



Part# 1010619-02  
12/31/2020

by **herkules**

# *VLA03 PIT BOSS TANDEM - LOW RISE*



Made in USA

## OWNERS MANUAL



### INSTRUCTIONS

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



### Herkules Patent Numbers

These products have patent protection under one or more of the following patent numbers:

9422142, 8733508, 8714524, 866247, 8052120, 7070167, 5485860, 5193561, 5174317, 4960142, 4793369 and Patents Pending

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## Herkules Equipment Corporation

A U.S.-based manufacturer, Herkules Equipment Corporation offers a diverse line of products that support multiple industries by improving efficiency, productivity, ergonomics, comfort, and safety in the work environment. The company consists of the three product lines: Herkules, Enkon and BossLifts.

Since 1985, Herkules has designed, engineered and manufactured quality products at our Walled Lake, Michigan facility. Our company supports our products after delivery, with U.S. based customer service, and replacement parts, enabling our customers to proceed with confidence.

To learn more about Herkules, visit <http://herkules.us>. Contact us at [info@herkules.us](mailto:info@herkules.us) with any questions or concerns.

Thank you for purchasing a Herkules product!

# Warranty

**IMPORTANT NOTICE:** if you have a problem with your Herkules product,

## **DO NOT RETURN TO PLACE OF PURCHASE**

Contact Herkules: by phone 1-800-444-4351; by email, [info@herkules.us](mailto:info@herkules.us); or on the web at [herkules.us/contact-us](http://herkules.us/contact-us).

At Herkules we take great pride in the construction of our American-made products, and we stand behind their reliability. 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 product 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\* (Returned 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 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.***

\*To obtain a RGA, contact Herkules at 1-800-444-4351 and have the item model, serial numbers, and invoice number if applicable.

Upon receipt of your equipment, please write your purchase information below. Please retain this manual for your records.

Serial Number	_____	Model Number	_____
Purchase Date	_____	Distributor (if applicable)	_____

### Warning Symbol





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

### Caution Symbol





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

## Tags - Operating Instructions (P/N 1006355) Front

		www.enkon.pro	www.herkules.us	1-800-444-4351
<b>GENERAL OPERATING INSTRUCTIONS</b>				
<ol style="list-style-type: none"><li>1 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>2 Read and understand all warnings, cautions, and instructions in the manual and tags before operating equipment.</li><li>3 Inspect equipment prior to use; repair or replace damaged or broken components. Keep system lubricated for proper function.</li><li>4 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>5 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>6 Secure loads to lift in order to prevent moving or tipping of load.</li><li>7 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>8 Do not operate lift until unit has been correctly installed and adjusted as described in the manual.</li><li>9 Ensure proper function of safety and maintenance devices regularly.</li><li>10 See manual for proper use of maintenance stops.</li><li>11 It is the responsibility of the owner/operator to maintain legibility of all safety and instruction labels.</li><li>12 Herkules is not responsible for any personal injury or property damage resulting from owner/operator failure to follow instructions, cautions, and warnings.</li><li>13 See additional operating instructions, cautions, and warnings tags.</li></ol>				
Warnings and Cautions — see other side of tag				1006355

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

		www.enkon.pro	www.herkules.us	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>				
Operating Instructions — see other side of tag				1006355

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



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### OPERATING INSTRUCTIONS AIR LIFT SYSTEMS

- 1 See general operating instructions, cautions, and warnings tag.

#### **CAUTION**

- 1 Do not use an air supply with pressure exceeding 120 PSI.
- 2 Do not continue to push control lever after lift is fully raised, even though safety valve will prevent over-inflation of air bag.
- 3 Always use a clean, dry air supply that is properly filtered and regulated.

#### **WARNING**

- 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 manufacturer-provided parts.

**1006356**

# VLA03 Instructions

## STEP 1

Herkules recommends using cross tubes in every lifting application

## STEP 2

Once vehicle is over lift, slide cross tube into position between both lifts. 2-4 rubber lifting blocks need to be placed on cross tubes at the preferred lifting positions of the vehicle.

- a) ALWAYS use cross tubes when lifting vehicles over 3000 LBS
- b) DO NOT stack rubber blocks on top of each other.

### CAUTION

1. ALWAYS use cross tubes when lifting vehicles over 3000 LBS.
  2. NEVER stack rubber blocks on top of each other.
- 1002519

## STEP 3

Position cross tubes as close to the center of each air bag as possible.

## STEP 4

If operator cannot align lifting blocks to the vehicle frame due to a large gap between cross tubes and vehicle, raise the lift slightly to decrease the gap then align the rubber blocks.

## STEP 5

Raise the lift by pressing the control lever on the control pedestal to the up position. Release the lever once the vehicle is at the desired height.

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

## STEP 6

Lower the lift by pressing the control lever on the control pedestal to the down position. Release the lever once the vehicle is lowered to the desired position or till the lifts collapse fully.

Ensure all personnel and equipment are clear of vehicle and lift prior to lowering the system.

# Maintenance Instructions

## STEP 1

Check hose connections periodically for tightness to prevent air leakage.

## STEP 2

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

## STEP 3

Replace filter / regulator yearly if option is purchased. (#1001304)

## 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.

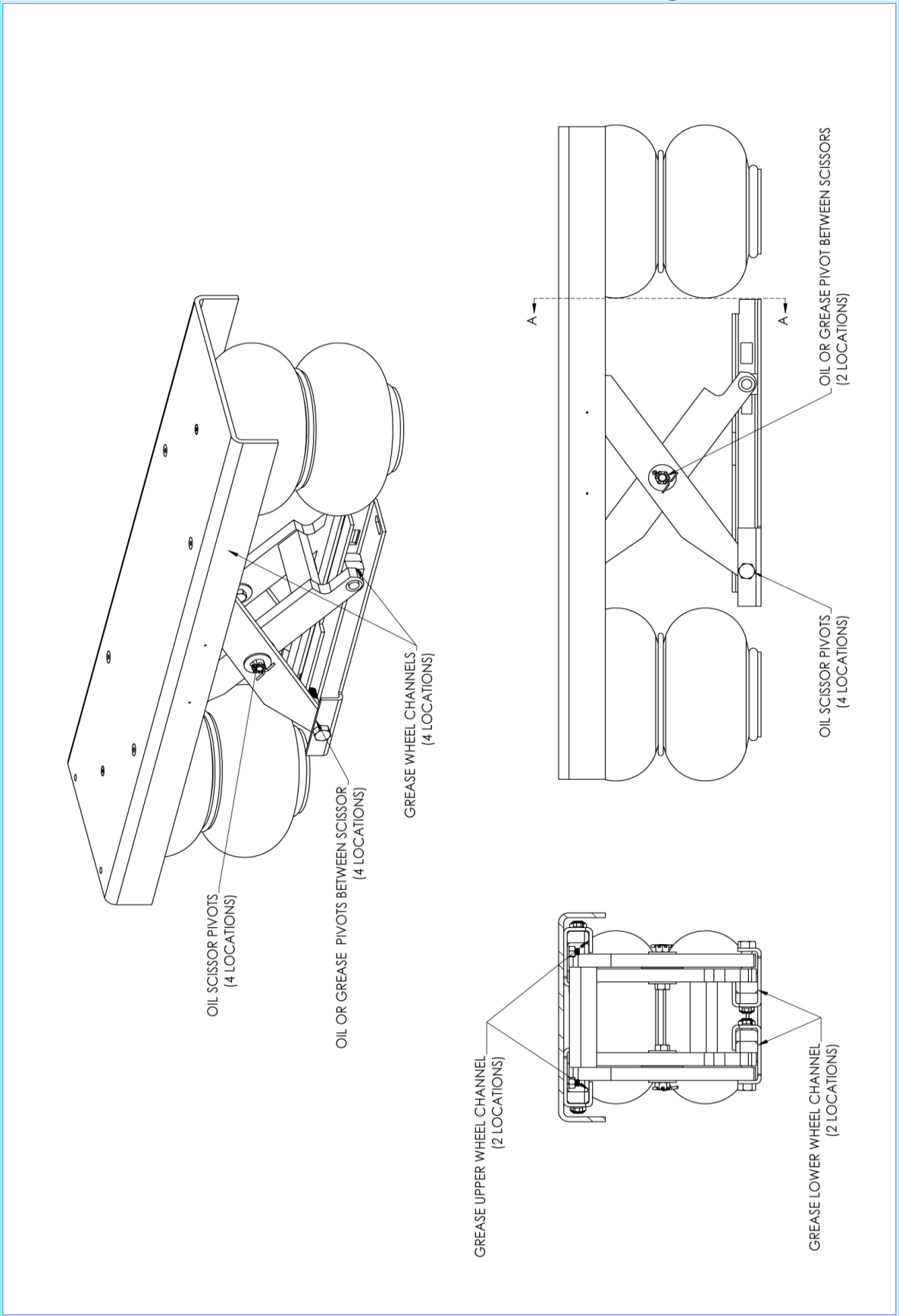
## STEP 8

Use overhead rigging when anything beyond external lubrication is required

## STEP 9

All rubber parts are to be replaced every 5 years.

# Maintenance Lubrication Diagram



# Installation Tools Required

- 1 Core Drilling Machine (Drill bits for 1/2 & 1.00)
- 2 Adjustable wrench (for pneumatic component assembly)
- 3 Flat head screw driver
- 4 Wrench ( 9/16 )
- 5 Wrench ( 3/4 )
- 6 Wrench ( 1-1/16 )
- 7 Wrench ( 1-1/8 )
- 8 Allen wrench ( 5/16 )
- 9 Allen wrench ( 7/32 )
- 10 Pipe wrench (for pneumatic component assembly)
- 11 Teflon tape
- 12 Hose cutter or knife
- 13 Caulk gun (for epoxy anchors)
- 14 Tin snips or cutters
- 15 Saw (cut off stud ends)
- 16 Grinder (smooth studs)

## Special Installation Notes

### STEP 1

Read all installation instructions prior to beginning first step.

### STEP 2

Supplied with the lift is a paper drill template. This template will resemble the diagram shown on page 9.

NOTE: This template will need to be reused for each half of the lift

### STEP 3

In the event that more access is needed to the base of the unit the top deck can be removed.

To remove the top deck, remove items 10, 11, & 15 from the top deck (see page 11)

NOTE: The stop bar must be in place PRIOR to attempting to remove the top plate

NOTE: The top deck is heavy and a second person may be needed to help move during uninstall and reinstall.

### STEP 4

The top plate must be reinstalled and securely fastened with nuts and lock washers prior to installing the air bags to the lifting system.

NOTE: The top deck is heavy and a second person may be needed to help move during uninstall and reinstall.



# Installation/Concrete Instructions

## STEP 1

Read all concrete installation instructions prior to beginning to drill.

## STEP 2

Locate the center line of lift from which all other dimensions will be taken. (see pages 6 & 7)

NOTE: The distance between the center of the two lifts must not exceed 65". The center line of the lift must not be closer to the edge of the pit than 8.5" (see page 6)

## STEP 3

Locate hole "B" along the length of the pit and 3.125" from the center line of the lift and mark hole location. (see pages 6 & 7)

NOTE: See tolerance allowed toward the pit allotted for this hole

## STEP 4

Drill hole "B" into concrete. (see pages 6 & 7)

## STEP 5

Repeat step 2 & 3 for all hole "B" locations. (see pages 6 & 7)

## STEP 6

Either perform step 6 or 7, not necessary to perform both steps. (see pages 6 & 7)

NOTE: Acceptable to use hole "C" or hole "D" in any combination provided one hole is on either side of the center line of the lift.

## STEP 7

Locate hole "C" along the length of the pit 21.875" behind hole "B" and 3.75" from the center line of the lift and mark hole location. (see pages 6 & 7)

NOTE: See tolerance allowed toward the pit allotted for this hole. Hole "C" to hole "C" must be 7.50"

## STEP 8

Locate hole "D" along the length of the pit 21.875" behind hole "B" and 2.50" from the center line of the lift and mark hole location. (see pages 6 & 7)

NOTE: See tolerance allowed toward the pit allotted for this hole. Hole "D" to hole "D" must be 5.00"

## STEP 9

Drill hole "C" and / or hole "D" into concrete. (see pages 6 & 7)

## STEP 10

Repeat step 5 - 8 for all hole "C" and / or "D" locations. (see pages 6 & 7)

## STEP 11

Locate and mark the center of the first airbag along the center line of the lift 7.313" from hole "B" in the opposite direction of hole "C". (see pages 6 & 7)

## STEP 12

Locate and mark the center of the second airbag along the center line of the lift 29.687" from hole "B" in the direction of hole "C". (see pages 6 & 7)

## STEP 13

Drill the 1.00" diameter hole for the air bag plumbing. Perform this operation for both air bag locations. (see pages 6 & 7)

**STEP 14**

Repeat steps 10 - 12 for the second lift on the other side of the pit. (see pages 6 & 7)

**STEP 15**

Locate the two ramp mounting holes (hole "E") 30.930" from hole "B" in the opposite direction of hole "C".  
The hole will be 3.357" from the center line of the lift and mark hole location. (see pages 6 & 7)

NOTE: See tolerance allowed toward the pit allotted for this hole

**STEP 16**

Locate the two ramp mounting holes (hole "E") 53.304" from hole "B" in the direction of hole "C".  
The hole will be 5.375" from the center line of the lift and mark hole location. (see pages 6 & 7)

NOTE: See tolerance allowed toward the pit allotted for this hole

**STEP 17**

Drill hole "E" into concrete. (see pages 6 & 7)

**STEP 18**

Repeat steps 14 - 16 for second lift on the other side of the pit. (see pages 6 & 7)

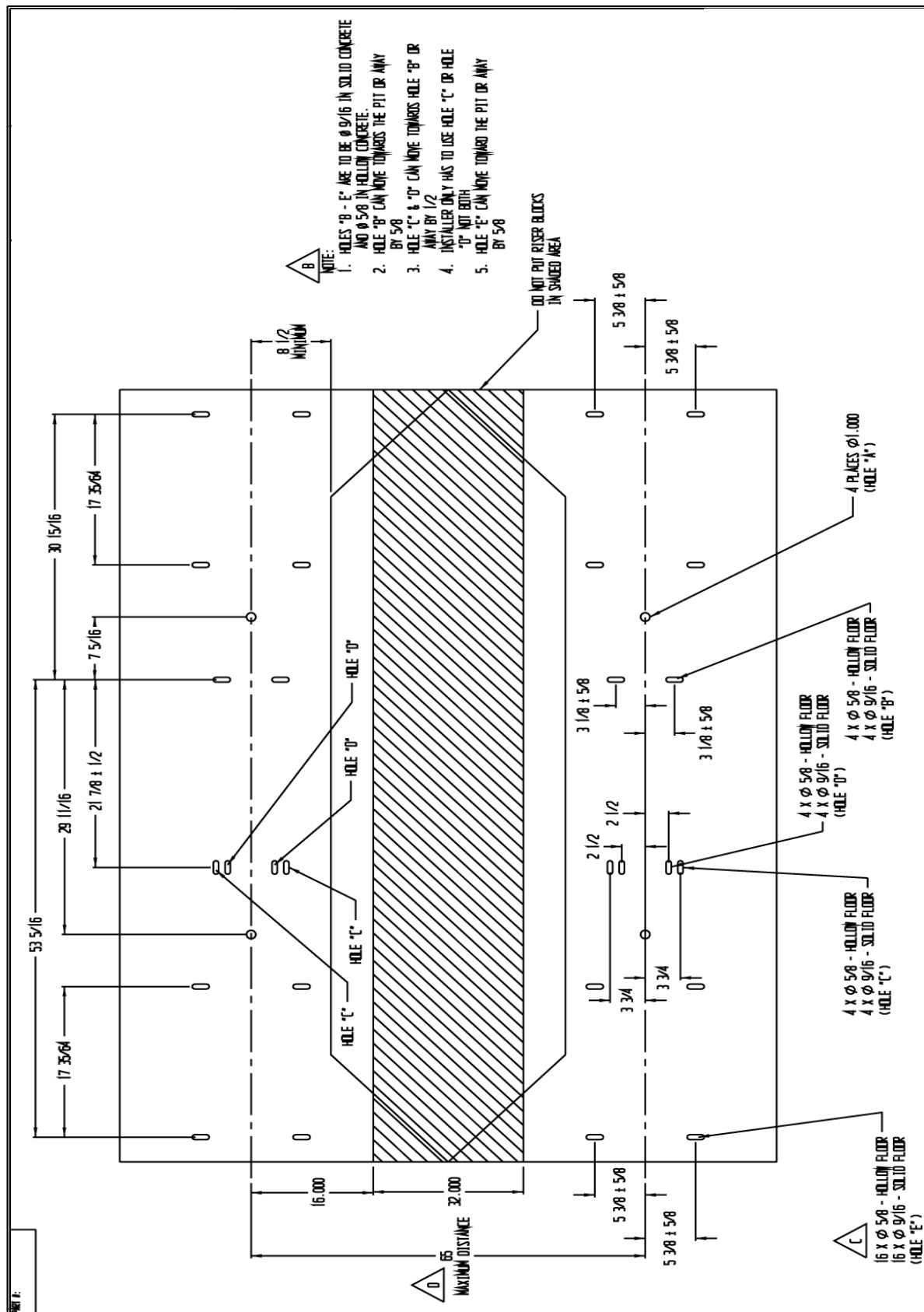
**STEP 19**

Clean out all holes in the concrete and prepare for wedge anchor installation.

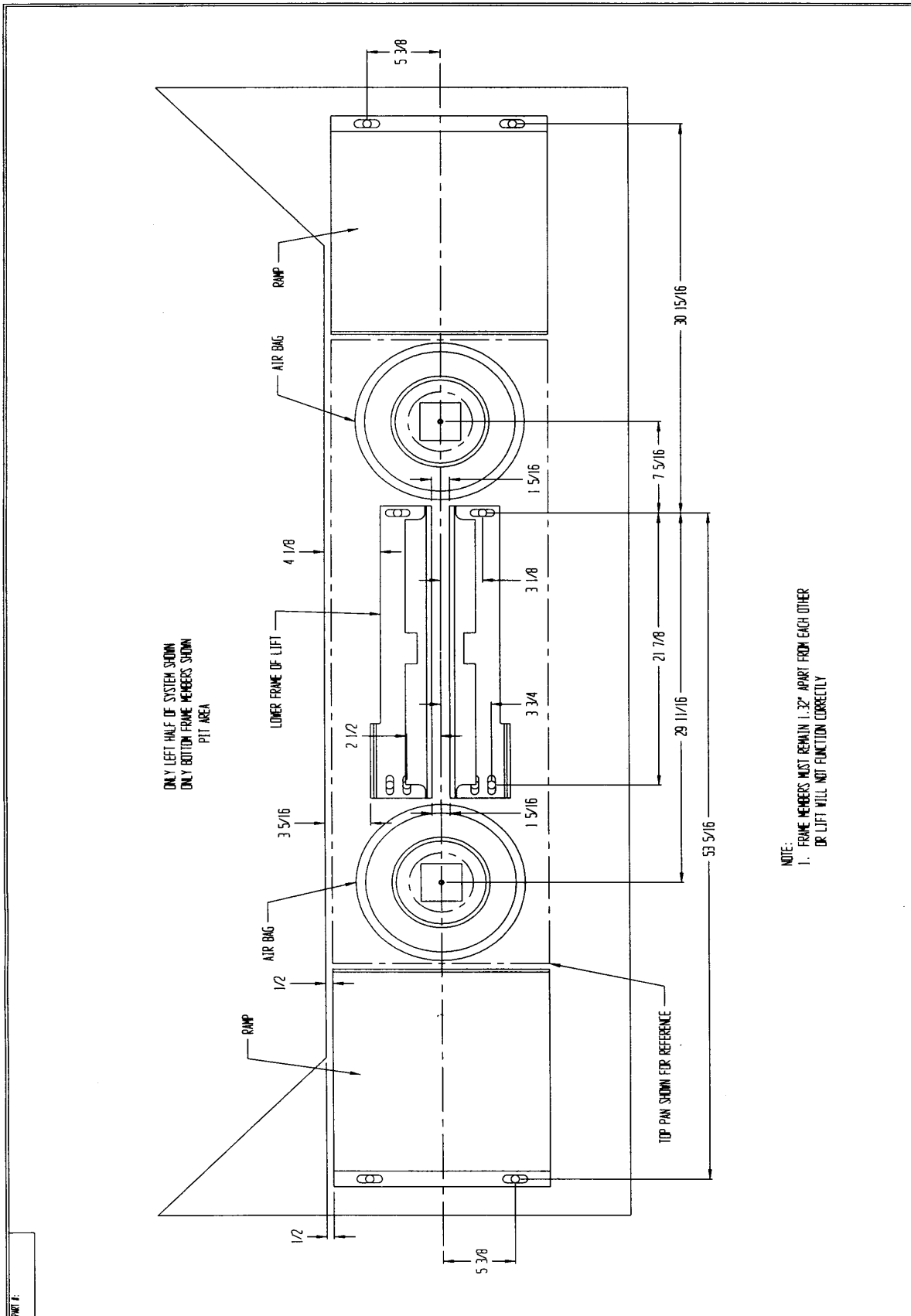
**STEP 20**

See wedge anchor installation instructions.

## Installation/Concrete diagrams

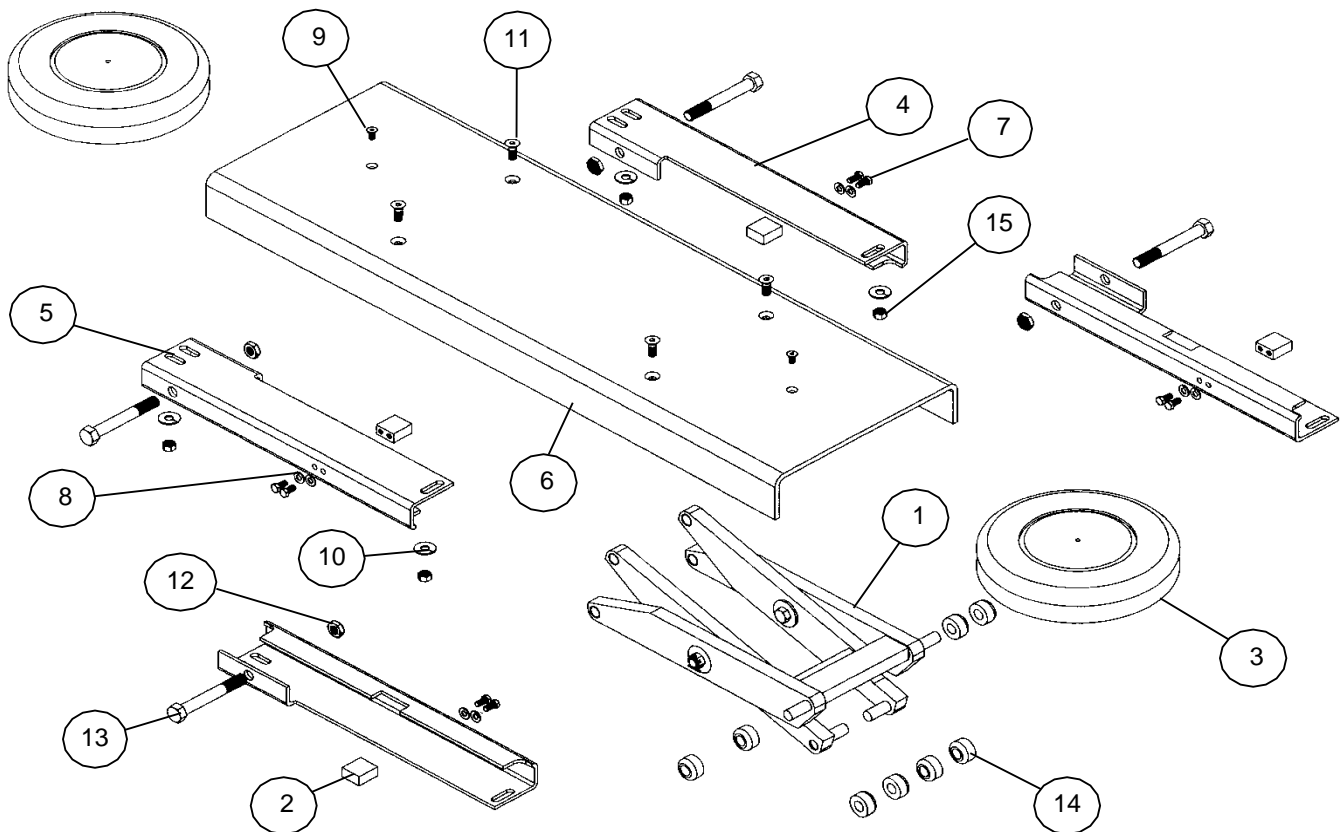


# Installation/Concrete diagrams



NOTE:  
1. FRAME MEMBERS MUST REMAIN 1.32" APART FROM EACH OTHER  
OR LIFT WILL NOT FUNCTION CORRECTLY

## Parts Contained in VLA03 Kit



ID	Part #	Description	Qty	Units	Reference
1	12711	SCISSOR ASSEMBLY FOR T200	2	EA	Appendix 1
2	12578	BLOCK WHEEL STOP FOR T200	8	EA	
3	13753	AIR BAG DOUBLE FOR K-200	4	EA	Appendix 2
4	1002660	FRAME MEMBER A FOR T200	4	EA	
5	1002661	FRAME MEMBER B FOR T200	4	EA	
6	1002697	TOP PAN FORMED FOR T200	2	EA	
7	83G	BOLT HEX 3/8-16 X 3/4 GD 5 Z	16	EA	
8	85C	WASHER LOCK 3/8 Z	16	EA	
9	1000613	BOLT FHSC 3/8-16 X 3/4 BLACK	4	EA	
10	85H	WASHER LOCK 1/2 Z	8	EA	
11	1000031	BOLT FHSC 1/2-13 X 1-1/2 BLACK	8	EA	
12	1000211	NUT JAM NYLOCK 3/4-10 Z	8	EA	
13	1002711	BOLT HEX 3/4-10 X 5 W/3-3/4SHLD	8	EA	
14	1007868	WHEEL 1.565 OD X .765 ID STEEL	16	EA	
15	1001259	NUT HEX 1/2-13 Z	8	EA	
16	12368	BLOCK SET 3-7/8 X 5 X 1-1/2 (QTY 4)	1	EA	Not Shown
17	12855	STOP BAR FOR T200 SYSTEM	2	EA	Not Shown

# Installation Instructions

## STEP 21

Using two people lift the top of the lift system and insert the yellow block stop to keep the lift in the raised position  
Repeat this step for the second lift.

NOTE: Ensure the stop is positioned evenly in the slot or the lift may fall causing injury.

## STEP 22

Obtain assembled lift system and place lift over threaded rod anchored to the floor.

NOTE: Lift is symmetrical with no front or back. Orientate the lift so the Pit Boss sticker and the warnings are facing away from the pit.

## STEP 23

Obtain second assembled lift system and place lift over threaded rod anchored to the floor on opposite side of the pit.

NOTE: Lift is symmetrical with no front or back. Orientate the lift so the Pit Boss sticker and the warnings are facing away from the pit.

NOTE: The rollers of each lift MUST roll in the same direction during the lifting cycle.

## STEP 24

Secure lift into position using washers and nuts provided in the installation kit (12693)

## STEP 25

Obtain air bag (1000953), and hose barb from plumbing kit (12694) [see fig 1].

ID	Part #	Description	Qty.
1	13753	REPLACEMENT AIR BAG FOR T200	1
2	1003396	HOSE BARB PTL 3/8 X 1/4 NPT	1
3	1006461	HOSE BARB PTL 90 DEG 3/8 X 1/4 NPT (IF ANGLE HOSE BARB IS NEEDED)	1

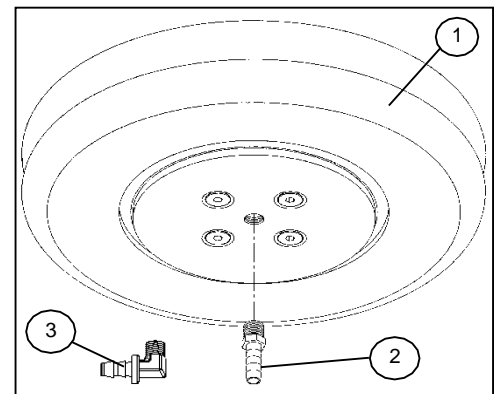


fig 1.

## STEP 26

Apply Teflon tape to all male threaded components and secure components together [see fig 1].

NOTE: Failure to apply Teflon tape will result in air leaks.

## STEP 27

Secure hose barb (1003396) to the air bag base plate (1002825).

NOTE: Air bag base plate (1002825) comes attached to air bag (1000953).

## STEP 28

Repeat steps 25 - 27 for each air bag.

## STEP 29

Obtain air bags and mounting hardware: [see fig 2].

ID	Part #	Description	Qty.
1	1000953	AIR BAG DOUBLE FOR K-200	2
2	1000613	BOLT FHSC 3/8-16 X 3/4 BLACK	2

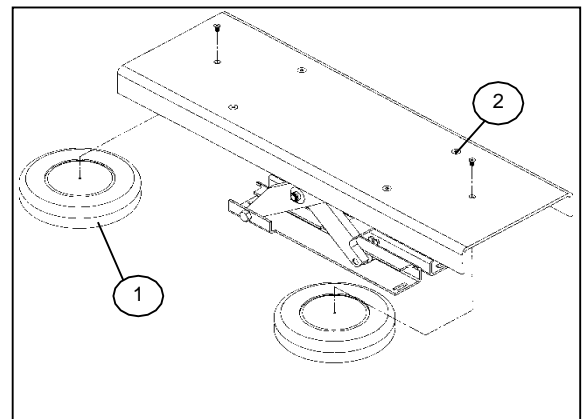


fig 2.

## STEP 30

Secure air bags into position on the top pan. [see fig 2].

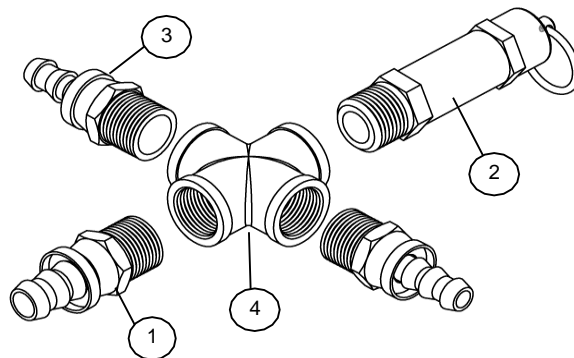
## STEP 31

Repeat steps 29 - 31 to complete second lift assembly before moving onto the next step.

**STEP 31**

Obtain components used to build the cross assembly from plumbing kit [see fig 3].

ID	Part #	Description	Qty.
1	1003586	HOSE BARB PTL 1/2 X 1/2 NPT	1
2	1003587	VALVE RELIEF 1/2 NPT X 75 PSI	1
3	1003585	HOSE BARB PTL 3/8 X 1/2 NPT	2
4	1002250	CROSS 1/2 NPT BRASS	1



REFERENCE KIT# 12694 (APPENDIX 3)  
fig 3.

**STEP 32**

Apply Teflon tape to all male threaded components and secure components together [see fig 3].

**STEP 33**

Repeat steps 31 & 32 to create second cross assembly.

**STEP 34**

Position the cross assembly between the two air bags and fix to location. [see fig 4].

**STEP 35**

Obtain 3/8" hose: [see fig 5]

ID	Part #	Description	Qty.
1	100-334	HOSE 3/8" PUSH TO LOK	(user defined)

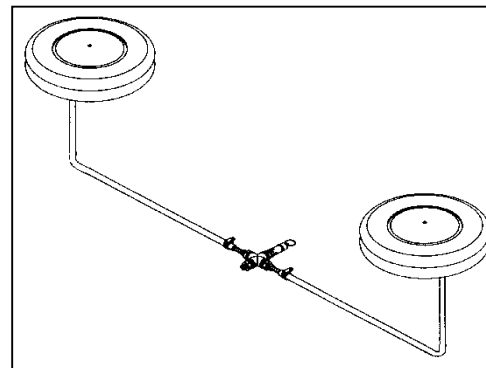


fig 4.

**STEP 36**

Cut a length of 3/8" hose (100-334) to run from the air bag hose barb to the cross assembly [see fig 5].

NOTE: This length of hose MUST be the same length in all four positions [see fig 6].

NOTE: Failure to have the same length in all 4 positions will cause the lift to function incorrectly and eventual failure

**STEP 37**

Verify all 3/8" hose lengths (100-334) are the same [see fig 6].

**STEP 38**

Push hose onto hose barb at the air bag and secure [see fig 5].

NOTE: Hose clamps not needed.

**STEP 39**

Route hose from air bag to the cross assembly [see fig 5].

NOTE: Loop hoses in remote location to keep same length of hose if necessary.

**STEP 40**

Push hose onto hose barb at the cross assembly and secure. [see fig 5].

**STEP 41**

Repeat steps 38 - 40 for each of the four locations [see fig 6].

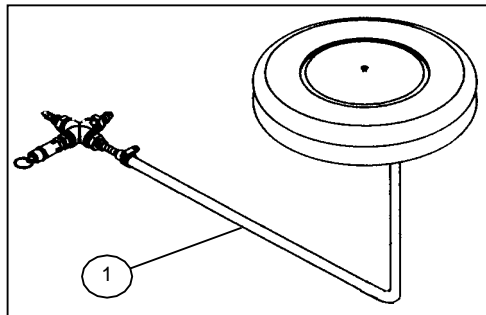


fig 5.

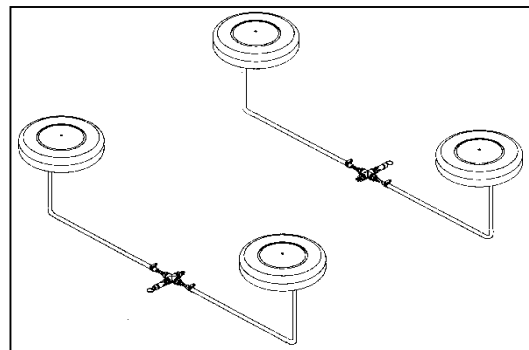
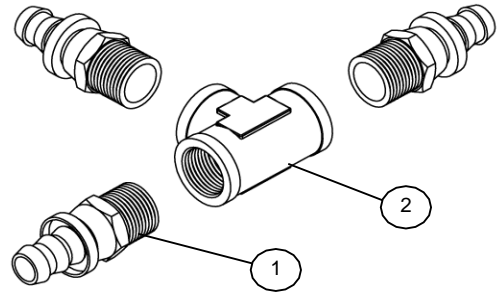


fig 6.

**STEP 40**

Obtain components used to build the tee assembly from plumbing kit [see fig 7].

ID	Part #	Description	Qty.
1	1003586	HOSE BARB PTL 1/2 X 1/2 NPT	3
2	C12G	TEE 1/2 NPT BRASS	1

**STEP 41**

Apply Teflon tape to all male threaded components and secure components together [see fig 7].

**STEP 42**

Secure hose barbs (1003586) to the tee (C12G) [see fig 7].

fig 7.

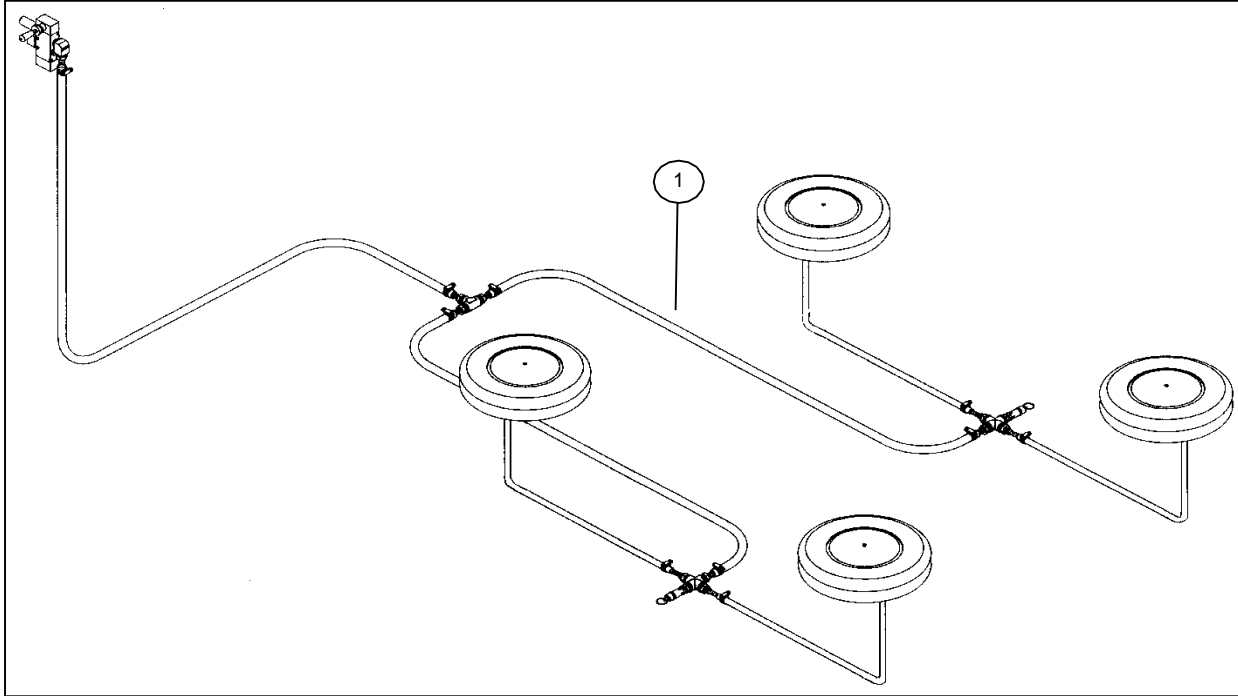


fig 8.

**STEP 43**

Obtain 1/2" hose: [see fig 8].

ID	Part #	Description	Qty.
1	100-332	HOSE 1/2 ID 250 PSI RUBBER	(user defined)

**STEP 44**

Cut a length of 1/2" hose (100-332) to run from the cross assembly to the tee assembly [see fig 8].

NOTE: This length of hose MUST be the same length in both positions as shown in fig 8.

Failure to have the same length in both positions will cause the lift to function incorrectly and eventual failure

**STEP 45**

Verify the 1/2" hose lengths (100-332) are the same [see fig 8].



STEP 46

Push hose onto hose barb at the tee assembly and secure [see fig 8].

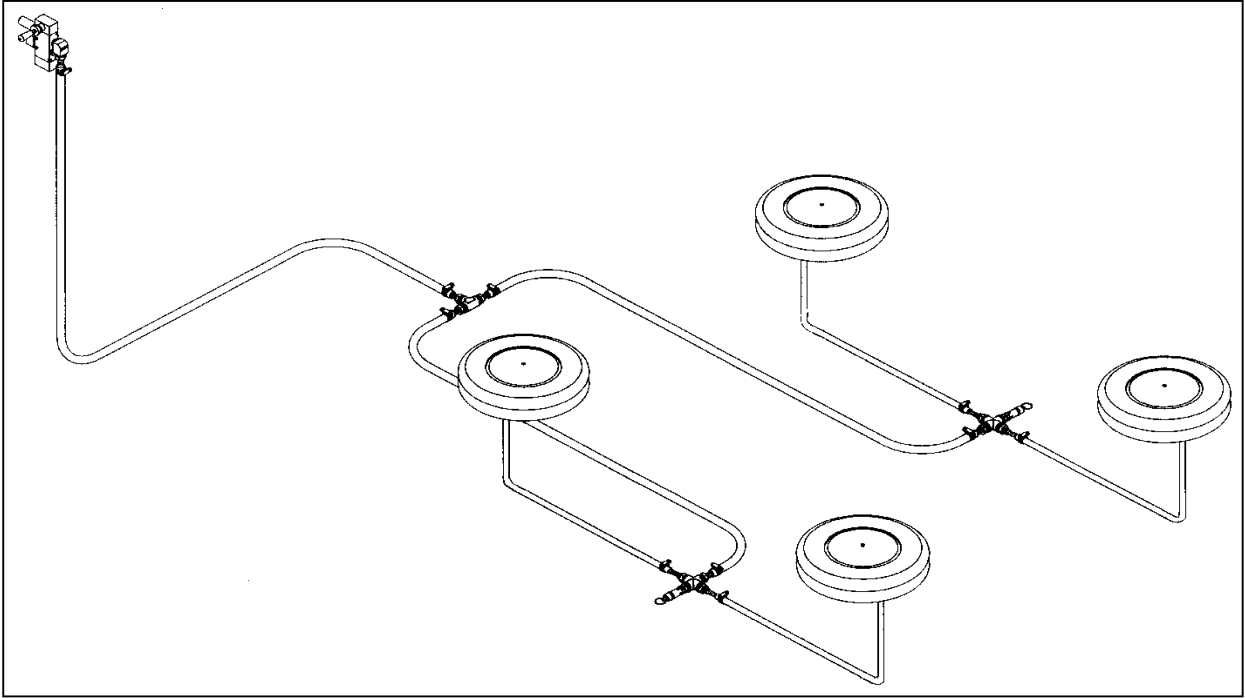


fig 9.

STEP 47

Route hose from tee assembly to the cross assembly

NOTE: Loop hoses in remote location to keep same length of hose if necessary.

STEP 48

Push hose onto hose barb at the cross assembly and secure [see fig 9].

STEP 49

Repeat steps 65 - 70 for each of the opposite side [see fig 9].

STEP 50

Use the remaining length of hose (100-332) to join tee assembly to the controller [see fig 9].

STEP 51

Locate and identify all lift components prior to beginning assembly (see page 11).

STEP 52

Obtain Frame member, wheel stop and hardware: [see fig 10].

ID	Part #	Description	Qty.
1	1002660	FRAME MEMBER A FOR T200	1
2	85C	WASHER LOCK 3/8 Z	2
3	83G	BOLT HEX 3/8-16 X 3/4 GD 5 Z	2
4	12578	BLOCK WHEEL STOP FOR T200	1

STEP 53

Using 3/8" bolt (83G) and lock washer (85C) secure wheel stop (12578) to frame member (1002660) [see fig 10].

STEP 54

Repeat steps 52 & 53 for second frame member (1002660)

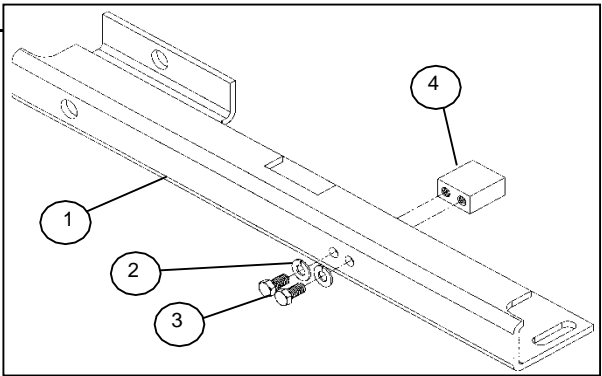


fig 10.

**STEP 55**

Obtain Frame member, wheel stop and hardware: [see fig 11].

ID	Part #	Description	Qty.
1	1002661	FRAME MEMBER B FOR T200	1
2	85C	WASHER LOCK 3/8 Z	2
3	83G	BOLT HEX 3/8-16 X 3/4 GD 5 Z	2
4	12578	BLOCK WHEEL STOP FOR T200	1

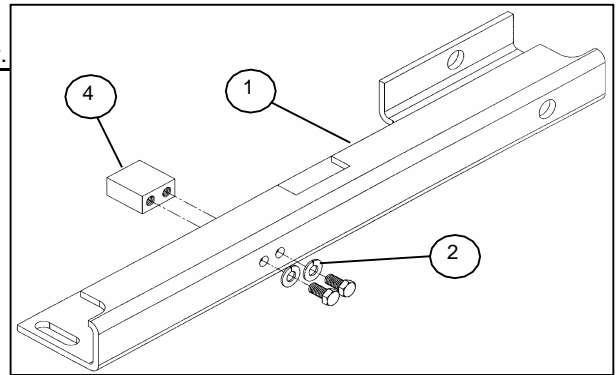


fig 11.

**STEP 56**

Using 3/8" bolt (83G) and lock washer (85C) secure wheel stop (12578) to frame member (1002661) [see fig 11].

**STEP 57**

Repeat steps 55 & 56 for second frame member (1002661)

**STEP 58**

Obtain 2 assembled frame members (will now be considered lower frame member) and align with holes in floor [see fig 12].

NOTE: The frame members should be one "A" and one "B" as shown in floor mount drawing.  
The frame members MUST remain 1.32" apart or damage will occur to the system [see fig 12].

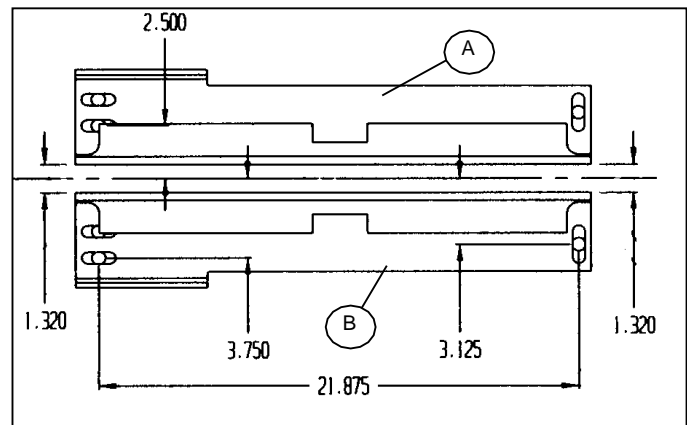


fig 12.

**STEP 59**

Locate lower frame members on a level surface shim frame member if floor is not level [see fig 12].

**STEP 60**

Using anchor hardware secure frame members to floor [see fig 12].

**STEP 61**

Obtain scissor assembly (12711) and 8 wheels (10881) [see fig 13].

ID	Part #	Description	Qty.
1	10881	WHEEL STEEL FOR TILT MODULE 10870	1
2	12711	SCISSOR ASSEMBLY FOR T200	1

**STEP 62**

Install 8 wheels (10881) per scissor assembly [see fig 13].

NOTE: Add grease to wheel pin prior to installing the wheels

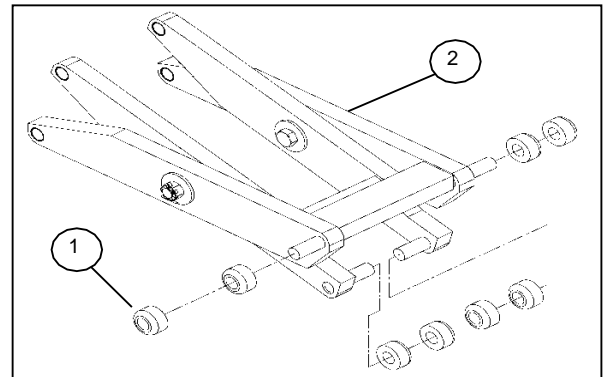


fig 13.

**STEP 63**

Obtain scissor assembly and mounting hardware: [see fig 14].

ID	Part #	Description	Qty.
1	1000211	NUT JAM NYLOCK 3/4-10 Z	1
2	1002711	BOLT HEX 3/4-10 X 5 W/3-3/4SHLD	1

**STEP 64**

Position the scissor assembly within the lower frame members so wheels slide within the wheel track. Slide the 3/4" bolt (1002711) through the outer scissor and secure using nut (1000211) [see fig 14].

NOTE: Add grease to wheel track prior to installing scissor assembly

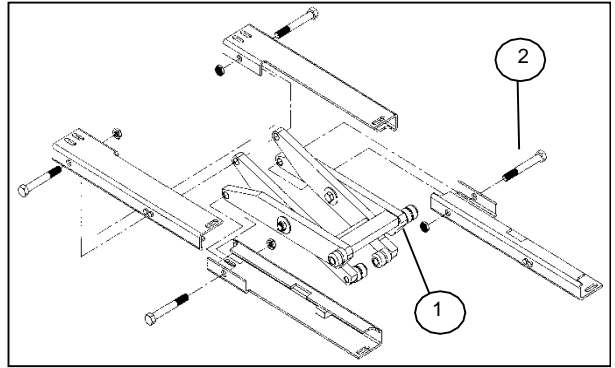


fig 14.

**STEP 65**

Repeat steps 63 & 64 for second half of scissor assembly

**STEP 66**

Obtain a 2 x 2 block and position between the outer scissor and the lower frame member so scissors sit elevated.

NOTE: The block must be rigid and unable to slip out. Without proper support hands may be crushed

**STEP 67**

Obtain one frame member assembly (will now be considered upper frame member) and hardware: [see fig 15].

ID	Part #	Description	Qty.
1	1000211	NUT JAM NYLOCK 3/4-10 Z	1
2	1002711	BOLT HEX 3/4-10 X 5 W/3-3/4SHLD	1

**STEP 68**

Position the upper frame member by sliding frame member over the outer scissor wheels then lower so upper frame member rests on top of the inner scissor [see fig 15].

NOTE: Add grease to wheel track prior to installing scissor assembly

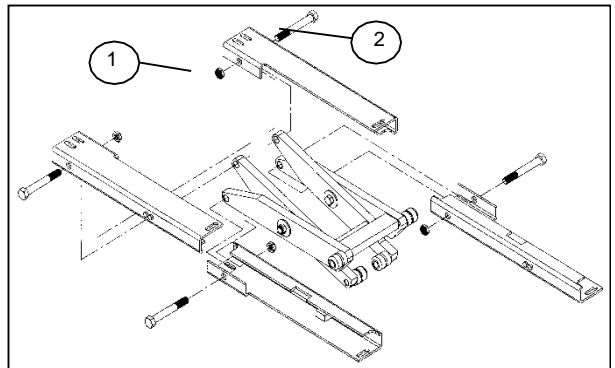


fig 15.

**STEP 69**

Slide the 3/4" bolt (1002711) through the inner scissor and secure using nut (1000211) [see fig 15].

**STEP 70**

Repeat steps 68 - 69 for second half of scissor assembly

**STEP 71**

Obtain the top pan and mounting hardware: [see fig 16].

ID	Part #	Description	Qty.
1	1002697	TOP PAN FORMED FOR T200	1
2	1000031	BOLT FHSC 1/2-13 X 1-1/2 BLACK	4
3	84J	NUT LOCK 1/2-13 Z	4

**STEP 72**

Place top pan over lift assembly and secure top pan (1002697) to the lift assembly using bolts (1000031) and nuts (84J) [see fig 16].

NOTE: Be sure that the upper frame members are pushed as close together as possible.

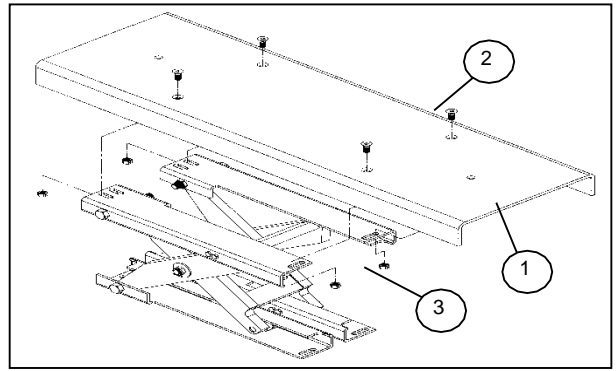


fig 16.

**STEP 73**

Obtain air bags and mounting hardware: [see fig 17].

ID	Part #	Description	Qty.
1	12573	AIR BAG WELDMENT FOR T0011	2
2	1000613	BOLT FHSC 3/8-16 X 3/4 BLACK	2

**STEP 74**

Secure air bags into position on the top pan [see fig 17].  
Be sure to install shim plate between air bag and top pan.

**STEP 75**

Repeat steps 21 - 43 to complete second lift assembly before moving onto the plumbing installation.

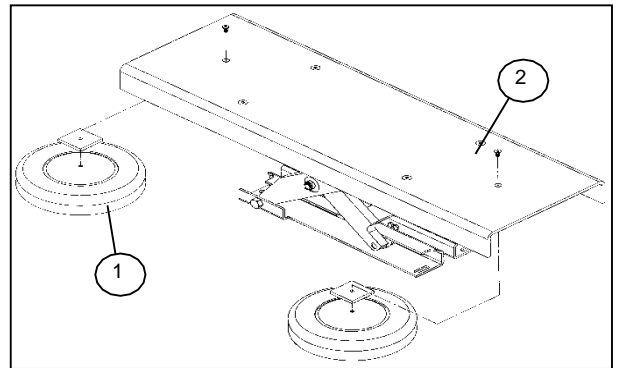
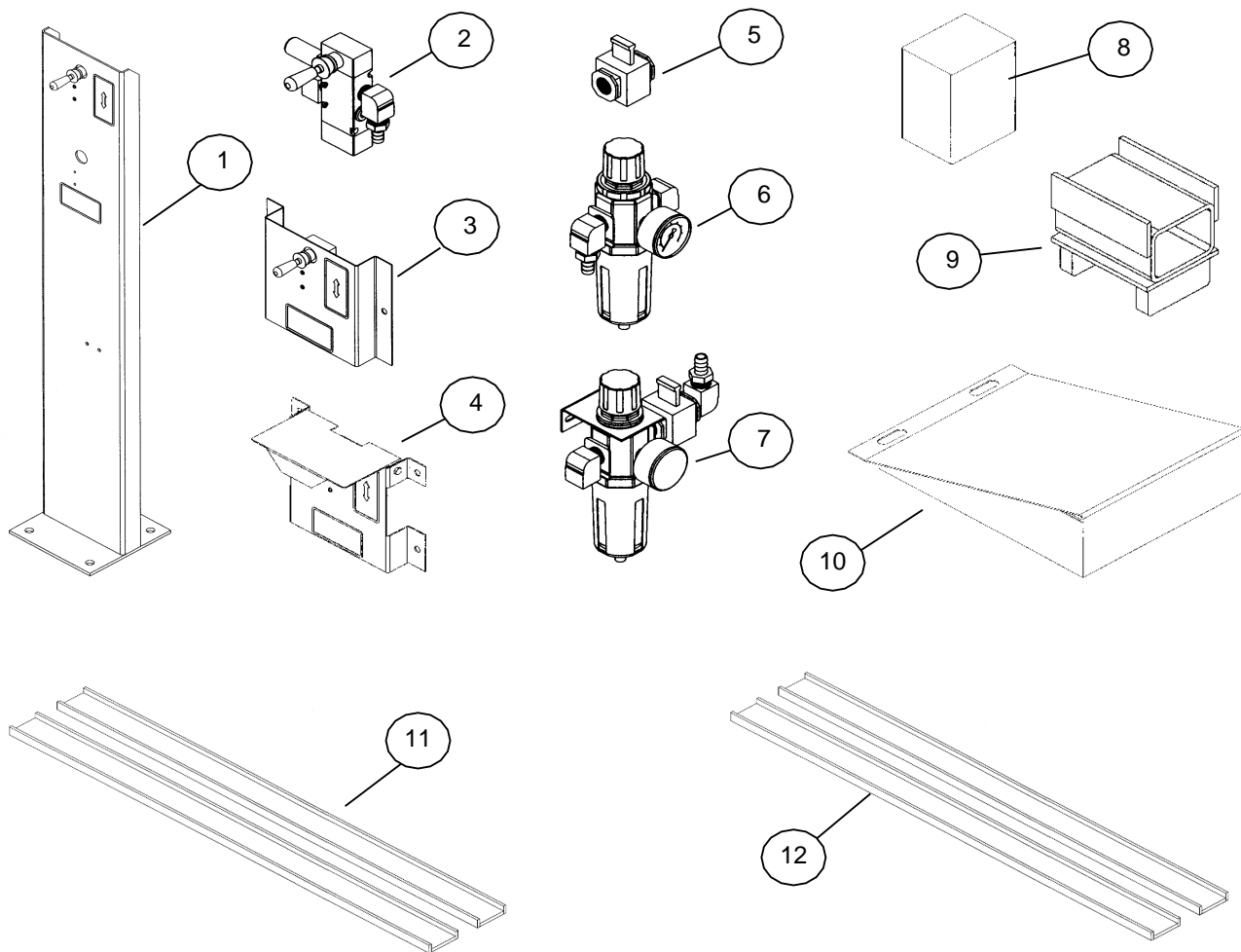


fig 17.

## Optional T200 Accessories



ID	Part #	Description	Qty	Units
1	12591	CONTROL MOUNT ASSY L-ONLY HAND (PED)	1	EA
2	12592	VALVE ASSY HAND LIFT-ONLY W/MUFFLER	1	EA
3	19325	CONTROL MOUNT ASSY L-ONLY HAND (WALL)	1	EA
4	19324	CONTROL MOUNT ASSY (WALL & SAFETY COVER)	1	EA
5	1002450	VALVE LOCKOUT 1/2 NPT BLOCK - AL	1	EA
6	11028	VALVE ASSY FILTER/REG W/GAUGE	1	EA
7	12088	VALVE ASSY FILTER-REG/LOUT BLOCK AL	1	EA
8	12892	BLOCKS 160 X 120 X 100 (SOLD INDIVIDUALLY)	1	EA
9	12826	KIT RISER TRUCK FOR T200 (QTY 4)	1	EA
10	12572	RAMPS SHORT & NARROW (QTY 4)	1	EA
11	21012	KIT CROSS TUBE WELDMENT - AL	1	EA
-	12693	KIT INSTALLATION FOR T200	1	EA
-	12694	KIT PLUMBING FOR T200	1	EA

## Troubleshooting

Problem	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 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 (if purchased) set to minimum of 80psi</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.</li> <li>2 Check pressure relief valve. If pressure relief valve is "leaking" lower lift immediately, the bags are in a state of over pressurization.</li> <li>3 Check air bag for cuts or holes.</li> </ol>
Only 1 lift is functioning	<ol style="list-style-type: none"> <li>1 Check all air lines to ensure they are properly connected and no leaks.</li> <li>2 Check air hoses to ensure no kinks or cuts in the line.</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 joint and wheel tracks</li> </ol>
Lift system raises load unevenly	<ol style="list-style-type: none"> <li>1 Load is uncentered, recenter the vehicle and repeat lift process</li> <li>2 Hose lengths are not correct. Verify proper hose lengths as stated in steps 58 - 71 in the "Plumbing Instructions" section of the manual.</li> </ol>

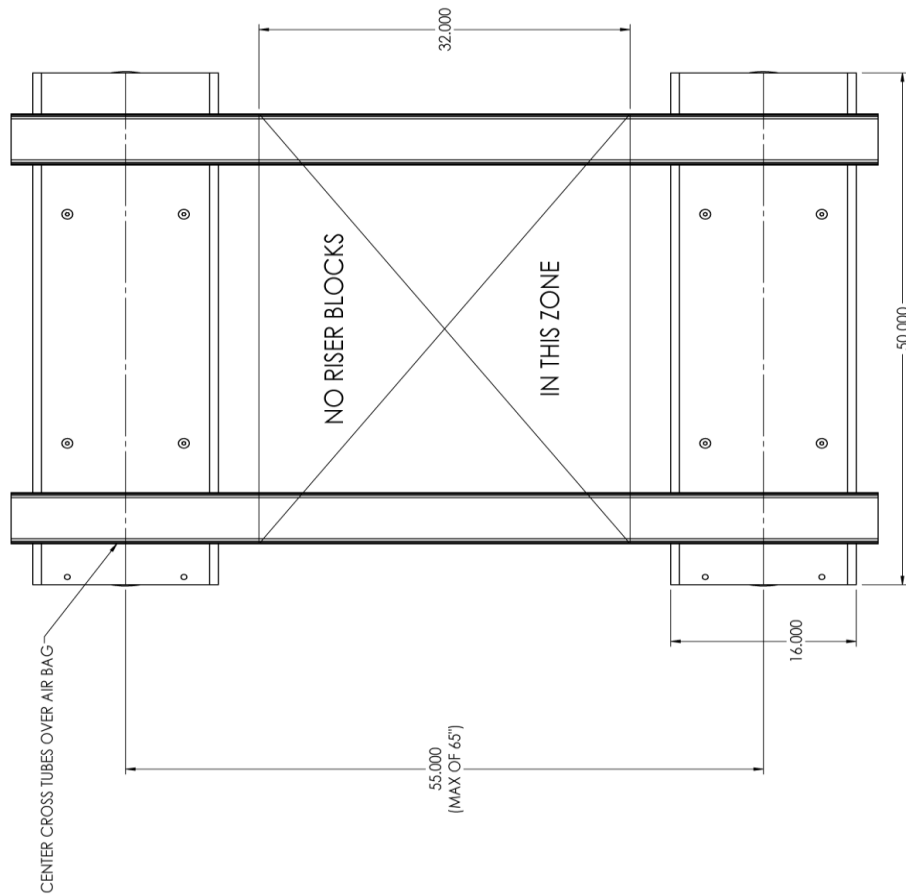
## Notes

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

## VLA03



PART #: VLA03

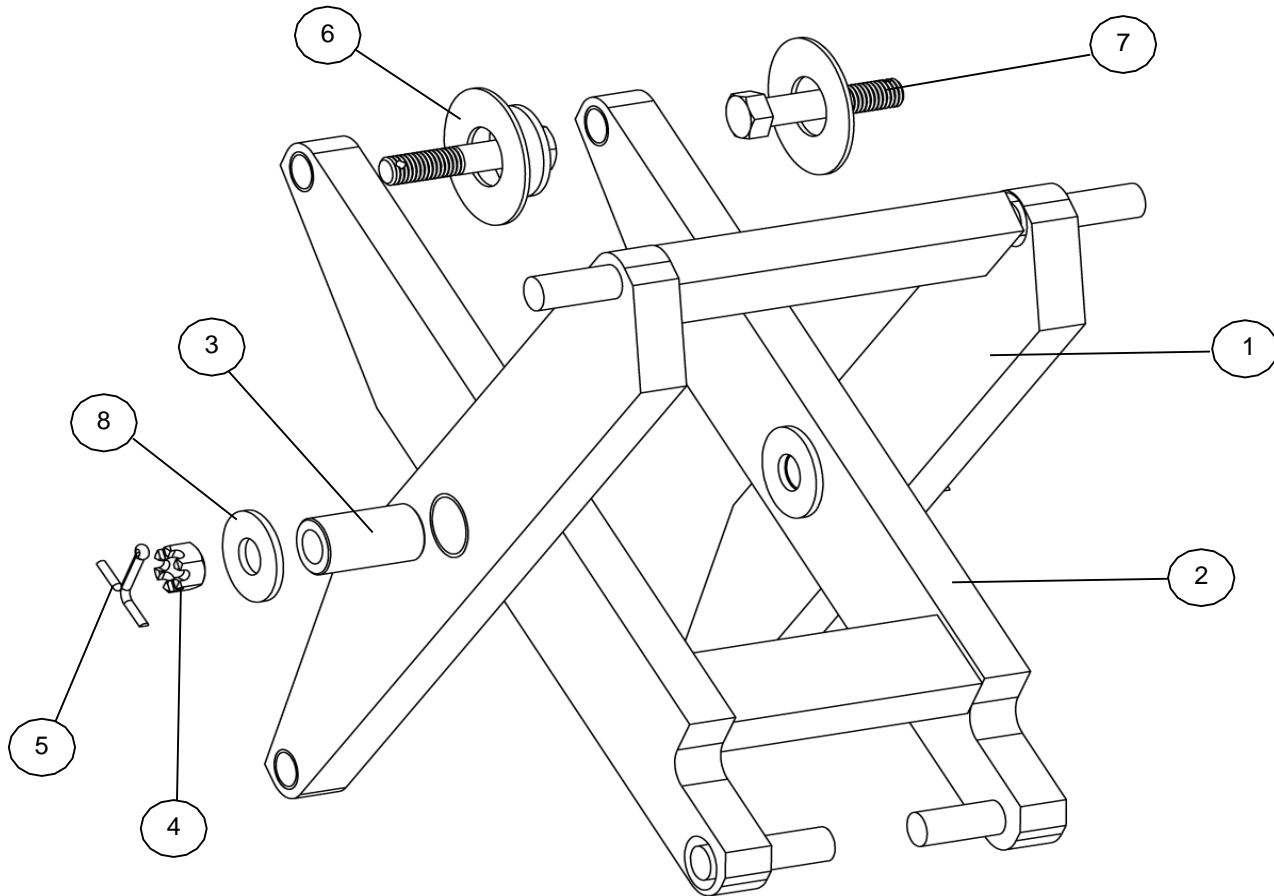


- NOTES:
1. ALUMINUM CROSS TUBES (SET OF 2) RATED FOR LOAD CAPACITY OF THE LIFT, 10,000 LBS.
  2. WEIGHT OF SINGLE ALUMINUM CROSS-MEMBER IS APPROXIMATELY 15 LBS.
  3. ALWAYS USE CROSS TUBES ON VEHICLES WEIGHING MORE THAN 3,000 LBS.
  4. DO NOT STACK RUBBER BLOCKS ON TOP OF EACH OTHER.

THE NEED FOR SAFETY DEVICES VARIES WITH EACH APPLICATION OF THIS PRODUCT. THIS DRAWING MAY NOT INCLUDE ALL APPROPRIATE SAFETY DEVICES FOR YOUR APPLICATION.		TOLERANCES UNLESS OTHERWISE NOTED X ± .250 XX ± .125 XXX ± 0.030 XXXX ± 0.020 ANGLE ± 1°		 2760 ROXBURY COURT • WALLED LAKE, WA 98093-1602 • www.enkon.com	
CONFIDENTIAL					
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		CHG. BY:	VLA03	DATE:	20172432
		SHEET:	2 of 2		

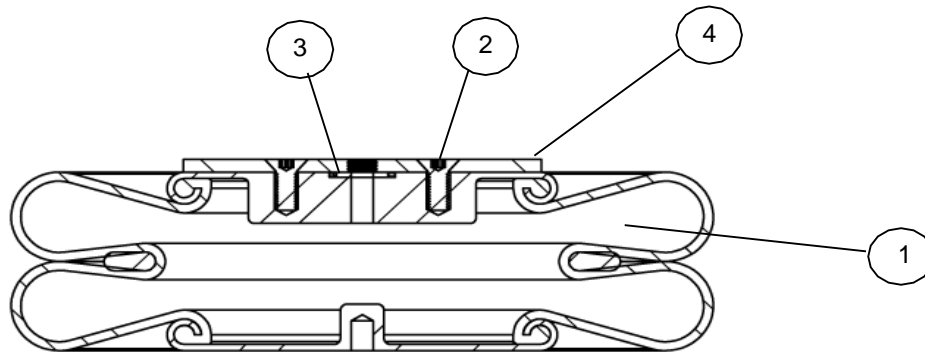


## Appendix 1) Scissor Assembly for T200 (Part # 12711)



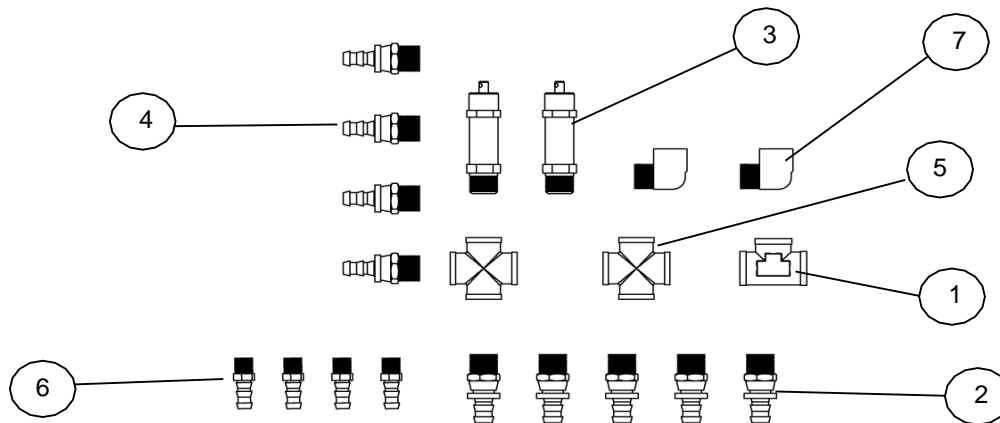
ID	Part #	Description	Qty	Units
1	12539	SCISSOR OUTER WELDMENT A#B 9.7 X 20	1	EA
2	12538	SCISSOR INNER WELDMENT C#D 7.4 X 20.2	1	EA
3	1002626	TUBE 1.244 OD X .75 ID X 2.10 CRS	2	EA
4	1001480	NUT SLOTTED HEX 5/8-11 Z	2	EA
5	1001481	COTTER PIN 5/32 X 1.25 ZINC	2	EA
6	1002473	WASHER FLAT 3 OD X 1.313 ID X .1 Z	2	EA
7	12125	BOLT ASSY DRILLED FOR V-960	2	EA
8	009-125	WASHER 2 OD X .8125 ID Z 3/4 USS Z	4	EA

## Appendix 2) AIR BAG DOUBLE FOR K-200 (Part # 13753)



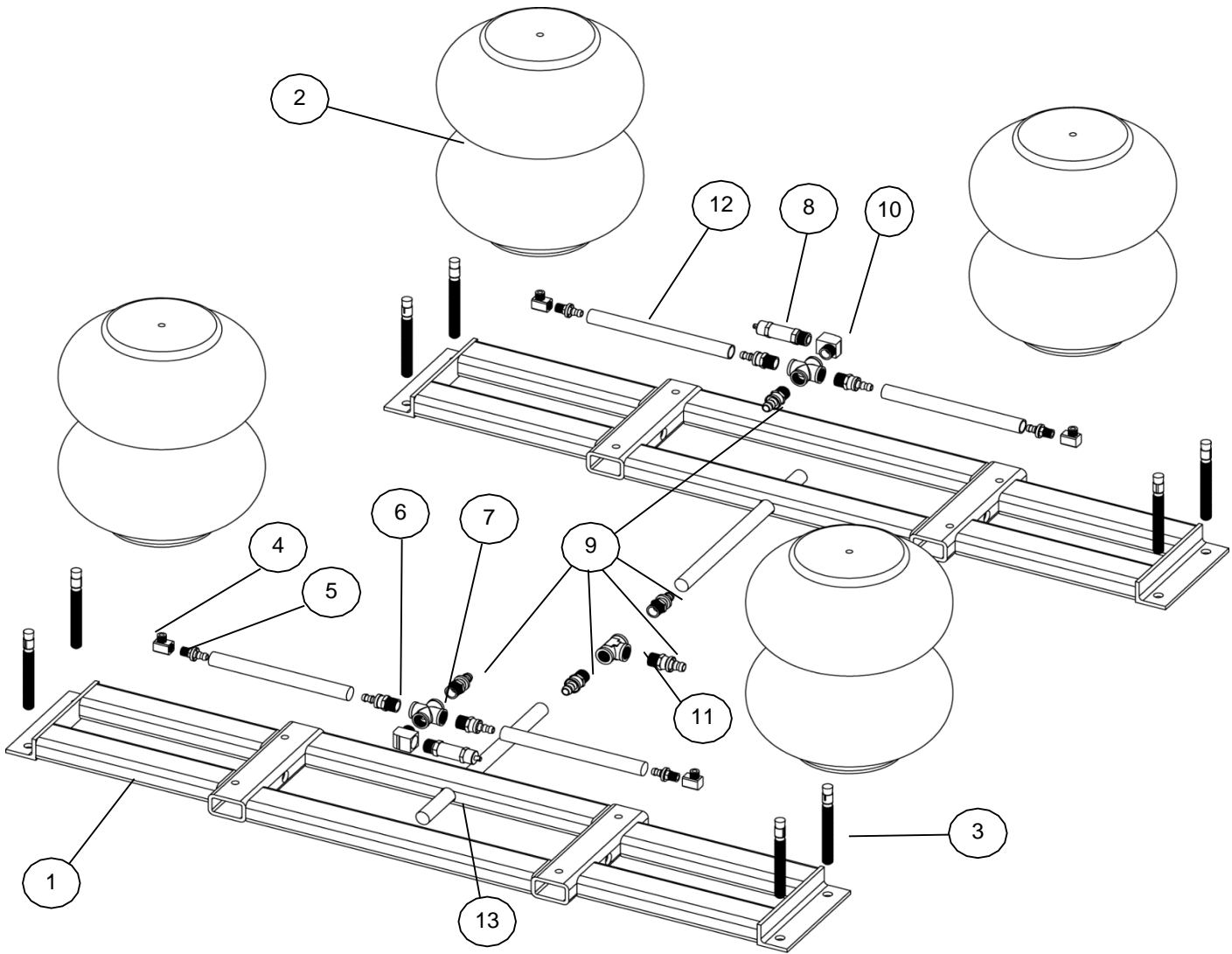
ID	Part #	Description	Qty	Units
1	1000953	AIR BAG DOUBLE FOR T-200	1	EA
2	1003363	O-RING 1.25 OD X .955 ID X .155 THK	1	EA
3	1002825	PLATE ROUND 6.5" OD T200 BAG MOUNT	1	EA
4	1000613	BOLT FHSC 3/8-16 X 3/4 BLACK	4	EA

## Appendix 3) KIT PLUMBING FOR T200 (Part # 12694)



ID	Part #	Description	Qty	Units
1	C12G	TEE 1/2 NPT BRASS	1	EA
2	1003586	HOSE BARB PTL 1/2 X 1/2 NPT	5	EA
3	1003587	VALVE PRESSURE RELIEF 1/2 NPT X 75 PSI	2	EA
4	1003585	HOSE BARB PTL 3/8 X 1/2 NPT	4	EA
5	1002250	CROSS 1/2 NPT BRASS	2	EA
6	1003396	HOSE BARB PTL 3/8 X 1/4 NPT	4	EA
7	M6B	ELBOW STREET 1/2 NPT BRASS	2	EA

# INSTALLATION INSTRUCTIONS FOR 13758



ID	Part #	Description	Qty	Units
1	13758	FRAME WLDMT BOTTOM FOR V-200	2	EA
2	13753	REPLACEMENT AIR BAG FOR T200	4	EA
3	1004876	ANCHOR WEDGE 1/2 X 5-1/2 SS	8	EA
4	002-131	ELBOW STREET 1/4 NPT BRASS EXTRUDED	4	EA
5	1003396	HOSE BARB PTL 3/8 X 1/4 NPT	4	EA
6	1003585	HOSE BARB PTL 3/8 X 1/2 NPT	4	EA
7	1002250	CROSS 1/2 NPT BRASS	2	EA
8	1003587	VALVE PRESSURE RELIEF 1/2 NPT X 75 PSI	2	EA
9	1003586	HOSE BARB PTL 1/2 X 1/2 NPT	5	EA
10	M6B	ELBOW STREET 1/2 NPT BRASS	2	EA
11	C12G	TEE 1/2 NPT BRASS	1	EA
12	100-332	HOSE 1/2" PUSH TO LOK	4	~18 inches
13	100-334	HOSE 3/8" PUSH TO LOK	2	length inches TBD