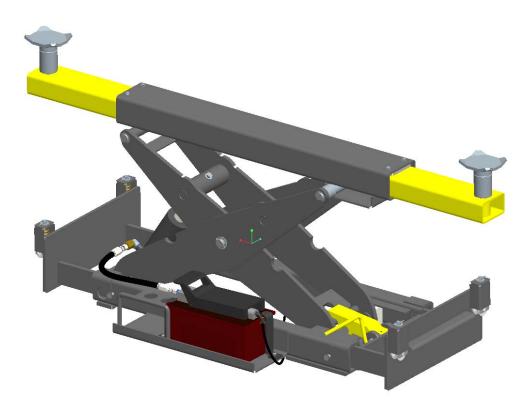


AIR-HYDRAULIC ROLLING JACKBEAM CAPACITY: 6000 LBS. MODELS: EELR512A



# **INSTALLATION AND OPERATION MANUAL**

# READ ALL INSTRUCTIONS THOROUGHLY BEFORE INSTALLING, OPERATING, SERVICING, OR MAINTAINING THE LIFT.





6500 Millcreek Drive, Mississauga, Ontario, L5N 2W6 Customer Service 1-800-268-7959

> OCT. 2013 REV. -6-4140

## **OWNER / EMPLOYER OBLIGATIONS**

- The Owner/Employer shall ensure that lift operators are qualified and that they are trained in the safe use and operation of the lift using the manufacturer's operating instructions; ALI/SM 93-1, ALI Lifting it Right safety manual; ALI/ST-90 ALI Safety Tips card; ANSI/ALI ALOIM-2008, American National Standard for Automotive Lifts - Safety Requirements for Operation, Inspection and Maintenance; ALI/WL Series, ALI Uniform Warning Label Decals/Placards; and in the case of frame engaging lifts, ALI/LP-GUIDE, Vehicle Lifting Points/Quick Reference Guide for Frame Engaging Lifts.
- The Owner/Employer shall establish procedures to periodically inspect the lift in accordance with the lift manufacturer's instructions or ANSI/ALI ALOIM-2008, American National Standard for Automotive Lifts - Safety Requirements for Operation, Inspection and Maintenance; and the Employer shall ensure that the lift inspectors are qualified and that they are adequately trained in the inspection of the lift.
- 3. The Owner/Employer shall establish procedures to periodically maintain the lift in accordance with the lift manufacturer's instructions or ANSI/ALI ALOIM-2008, American National Standard for Automotive Lifts - Safety Requirements for Operation, Inspection and Maintenance; and the Employer shall ensure that the lift maintenance personnel are qualified and that they are adequately trained in the maintenance of the lift.
- The Owner/Employer shall maintain the periodic inspection and maintenance records recommended by the lift manufacturer's instructions or ANSI/ALI ALOIM-2008, American National Standard for Automotive Lifts - Safety Requirements for Operation, Inspection and Maintenance.
- 5. The Owner/Employer shall display the lift manufacturer's operating instructions; ALI/SM 93-1, ALI Lifting it Right safety manual; ALI/ST-90 ALI Safety Tips card; ANSI/ALI ALOIM-2008, American National Standard for Automotive Lifts Safety Requirements for Operation, Inspection and Maintenance; ALI/WL Series, ALI Uniform Warning Label Decals/Placards; and in the case of frame engaging lifts, ALI/LP-GUIDE, Vehicle Lifting Points/Quick Reference Guide for Frame Engaging Lifts in a conspicuous location in the lift area convenient to the operator.
- The Owner/Operator shall provide necessary lockout/tagout means for energy sources per ANSI Z244.1-1982 (R1993), Safety Requirements for the Lockout/Tagout of Energy Sources, before beginning any lift repairs and maintenance.
- 7. The Owner/Employer shall not modify the lift in any manner without the prior written consent of the manufacturer.

# JACKBEAM INSTALLATION AND OPERATION MANUAL

The Jackbeam should only be used with lifts installed on level concrete floors conforming to the installation instructions for the lift. Consult lift installation instructions for concrete thickness and strength requirements. Ensure clearance around and above lift conforms to installation instructions for the lift.

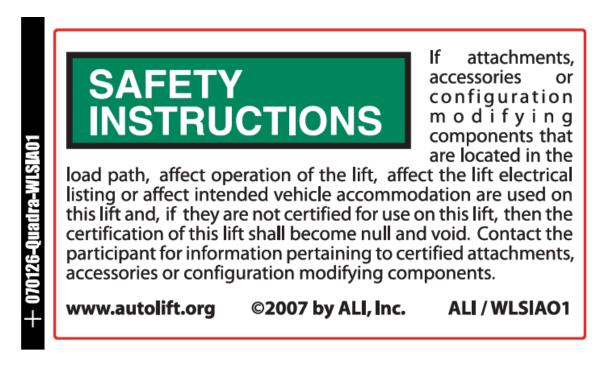


<u>ATTENTION!</u> This lift is intended for indoor installation only. It is prohibited to install this product outdoors. Operating environment temperature range should be 41 - 104 °F (5 - 40 °C). Failure to adhere will result in decertification, loss of warranty, and possible damage to the equipment.

Installation of lifts shall be performed in accordance with ANSO/ALI ALIS, Safety Requirements for Installation and Service of Automotive Lifts

For additional safety instructions regarding lifting, lift types, warning labels, preparing to lift, vehicle spotting, vehicle lifting, maintaining load stability, emergency procedures, vehicle lowering, lift limitations, lift maintenance, good shop practices, installation, operator training and owner/employer responsibilities, please refer to "Lifting It Right" (ALI/SM) and "Safety Tips" (ALI/ST).

For additional instruction on general requirements for lift operation, please refer to "Automotive Lift-Safety Requirements For Operation, Inspection and Maintenance" (ANSI/ALI ALOIM).



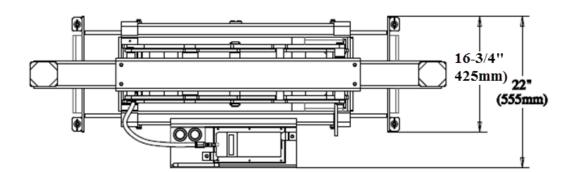
NOTE: Air supply must be lubricated and include water separator. Failure to do so will damage the air /hydraulic motor and void the manufacturer's warranty.

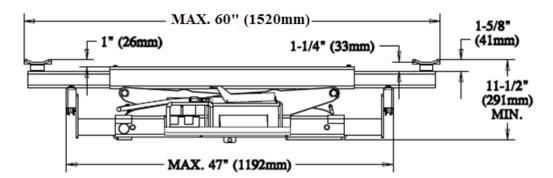
## **Table of Contents**

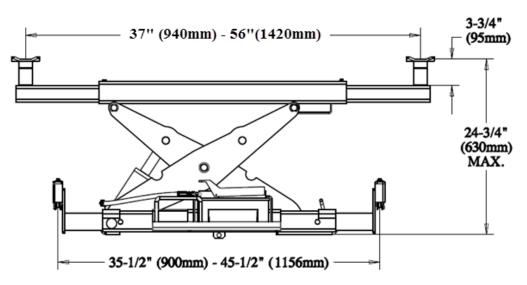
1.0	Specifications
2.0	Shipping Contents
3.0	Safety Instructions
4.0	Position the Jackbeam on Lift7
5.0	Operating Instructions
6.0	Storage Position of Jackbeam 10
7.0	Positioning of Vehicle on Jackbeam11
8.0	Recommended Maintenance 12
9.0	Trouble Shooting
10.0	Parts List: Exploded View 14
11.0	Jackbeam Parts List 15
12.0	Maintenance Schedule

## **1.0 Specifications**

6000 lbs Maximum Capacity: 2722 kg 45-1/2" Max. Width Rail to Rail: 1156mm Min. Width Rail to Rail: 35-1/2" 900mm 56" Arms Fully Extended: 1420mm 37" Arms Fully Retracted: 940mm Min. Lowered Height w/o Extension: 11-1/2" 291mm Max. Raised Height w/ Extension: 24-3/4" 630mm Pad Extension Adapter 2-7/16" 62mm 90-140 psi @5-10CFM Air Supply Requirements: Max Operating Hydraulic Pressure: 3975 psi ISO 32 (10 weight) hydraulic oil Hydraulic Oil Type







**Figure 1- Jack Beam Specifications** 

## 2.0 Shipping Contents

The Jackbeam is fully assembled and packaged to protect it during shipping. Included are the following components:

- (1) Jackbeam Assembly, including:
  - Jackbeam Body
  - Lifting Arms with Lifting Pads
  - Air/Hydraulic Pump
- o (2) Lifting Pad Extension Adapter
- (1) Jackbeam accessory kit (2ft-1/4" polytube, 1/4" NPT elbows, Terminals, recoil hoses, mounting brackets and hardware)
- o (1) Installation and Operation Manual
- Wherever LOCTITE symbol is shown, apply LOCTITE #242 on required fasteners. If fasteners are removed reapply LOCTITE before re-installing.



### 3.0 Safety Instructions

# **A**CAUTION

- Never allow unauthorized or untrained persons to operate the Jackbeam.
- Thoroughly train all employees in the use and care of the Jackbeam.
- Be aware of the clearance between the vehicle and the nearest overhead obstruction.

# **A**WARNING

- To avoid personal injury and/or property damage, the Jackbeam must only be operated by trained personnel.
- Never overload the Jackbeam. Capacity of Jackbeam is stated on nameplate, **DO NOT** exceed.
- Observe and avoid any pinch point areas of the Jackbeam.
- Never operate a Jackbeam that is not in proper working order or in a manner not recommended by the vehicle or Jackbeam manufacturer.
- Always ensure that the mechanical safety is engaged whenever a vehicle is supported by the Jackbeam.
- Load evenly; do not place weight on one side of the Jackbeam.

## 4.0 Position the Jackbeam on Lift

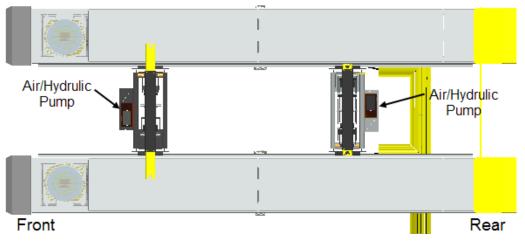
Lock out and tag out the compressed air supply to the lift. Release the stored air within the unit by draining it by depressing the water drain at the FRL.



DO NOT USE YOUR FINGER TO DEPRESS THE DRAIN. COMPRESSED AIR COULD ENTER YOUR BLOODSTREAM AND CAUSE SERIOUS INJURY OR DEATH.

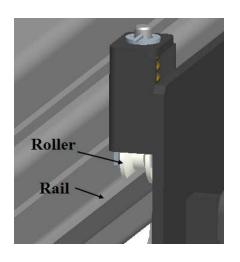
**Note:** The Jackbeam must be positioned on the lift correctly prior to usage. The pump side of the Jackbeam should face the direction included in **Figure 2**.

- 1. Following the manufacturer's instructions in the lift manual, lower the lift to the ground or lock the lift on the first safety lock depending on the lifting device used to place the Jackbeam on the rails.
- 2. Check the rail width between the two runways and ensure that the distance between the railways is equal along the entire length of the lift, then check if the Jackbeam rollers can be adjusted to the desired railway width.
- 3. Using a shop crane, forklift or other lifting device raise the Jackbeam and place it in between the runways, orient the Jackbeam with air/hydraulic pump towards outwards (front or rear). See **Figure 2**. Lower the Jackbeam to just above the rail on the inside of the Runway.



**Figure 2-Jackbeam Orientation** 

4. Extend each roller adapter from the base of the Jackbeam and place on lift with the rollers centered on the deck rails. see **Figure 3**.



**Figure 3-Roller Seat on Rail** 

- 5. Raise the lift to a comfortable working height. Check the clearance and movement of the Jackbeam by sliding the Jackbeam forward and backward on the rails. Check that the rollers are centered on the rails at all points along the rail's length. Adjustment of the base arms may be necessary to assure proper operation.
- 6. Tighten the bolts and nuts to retain the roller adapters. See Figure 6.
- 7. Bolt the mounting brackets on base frame of Jackbeams using the supplied hardware in the accessory kit. Mount the terminal fitting onto the bracket. See **Figure 4**.
- 8. Remove the thread protector from the air inlet of the pump, and install the 1/4" NPT 90° elbow from accessory kit on to the air/hydraulic pump. Then route the polytube underneath Jackbeam from the elbow to the terminal on bracket. See **Figure 5**.

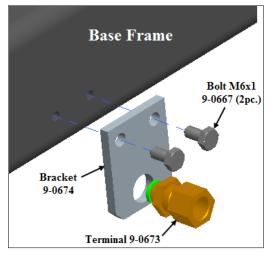
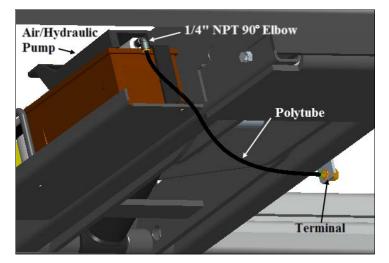
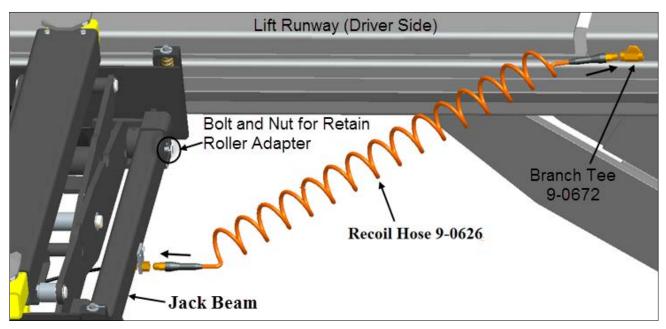


Figure 4-Bracket and Terminal



**Figure 5-Air Hose Routing** 

 Remove 1/4" plugs at the branch tee on the lift. Attach one end of the recoil hose to the terminal on Jackbeam base frame, than attach the other end of the recoil hose to the branch Tee fitting on the side of the lift runway. See Figure 6.



**Figure 6-Recoil Hose Connection** 

- 10. Remove the plug with vent breather on top of reservoir to check the hydraulic oil level and fill as need, then replace the plug.
- 11. Repeat the above process for other Jackbeam.
- 12. Restore compressed air supply to the lift and check for leaks.
- 13. Prior to placing vehicle on lift, raise and lower the Jackbeam multiple times without any load and Do following final checks. See sections **\*5.0 Operation Instructions**"

#### Final Check the followings:

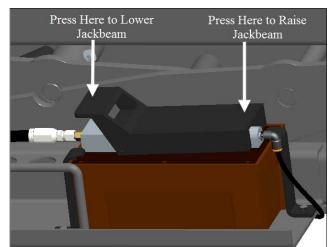
- Check proper function of mechanical safety locks
- Check for air and hydraulic leaks
- Check hydraulic oil level
- Lubrication of moving components
- All screws, bolts, and pins secured
- Surrounding area clean
- Operation, maintenance and Safety Manual on site.

AN APPROPRIATE AIR LINE REGULATOR, WATER SEPARATOR AND LUBRICATOR SHOULD BE INSTALLED ON THE AIR SUPPLY LINE. THE ABSENCE OF THESE ITEMS WILL VOID THE WARRANTY ON PNEUMATIC COMPONENTS.

## **5.0 Operating Instructions**

#### **Raising the Jackbeam**

- 1. Position the vehicle on the lift and raise the lift to the desired working height following the operating instructions noted in the lift operating manual. Always ensure that the lift is securely positioned on the mechanical safety locks prior to raising the vehicle off the runways.
- 2. Position the Jackbeam at the correct lifting points for the vehicle. Refer to the vehicle manufacturer's literature or, "lifting it right guide" or "vehicle recommend lift points guide" for correct lifting locations.
- 3. Choose the appropriate pad adapter and ensure it is properly seated into the lifting arm. Extended the lifting arms into position under the vehicle lift points as necessary.
- Press and hold the Raise end of the pedal of Air/Hydraulic pump until the vehicle wheels have sufficient clearance from the runway surface for the type of service being performed. Ensure that the Jackbeam can be lowered onto a mechanical safety lock. See Figure 7.
- 5. Press the Lower end of the pedal of Air/Hydraulic pump to lower the Jackbeam until it is secured on the mechanical lock.



**Figure 7-Pump Operation** 

#### Lowering the Jackbeam

- 1. Raise the Jackbeam off the mechanical safety lock. Then release the safety lock by pushing and holding the Safety Release Handle. See **Figure 8**.
- 2. Press the Lower end of the pedal of Air/Hydraulic pump to release pressure allowing the Jackbeam to lower to its full down position.
- 3. Once Jackbeam is completely collapsed, release the safety lock.

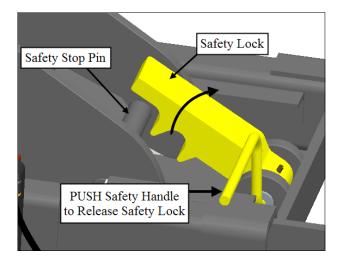


Figure 8-Release Safety Lock

- **NOTE:** The Safety Release handle is gravity returned to "reset" the safety.
- NOTE: After reading these instructions, get familiar with the controls by running the Jackbeam through a few cycles before loading vehicle on lift.

## 6.0 Storage Position of Jackbeam

In order to allow for adequate vehicle drive-on clearance,

- 1. When not in use, store Jackbeams towards the center of the lift.
- 2. Ensure lift is fully collapsed.
- 3. Remove lifting pads if additional clearance is required.

## 7.0 Positioning of Vehicle on Jackbeam

1. The vehicle must be positioned correctly on the lift prior to raising the vehicle with the Jackbeam. With the vehicle's center of gravity equally spaced between the runways, the Jackbeam can be used to lift the vehicle. Then raise the runways to desired working height.

# NOTE: Make sure to set parking brake and use wheel chocks to secure vehicle in position before raising the vehicle.



**<u>ATTENTION</u>**: Lifting an improperly positioned vehicle with Jackbeam increases the possibility of one deck leading or lagging the other deck.

- 2. Raise the lift to the desired working height, move the Jackbeam to the desired pickup area. Refer to the "Lifting points guide" for vehicle lifting information.
- 3. NOTE: Lift vehicle at vehicle manufacturer's recommended pickup points only. Please refer to **ALI/LP-GUIDE**, **Vehicle Lifting Points/Quick Reference Guide for Frame Engaging Lifts**.
- 4. Select lifting points that are the same distance from the centerline of the vehicle, i.e. position the lifting pads so that they make contact at the same point on each side of the vehicle.
- 5. With the Jackbeam positioned at the desired location, select the proper lifting pads to insert into the arms. If required, add a 2-7/16" extension adapter below vehicle.



**<u>ATTENTION</u>**: Use the same size pad extension adapter on each lifting arm. Failure to adhere may cause vehicle damage and/or personal injury.

6. Extend the arms to the desired pickup point. If required, raise the Jackbeam so the arms can be extended above the runways.



**<u>ATTENTION</u>**: Lifting arms should be extended equally as to avoid any offload the vehicle that may cause vehicle damage and/or personal injury.

- 7. As the Jackbeam raises the vehicle, the load on the Jackbeam is transferred from the rollers to the lift. The roller assemblies on the Jackbeam are spring loaded and are meant to carry the weight of the Jackbeam only. When load is applied, the structure cannot be moved.
- 8. When the vehicle is raised to the desired working height, lower the Jackbeam onto the nearest safety lock before servicing the vehicle, refer back to section "**5.0 Operation Instructions**".
- 9. To lower the vehicle, refer back to section "5.0 Operation Instructions".



**<u>ATTENTION!</u>** Do not raise lift while vehicle is supported by the Jackbeams. Failure to adhere may cause vehicle damage and/or personal injury.

## 8.0 Recommended Maintenance

## Daily:

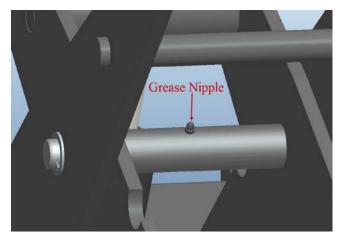
- 1. Inspect that the Jackbeam is in proper working condition.
- 2. Make certain that the automatic engaging safety drops into place when the Jackbeam is raised and that it will release when held in the up position during lowering.
- 3. Inspect air/hydraulic system for leaks.
- 4. Inspect for loose bolts, broken/damaged components. Replace as required.
- 5. Keep the entire Jackbeam as clean as possible at all times.
- 6. Ensure that the lifting arm stops are working correctly. Fully extend each arm until the stop engages.
- 7. Inspect condition and stack ability of lifting pads. Replace any broken or damaged components.
- 8. Check filter lubricator oil level and fill if needed. Hydraulic oil: ISO 32 (10 weight).

#### Monthly:

1. Keep the air source clean and make certain that an air filter is used to keep dirt out of the air motor. To maintain a clean shop air supply, an FRL (Filter/Regulator/Lubricator) should always be in good working order in conjunction with the use of an oiler/separator.

NOTE: It is the user(s) responsibility to supply an air filter/lubricator to ensure a clean dry air source is provided to the air/hydraulic pump. Failure to provide clean dry air may void manufacturers' warranty. Please contact customer service regarding Optional Kit # 0100.

- 2. Check functionality of the rollers, keep clean.
- Grease upper and lower slider block areas. Use multipurpose, extreme pressure grease such as Megaplex XD%, NGLI grade 2 or other equivalent.
- 4. Add grease to center hinge nipple, see Figure 9.



**Figure 9-Center Hinge Nipple** 

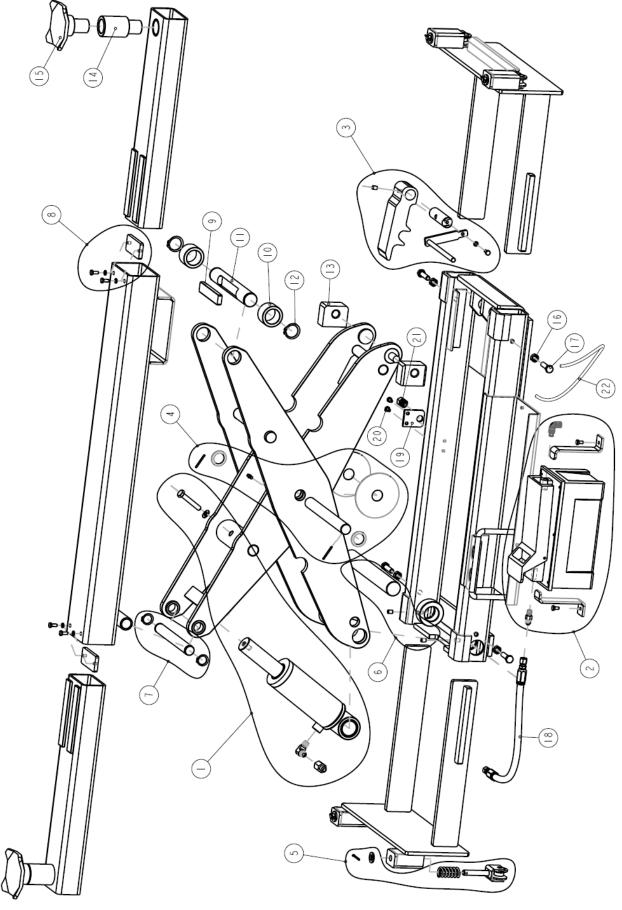


**<u>ATTENTION!</u>** Discontinue the use of the Jackbeam <u>immediately</u> if any component(s) are damaged, defective, worn or broken. Please contact Customer Service 1-800-225-5786.

# 9.0 Trouble Shooting

Trouble	Cause	Remedy	
Pump runs but lift will not rise after contacting load.	Lift loaded beyond capacity.	Do not exceed capacity of lift list on tag.	
	Fluid leak at pump, hose or cylinder.	Repair leak, refill reservoir.	
	Wrong pump installed on lift.	Verify pressure rating of pump on label.	
	Pump malfunction.	Contact customer service to have pump serviced.	
_	Pump low on fluid.	Lower Jackbeam and check fluid level. Replenish if required.	
Pump will not start when Raise Lever is pushed.	Insufficient air supply at pump.	Pump requires 90 – 140 psi of shop air @5-10CFM	
	Leak in air supply line.	Locate and correct leak.	
	Restriction in air line (i.e. Kink)	Locate and correct restriction.	
	Malfunctioning air motor.	Contact customer service to have pump serviced.	
Pump runs but will not lift to full height	Pump low on fluid.	Lower Jackbeam and check fluid level. Replenish if required.	
Lift does not hold pressure and will slowly descend.	Fluid leak at pump, hose or cylinder.	Repair leak, refill reservoir.	
	Lowering valve damaged.	Replace damaged or missing parts.	
	Pump malfunction.	Contact customer service to have pump serviced.	
Lift lowers slowly or not at all.	Mechanical Safety is engaged.	Release mechanical safety.	
	Restriction in hydraulic system.	Contact customer service to have lift serviced.	
	Lack of grease	Apply grease to top and bottom slide block areas	
<b>WARNING</b> If Jackbeam is in the raised position and will not come down ensure that the mechanical safety is engaged prior to servicing the lift. Failure to do so can cause vehicle damage and/or personal injury.			

# 10.0 Parts List: Exploded View



## 11.0 Jackbeam Parts List

ITEM#	PART#	DESCRIPTION	QTY.
1	01818	HYDRAULIC CYLINDER KIT	1
	9-0444	HYDRAULIC CYLINDER -JACK BEAM	1
	6-0625	FLAT WASHER 3/8 ID	1
	9-0565	HEX BOLT M10X60L	1
	9-0561	FLOW CONTROL F.NPT/JIC-06	1
	9-0607	ELBOW-90° 3/8" NPT M-M	1
2	01819	HYDRAULIC PUMP KIT	1
	9-0452	AIR/HYDRALIC PUMP	1
	9-0666	BRACKET - HYDRAULIC PUMP MOUNTING	2
	9-0554	HEX BOLT M6X1 X16L	2
	9-0558	STRAIGHT UNION 3/8NPT/JIC-06	1
	9-0675	SWIVEL ELBOW EPL 0602 1/4" NPT-Ø6 PLOY	1
3	01820	MECHANICAL SAFETY LOCK KIT	1
	9-0450	MECHANICAL LOCK	1
	9-0668	PIN - MECHANICAL LOCK	1
	9-0513	SAFETY RELEASE HANDLE	1
	9-0553	SPRING WASHER DIA 7	1
	9-0554	HEX BOLT M6X1 16L	1
	9-0567	M8X12L GRUB SCREW	1
4	01821	SCISSOR CENTER PIN KIT	1
	9-0465	PIN - SCISSOR CENTER	1
	9-0466	SHIM - CENTER PIN	2
	9-0557	WASHER OD-36, ID-26, T-2mm	2
	9-0665	SPRING PIN -DIA 3X35L	2
	9-0566	GREASE NIPPLE M6	1
5	01822	JACK ROLLER KIT	4
	9-0488	ROLLER ASM	1
	9-0550	COMPRESSION SPRING	1
	6-0625	FLAT WASHER 3/8 ID	1
	9-0552	SPLIT PIN DIA3X32L	1

ITEM#	PART#	DESCRIPTION	QTY.
6	01823	BOTTOM PIN KIT	1
	9-0445	PIN - SCISSOR FIX END BOTTOM	1
	9-0567	M8X12L GRUB SCREW	2
7	01824	TOP FIX END PIN KIT	1
	9-0446	PIN - FIXED END TOP FRAME	1
	9-0563	EXTERNAL CIRCLIP Ø23	2
8	01825	ARM STOPPER KIT	2
	9-0460	STOPPER - RHS TOP FRAME	1
	9-0553	SPRING WASHER DIA 7	2
	9-0554	HEX BOLT M6X1 16L	2
9	9-0447	SLEEVE CENTER - SLINDING END TOP FRAME	1
10	9-0448	SLEEVE SIDES - SLIDING END TOP FRAME	2
11	9-0449	PIN - SLIDING END TOP FRAME	1
12	9-0355	EXTERNAL CIRCLIP Ø33	2
13	9-0468	NYLON BLOCK	2
14	9-0461	SLEEVE-RESTING PAD	
15	9-0462	RESTING PAD WELDMENT	
16	9-0568	M10 NUT	4
17	9-0569	HEXT BOLT M10 X 40L	4
18	9-0559	HYDRAULIC HOSE -JACKBEAM	1
19	9-0674	TERMINAL MOUNTING PLATE	1
20	9-0667	HEX BOLT M6X1 X16L	2
21	9-0673	TERMINAL FITTING EPMF 0602 M14x1 -Ø6 POLY	1
22	9-0622	Ø6 POLYTUBE PU6*4, 0.9m (35")	1
		OTHER ACCESSORY	
	9-0626	RECOIL HOSE Ø8 PU8*6, 1/4" NPT-M, 12FT	2/LIFT

## **12.0 Maintenance Schedule**

Records of all lift maintenance and operator training should be recorded in the following table. Serial Number of lift is located on rear of base.

Maintenance and Training Performed	Date	Ву	Notes

Maintenance and Training Performed	Date	Ву	Notes

\* Make copies of this form as required.