



Jema Autolifte A/S
we are here to surprise!

JA4000FP

FOUR POST LIFT

Capacity: 4000KG

Manual Release

**INSTALLTION, OPERATION
AND MAINTENANCE MANUAL**



Read this entire manual carefully and completely before installation and operation of the lift.

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User's Records

Fill the following blanks with the information on the nameplate.

Model No. _____

Serial No. _____

Production Date _____

The following specially trained people are permitted to operate and maintain this lift.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Installation Records

Model No. _____

Serial No. _____

Customer's Name: _____

Installation Date: _____

Declaration

The above-mentioned lift has been correctly installed and all its functions including the reliability of safety locks have passed strict tests. Therefore, we hereby declare that this lift is in normal working condition when installation finished.

Installation date

Installer's signature

User's signature

1. IMPORTANT SAFETY INSTRUCTIONS

1.1 Important notices

Jema Autolifte A/S will offer one-year's quality warranty for the whole machine, during which any quality problem will be properly solved to the user's satisfaction. However, we will not take any responsibility for whatever bad consequence resulted from improper installation and operation, overload running or unqualified ground condition.

Users must always bear in mind that this lift is specially designed for lifting cars or other vehicles, so never use it for any other purposes. Otherwise, we, as well as our sales agency, will not bear any responsibility for accidents or damages of the lift.

Make sure to pay careful attention to the label of the lifting capacity attached on the lift and never try to lift cars with its weight beyond.

Read this manual carefully before operating the machine so as to avoid economic loss or personnel casualty incurred by wrong operation.

Without our professional advice, users are not permitted to make any modification to the control unit or whatever mechanical unit.

1.2 Qualified personnel

1.2.1 Only properly trained personnel can operate the lift.

1.2.2 Electrical connection must be done by a competent electrician.

1.2.3 People who are not concerned are not allowed in the lifting area.

1.3 Danger notices

1.3.1 Do not install the lift on any asphalt surface.

1.3.2 Read and understand all safety warnings before operating the lift.

1.3.3 Do not leave the controls while the lift is still in motion.

1.3.4 Keep hands and feet away from any moving parts. Keep feet clear of the lift when lowering.

1.3.5 Only properly trained personnel can operate the lift.

1.3.6 Do not wear unfit clothes such as large clothes with flounces, tires, etc, which could be caught by moving parts of the lift.

1.3.7 To prevent evitable incidents, surrounding areas of the lift must be tidy and with nothing unconcerned.

1.3.8 The lift is simply designed to raise the entire body of vehicles, with its maximum weight within the lifting capacity.

1.3.9 Always ensure the safety latches 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.

1.3.10 Do not rock the vehicle while on the lift or remove any heavy component from vehicle that may cause excessive weight shift.

1.3.11 Check at any time the parts of the lift to ensure the agility of moving parts and the performance of synchronization. Ensure regular maintenance and if anything, abnormal occurs, stop using the lift immediately and contact our dealers for help.

1.3.12 Lower the lift to its lowest position and do remember to cut off the power source when service finishes.

1.3.13 Do not modify any parts of the lift without manufacturer's advice.

1.3.14 If the lift is going to be left unused for a long time, users are required to:

- a. Disconnect the power source;
- b. Empty the oil tank;
- c. Lubricate the moving parts with hydraulic oil.

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

1.4 Warnings (Read and understand all safety warnings before operation)

All safety warning signs attached on the lift are for the purpose of drawing the user's attention to safety operation. The labels must be kept clean and need to be replaced when they are worn-out or have dropped. Read the explanations of the labels carefully and try to memorize them.



1.5 Sound Level

The sound emitted from the lift should not exceed 70DB. For the sake of your health, we suggest putting a noise detector in your working area.

1.6 Training

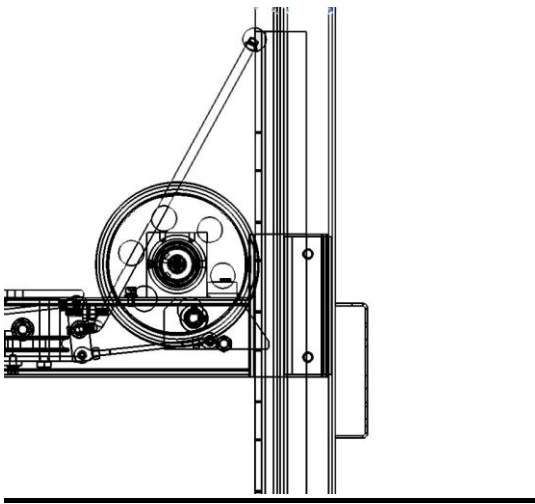
Only properly trained people are allowed to operate the lift. We are quite willing to provide professional training for the users when necessary.

2. Overview of the lift

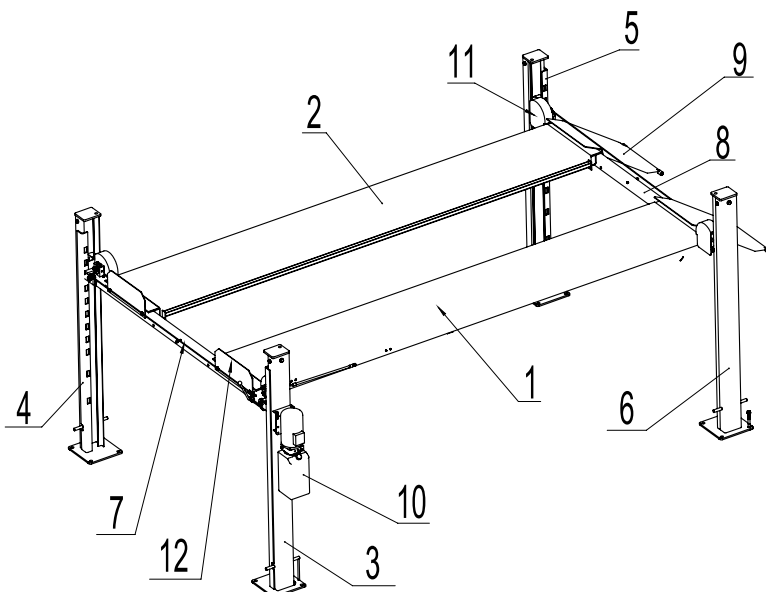
2.1 General descriptions

This four-post lift is generally composed by four posts, two beams, two platforms, a hydraulic oil cylinder and a set of power unit. It is driven by an electro-hydraulic system. Up and down of platforms is controlled by the to and fro movement of the oil cylinder. To ensure ultra safety of operators, it is equipped with mechanical safety locks in the four posts, which will **be manually** engaged in the process of lifting so as to prevent the platforms from sudden dropping down in case the hydraulic system fails to work.

Safety construction:



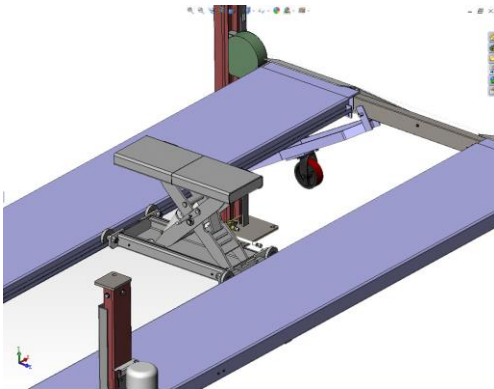
2.2 General construction of the lift



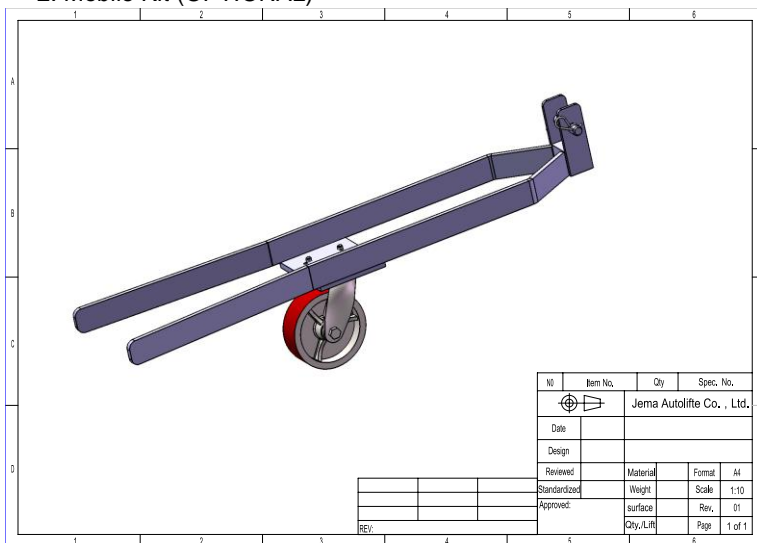
1. Platform A
2. Platform B
3. Main post 1
4. Post2
5. Post3
6. Post4
7. Main beam
8. Assistant beam
9. Ramps
10. Hydraulic pump
11. Wheel protection
12. Car protection

2.3 Optional parts

1. Jacking beam light



2. Mobile Kit (OPTIONAL)



3. Installation instructions

3.1 Preparations before installation

3.1.1 Tools and equipment needed.

- ✓ Appropriate lifting equipment
- ✓ Anti-abrasion hydraulic oil.
- ✓ Rotary Hammer Drill with 3/4" drill bit.
- ✓ Chalk and tape measure, magnetic plump, 8 meters ø15 level pipe.
- ✓ Sockets and open wrenches, a set of inside hex wrenches, cross and straight screw drivers.
- ✓ Hammer, 4pounds, sharp nose pliers, ø17,ø19,ø22 socket spanners.

3.1.2 List for parts checking ---Annex 1 (Packing list)

Unfold the package and check if any parts missed as per Annex 1. Do not hesitate to contact us in case any parts missed, but if you do not contact us and insist installing upon the lack of some parts, Jema Autolifte A/S 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 and minimum thickness of 200mm. In addition, newly built concrete ground must undergo more than 28days' cure and reinforcement.

3.2 Precautions for installation

3.2.1 Make sure the four posts stand paralleled and are vertical to the ground. No slanting.

3.2.2 Joints of oil hose and steel cable must be firmly connected in order to avoid the looseness of steel cable and leakage of oil hose.

3.2.3 All bolts should be firmly screwed up.

3.2.4 Do not place any vehicle on the lift in the case of trial running.

3.3 Installation instructions

Step1: Choose a proper site

Location requirement

If not specifically stated, our lifts are only for indoor use. It should be fixed on a smooth and solid concrete ground. Do not install this lift on expansion beams of concrete or on a second or an elevated floor without first consulting building architect. Make sure that the space around or over the lift should be free of obstructions like heaters, building supports, electrical lines etc.

Step 2: Fix the installation layout.

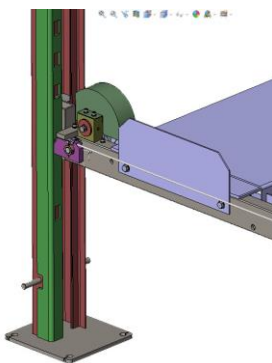
Once the installation site is determined, mark first the standing point of the four posts by a tape measure and chalk. Ensure two diagonal lines are of the same length.

Step 3: Remove the packing materials.

Step 4: Lay down the main post and assistant post as showed in below picture.

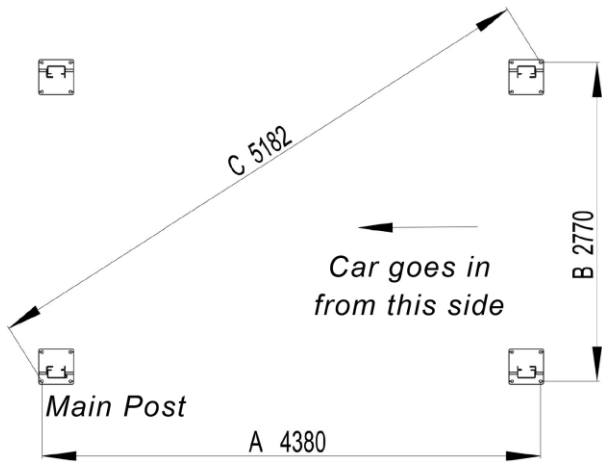


Step 5: Connect the main beam (the one without angle bar) into the posts and lock it on the second lock. Then put both posts up. Please refer to below picture.



Step 6: Connect the other posts and beams in the same method.

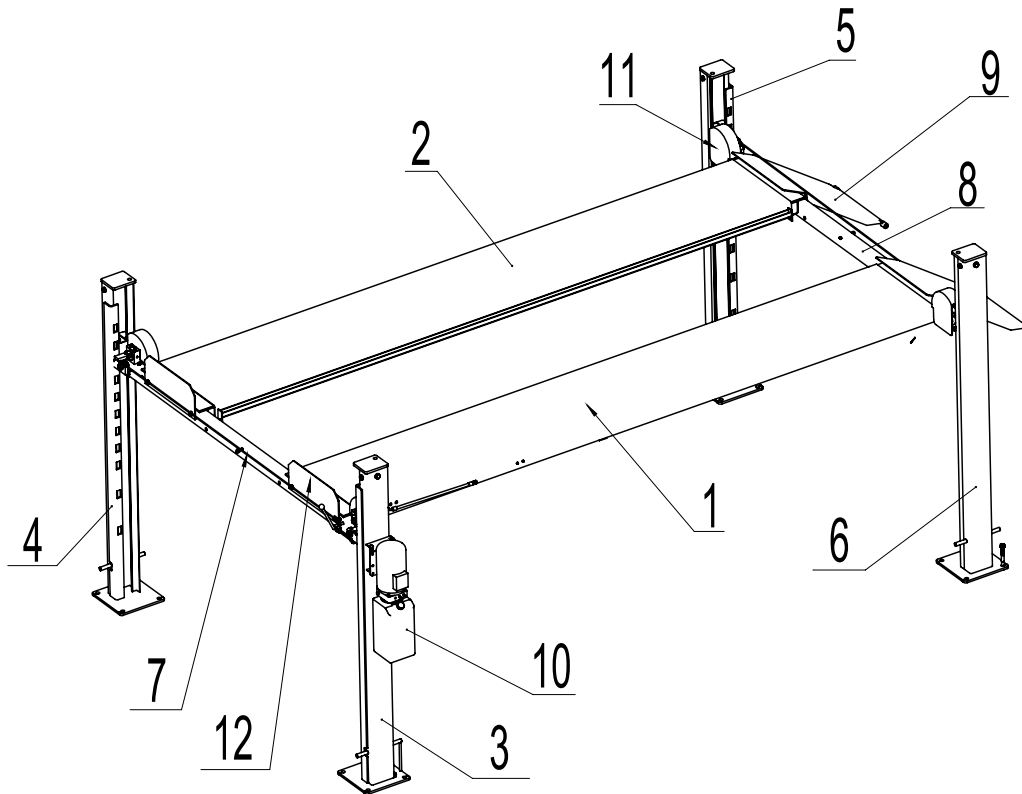
Step 7: Position the four posts according to the dimensions show in the picture.



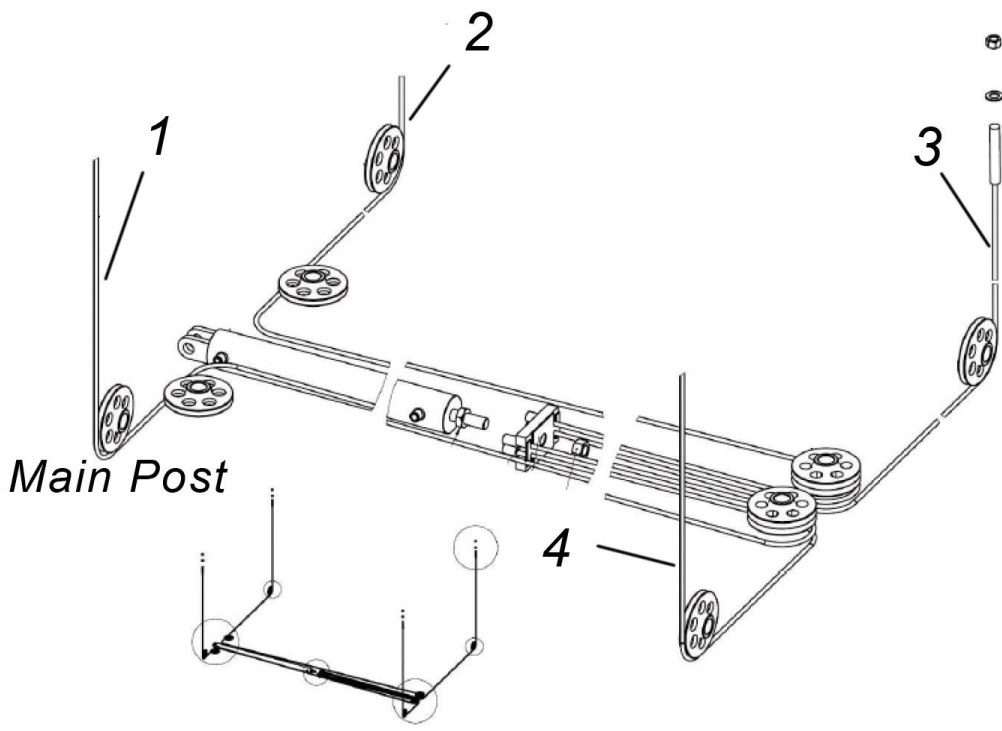
Step8: Connect the platforms and beams

Connect the assistant platform to the beam. Pay attention that the runway for jack should be placed inside. Mount the car protection in front of the platform. Connect the other beam in the same way.

Step 9: Mount the top of the post with showed direction.



Step 10: Connect the steel wire and release bar. Release bar should be mounted nearby the engine.



L1=6800mm

L2=8265mm

L3=4140mm

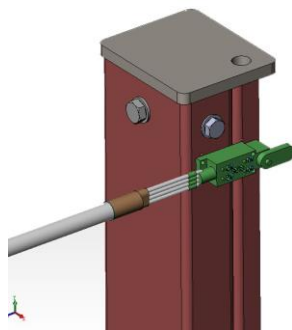
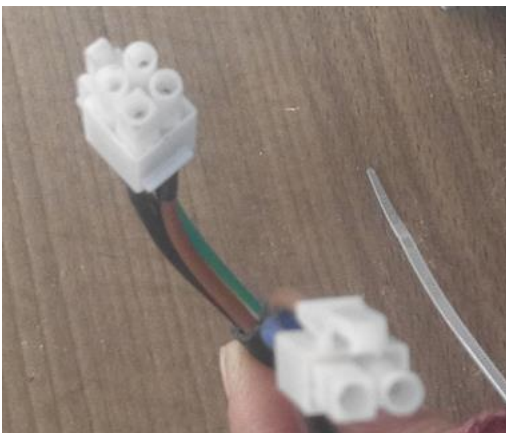
L4=2670mm

Step11: Mount the hydraulic pump and oil hose onto the main post.

Pull out the oil hose and air hose (if applicable) from the main platform and have them connected to the hydraulic block. Then fix the hydraulic pump on to the plate by M10*30 hex bolts, spring, and flat washers.

Step 12: Connect the limit switches

The two-wire plug is for top limit switch and four-wire plug for bottom limit. Mount the limit switch according to below pictures.

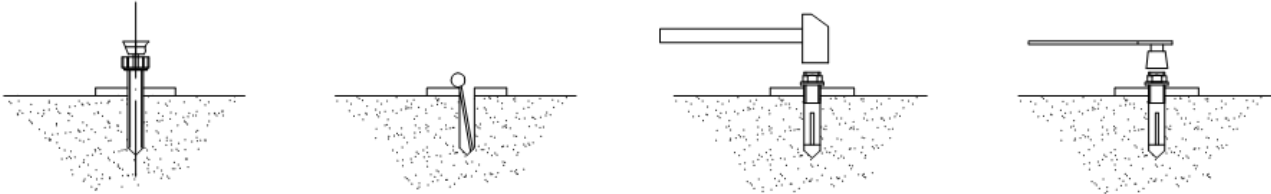


Step 13: Leveling

No vehicle on platforms when leveling.

Switch on and press the UP button. When the steel cable has been tightened, measure if the two platforms are of the same height from the ground. If not, adjust the tightening screw fixed on top of the main post.

Step14: Fix the expansion plug.



3.4. Items to be checked after installation.

S/N	Check items	YES	NO
1	Are the posts vertical to the floor?		
2	Is the oil hose well connected?		
3	Is the steel cable well connected?		
4	Are two platforms well connected?		
5	Are electrical connections, right?		
6	Are the rest joints firmly screwed?		
7	Are all items need lubricating added with grease?		

4. Operation instructions

4.1 Precautions

4.1.1 Check all the joints of oil hose. Only when there is no leakage, the lift can start work.

4.1.2 The lift, if its safety device malfunctions, shall not be used.

4.1.3 The machine shall not lift or lower an automobile if its center of gravity is not positioned midway of the platforms. Otherwise, Jema Autolifte A/S as well as our dealers will not bear any responsibility for any consequence resulted thereby.

4.1.4 Operators and other personnel concerned should stand in a safety area during lifting and lowering process.

4.1.5 When the platforms rise to the desired height, switch off the power at once to prevent any mal operation done by unconcerned people.

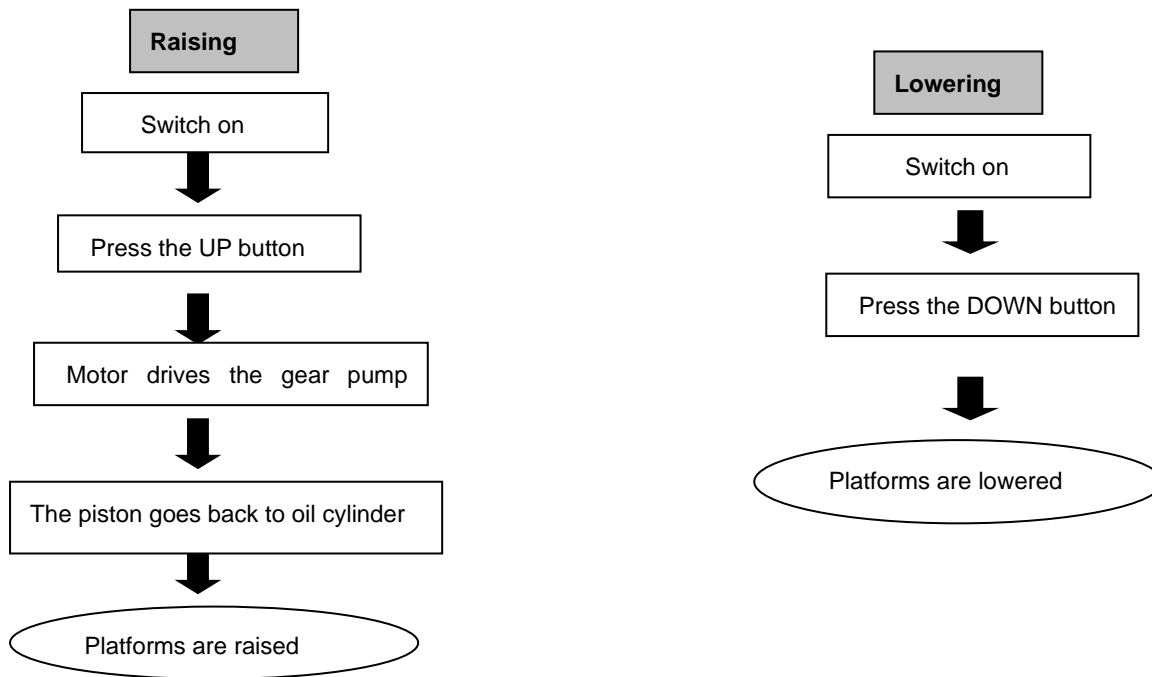
4.1.6. Make sure the safety lock of the lift is engaged before start working under the vehicle and no people under the vehicle during lifting and lowering process.

4.2 Descriptions of control panel



Description	Function
Alarm buzzer	Low height alarm
UP button	Control the UP movement
DOWN I button	Control down movement
DOWN II button	Control down movement

4.3 Flow chart for operation



4.4 Operation instructions

Raise the lift

1. Make sure that you have read and understood the operation manual before operation.
2. Park the vehicle on the platforms to ensure its gravity is positioned midway of the platforms.
3. Switch on. When the power indicator is on, press the UP button until platforms rise to the desired height.
4. Before perform any service around or under the vehicle, operators must press the safety lock button to ensure the mechanical safety lock is fully engaged, turn off the power so as to avoid any wrong operation done by irrelevant personnel and check again the stability of the vehicle.

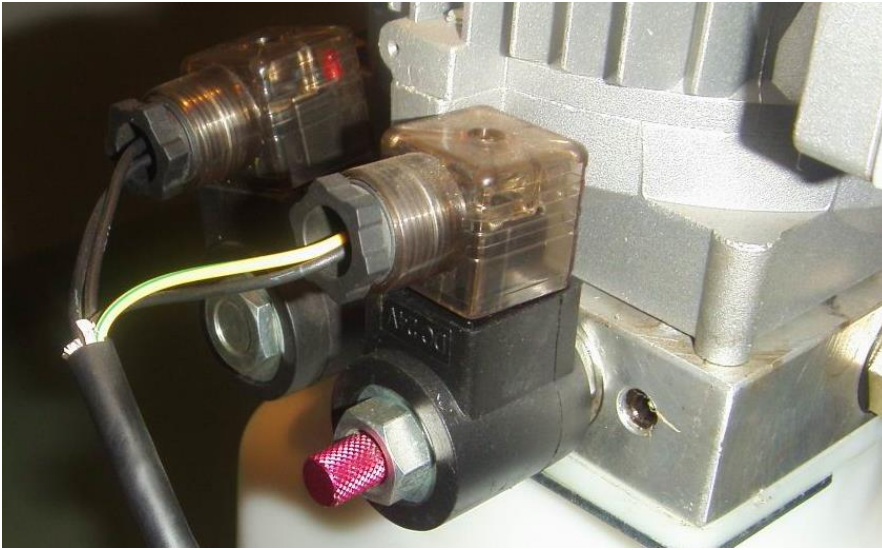
Lower the lift

1. Switch on. When the power indicating light is on, press the DOWN I and DOWN II button and then platforms of the lift will go down gradually.
2. Drive away the vehicle when platforms have lowered to the lowest position.
3. Turn off the power.

4.5 Emergency lowering in case of no power

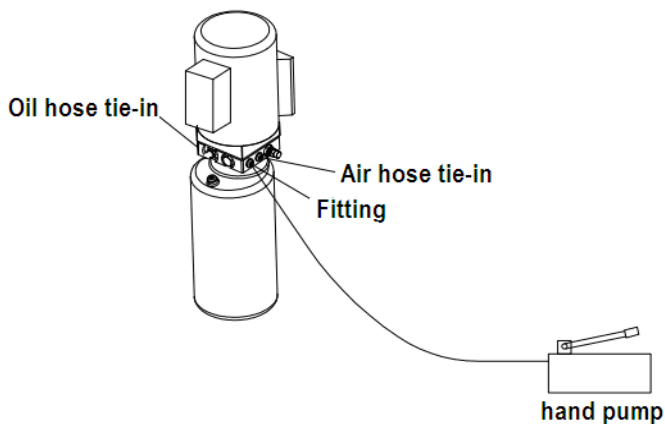
In the case the safety lock is not fully engaged:

1. Push the release bar and make sure all four locks are off.
2. Press and screw loose counterclockwise the unloading valve to lower the platform.

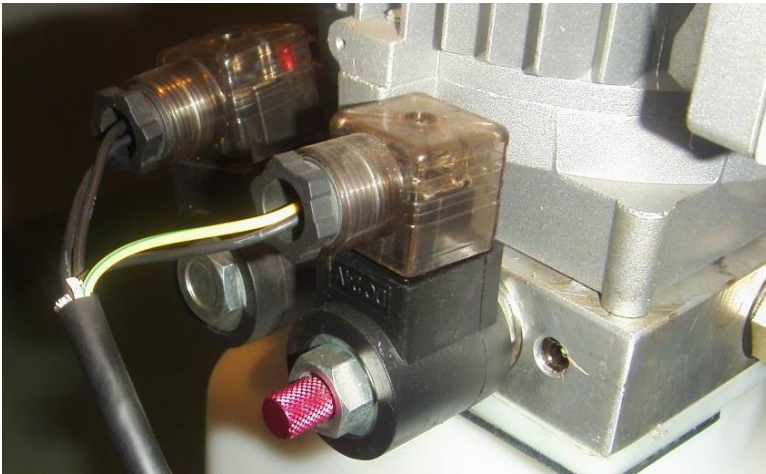


In the case the safety lock is fully engaged:

1. Remove the fitting as show in the following pictures and connect the tie-in with hand pump. Pull and push the handle of the hand pump to supplement oil to the oil cylinder so as to have the safety teeth released.



2. Press the release bar and screw loose counterclockwise the unloading valve to lower the platform.



5. Trouble Shooting

ATTENTION: If the trouble could not be fixed by yourself, please do not hesitate to contact us for help .We will offer our service at the earliest time we can. By the way, your troubles will be judged and solved much faster if you could provide us more details or pictures of the trouble.

TROUBLES	CAUSE	SOLUTION
Abnormal noise	Abrasion exists on insider surface of the posts.	Grease the inside of the post.
	Trash in the post.	Clear the trash
Motor does not run and will not rise	The wire connection is loose.	Check and make a good connection.
	The motor is blown.	Replace it.
	The limit switch is damaged or the wire connection is loose.	Connect it or adjust or replace the limit switch.
Motor runs but will not rise	The motor run reversely.	Check the wire connection.
	Overflow valve is loose or jammed.	Clean or adjust it.
	The gear pump is damaged.	Replace it.
	Oil level is too low.	Add oil.
	The oil hose became loose or dropped off.	Tighten it.
	The cushion valve became loose or jammed.	Clean or adjusts it.
Platforms go down slowly after being raised	The oil hose leaks.	Check or replace it.
	The oil cylinder is not tightened.	Replace the seal.
	The single valve leaks.	Clean or replace it.
	The overflow valve leaks.	Clean or replace it.
	Manual unloading valve or electrical unloading valve leaks.	Clean or replace it.
Rising too slow	The oil filter is jammed.	Clean or replace it.
	Oil level is too low.	Add oil.
	The overflow valve is not adjusted to the right position.	Adjust it.
	The hydraulic oil is too hot (above 45°) .	Change the oil.
	The seal of the cylinder is abraded.	Replace the seal.

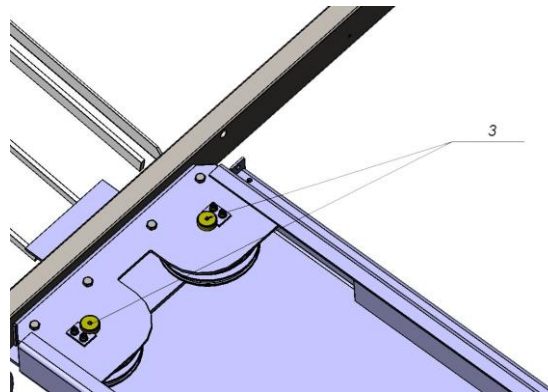
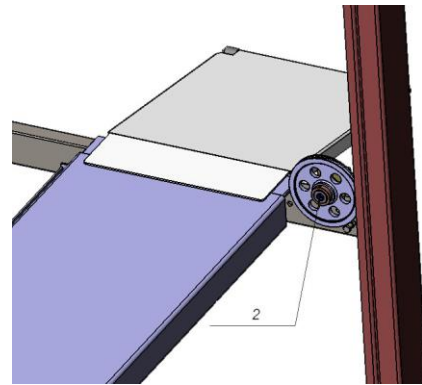
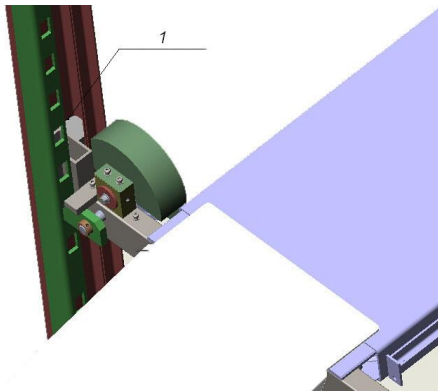
	Inside surface of the posts is not well greased.	Add grease.
Lowering too slow	The throttle valve jammed.	Clean or replace.
	The hydraulic oil is dirty.	Change the oil.
	The anti-surge valve jammed.	Clean it.
	The oil hose jammed.	Replace it.
The steel cable is abraded	No grease when installation or out of lifetime	Replace it.

6. Maintenance

Easy and low-cost routine maintenance can ensure the lift work normally and safely. Following are requirements for routine maintenance. You may decide the frequency of routine maintenance by consulting your lift's working conditions and time.

THE FOLLOWING PARTS NEED TO BE LUBRICATED

S/N	Name
1	Slider
2	Wire wheel
3	Shaft



6.1 Daily checking items before operation

The user must perform daily check. Daily check of safety latch system is very important – the discovery of device failure before action could save your time and prevent you from great loss, injury or casualty.

- Before operation, judge whether the safety latches are engaged by sound.
- Check whether oil hose well connected and whether it leaks or not.
- Check the connections of chain and steel cable and check the power unit.
- Check whether plug bolts firmly screwed.
- Check if safety teeth and safety block matched well or not.

6.2 Weekly checking items

- Check the flexibility of moving parts.
- Check the working conditions of safety parts.
- Check the amount of oil left in the oil tank. Oil is enough if the carriage can be raised to highest position. Otherwise, oil is insufficient.
- Check whether plug bolts firmly screwed.

6.3 Monthly checking items

- Check whether plug bolts firmly screwed.
- Check the tightness of the hydraulic system and screw firm the joints if it leaks.
- Check the lubrication and abrasion circumstance of axial pins, carriages, lifting arms and other related parts and replace in time with new ones if they failed to work well.
- Check the lubrication and abrasion circumstance of steel cable.

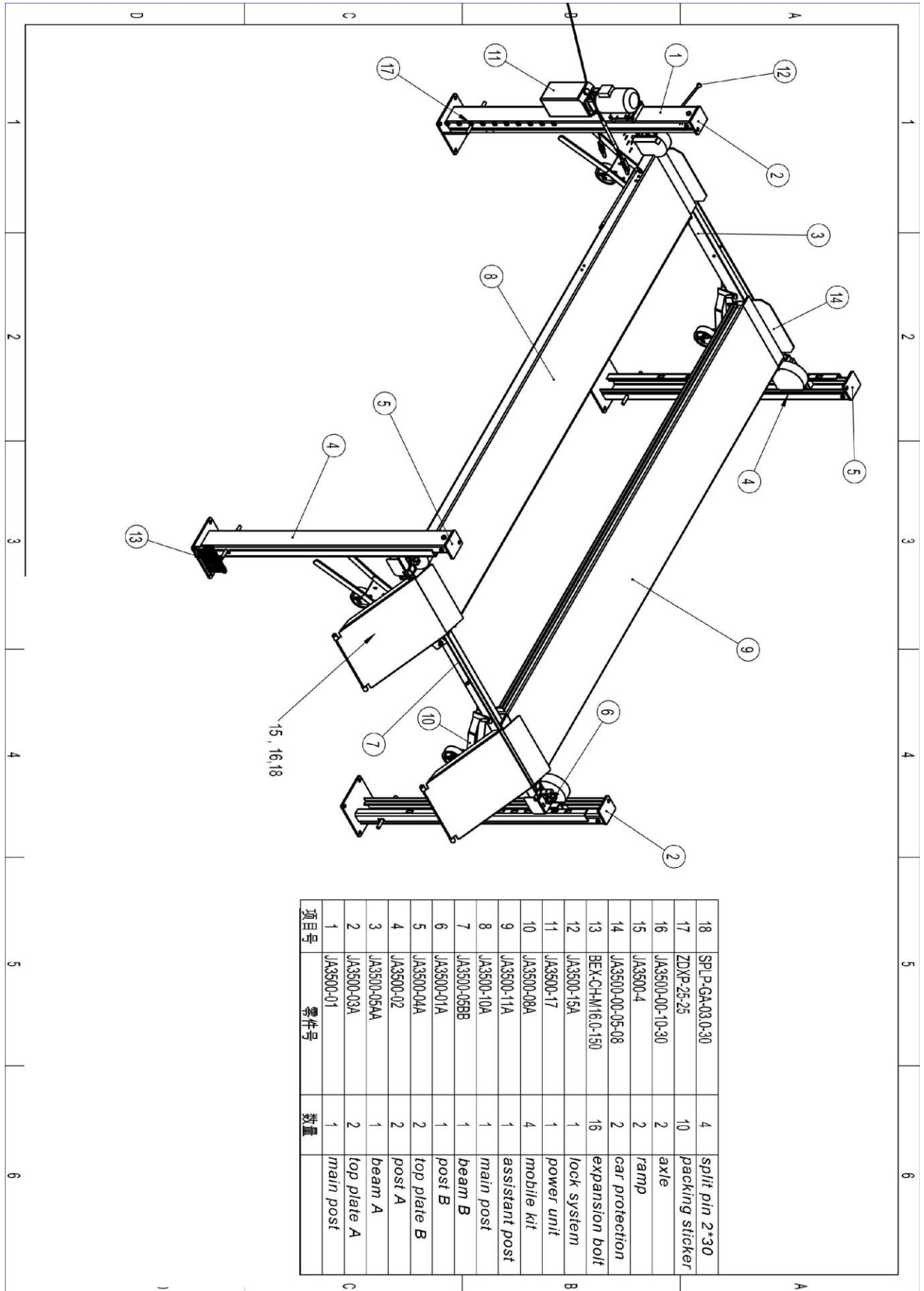
6.4 Yearly checking items

- Empty the oil tank and check the quality of hydraulic oil.
- Wash and clean the oil filter.

users strictly follow the above maintenance requirements; the lift will keep in a good working condition and meanwhile accidents could be avoided to a large extent.

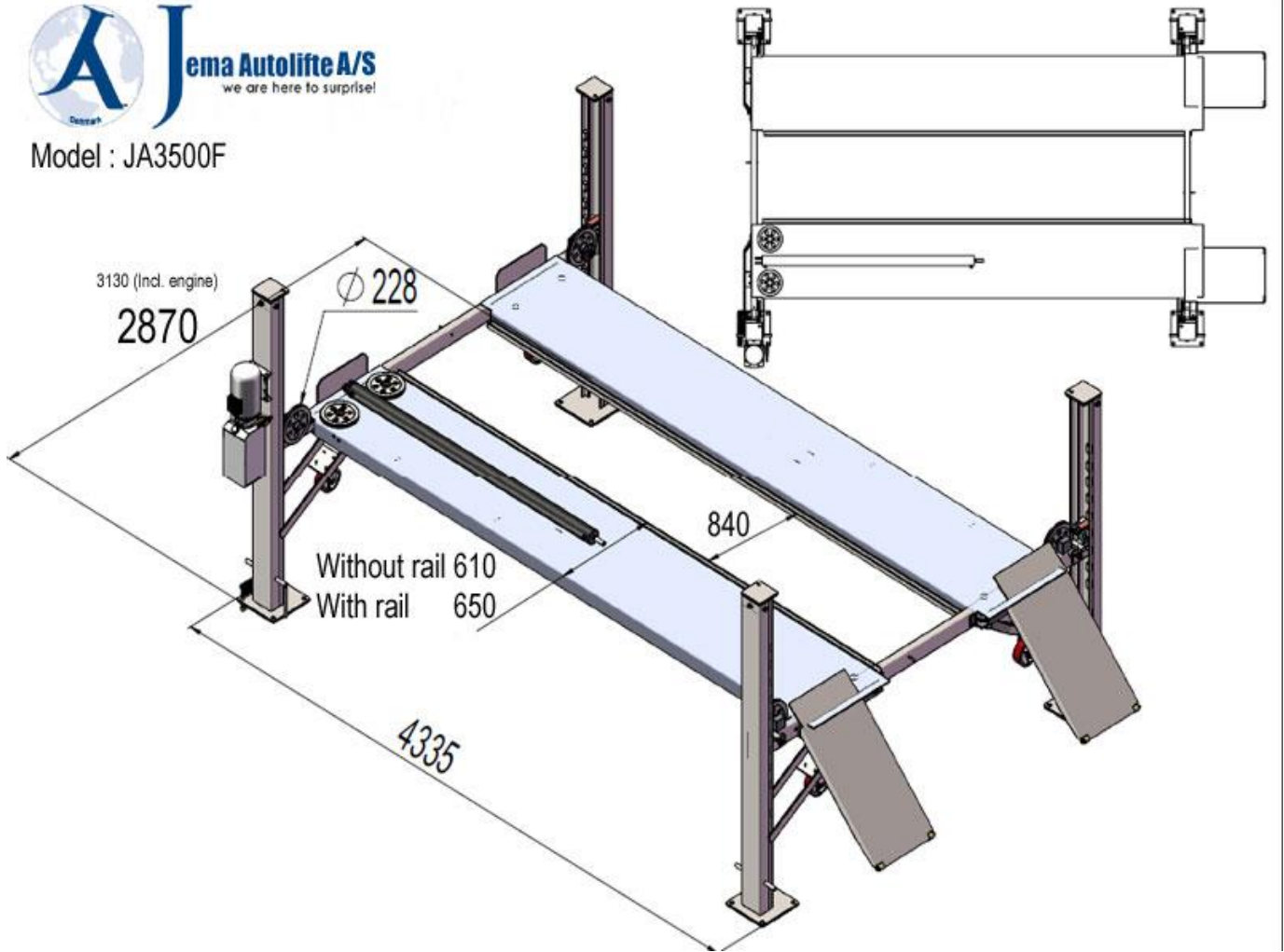
7. Annex

Annex1: Packing list of the whole lift.

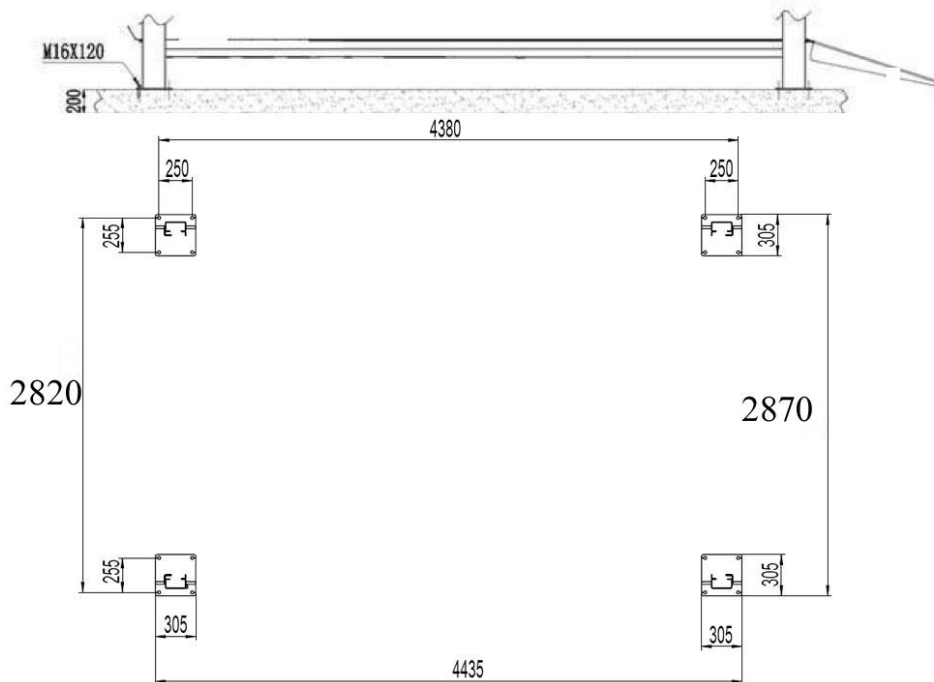




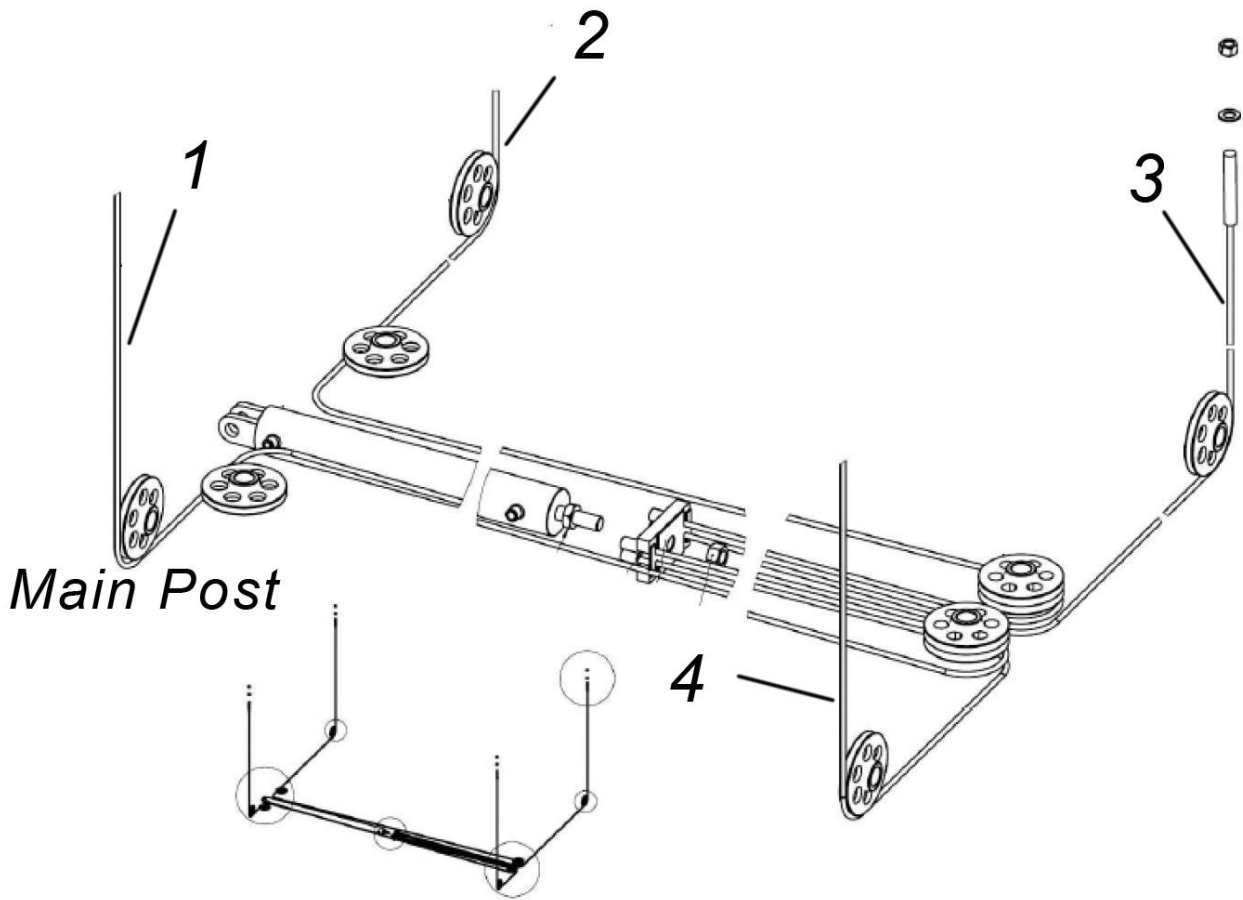
Model : JA3500F



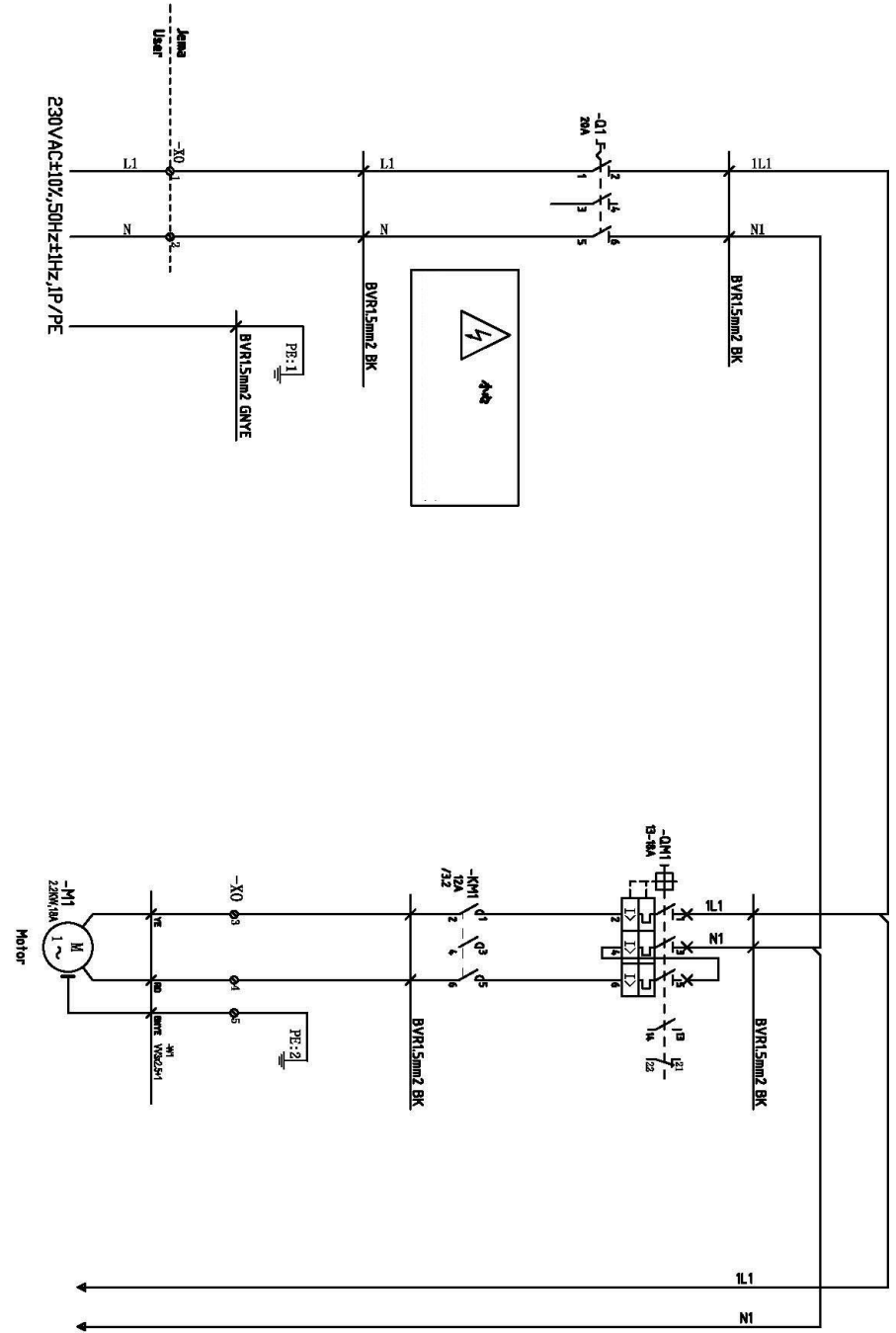
Annex3: Floor plan



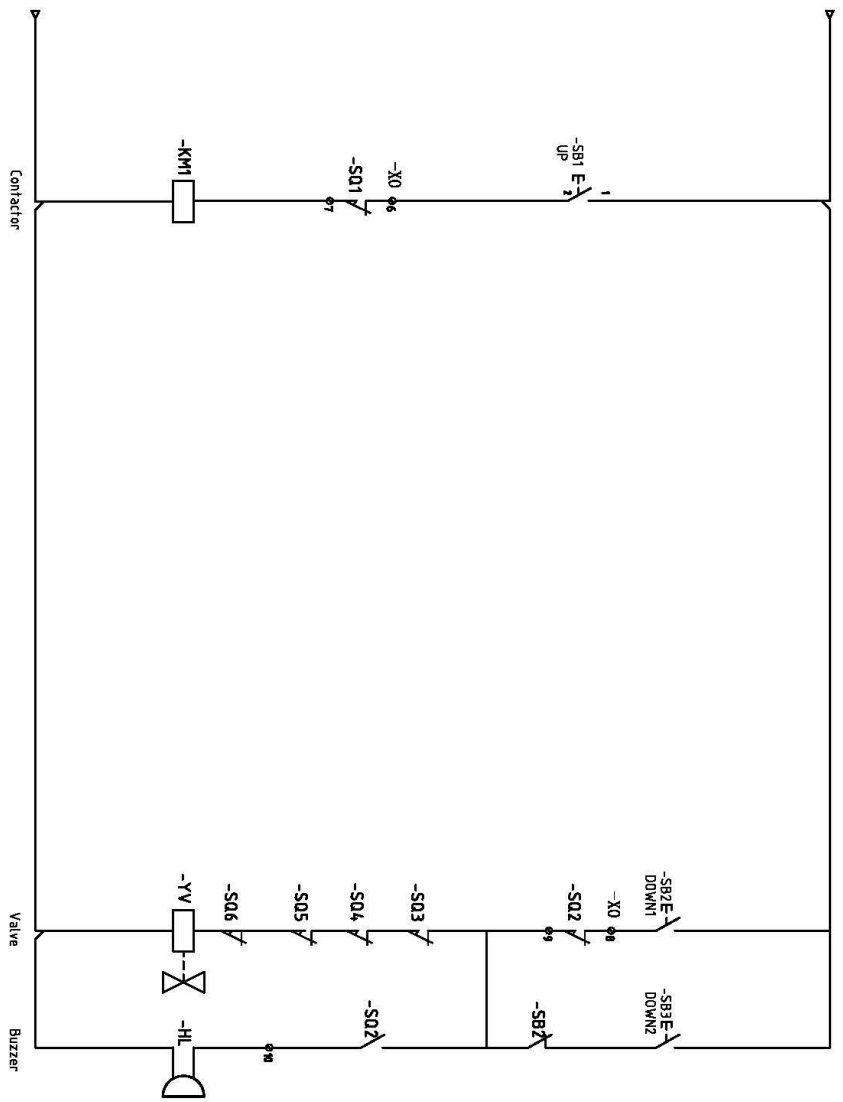
Annex 4: Steel cable connection



0 1 2 3 4 5 6 7 8 9

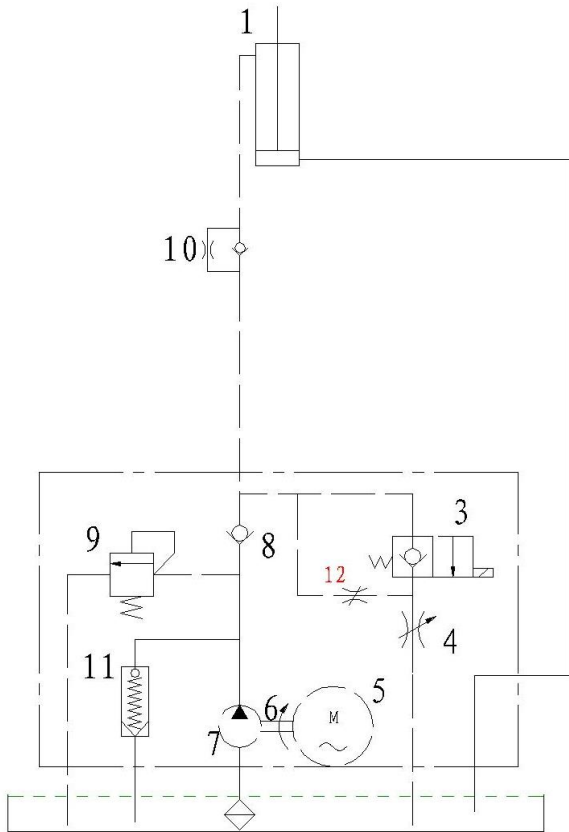


Change	Date	Name	Norm	Date	Handled	Checked	Vehicle Lift	JEMAutoLiftCo.,Ltd.	Power Supply
							350NF		
							Uspr.	Prod.	
									350NF-001
									< EMT
									Version 1.0
									Page 2
									of 4



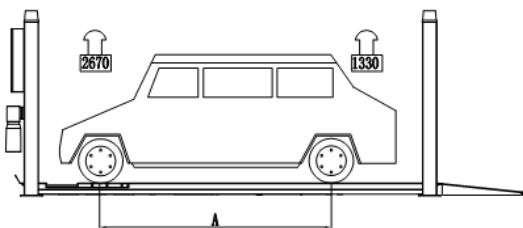
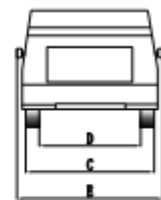
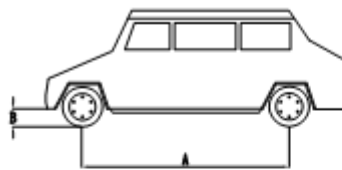
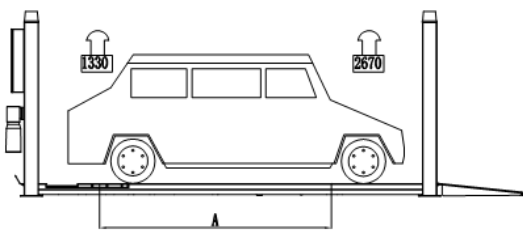
Change	Date	Name	Notes	Date	Handled	Checked	Approved	Vehicle Lift	JEMAL Auto Lift Co. Ltd.	Control Logic	Version 1.0	Page 3 of 4

Annex 5: Hydraulic working system



1. Oil cylinder
3. Electrical unloading valve
4. Throttle valve
5. Motor
6. Coupling
7. Gear pump
8. One way valve
9. Overflow valve
10. Anti-surge valve
11. Cushion valve
12. Emergency unloading valve

Annex6: Size and weight requirements on vehicles



	Min (mm)	Max (mm)
A	-	3000
B	100	-
C	-	2000
D	1000	-
E	-	2400

EC Declaration of Conformity (informative)

In accordance with EN ISO 17050-1:2010

We (name of applicant) Jema Autolifte A/S
of (address of applicant) Industrihegnet 2, 4030 Tune, Denmark
hereby declare that the equipment submitted for Type Approval is in conformity with the requirements of following EU Directives:

2006/42/EC The Machinery Directive

We hereby declare that:

Equipment Four Post Lift
Model number JA4000FP
Serial Number 202109001

is in conformity with the applicable requirements of the following documents

Ref. No.	Title	Edition/date
2006/42/EC	Essential health and safety requirements relating to the design and construction of machinery	Annex I
EN 60204-1	Safety of machinery - Electrical equipment of machines -- Part 1: General requirements	2018
EN 1493	Vehicle lifts	2010

The machine has been the subject of a type examination by CTI-CEM International Ltd (Notified Body Number 2845) & granted Type Examination Certificate number: C-353-20-1129-21-01-B1

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications and is in accordance with the requirements of the following Directive(s):

Signed by:

Full Name: Kasper
Title: Director
Location: Tune, Denmark
Date: 22, Nov. 2022



Document ref. No.
C-353-20-1129-21-01-B1

The technical documentation only for the machinery certified to the Test Standards as required by the Machinery Directive, is available from:

Name: CTI-CEM International Ltd
Address: Unit 200 Greenogue Business Park, Grants Lane, Rathcoole, Co. Dublin, Ireland

Certificate No: C-353-20-1129-21-01-B1

Date of Issue: 02 November 2022

Machinery Directive 2006/42/EC EC TYPE-EXAMINATION CERTIFICATE

Holder: Jema Autolifte A/S
Holder Address: Industrihegnet 2, 4030 Tune, Denmark
Product: Four post lift
Model: JA4000FP
Applied Standards: Annex I of the Machinery Directive
EN ISO 12100:2010 Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)
EN 60204-1:2018 Safety of machinery - Electrical equipment of machines - Part 1: General requirements
EN 1493:2010 Vehicle lifts
TCF Reference No: F-353-20-1129-21-01-B
Model Examined: JA4000FP (202109001)
Special Conditions: The certificate will be valid until 18 October 2027

Based on the evidence presented in the above Technical Construction File (TCF), we certify that the products listed above meet the relevant Essential Health and Safety Requirements of the Machinery Directive. It is the manufacturer's responsibility to meet the requirements of all applicable directives before applying CE marking to the product.

Certificate Approved by / Signed on behalf of CTI-CEM International Ltd



Paul White (Technical Manager)

