TW 445W

Rolling Jack
Manual or Pneumatic Release
Lifting Capacity: 3000 KG

twinbusch.de

Installation, Operation and Parts Manual

Please read this entire manual carefully and completely before installation or operation of the lift.

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IMPORTANT SAFETY INSTRUCTIONS

1.1 Important notices

We 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 jack 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.

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 Read and understand all safety warnings before operating.

1.3.2 Keep hands and feet away from any moving parts.

1.3.3 Only properly trained personnel can operate the lift.

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

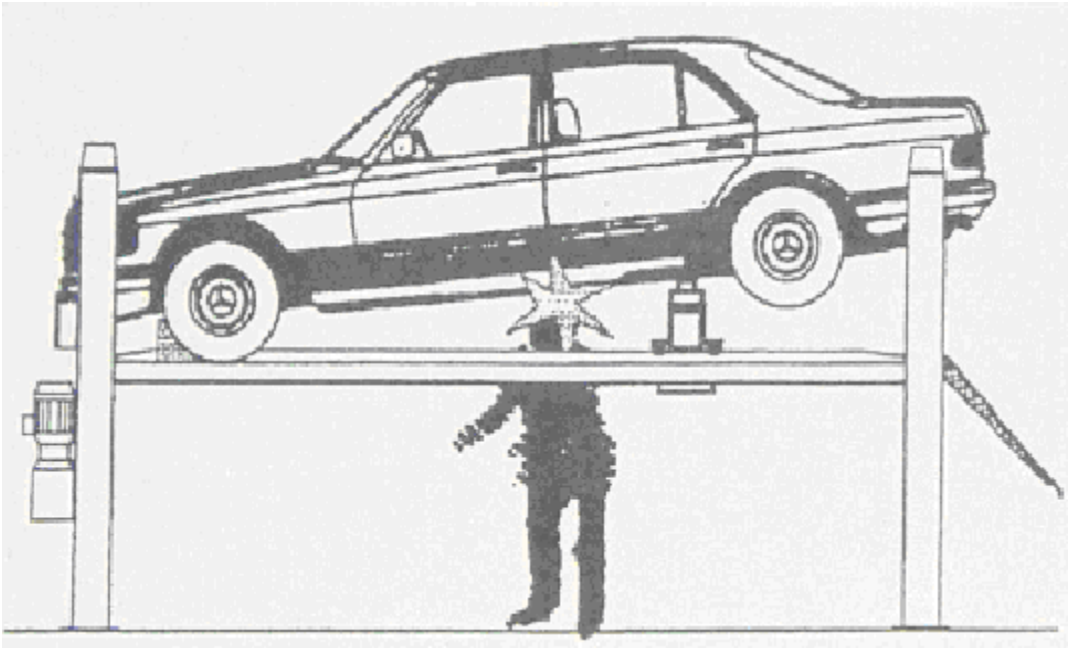
1.3.5 Always insure the safety locks are engaged before any attempt to work near or under the vehicle. Never remove safety related components from the lift. Do not use if safety related components are damaged or missing.

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

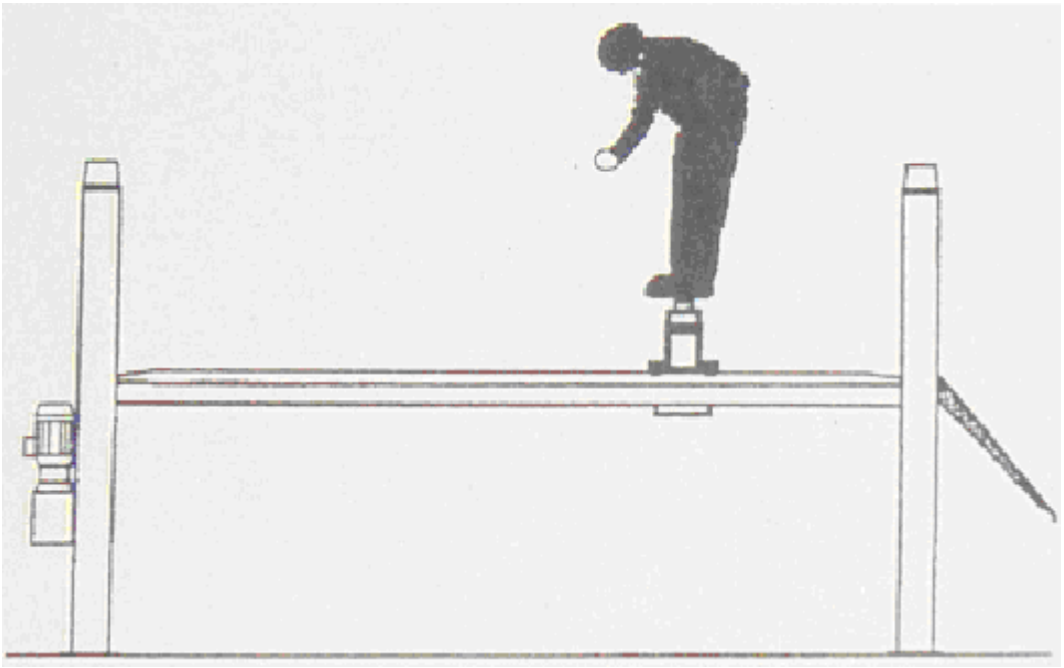
1.3.7 Do not modify any parts of the jack without manufacturer’s advice.

1.4 Warnings

1.4.1 Avoid being bashed over head.



1.4.2 Forbidden standing over the lifting beam.



OVERVIEW OF THE JACK

2.1 General descriptions

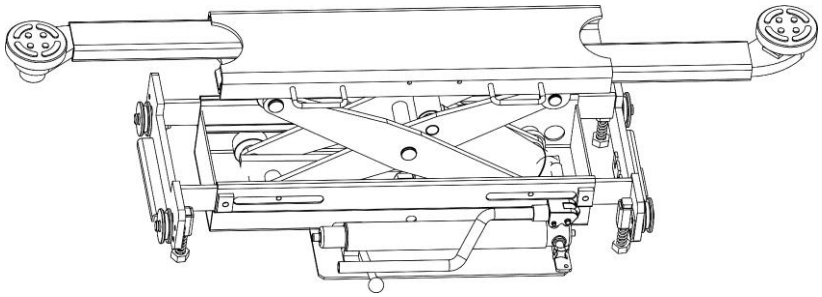
This jack is mainly composed of lifting brackets, beam, base, oil cylinder and pump.

It is powered by a manual pump or pneumatic pump. The pressure of oil pushes piston of oil cylinder and brings up and down movement of the lifting beam.

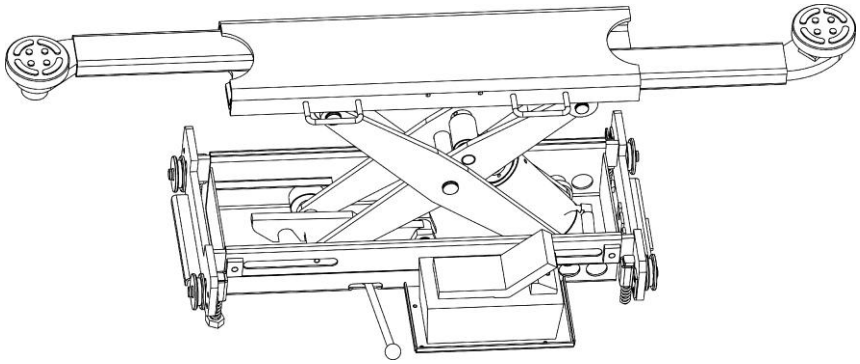
During lifting process, the safety lock will automatically and firmly bite with the safety rack. Therefore, no sudden dropping-down will happen in case the hydraulic system beaks down.

To meet specific needs, there are two options for the jack

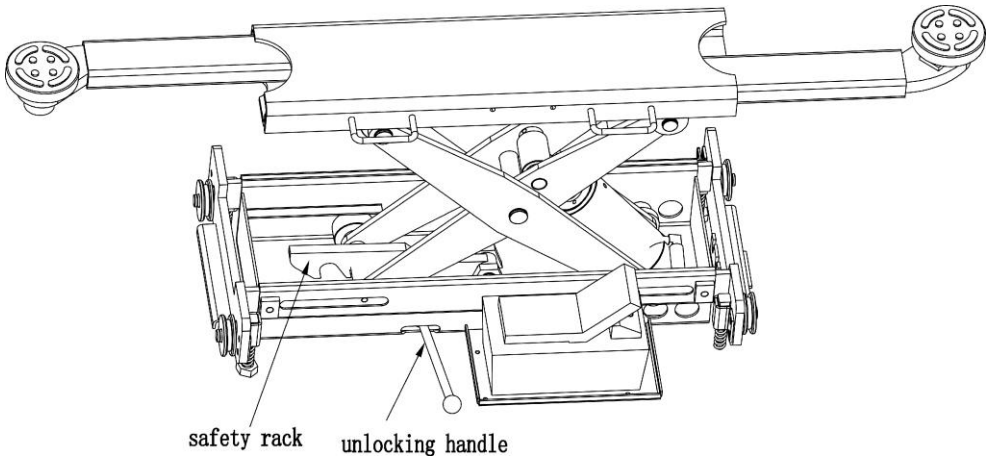
1. Manual pump



2. Pneumatic pump

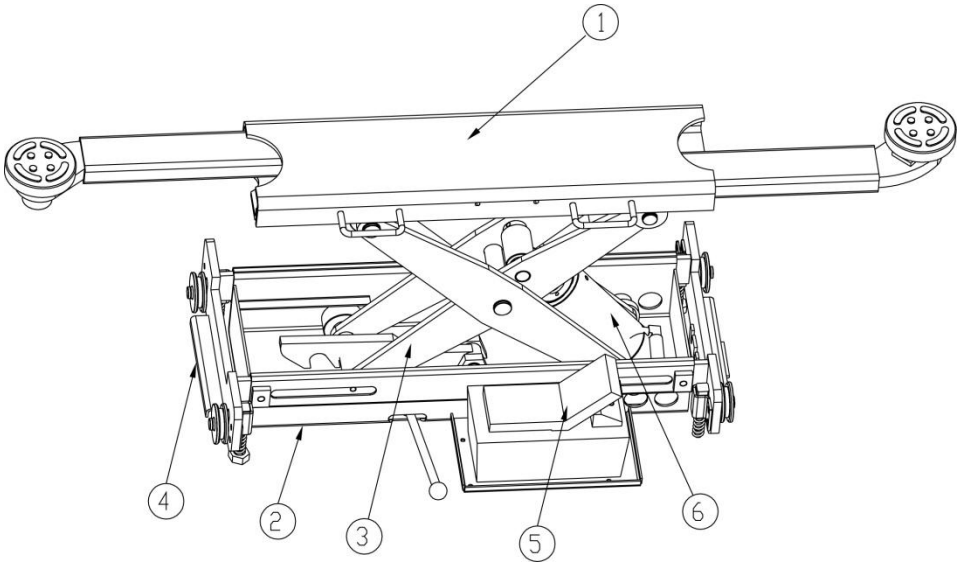


2.2 Safety structure



2.3 Construction of the lift

1. Beam 2.Base 3.Moving bracket 4.Supporting frame 5.Mannul /pneumatic pump 6.Oil cylinder



2.4 Name plate

Check the work voltage and the lift capacity printed on the name plate.

Do not lift vehicles with weight beyond the capacity.

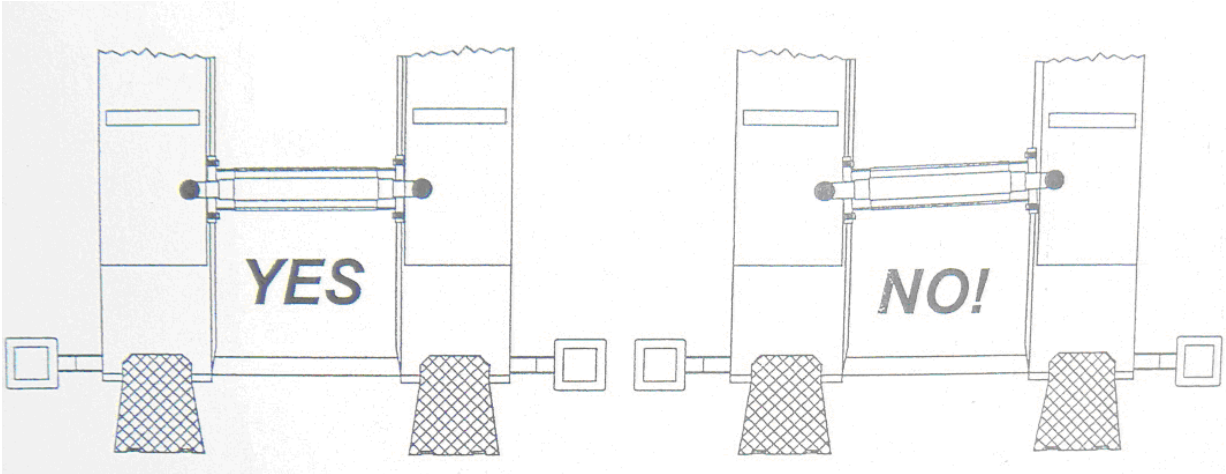
S/N and production date could be helpful for after sale service.

INSTALLATION INSTRUCTIONS

3.1 Preparations before installation

- ✓ Appropriate lifting equipment
- ✓ 14# open spanner

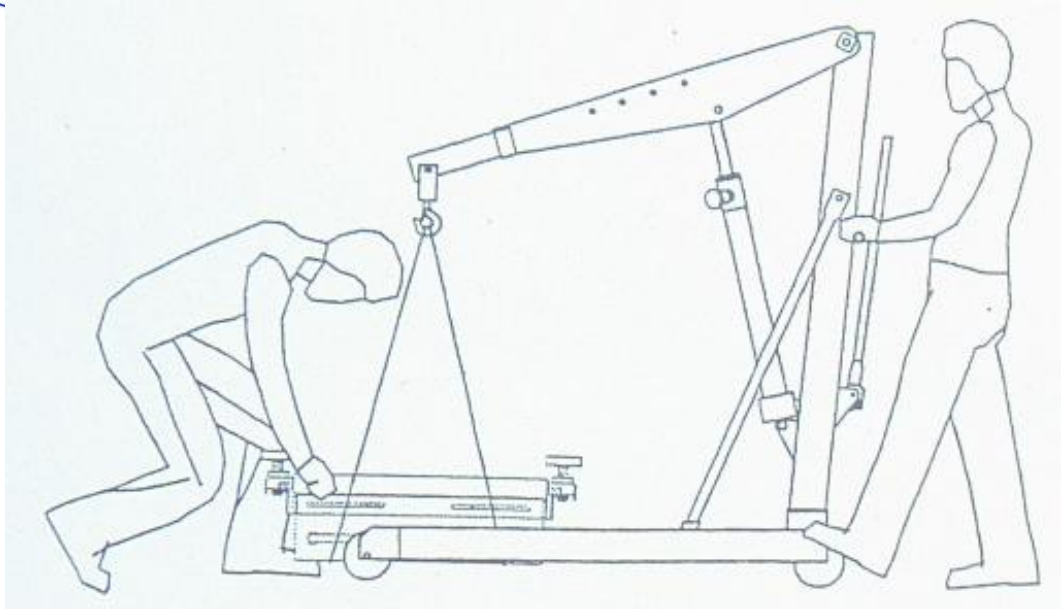
3.2 Precautions for installation



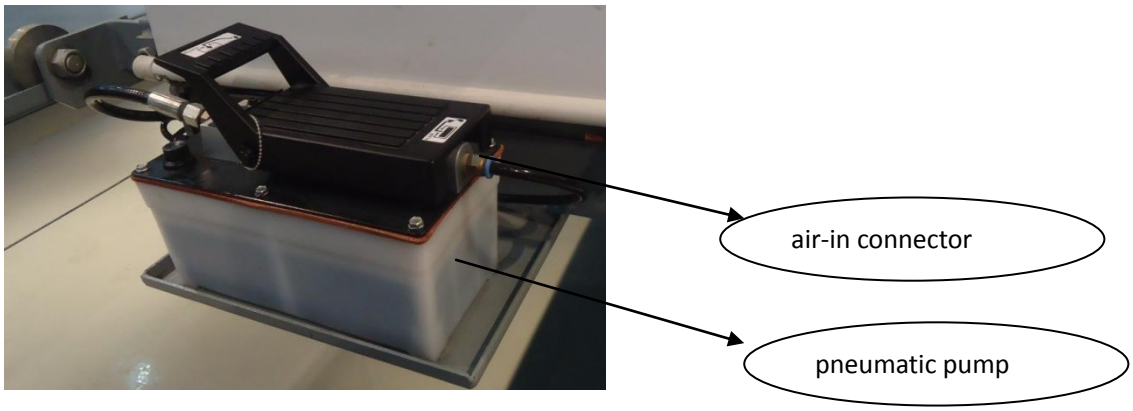
3.3 Installation instructions

Step1: Remove the package

Step2: Use proper lifting tools to have the jack placed onto your lift.



Step3: Connect air hose (it is only necessary for jack equipped with pneumatic pump)



The end user need to prepare ∅8mm air hose. Length of the hose is decided by practical use.

Connect one end of the hose to the air-in connector on the pump and the other end to the air supply equipments.

(Air pressure: 6~8kg/cm²)

3.4. Items to be checked after installation.

S/N	Check items	YES	NO
1	If the roll wheels of the jack could move easily in the track?		
2	If the jack is slant?		
3	If all the connections are firm and reliable ?		
4	If it is grease as being required?		

OPERATION INSTRUCTIONS

4.1 Precautions

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

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

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

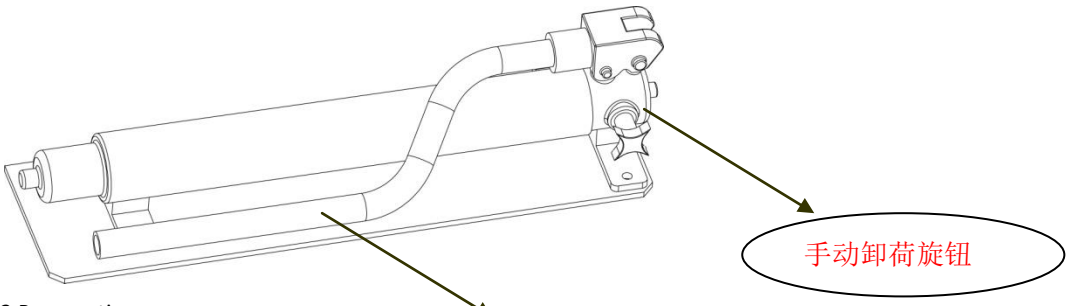
4.1.4 Only when your lift has been raised to a proper height can the operator use the jack.

4.1.5 Make sure the safety lock of the jack is engaged before start working under the vehicle and during lifting and lowering process, height of operator must be lower than platform of your lift.

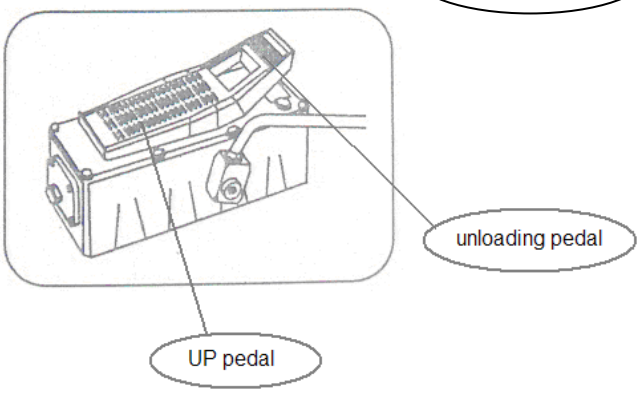
4.2 Operation instructions

4.2.1 Operation instructions of the hydraulic pump

1.Manualpump



2.Pneumatic pump



DANGER: When raise the jack to proper height, it is necessary to press the unloading valve to have the safety lock engaged before doing any service work.

ATTENTION: After service work finished, raise the jack to release the safety lock first and then press the unlocking handle and manual unloading valve to lower the jack.

4.2.2 Raise and lower the jack

Raise the jack

1. Make sure the operation manual is well understood before operation.

2. Move the lifting tray to proper pick-up points.

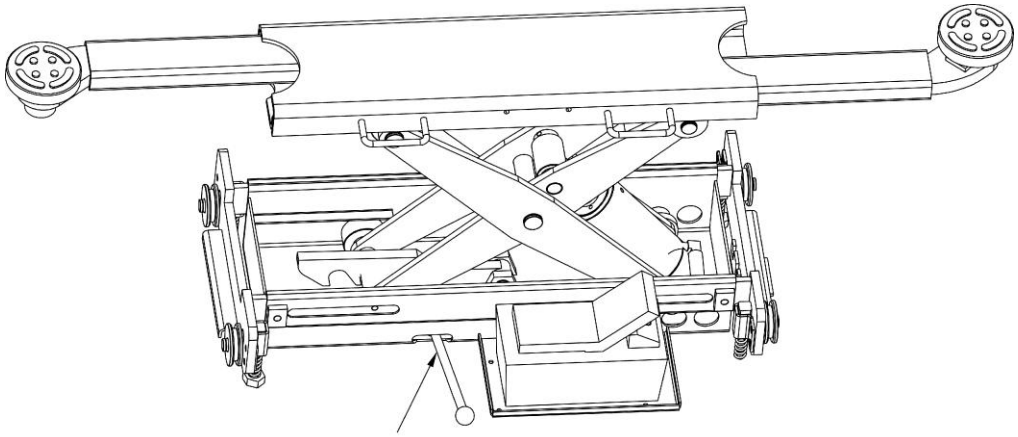
3.**Maunal hydraulic pump** ： Move forth and back the drive handle to raise the jack.

Pneumatic hydraulic pump ： Press the pedal on the pump to raise the jack.

4. **Manual hydraulic pump** ：After being raised to required height, press manual unloading handle on the hydraulic pump to make the safety lock engaged and check again the stability of the vehicle lifted before doing service work underneath.

Pneumatic hydraulic pump ： After being raised to required height, press manual unloading pedal on the hydraulic pump to make the safety lock engaged and check again the stability of the vehicle lifted before doing service work underneath.

Lower the jack



1. **Manual hydraulic pump**： Move forth and back the handle to raise the jack and release the safety lock.

   Pneumatic hydraulic pump： Press the pedal on the pump to raise the jack and release the safety lock.

2. Pull the unlocking handle.

3. **Manual hydraulic pump**: Press the manual unloading handle to lower the jack.

   Pneumatic hydraulic pump: Press the manual unloading pedal to lower the jack.

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, troubles could be judged and solved much faster if more details or pictures can be provided.

TROUBLES	CAUSE	SOLUTION
Abnormal noise	Trash in the track	Clean
Unloading after being raised	Oil hose leak	Change oil hose
	Cylinder seals bad	Change seal components
	Single-way valve seal bad	Dismantle and clean or replace with a new one
	Overflow valve does not work	Dismantle and clean or replace with a new one
	Soul performance of solenoid unloading valve	Dismantle and clean or replace with a new one
Raise too slow	Oil filter plugged	Dismantle and clean or replace with a new one
	Air in the oil	Add more oil
	Overflow valve not adjusted well	Adjust
	Temperature of oil high than 45°	Change oil
	Seal ring abraded	Change seal components

MAINTENANCE

Easy and low cost routine maintenance can ensure the jack 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.

6.1 Daily checking items before operation

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

. Judge whether the safety latches are engaged by sound.

. Check whether oil hose well connected and whether it leaks or not.

6.2 Weekly checking items

·Check the flexibility of moving parts.

·Check the working conditions of safety parts.

.6.3 Monthly checking items

. Check the tightness of hydraulic system, screw tight the connectors.

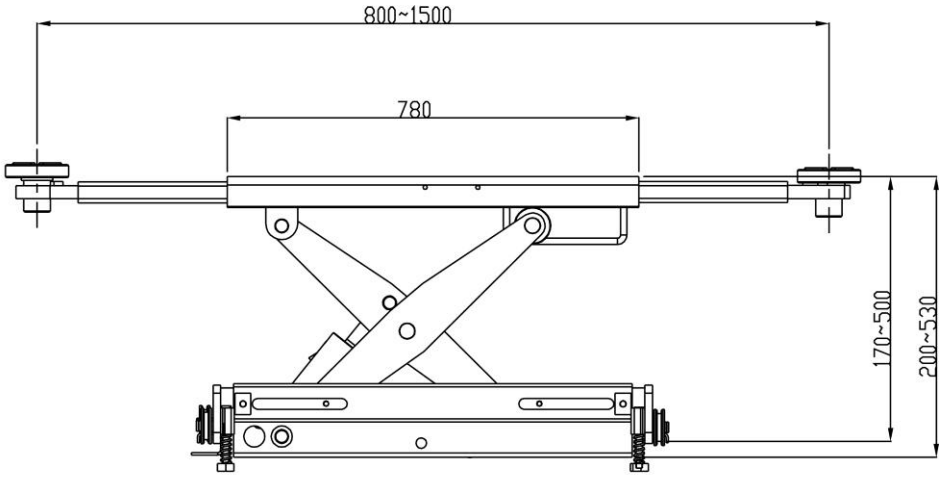
. Check the abrasion of moving parts.

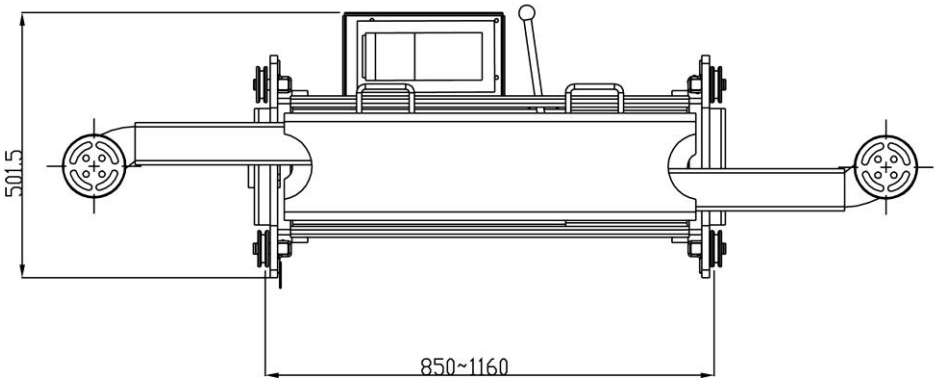
If the above maintenance requirements are strictly followed, the jack will keep in a good working condition and meanwhile accidents could be avoided to a large extent.

ANNEX

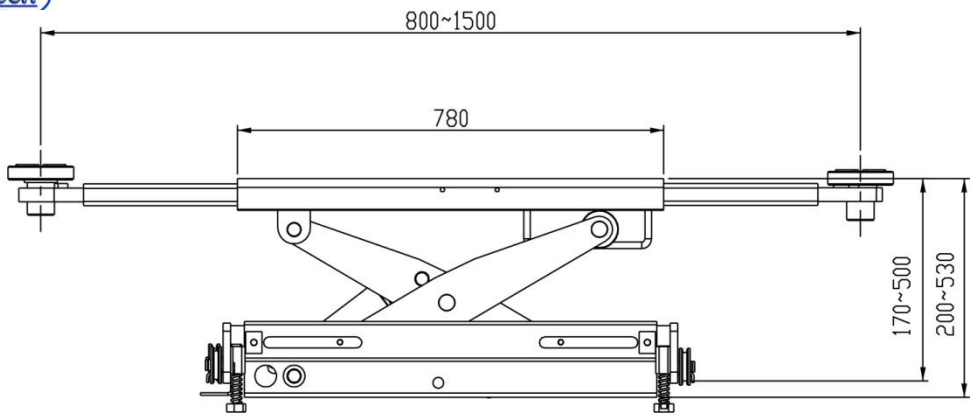
Annex1, Overall dimension

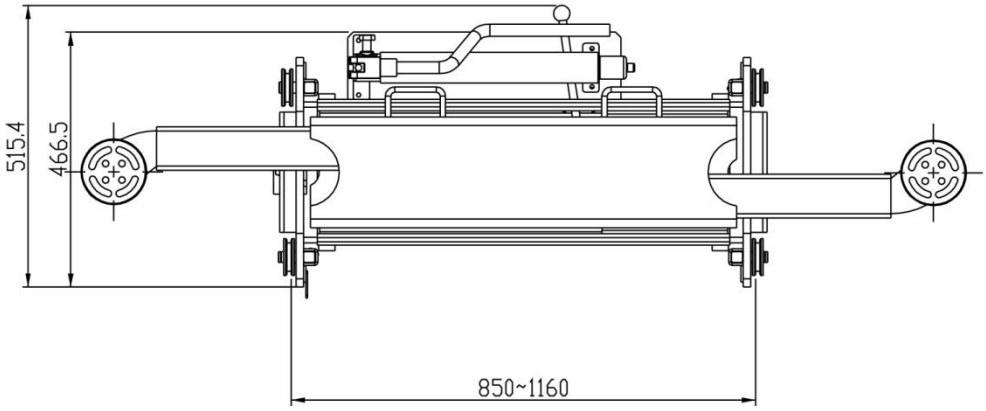
1. Pneumatic pump



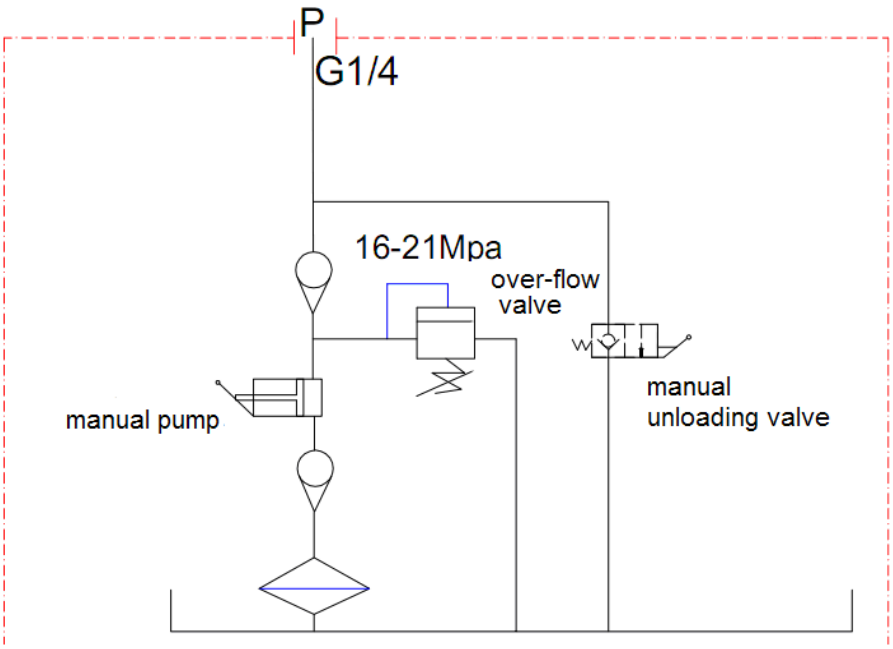


2.Manual pump

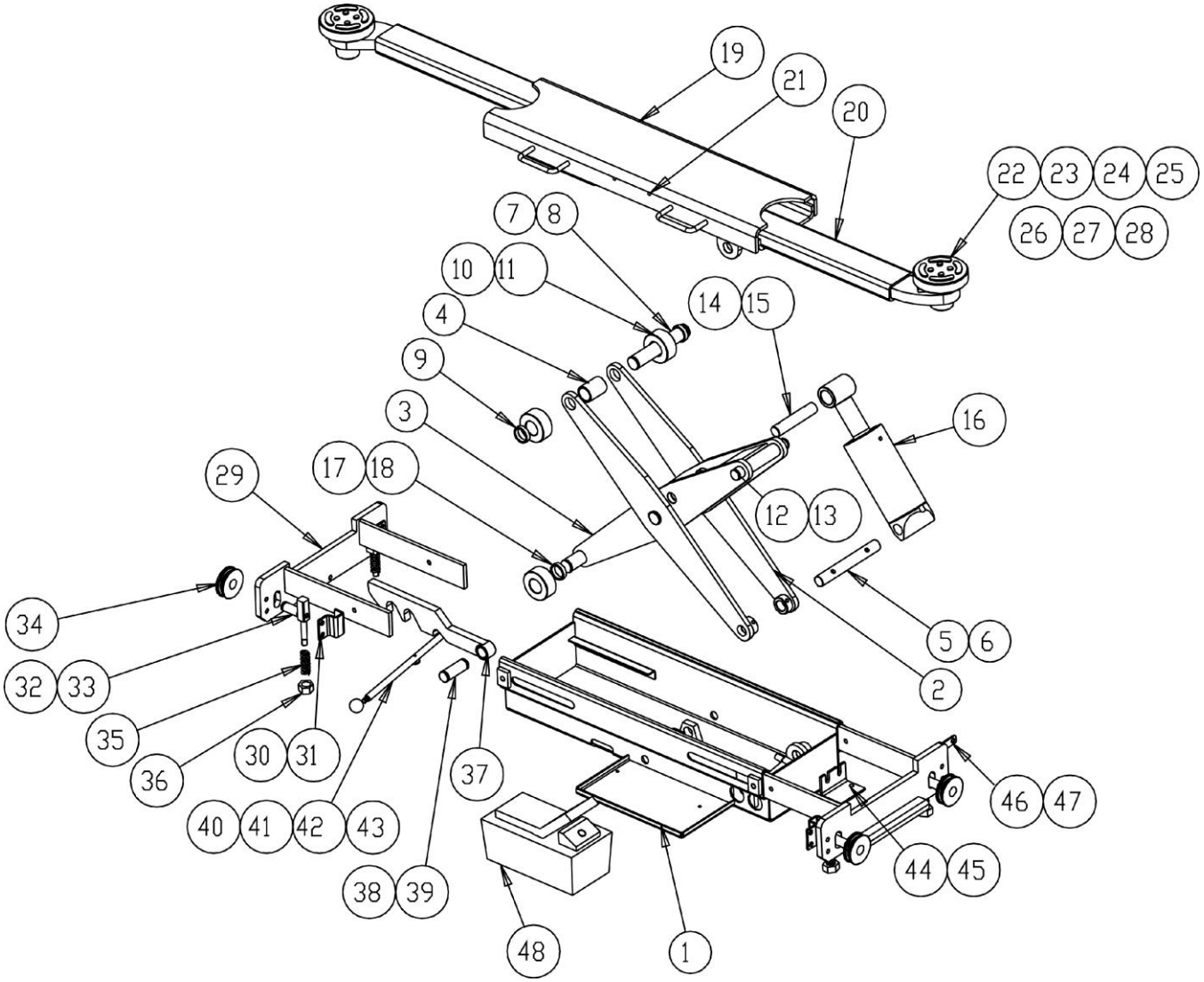




Annex2, Hydraulic system



Annex3, Separated drawings



S/N	Material #	Name	Specification (drawing#)	Qty	Note
1		Base plate	FL-8448T-A10-B1	1	
2		Moving bracket A	FL-8448T-A10-B2-C1	2	
3		Moving bracket B	FL-8448T-A10-B3	2	
4		Roller spacer	FL-8448T-A10-B2-C4	1	
5		Shaft A	FL-8448T-A10-B2-C5	1	
6		Hexagon socket set screw with cone point	M8*12	2	
7		Shaft B	FL-8448T-A10-B2-C6	2	
8		Circlip for shaft	D30	4	
9		Roller spacer 2	FL-8448T-A10-B2-C7	2	
10		Iron roller	FL-8448T-A10-B2-C3	2	
11		Lubrication bearing SF-1	3030	4	
12		Shaft D	FL-8448T-A10-B3-C4	1	
13		circlip for shaft	D30	2	
14		Oil cylinder shaft	FL-8448T-A10-B3-C2	1	
15		Hexagon socket set screw with cone point	M8*12	2	

S/N	Material #	Name	Specification (drawing#)	Qty	Note
16		Oil cylinder	φ80*85	1	
17		Roller spacer 2	FL-8448T-A10-B2-C7	2	
18		Iron roller	FL-8448T-A10-B2-C3	2	
19		Beam	FL-8448T-A10-B4-C1	1	
20		Extension arm	FL-8448T-A10-B4-C2	2	
21		Inside hex round head screw	M8*20	2	
22		Pad welding parts	FL-8224-A7-B3-C1	2	
23		Screw barrel	FL-8224-A7-B3-C2	2	
24		In screw barrel	FL-8224-A7-B3-C3	2	
25		Round rubber pad	FL-8224-A7-B3-C4	2	
26		Roundwire snap ring for shaft	34	4	
27		Roundwire snap ring for shaft B	22	2	
28		Inside hex round head screw	M8X16	4	
29		Frame bracket	FL-8448T-A10-B5-C1	2	
30		U plate	FL-8448T-A10-B6	4	
31		Inside hex round head screw	M10*10	7	
32		Limit shaft	FL-8448T-A10-B7	4	
33		Circlip for shaft	D20	4	
34		Roller	FL-8448T-A10-B8	4	
35		Spring	FL-8448T-A10-B9	4	
3		hexagon nut	M12	4	
37		Safety welding parts	FL-8448T-A10-B10	1	
38		Safety roller	FL-8448T-A10-B12	2	
39		Circlip for shaft	D25	2	
40		Handle	FL-8448T-A10-B11	1	
41		Handle ball	M10×32	1	
42		Inside hex round head screw	M6*25	1	
43		Flat washer C class	M6	1	
44		rollover prevention dam board	FL-8448T-A10-B13	2	
45		Inside hex round head screw	M10*15	4	
46		Air hose putting plate	FL-8448T-A10-B14	1	
47		Inside hex round head screw	M10*20	1	
48		pneumatic pump	NAP-003	1	
		Manual pump	NHP001	1	

Annex4, Spare parts list

S/N	Material #	Name	Specification (drawing#)	Qty	Note
1		Roller	FL-8448T-A10-B8	4	
2		Iron roller	FL-8448T-A10-B2-C3	2	
3					

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