

INSTALLATION & OPERATION MANUAL



Atlas 7KAB 7,000 lb. Capacity Pneumatic Air Bag Lift



Atlas Automotive Equipment
www.atlasautoequipment.com
(866) 898-2604

Read this entire manual before operation begins.

Record below the following information which is located on the serial number data plate.

Serial No. _____

Model No. _____

Date of Installation _____

———— Contents ————

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PRINTING CHARACTERS AND SYMBOLS

Throughout this manual, the following symbols and printing characters are used to facilitate reading:

	Indicates the operations which need proper care
	Indicates prohibition
	Indicates a possibility of danger for the operators
	Indicates the direction of access for motor vehicles to the lift
BOLD TYPE	Important information



WARNING: before operating the lift and carrying out any adjustment, read carefully chapter 7 “installation” where all proper operations for a better functioning of the lift are shown.

General Information

This chapter contains warning instructions to operate the lift properly and prevent injury to operators or objects.

This manual has been written to be used by shop technicians in charge of the lift (operator) and routine maintenance technician (maintenance operator).

The operating instructions are considered to be an integral part of the machine and must remain with it for its whole useful life.

Read every section of this manual carefully before operating the lift and unpacking it since it gives helpful information about:

- **safety of people**
- **safety of the lift**
- **safety of lifted vehicles**

The company is not liable for possible problems, damage, accidents, etc. resulting from failure to follow the instructions contained in this manual.

Only skilled technicians of AUTHORISED DEALERS or SERVICE CENTRES AUTHORISED by the manufacturer shall be allowed to carry out lifting, transport, assembling, installation, adjustment, calibration, settings, extraordinary maintenance, repairs, overhauling and dismantling of the lift.

The manufacturer is not responsible for possible damage to people, vehicles or objects if said operations are carried out by unauthorized personnel or the lift is improperly used.

Any use of the machine made by operators who are not familiar with the instructions and procedures contained herein shall be forbidden.

1.1 Manual Keeping

For a proper use of this manual, the following is recommended:

- Keep the manual near the lift, in an easily accessible place.
- Keep the manual in an area protected from the damp.
- Use this manual properly without damaging it.
- Any use of the machine made by operators who are not familiar with the instructions and procedures contained herein shall be forbidden.

This manual is an integral part of the lift: it shall be given to the new owner if and when the lift is resold.

1.2 Obligation In Case Of Malfunction



In case of machine malfunction, follow the instructions contained in the following chapters.

1.3 Cautions For The Safety Of The Operator

Operators must not be under the influence of sedatives, drugs or alcohol when operating the machine.



Before operating the lift, operators must be familiar with the position and function of all controls, as well as with the machine features shown in the chapter “Operation and Use”

1.4 Warnings



Unauthorized changes and/or modifications to the machine relieve the manufacturer of any liability for possible damages to objects or people. Do not remove or make inoperative the safety devices, this would cause a violation of safety at work laws and regulations.



Any other use which differs from that provided for by the manufacturer of the machine is strictly forbidden.



The use of non genuine parts may cause damage to people or objects

DECLARATION OF WARRANTY AND LIMITATION OF LIABILITY

The manufacturer has paid proper attention to the preparation of this manual. However, nothing contained herein modifies or alters, in any way, the terms and conditions of manufacturer agreement by which this lift was acquired, nor increase, in any way, manufacturer's liability to the customer.

TO THE READER

Every effort has been made to ensure that the information contained in this manual is correct, complete and up-to date. The manufacturer is not liable for any mistakes made when drawing up this manual and reserves the right to make any changes due the development of the product, at any time.

Product Identification

The identification data of the machine are shown in the label placed on the control unit.

LOGO	
Type:
Model:
Serial Number:
Year of manufacturing:
Capacity:
Voltage:
Power:



Use the above data both to order spare parts and when getting in touch with the manufacturer (inquiry). The removal of this label is strictly forbidden.

Machines may be updated or slightly modified from an aesthetic point of view and, as a consequence, they may present different features from these shown, this without prejudicing what has been described herein.

2.1 Warranty Certificate

The warranty is valid for a period of 12 months starting from the date of the purchase invoice.

The warranty will come immediately to an end when unauthorized modifications to the machine or parts of it are carried out.

The presence of defects in workmanship must be verified by the Manufacturer's personnel in charge.

2.2 Technical Servicing

For all servicing and maintenance operations not specified or shown in these instructions, contact your Dealer where the machine has been bought or the Manufacturer's Commercial Department.

Only skilled personnel who are familiar with the lift and this manual shall be allowed to carry out packing, lifting, handling, transport and unpacking operations.

Packing, Transport, Storage

3.1 Packing

The packing of the lift is delivered in following components:

- N. 1 base unit packed in a cardboard box on a plywood pallet.
- N. 1 cardboard box on a plywood pallet with four ramps included.
- N. 1 cardboard box with control pedal unit and either rubber pads included.

The average weight of the packages is 1,668 lbs, the telescopic arms are included.

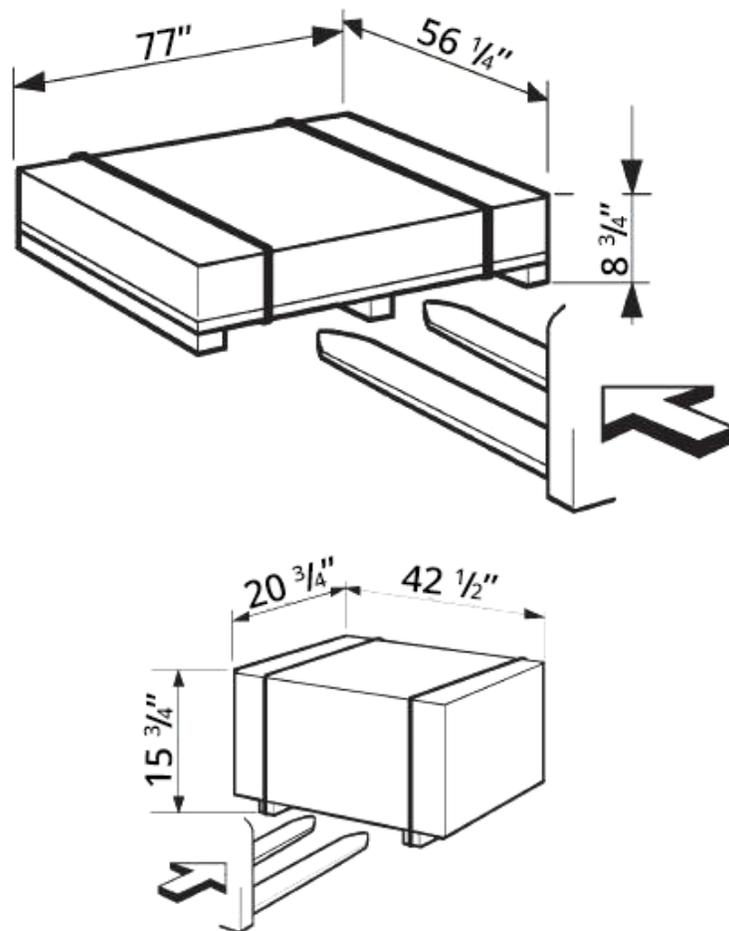


Figure 1 - Packages

3.2 Lifting And Handling

When loading/unloading or transporting the equipment to the site, be sure to use suitable loading (e.g. cranes, trucks) and hoisting means. Be sure also to hoist and transport the components securely so that they cannot drop, taking into consideration the package's size, weight and center of gravity and its fragile parts.

3.3 Storage And Stacking Of Packages

Packages must be stored in a covered place, out of direct sunlight and in low humidity, at a temperature between +50°F and +131°F.

Stacking is not recommended: the package's narrow base, as well as its considerable weight and size make it difficult and hazardous.

3.4 Delivery And Check Of Packages

When the lift is delivered, check for possible damages due to transport and storage; verify that what is specified in the manufacturer's confirmation of order is included. In case of damage in transit, the customer must immediately inform the carrier of the problem.

Packages must be opened paying attention not to cause damage to people (keep a safe distance when opening straps) and parts of the lift (be careful the objects do not drop from the package when opening).

Specifications

Lift Description (Ref. Figure 2)

This lift has been designed for the lifting a vehicles for tire service. The maximum lifting weight is 7000 lbs.

The operation is described in detail in Chapter 8.

This chapter describes the lift's principal elements, allowing the user to be familiar with the lift.

As shown in Figure 2, the lift is mainly composed of the following components:

- Platform (1)
- Base (2)
- Air spring (3)
- Rubber pad (4)
- Control pedal (5) with the pressure gauge
- N.4 drive-on ramps (6)
- Oil filter (7)

Motion is transmitted by the air spring and carried out by means of the control pedal.

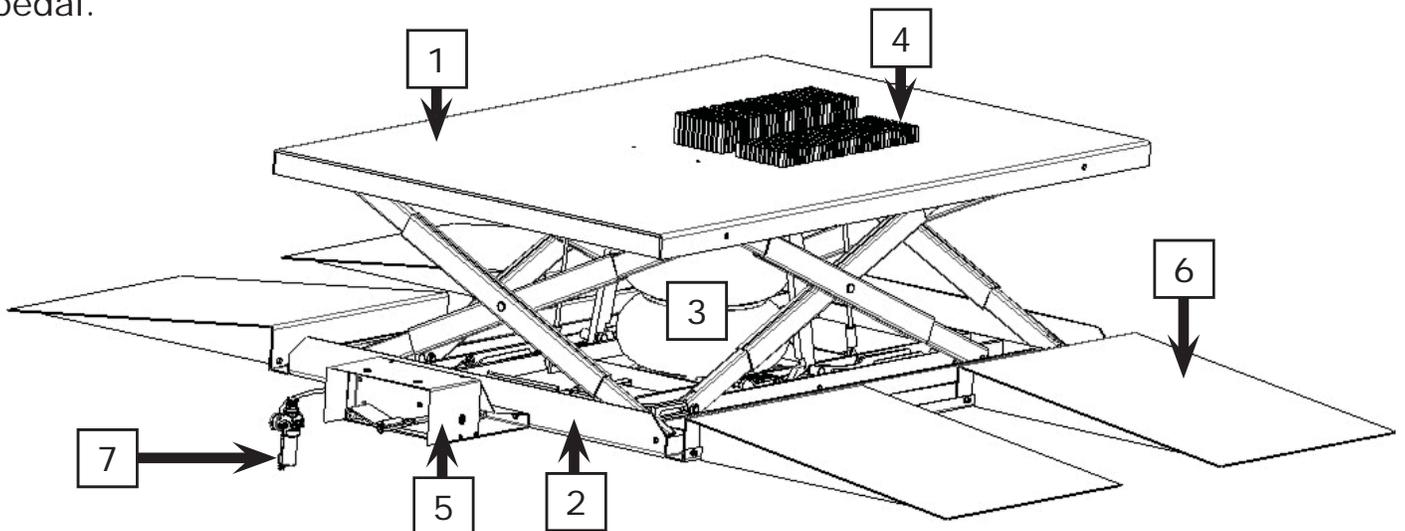


Figure 2 – Lift

CAPACITY	7000LBS
Max. lifting height	22 5/8"
Min. lift height	5 1/2"
Length of the platform	80"
Width of platform	55"
Lifting time	45s
Lowering time	40s
Compressed air pressure	6 bar – 8 bar
Average weight of package	1,668 lbs

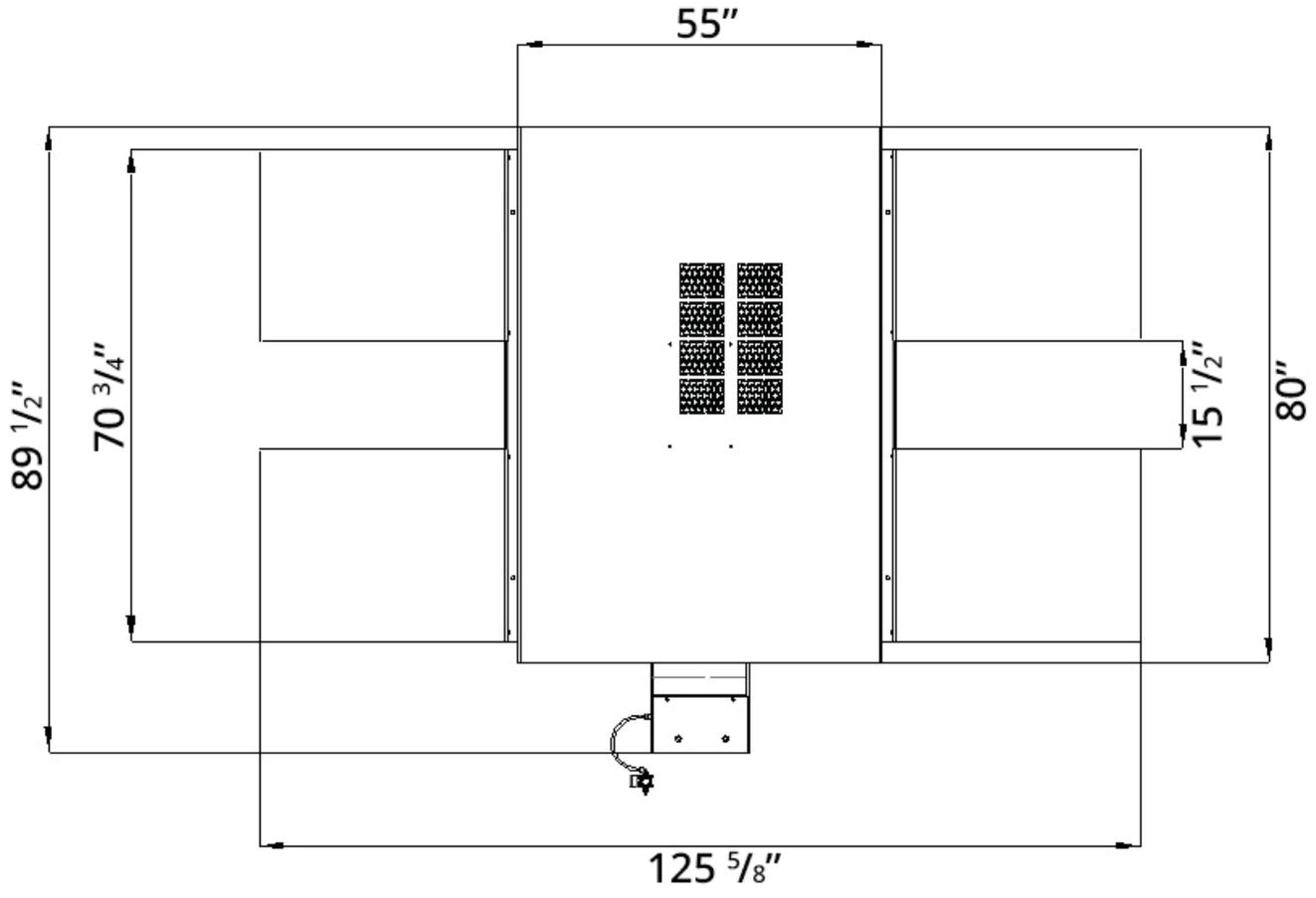
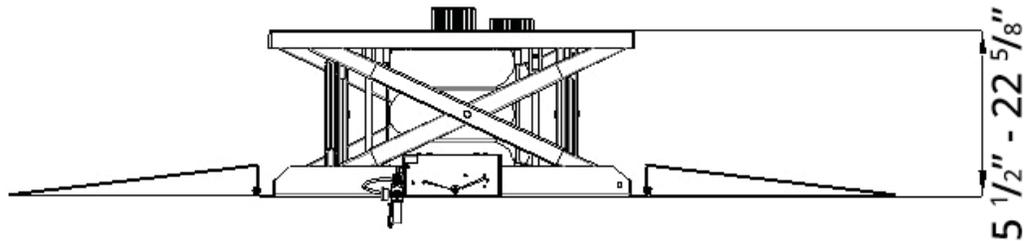


Figure 3 - Layout

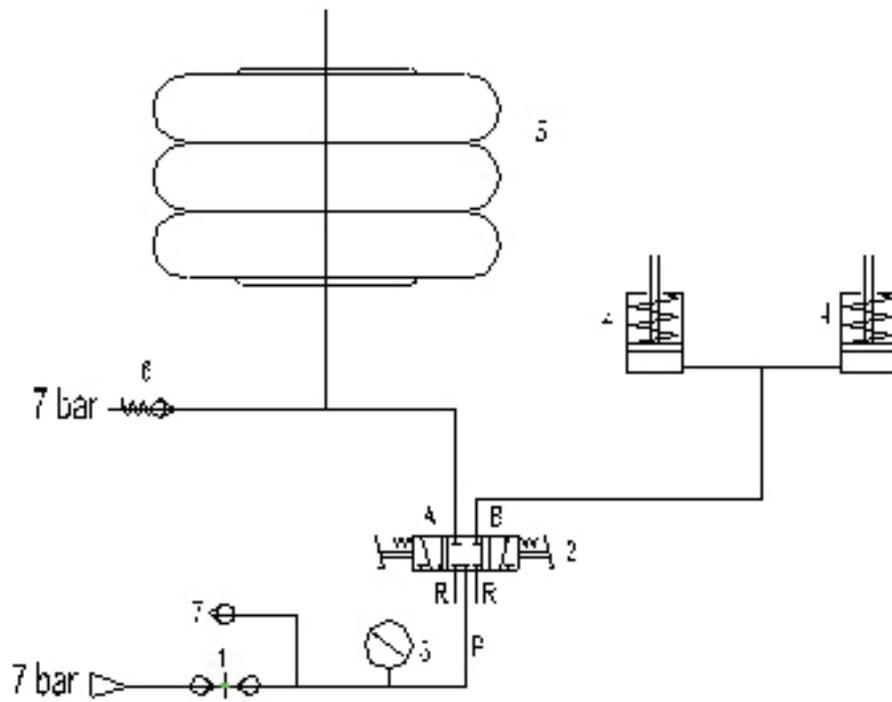


Figure 4 – Pneumatic Plan

1	Air inlet connection
2	Air distributor valve
3	Pressure gauge
4	Safety release cylinder
5	Air spring
6	Pressure overload valve 7 bar
7	Supplementary air outlet



Filter with lubricator must be equipped on the air supply and the pressure must be set at 6-8 bar.

Safety

Read this chapter carefully and completely because it contains important information for the safety of the operator and the person in charge of maintenance.



The lift has been designed and built for lifting vehicles and making them stand above level in a closed area. Any other use is forbidden. The manufacturer is not liable for possible damages to people, vehicles, or objects resulting from an improper or unauthorized use of the lift.

For operator and people safety, a safety area at least 3 feet away from the lift must be vacated during lifting and lowering. The lift must be operated only from the operator's control site in this safety area.

Operator's presence under the vehicle, during working, is only admitted when the vehicle is lifted and platforms are not running.



Never use the lift when safety devices are off-line. People, the lift, and the vehicles lifted can be seriously damaged if these instructions are not followed.

6.1 General Warnings

The operator and the person in charge of maintenance must follow accident-prevention laws and rules in force in the country where the lift is installed

They also must carry out the following:

- neither remove nor disconnect hydraulic, electric or other safety devices;
- carefully follow the safety indications applied on the machine and included in the manual;
- observe the safety area during lifting;
- be sure the motor of the vehicle is off, the gear engaged and the parking brake put on;
- be sure only authorized vehicles are lifted without exceeding the maximum lifting capacity;
- Verify that no one is on the platforms during lifting or standing.

6.2 Risks For People

All risks the personnel could run, due to an improper use of the lift, are described in this section.

6.3 Personnel Crushing Risks

During lowering of runways and vehicles, personnel must not be within the area covered by the lowering trajectory. The operator must be sure no one is in danger before operating the lift.



Fig. 5a

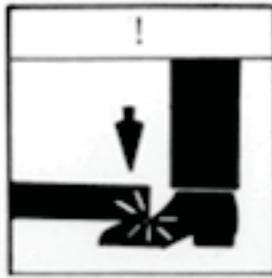


Fig. 5b



Fig. 5c

6.4 Bumping Risk

When the lift is stopped at relatively low height for working, the risk of bumping against projecting parts occurs.

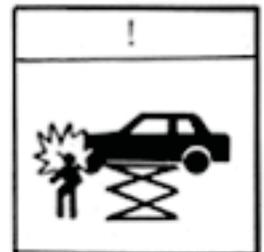


Fig. 6

6.5 Risk Of The Vehicle Falling From The Lift

Vehicle falling from the lift can be caused when the vehicle is improperly placed on platforms, and when its dimensions are incompatible with the lift or by excessive movement of the vehicle.



Fig. 7a



Fig. 7b



Fig. 7c

In this case, keep immediately away from the working area.

6.6 Slipping Risks

The risk of slipping can be caused by oil or dirt on the floor near the lift.



Keep the area under and around the lift clean. Remove all oil spills.



Fig. 8

6.7 Risks Resulting From Improper Lighting

Make sure all areas next to the lift are well and uniformly lit, according to local regulations.

6.8 Risks Of Breaking Component During Operation

Materials and procedures, suitable for the designed parameters of the lift, have been used by the manufacturer to build a safe and reliable product. Operate the lift only for the use it has been designed for and follow the maintenance schedule shown in the chapter "Maintenance".



Fig. 9

6.9 Risks For Unauthorized Uses

The presence of unauthorized persons next to the lift and on the platforms is strictly forbidden during lifting as well as when the vehicle has been already lifted

- ⊗ **Any use of the lift other than that herein specified can cause serious accidents to people in close proximity of the machine.**



Fig. 10

6.10 Risks During Vehicle Lifting

Safety devices are built with the lift as follows:

- A pressure overload valve (1/Fig. 11) sets the maximum pressure at 7 bars and can automatically discharge the air in excess to prevent the air spring from damaging.
- The mechanical safety pin (1/Fig. 12) prevents the lift from falling down accidentally in case that the pneumatic system is broken or failed. It can automatically fit into one of two positions on the safety rack to ensure the lift stops at the required height. When the lift is raised, it also prevents whole weight from loading on the air spring.
- Additional safety cable (2/Fig. 12) prevents unnecessary stress when the maximum height is reached.

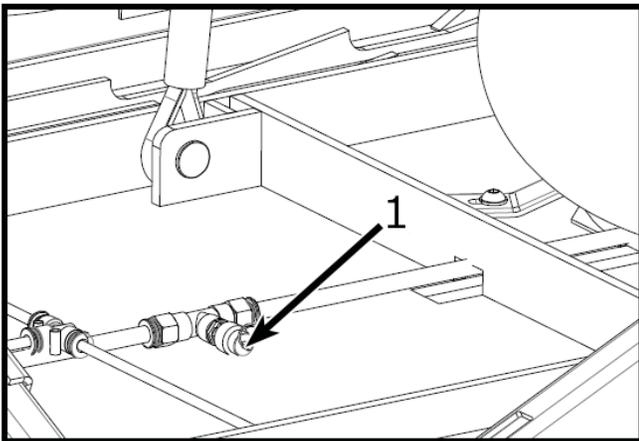


Fig. 11

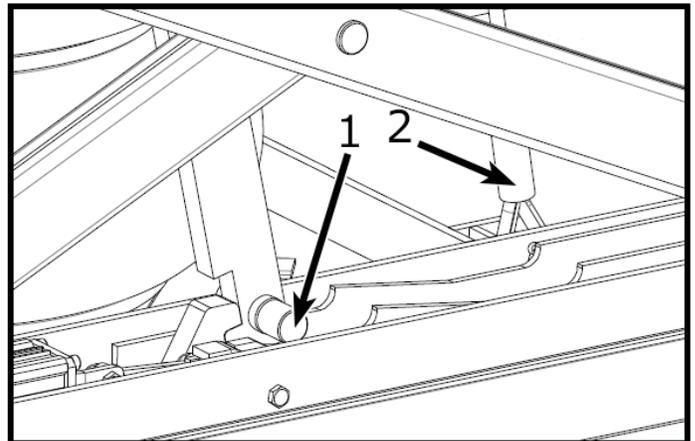


Fig. 12

Installation



Only skilled technicians, appointed by the manufacturer, or by authorized dealers, must be allowed to carry out installation. Serious damage to people and to the lift can be caused if installations are made by unskilled personnel.

7.1 Checking Room Suitability

Determine the place the lift is to be installed. The relevant standards of the local Health and Safety at Work regulations, for instance, with respect to minimum distance to wall or other equipment, escapes and the like, must be observed.

The place of installation must be closed to an air compressor with the **filter device with lubricator**. The temperature in the installation side must be between +50°F and +131°F.

7.2 Lighting

Lighting must be carried out according to the effective regulations of the place of installation. All areas next to the lift must be well and uniformly lit.

7.3 Installation Foundation

The lift must be placed on a B25 concrete floor, well leveled, 6 inch thick at least, and in conformity with local regulations. The new concrete must be adequately cured by at least 21 days minimum. There must be enough space for the lift so as to raise and lower the lift easily. The lift should be bolted to the ground via the holes at the ends of the base, in the ramp locking the feet.



The lift must be anchored on ground if the lift is equipped with the telescopic arms.

7.4 Lift Positioning



Unauthorized persons are not allowed to enter during assembly.

- Transport the lift packages to the installation site by using hoisting means with load capacity of *2200 lbs* at least.
- Remove the packages
- Place four ramps in the position provided for.



Once the lift is unpacked, check the machine visually for any sign of damage. Keep the packing materials for the possible future transportation.

7.5 Pneumatic System Connection

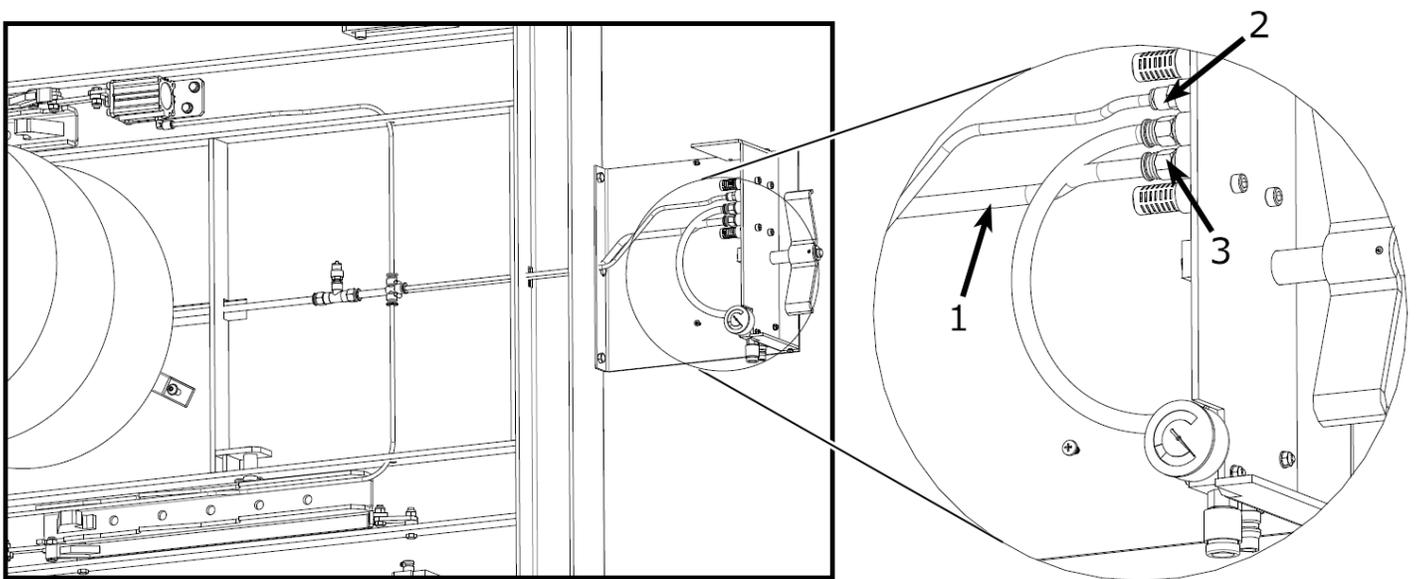


Figure 13 – Pneumatic System Connection

- Using a normal compressed air gun, blow the compressed air into the air spring through the larger pipe (1/ Fig. 13) projecting from the base until the lift is raised fully and the mechanical safety is engaged.
- Remove the top cover of the control pedal by unscrewing the relative screws.
- Insert 2 pipes projecting from the base into the holes on the pedal board and connect them to the respective unions as shown in the Figure 13. Pay attention that the smaller pipe D.6 should be connected to the union (2/ Fig. 13) and the larger pipe D.10 should be connected to the union (3/ Fig. 13).

- Fit the top cover of the pedal back in place.
- Connect the compressed air supply to the inlet union (1/Fig. 14).

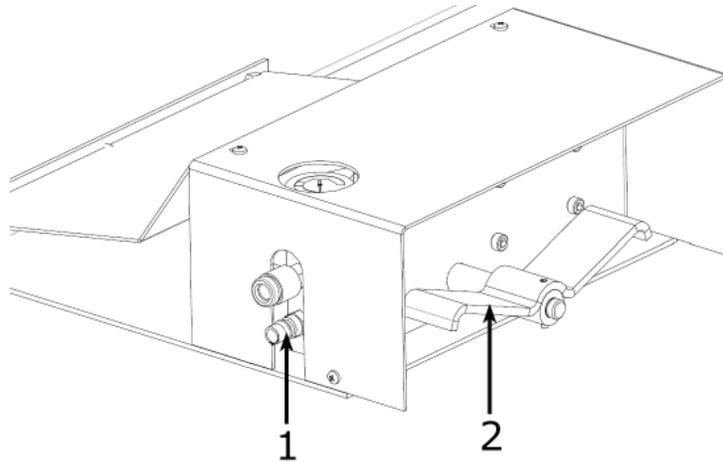


Fig. 14



Filter with lubricator must be equipped on the air supply and the pressure must be set at 6-8 bar.

7.6 Check Before Operation



During START UP procedure, observe all operating components and check for proper installation and adjustment. DO NOT attempt to raise vehicle until a thorough operation check has been completed.

- Check to make sure all bolts, nuts and screws are tightened securely.
- Check to make sure the airline is connected properly and the air pressure is set to 6-8bar.
- Check to make sure that the safety devices for proper operation.
- Check to make sure to check the lift anchored well if the telescopic arms are used.
- Check to make sure the control pedal for correct operation: Depress the right side of pedal (2/Fig. 16) to raise the lift, depress it again until the maximum height is reached (about 23"). Depress the left side of pedal to lower the lift, stops the lift when the pedal is released.

Operation And Use



Never operate the lift with any person or equipment below. Never exceed the rated lifting capacity. Always ensure that the lift safety is locked before any attempt is made to work on or near the vehicle.

8.1 Controls

- Depress the right side to raise the lift.
- Depress the left side to lower the lift.
- Release the pedal to stop the lift

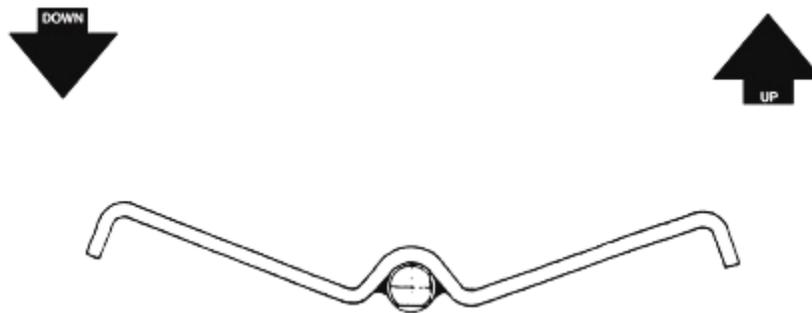


Figure 15 – Pedal Controls

Lift operation can be summarized into following steps

8.2 To Raise The Lift



As soon as the lift is off the ground, stop the lift to be sure that the lift is balanced.

- With help of ramps, drive-on the vehicle on the lift. Check to make sure that the vehicle is secured.
- Position four rubber pads under the lifting points of the vehicle.

- Raise the lift by depressing the right side of pedal.
- To rest the lift in standing position at the desired height by releasing the pedal.
- Always ensure that the lift rests on the safety before any attempt is made to work on or near the vehicle.

8.3 To Lower The Lift

- Be sure the safety area is free of people and objects.
- Raise the lift a little bit by depressing the right side of pedal to clear off the safety.
- Lower the lift completely by continuously depressing the left side of pedal
- Remove the rubber pads and drive vehicle off the lift.

Maintenance



Only trained personnel who knows how the lift works, must be allowed to service the lift.

To service the lift properly, the following has to be carried out:

- use only genuine spare parts.
- use only equipment suitable for the work required.
- follow the scheduled maintenance and check periods shown in the manual.

Refer to documents supplied by the dealer to carry out maintenance:

- exploded views with all data necessary for spare parts ordering.
- list of possible faults and relevant solutions.



Before carrying out any maintenance or repair on the lift, disconnect the air power supply and keep the key in a safe place to prevent unauthorized persons from switching on or operating the lift.

9.1 Ordinary Maintenance

- The lift has to be properly cleaned at least once a month using clean rags.
- Lubricate all pivot pins at least once a week.
- Check the safety devices for proper operation.



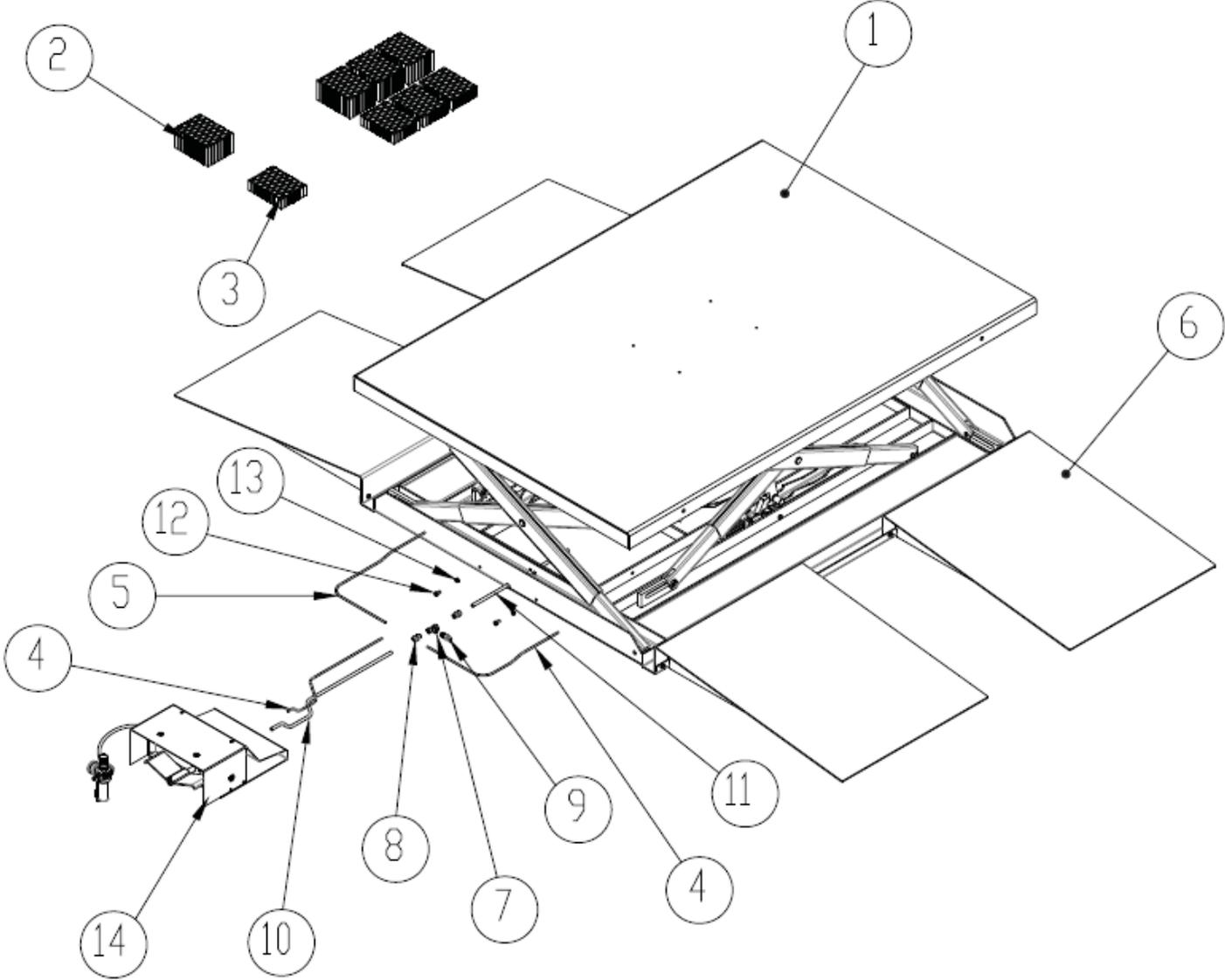
The use of water or inflammable liquid is strictly forbidden.

Troubleshooting

A list of possible troubles and solutions is given below

Trouble:	Possible Cause:	Solution:
The lift does not raise when the right side of pedal is pressed	There is not enough pressure in the compressed air system.	Check and ensure the air pressure is sufficient for operation of the lift.
	The air pipe is crushed and damaged.	Replace the damaged pipe and ensure the correct air flow.
The lift does not lower when the left side of pedal is pressed	There is no enough pressure in the compressed air system.	Check and ensure the air pressure is sufficient for operation of the lift.
	The air pipe is crushed and damaged.	Replace the damaged pipe and ensure the correct air flow.
	The mechanical safety lock is engaged.	Raise the lift a little bit and lower it again.

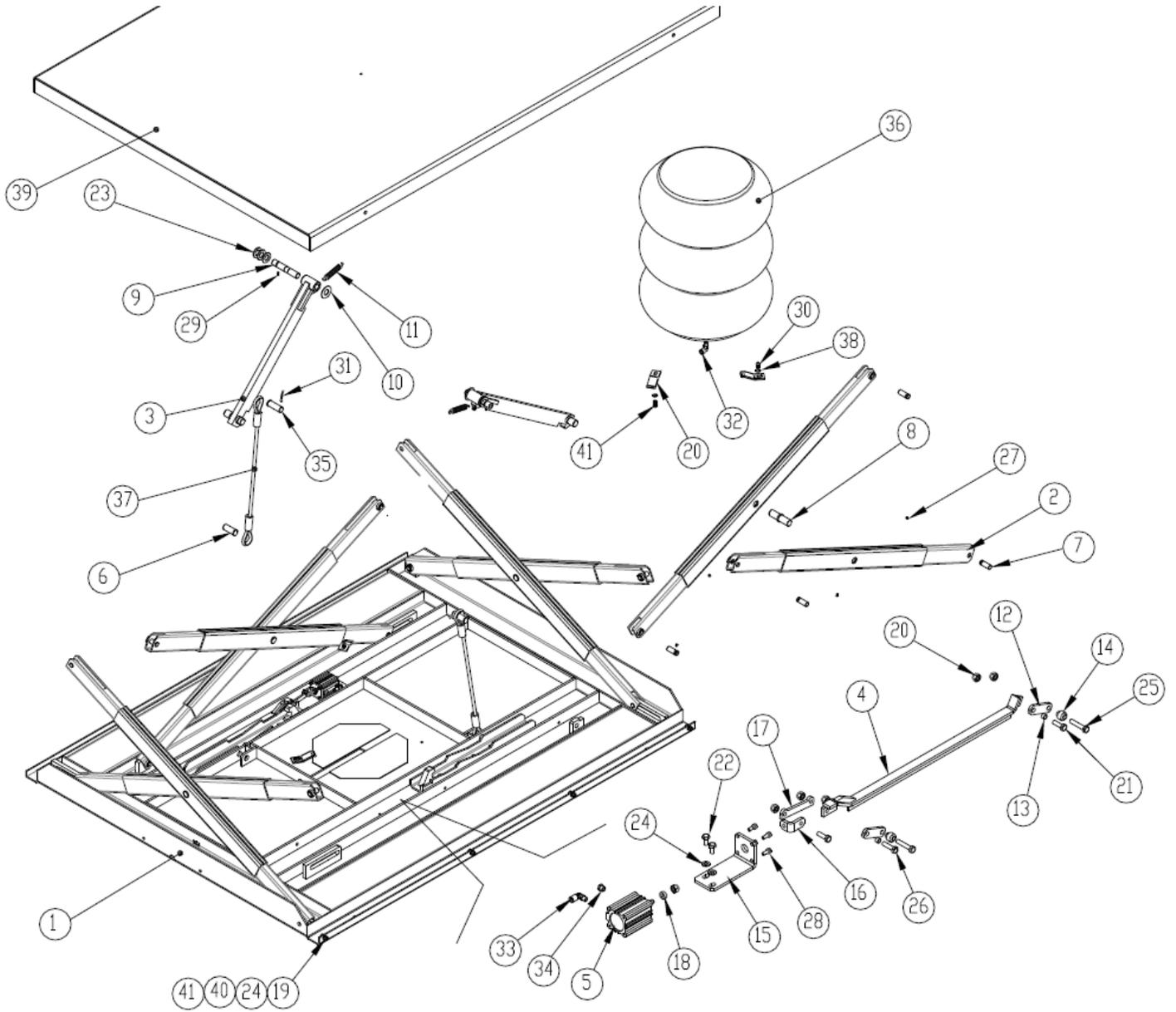
Parts List



Lift

Lift

ITEM	PART NUMBER	DESCRIPTION	QTY
1	J43A001000C	Lifting system	1
2	J43A000001	Rubber pad 160X120X80	4
3	J43A000002	Rubber pad 160X120X40	4
4	0306095	Rilsan hose 6X4 L=600	3
5	0306095	Rilsan hose 6X4 L=1050	1
6	J43A001700C	Ramp	4
7	0306075	Tee union 1/4 female	1
8	0306143	Quick union 10-1/4	2
9	0306099	Pressure overload valve 1/4 7bar	1
10	0306094	Rilsan hose 10X6.5 L=700	1
11	0306094	Rilsan hose 10X6.5 L=460	1
12	0201026	Screw M8X16 - GB/T5783	2
13	0203029	Nut M8 - GB/T6170	2
14	J43A002000C	Pedal control unit	1

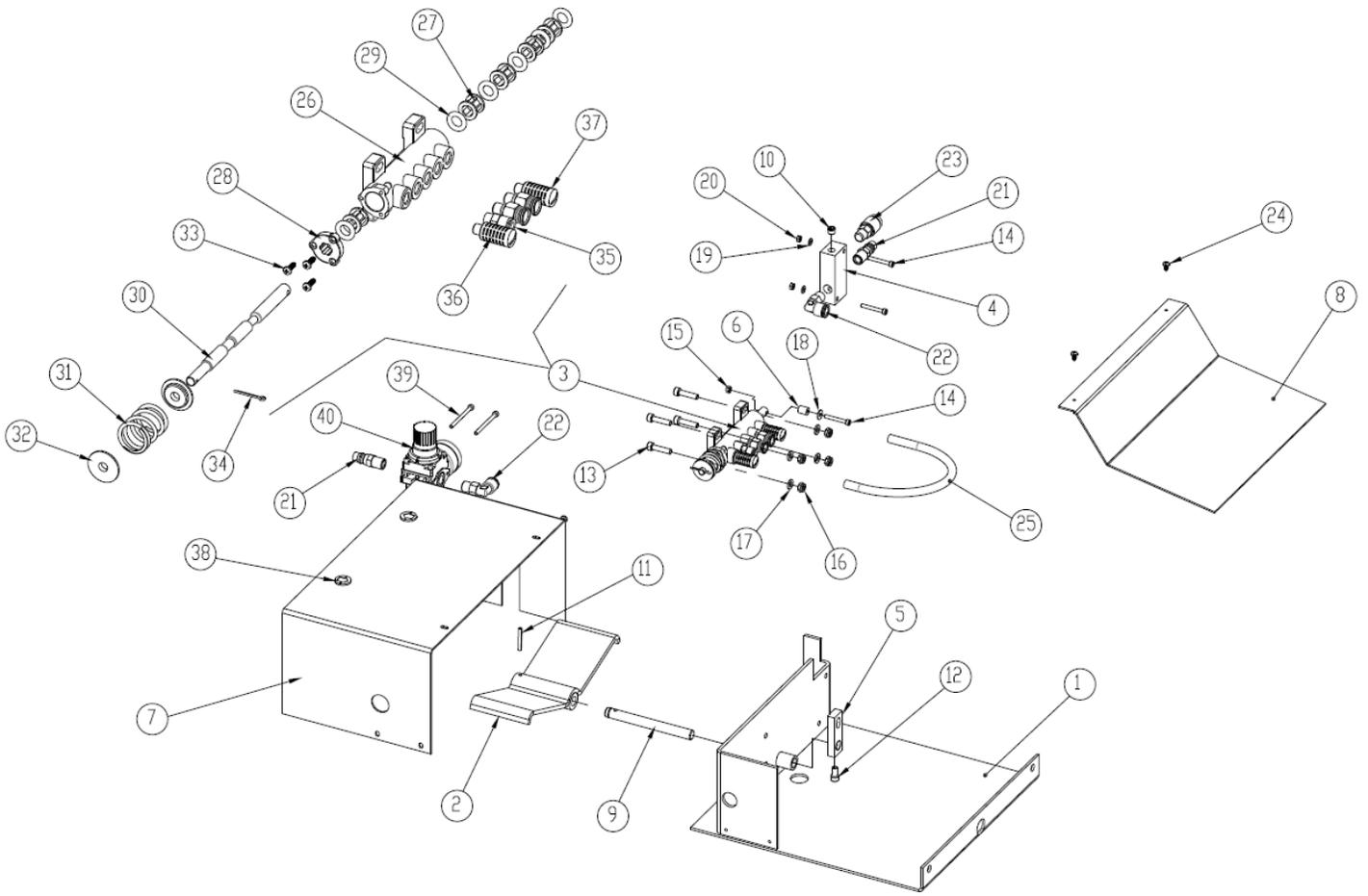


Lifting System

Lifting System

ITEM	PART NUMBER	DESCRIPTION	QTY
1	J43A001200B	Base	1
2	J43A001300	Stabilizer connection rod	8
3	J43A001400C	Safety connection rod	2
4	J43A001500A	Safety release lever	2
5	0306265	Safety release cylinder 40X20	2
6	J43A001001	Cable lower pin	2
7	J43A001002	Pin	16
8	J43A001003	Stabilizer connection rod pivot	4
9	J43A001004	Safety connection rod pivot	2
10	J43A001005	Spacer	2
11	J43A001006	Return spring	2
12	J43A001007	Connection rod	4
13	J43A001008	Bush	4
14	J43A001009	Spacer bush	4
15	J43A001010A	Cylinder support	2
16	J43A0010011A	Connection rod	2
17	J43A0010012	Connection plate	2
18	J43A0010019A	Spacer 3	2
19	0203029	Nut M8 - GB/T6170	8
20	0204004	Self-locking nut M8	13
21	0201038	Screw M8X25 - GB/T5783	4
22	0201026	Screw M8X16 - GB/T5783	4
23	0205022	Washer D.20 - GB/T97.1	6
24	0205009	Washer D.8 - GB/T96	20
25	0201037	Screw M8X40 - GB/T5782	4
26	0201030	Screw M8X30 - GB/T5781	2
27	0209030	Screw M6X8 - GB/T78	16
28	0202025	Screw M6X14 - GB/T70.1	8

ITEM	PART NUMBER	DESCRIPTION	QTY
29	0209010	Screw M6X10 - GB/T78	2
30	0206070	Screw M8X15 - GB/T70.2	2
31	0213020	Split pin 3X40 - GB/T91	4
32	0306268	90 degree quick union 10-1/4	1
33	0306138	90 degree quick union 6-1/8	2
34	0306087	Silencer 1/8	2
35	J43A001020A	Cable upper pin	2
36	J43A001018B	Air spring	1
37	J43A001800B	Safety steel cable	2
38	J43A0010013A	Fastening plate	4
39	J43A001100A	Platform	1
40	0208006	Locking washer D.6	8
41	0201042	Screw M8X20 - GB/T5783	8



Pedal Unit

Pedal Unit

ITEM	PART NUMBER	DESCRIPTION	QTY
1	J43A002100A	Pedal base	1
2	J43A002200A	Pedal	1
3	J43A002400	Pedal valve unit	1
4	J43A002001	3-way interface block	1
5	J43A002002	Valve connecting rod	1
6	J43A002003	Bush	1
7	J43A002007C	Pedal upper cover	1
8	J43A002008A	Pedal cover	1
9	J43A002009A	Pedal pin	1
10	0305014	Plug 1/8	1
11	0213114	Elastic pin 4X20	1
12	0202024	Screw M6X12 - GB/T70.1	1
13	0202034	Screw M6X25 - GB/T70.1	4
14	0202006	Screw M4X30 - GB/T70.1	3
15	0204001	Self-locking nut M4	1
16	0204003	Self-locking nut M6	4
17	0205006	Washer D.6 - GB/T97.1	4
18	0205003	Washer D.4 - GB/T96	1
19	0205002	Washer D.4 - GB/T97.1	2
20	0203002	Nut M4 – GB52	2
21	0306112	Quick union 8-1/4	2
22	0306268	90 degree quick union 10-1/4	2
23	0306269	Rotation union LSM-20	1
24	0207035	Self-tapping screw ST4.2X9.5	5
25	0306094	Rilsan hose 10X6.5 L=320	1
26	YC1-3001583	Valve body	1
27	YC1-3001584	Valve spacer	5
28	YC1-3001585	Valve flange	1

ITEM	PART NUMBER	DESCRIPTION	QTY
29	YC1-4299000	O-ring 17X4	6
30	J43A002004	Valve pin	1
31	J43A002005	Spring	1
32	J43A002006	Washer	2
33	0207032	Self-tapping screw ST3.5X13	3
34	0213044	Split pin 2X20 - GB/T91	1
35	0306141	Quick union 6-1/8	1
36	0306059	Silencer 1/8	2
37	0306267	Quick union 10-1/8	2
38	0510196	Lifting/lowering decal	2
39	0202010	Screw M4X50 - GB/T70.1	2
40	0306278	Regular filter 1/4	1

Warranty



This item is warranted for one (1) year on structural components and one (1) year on air or electric hydraulic power units, pneumatic power units, cylinders and major components from date of invoice. Wear items are covered by a 90 day warranty.

This LIMITED warranty policy does **not include a labor** warranty.

NOTE: ALL WARRANTY CLAIMS MUST BE PRE-APPROVED BY THE MANUFACTURER TO BE VALID.

The Manufacturer shall repair or replace at their option for this period those parts returned to the factory freight prepaid, which prove after inspection to be defective. This warranty will not apply unless the product is installed, used and maintained in accordance with the Manufacturers installation, operation and maintenance instructions.

This warranty applies to the ORIGINAL purchaser only, and is non-transferable. The warranty covers the products to be free of defects in material and workmanship but, does not cover normal maintenance or adjustments, damage or malfunction caused by: improper handling, installation, abuse, misuse, negligence, carelessness of operation or normal wear and tear. In addition, this warranty does not cover equipment when repairs or alterations have been made or attempted to the Manufacturer's products.

THIS WARRANTY IS EXCLUSIVE AND IS LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY IMPLIED WARRANTY OR MERCHANTABILITY OR ANY IMPLIED WARRANTY OF FITNESS FROM A PARTICULAR PURPOSE, AND ALL SUCH IMPLIED WARRANTIES ARE EXPRESSLY EXCLUDED.

THE REMEDIES DESCRIBED ARE EXCLUSIVE AND IN NO EVENT SHALL THE MANUFACTURER, NOR ANY SALES AGENT OR OTHER COMPANY AFFILIATED WITH IT OR THEM, BE LIABLE FOR SPECIAL CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR THE BREACH OF OR DELAY IN PERFORMANCE OF THIS WARRANTY. THIS INCLUDES, BUT IS NOT LIMITED TO, LOSS OF PROFIT, RENTAL OR SUBSTITUTE EQUIPMENT OR OTHER COMMERCIAL LOSS.

PRICES: Prices and specifications are subject to change without notice. All orders will be invoiced at prices prevailing at time of shipment. Prices do not include any local, state or federal taxes.

RETURNS: Products may not be returned without prior written approval from the Manufacturer.

DUE TO THE COMPETITIVENESS OF THE SELLING PRICE OF THESE LIFTS, THIS WARRANTY POLICY WILL BE STRICTLY ADMINISTERED AND ADHERED TO.