Instructions and Maintenance Manual

FOR HYDRAULIC SCISSOR LIFT

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******* IMPORTANT NOTE ********

The following must be observed at all times to ensure correct use of the hoist.

- **Follow regular maintenance schedule as per manual**
- **Ensure safety precautions are taken and use the hoist in accordance with the manufactures instructions**
- **It is the Owner's responsibility to ensure all safety regulations and work cover requirements are met to satisfy all state laws**

PACKING, TRANSPORT AND STORAGE

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.

PACKING

	The Lift is shipped disassembled into the following parts	Weight (kg)
1.	Complete vehicle body including frame and rams	310kg
2.	Motor and pump assembly and accessory package.	90kg

GROSS WEIGHT	450kg

TRANSPORTATION

The packed boxes may be lifted and moved with a forklift.

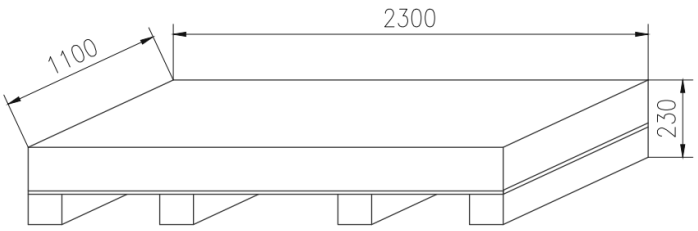


Fig.1

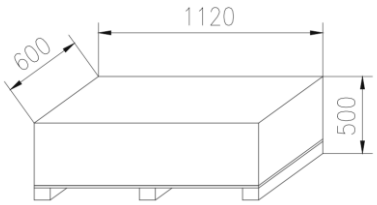


Fig.2

STORAGE

Packed boxes must be kept in a covered, protected place, at a temperature between -10° C - +40° C. They must not be exposed to direct sunlight or rain.

STACKING

The type of packaging allows the lifts to be stacked up to 5 crates high. Crates may be stacked one upon the other on trucks if properly positioned and provided they are restrained to prevent falling.

UNPACKING

Check that the lift has not been damaged during transport and that all parts listed are present. The crates must be opened using precautionary measures to avoid damaging the lift or its parts. Ensure that parts do not fall from the crate whilst opening.

WARNING INTRODUCTION

This manual has been prepared for workshop personnel and technicians responsible for routine maintenance. It must be read prior to carrying out any operation with the lift. It contains important information regarding the personal safety of operator and maintenance workers as well as lift safety.

LIFT SAFETY

2800kg NB: The rated load is 2800kg. Do not allow the lift load weight to exceed 2800kg.

This symbol conveys the attention that should be taken for electrical hazards.

PRESERVING THE MANUAL

The manual is an integral part of the Lift, which should always accompany the lift, 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 are able to locate and consult the manual at any time.

IT IS HIGHLY RECOMMENDED TO CAREFULLY READ CHAPTER 3, WHICH CONTAINS IMPORTANT INFORMATION AND SAFETY WARNINGS.

CHAPTER 1 – LIFT DESCRIPTION

The hydraulic moveable lift can operate on flat ground or the grade of a slope, less than or equal to 3º.

The lift consists of the following main parts:

1. Fixed structure (frame)
2. Moving units (idle wheel and hydraulic vehicle)
3. Lift units (2 hydraulic cylinders + power unit)
4. Control station
5. Safety devices

Fig.3 illustrates the various parts of the lift.

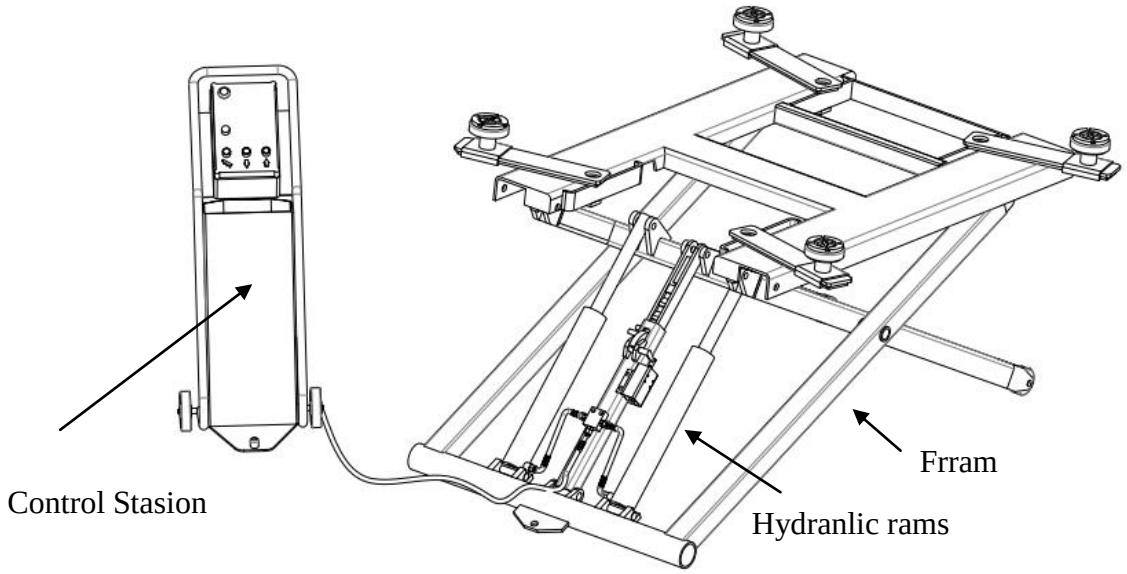


Fig.3 Complete unit

1.1 FIXED STRUCTURE (FIG.3)

The frame and the arms are all combined with steel plates, which are the base components of the moveable lift.

1.2 MOVING UNITS (SEE FIG.3)

Each unit consists of:

Six idle wheels. Four are mounted on the base angle of the frame arms; the other two (slightly larger) are mounted on the bottom of the movable hydraulic vehicle. A connection - a pin shaft between the movable vehicle and the underside beam of the frame.

1.3 LIFT UNIT (SEE FIG.5)

Consists of:

1. Two hydraulic cylinders, to lift the frame.
2. One hydraulic unit (see Fig.5), mounted on the mobile trolley.

1.4 HYDRAULIC POWER UNIT (FIG.4、FIG.5)

The hydraulic power unit consists of:

1. An electric motor

2. A geared hydraulic pump
3. Descent hand-valve equipped with a manual oil drain valve (see use and maintenance chapter)
4. A adjusting pressure valve
5. Two oil cylinders
6. Oil tanks
7. Two steel wire flexible pipes to deliver oil

Note: The pressure of the oil delivery pipe may be not less than 40Mpa

1.5 CONTROL BOX (FIG.5)

The panel that houses the electric control box contains the following:

1. Main switch (power supply plug)
2. Rise push button

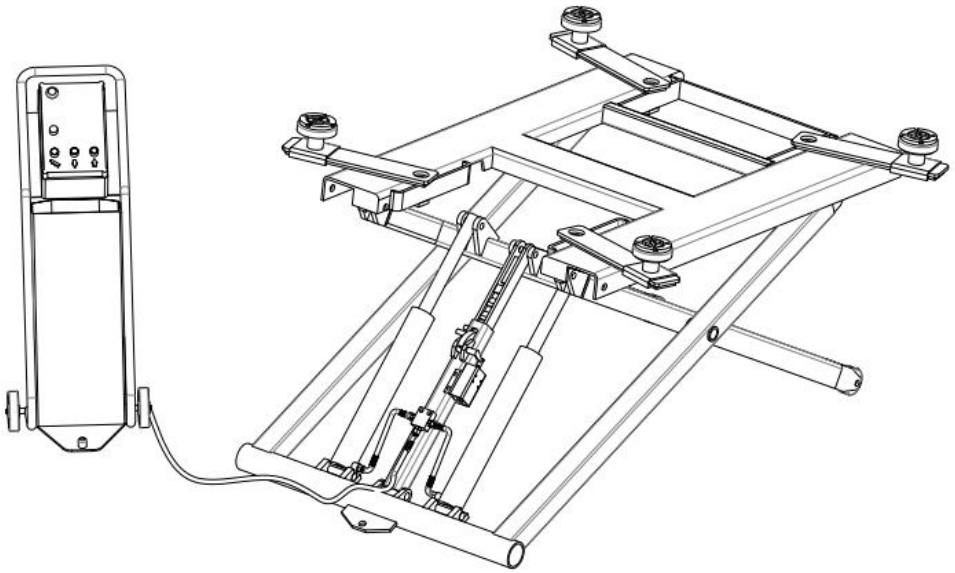


Fig.4 hydraulic system

Fig.5 safety device

1.6 SAFETY DEVICE（Fig.5）

The safety devices include:

1. Arms locking system
2. Support
3. Explosion valve

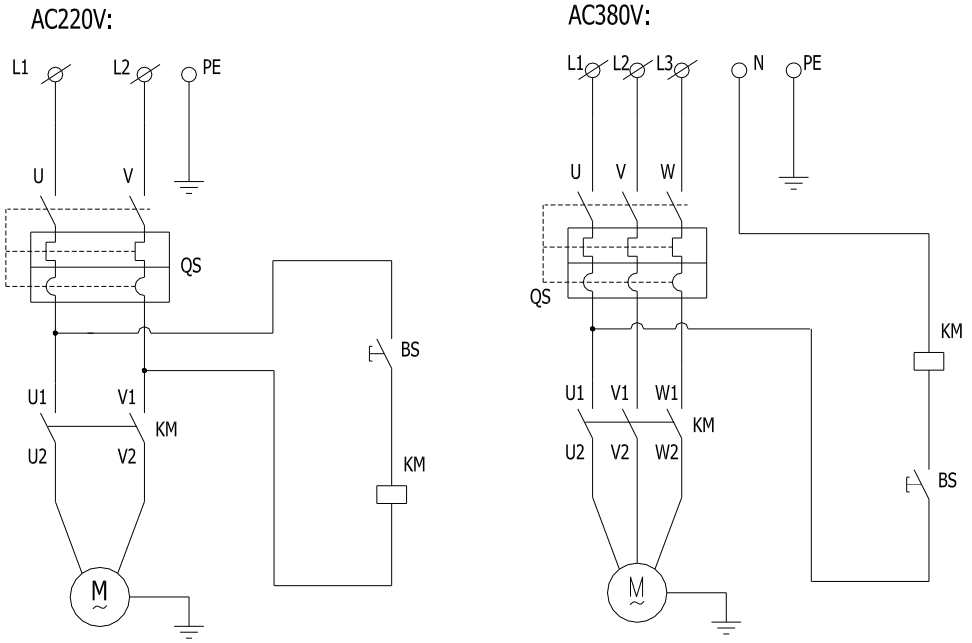
These safety devices will be described in further detail in the following chapters.

CHAPTER TWO - TECHNICAL SPECIFICATIONS

Capacity	2800kg
Car max lifting height	1200mm
Lift min stand height	120mm
The frame width	1082mm
The total length	2021mm
Rise time with three-phase motor	25 sec
Rise time with single-phase motor	30 sec
Descent time	30 sec
Gross weight	450kg
Net weight	400kg
Noise	≤70db (A) 1m
Operating temperature	-10° C - +50℃
Work environment	Flat ground or grade of < 3°
Relative humility	90% at 20℃

2 .1 POWER DEVICE

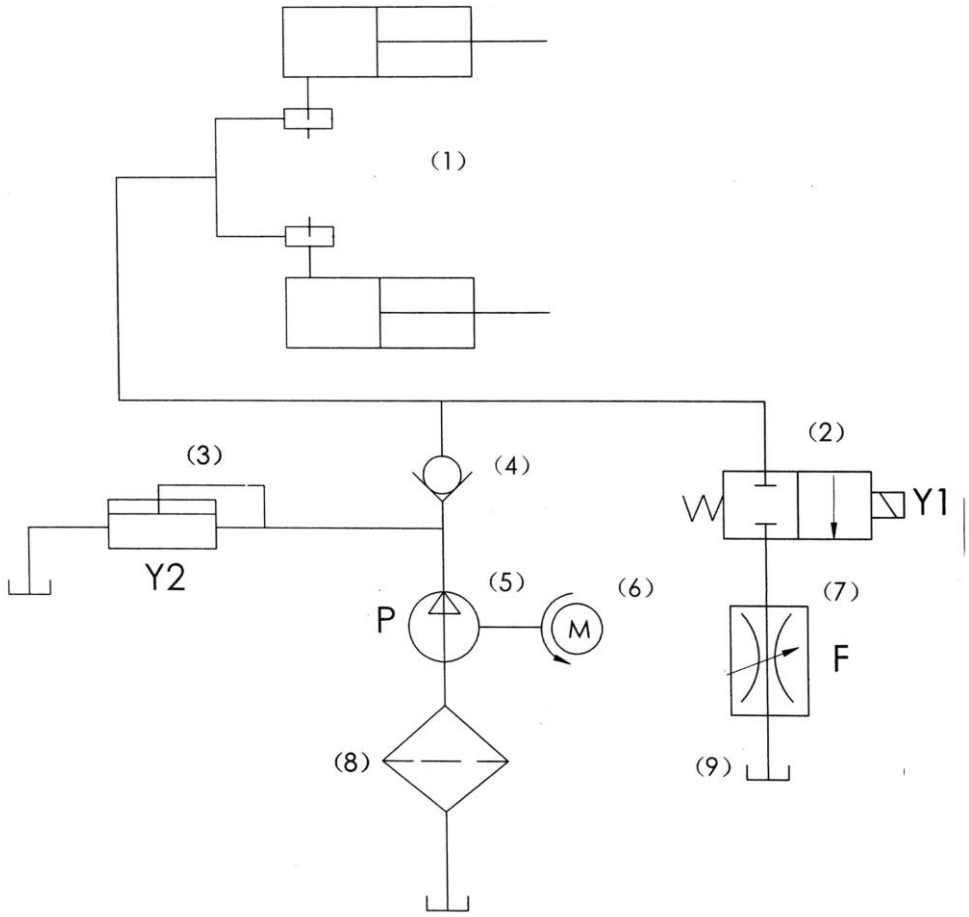
2.1.1 ELECTRIC PRINCIPLE DIAGRAM AND ACCESSORIES



MOTOR AND ASSEMBLY

BS	START SWITCH
KM	ALTERNATING CONTACTOR
QS	OVERLOAD
M	ELECTRIC MOTOR

2.2 HYDRAULIC SYSTTEM
2.2.1 PRINCIPLE DIAGRAM AND ACCESSORIES



2.2.2 HYDRAULIC ASSEMBLY

(1）	Oil cylinder
(2)	Descending valve
(3)	Slipping valve
(4)	Retaining valve
(5)	Pump station
(6)	Motor
(7)	Throttle valve
(8)	Oil filter
(9)	Oil Tank

2.3 HYDRAULIC OIL
The oil reservoir contains hydraulic mineral oil in accordance with ISO/DIN 6743/4 with a level of contamination according to ISO 4406, for example Valvoline Ultramax 32 or equivalent.

2.4 LIFTING WEIGHT
The lift weight is 2800kg.

2.5 MAXIMUM DIMENSIONS OF VEHICLES TO BE LIFTED

Max width	2400mm
Max wheel base	3000mm

The underbody of cars with low ground clearance may interfere with the structure of the lift .Pay particular attention in the case of low body sports cars.

Always keep the capacity of the lift in mind. The dimensions of the vehicle will determine the SAFETY area.

The diagrams below include the criteria for defining the limits of use of the lift.

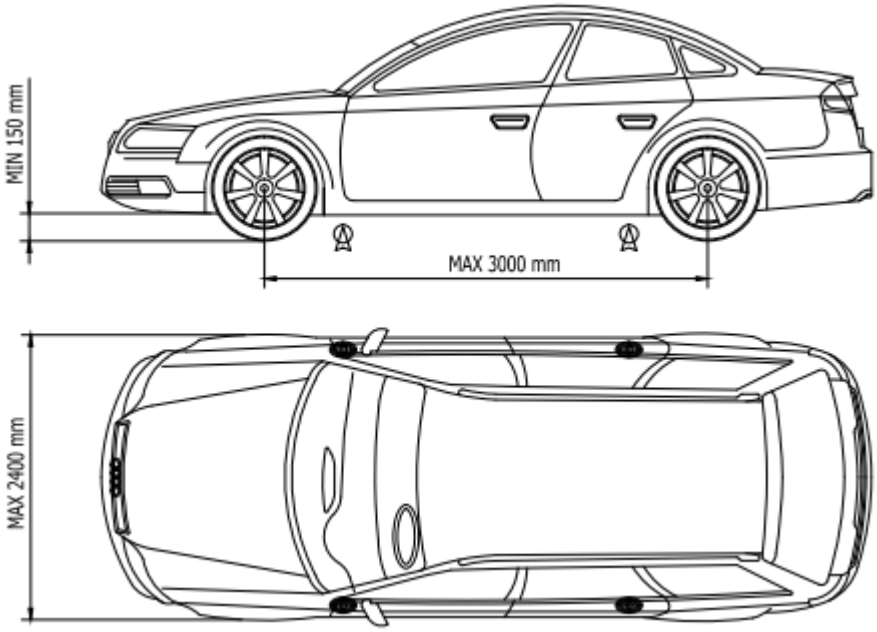


Fig.8 Minimum and maximum dimensions

CHECK MAXIMUM LOAD CAPACITY AND LOAD DISTRIBUTION IN CASE OF LARGER VEHICLES. MAXIMUM WEIGHT OF THE VEHICLE TO BE LIFT

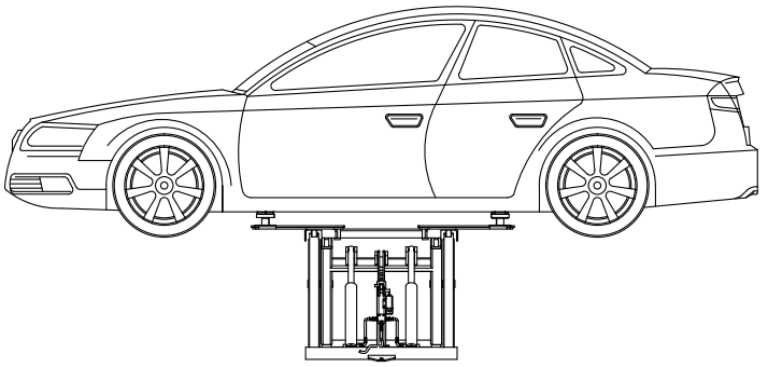


Fig.9 Weight distribution

CHAPTER 3 – SAFETY

It is vital to read this chapter of the manual carefully from beginning to end as it contains important information regarding the risks that the operator and the maintenance fitter may be exposed to in the event that the lift is used incorrectly.

The following text contains clear explanations, regarding certain situations of risk or danger that may arise during the operation or maintenance of the lift. The safety devices installed and the correct use of such systems and operating procedures including general and specific precautions eliminate potential danger.

WARNING

The lift is designed and built to lift vehicles and hold them in the elevated position in a closed workshop. All other uses are unauthorised; in particular, the lift is not suitable for:

- Washing vehicles
- Creating raised platforms or lifting personnel
- Use as a makeshift press for the purpose of crushing
- Use as goods lift
- Use as a jack for partial lifting of vehicles

THE MANUFACTURER AND ITS DISTRIBUTORS RENOUNCE ALL LIABILITY FOR INJURY TO PERSONS OR DAMAGE TO VEHICLES AND OTHER PROPERTY CAUSED BY THE INCORRECT AND UNAUTHORISED USE OF THE LIFT.

During raising and descent movements, the operator must remain in the command station as defined in Figure 10. The presence of persons inside the danger zone indicated in the same figure is strictly prohibited. The presence of persons beneath the vehicle during operations is permitted only when the vehicle is parked in the elevated position.

DO NOT USE THE LIFT WITHOUT PROTECTION DEVICES OR WITH THE PROTECTION DEVICES INHIBITED. FAILURE TO COMPLY WITH THESE REGULATIONS CAN CAUSE SERIOUS INJURY TO PERSONS, AND IRREPERABLE DAMAGE TO THE LIFT AND THE VEHICLE BEING LIFTED.

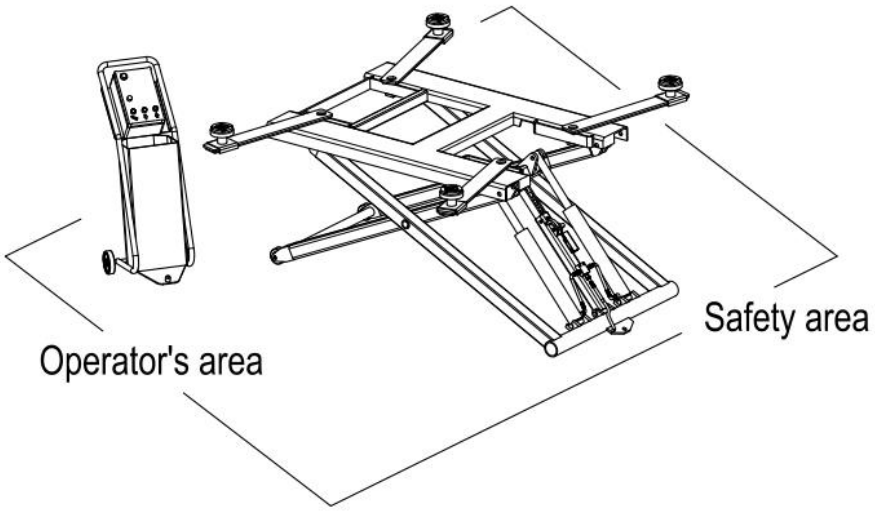


Fig.10 safety operating zone

3.1 GENERAL PRECAUTIONS

The operator and the maintenance fitter are required to observe the prescriptions of accident prevention legislation in force in the country of installation of the lift. Furthermore, the operator and the maintenance fitter must:

1. Always work in the scheduled working area as shown in the manual
2. Never remove or deactivate the guards, mechanical, electrical or other safety devices.
3. Read the safety notices affixed to the machine and the safety information in this manual.

3.2 RISKS OF ELECTRIC SHOCK

See safety notices affixed to the lift in areas where the risk of electric shock is particularly high.

3.3 RISKS AND PROTECTION DEVICES

We shall now examine the risks to which the operator and the maintenance fitters may be exposed when the vehicle is immobilized in the raised position, together with the protection devices adopted by the manufacturer to reduce all such hazards.

3.4 LONGITUDINAL AND LATERAL MOVEMENT

The equipment chosen must be suitable for safe lifting and moving, bearing in mind the dimensions and weight. It is not allowed, when get to the height, to shift the load backward and forward or left and right, which will cause the vehicle falls off and slant.

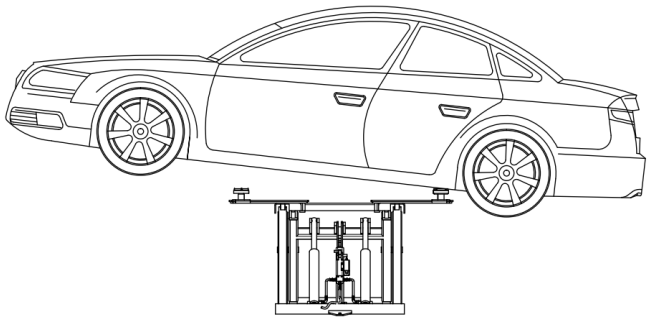


Fig.11 Risk of vehicle falling

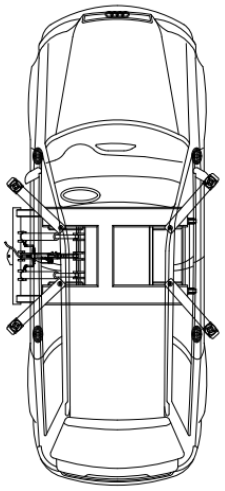


Fig.12 Correctly loaded vehicle

WARNING

DO NOT ATTEMPT TO MOVE THE TABLE AND THE VEHICLE SUPPORT WHEN LIFTING.

It is important to position the vehicle on the lift so that the weight is correctly distributed. For personal and equipment safety, it is important that:

1. People remain inside the safety area while the vehicle is being raised
2. The engine is off and the safety lock is engaged
3. The vehicle is correctly positioned. (Fig.12).
4. Only authorized vehicle are raised without exceeding the rate capacity and overall dimensions.

3.5 RISKS WHILE THE VEHICLE IS BEING RAISED

The following safety devices have been installed to protect against overweight conditions and

equipment failure:

1. The thermal relay in the electric box will trip if the motor is overloaded.
2. The pressure-regulating valve, located on the hydraulic oil power unit, will trip if the lift is overloaded.
3. In case of a hydraulic failure in the hydraulic circuit (a broken pipe), the blocking valves, at the bottom of each cylinder, will trip.

3.6 RISKS TO PERSONELL

This paragraph illustrates risks to which the operator, maintenance worker, or any person near the operating area of the lift may be exposed in the case of improper use of equipment.

3.6.1 RISK OF CRUSHING (OPEARATOR)

The operator controlling the lift must remain in the specified position at the command panel when the platform and the vehicle are descending. The operator must never be partly or completely underneath the moving structure. During this phase the operator must remain in the command zone. (Fig.13)

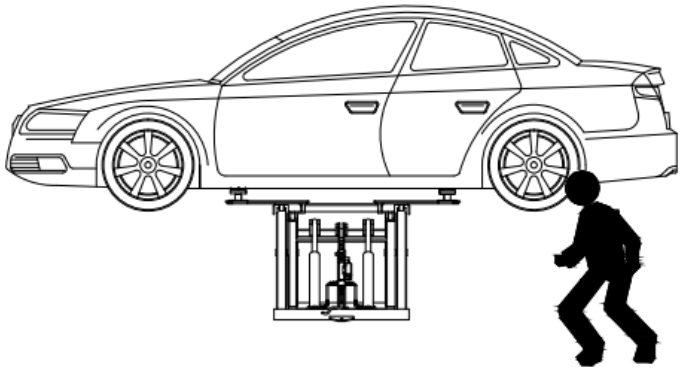


Fig.13 Crushing risk

3.6.2 RISK OF VEHICLE FALLING FROM LIFT

Caution should be taken when positioning the vehicle. Ensure that the vehicle is positioned correctly on the disk support plates in relation to the lift. Ensure the center of gravity of the vehicle is correctly positioned.

NEVER BOARD THE VEHICLE AND/OR TURN THE ENGINE ON WHEN LIFT IS RAISED.

NEVER LEAN OBJECTS AGAINST THE POSTS OR LEAVE THEM IN THE AREA WHERE MOVING PARTS ARE LOWERED

This could hamper lowering or cause the vehicle to fall from the rack.

3.6.3 SLIPPING

This risk may arise due to spillage of lubricants in the surrounding area.

ALWAYS KEEP THE AREA SURROUNDING THE LIFT CLEAN BY REMOVING ALL OIL SPILLS.

To avoid the risk of slipping, make use of the recommended personal protection (anti-slip footwear).

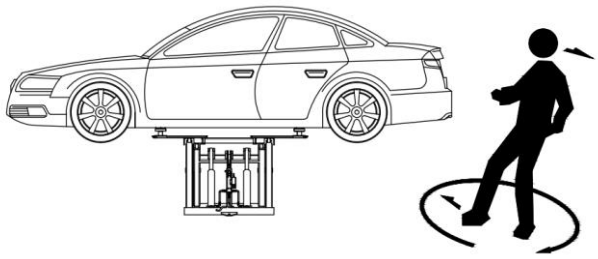


Fig.15 Electrical shocking risk

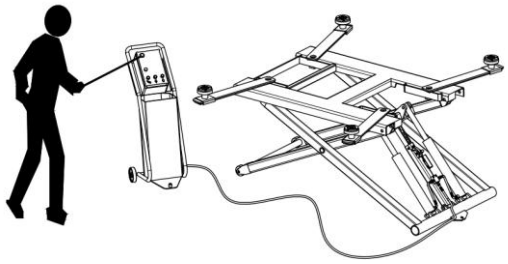


Fig.14 Slipping risk

3.6.4 RISK OF ELECTRIC SHOCK

To eliminate the risk of electric shock, do not use jets of water, steam (high pressure wash units), or solvents in the vicinity of the electrical wiring housing. Do not paint in the immediate vicinity of the lift. Special care must be taken to keep such substances clear of the electrical command panel (Fig.15)

3.6.5 RISK RELATED TO INAPPROPRIATE LIGHTING.

The operator and the maintenance fitter must ensure that all the areas of the lift are properly and uniformly illuminated in compliance with optics principle and the laws in force in the place of installation.

3.6.6 RISK OF COMPONENT FAILURE DURING OPERATION

The manufacturer has used appropriate materials and construction techniques in relation to the specified use of the lift in order to manufacture a reliable and safe lift. Note however, that the lift must be used in conformity with the manufacturers directions and the frequency of inspections and maintenance work recommended in chapter 6 "MAINTENANCE" **must be observed**.

RISK RELATED TO IMPROPER USE

Personnel are not permitted to stand or sit on the platforms during the Lift maneuver or when the vehicle is in the raised position. (Fig. 16) All uses of the lift other than the use for which it was designed are liable to give rise to serious accidents involving the persons working in the immediate vicinity of the unit. It is therefore essential to adhere scrupulously to all regulations regarding use, maintenance and safety contained in this manual.

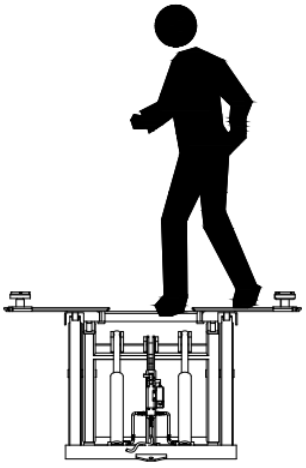


Fig.16 Falling risk

CHAPTER 4 - INSTALLATION

TO AVOID INJURY TO PERSONNEL OR DAMAGE TO THE LIFT, EXPERIENCED/QUALIFIED INSTALLERS MUST PERFORM THE FOLLOWING OPERATIONS.

4.1 INSTALLATION REQUIREMENTS

The YYJ-2800 Lift can be operated both indoors and outdoors, although cannot be operated in wet conditions. It is also considered that the place of installation must be well clear of areas destined to washing or painting, and away from solvent or paint storage areas or areas where there is a risk of a potentially explosive atmosphere.

4.2 INSTALLATION

The installation of the YYJ-2800 lift is very simple.

1. Remove the transportation packaging and check the components.
2. Stand the frame
3. When the frame has been mounted, which includes the extendable arm, safety lock, idler wheels and so on, please check whether it is loose or not.
4. After mounting, connect the hydraulic station and the oil pipe, and then switch on the power. But first, check the voltage. If it isn't the same as the requirement of the lift, replace the voltage. Then find a plug suitable for the lift.
5. The motor must be installed by a fully licensed electrician.

4.3 TEST AND CHECK TO PERFORM BEFORE START-UP

4.3.1 MECHANIAL TESTS

1. Attachment and tightness of bolts, fittings and connections
2. Free sliding of moving parts
3. Clean state of various parts of the machine
4. Position of the protection device
5. Arms and lifting vehicle and other parts should be filled with lubricating oil.

4.3.2 ELECTRIC TESTS

1. Connections must comply with diagrams
2. Machine earth connections

4.3.3 OPERATING OF THE FOLLOWING DEVICES

1. Mechanic lock inserting pole.
2. Security device electromagnets
3. Hydraulic oil plant solenoid-valve

4.3.4 HYDRAULIC OIL TEST

- Sufficient oil in the tank
- No leaks
- Cylinder operation

NOTE: If oil is not present, fill the reservoir of the power unit with the necessary amount of oil.

See the procedure in Chapter 6: MAINTENANCE

4.3.5 ROTATION DIRECTION TEST

The motor should turn in the direction of the arrow located on the power unit pump; check using brief start-ups (each start-up must last a maximum of two seconds). If problems arise in the hydraulic oil plant, see the "Trouble-shooting" table in Chapter 7.

4.4 SET UP

WARNING

THESE OPERATIONS MUST ALWAYS BE PERFORMED BY TECHNICIONS OF THE AUTRORIZ

SERVICE CENTRE INDICATED IN THE FRONT OF THIS MANUAL

4.4.1 POSTS ASSEMBLEING

Mount the command post

Assemble the hydraulic station on the command post, with the screws fixed on the installation panel of the hydraulic station.

CHAPTER 5 OPERATIONS AND USE

The lift Commands (control box) is shown as Fig.17:

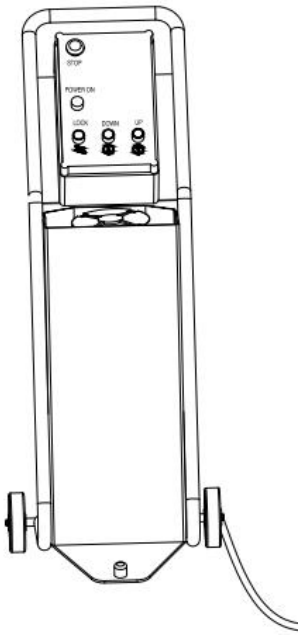


Fig.17Control Station

5.1 CONMANDS

5.1.1 UP BUTTON (1)

If pressed, activates the electric motor and mechanisms that lift the carriage.

5.1.2 DOWN HANDLE (2)

If the handle moved, the overload valve will release the press of the system. The lift must descend.

5.2 OPERATING SEQUENCE

Position the lift frame in the two axes prescribed for the vehicle, adjusting the disks to the same height. Each time the carriages are brought down to the ground, check the position of the disks under the chassis of the vehicle before raising the carriages again.

5.2.1 LIFTING

Press the up push button until reaching the required height. As the carriages are raised the safety wedges are inserted automatically into each the limit block. Regarding lift limits and safety devices, see **"RISKS WHILE THE VEHICLE IS BEING RAISED".**

5.2.2 PARKIGN

Once the required height has been reached, press the parking push button. The movement is stopped automatically when the safety wedge rests on the level of the first slot that they come in contact with while the carriages are coming down. See "the rising risk".

5.2.3 LOWERING

Before lowering the carriages, the safety wedges must be pulled out. Move the descending handle. Lowering speed is regulated by the "flow regulating valve" in the pump. Regulate throttle to make it

at the speed of 25~30sec. When assembling the lift, do not regulate again for it has been done. Lowering stops when the hydraulic cylinders are completely unloaded.

CHAPTER 6. MAINTENANCE

6.1 PRECAUTIONS

WARNING

Maintenance must be carried out only by skilled personnel who are very familiar with the lift.

When performing maintenance on the lift, follow all the necessary precautions to prevent the lift from being started accidentally**:**

1. Cut off the power and pull the plug out of the jack.

3. While maintenance is being performed on the machine, always keep in mind all the main possible risks and the safety instructions indicated in chapter 3 "safety risk of electric shock" at the machine power supply terminal strip.

IT IS PROHIBITED TO PERRORM MAINTENANCE ON THE OIL CYLINDER. IT SHOULD BE REPLACED WHEN DAMAGED.

IMPORTANT

1. Only use original spare parts and tools that are suitable for the job and in good condition;

2.Follow the maintenance schedule indicated in the manual: these frequencies are indicative and must always be considered as general rules to be respected.

3.Good preventive maintenance requires constant attention and continuous supervision on the machine. Quickly find the cause of any abnormalities such as excessive noise, overheating, leaking fluids, etc.

Special attention is required for:

1. The condition of lifting parts (cylinder, power unit);
2. Safety devices (oil cylinder and safety wedges)

To perform maintenance correctly, refer to the following documents supplied by the lift manufacturer:

1. Complete functional diagram of the electric equipment and auxiliary equipment indicating the power supply connections

2. Hydraulic diagram with lists of parts and max. Pressure values

3. Exploded drawings with the data needed to order spare parts

4.List of the possible causes of malfunctions and recommended solutions (chapter 7 of the manual)

6.2 PERIODIC MAINTENANCE

6.2.1 OPERATION FREQUENCY

To keep the lift working at full efficiency, follow the indicated maintenance schedule. The manufacturer will not be responsible and will not honor the warranty as a result of non-compliance with the instructions indicated above.

NOTE

The frequency indicated refers to normal operating conditions; different frequencies will apply to particularly server conditions.

ALL MAINTENANCE OPERATIONS MUST BE PERFORMED WITH THE LIFT STOPPING OR THE MAIN SWITCH PLACED AT "O".

When after the machine has been installed, check:

1 That the opposite carriages arms are at the same level

2 The power unit oil level. Add oil up to the right level, if necessary

6.2.2 EVERY MONTH

HYDAULIC POWER UNIT

1 Check the oil level in the tank, using the special dipstick, which is attached to the filler cap. If necessary, add oil through the cap to reach the required level. For the type of oil, see "TECHNICAL SPECIFICATIONS".

2 After the first 40 hours of operation, check the press oil contamination level. (Clean the filter and replace the oil if there is a high contamination level).

HYDRAULIC CIRCUIT

Check that there are no oil leaks in the circuit between the power unit and cylinder and in the cylinder itself. In this case, check the condition of the gaskets and replace them, if necessary.

HYDRAULIC PUMP

Under normal operating conditions, check that there is no change in the noise in the motor and gear pump and check that the relative bolts are properly tightened.

SAFETY SYSTEMS

1 Check the operating condition and efficiency of the safety devices.
2 Use a torque wrench to check that the post bases anchor bolts screws are properly tightened to the ground as well as the connection bolts.
3 Clean and lubricate the carriage side runners and guides.
4 Check that all screws are tightened
5 Check that the locking system works properly.
6 Grease all the moving parts.

6.2.3 EVERY 6-MONTHS…

HYDRAULIC

Check the contamination or aging level of the oil. Contaminated oil is the main cause of malfunctions of the valves and leads to a brief service life of the gear pumps.

6.2.4 EVERY 12-MONTHS…

General check: visual inspection of all structural parts and mechanisms to guarantee that there are no problems or abnormalities.

Electric plant: skilled electricians (contact the service center) should test the electric plant, including the motor of the power unit and control box.

HYDRULIC PLANT OIL

Replace the oil, following the instructions listed below:

1. Lower the lift to the minimum height (on the ground)
2. Make sure that the hydraulic cylinder is at the end of its travel
3. Disconnect the power supply to the lift rack.
4. Drain the oil from the hydraulic circuit, unscrewing the plug located at the bottom of the power unit reservoir.
5. Close the drain plug
6. Fill the hydraulic station oil cylinder with oil throng the plug located at the top of the hydraulic station.

The oil must be filtered.

Oil characteristics and types are reported in the technical specifications.

1. Close the filler plug
2. Energize the lift

Go through two or three up-down cycles (for a height about 20-30 centimeters) to insert oil into the circuit.

3. When changing the oil: use only recommend oil or the equivalent; do not use deteriorated oil that has been in the warehouse for an extended period of time. Oil should be disposed as indicated in appendix "A".

AFTER EACH MAINTENANCE OPERATION, THE MACHINE MUST RETURN TO ITS INITIAL CONDITIONS, INCLUDING THE DISASSEMBLEED PROTECTION AND SAFETY DEVICE.

To ensure good maintenance, it is important:

1. To sue only tools that are suitable for the job and original spare parts
2. Follow the minimum maintenance schedule as indicated
3. Immediately find the cause of any abnormalities (excessive noise, overheating, leaking fluids, etc)
4. Pay special attention to lifting parts (cylinders) and safety devices
5. Use all the documentation supplied by the manufacturer (wiring diagrams, etc)

CHAPTER 7 - TROUBLESHOOTING

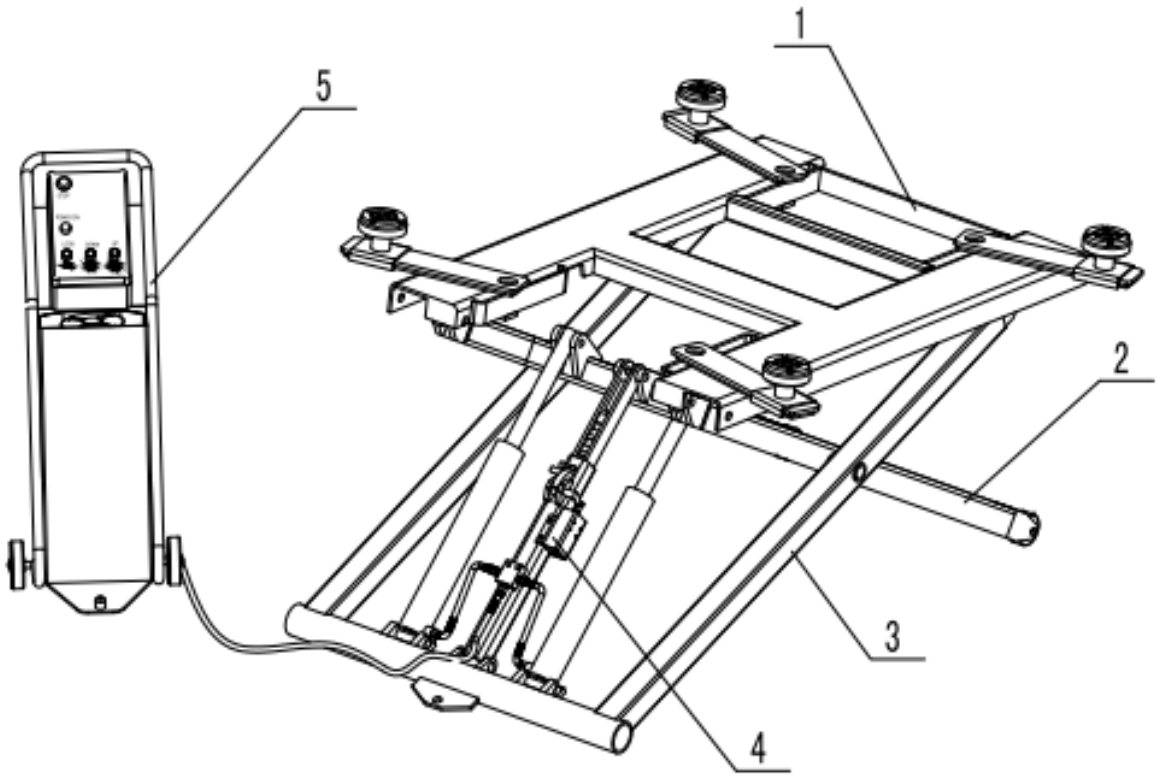
7.1 TROUBLESHOOTING GUIDE

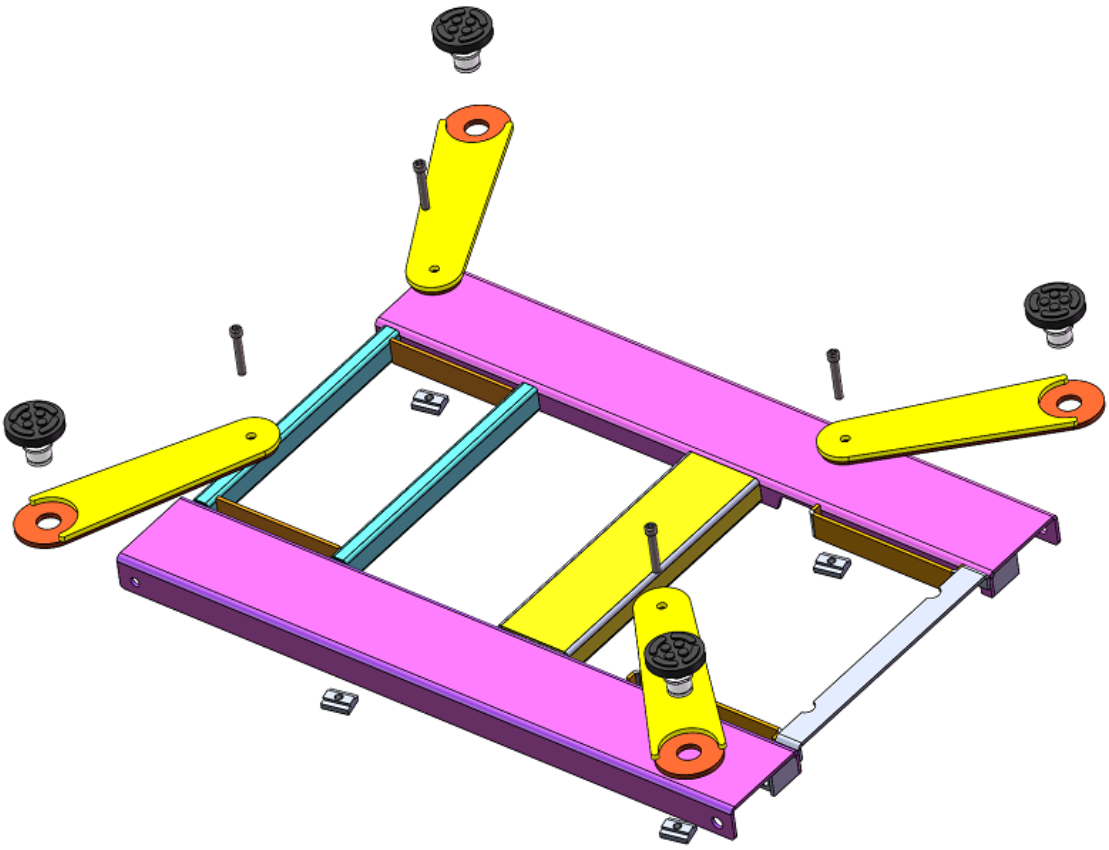
Troubleshooting and possible repairs require absolute compliance with ALL THE SAFETY PRECAUTIONS indicated in chapter 6 "MAINTENANCE" and chapter 3 "SAFETY"

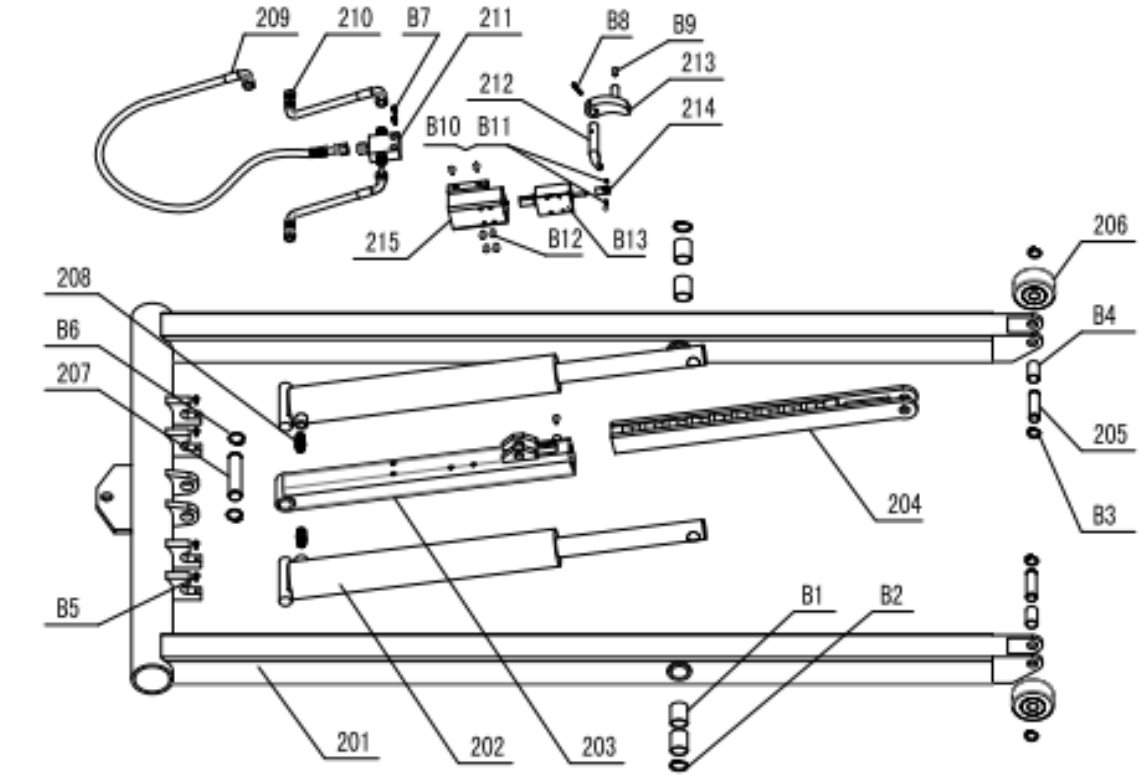
7.2 TROUBLESHOOTING CHECKLIST

Problem	Possible cause	Solution
The motor doesn't rotate.	Bad contact Electric switch doesn't work.	Check and replace good wire. Check and replace switch.
The motor rotates, but the lift doesn't rise.	Damaged gear pump Hydraulic oil is not enough.	Replace gear pump. Supply hydraulic oil.
Can't go down.	The safety lock shaft is not drawn out. The electromagnetic valve is not open	Draw out the shaft Check and replace – the electromagnetic valve.
Leak oil	Loosed tie-in. The oil seal of the tie-in is damaged	Screw the tie-in Replace the oil seal.
Two oil cylinders don't work synchronously.	Leak oil Blocked oil pipe	Check and eliminate Clear away the oil pipe.

CHAPTER 8 - STRUCTURE AND ACCESSORIES



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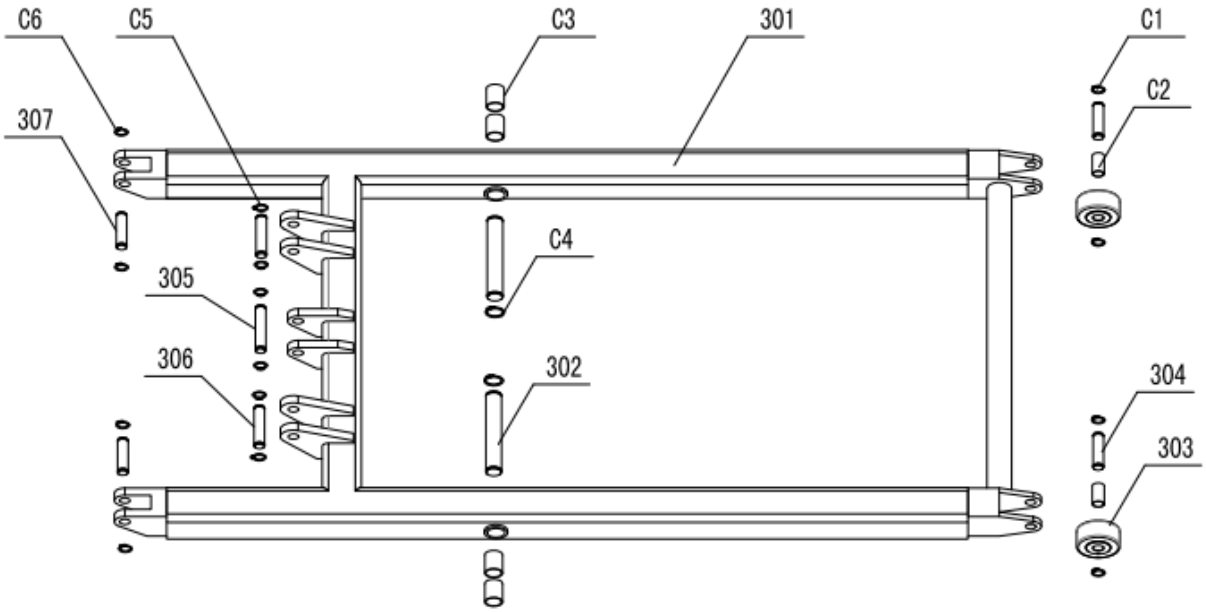
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APPENDIX A-SPECIAL NOTES

No.	Name	No.	Name
1	Platform assembly	B1	30 Circlip
2	Outside scissor frame assembly	B2	Oilless bearing 3040
3	Inside scissor frame assembly	B3	20 卡簧
4	Security lock assembly	B4	Oilless bearing 2040
5	Pump station	B5	M6×10 Hexagonal bolt
101	Upper Cover Plate assembly	B6	25 Circlip
102	Lift arm support	B7	M6×16 Hexagonal bolt
103	Vertical tray	B8	Elastic cylindrical pin
104	Horizontal tray	B9	M6×10 hexagonal bolt
105	T type screw	B10	M4 fasten screw
A1	M6×10 hexagonal bolt	B11	M4×20 hexagonal bolt
A2	M20×95 hexagonal bolt	B12	M6 × 10 Half-round head screw
201	Outside scissor arm	B13	DC24V electromagnet
202	Cylinder	301	Inside scissor arm
203	Locking hook support	302	Middle axle of scissor
204	Locking chain assembly	303	Trolley
205	Trolley axle	304	Trolley axle
206	Trolley	305	Tooth lock axle
207	Locking hook support assembly	306	Upper axle of cylinder
208	Cylinder connector 3/8”-1/4”	307	Articulated shaft with shear arm
209	Pipe of pump station	C1	20 Circlip
210	Pipe of cylinder	C2	Oilless bearing 2040
211	Plate-type T-junction	C3	Oilless bearing 3040
212	Pulling leave	C4	30 Circlip
213	Locking hook	C5	20 Circlip
214	Connecting axle	C6	20 Circlip

A.1 DISPOSAL OF USED OIL

Used oil, which is removed from the oil tank 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.

A.2 MACHINE DEMOLITION

DURING MACHINE DISASSEMBLY, COMPLY WITH ALL THE SAFETY PRECAUTIONS DESCRIBED IN CHAPTER 3, WHICH ARE ALSO VALID FOR ASSEMBLING.

The machine must be d 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 B-SPARE PARTS

B.1 SPARE PARTS

When replacing parts and making repairs, comply with ALL THE SAFETY PRECAUTIONS described in chapter 6 MAINTENANCE and in chapter 3 SAFETY

Take all the necessary precautions to **AVOID ACCIDENTAL START-UP OF THE LIFT**

1. The switch on the control box must be blocked.
2. The key of the lock must be kept by the maintenance fitter during the maintenance operation.

B.2 PROCEDURE FOR ORDERING SPARE PARTS

To order spare parts:

1. Indicate the serial number of the lift and the year built
2. Indicate the code of the piece requested (see the CODE" columns in the tables)
3. Indicate the quantity required.