

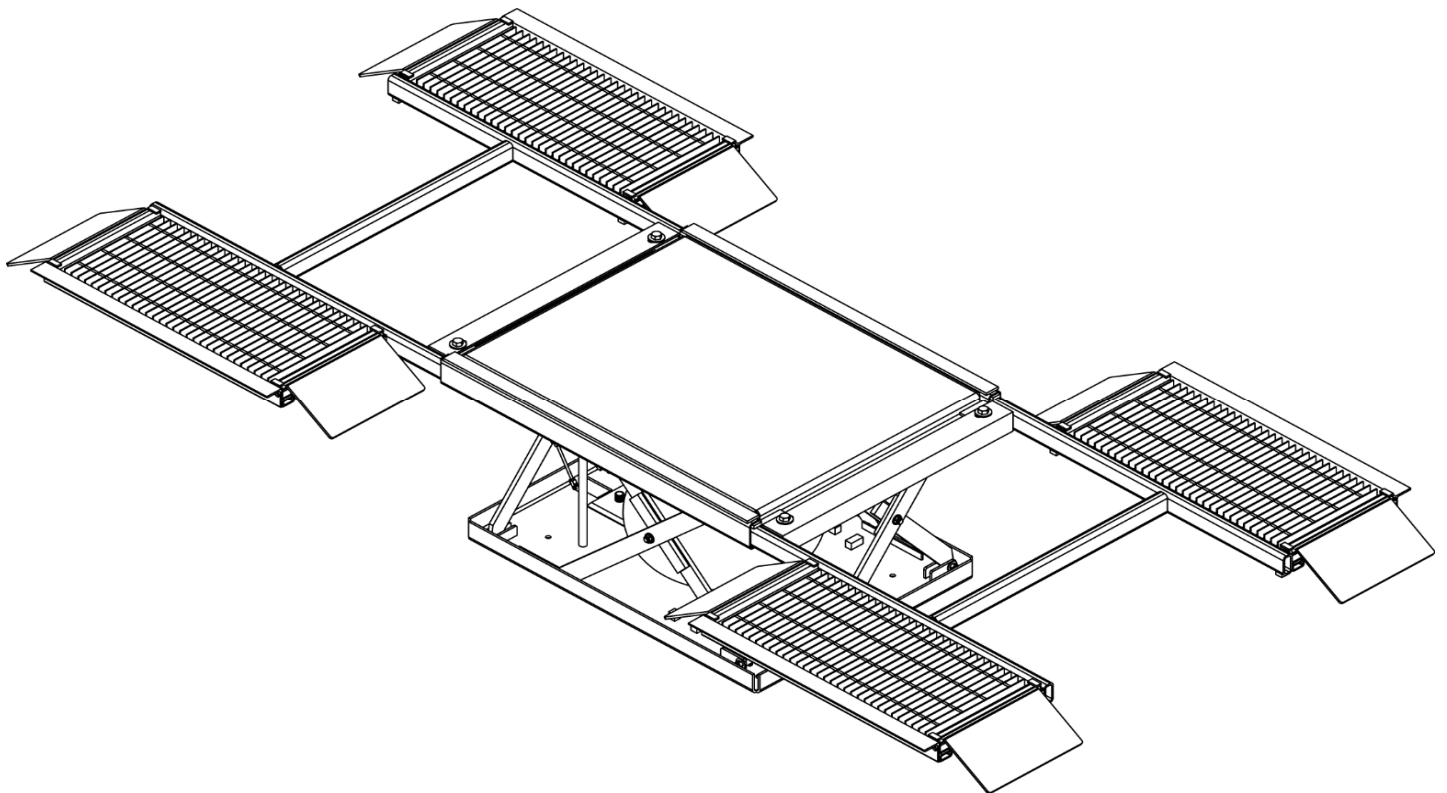
## **K900S**

### **OWNERS MANUAL**



This manual contains important information concerning the installation and operation of the automobile lift listed above. **Read manual thoroughly and keep for future reference**

**INSTRUCTIONS**



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Patents USA 7070167 4793369, 4960142, 5174317, 5193561, 5485860 Canada 1299468 & Patents Pending

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## Warning Symbol

## Caution Symbol



This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.




This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the instructions.

Serial Number \_\_\_\_\_

Model Number \_\_\_\_\_

Purchase Date \_\_\_\_\_

Distributor \_\_\_\_\_



This product has patent protection under one or more of the following patent numbers:

7070167, 5485860, 5193561, 5174317  
4960142, 4793369, 1299468  
and Patents Pending

website: [www.herkules.us](http://www.herkules.us) 1002742

## Limited Liability Warranty

The limited liability warranty applies to the pneumatic chambers of our Herkules lifts and to the initial user against defective materials for a period of five years from the proof of purchase date. The limited liability warranty applies to other components of our Herkules lifts to the initial user against defective materials for a period of one year from the proof of purchase date.

This warranty does not apply to equipment damaged from accident, abuse, overload, misuse, negligence, improper installation, abrasive or corrosive materials, or shipping damage.

In the event of failure, the defective item must be returned, freight prepaid, to the Herkules manufacturing plant for repair or replacement. If repairs are required Herkules will not be liable for these repairs to take place in the field regardless of the application. Proof of purchase and date of purchase must be confirmed. An RGA number (Return Goods Authorization) and written approval from Herkules must be obtained before any goods can be shipped to Herkules. Herkules reserves the right to determine whether the cause of failure is due to defective material, normal wear, and/or other causes.

**There are no warranties which extend beyond the description on the face hereof. Herkules disclaims any warranty of merchantability or fitness for a particular purpose in connection with the Buyer's purchase of any Product under this agreement. Damages are limited to the sales price of the Herkules system.**

**The terms and conditions herein represent the entire agreement between Herkules and the Buyer. Any prior / future representations do not apply.**



# Warnings

THIS MANUAL CONTAINS IMPORTANT INFORMATION CONCERNING THE INSTALLATION AND OPERATION OF VEHICLE LIFTS.

WE OFFER TWO SUGGESTIONS:

- READ ALL MANUALS THOROUGHLY BEFORE INSTALLATION.
- KEEP ALL MANUALS FOR FUTURE REFERENCE.

## CAUTION

- 1 Do not exceed the rated load capacity of the lift.
- 2 Do not continue to push the control lever after lift is fully raised, even though safety valve will prevent over-inflation of air bag.
- 3 Use lift only on level surfaces.
- 4 Keep clear of lift while it is in motion.
- 5 Do not use air supply exceeding 120 PSI.
- 6 Do not leave a vehicle raised on the lift overnight.
- 7 Do not operate lift with defective Control assembly.
- 8 Never for any reason put arm or any other body part inside lift.

## WARNING

- 1 Herkules will not be held responsible for any personal injury and/or property damage due to owner/operator failure to follow the warnings and cautions listed in this manual.
- 2 Read and understand all warnings, cautions, instructions and manuals before operating this equipment.
- 3 It is the owner/operators responsibility to maintain the legibility of all warning and instruction labels.
- 4 DO NOT alter or modify any part of this equipment.
- 5 DO NOT attempt to bypass the safety lock system.
- 6 DO NOT tamper with pressure relief valve system inside the lift.
- 7 DO NOT operate lift while person(s) are in the vehicle
- 8 ALWAYS check equipment regularly for proper operation and repair or replace worn or damaged parts immediately.
- 9 ALWAYS remove damaged lifts from service until repairs are made to the unit. Use only manufacturer's approved parts and accessories.

## Tags - Operating Instructions


### **Warning:**

This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions


### **Caution:**

This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the instructions.

#### I. Tag - Operating Instructions (P/N 1006355) Front


	<a href="http://www.enkon.pro">www.enkon.pro</a>	<a href="http://www.herkules.us">www.herkules.us</a>	1-800-444-4351
<b>GENERAL OPERATING INSTRUCTIONS</b>			
<ol style="list-style-type: none"><li><b>1</b> The equipment is designed solely in accordance with buyer's specifications and technical operating parameters. By using the equipment, buyer acknowledges and agrees that it has inspected the equipment; is satisfied that the equipment is of the size, design, capacity, description and manufacture selected by buyer; compliant with buyer's specifications and technical operating parameters; and solely fit for its intended purposes. Buyer acknowledges and agrees that the manufacturer shall not be liable to buyer, or any operator, for any injury, loss, damage, or expense of any kind or nature caused, directly or indirectly, by the use, operation, or maintenance of the equipment which has been modified or is otherwise not in compliance with the equipment specifications and technical operating parameters, and buyer agrees to indemnify and hold the manufacturer harmless from any such claims.</li><li><b>2</b> Read and understand all warnings, cautions, and instructions in the manual and tags before operating equipment.</li><li><b>3</b> Inspect equipment prior to use; repair or replace damaged or broken components. Keep system lubricated for proper function.</li><li><b>4</b> This lift is designed and engineered to be operated at a predetermined amount of duty cycles per day as specified in the manual or the Herkules approval drawing.</li><li><b>5</b> This lift is designed and engineered to be exclusively center loaded unless otherwise specifically specified in the manual or the Herkules approval drawing.</li><li><b>6</b> Secure loads to lift in order to prevent moving or tipping of load.</li><li><b>7</b> Install lift system only on flat, level surfaces as noted in the installation instructions. If improperly installed, lift system is subject to excessive wear, reduced life span, and lift failure.</li><li><b>8</b> Do not operate lift until unit has been correctly installed and adjusted as described in the manual.</li><li><b>9</b> Ensure proper function of safety and maintenance devices regularly.</li><li><b>10</b> See manual for proper use of maintenance stops.</li><li><b>11</b> It is the responsibility of the owner/operator to maintain legibility of all safety and instruction labels.</li><li><b>12</b> Herkules is not responsible for any personal injury or property damage resulting from owner/operator failure to follow instructions, cautions, and warnings.</li><li><b>13</b> See additional operating instructions, cautions, and warnings tags.</li></ol>			
<b>Warnings and Cautions — see other side of tag</b>			<b>1006355</b>

I. Tag - Operating Instructions (P/N 1006355) Back

 <a href="http://www.enkon.pro">www.enkon.pro</a> <a href="http://www.herkules.us">www.herkules.us</a> 1-800-444-4351
<b>⚠ CAUTION</b>
<ol style="list-style-type: none"><li>1 Keep clear of lift while in motion.</li><li>2 Do not operate lift while person(s) are on lift, unless it is a Herkules-engineered operator lift.</li><li>3 Use only manufacturer-provided replacement parts.</li><li>4 Maintenance stops are used for external lubrication maintenance only, lift must be unloaded.</li><li>5 Do not exceed rated load capacity.</li><li>6 This lift system was designed for a specified application. Personal injury and/or property damage may result if used outside of the original specification.</li><li>7 If this lift system is used outside the specification, it may not include all appropriate safety devices for your application. Compliance with all federal, state, OSHA, and local laws or codes are the responsibility of the end user.</li></ol>
<b>⚠ WARNING</b>
<ol style="list-style-type: none"><li>1 Lift can fail if damaged, misused, or overloaded. Use only if trained.</li><li>2 Death or injury can occur from improper use or care.</li><li>3 Inspect before use and observe rated load to avoid death or personal injury.</li><li>4 Always keep lift system free of all obstructions and debris.</li><li>5 Non-portable systems must be anchored to the ground with proper lag bolts; failure to do so could cause system to tip or fall, resulting in serious injury, property damage, or death.</li><li>6 Never, for any reason, put limbs or other body parts inside the lift unless safety/maintenance stops are properly engaged and overhead rigging is used.</li><li>7 Do not alter or modify any part of equipment.</li><li>8 Never use a damaged lift. Immediately remove damaged lifts from service until repairs are made.</li></ol>
<b>Operating Instructions — see other side of tag</b> <b>1006355</b>

II. Tag - Operating Instructions - Air (P/N 1006356)



 <a href="http://www.enkon.pro">www.enkon.pro</a> <a href="http://www.herkules.us">www.herkules.us</a> 1-800-444-4351
<b>OPERATING INSTRUCTIONS AIR LIFT SYSTEMS</b>
<ol style="list-style-type: none"><li>1 See general operating instructions, cautions, and warnings tag.</li></ol>
<b>⚠ CAUTION</b>
<ol style="list-style-type: none"><li>1 Do not use an air supply with pressure exceeding 120 PSI.</li><li>2 Do not continue to push control lever after lift is fully raised, even though safety valve will prevent over-inflation of air bag.</li><li>3 Always use a clean, dry air supply that is properly filtered and regulated.</li></ol>
<b>⚠ WARNING</b>
<ol style="list-style-type: none"><li>1 Do not modify the pressure relief valve system.</li><li>2 Replace the pressure relief valve with a Herkules-supplied valve annually.</li><li>3 Regularly inspect air bags and valves for damage. Damaged components could cause sudden failure of the lift system. Worn or damaged components should be replaced immediately with manufacturer-provided parts.</li></ol>
<b>1006356</b>

# Installation

## STEP 1

Locate lift on a level surface in a position most convenient for the loading and unloading of vehicles.

## STEP 2

Obtain hose clamps

ID	Part #	Description	Qty.
1	1000166	CLAMP HOSE WIDE BAND #8 SS/Z	1
2	720-122	CLAMP HOSE # 4 SS/Z	1

## STEP 3

Using the hose clamp (1000166), clamp the 3/8" ID air line from the lift to 3/8" hose barb on the hand control assembly (see fig.1).

## STEP 4

Using hose clamp (720-122), clamp the 1/4" ID air line from the lift to hose barb (1004805) on the hand control assembly (see fig.1).

*NOTE: Check these connections periodically to prevent leakage.*

## STEP 5

Obtain 1/4 NPT connector compatible with the quick disconnect on your shop air line.

*NOTE: Connector not supplied with lift.*

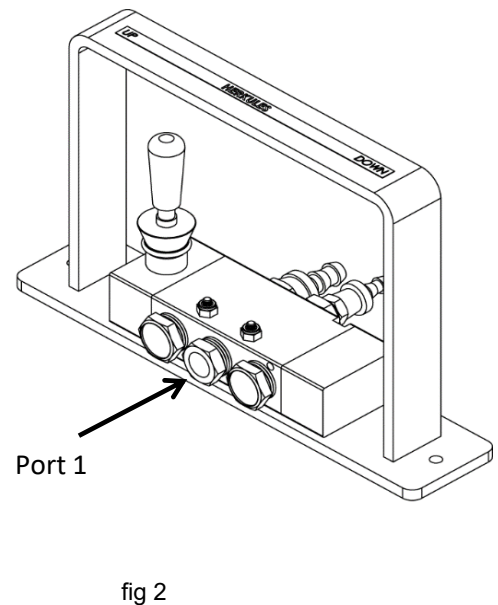
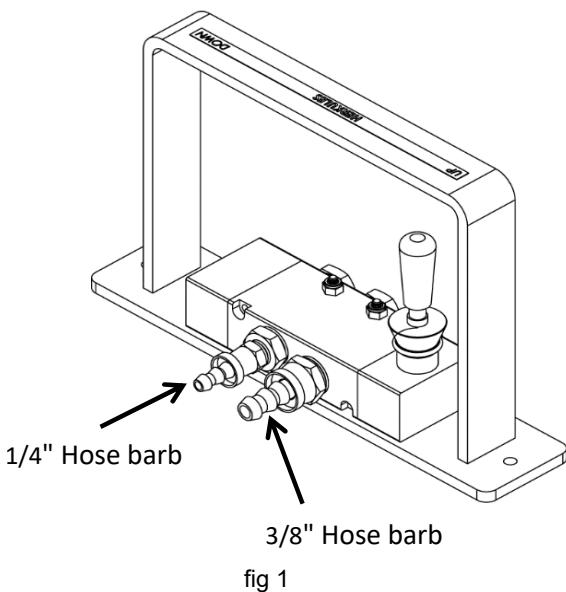
## STEP 6

Install 1/4 NPT connector into open port (Port 1) on hand control valve (see fig.2).

## STEP 7

Connect your shop air line to connector and test for proper operation.

*NOTE: Must use clean, dry air only. Herkules recommends using a filter/regulator (see Optional Accessories).*



# Duty Cycle

## I. Lift Cycle Rating:

This lift is rated for 1 - 5 cycles per day maximum. For high cycle usage warranty does not apply.

## II. Duty Cycle:

This lift is rated for approximately 7,000 - 10,000 cycles between repairs (MTBF). This lift is not rated for high duty cycles. Items that will need repair may include: 1) air bag, 2) safety ratchet, 3) scissors, 4) pivots, and 5) valves.

For heavy duty scissor lift systems that requires little maintenance Herkules recommends our Herkules Ball Screw or Belt Drive Scissor Lift Systems. These lift systems are designed and manufactured for high duty cycles and long life. Herkules recommends our electric Ball Screw or Belt Drive lift system for high cycle applications.

# Operation

### STEP 1

Check the weight of the vehicle to be sure that it does not exceed the rated load capacity of the lift: **5,000 lbs.**

### STEP 2

Drive the vehicle over the first set of ramps and onto the second set of ramps so that all four tires are on the lift, and position the vehicle so that the vehicle is centered by weight over the center of the lift. Once the vehicle is in the desired position, set the parking brake of the vehicle.

### STEP 3

To raise the lift, move the lever of the hand controller assembly into the UP position. Hold the lever in the UP position until vehicle has reached the desired working height, then release. The mechanical safety arms will automatically fall into position as the lift rises.

*Do not continue to push the control lever after lift is fully raised, even though safety valve will prevent over-inflation of air bag.*

*NOTE: Check the stability of the vehicle during the lifting process, and when vehicle is at desired working height. If vehicle is unstable, immediately stop the lifting process, slowly lower the lift and reposition vehicle.*

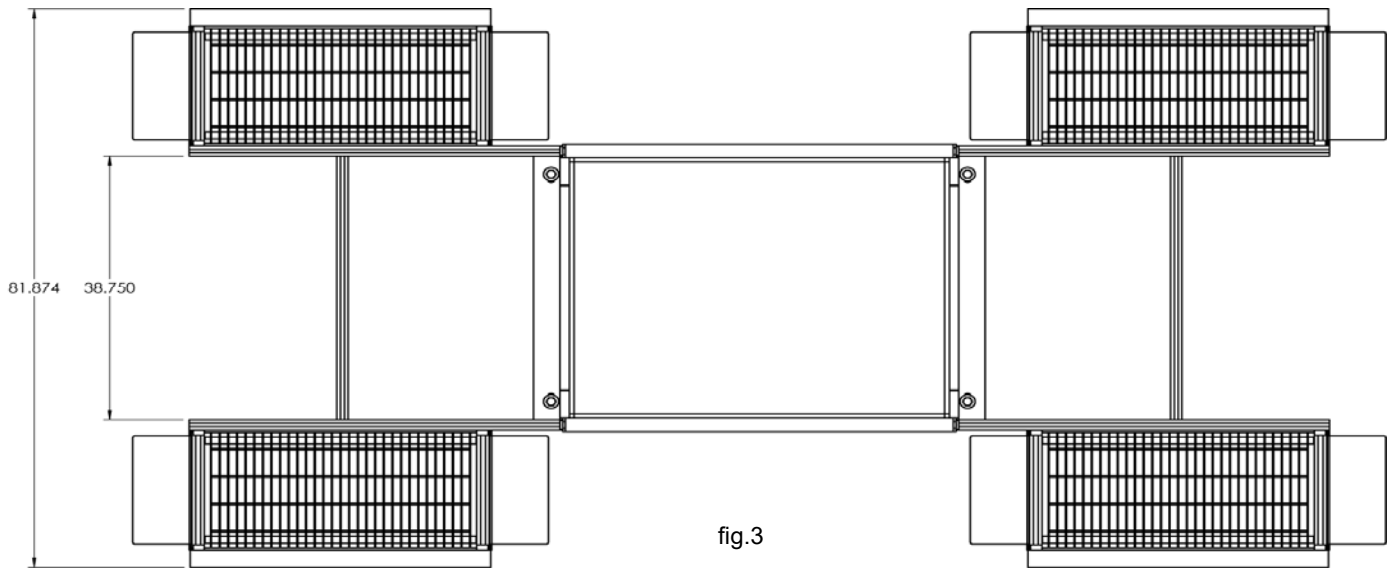
### STEP 4

To lower the lift, move the lever of the hand controller assembly into the DOWN position. Hold the lever in the DOWN position until the lift is completely lowered and the wheel platforms are resting on the ground. The mechanical safety arms will swing up during descent.

*NOTE: Check the stability of the vehicle during the lowering process. If vehicle is unstable, immediately stop and diagnose the issue before continuing to lower the lift.*

**STEP 5**

Once the lift is completely lowered, drive the vehicle off of the lift.



## Maintenance Instructions

**STEP 1**

Check clamps and hose connections periodically for tightness to prevent air leakage.

**STEP 2**

Make sure all moving parts are clean and unobstructed by foreign objects.

**STEP 3**

Clean filter element every 3 months if applicable.

**STEP 4**

Grease and oil pivot points once every 3 months.  
Lubricate daily if lift is in high cycle application.

**STEP 5**

Use 90-weight gear lube (SAE 85W 140 EP) to lubricate the pivots and shafts once every 3 months or as needed.

**STEP 6**

Grease the upper and lower wheel channels every 3 months or as needed.

**STEP 7**

Lubricate lock mechanism pivot points every 3 months or as needed.

**STEP 8**

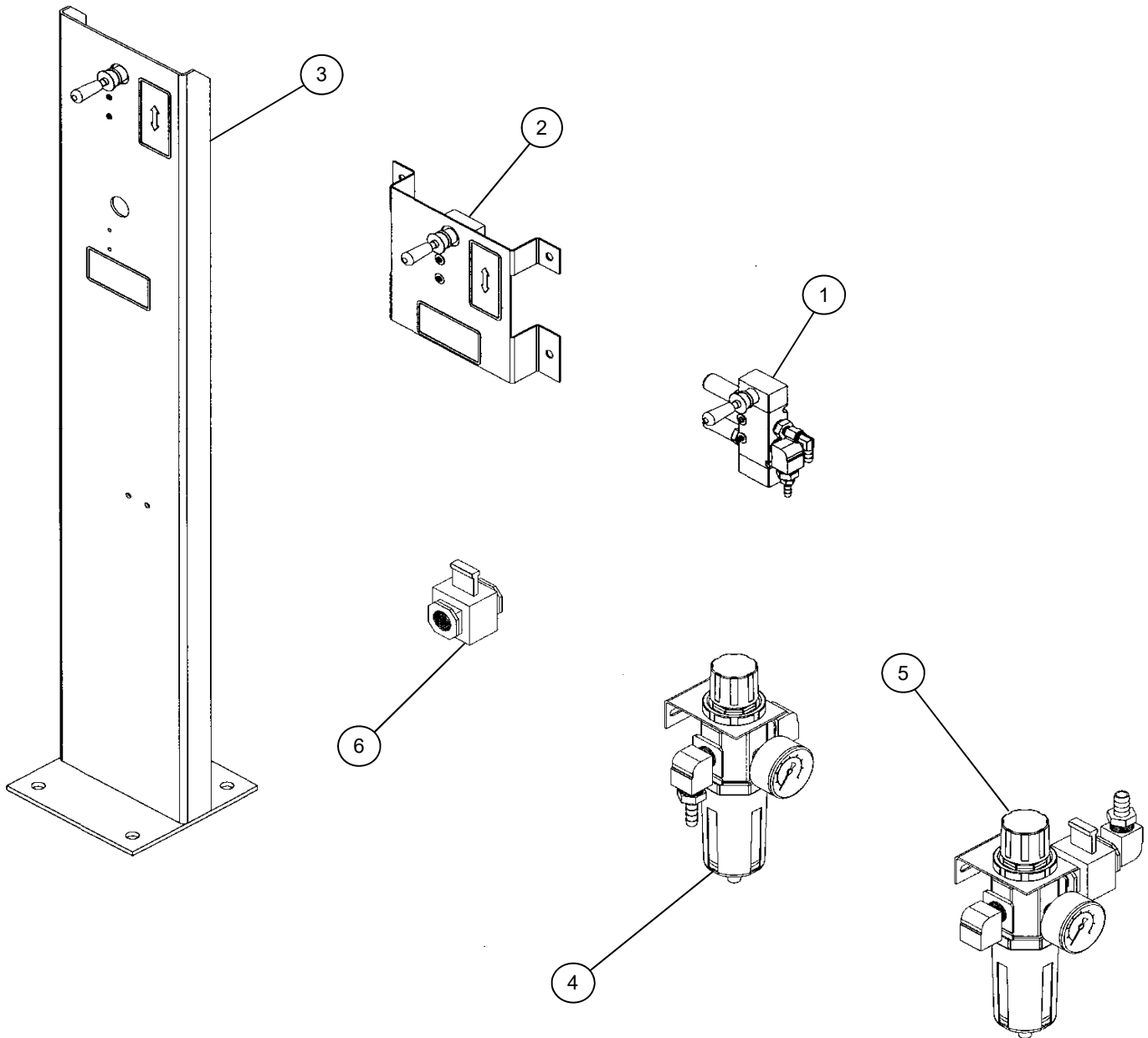
Use overhead rigging when any maintenance beyond external lubrication is required.



# Troubleshooting

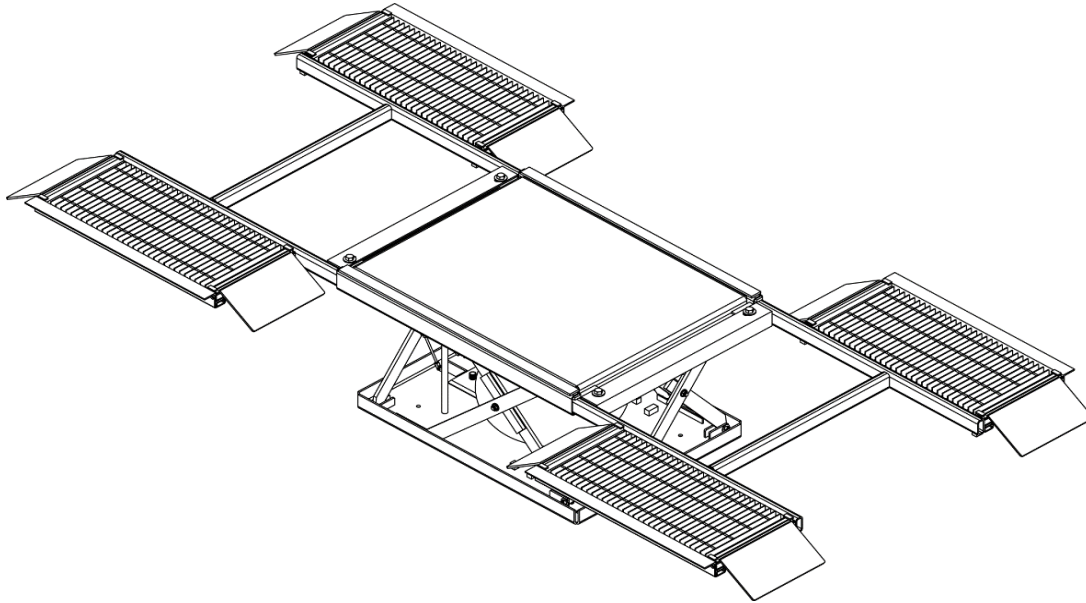
Problem	Possible Solution
Lift will not go up	<ol style="list-style-type: none"> <li>1 Check that air inlet is connected to the controller.</li> <li>2 Check to ensure lockout is not engaged (if purchased as option).</li> <li>3 Check air hoses to ensure no kinks or cuts in the line.</li> <li>4 Check to ensure no debris is preventing wheels from rolling in track.</li> <li>5 Check regulator gauge is set to minimum of 80 psi (if purchased as option).</li> </ol>
Lift is making a hissing noise	<ol style="list-style-type: none"> <li>1 Check all air lines to ensure they are properly connected and no leaks are occurring.</li> <li>2 Check pressure relief valve. <i>If pressure relief valve is "leaking" lower lift immediately. The air bag is in a state of over pressurization.</i></li> <li>3 Check air bag for cuts or holes.</li> </ol>
Lift is making a squeaking noise	<ol style="list-style-type: none"> <li>1 Lubricate center joints and wheel tracks.</li> </ol>

# Optional K900S Accessories



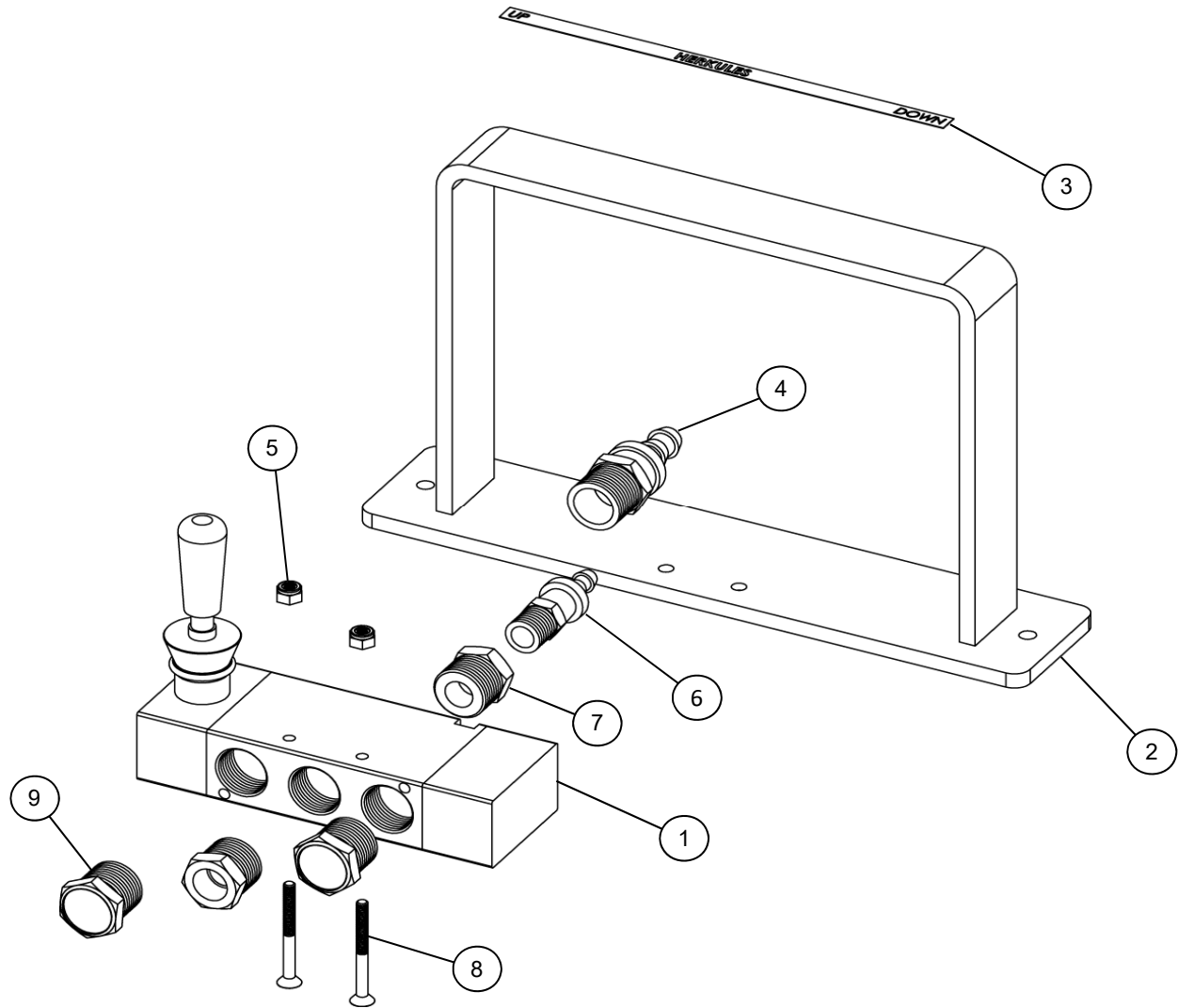
ID	Part #	Description	Qty	Units
1	12848	Control Valve Assembly - Hand - Lift Only - 2 x Muffler	1	EA
2	12849	Control Assembly - Hand - Lift Only - Wall Mount	1	EA
3	12850	Control Assembly - Hand - Lift Only - Pedestal Mount	1	EA
4	12851	Filter / Regulator Assembly	1	EA
5	12852	Filter / Regulator / Lock Out Assembly	1	EA
6	1002450	Lock Out Valve	1	EA
-	12368	Set of (4) Rubber Blocks - 3-7/8 x 5 x 1-1/2	1	EA
-	12369	Set of (4) Rubber Blocks - 3-7/8 x 8 x 1-1/2	1	EA

# Parts Layout



Part #	Description	Quantity	Units
17047	BOTTOM PAN WELDMENT 37 X 49-1/16	1	EA.
16929	SCISSOR ARM WLDMNT C 2-1/2 X 39-3/4	2	EA.
16930	SCISSOR ARM WLDMNT G 2-1/2 X 35-3/4	2	EA.
16925	SCISSOR ARM WLDMNT A 2-1/2 X 39-3/4	2	EA.
16928	SCISSOR ARM WLDMNT E 2-1/2 X 35-3/4	2	EA.
17043	TOP PAN WELDMENT 38-1/4 X 58-1/4	1	EA.
15244	KIT SUSPENSION K900 & K900P	1	EA.
10253	SAFETY CYLINDER ASSY FOR LIFT	1	EA.
693-103	WHEEL 40 MM PLASTIC	8	EA.
009-126	BOLT HEX 9/16-12 X 2 GD 5 Z	8	EA.
1000498	WASHER 9/16 SAE F/W ZINC	8	EA.
009-131B	NUT JAM 9/16-12 Z	4	EA.
009-131A	NUT LOCK 9/16-12 Z	4	EA.
009-137B	BOLT FHSC 5/8-11 X 5 CUT 3.25 BLACK	2	EA.
009-124	WASHER FLAT 5/8 SAE Z	6	EA.
008-113A	NUT LOCK 5/8-11 Z	4	EA.
10377	BOLT ASSEMBLY - CUT AT 3.125	2	EA.
720-122	CLAMP HOSE # 4 SS/Z	1	EA.
1000166	CLAMP HOSE # 8 SS/Z	1	EA.
300-001	AIR BAG - K-900	1	EA.
10037	ACCELERATOR VALVE ASSEMBLY	1	EA.
M00	MUFFLER 3/8 AIR EXHAUST	1	EA.
009-151	TUBE 1-1/4 CLEAR	4	IN.
17048	LIFT CONTROLLER ASSY KIT	1	EA.
1000505	CAP 1.0 ID PE BLACK	2	EA.
100-334	HOSE 3/8" PUSH TO LOK	225	IN.
100-333	HOSE 1/4" PUSH TO LOK	228	IN.
1002968	TUBE COILED 5/32 OD X 6 NYLON	2	EA.
009-125	HERKULES LIFT SERIAL TAGS	1	EA.
009-153	INSTRUCTION LABEL FOR LIFT	1	EA.
1006323	STICKER BOX LIFT MODEL & SERIAL	2	EA.
1006222	DECAL MAXIMUM CAPACITY 6000 LBS	1	EA.
1000082	DECAL HERKULES LIFT 5.25 X 14.5	1	EA.
1002860	OWNERS MANUAL K900	1	EA.

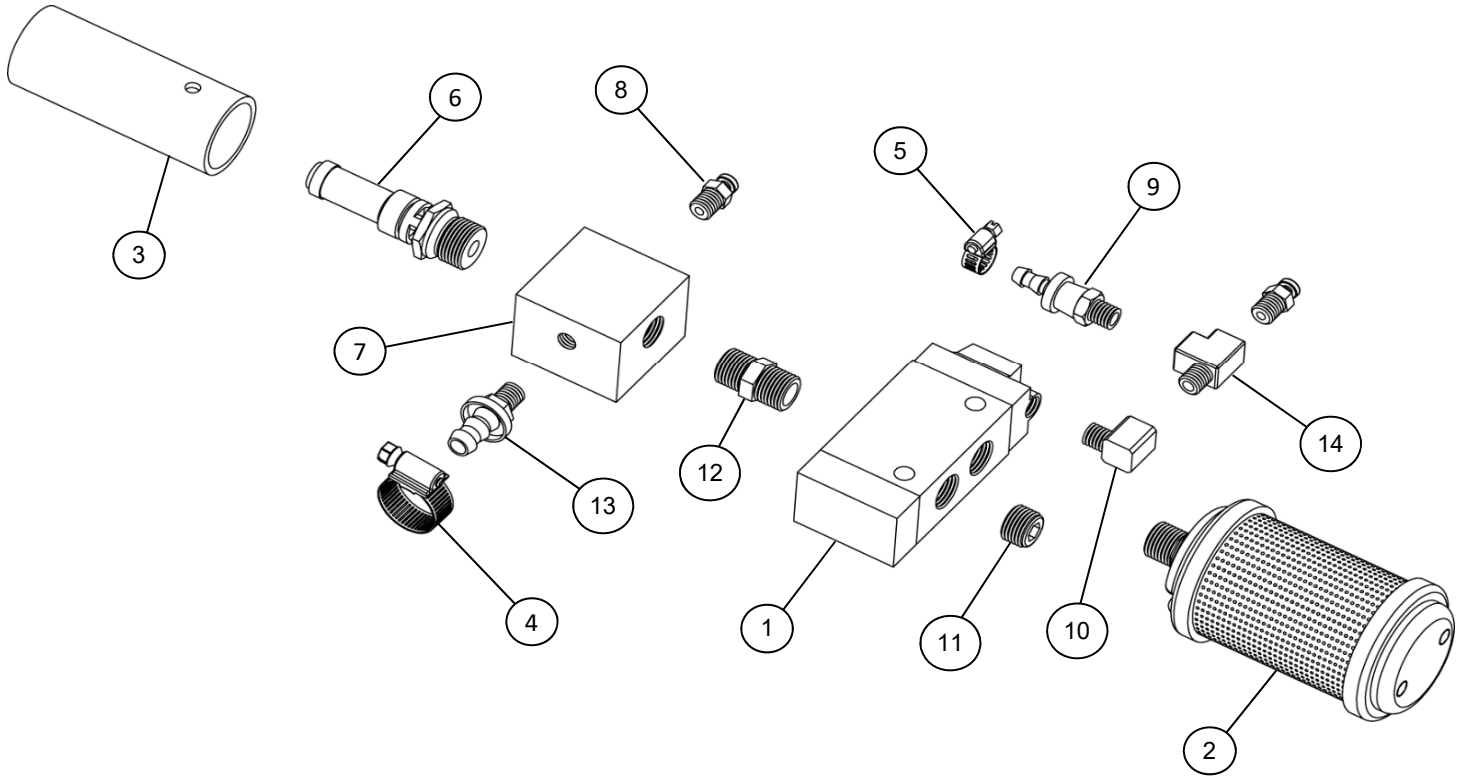
# Controller Layout



ID	Part #	Description	Qty	Units
1	1002449	VALVE HAND P5 POS 3 SC OC 1/2 NPT	1	EA.
2	17049	HAND CONTROL WELDMENT	1	EA.
3	1000078	STICKER UP HERK DOWN .625 X 7	1	EA.
4	1003585	HOSE BARB PTL 3/8 X 1/2 NPT	1	EA.
5	002-172	NUT NYLOCK 8-32 Z	2	EA.
6	1004805	HOSE BARB PTL 1/4 X 1/4 NPT BRASS	1	EA.
7	66B	RED BUSHING 1/2 NPT X 1/4 NPT BRASS	2	EA.
8	1004798	SCREW FHSC 8-32 X 1-3/4 BLACK	2	EA.
9	1001602	VENT BREATHER 1/2 FOR LIFT CONTROLS	2	EA.

NOTE: Entire controller assembly is part number 14857.

# Internal Valve Layout

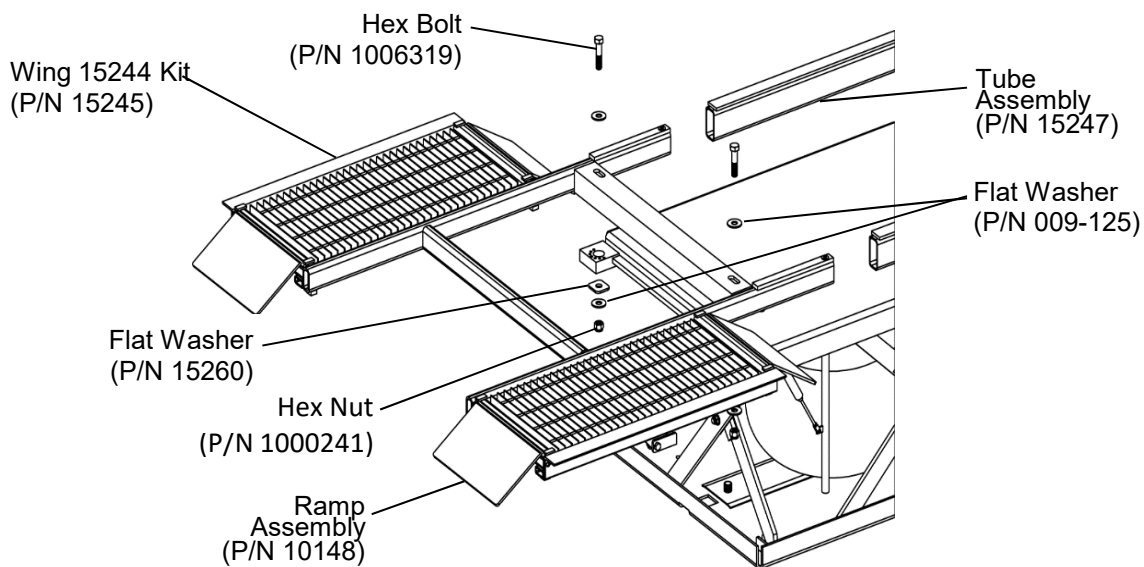


ID	Part #	Description	Qty	Units
1	009-141	VALVE 4-WAY PILOT 3/8 NPT BLACK	1	EA.
2	M00	MUFFLER 3/8 AIR EXHAUST	1	EA.
3	009-151	TUBE 1-1/4 CLEAR	4	IN
4	1000166	CLAMP HOSE # 8 SS/Z	1	EA.
5	720-122	CLAMP HOSE # 4 SS	1	EA.
6	700-112	VALVE PRESSURE RELIEF 1/2 NPT 3.5 BAR	1	EA.
7	1007872	MANIFOLD BLOCK 2 X 2 X 1-1/2 ALUM	1	EA.
8	T4	FITTING PTC 5/32 X 1/8 NPT	2	EA.
9	1003288	HOSE BARB PTL 1/4 X 1/8 NPT	1	EA.
10	M6	ELBOW STREET 1/8 NPT BRASS	1	EA.
11	61A	PLUG SOCKET 3/8 NPT BRASS	1	EA.
12	M25C	NIPPLE HEX 3/8 NPT BRASS	1	EA.
13	1006006	HOSE BARB PTL 3/8 X 1/8 NPT BRASS	1	EA.
14	C12D	TEE STREET 1/8 NPT BRASS	1	EA.

NOTE: Entire internal valve assembly is part number 10037.

# Installation of Suspension Kit

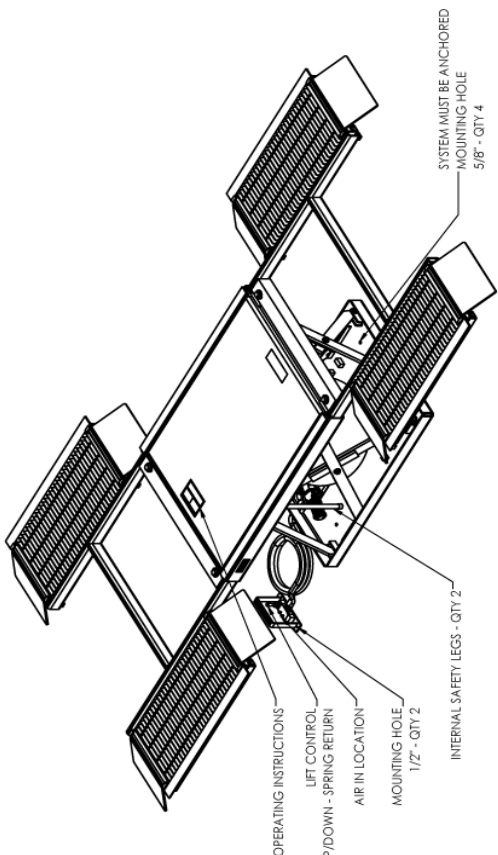
1. Layout the components of the 15244 KIT around the lift.
3. Position one side of the wing brackets over the appropriate lift blocks (see fig. 1).
4. Bolt the wing brackets to the lift as shown in fig. 1.
5. Slide the two tubes (#15247) into position on each side of the wing.
6. Slide the other wing into the tubes and line the mounting bracket over the lift blocks as shown in fig. 1.
8. Bolt the second set of wing brackets to the lift as shown in fig. 1.
9. Replace the old maximum capacity sticker with the new sticker. A stationary lift has 5000 lb. lifting capacity after the 15244 KIT is installed.
10. Attach two ramps (10148) to each wing assembly (see fig. 1).



# Model Information

REV.	DESCRIPTION	DATE	APPROVED
A	UPDATED 985 WING KIT (P/N 15245)	2/5/2013	SW

REV.	DESCRIPTION	DATE	APPROVED
A	UPDATED 985 WING KIT (P/N 15245)	2/5/2013	SW



**LIFT SPECIFICATIONS**

**CAPACITY:**  
 6000 LBS  
 ALL LOADS MUST BE EVENLY DISTRIBUTED  
 LIFT MAY NOT RAISE TO FULL HEIGHT  
 WITH MAXIMUM CAPACITY LOAD

**CONTROLLER:**  
 HAND

**CONTROLLER MOUNT:**  
 FRAME

**INTERNAL VALVE:**  
 PILOTED EXHAUST

**AIR FEED LINE:**  
 1/2" MINIMUM

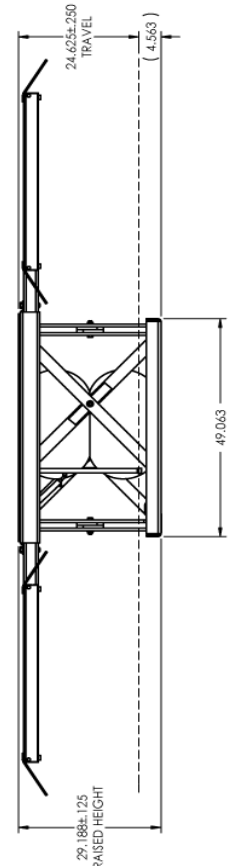
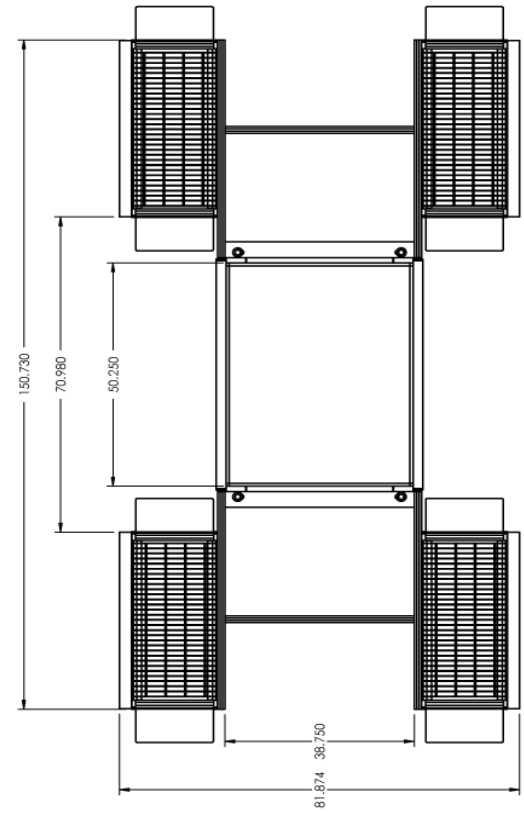
**CONTROLLER HOSE:**  
 19 FEET

**SKIRT:**  
 NONE

**COLOR:**  
 LIFT: HERKULES BLUE  
 SCISSORS: HERKULES WHITE  
 PEDESTAL: HERKULES BLUE

**SAFETY FEATURES:**  
 PRESSURE RELIEF VALVE-QTY 1  
 INTERNAL SAFETY LEGS-QTY 2

NOTE: ADD SEVEN INCHES TO BASE  
 MODULE DIMENSIONS FOR BELLOWS SKIRTING



**hercules**  
 2340 GERRARD COURT • WALKER LAE, IA 48994-162

TOLERANCES UNLESS OTHERWISE NOTED  
 XX ± .50  
 XX ± .125  
 XXX ± 0.000  
 XXXX ± 0.0050  
 ANGLE ± 1°

ITEM: LIFT VEHICLE FIXED WINGS SUSP&TIRES

DATE: 7/5/2006

CHG. NO.: 02063854

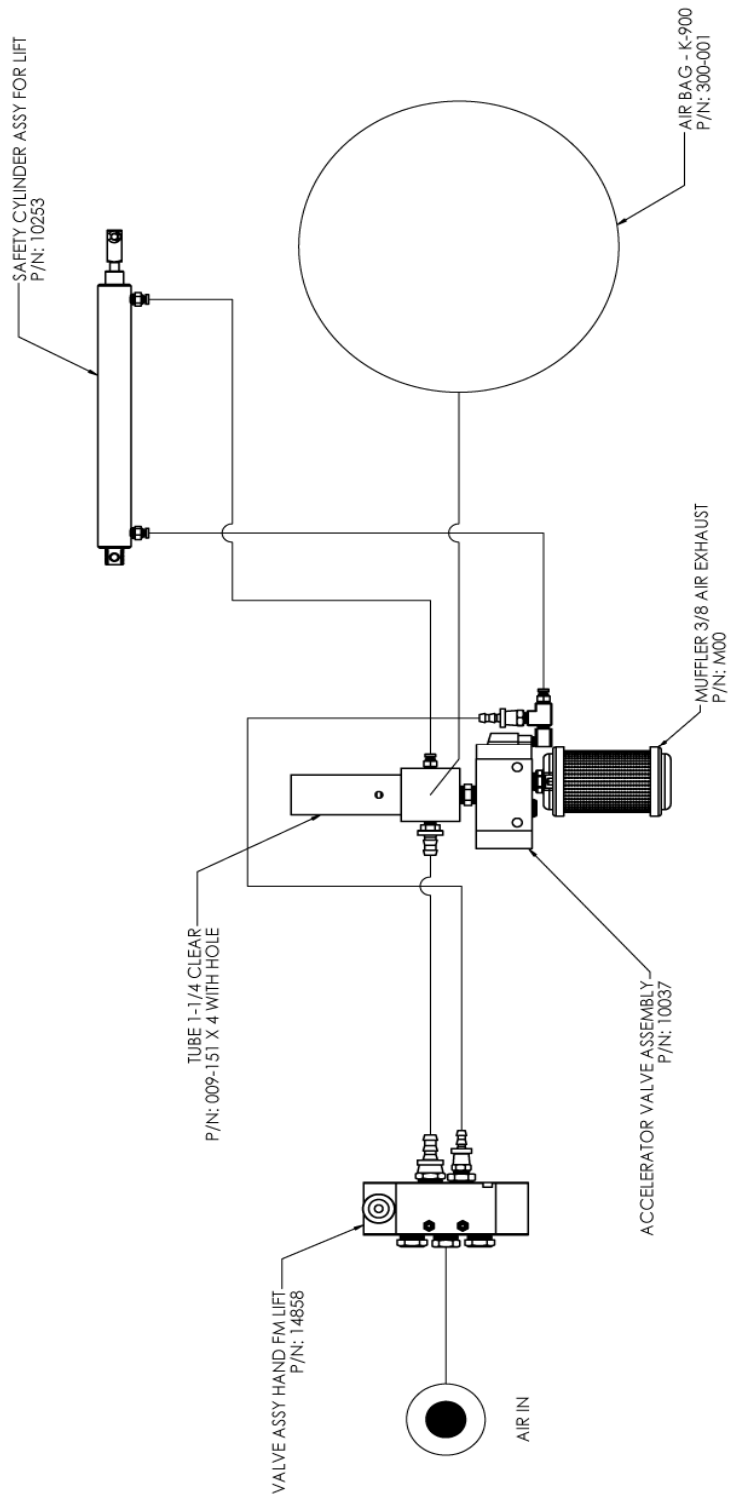
REV. A

SHEET 1 OF 1

**CONFIDENTIAL**

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PART: K900S



<b>hercules</b> Pneumatic Cylinders • Walled Air Motors & Actuators	TOLEANCES UNLESS OTHERWISE NOTED
	X + .250 XX + .125 XXX + .060 XXXX + .030 ANGLES ± 1°
TITLE: K900S SCHEMATIC	DRAWN: 10/19/2016
MATERIAL:	CHK BY: K900S
PART: K900S	DWG NO: K900S
REF: SHEET 1 OF 1	

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