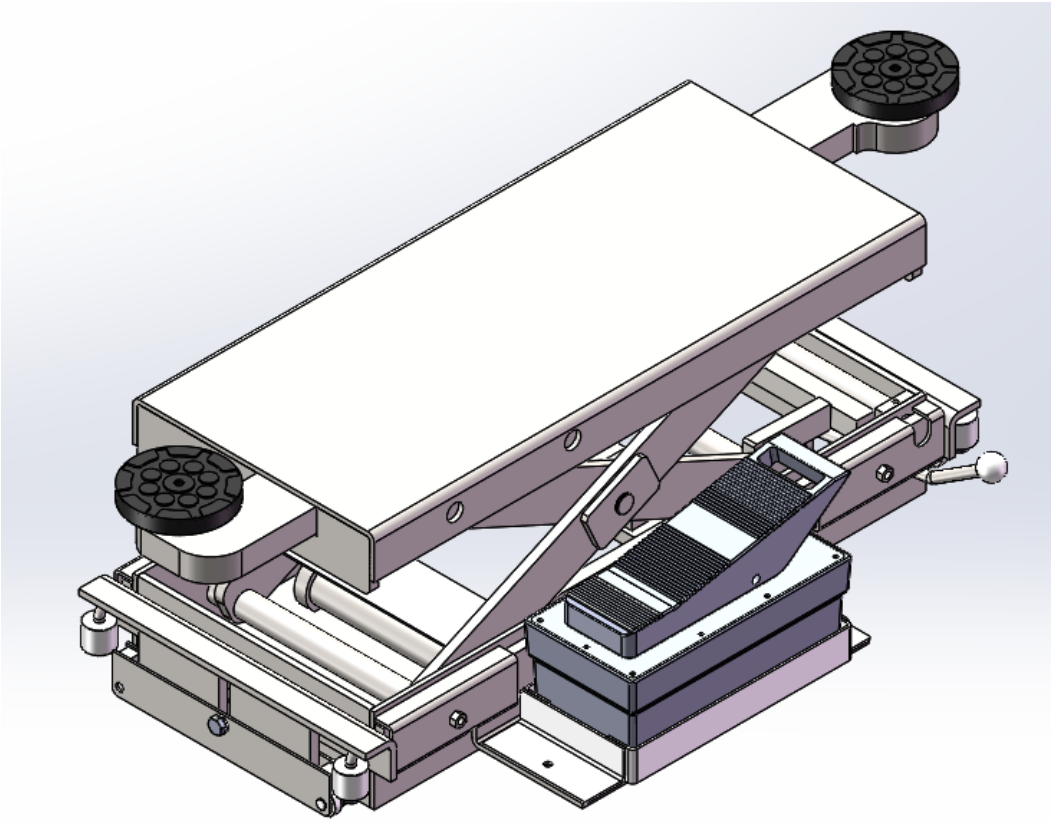
LIFT KING

**Model 306029LK**

# Sliding Jack

## Installation, Operation & Maintenance Manual



APRIL.2025

## IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

| | |
|---|---|
|  | *PLEASE READ THE ENTIRE CONTENTS OF THIS MANUAL PRIOR TOINSTALLATION AND OPERATION. BY PROCEEDING WITH LIFT INSTALLATION AND OPERATION YOU AGREE THAT YOU FULLY UNDERSTAND AND COMPREHEND THE FULL CONTENTS OF THIS MANUAL. FORWARD THIS MANUAL TO ALL OPERATORS. FAILURE TO OPERATE THIS EQUIPMENT AS DIRECTED MAY CAUSE INJURY OR DEATH* |

## BE SAFE

Your new lift was designed and built with safety in mind. However, your overall safety can be increased with proper training and thoughtful operation on the part of the operator. DO NOT operate or repair this equipment without reading this manual and the important safety instructions shown inside. Always keep this operation manual near the lift. Make sure that ALL USERS read and understand this manual.

## PRODUCT WARRANTY

This product under warranty for 1 years on equipment structure, to be free of defects in material and workmanship. Power units, hydraulic cylinders, and all other assembly components (such as cables, valves, switches etc.) are warrantied for one year against defects in material or workmanship under normal use. The manufacturer shall repair or replace at its discretion, within the warranty period, those parts returned to the factory freight, prepaid, which prove upon inspection to be defective.

The warranty does not extend to:

- Defects caused by ordinary wear, abuse, misuse, negligence, shipping damage, improper installation, voltage or lack of required maintenance;
- Damages resulting from purchaser’s neglect or failure to operate products in accordance with instructions provided in the owner’s manual(s) and/or other accompanying instructions supplied;
- Normal wear items or service normally required to maintain the product in a safe operating condition;
- Any component damaged in shipment;
- Other items not listed but may be considered general wear parts;
- Damage caused by rain, excessive humidity, corrosive environments or other contaminants.

THESE WARRANTIES DO NOT EXTEND TO ANY COSMETIC DEFECT NOT INTERFERING WITH EQUIPMENT FUNCTIONALITY OR ANY INCIDENTAL, INDIRECT, OR CONSEQUENTIAL LOSS, DAMAGE, OR EXPENSE THAT MAY RESULT FROM ANY DEFECT, FAILURE, OR MALFUNCTION OF THE MANUFACTURER. PRODUCT OR THE BREACH OR DELAY IN PERFORMANCE OF THE WARRANTY.

## IMPORTANT NOTICE

Do not attempt to install this lift if you have never been trained on basic automotive lift installation procedures. Never attempt to lift components without proper lifting tools such as a forklift or cranes. Stay clear of any moving parts that can fall and cause injury. These instructions must be followed to insure proper installation and operation of your lift. Failure to comply with these instructions can result in serious bodily harm and void product warranty. Manufacturer will assume no liability for loss or damage of any kind, expressed or implied resulting from improper installation or use of this product.

## Content

# Chapter 1 Packing, transport and storage

ALL PACKING, LIFTING, HANDLING, TRANSPORT AND UNPACKING ORERATIONS ARE TO BE PERFORMED EXCLUSIVELY BY EXPERT PERSONNEL WITH KNOWLEDGE OF THE LIFT AND THE CONTENTS OF THIS MANUL.

## 1.1 Package

The dimension of package is 38.6” X 23.6” X 13”, and the package weight is 372lb

## 1.2 Transport

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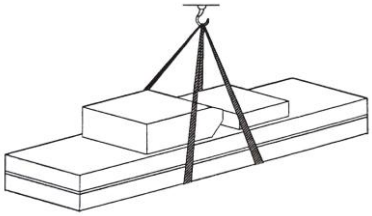
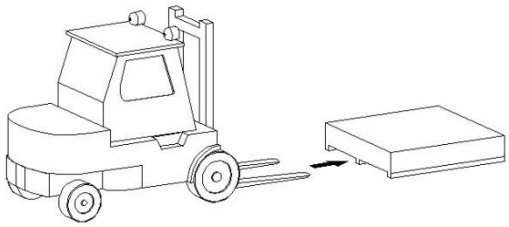
| ⚠ | *Packing can be lifted or moved by lift trucks, cranes or bridge cranes. In case of slinging, a second person must always take care of the load, to avoid dangerous oscillations.* |

During loading and unloading operation, goods must be handled by vehicles or ships. At the arrival of the goods, verify that all items specified in the delivery notes are included. If finding missing parts, possible defects or damage due to transport, one should examine damaged cartons according to ‘Packing List’ to verify the condition of damaged goods and missing parts, also the person in charge or the carrier must be immediately informed. The machine is heavy goods! Don’t take manpower load and unload and transporting way into consideration, the safety of working is important. Furthermore, during loading and unloading operation goods must be handled as shown in the picture



Handled by crane



Handled by fork-lift truck

## 1.3 Storage

-The machine equipment should be stocked in the warehouse, if stocked outside should do the disposal well of waterproof.

-Use box truck in the process of transport, use container storage when shipping.

-The control box should be placed perpendicularly during the transport; and prevent other goods from extrusion.

-The temperature for machine storage: -25ºC-- 55ºC

### 1.4 Opening

When the crates arrive, check that the machine has not been damaged during transport and that all parts listed are present. The crates must be opened using all possible precautionary measure to avoid damaging the machine or its parts. Make sure that parts do not fall from the crate during opening.

# Chapter 2 Description of the machine

## 2.1 Introduction

This product is a hand pump operated, scissor-style jack. It is designed for mounted on the runways of the four-post lift or scissor lift. It can lift the wheels free of the runways for brake, suspension and tire service.

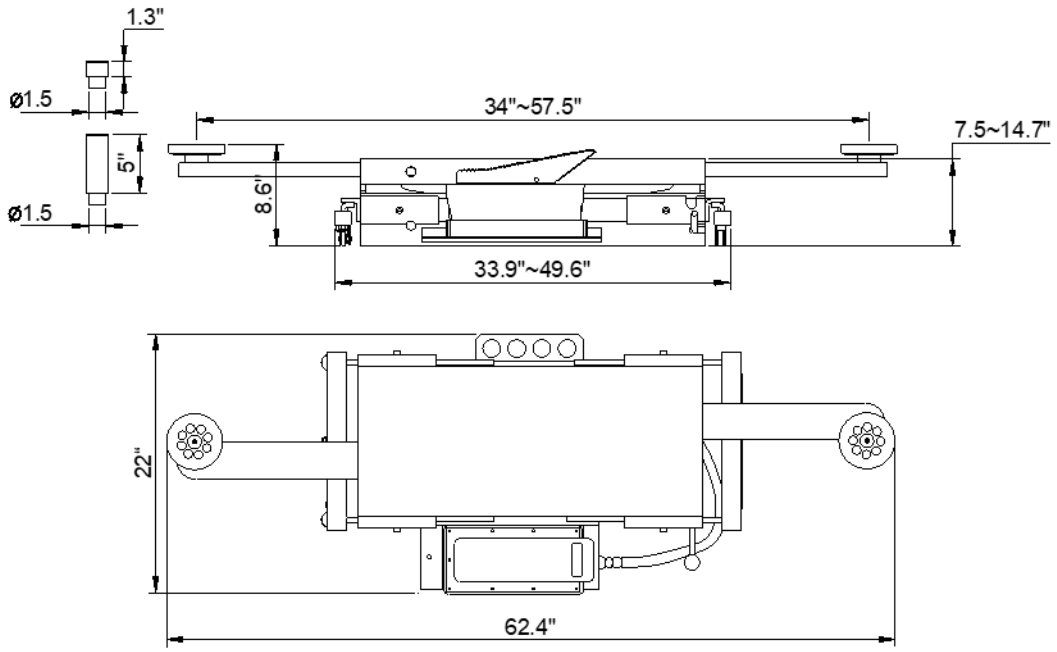
## 2.2 Intend use

This product is designed to mounted on the runways of the four-post lift or scissor lift for lifting the front or rear axles of trucks, buses, tractors. It should be used for no other purpose.

- Forbid to use for washing and spraying vehicles!
- Forbid to lift vehicle which weight is over 4500lb(20000kg)
- Forbid to park car.

## 2.3 Nameplate

## 2.4 Layout dimension




## 2.5 Technical parameter

| | |
|---|---|
| Model type | 306029LK |
| Capacity | 4500lb |
| Overall length | 62.4” |
| Overall width | 22” |
| Overall height | 8.6” |
| Min. height | 7.5” |
| Max lift height | 14.7” |
| Lift time (without load) | ≤0.15m/s |
| Lower speed (without load) | ≤0.15m/s |
| Net Weight | 328lb |
| Gross Weight | 372lb |
| Power (Pneumatic hydraulic pump) | 0.8~1.0Mpa |
| Working Temperature | -20 ℃ ~ +50 ℃ |
| Installation place | Indoors |

# Chapter 3 Safety caution

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

| | |
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|  | *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 square space for a safety area at least 1m free 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 the safety lock is engaged.

| | |
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|  | *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.* |

### 3.1 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 load is secured firmly when operate the lift;
- Be sure the load should not exceed the maximum lifting capacity;
- Use the lift only for its intended purpose. Improper use of this lift could cause severe injury or death.

### 3.2 Safety device

To avoid overloading and possible breaking, the following safety devices have been used:

- A maximum pressure valve is placed inside the hydraulic unit to prevent excessive weight.

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| | *The maximum pressure valve has been preset by the manufacturer to a proper pressure. DO NOT try to adjust it to overrun the rated lifting capacity.* |

- A mechanical safety mechanism is built inside each side with automatic engagement.

| | |
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| | *It is strictly forbidden to modify any safety device. Always ensure the safety device for proper operation during the service.* |

### 3.3 Risk list

Risks for personnel

This heading illustrates potential risks for the operator, maintenance fitter, or any other person present in the area around the lift, result from incorrect use of the lift.

Risk of crushing

Possible if the operator controlling the lift is not in the specified position at the control panel. When the carriages (and vehicle) are lowering the operator must never be partly or completely underneath the movable structure. Always remain in the control zone.

Risk of crushing (personnel)

When the carriages and the vehicle are lowering personnel are prohibited from entering the area beneath the movable parts of the lift. The lift operator must not start the maneuvers unit it has been clearly established that there is no person in potentially dangerous positions.

Risk of impact

Caused by the parts of the lift or the vehicle that is positioned at head height. When, due to operational reasons, the lift is stopped at relatively low elevations personnel must be careful to avoid impact with parts of the machine not marked with special colors.

Risk of vehicle moving

Cause by operations involving the application of force sufficient to displace the vehicle. In the case of large or heavy vehicles, sudden movement could create an unacceptable overload or uneven load sharing. Therefore, before lifting the vehicle and during all operations on the vehicle, make sure that it is properly topped by the hand brake.

Risk of vehicle falling from lift

This hazard may arise in the case of incorrect positioning of the vehicle on the carriages, incorrect stopping of the vehicle, or in the case of vehicles of dimensions that are not compatible with the capacity of the lift.

*Never attempt to perform tests by driving the vehicle while it is on the carriages.*

*Never leave objects in the lowering area of the movable parts of the lift.*

Risk of slipping

Cause by lubricant contamination of the floor around the lift. The area beneath and immediately surrounding the lift must be kept clean. Remove any oil spills immediately. When the lift is fully down, do not walk over the carriages or the cross-pieces in places that are lubricated with a film of grease for functional requirements. Reduce the risk of slipping by wearing safety *shoes.*

Risk of electric shock

Risk cause by electric shock in areas of the lift housing electrical wiring. Do not use jets of water, steam solvents or paint next to the lift, and take special care to keep such substances clear of the electrical control panel.

Risks related to inappropriate lighting

The operator and the maintenance fitter must be able to assure that all the areas of the lift are properly and uniformly illuminate compliance with the laws in force in the place of installation.

Risk of component failure during operation

The manufacturer has used appropriate materials and construction techniques in relation to the specified use of the machine to manufacture a reliable and safe lift. Note however, that the lift must be used in conformity with manufacturer’s prescriptions, and the frequency of inspections and maintenance works recommended.

Risk related to improper use

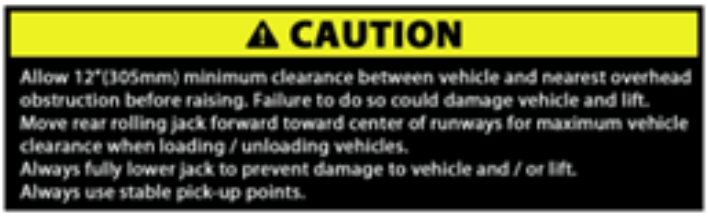
Persons are not permitted to stand or sit on the carriages during the lift man oeuvre or when the vehicle is already lifted. The handling of safety devices is strictly forbidden.

*Never exceed the maximum carrying capacity of the lift, make sure the vehicles to be lifted have no load.*

It is therefore essential to adhere scrupulously to all regulations regarding use, maintenance and safety contained in this manual.

### 3.4 Warning labels

All safety warning signs displayed on the machine are with the purpose to draw the operator's attention to dangerous or unsafe situations. The labels must be kept clean and they must be replaced if detached or damaged. Read the meaning of the labels carefully and memorize it.



The warning signs

# Chapter 4 Installation

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|  | *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.*<br><br>*Always refer to the exploded views attached during installation.* |

## 4.1 Tools required

- Forklift, or shop crane
- Pry Bar
- Hammer
- Screwdrivers
- Socket Wrenches with Ratchet
- Hex Key Set
- Hydraulic Fluid (3L)
- Adjustable Wrench

| | |
|---|---|
|  | ***Important notice*** *These instructions must be followed to insure proper installation and operation of your lift. Failure to comply with these instructions can result in serious bodily harm and void product warranty. Manufacturer will assume no liability for loss or damage of any kind, expressed or implied, resulting from improper installation or use of this product. Please read entire manual prior to installation.* |

## 4.2 Selecting site

Before setup your new lift, check the following.

1. CLEARANCE: There must be an adequate unobstructed space on all sides and enough space above the lift for assembly and testing.

2. OPERATOR: The operator at the control pendant must maintain a full, unobstructed view of the lift always.

3. OUTDOOR OPERATION, OUTDOOR USE IS PROHIBITED. This lift is intended for indoor use only.

## 4.4 Unpack the lift.

A. You will need a forklift that can handle about 2,200~3,300lb and operate on a smooth surface.
B. Use a pry bar and hammer to remove the top and all four sides of the shipping package.
C. Verify the area is clear around the lift and there are no overhead obstructions

that will interfere with removing the lift from the shipping package.

D. Take out the whole lift by the forklift. Or simply open the plywood side walls then move the lift on ground.

**4.5 Assemble the Sliding Jack**

A. Carefully take out the rolling jack from its package.

B. Connect the compressed air with pressure of 0.8-1.0 Mpa (8-10 bar) to the pneumatic pump air inlet port.

C. Change the oil filling port plug with the one supplied (ventilating one).

D. Pump the jack to its top height by foot lever down. Check hydraulic oil quantity if it is enough and all hose connecting.

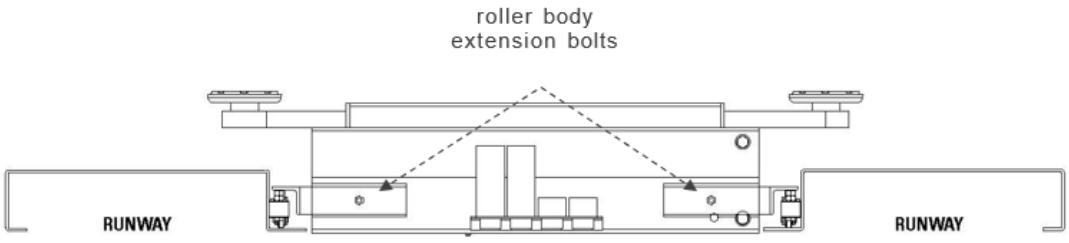
E. Lower the jack down to bottom by foot lever head down.

F. Sliding out the extension frames on both sides to match the width between the runways.

G. Put the jack on the rails of the runways.

H. Remember to lock the frame position by bolts after it is centered.

**NOTE**: Make sure the jack can be sliding on the rails freely and all the rollers contact with the runways.



# Chapter 5 Adjustment

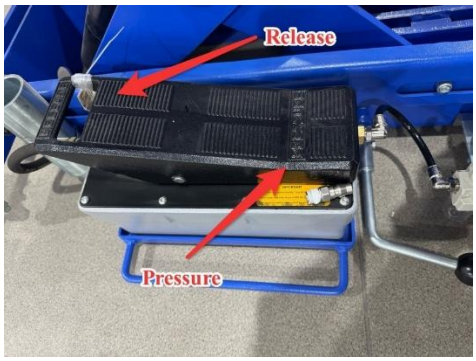
Before first use Test unit as follows:

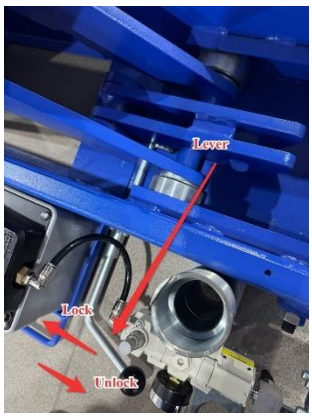
- Inspect the equipment to ensure it is correctly installed within the track and can move smoothly via the pulleys.
- Fasteners are intact, and the top block is properly installed.
- The lever is in the unlocked position.
- The connection between the pneumatic hydraulic pump and actuator, including hoses, is secure.
- Press the 'Pressure' pedal on the pneumatic hydraulic pump and extend the actuator to its maximum position.
- Move the lever to the locked position, press the 'Release' pedal on the pneumatic hydraulic pump to lower the actuator to the locked position, and observe whether the locking mechanism functions normally.
- Press the 'Pressure' pedal on the pneumatic hydraulic pump to raise the actuator slightly to unlock it, then move the lever to the unlocked position, and press the 'Release' pedal on the pneumatic hydraulic pump to place the platform at its lowest position.
- Perform the full stroke operation three times to confirm that there is no leakage in the tubing and connectors, no hydraulic oil leakage from the actuator, and that the actuator operates smoothly without vibration within its stroke.

# Chapter 6 Operation instruction

## Operation

***To Raise*:** Confirme the lever to the unlocked position, press the 'Pressure' pedal of the pneumatic hydraulic pump until the jack rises to the desired locked position, then move the lever to the locked position, and press the 'Release' pedal of the pneumatic hydraulic pump to lower the jack to the latch position.




***To Lower:*** Move the lever to the unlock position, press the 'Release' pedal of the pneumatic-hydraulic pump, and allow the hydraulic fluid to return to the pump, causing the actuator to descend to its lowest position.

## Safety

***Never*** exceed maximum working load or work under unsupported vehicle.

Ensure there is no person or obstruction beneath the vehicle before lowering.

***Always*** retract cylinder ***fully*** before driving on or off jacking position.

Ensure air supply is ***clean and dry*** and is between 0.8-1.0 Mpa.

***Under no circumstances*** attempt to dismantle air pump.

# Chapter 7 Maintenance

**Daily:**

- Inspect rolling jack adapters for damage or excessive wear.
- Inspect hydraulic system for leaks.
- Inspect for loose bolts, broken/damaged components.
- Inspect linkages for damage, wear and tear.

**Weekly:**

- Drain water filter.
- Check condition of hoses.
- Apply a few drops of general-purpose oil to air inlet.


**Quarterly:**

- Grease wheel bearings.
- Inspect the roller body assemblies.
- Check fluid level in hydraulic reservoir.

**Annually:**

A competent person should thoroughly inspect the equipment and any faulty or damaged parts should be replaced. A competent person should also carry out a load test to the maximum capacity of the unit.

**Fluid level checking procedure**

1. Completely lower rolling jack.
2. Wipe reservoir clean to prevent contamination of fluid.
3. Remove fill plug and check fluid level. Fill as required to bottom of fill hole with AW32 hydraulic fluid. Take care to prevent contamination during filling operation.
4. Reinstall plug hand tight only.

| | |
|---|---|
| ⚠ | *Repair/Replace as required with original equipment parts.* |

## Chapter 8 Trouble shooting

| TROUBLE | CAUSE | REMEDY |
|---|---|---|
| ***Rolling Jack will not raise after contacting load*** | 1. Jack loaded beyond capacity. | 1. Use Jack only to rated capacity. |
| | 2. External fluid leak at pump, hose or cylinder. | 2. Repair leak, refill reservoir. * |
| | 3. Internal leakage. | 3. Have pump serviced by an authorized service center. |
| | 4. Release mechanism damaged or parts missing. | 4. Replace damaged or missing parts. |
| | 5. Pump low on fluid. | 5. Lower Jack and check fluid level. Fill with AW32 hydraulic fluid. Locate and correct leak. * |
| | 6. Pump malfunctioning. | 6. Have pump serviced by an authorized service center. |
| ***Rolling Jack will not raise to full height.*** | 1. Pump low on fluid. | 1. Lower Jack and check fluid level. Fill with AW32 hydraulic fluid. Locate and correct leak. * |
| ***Jack drifts down - will not hold.*** | 1.Release mechanism damaged or parts missing | 1. Replace damaged or missing parts. |
| | 2. External leakage. | 2. Locate leak and repair. Refill reservoir. * |
| | 3. Internal leakage. | 3. Have pump serviced by an authorized service center. |
| ***Jack lowers slow or not at all.*** | 1. Release mechanism damaged or parts missing. | 1. Replace damaged or missing parts. |
| | 2. Return flow of fluid restricted or blocked. | 2. Eliminate blockage. |

| | |
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|  | **Do not overfill reservoir. Jack must be completely lowered prior to adding hydraulic fluid.* |

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|  | *If rolling jack is in the raised position, be sure to activate the mechanical locking device prior to attempting to service the unit. Failure to do so may cause jack to drop out of control.* |

## Chapter 9 Disposal of used oil

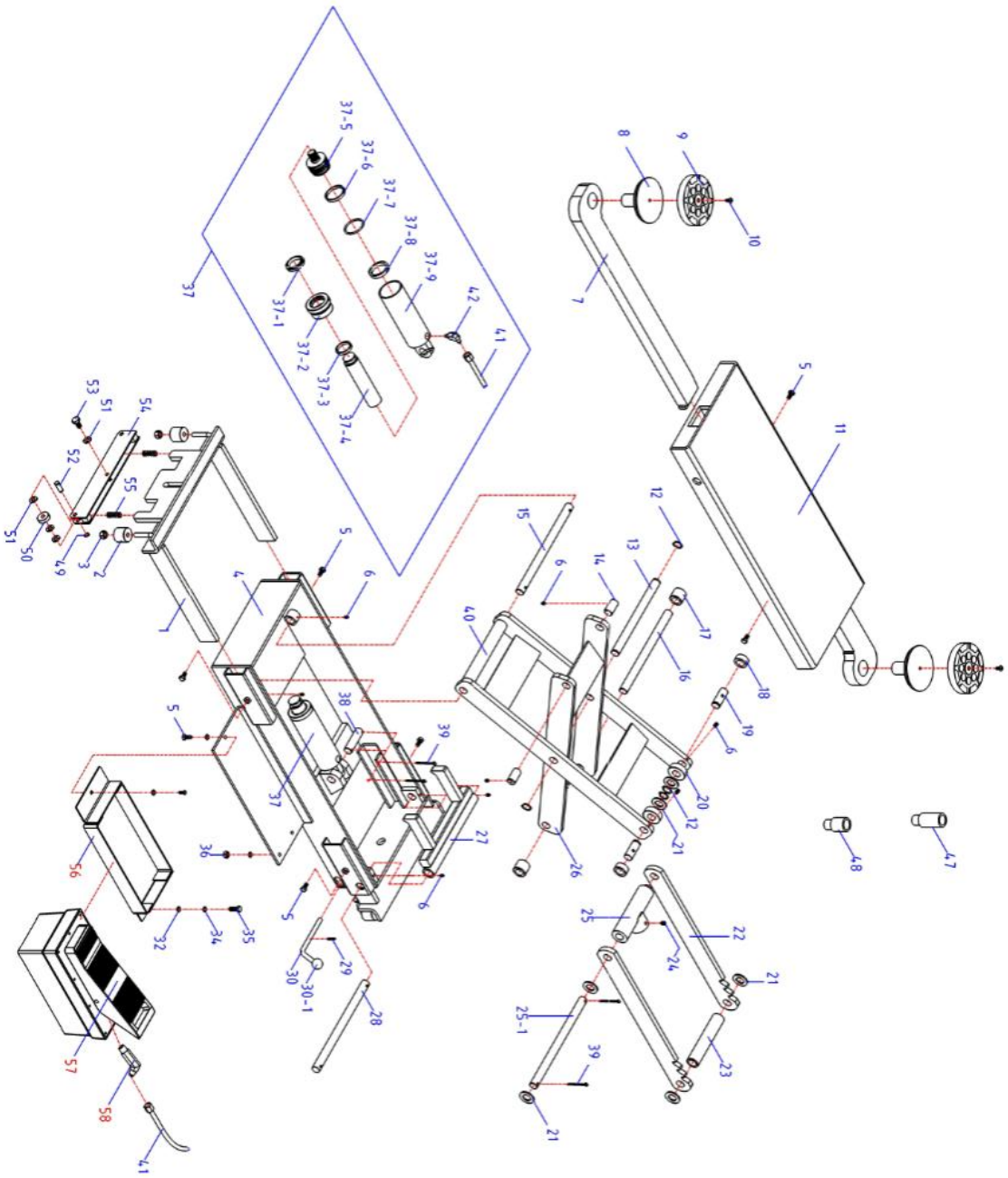
Used oil, which is removed from the power unit and the plant during an oil change, must be treated as a polluting product, in accordance with the legal prescriptions of the country in which the lift is installed.

## Chapter 10 Machine demolition

The machine must be demolished by authorized technicians, just like for assembling. The metallic parts can be scrapped as iron. In any case, all the materials deriving from the demolition must be disposed of in accordance with the current standards of the country in which the rack is installed. Finally, it should be recalled that for tax purposes, demolition must be documented; submitting claims and documents according to the current laws in the country in which the rack is installed at the time the machine is demolished.

# Appendix

## Exploded Drawing & Part



| Item | Code | Description | Qty | Note |
|---|---|---|---|---|
| 1 | LJ05-07000-000 | Mobile frame assembly | 2 | |
| 2 | LJ05-07001-000 | Wheels | 4 | |
| 3 | 5206-00010-000 | Hexagonal nylon lock nut | 2 | M10 |
| 4 | LJ05-08000-000 | Base frame assembly | 1 | |
| 5 | 5101-08016-000 | Hex screws | 7 | M8*16 |
| 6 | 5114-06010-000 | Hex socket set screw with cone point | 8 | M6*10 |
| 7 | LJ05-00001-000 | Support arm | 2 | |
| 8 | LJ03-10100-000 | Top plate welding group | 2 | |
| 9 | SJ03-00008-000 | Top plate washer | 2 | |
| 10 | 5110-06012-000 | Cross recessed head screw | 2 | M6*12 |
| 11 | LJ05-01000-000 | Workbench panel assembly | 1 | |
| 12 | 5304-00020-000 | Axle retaining ring | 4 | ϕ20 |
| 13 | LJ05-00004-000 | Main shaft | 1 | |
| 14 | LJ03-00001-000 | Short shaft | 2 | |
| 15 | LJ05-00002-000 | Shaft 1 | 1 | |
| 16 | LJ05-00007-000 | Shaft 2 | 1 | |
| 17 | LJ03-00013-000 | Wheel | 2 | |
| 18 | LJ03-06003-000 | Small wheel | 2 | |
| 19 | LJ03-06001-000 | Wheel shaft | 2 | |
| 20 | LJ03-06002-000 | Large wheel | 2 | |
| 21 | 5307-00020-000 | Flat washer | 6 | ϕ20x2 |
| 22 | LJ05-00006-000 | Rod | 2 | |
| 23 | LJ05-00005-000 | Sleeve | 1 | |
| 24 | 5114-08010-000 | Hex socket set screw with cone point | 1 | M8*10 |
| 25 | LJ05-05000-000 | Piston rod assembly | 1 | |
| 25-1 | LJ05-00003-000 | Piston rod shaft | 1 | |
| 26 | LJ05-03000-000 | Internal cutter assembly | 1 | |
| 27 | LJ05-04000-000 | Safety assembly | 1 | |
| 28 | LJ05-00008-000 | Safety shaft | 1 | |
| 29 | 5402-05050-000 | Elastic cylindrical pin | 1 | ϕ5*50 |
| 30 | LJ03-00011-000 | Lever | 1 | |

| | | | | |
|---|---|---|---|---|
| 30-1 | LJ03-00012-000 | Plastic ball head | 1 | ϕ35*M10 |
| 32 | 5307-00008-000 | Flat washer | 5 | ϕ8 |
| 34 | 5306-00008-000 | Elastic washer | 2 | ϕ8 |
| 35 | 5101-08030-000 | Hex screw | 2 | M8*30 |
| 36 | 5201-00008-000 | Nut | 2 | M8 |
| 37 | LJ05-09000-000 | Cylinder assembly | 1 | |
| 37-1 | LJ03-09006-000 | Dust seal | 1 | |
| 37-2 | LJ05-09003-000 | Guide ring | 1 | |
| 37-3 | LJ03-09005-000 | Guide ring two | 1 | ϕ35*ϕ47*5 |
| 37-4 | LJ03-09007-000 | Piston rod | 1 | |
| 37-5 | LJ05-09002-000 | Piston | 1 | |
| 37-6 | LJ05-09001-000 | Guide ring one | 1 | ϕ58*ϕ63*6 |
| 37-7 | 5901-00560-000 | O-ring | 1 | ϕ56*ϕ3.55 |
| 37-8 | 5902-00053-000 | Seal | 1 | ϕ63*ϕ53*7.3 |
| 37-9 | LJ05-09100-000 | Cylinder welding group | 1 | |
| 38 | LJ03-00007-000 | Cylinder shaft | 1 | |
| 39 | 5404-03030-000 | Split pin | 4 | ϕ3*30 |
| 40 | LJ05-02000-000 | External cutter assembly | 1 | |
| 41 | LJ03-00010-000 | Hose | 1 | |
| 42 | SJ01-03002-000 | Right-angle fitting | 1 | |
| 47 | LJ03-00018-000 | Long coupling | 1 | |
| 48 | LJ03-00019-000 | Short coupling | 1 | |
| 49 | 5304-00010-000 | Axle retaining ring | 2 | ϕ10 |
| 50 | 5602-00010-000 | Bearing | 4 | ϕ10*ϕ30*9 |
| 51 | 5307-00010-000 | Flat washer | 8 | ϕ10 |
| 52 | LJ05-07003-000 | Shaft | 2 | |
| 53 | 5101-01025-000 | Hex bolt | 2 | M10*25 |
| 54 | LJ05-07200-000 | Telescopic frame welding group | 2 | |
| 55 | LJ05-07002-000 | Spring | 4 | |
| 56 | LJ03-12000-A00 | Pneumatic hydraulic pump mounting frame | 1 | |
| 57 | QY03AS-00 | Pneumatic hydraulic pump | 1 | |
| 58 | LJ03-00021-A00 | Fitting | 1 | |