M0956 4/5/2018

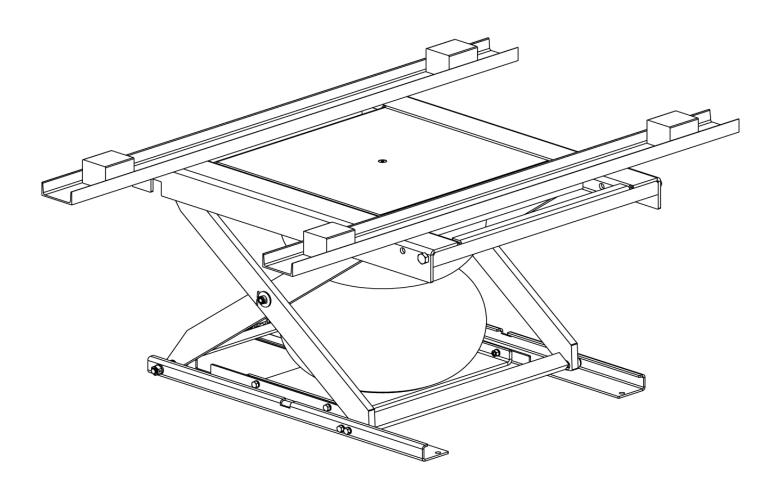
# **herkules**

# **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



M0956 (VLA05 Vehicle Air Lift) Herkules Equipment Corporation.xlsx

Herkules Equipment Corporation	2760 Ridgeway Court	Walled Lake, MI 48390-1662 USA		
248-960-7100	800-444-4351	Fax 248 960-7109		
Patents USA 7070167 4793369, 4960142, 5174317, 5193561, 5485860 Canada 1299468 & Patents Pending				
website: www.herkules.us	Made in the USA	e-mail: info@herkules.us		

# **herkules**

# **Table of Contents**

Warnings	 . 2 - 4
Installation	 . 5
Duty Cycle	 . 6
Operation	 . 6 - 7
Maintenance Instructions	 .7
Troubleshooting	
Parts Layout	
Controller Layout	
Lift Drawings Schematic	 . 11 - 12
Schematic	 . 13
Mounting Hole Locations	 . 14
Notes	 . 15

### Warning Symbol

### Caution Symbol

WARNING

Ð

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	This product has patent protection under one or more of the following patent numbers:	
Purchase Date	7070167, 5485860, 5193561, 5174317 4960142, 4793369, 1299468 and Patents Pending	
Distributor	website: www.herkules.us 10027	'42

### 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. We reserve 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.



**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 - Danger stickers

# DANGER

If lift is utilized for overhead vehicle work then four quantity jack stands must be put in place to help support vehicle. Operators not allowed under lift without the use of jack stands.



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

		www.enkon.pro	www.herkules.us	1-800-444-4351	
	GENERA	L OPERATIN	G INSTRUCTION	IS	
1	The equipment is designed so parameters. By using the equi equipment; is satisfied that th selected by buyer; compliant w fit for its intended purposes. B to buyer, or any operator, for a or indirectly, by the use, opera otherwise not in compliance w	pment, buyer acknowled e equipment is of the siz with buyer's specification buyer acknowledges and ny injury, loss, damage, tion, or maintenance of vith the equipment spec	dges and agrees that it has in ze, design, capacity, descripti hs and technical operating pa agrees that the manufacture or expense of any kind or nat the equipment which has been ifications and technical opera	spected the on and manufacture rameters; and solely er shall not be liable ure caused, directly en modified or is ting parameters, and	
2	buyer agrees to indemnify and Read and understand all warn equipment.		-		
3	Inspect equipment prior to use lubricated for proper function.		aged or broken components.	Keep system	
4	This lift is designed and engines specified in the manual or the	•	-	luty cycles per day as	
5	This lift is designed and engineered to be exclusively center loaded unless otherwise specifically specified in the manual or the Herkules approval drawing.				
6 7	Secure loads to lift in order to Install lift system only on flat, installed, lift system is subject	level surfaces as noted to excessive wear, redu	in the installation instructions uced life span, and lift failure.		
8 9 10	Do not operate lift until unit has Ensure proper function of safe	ety and maintenance dev	-	in the manual.	
10 11 12 13	See manual for proper use of It is the responsibility of the ov Herkules is not responsible fo failure to follow instructions, c See additional operating instru	wner/operator to mainta r any personal injury or p autions, and warnings.	property damage resulting fro		
		arnings and Cautions – s	0 0	1006355	

# **Eherkules**

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

1 2 3 4 5 6 7	Keep clear of lift while in motion. Do not operate lift while person(s) are on lift, unless it is a Herkules-engineered operator lift. Use only manufacturer-provided replacement parts. Maintenance stops are used for external lubrication maintenance only, lift must be unloaded. Do not exceed rated load capacity. This lift system was designed for a specified application. Personal injury and/or property damage ma result if used outside of the original specification. 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 responsib of the end user.		
12345 678	Lift can fail if damaged, misused, or overloaded. Use only if trained. Death or injury can occur from improper use or care. Inspect before use and observe rated load to avoid death or personal injury. Always keep lift system free of all obstructions and debris. Non-portable systems must be anchored to the ground with proper lag bolts; failure to do so could cau system to tip or fall, resulting in serious injury, property damage, or death. Never, for any reason, put limbs or other body parts inside the lift unless safety/maintenance stops ar properly engaged and overhead rigging is used. Do not alter or modify any part of equipment. Never use a damaged lift. Immediately remove damaged lifts from service until repairs are made.		
	Operating Instructions — see other side of tag 1006		

### www.enkon.pro www.herkules.us 1-800-444-4351 **OPERATING INSTRUCTIONS AIR LIFT SYSTEMS** See general operating instructions, cautions, and warnings tag. 1 Do not use an air supply with pressure exceeding 120 PSI. 1 Do not continue to push control lever after lift is fully raised, even though safety valve will prevent over-2 inflation of air bag. 3 Always use a clean, dry air supply that is properly filtered and regulated. 1 Do not modify the pressure relief valve system. 2 Replace the pressure relief valve with a Herkules-supplied valve annually. 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 manufacturerprovided parts. 1006356

## **I**herkules

# Installation

### STEP 1

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

### STEP 2

Obtain 1/2 NPT connector compatible with the quick disconnect on your shop air line.

NOTE: Connector not supplied with lift.

### STEP 3

Install hose to 1/2 NPT hose barb on foot control valve assembly (see fig.1).

### STEP 4

After connecting your shop air line to 1/2 NPT hose barb test for proper operation.

NOTE: Must use clean, dry air only. Herkules recommends using a filter/regulator.

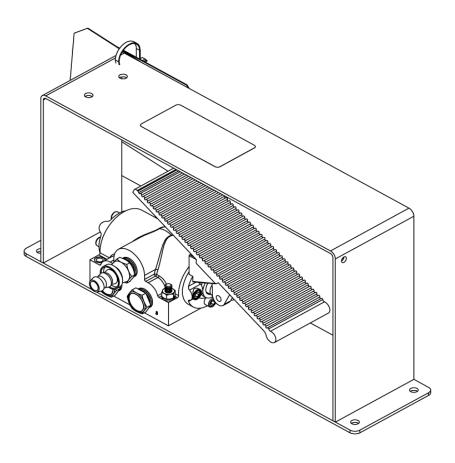


fig.1

# **I**herkules

# **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: 6,000 lbs.

### STEP 2

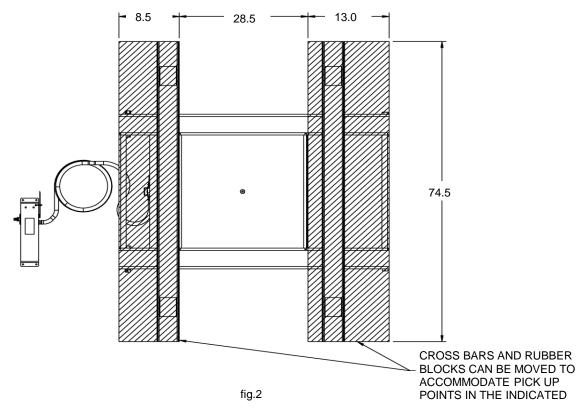
Position the vehicle over the lift so that it is approximately centered by weight over the center of the lift. Once the vehicle is in the desired position, set parking brake.

### STEP 3

Insert cross bars - QTY 2 - onto the lift. Position cross bars under the vehicle manufacturer's recommended lifting points. (See Fig. 2)

The cross bars should be oriented with the center web pointing down and the "U" of the channel facing up. Position rubber blocks at each end of the cross bars under the vehicle lifting points.

NOTE: Do not exceed the rated load capacity of the cross bars: 2,500 lbs.



# **I**herkules

### STEP 4

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 cross bars.

### STEP 5

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 vehicle's wheels are 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 6

Once the lift is completely lowered, remove the rubber blocks and cross bars. Drive the vehicle clear 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

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

### STEP 7

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

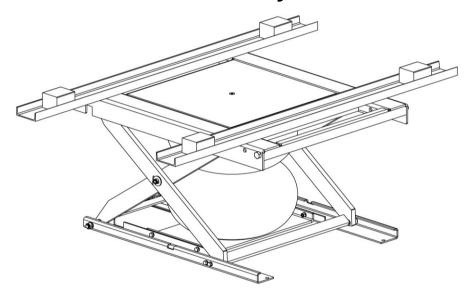


# Troubleshooting

Problem	Possible Solution
Lift will not go up	1 Check that air inlet is connected to the controller.
	2 Check to ensure lockout is not engaged (if purchased as option).
	3 Check air hoses to ensure no kinks or cuts in the line.
	4 Check to ensure no debris is preventing wheels from rolling in track.
	5 Check regulator gauge is set to minimum of 80 psi (if purchased as option).
Lift is making a hissing noise	1 Check all air lines to ensure they are properly connected and no leaks are occuring.
	2 Check pressure relief valve. If pressure relief valve is "leaking" lower lift immediately. The air bag is in a state of over pressurization.
	3 Check air bag for cuts or holes.
Lift is making a squeaking noise	1 Lubricate center joints and wheel tracks.



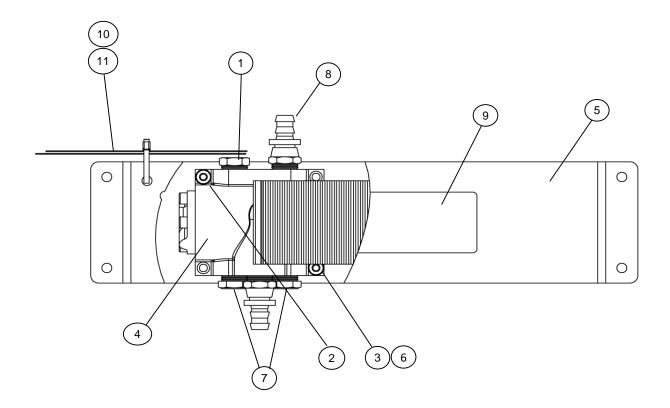
# **Parts Layout**



Part #	Description	Quantity	Units		
17025	BOTTOM FRAME ASSY 37.28 X 46	1	EA.		
17027	SCISSOR INNER WELDMENT C≠D 32.76 X 44	1	EA.		
17026	SCISSOR OUTER WELDMENT A≠B 34.96 X 44	DR OUTER WELDMENT A≠B 34.96 X 44 1			
1008010	TOP FRAME WELDMENT 38.5 X 60	1	EA.		
1007868	WHEEL 1.565 OD X .765 ID STEEL	4	EA.		
1002731	BLOCK WHEEL STOP FOR A1050	2	EA.		
1001481	COTTER PIN 5/32 X 1.25 ZINC	2	EA.		
1002626	TUBE 1.244 OD X .75 ID X 2.10 CRS	2	EA.		
1002473	WASHER FLAT 3 OD X 1.313 ID X .1 Z	2	EA.		
1008018	SPACER 3/4 IPS X 0.87 ST	2	EA.		
1008019	SPACER 3/4 IPS X 1.37 ST	2	EA.		
1008020	SPACER 3/4 IPS X 1.98 ST	4	EA.		
12125	BOLT ASSY DRILLED FOR V-960	2	EA.		
1001480	NUT SLOTTED HEX 5/8-11 Z	2	EA.		
009-125	WASHER 2 OD X .8125 ID Z 3/4 USS Z	4	EA.		
83F	BOLT HEX 1/2-13 X 1 GD 5 Z	4	EA.		
1000624	BOLT FHSC 1/2-13 X 3/4 BLACK	1	EA.		
1001193	WASHER LOCK 3/4	4	EA.		
1002672	BOLT HEX 3/4-10 X 5-1/2 GD5 ,SHLDR 3-3/4" MIN. Z	2	EA.		
1003386	BOLT HEX 3/4-10 X 6 GD5 Z	2	EA.		
85H	WASHER LOCK 1/2 Z	4	EA.		
1005454	NUT LOCK 3/4-10 BI-WAY Z	4	EA.		
1007994	BOLT HEX 3/4-10 X 8 GD 8	2	EA.		
18371	AIR BAG WELDMENT DBL W/1/2-13 TAP	1	EA.		
17034	TEE ASSY 1/2 X 3/4 NPT X 3.5 BAR	1	EA.		
17024	CONTROL FOOT ASSY LIFT W/ NP EXH	1	EA.		
100-332	HOSE 1/2" PUSH TO LOK	188	IN.		
1007992	CROSS TUBE WELDMENT ALUMINUM	2	EA.		
800-105	BLOCKS 120 X 100 X 80 MM	4	EA.		
1006206	STICKER DANGER NO HAND/LEG UNDERTOP	2	EA.		
1004277	STICKER ENKON 1-800 2.75 X 9.5	2	EA.		
1006222	STICKER MAXIMUM CAPACITY 6000 LBS	2	EA.		
1009264	ENKON SERIAL TAG	1	EA.		
1006355	TAG OPERATING INSTRUCTIONS (GENERAL)	1	EA.		
1006356	TAG OPERATING INSTRUCTIONS (AIR)	1	EA.		
1006323	STICKER BOX MODEL & SERIAL	1	EA.		



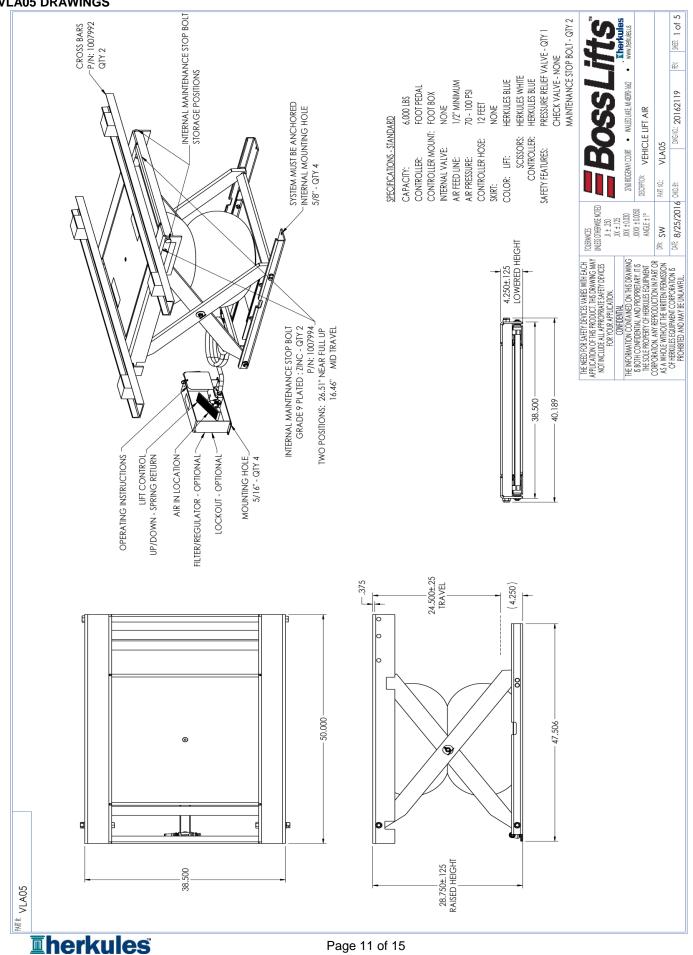
# **Controller Layout**



ID	Part #	Description	Qty	Units
1	59A	PLUG HEX 1/2 NPT BRASS	1	EA.
2	84	NUT HEX 1/4-20 Z	2	EA.
3	85	WASHER LOCK 1/4 Z	2	EA.
4	754	VALVE FOOT P5 POS3 SC OC 1/2NPT	1	EA.
5	10071	CONTROL MNT WLDMNT FOOT SNG	1	EA.
6	100996	BOLT FHSC 1/4-20 X 1-3/4 BLACK	2	EA.
7	1001602	VENT BREATHER 1/2 FOR LIFT CONTROLS	2	EA.
8	1003586	HOSE BARB PTL 1/2 X 1/2 NPT	2	EA.
9	1006365	STICKER LIFT UP/DOWN BLK IND.	1	EA.
10	1006355	TAG OPERATING INSTRUCTIONS (GENERAL)	1	EA.
11	1006356	TAG OPERATING INSTRUCTIONS (AIR)	1	EA.

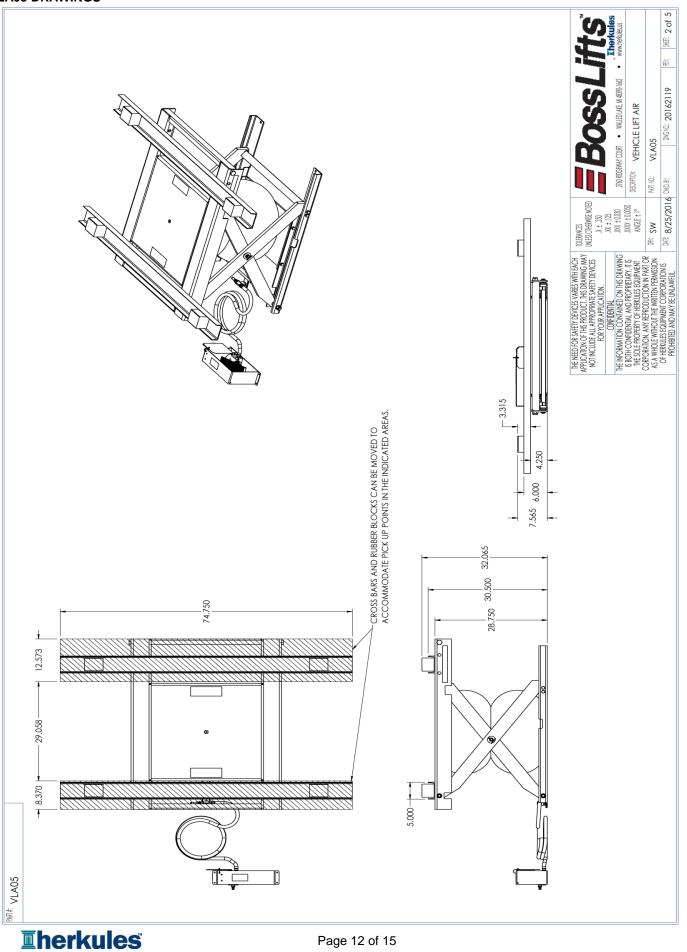
NOTE: Entire controller assembly is part number 17024.

**herkules** 

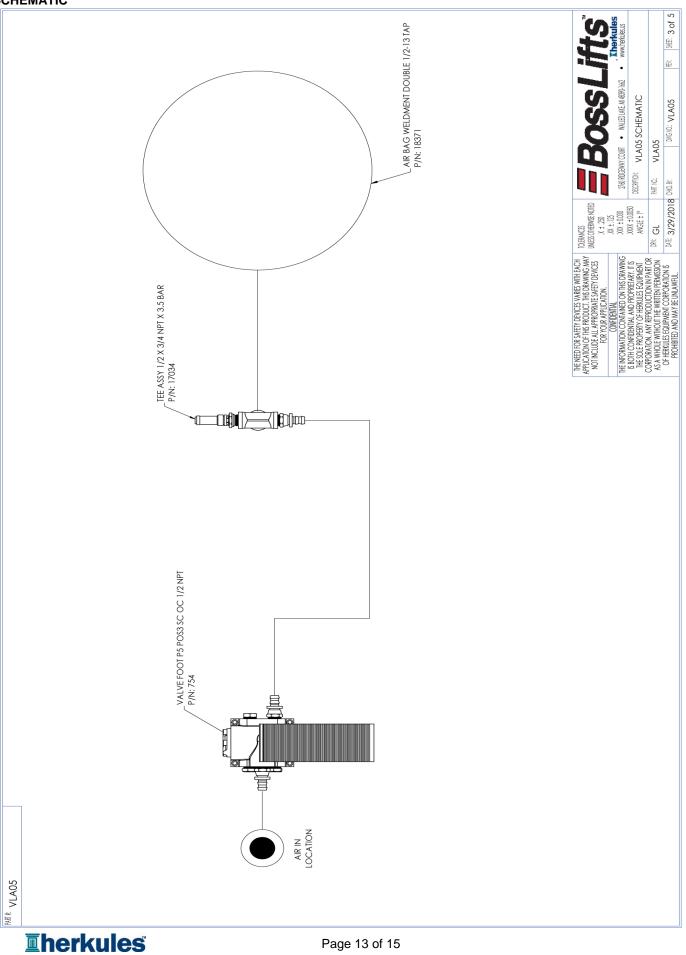


### **VLA05 DRAWINGS**

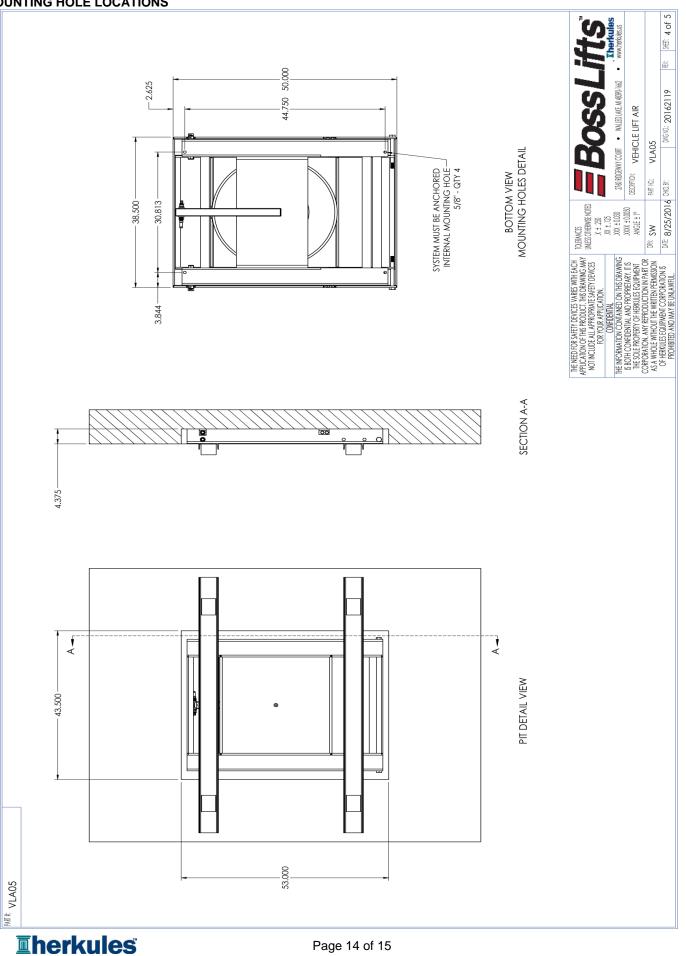
Page 11 of 15



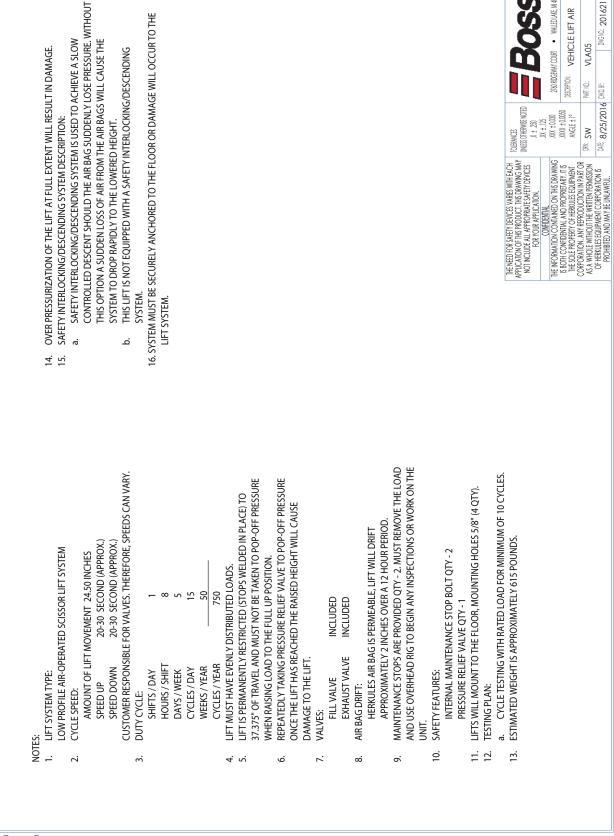
Page 12 of 15







Page 14 of 15



3HET: 5 of 5

55

DWG NO.: 20162119

WWW

DESCRIPTION: VEHICLE LIFT AIR

VLA05

PART NO.:

U

**herkules** 

PART#: VLA05