

# HYDRAULIC SCISSOR LIFT

## OPERATION MANUAL

SL30A



- The manual is just for reference only. Actual products are subject to the specific kind prevail.
  - The Specification in this manual may change without prior notice
  - Any part of this manual cannot be reproduced without prior approval
  - Please read this manual before you get started. Please understand the precautions for safety.
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## **CONSERVING THE MANUAL**

The manual is an integral part of the lift, which it should always accompany even if the unit is sold. The manual, must be kept in the vicinity of the lift in an easily accessible place so that the operator and maintenance staff must be able to locate and consult the manual quickly at any time.



**ATTENTIVE AND REPEATED READING OF SAFETY INSTRUCTION, WHICH CONTAINS IMPORTANT INFORMATION AND SAFETY WARNINGS, IS PARTICULARLY RECOMMENDED.**

# Content

<b>Safety</b> .....	3
<b>Introduction</b> .....	3
<b>Symbols</b> .....	3
<b>Intended Use</b> .....	4
<b>Safety Instructions for Commissioning</b> .....	4
<b>Safety Instructions for Servicing</b> .....	5
<b>1. Purpose and characteristics</b> .....	7
<b>2. Main technique parameters</b> .....	8
STORAGE .....	9
OPENING THE CRATES .....	9
DISPOSAL OF CRATES .....	9
<b>3. TRANSPORTATION</b> .....	9
<b>4. UNPACKING</b> .....	10
<b>5. Installation and testing</b> .....	10
<b>6. Maintenance</b> .....	11
<b>6.1 Maintenance Schedule</b> .....	11
<b>7. Operation</b> .....	12
<b>7.1 Defects / Malfunctions</b> .....	12
<b>7.2 Controls</b> .....	13
<b>7.2.1 Control Unit</b> .....	13
<b>7.3 Operation</b> .....	15
<b>7.3.1 Preparations</b> .....	15
<b>7.3.2 Raising</b> .....	16
<b>7.3.3 Vehicle in Raised Position</b> .....	17
<b>7.3.4 Lowering</b> .....	17
<b>7.4 Protection against Unauthorized Usage</b> .....	18
<b>8. Troubleshooting</b> .....	18
<b>9. Electrical Systems</b> .....	19
<b>10. Hydraulic System</b> .....	20

## Safety

### Introduction

Thoroughly read this manual before operating the lift and comply with the instructions. Always display the manual in a conspicuous location.

Personal injury and property damage incurred due to non-compliance with these safety instructions are not covered by the product liability regulations.

### Symbols



**Failure to comply with instructions could result in personal injury.**

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**Failure to comply with instructions could result in property damage.**

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**Important information**

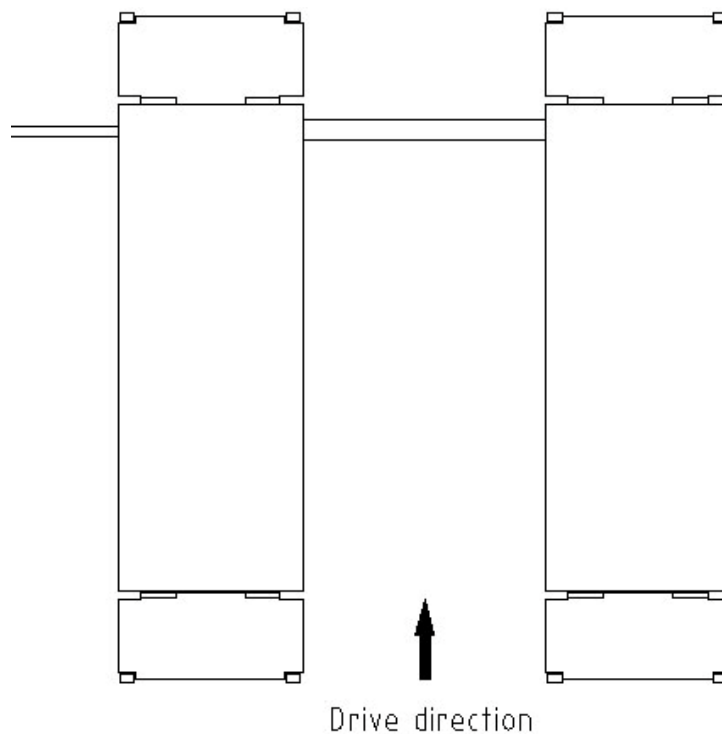
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## Intended Use

The lift is designed for the safe lifting of automotive vehicles. Observe the rated load capacity and load distribution of the lift.

	Load Capacity	Load Distribution Front : Rear	
		Minimum	Maximum
SL30A	3000Kg	3 : 2	2 : 3

In principle, the lift is designed for one approach directions.



## Safety Instructions for Commissioning

- ⑩ The lift may be installed and commissioned by authorized service personnel only.
- ⑩ The standard lift version may not be installed and commissioned in the vicinity of explosives or flammable liquids, outdoors or in moist rooms (e.g. car wash).

## Safety Instructions for Operation

- ⑩ Read the operating manual.
- ⑩ Lift operation by authorized personnel over 18 years only.
- ⑩ Always keep the lift and lift area clean and free of tools, parts, debris etc.
- ⑩ Once the disk adapters contact the lift points, check arm restraints for engagement.
- ⑩ After raising the vehicle briefly, stop and check the disk adapters for secure contact.
- ⑩ Always lift the vehicle using all four adapters.
- ⑩ Make sure the vehicle doors are closed during raising and lowering cycles.
- ⑩ Closely watch the vehicle and the lift during raising and lowering cycles.
- ⑩ Do not allow anyone to stay in lift area during raising and lowering cycles.
- ⑩ Do not allow anyone on lift or inside raised vehicle.
- ⑩ Only use the lift for its intended purpose.
- ⑩ Comply with the applicable accident prevention regulations.
- ⑩ Do not overload the lift. The rated load capacity is indicated on the lift nameplate.
- ⑩ Only use the vehicle manufacturer's recommended lift points.
- ⑩ After positioning the vehicle apply the parking brake.
- ⑩ Use caution when removing or installing heavy components (center-of-gravity displacement).
- ⑩ The main switch serves as emergency switch. In case of emergency turn to position 0.
- ⑩ Protect all parts of the electrical equipment from humidity and moisture.
- ⑩ Protect the lift against unauthorized usage by padlocking the main switch.

## Safety Instructions for Servicing

- ⑩ Maintenance or repair work by authorized service personnel only.
- ⑩ Turn off and padlock the main switch before doing any maintenance, or repair work.
- ⑩ Work on pulse generators or proximity switches by authorized service personnel only.
- ⑩ Work on the electrical equipment by certified electricians only.
- ⑩ Ensure that ecologically harmful substances are disposed of only in accordance with the appropriate regulations.
- ⑩ Do not use high pressure / steam jet cleaners or caustic cleaning agents. Risk of damage!
- ⑩ Do not replace or override the safety devices.

## **Friendly attention SAFETY FIRST!**

1. Please check lift before work. If the lift is not balanceable, please adjust the lift and check the safe chain.
2. You must enhance the lift above the safe chain, and then begin your work.
3. Please check the parts of transmission and slippage frequently. Please infuse the oiling on the chain between the axles every 5 to 7 days
4. Work please refers to the instruction and safe guide picture.
5. Please change the oil upon the season (summer 46# / winter 32#)

## **1. Purpose and characteristics**

Suits for the checking、 maintenance of different kinds of light automobile, and especially for working outside.

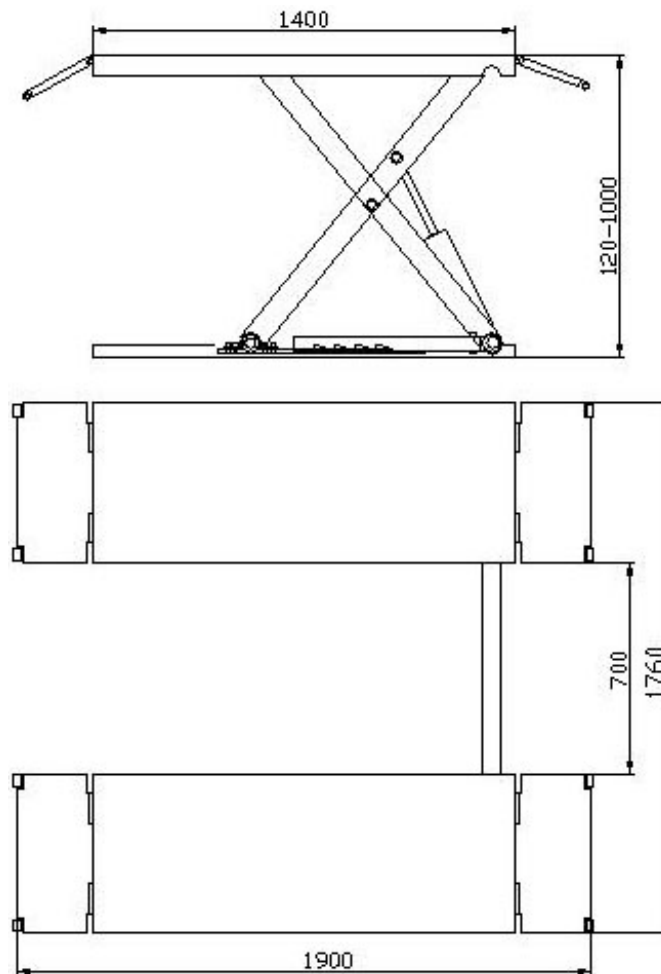
The lift use the rotatable arm to support the car, the length and width of supportive point can be adjusted. Compact structure, less space, light weight and convenient to move.

for steady running; Good quality Chinese Pump and electronic units、 mechanical racks self-lock and hydraulic pressure are adopted, safe and credible; No need the preparation of the basement, place it to the ground is ok.

This machine is composed of host and hydraulic system



## 2. Main technique parameters



	SL30A
Lifting capacity	3000Kg
Lifting height	1000mm
Min. height	120mm
Lifting time	55-60s
Motor power	2.2kW
Power supply	240V/50Hz(60Hz)
Rated oil pressure	20MPa
Net weight	540Kg

## STORAGE

Packed machinery must always be kept in a covered, protected place, at a temperature between  $-10^{\circ}\text{C}$  and  $+40^{\circ}\text{C}$  and must not be exposed to direct sunlight.

## OPENING THE CRATES

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 measures to avoid damaging the machine or its parts. Make sure that parts do not fall from the crate during opening.

## DISPOSAL OF CRATES

The wood of the crates may be reused or recycled.

## 3. TRANSPORTATION

For transport easily, the PACKAGE are bolted together with BELT, and control unit is packed into a plywood case. It must be moved by suitable capacity forklift truck at the middle of package.



Moving and positioning operation can be very dangerous if not performed with the utmost caution. Check the integrity and suitability of the available means.



**ALL PACKING, LIFTING, HANDLING, TRANSPORT AND UNPACKING OPERATIONS ARE TO BE PERFORMED EXCLUSIVELY BY EXPERT PERSONNEL WITH KNOWLEDGE OF THE LIFT AND THE CONTENTS OF THIS MANUAL**

The PACKAGE may be lifted and moved with a lift truck (Fig.1). If either of the latter two is used, crates must be harnessed with at least 2 slings.

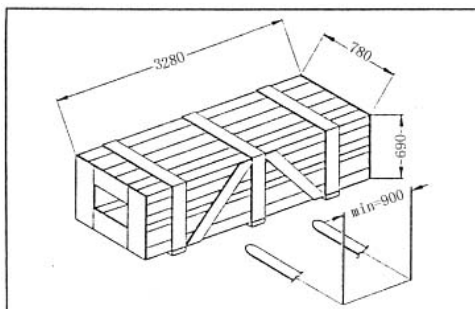


Fig.1

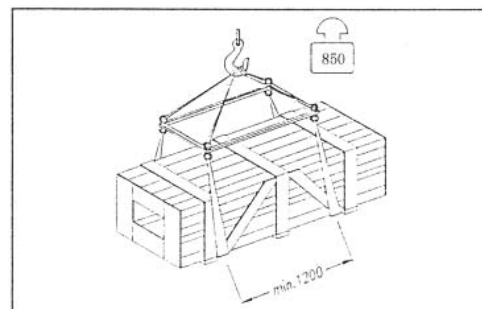


Fig.2

The equipment chosen must be suitable for safe lifting and moving, bearing in mind the dimensions and weight.

## 4. UNPACKING

Check that the equipment is in perfect condition, making sure that no parts damaged or missed. Use below figure for reference. If in doubt, do not use the machine and contact your retailer.



## 5. Installation and testing

- 1、 Take out the machine from the packing and place it on the ground, then connect the oil tube.
- 2、 Fill the hydraulic oil:  
Fill 10 liters of hydraulic oil into oil box (hydraulic oil provided by user).
- 3、 Adjust the machine  
Turn on power supply, press “ascend” button UP to 100~200mm, then press “descend” button. Redo it for 4-5 times, and add the height 100-200 each time. That can be use if it runs normally.

## 6. Maintenance



Turn off and lock the main switch before servicing the lift.



The maintenance intervals indicated below apply to average workshop use. The lift should be inspected more frequently for severe use applications.

### 6.1 Maintenance Schedule

Establish a periodic preventive maintenance procedure to ensure trouble free operation and long service life.

Interval	Maintenance to be performed on	Items
1 week	Support arms / Disk adapters	<ul style="list-style-type: none"> <li>⑩ Check arm restraints for engagement.</li> <li>⑩ Add oil with oil pot on all branch hinge axes of this machine.</li> <li>⑩ Up and down wheels should be kept clean, added lubricant.</li> </ul>
6 months	Greasing points	<ul style="list-style-type: none"> <li>⑩ Check and lubricate as required:               <ul style="list-style-type: none"> <li>- Slide tracks</li> <li>- Arm extensions</li> <li>- Threads of disk adapters</li> </ul> </li> </ul>
	Nuts of anchor bolts	<ul style="list-style-type: none"> <li>⑩ Check all nuts for correct torque and retighten them as required.</li> </ul>
12 months	Hydraulic system	<ul style="list-style-type: none"> <li>⑩ Check fluid level.</li> <li>⑩ Change hydraulic oil. Clean the oil box and oil filter while changing oil. Keep oil level on upper limit for long time</li> <li>⑩ Check tightness of hoses and fittings.</li> </ul>

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## 7. Operation

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Lift operation by authorized personnel over 18 years only.

Apply the parking brake after positioning the vehicle on the lift.

Do not allow anyone to stay in lift area during raising and lowering cycles.

Closely watch the vehicle and the lift during raising and lowering cycles.



Observe the rated load capacity and load distribution.

Do not allow anyone to climb on lift or stay inside vehicle.

After raising the vehicle briefly, stop and check adapters for secure contact.

Once the disk adapters contact the lift points, check arm restraints for engagement.

Make sure the vehicle doors are closed during raising and lowering cycles.

Remove obstacle around before working.

Weight of lifted car should not be over the lifting capability.

Before lifting, please set well the car's manual handle; underlay the slip protective plastic board.

Be attentive while ascending or descending. Stop the machine if any abnormality, check and exclude failure.

When equipment is not under work or at night, descent it to the lowest position, and drive the car away, then turn off power supply.

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### 7.1 Defects / Malfunctions

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In case of defects or malfunctions such as jerky lift movement or deformation of the Superstructure, support or lower the lift immediately.

Turn off and padlock the main switch. Contact qualified service personnel.

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## 7.2 Controls

### 7.2.1 Control Unit



Main Switch

Lifting Button

Lock Button

Down Button



The main switch is used as emergency switch. In case of emergency turn it .

Main switch in position 0: Power supply is interrupted

Main switch in position 1: Lift is ready for operation



Once any button is actuated, the lift moves until the button is released or the limit position is reached.

UP button



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**LOCK button**

When the lift up to your wanted position, Please press this "LOCK" button, then see the lift will be lower a little to set down on to the lock position for safety. Otherwise the car lift may has falling danger.

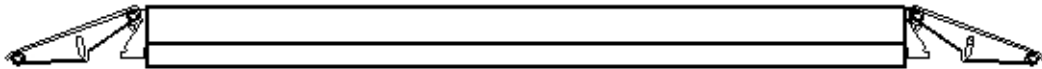
**DOWN button**

Press the "DOWN" button to lower the platform completely.



## 7.3 Operation

### 7.3.1 Preparations



- 1 Fully lower the lift.
- 2 Slowly position vehicle midway between platforms. Apply the parking brake.
- 3 Position pads under vehicle manufacturers recommended lift points.
- 4 Put pads so that they evenly contact all four lift points.
- 5 Leave vehicle and remain clear of lift.



**Always lift the vehicle using all four adapters.**

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## 7.3.2 Raising

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**During raising and lowering cycles: Closely watch the vehicle and the lift, do not allow anyone to stay in lift area and make sure the vehicle doors are closed.**



**Once the disk adapters contact the lift points, check arm restraints for engagement. After raising the vehicle briefly, stop and check adapters for secure contact.**

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- 1 Turn the main switch to position 1.

Ⓜ Lift is ready for operation.



- 2 Push and hold UP button until lift reaches desired height.

Ⓜ Lift stops once button is released or upward travel limit is reached.



### 7.3.3 Vehicle in Raised Position

- ⑩ Observe all accident prevention regulations.
- ⑩ Do not allow unauthorized persons to stay under the raised vehicle.
- ⑩ Avoid rocking of vehicle.
- ⑩ Keep lift free of tools, parts, etc.
- ⑩ Fasten the vehicle to the support arms using lashing straps when removing or installing heavy components.

#### Use LOCK button for setting down safety position

When the lift up to your wanted position, Please press this "LOCK" button, then see the lift will be lower a little to set down on to the lock position for safety. Otherwise the car lift may has falling danger.



### 7.3.4 Lowering



**During raising and lowering cycles: Closely watch the vehicle and the lift, do not allow Anyone to stay in lift area and make sure the vehicle doors is closed.**

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- 1 Remove tools, stands or other objects from lift bay.
  - 2 Turn the main switch to position 1.
- Ⓡ Lift is ready for operation.
- 3 Push "DOWN" button until lift reaches desired height.
- Ⓡ Lift stops once switch is released.



- 4 To lower the arms completely, release the "DOWN" button.

- 5 Swing arms to full drive-through position and drive the vehicle off the lift.

## 7.4 Protection against Unauthorized Usage

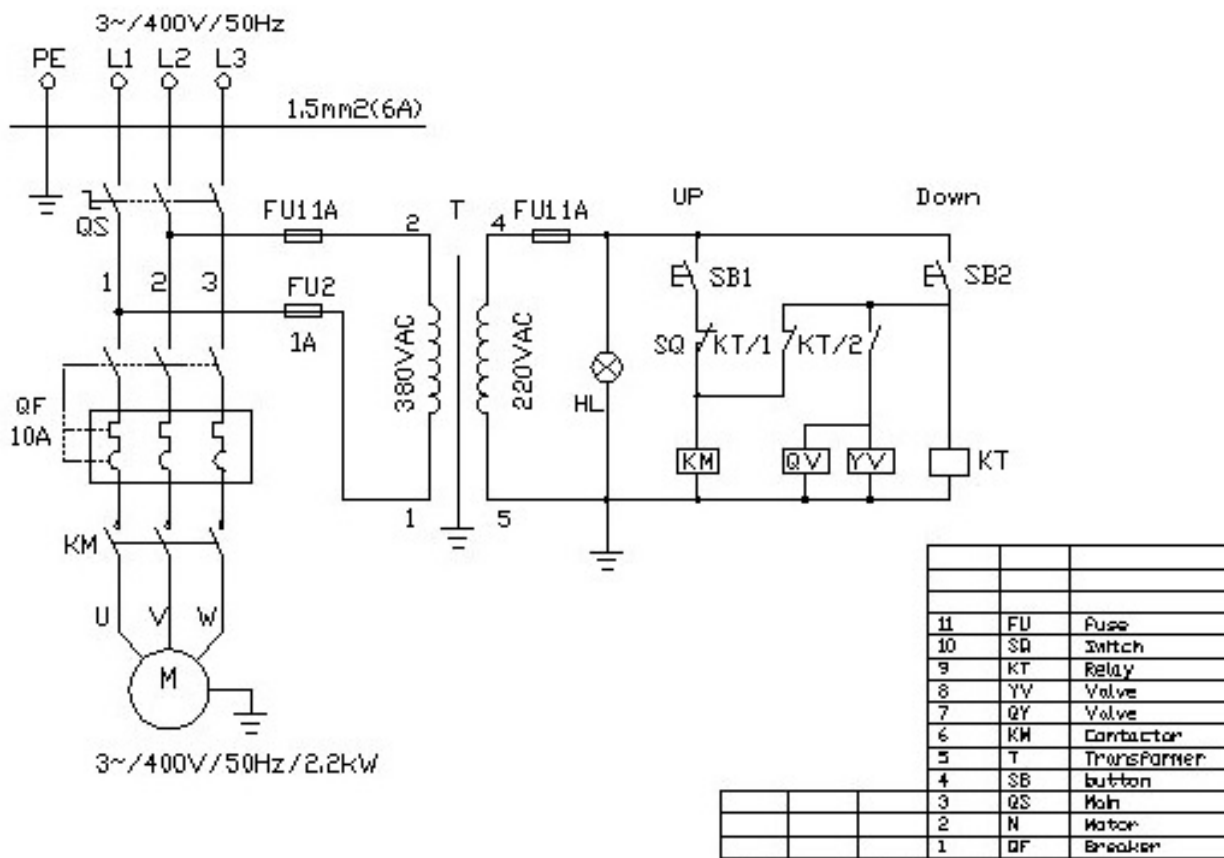
When in position 0, the main switch can be protected against tampering by means of a padlock.

## 8. Troubleshooting

Failure	Cause	Solution
Engine doesn't rotate	<input type="checkbox"/> Bad contact of wires	Check and joint the wires
	<input type="checkbox"/> contact device doesn't work	Check or change contact device
	<input type="checkbox"/> bad action of limited switch	Adjust or change limited switch
Engine rotates but not ascend	<input type="checkbox"/> have dust in the center of the electromagnetism valve	Check the electromagnetism valve and clean it
	<input type="checkbox"/> the line pole is loose	Fix it
	<input type="checkbox"/> falling short of hydraulic oil	Makeup hydraulic oil
The ascend speed is slow	The oil seal hole is leak	Change the oil seal
Shake in the running	Air in the hydraulic pressure loop	Release the air by redo the ascend and decent
	Air leak at the top connect oil tube mouth of the pump	Check the seal of the oil tube mouth
	Filtrate net is jam	Clean it
Only ascend ,can not descend	<input type="checkbox"/> electromagnetic damage	Check it and mend it
	<input type="checkbox"/> connect invalidation in the button	Check the button
	<input type="checkbox"/> electromagnetic valve blocked	Check or change electromagnetic valve

	<input type="checkbox"/> descending electromagnetic valve unopened	Check or change electromagnetic valve
	<input type="checkbox"/> hydraulic oil too dense (in winter)	Add oil according to the manual
Oil leak	Loose tie-in	Screw the tie-in
	Mangled oil seal on tie-in	Change oil seal

## 9. Electrical Systems



## 10. Hydraulic System

