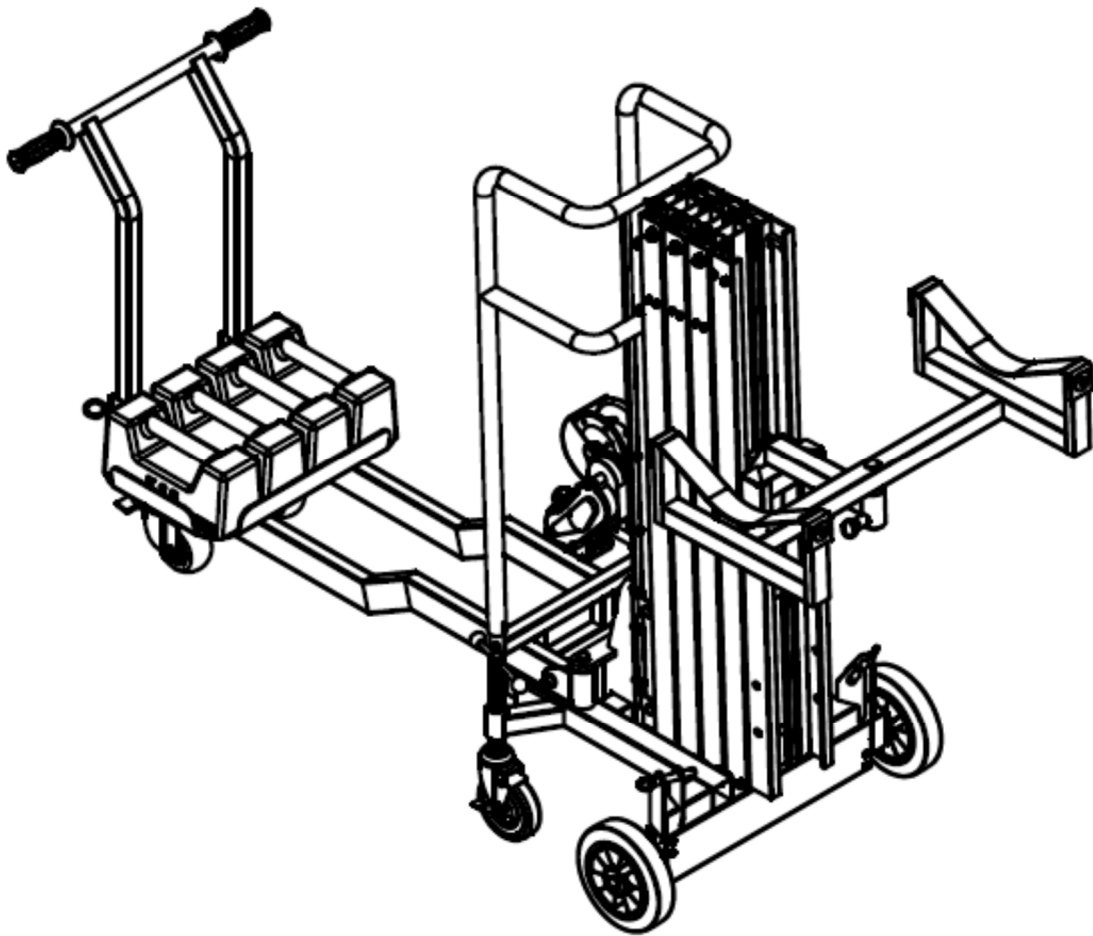

MATERIAL LIFTER

INSTRUCTION BOOK

MODEL : BD400



SAFETY

To operate this machine safely, this **INSTRUCTION BOOK** must be read and understood **BEFORE** operating this machine.





Important

Read, understand and obey these safety rules and operating instructions before operating this machine.

Only trained and authorized personnel shall be permitted to operate this machine. If you have any questions, call Kou Sheng Feng CO., LTD.

INDEX

1. Safety Rules	- 2 -
2. Specifications	- 7 -
3. Optional Accessories	- 8 -
4. Products feature	- 9 -
5. Overall Dimensions	10
6. Assembly Instructions-Option A / Option B	15
6. Assembly Instruction	25
7. Inspecting the machine before starting	28
8. Function Tests	30
9. Disassemble	- 13 -
10. Transport Instructions	- 14 -
11. Responsibility Statement	- 15 -
12. Explosion View	- 34 -

1. Safety Rules



Important

It is of paramount importance that these instructions have been read and understood before operating this machine. Only authorized and trained personnel should operate this machine.

This manual must be placed in an easily accessible location for authorized operators to use as required. Failure to obey the instructions and safety rules in this INSTRUCTION BOOK may result in death or serious injury.

A. Do Not Operate Unless

- Instructions have been read and understood
- Machine is in a fixed position on even terrain
- Machine has been checked for any faults
- Accessories have been installed correctly
- Machine has all necessary parts present and only official parts from the manufacturer are installed.



As well as this, users must ensure that:

- The machine is stored properly
- The machine is checked regularly
- Repairs to the machine are only made by a qualified service technician. At the completion of these repairs, the operator must perform a pre-operation inspection before using.

B. Qualified personnel

Only qualified personnel are allowed to install and operate this equipment. Qualified personnel are authorized to move, install and operate the machinery in accordance with safe practice and this INSTRUCTION BOOK. – Operators must be familiar with this machine and capable of operating it properly and must be correctly trained.

C. Correct usage

This equipment can only be used within the constraints described in this INSTRUCTION BOOK. This machine must be operated correctly and safely under careful and correct operation and maintenance.

D. Fall Hazards

1. Do not exceed the rated load capacity. The maximum capacity is 250kgs. Ensure the load is centered on the platform.
2. Do not use to lift persons.
3. Do not stand or sit on the load platform.
4. Do not climb on the machine.
5. Tip Over Hazards – Due to the weight of the BD400 and possible additional weight the operator has added, it can be unstable. Precautions must be used to avoid unsteadiness in the machine.



E. Tip-over Hazards

1. Do not move the machine if it contains a raised load or is on a slope.
2. Do not tilt the machine back with a raised load.
3. Do not use blocks to level the machine.
4. Do not raise the load unless the legs have been fully locked.
5. Do not place ladders or scaffolding against any part of the machine.
6. Do not replace machine parts critical to stability or structure with items of different weight or specification. Only official parts are to be used on the machine at all times
7. Do not introduce a horizontal force or side load to the machine by raising or lowering a fixed or overhanging load.
8. Do not use the machine on a moving or mobile surface or vehicle.
9. Do not operate the machine in strong or gusty winds.
10. MAKE SURE the area is level when raising a load.

F. Collision Hazards

1. Do not raise a load unless the load is properly centered on the load platform.
2. Use common sense and planning when transporting the machine on an incline, slope or stairs.
3. Do not move the machine when the load is raised.
4. Once the machine has been positioned and the load has been raised safely, ensure:
 - The area below the lifter is clear of any personnel and/or obstructions.
 - Ensure any mobile objects nearby do not pose any threat of interference with the lifter.
 - The area in which the load will be raised is clear of any obstructions.

G. Lifting Hazard

Use proper lifting techniques when loading or moving the machine.

H. Improper Use Hazard

Never leave a machine unattended with a load. Unauthorized personnel may attempt to operate the machine without proper instruction, violating safety precautions and creating an unsafe environment.






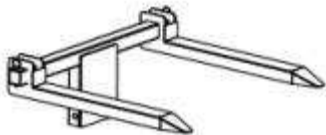

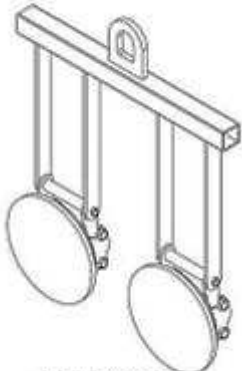
I. Bodily Harm

1. Do not touch the steel wire.
 2. Do not allow the platform to drop during setup.
 3. Keep hands and fingers away from folding legs, pulleys, the carriage and other potential pinching points.
 4. Do not place arms, hands or fingers through the frame.
-

2. Specifications

Spec / Model	BD400
Lifting Height	415 cm
Basic Height	130 cm
Max. Load capacity	250 kg, 3 m 200 kg, 4 m
Machine Weight (without accessories)	100kg
Package size	138 X 81 X 88cm

3. Optional Accessories

<p>PART NO. 3029294</p>  <p>5.1KG</p>	<p><i>Hook & Jib (Accessory)</i></p> <p><i>Weight :5.1kg/set</i></p> <p><i>Capacity: 250 kg (551 lb)</i></p>
<p>PART NO. 3029399</p>  <p>8KG</p>	<p><i>Fork (Accessory)</i></p> <p><i>Weight: 8.0kg/set</i></p> <p><i>Capacity: 250 kg (551 lb)</i></p>
<p>PART NO. 3029287</p>  <p>9.3KG</p>	<p><i>Pipe Cradle (Accessory)</i></p> <p><i>Weight: 9.3kg/set</i></p> <p><i>Capacity: 180 kg (396 lbs)</i></p>
<p>PART NO.3027002</p>  <p>17.7KG</p>	<p><i>2 Vacuum cups Hanging Crane (Accessory)</i></p> <p><i>Weight: 17.7kg/set</i></p> <p><i>Capacity: 90 kg (198 lbs)</i></p>

4. *Products feature*

The BD400 is perfect for lifting heavy loads, with a maximum load capacity of up to 250kg with Fork, lifting from ground level to 4163mm.

The BD400 is a multi-purpose lifting device with a range of accessories, including the pipe cradle, fork or hook jib, that can be used anywhere where traditional bending, transporting and lifting is required.

It offers a safer working environment and a reduction in potential muscle strain such as a strain in the back.

The BD400 offers

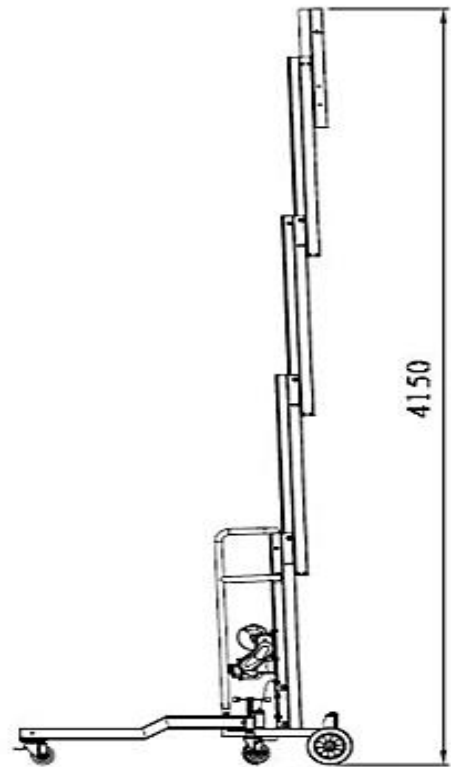
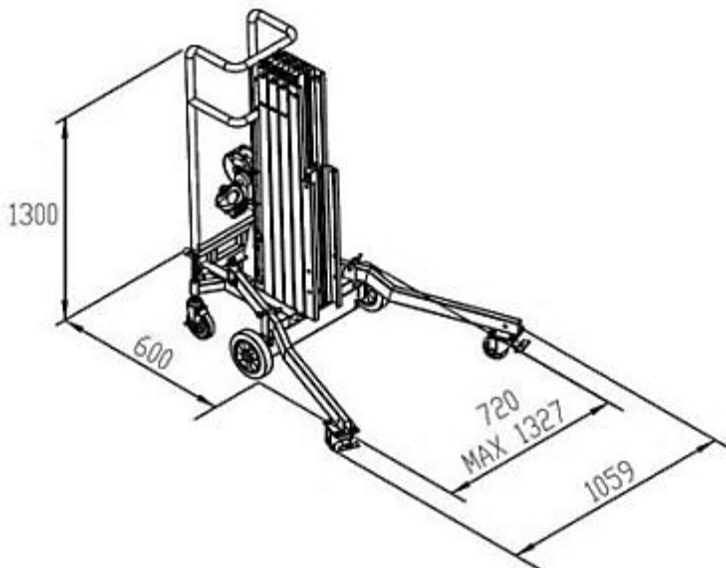
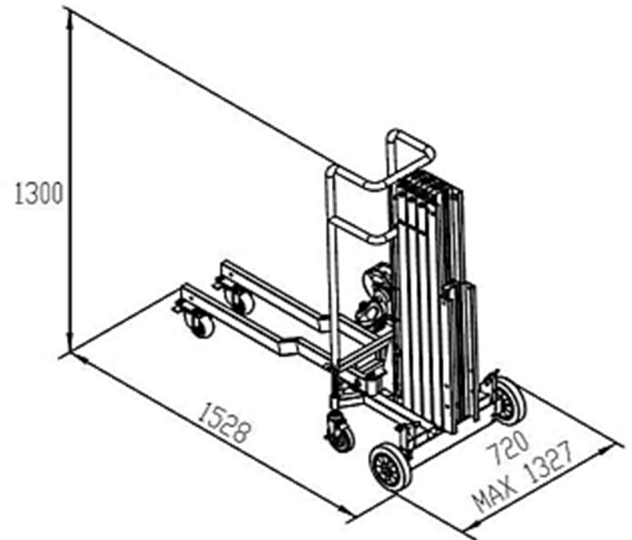
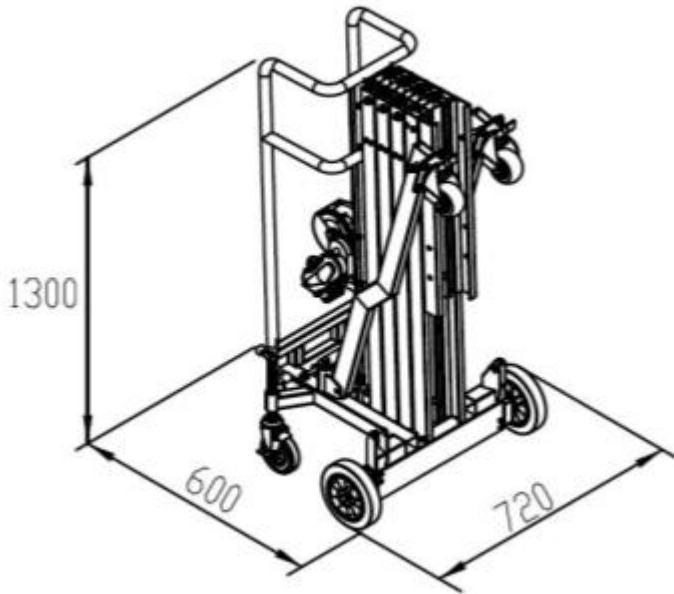
- 1 Aluminum lifting rails; compact and very strong.
2. Universal lift and multipurpose abilities thanks to the variety of accessories that can be used for beam installation, shutters, blinds, air conditioners etc.
3. Compact and removable construction for easy transport in vehicles and storage in a workshop

4. Virtually immediate use once out of the vehicle.



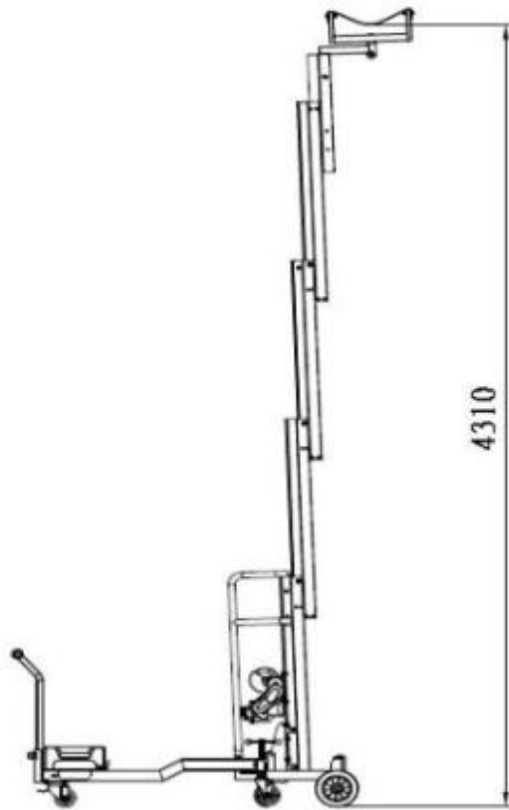
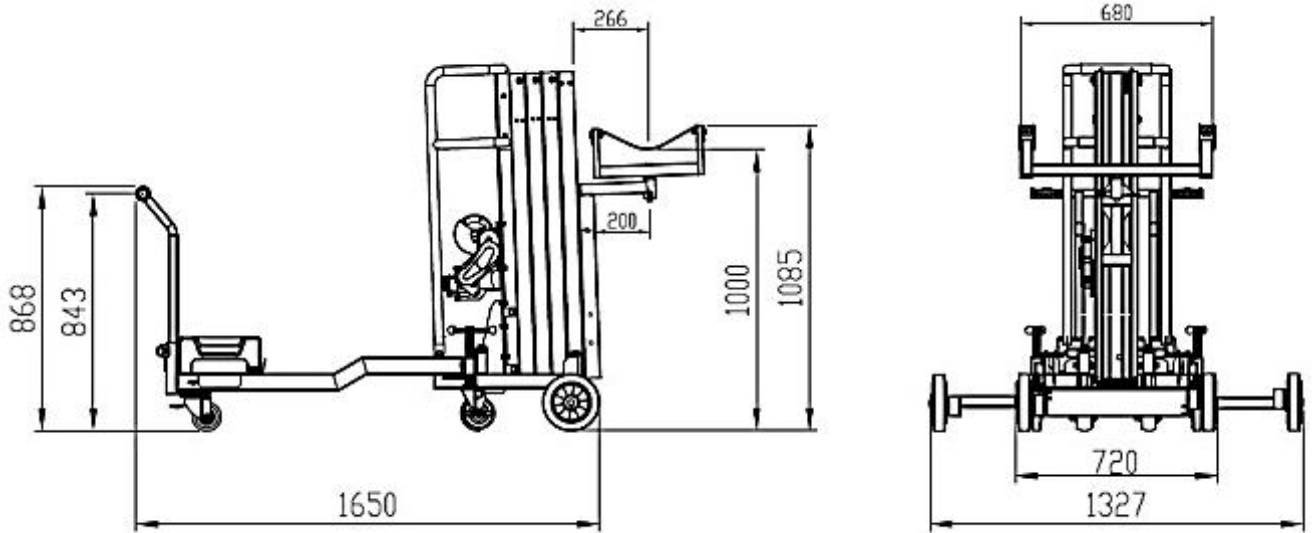
5. Overall Dimensions

WITHOUT ACCESSORIES



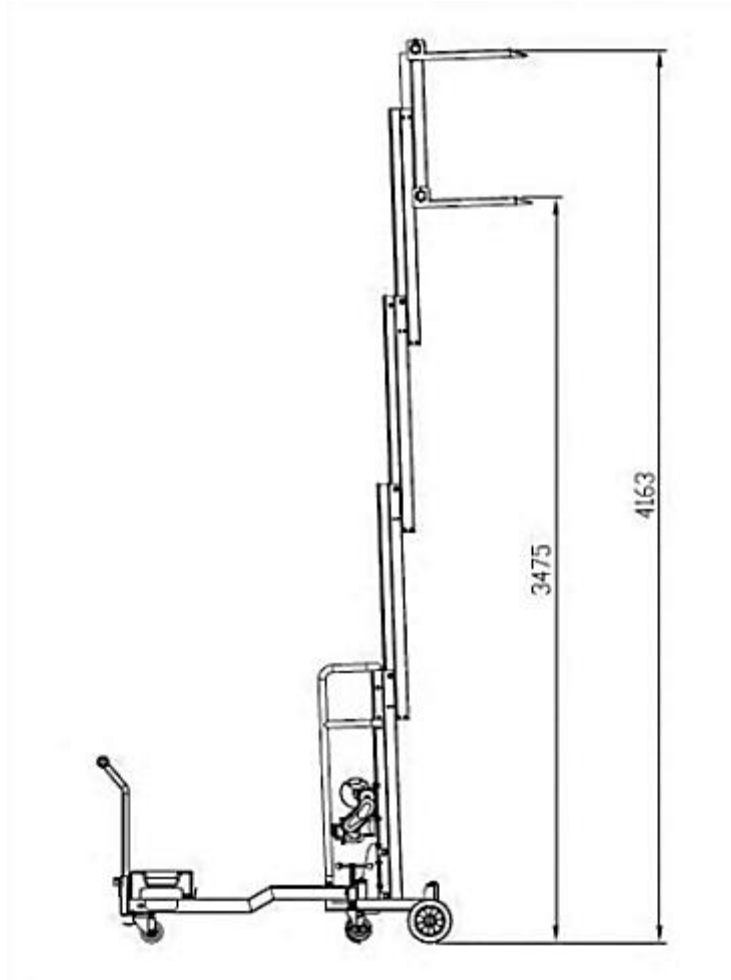
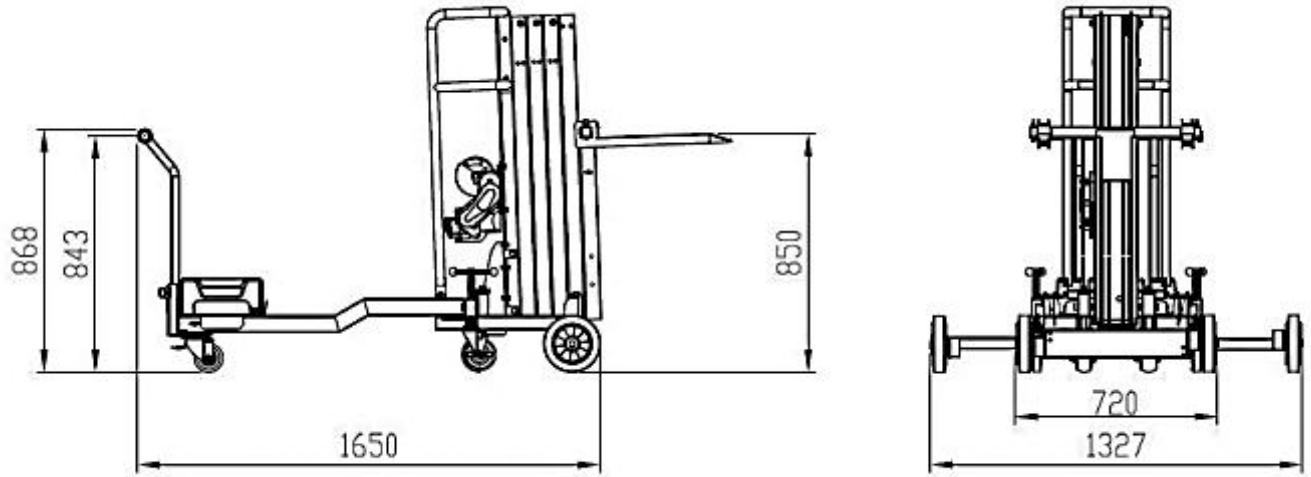


WITH PIPE CRADLE ACCESSORY



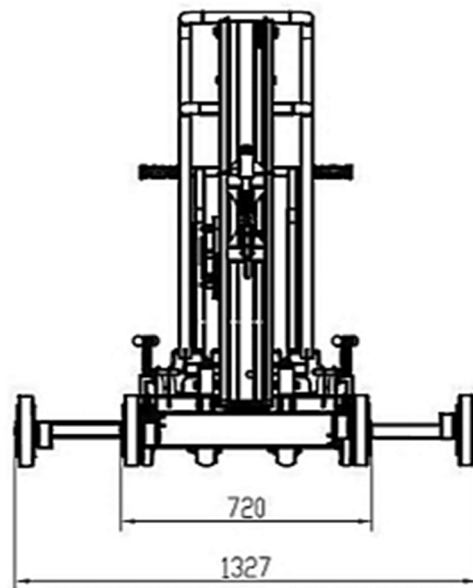
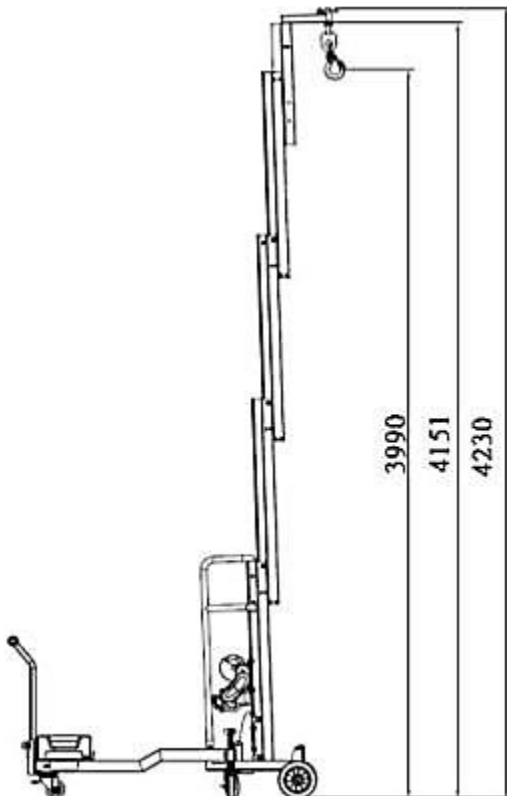
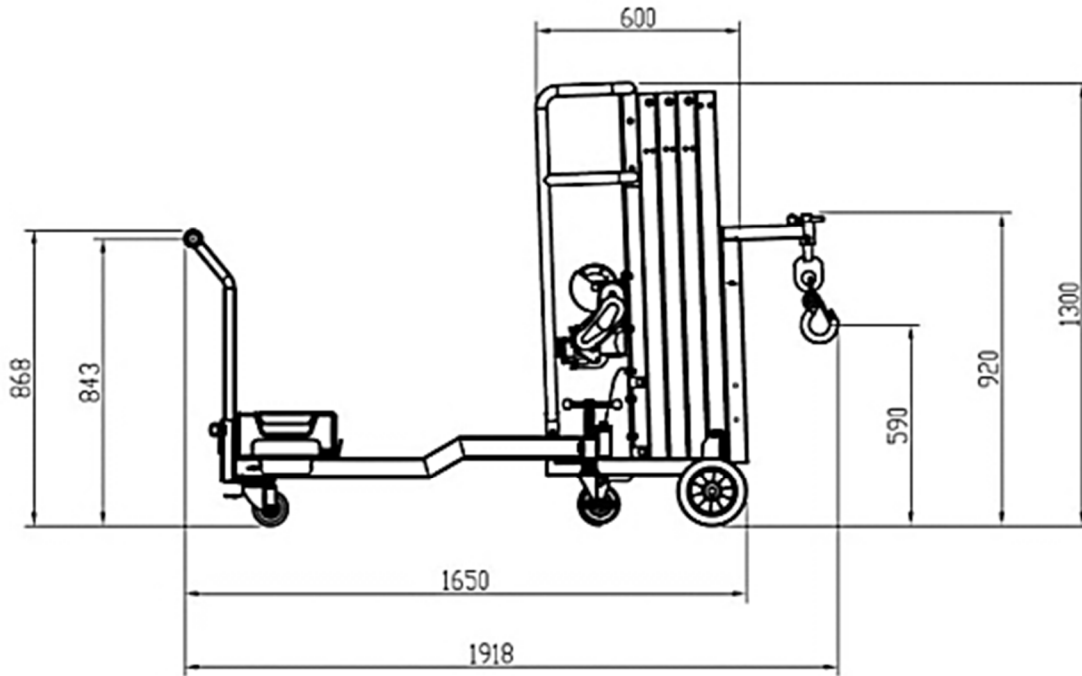


WITH FORK ACCESSORY





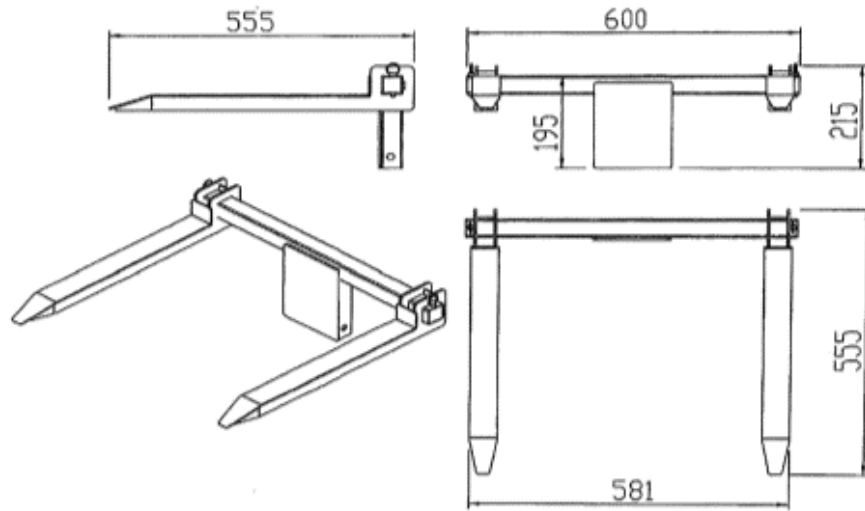
WITH HOOK & JIB ACCESSORY



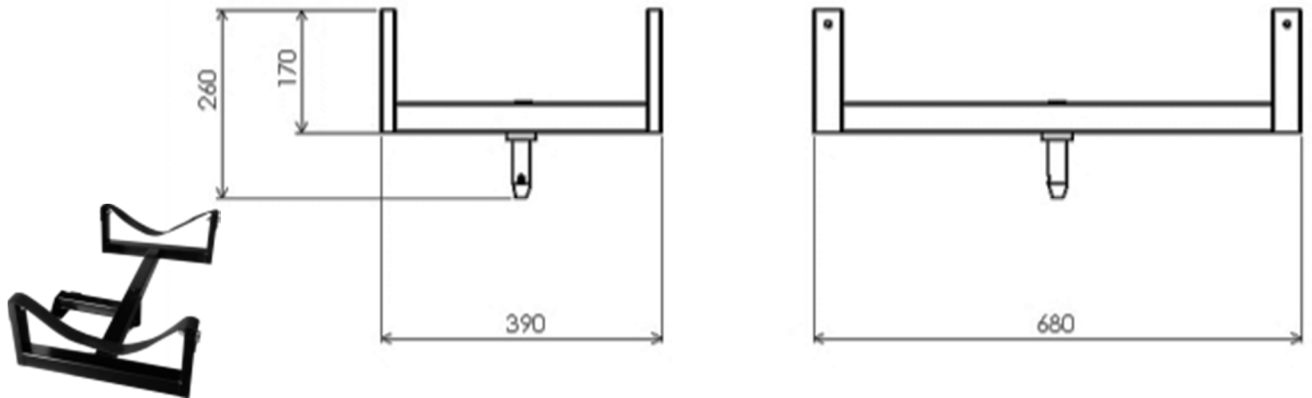


ACCESSORY DIMENSIONS

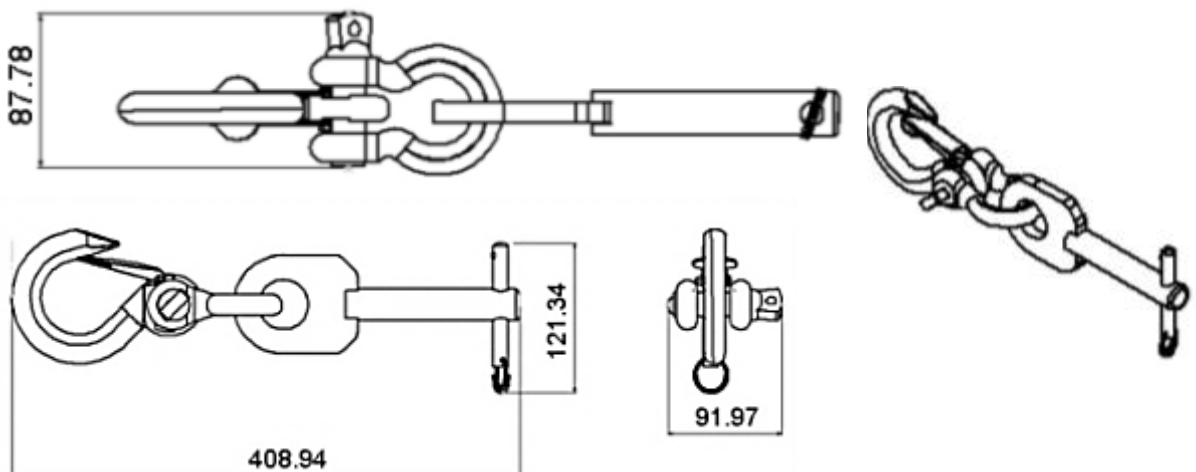
FORKS



PIPE CRADLE



HOOK & JIB





6. Assembly Instructions-Option A / Option B

Setting up the BD400

Before starting, ensure all required safety precautions have been addressed. Then:

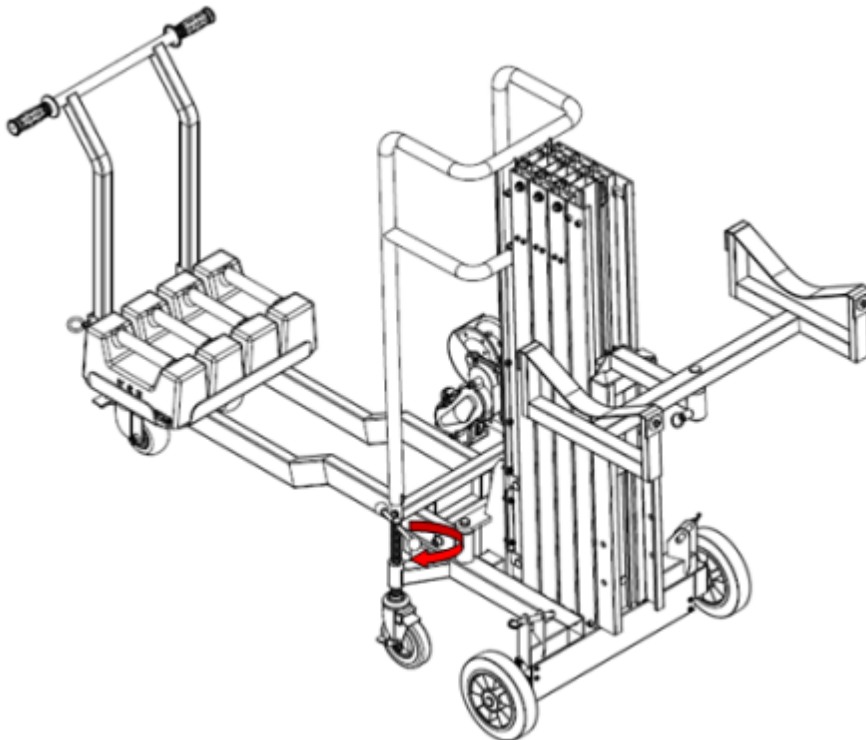
- 1) Unpin both pins that are attaching the legs to the (shaft).
- 2) Lower the legs into the desired position, in accordance with the options below:

There two assembly types:

Option A) – Close to the wall Option B) – Legs out towards the front

A) If Option A is desired

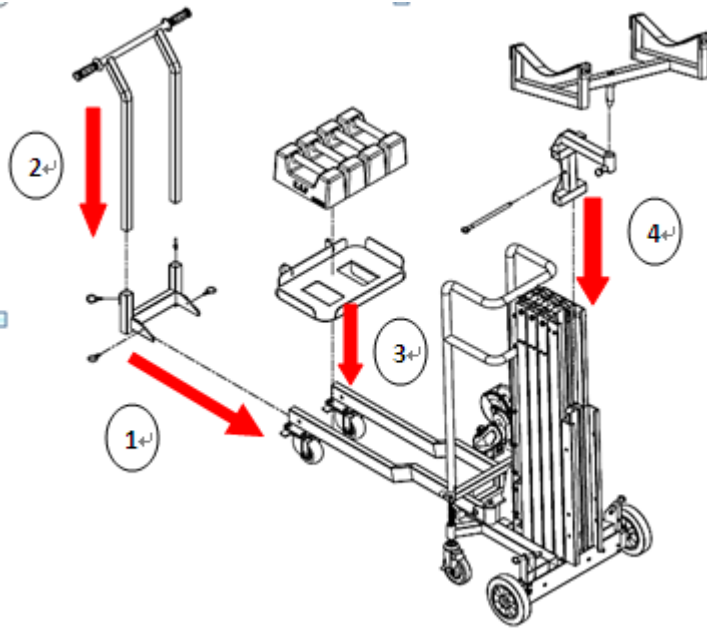
1. Adjust the height of stabilizing wheels by turning the handle, this will stabilize the machine
machine
whilst you maneuver the legs.



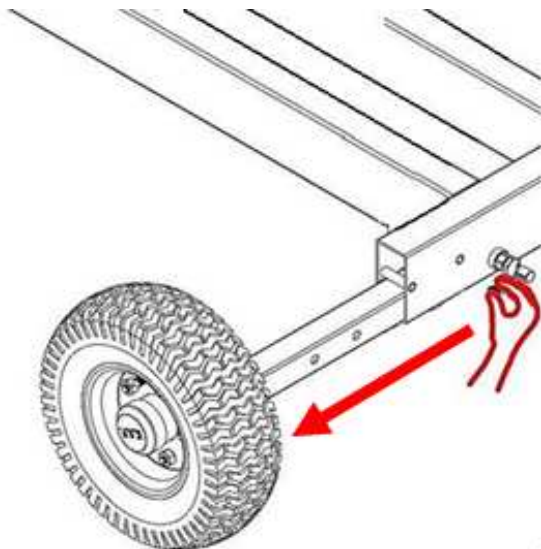


K.S.F.

2. Turn the legs towards the back of the lifter and lower them into the correct position.
3. Slot in the carry handle and base. Then, put counterweight base over both legs as shown below :



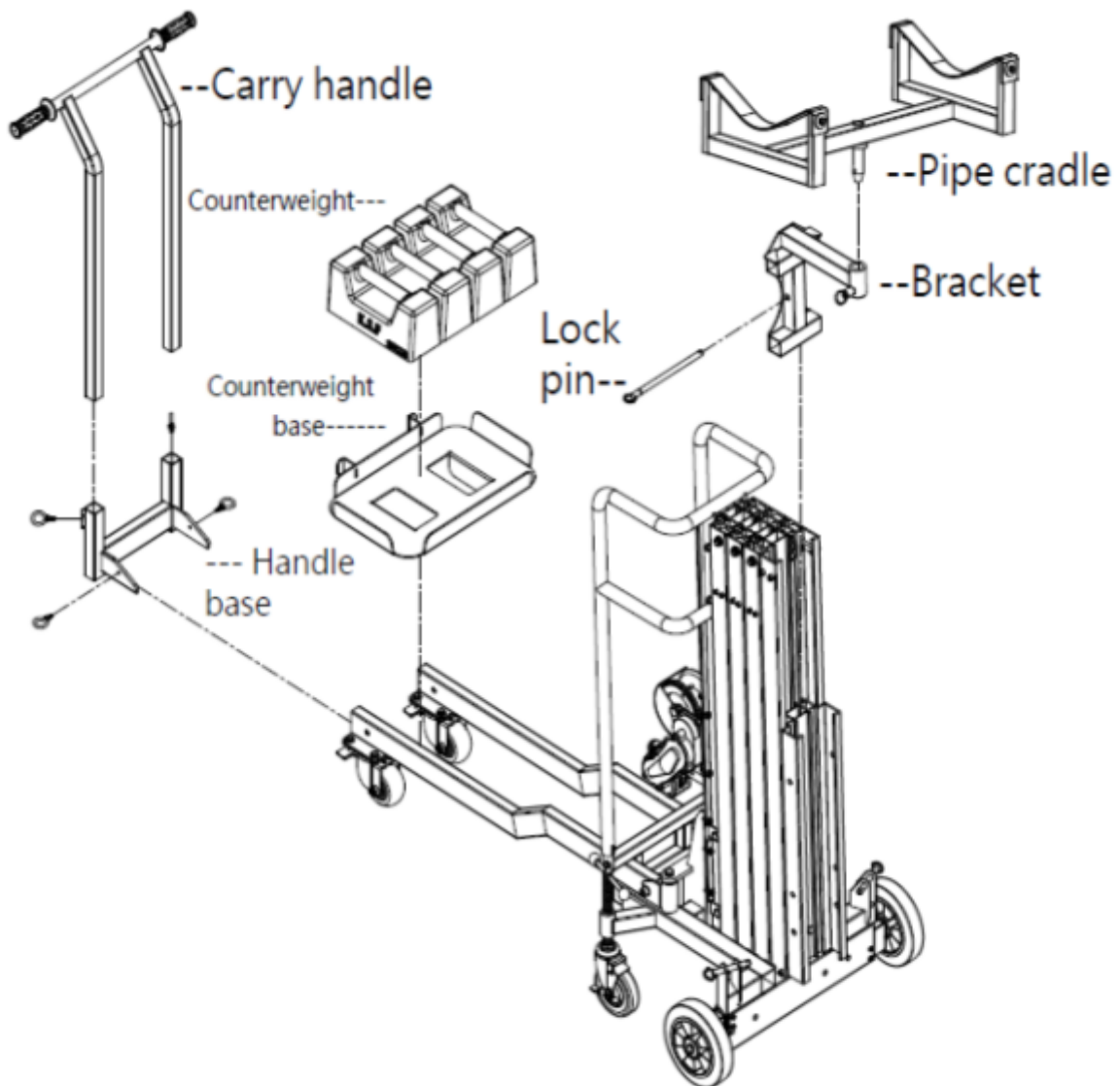
4. Place the required amount of counterweight on the base.
5. Rotate the black pins for the main wheels 180 degrees upwards as below figure.





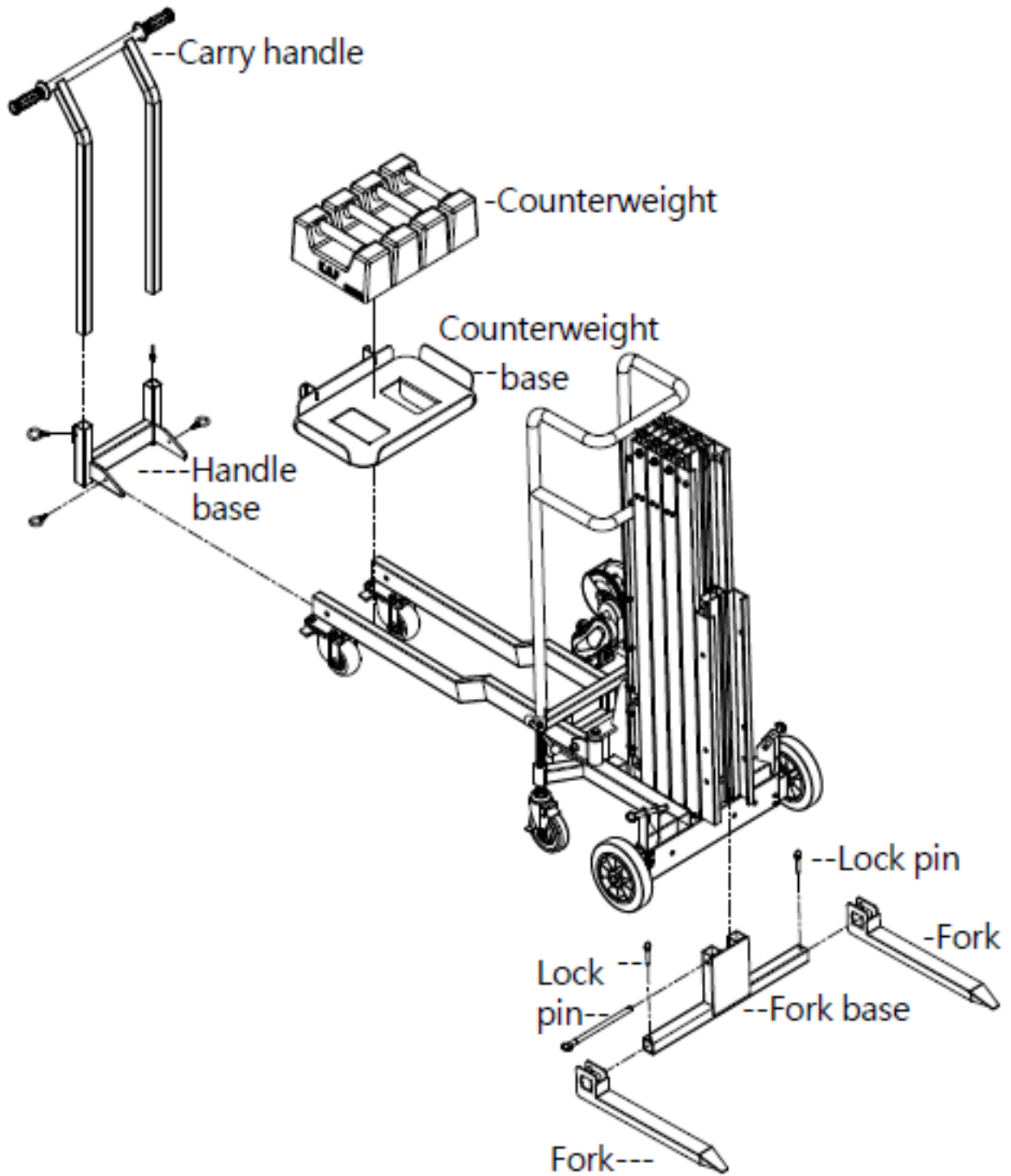
- Slide the wheels outwards until the desired length has been reached. Once this has been achieved rotate the black pins into the initial position.
- Plug in the BD400 to a power source.

Option A) – Close to the wall – With Pipe Cradle

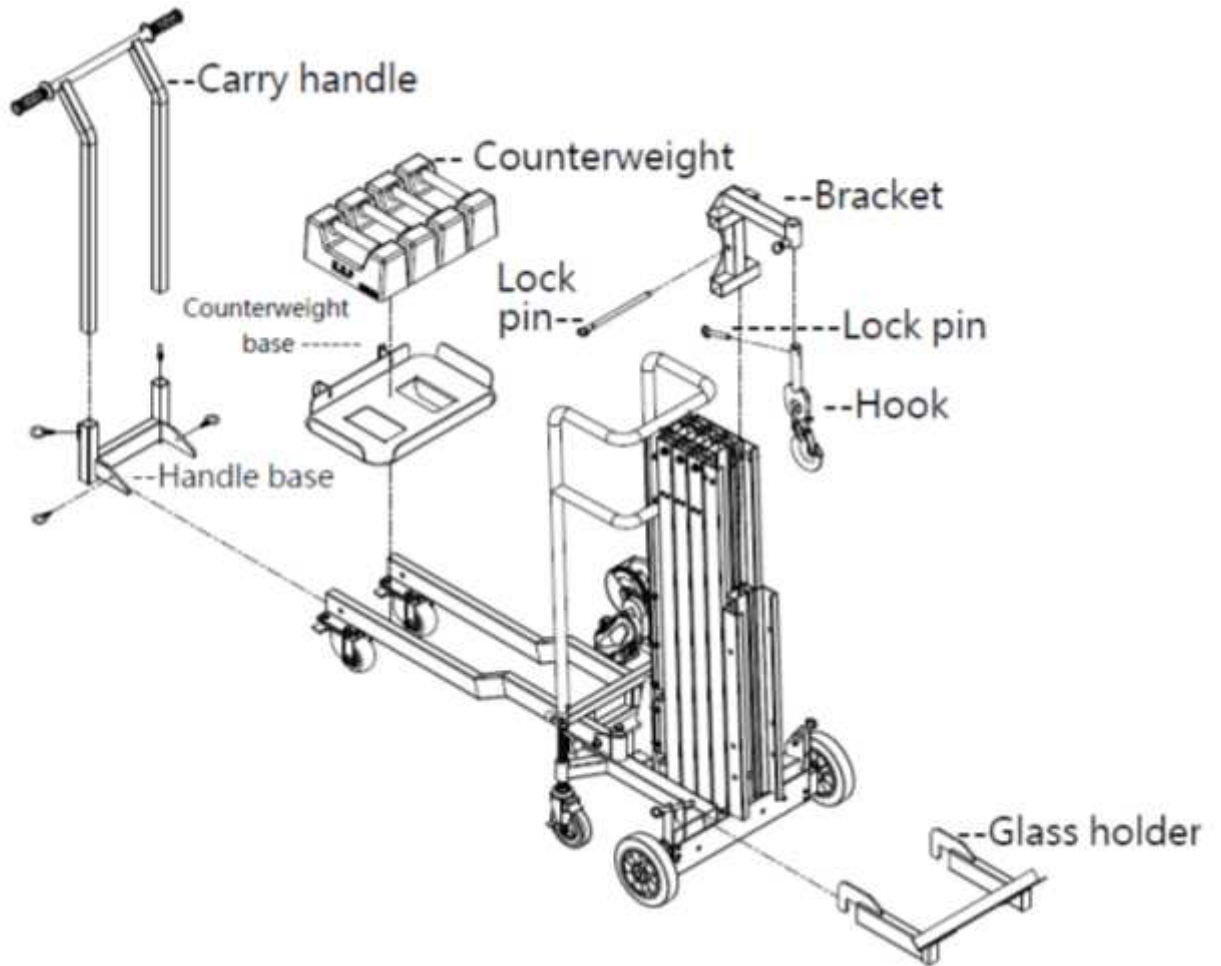




Option A) – Close to the wall – With Fork



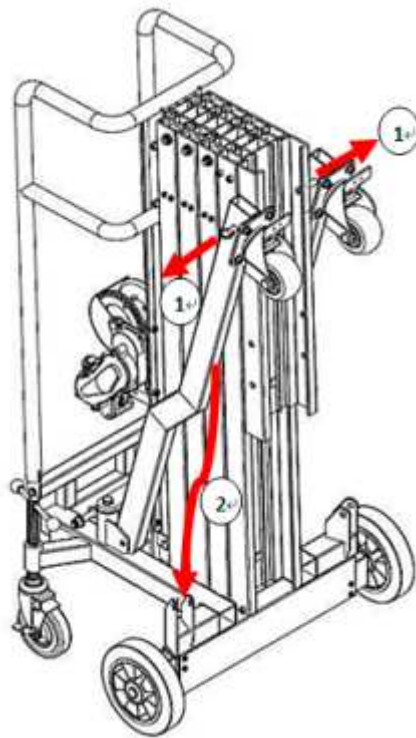
Option A) – Close to the wall – With Hook



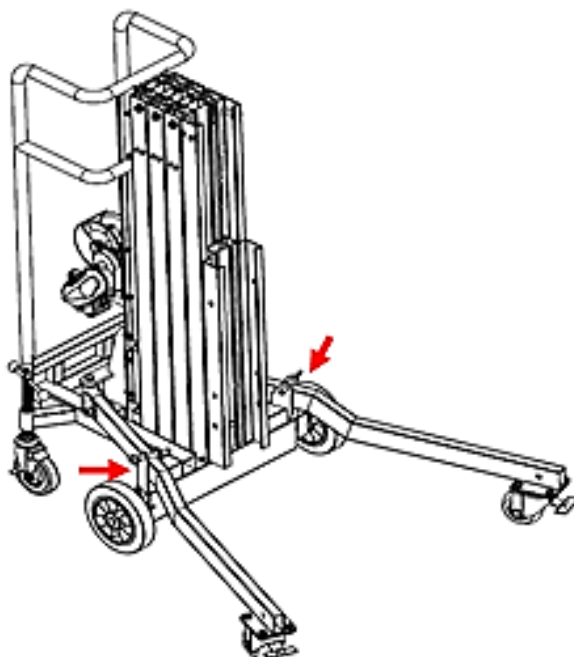


B) If Option B is desired

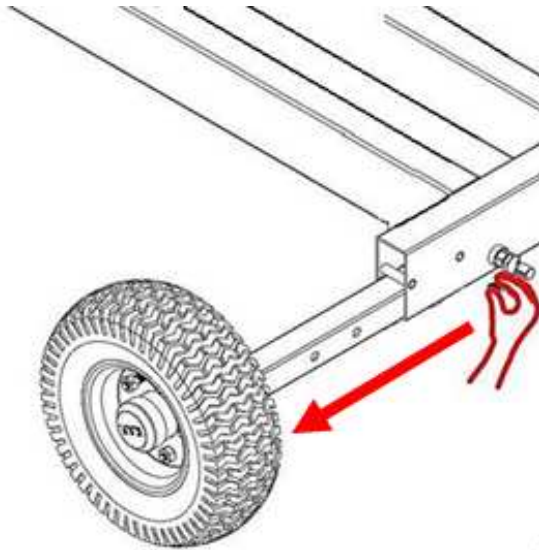
1. Pull the pin to release legs. Lower the legs into the slots holes as below:



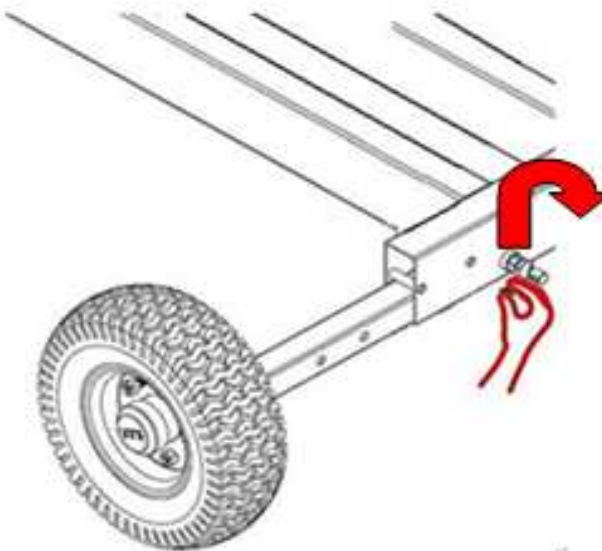
2. Place the pins in the holes.



3. Rotate the black pins for the main wheels 180 degrees upwards.



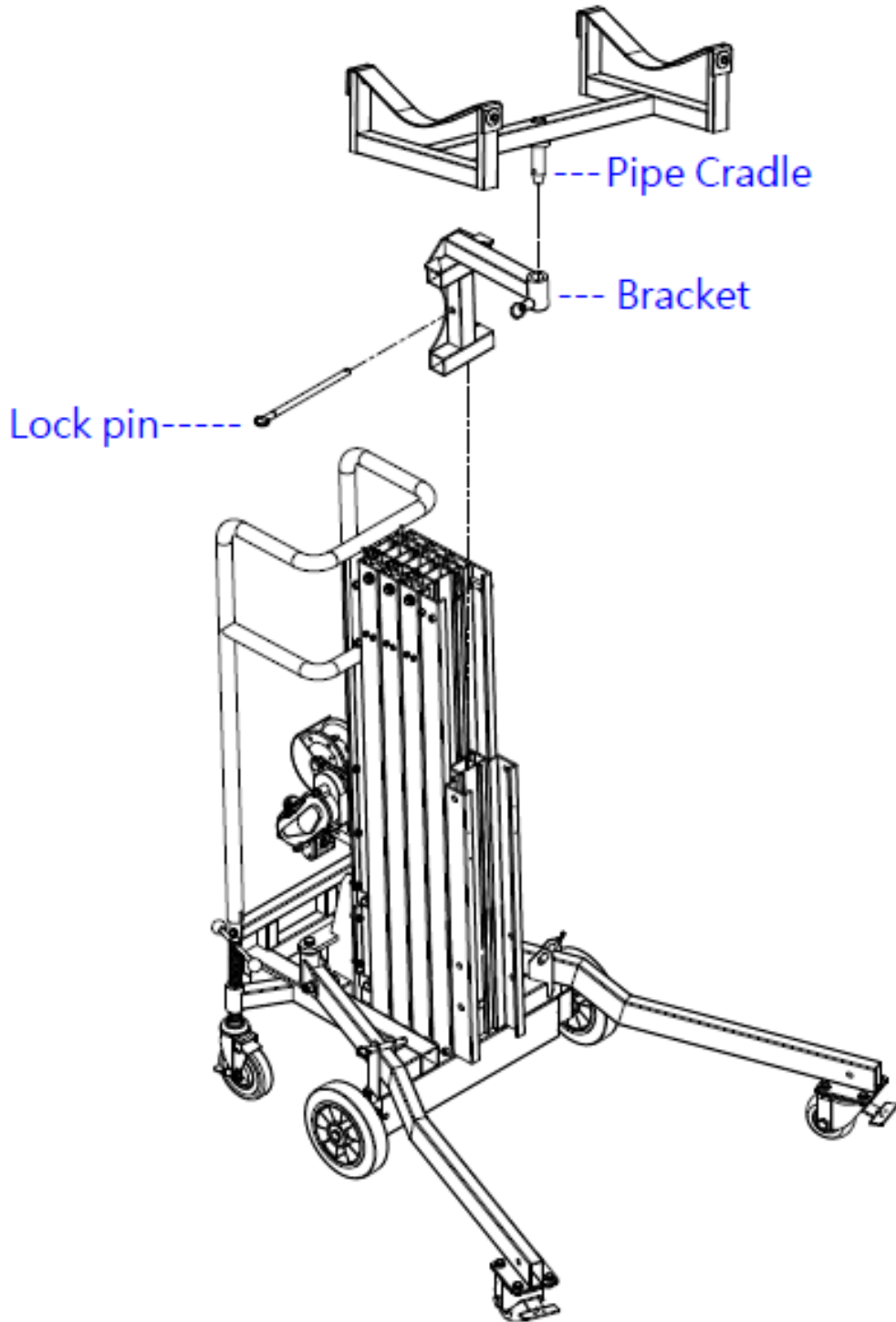
4. Slide the wheels outwards until the desired length has been reached.
5. Lock the pin back in place by rotating it back down 180 degrees.



Note: Whilst adjusting the main wheels or placing the legs the stabilizing wheels may have to be adjusted.

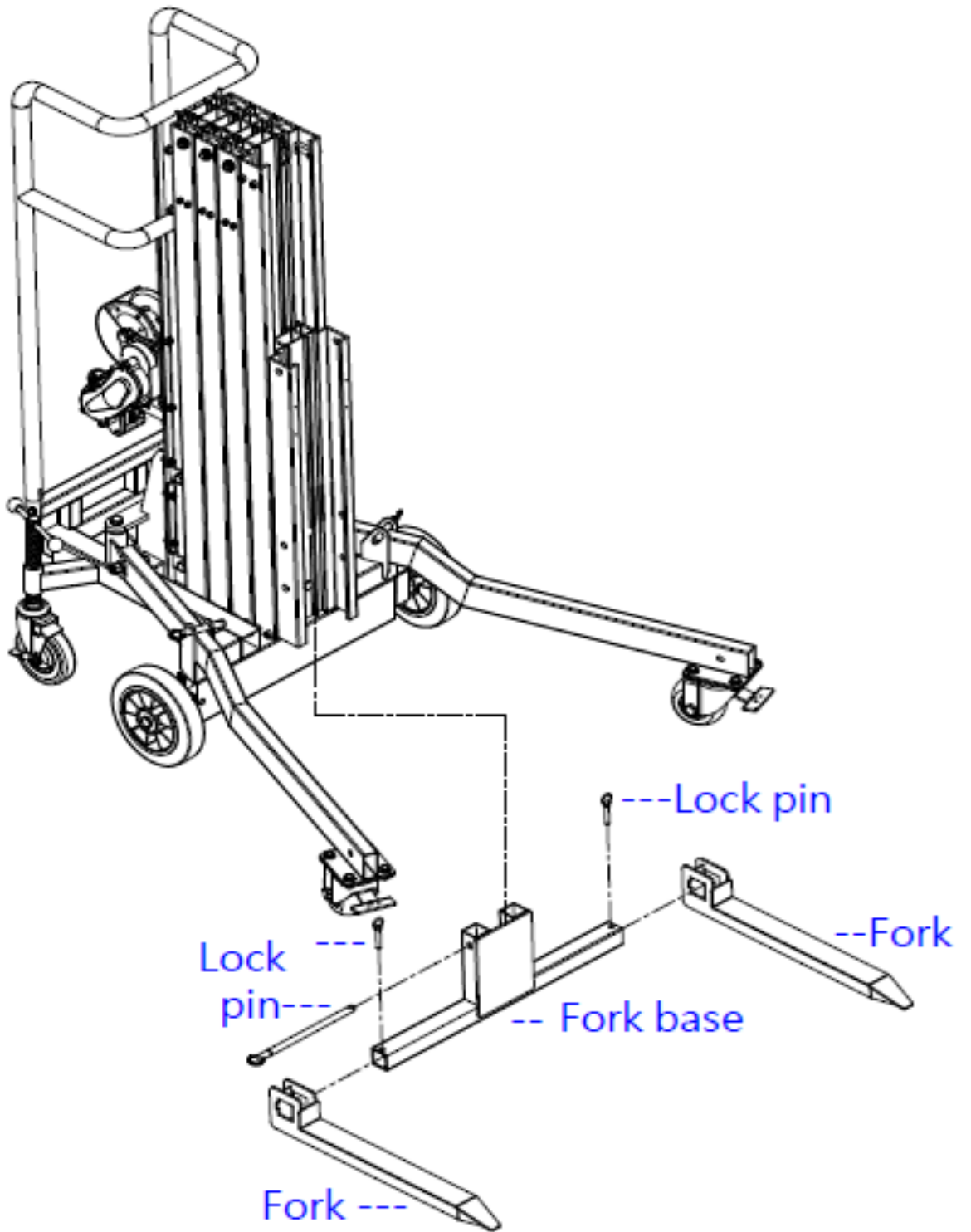


Option B) – Legs out towards the front - With Pipe Cradle

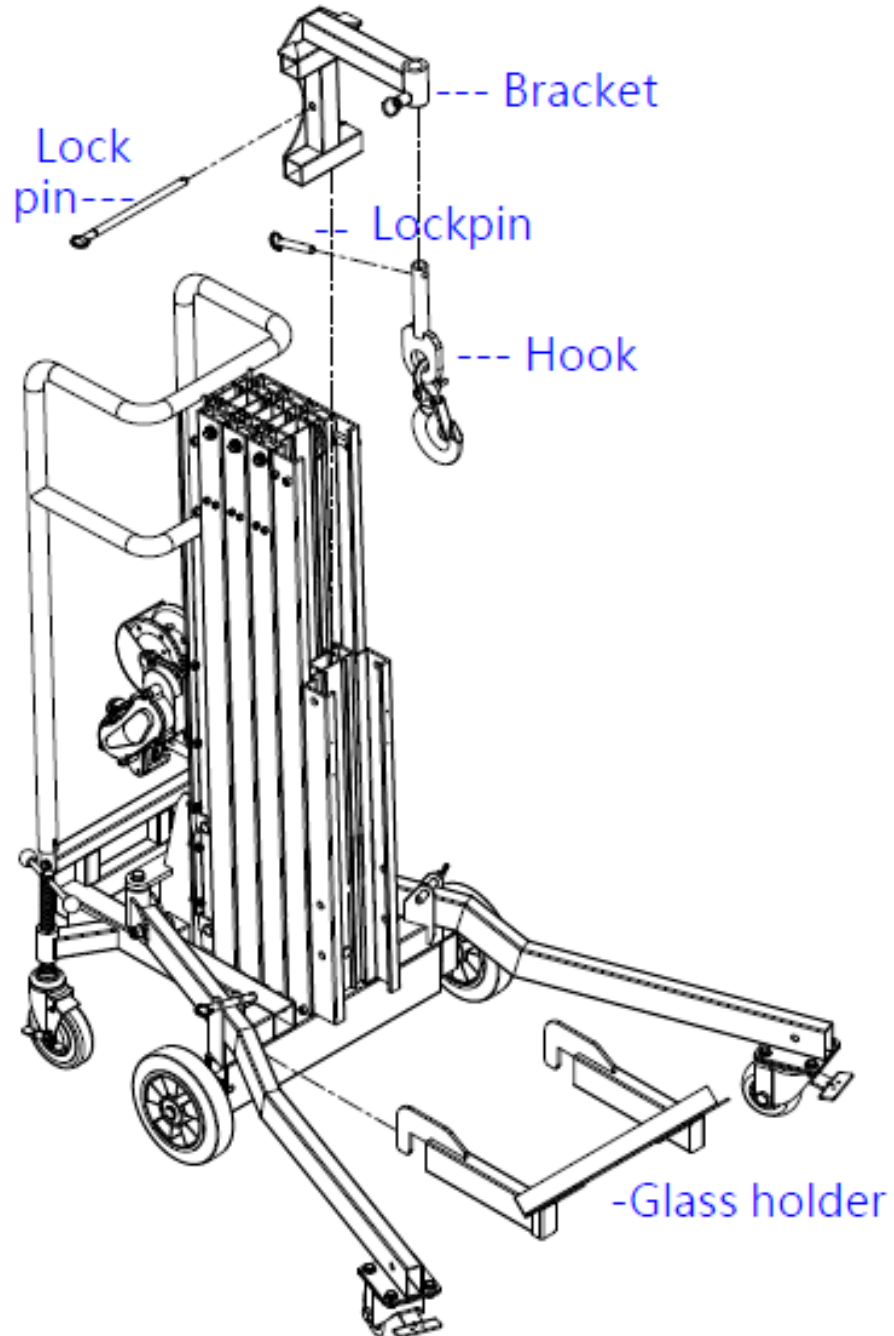




Option B) – Legs out towards the front - With Fork



Option B) – Legs out towards the front - With Hook





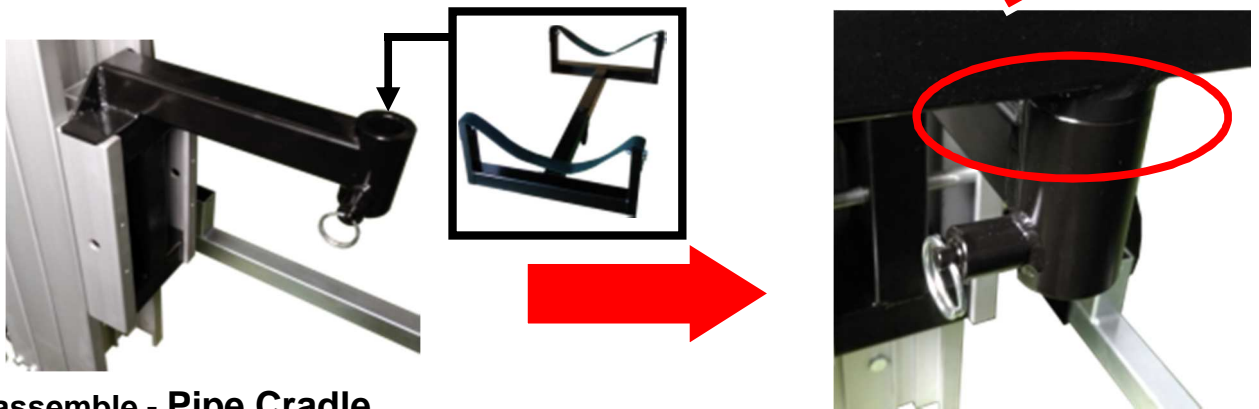
6. Assembly Instruction

Assembly Instruction - Pipe Cradle

1.



2.

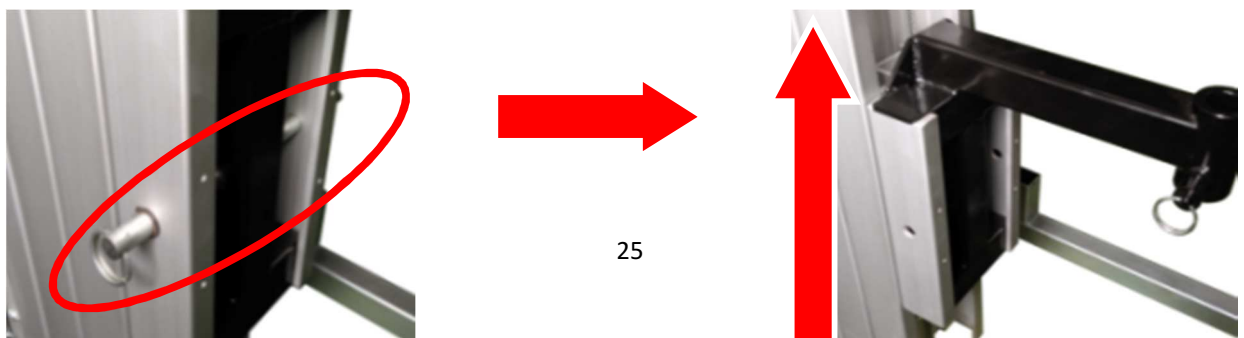


Disassemble - Pipe Cradle

1.



2.

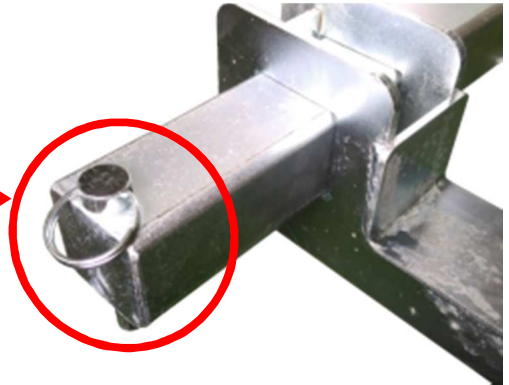


Assembly Instruction - FORK

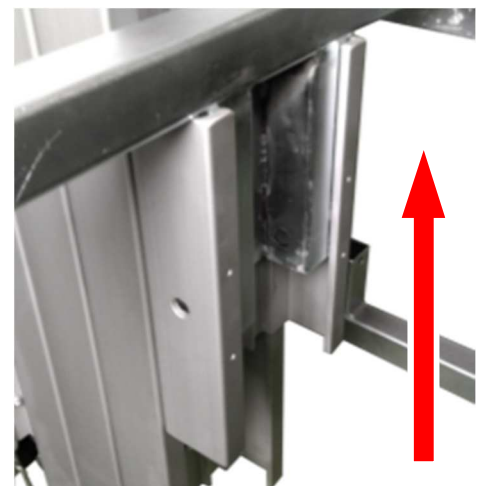
1.



2.



Disassemble - FORK



Assembly Instruction - Hook & Jib

1.

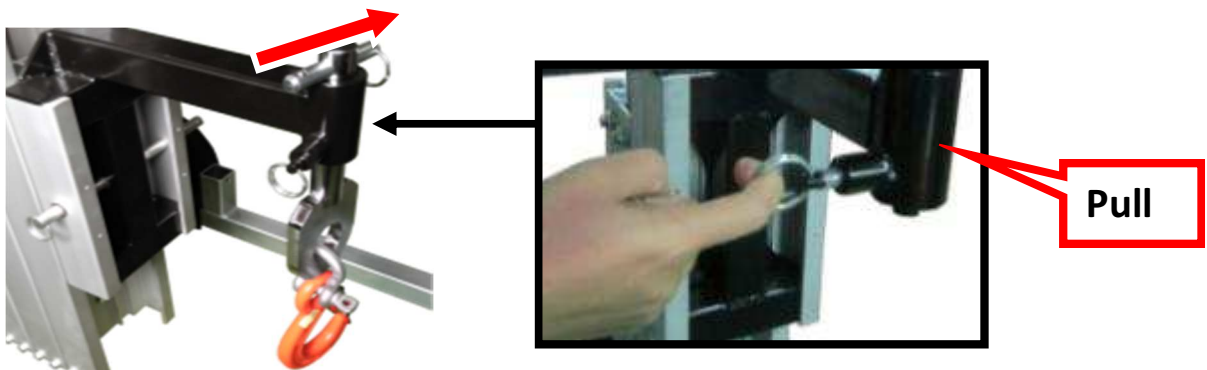


2.

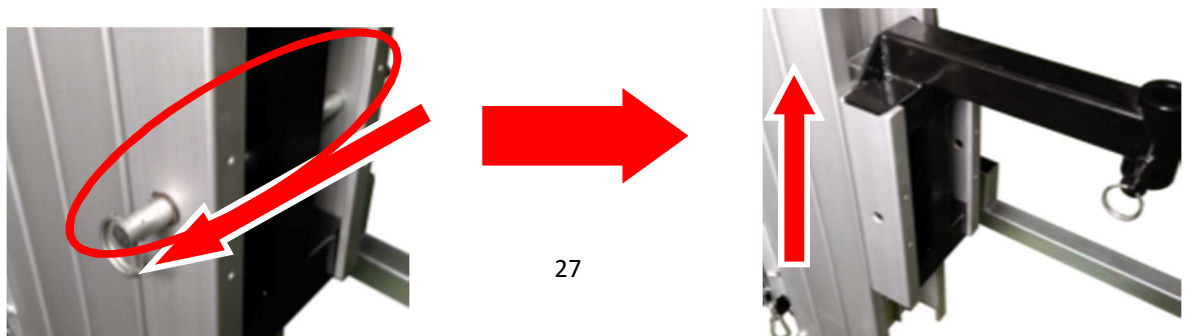


Disassemble - Hook & Jib

1.



2.





7. Inspecting the machine before starting

The control before the initiation is a visual inspection performed by the operator prior to each working day. This inspection is designed to discover defects apparent on the machine before the operator does the tests. Inspect the machine to detect damaged, loose or missing parts. **Never use a damaged or modified machine.**

If damage or modifications to the factory machine are identified, place a sign on the machine to warn others and remove from service.

Only a qualified technician should perform repairs on the machine, according to the manufacturer's specifications. Once repairs are completed, the operator must perform a new inspection before startup and before starting to test the machine functions.

Do not use without:

User must learn and practice the principles of using the machine safely contained in this operator's manual. They must also:

- 1 - Avoid risky situations.
- 2 - Always perform a pre-operation inspection route.
- 3 - Always perform function tests prior to use.
- 4 - Inspect the workplace for any hazards.
- 5 - Not use the machine for applications in which it was not designed for.

Before getting started

- Ensure that the operator's manual is complete and legible.
- Ensure that all decals are legible and in place.
- Check whether the following components or areas have been damaged, altered, improperly installed or have loose or missing parts:

Components of stabilizers,

Mast columns

Lifting accessories retaining pin (gallows-fork)

Cable anchor

Cable and pulleys

Wheels and Castors

Perform complete control of the machine and check that there is:

No dents or damage

The absence of corrosion or oxidation

No cracks in welds or structural components

The presence of all construction components and other critical components and that all associated fasteners and pins are in place and properly tightened.



Check before operation

- Before plugging, please make sure the voltage is right.
- BEFORE RISING, PLEASE MAKE SURE THE ATTACHED MANUAL HANDLE IS NOT SET IN MANUAL SHAFT.
- BEFORE RAISING, PLEASE MAKE SURE EMERGENCY STOP BUTTON IS COMPLETELY PULLED UP AS SHOWN, IF NOT, THE MOTOR IS RUNNING BUT THE MAST CAN NOT BE RAISING, JUST LIKE OPERATE IN MANUALLY.



YES!! RIGHT!!

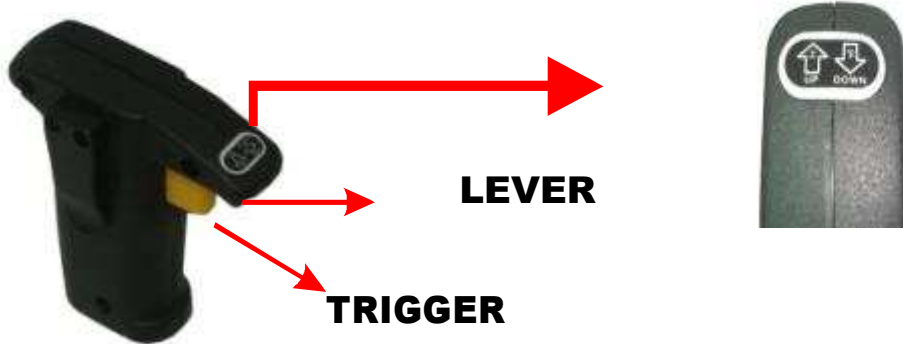
EMERGENCY STOP BUTTON IS COMPLETELY PULLED UP

- IF EMERGENCY STOP BUTTON CAN NOT BE PULLED UP, YOU MAY PRESS THE TRIGGER OF THE SWITCH BOX SLIGHTLY AS SOFT START WITH YOUR RIGHT HAND, AND TWIST THE EMERGENCY STOP BUTTON A LITTLE BIT WITH YOUR LEFT HAND AS SHOWN AND THE PULLS IT UP. INV THE GEAR BOX IS ENGAGED.





RAISING AND LOWERING



1. **RAISING:** Shift the LEVER to UP mark side of the switch box and press the TRIGGER to rising.
2. **LOWERING:** Shift the LEVER to DOWN mark side of the switch box and press the TRIGGER to lowering.
3. The switch is variable speed control, press TRIGGER slightly can be soft start. Press TRIGGER deeper for raising or lowering faster.



AFTER FULL LOWERING, MAKE SURE TO SHIFT THE LEVER TO UP MARKED OF THE HANDLE BOX BEFORE RAISING. If you did not shift the LEVER to UP marked but still operating raise, will occur sound of "Da, Da, Da" which Anti-Reverse device stop raising. Follow the Mark of UP-DOWN sign for operating.

EMERGENCY STOP BUTTON , MANUALLY



1. When the unexpected situation is happening, press the emergency stop button, the machine will stop raising or lowering immediately.



2. Manually: Mounted the manual handle on and rotate it raising or lowering. **WARNING!!**
When operation in manual, operator must be squatting below the basic height of Portable Lifter.



3. Pull the Emergency Stop Button up to operating in electrically.

IF EMERGENCY STOP BUTTON CAN NOT BE PULLED UP, YOU MAY PRESS THE TRIGGER OF THE SWITCH BOX SLIGHTLY AS SOFT START WITH YOUR RIGHT HAND, AND TWIST THE EMERGENCY STOP BUTTON A LITTLE BIT WITH YOUR LEFT HAND AS SHOWN, THEN PULL IT UP.

This is not damaged, it because the gear in the gear box is engaged.



8. Function Tests

These tests are designed to discover any malfunctions before the machine is put into service. The operator must follow the step instructions to test all machine functions.

Function Tests

Choose a firm test surface - flat and unobstructed.

Start-up

- 1 - Position 2 legs
- 2 - Put the fork or the cradle hooks in working position
- 3 - Ensure their assembly with the lock pin
- 5 - Adjust the wheel base if necessary
- 6 - Check that the axle pin wheels are fully inserted

Work Place Inspection

The workplace inspection helps the operator determine if the workplace is suitable for the use of the machine. It should be performed by the operator before the machine is transported onto the worksite.

It is up to the operator to be aware of potential risks in the workplace and then make sure to avoid these during the driving, installation and use of the machine.

Consider the following risk situations as examples of hazards to avoid:

- Drop-offs or holes
- Bumps and obstacles on the ground
- Overhead obstructions and high voltage conductors
- Hazardous locations
- Insufficiently firm ground to withstand all load forces imposed by the machine
- Wind force and weather
- Other potential risk situations

Instructions

Using the machine for any purpose other than lifting material is unsafe and dangerous.

Several operators are to use a machine at different times of the day; each operator must comply with all safety regulations and instructions in this manual.

Every new operator should perform checks such as commissioning, testing functions and monitoring the workplace before using the machine.



Moving Machine with a load

It is best to move the machine around the workplace without a load. The machine must not be moved whilst the load is being lifted. If it is necessary to move the machine with a raised load, understand and follow the following safety rules:

- Ensure that the area is flat and free of obstacles
- Ensure that the load is centered and securely attached to the forks/cradle/hooks.
- Avoid sudden starts and stops
- Move the machine with the minimum height load
- Keep personnel away from the machine whilst loading

Lifting and lowering of the load

- 1 - Center the load on the forks or cradles.
- 2 - Secure the load on the forks or cradles, always as close as possible to the masts
- 3 - Raise the load by press the "UP" button of the switch
- 4 - Lower the load by press the "DOWN" button of the switch

Failure to properly position the load may result in death or serious injury.

Check that the load to be lifted does not exceed the maximum load for the center of gravity.

- Rollover Risk:

The lifting of a load exceeding the capacity of the machine can cause serious injury.

The positioning of the load center outside the area of the center of gravity can cause injury or death.

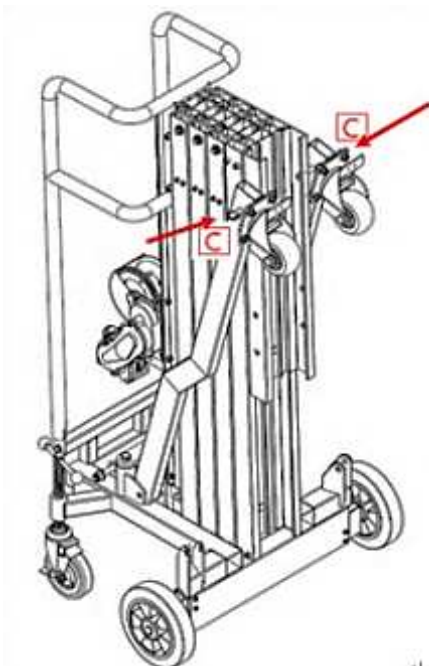
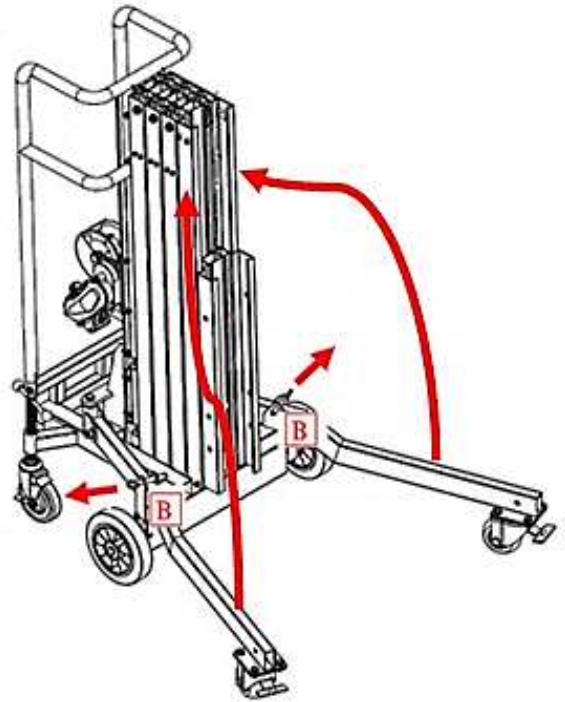
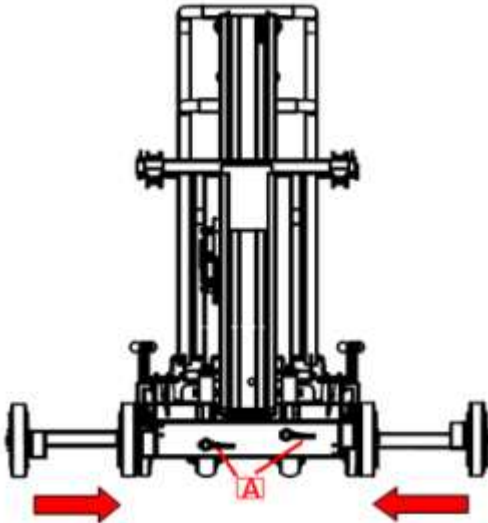
9. Disassemble



Make sure off load before disassemble the unit.

Be sure maintaining the safety distance from the authorized personnel.

1. Remove the lock pin of pipe cradle, fork, and hook. Take them off from mast.
2. Press the handle as shown in figure A to retract the wheel.
3. Pick up the pin as shown in figure B, fold two legs up.
4. Insert the lock pin as shown in figure C to fix the two legs.





10. Transport Instructions

The transport vehicle must be parked on a level surface before loading or unloading this machine.

The transport vehicle must be secured to prevent movement when loading the machine.

Ensure the load capacity, the rolling surfaces, slings or lashing straps are capable of supporting the weight of the machine. The machine must be secured to the vehicle using slings or straps of sufficient load capacity.

Use proper lifting techniques to load the machine onto the transport vehicle.

Ensure that the carriage remains locked in the down position.

Use a minimum of 2 webbing slings to secure the machine during transport.



11. Responsibility Statement

We appreciate your adopting of the BD400. Our company is insistent in high quality and excellent technology to manufacture all types of professional equipment to help customers create high quality products and services. Any suggestion of improvements will be very much welcome.

12. Explosion View

