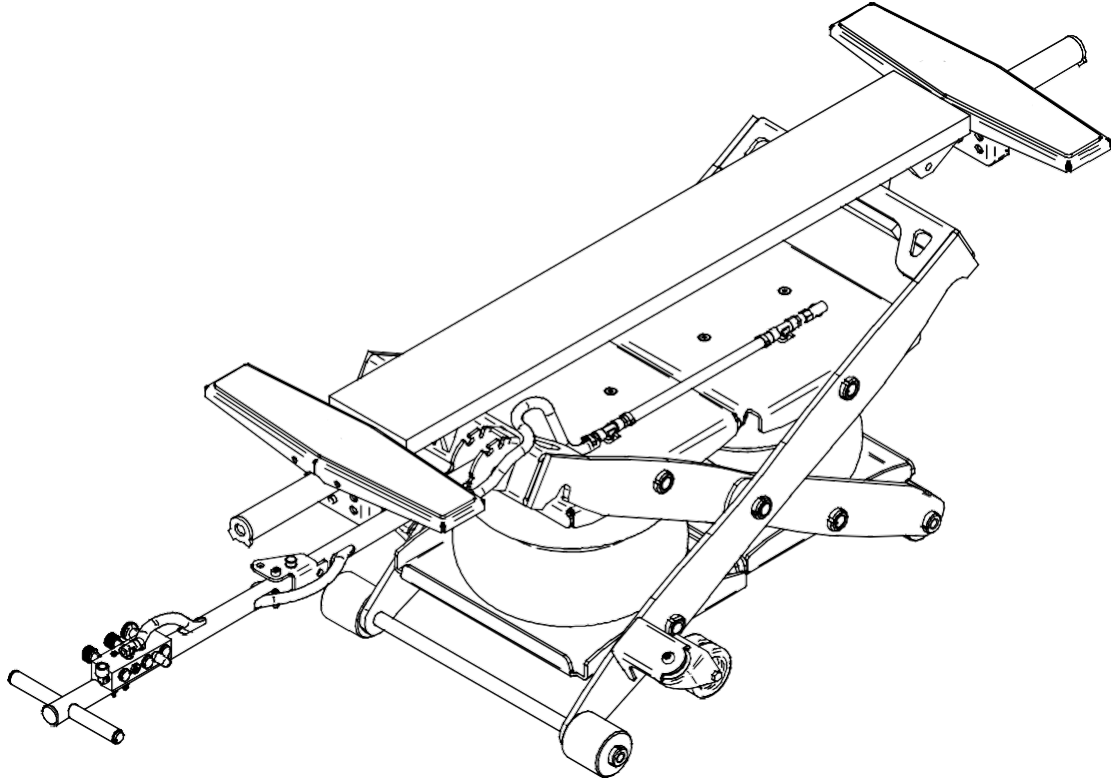


miniLIFT - *Lift & Move*

Model: 92055

Available Accessories: 92053, 92058



OPERATING AND MAINTENANCE MANUAL



ESCO

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3-YEAR EXTENDED WARRANTY

VISIT WWW.ESCO.NET/WARRANTY OR CALL 352-754-1117 TO REGISTER YOUR PRODUCT WITHIN 30-DAYS OF PURCHASE.

SEE PAGE 27 FOR STANDARD WARRANTY DETAILS.

1. INTRODUCTION

1.1. THE COMPANY

ESCO is the world leader in manufacturing and supplying quality tire service equipment for the automotive, agricultural, commercial truck, off-the-road (OTR), and mining markets. ESCO produces a wide range of tire service/handling products ranging from: heavy duty bead breakers; hydraulic rams; air hydraulic pumps; heavy duty jacks and stands; tire demounting and mounting tools; tire wheel dollies, torque wrenches, and many other quality tire service equipment to better aid in safely and efficiently servicing tire/wheels.

ESCO also has an in-house hydraulic repair facility where we feature our 24-hour Turnaround Hydraulic Tool Repair Program. ESCO is known in the industry as the expert in producing equipment for servicing single and multi-piece rims, with over 30 years of experience, ESCO has the Proper Tools to Keep All of Your Equipment Moving.

Our Mission

To supply innovative industry evolving tire tools and equipment to the marketplace through expanding relationships with our distribution channels.

Our Vision

We envision ourselves changing the way tire service professionals handle tires/wheels globally through the use of innovation, market research, consumer knowledge, and industry trends to better supply relevant products that will continue to support safety and efficiency.

1.2. THE PRODUCT

miniLIFT “Lift & Move” is a small size scissor lift with two pneumatic actuators, designed for those workshops which also require a machine that is capable of partially lifting vehicles up to 5,000 lbs. This lift is able to perform three different movements highlighting the following: lifting of the front and rear axle and shifting of the car. This means that, using the miniLIFT, the car will always have the front or rear wheels raised.

miniLIFT “Lift & Move” is a very versatile and manageable product. Thanks to the steering wheel, we can move the lift effortlessly to any point of the workshop and we can also control the lifting of the vehicle.


The pneumatic system is easy to connect so you only need an air intake.

2. GENERAL SPECIFICATIONS

miniLIFT “Lift & Move” is a vehicle lift with a structure made of folding scissors and is driven by two pneumatic actuators. This vehicle lift has been developed for workshops that work with car bodies of different tare and need to be partially lifted or comfortably displaced over the surface of the workshop. The vehicle lift must have the same or less weight than the maximum load indicated in the technical characteristics shown below (section 2.3).

2.1. PRODUCT IDENTIFICATION

Every machine will be equipped with a name tag on one of its parts and visibly to differentiate it from other machines of the same model. The tag is like the following image:

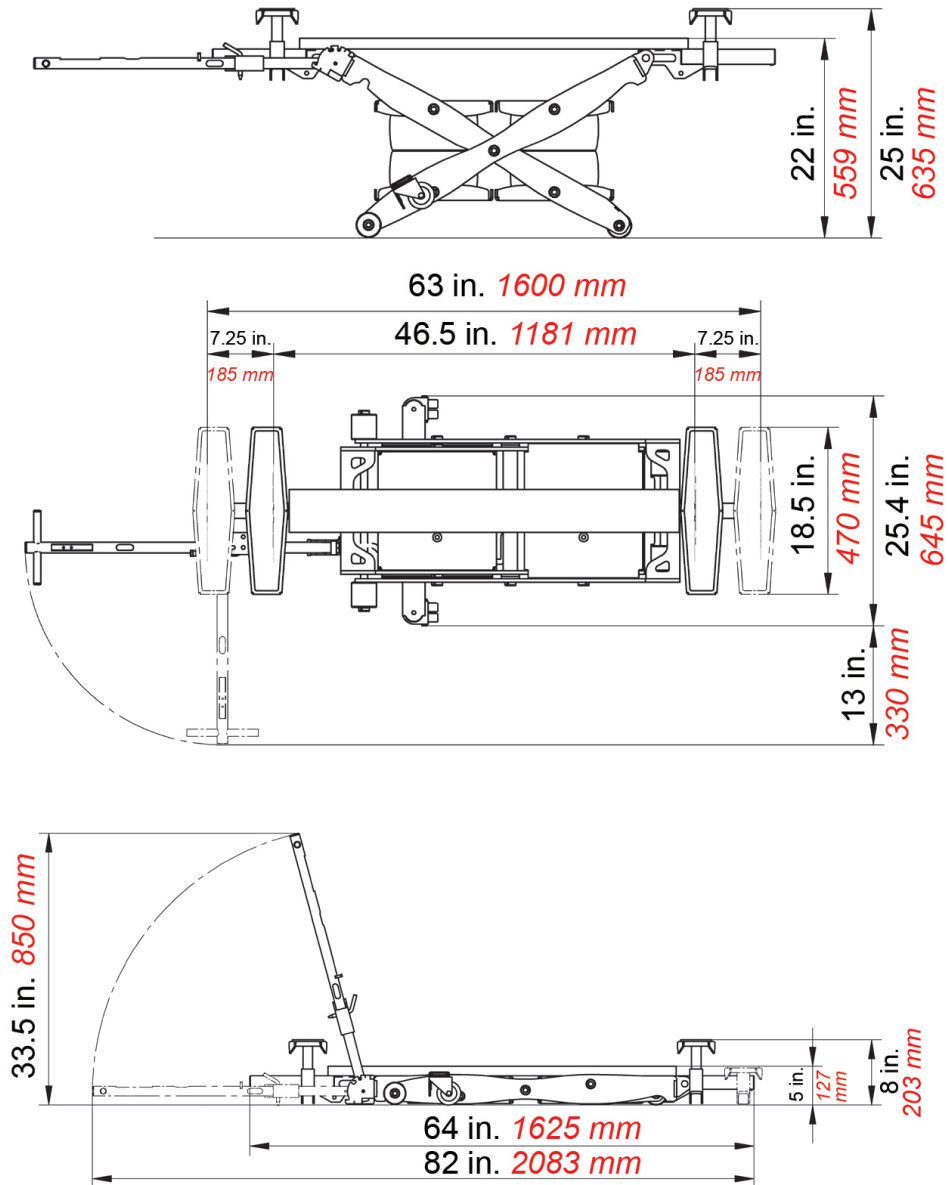
ESCO Equipment Supply Co. www.esco.net		
MODEL:	92055	
MANUFACTURING NR:	
YEAR OF MANUFACTURE:	
MAXIMUM ADMITTED LOAD:	5,000 lbs.	
MAXIMUM LIFTING:	2.5 Tons	
AIR PRESSURE:	90 – 120 psi	
DIMENSIONS (L x H x W):	82 x 25 x 24 in.	

2.2. TECHNICAL SPECIFICATIONS

The technical specifications are basic data of interest to the user. These are:

SPECIFICATIONS	VALUE
MAXIMUM LOAD	5,000 lbs.
MAXIMUM HEIGHT FROM THE GROUND	21 in.
MINIMUM HEIGHT FROM THE GROUND	5 in.
MAXIMUM WIDTH	25 in.
MINIMUM LENGTH	64 in.
MAXIMUM LENGTH	82 in.
STRUCTURE WEIGHT WITH ACCESSORIES	340 lbs.
PNEUMATIC PRESSURE CIRCUIT	6 - 8 bar
ASCENT TIME	13 seconds
DESCENT TIME	17 seconds

2.3. OVERALL DIMENSIONS



3. UNPACKING AND HANDLING

All parts of the **miniLIFT Lift & Move** will be shipped in a single pallet.



We recommend that, at the time of opening the package, the content is revised in full. This is to ensure that no component has been lost. The manufacturer is not responsible for any damage caused by transportation, loading, unloading or unpacking.

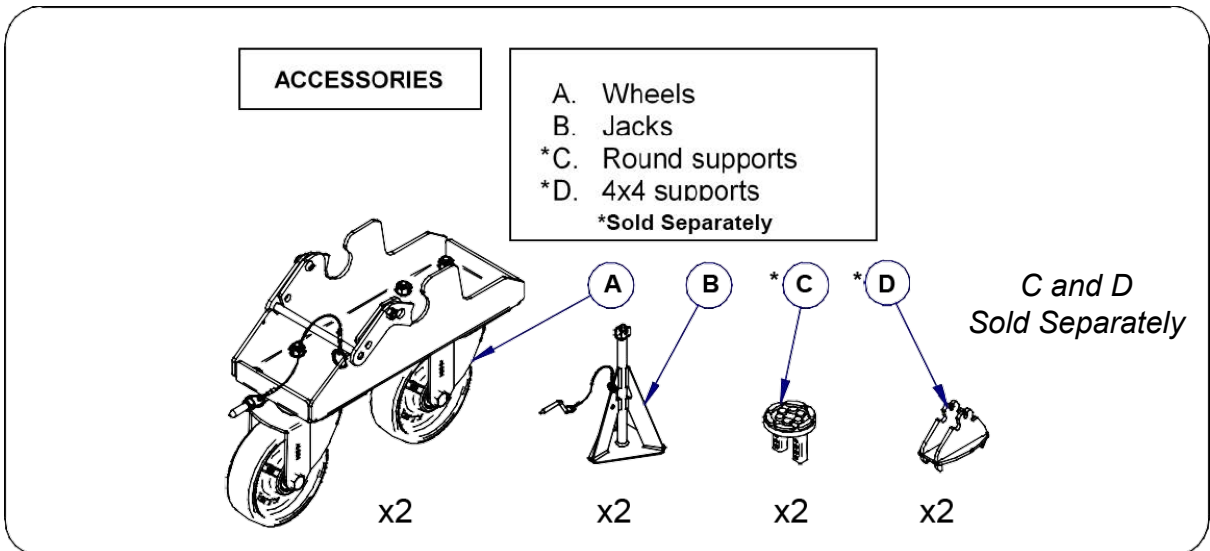
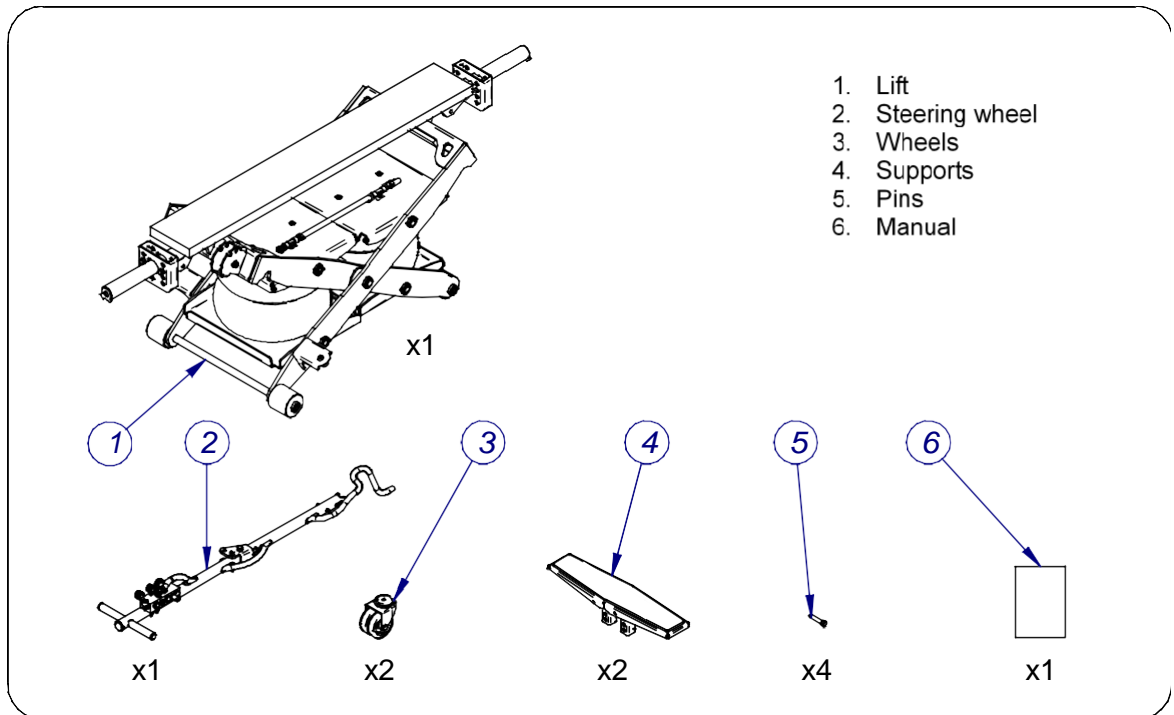
The transfer and transport of packaging must be done according to safety standards and by staff with expertise in the transport of mechanical loads.

It is strictly forbidden to manually transport the package containing the lift.

Staff should wear appropriate protective clothing.

3.1. MACHINE COMPONENTS

Parts are presented separately inside the packaging.



3.2. HANDLING OF CONTENTS

The pallet can be manipulated with a forklift or pallet truck. Then, cut the strips that secure the structure to the pallet and leave the lift so that the wheels are in contact with the pavement.

If a crane to move the lift is used, work should be performed by qualified staff, meeting safety standards. Do not touch or place under the load radius of the crane. Please follow these recommendations:

- Place the Lift in a horizontal position and fix the crane to the Lift with two ribbons or slings at each end to carry the structure correctly.
- Ensure that the ribbons are in good condition and properly placed.
- Place the lift on the pavement so that the wheels are in contact with the pavement.

4. BEFORE USING THE MINILIFT

4.1. WARNINGS

The **miniLIFT** is a mobile lift that must be used within a workshop with a perfectly leveled floor, with enough features to support the lift and its maximum load and protected from adverse factors such as temperature, humidity, wind, rain, etc. it should not be used on a rough surface or other types of surfaces not meeting the minimum requirements for proper functioning. However, the **miniLIFT** is prepared to also work in preparation areas with grid surfaces, as long as it is free of obstacles and special attention is paid.

This product has been developed to repair vehicles, not to lift people. The lift is not designed to work underneath it.

Before starting the installation, the entire area should be rid of any obstacle.

The operation with the lift must be performed by skilled and responsible staff. In addition, the operator must comply with safety and prevention of occupational risks in the workplace.

Any other operation not described in this manual will be a risk borne by the owner and will be considered negligence, which will automatically entail the loss of warranty.



NOTE: The manufacturer is not responsible in any way for any damage caused to persons or property due to misuse of the lift.

4.2. SECURITY ZONE

In order to get the necessary security it is advisable to set the space where you will use the lift at a certain distance from another object or wall.

The operations the user does, like handling, lifting and lowering the car should be done carefully. There should be no one in the work area except the operator.

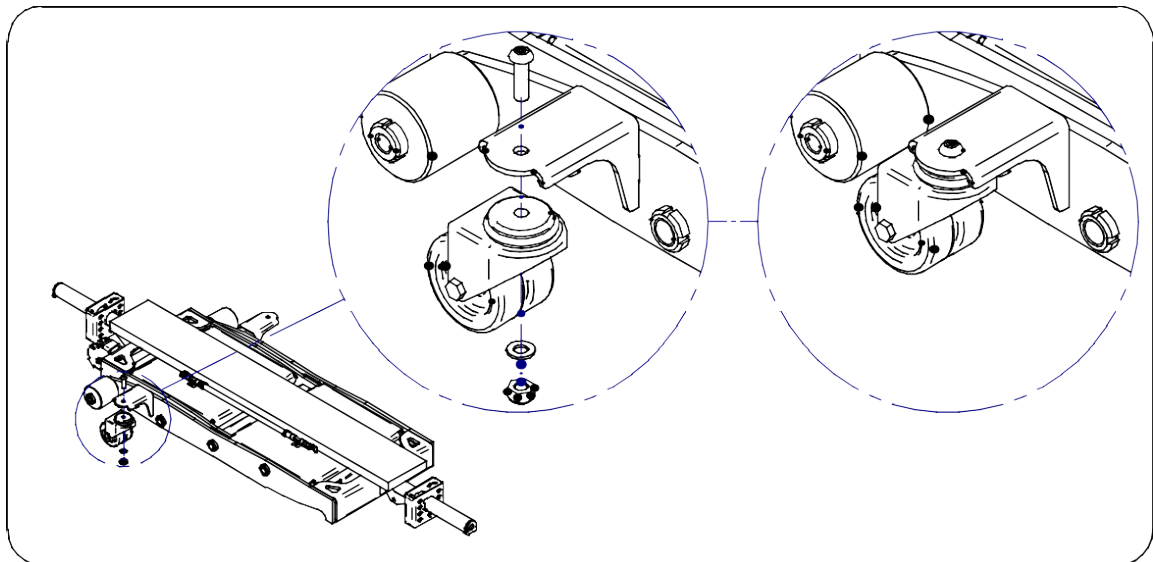
4.3. PERSONAL PROTECTION

The operator must always wear appropriate work clothes and take all necessary measures to maintain security in compliance with the regulation of occupational risk prevention. During handling, the user must ensure his own personal safety and the safety of people and objects around him. The operator must take into account all the recommendations contained in this manual.

5. INSTALLATION AND STARTUP

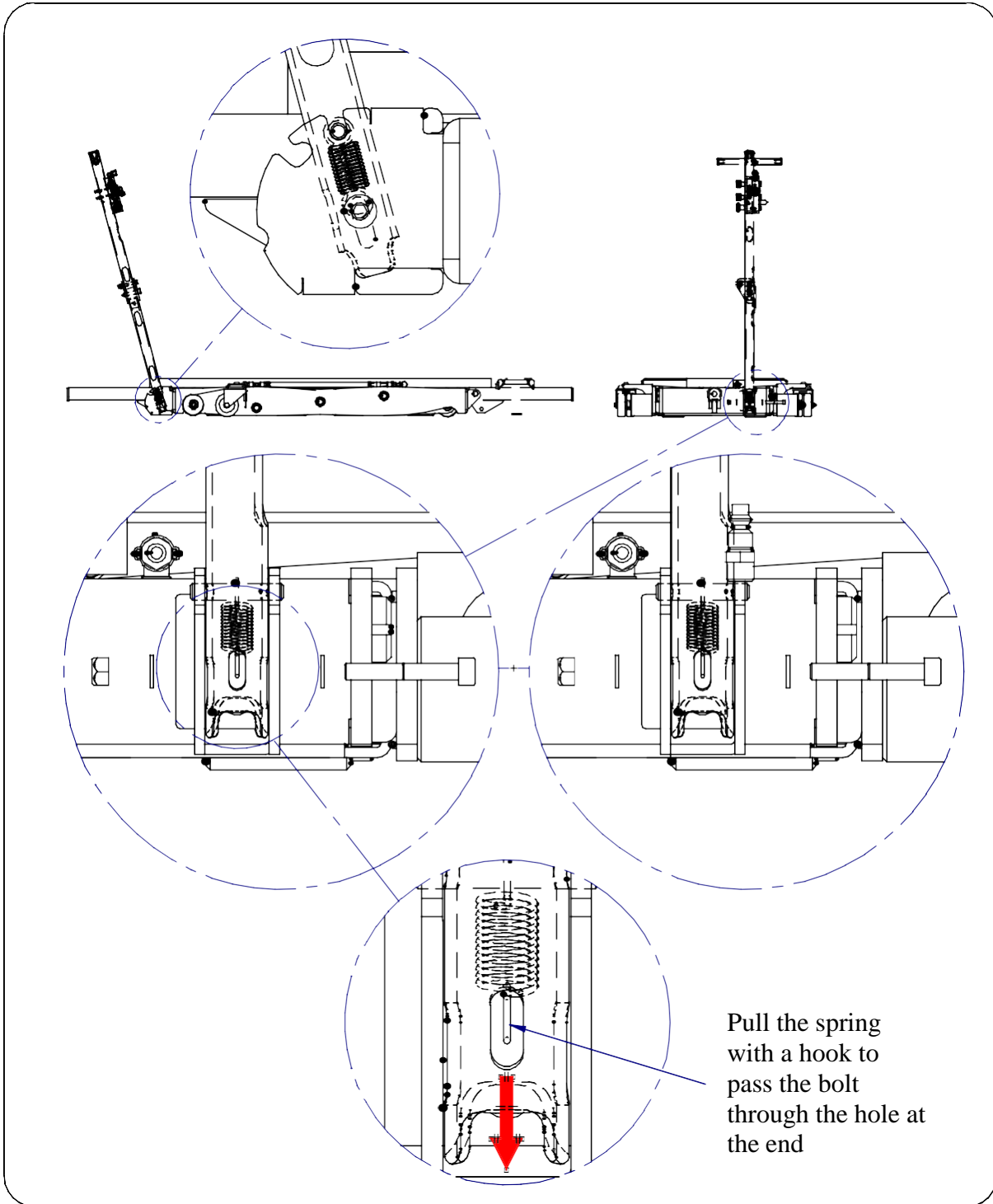
5.1. WHEEL ASSEMBLY

Fit the wheels as shown in the following image:



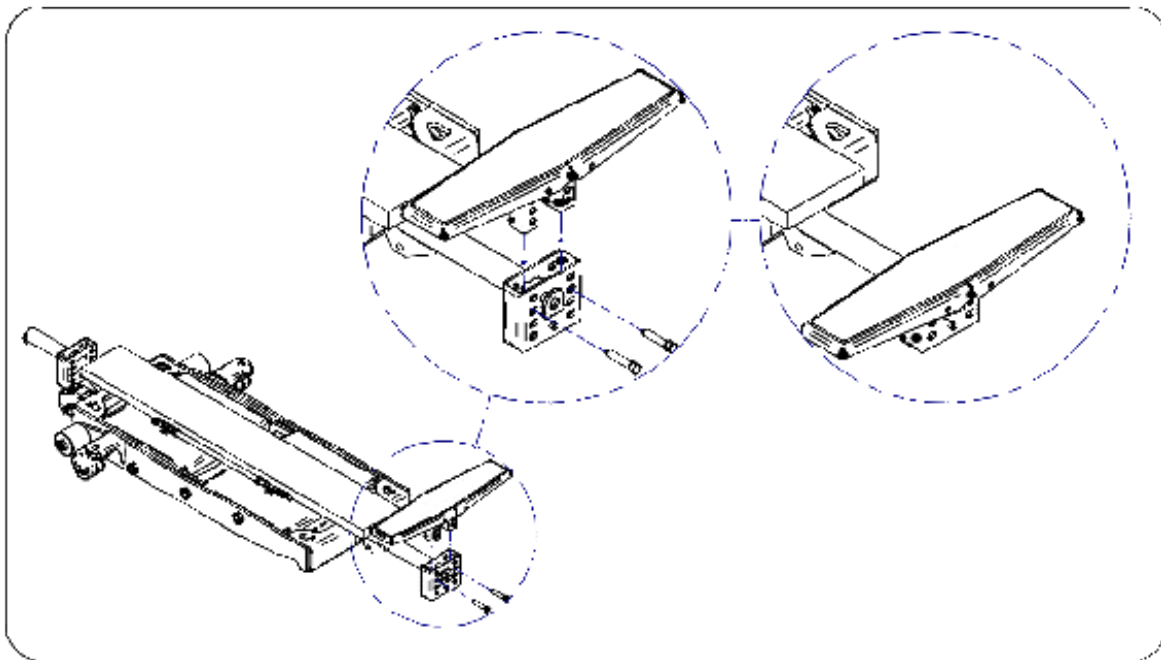
5.2. STEERING WHEEL ASSEMBLY

The bolt that attaches the wheel to the ridge must pass through the hole at the end of the spring that is in the steering wheel. In order to easier understand the procedure, assemble the steering wheel as follows:



5.3. SUPPORTS FITTING

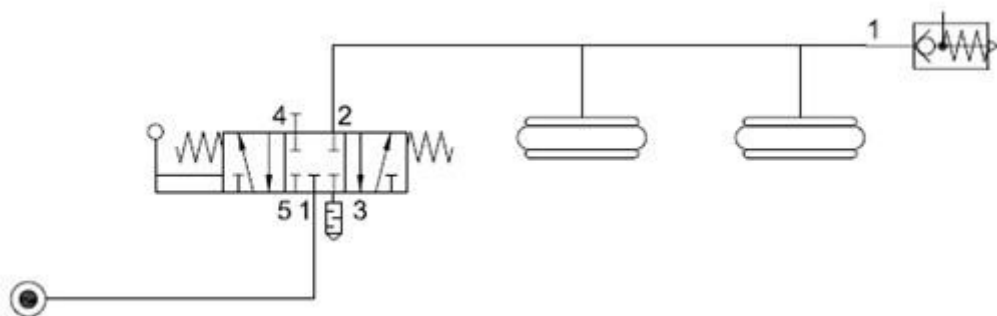
Attach the supports as shown in the following image:



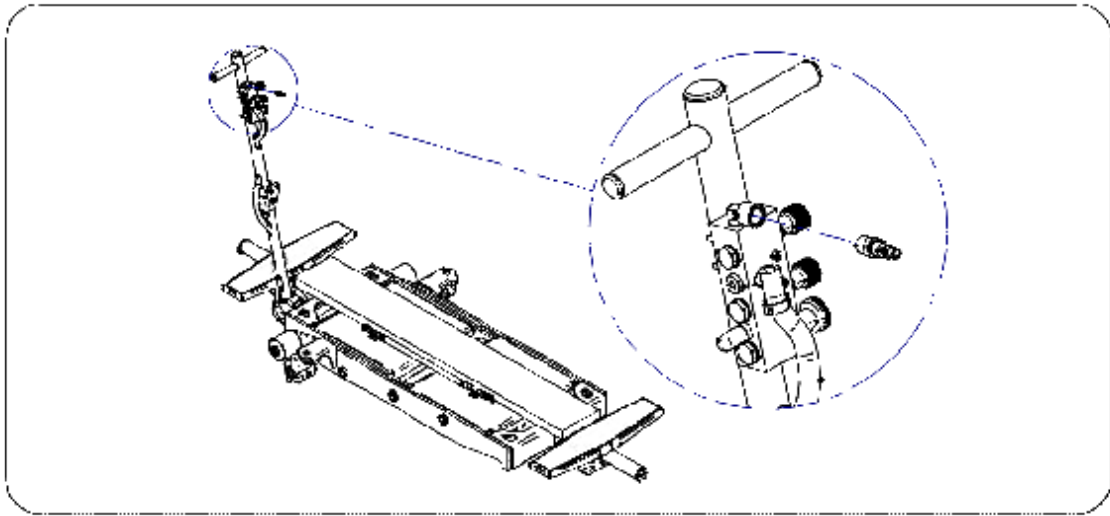
5.4. PNEUMATIC CONNECTION

The pneumatic system that contains the **miniLIFT** allows an important freedom of movement and a clean of oil devoid job.

The drawing of the pneumatic circuit is as follows



The valve that we manipulate to lift and lower the lift is at the steering wheel. To complete the installation, a fitting must be installed on the valve with a quick coupling system that fits the needs of the workshop. ESCO does not provide said fitting. Attach the fitting exactly as indicated in the figure below.



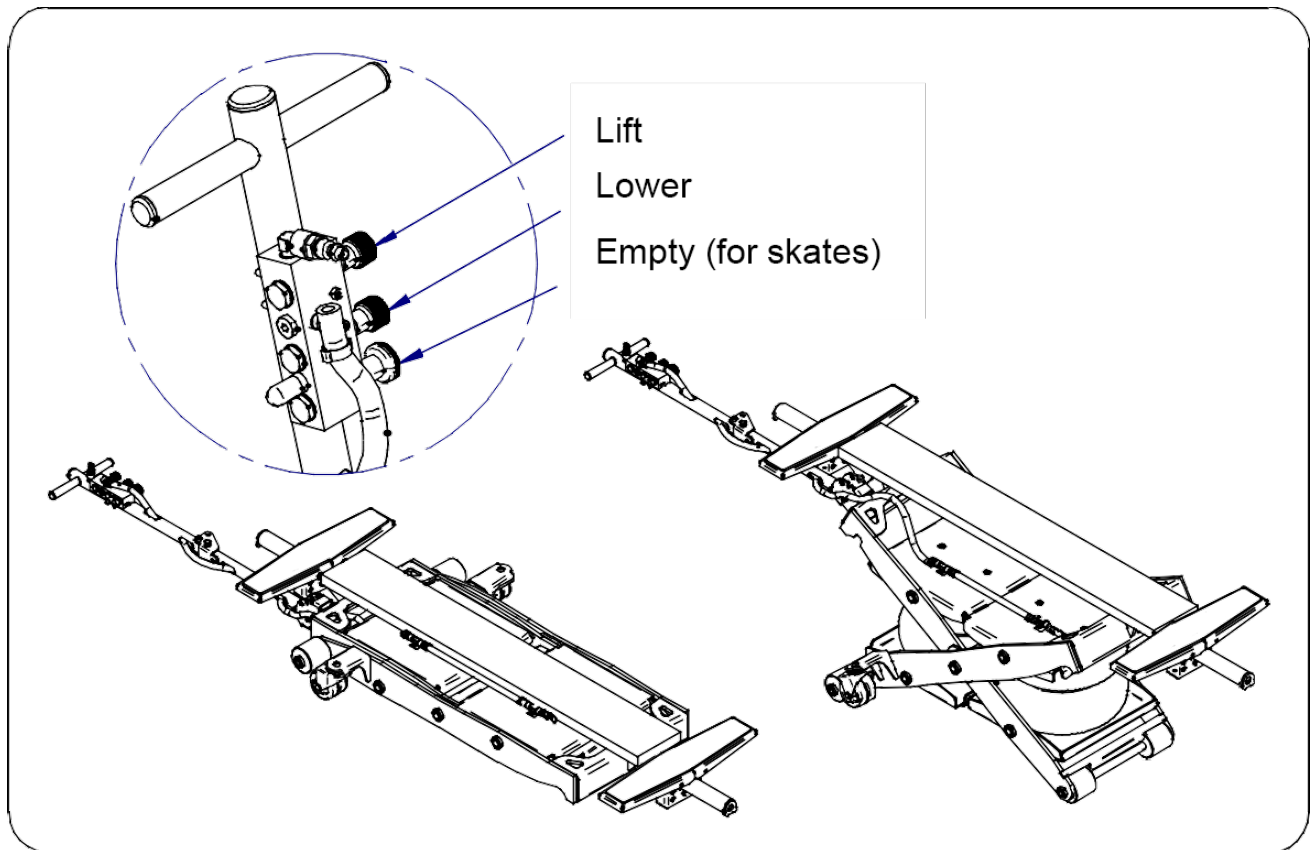
5.5. START UP

After making the connections, it is time to make the necessary checks to ensure that the lift goes up and down properly:



WARNING: Before performing this operation, make sure that no person or object is under or next to the lift.

To raise the lift, actuate the joystick upward. To lower, press the joystick down. In any situation, the lift will go up or down as we continue pressing and remain inoperative when we stop.



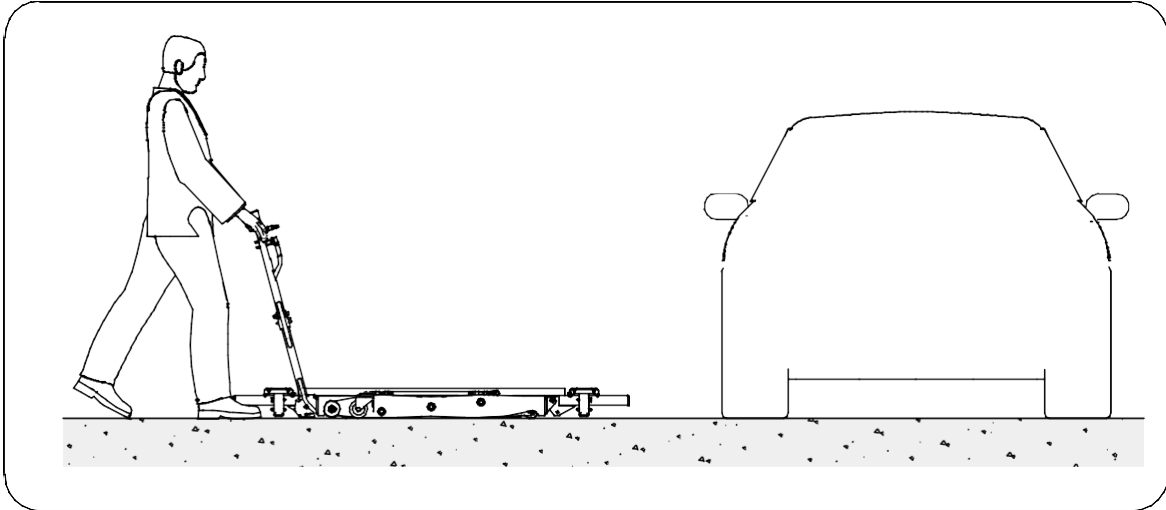
6. DIRECTIONS FOR USE

If the operations described in section 5.5 were successful, the **Lift & Move** is ready for use. Such operations must be controlled before performing any operation.

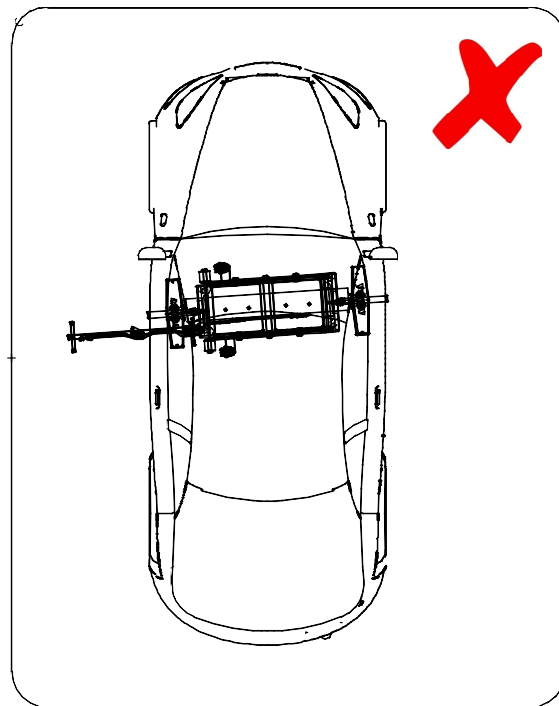
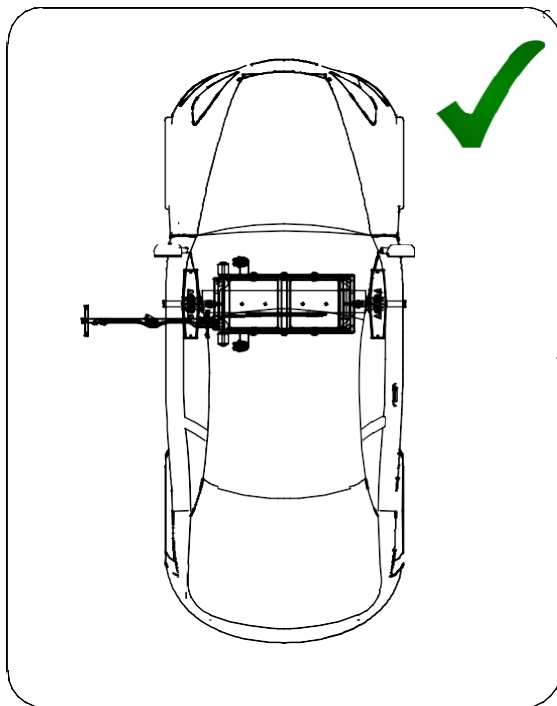
In addition, make sure that the vehicle mass to be handled does not exceed 5,000 lbs, maximum authorized by the lifting load.

6.1. LOCATION OF THE LIFT

The **Lift & Move** is easily movable thanks to the steering wheel that has an anatomical shape. It also contains two swivel casters allowing directing it comfortably and effortlessly.

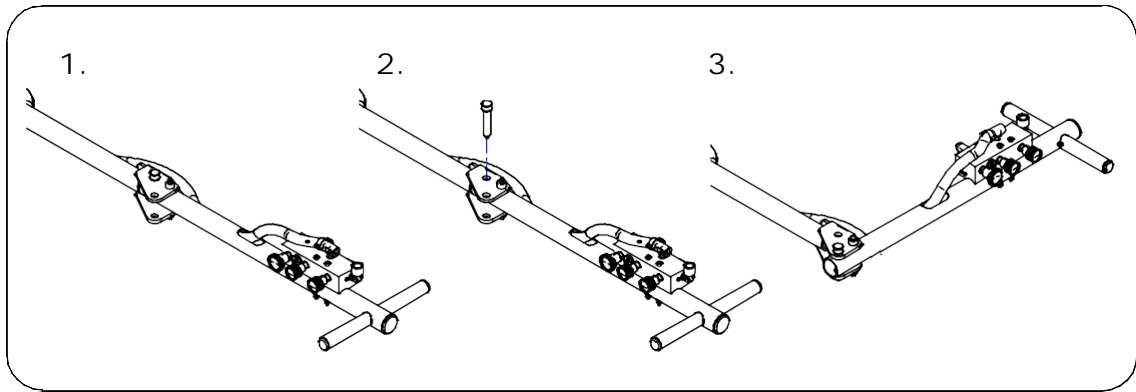


Make sure that the lift is well perpendicular to the length of the car. Otherwise, the **miniLIFT** may suffer and not work properly.



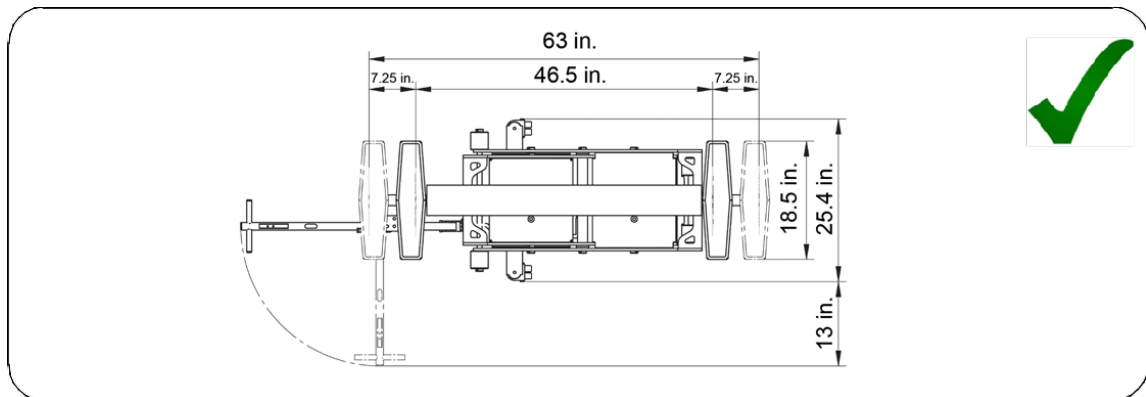
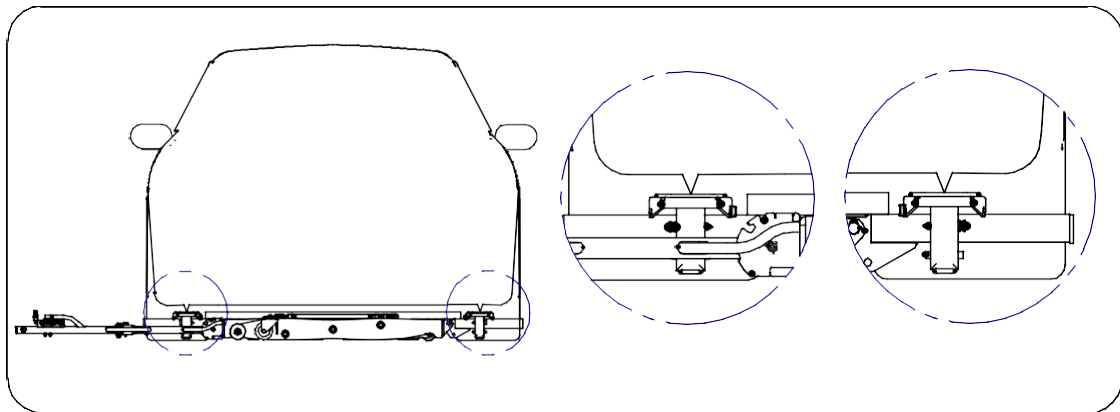
Before placing the lift under the vehicle, we must remove the nearest support at the steering wheel. After entering the **miniLIFT**, we put the steering wheel in a horizontal position and place the support again.

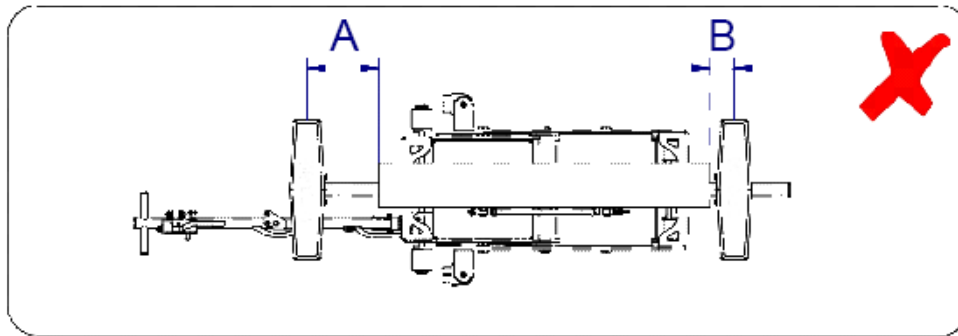
The steering wheel is articulated to avoid tripping around the perimeter of the car. It is advisable to fold and secure it with the bolt.



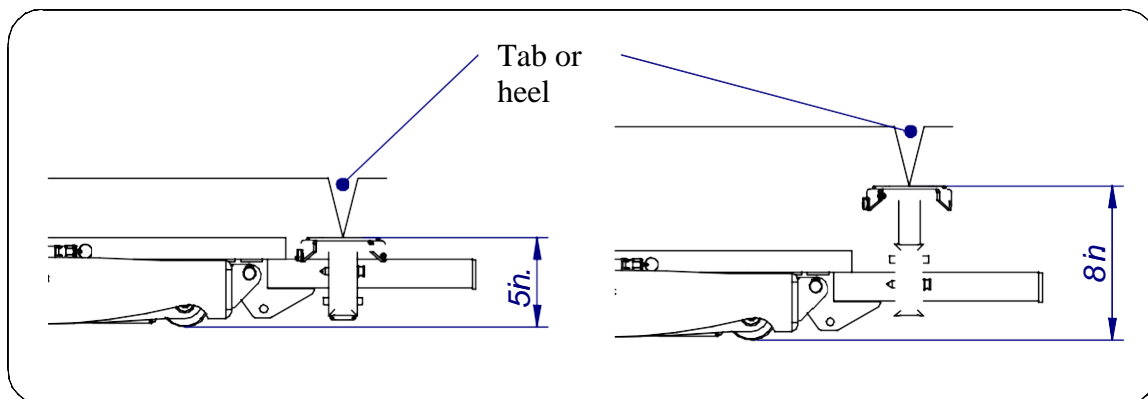
6.2. SET UP THE LIFT ATTACHING IT TO THE VEHICLE WITH REGULAR SUPPORTS

The support system is capable of reaching a large number of points under the vehicle. This is due to the length of the arms. Support should be moved until it is under the ideal spot in order to be able to lift (where normally the jack is placed; generally, the tab or heel). Keep in mind that the two supports have to be placed at the same length in relation to the platform, as shown in the image, without exceeding the maximum.





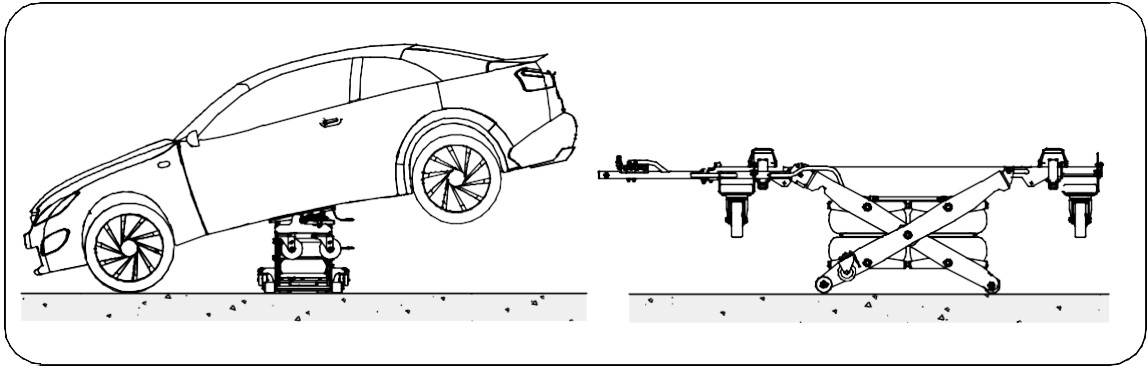
In addition, regular support can be adjusted to different heights depending on vehicle characteristics and location of the tab or heel. This is due to the configuration between said supports and the holder. The maximum and minimum height can be seen in the following image.



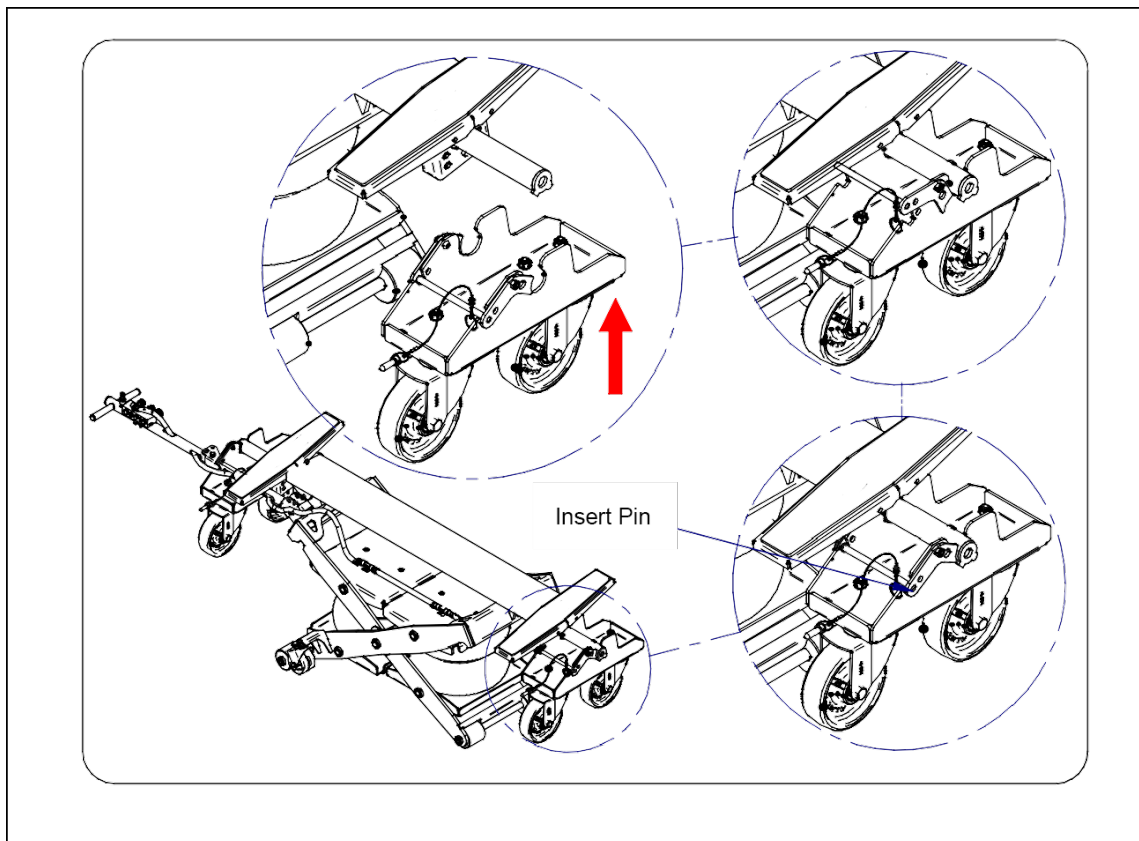
6.3. SET UP OF VEHICLE WITH SKATES (ACCESSORIES INCLUDED)

The main peculiarity of the **miniLIFT Lift & Move**, unlike the **miniLIFT Classic [Model 92050]**, is the possibility to freely move the lift alongside the car over the floor.

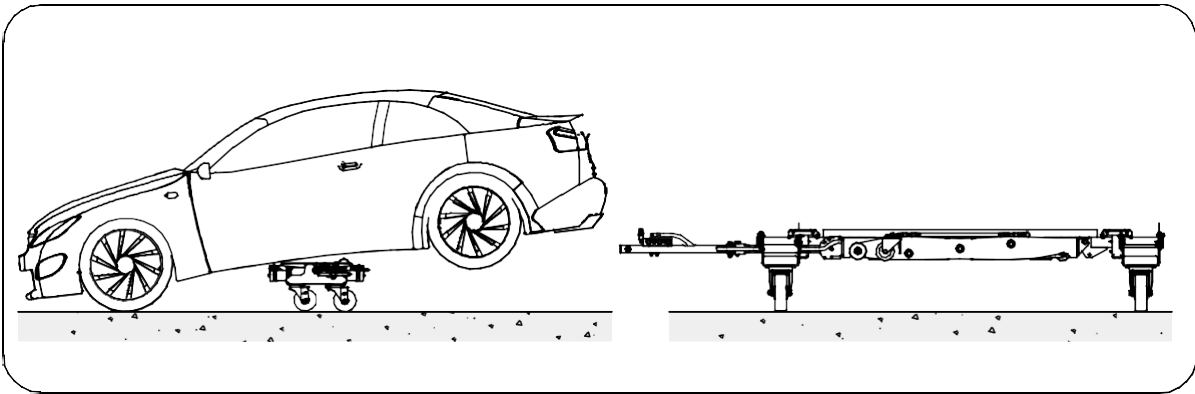
This maneuver is made possible by skates that are to be coupled to the lift. To do this, it is necessary that the lift is at the highest level with the car properly placed on it. Then decide on which part of the fixed arms we will place the skates. The holder of the support can be in the middle, before or after, depending on the configuration of the car and, with a light pressure, the skate is automatically fixed.



This accessory has a security system that the operator must take into account when coupling. This system consists of a pin that prevents the lock from coming out ensuring a perfect coupling without risks. Keep in mind that the skate has an end with a hole necessary to support the steering wheel in it.



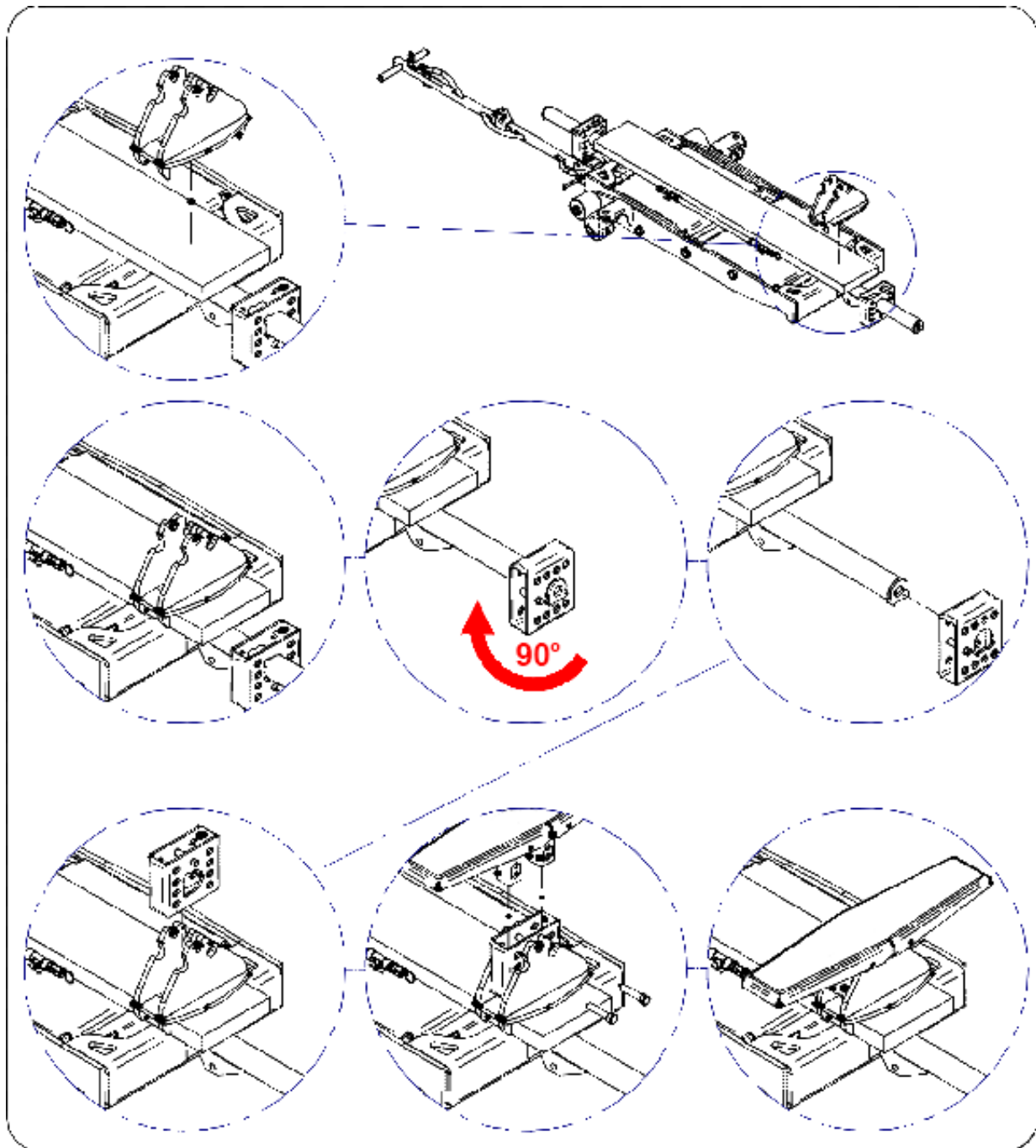
Once coupled, it is necessary to empty the contents of air found inside the pneumatic cylinders. To do this, the button for lowering and vacuum have to be pressed simultaneously to let the **Lift & Move** hold itself only by the 4 swivel casters. At this time, the car can move freely pushing it and / or lifting it.



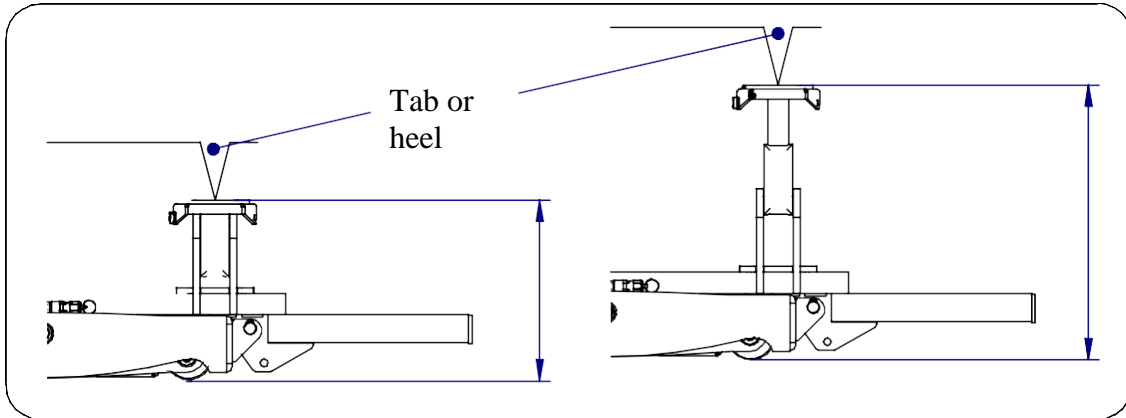
WARNING: It is forbidden to use the skates while using 4x4 supports. There is a danger of tipping the lift.

6.4. SET UP THE LIFT ATTACHING IT TO THE VEHICLE WITH 4X4 SUPPORTS (ACCESSORIES OPTIONAL)

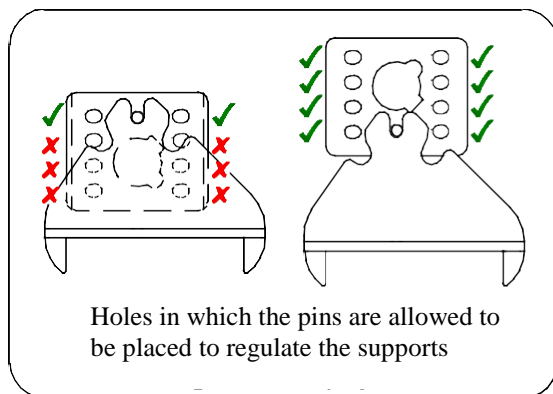
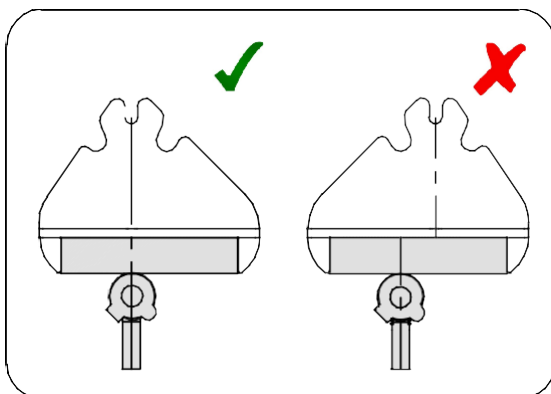
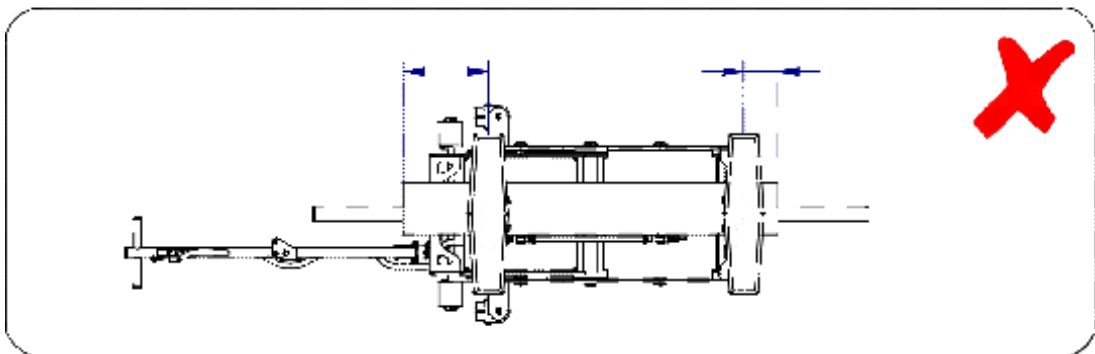
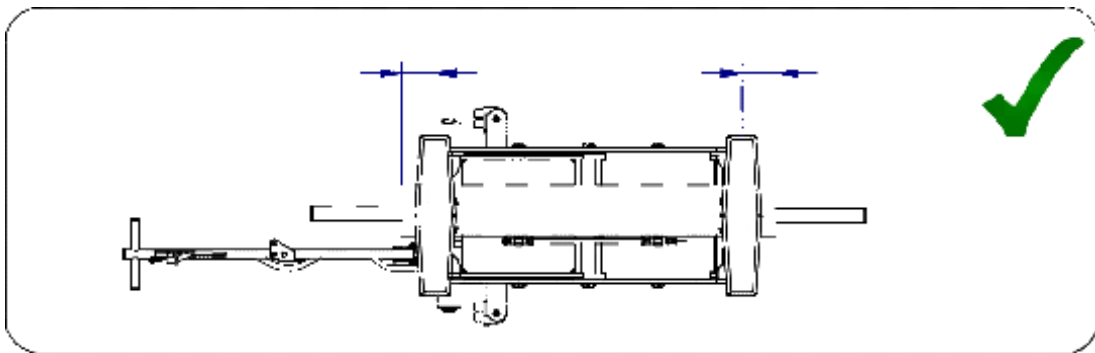
There are cases in which the distance between heels is less than 50 inches. In most of these cases we found as well that the height from ground level to the heel is very high. That's why we created 4x4 support accessories.



4x4 supports can simply be placed on the platform of the **Lift & Move** and can be easily combined with regular supportors and so regulate the desired height, as shown in the image below.



In addition, and for better performance, it is necessary to respect the distances and the directions shown in the following images:



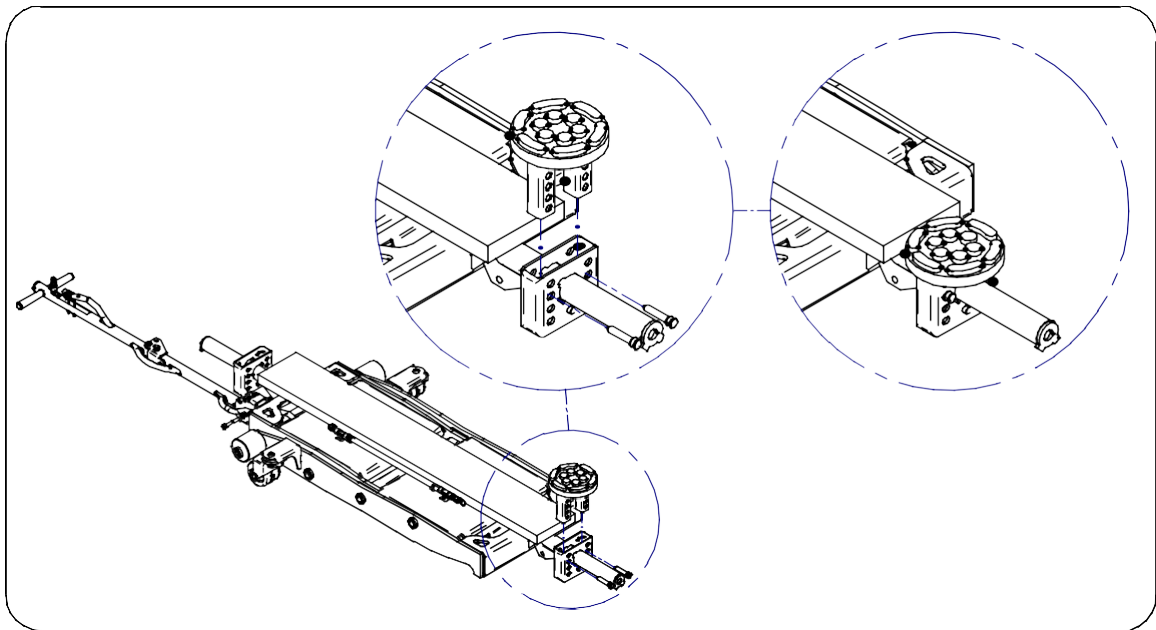


WARNING: It is forbidden to use the skates while using 4x4 supports. There is a danger of tipping the lift

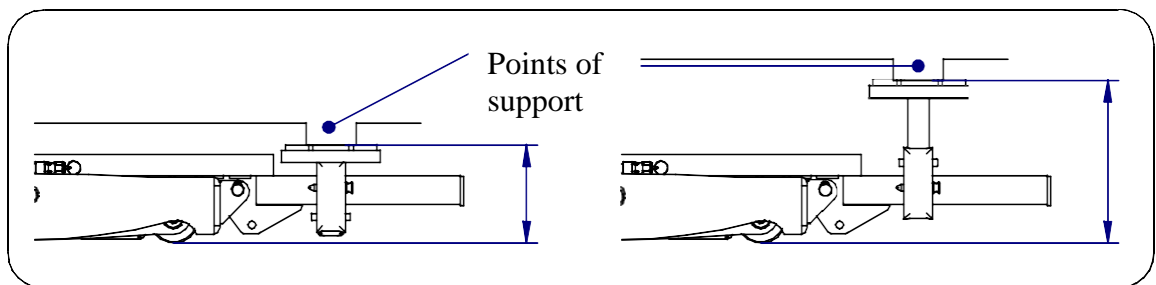
It is also possible to combine them with round supports (optional accessories)

6.5. SET UP THE LIFT ATTACHING IT TO THE VEHICLE WITH ROUND SUPPORTS (ACCESSORIES OPTIONAL)

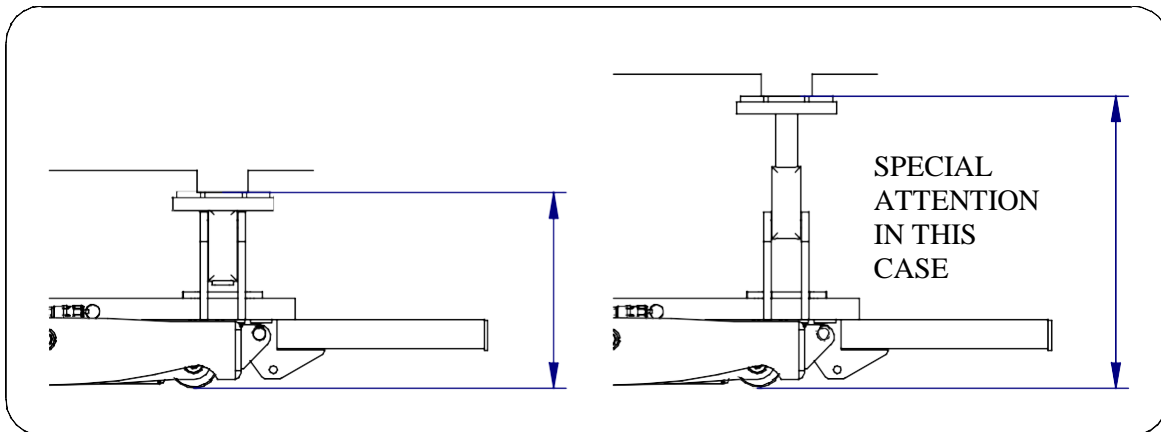
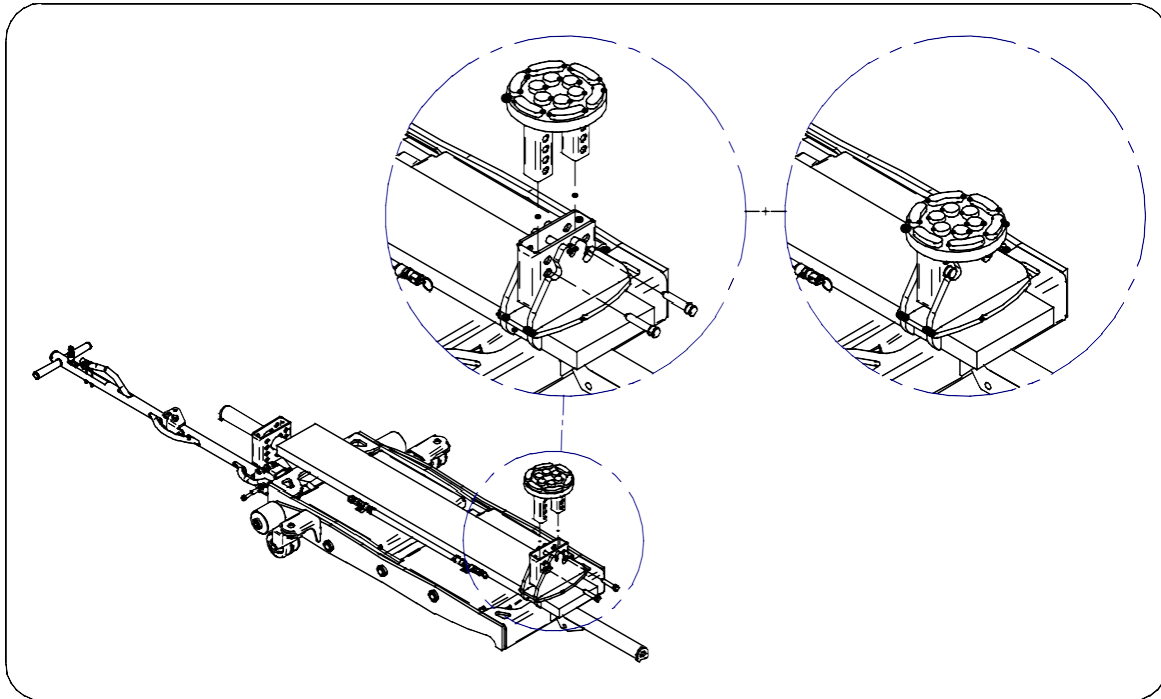
Round supports are optional accessories for those cars without tab or heel but support points distributed under the chassis. In the same way as regular supports, the arms have to be removed until the support is under the ideal point in order to be able to lift it. Keep in mind that the two arms should be pulled out at the same length, without exceeding the maximum.



In addition, round supports can be adjusted to different heights depending on vehicle characteristics and location of the points of support. The maximum and minimum height can be seen in the following image.



Round supports are also compatible and combinable with 4x4 supports and can be adjusted in height as shown in the image below:



In addition, and for better performance, it is necessary to respect the distances and directions represented in the last three images of **point 6.4**.



WARNING: It is forbidden to use the skates while using 4x4 supports. There is a danger of tipping the lift

It is also possible to combine them with round supports (optional accessories).

6.6. ENSURE THE WORK AREA

Once the Lift is placed correctly, follow these guidelines:

- Check that the safety zone is clear of people, objects or obstacles before and during the process of lifting or lowering the vehicle, which has already been mentioned in this manual.
- Continue with the operation only if everything is stable and there is no danger.



WARNING: ESCO is not liable for either civil or criminal proceedings or any injury that may occur if the above instructions are not followed.

6.7. REGULAR LIFTING AND LOWERING MANEUVRE

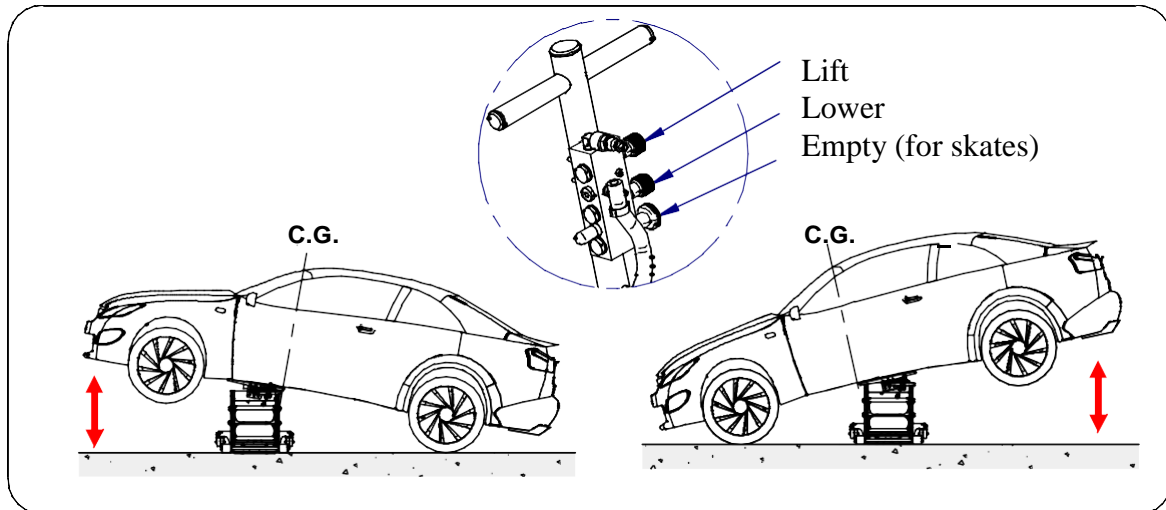
We remind you that before adjusting and lifting a car, you need to check that it works correctly as explained in section 5.5.

Also ensure that the lift is connected to the air network of the workshop and that you have followed the relevant observations detailed in point 6.6.

Once supports are properly positioned, you can proceed to lift the vehicle. The **miniLIFT** is able to reach 55 cm. This means that the vehicle can be lifted over a meter at one end, suitable height for preparation areas and other repairs.

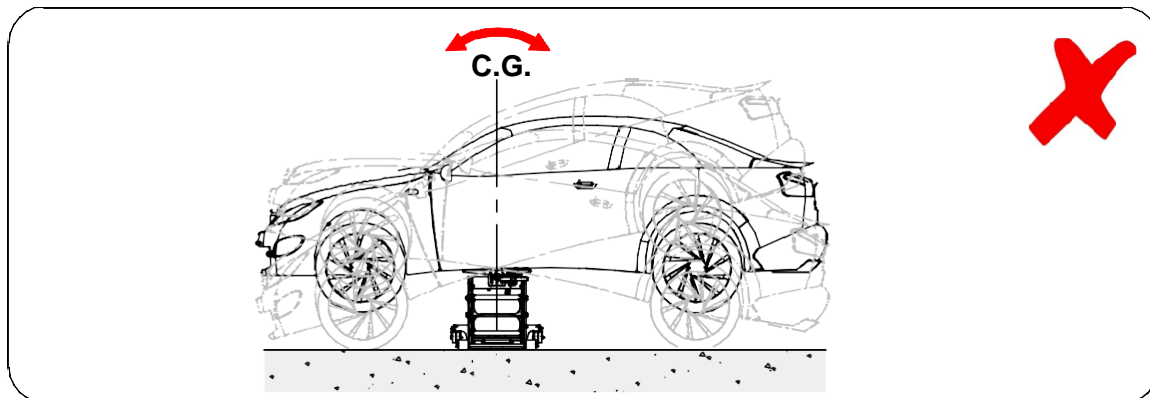
Another thing to consider is the longitudinal position of the lift in relation to the vehicle. We recommend not to place the **miniLIFT** just below the center of gravity (C.G.) of the vehicle and thus avoid the car be lifted by the unwanted side. For further explanation, see the following image.

To lift, we push the up button. This way we let the air network of the workshop go within the pneumatic system of the lift. We will keep it on until the desired height or until the end of its journey. If we stop the action, the lift stops going up.



We must ensure that supports are still in the original place where we positioned it and that the structure remains stable and safe. Desist otherwise and configure it properly.

If the operator had placed the Lift right in the center of gravity, it is possible to pivot the car effortlessly and reverse the tilt. We recommend not performing this maneuver as it can be a risk to the vehicle and / or to the operator. Apuana will not be liable for any damage caused if the operator performs this maneuver.



To lower, just press the joystick down (DOWN) until the lift stops having contact with the vehicle. At that time, we can uncouple it from the air network and remove it from under the car.

7. MACHINE SAFETY

7.1. SECURITY VALVE

The lift is provided with a limited overpressure valve at 8 bars to ensure proper use of pneumatic actuators and prevent damage to the equipment structure.

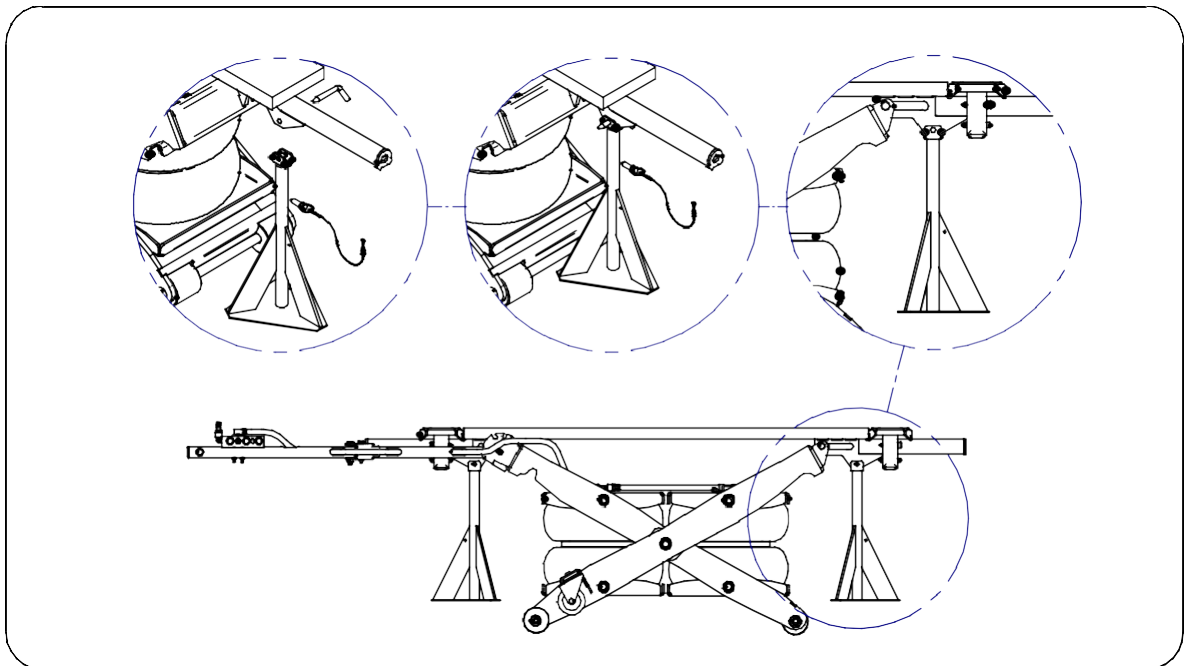
EC declaration of conformity of said valve is attached.

7.2. SAFETY STANDS (ACCESSORY INCLUDED)

Safety stands are an accessory that we supply as a **gift** and is essential in any **miniLIFT**. These stands allow, if there is instantaneous pressure loss, the platform containing arms and supports to remain fixed at a certain height to prevent the car from plummeting causing damage to it and to the operator.

Stands are not an accessory that can be used for working under the car.

They must fit into the holes under the platform and fixed with the pin that each stand contains.



7.3. REMINDER OF THE WARNINGS AND SAFETY DATA

Most safety data listed below have been mentioned extensively throughout this manual:

Remember that the manufacturer is not liable in any way for either civil or criminal proceedings, or any injury that may occur to people or things due to bad use of the lift. The information specified in this manual must be respected.

Any operation that is not described or advised in this manual will be a risk borne by the owner and will be considered negligence which will automatically entail the loss of warranty.

- This manual should be read carefully before using and applying each of the functions of the lift.
- The **miniLIFT** is a mobile lift that must be used within a workshop with a perfectly leveled and smooth floor with enough features to support the load of the lift with its maximum load, and protected from adverse factors. It should not be used on a rough surface or other type of surface not meeting the minimum requirements for the proper functioning.
- The lift can only be used by people over 18 years, properly trained, authorized, skilled and responsible. In addition, the operator must comply with safety and prevention of occupational risks for the workplace.
- It is prohibited to use the lift to carry people.
- The lift is not designed to work underneath it.
- The maximum load permitted by this lift is 5,000 lbs. In no event this load may be exceeded.
- It is extremely important to place the lift in the correct position.
- Both supporters and 4x4 supports must be placed symmetrically in relation to the platform as indicated previously in some of the images.
- Before starting a job, ensure that no person or object is under or next to the lift.
- Prior to the operation of lifting and lowering, always ensure that the structure is free from any obstacle.
- Always check the load, especially in the lifting phase, ensuring that the maneuver is being carried out correctly. If a problem occurs, the elevator must be lowered immediately to then place the vehicle properly.
- Do not swing the vehicle on top of the miniLIFT.
- There is a risk of tipping of the lift if the skates are used if the car is carried by 4x4 supporters.

8. INSPECTION, MAINTENANCE AND CLEANING

The lift must be free of loads upon inspection. You should make a visual recognition of all mechanical parts and check that there is no break, crack or deformation.

Regarding the inspection of pneumatic circuit, you must ensure that connections and tubes are in good shape. There should be no pressure loss in the circuit. To do this, we recommend lifting and lowering the lift without load and check that it works normally.

We recommend greasing the bolts periodically. This operation will prevent breakdowns and problems.

The only source of power for the lift is compressed air. Therefore, breakdowns are reduced to a minimum: There are no engines or electrical components or any oils in this equipment.

We recommend cleaning the **miniLIFT** once a week and remove all dirt and dust that has accumulated, leaving the work area clean. Never use water, or flammable or corrosive liquids.

9. WARRANTY

The **miniLIFT** has 1-year warranty* on all parts supplied, as long as none of the original assembly parts have been tampered with or changed.

***FOR 3-YEAR EXTENDED WARRANTY, PLEASE VISIT
WWW.ESCO.NET/WARRANTY TO REGISTER YOUR PRODUCT WITHIN 30-DAYS
OF PURCHASE.**

To preserve the guarantee, it is necessary to keep the identification label and this manual.

In case of minor repairs, spare parts can be ordered to ESCO, but if the repair is of greater magnitude, the repair must be under the supervision of a specialist of ESCO. That way, the repair can be certified and approved for normal usage.

10. DESTRUCTION OF THE MACHINE

In case of destruction of the lift, we recommend to apply the standards of recycling of ferrous elements.

11. MACHINE DIARY

This section is available for the user to record comments on work, repairs, breakdowns, etc. emerging during the life of the elevator. This way machine information will be recorded.

DATE	COMMENTS

DATE	COMMENTS