Raise the front crossmember up to the level of the decks and attach it using the ½”DIA x 4½”LG Hex Bolts, ½” Washers, ½” Lockwashers and ½” Hex Nuts found in the polybag labeled “D” (Decks).

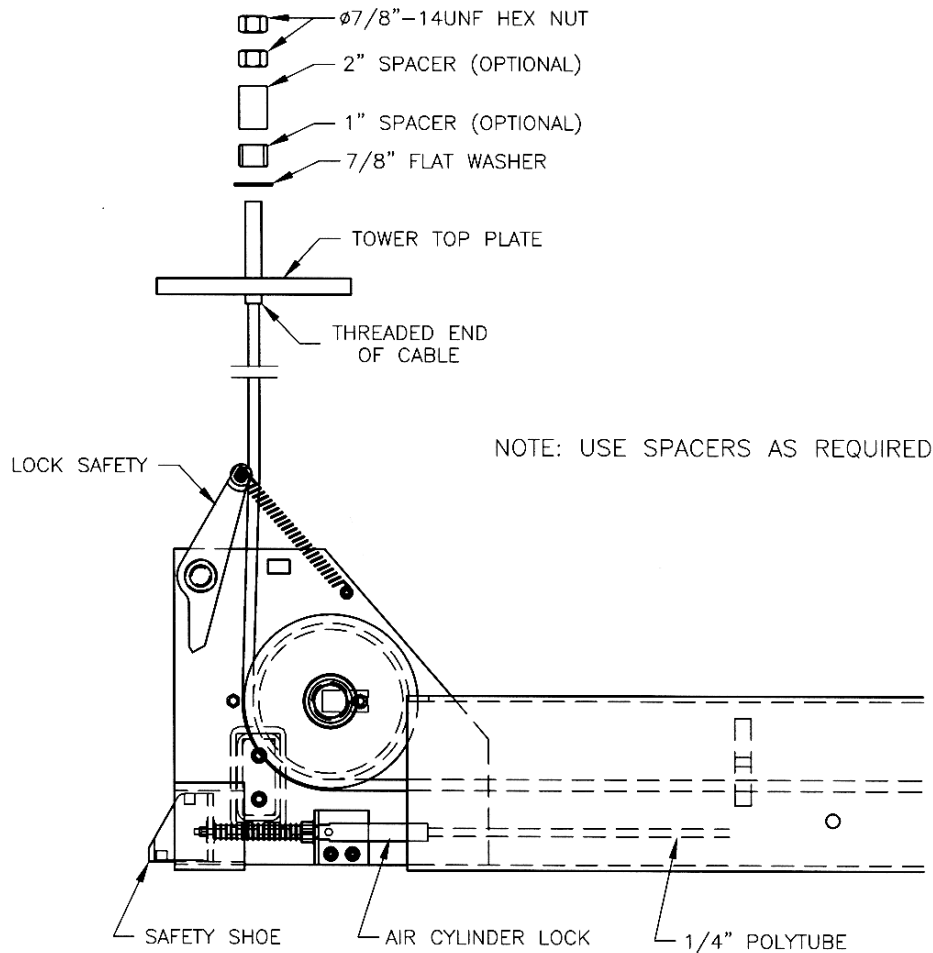
**NOTE: THE CABLES RUNNING INSIDE THE CROSSMEMBERS MUST PASS BETWEEN THE ½”DIA x 4½”LG HEX BOLTS USED TO FASTEN THE CROSSMEMBERS TO THE DECK ASSEMBLIES.**

- Repeat the previous step for the rear crossmember.
- Position the decks between the locating tabs on the crossmembers using the ½”-13UNC x 1”LG Set Screws found in the polybag labeled “D” (Decks). The set screws go in the outer locating tabs and should be tightened until the inside of the edge of the deck assemblies are flush with the inside edge of the locating tabs on the crossmembers.
- At this point the decks should be completely fastened to the crossmembers and the threaded portion of each cable should be routed through the crossmembers, past the lock safety. The crossmember pulleys should be removed and lying at each corner of the lift. Before proceeding, check that the layout matches that shown in Figure 2, that

the lift is square and that there is a 40" gap between the decks along their entire length.

## CABLE ROUTING DIAGRAM

Figure 4



**NOTE: THE 40" DIMENSION SHOWN IN FIGURE 1 AND FIGURE 2 IS CRITICAL AS IT IS NECESSARY TO ALLOW THE JACKING BEAMS TO ROLL FREELY.**

- Remove the slider block weldments from both crossmembers by removing the 3/8"-16UNC x 1"LG Hex HD Bolts and 3/8" Lockwashers attaching them to the crossmember.
- Determine which tower is the power post (the tower with the mounting plate for the powerpack) and position it in the front left corner. Position the remaining three towers at the other corners of the lift.
- Slide each tower around the crossmember so that the holes for attaching the slider blocks are roughly halfway inside the channel.

- Place the Glide Bearings (located in the accessory box) on the slider block weldments and bolt the slider block weldments back onto the crossmember using the 3/8”-16UNC x 1”LG Hex HD Bolts and 3/8” Lockwashers removed previously.
- Replace all of the crossmember pulleys, being sure to lock the sheave pins with the 3/8”-16UNC x 1”LG Hex HD Bolt. Be sure to replace pulleys and spacers in the same arrangement as they were removed (see Figure 4 and the Parts Manual, Front Crossmember Assembly).
- Pull the towers backwards (away from the decks) so that the slider blocks are flush with the tower roll form.

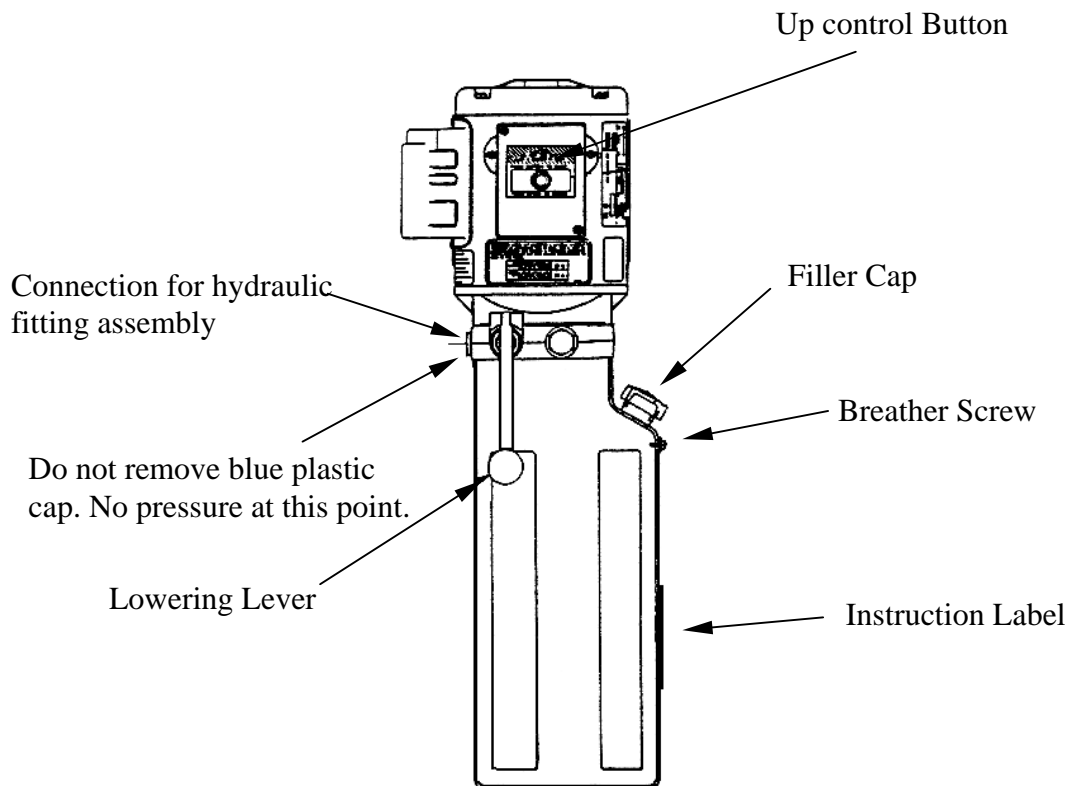
**NOTE: THE CYLINDER ROD MUST BE FULLY EXTENDED IN ORDER TO ATTACH THE THREADED ENDS OF THE CABLES TO THE TOP PLATE OF THE TOWERS. TO EXTEND THE CYLINDER ROD, THE POWERPACK AND HYDRAULIC KIT MUST BE INSTALLED AND THE ELECTRICAL CONNECTIONS MADE (SEE FOLLOWING SECTIONS).**

#### 4.2 POWER PACK INSTALLATION

**NOTE: WHEN WORKING WITH HYDRAULIC LINES AND VALVES, IT IS IMPORTANT TO KEEP ALL COMPONENTS CLEAN AND FREE OF DIRT.**

#### POWER PACK DETAILS

Figure 5



- Install the power pack to the mounting bracket on the front face of the left front post using the 5/16"-18UNC × 1"LG. hex head bolts and 5/16" washers, lockwashers and hex head bolts, found in polybag "C" (Powerpack). Refer to the Parts Manual, Power Post Tower Assembly Diagram.

### 4.3 HYDRAULIC INSTALLATION

- Refer to Parts Manual, Hydraulic and Air Kit Diagram
- Locate the supply lines: 1/4" and 3/8" polytube (10ft.), 3/8" flexible hydraulic line (16ft.), and install the hose guard to cover all three lines. All four items are found in the accessory box

**TIP: TAPE ONE END OF THE HYDRAULIC HOSE TO THE TWO POLYTUBES AND FEED THEM THROUGH HOSE GUARD. NOW REMOVE THE TAPE.**

- Feed the hose guard through the opening on the front left crossmember assembly.
- Connect the end of the flexible hydraulic hose (3/8" JIC, F SWIVEL) to the fitting at the cylinder. **DO NOT OVER TIGHTEN.**
- Connect the other end of the flexible hydraulic hose (3/8" JIC, F SWIVEL) to the flow control on the powerpack.

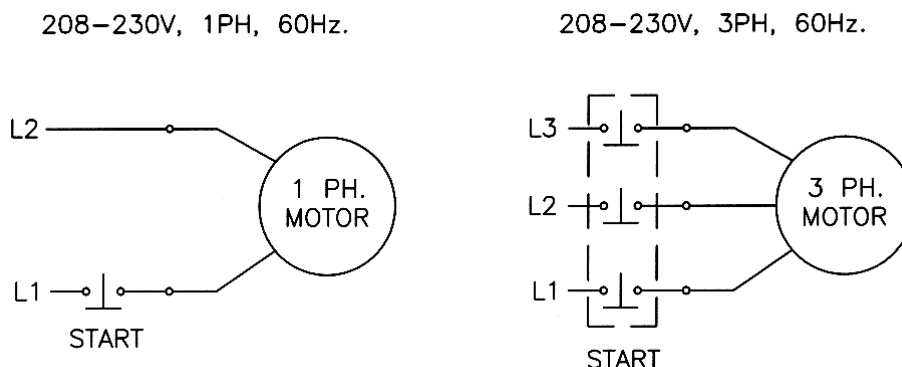
### 4.4 ELECTRICAL CONNECTIONS

**CAUTION: ALL ELECTRICAL CONNECTIONS SHOULD BE MADE BY A QUALIFIED ELECTRICIAN.**

Refer to Figure 6, Electrical Diagram for electrical connections.  
Electrical Breaker Size Recommendation: 20Amps

#### Electrical Diagram for 230V/1Ph.

**Figure 6**



## 4.5 CABLE INSTALLATION

- Remove the hydraulic cap from the fitting at the base of the hydraulic cylinder.
- Depress the lowering lever on the powerpack, while using an air chuck to blow air into the breather hole at the base of the cylinder to extend the rod.
- Extend the rod until it reaches its full stroke.
- Fill the reservoir on the powerpack with ISO 32 (10 Hydraulic Weight) hydraulic fluid.
- Install the threaded stud end of the cables to the tower top plates using the 7/8" Flat Washer, and two (2) 7/8"-14UNF Hex Nuts with Cable Spacers as required (see Figure 4). The Hex Nuts, Washers and Cable Spacers are located in polybag "A" (cables).

## 4.6 AIR INSTALLATIONS

**NOTE: FOR ALL AIR INSTALLATIONS REFER TO THE HYDRAULIC AND AIR KITS DIAGRAM IN THE PARTS MANUAL.**

- Install the air valve and filter assembly (found in the accessory box) to the mounting bracket on the power post. To do this pull off the pushbutton and unscrew the plastic nut. Slide the assembly into the mounting bracket and re-fasten the plastic nut so that the assembly is attached to the top hole. Replace the pushbutton by pressing it firmly back onto the air valve and filter assembly.

**NOTE: MOST OF THE 1/4" AND 3/8" POLYTUBE CONNECTIONS HAVE BEEN MADE IN THE FRONT AND REAR CROSSMEMBER ASSEMBLIES. THE 1/4" AND 3/8" POLYTUBES THAT RUN THE LENGTH OF THE DECK ARE ALSO INSTALLED. THE 1/4" POLYTUBE IS USED FOR THE AIR CYLINDER LOCKS, THE 3/8" POLYTUBE IS USED FOR THE AIR OUTLETS TO THE JACKING BEAMS.**

**CAUTION: DO NOT OVER TIGHTEN CONNECTORS.**

- Install the two manifolds beneath the front and rear pulley boxes (left side deck assembly) using the 1/4"-20UNC x 2" Hex HD bolts, 1/4" Hex Nuts and 1/4" Lockwashers found in polybag "B" (pneumatics).
- Attach the 90° 1/8" NPT 1/4" Polytube Elbows, 1/8" NPT 1/4" Polytube Adapters, and 1/8" NPT plug to the manifolds as shown in the Hydraulic and Air Kits diagram in the Parts Manual. Pneumatic fittings are found in polybag "B" (pneumatics).
- Connect all of the 1/4" polytubes, coming out of the front left and rear left crossmember assemblies and the front and rear of the left side deck, to the manifolds.

- Connect the 1/4" polytube from the hose guard (i.e. supply line) to the manifold at the front of the left side deck assembly. Connect the opposite end to the Air Valve and Filter assembly on the front left tower.
- Connect the 3/8" polytube from the hoseguard to the 3/8" fitting at the front of the left deck assembly (jacking beam air bracket). Connect the opposite end to the Air Valve and Filter assembly on the front left tower.

**NOTE: FOR THOSE UNITS EQUIPPED WITH JACKING BEAMS, THIS IS THE APPROPRIATE TIME TO INSTALL THEM. CONSULT THE JACKING BEAM INSTRUCTION MANUALS FOUND IN EACH JACKING BEAM BOX.**

- Hook up an air supply to the inlet of the water trap on the Air Valve and Filter Assembly located on the front left post.
- Check for air leaks.
- Check the operation of the air cylinder locks by pressing the pushbutton on the Air Valve and Filter Assembly on the front left post. This should cause the safety shoes to be pulled into the crossmembers, releasing the lift from the safety racks.
- The pneumatics are now completely installed. Press the "UP" button on the power pack and continue until the lift is fully supported by the cables.

**NOTE: MAKE CERTAIN THAT THE MECHANICAL SAFETY LOCKS AND CABLE ROLLERS ARE WORKING PROPERLY.**

#### **4.7 ANCHOR INSTALLATION**

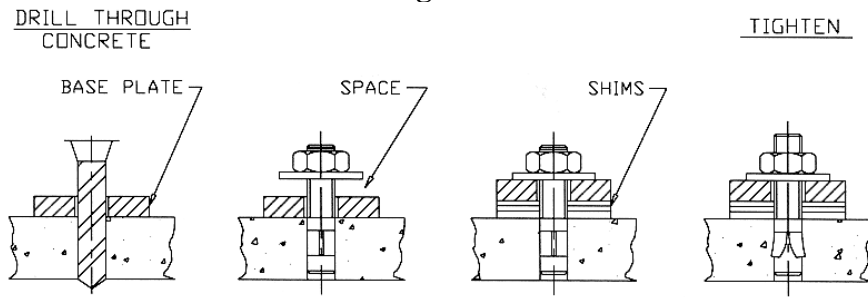
**CAUTION: USE THE CORRECT WEDGE ANCHOR BOLTS. (SUPPLIED)**

- Check all layout dimensions on Figure 1 and Figure 2 before continuing with anchor installation.
- Ensure that the lift is fully supported by the cables and is at a level just above the work stands.
- The 3/4" x 5 1/2" LG. wedge anchor bolts supplied allow for the thickness of the base plates plus a maximum of 1/2" of shim stock. **DO NOT USE THE ANCHOR BOLTS SUPPLIED IF MORE THAN 1/2" OF SHIM STOCK IS USED.**
- Using a 3/4" concrete drill bit and rotary hammer drill, drill through the concrete floor in the four (5) anchor bolt location holes on each baseplate.

**Concrete grade: Lifts should only be installed on level concrete floors with a minimum thickness of five (5) inches. Concrete must have a minimum strength of 4,000 psi. and should be aged 30 days prior to the installation of the lift.**

## ANCHOR INSTALLATION

Figure 7

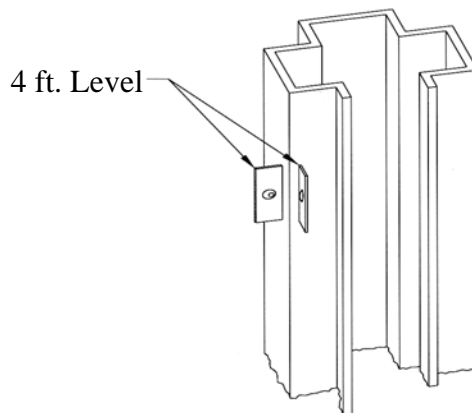


- Use a 4' level, to level the posts vertically (shim if necessary) as shown in Figure 8.
- Tighten all anchor bolts to a torque of 150 ft. lb.

**NOTE: IN CASES WHERE THE FLOOR IS EXTREMELY OUT OF LEVEL, THE MECHANICAL SAFETIES MAY NOT ENGAGE ON THE SAME LOCK.**

## POST LEVELING

Figure 8



### 4.8 DECK LEVELING PROCEDURE

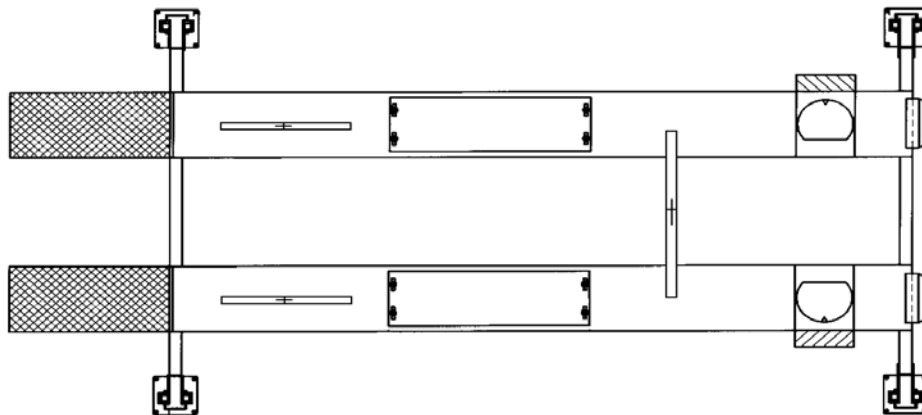
- Raise the lift so that it is fully supported by the cables and is not resting on the safety ladders.
- Using a 4' level, check the level of the decks front to rear and side to side as shown in Figure 9.
- Lower the lift onto the nearest safety
- Adjust the cable lengths by tightening or loosening the two (2) 7/8"-14UNF hex nuts attached to each cable at the tower top plate to raise or lower each corner.
- Repeat the preceding steps until the lift is completely level when supported by the cables.



- Raise the lift so that the deck is supported by the cables and is not resting on the safety ladders.
- Loosen the 3/8"-16 UNC × 1" LG. hex bolts at the bottom and top of each safety ladder (on the back side of the tower) and pull the safety ladders up until they come into full contact with each safety shoe on the crossmember assemblies.
- When flush with the safety shoe, tighten the two (2) 5/8"-11 UNC hex nuts at the top of each safety ladder and the 3/8"-16 UNC × 1" LG hex bolts at the bottom and top of each safety ladder (on the back side of the tower).
- Raise the lift and check that the ladders engage evenly.

## DECK LEVELING

Figure 9



- Raise the lift to its full height and check for full operating height of 72". This measurement is taken from the top of the decks to the floor.
- Install the approach ramps using the ramp pins, 1/8" x 2" LG cotter pins, 1/2" washers, and approach ramps provided. The ramps and ramp pins are located in the accessory box, the cotter pins and washers are found in polybag "E" (Misc.). Ensure the proper operation of the ramps.
- Install the front wheel stops using the 1/2"-13 UNC × 1" LG hex bolts and 1/2" lockwashers found in polybag "E" (Misc.).
- Install the (4) sheave covers over the sheaves in the crossmember assembly. These are found in the accessory box.
- Cycle the lift several times to check proper operation of the cables, safety lock, air locks, etc.

**STOP IMMEDIATELY IF THE LIFT IS NOT OPERATING PROPERLY.**

- Make any necessary adjustments and check again for proper operation.

**5. SAFETY AND OPERATING INSTRUCTIONS**

1. **Inspect** the lift daily. Do not operate if malfunctions occur or damaged parts have been found.
2. **Never** attempt to **overload** the lift. The manufacturer's rated capacity is shown on the serial number tag on the power post.
3. **DO NOT OVERRIDE** the safeties. The mechanical safeties are designed to engage automatically on the way up. Press the up button on the power pack to go up. When the desired height is reached, release the power pack up button and lower the lift onto the safety. To lower the lift, raise off of the safety locks, then press the air release valve button and the lowering release lever at the same time.
4. **Only trained** and authorized personnel should operate the lift. Do not allow customers or bystanders to operate the lift or be in the lift area.
5. **Caution**, never work under the lift unless the mechanical safety locks are engaged.
6. **Before driving** vehicle on, make sure lift is in the fully down position.
7. **Before removing** the vehicle from the lift, make sure the lift is in the fully down position and ensure that all tools have been removed from the deck surfaces.
8. **Always keep** the lift area free from debris. Grease and oil spills should always be cleaned up immediately. **Never leave** any tools or parts laying on the decks.
9. **Never operate** lift with passengers in vehicle.
11. **Always** raise the lift off safety locks before lowering.

**NOTE: DO NOT ATTEMPT TO OPERATE THIS LIFT IF ANY PART IS NOT WORKING PROPERLY OR YOU HAVE NOT READ THE COMPLETE OPERATING INSTRUCTION MANUAL.**

## **6. RECOMMENDED MAINTENANCE**

### **DAILY**

1. Check general operation of lift.
2. Check operations of mechanical safety locks.
3. Check operation of air release valve for air leaks.
4. Check operation of cables and pulleys.
5. Check and drain water trap filter bowl.

### **MONTHLY**

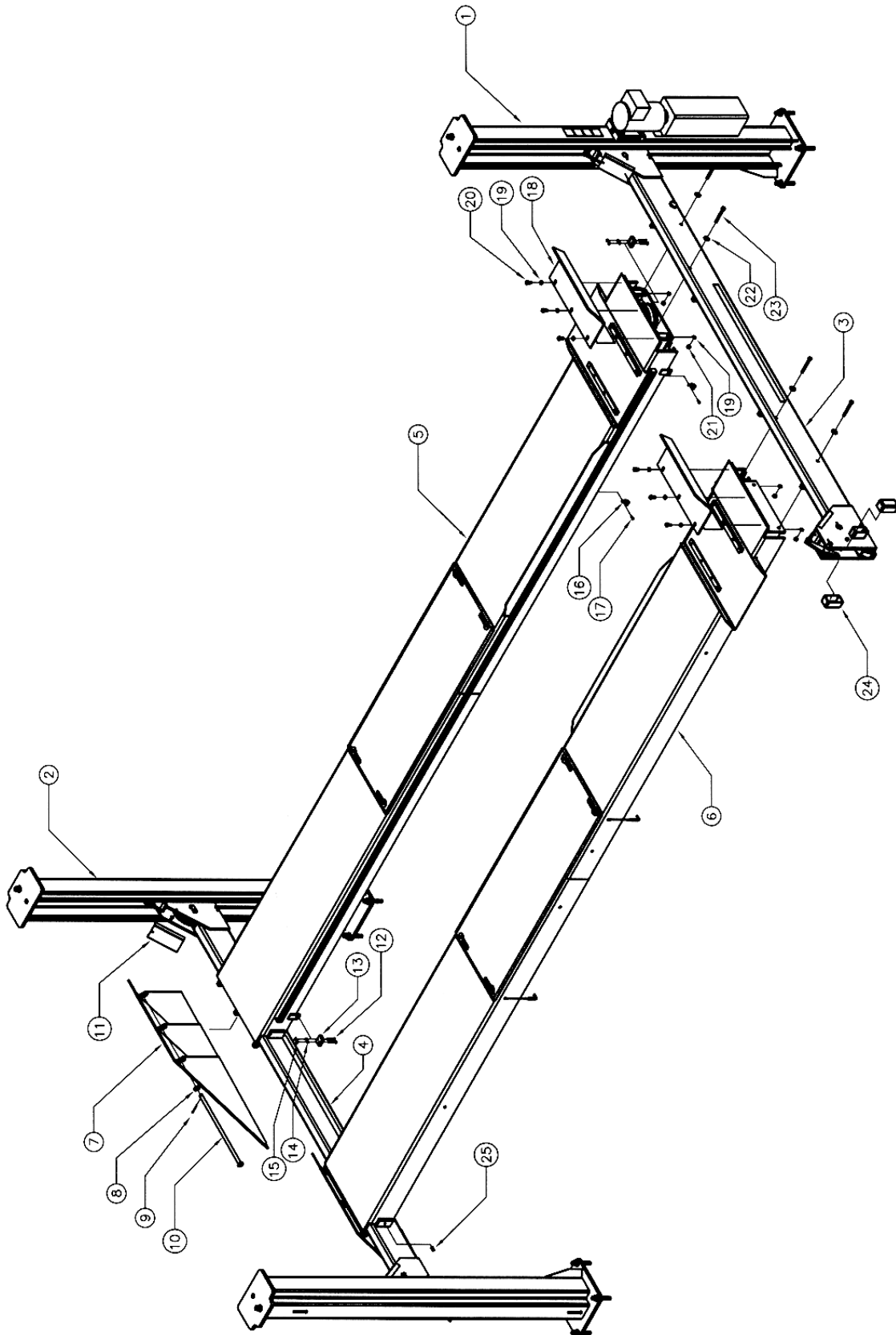
1. Check anchor bolts (if loose re-torque to 150 ft. lbs.). Replace concrete if anchors continue to loosen.
2. Check all air and hydraulic hoses, fittings and cylinders for leaks.
3. Check level of oil in power pack reservoir when lift is in the lowered position. Add if required.
4. Check lifting cables for wear, separation or breaks. If found, replace cables immediately. Lubricate cables with oil or a light grease.
5. Check and adjust cables if lifting is uneven. Make adjustments with weight on lift.
6. Check all fasteners and tighten as required.
7. Check all pulleys on crossmember assembly and under the runways for wear or play. Replace immediately. Pulley pins are held in place by a 3/8" - 16 x 1" lg. Hex Hd Bolt. Make certain that this bolt is in position and tight.
8. Check and adjust safety racks if lift is not level on safety, or if safeties do not engage properly.
9. Check and clean full floating rear steer plates. Lubricate with oil or light grease.
10. Lubricate all safety shoes and locks.

### **QUARTERLY SLIP PLATE MAINTENANCE**

1. Remove top Slip Plate covers by first removing the four (4) shoulder bolts on each cover.
2. Remove polyethylene bearing cages insuring that all the delrin bearings remain in the cages. Additional delrin bearings may be purchased if required.
3. Clean runway surface and touch up any paint wear with a rust resistant paint. Allow paint to dry thoroughly.
4. To obtain optimum performance, the position of the slip plate bearing cage should be rotated every quarter to change the wear pattern. With the first quarter maintenance, flip the bearing cage over to the opposite side. With the second quarter maintenance, rotate the bearing cage end-to-end. With the third quarter maintenance, flip bearing cage over to the opposite side. Fourth quarter maintenance should see the bearing cage rotated back to the original position.
5. Quarterly maintenance will optimize performance and contribute to longer slip plate life..

## 7. PARTS LIST

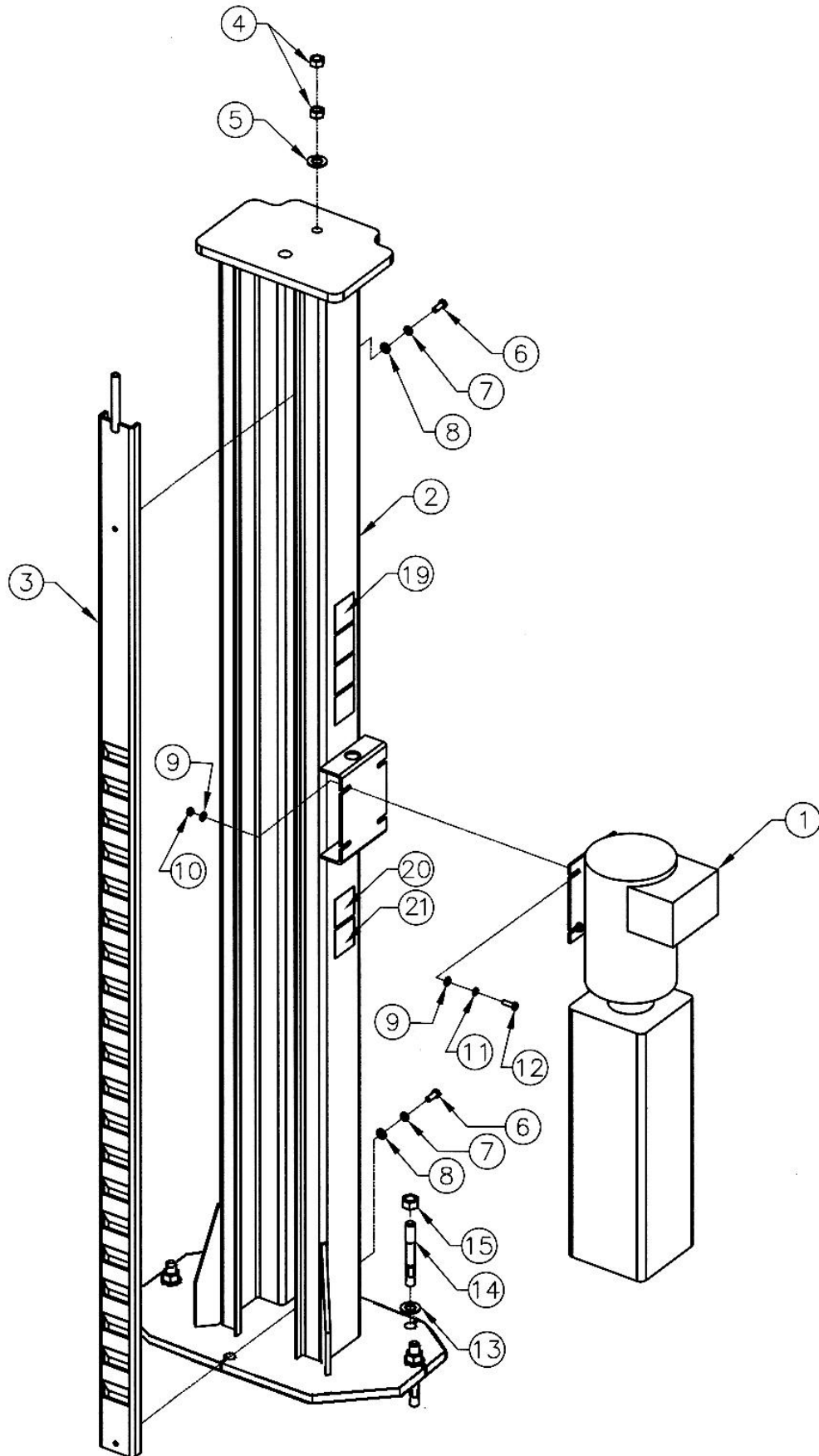
### 7.1 LIFT ASSEMBLY



## 7.2 PARTS LIST - LIFT ASSEMBLY

ITEM	QTY.	DESCRIPTION	PART #
1	1	TOWER WELDMENT - POWER POST	4-0636
2	3	TOWER WELDMENT	4-0630
3	1	FRONT CROSSMEMBER WELDMENT	4-0627
4	1	REAR CROSSMEMBER WELDMENT	4-0626
5	1	DECK WELDMENT - L.S. (ALIGNMENT)	4-0629
	1	DECK WELDMENT - L.S. (SERVICE)	4-0916
6	1	DECK WELDMENT - R.S. (ALIGNMENT)	4-0628
	1	DECK WELDMENT - R.S. (SERVICE)	4-0917
7	2	APPROACH RAMP WELDMENT	3-0680
8	2	FLAT WASHER, 3/4"ID	6-0738
9	2	COTTER PIN, 1/8" x 2"LG	6-0115
10	2	APPROACH RAMP PIN	2-1381
11	4	SHEAVE COVER	2-1379
12	4	HEX HD BOLT, 1/4"-20UNC x 2"LG	6-0177
13	2	MANIFOLD	1-1057
14	4	LOCKWASHER, 1/4"ID	6-0056
15	4	HEX NUT, 1/4"-20UNC	6-0032
16	2	HOSE CLAMP, 3/4"	6-1683
17	2	SELF THREADING SCREW, #10 x 3/4"LG	6-0297
18	2	FRONT WHEELSTOP	2-0998
19	14	LOCKWASHER, 1/2"ID	6-0059
20	6	HEX HD BOLT, 1/2"-13UNC x 1"LG	6-0045
21	8	HEX NUT, 1/2"-13UNC	6-0035
22	8	FLAT WASHER, 1/2"ID	6-0063
23	8	HEX HD BOLT, 1/2" x 4 1/2"	6-1694
24	8	GLIDE BEARING	2-0772
25	4	SET SCREW, 1/2"-13UNC x 1"LG	6-0726

### 7.3 TOWER ASSEMBLY

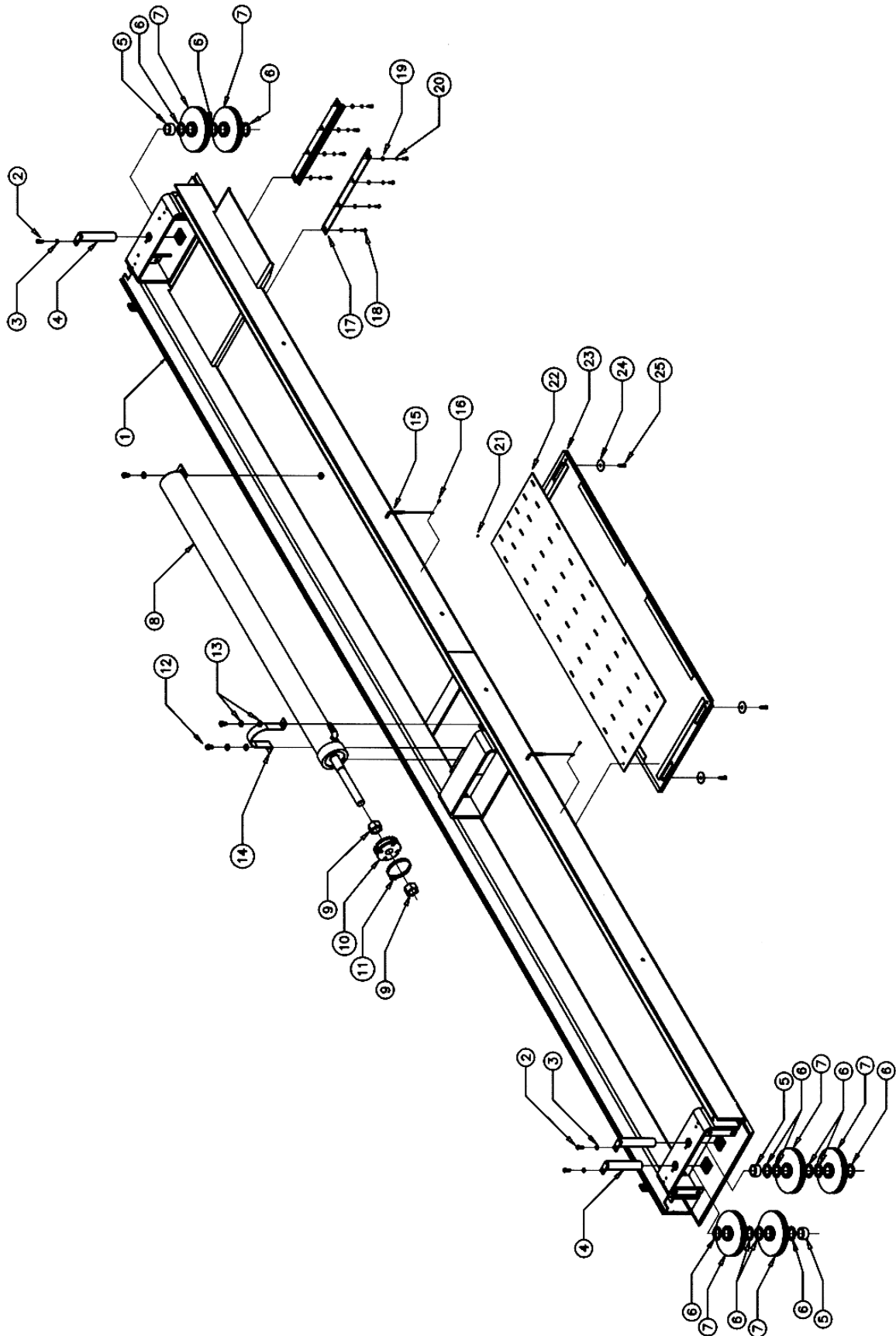


## 7.4 PARTS LIST – POWER TOWER ASSEMBLY

ITEM	QTY.	DESCRIPTION	PART #
1	1	POWER PACK, 230V/1PH	6-1695
	1	POWER PACK, 230V/3PH	6-2615
2	1	POWER POST WELDMENT	4-0636
3	1	SAFETY RACK WELDMENT	3-0581
4	2	HEX NUT, 5/8"-11UNC, GR8	6-0673
5	1	FLAT WASHER, 3/4" I.D.	6-0738
6	2	HEX HD. BOLT, 3/8"-16UNC X 1"LG., GR.8	6-0668
7	2	LOCK WASHER, 3/8" I.D.	6-0058
8	2	FLAT WASHER, 3/8" I.D.	6-0625
9	8	FLAT WASHER, 5/16" I.D.	6-0295
10	4	HEX NUT, 5/16"-18UNC, GR.8	6-0294
11	4	LOCK WASHER, 5/16" I.D.	6-0674
12	4	HEX HD BOLT, 5/16"-18UNC X 1"LG., GR.8	6-0293
13	5	FLAT WASHER, 3/4" I.D.	6-0738
14	5	WEDGE ANCHOR, 3/4"-10UNC X 5 1/2"LG.	6-1379
15	5	HEX NUT, 3/4"-10UNC	6-0737
19	1	"ATTENTION" DECAL	6-1637
20	1	SERIAL TAG	
21	1	DECAL SET, ALI/WL 200	6-0988

**NOTE: Refer to section 7.1 for other Tower Weldment part numbers.**

### 7.5 DECK ASSEMBLY (LEFT SIDE)



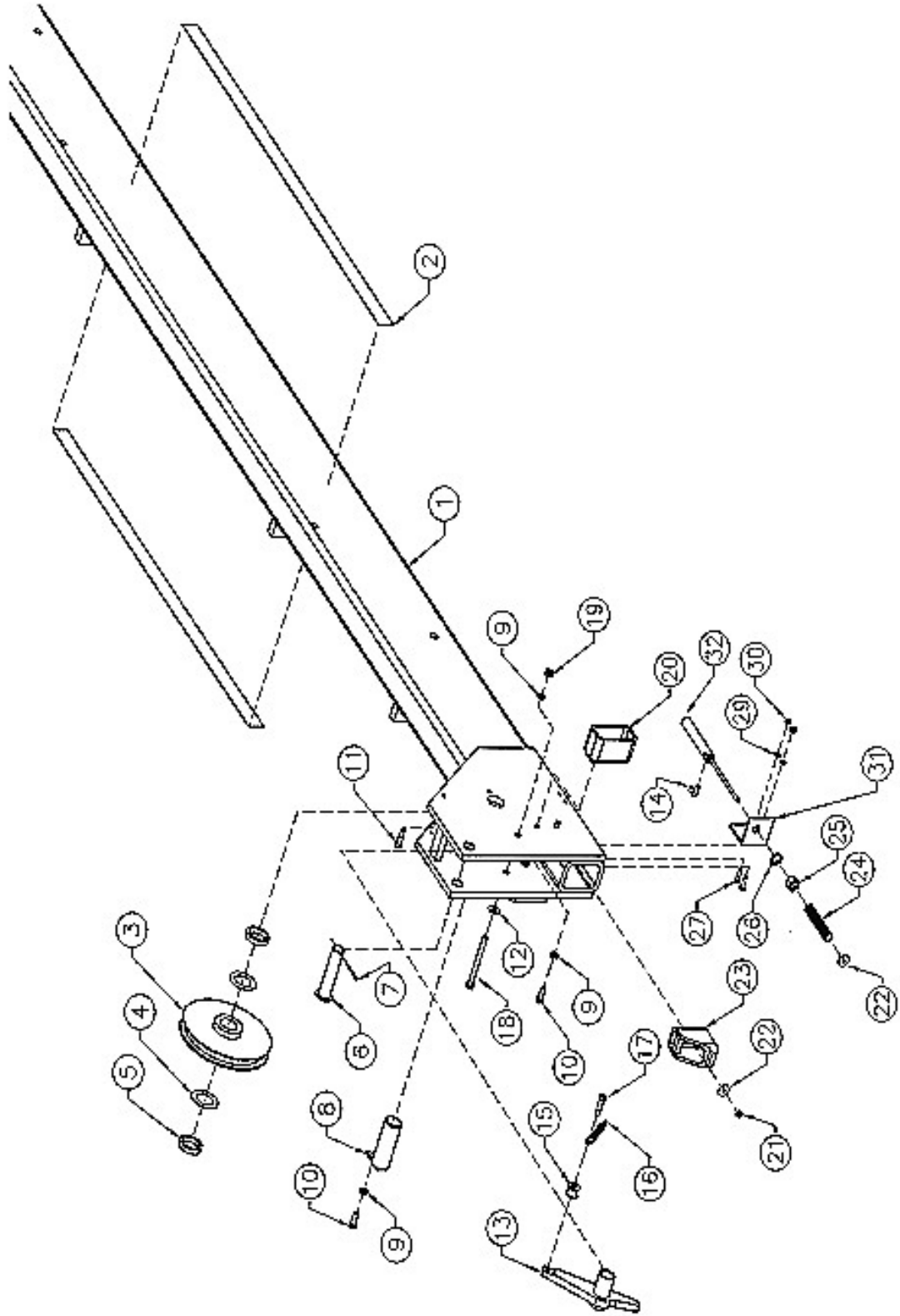


## 7.6 PARTS LIST - DECK ASSEMBLY (LEFT SIDE)

ITEM	QTY.	DESCRIPTION	PART #
1	1	DECK WELDMENT - L.S. (ALIGNMENT)	4-0629
	1	DECK WELDMENT - L.S. (SERVICE)	4-0916
2	3	HEX HD BOLT, 3/8"-16UNC x 1" LG	6-0668
3	3	LOCKWASHER, 3/8"	6-0058
4	3	DECK SHEAVE PIN WELDMENT	2-1355
5	3	SHEAVE SPACER, 1"	1-1697
6	12	NYLON THRUST WASHER	1-0757
7	6	SHEAVE ASSEMBLY	2-1377
8	1	CYLINDER ASSEMBLY - 4" BORE	3-0681
9	2	HEX NUT, 1 3/8"-12UNF	6-1644
10	1	CABLE FLANGE (18K 4POST)	2-1432
11	1	HOSE CLAMP, 4 1/2" DIA	6-0665
12	3	HEX HD BOLT, 1/2"DIA x 3/4" LG	6-0044
13	5	WASHER, 1/2"ID	6-0248
14	1	CYLINDER SLING	1-1747
15	2	LOCKING PIN ASSEMBLY	2-0637
16	2	SELF TAPPING SCREW, #10 x 1/2" LG	6-0505
17	2	RETAINING BAR	2-1391
18	8	HEX HD BOLT, 1/4"-20UNC x 3/4" LG	6-0128
19	8	WASHER, 1/4" ID	6-0060
20	8	LOCKWASHER, 1/4" ID	6-0056
21	1	1/4" BALL BEARING (1 PACKET)	6-0829
22	1	BEARING CAGE	3-0196
23	1	REAR SLIP PLATE (FULL FLOATING)	3-0197
24	4	FLAT WASHER, 2" OD x 13/32" ID	6-0426
25	4	SHOULDER BOLT, 3/8" x 5/8" LG	6-0069

**NOTE: Refer to section 7.1 for Right Side Deck Weldment part numbers.**

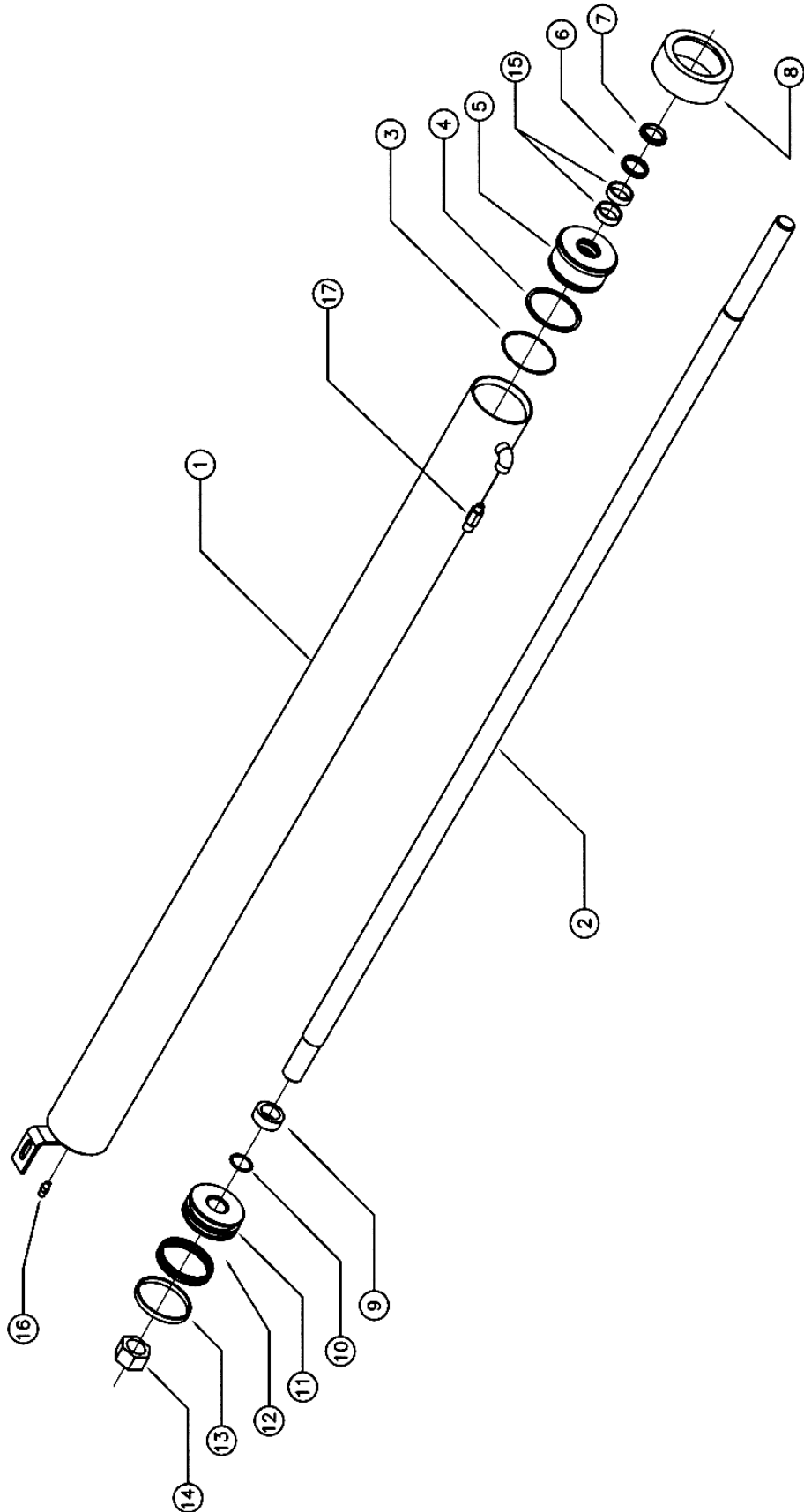
## 7.7 CROSSMEMBER ASSEMBLY



## 7.8 PARTS LIST- CROSSMEMBER ASSEMBLY

ITEM	QTY.	DESCRIPTION	PART #
1	1	FRONT CROSSMEMBER WELDMENT	4-0627
	1	REAR CROSSMEMBER WELDMENT	4-0626
2	2	"CAUTION" TAPE, 40" LONG	6-1125
3	2	SHEAVE ASSEMBLY	2-1377
4	4	NYLON THRUST WASHER	1-0757
5	4	SHEAVE SPACER, 3/8" LONG	1-0786
6	2	LOCK SAFETY PIN WELDMENT	1-1744
7	2	COTTER PIN, 1/8" x 2" LG	6-0115
8	2	CROSSMEMBER SHEAVE PIN WELDMENT	2-1356
9	12	LOCKWASHER, 3/8" I.D.	6-0058
10	10	HEX BOLT, 3/8"-16UNC x 1" LG	6-0668
11	2	SHOULDER BOLT, 3/8" x 5/8" LG	6-0069
12	2	FLAT WASHER, 3/8"	6-0625
13	2	LOCK SAFETY	2-1424
14	2	90 ELBOW, 1/8"NPT x 1/4" POLYTUBE	6-0709
15	2	CABLE ROLLER	1-0766
16	4	TENSION SPRING	1-0768
17	2	SHOULDER BOLT, 3/8" x 1 1/2" LG	6-0801
18	2	HEX BOLT, 3/8"-16UNC x 4 1/2" LG	6-1693
19	2	HEX NUT, 3/8"-16UNC	6-0034
20	4	SLIDER BLOCK WELDMENT	2-1376
21	2	HEX NYLON LOCKNUT, 1/4"-28UNF	6-1563
22	4	FENDER WASHER, 1/4" I.D.	6-0626
23	2	SAFETY SHOE WELDMENT	2-1378
24	2	COMPRESSION SPRING	1-0767
25	2	HEX NUT, 5/8"-18UNF	6-0662
26	2	INTERNAL TOOTH LOCKWASHER, 5/8"ID	6-0663
27	4	HEX BOLT, 1/4"-20UNC x 1" LG	6-0008
29	4	LOCKWASHER, 1/4" I.D.	6-0056
30	4	HEX NUT, 1/4"-20UNC	6-0032
31	2	AIR CYLINDER BRACKET	1-1712
32	2	AIR CYLINDER	6-0651

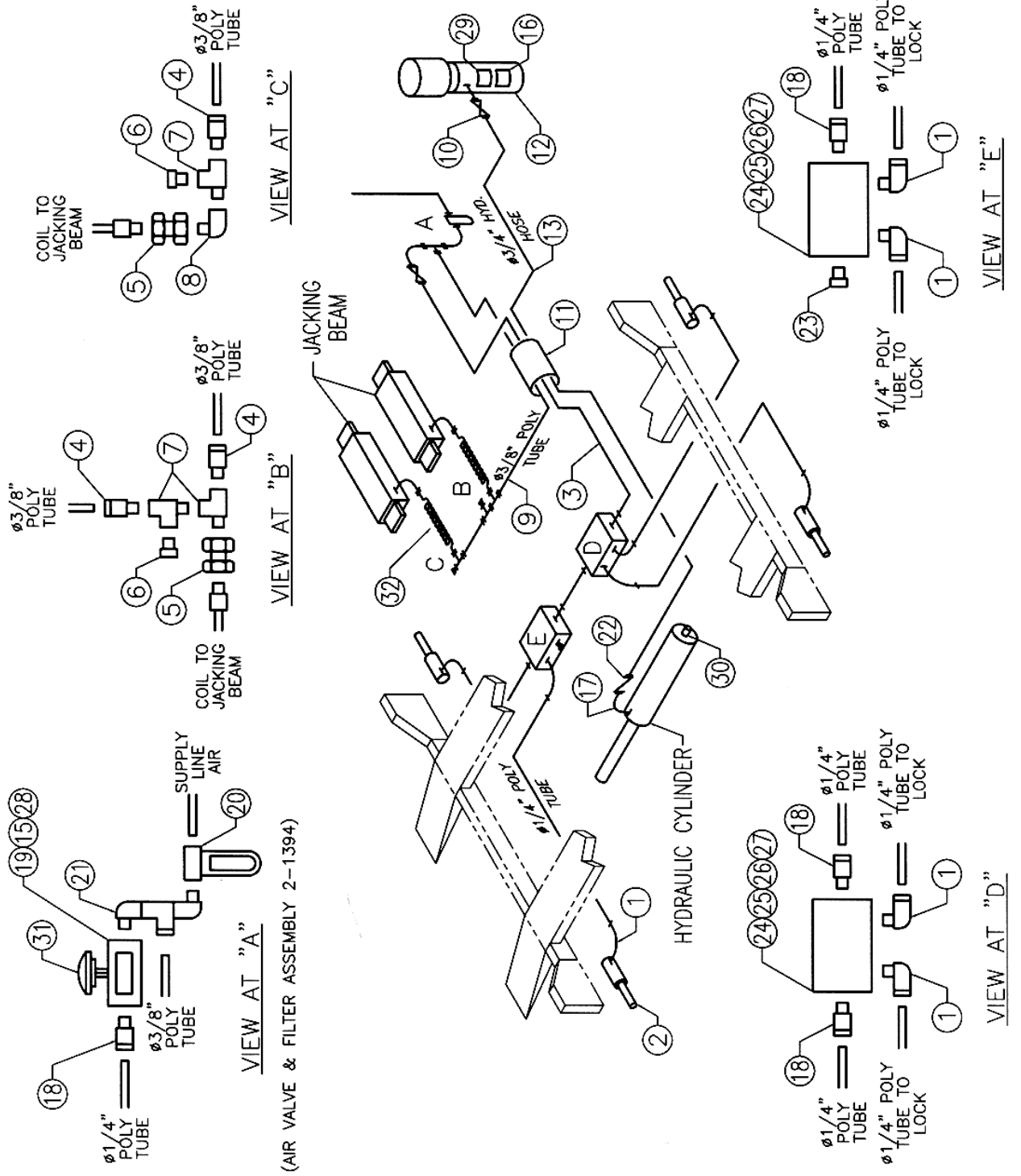
## 7.9 CYLINDER ASSEMBLY



## 7.10 PARTS LIST - CYLINDER ASSEMBLY

ITEM	QTY.	DESCRIPTION	PART #
1	1	CYLINDER TUBE WELDMENT 4" BORE	2-1345
2	1	PISTON ROD - MACHINED	2-1340
3	1	ORING, 4"OD x 1/8"C/S	6-1633
4	1	BACKUP RING	6-1634
5	1	GLAND	3-0673
6	1	ROD SEAL, 1 1/2"ID x 1 7/8"OD x 1/4"	6-1892
7	1	ROD WIPER, 1 1/2"ID x 1 7/8"OD x 3/16"	6-0001
8	1	TUBE NUT	2-1343
9	1	KEEPER WASHER	1-1689
10	1	ORING, 1 3/8"ID x 1/8"C/S	6-1632
11	1	PISTON	2-1344
12	1	ROD SEAL, 4"OD x 3 1/2"ID	6-1636
13	1	WEAR RING, 4"OD x 3/8"WIDE x 1/8"THK	6-1635
14	1	LOCKNUT, 1 3/8"-12UNF	6-1645
15	2	WEAR RING, 1 3/4"OD x 1/2"WIDE x 1/8"THK	6-1686
16	1	ADAPTOR, 1/8"NPT-M TO 1/4"JIC-M	6-0280
17	1	VELOCITY FUSE - 8GPM	6-1684

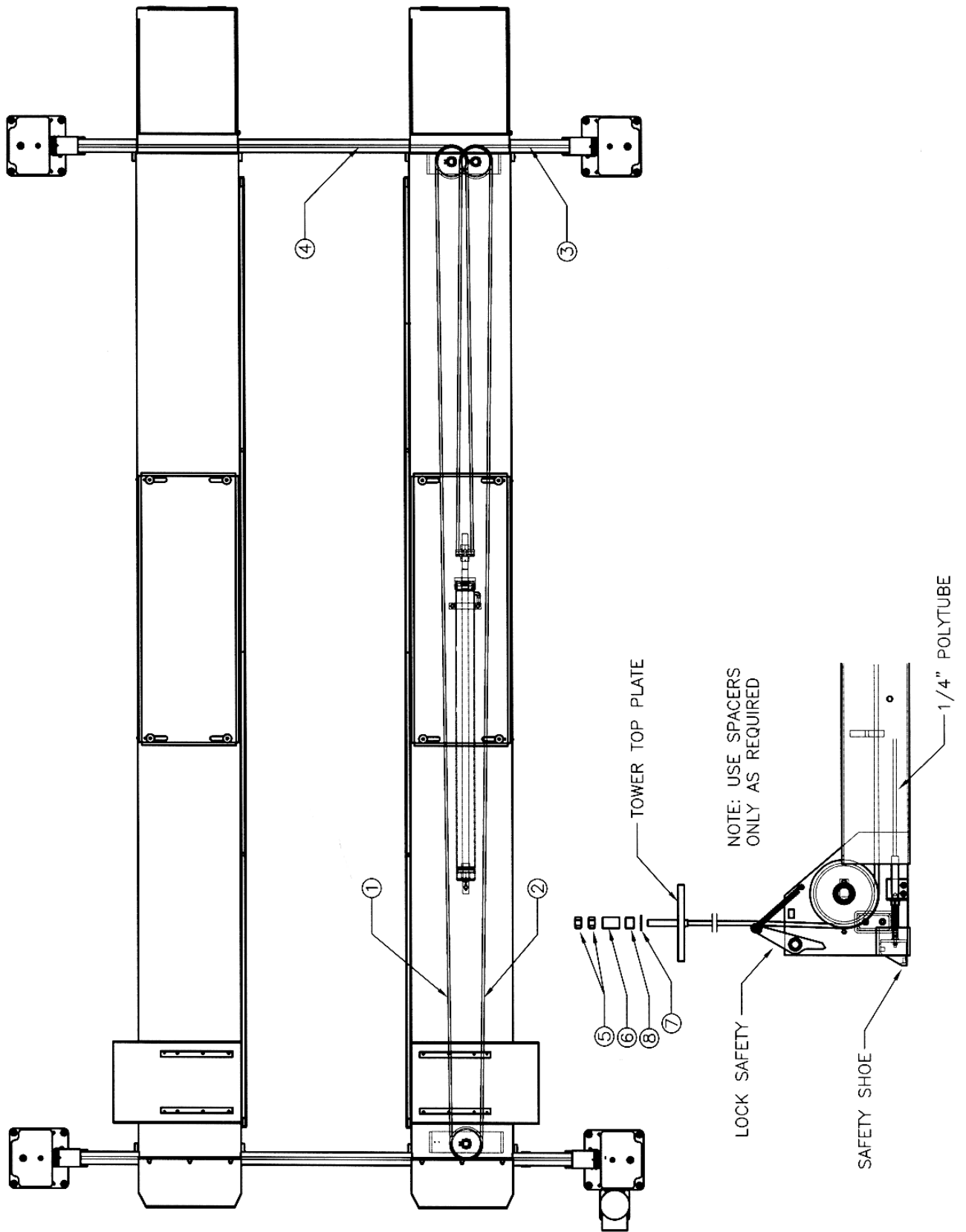
# 7.11 HYDRAULIC AND AIR KIT



## 7.12 PARTS LIST- HYDRAULIC AND AIR KIT

ITEM	QTY.	DESCRIPTION	PART #
1	8	90° ELBOW, 1/8" NPT x 1/4" POLYTUBE	6-0709
2	4	AIR CYLINDER	6-0651
3	10FT	1/4" DIA. POLY TUBE	6-1396
4	3	ADAPTER, 3/8" POLY TUBE x 1/4" NPT	6-0710
5	2	TERMINAL BOLT, 3/4"	6-0713
6	2	PLUG, 1/4" NPT	6-0282
7	3	1/4" NPT STREET TEE	6-0014
8	1	1/4" NPT STREET ELBOW	6-0015
9	10FT	3/8" DIA. POLY TUBE	6-1400
10	1	FLOW CONTROL	6-1691
11	4FT	HOSE GUARD	6-0714
12	1	POWER PACK 230V/1 PH	6-1695
	1	POWER PACK 230V/3 PH	6-2615
13	1	HYD.HOSE ASS'Y, 3/8" JIC FEMALE, 16FT LONG	6-1692
14	3	CABLE TIE	6-0731
15	2	HEX NUT, #8-32	6-1095
16	1	"NOTICE" DECAL	6-0594
17	1	90° ELBOW, 1/4" NPT M x 3/8" NPT F	6-0796
18	3	ADAPTER, 1/4" POLY TUBE x 1/8" NPT	6-0708
19	1	3-WAY AIR VALVE	6-1775
20	1	AIR FILTER ASSEMBLY	6-0772
	1	AIR FILTER ELEMENT, (REPLACEMENT)	6-0180
21	1	AIR VALVE FITTING KIT	0-0405
22	1	VELOCITY FUSE 8GPM	6-1684
23	1	PLUG, 1/8" NPT	6-0182
24	2	MANIFOLD	1-1057
25	4	HEX HD.BOLT, 1/4"-20UNC X 2" LG	6-0177
26	4	HEX NUT, 1/4"-20UNC	6-0032
27	4	LOCKWASHER, 1/4" I.D.	6-0056
28	2	PHIL. HD. SCREW, #8-32 X 1" LG.	6-1094
29	1	"LIFT OPERATION" DECAL	6-0593
30	1	ADAPTER, 1/8" NPT M X 1/4" JIC M	6-0280
31	1	AIR VALVE PUSHBUTTON KIT	6-1777
32	1	RECOIL HOSE	6-0337
*		AIR VALVE & FILTER ASSEMBLY	2-1394

### 7.13 CABLE ROUTING

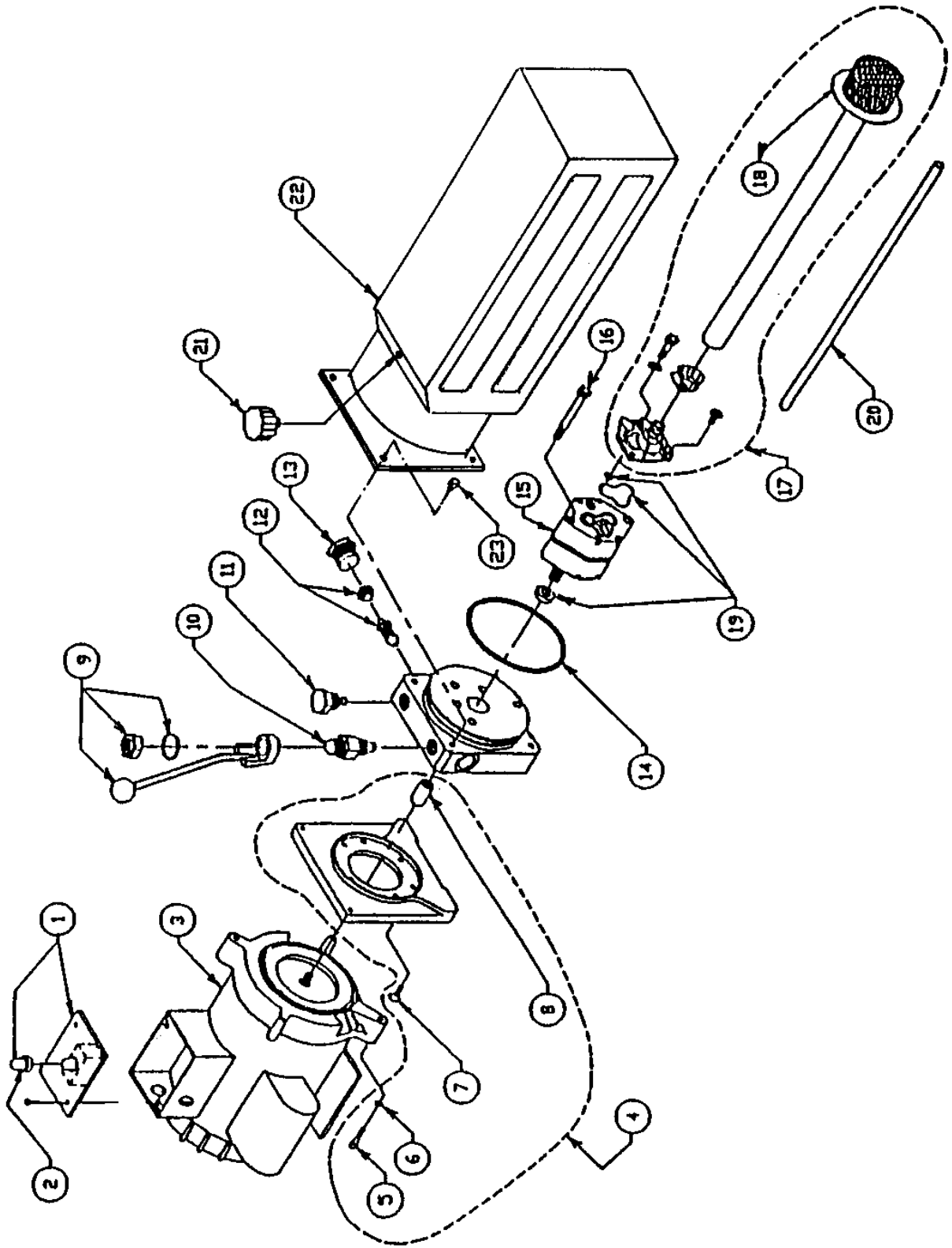




## 7.14 PARTS LIST - CABLE ROUTING

ITEM	QTY.	DESCRIPTION	PART #
1	1	CABLE ASSY. 407.5" - FRONT LEFT	2-1360
2	1	CABLE ASSY. 473.5" - FRONT RIGHT	2-1361
3	1	CABLE ASSY. 162" - REAR LEFT	2-1362
4	1	CABLE ASSY. 228" - REAR RIGHT	2-1363
5	8	HEX NUT, 7/8"-14UNF GR8	6-0724
6	4	CABLE SPACER, 2"LG	1-0800
7	4	FLAT WASHER, 7/8"ID	6-0725
8	4	CABLE SPACER, 1"LG	1-0801

# 7.15 POWER PACK ASSEMBLY



## 7.16 PARTS LIST - POWER PACK

ITEM	QTY.	DESCRIPTION	PART #
1	1	MICROSWITCH AND WIRING ASSEMBLY, 1PH	6-0881
	1	MICROSWITCH AND WIRING ASSEMBLY, 3PH	6-0918
2	1	MICROSWITCH BOOT	6-1084
3	1	MOTOR, 230V AC, 1 PHASE, 60 HERTZ 3HP	6-1959
	1	MOTOR, 230V AC, 3 PHASE, 60 HERTZ	6-1079
4	1	MOTOR ADAPTER KIT	0-0197
5	4	SOCKET HD.CAP SCW. 1/4"-20UNC X 1 5/8"LG.	6-1085
6	4	LOCK WASHER, 1/4" I.D.	6-0056
7	4	ALLEN FLAT HD.SCW. 1/4"-20UNC X 3/4"LG.	6-1086
8	1	COUPLING	6-0774
9	1	RELEASE BRACKET & HANDLE ASSEMBLY	6-0776
10	1	VALVE CARTRIDGE RELEASE	6-0880
11	1	VALVE CARTRIDGE CHECK	6-1087
12	1	FIXED RELIEF VALVE ASSEMBLY (RV 19)	6-1319
13	1	RELIEF VALVE CAP	6-1089
14	1	RESERVOIR "O" RING	6-0875
15	1	PUMP ASSEMBLY	6-1688
16	2	PUMP MOUNTING BOLT	6-1090
17	1	INLET PLUMBING KIT	0-0198
18	1	INLET HOSE / FILTER ASSEMBLY	6-0786
19	1	PUMP "O" RING KIT	0-0199
20	1	RETURN TUBE	6-0783
21	1	BREATHER FILLER CAP	6-0784
22	1	RESERVOIR	6-2828
23	4	RESERVOIR SCREW	6-1091

# CAUTION

ALL SAFETY LADDERS USED ON 4-POST LIFTS ARE PRELOADED.

**REMOVING THE BOLT HOLDING THE BOTTOM PORTION OF THE SAFETY LADDER WITHOUT PROPER PRECAUTIONS CAN RESULT IN INJURY.**

PLEASE CONTACT CUSTOMER SERVICE FOR PROPER REMOVAL INSTRUCTIONS.

