

EmsRobot

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Symbols and Important Safety Instructions

WARNING: May cause serious injury or death!

NOTE: May cause machine damage!



Note:

Stair Climber parameters are suitable for ambient temperatures of 25° C. In low temperatures, the endurance and load-carrying capacity will be reduced. This product is recommended for use up to 1,000 meters above sea level, with an ambient humidity range of 45% to 85%. Not recommended for use in frost or snow.

WARNING: If faults, malfunctions, damage, unusual noises or vibrations are detected during the pre-operation inspection and testing, the Stair Climber should be locked and tagged to prevent use.

Contact your local dealer immediately for advice and support

Monthly maintenance and checks

Checking the electrical circuits and components

Check the good condition of the electric control and connection cables with the battery. The sheathing must be perfectly intact and all the connections must be secure and not bear signs of

Checks performed by the manufacturer

It is mandatory to have the stair climbing trolley undergo periodical checks at the manufacturer's site every 12 months so as to guarantee proper operation of the device.

The general conditions of the trolley will be examined, in particular the components subject to wear, assessing whether or not they need to be replaced.

In case of heavy-duty use of the trolley (constant use at maximum

- Before starting to use products, it is mandatory to read and understand the instructions in this manual.
- The efficiency and safety of the stair climbing trolley can be guaranteed only when all the instructions in this manual are observed.
- If the user has trouble understanding the concepts in this manual, he/she should not use the device.
- The product corresponds to the current state-of-the-art and to the related technical safety requirements. Nonetheless it is not possible to exclude a minimum of residual risks. In this regard, please comply with the safety indications.
- It is recommended to be use below 1000m altitude, and the environmental humidity is required to be within the range of 45%-85% (no coagulated snow).
- Before initial operation, please ensure the machine is operated in an environment higher than 0°C.
- Motors on 50% continuous duty [Continuous Operating Hours / (Continuous Operating Hours + Continuous rest hours) ≤ 50%], when rated load of 70% or above, the maximum continuous running time is less than 10 minutes. When rated load of less than 70%, the maximum continuous running time is less than 30 minutes.
- When climbing upstairs, the operator will feel an initial force. Adjust the angle of the machine keeping the balance of gravity to counteract the force.
- Do not allow other people to stand behind the machine during operation!
- Prevent the machine from tipping over due to improper operation and cause danger to the operator.
- When climbing stairs, the operator will feel an initial force. Adjust the angle of the stair climber to keep the balance of gravity to counteract the force.
- Always keep the machine balanced. Be sure to turn off the power after each use.

The following graphic symbols are used to identify the safety messages in this manual. These serve the purpose of drawing the attention of the reader / user to ensure a correct and safe use of the stair climbing trolley. Further graphical elements on safety warnings are in UPPERCASE, italics or boldface characters, even combined.

Warnings for users

1. Do not load people or animals on the stair climbing trolley.
2. Do not load objects on the trolley beyond the maximum capacity indicated on its identification plate.
3. Do not operate the stair climbing trolley while under the influence of alcohol or narcotics.
4. Do not use portable communication devices, like mobile phones, when steering, because both hands must be kept on the control handle.
5. Do not attempt to climb stairs with the load facing the stairs.
6. Do not circulate on open roads where there is vehicular traffic.
7. Do not use when it is raining.
8. Do not use the stair climbing trolley when the battery is not sufficiently charged to power the trolley all the way.
9. Do not attempt to climb the stairs without having first strapped the load to the trolley. Before using the stair climber, it's mandatory to always tie the load with the supplied fastening strap.
10. Do not climb the stairs with the wheels used for flat surfaces assembled on the trolley.
11. When using the crawler track trolley, the operator must always remain in the control position, i.e. in front of the control handle.
12. Do not stop suddenly, make sharp turns or travel in a zig-zag formation.
13. Do not over-exert the stair climbing trolley.
14. Never drive the stair climbing trolley with parts of it disassembled.
15. Replace any worn and/or damaged parts and check that the protective devices and controls work correctly before use.

Obligations for operators

The trolley must only be used by one operator at a time.
The operator must be qualified and trained in its use and have the psycho-physical ability to control the trolley easily with full load
It is PROHIBITED for children / persons not physically fit/unqualified persons/unauthorised persons to use the trolley.



Maintenance warnings

1. All maintenance must be carried out with the battery disconnected from the trolley.
2. Operators must use the necessary safety equipment when performing maintenance.
3. The tools used for maintenance must be suitable and of good quality.
4. Do not use fuel or flammable solvents as detergents. Use only non-flammable and non-toxic solvents.
5. Limit the use of compressed air as much as possible (2 bar max) and wear goggles with side protections to protect your eyes.
6. Never use naked flames as a source of light when performing checks or maintenance.
7. Do not perform any maintenance without having the necessary technical training.
8. After performing any maintenance or checks, make sure that there are no tools or foreign bodies between the moving parts of the stair climbing trolley.
9. Do not attempt to open or tamper with the battery pack of the crawler track trolley. If the battery pack needs to be replaced, contact the Ems-Robot assistance service.

Weekly maintenance and checks

Washing and cleaning

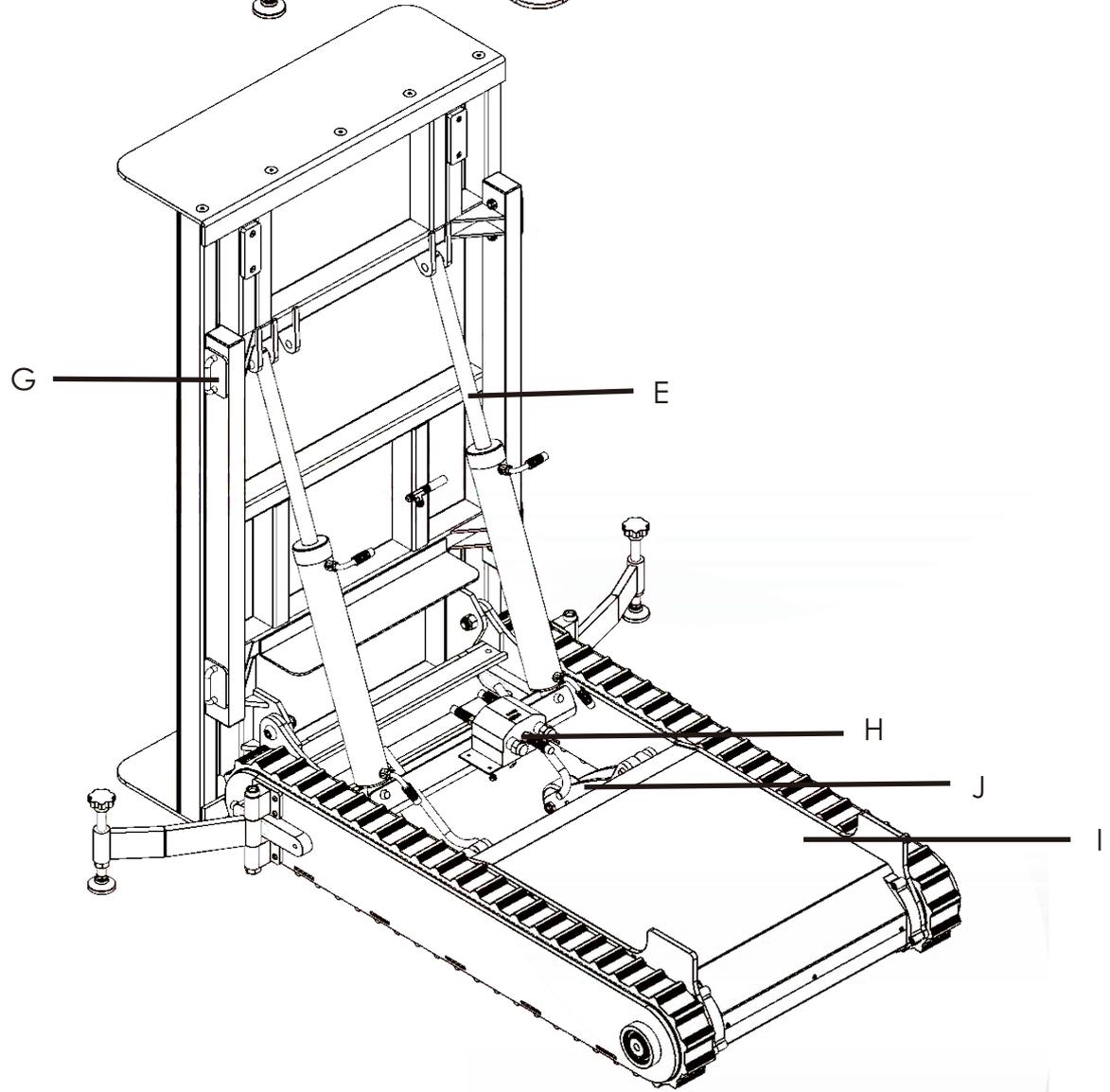
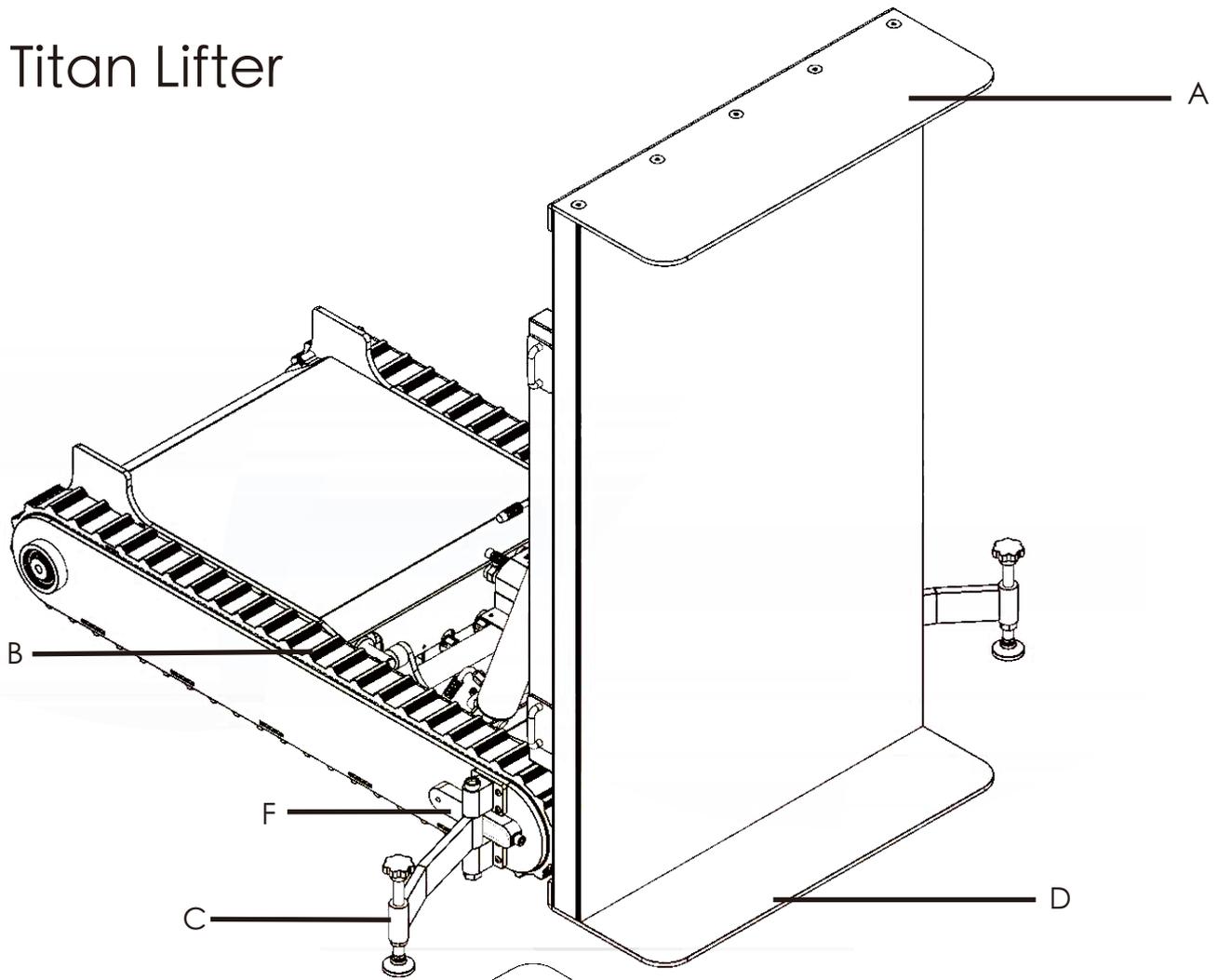
The stair climbing trolley should be cleaned not only for reasons of decorum, but also to immediately identify any defects.

Certain precautions should be taken while cleaning to avoid damaging or reducing the efficiency of the various components, especially the electrical parts. It is strictly prohibited to aim jets of pressurised water at the electrical parts, motors and battery, which should preferably be cleaned with compressed air.

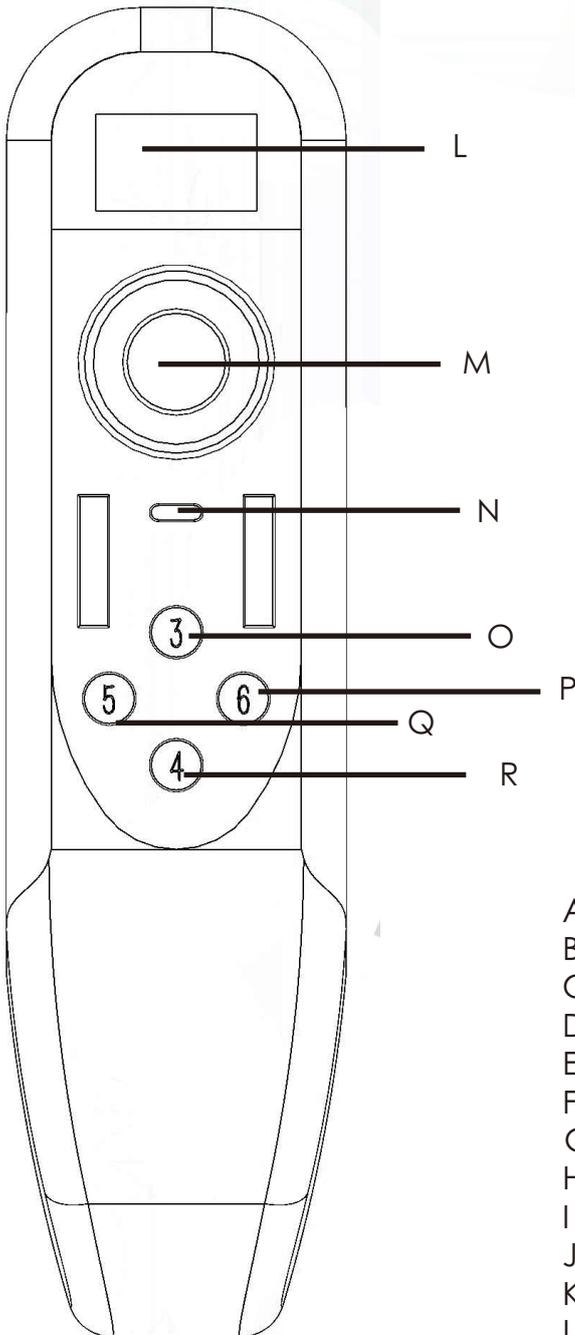
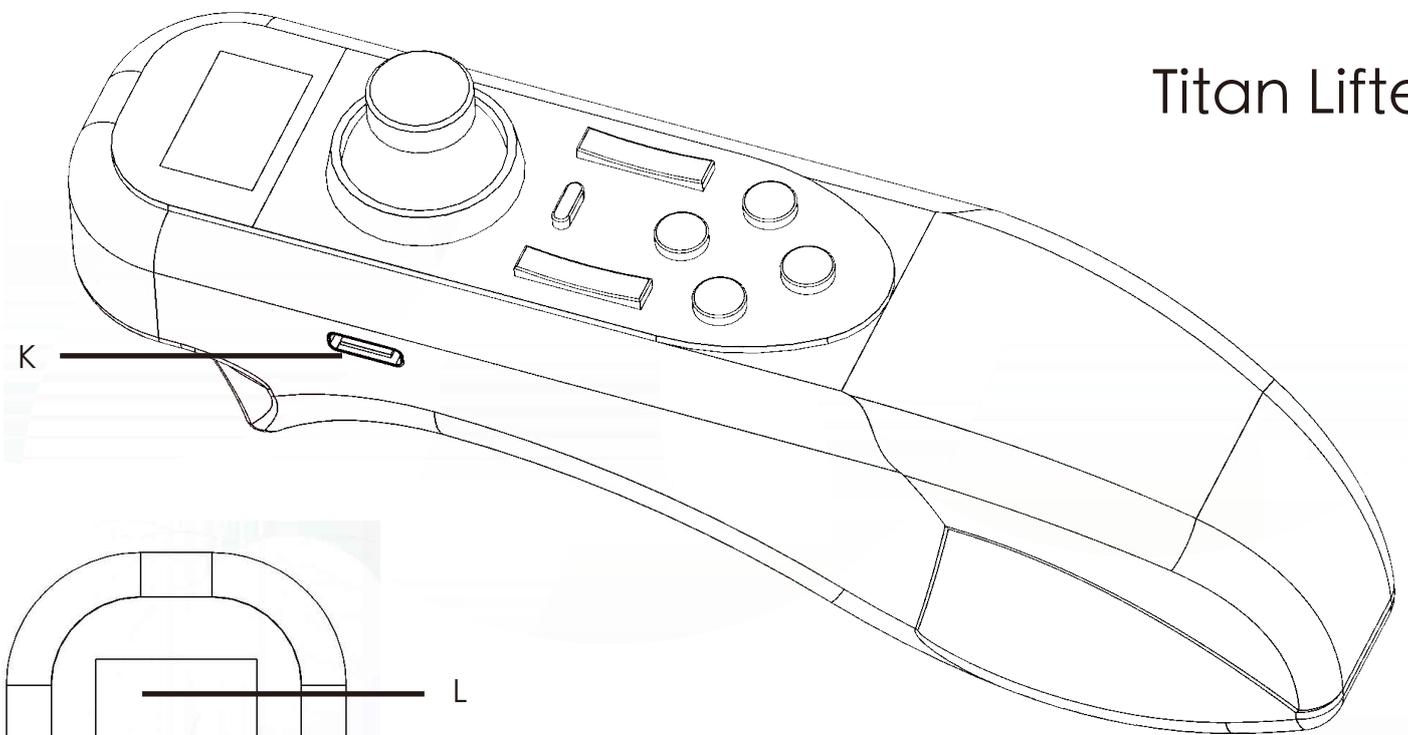
checking the frame and bolts

The supporting frame of the stair climbing trolley and the welds must not have any visible defects like: cracks, deformities, cuts, corrosion, etc. Check that all the bolts on the stair climbing trolley are securely fastened.

Titan Lifter

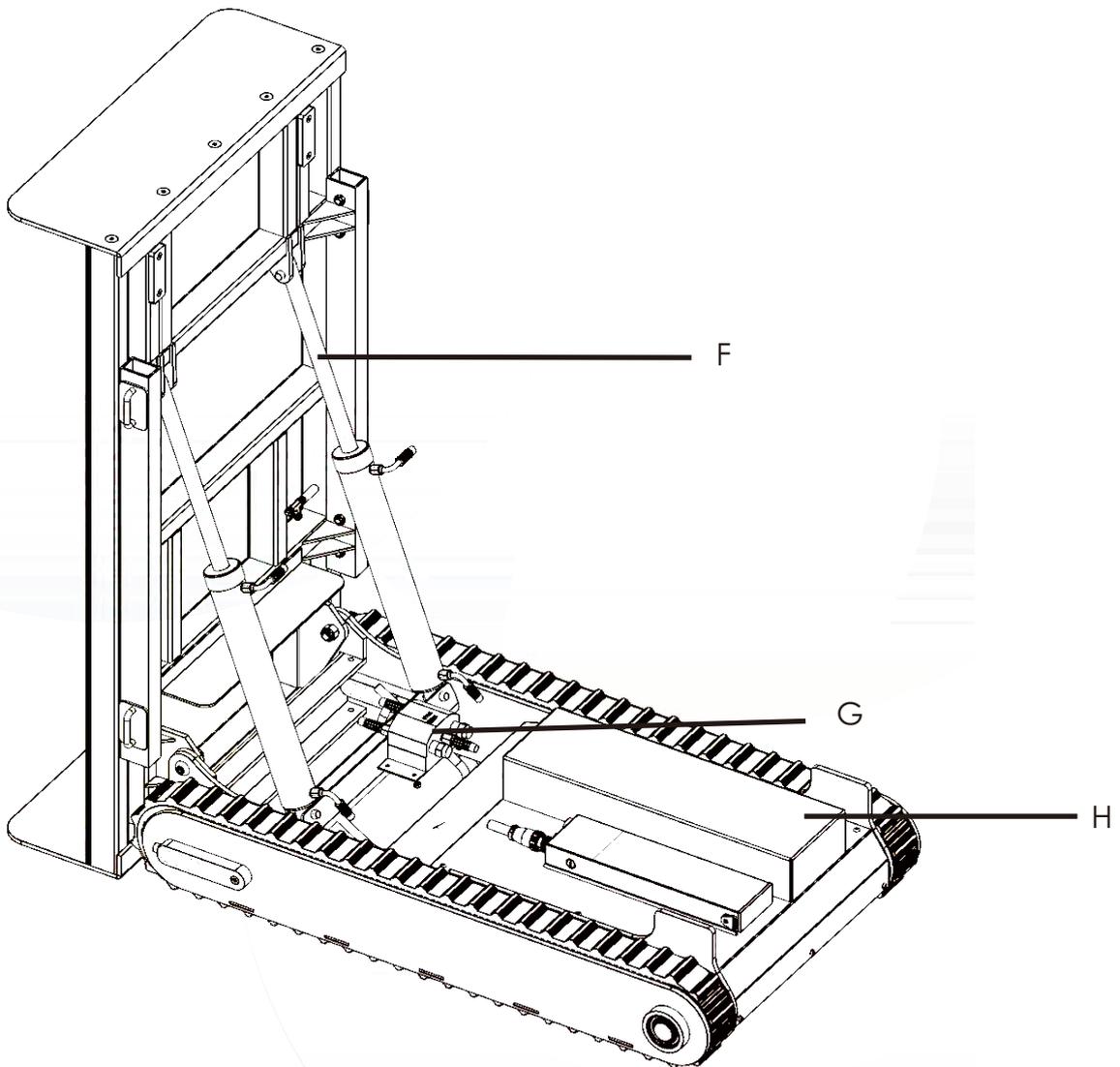
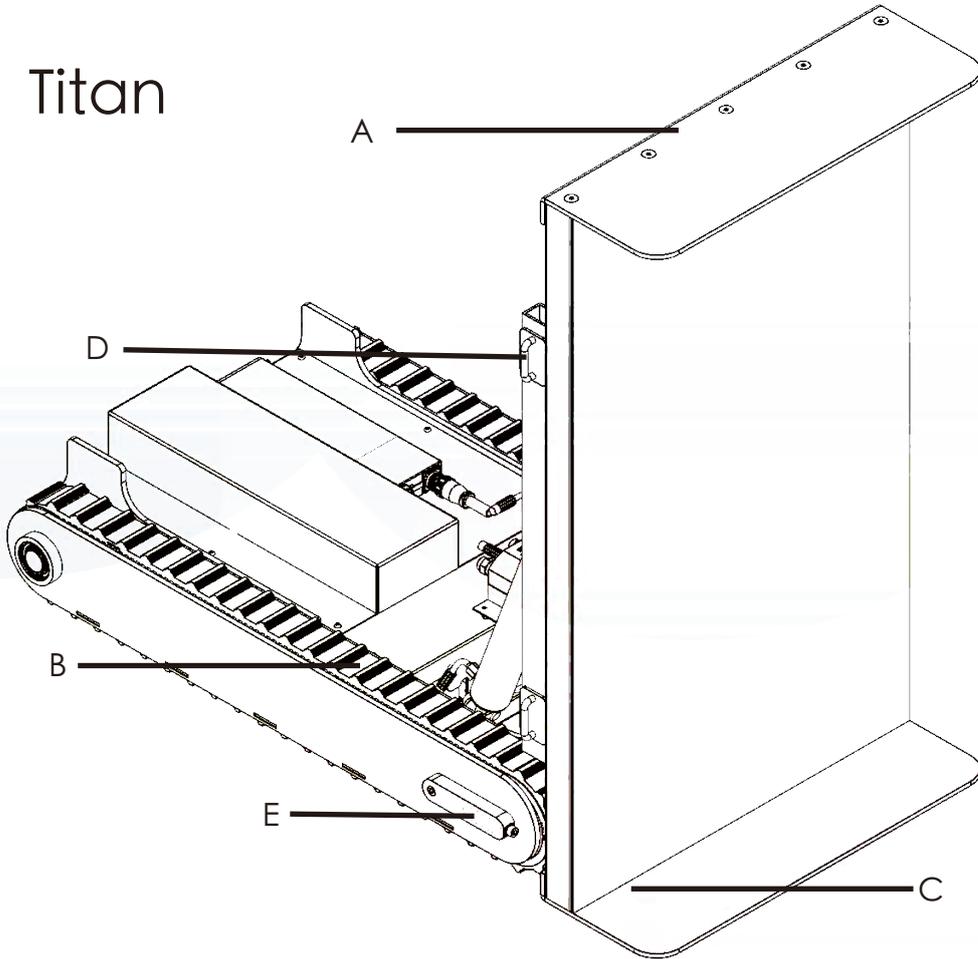


Titan Lifter

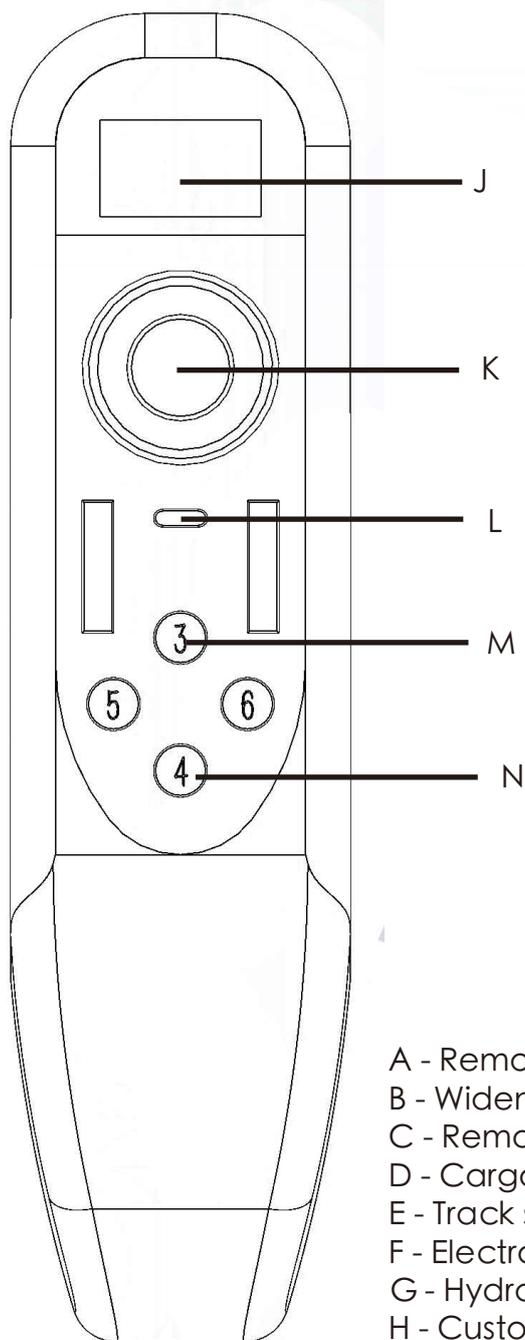
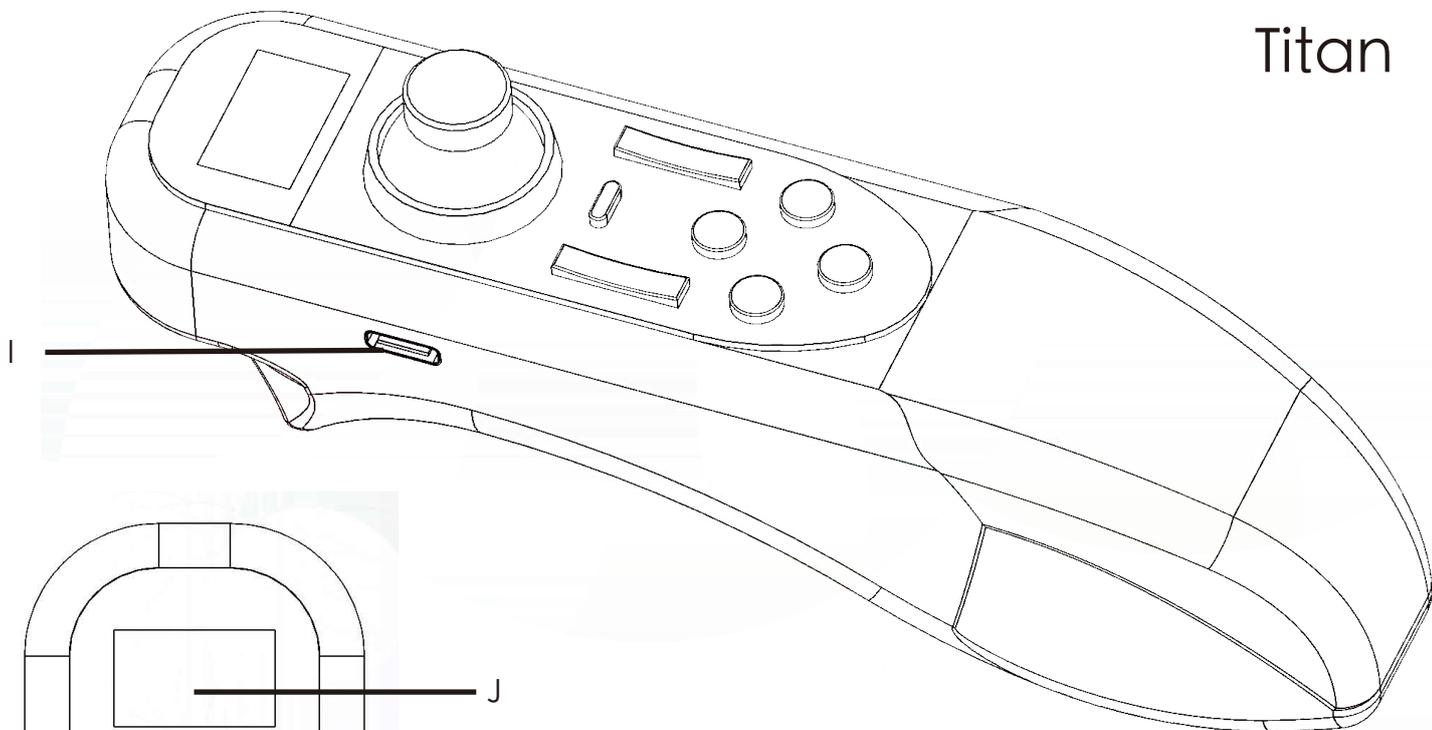


- A - Removable cargo baffle
- B - Widened rubber tracks
- C - Foldable anti-tilt bracket
- D - Removable cargo shovel
- E - Electro-hydraulic rod (dual support)
- F - Track fixing/removal module
- G - Cargo securing buckle
- H - Hydraulic oil reservoir
- I - Custom brushless motor (custom transmission gearbox)
- J - Auxiliary support wheel
- K - Wireless remote control charging interface
- L - Display screen
- M - 360-degree joystick
- N - Power button
- O - Platform rise
- P - Platform fall
- Q - Auxiliary wheel open
- R - Auxiliary wheel folding

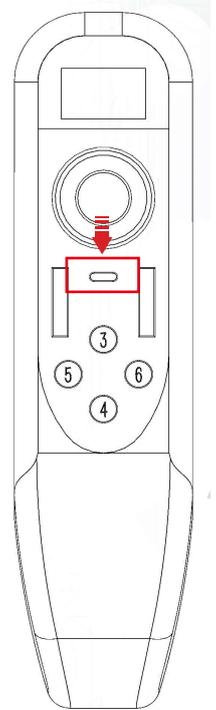
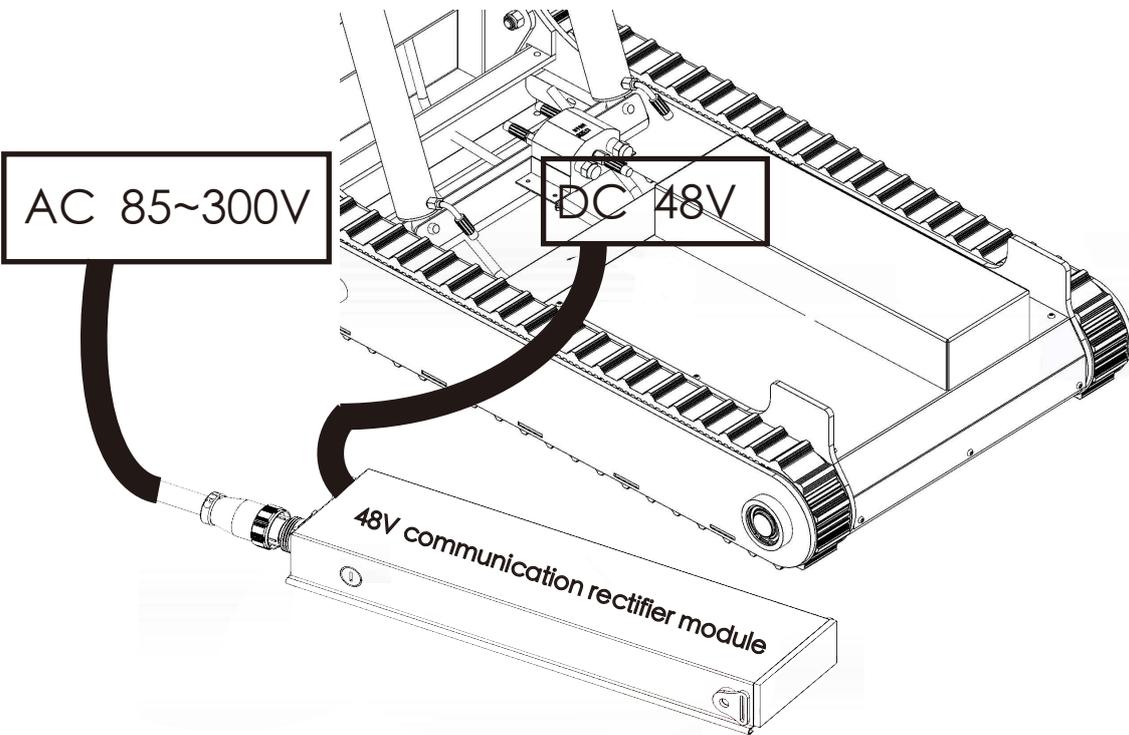
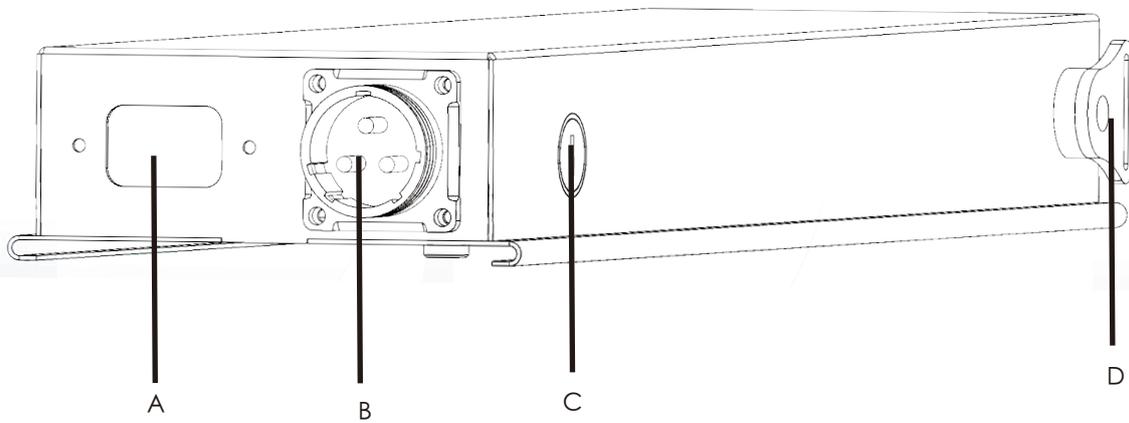
Titan



Titan



- A - Removable cargo baffle
- B - Widened rubber tracks
- C - Removable cargo shovel
- D - Cargo securing buckle
- E - Track securing/removing module
- F - Electro-hydraulic rod (dual support)
- G - Hydraulic oil reservoir
- H - Customized worm gear motor (customized transmission gearbox)
- I - Wireless remote control charging interface
- J - Display screen
- K - 360-degree joystick
- L - Power button
- M - Platform rise
- N - Platform lower



A - Device interface (48V)

B - Household AC power interface (allows voltage from 85 to 300V)

C - Fixed lock

D - Pull ring handle

After powering on,

press and hold the power button on the remote control to turn on and connect.

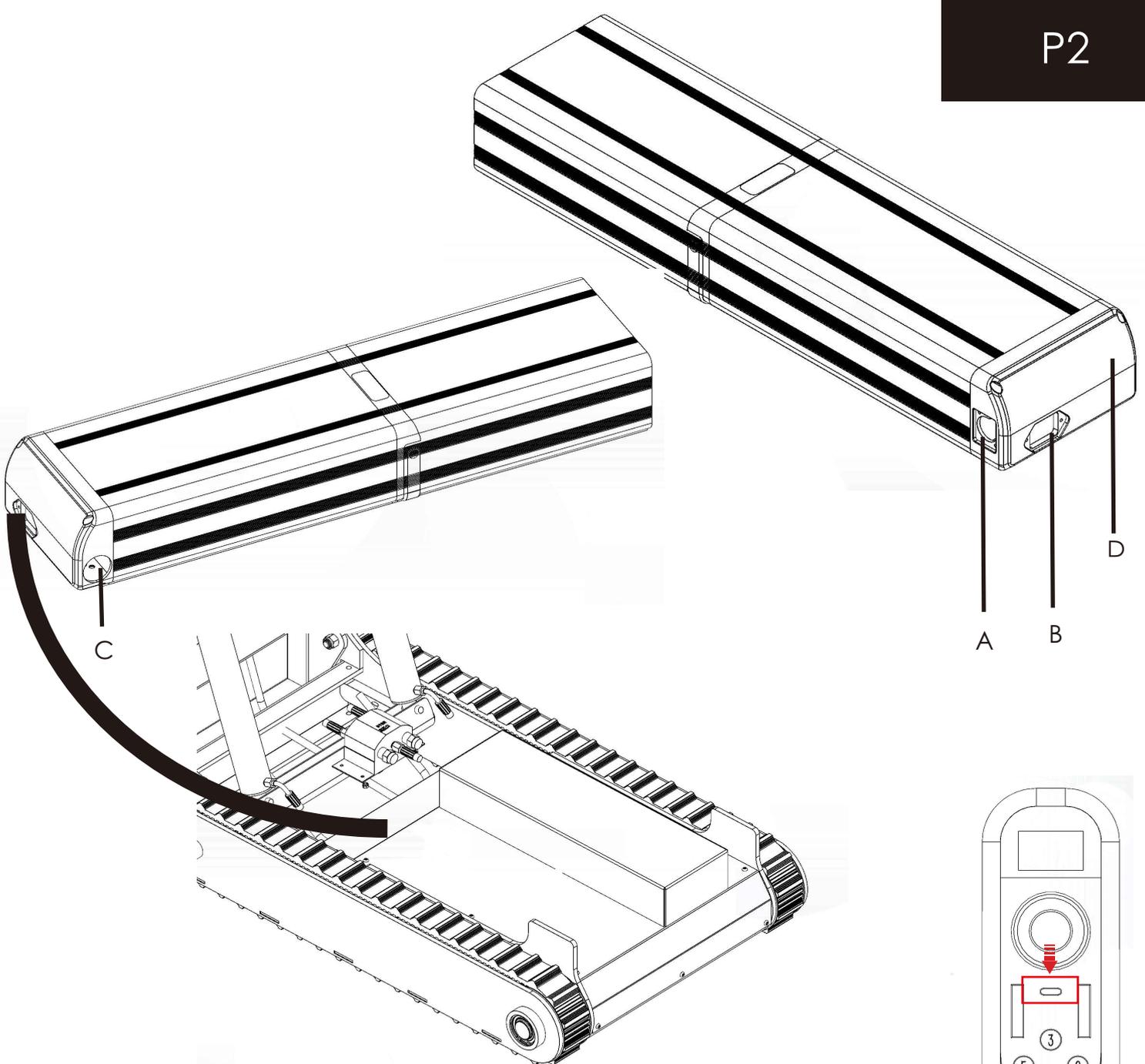
Also, test if the remote control buttons function properly.

Working Principle:

1. Connects to household electricity/AC (allows AC voltage from 85V to 300V), suitable for use in various countries worldwide.

2. This module converts current into DC 48V voltage.





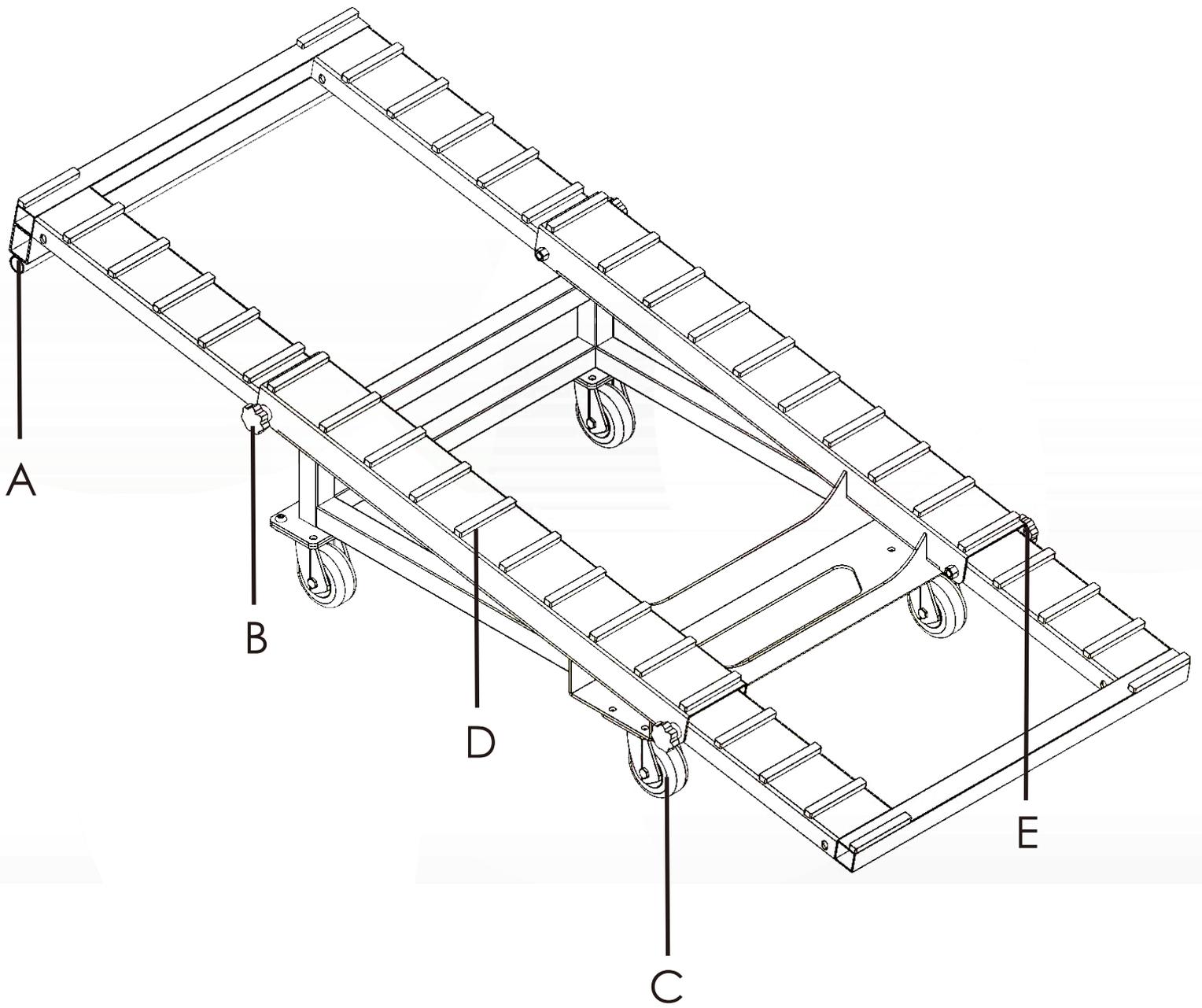
- A - Charging port
- B - Discharge interface (for connecting products)
- C - Fixed lock
- D - Battery display

After powering on,
 press and hold the power button on the remote control to turn on and connect.
 Also, test if the remote control buttons function properly.

NOTE

The charger specifications are 48V 3A.
 Theoretically, a full charge takes 13 hours.





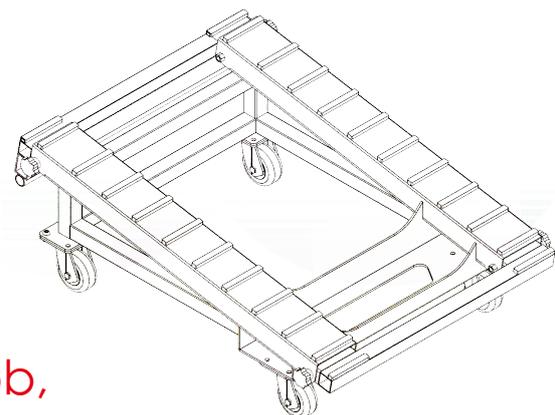
A - Universal support platform

B - Top fixing knob (for top bracket extension/retraction)

C - Omnidirectional heavy-duty casters

D - Anti-slip plate

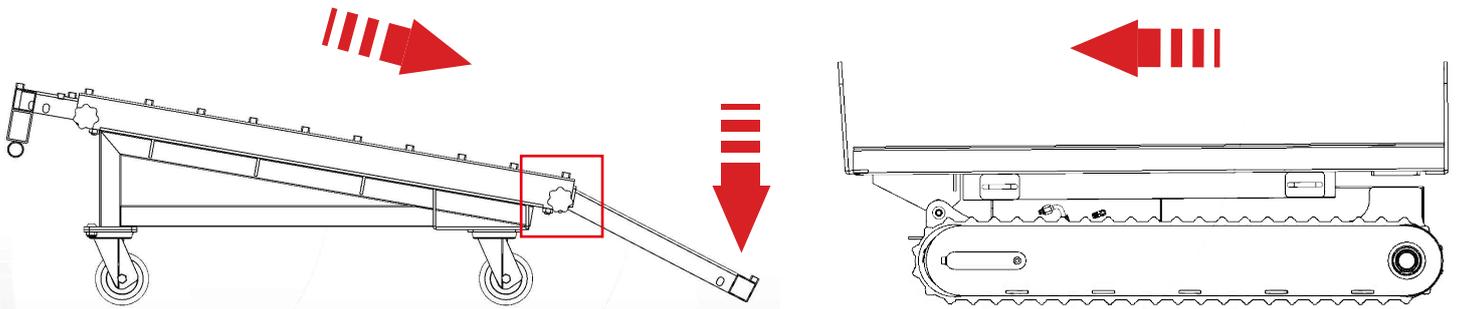
E - Bottom fixing knob (for bottom bracket extension/retraction)



Two people are needed to secure the knob,
then the Titan will climb up. Be aware of the risk of tilting.

Titan uses scaffolding for transport

Step 1

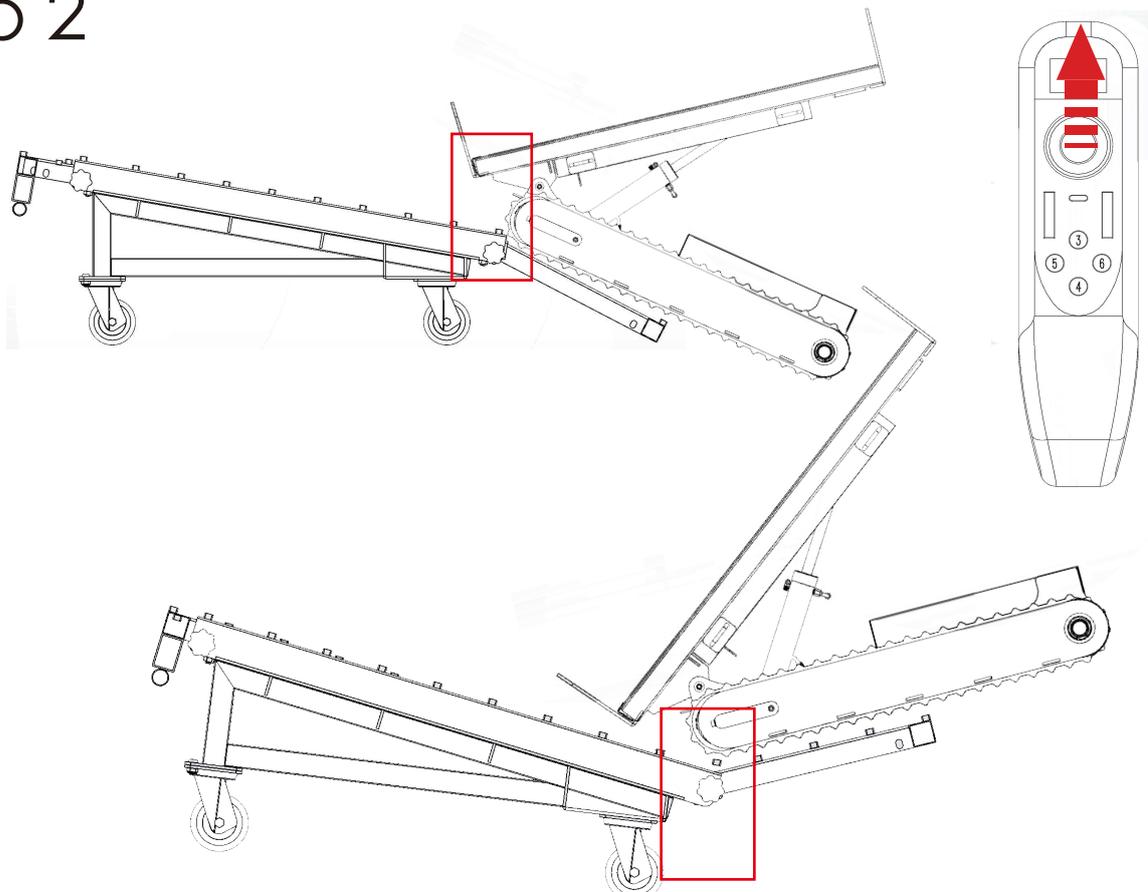


Turn on the knob.

Extend the bracket and lock the knob in place.

Adjust the bracket to contact the ground according to the angle of the ground.

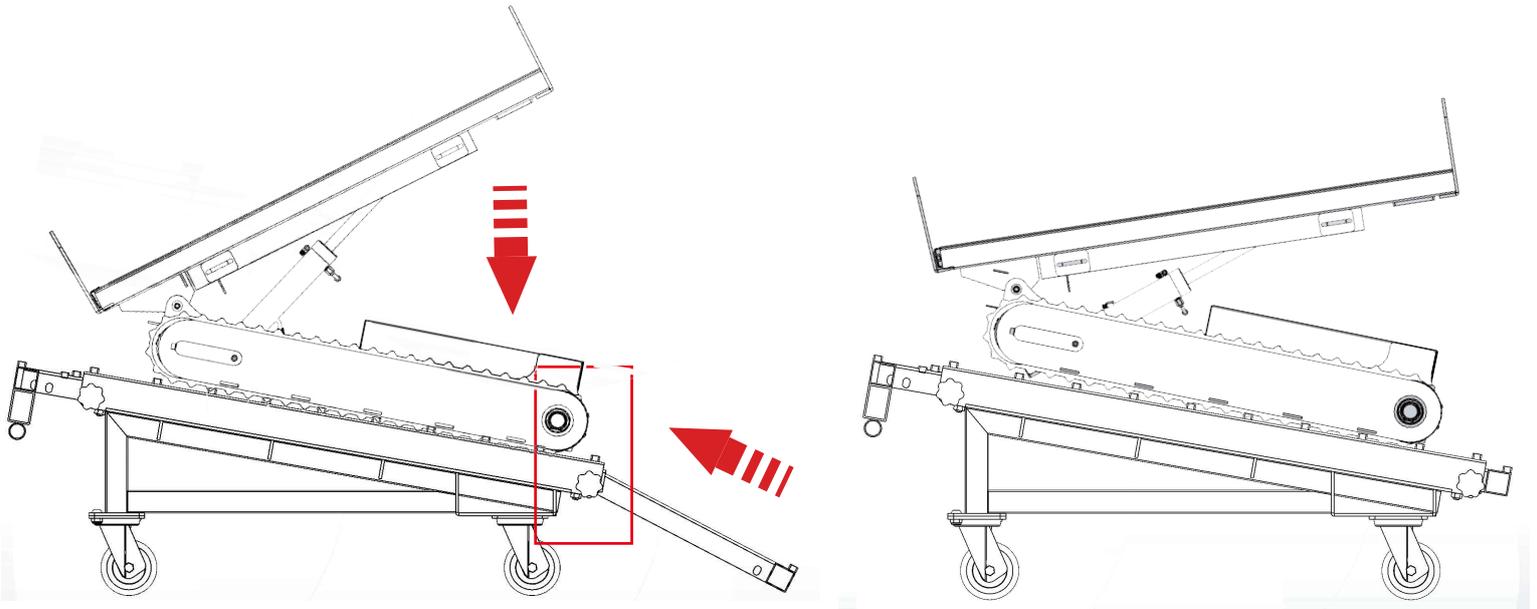
Step 2



This is a natural phenomenon, so two people are needed when using it:
one person holds down the back and observes,
and the other operates the remote control.



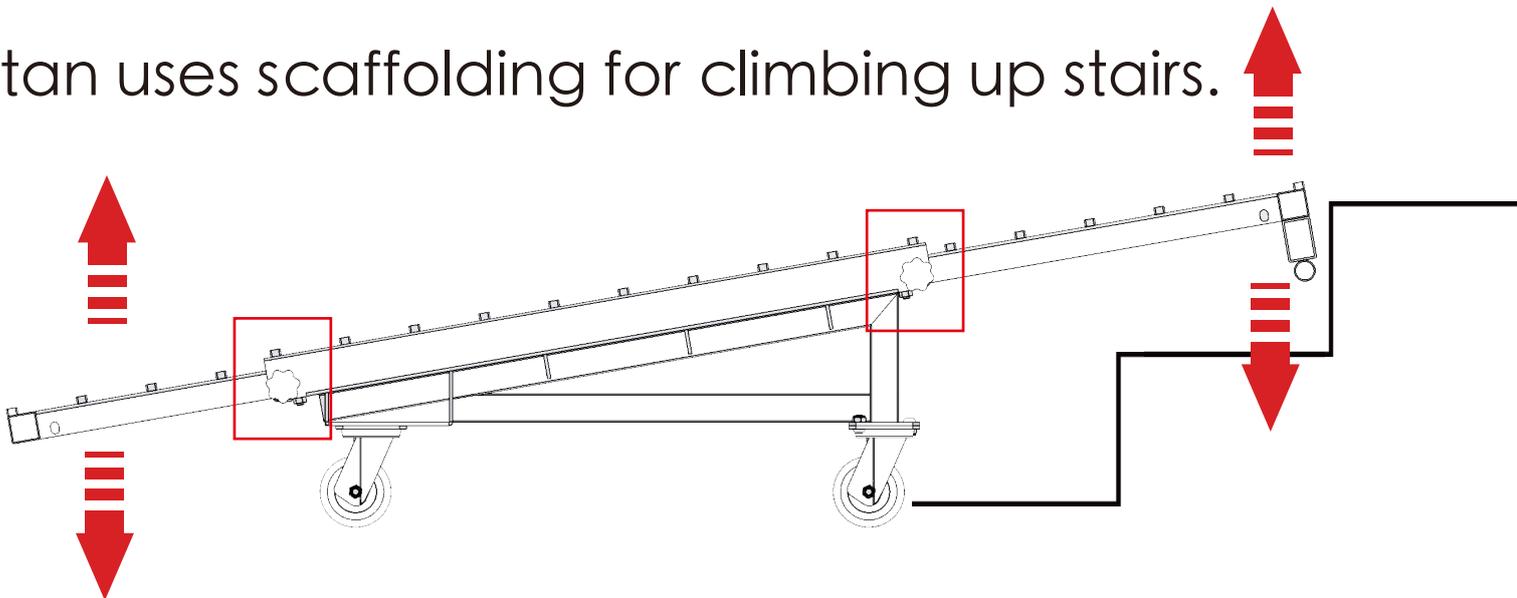
Step 3



Once the Titan is fully on the stand, retract the bottom telescopic stand and lock it in place using the knob.

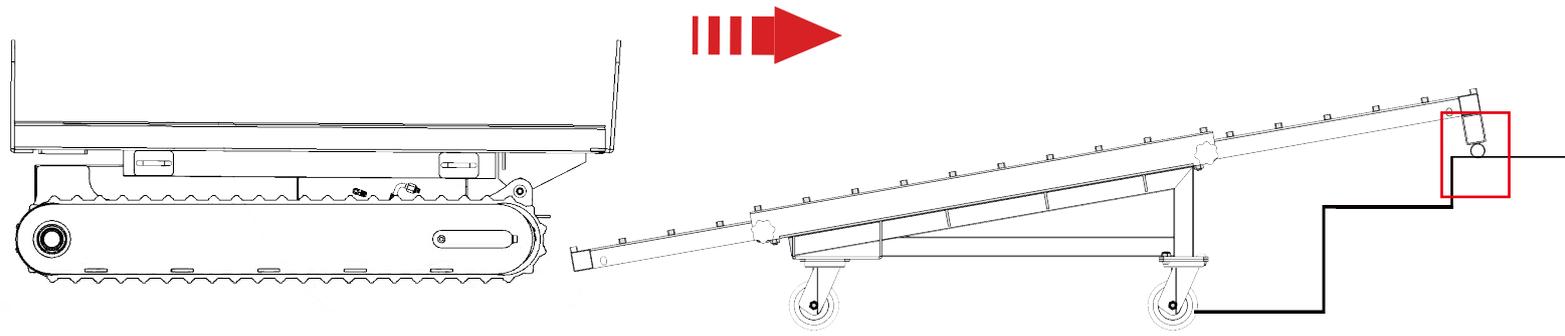
Even if there are goods on Titan, they can still be transferred using the methods described above (but please be aware of safe handling procedures).

Titan uses scaffolding for climbing up stairs.

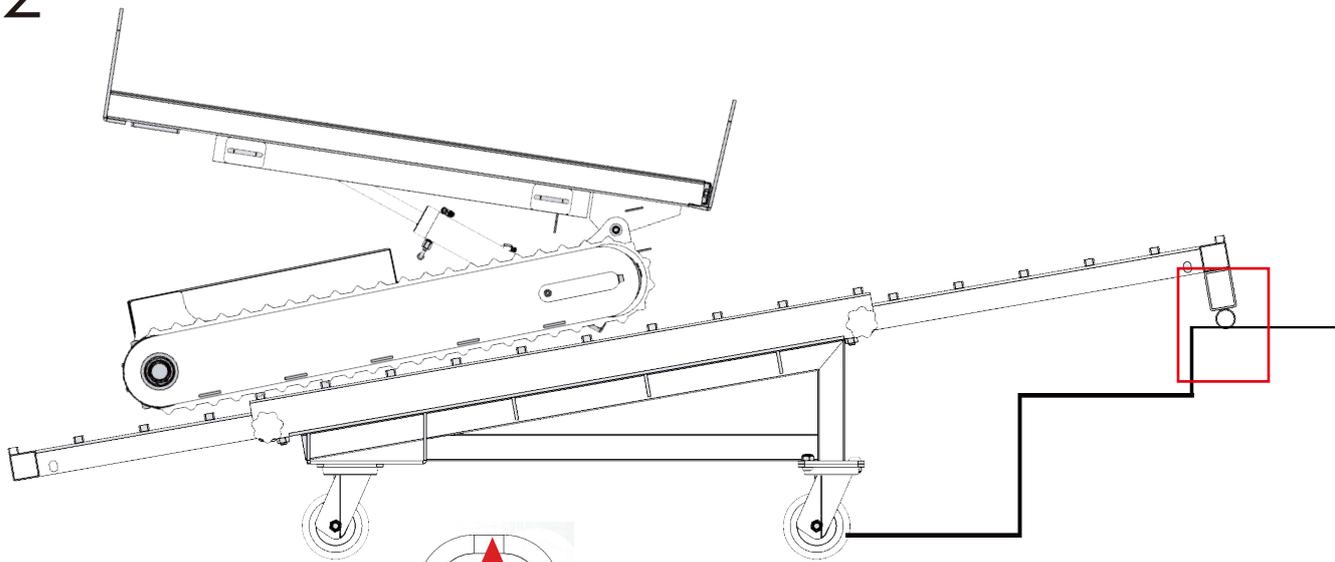


Adjust the angle according to the height of the ground and stair steps, and fix it with a knob.

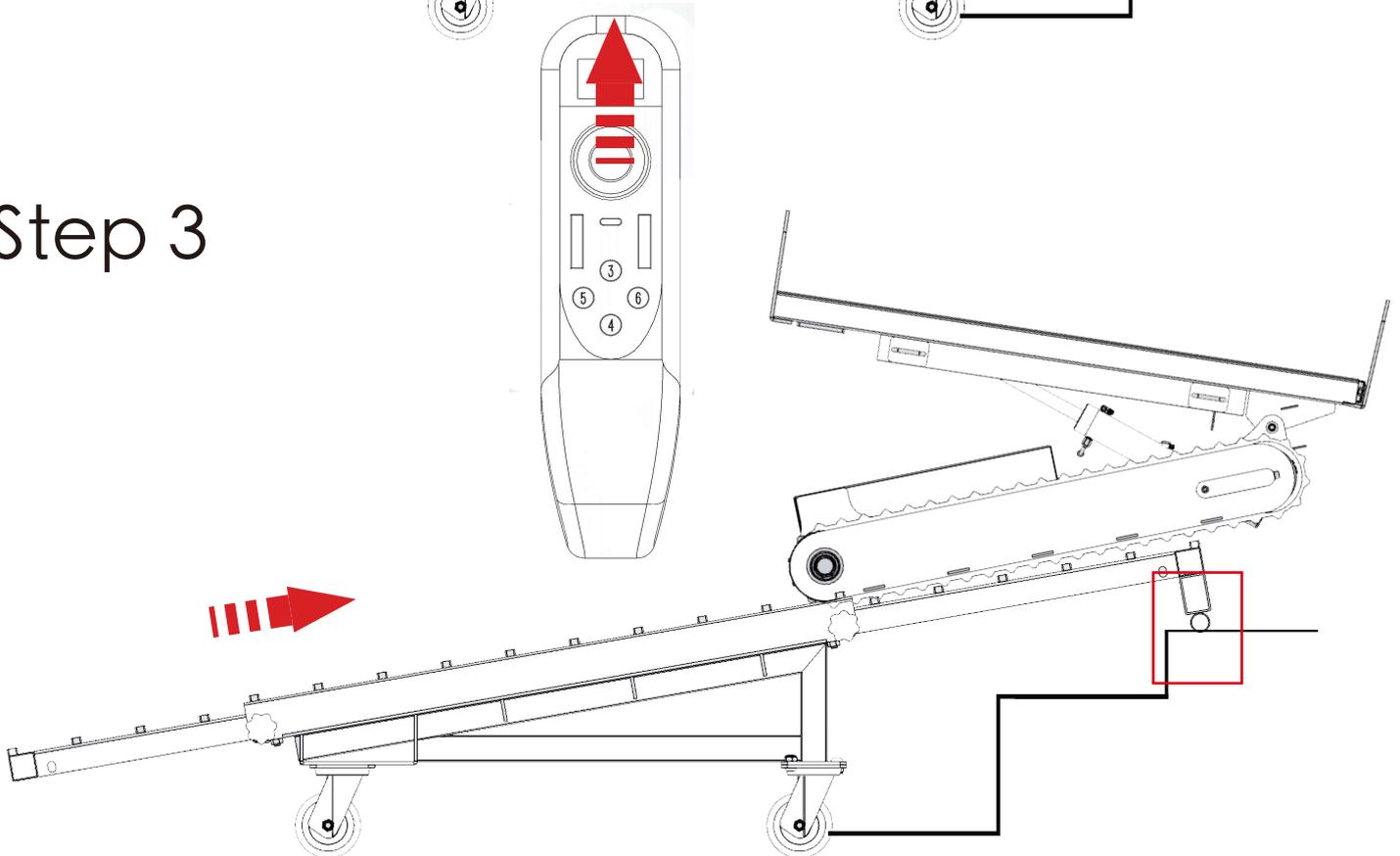
Step 1



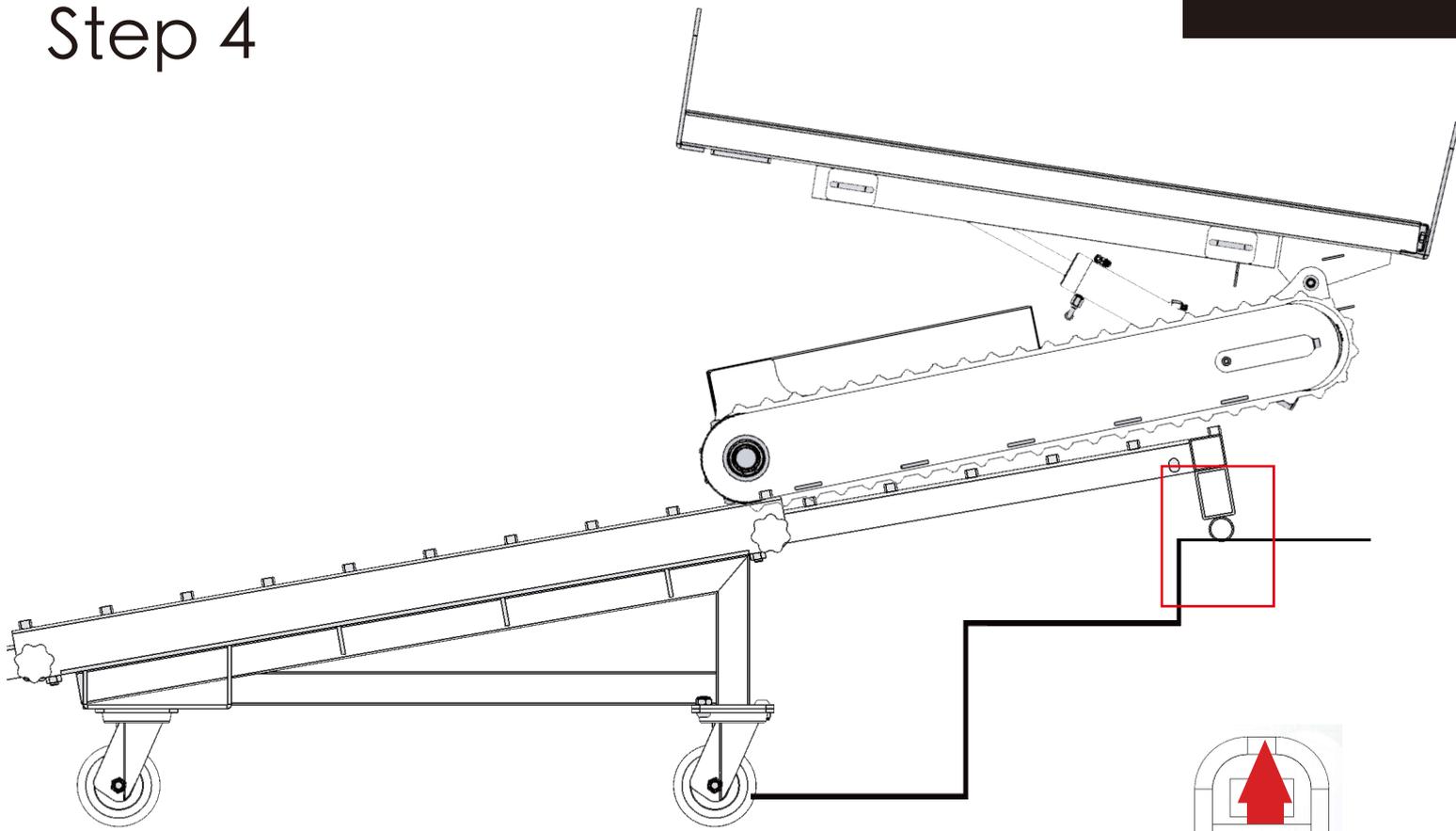
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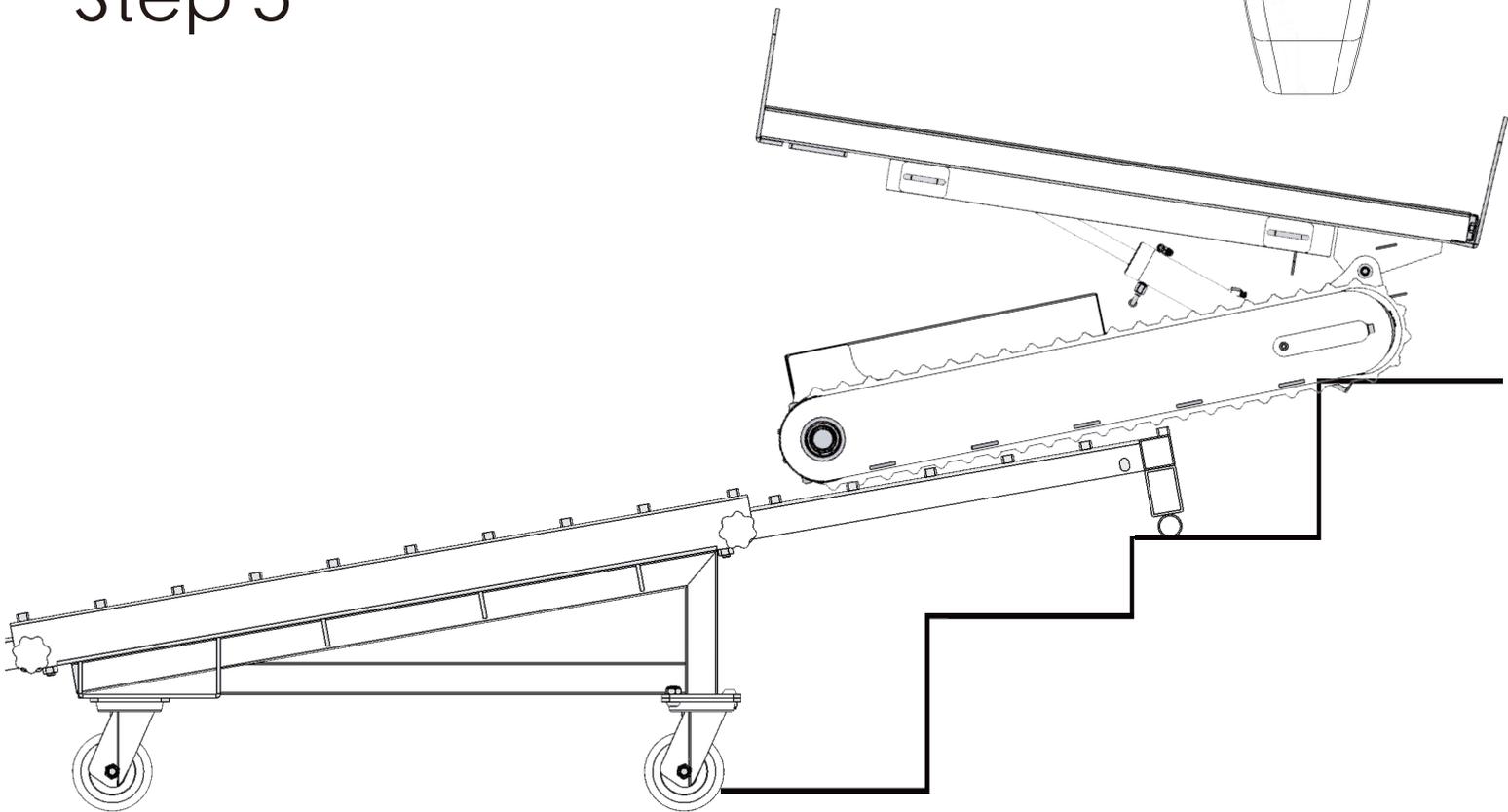
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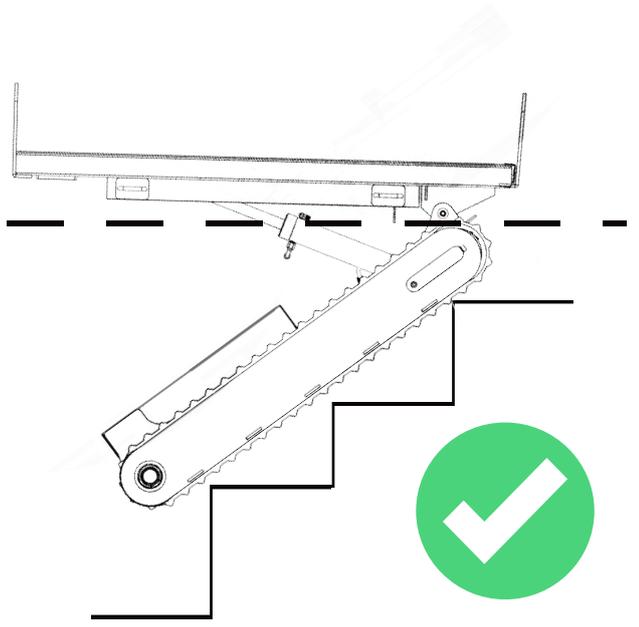
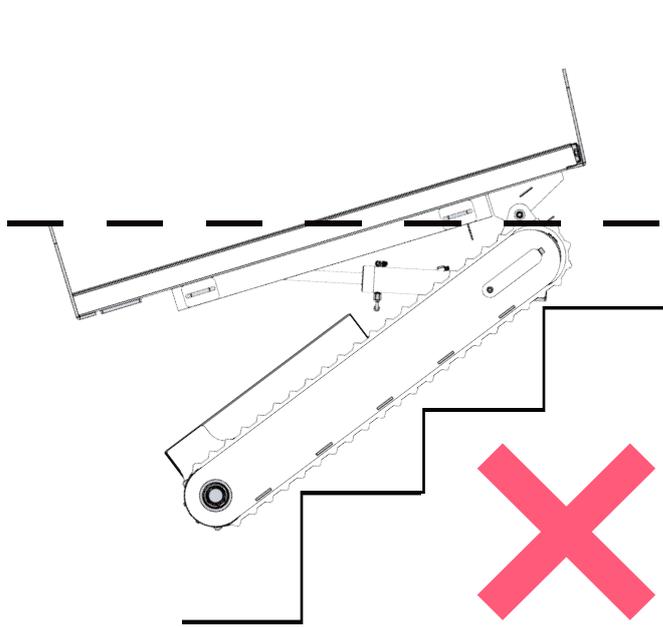
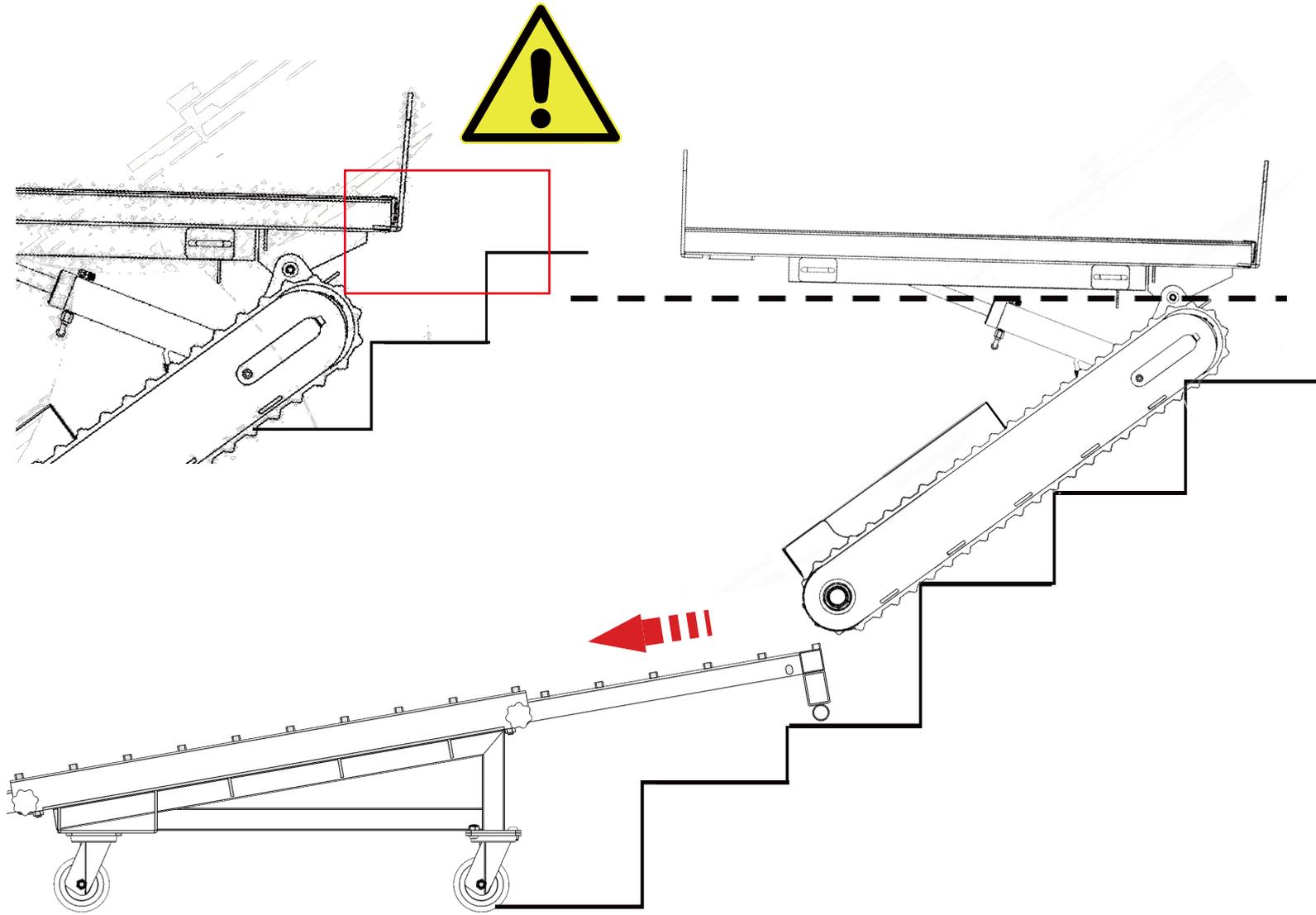
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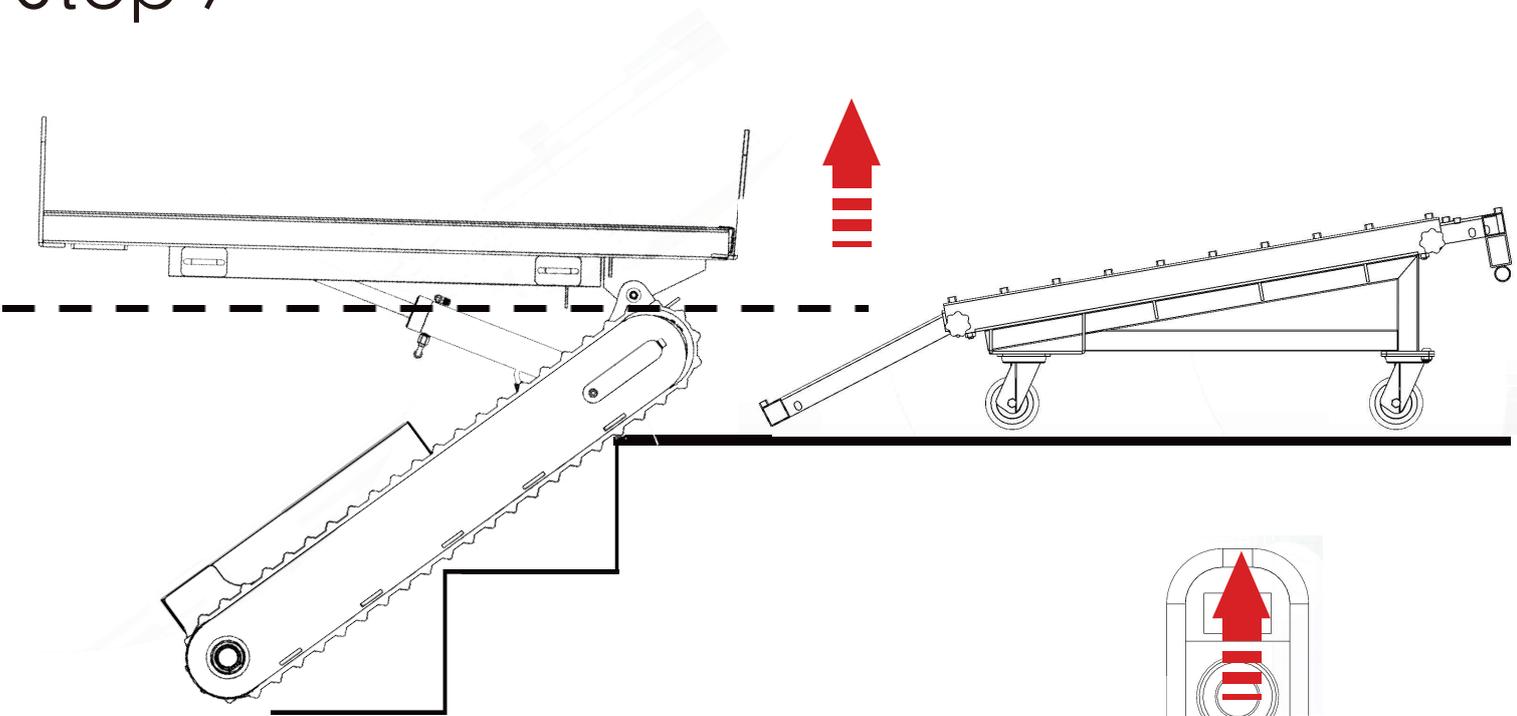
Step 5



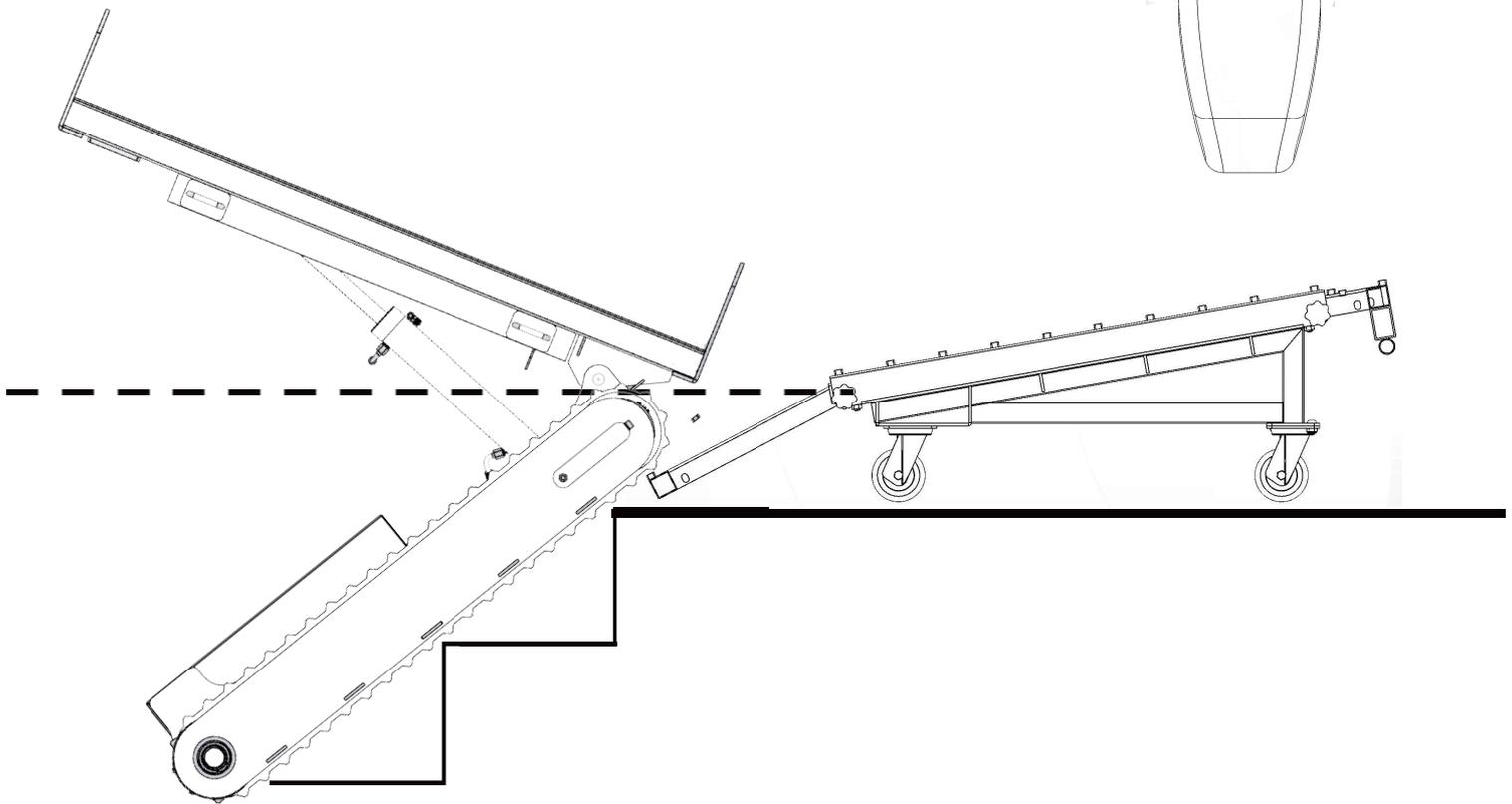
Step 6



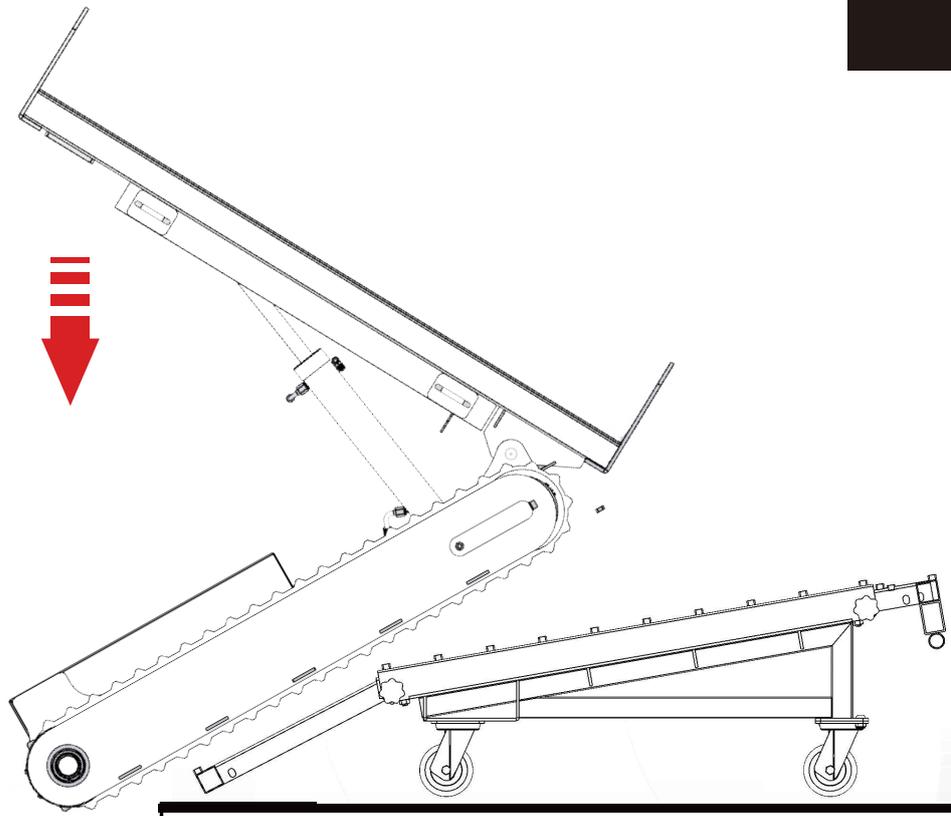
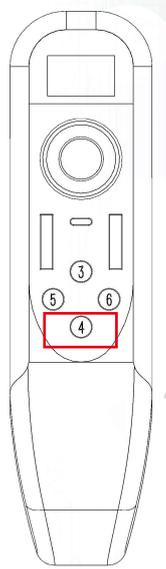
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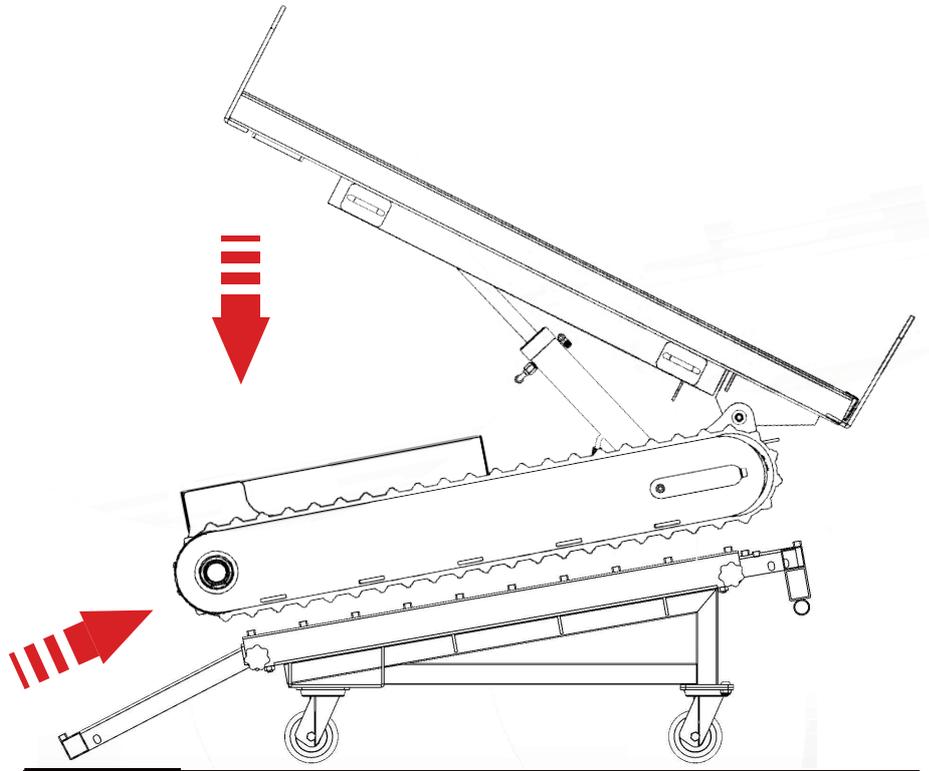
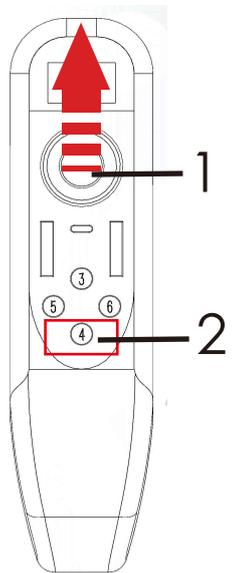
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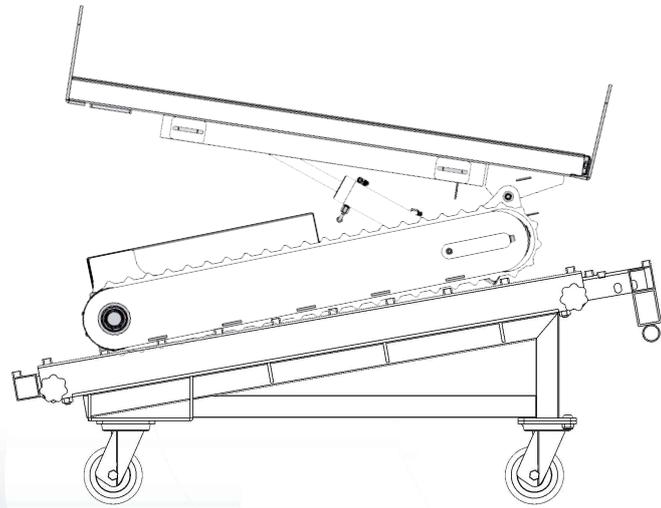
Step 9



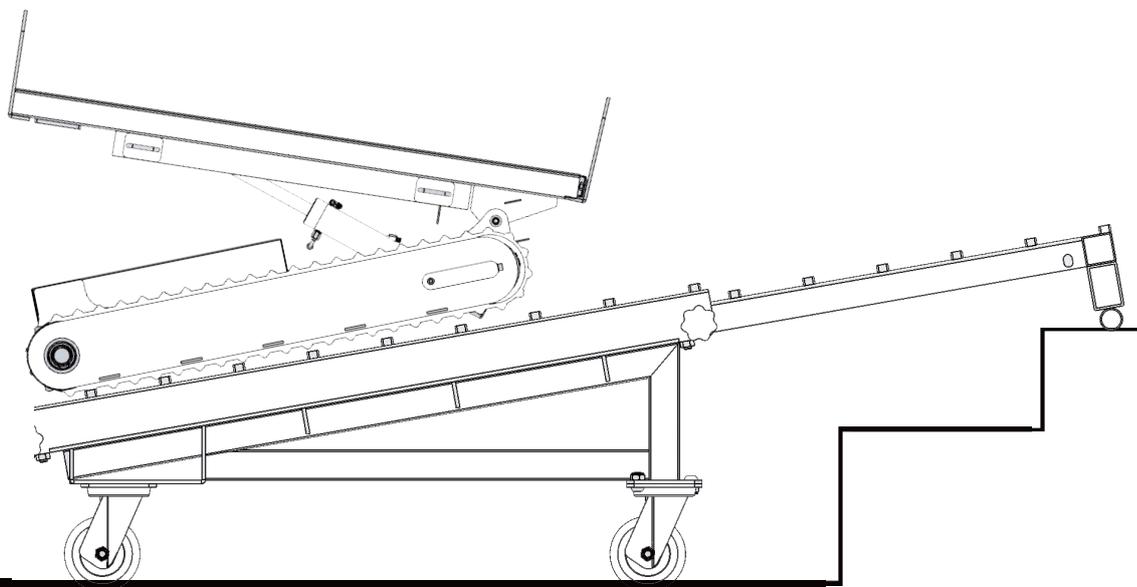
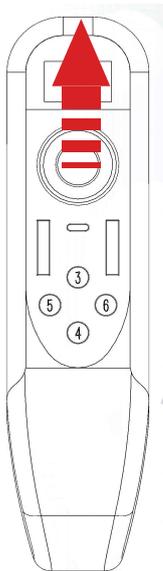
Step 10



Step 11

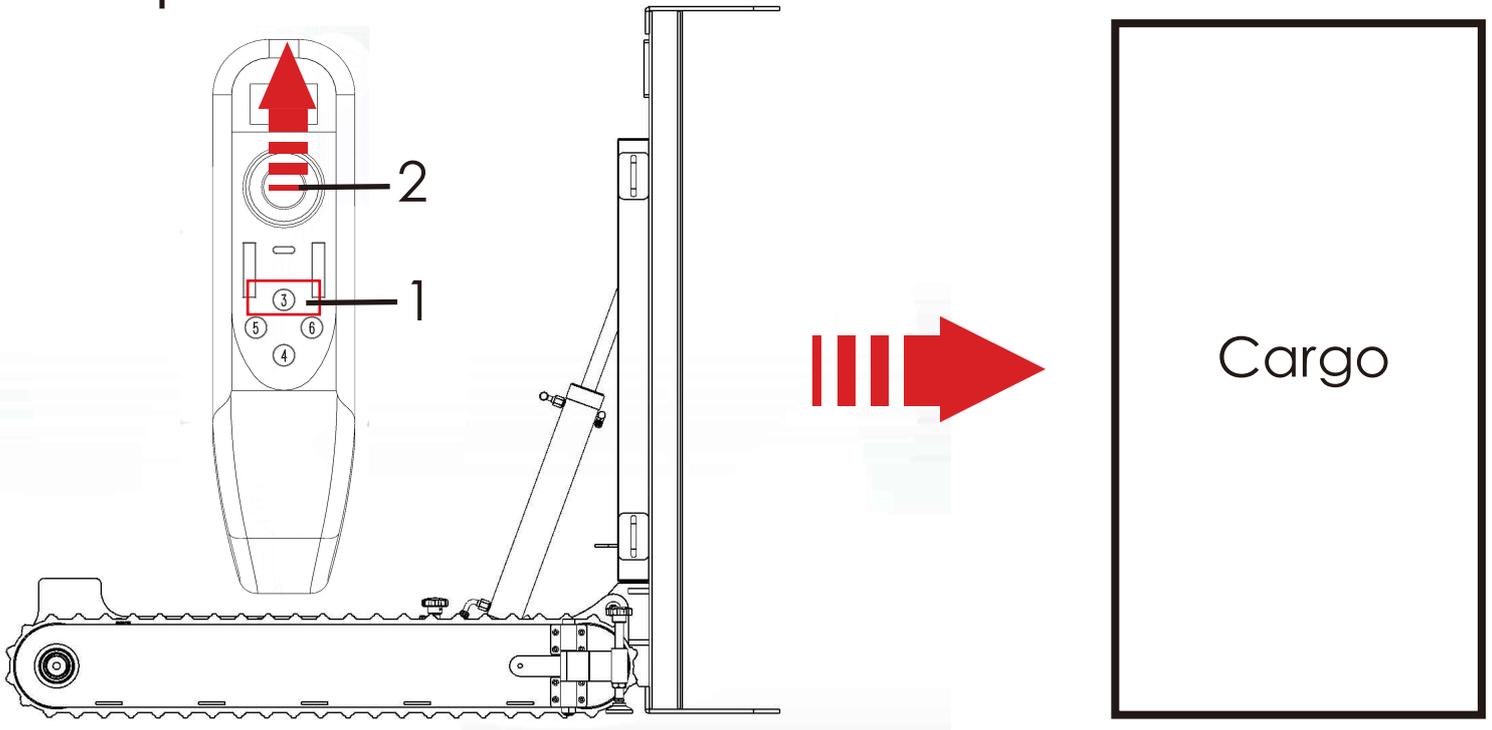


When you encounter a series of stairs

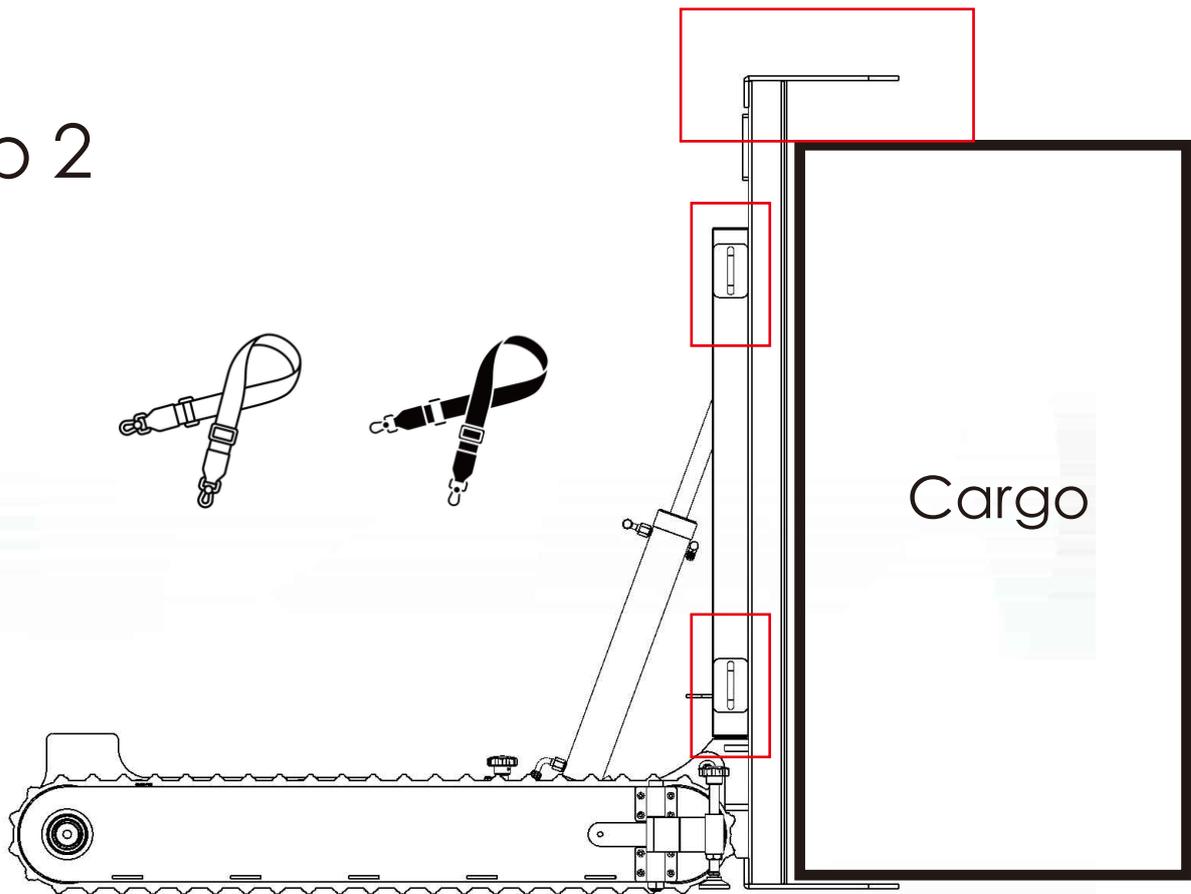


Transporting goods using the vertical shovel function

Step 1



Step 2

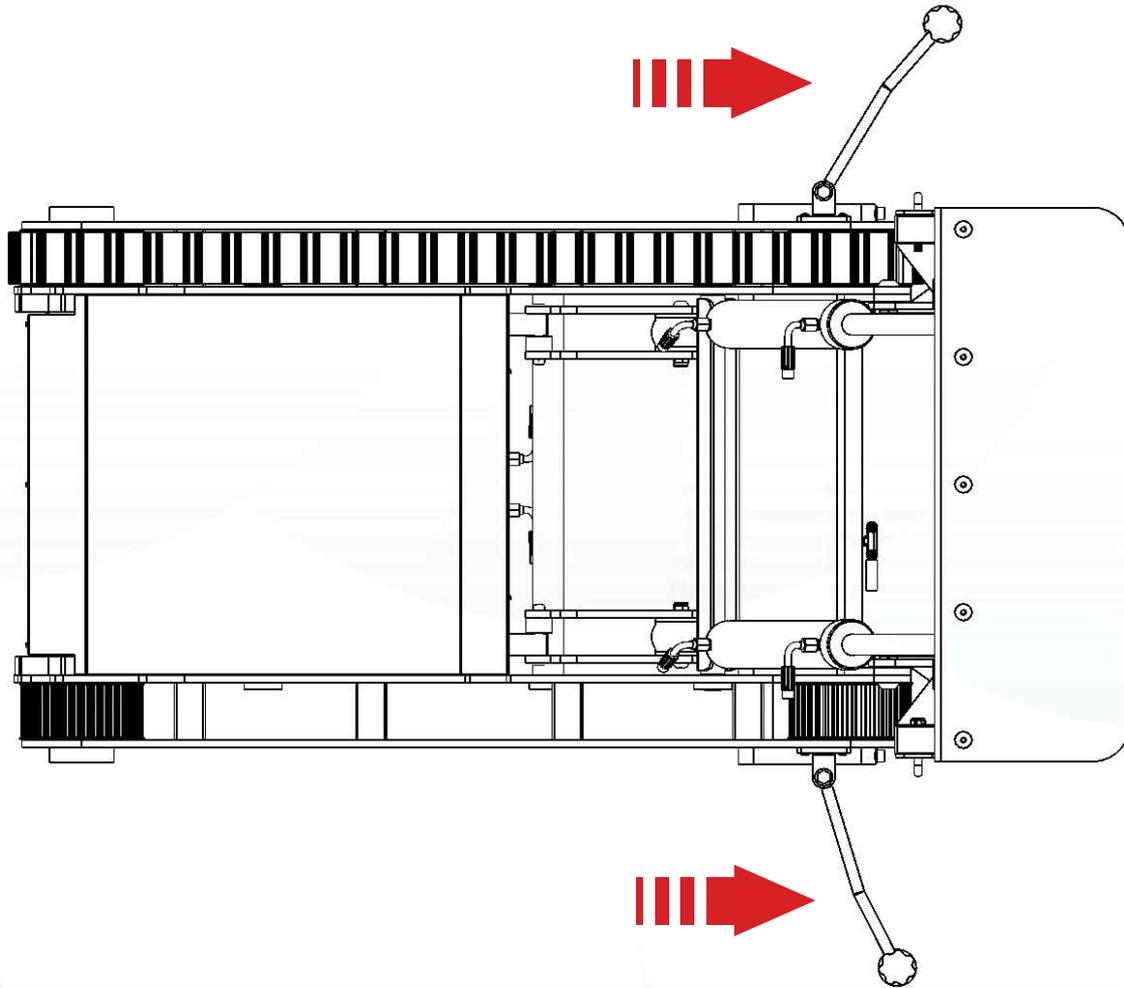


Don't forget to secure the goods with cargo straps!

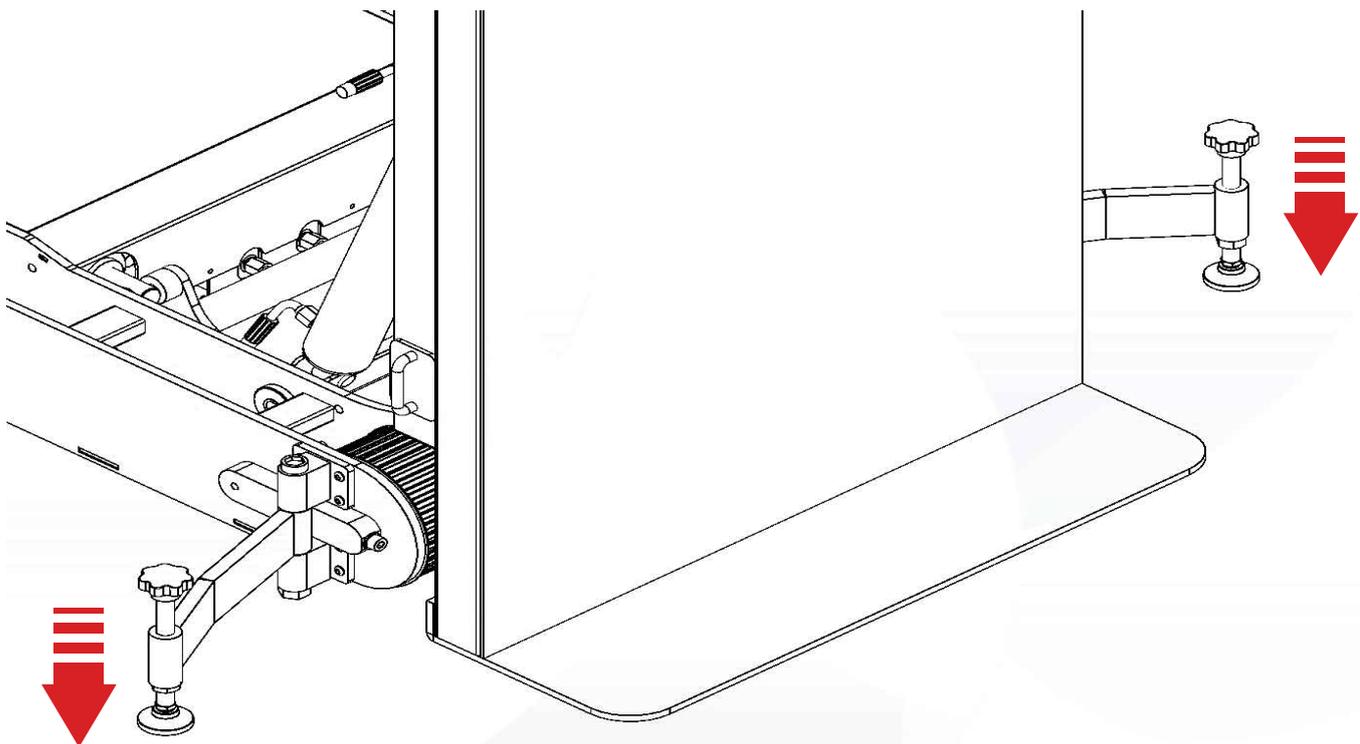
If the cargo height exceeds the limit, the top baffle can be removed and then used.



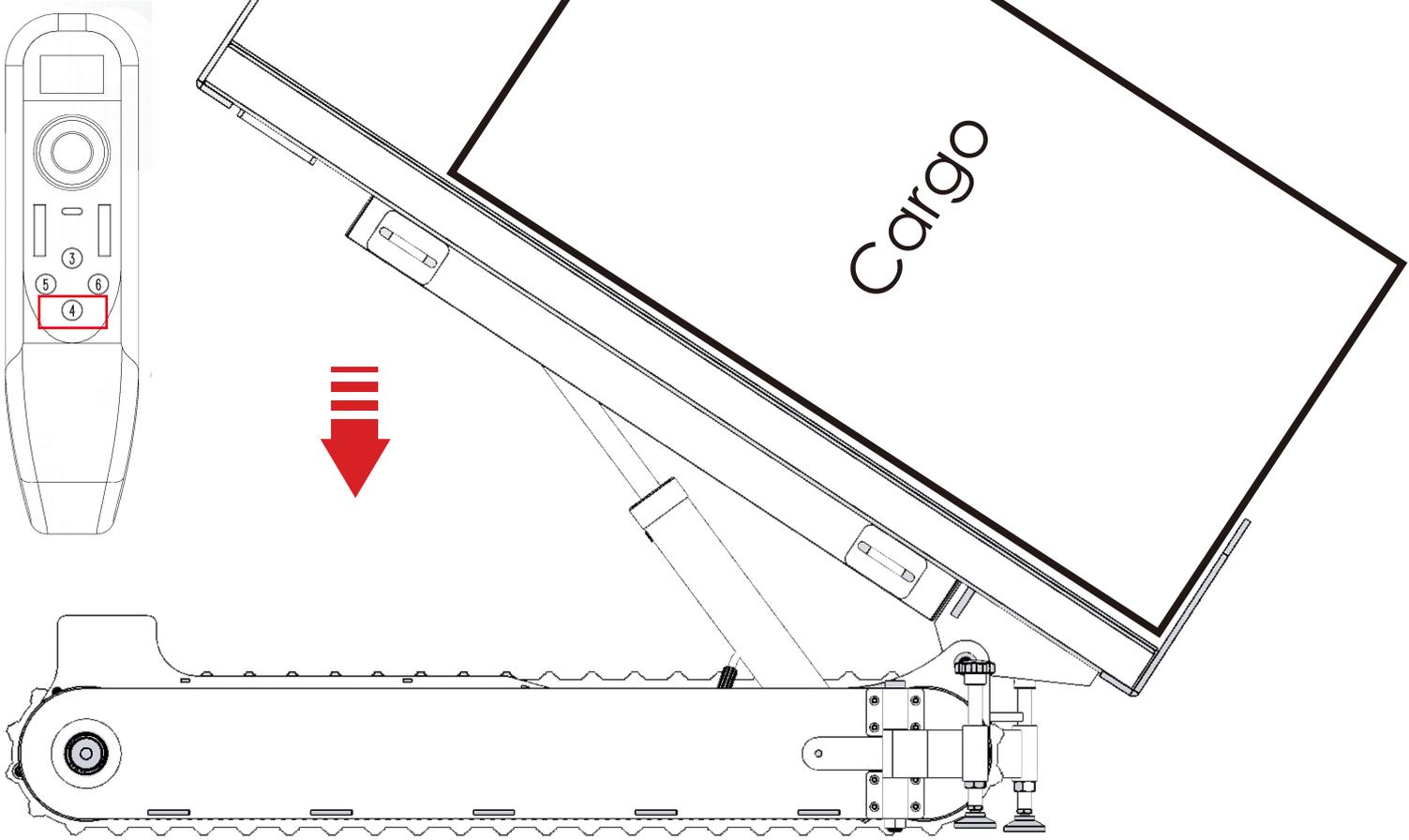
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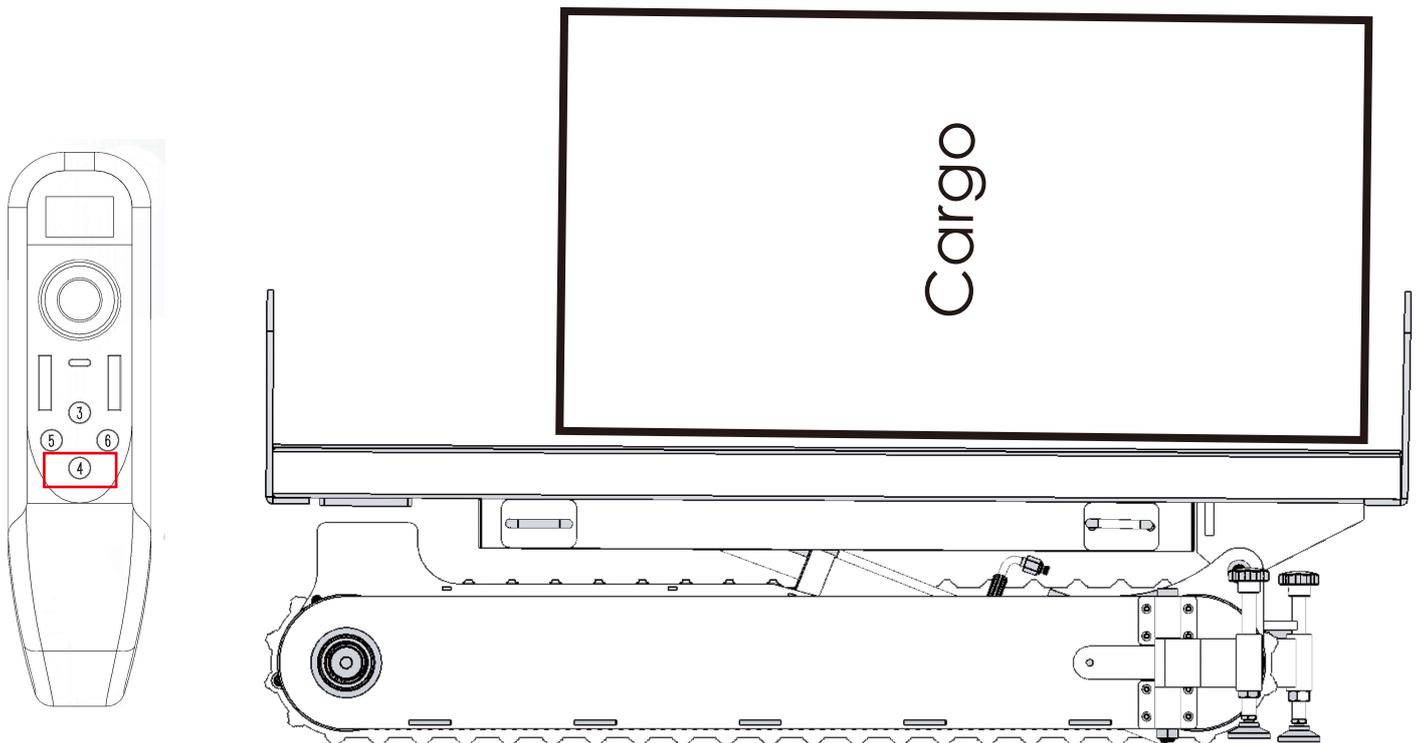
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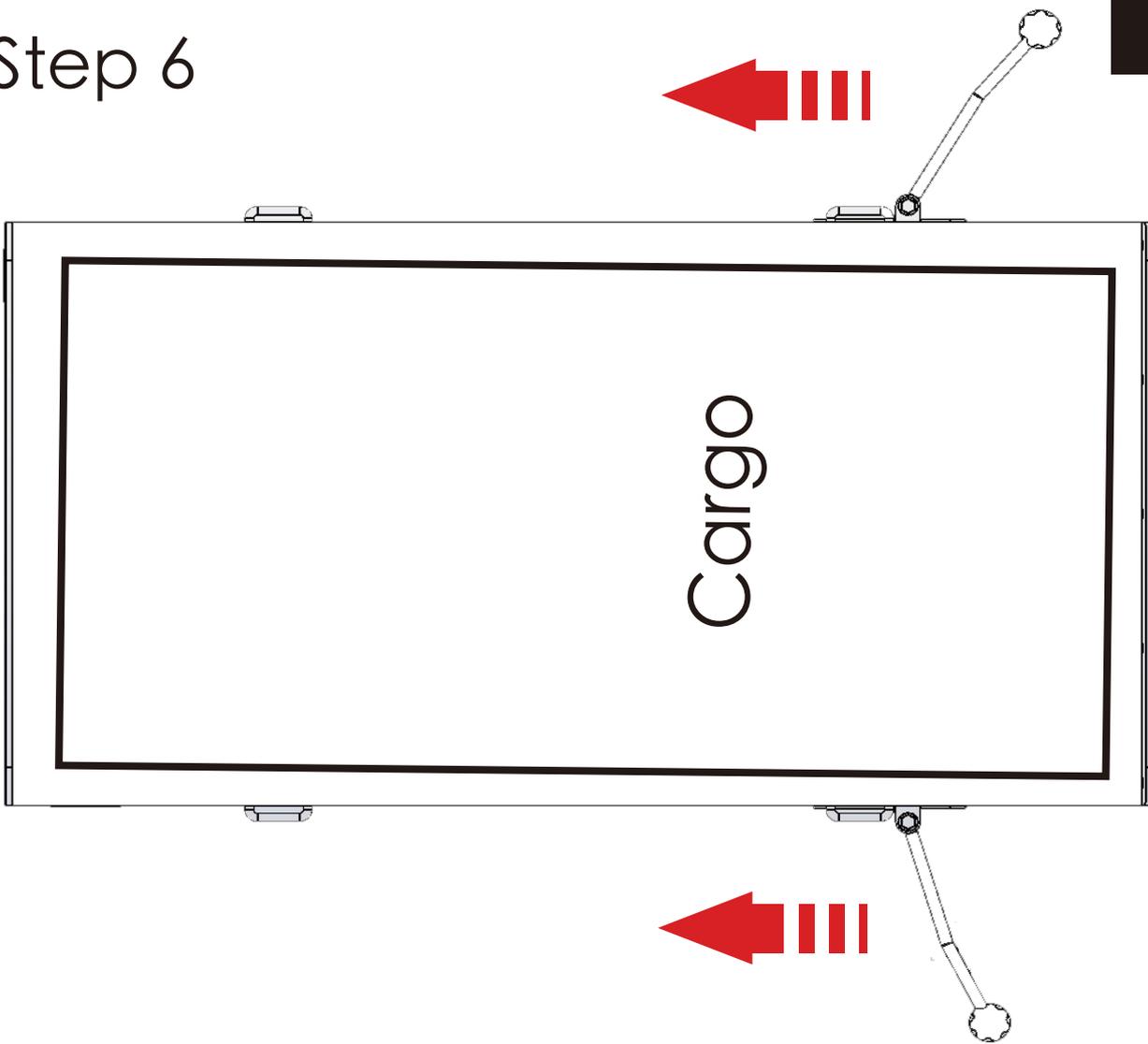
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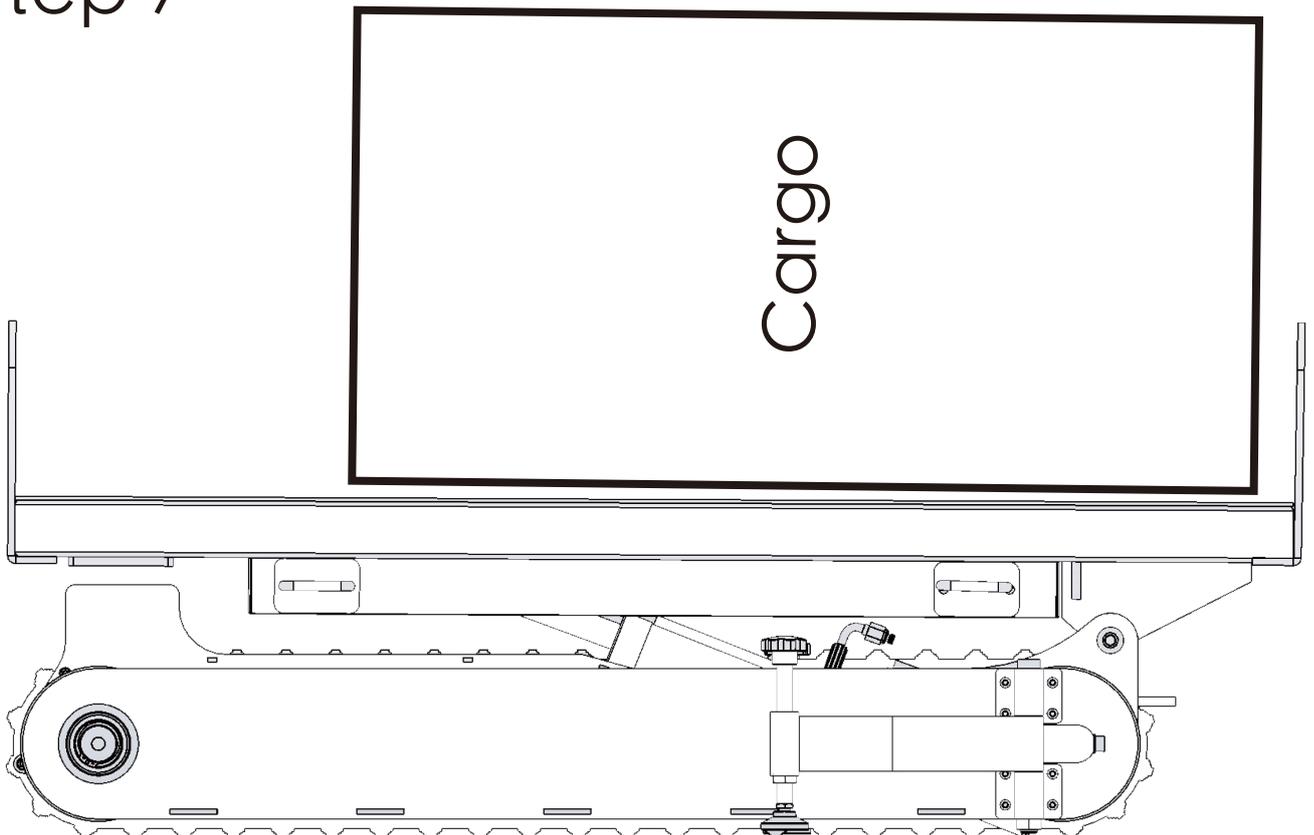
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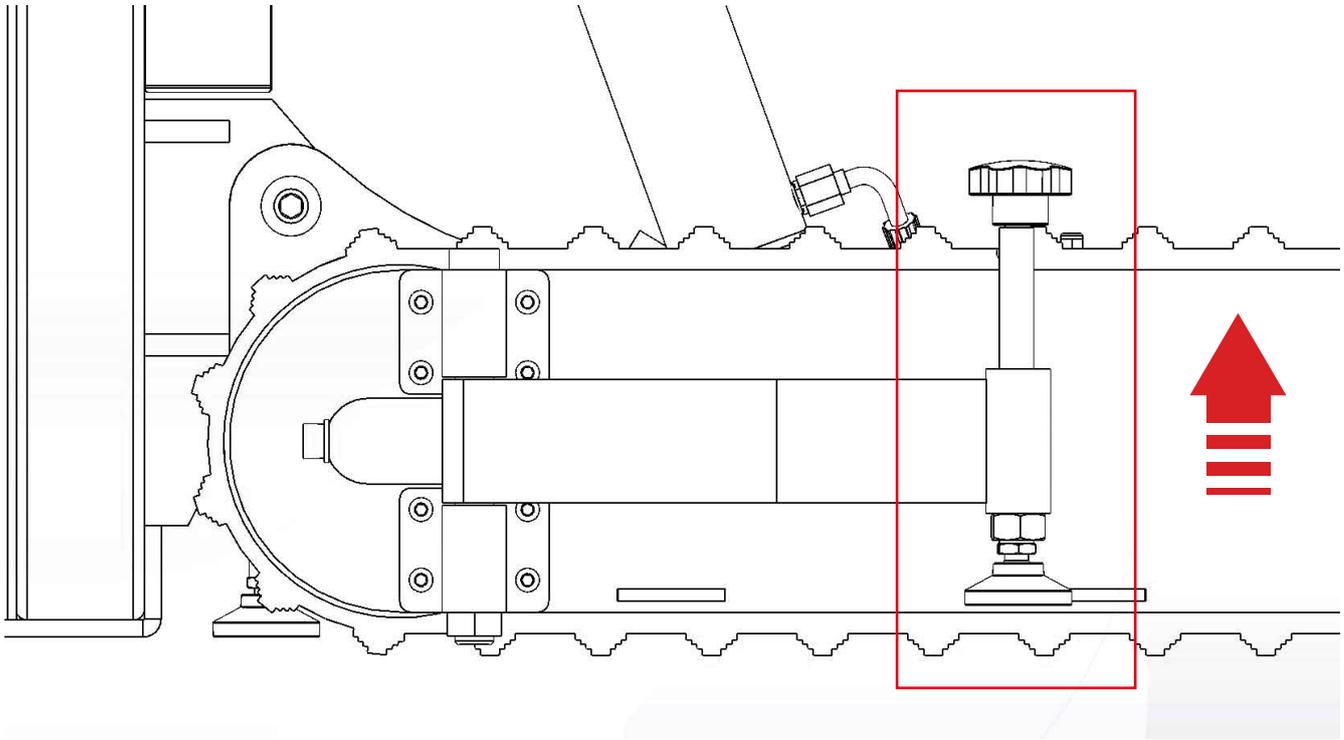
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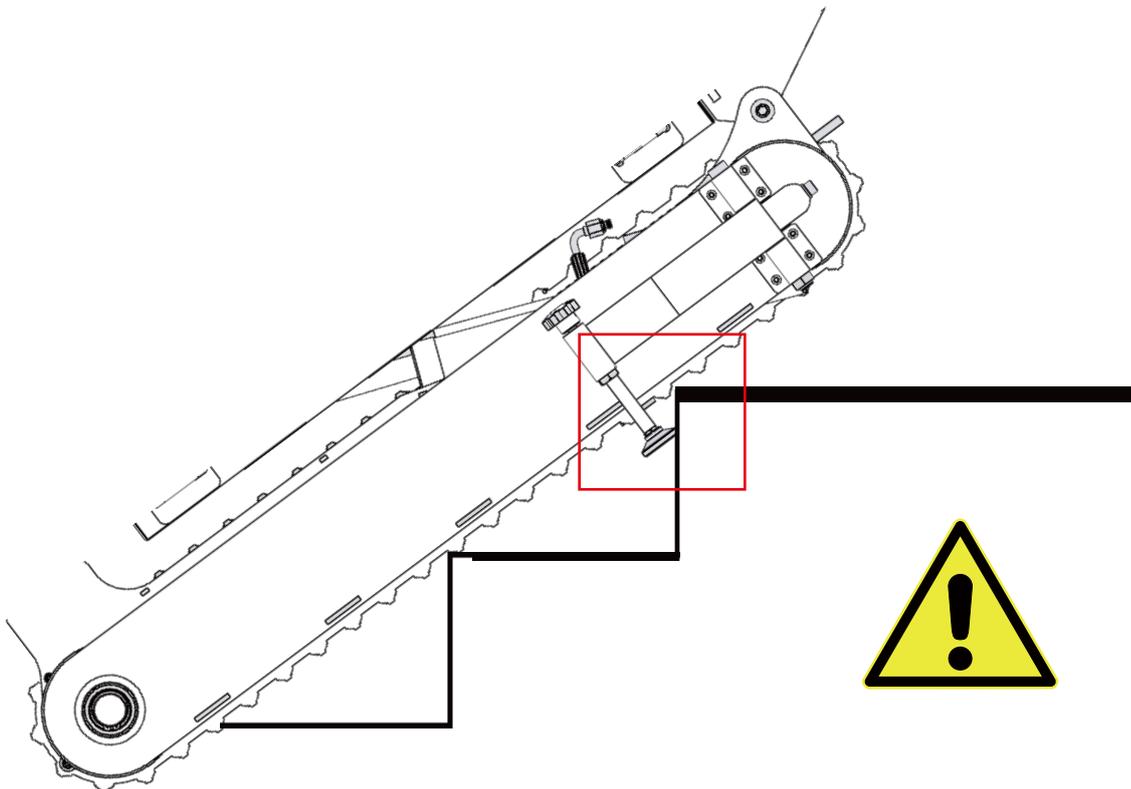
Step 7



Step 8

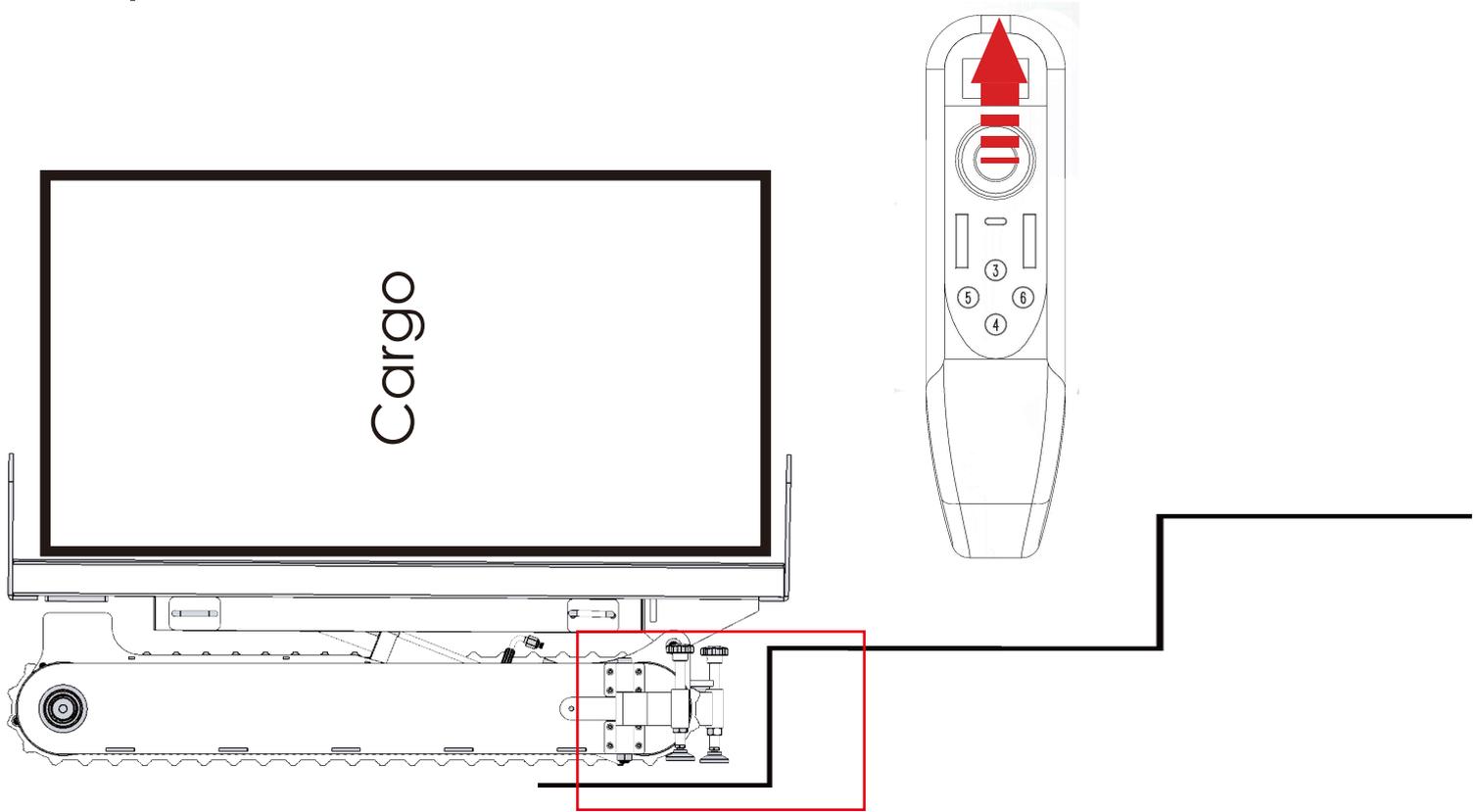


Fold it up immediately to prevent accidents while climbing stairs.

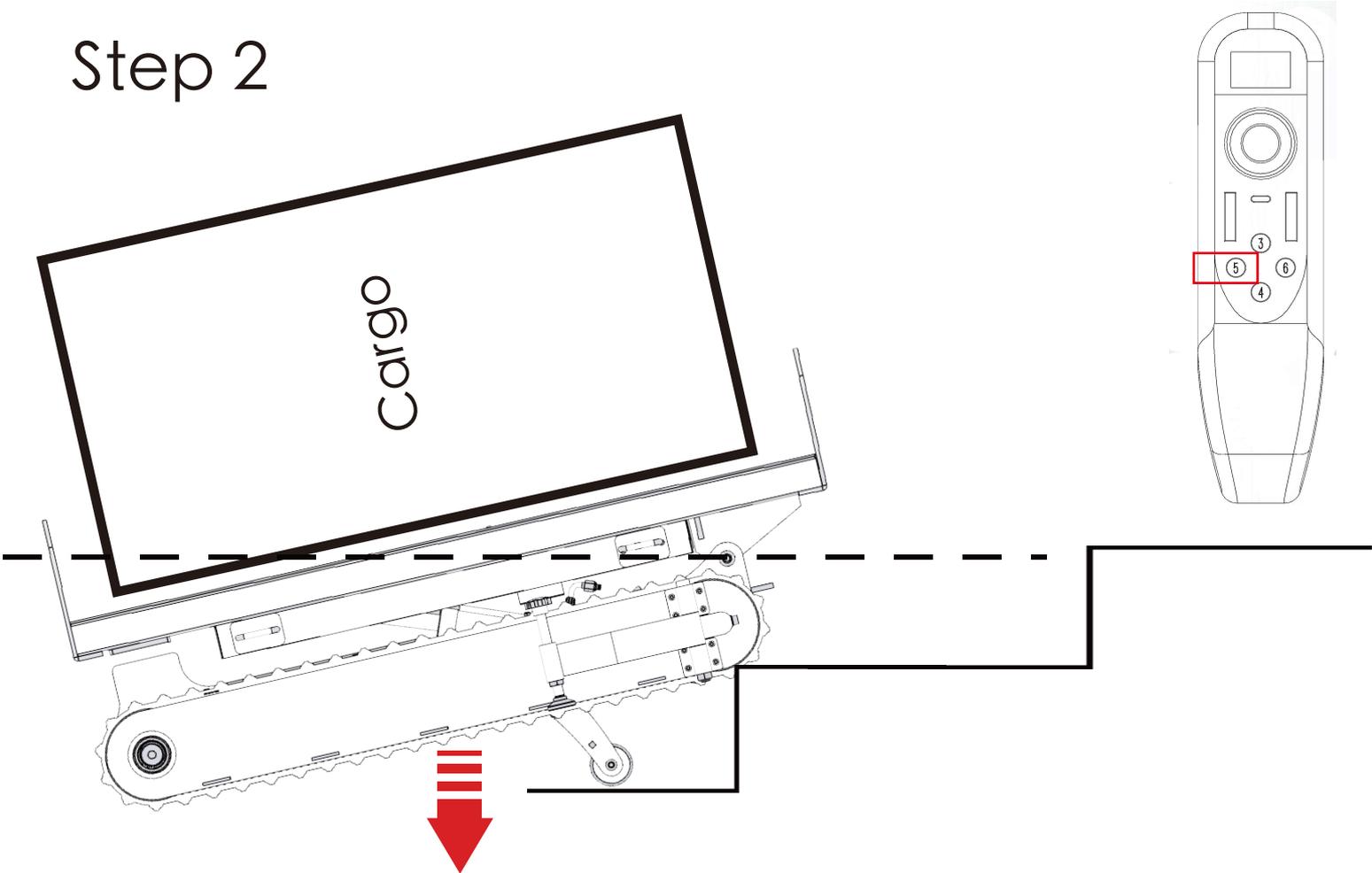


Application of auxiliary wheels-Up Stairs

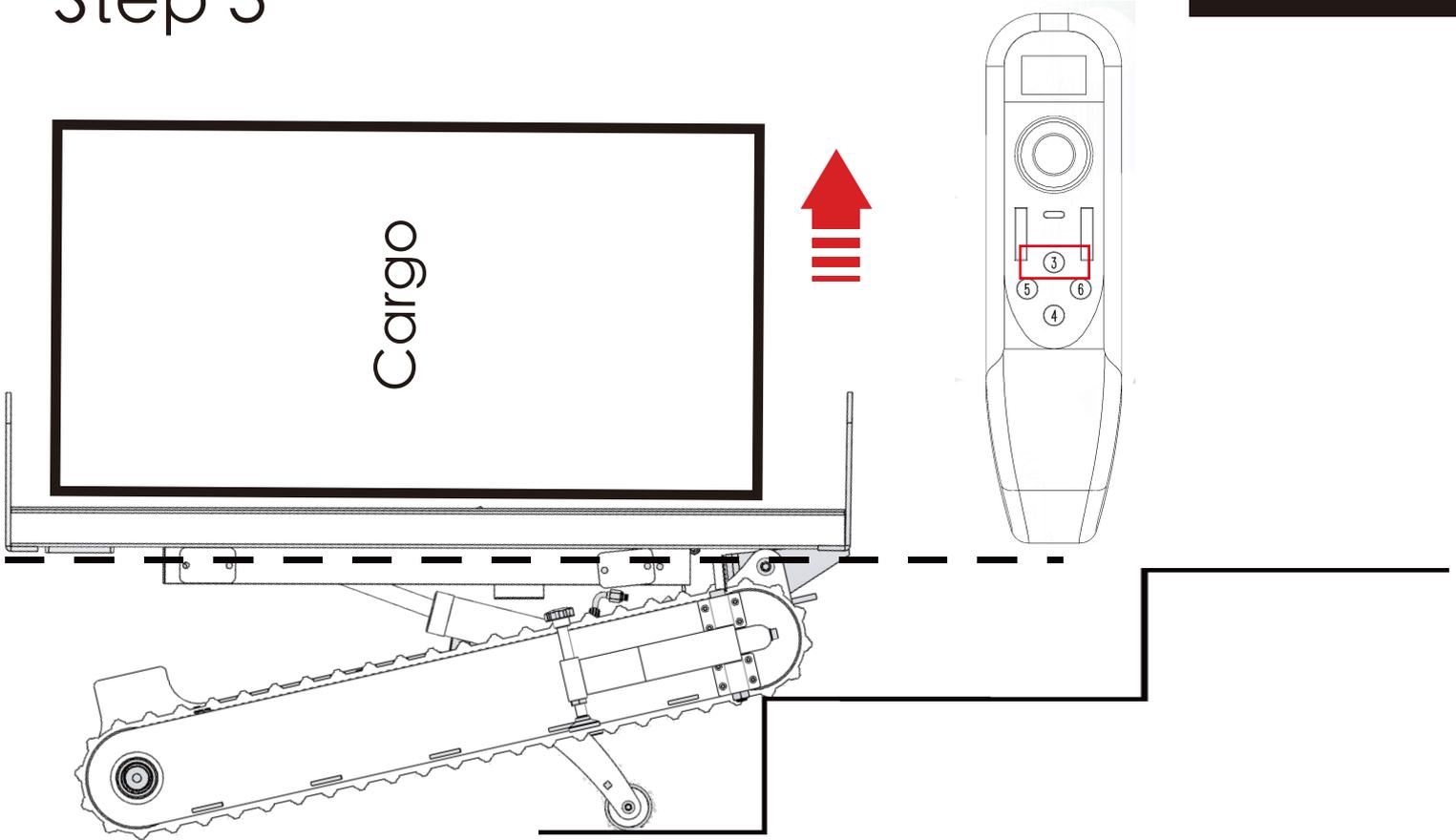
Step 1



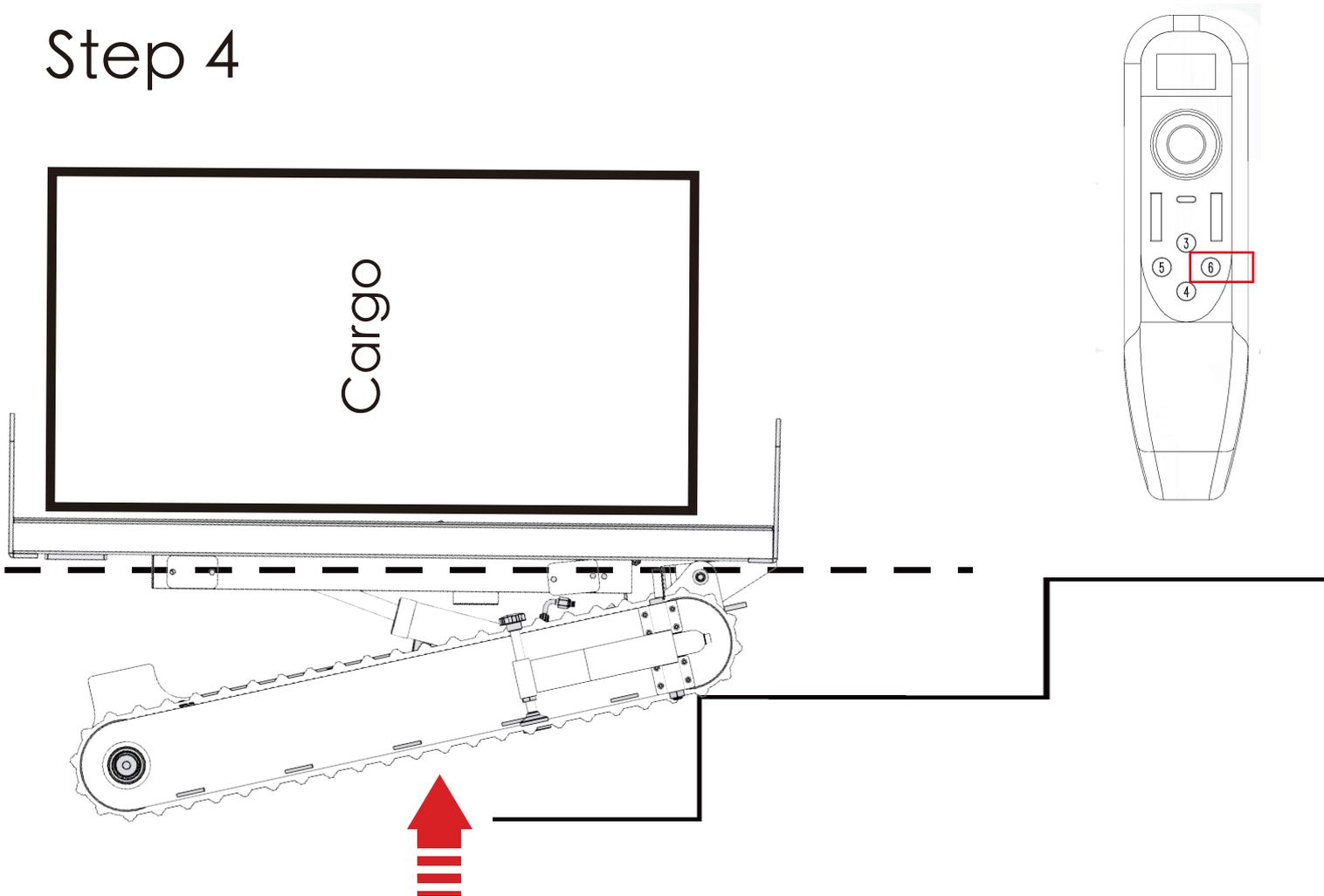
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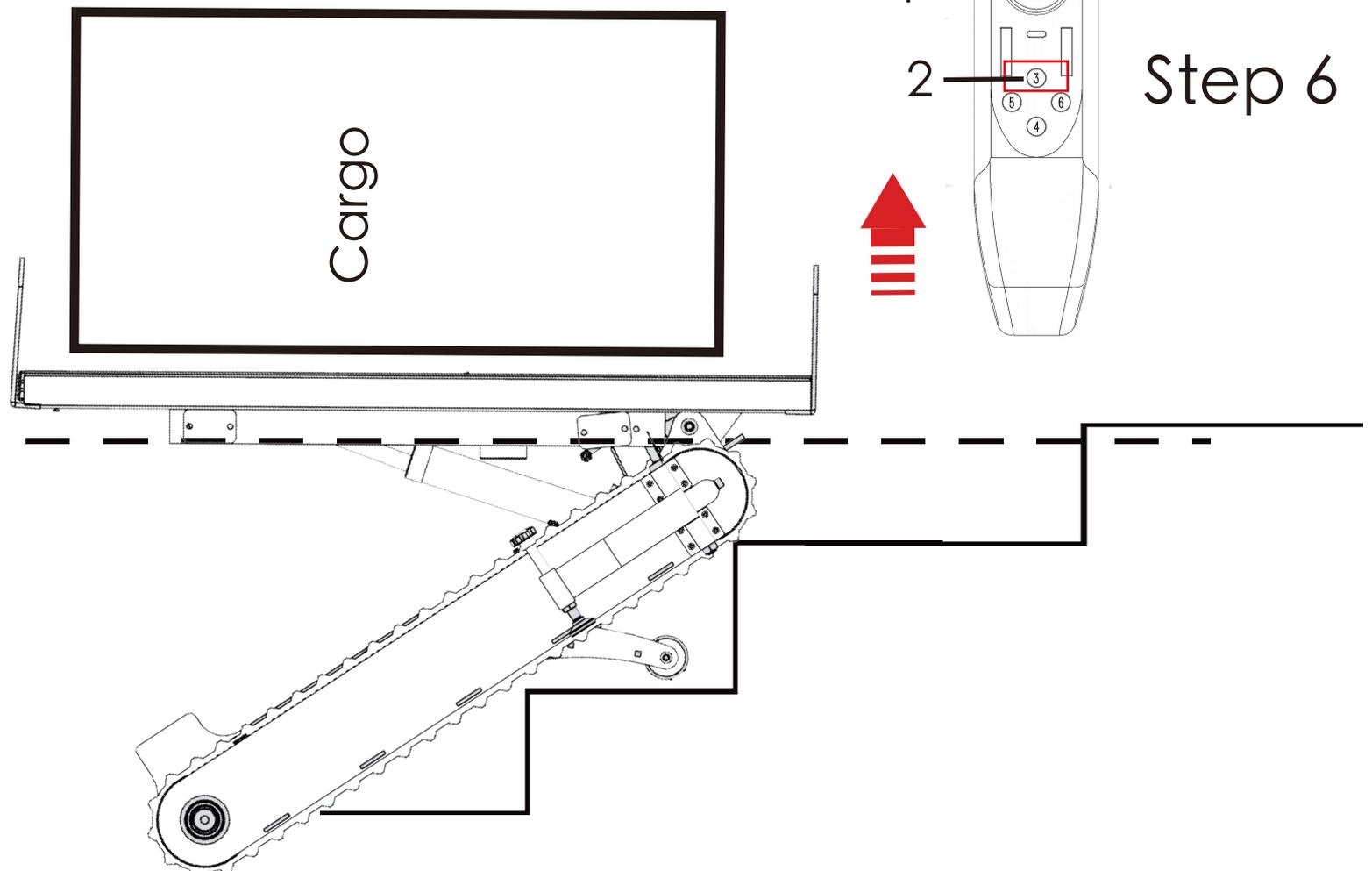
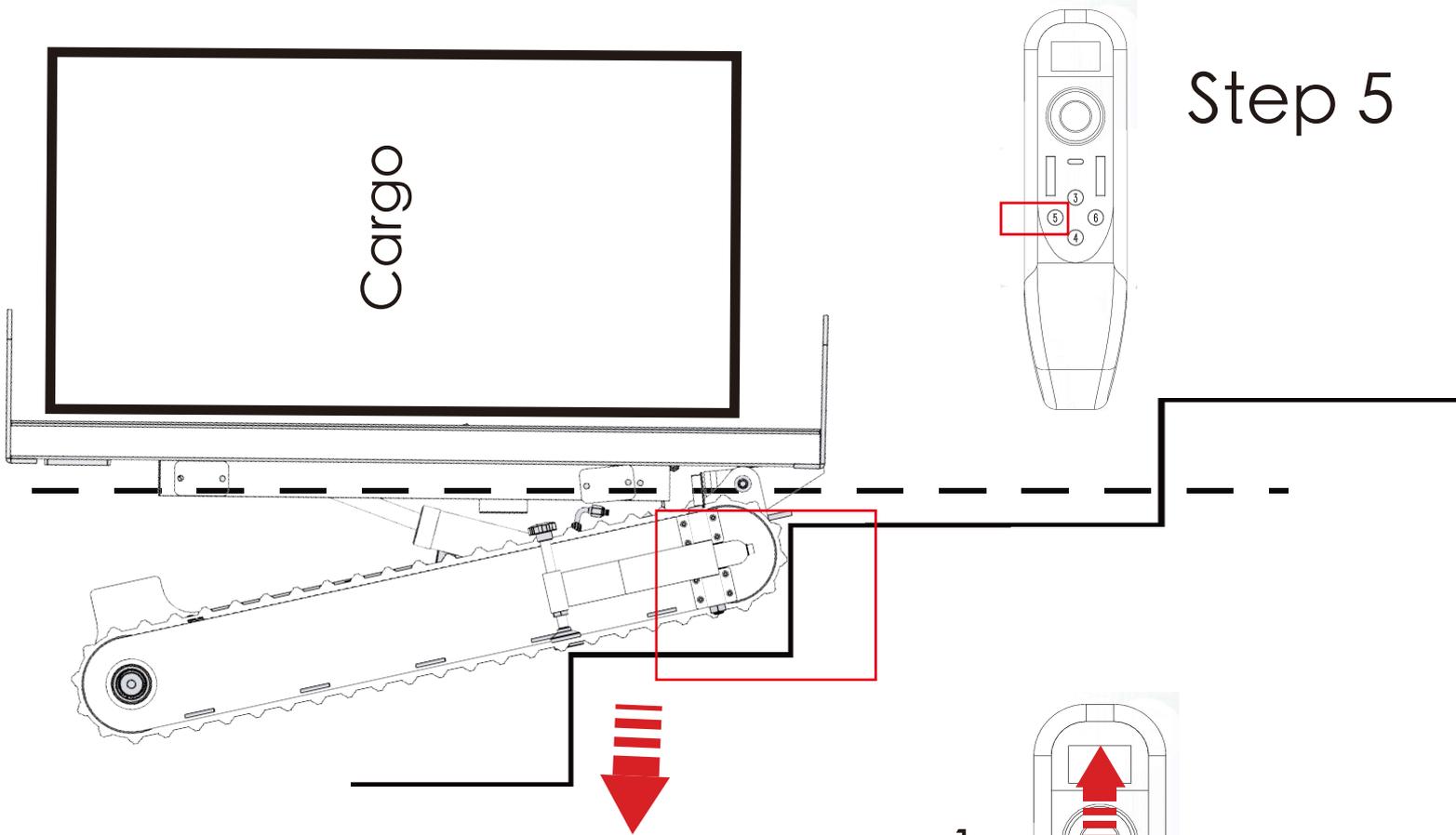
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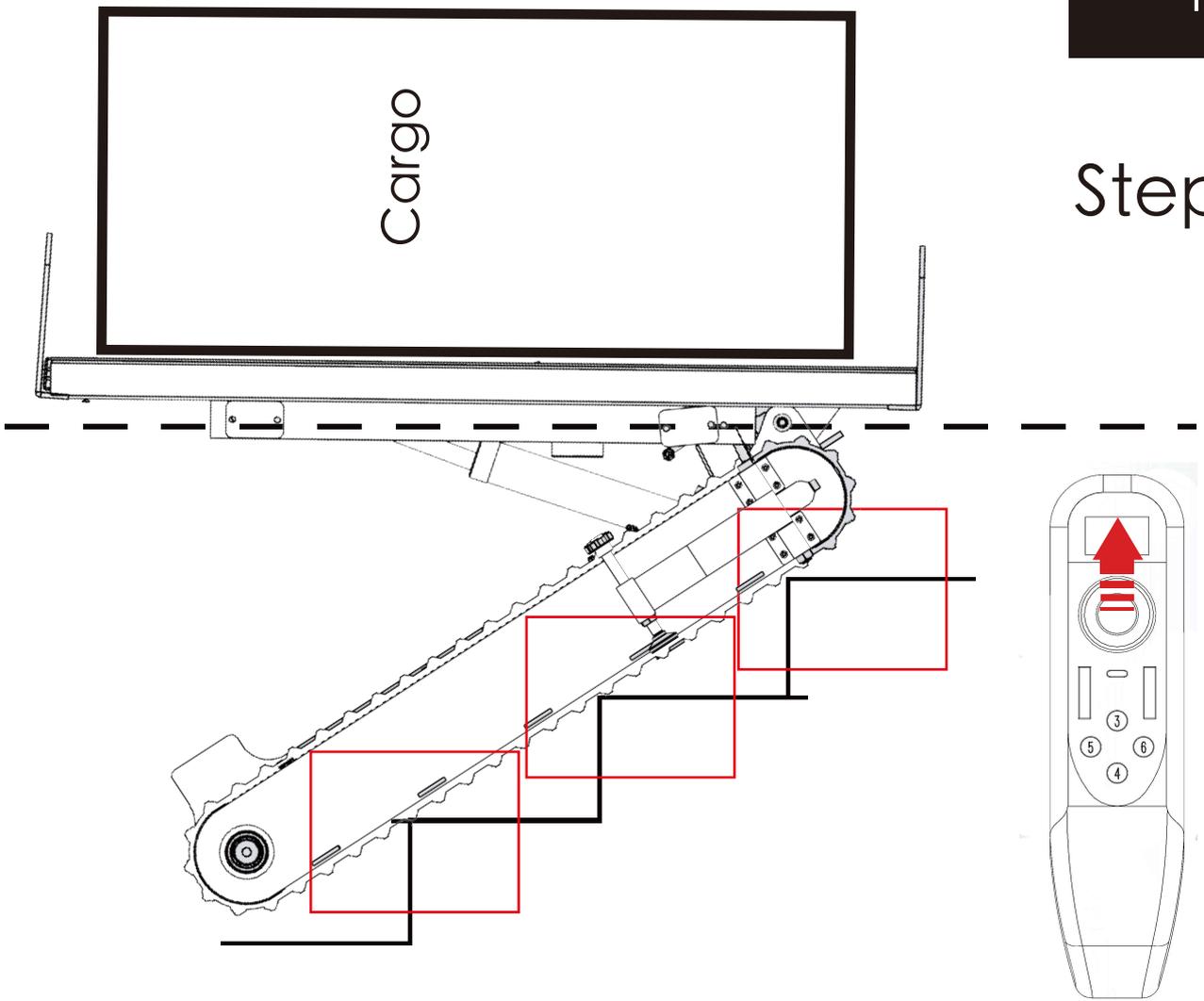
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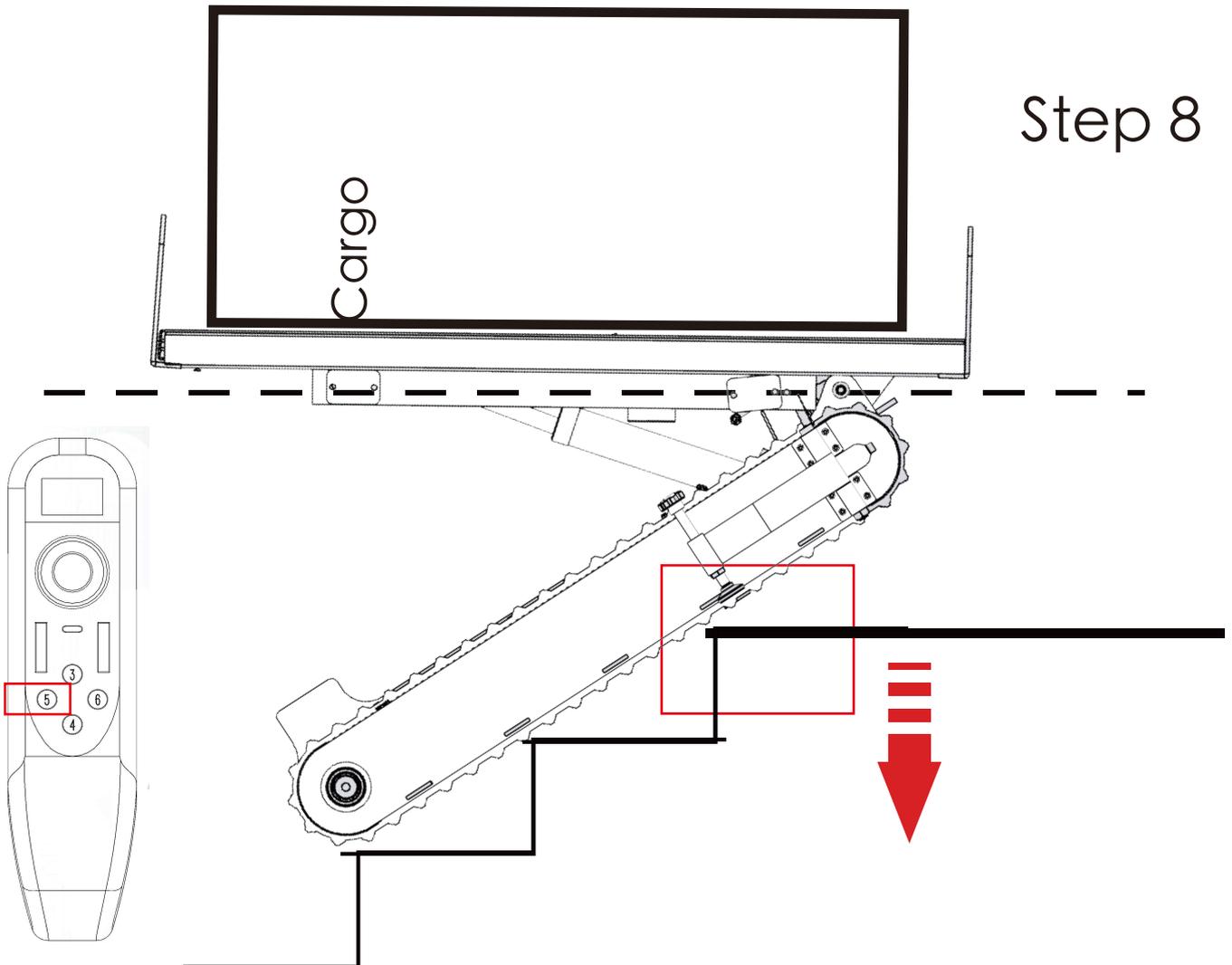
Note: If encountering special staircases, the handling method (the ultimate goal is to ensure that the tracked parts make contact with as many as possible of the three staircases) is as possible.



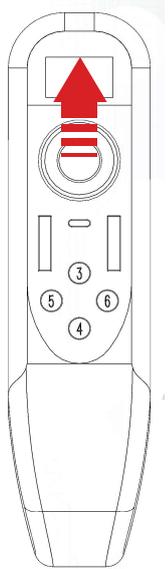
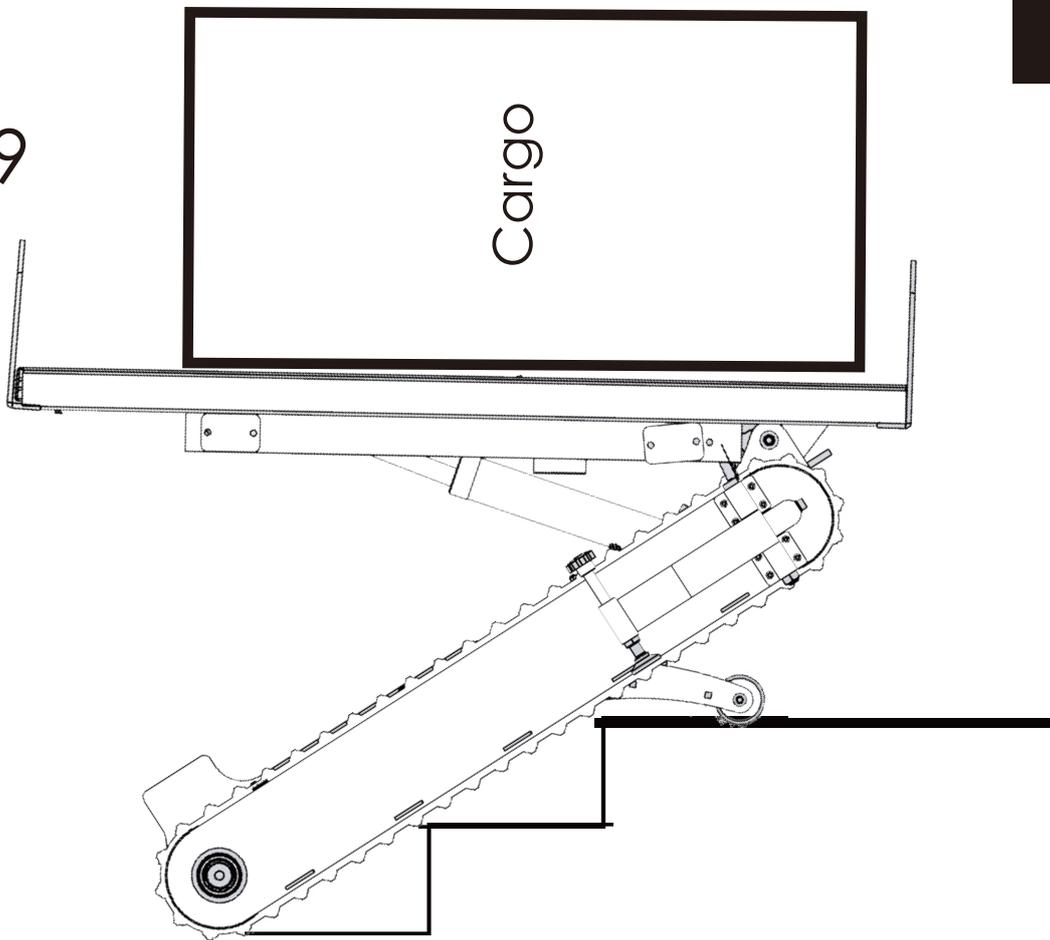
Step 7



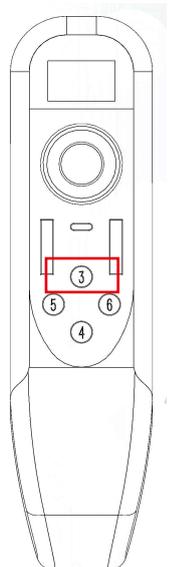
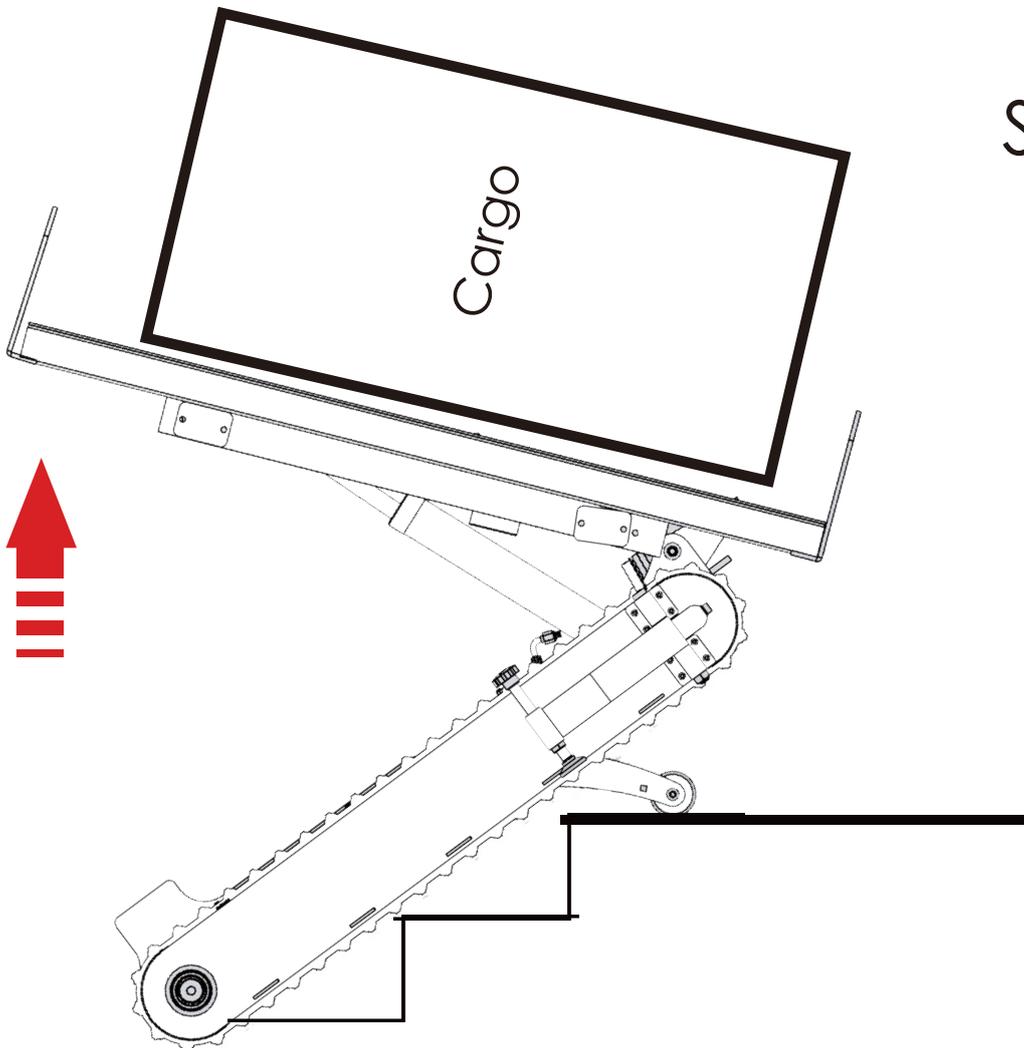
Step 8



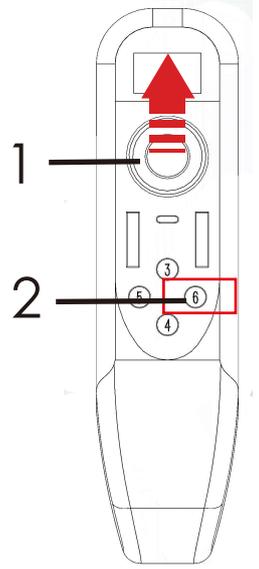
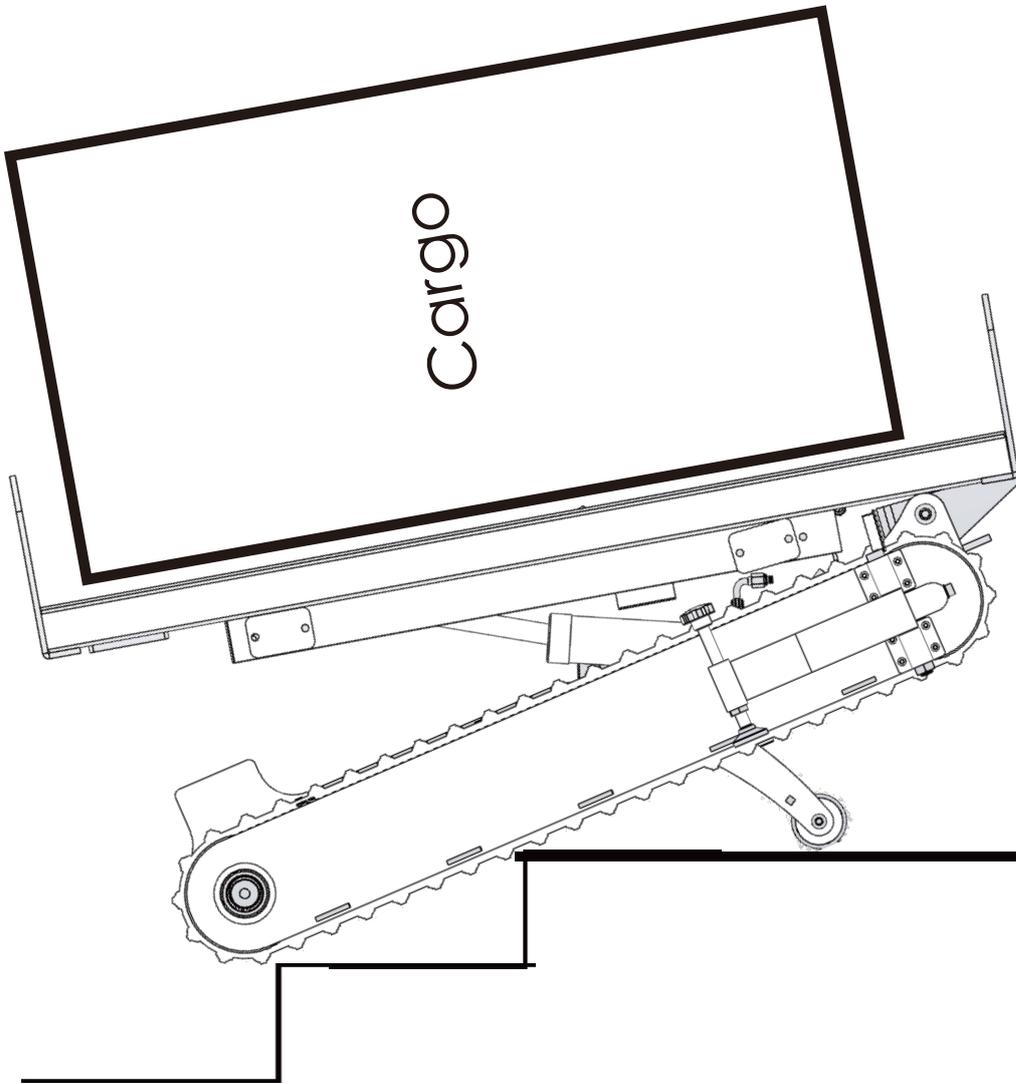
Step 9



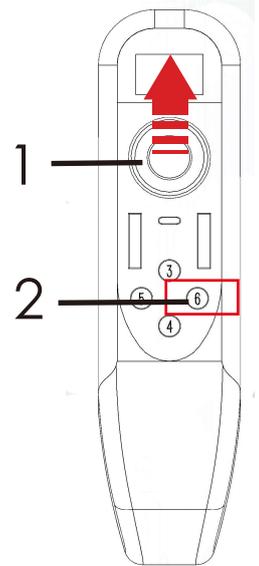
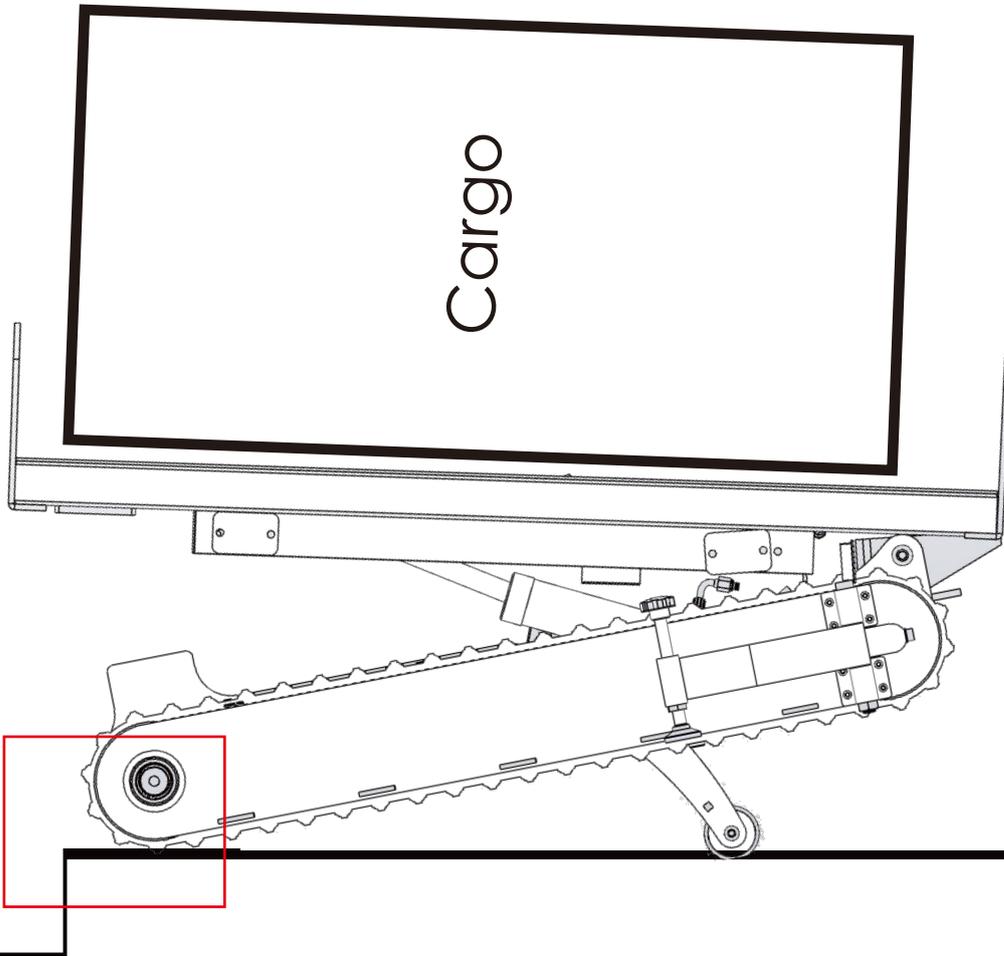
Step 10



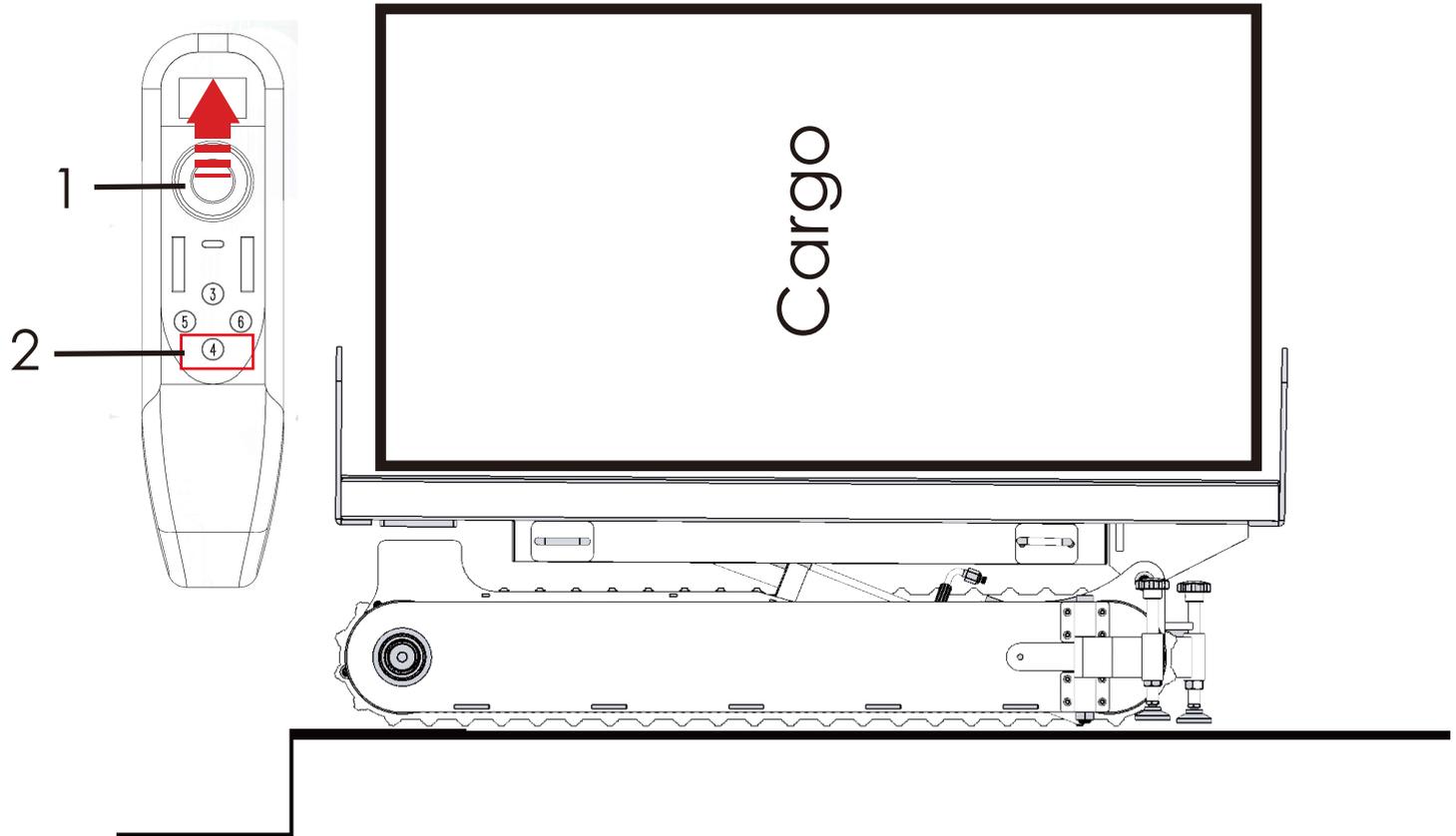
Step 11



Step 12



Step 13



- The extendable ramp stand is a mandatory accessory for the Titan (it's optional with the Titan Lifter).
- The lithium battery (48V 40A) and communication rectifier module (48V) are optional.
- You can choose one or both as needed (it's recommended to have both for various emergency situations).
- Communication rectifier module (48V) user guide - P1
- Lithium battery (48V 40A) user guide - P2
- Extendable ramp stand user guide - P3 (Step 1-Step 3)
- Titan going upstairs - P4 (Step 1-Step 11)
- Titan going upstairs - P4 (Step 11-Step 1)
- Titan/Titan Lifter cargo ground transport steps - P5 (Step 1-Step 8)
- Titan Lifter going upstairs - P6 (Step 1-Step 13)
- Titan Lifter going downstairs - P6 (Step 18-Step 1)

Product After-Sales Service Guarantee

Thank you very much for purchasing our product this time.

- During the warranty period, if a malfunction occurs under normal use by the customer, we will repair it in accordance with the warranty provisions recorded in this warranty.
- Please attach the purchase certificate to apply to the dealer where you purchased.
- Free repair during the warranty period.
- During the warranty period, the following situations are all paid repairs
- Failures and damages caused by fire, ground, water, lightning, and other natural disasters.
- Failures and damages caused by improper operation such as transportation and falling during movement on the user's side.
- Failures and damages caused by violating the usage methods and precautions recorded in the manual.
- Due to the connection with other devices, this product is damaged or damaged.
- The company does not assume any responsibility for the direct or indirect damages (including data loss) caused by the failure of this product or during the use of this product.

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