AMGO® Hydraulics

Original

Installation And Service Manual

ROLLING JACKS

Model: RJ-20A

Cargo Claims

If there is any missing or damaged product during transportation, the buyer must notate on the shipping paperwork or refuse the shipment. NOTATE ALL DAMAGE OR REFUSE DAMAGED SHIPMENT!

⚠ DANGER

Read the entire contents of this manual before using this product. Failure to follow instructions and safety precautions could result in serious injury or even death. Make sure all other operators also read this manual. Keep this manual near the machine so that it can be seen by all users. By proceeding with installation and operation, you agree that you are fully understand the contents of this manual and take full responsibility for the use of the product.

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PROFILE

This instruction manual is specially prepared for you. Your new lift is the product of over a decade of continuous research, testing and development and is the most technologically advanced lift on the market today.

Please make sure to read through this manual before operating the lift.

Record the information on the nameplate label here:

Model No.: _____

Serial No.: _____

Manufacturer date: _____

WARRANTY

The warranty period for the steel structure part of new car lift is 5 years, hydraulic components, bronze bushings, sliders and plastic parts are under warranty for 3 years, and electrical components warranty for 2 years. During the warranty period, the manufacturer will repair or replace the defective parts free of charge including shipping costs.

This warranty does not cover damage caused by normal wear and tear, improper use, damage in transit, or damage caused by lack of maintenance.

This warranty is unique and supersedes what is expressed and implied in all other warranties. The manufacturer shall not be liable for any particular, indirect or accidental damage resulting in breach of or delay in the execution of the warranty. The manufacturer reserves the right to design and improve the product and has no obligation to make notice of the changes in advance.

The product warranty based on the above clause is based on the model number and serial number of the equipment. This information must be provided in conjunction with all warranty information at the time of service and warranty

IMPORTANT SAFETY INSTRUCTIONS

Please read this safety instructions entirely in first!

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

1. Read explicitly and understand all safety warnings before operating the lift.
2. Keep your hands and feet away from the machine. Keep hands and feet away from any moving parts. Keep your feet away from the lift as it descends to avoid pressing on pointed objects.
3. Keep the work area clean. A cluttered workspace can lead to injuries.
4. Do not use the equipment in wet and rainy places, keep it away from the rain, keep the working area well lit.
5. Only trained operators are allowed to handle the lift machine. All untrained persons must stay away from the workplace. Never allow untrained persons to handle or operate the machine.
6. Use the lift properly. Use the lift in the correct way.
7. Warning! Keep persons and objects from the lift when lifting the a vehicle.
8. If the vehicle is at risk of falling, make sure no one is around the lift.
9. Before preparing to approach or service the vehicle, ensure that the safety device is in effect.
10. Dress appropriately when operating machines, and consider wearing non-slip steel-toe shoes for added safety..
11. Beware of electric shock. In order to protect the operator from electric shock, the lift in use must be grounded. Do not connect the green wire to the terminal. This is the ground wire.
12. Danger! The power supply used in this type of lift has high voltage. Please disconnect the power supply before any circuit repair. Unplug in case the power supply is accidentally switched on during maintenance.
13. Warning! There is a risk of explosion. There are parts in the equipment that produce arc light and spark. Do not operate near flammable gas. This machine should not be placed in the lounge or basement.

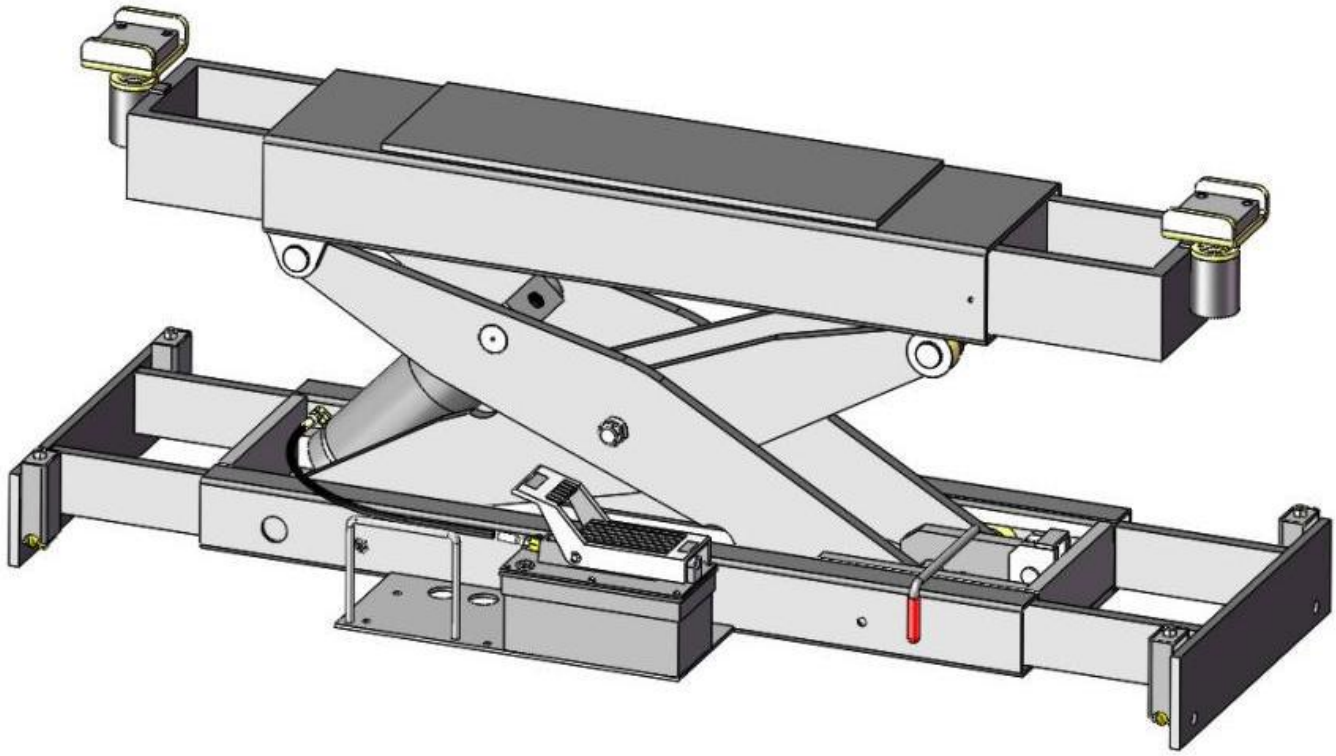
14. Maintain with care. Keep the machine clean for better and safer operation. Perform proper lubrication and maintenance procedures according to the manual. Keep handles or buttons clean, dry, and free of oil.
15. Stay alert. Use common sense to observe what you are doing.
16. Check damages parts. Check moving parts, damaged parts or anything that affects their operation. Do not use the machine if any part is damaged.
17. Do not remove any safety part from the machine. Do not use the machine once the safety part damaged.

! This symbol indicates important safety instructions that, if not followed, could endanger the safety of persons or properties, cause serious personal injury. Please read and follow all instructions in this manual before operating the machine.

In order to protect the safety of personnel and equipment, only trained and competent operators are allowed to touch and use the machine if they are fully aware of the use procedures, potential hazards, and scope of use of the machine. The machine is not designed to be used alone, or to lift other machines or transport personnel.

I. FEATURE AND SPECIFICATIONS

- Self-locking safety mechanism: dual safety lock device & mechanical lock.
- Easy operation: Equipped with pneumatic pump.
- Can be used separately or work with four post lifts and large scissors lifts.
- Single screw saddle adapters with 3", 6" extension adapters.



RJ-20A

Fig.1

Measurement Image

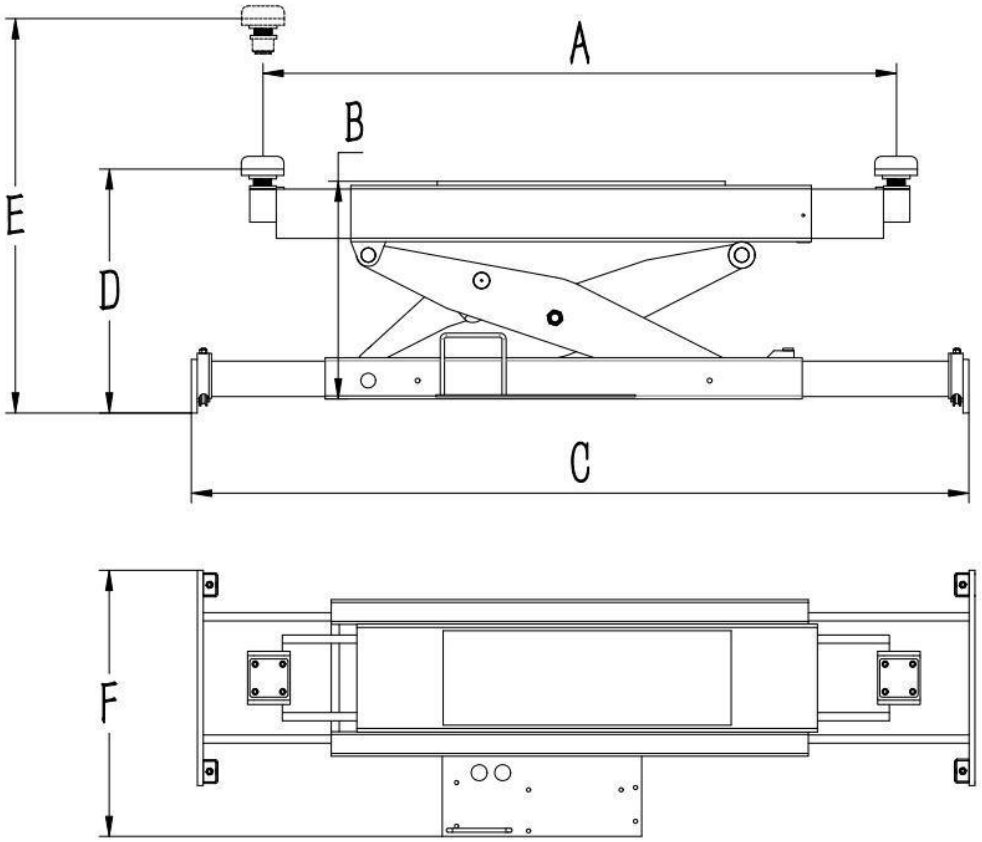


Fig.2

Specifications

Model	Lifting capacity	A	B	C	D	E		F	Air Pressure	Pump
		Arm Pads Reach	Min. Height	Support Base Width	Min. Rubber pad height	Max Lifting Height (without adapters)	Max Lifting Height (with adapters)	Overall Width		
RJ-20A	20000lbs	45 1/4”-72 5/8”	14 3/16”	47 1/4"-63”	16 9/16”-17 15/16”	31”- 32 5/16”	40”- 41 5/16”	25 1/2”	0.8MPa	Pneumatic pump

II.Storage and Installation

1. Requirements.

1.1. Store the equipment in a dry, non-moldy, non-flammable environment.;

1.2. The lift is only approved for indoor installation and use, and outdoor installation is prohibited;

1.3. When installing the device, take safety precautions according to the instructions to avoid device damage;

1.4. Do not install the device outdoors if the installation area is not protected;

1.5. After installation, the whole machine should be checked to make sure that every component is working properly;

1.6. Ensure that only authorized personnel are allowed to operate the equipment. All installation and maintenance must be carried out by an authorized and qualified technician. Do not make any change to the equipment.

2. The equipment should be unloaded and transferred by forklift or lifting crane.

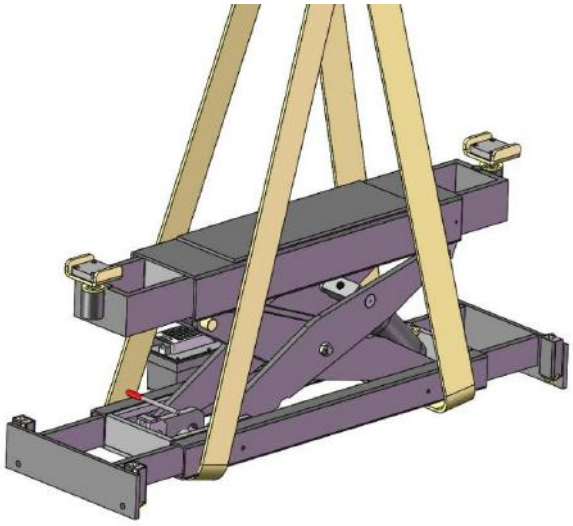


Fig.3

3. Air source requirements

The air source pressure must be above 0.8MPa

III.Installation steps

1. Check the parts before assembly, confirm all the parts are prepared.

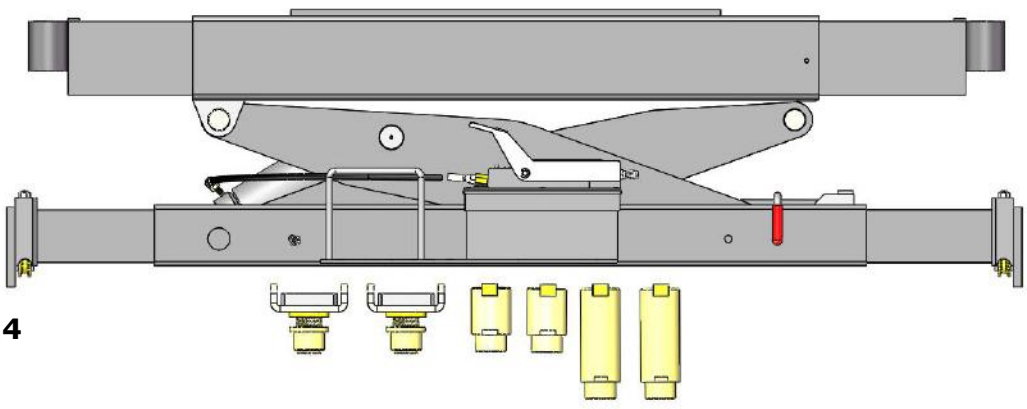


Fig.4

2. Equipment installation

2.1 Make sure the 4-post lift or large scissor lift is fully lowered and the safety lock is locked;

2.2 Adjust the distance between rollers of support base according to distance between rails of platforms;

2.3 Use the hoist crane,forklift or other lifting equipment to lift the rolling jack onto the guide rails of four post lift (large scissor lift).

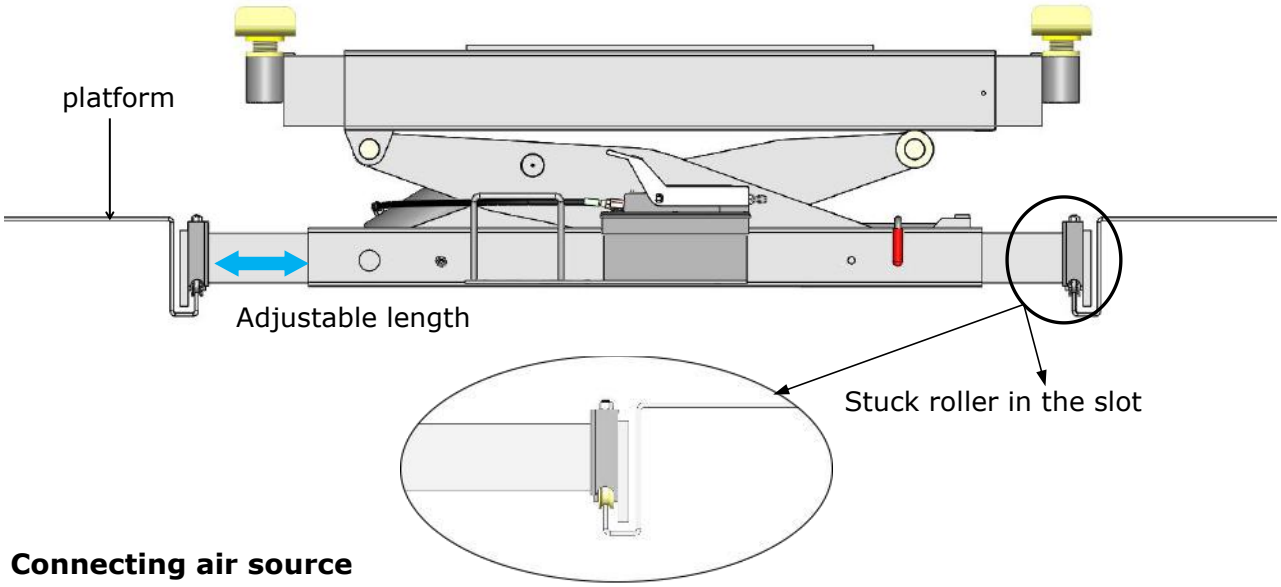


Fig.5

3. Connecting air source

After the rolling jack is installed, plug air line fitting into pneumatic pump input fitting, the air source is then connected to the pump.

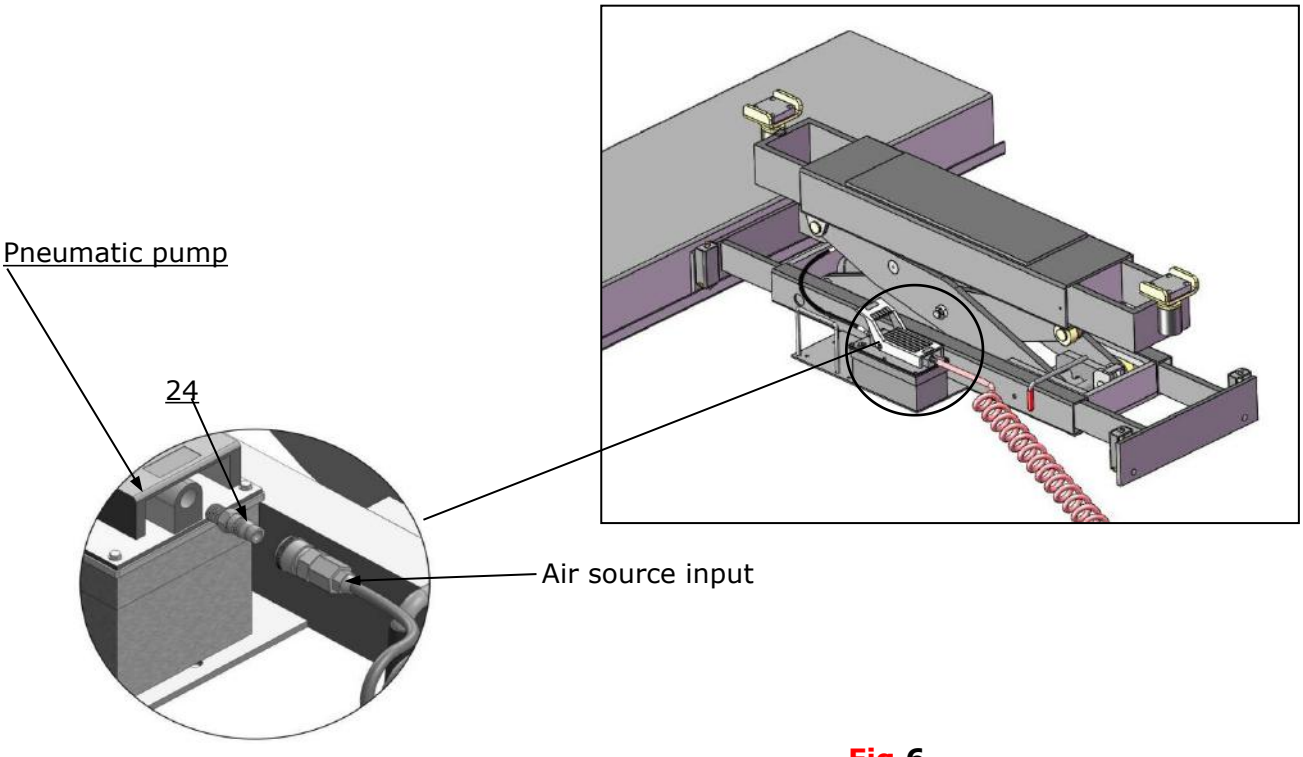


Fig.6

IV. Operation instruction

1. Preparation before use:

1.1 Make sure the 4-post lift or large scissor lift is locked;

1.2 The equipment is activated by air source, please prepare air source in advance;

1.3 An oil-water separator must be installed on the air source device. Failure to install oil-water separator may cause a damage to the equipment.

1.4 The pneumatic pump has been filled with enough hydraulic oil at factory, do not need to fill more unless there is a oil leakage.

2. Operation of RJ-20A

2.1 Operating instructions for pneumatic pump

Loosen the exhaust nut approximately one turn counterclockwise before starting normal operation(it was tightened for shipment).

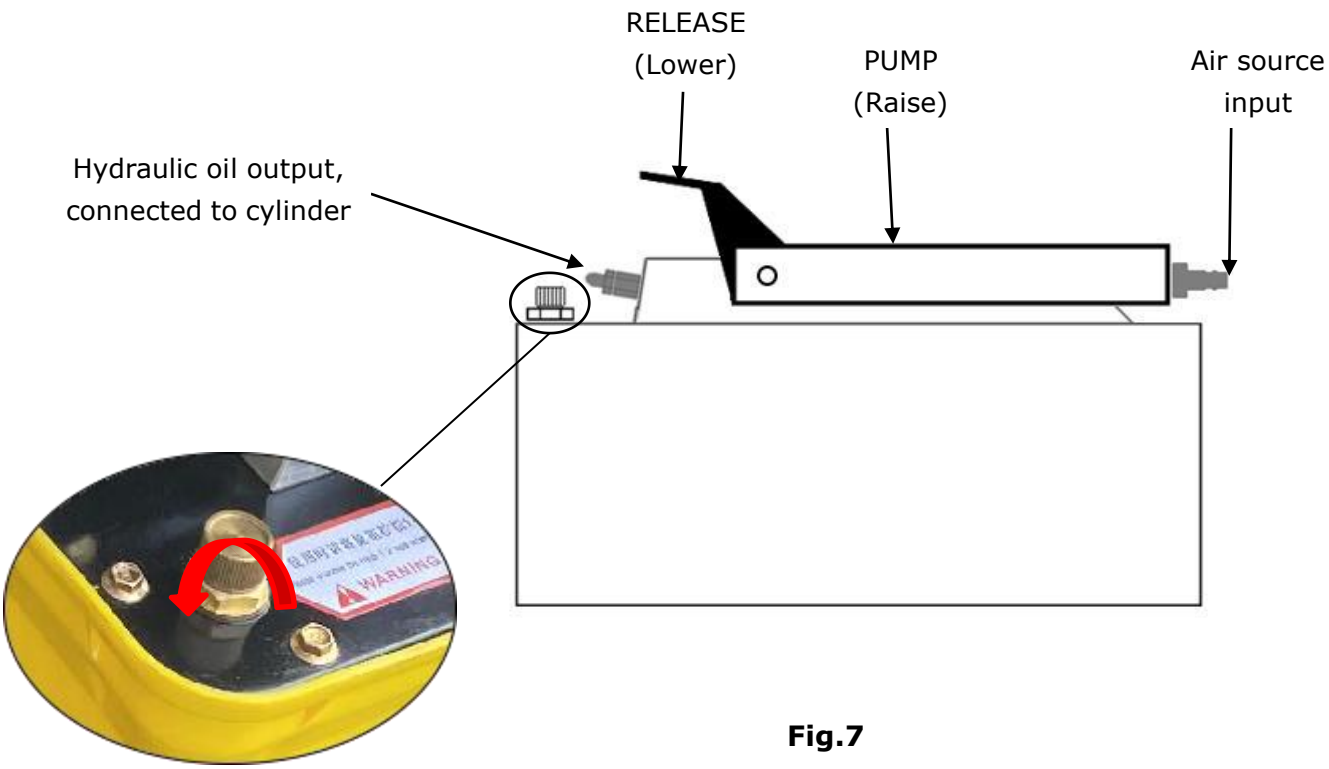


Fig.7

Loosen one turn counterclockwise

Warning: before the vehicle enters or exits the lift, ensure the rolling jack is completely lowered and rubber pads assy. are all removed, to prevent the vehicle from hitting the chassis.

2.2 Lifting operation of RJ-20A

A. Adjust the rubber pad assy. positions according to the vehicle lifting points.

Adjust the support pads to the vehicle's support points

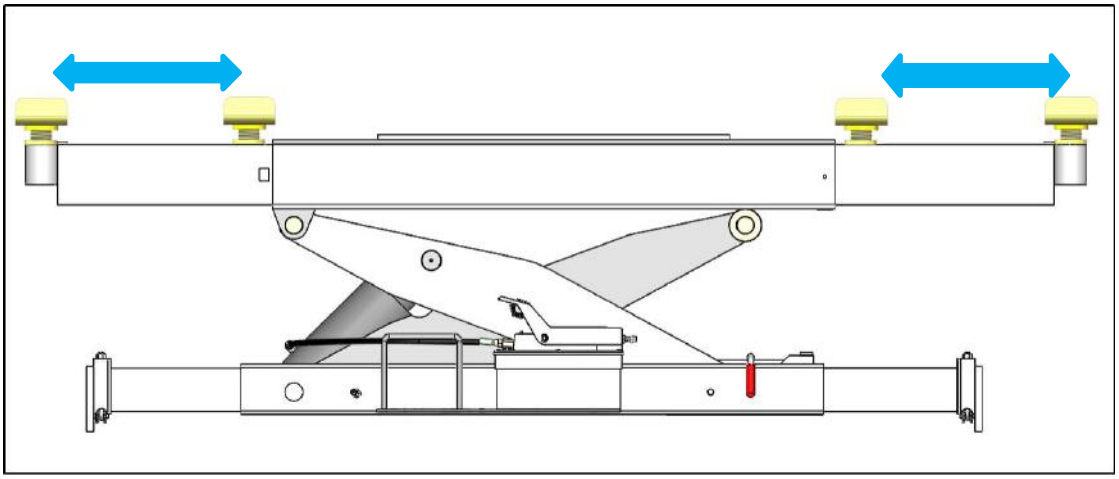


Fig.8

B. Press 'PUMP' to fill air into the pump and the Rolling Jack rises.

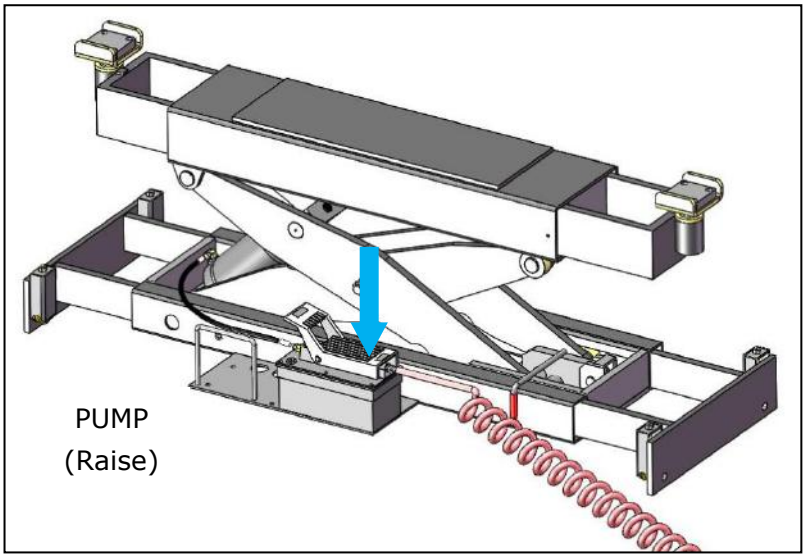


Fig.9

C. When the rolling jack reaches the appropriate working height, press 'RELEASE' to lock it at the nearest safety lock. Make sure the lock is activated before repair operation carried out.

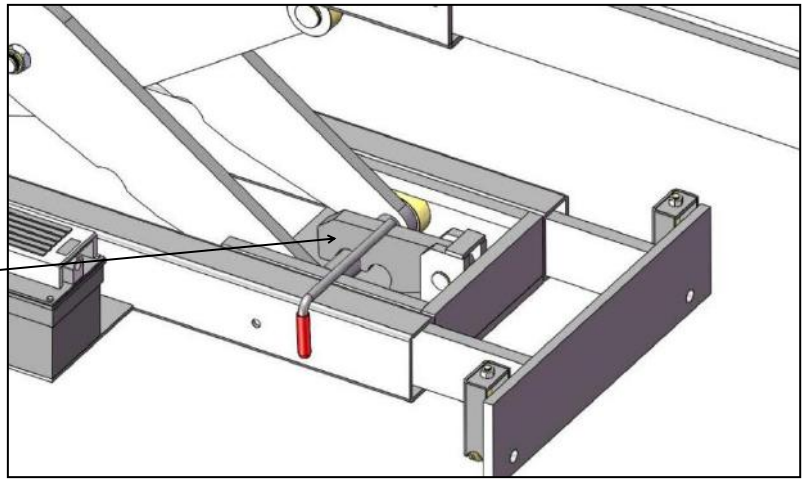


Fig.10

2.3 Descending operation of RJ-20A

A. Press 'PUMP' to raise the jack for few seconds till the safety lock is released (safety block completely out of safety lock position).

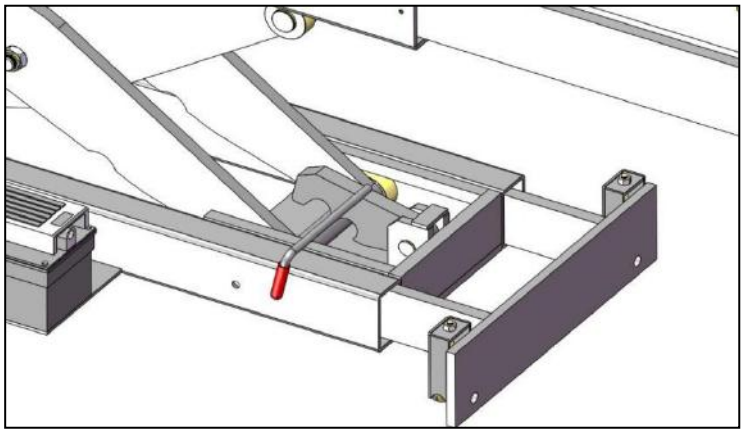


Fig.11

B. Turn up the safety block handle with a hand and press 'RELEASE' with the other hand , the jack descends.

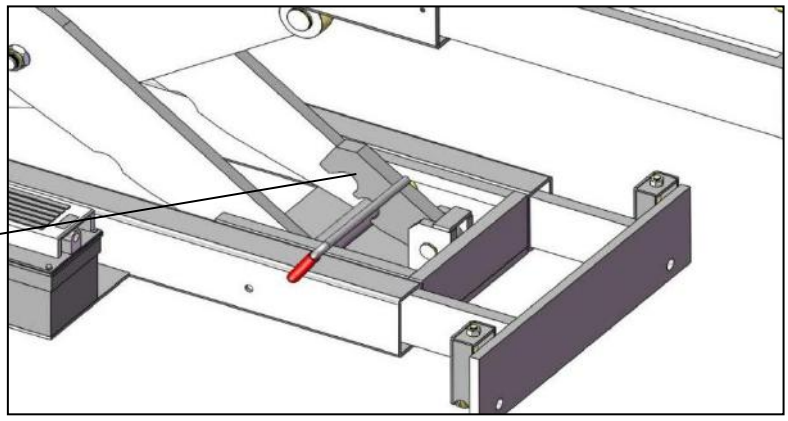


Fig.12

C. Reset the pedal position to horizontal after the jack fully descends.

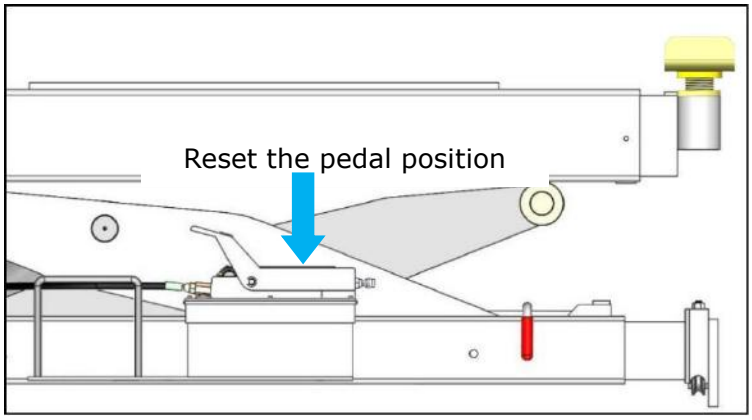


Fig.13

⚠ Warning: keep your body, especially your hands away from the scissor of the jack during lifting or lowering, in order to prevent any injury.

V. MAINTENANCE SCHEDULE

Keep the rolling jack clean; wipe all spills. Do not let dirt get into the hydraulic system.

1. Daily：

• Make a visual inspection of all moving parts and check for damage or excessive wear. Replace any damaged or worn parts before setting the Jack back into service.

• Ensure that safety locks are in good working status. Do not use your Rolling Jack if the safety lock is damaged, over-worn, or out of place.

• Inspect rubber pads for damage or excessive wear.

2. Weekly:

• Lubricate all rollers and connecting pin with oil or WD-40.

• Check all oil hose connections,bolts,and pins to ensure no abnormalities.

• Check the cylinder connection bolt (tighten the bolt if necessary).

3. Monthly：

• Check the hydraulic oil of the pneumatic hydraulic pump, and refill it if required

• Lubricate running friction parts with grease.

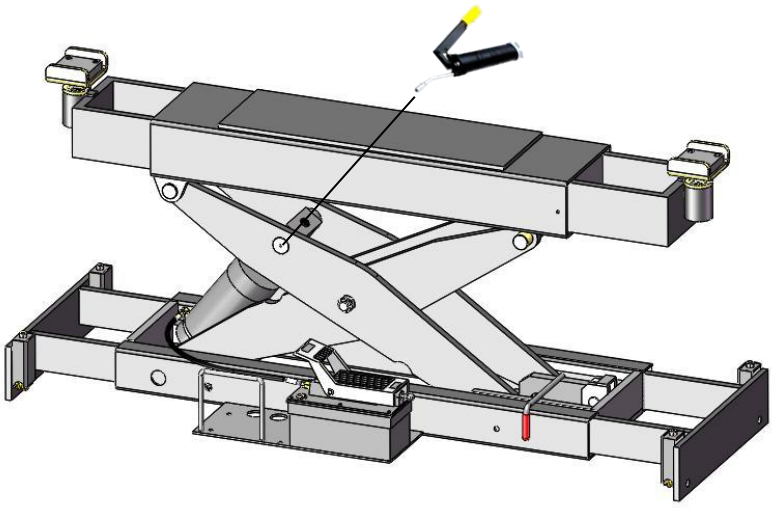


Fig.14

4. To maintenance Hydraulic Oil

A. Replace the hydraulic oil every 350 hours. The oil change period should be appropriately shortened,if used in a dirty environment;

B. Remove the tank cover when changing oil, to thrown out the deteriorated and dirty hydraulic oil,and then put the pump body and the tank into a clean container with clean diesel or kerosene for washing,and finally dry it with compressed air. Reassemble the tank with good quality, cleanly 32# hydraulic oil.

C. Waste hydraulic oil used by the equipment can not be thrown into regular trash or dumped in the environment.It pollutes the environment and is illegal. Instead, take it to a recycling center. Used/dirty hydraulic oil can be cleaned and re-used.

VI. TROUBLE SHOOTING

TROUBLE	CAUSE	REMEDY
Jack raises slowly or descent slowly	1. Low pressure 2. Low oil level 3. Oil line leakage 4. Dirty hydraulic oil 5. Oil line is jammed 6. Overload lifting	1. Recheck air pressure 0.8Mpa 2. Fill in the tank 3. Check oil line, tighten fittings. 4. Check the oil, replace and clean hydraulic system 5. Clean the oil line 6. Check load
Jack does not moved	1. Roller pin worn or damaged 2. Roller not on right position 3. Roller is stuck	1. Repair or replace 2. Adjust the roller position 3. Repair or replace roller connecting U-shaped bracket
Lift does not stay up	1. Oil line leakage 2. Dirty hydraulic oil 3. Cylinder leakage 4. Spring of pedal for reset release is stuck	1. Check the oil connection and tighten the fittings 2. Check the oil, replace and clean hydraulic system 3. Replace cylinder seals 4. Repair or replace
Lift cannot lower	1. Safety device are engaged 2. The "RELEASE" button of the pedal is not pressed	1. Re-operate 2. Re-operate

VII. EXPLODED VIEW

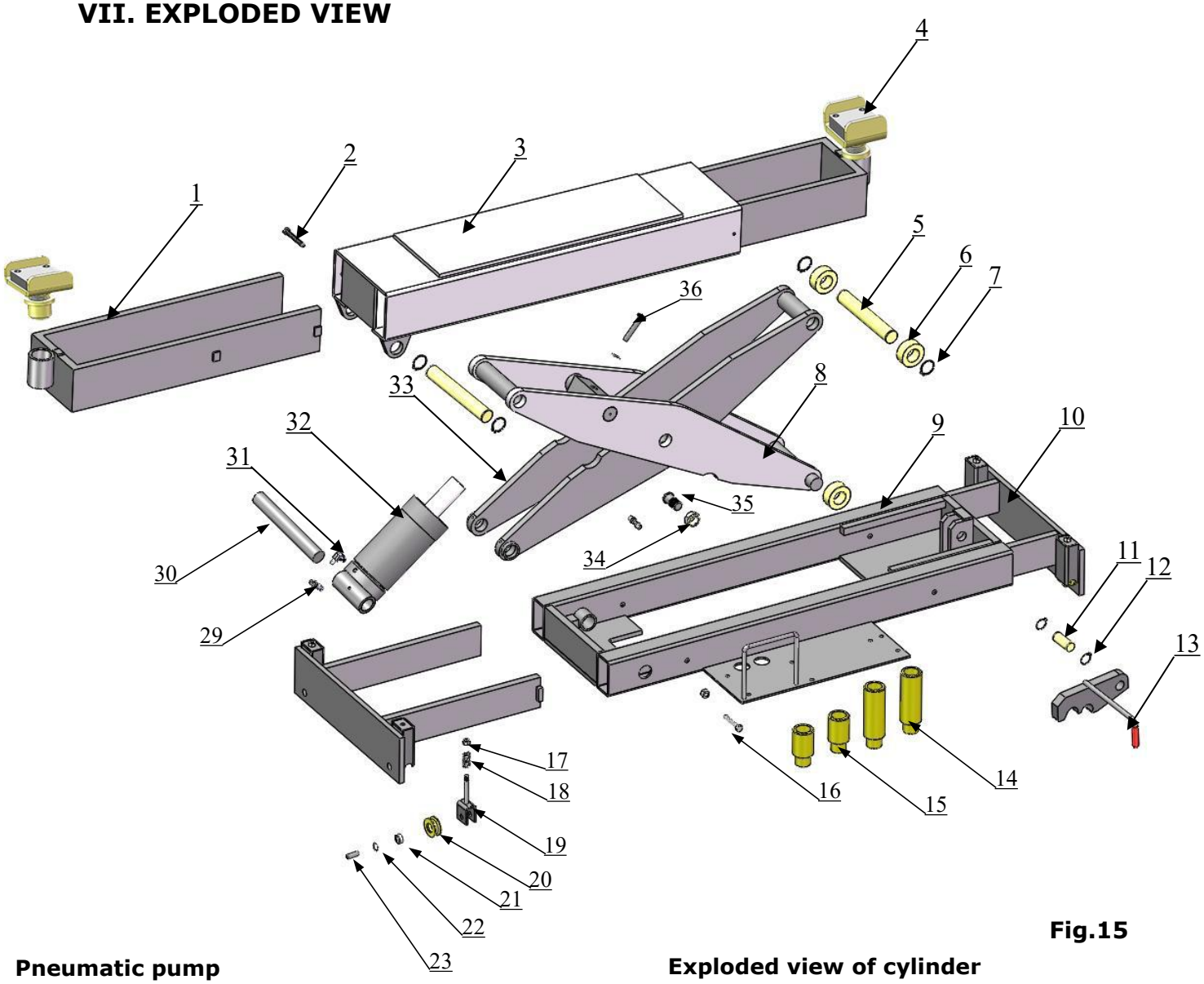


Fig.15

Pneumatic pump

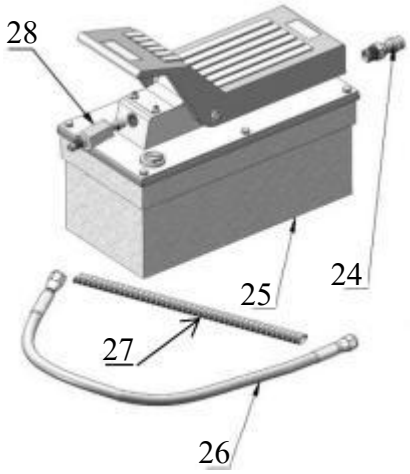
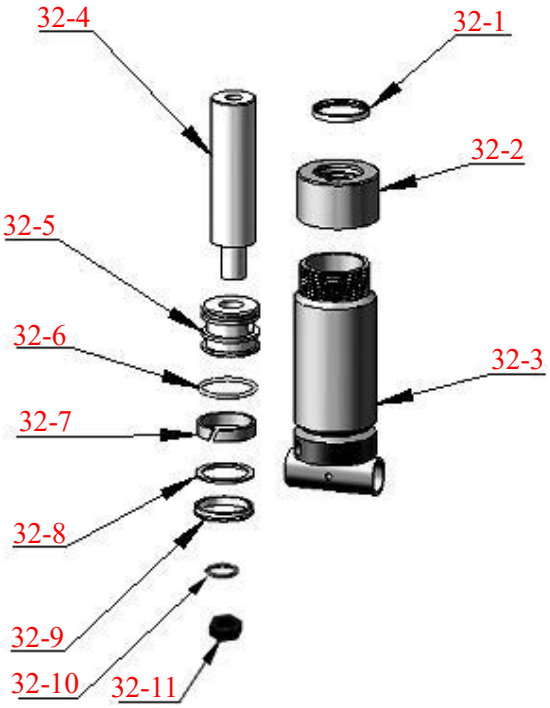


Fig.16

Exploded view of cylinder



Rolling Jack parts list

Item	Part No.	Description	QTY
1	11683002	Extendable arm frame	1
2	1005134004	Hex bolt M8*16	2
3	11683003	Upper support	1
4	1102185006C	Single screw saddle adapter	2
5	11680008	Pin for upper roller	2
6	11683011	Upper roller	4
7	10206032	Clip ring Φ25	4
8	11683005	Outer scissor	1
9	11683006-01	Base	1
10	11683008-01	Lower sliding frame	2
11	11683013	Pin for safety lock device	1
12	10206032	Clip ring Φ25	2
13	11683007	Safety lock device	1
14	1102504001	Stackable extension adapter 6”	2
15	1102214016A	Stackable extension adapter 3”	2
16	1005134006	Hex bolt M10*40 (with M10 nut)	2
17	10209056	Nylok nut M10	1
18	1005134003	Spring	4
19	1105124001A-01	Pulley seat	4
20	11680016	Pulley	4
21	10680031	Bearing	4
22	10680010	Limit ring Φ32	4
23	1105074005	Pulley pin	4
24	1004334013	Pneumatic input fitting 1/4NPT Male	1
25	1005134009	Pneumatic pump	1
26	10670004	Oil Hose 1/4*17 1/8"	1
27	1005134002	Wave tube φ25.5*φ20*23 5/8"	1
28	10420119	Straight fitting 3/8NPT*1/4JIC(M)	1
29	10620064	Greasing fitting M6	2
30	11683009	Pin for lower roller	1
31	10420097	90^0 fitting for cylinder	1
32	10683017	Cylinder	1
33	11683004	Inner scissor	1
34	10610019	Nylok nut M30	2
35	11683012-01	Connecting pin	2
36	1005134005	Hex Bolt M20*90 (with Φ20 flat washer)	1

PARTS FOR HYDRAULIC CYLINDER

Item	Part No.	Description	QTY
32-1	10209078	Dust ring Φ38*Φ46*5	1
32-2	11683026	Head cap	1
32-3	11683028	Bore weldment	1
32-4	11683027	Piston rod	1
32-5	11683025	Piston	1
32-6	10683030	O ring Φ92*3.55	1
32-7	10520062	Support ring	1
32-8	10520063	Y ring OSI Φ85*Φ100*9	1
32-9	10683032	Support ring Φ85*Φ100*3	1
32-10	10206069	O ring Φ21*3.1	1
32-11	10206071	Hex bolt M20*2	1

VIII. Car lift safety tips

Put this safety tips in a place where you can always alert the operator. Please reference to the lift manufacturer's manual for specific information about the lift.

1. Check the lift daily. If the machine breaks down or has damaged parts, do not operate, and use the parts of original equipment to repair.

2. Do not overload the lift. The rated weight of the manufacturer design is indicated on the label of the lift.

3. Position control of the vehicle and operation of the lift can only be done by a trained and authorized person.

4. You can not lift a car with people inside. When the lift is working, the customer or other people should not be around the machine.

5. Keep the place around the lift without obstacles, lubricants, grease, garbage and other debris for a long time.

6. Carefully drive the car onto the lift, and the lift should raise to the required height for operation. **Note**, if you are working under a car, raise the lift high enough and mare sure the safety mechanism has locked the machine.

7. Note, removing(or installing) parts from a car can cause a sudden shift of gravity that unstable the raised car. Reference to the car manufacturer's service manual as a recommended procedure when removing parts from the car.

8. Before the lift drops, make sure that the tool tray, tool rack, etc.are removed under the car.

IX. Lift disposal.

When the car lift cannot meet the requirements for normal use and needs to be disposed, it should follow local laws and regulations.

AMGO Hydraulics

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