

Safety - Installation - Operation - Maintenance

Stratus Electrical Safety Lock Release Scissor Parking Lift PS6

110V SAE-PS6

Model: SAE-PS6



Manual SAE-PS6— Oct 2024

IMPORTANT NOTE:

- 1. Save these instructions!
- 2. This equipment should not be installed, operated or repaired without first reading the instructions. Failure to follow the instructions and safety can result in serious injury or death.
- 3. Electricity should be hooked up by a certified electrician.
- 4. Do NOT use equipment beyond its rated capacity.
- 5. Keep manual near lift for reference
- 6. By proceeding with installation and operation, you agree that you fully understand the contents of this manual and assume full responsibility for product use.
- 7. Only Operate this lift if it can be done so safely.

Introduction

This manual is designed to help customers use Stratus SAE-PS6, scissor parking lift. This is a scissor parking lift with an open center that provides full under vehicle access.

This lift comes with a capacity of 6,000 LBS.

Stratus recommends keeping this manual within reach of the lift for anyone who is to use or service the machine. Frequently asked questions and Troubleshooting steps have been included within this manual. If you have any questions and/or issues which are not answered here, please contact us at **512-640-9896** or email support@stratusautoequip.com

Symbols

Following are the symbols used in this manual:

 **DANGER** Calls attention to an immediate hazard that will result in injury or death.

 **WARNING** Calls attention to a hazard or unsafe practice that could result in injury or death.

 **CAUTION** Calls attention to a hazard or unsafe practice that could result in minor personal injury, product, or property damage.

 **NOTICE** Calls attention to a situation that, if not avoided, could result in product or property damage.

 **Tip** Calls attention to information that can help you use your product better.

Liability

Stratus Auto Equipment assumes no liability for damages resulting from:

- Use of the product for purposes other than those described in this manual.
- Modifications to the equipment without prior, written permission from Stratus Auto Equipment
- Injury or death caused by modifying, disabling, overriding, or removing safety features.
- Damage to the equipment from external influences.
- Incorrect or improper operation of the equipment.

Manual -PS6 Stratus Extra Wide Floor Plate 6,000 lbs Capacity Single Point Manual Release Auto Lift SAE-PS6 - Safety - Installation - Operation - Maintenance

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Limitations- Whereas every effort has been made to ensure this manual has complete and accurate information; Product updates, revisions, and/or changes could have occurred since this manual was written and published. Stratus Auto Equipment reserves the right to change any information in this manual without incurring any obligation for equipment previously or subsequently sold. Stratus Auto Equipment is not responsible for typographical errors in this manual.

Safety- Your product was designed and manufactured with safety in mind. However, your safety also depends on proper training and thoughtful operation. Do not install, operate, maintain, or repair the unit without reading and understanding this manual and the labels on the unit; *do not use your Lift unless you can do so safely!*

Owner Responsibility- In order to ensure operator safety and maintain your product properly, it is the responsibility of the product owner to read and follow these instructions:

- Follow all setup, operation, and maintenance instructions.
- Make sure product setup and use conforms to all applicable local, state, and federal codes, rules, and regulations, such as state and federal OSHA regulations and electrical codes.
- Read and follow all safety instructions. Keep them readily available for operators.
- Make sure all operators are properly trained, know how to safely operate the unit, and are properly supervised.
- Do not operate the product until you are certain all parts are in place and operating correctly.
- Carefully inspect the product on a regular basis and perform all maintenance as specified.
- Service and maintain the unit only with approved replacement parts.
- Keep all instructions permanently with the product and make sure all labels are clean and visible.

Stratus Auto Equipment makes no promises, guarantees or assurances that our products meet any state, county, federal or international mandated permit, license, code, standard, certification, or any other mandate other than what is listed or shown on Stratus Auto Equipment's website. Not all of Stratus Auto Equipment lift models meet the standards as prescribed by ANSI/ALI ALCTV-(current edition) or ANSI/UL 201. Consult www.autolift.org for a complete list of lift models that meet ANSI/ALI ALCTV-(current edition) or ANSI/UL 201 or contact support@stratusautoequip.com

Buyer assumes full responsibility for any state, county, federal or international mandated permit, license, code, standard, certification, or any other mandate required related to the installation and/or operation of any Stratus Equipment. Stratus will not be responsible for any charges, fines, liens, or other levies imposed on the Buyer related to any special or regional structural, seismic or any other building code and/or codes such as the Uniform Building Code (UBC), International Building Code (IBC), or any other state, county, federal or international mandated permit, license, code, standard, certification, or other mandate, law, rule, regulation or directive by any other agency, government, administrations, or corporations whether state, county, federal, or international mandated.

Unit Information

Be sure to document the Model Number, Serial Number, and Date of Manufacture from the label on your unit below. This information is required for part or warranty issues.



STRATUS[®] auto equipment		STRATUS AUTO EQUIPMENT www.stratusautoequip.com sales@stratusautoequip.com Tel: 512-640-9896		CE	
MODEL:				DATE:	
SERIAL NO.					
Lifting Capacity:		lbs	Rated Voltage:		V
Lifting Height:		in	Rated Frequency:		Hz
Min Height:		in	Phase:		Ph
Platform Length:		in	Net Weight:		lbs

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Product overview

Product description

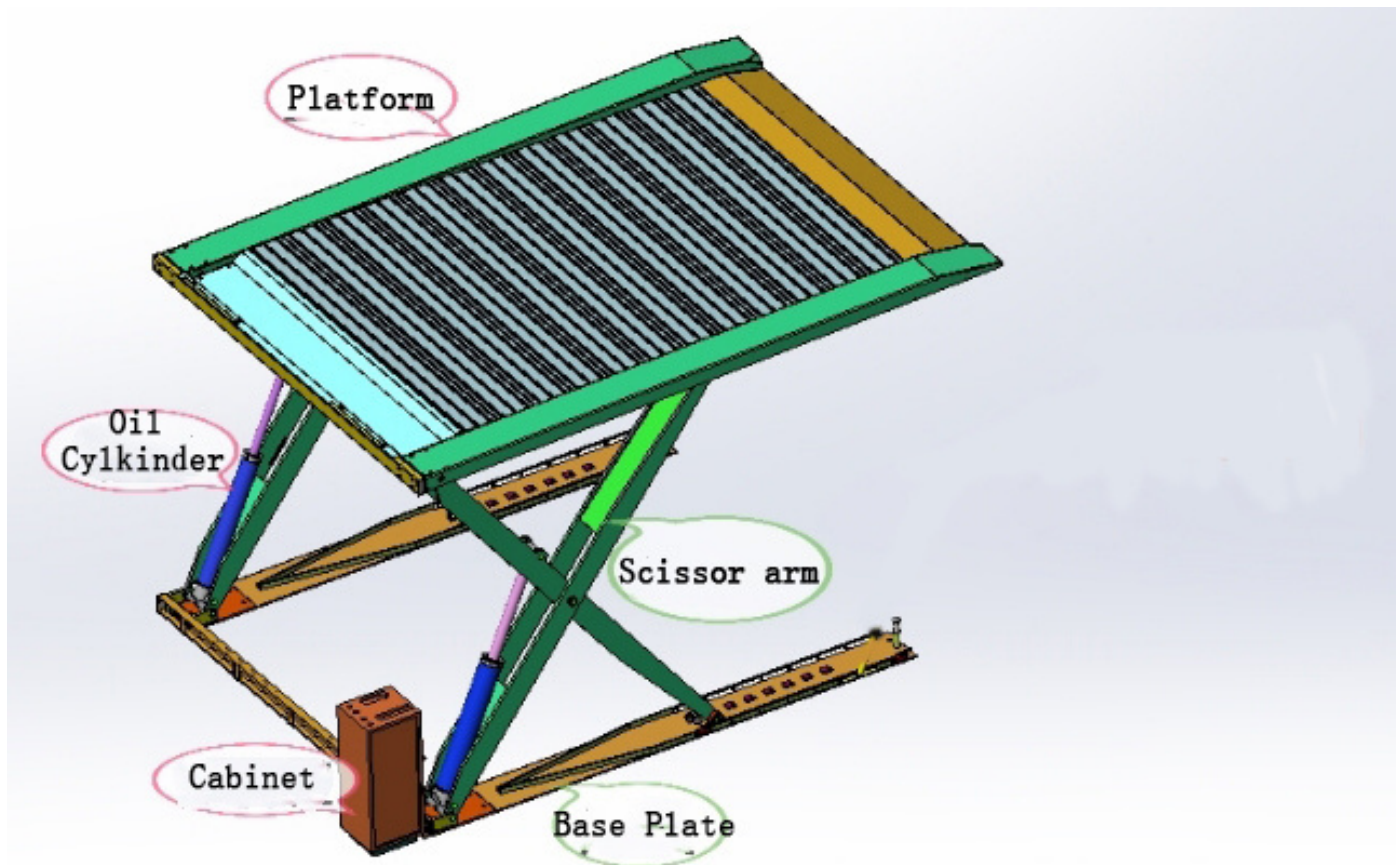
The scissor parking lift SAE-PS6 has a scissor-type structure. The equipment is suitable for parking 2 vehicles. The transmission system adopts a hydraulic transmission method. The hydraulic pump outputs high-pressure oil to push the hydraulic cylinder and drive the vehicle-carrying plate to rise or fall to achieve the purpose of accessing the vehicles. For the ground parking space, after the vehicle-carrying plate rises in place, the vehicle can be driven in or out.

Features:

1. CE certified
2. Small floor area, and the number of parking spaces can be changed arbitrarily according to the parking lot.
3. Lifting is achieved by using a single-stage double hydraulic cylinder, with automatic balance adjustment, low noise and stable operation.
4. The vehicle-carrying platform adopts hot-dip galvanizing or plastic spraying process, with beautiful color and durability.
5. The side beams are formed by bending, which can collect the water and oil dripping from the vehicles at the same time.
6. Easy to install, suitable for home use, 4S stores, public or underground parking lots, but the net height of the underground space should be greater than 3.6 meters.

2.2 Specifications

2.3 Construction of the Lift



Technical Specifications:

Model	SAE-PS6
Lift Capacity	6,000 LBS
Overall Height	72 13/16" (1850 mm)
Overall Width	103 5/32" (2620 mm)
Overall Length	161 7/16"(4100mm)
Minimum Height	9 13/16" (2108 mm)
Platform Width	83" (2108 mm)
Platform Length	125" (3175 mm)
Lifting time	About 60 Sec.
Motor	3 HP, 110V, 1ph
Hydraulic Oil	AW32 or AW46
Breaker	30A
Shipping Size	144"L * 29"W * 28"H
Equipment Weight	3109 LBS

3. Installation instructions

3.1 Preparations before installation

3.1.1Tools and equipment needed

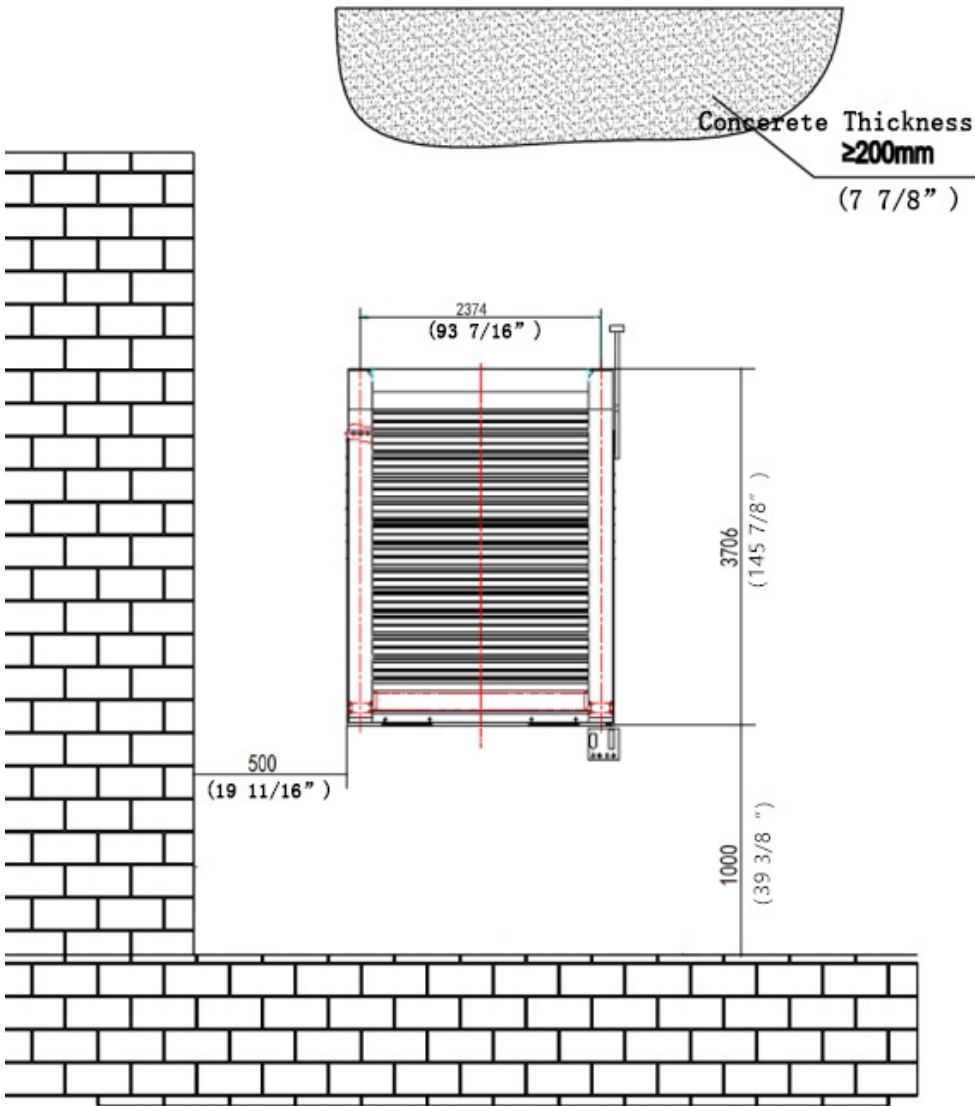
- √ Electrical drill
- √ Open wrenchesΦ17, Φ19
- √ Screwdrivers
- √ Anti-wear hydraulic oil (AW32/AW46)

3.1.2 Check List of parts ---Annex 1 (Whole lift Packing list)

Open the package and check if all parts as per Annex 1 are included. Do not hesitate to contact the dealers or manufacturer in case any part is missing. But if you do not contact us and proceed with installation after knowing lack of parts, Stratus as well as our dealers will not bear any responsibility for this and will charge for any parts subsequently demanded by the buyer.

3.1.3 Ground conditions

The lift should be fixed on a smooth and solid concrete ground with its strength more than 3000psi, tolerance of flatness less than 5mm (0.2") and minimum thickness of 200mm (7.9"). In addition, newly built concrete ground must undergo more than 28 days' cure and reinforcement. The ground and its installation diagram as follows.

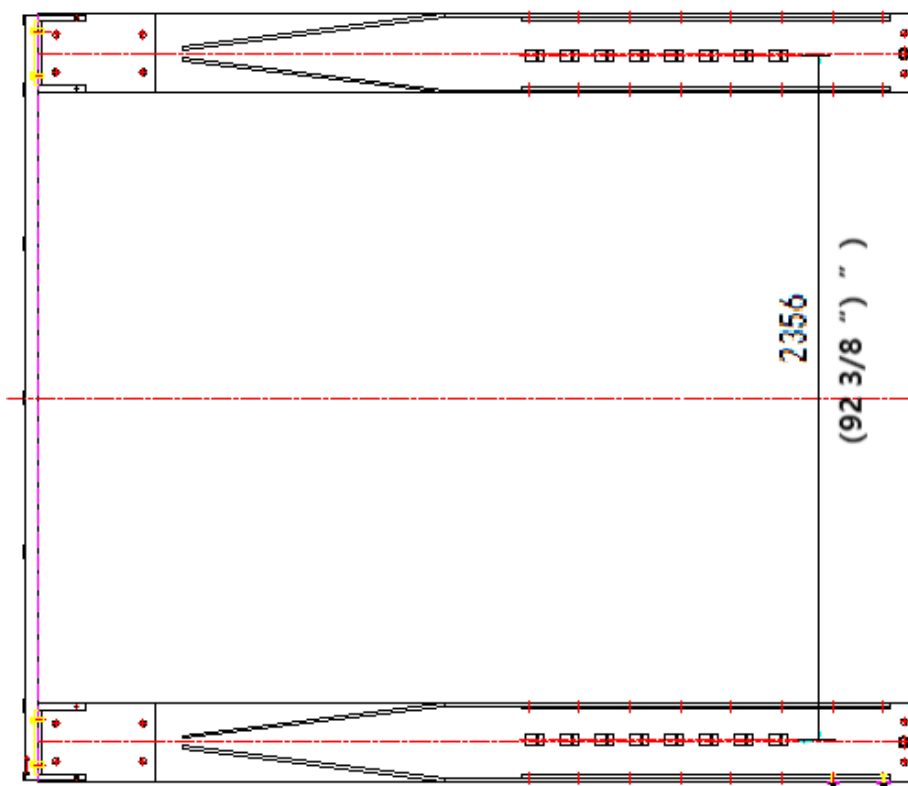


3.2 Precautions during Installation

- Joints of oil hose and electric wire must be firmly connected in order to avoid leakage and wire loosening
- All bolts should be firmly screwed up.
- Do not place any vehicle on the lift in the case of trial running.

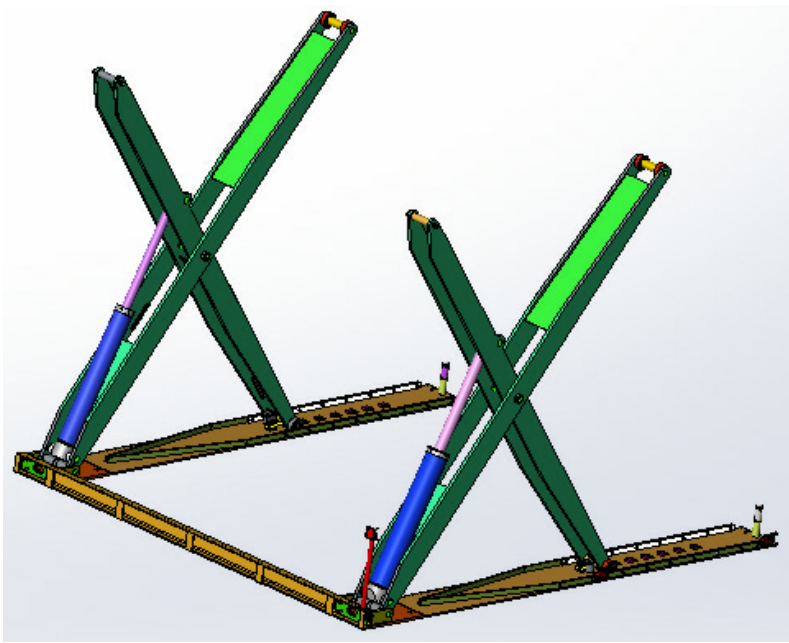
3.3 Installation steps

Step1: Remove Lift from packaging and ensure all parts are present. After ensuring all components are readily available position the two scissor arms as shown below.



Step2:

After locating the lift arms into their desired position install the lower scissor brace, as shown in the image above.



Step 3: Connect all electrical and hydraulic connections to the power unit ensuring the hydraulic fittings are properly tightened to prevent leakage. Teflon/Plumbers tape should NOT be used for the connections as this may introduce contaminants into the system.

- Step 3A:** Tubing Connection (this step is very important to understand the tubing connection diagram and the following instructions before operation).
- A. Ensure that the tubing is clean and smooth.
 - B. The installation personnel need to find the joint of the main tubing according to the need and connect the main tubing first.
 - C. see the figure below. connect the main tubing and leveling pipe according to the hydraulic schematic diagram. Finally, check whether all connections are sealed.

Number	Tubing serial number	Name	Quantity	Remarks
1	1#	2-180 degree tubing	1	3000mm
2	2#	2-180 degree tubing	1	400mm
3	3#	2-180 degree tubing	1	1800mm
4	4#	2-180 degree tubing	1	1650mm

Step 3B: Electrical connection

Connect to the external power supply plug according to the electrical schematic diagram, the black line is the phase line, the blue line is the zero line, and the yellow and green line is the ground line.

Step 4: Fill it up with the hydraulic oil

Fill the hydraulic reservoir with 13 liters (~ 3 Gal) of AW32/46 hydraulic oil from the top of the barrel between 10mm and 40mm (measured with a gauge on the barrel cover)

Step 5: Balancing

1. Under normal operating conditions, the main circuit of the combined valve plate 5 is open at Z1, while the secondary circuit P1 is closed. If there is a lifting failure or a power outage in the hydraulic system, the safety lock engages, and the drop speed can be adjusted by modifying throttle control valve 4, allowing for a no-load speed between 45 and 55 seconds.
2. To adjust the oil filling and leveling of the oil cylinder: when the auxiliary cylinder is low and the main valve Z1 for the auxiliary cylinder is also low, completely close the auxiliary loop valve stem F1 on the combined valve plate. Then, press the rising button to fill the oil. If there is too much oil, press the drop button to release some from the auxiliary cylinder. After making these adjustments, return the combined valve plate stem to its normal working position to complete the oil filling and leveling process.
3. For the exhaust steps: open the Z1 valve and close F1. Lift the main unit several times until the main cylinder is stable and free of shaking. Lift the main unit fully, then close Z1 and open F1 to lift the auxiliary engine until the secondary oil cylinder is also stable and shows no shaking. Lift the auxiliary engine fully, then close F1, open Z1, and lower the machine to exhaust. If the main and secondary platforms are uneven, adjust the oil as described in step (2).

Step 6: Connect the limit switch

1. Raise the vehicle board to 1980mm (78 in), adjust the limit switch action, pay attention to the highest limit, and park the insurance safety lock 5~10mm (0.25-0.5 in) in front of the final tooth of the locking tooth, or adjust to the required height according to the user's requirements.
2. Lower and raise the platform to the limit position 3 to 4 times to verify whether the load board limit is accurate and whether the action is reliable.
3. Use the provided shims to ensure the lift is properly leveled.

Order #	Inspection Item	Yes	No
1	Whether the platform is leveled		
2	Whether the oil tubing is well connected		
3	Whether the electrical connection is correctly connected		
4	Whether the valve on the pump station leaks from the oil		

Operation and debugging

4.1 Description of operation precautions

4.1.1 Check all tubing connections to ensure that work can start without oil leakage.

4.1.2 Can not be used if the safety device is faulty.

4.1.3 Check whether the center of gravity of the raised vehicle is in the center of the lifting platform. If not, please adjust the center of gravity before lifting.

4.1.4 The operator and other relevant personnel shall stand in the safe area during the lifting process.

4.1.5 When the platform is lifted to the required height, the operator should turn off the power supply when leaving the control cabinet to avoid misoperation by other personnel.

4.1.6. Make that the safety lock is locked in place before working off the car. Make sure there is nobody under the car before you lift it.

4.2 Test

A. No-load test:

Turn on the power switch and press the "rise" button to observe whether the vehicle plate rising is stable and the two cylinders are synchronized; rise to the highest point to observe whether the upper limit of the device is accurate and reliable; press the "drop lock" button to observe whether the safe block is accurately.

Note: During the test, there can be no people or other items on the car plate or in the specified area. If any abnormality is found, stop in time and retest after the fault is removed.

B. Load Test

1. Drive the vehicle without exceeding the maximum parking weight limit.
2. Secure the brakes.
3. Have personnel exit the vehicle and the loading platform.
4. Press the rising button to check if the loading plate is stable.
5. Inspect the mechanical components and hydraulic system to ensure the upper level is accurate and reliable.
6. Press the "drop lock" button to confirm that the safety block is correctly positioned.

Note: During the test, no people or other items should be on the plate or in the designated area. The test vehicle must not exceed the maximum carrying capacity. Check the oil circuit for leaks; if any abnormalities are detected, stop immediately and perform a retest after resolving the issue.

4.4 Description of the operation steps

1. Lifting:

- Set the push button to manual mode.

2. Lowering:

- Hold down the "rise" button to activate the oil pump, which will send hydraulic oil to the hydraulic cylinder via the solenoid valve. This will raise the loading plate to the upper limit.

3. Oil Filling and Leveling Operation (Normal Service Period):

- Raise the vehicle loading plate to about 500 mm. Open the oil filling stop valve, press either the "up" or "down" button, and then close the oil filling stop valve once the desired level is reached. This completes the oil filling adjustment procedure.

Maintenance:

1. The maintenance and maintenance of shear parking treasure shall be operated by trained operators

1. At all the hinges of the equipment, use the oil tank once a week;
2. Equipment guide belt and moving parts to add grease once a month;
3. The new machine must be used for three months when the first hydraulic oil replacement, after replacement once a year, and clean the pump station inlet and inlet oil filter, oil level should keep the upper limit for a long time;
4. Every five years, the parking treasure must be used by a professional department to conduct a safety inspection of the equipment;
5. Clean the oil and water separator oil cup and water cup every quarter, and replace the oil cup oil;
6. When replacing the hydraulic oil, reduce the machine to a minimum and empty the old oil in the tank. The filling of new oil should be filtered by the oil filter;
7. Check the reliability of the limit switch and the flexibility of the safety device before using the device.

2. Problem symptoms and solutions

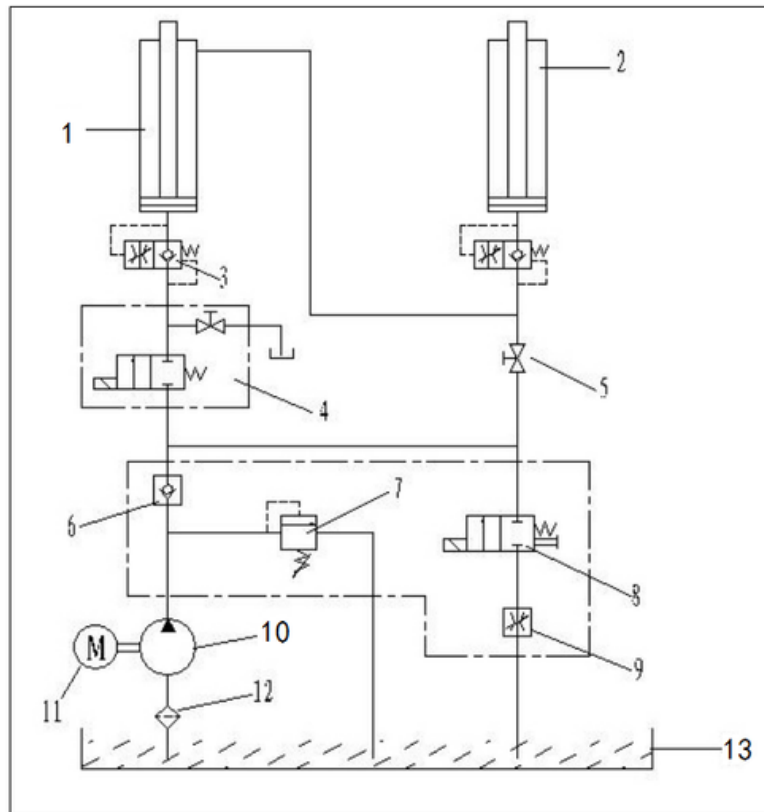
Note: If you are unable to resolve the fault, please contact the manufacturer for help. We will help you to solve the fault in the first time, provide related fault information and fault pictures can make the manufacturer in the fastest speed for you.

Fault phenomenon	Cause	The exclusion method
Motor Does Not Run when "UP" button is depressed	1. The power supply is not normal	Check and remove and connect the wires
	2) The AC contactor of the main circuit of the pump motor does not engage	If the motor is pressed with the insulation rod, check the control loop, and if the voltage at the contactor coil end is normal, replace the contactor
	3) Limit switch circuit fault	If the fault disappears after connecting the limit switch terminal, check the limit switch and wire and adjust or replace them
	4) The push-button switch fails	Check the button contacts, wires and exclude
Motor engages but lift does not move	1) Motor reversal	Change the incoming line phase sequence of the power supply
	2) No load can rise the load to rise	Micro right relief valve safety pressure setting, drop solenoid valve spool has dirt, clean the spool
	3) Insufficient hydraulic oil or incorrect label	Supplement or replace the hydraulic oil
	4) The manual oil return screw of the solenoid valve is not closed	Tighten the main cylinder or sub cylinder drain screws
	5) The solenoid valve plug is burned out	Replace the solenoid valve plug
Motor Runs but Lift will not Lower	1) The insurance claw does not remove the insurance tooth	Increase delay on timer relay
	2) The insurance paw is not lifted	The main safety claw card or electromagnet power supply is blocked, check the power supply and exclude it
	3) The drop solenoid valve is not working	Check the drop solenoid valve connector and coil for the end copper nut
	4) Over pressure valve is blocked	Remove the "over pressure valve" in the oil inlet of the main cylinder or sub cylinder and clean it

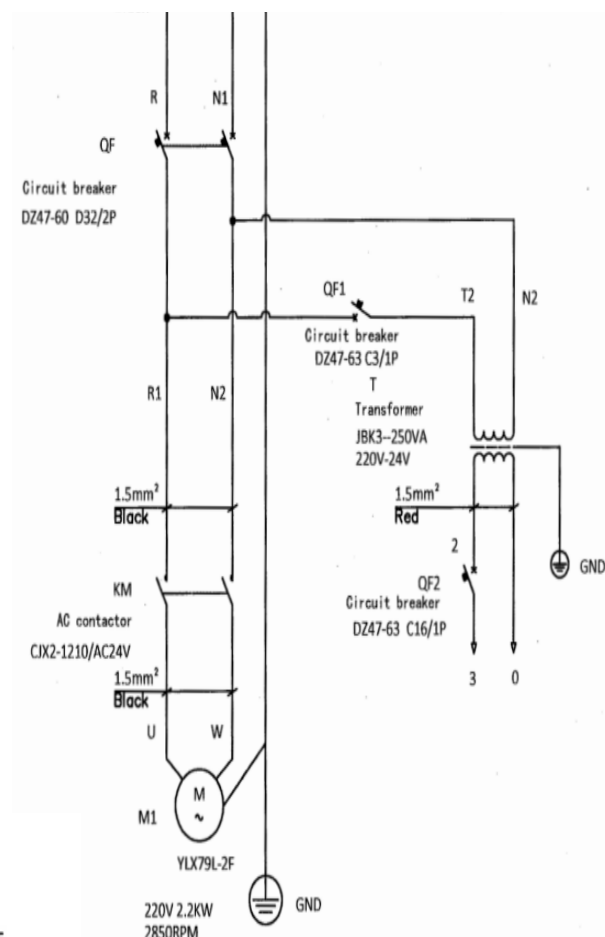
The drop speed of the equipment is slow during the normal load	1) Hydraulic oil viscosity is too large or frozen or deteriorated (in winter)	Replace the hydraulic oil or take thermal insulation measures according to the instructions
	2) The "explosion-proof valve" to prevent the oil pipe from bursting is blocked	Remove or close the power supply of the electromagnet to make the equipment claw and lock, remove the "over pressure valve" in the oil hole at the bottom of the cylinder and clean up
Left and right cylinder not synced	1) The air in the oil cylinder is not exhausted	See oil fill and leveling operations
	2) Oil leakage at the oil pipe or the joint	Tighten the connector or replace the oil seal, and fill the oil and leveling
	3) The oil filling stop valve is not tight, almost every day	Replace the oil filling stop valve, and then fill the oil for leveling
There is a noise when you rise and fall	1) Lack of lubricating oil	Fill oil for all hinge joints (and moving parts including piston rods)
	2) Foundation or machine distortion	Adjust the machine level and level the foundation
Lift goes up, but not down when attempting to lower	1) The time relay is loose or damaged	Insert the time relay or replace it

Attachment 1

Hydraulic Schematic Diagram



- 1. Main hydraulic cylinder
- 2. Auxiliary hydraulic cylinder
- 3. Explosion-proof valve
- 4. Working solenoid valve
- 5. Stop valve
- 6. Check valve
- 7. Relief valve
- 8. Descending solenoid valve
- 9. Throttle valve
- 10. Gear pump
- 11. Pump motor
- 12. Filter
- 13. Oil tank



Special Notes

Environmental damage :

- Only appropriately trained personnel may dismantle and dispose of the unit.

Dismantling:

- To dismantle the product, proceed as follows:

ELECTRICAL HAZARD!

- When carrying out any decommissioning and dismantling work on the unit, switch off all power supply connections, ensure they cannot be switched on unintentionally and verify that they have been disconnected. Earth and short-circuit them, and cover or otherwise isolate any neighboring live parts. Failure to do so may lead to serious injuries or death.

HIGH PRESSURE HAZARD.

- When carrying out any unit decommissioning and dismantling work, close off and empty all the connection pipes until the pressure is the same as the ambient air pressure. Failure to do so may lead to injury.
- Make sure that the hydraulic circuit has been switched off. Close all hydraulic shut-off valves.
- Disconnect all connections, making sure at the same time, that no operating materials escape, such as oil, refrigerant and water- glycol mixture.
- Loosen the connection to the base.

PERSONAL INJURY!

- Secure the unit against slipping. The unit is ready for transporting.
- It is important that all transport information is observe

Disposal:

- A specialist company with the appropriate competence must dispose of the unit and individual components. This technical services department must ensure that:
 - the components are separated according to material types
 - that the operating materials are sorted and separated according to their properties.

ENVIRONMENTAL DAMAGE.

- Dispose of all components and operating materials (such as oil, refrigerant and water-glycol mixture) separately according to material and in line with local laws and environmental regulations.

Noise Declaration:

- Sound power level: LWA<85dB Accompanied uncertainly K=4 dB
- With the rated load, the pump motor rotate.
- Applied operating conditions are:
- According to the test report, the operating position is the loudest, but the noise risk is not a hazard, as the volume should not be high enough to hurt the operator.
- If the volume is higher than 85 dB, the lift must be stopped and check for troubles and repairs.

Important Safety Instructions

1.1 Important Notices

- Make sure to pay careful attention to the label of the lifting capacity attached on the lift and never try to lift cars above the lifting capacity labeled.
- Read this manual carefully before operating the machine so as to avoid personnel injury
- Users are not permitted to make any modification to the control or mechanical unit

1.2 Qualified Personnel

- Only properly trained individuals are permitted to operate the lift.

1.3 Warning Signs

- All safety warning labels are clearly depicted on the lift to ensure that the operator is aware of and avoids the dangers of using the lift in an incorrect manner. The labels must be kept clean and they have been replaced if detached or damaged. Please read the meaning of each label carefully and understand them for future operation

1.4 Safety Instructions

- Make sure that you have read the User's Manual completely, including relevant instructions on installation, operation, and safety before operating the lift.
- This lift is designed for lifting vehicles 6,000 LBS and under. Any other use may result in damage of the lift or injury to personnel.
- Only those who have been properly trained should operate the lift. Customers or inexperienced persons should be prohibited from operating the lift at will.
- Do not load the lift beyond its rated capacity. To reduce the risk of injury, refer to loading instructions, and never attempt to lift more than the rated capacity.
- The lift is designed to lift the entire body of vehicles with weight within the lifting capacity.
- If the lift is designed for indoor use only, outdoor use is prohibited.
- Do not install the lift on any surface other than concrete that is at least 6" thick and has set for at least 30 days.
- Do not move away from controls while lift is in motion.
- Keep hands and feet away from any moving parts, do not put hands in any dangerous places, such as the space between tool arms.
- Do not wear any loose clothing that could be caught in moving parts. Keep hair, fingers, and all body parts away from moving parts. Always wear appropriate safety equipment during operation.
- Keep area around the lift clean to avoid incidents. Any oil stain or obstacle may pose a safety risk.
- Always ensure the safety latches are operational before any attempt to work near or under the vehicle.
- Always ensure the safety locks are engaged before any attempt to work near or under the vehicle.
- Never remove safety related components from the lift.
- Do not use if safety related components are damaged or missing
- Ensure all regular maintenance is completed. If anything abnormal occurs, stop using the lift and immediately contact us for help.
- Do not rock the vehicle while on the lift or remove heavy components that may cause weight shift, as the vehicle could fall.
- Do not modify any part of the lift without manufacturer's advice; THIS VOIDS THE WARRANTY and increases the chances of injury or property damage.
- If the lift is not in use, lower to the lowest position and disconnect power.
- It is prohibited to lift the vehicle while occupied.
- When a vehicle is being loaded or unloaded from the lift, no person is allowed to stand in the vehicle passage.
- Do not use the lift while tired, or under the influence of drugs, alcohol, or medications

- Keep areas well lit.
- Keep loads balanced on the lift platforms. Clear the area immediately if a vehicle is in danger of falling off the lift. DO NOT ATTEMPT TO CATCH A FALLING VEHICLE!
- Make sure there are no obstacles under the vehicle before lowering it
- If the lift will be left unused for a long period of time, it is recommended that the user disconnects power, empties the oil tank, and lubricates any moving parts with hydraulic oil

Attention: For environment protection, please dispose of the used oil in a proper way.

WARNING:

- 1.The warning, cautions and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by operator.
- 2.ALWAYS ensure the mechanical safety locks are engaged. Never remove safety related components from the lift. Do not use if safety related components are damaged or missing.
- 3.Failure to correctly install, operate, or any improper modifications could result in injury or death of operators.

1.5 Labels

A

STRATUS[®]

auto equipment

STRATUS AUTO EQUIPMENT
www.stratusautoequip.com
sales@stratusautoequip.com
Tel: 512-640-9896

CE

MODEL:

DATE:

SERIAL NO.

Lifting Capacity: lbs

Rated Voltage: V

Lifting Height: in

Rated Frequency: Hz

Min Height: in

Phase: Ph

Platform Length: in

Net Weight: lbs

1.6 Sound Level

- The sound emitted from the lift should not exceed 75 DB.

1.7 Special Reminder

- The newly installed lift can NOT directly lift vehicle, and should be raised to the highest point then lowered to the lowest point 2-3 times repeatedly without any load to bleed the air out from the hydraulic hose and cylinders to ensure the lift runs smoothly
- 1st time use of the lift with a load after bleeding air out of the the hydraulic hose and cylinders should follow the steps below
 - Loosen the screw cap of the hydraulic oil flow valve and tighten the middle hexagonal screw clockwise inward to the tightest position.
 - Press the “UP” button to raise the lift with loaded vehicle to your desired height.
 - Press and hold the “DOWN” button to wait for the safety lock to be disengaged, then adjust the hydraulic oil flow valve (the middle hexagonal screw) by turning the screw counterclockwise to make the lowering speed reach .5 in/sec or slower.