








GTX 12

HIGH DEFINITION LINE ARRAY MODULE

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1. SAFETY PRECAUTIONS AND GENERAL INFORMATION

The symbols used in this document give notice of important operating instructions and warnings which must be strictly followed.

	CAUTION	Important operating instructions: explains hazards that could damage a product, including data loss
	WARNING	Important advice concerning the use of dangerous voltages and the potential risk of electric shock, personal injury or death.
	IMPORTANT NOTES	Helpful and relevant information about the topic
	SUPPORTS, TROLLEYS AND CARTS	Information about the use of supports, trolleys and carts. Reminds to move with extreme caution and never tilt.
	WASTE DISPOSAL	This symbol indicates that this product should not be disposed with your household waste, according to the WEEE directive (2012/19/EU) and your national law.

IMPORTANT NOTES

This manual contains important information about the correct and safe use of the device. Before connecting and using this product, please read this instruction manual carefully and keep it on hand for future reference. The manual is to be considered an integral part of this product and must accompany it when it changes ownership as a reference for correct installation and use as well as for the safety precautions. TT+ Audio will not assume any responsibility for the incorrect installation and / or use of this product.

SAFETY PRECAUTIONS

1. All the precautions, in particular the safety ones, must be read with special attention, as they provide important information.

2. Power supply from mains

- The mains voltage is sufficiently high to involve a risk of electrocution; install and connect this product before plugging it in.
- Before powering up, make sure that all the connections have been made correctly and the voltage of your mains corresponds to the voltage shown on the rating plate on the unit, if not, please contact your dealer.
- The metallic parts of the unit are earthed through the power cable. An apparatus with CLASS I construction shall be connected to a mains socket outlet with a protective earthing connection.
- Protect the power cable from damage; make sure it is positioned in a way that it cannot be stepped on or crushed by objects.
- To prevent the risk of electric shock, never open this product: there are no parts inside that the user needs to access.
- Be careful: in the case of a product supplied by manufacturer only with POWERCON connectors and without a power cord, jointly to POWERCON connectors type NAC3FCA (power-in) and NAC3FCB (power-out), the following power cords compliant to national standard shall be used:
 - EU: cord type H05VV-F 3G 3x2.5 mm2 - Standard IEC 60227-1
 - JP: cord type VCTF 3x2 mm2; 15Amp/120V~ - Standard JIS C3306
 - US: cord type SJT/SJTO 3x14 AWG; 15Amp/125V~ - Standard ANSI/UL 62

3. Make sure that no objects or liquids can get into this product, as this may cause a short circuit. This apparatus shall not be exposed to dripping or splashing. No objects filled with liquid, such as vases, shall be placed on this apparatus. No naked sources (such as lighted candles) should be placed on this apparatus.

4. Never attempt to carry out any operations, modifications or repairs that are not expressly described in this manual.

Contact your authorized service centre or qualified personnel should any of the following occur:

- **The product does not function (or functions in an anomalous way).**
- **The power cable has been damaged.**
- **Objects or liquids have got in the unit.**
- **The product has been subject to a heavy impact.**

5. If this product is not used for a long period, disconnect the power cable.

6. If this product begins emitting any strange odours or smoke, switch it off immediately and disconnect the power cable.

7. Do not connect this product to any equipment or accessories not foreseen.

For suspended installation, only use the dedicated anchoring points and do not try to hang this product by using elements that are unsuitable or not specific for this purpose. Also check the suitability of the support surface to which the product is anchored (wall, ceiling, structure, etc.), and the components used for attachment (screw anchors, screws, brackets not supplied), which must guarantee the security of the system / installation over time, also considering, for example, the mechanical vibrations normally generated by transducers. To prevent the risk of falling equipment, do not stack multiple units of this product unless this possibility is specified in the user manual.

8. TT+ Audio strongly recommends this product is only installed by professional qualified installers (or specialised firms) who can ensure correct installation and certify it according to the regulations in force.

The entire audio system must comply with the current standards and regulations regarding electrical systems.

9. Supports, trolleys and carts.



The equipment should be only used on supports, trolleys and carts, where necessary, that are recommended by the manufacturer. The equipment / support / trolley / cart assembly must be moved with extreme caution. Sudden stops, excessive pushing force and uneven floors may cause the assembly to overturn. Never tilt the assembly.

10. There are numerous mechanical and electrical factors to be considered when installing a professional audio system (in addition to those which are strictly acoustic, such as sound pressure, angles of coverage, frequency response, etc.).

11. Hearing loss.

Exposure to high sound levels can cause permanent hearing loss. The acoustic pressure level that leads to hearing loss is different from person to person and depends on the duration of exposure. To prevent potentially dangerous exposure to high levels of acoustic pressure, anyone who is exposed to these levels should use adequate protection devices. When a transducer capable of producing high sound levels is being used, it is therefore necessary to wear ear plugs or protective earphones. See the manual technical specifications to know the maximum sound pressure level.


OPERATING PRECAUTIONS


- Place this product far from any heat sources and always ensure an adequate air circulation around it.
- Do not overload this product for a long time.
- Never force the control elements (keys, knobs, etc.).
- Do not use solvents, alcohol, benzene or other volatile substances for cleaning the external parts of this product.


IMPORTANT NOTES

To prevent the occurrence of noise on line signal cables, use screened cables only and avoid putting them close to:

- **Equipment that produces high-intensity electromagnetic fields**
- **Power cables**
- **Loudspeaker lines**

 **WARNING! CAUTION! To prevent the risk of fire or electric shock, never expose this product to rain or humidity.**

 **WARNING! To prevent electric shock hazard, do not connect to mains power supply while grille is removed**

 **WARNING! to reduce the risk of electric shock, do not disassemble this product unless you are qualified. Refer servicing to qualified service personnel.**

CORRECT DISPOSAL OF THIS PRODUCT



This product should be handed over to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances

that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority or your household waste disposal service.

CARE AND MAINTENANCE

To ensure a long-life service, this product should be used following these advices:

- If the product is intended to be set up outdoors, be sure it is under cover and protected to rain and moisture.
- If the product needs to be used in a cold environment, slowly warm up the voice coils by sending a low-level signal for about 15 minutes before sending high-power signals.
- Always use a dry cloth to clean the exterior surfaces of the speaker and always do it when the power is turned off.



CAUTION: to avoid damaging the exterior finishes do not use cleaning solvents or abrasives.



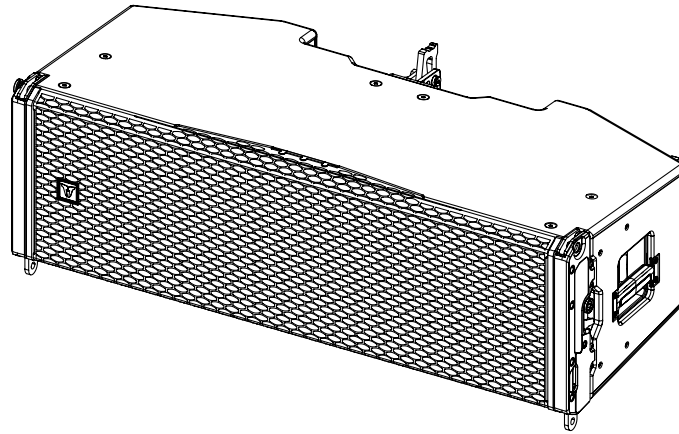
WARNING! CAUTION! For powered speakers, do cleaning only when the power is turned off.

TT+ Audio reserves the right to make changes without prior notice to rectify any errors and / or omissions. Always refer to the latest version of the manual on the website.

2. DESCRIPTION

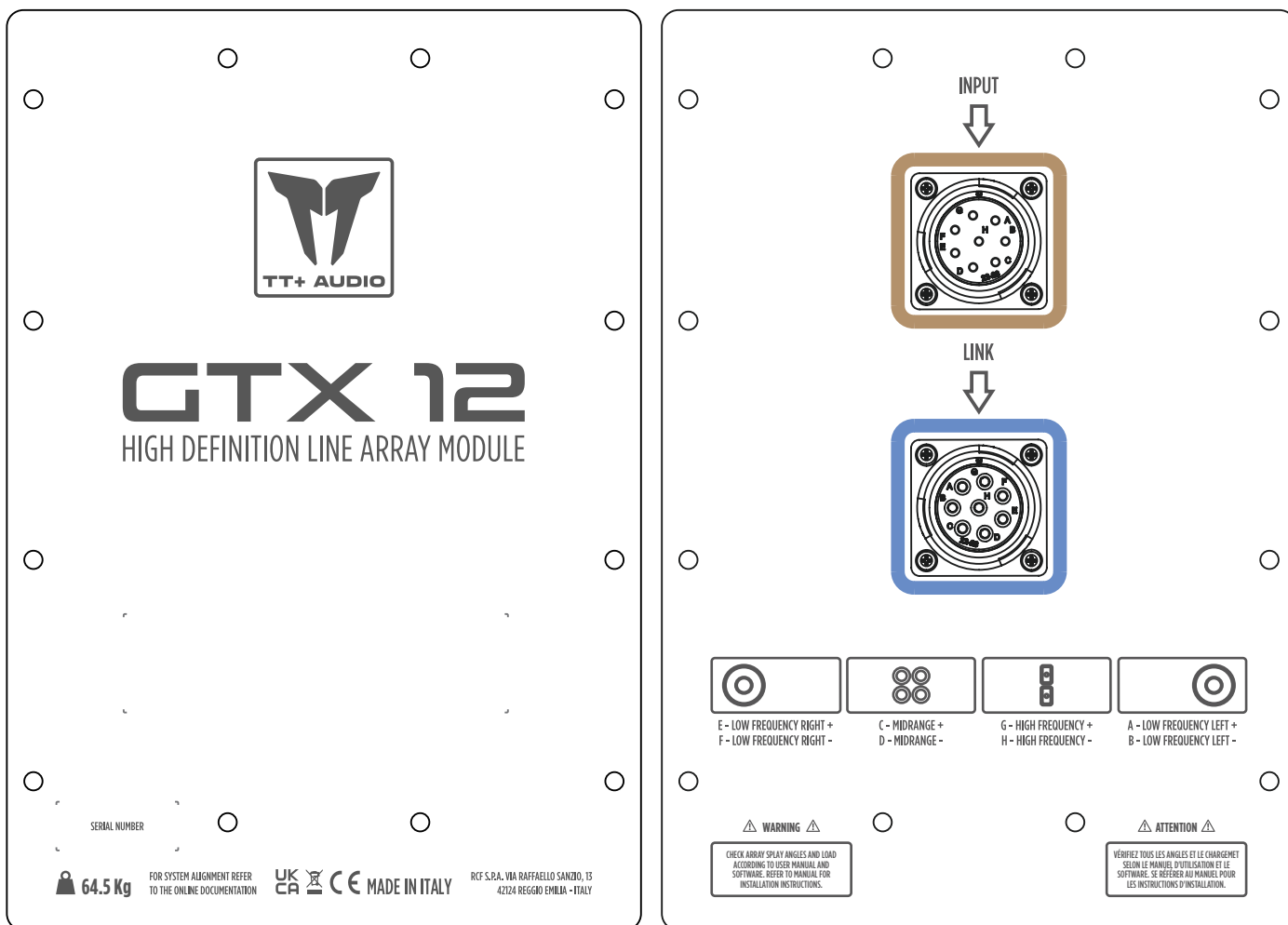
TT+ GTX 12

The GTX 12 is a 3-way line array module for large-sized events, indoors and outdoors. It features a sound pressure level of 148 dB SPL. Equipped with eight best-of-class transducers, it offers excellent playback quality ideal for professional musical applications. The proprietary 90 x 10 degrees 4PATH waveguide with the symmetrical design of the cabinet delivers optimal coverage. The integrated rigging hardware is both fast and reconfigurable, allowing the system engineer to create J-shaped and spiral arrays starting with 0.5° splay angles. The angling of the system develops on a single backbone. Up to 24 GTX 12 modules can be fastened on a single fly-bar. The hardware design let angle adjustments before use / on the ground and slip automatically into the correct position when pulling up the array. The system is designed to operate with XPS 16K amplifier (3 modules per unit).



TT+ GTX 12

2 x 12" Neo Woofer
2 x 3.0" Neo Compression Driver
4 x 6.5" neo Midrange
148 dB Max SPL
64.5 kg / 142.2 lbs



The rear panel features two **8-Pin CA-COM sockets**. The **INPUT** socket receives the signal from the amplifier, the **LINK** Socket is used to send the signal to another speaker (see Chapter 3 - CONNECTIONS).

⚠️ ⚠️ WARNING! CAUTION! Loudspeaker connections should be only made by qualified and experienced personnel having the technical know-how or enough specific instructions (to ensure that connections are made correctly) in order to prevent any electrical danger.

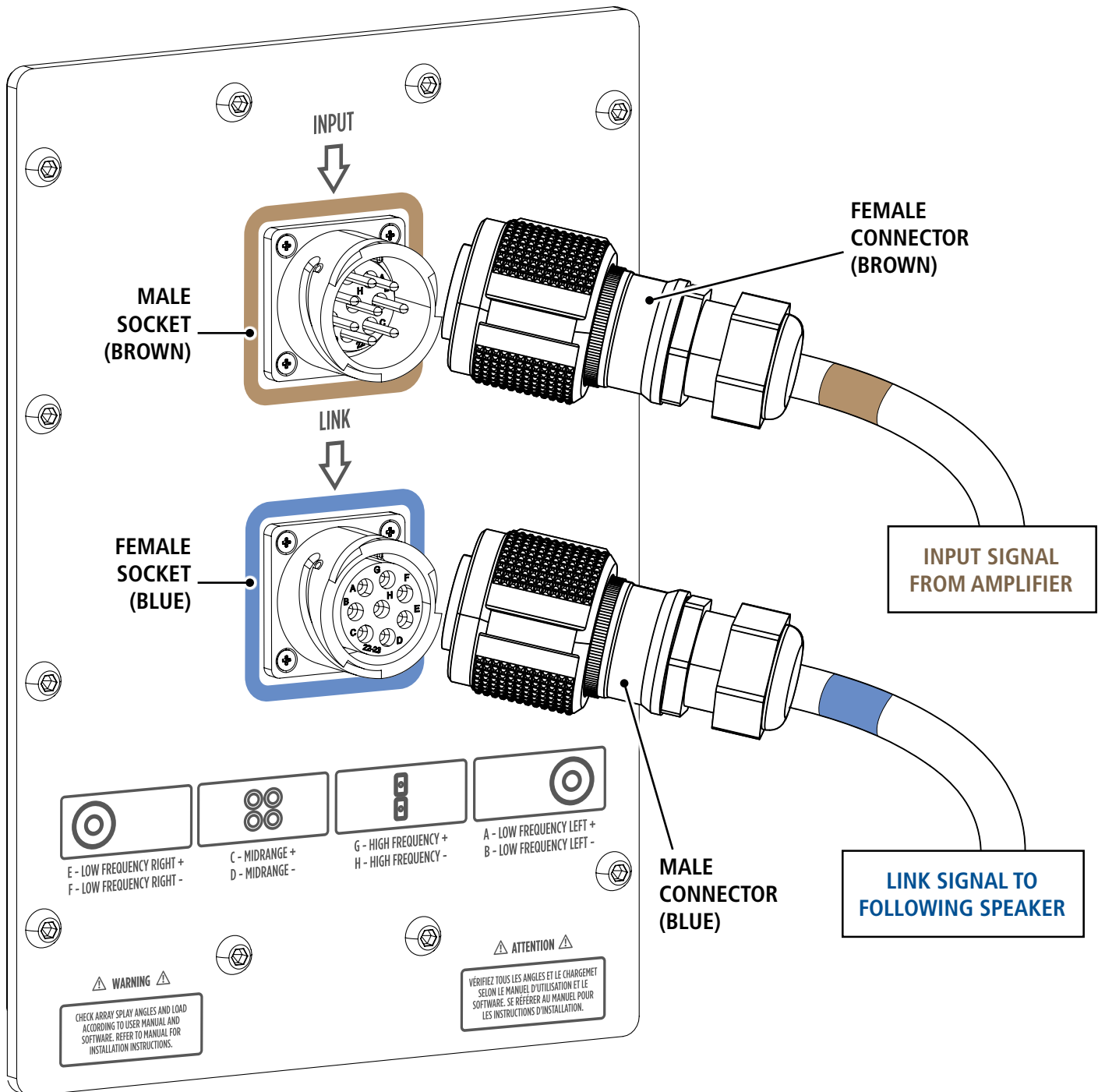
To prevent any risk of electric shock, do not connect loudspeakers when the amplifier is switched on.

Before turning the system on, check all connections and make sure there are no accidental short circuits.

The entire sound system shall be designed and installed in compliance with the current local laws and regulations regarding electrical systems.

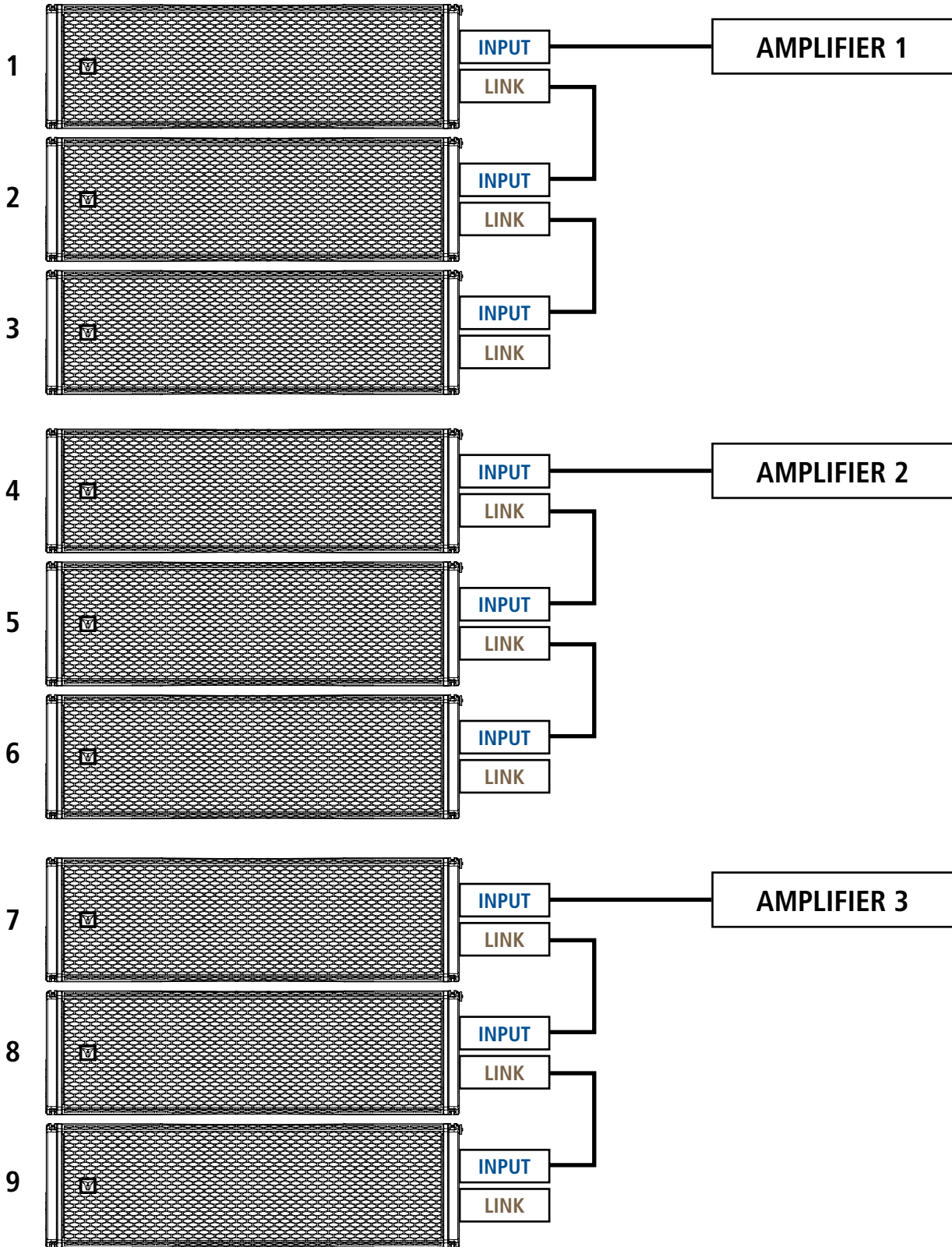
3. CONNECTIONS

Connect the cables in the speaker sockets (MALE to FEMALE; FEMALE to MALE) respecting the colors indicated on the cables and on the speaker rear panel. The connector must be secured to the socket by turning the grip clockwise.



3. CONNECTIONS

One amplifier drives **three** speakers at the time. Follow the illustration below to connect the speakers to the amplifiers.



4. SOFTWARE MANUALS FOR GTX SYSTEMS

For design, simulation and modeling of the system, please consult the **Shape D3D** Software Manual (from version 1.0).

For tuning, management, design, measurement and control of the system, please consult the **RNet** Software Manual (from version 5.0).

Shape D3D

Shape D3D is TT+ AUDIO's simulation software for modeling the acoustic performance of its line arrays, column arrays, point source loudspeakers, and subwoofers. The software facilitates tasks related to acoustic design, predicting SPL and frequency performance, aligning loudspeakers, rigging hardware, and ensuring safety parameters are met. Shape D3D enables autoplay for line arrays to properly plan the system coverage and allows users to streamline setup and tuning for touring applications.

Export Shapes to RNet

Within Shape D3D, users can define listening planes representing audience areas within a specific venue, creating a 3D representation with multiple virtual microphones for IR-modeled measures. The RNet remote control software can import data defined in Shape D3D to generate control data and provide full configuration details to the system after deployment.

RNet® 5 Networked Management

RNet is an advanced management, design, measurement and control platform for TT+ AUDIO systems. A network user can remotely monitor system status, measure the system frequency/phase response and control levels, delays, EQs, and many other settings of single or grouped devices, including advanced subwoofer array configurations.

AMFG® EASE

In EASE, each loudspeaker is described by a system definition profile, known as a GLL file, containing the loudspeaker system's mechanical, electronic, and acoustic properties. TT+ AUDIO provides GLL files for all TT+ Audio loudspeakers. These GLL files can be shared with EASE and EASE Focus software for system design and acoustic simulation.

TT+ Audio has developed a complete procedure to set up and hang a line array system starting from software data, enclosures, rigging, accessories, cables, until the final installation.



WARNING! CAUTION! GENERAL RIGGING WARNINGS AND SAFETY PRECAUTIONS:

- Suspending loads should be done with extreme caution
- When deploying a system always wear protective helmets and footwear
- Never allow people to pass under the system during the installation process
- Never leave the system unattended during the installation process
- Never install the system over areas of public access
- Never attach other loads to the array system
- Never climb the system during or after the installation
- Never expose the system to extra loads created from the wind or snow



WARNING! CAUTION!

The system must be rigged in accordance with the laws and regulations of the Country where the system is used.

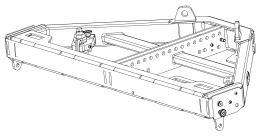
It is responsibility of the owner or rigger to make sure the system is properly rigged in accordance with Country and local laws and regulations.

Always check that all the parts of the rigging system that are not provided from TT+ Audio are:

- Appropriate for the application
- Approved, certified and marked
- Properly rated
- In perfect condition
- Each cabinet support the full load of the part of the system below. It is very important that each single cabinet of the system is properly checked

6. ACCESSORIES

SUSPENSION ACCESSORIES



FL-B 005

P/N 13360519

Flybar for GTX 12 plus 1x Pickup Tab with Shackle plus Mounting Bracket for inclinometer. Pins included. Flybar rigging 6 to 24 modules of GTX 12.



FL-B EXT 006

P/N 13360556

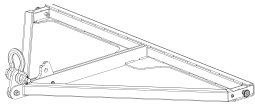
Extension Bar to complete the flybar to manage the hanging of multiple GTX 12 modules. Shackles, Pins, and cable hook included.



FL-B PK 007

P/N 13360561

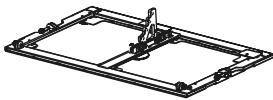
Pickup Tab with Shackle for GTX 12. To be added to the flybar when rigging with two motors. Pins included. One piece for every flybar, only when using two motors.



FL-B CMP 001

P/N 13360526

Pullback flybar with included pins and shackle.



STCK-KIT 001

P/N 13360555

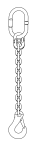
Stacking kit to stack one or more GTX12 over a GTS29 subwoofer.



FL-B CMP KIT 002

P/N 13360563

Pullback accessories kit. It includes chains and wrench for the pull-back.



HOIST SPACING CHAIN CH 001

P/N 13360129

Hoist Connector Chain to distance the chain hoist and the chain bag from the flybar.



SAFETY CHAIN CH 002

P/N 13360128

To be added to the flybar to provide a secondary safety (especially when the cluster is suspended with a single motor). One piece for every flybar is suggested.

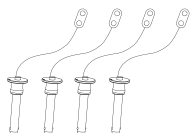


AZM-BR 2X

P/N 13360351

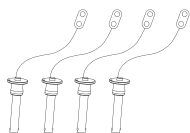
Azimut bracket. Two pieces. To be added for horizontal array control.

QUICK LOCK PINS

**QL-PIN 006**

P/N 13360562

4 x Quick Lock Pins for GTX 12 front/back rigging points and GTS 29 link.

**QL-PIN 007**

P/N 13360613

4 x Quick Lock Pins for GTX 12 rear link flybar, pickup flybar, and Extension Bar.

CABLES ACCESSORIES

**CBL 002**

P/N 12399072

0,7 m (2.3 ft.) P-COM 8 Cable. 8 x 2,5 mm (14 awg) cable to link GTX 12 and GTX 10 modules.

**CBL 004**

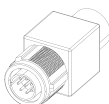
P/N 12399074

10 m (32.8 ft.) P-COM 8 Cable. 8 x 4 mm (12 awg) cable to link GTX 12, GTX 10, or GTS 29 modules with TTR 16K Touring Rack.

**CBL 005**

P/N 12399075

25 m (82 ft.) P-COM 8 Cable. 8 x 4 mm (12 awg) Cable to connect GTX 12, GTX 10 or GTX 29 with TTR 16K Touring Rack.

**CN-KIT 006**

P/N 12399076

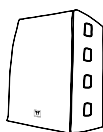
Adapter for the connection between two P-COM 8 cables.

**CBL 010**

P/N 12399082

Cable adapter to directly connect XPS 16K amplifiers to GTX/GTS modules without using PD32A/EU or PD 30A/US Power Distribution Boxes.

COVERS ACCESSORIES

**CVR 001**

P/N 13360557

Large cover for four GTX 12 modules mounted on a cart (tension and compression mode) with the flybar.

TRANSPORTATION ACCESSORIES

**KRT-WH 001**

P/N 13360537

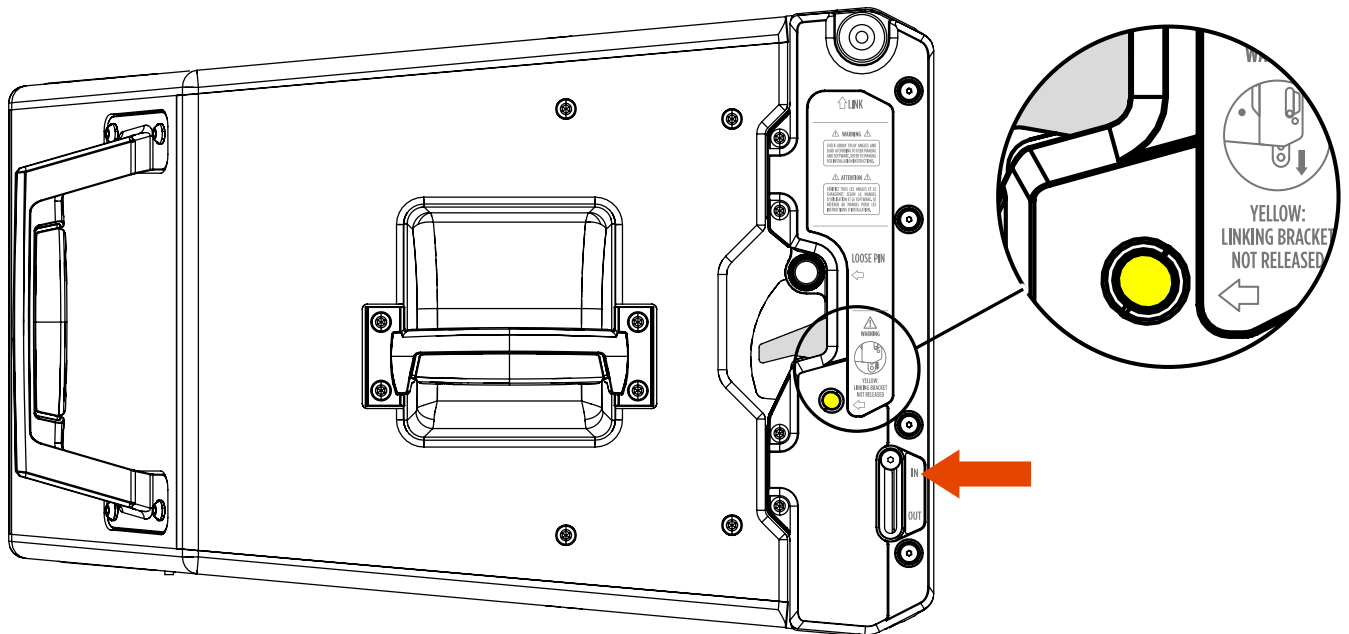
Heavy-duty cart to safely transport up to four GTX 12 modules. Four wheels included, pins included.

7. INSTALLATION

7.1 CONNECTING TWO OR MORE SPEAKERS

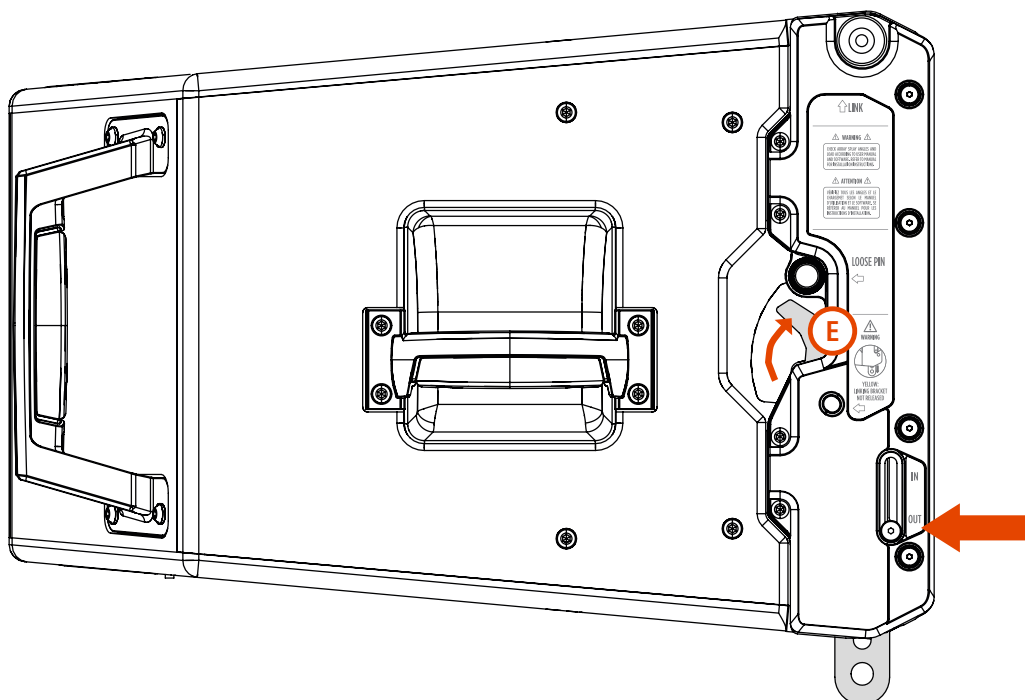
To connect two modules together the front connecting brackets need to be pulled out.

Notice: when the lateral bracket is not pulled out the indicator shows a yellow spot and the lateral bolt is on IN position.



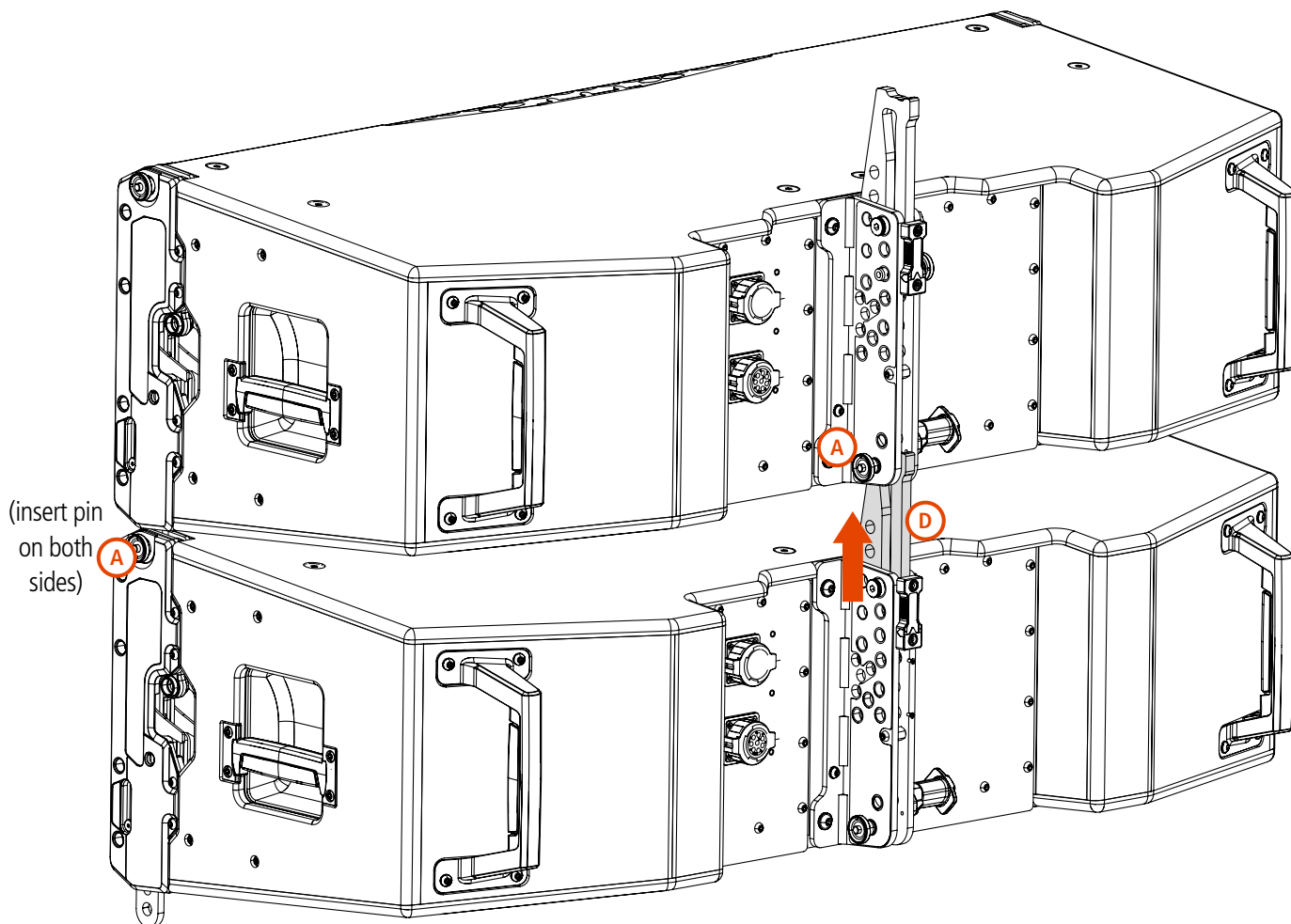
Lift up the lateral lever **E**. The front bracket **F** will come down automatically.

Notice: when the lateral bracket is pulled out the yellow indicator will disappear and the lateral bolt will switch in OUT position.



To place back the front bracket, lift up the lateral lever **E** and push up the front bracket on its position.

Now place one speaker above the other and insert 2 Quick Lock Pins on the front brackets **A**.
Lift the rear bracket **D** of the lower speaker and lock it to the other module with a Quick Lock Pin **A** in the Link hole.



Repeat this procedure with the following speakers until the desired number of modules is reached.



WARNING! CAUTION! The system should always be installed by qualified and experienced personnel having the technical know-how or enough specific instructions in order to prevent any danger.

7. INSTALLATION

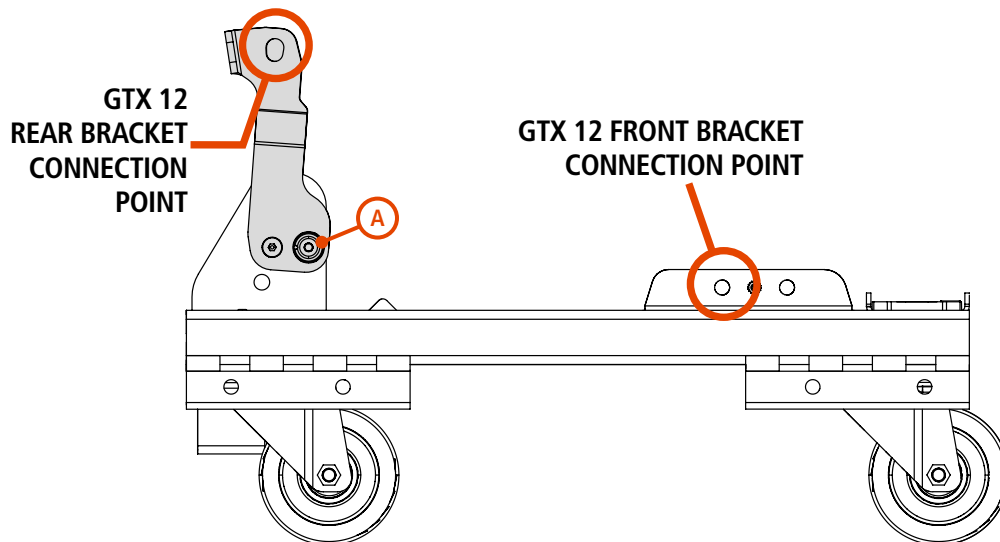
7.2 PLACING THE MODULES ON THE CART

Up to 4 modules can be placed on the cart in COMPRESSION or TENSION mode.

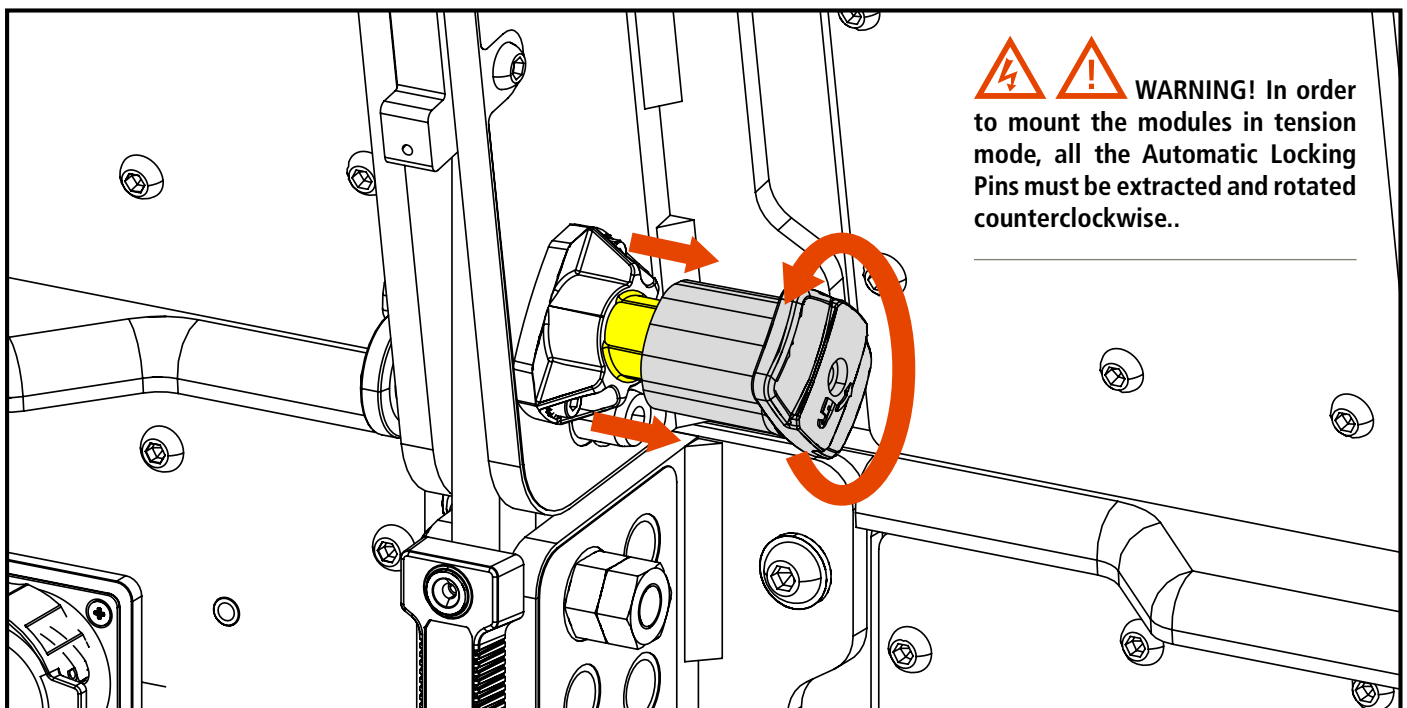
Either the mode is COMPRESSION or TENSION, the lowest module needs to be connected to the cart with two pins on the front brackets and one pin on the rear bracket.

TENSION MODE

To place the modules on the cart in TENSION mode, the cart rear bracket needs to be pulled up and locked with a Quick Lock Pin **A**.



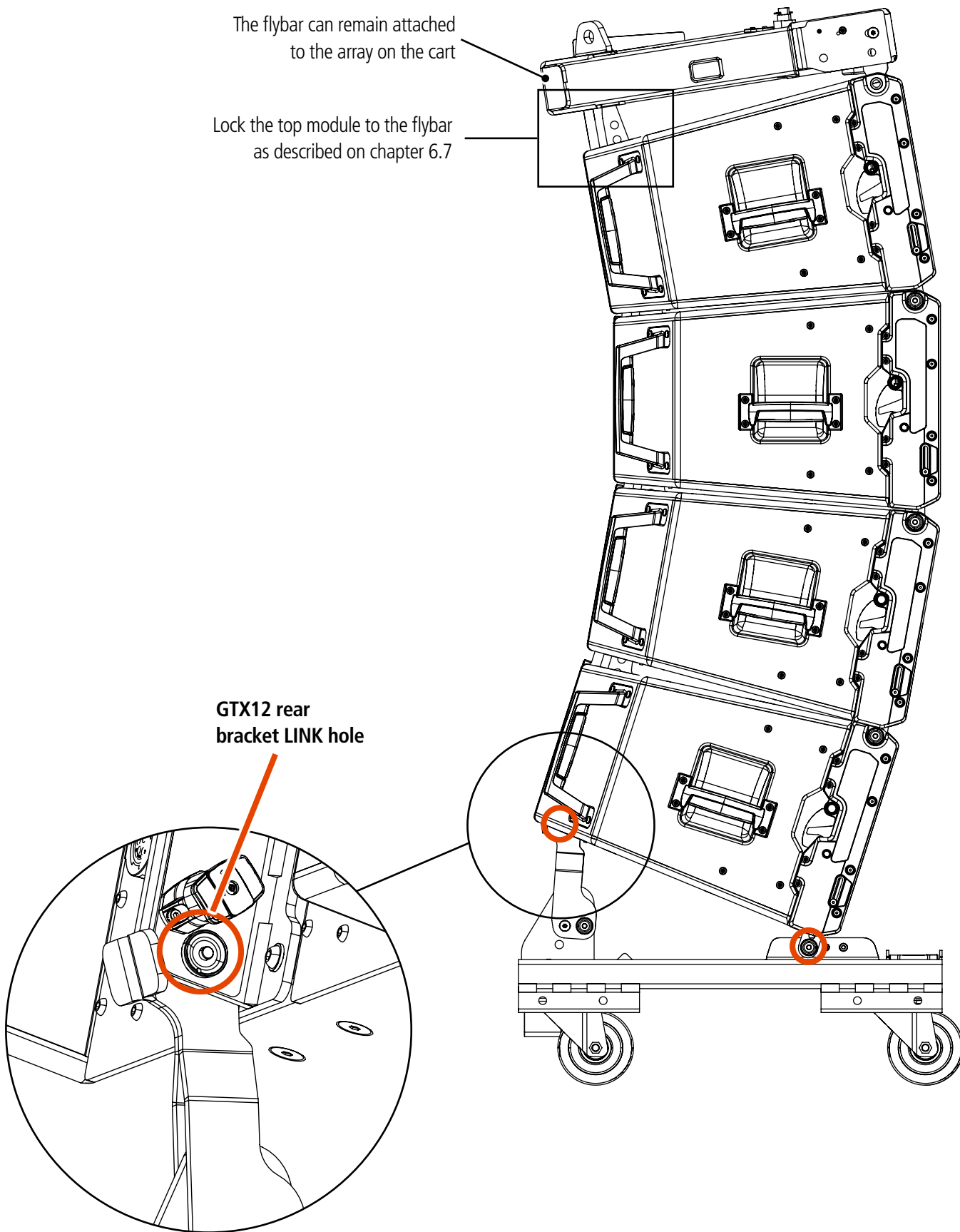
Lock the module on the cart with two Quick Lock Pin in the connection points indicated in the image.



The flybar can remain attached to the array on the cart

Lock the top module to the flybar as described on chapter 6.7

GTX12 rear bracket LINK hole



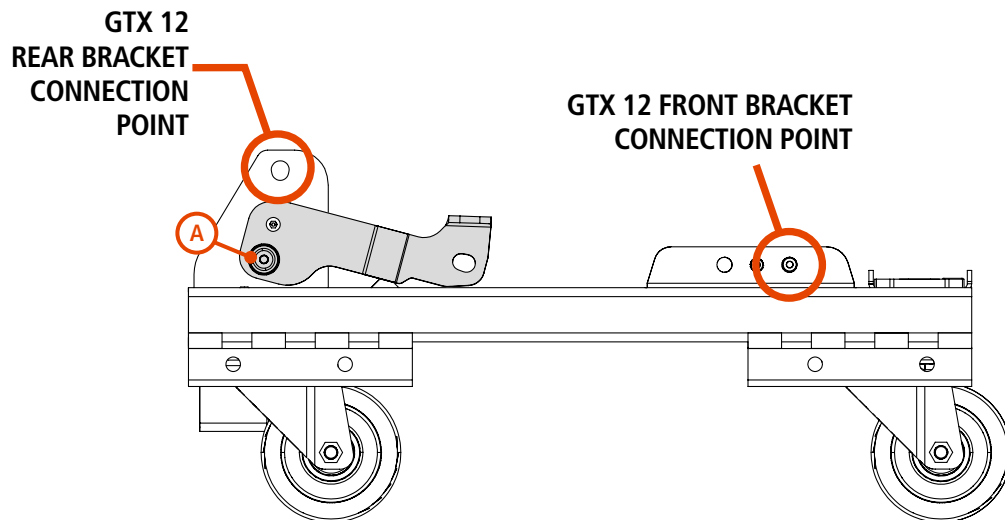
Lock the cart bracket on the speaker rear bracket with a Quick Lock Pin in the hole indicated as "LINK".



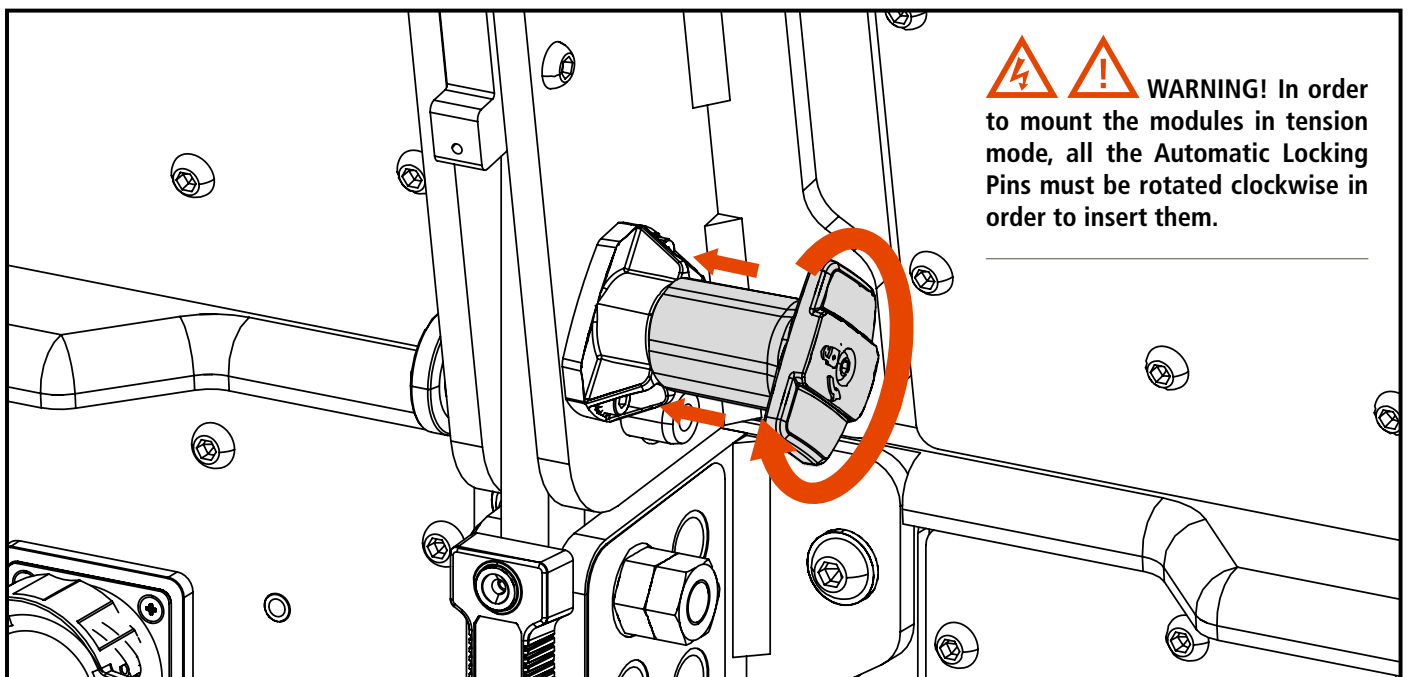
WARNING! CAUTION! The system should always be installed by qualified and experienced personnel having the technical know-how or enough specific instructions in order to prevent any danger.

COMPRESSION MODE

To place the modules on the cart in TENSION mode, the cart rear bracket needs to be layed down and locked with a Quick Lock Pin **A**.

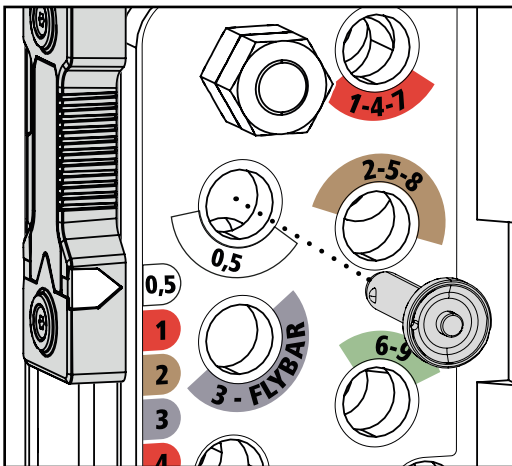


Lock the module on the cart with two Quick Lock Pin in the connection pontis indicated in the image.

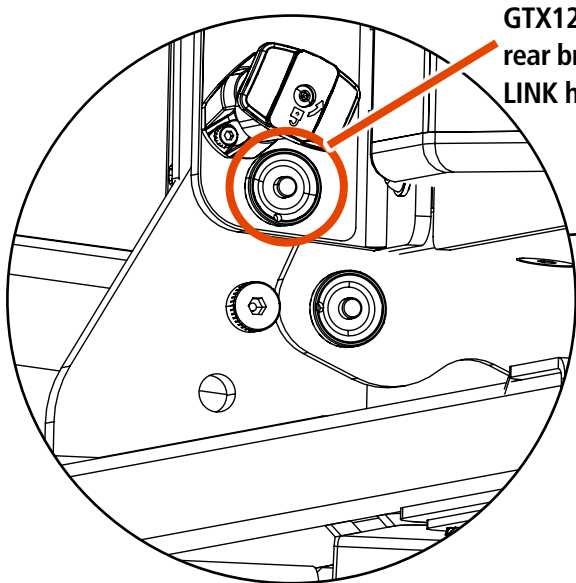


The flybar can remain attached to the array on the cart

Lock the top module to the flybar as described on chapter 6.7

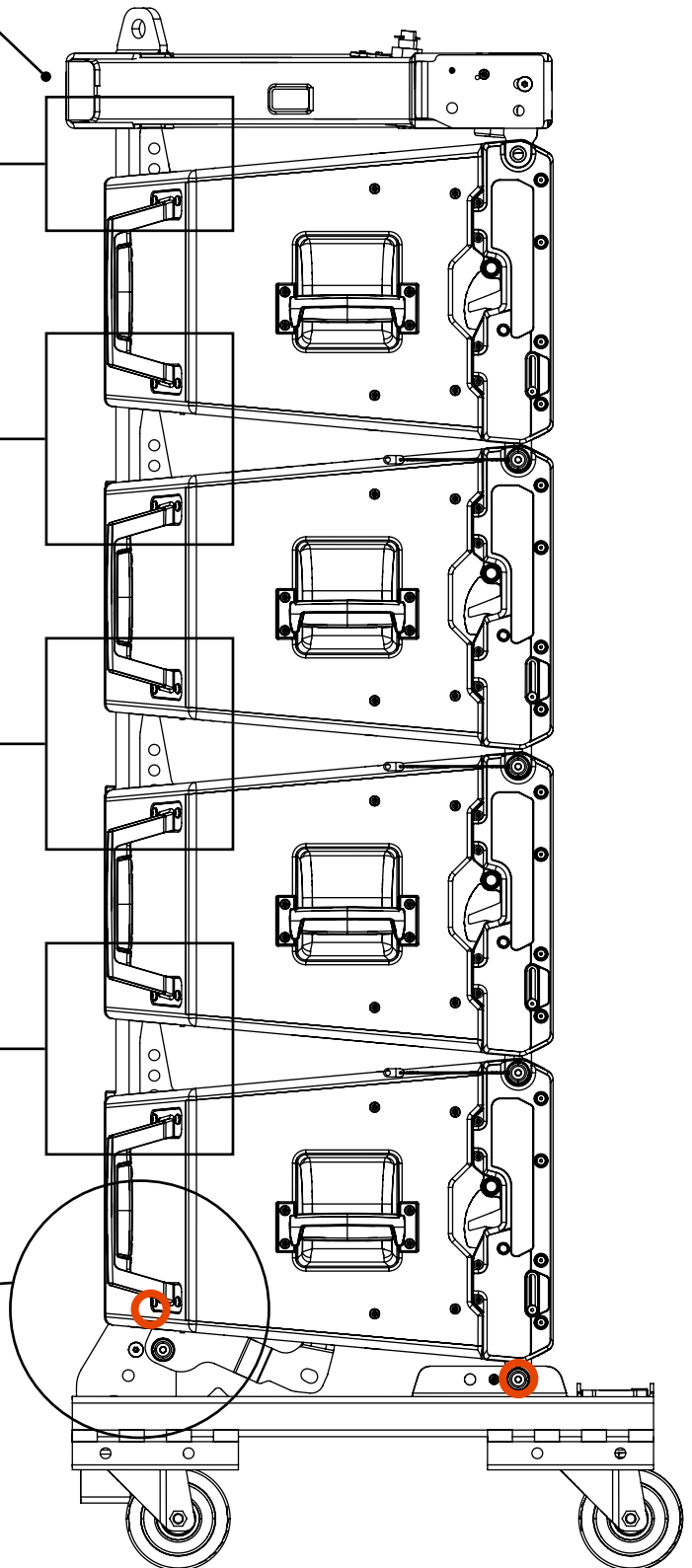


Lock the modules (except the top one and the bottom one) by matching the rear bracket into the 0,5 hole and fix with a Quick Lock Pin.



GTX12 rear bracket LINK hole

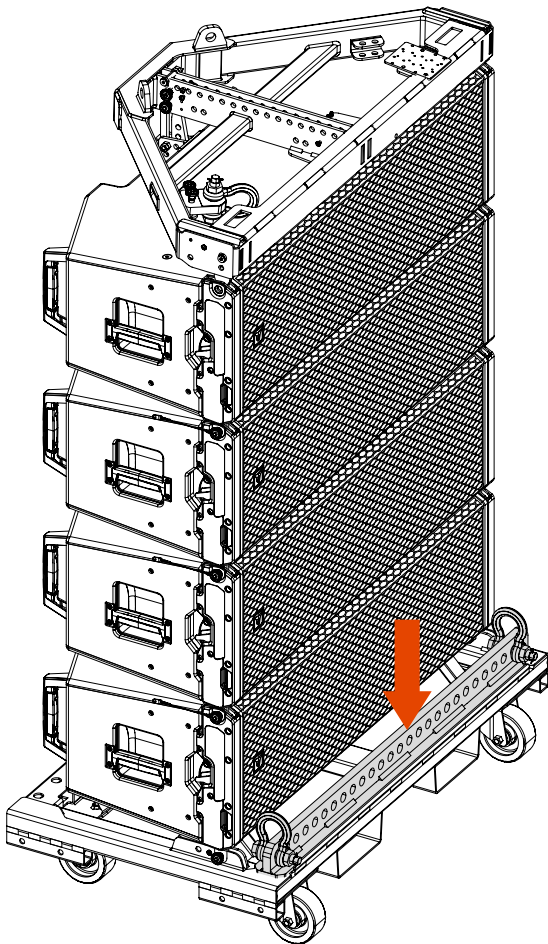
Lock the cart bracket on the speaker rear bracket with a Quick Lock Pin in the hole indicated as "LINK".



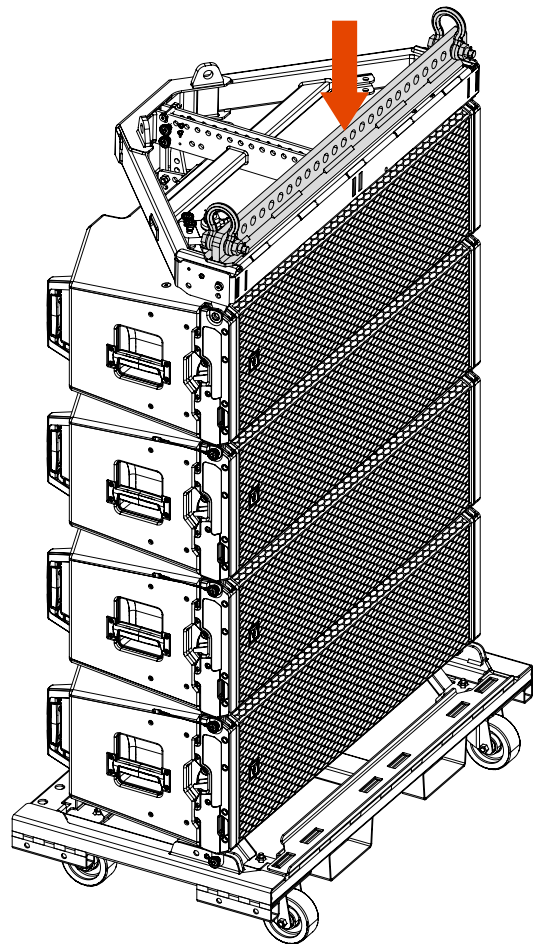
WARNING! CAUTION! The system should always be installed by qualified and experienced personnel having the technical know-how or enough specific instructions in order to prevent any danger.

7. INSTALLATION

When not used, the Extension Bar can be placed on the cart or on the flybar.

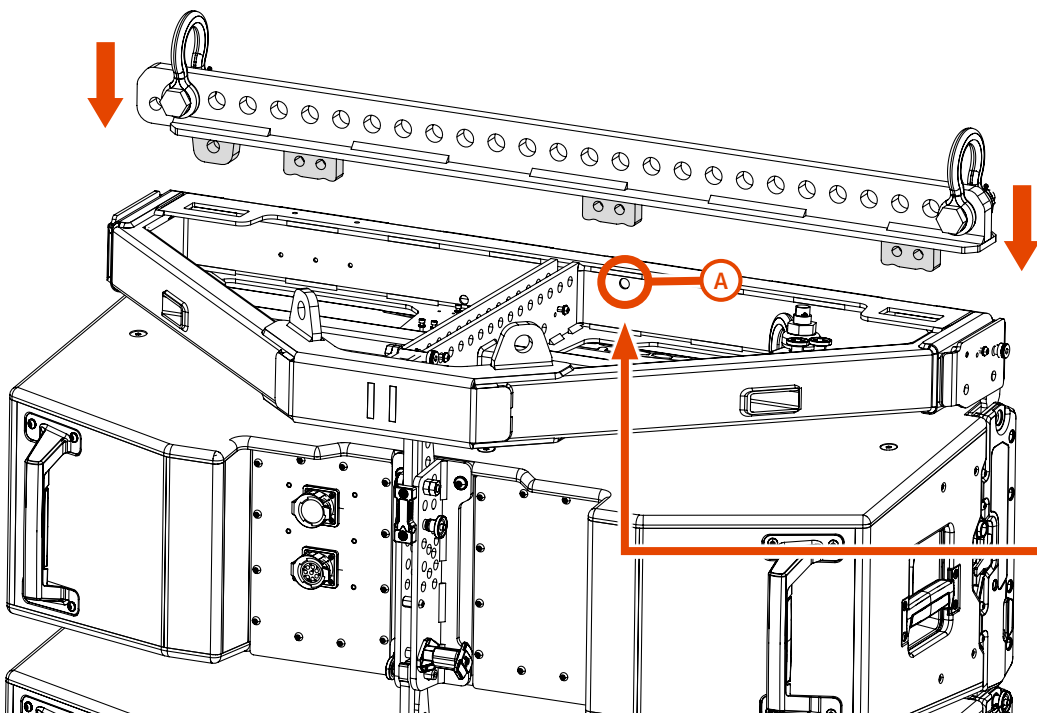


Extension Bar placed on the cart.



Extension Bar placed on the flybar.

To place the Extension Bar on the flybar make the lower brackets of the Extension Bar match on the flybar slots and fix the Extension Bar with a Quick Lock Pin on the corresponding hole on the flybar **A**.



WARNING!
CAUTION! This is not a suspension hole. It is only intended to secure the Extension Bar to the Flybar.

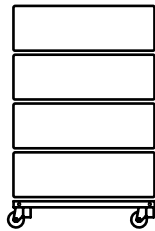
During transportation ensure the rigging components are not stressed or damaged by mechanical forces. Use suitable transport cases. We recommend the use of **KRT-WH 001** for this purpose. Due to their surface treatment the rigging components are temporarily protected against moisture. However, ensure the components are in a dry state while stored or during transportation and use.

Do not stack more than four GTX 12 on one Cart.

Exercise extreme caution when moving stacks of four cabinets with the kart to avoid tipping.

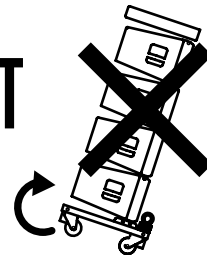
Do not move stacks in the front-to-back direction of the GTX 12 (long side); always move stacks sideways to avoid tipping.

**ALWAYS PUSH THE
CART LENGTHWISE**



REFER TO MANUAL FOR
FURTHER INSTRUCTIONS

**DO NOT
TILT!**



CAUTION! Always make sure all Quick Lock Pins are correctly inserted before moving the cart.

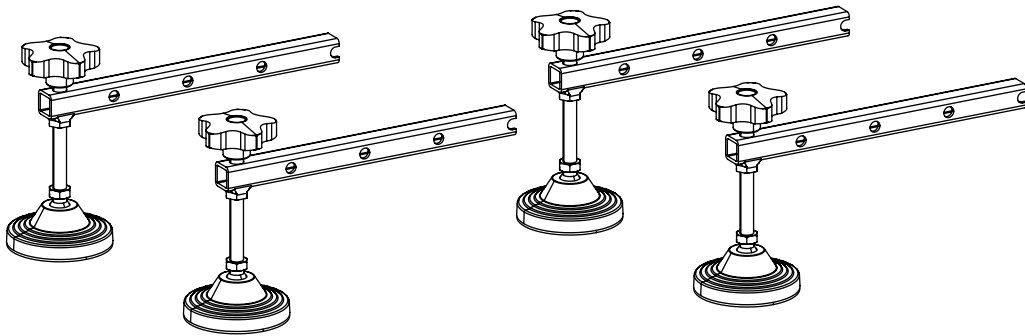


CAUTION! GTX12 must be loaded only on KRT-WH 001. Up to 4X GTX 12 can be loaded on one kart. Use with other equipment or overloading may result in instability causing injury.

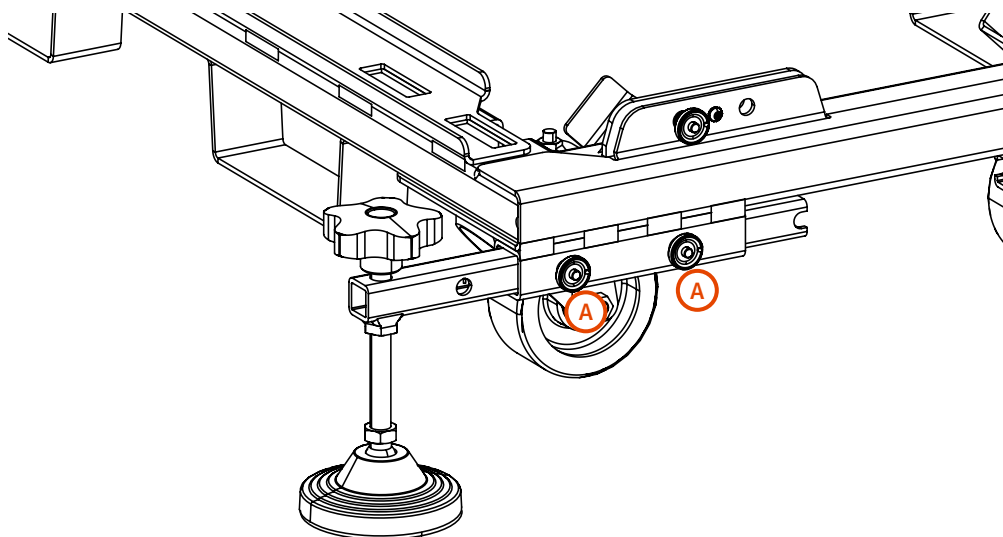
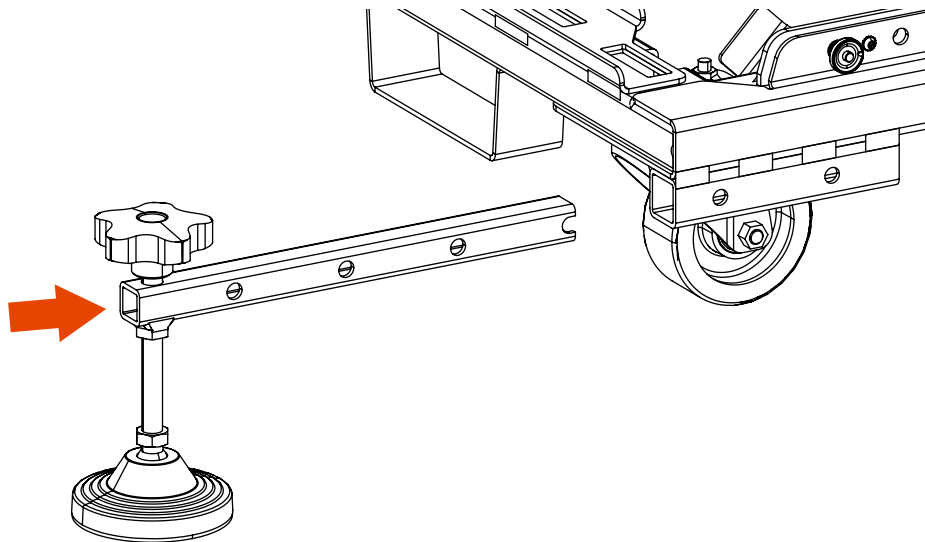
7. INSTALLATION

STACKING KIT STCK-KIT 004

The accessory STACKING KIT STCK-KIT 004 allows a better stabilization of the GTX12 cart.

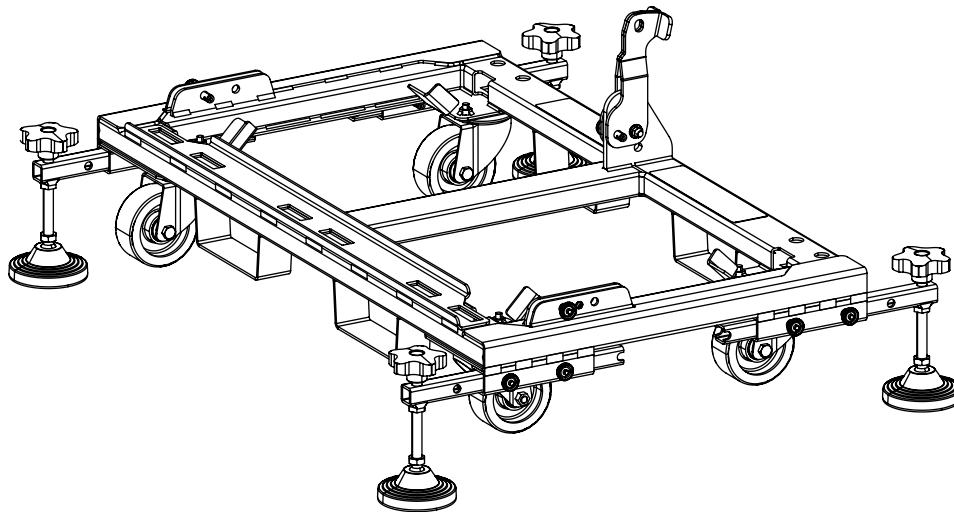
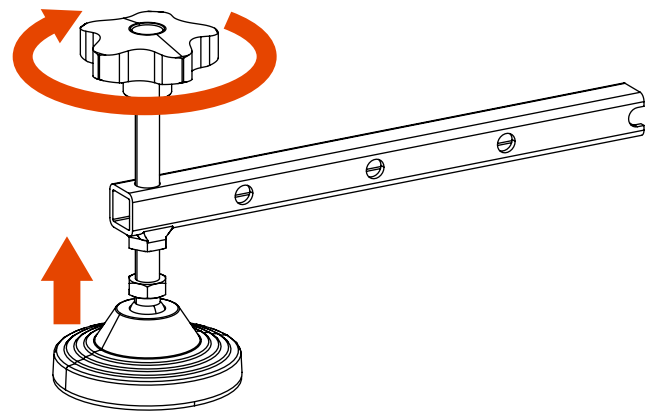
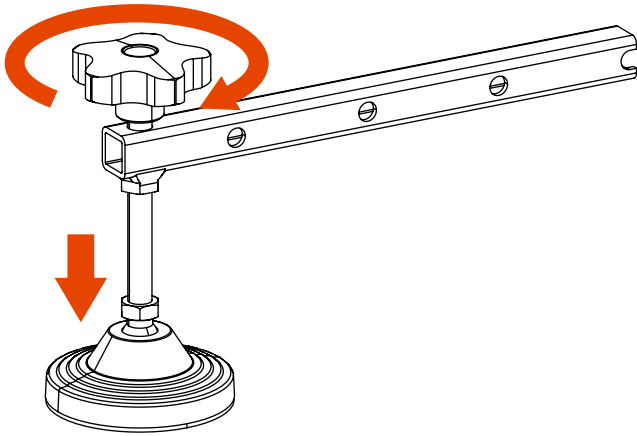


Insert each stacking kit on the cart corner brackets as shown in the picture below, then secure them with two Quick Lock Pins **A**.



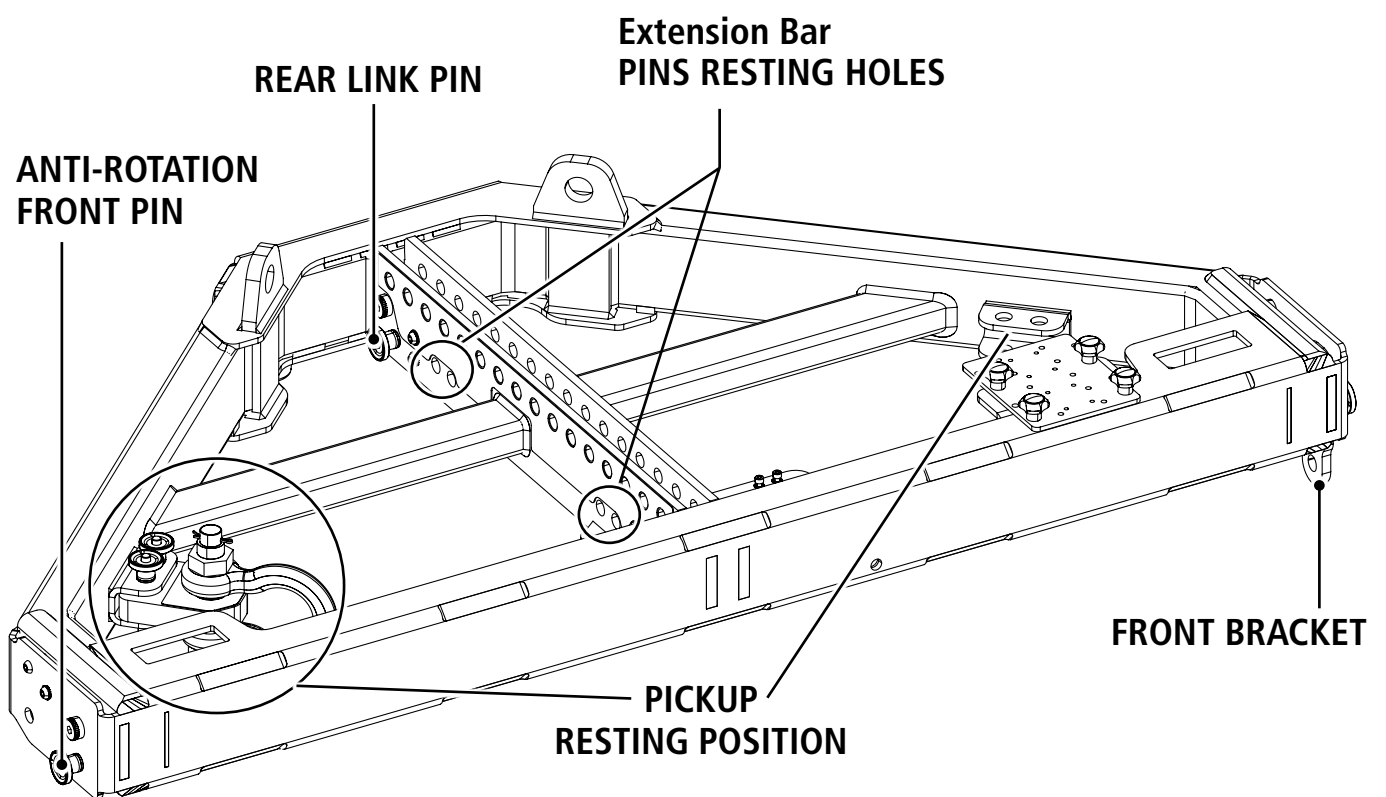
7. INSTALLATION

Adjust each foot by screwing or unscrewing its threaded rod



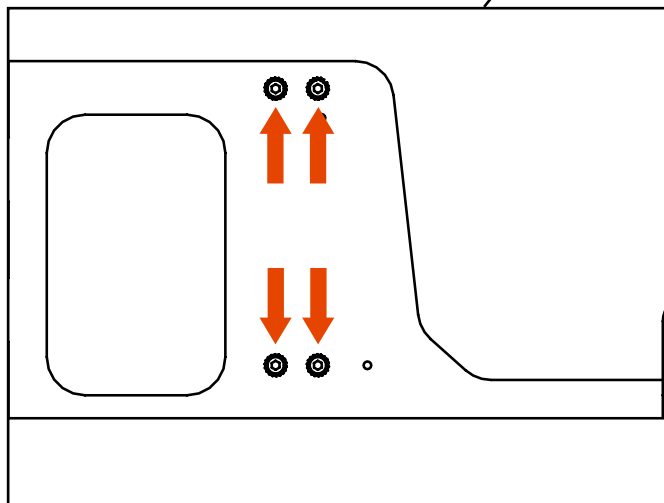
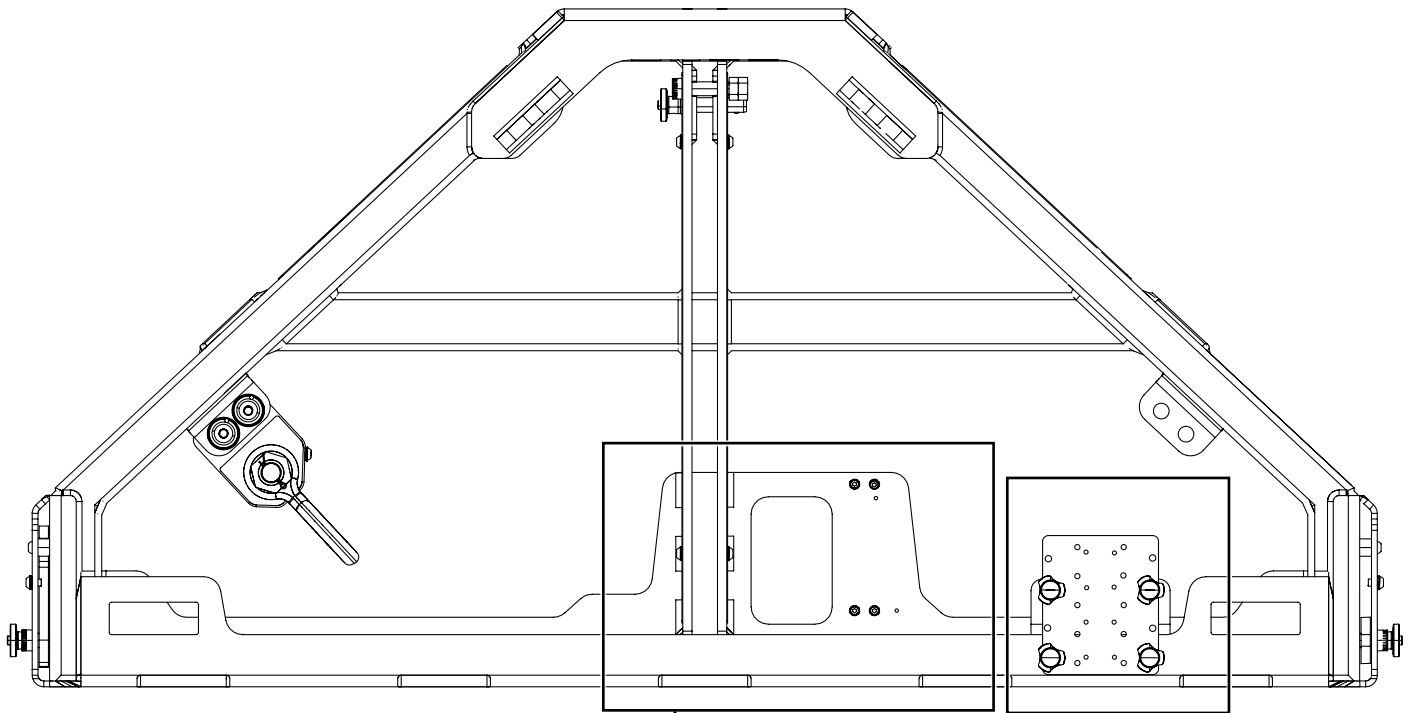
7. INSTALLATION

7.3 PREPARATION OF THE FLYBAR

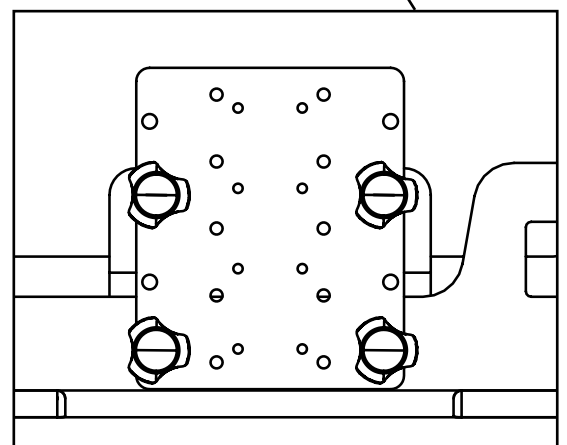


7.4 LASER/INCLINOMETER INSTALLATION

Different types of Laser/Inclinometers can be mounted on the flybar.



Lap-Teq Laser/Inclinometer set-up holes.



Other inclinometers set-up bracket.



WARNING! CAUTION! During the use of a laser-inclinometer, make sure that nobody looks directly into the laser beam. Always wear appropriate eye protection.

7. INSTALLATION

7.5 RIGGING THE SYSTEM

The system can be lifted in three different modalities:

- SINGLE PICK UP POINT (only Tension Mode)
- DOUBLE PICK UP POINT (only Tension Mode)
- DOUBLE PICK UP POINT WITH Extension Bar (both Tension or Compression Mode)



WARNING! CAUTION! The system should always be installed by qualified and experienced personnel having the technical know-how or enough specific instructions in order to prevent any danger.

The entire sound system shall be designed and installed in compliance with the current local laws and regulations.

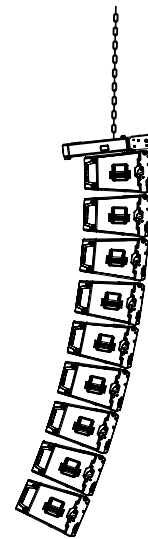
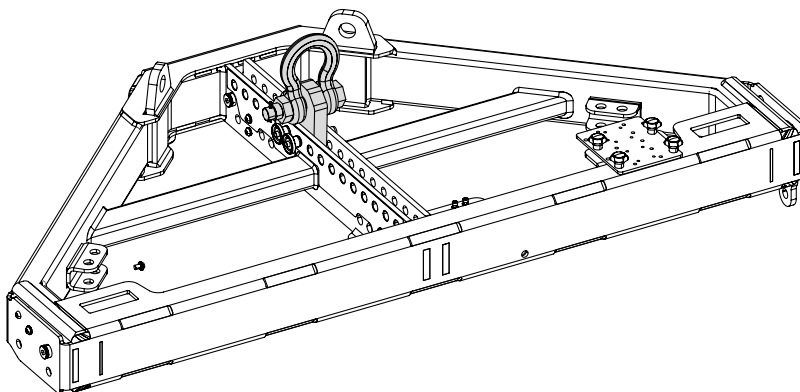
Always make sure that no tools or objects are left on the top of the array.

Always check that no other person is underneath or close to the array during installation.

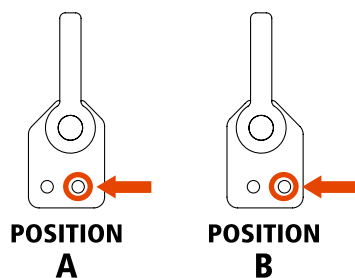
Never climb the array for any reason.

SINGLE PICK UP POINT

Use one single pick up point when there is no need to tilt the system upwards or downwards.



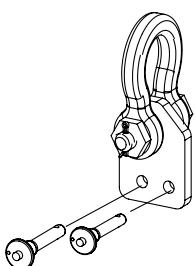
According to the information provided by the simulation software, the pick-up bracket can be placed in two positions (A and B).



Position A brings the shackle towards the front.

Position B allows an intermediate step using the same fixing holes.

Insert the Quick Lock Pins in the holes indicated by the software.

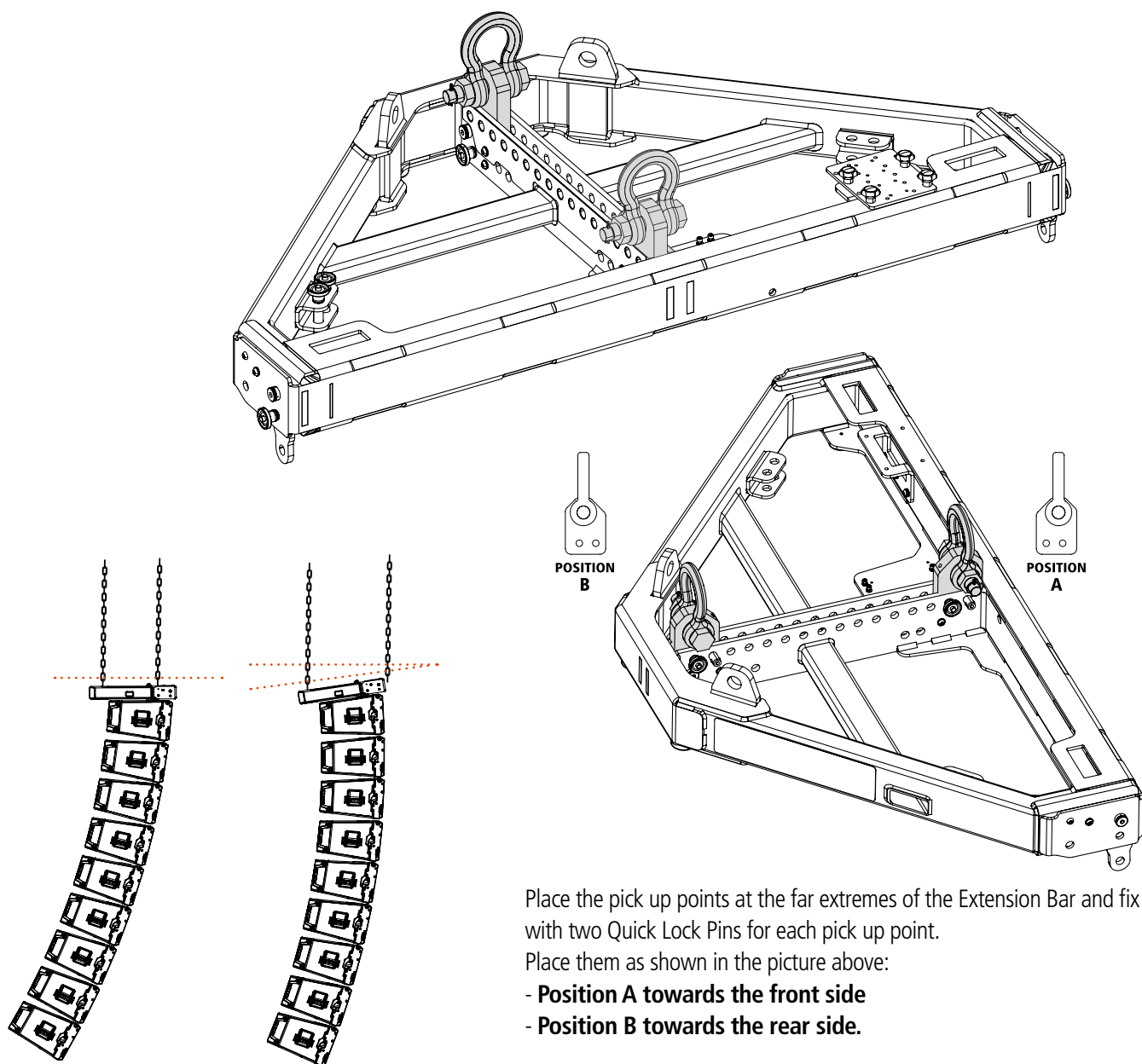


WARNING! CAUTION! Always insert **TWO** Quick Lock Pins on the Pick Up Bracket

Once lifted with one single pick up point the system will take on the desired shape and can not be tilted upwards or downwards.

DOUBLE PICK UP POINT

Two pick up points can be mounted on the flybar. Only one pick up point is provided with the flybar; the second one needs to be provided separately.



Place the pick up points at the far extremes of the Extension Bar and fix them with two Quick Lock Pins for each pick up point.

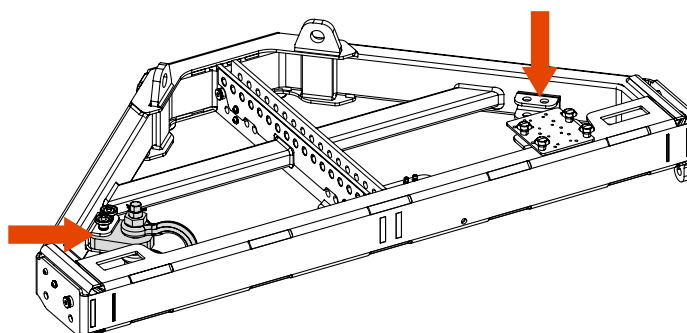
Place them as shown in the picture above:

- **Position A towards the front side**
- **Position B towards the rear side.**

The double pick up points modality only allows a small tilting of the system. Use the information provided by the inclinometer to adjust the inclination.

PICK UP POINTS RESTING POSITION

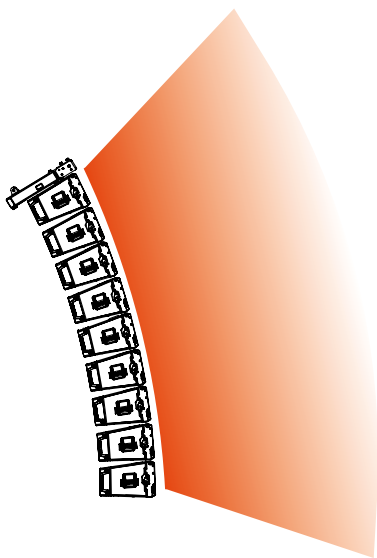
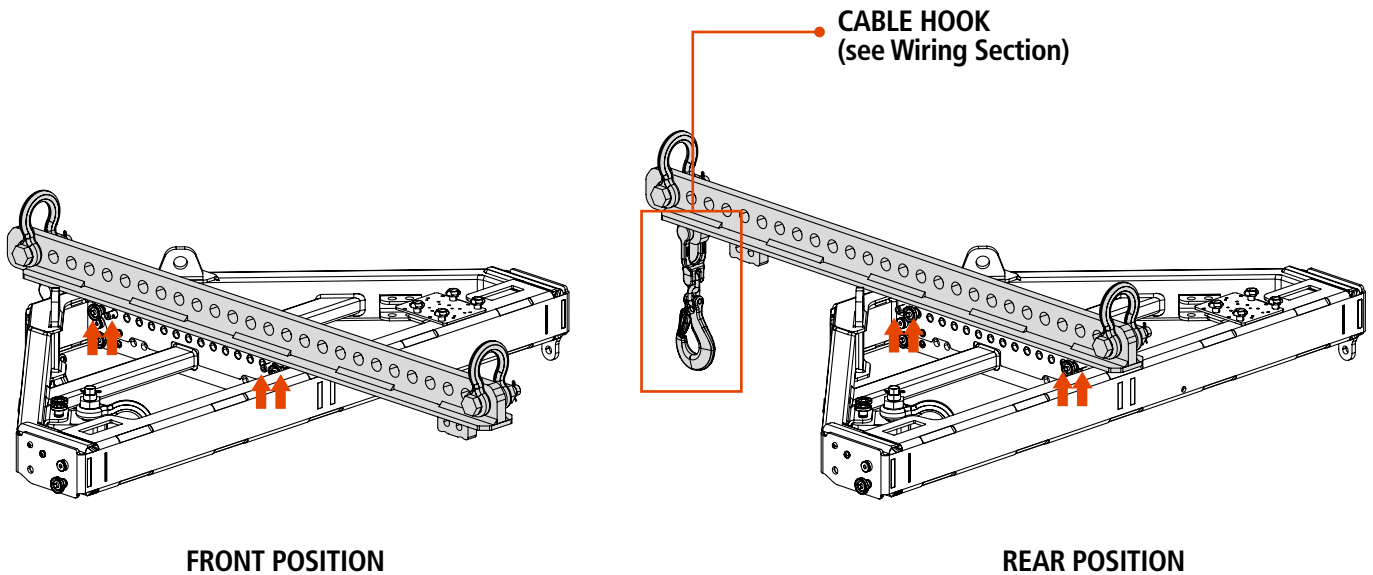
When not used, the pick up point can be placed in one of these resting seat.



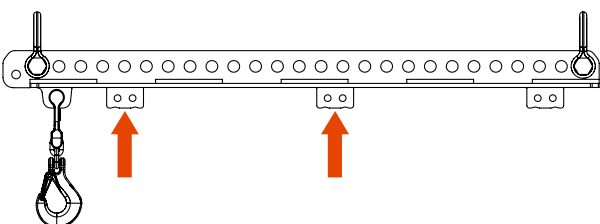
DOUBLE PICK UP POINT WITH Extension Bar

According to the information provided by the simulation software, the Extension Bar can be mounted in two positions:

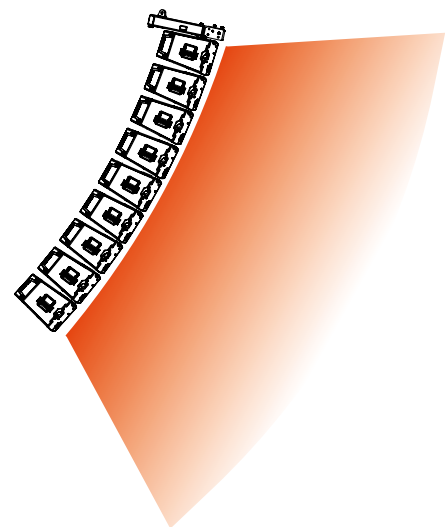
FRONT POSITION and **REAR POSITION**. Place the Extension Bar on the flybar (FRONT or REAR Position) and fix it with four Quick Lock Pins (two each bracket) as shown in the pictures below.



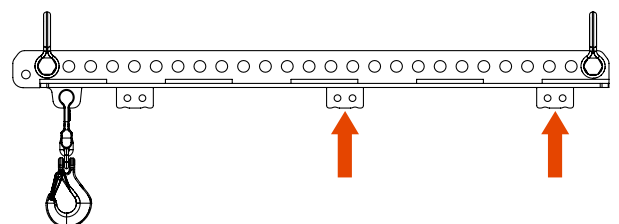
The Extension Bar in **FRONT POSITION** is required when the system needs to be tilted upwards.



Extension Bar appendices to be positioned on the FlyBar for **FRONT POSITION** configuration



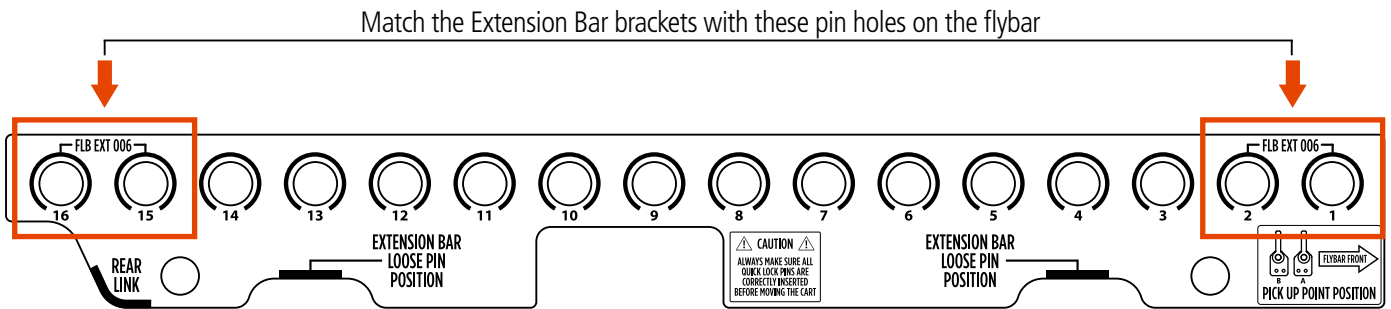
The Extension Bar in **REAR POSITION** is required when the system needs to be tilted downwards.



Extension Bar appendices to be positioned on the FlyBar for **REAR POSITION** configuration

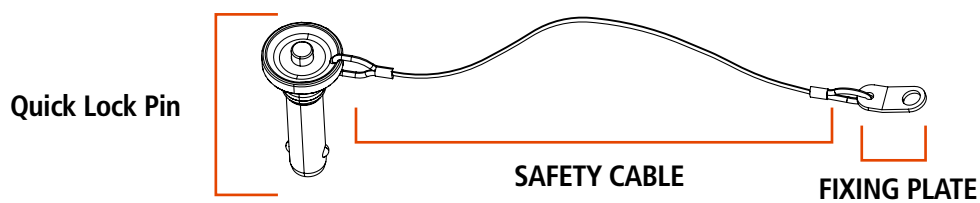
7. INSTALLATION

 **WARNING!** Always insert all 4 pins to fix the extension bracket on the flybar.

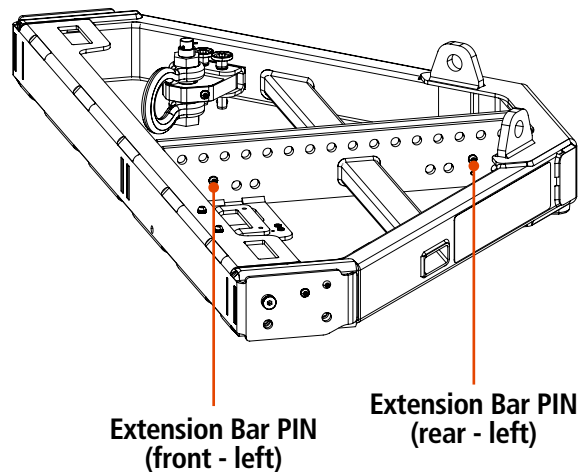
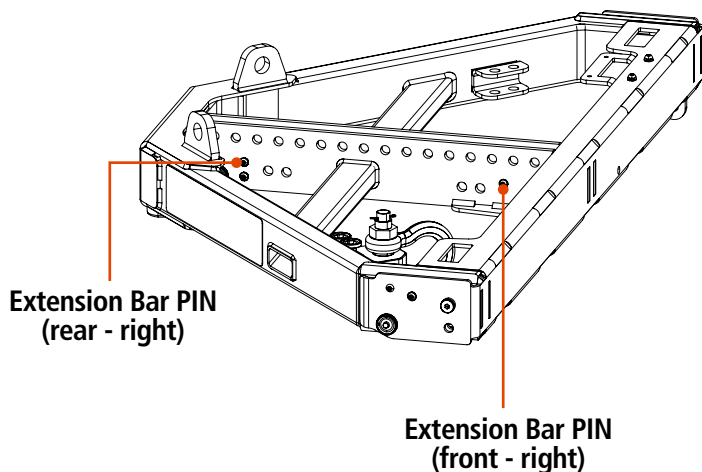
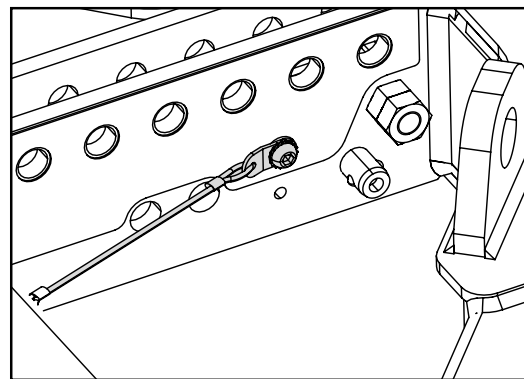
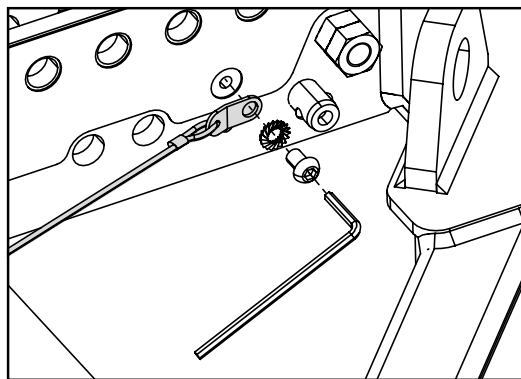


The use of the Extension Bar allows a greater tilting of the system. Use the information provided by the inclinometer to adjust the inclination.

Each Quick Lock Pin is equipped with a steel safety cable to which a fixing plate is applied.



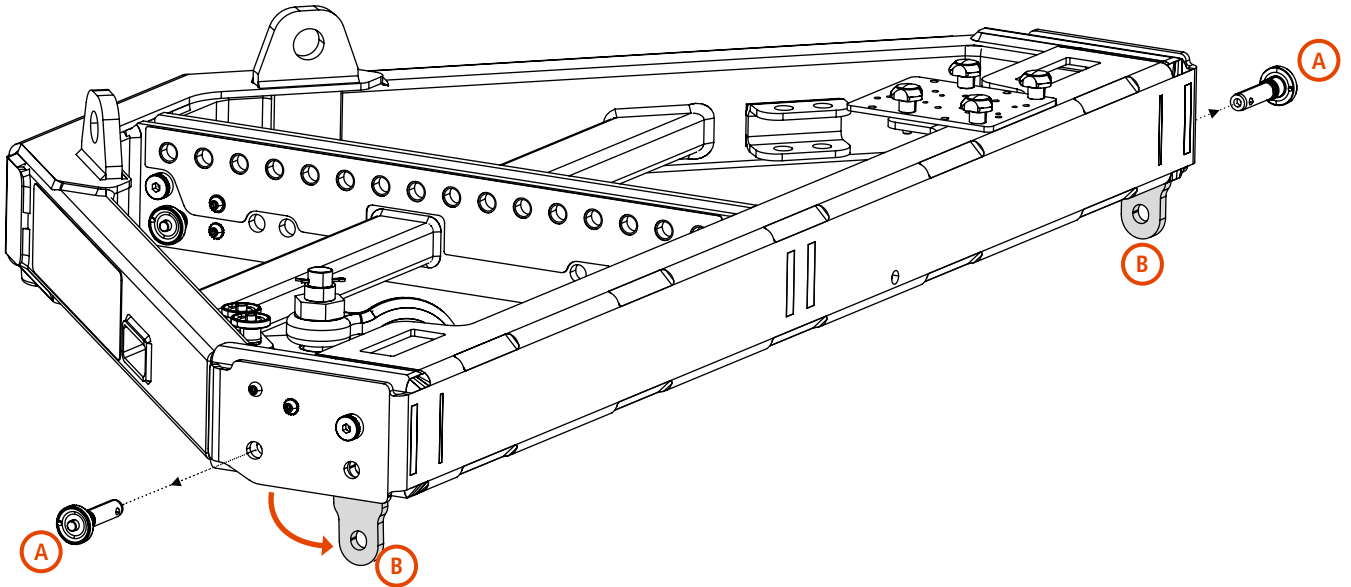
With the use of a M6 Allen Key, fix each fixing plate to the flybar in their corresponding hole. The appropriate M6 screws are provided with the Extension Bar.



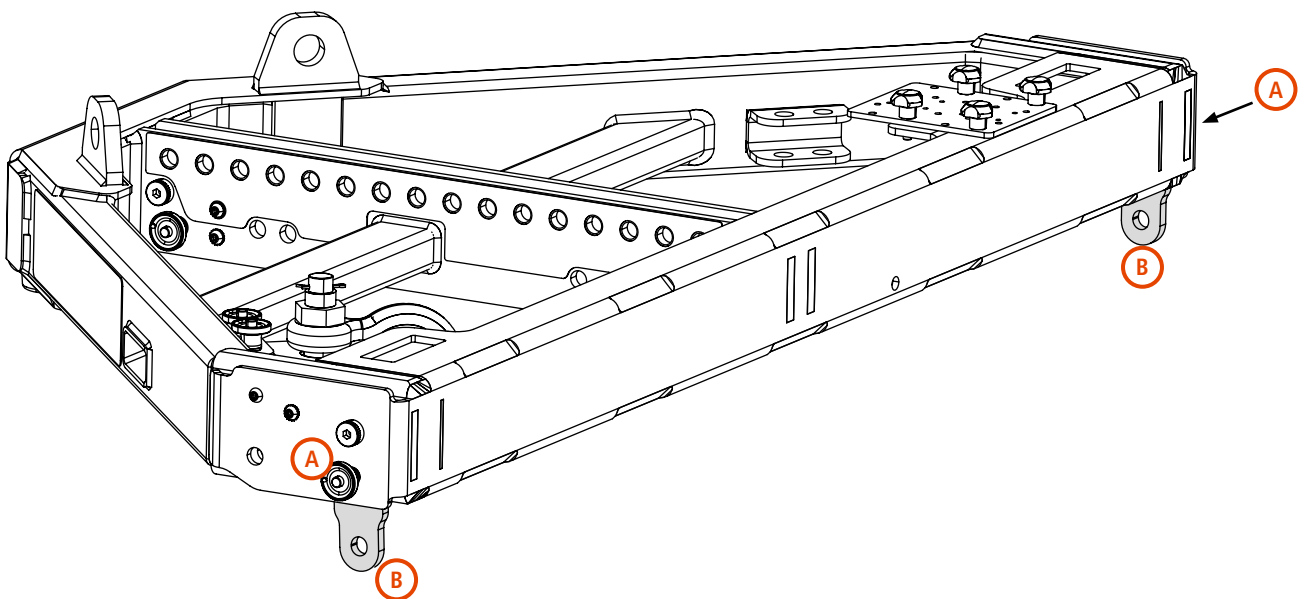
7. INSTALLATION

7.6 RIGGING THE FLYBAR TO THE SPEAKERS

Remove the lateral pins **(A)** in order to let the flybar front brackets **(B)** rotate and expose.

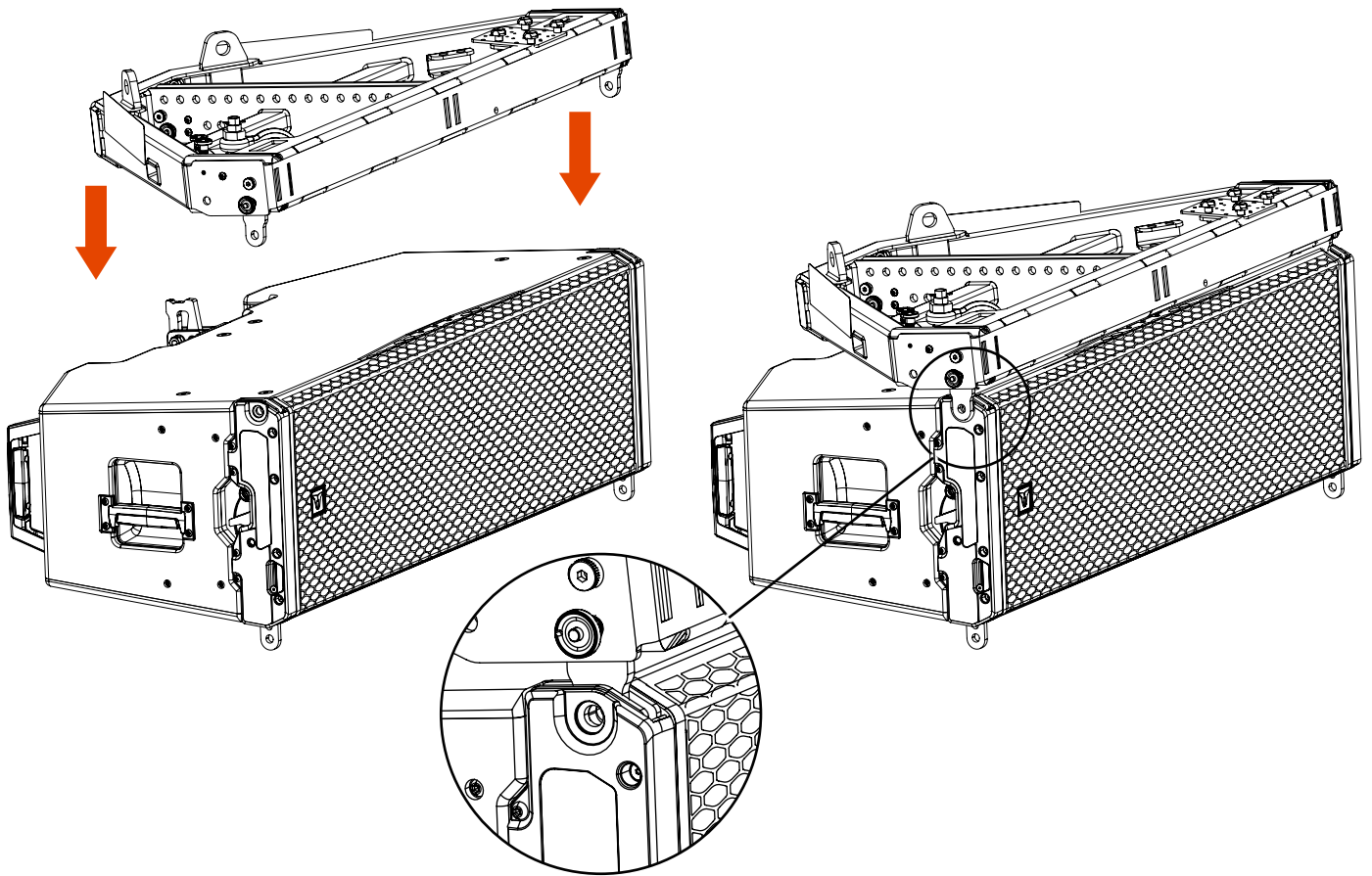


Once the flybar brackets **(B)** are exposed block them with the same Quick Lock Pin **(A)** removed earlier.

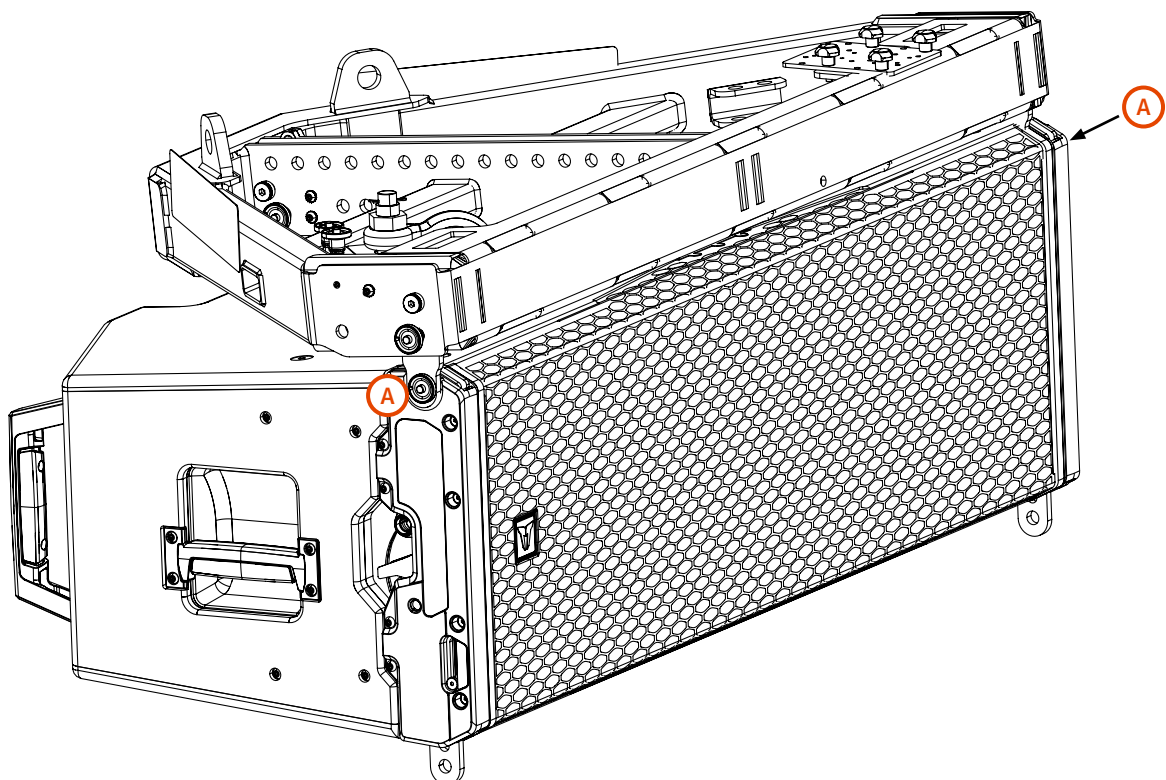


The flybar is now ready to be placed on top of a GTX12 module.

Place the Flybar on top of a GTX12 module making the flybar front brackets match with the module lateral seat.

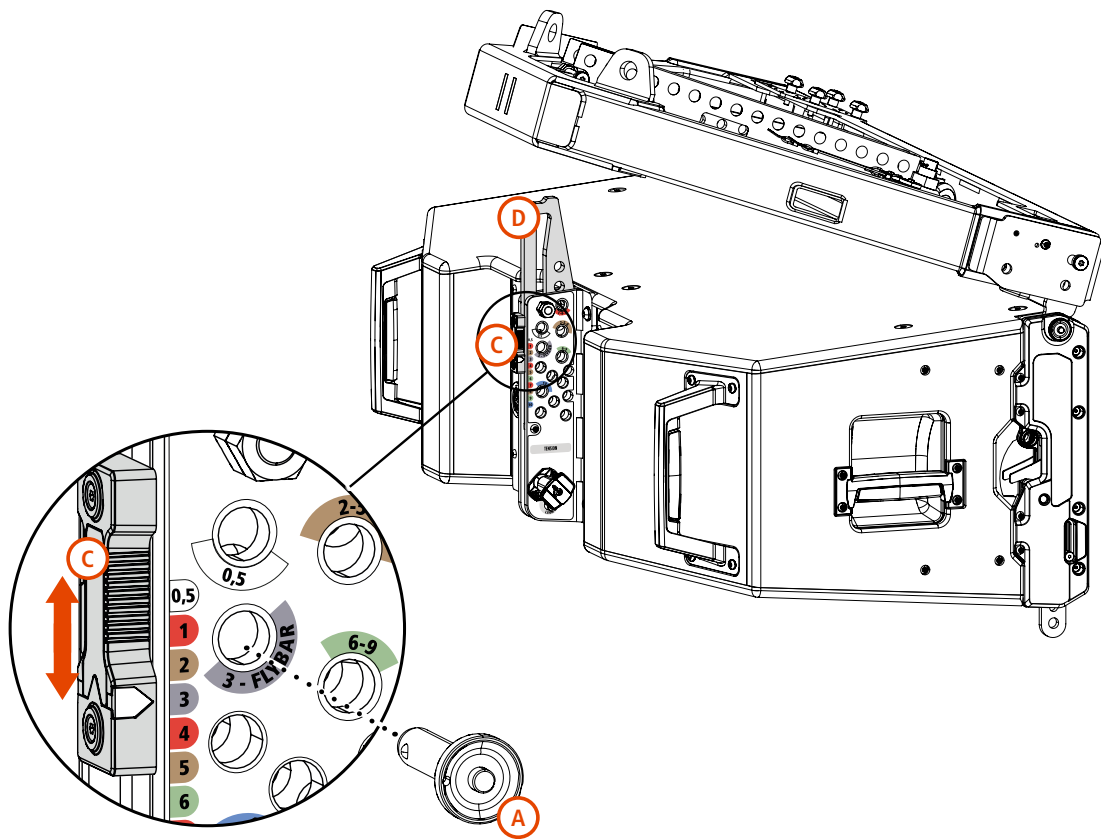


Fix the flybar to the module with a Quick Lock Pin **A** (on both sides)

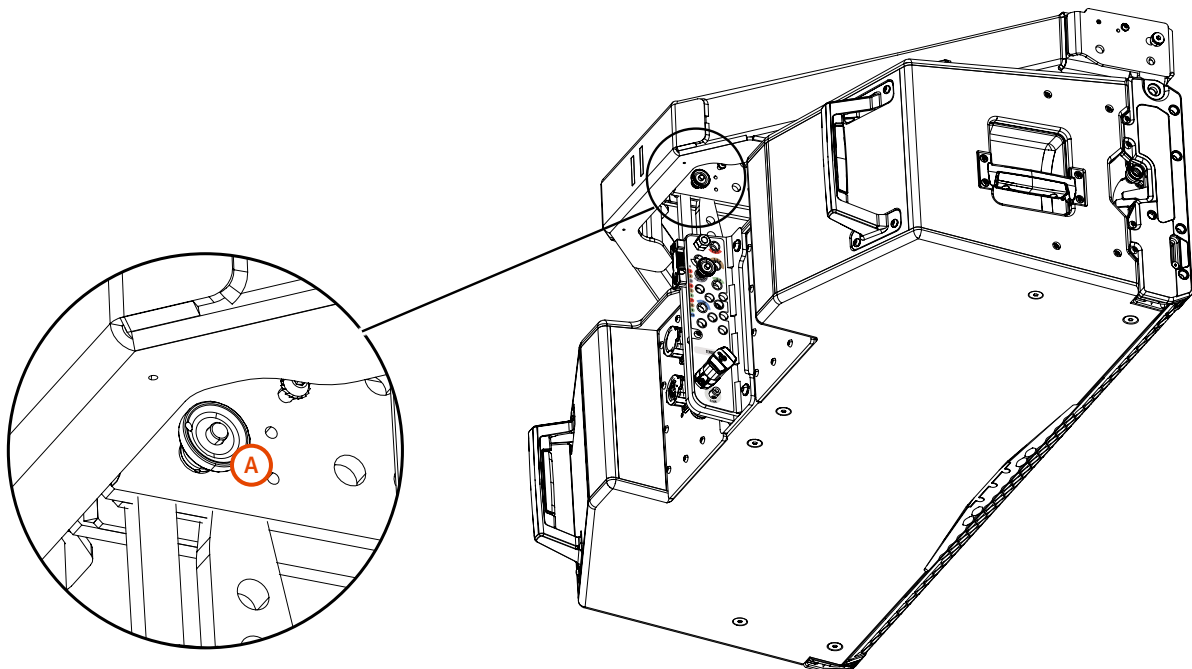


7. INSTALLATION

On the rear bracket, slide the selector **C** to position 3 - FLYBAR and insert a Quick Lock Pin **A** in order to block the sliding bracket **D**.



Now insert the sliding bracket into the flybar and lock the Quick Lock Pin in the rear link hole **A**.



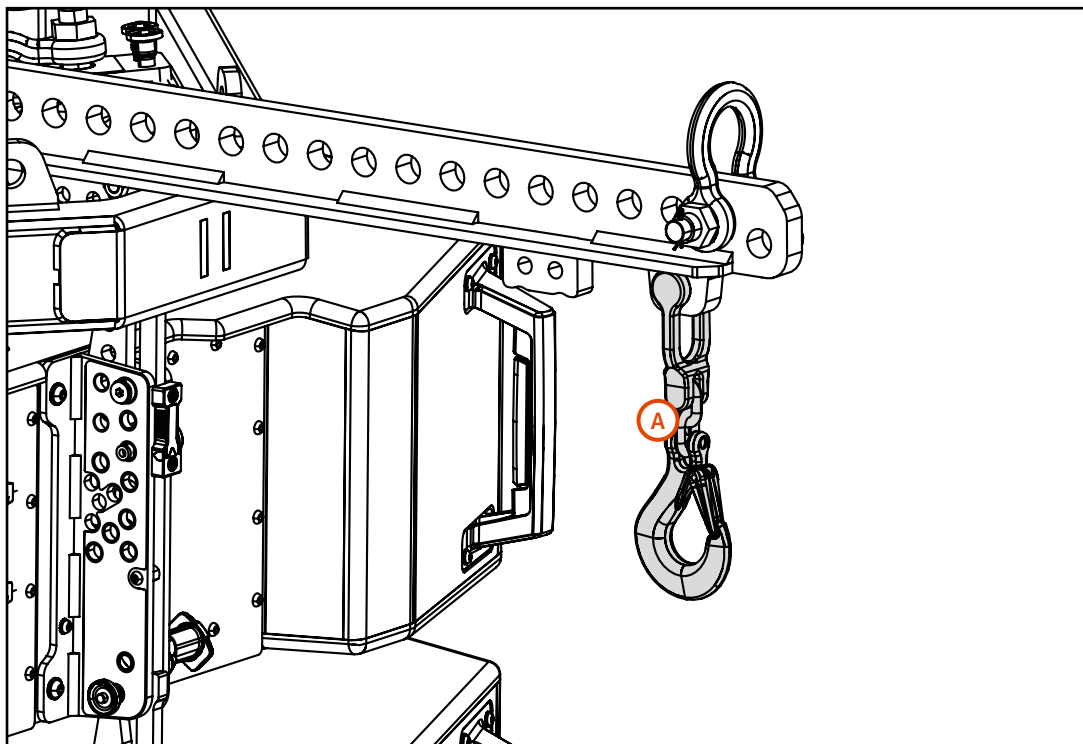
The flybar is now fixed to the GTX 12 module.



WARNING! CAUTION! During the use of a laser-inclinometer, make sure that nobody looks directly into the laser beam. Always wear appropriate eye protection.

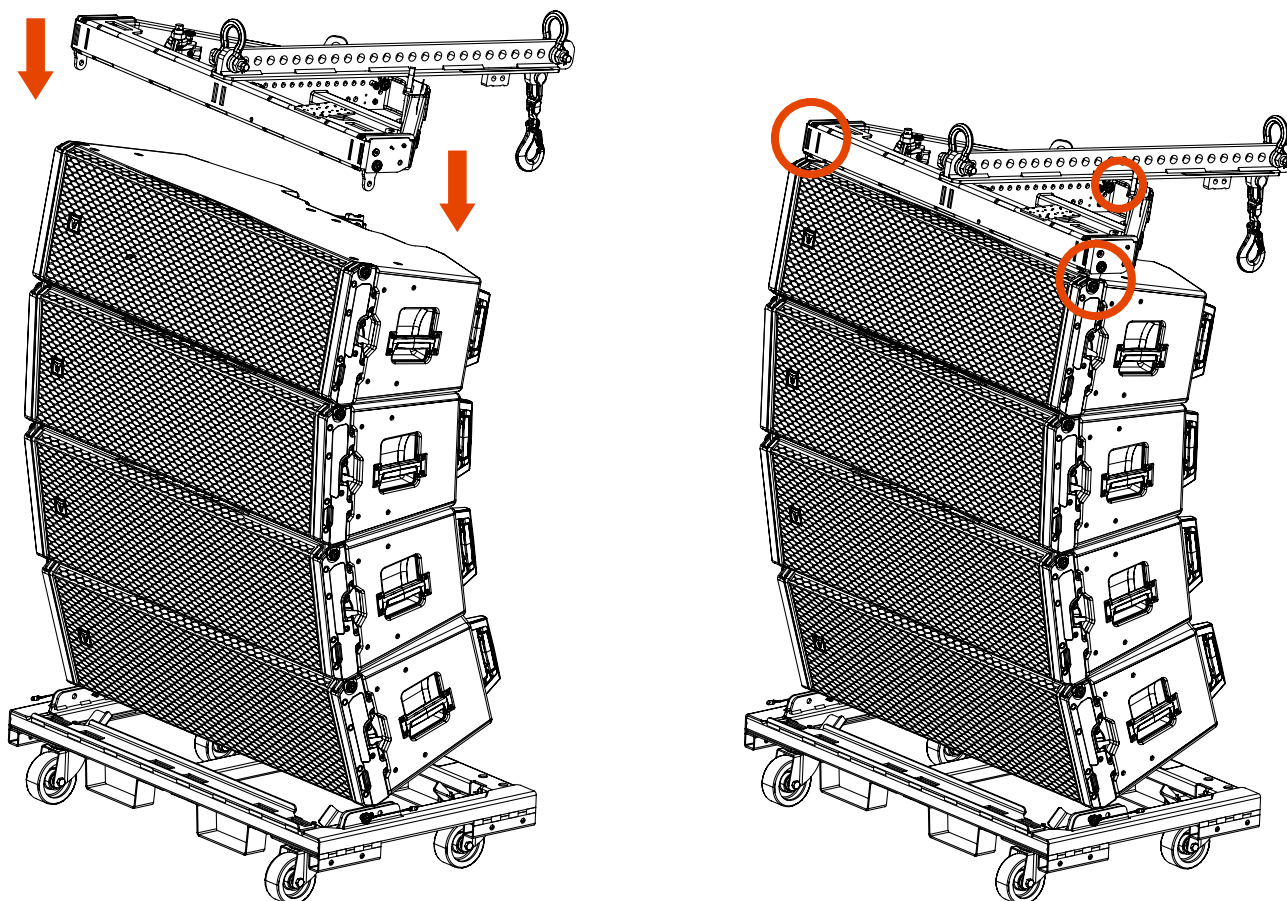
7.7 LIFTING THE SPEAKERS - TENSION MODE

On the far end of the Extension Bar fix the Cable Hook **A** as shown in the pictures below.



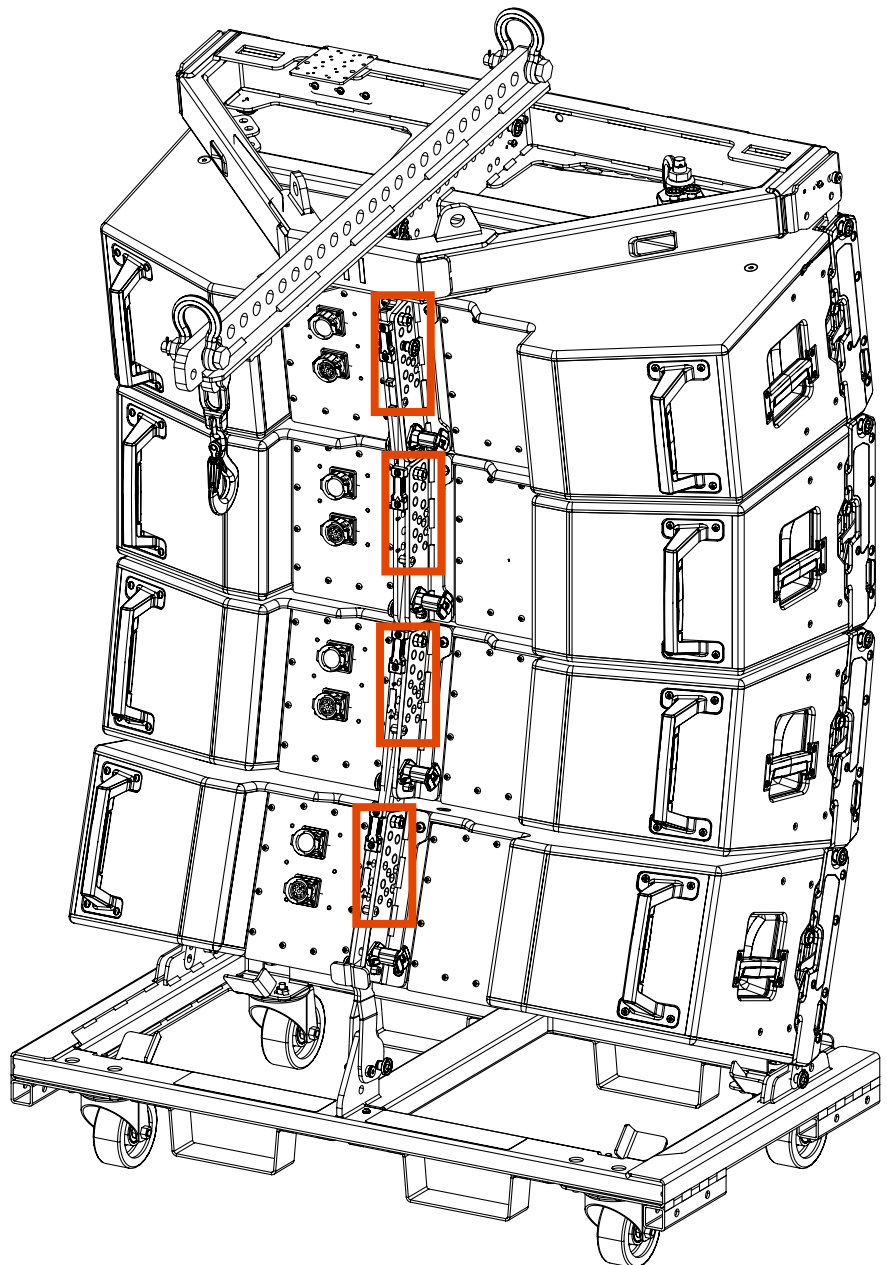
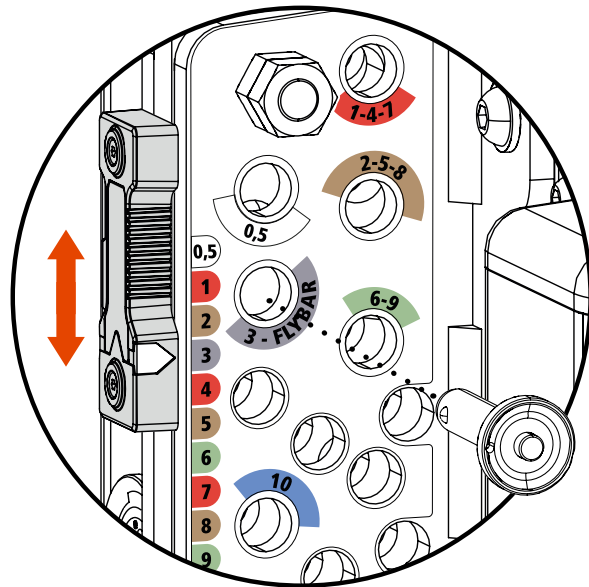
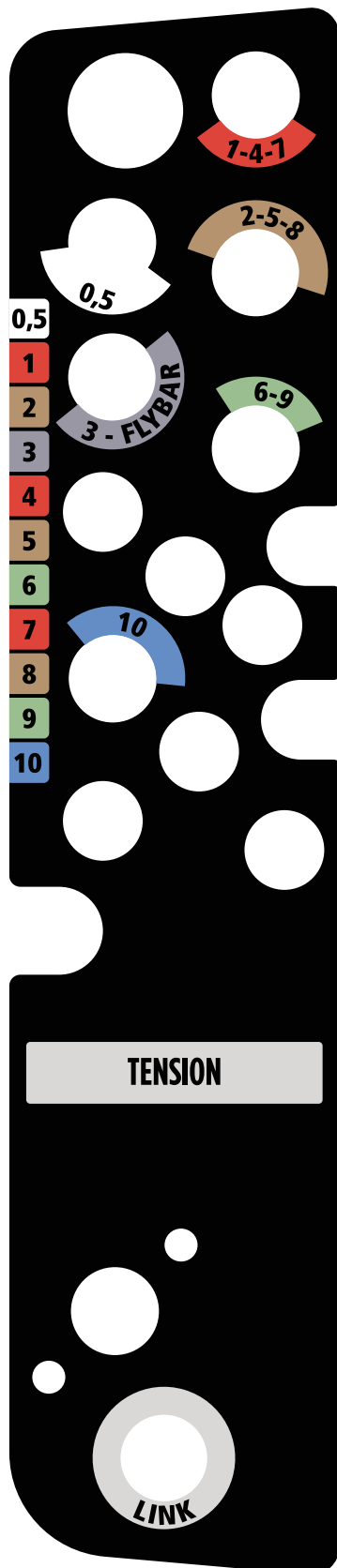
Place four modules on the cart in tension mode and move them below the flybar.

Fix the flybar to the speaker with three pins: two on the front and one on the rear side (see chapter 6.7).

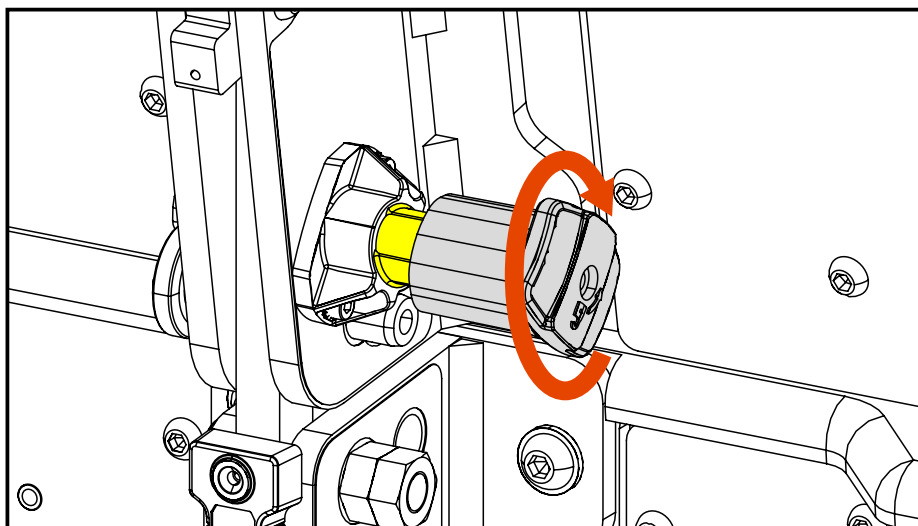
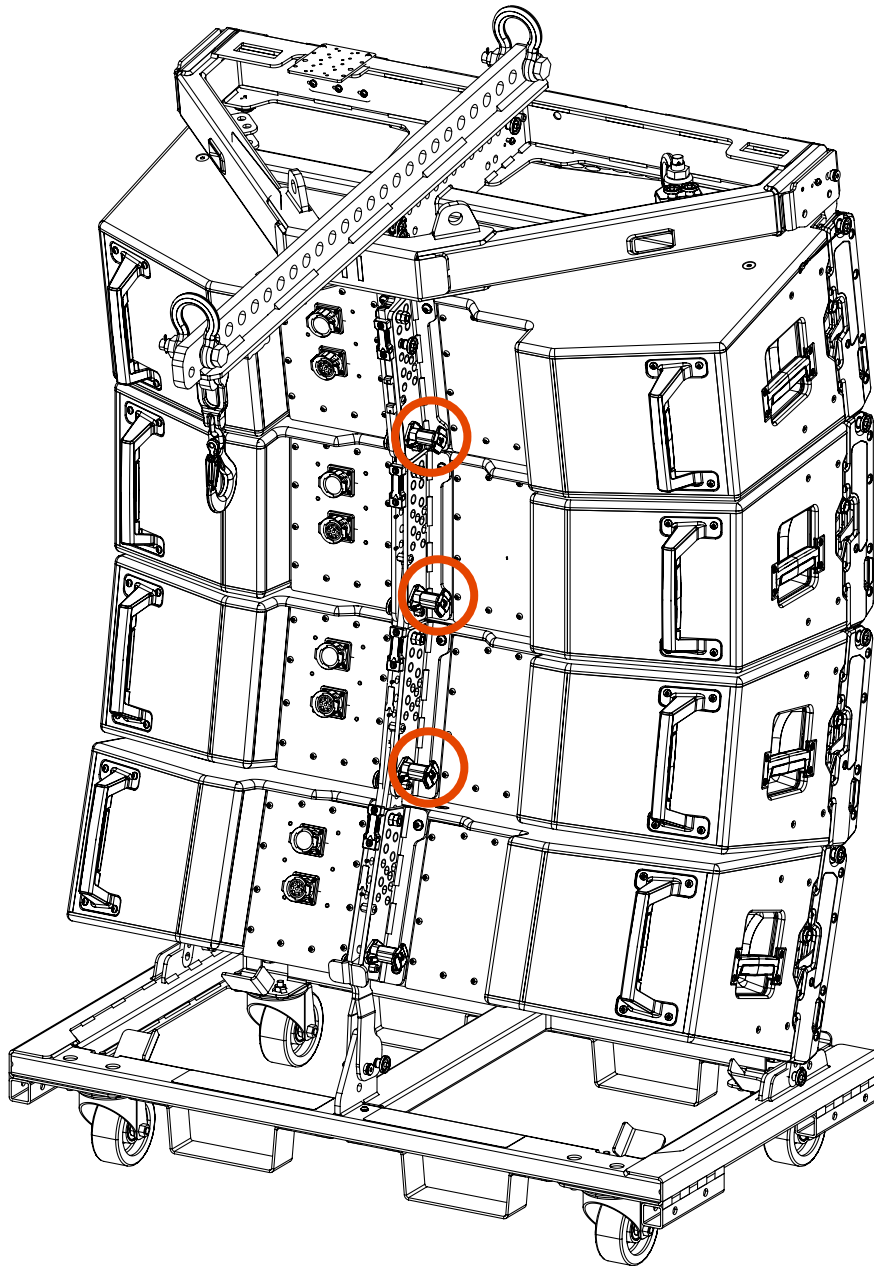


7. INSTALLATION

On the rear right side (tension side), slide the selector to the angle provided by the simulation software and insert the Quick Lock Pin on the relevant hole. The color on the list corresponds to the color on the hole.

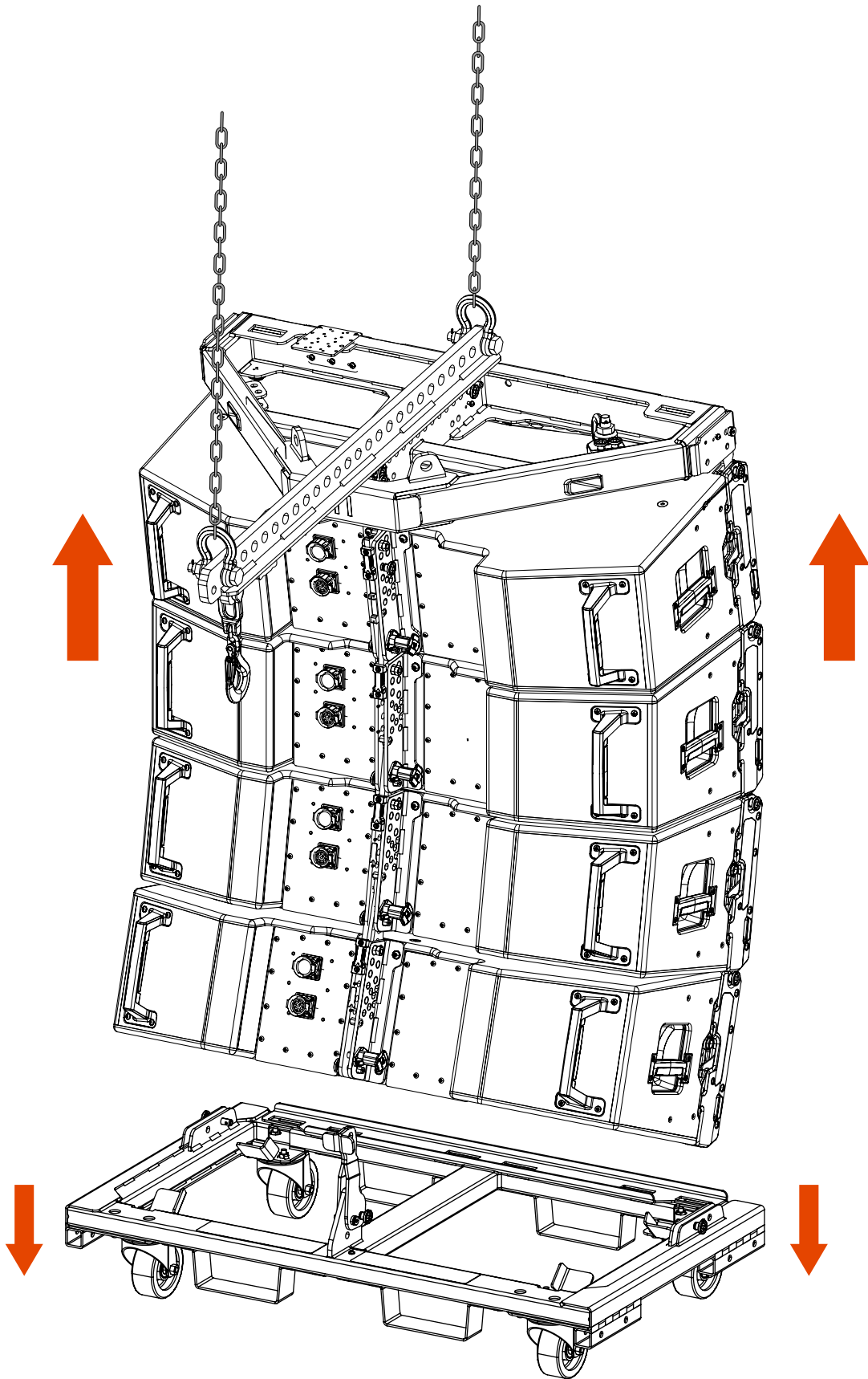


Now rotate all the Automatic Locking Pins clockwise in order to arm them.



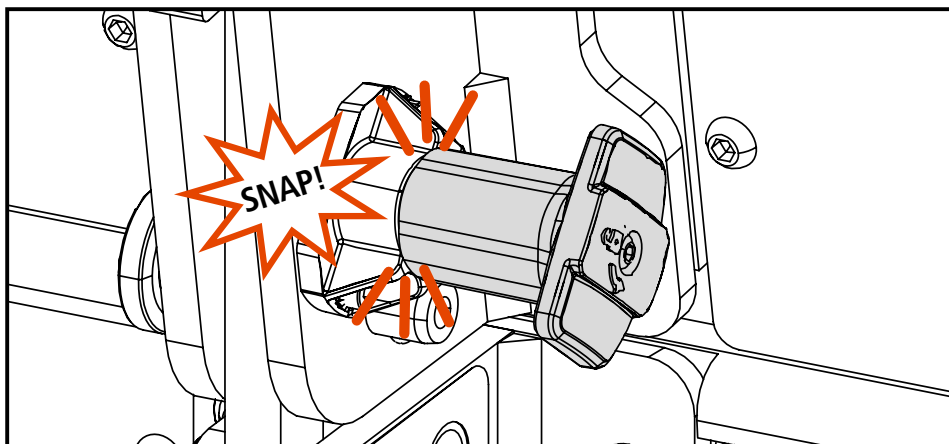
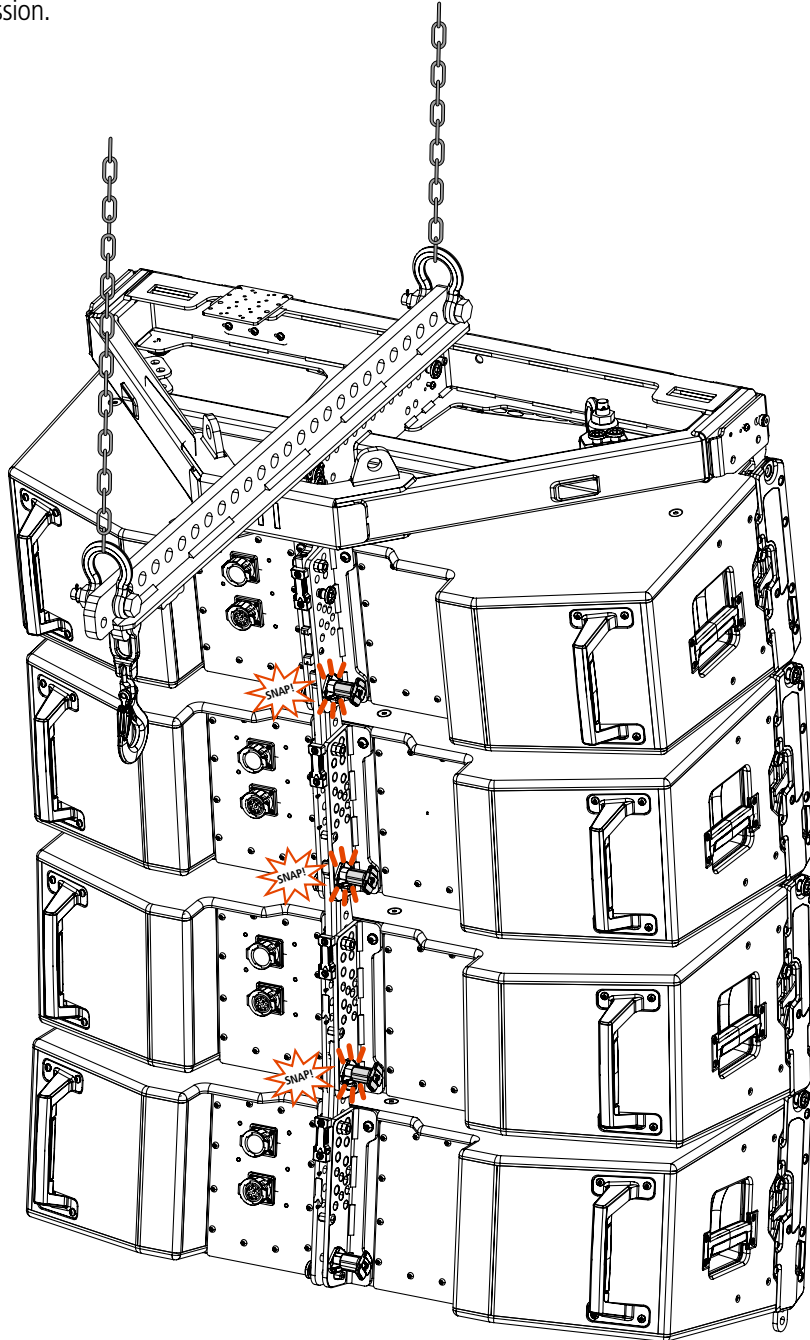
7. INSTALLATION

Now lift the system just enough to detach the cart from the bottom speaker

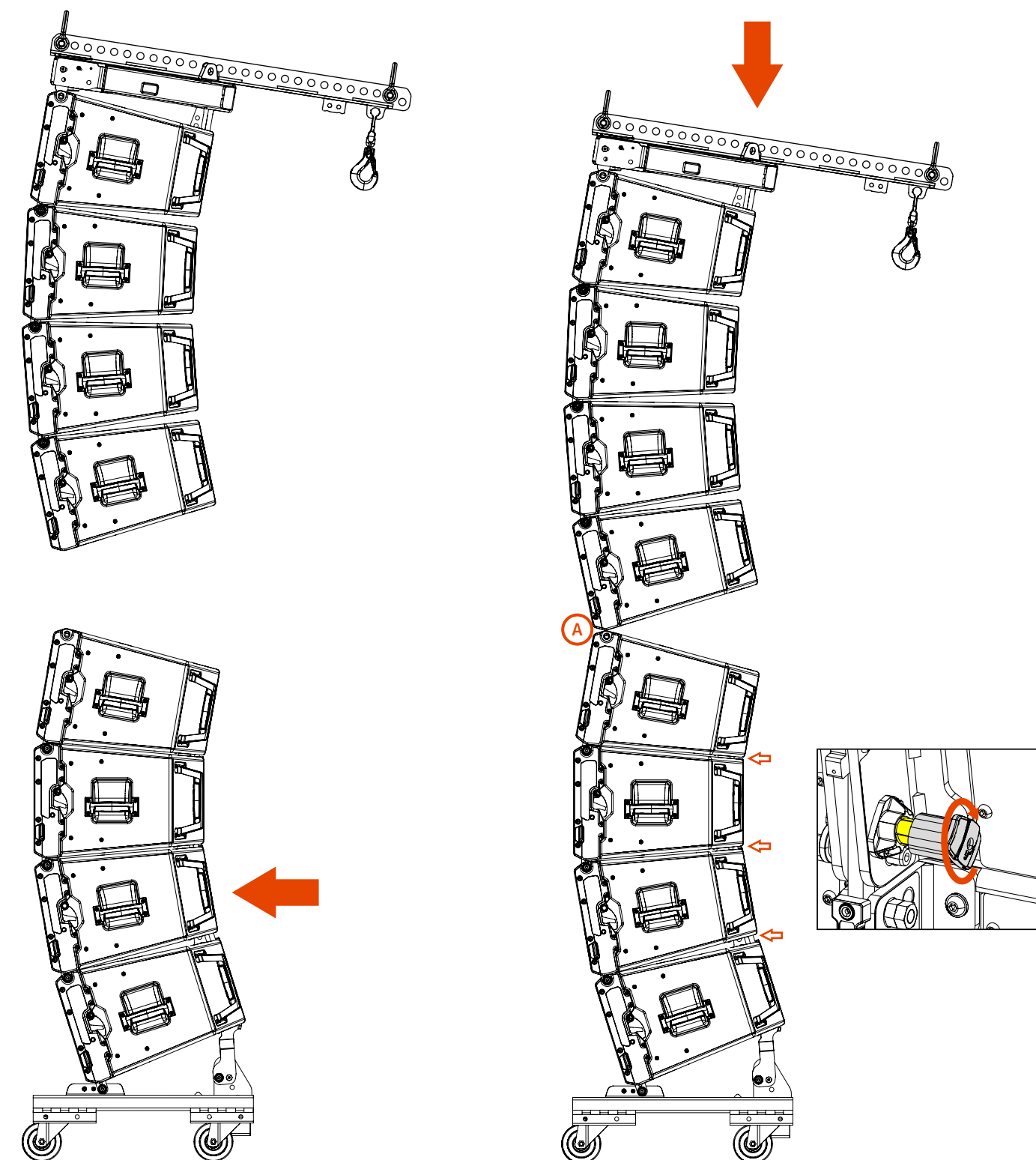


7. INSTALLATION

Keep lifting the system. While the modules will open on their selected angle, the Automatic Locking Pins will now snap back into their seat to avoid the system compression.

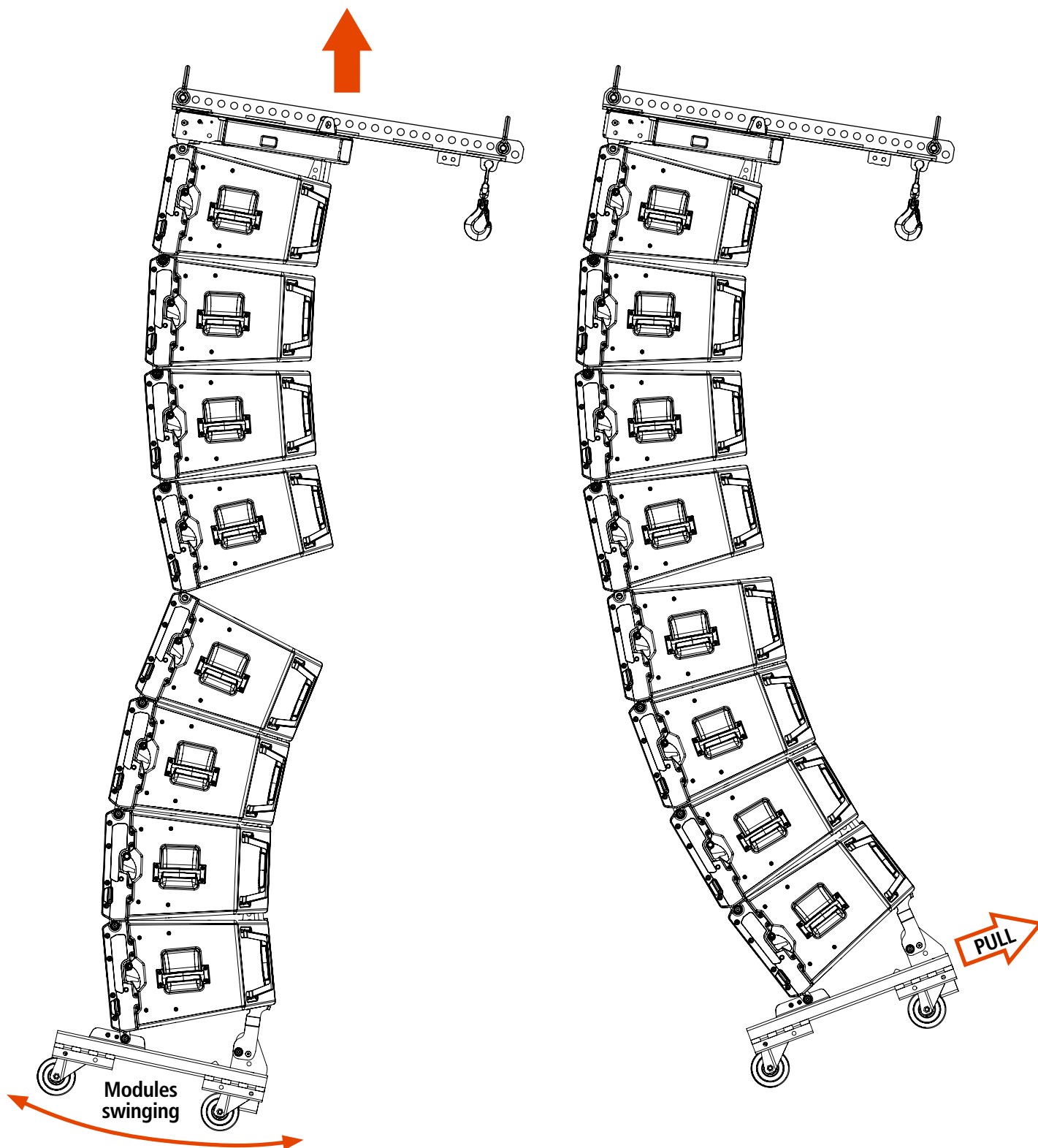


ADDING ANOTHER GROUP OF SPEAKERS TO THE ARRAY (TENSION MODE)



Place an array of speakers on the cart below the array.

Lower the array fix the speakers on the front side with two Quick Lock Pins **A** (on both sides). On the rear right side (tension side), insert the Quick Lock Pin on the relevant hole provided by the simulation software and rotate all the Automatic Locking Pins clockwise in order to arm them. (See chapter 6.8)

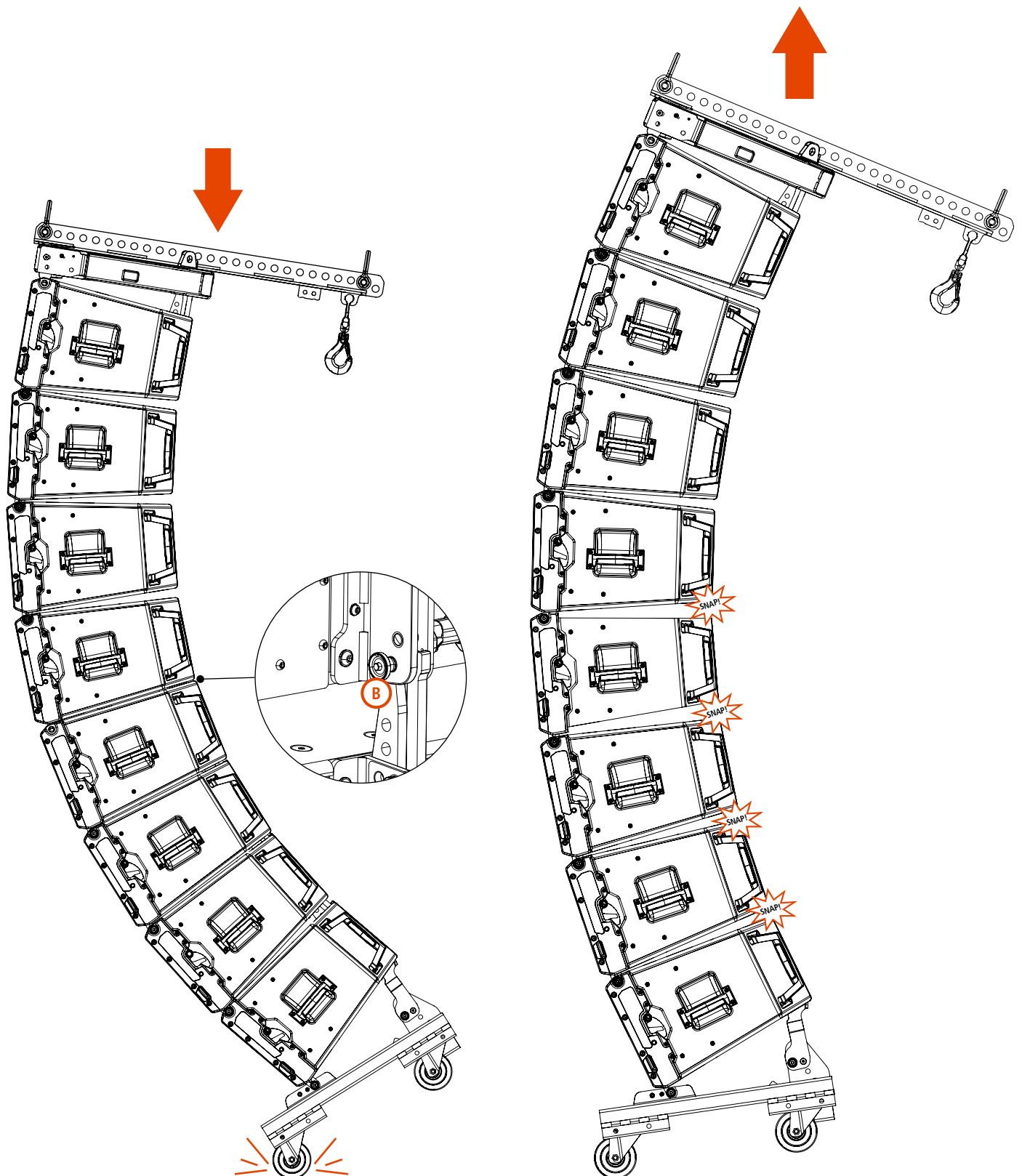


Lift up the array. The lower modules are now swinging, hanged from the front side only.

Pull the kart backwards in order to make the rear sides of the modules come closer to each other.

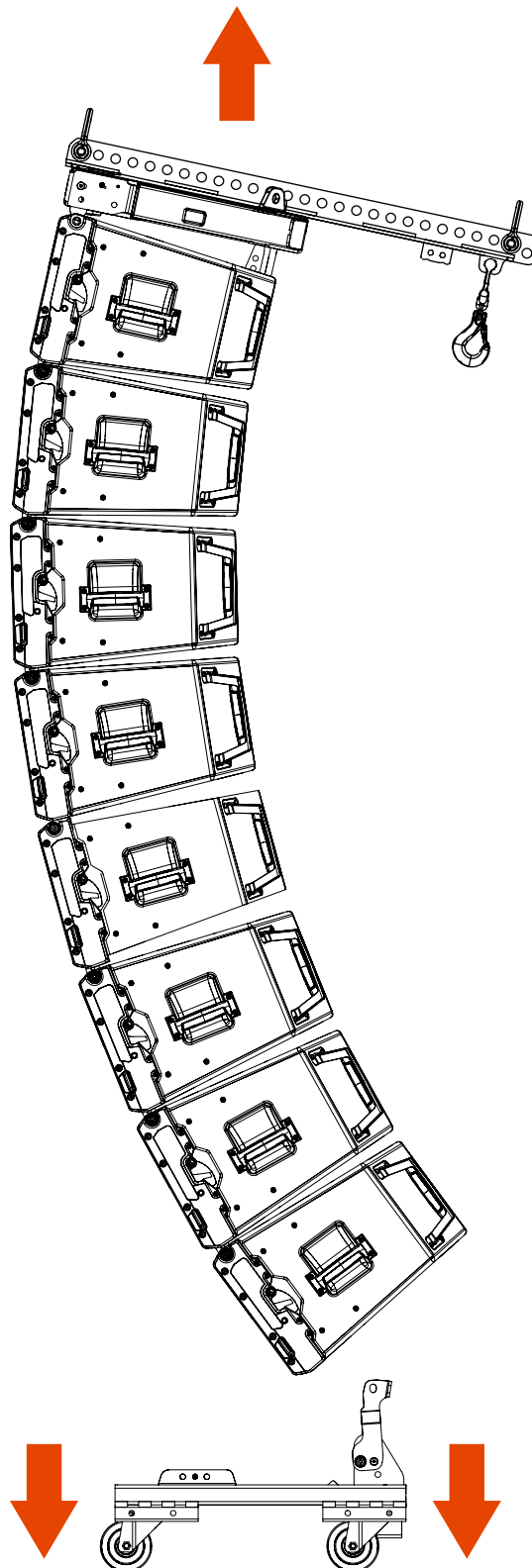


WARNING! CAUTION! The system should always be installed by qualified and experienced personnel having the technical know-how or enough specific instructions in order to prevent any danger.



Lower the array making the front wheels touch the ground. Keep lowering the system until the rear sides match together. Fix the modules with a Quick Lock Pin **B** as described on chapter 6.1.

Lift up the array; while lifting the system, the lower modules will begin to open to the selected angle while all the Automatic Locking Pins will begin to snap.



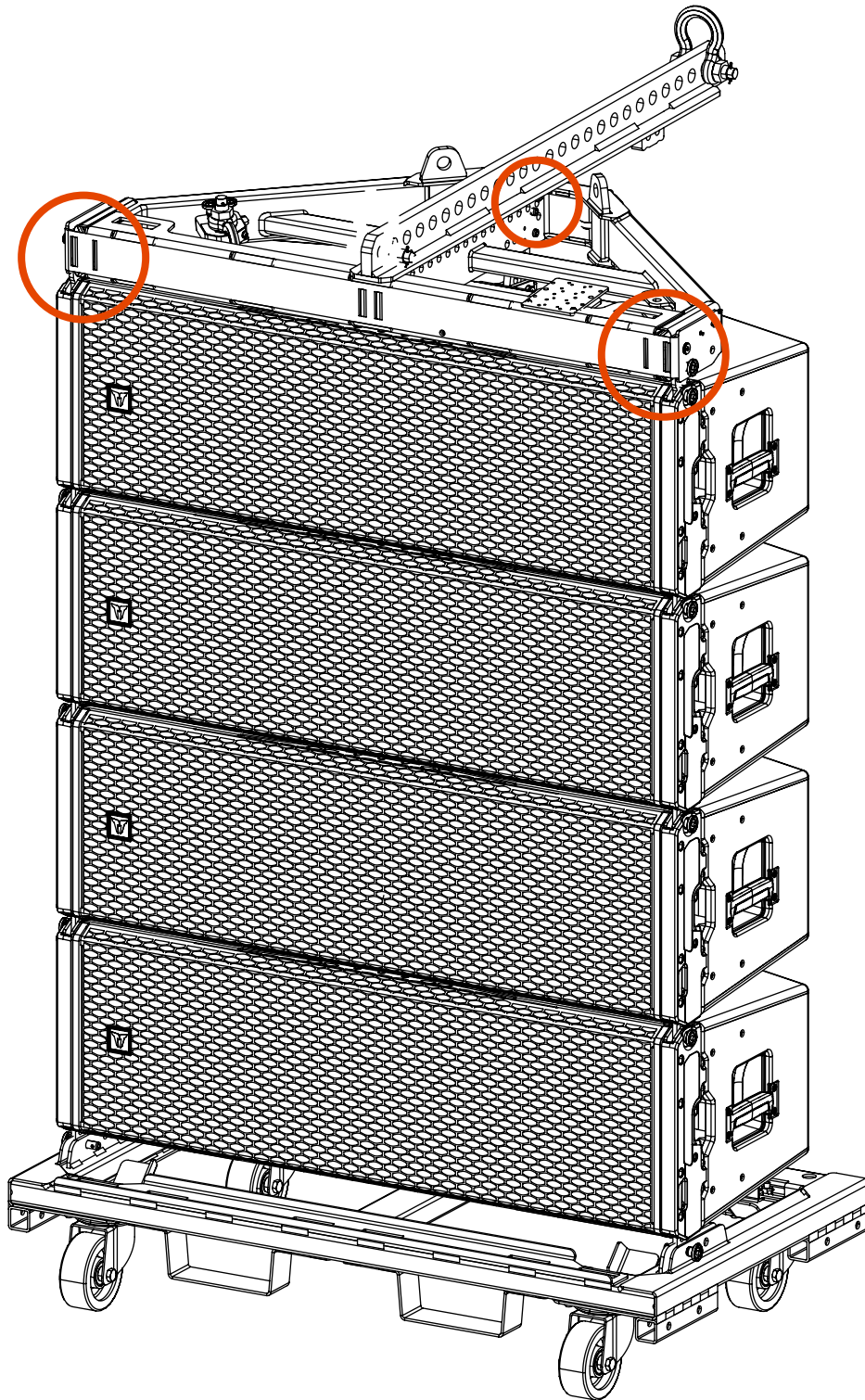
Now lift up the array just enough to detach the cart. See chapter 6.2. Repeat this entire operation until the necessary number of modules is reached.

i **IMPORTANT NOTE:** in case there is not enough work space, we suggest a maximum of 12 modules mounted in Tension Mode.

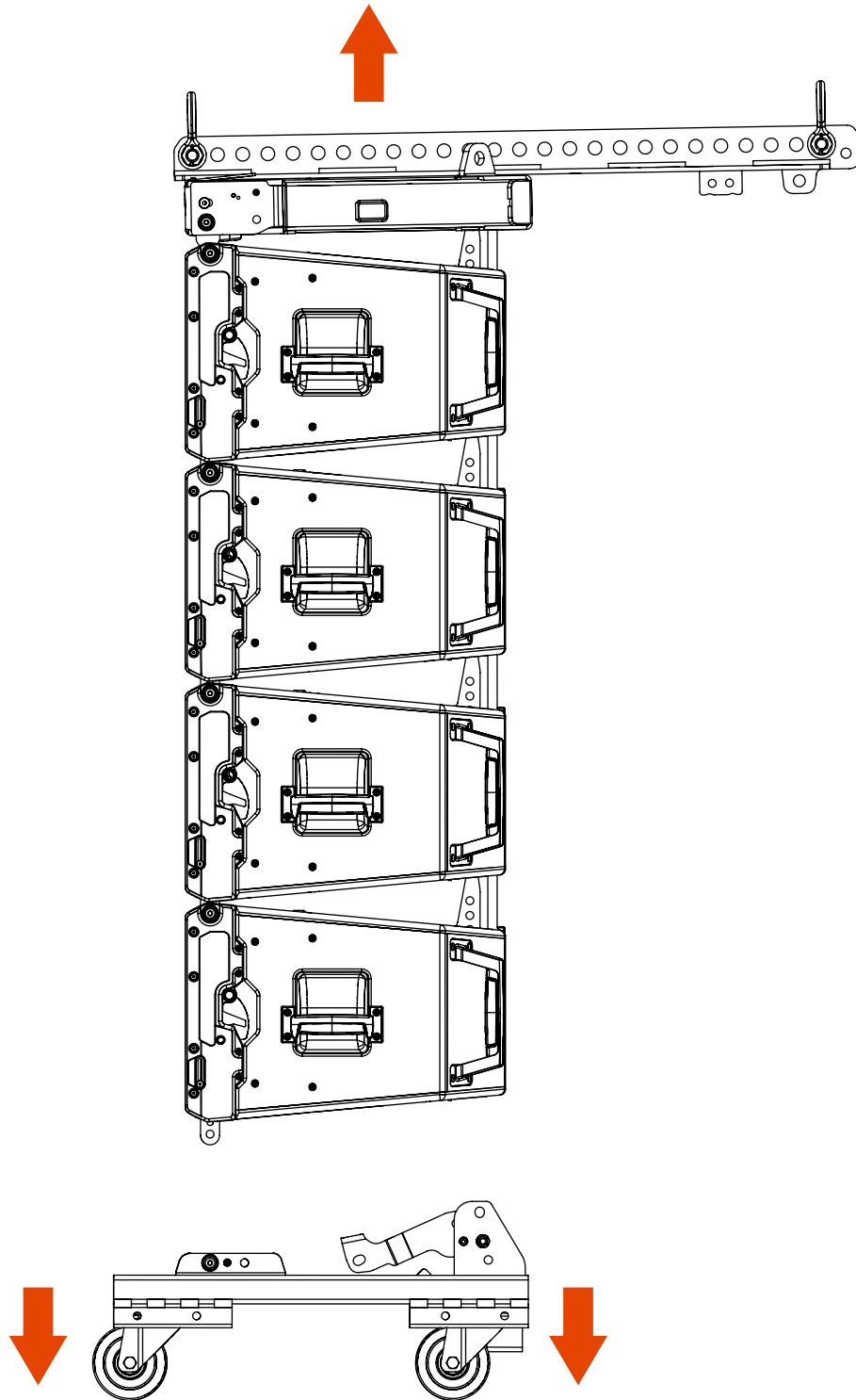
7. INSTALLATION

7.8 LIFTING THE SPEAKERS - COMPRESSION MODE

Place four modules on the cart in compression mode and move them below the flybar.
Fix the flybar to the speaker with three pins: two on the front and one on the rear side (see chapter 6.7).

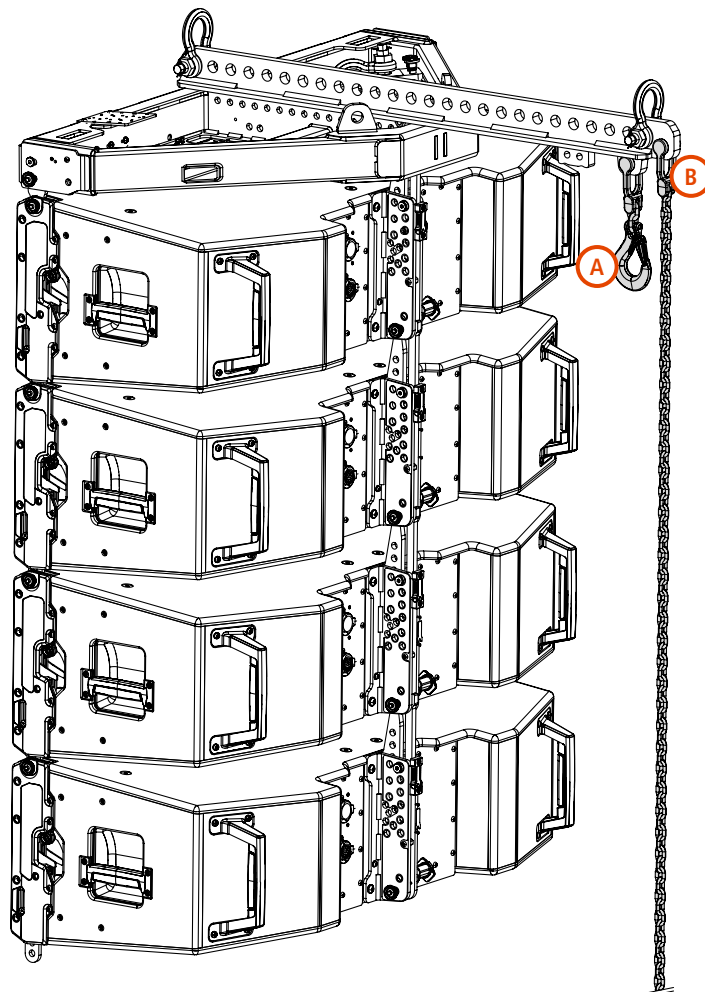
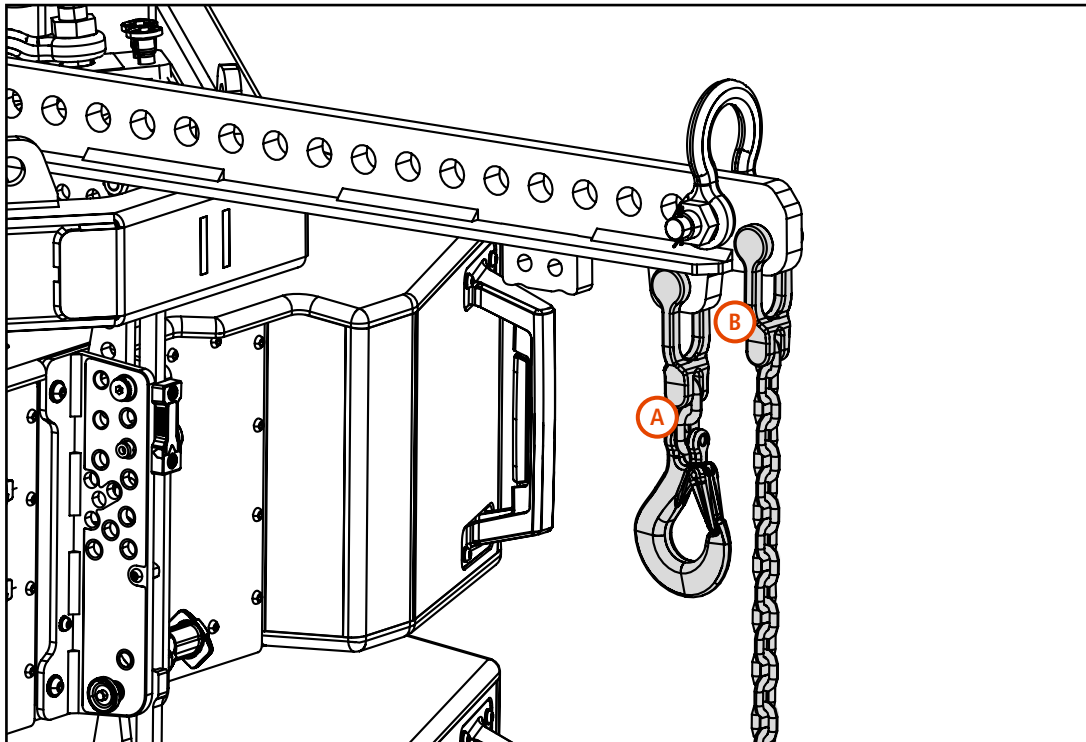


Lift up the system just enough to remove the cart.



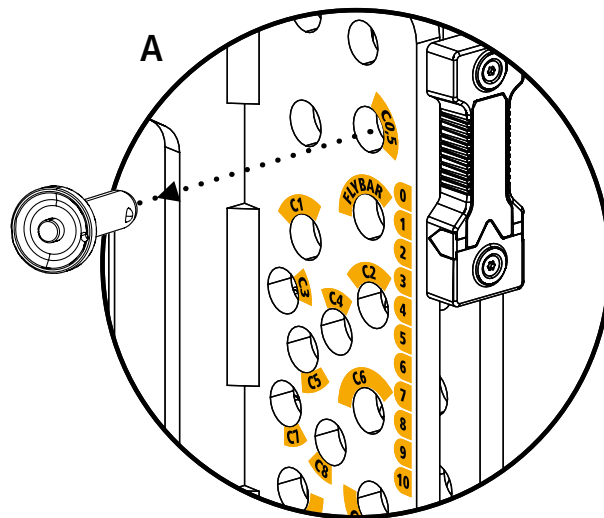
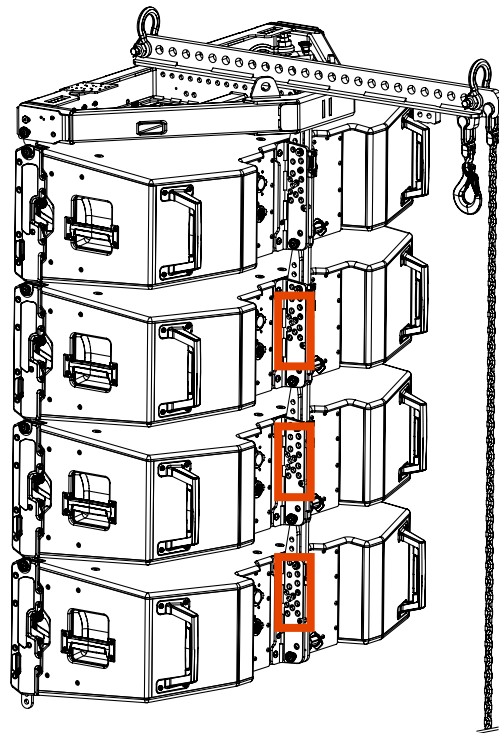
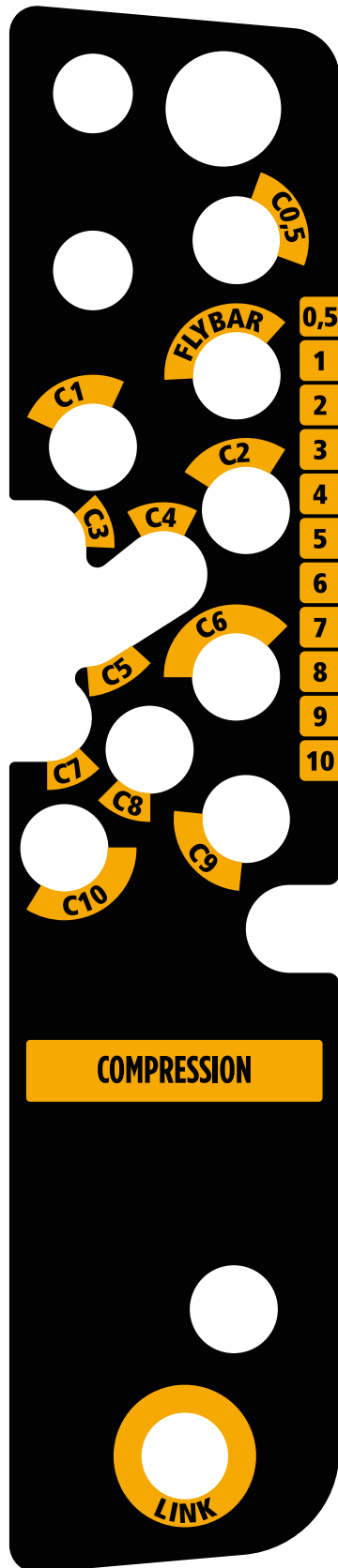
7. INSTALLATION

On the far end of the Extension Bar fix the Cable Hook **A** and the Main Chain **B** (see Section SETTING FL-B CMP KIT 002) as shown in the pictures below.

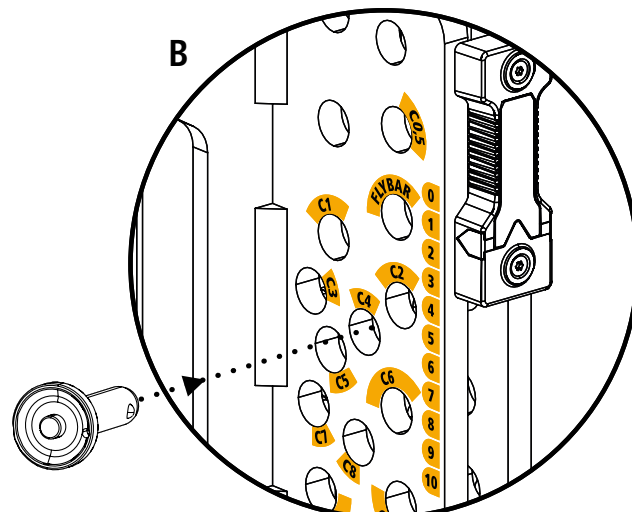


7. INSTALLATION

On the rear left side (compression side), extract the Quick Lock Pin from the 0,5 hole as shown on illustration **A** (except the first module on the top which is already attached to the flybar through the Flybar Hole) and insert it back in the hole provided by the simulation software (illustration **B**).

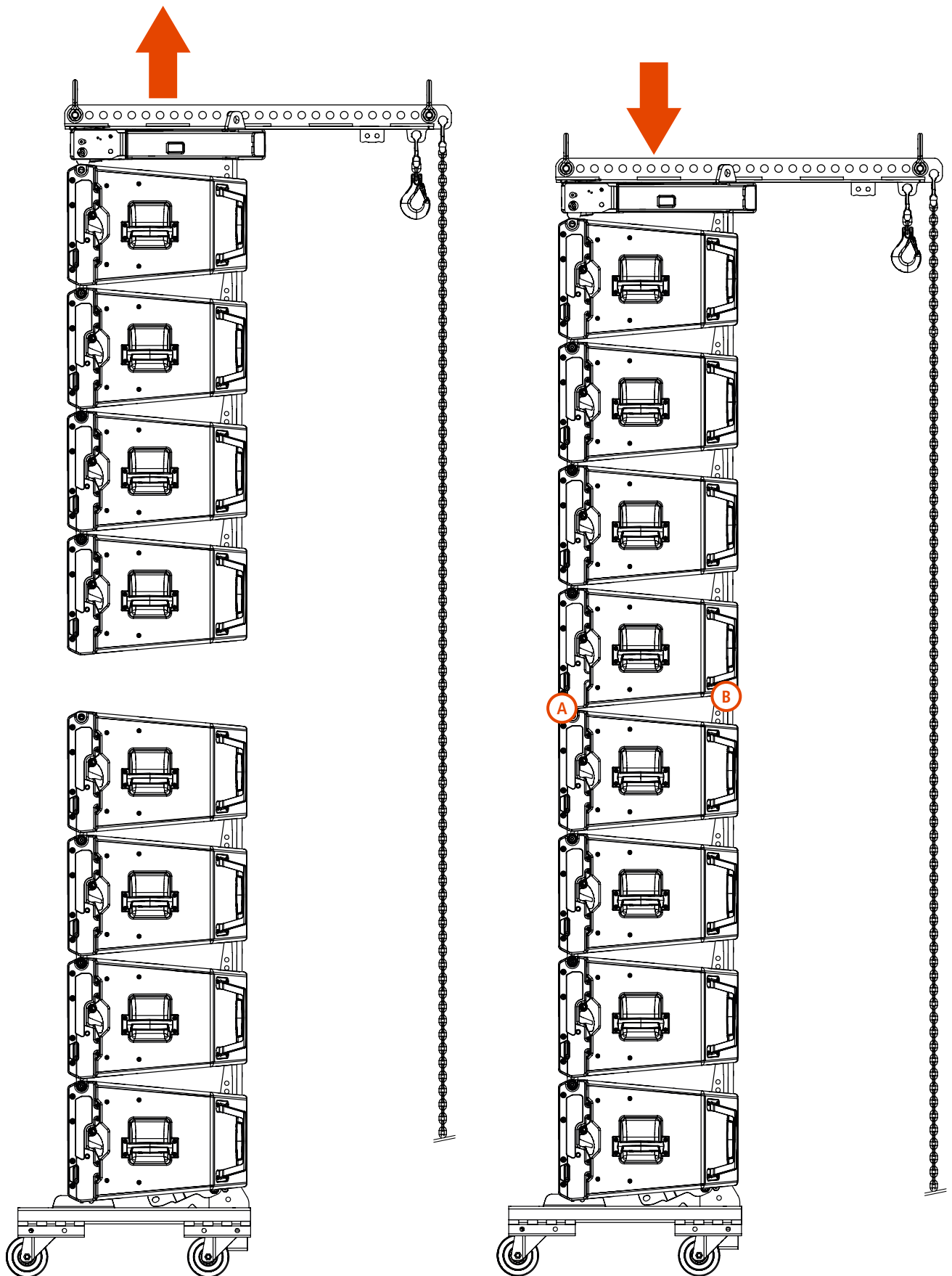


Extract the Quick Lock Pin from the 0,5 hole.



Insert the Quick Lock Pin back into the hole provided by the software (Example: C4 hole)

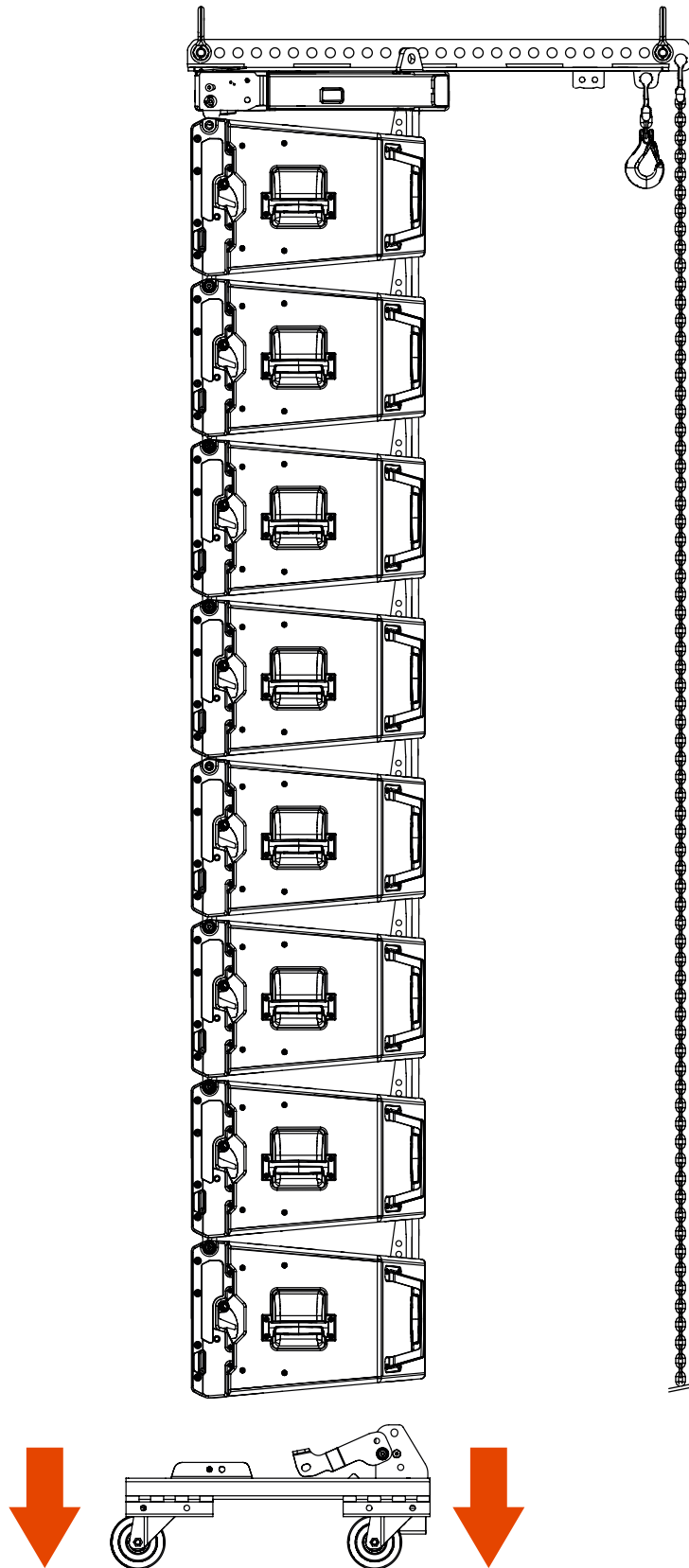
ADDING ANOTHER GROUP OF SPEAKERS TO THE ARRAY (COMPRESSION MODE)



Lift up the array, place another array of speakers on the cart below it.

Lower the array and fix the speakers with two Quick Lock Pins on the front side **A** and one Quick Lock Pin on the rear side **B**. (See chapter 6.10)

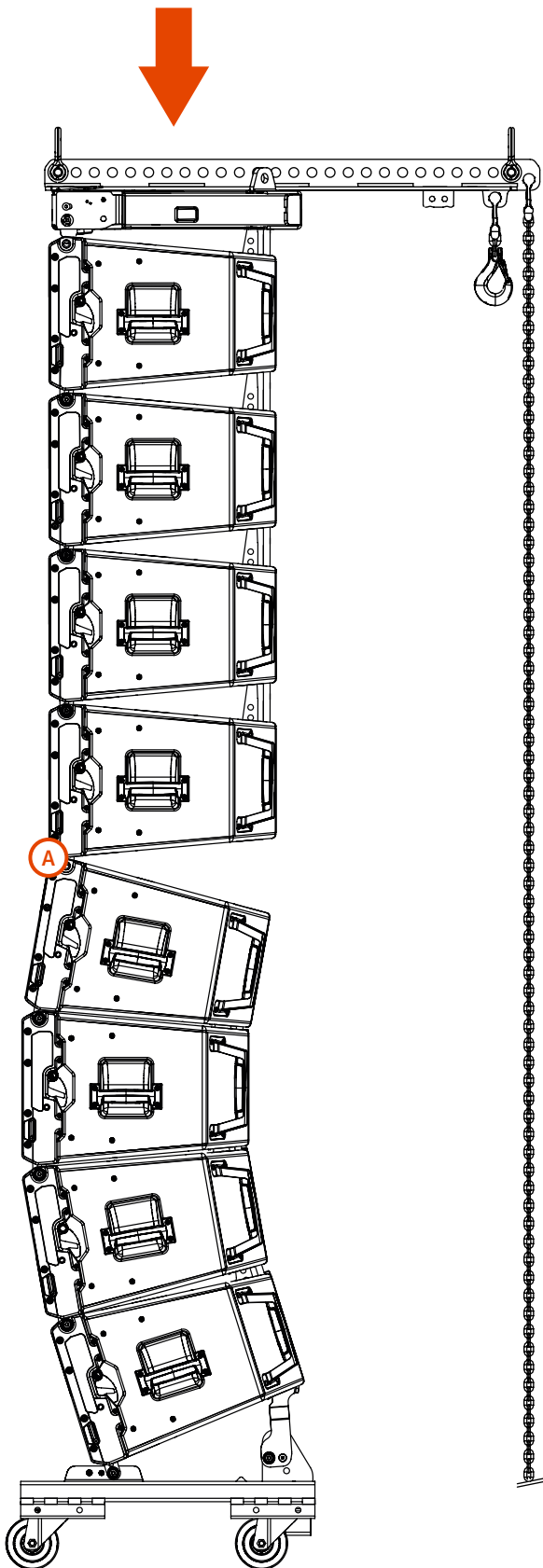
Now lift up the array just enough to detach the cart. See chapter 6.2. Repeat this entire operation until the necessary number of modules is reached (according to the information provided by the simulation software).



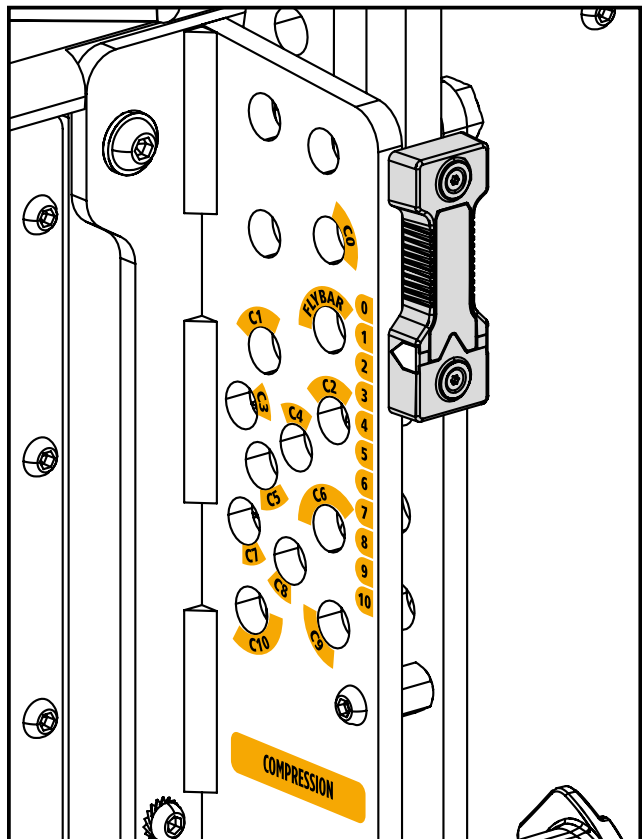
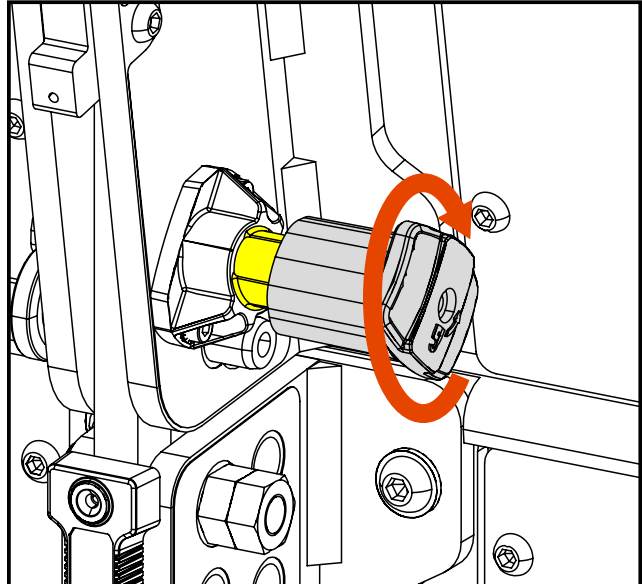
WARNING! CAUTION! The system should always be installed by qualified and experienced personnel having the technical know-how or enough specific instructions in order to prevent any danger.

7. INSTALLATION

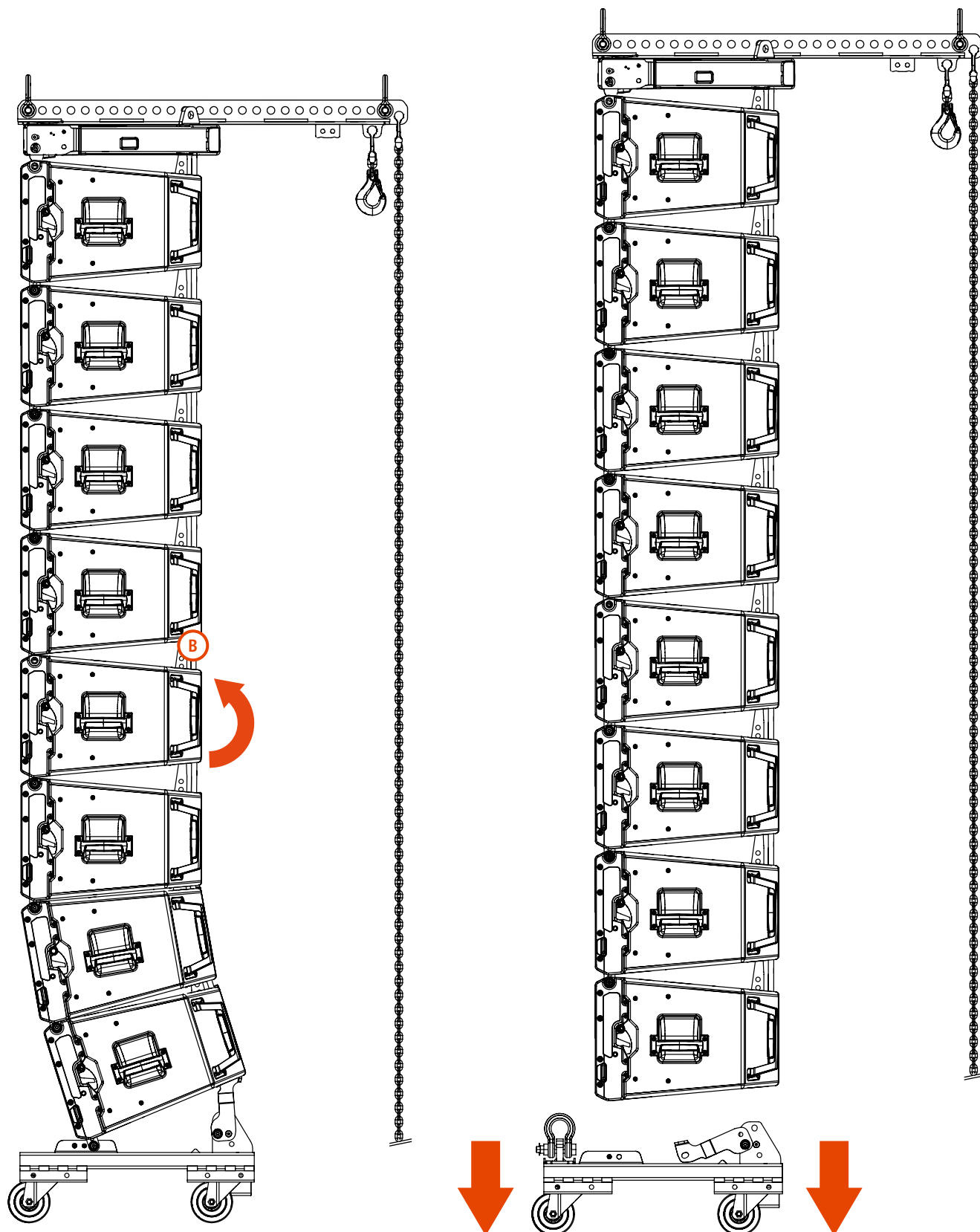
It is also possible to lift a group of modules in Compression Mode which have been stored in Tension Mode.



Place the cart (with modules stored in Tension Mode) under the array (Compression Mode) and fix the speakers on the front side with two Quick Lock Pins **A** (on both sides).



Rotate all the Automatic Locking Pins clockwise in order to arm them and remove all the pins from the rear bracket.



Manually lift up the top module on the cart and fix the rear link of the speakers with a Quick Lock Pin **B** (see chapter 6.1).

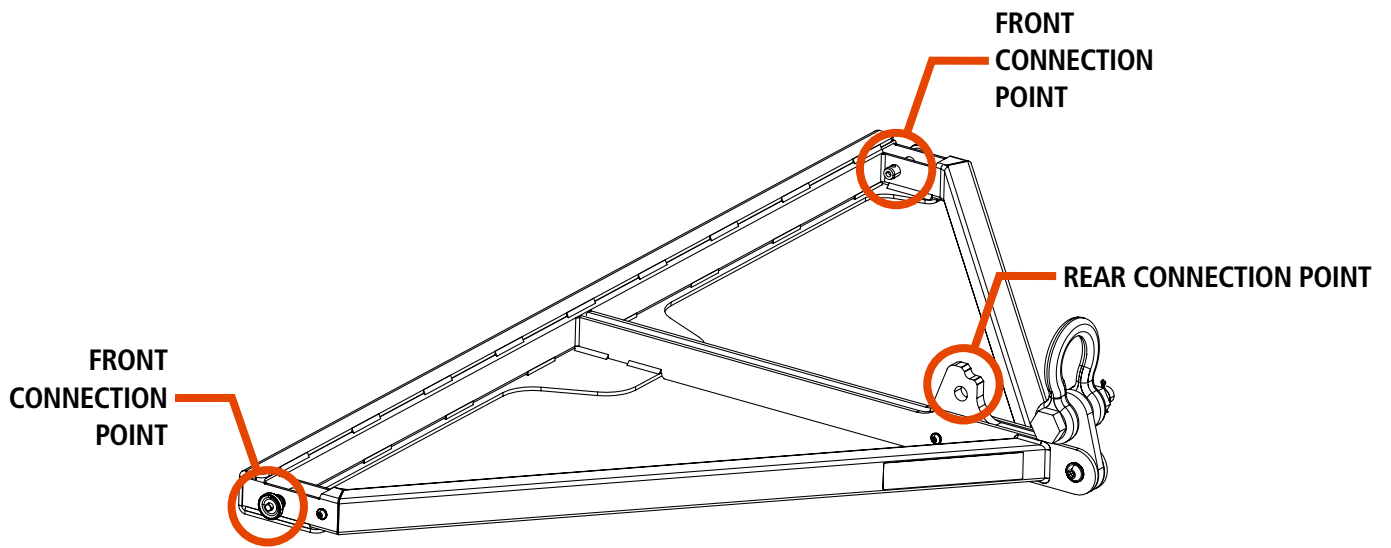
Now lift up the array and detach the cart. The modules will straighten. The system is now lifted in Compression Mode. To select the angles, follow the appropriate procedure described at the beginning of this chapter.



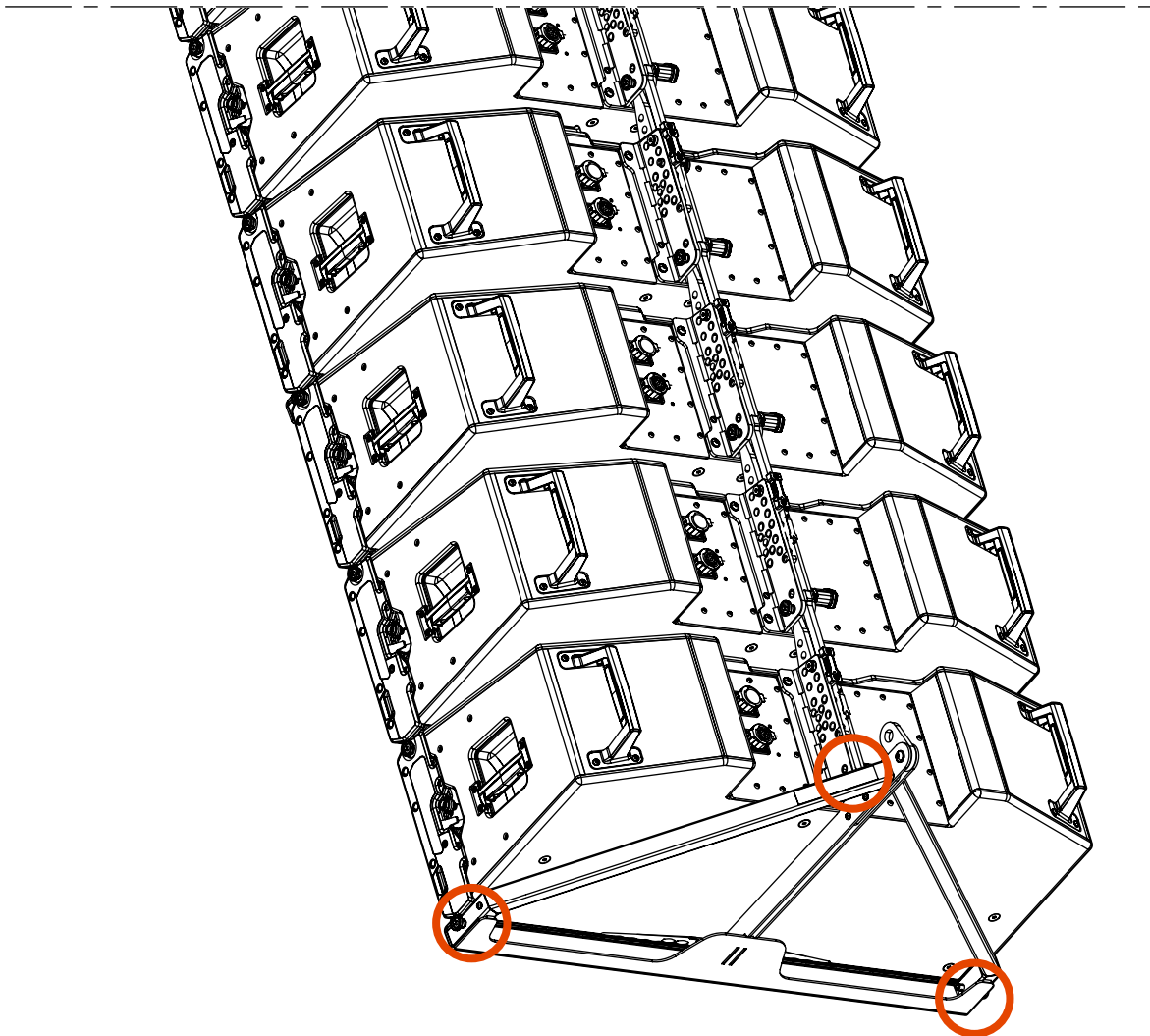
WARNING! CAUTION! The system should always be installed by qualified and experienced personnel having the technical know-how or enough specific instructions in order to prevent any danger.

7. INSTALLATION

To obtain a compression configuration, you need to secure the Compression Flybar below the last module on the bottom.



Place the Compression Flybar below the lowest module and secure it two Quick Lock Pins on the front and one Quick Lock Pin on the rear bracket (link hole).



SETTING FL-B CMP KIT 002

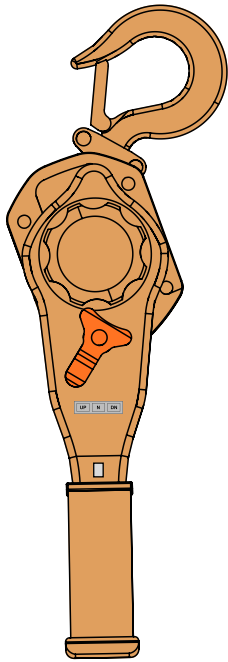
Through the use of the accessory **FL-B CMP KIT 002** the system can be lifted from the rear side, allowing the modules to approach each others until the selected angle is reached.

FL-B CMP KIT 002 consists in multiple parts:



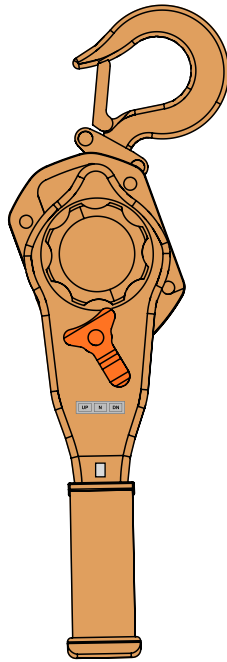
7. INSTALLATION

The manual hoist of FL-B CMP KIT 002 provides a compression force strong enough to lift up to bend the system to the desired angle. The manual hoist can be set in three different modalities: **UP**: Up - **N**: Neutral - **DN**: Down



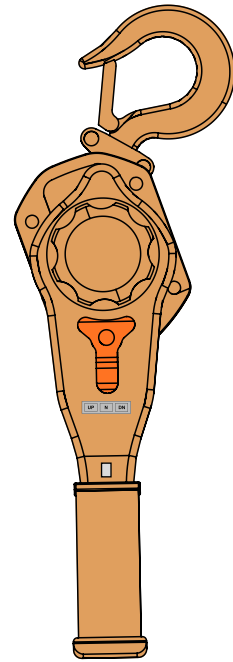
UP

To lift up the system



DOWN

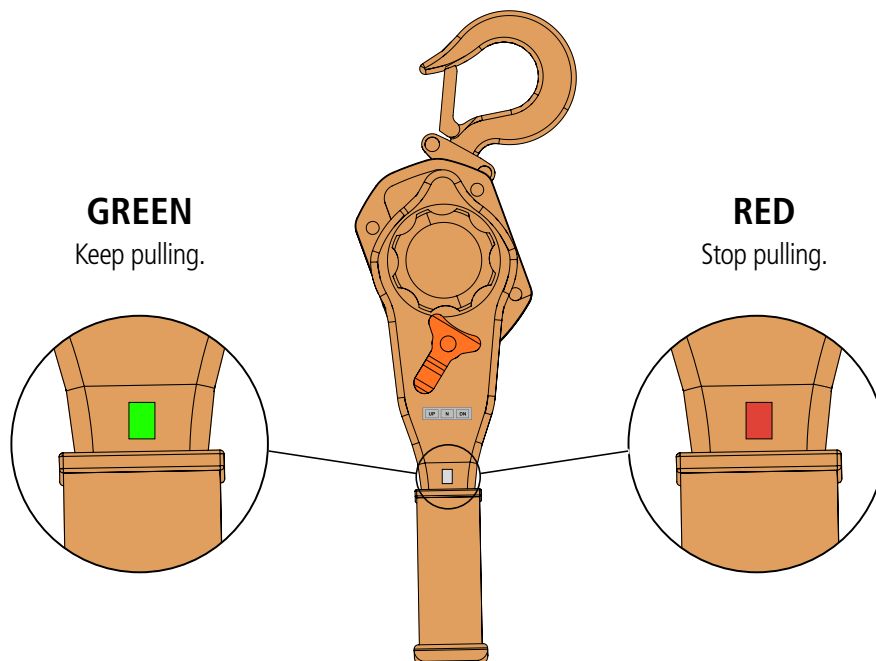
To bring down the system



NEUTRAL

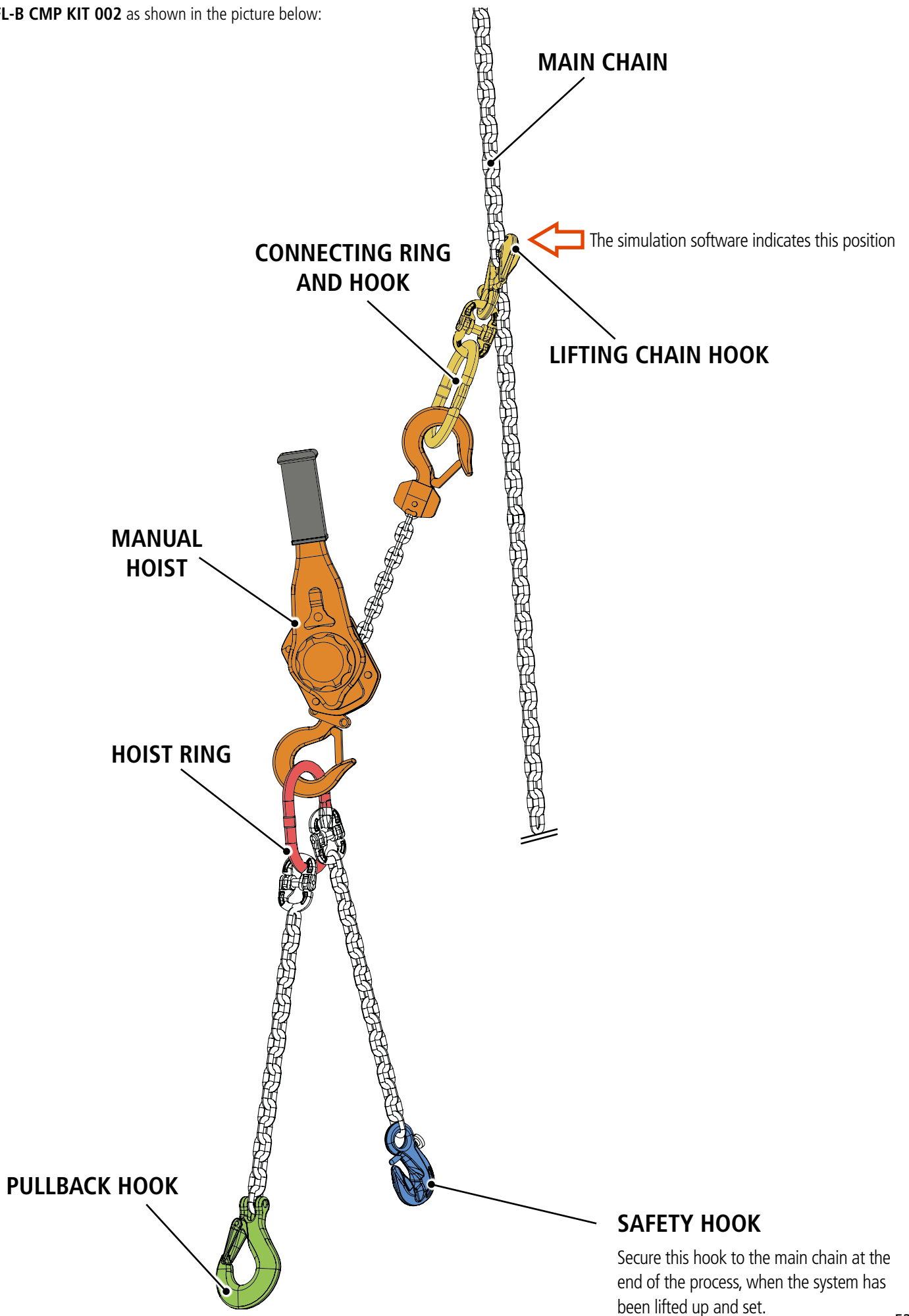
Put in this position when the system has been lift up and set. The lever will slide free and can be put vertically down.

While lifting up the system, keep pulling until the little window next to the handle turns RED. This indicates that the maximum force has been reached.



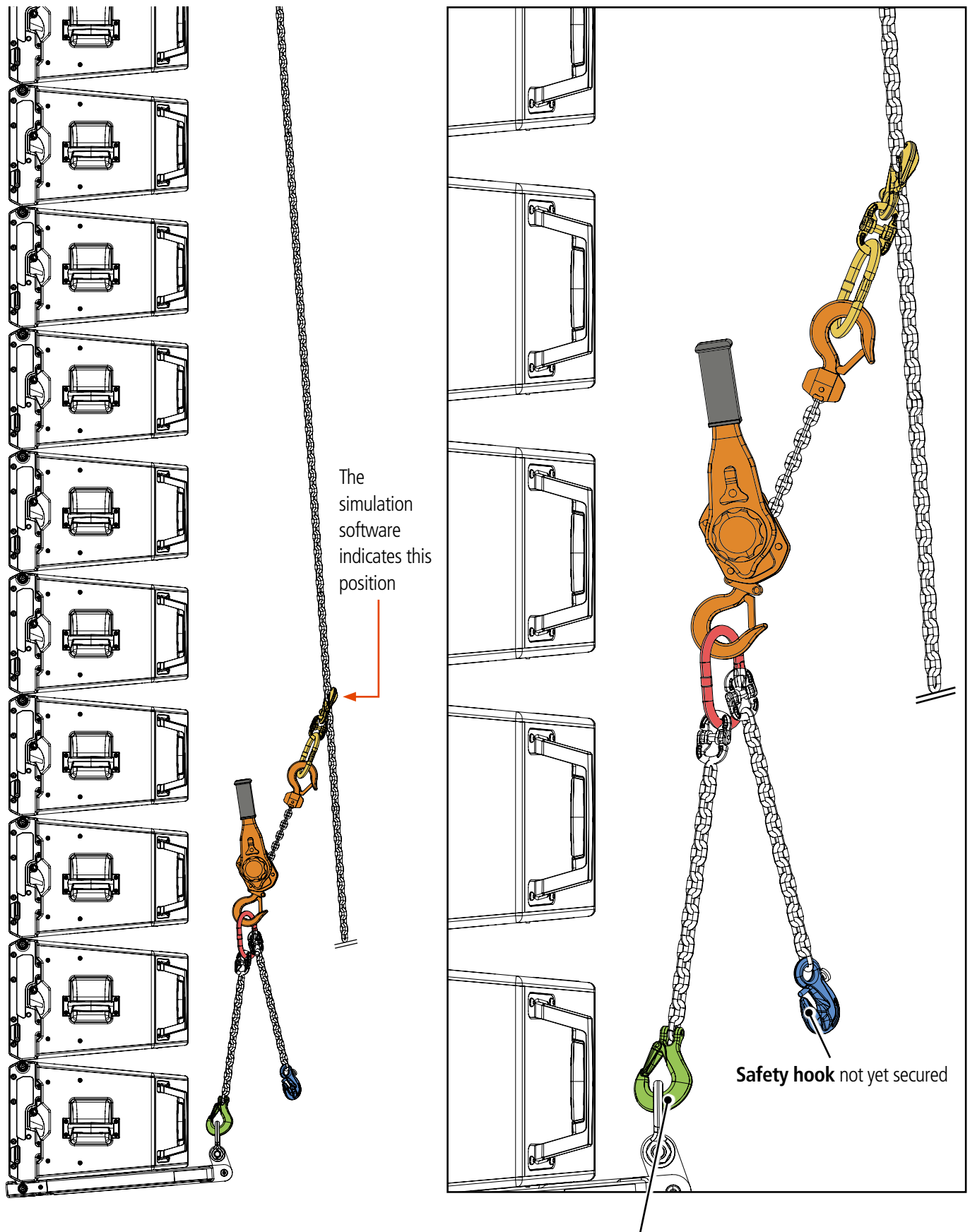
WARNING! CAUTION! The system should always be installed by qualified and experienced personnel having the technical know-how or enough specific instructions in order to prevent any danger.

Set **FL-B CMP KIT 002** as shown in the picture below:



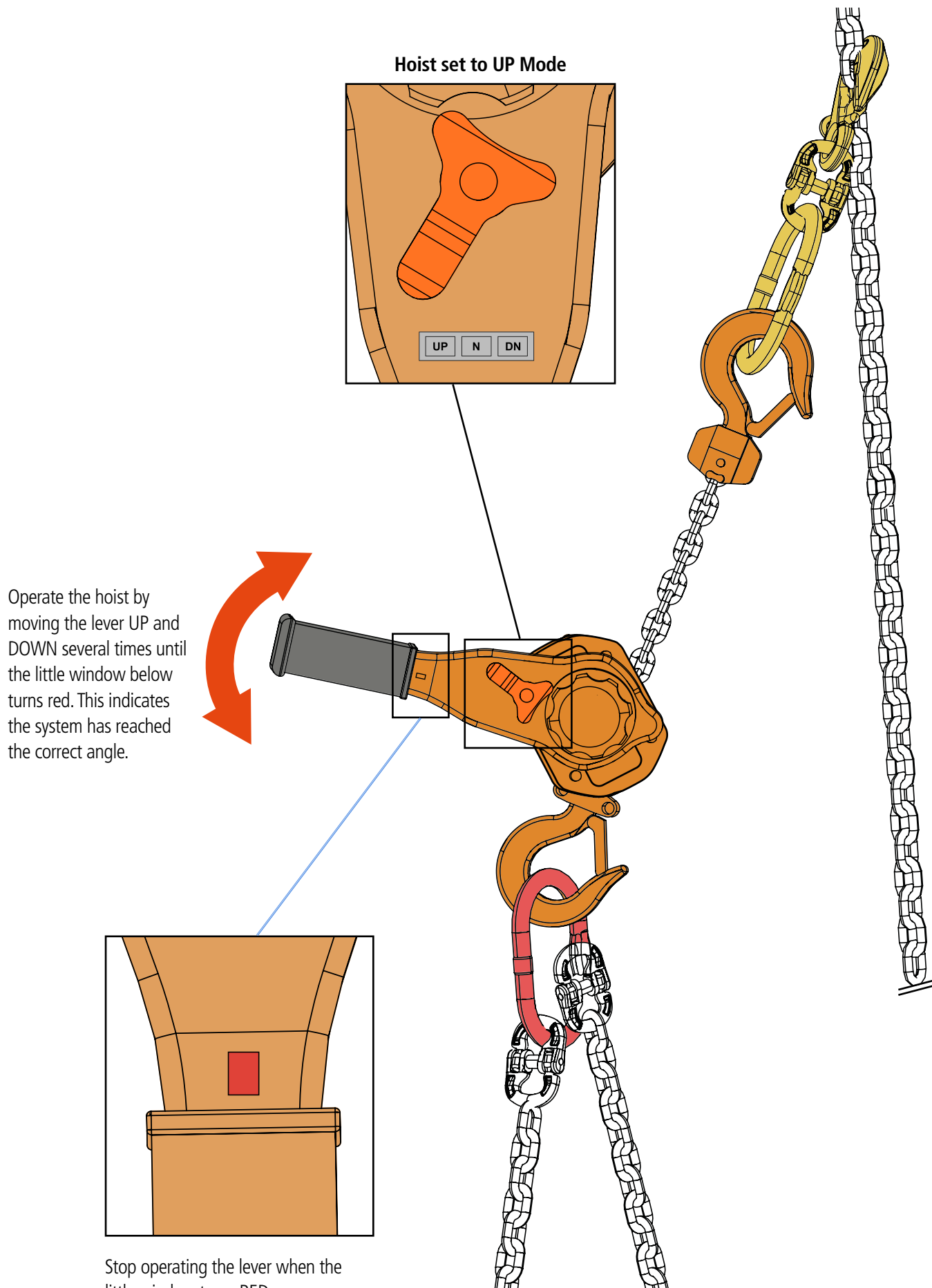
7. INSTALLATION

Secure **FL-B CMP KIT 002** as shown in the pictures below:



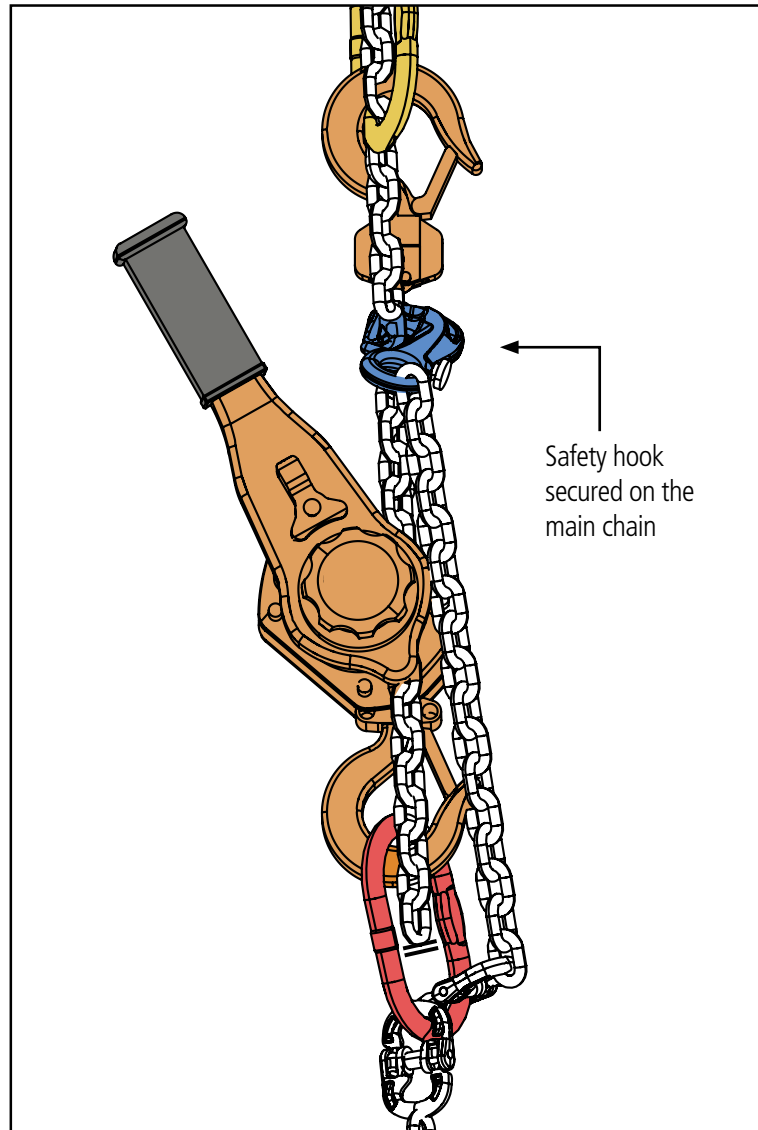
Secure the **pullback hook** to the pullback rear bracket

Now set the hoist to UP Mode and begin to operate the lever until the little window turns red.

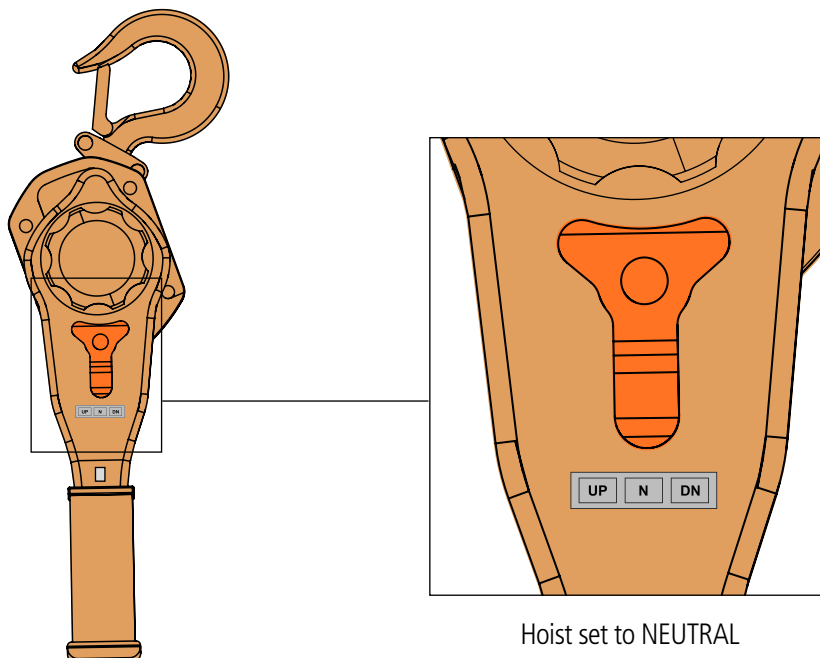


7. INSTALLATION

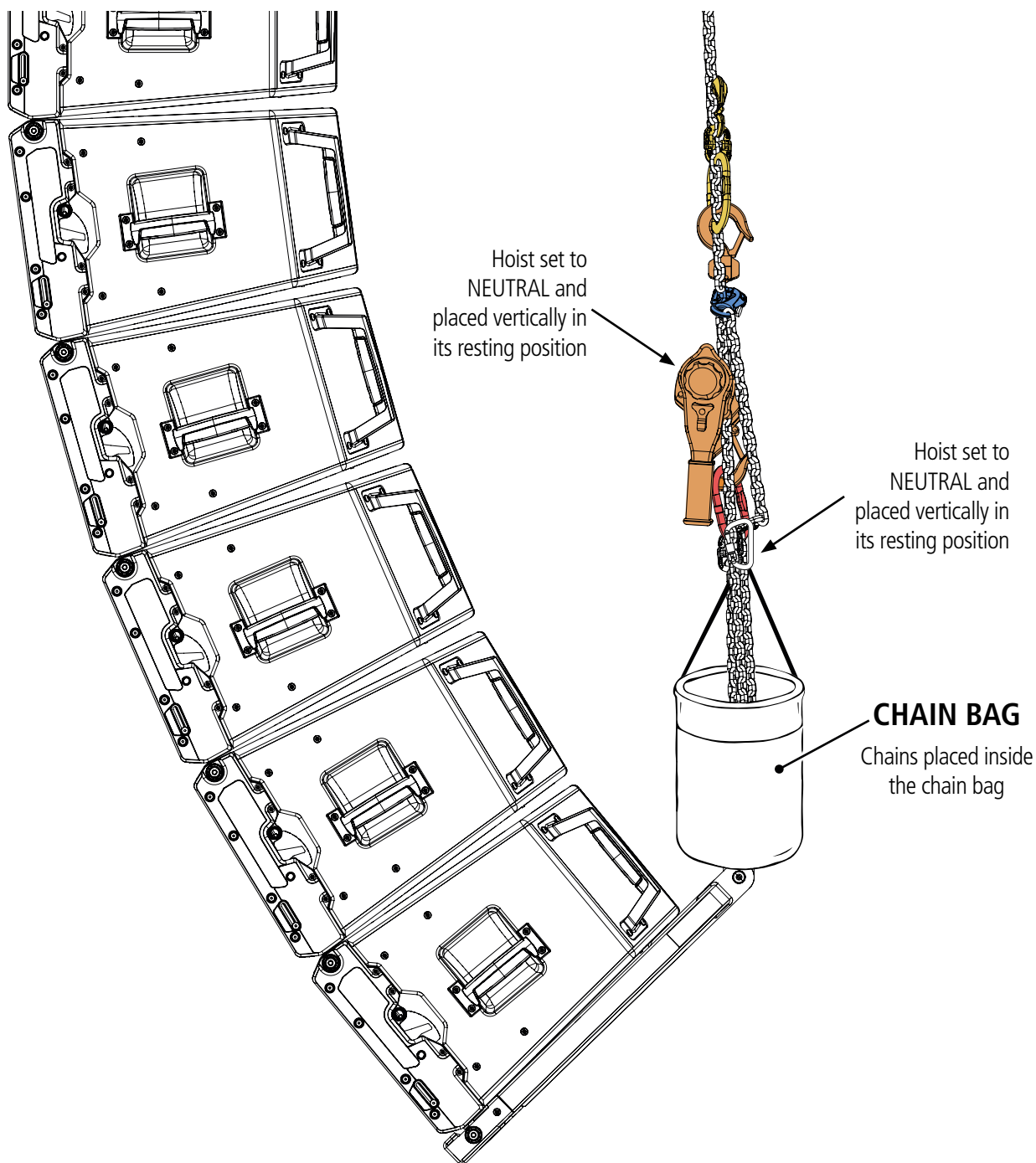
Once the little window on the hoist has become RED, stop operating the hoist and secure the safety hook to the main chain.



Set the hoist selector to N (NEUTRAL) in order to free the lever from the chain tension.



Fix the chain bag to the main chain and store the remaining chains into the bag.



The system is now set to COMPRESSION mode.



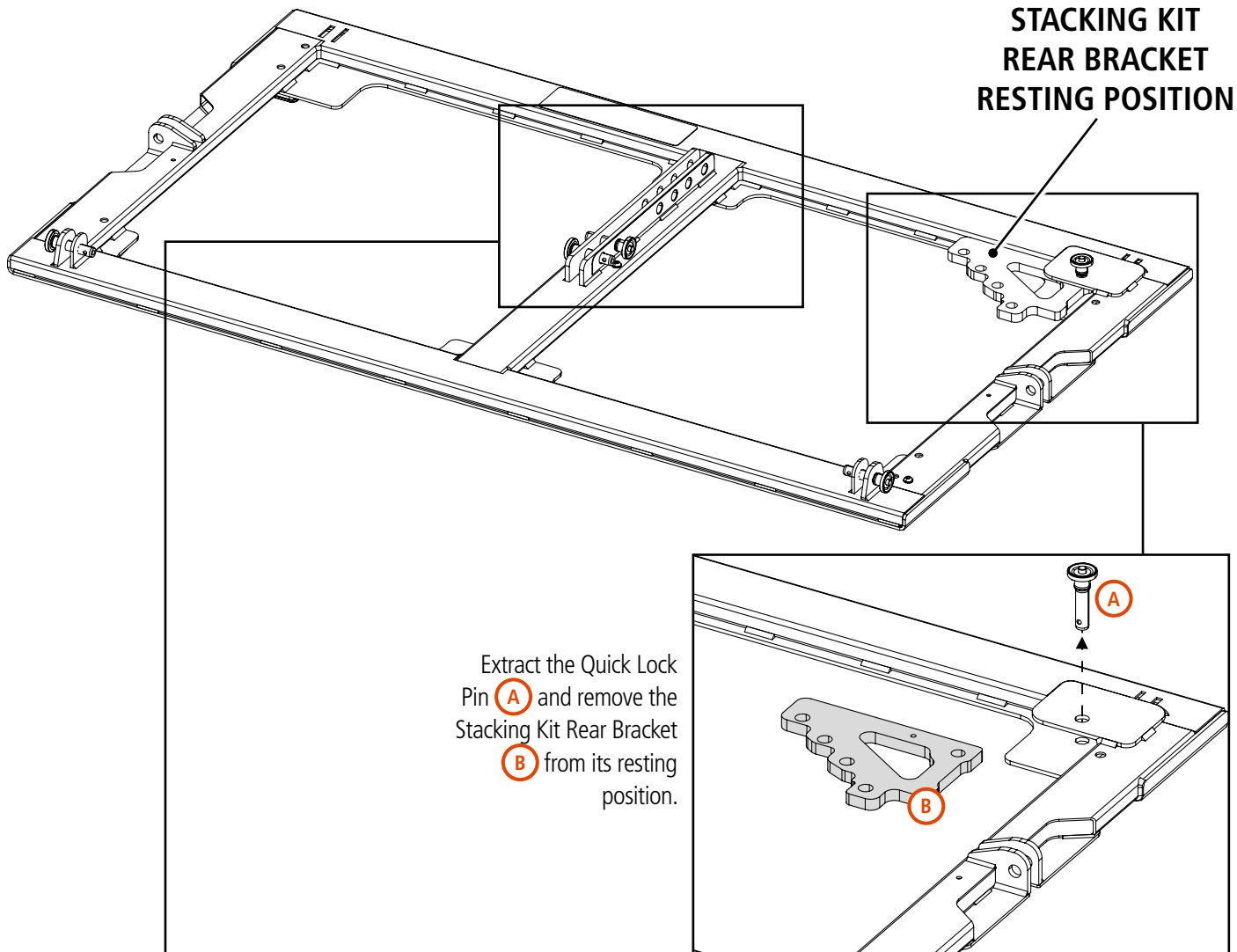
WARNING! CAUTION! The system should always be installed by qualified and experienced personnel having the technical know-how or enough specific instructions in order to prevent any danger.

7. INSTALLATION

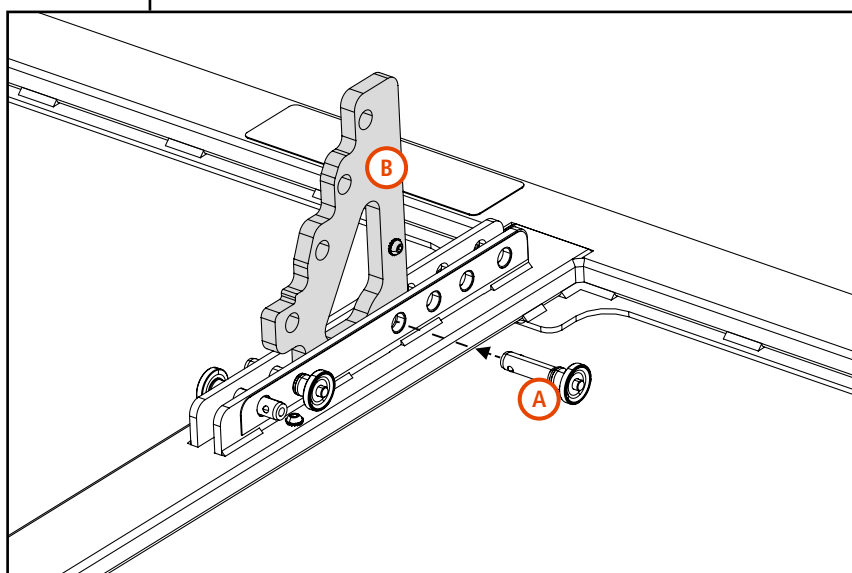
7.9 STACKING

Up to 4 GTX12 modules can be stacked on a single or double GTS 29 with the use of the accessory **STACKING KIT STCK-KIT 001**.

STACKING KIT REAR BRACKET RESTING POSITION

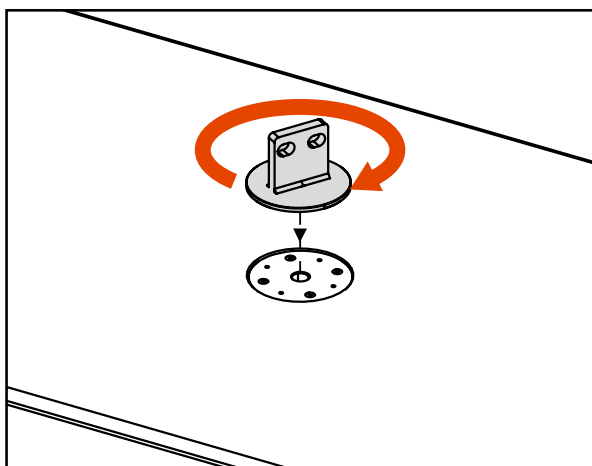
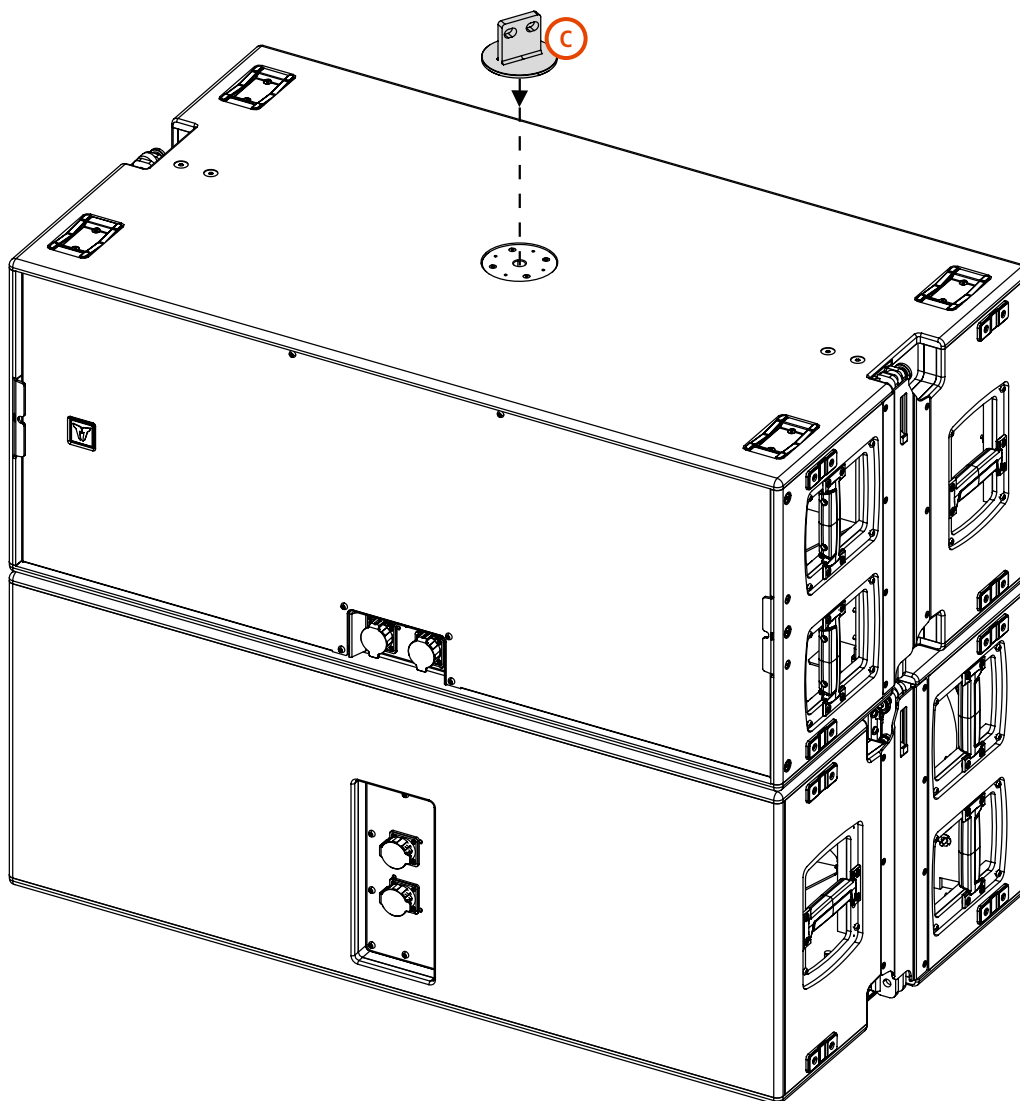


Extract the Quick Lock Pin **(A)** and remove the Stacking Kit Rear Bracket **(B)** from its resting position.

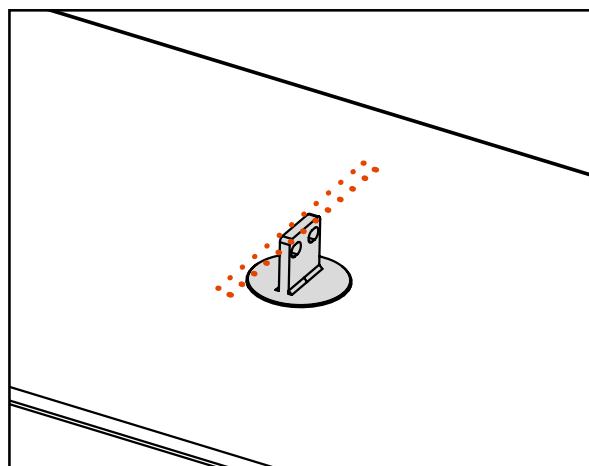


Place the Rear Bracket **(B)** on its seat by fixing it with the same Quick Lock Pin **(A)** removed earlier.

On the subwoofer top side, screw the M20 bracket **C** on its seat and place it perpendicularly as shown in the picture.



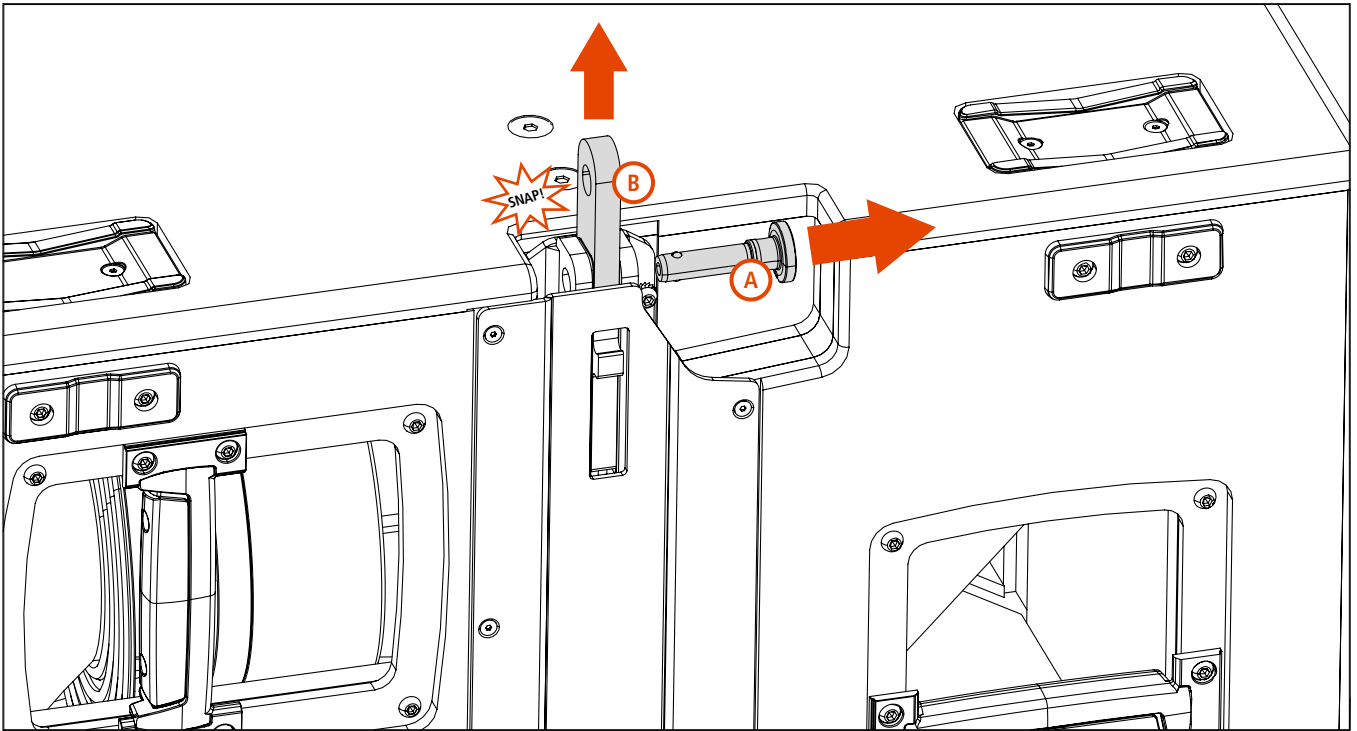
Screw the M20 bracket into its seat.



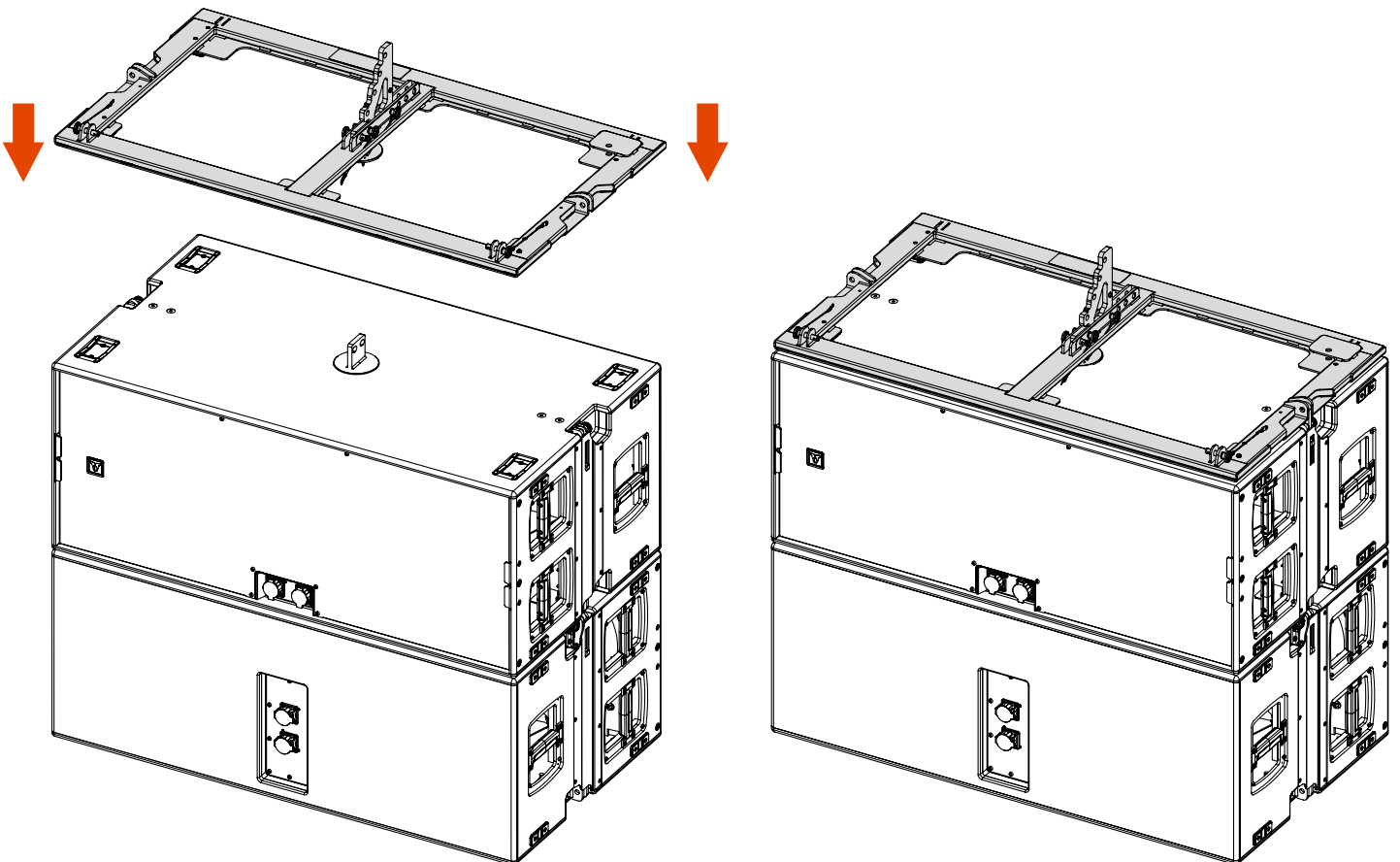
Place it perpendicularly.

7. INSTALLATION

Remove the lateral Quick Lock Pins **(A)** from the GTS29 sides in order to let the subwoofer lateral bracket **(B)** snap upwards

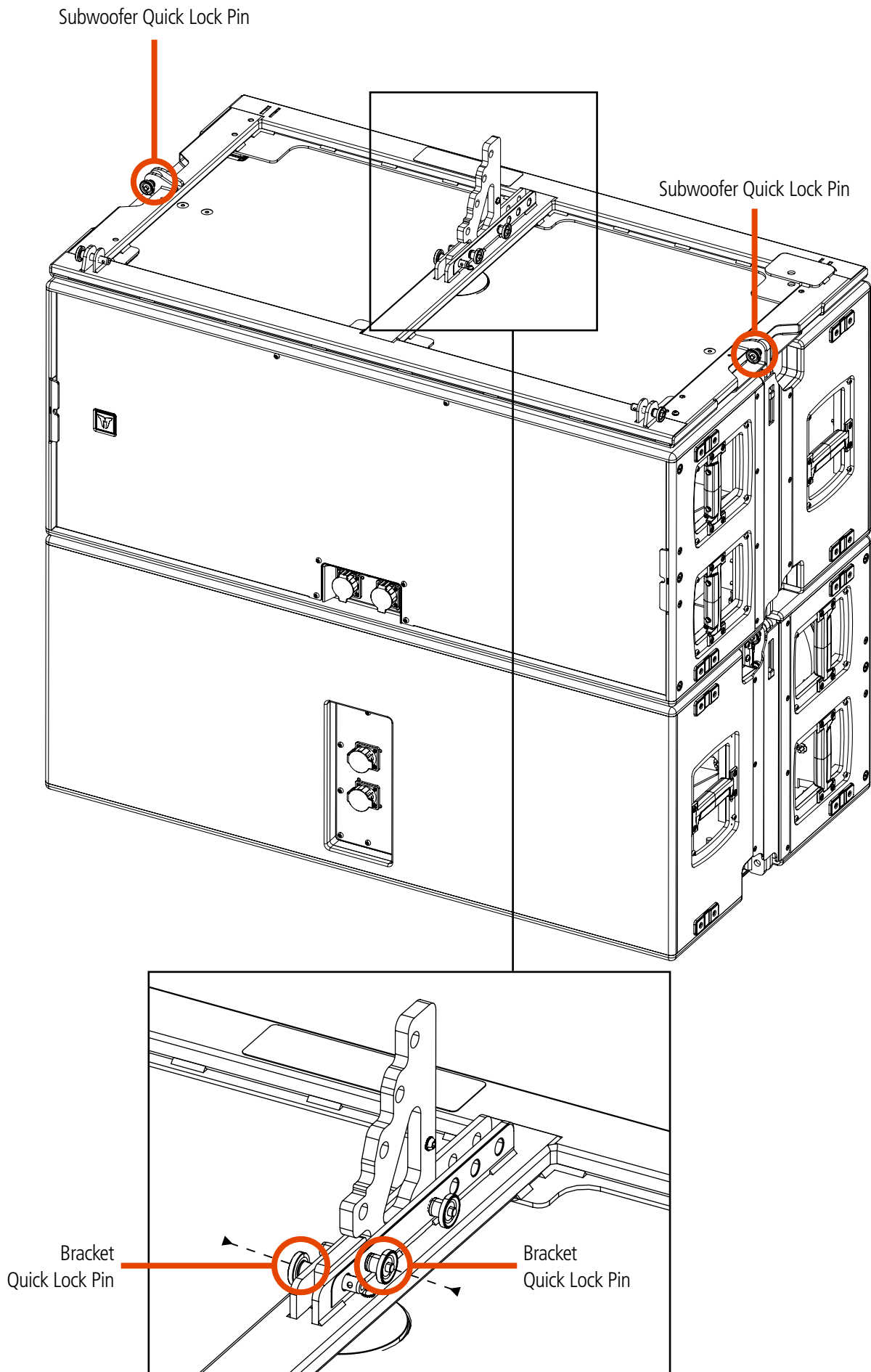


Place the **STACKING KIT STCK-KIT 001** over GTS29 (double or single) making the central and the lateral brackets match each other.



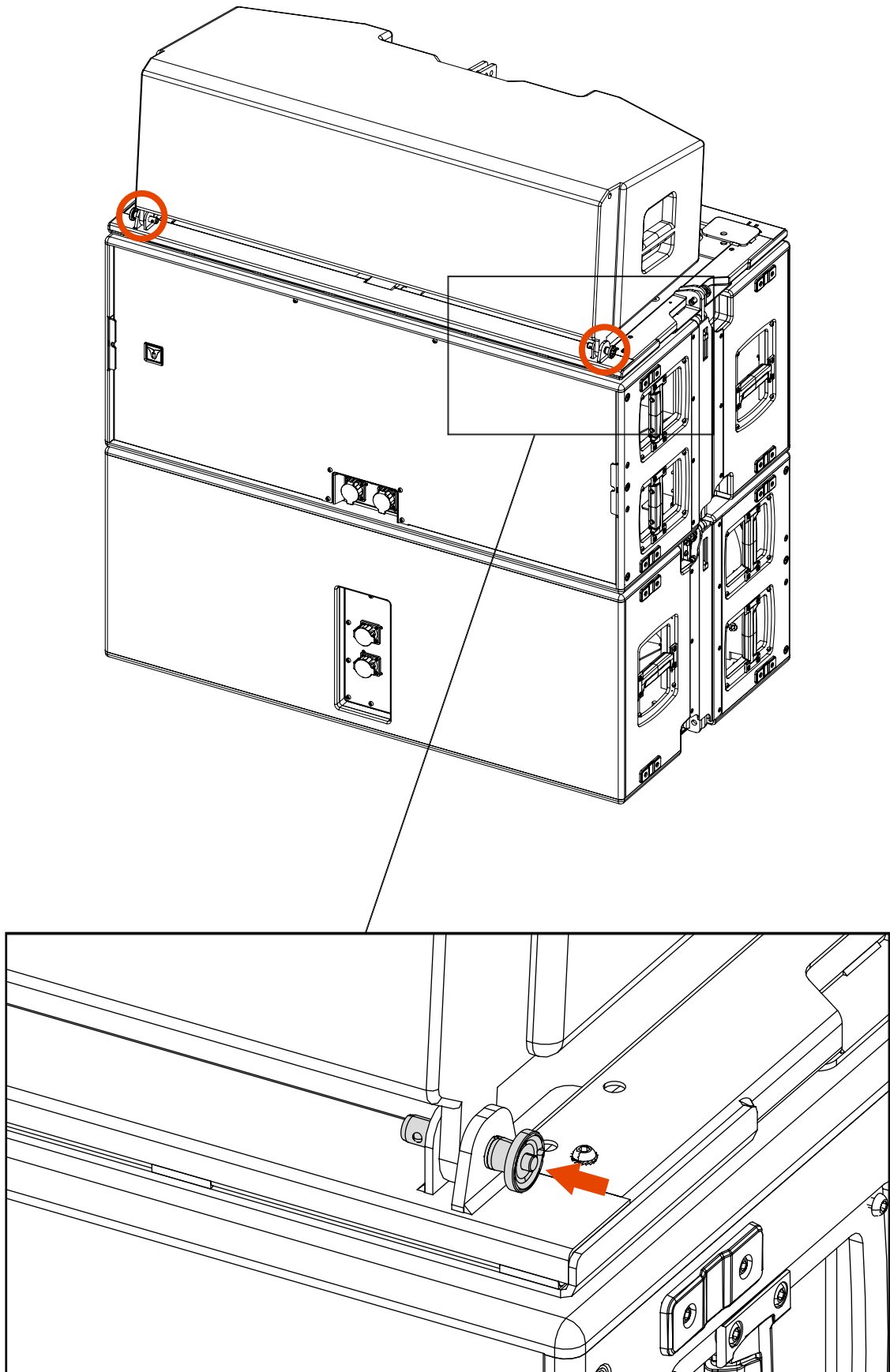
7. INSTALLATION

Fix the **STACKING KIT STCK-KIT 001** to the subwoofer with four Quick Lock Pins: two on the central bracket and two on each side. Use the subwoofer Quick Lock Pins to fix the sides.

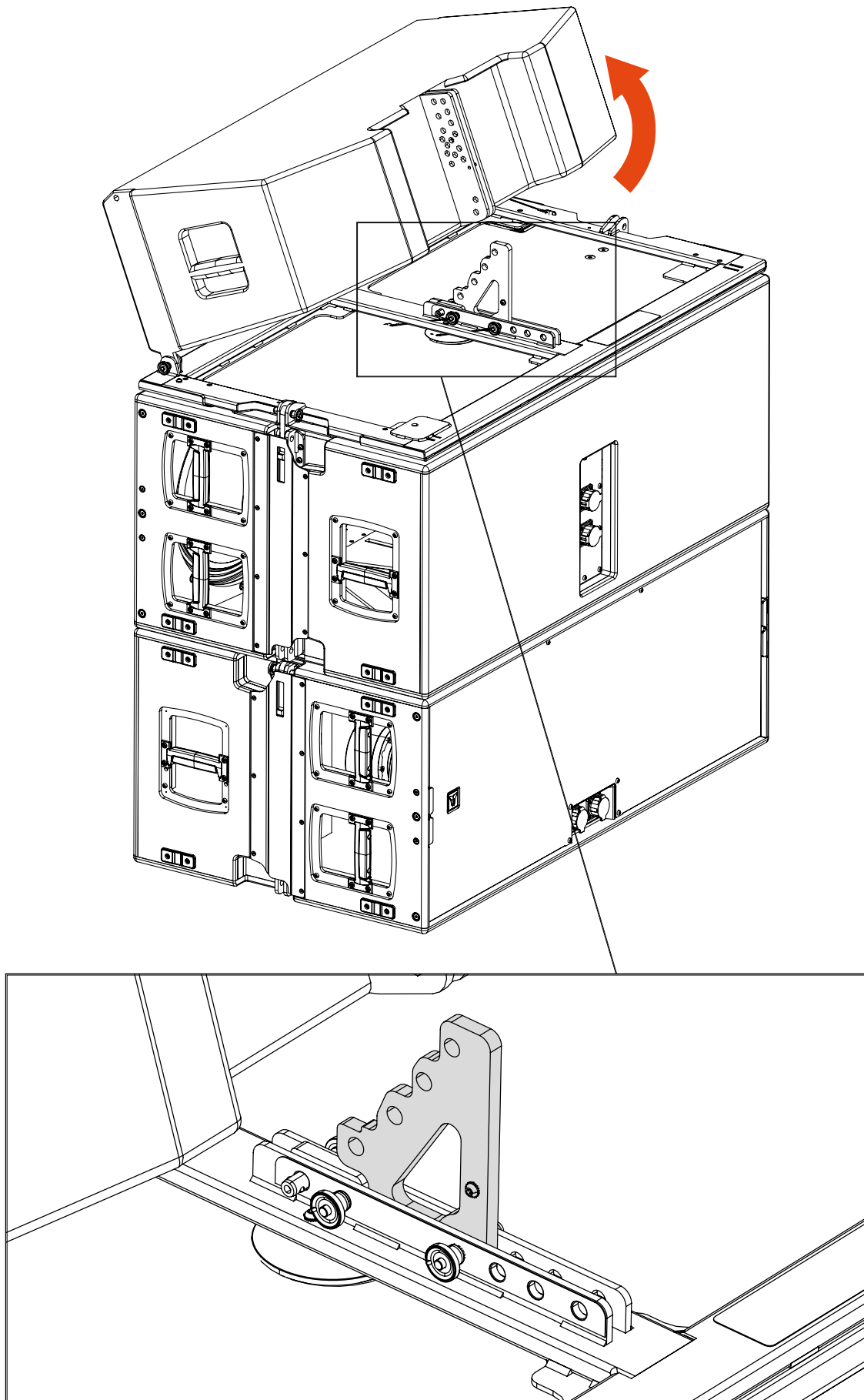


7. INSTALLATION

Place one GTX12 over the stacking kit making the front brackets match each other, then fix it with a Quick Lock Pin (on both sides).

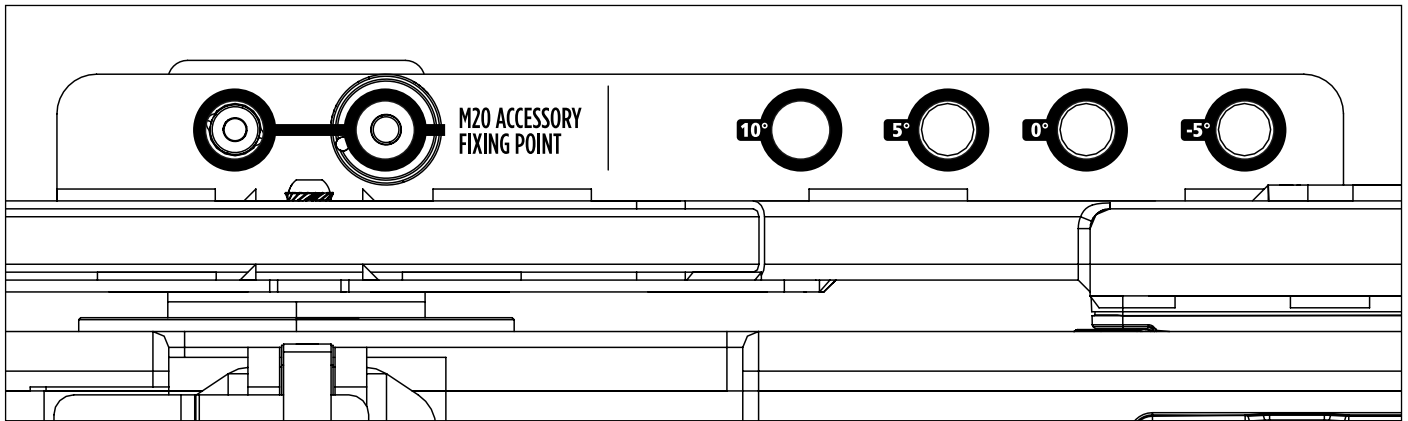


Lift up the rear side of GTX12 in order to expose the stacking kit rear bracket.

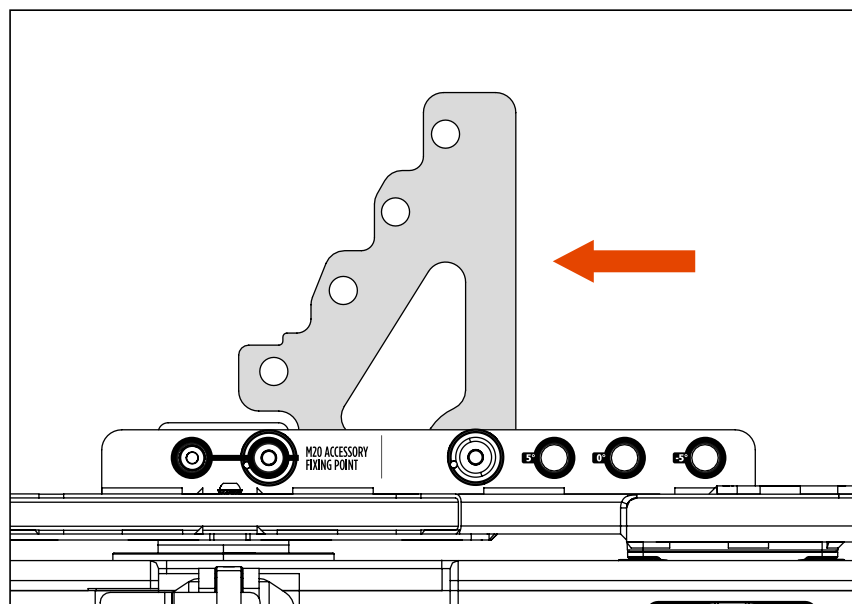


7. INSTALLATION

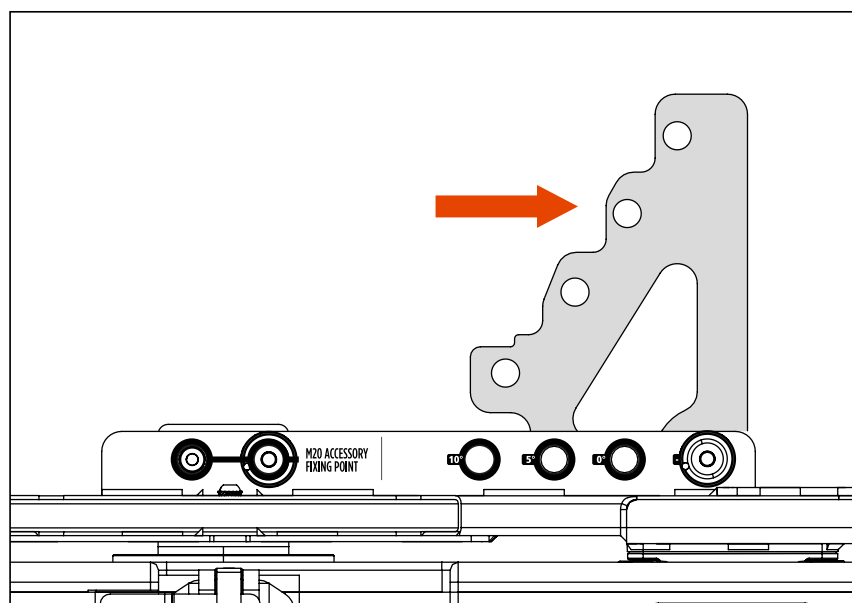
Relatively to the angle indicated on the stacking kit label, move the bracket upwards and forward to set the desired inclination angle of the first cabinet.



Once chosen the desired angle, lock the bracket with a Quick Lock Pin.



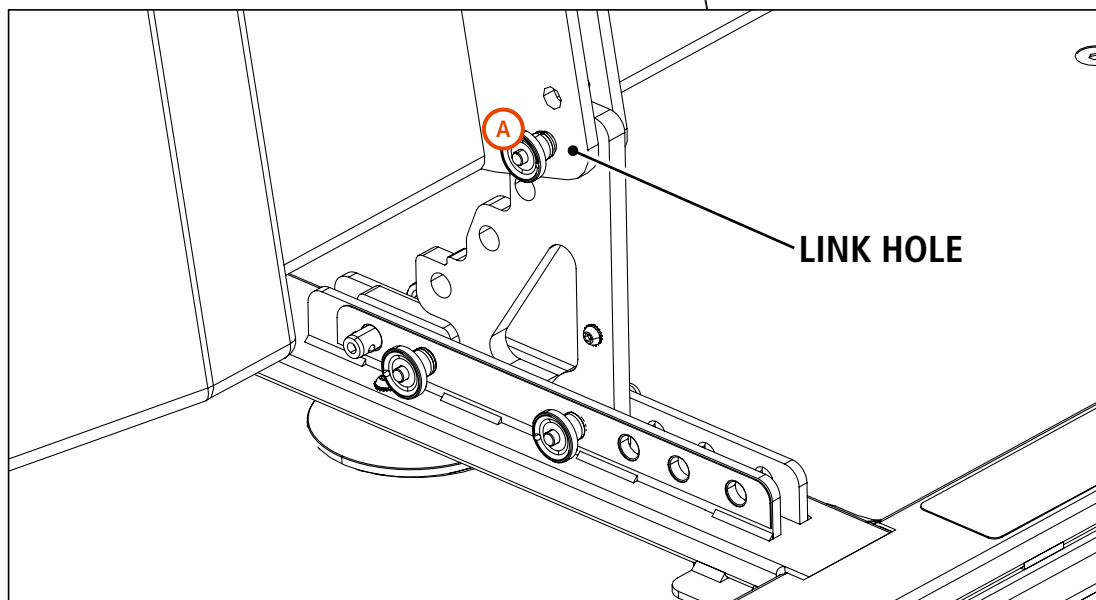
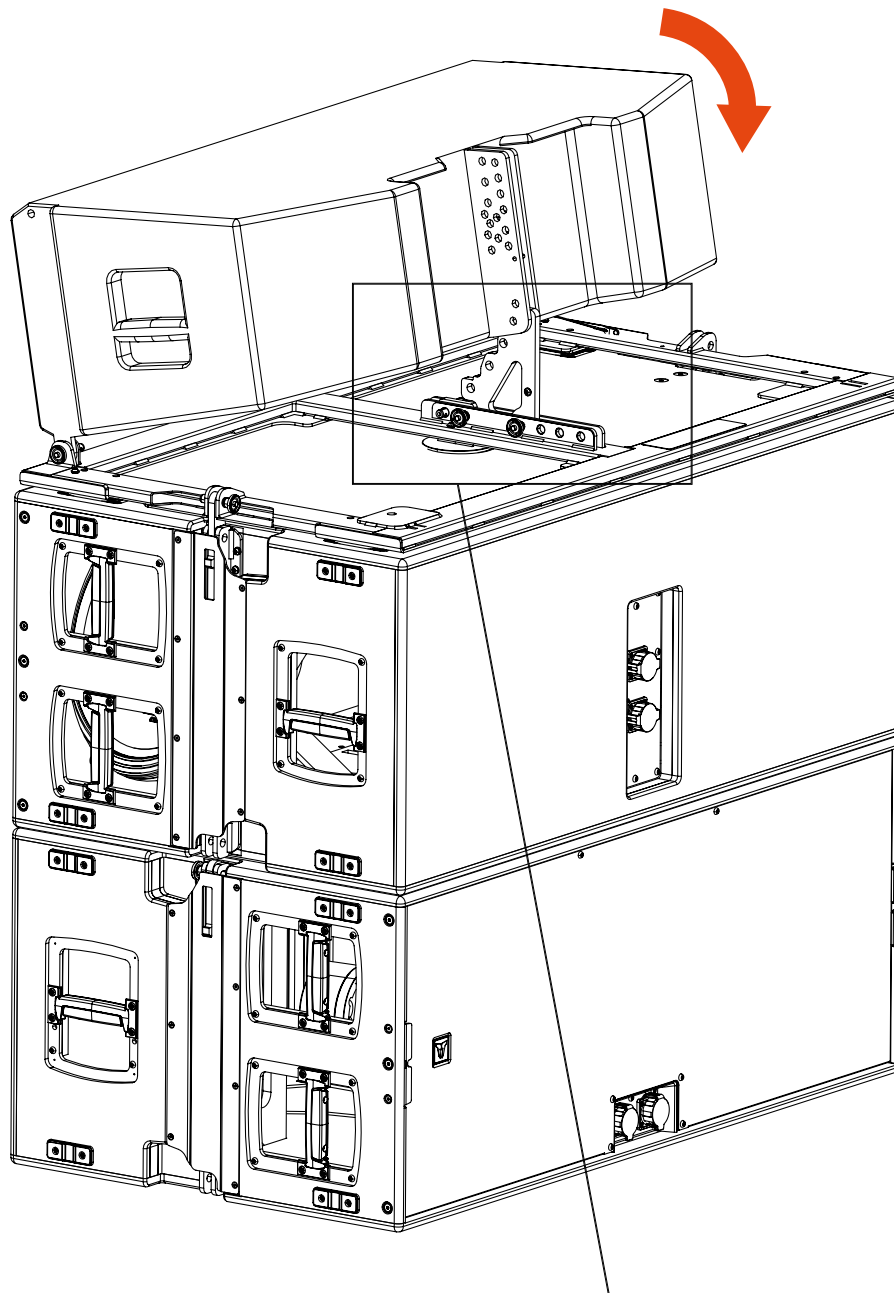
Example: bracket set to 10° angle



Example: bracket set to -5° angle

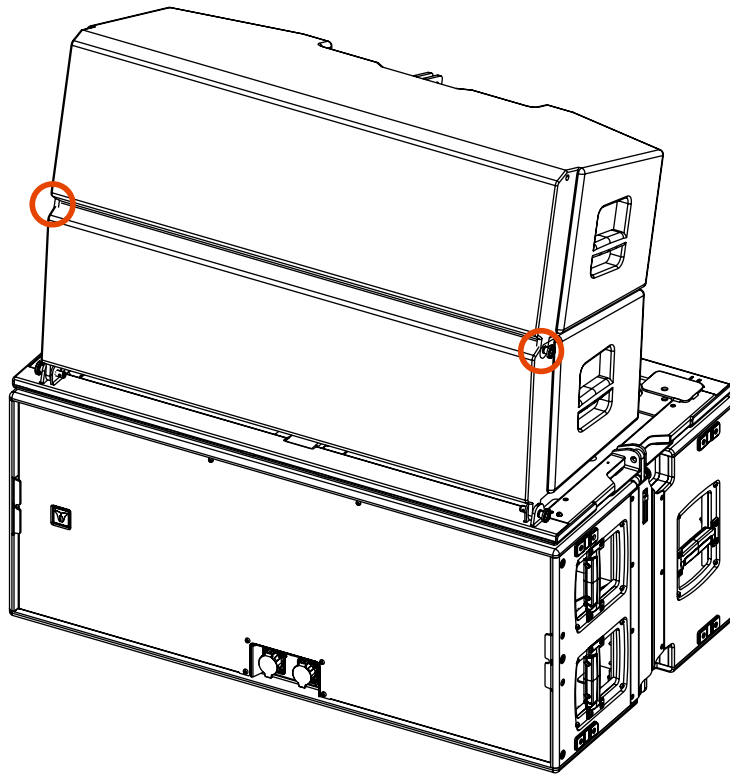
7. INSTALLATION

Lower the module and fix the rear brackets with a Quick Lock Pin **A**.

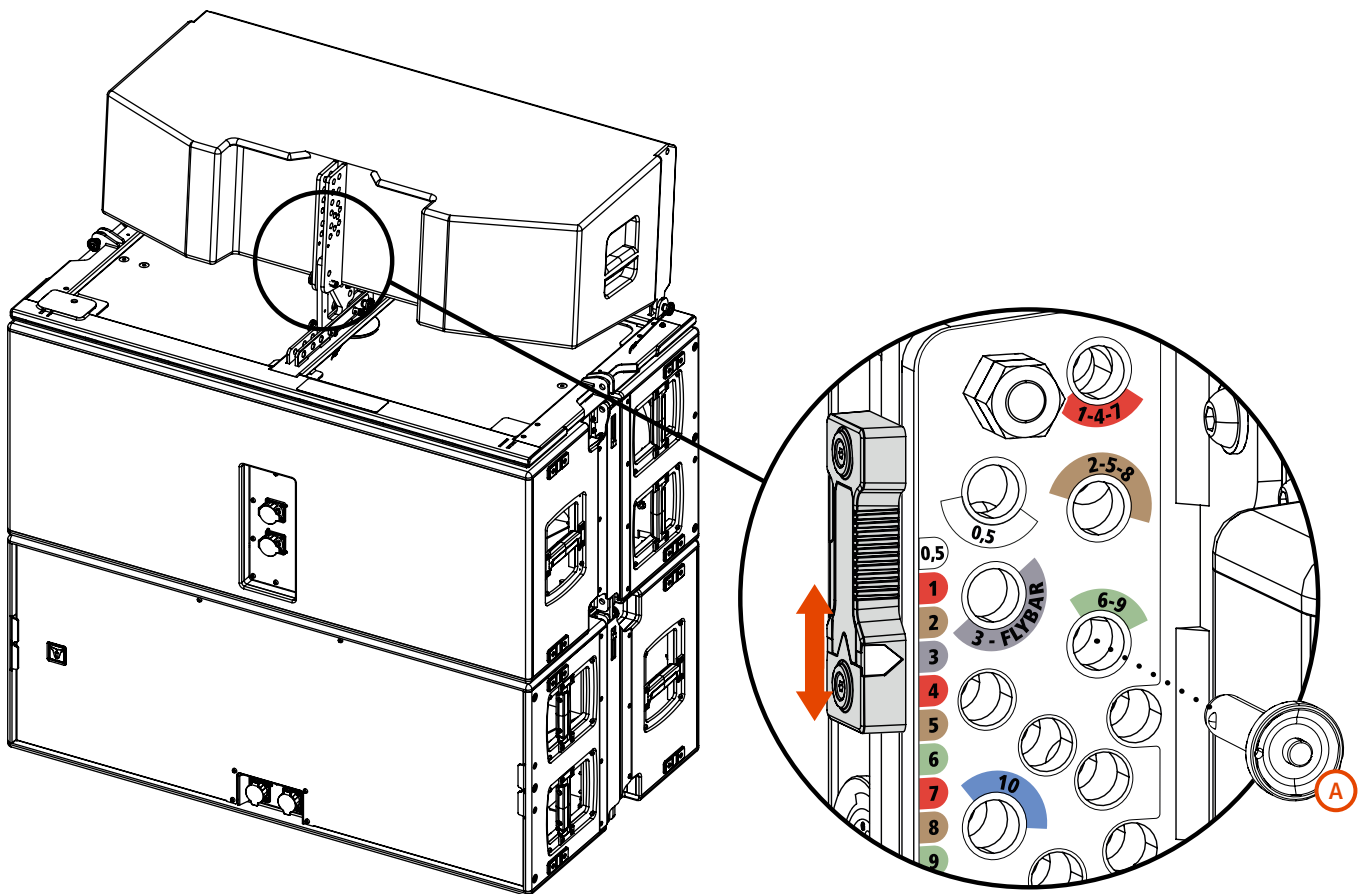


7. INSTALLATION

Place the second speaker over the first one and fix it on the front side with two Quick Lock Pins.

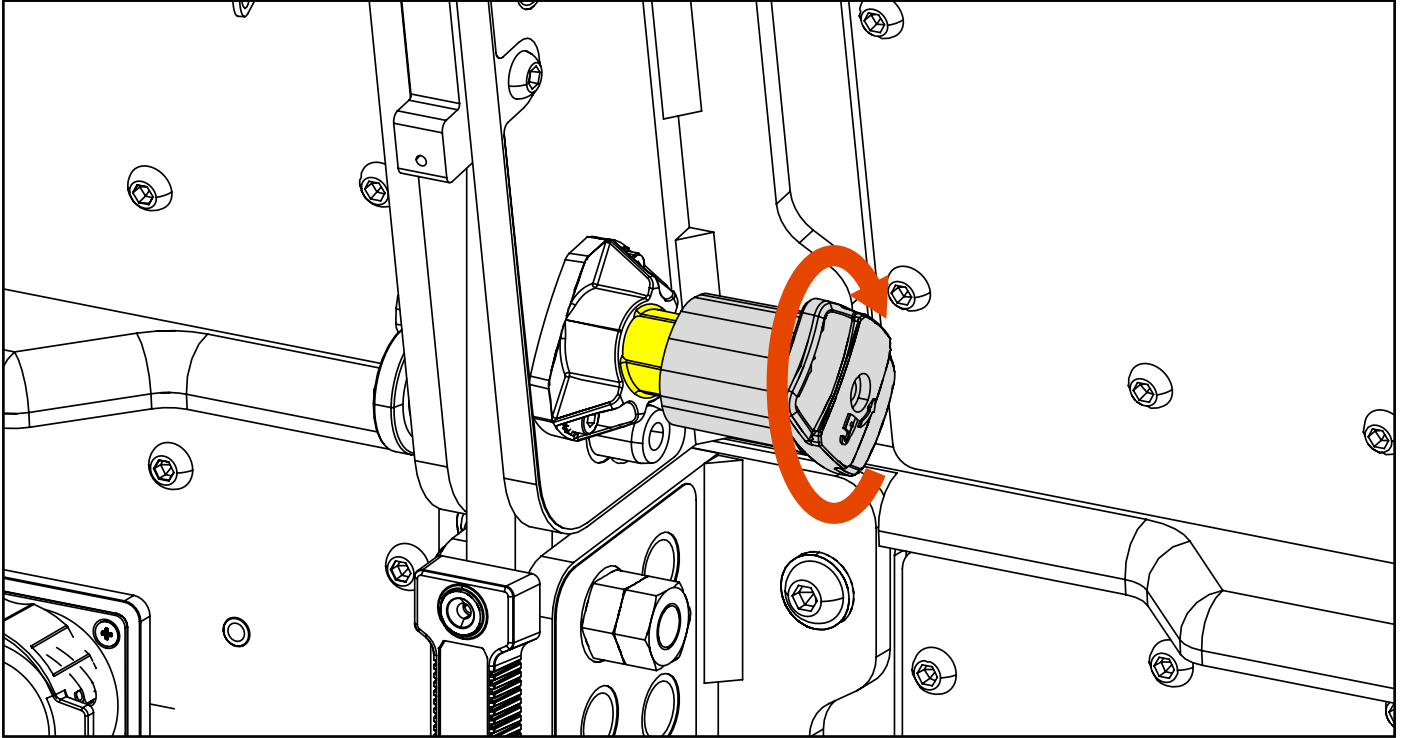


On the rear right side (tension side) of the first speaker, slide the selector to the angle provided by the simulation software and insert the Quick Lock Pin **A** on the relevant hole.

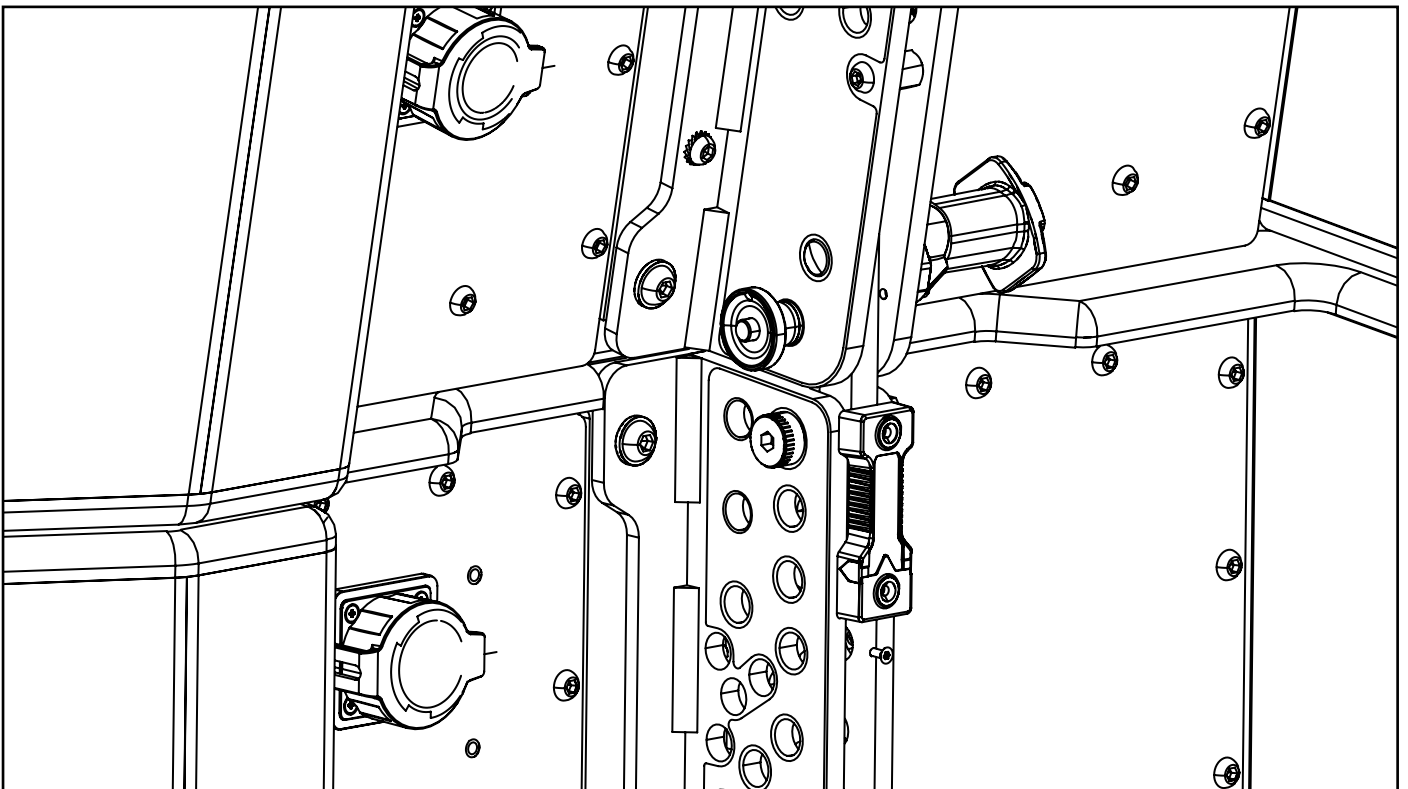


Example: hole 6° - 9°

On the rear side, rotate the Automatic Locking Pin clockwise in order to arm it.

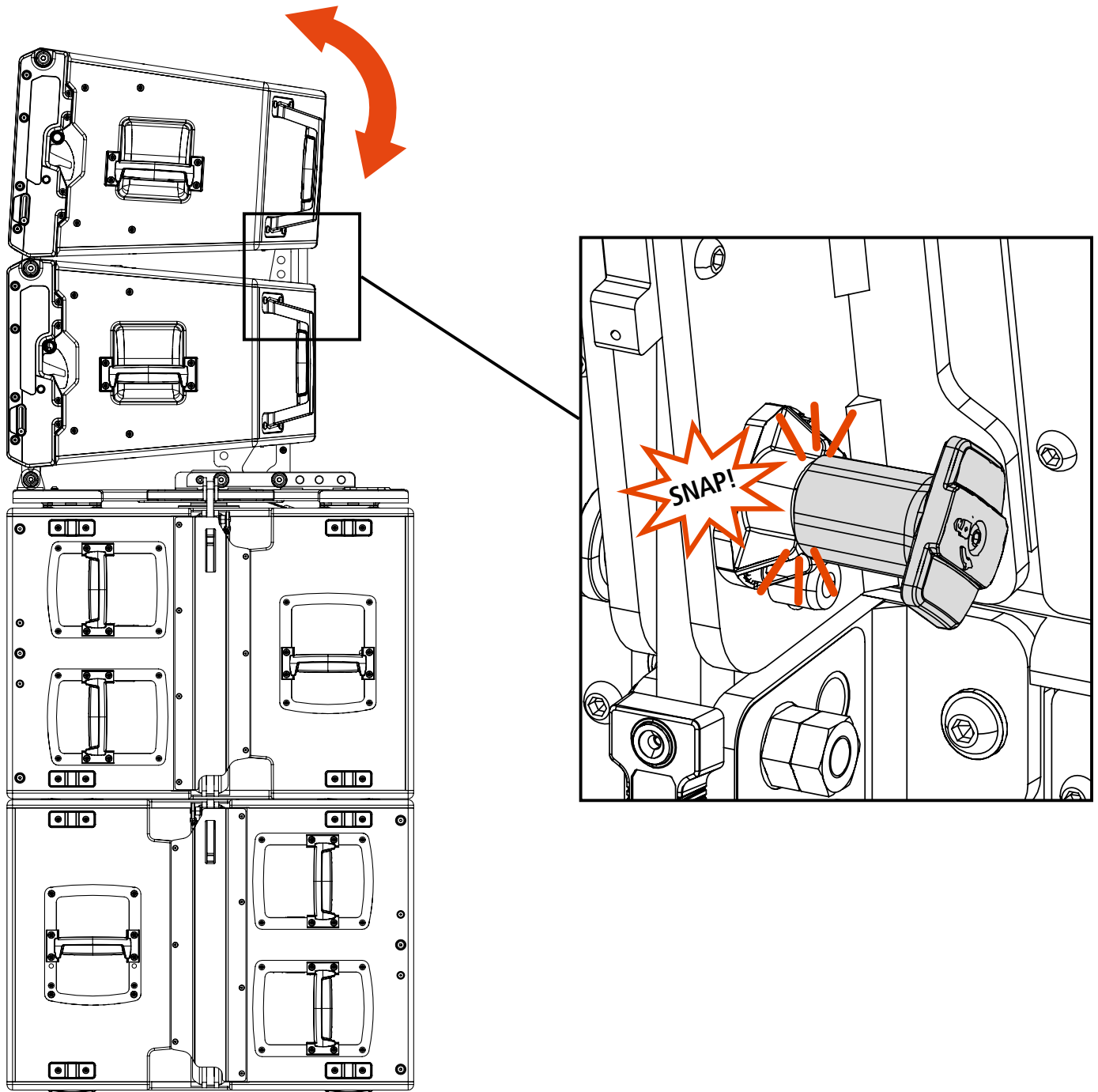


Fix the speakers by inserting a Quick Lock Pin **A** on the Link Hole.



7. INSTALLATION

Manually lift up the second speaker until the Automatic Locking Pin snaps inside the rear bracket.



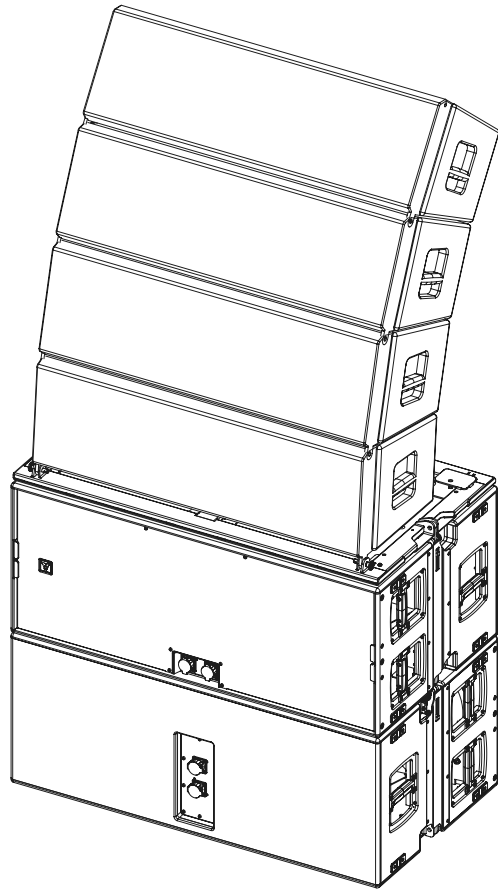
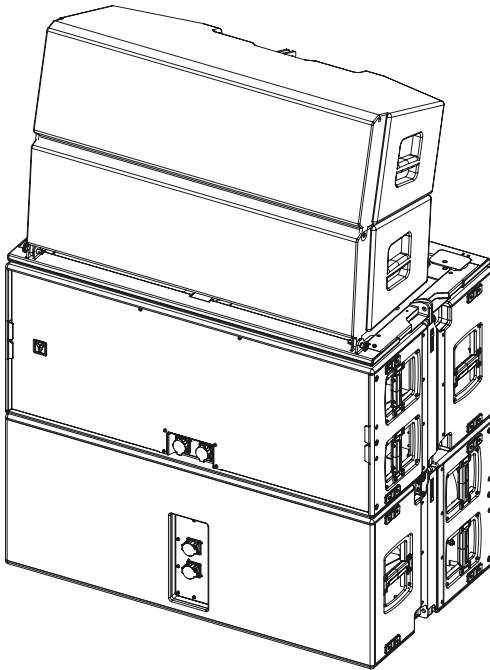
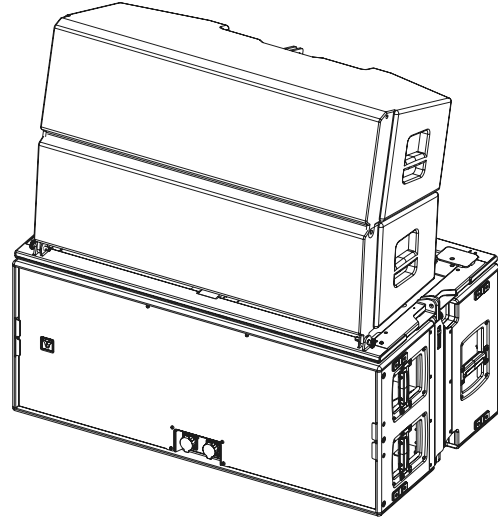
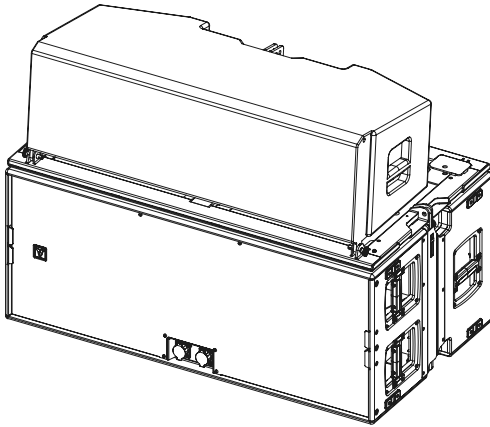
Repeat the procedure for the other speakers.



IMPORTANT NOTE: Up to 4 modules can be mounted on stacking over a single or double subwoofer GTS29.



IMPORTANT NOTE: Up to 4 modules can be mounted on stacking over a single or double subwoofer GTS29.



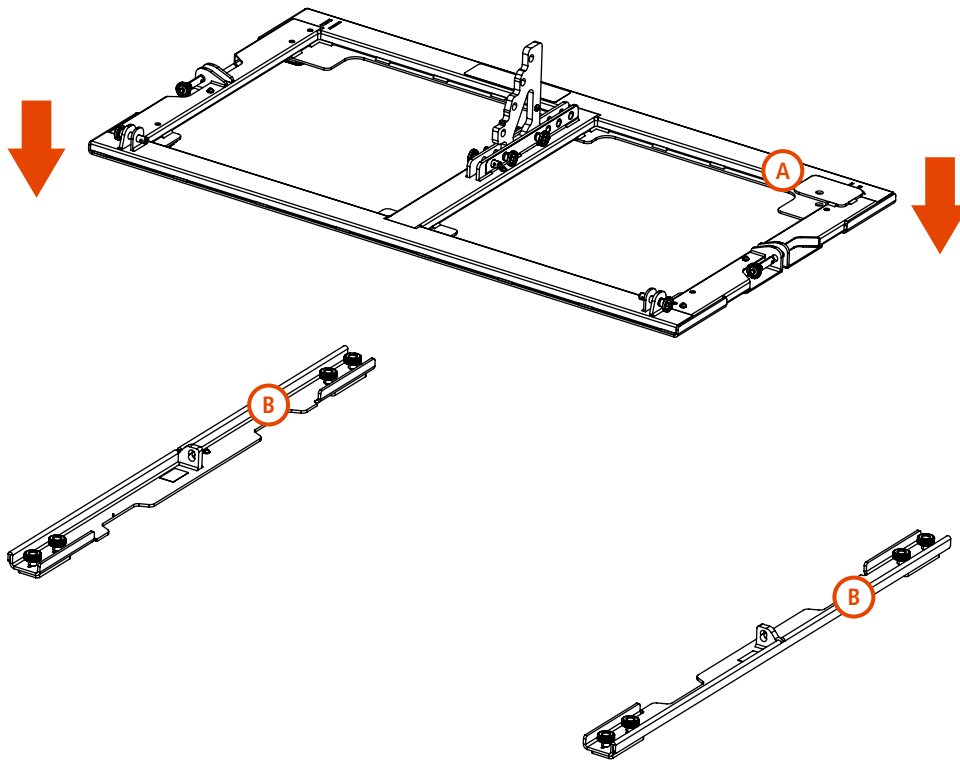
WARNING! CAUTION! The system should always be installed by qualified and experienced personnel having the technical know-how or enough specific instructions in order to prevent any danger.

7. INSTALLATION

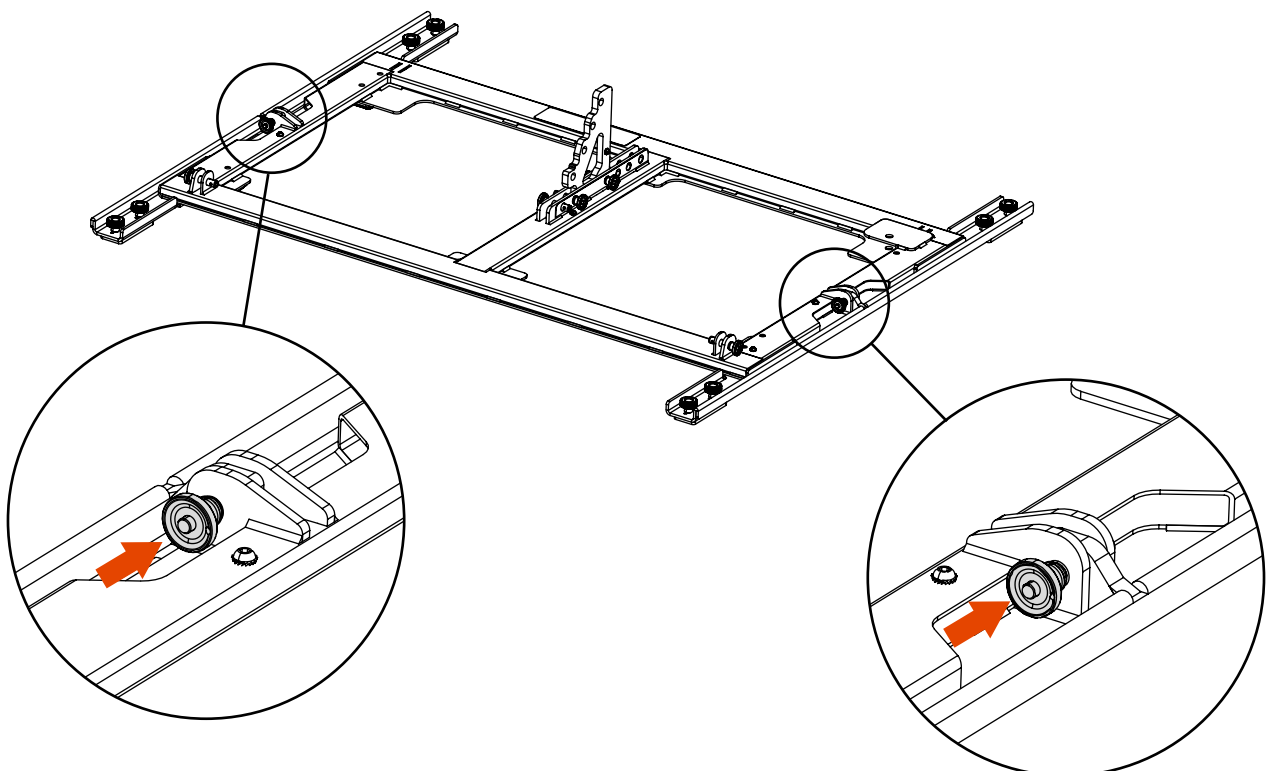
7.10 STACKING WITH STABILIZER BRACKETS

Up to 4 GTX12 modules can be stacked on the ground with the use of the **STACKING KIT STCK-KIT 001** (A) mounted on a pair of **STABILIZER BRACKETS** (B).

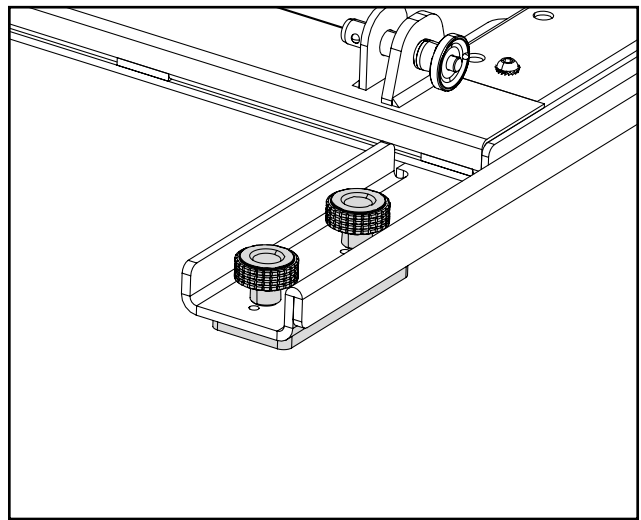
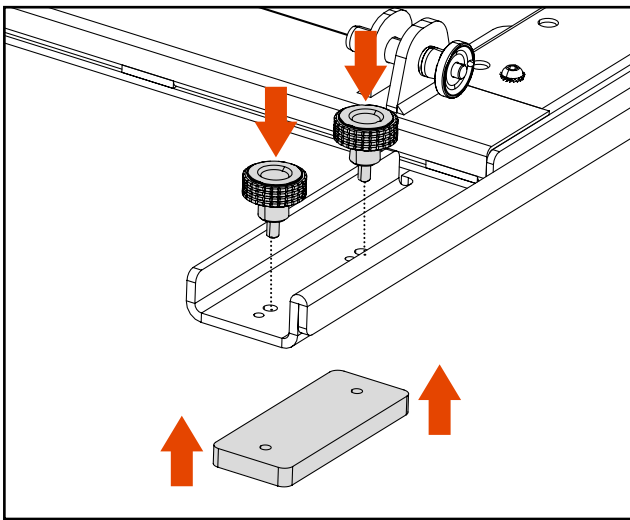
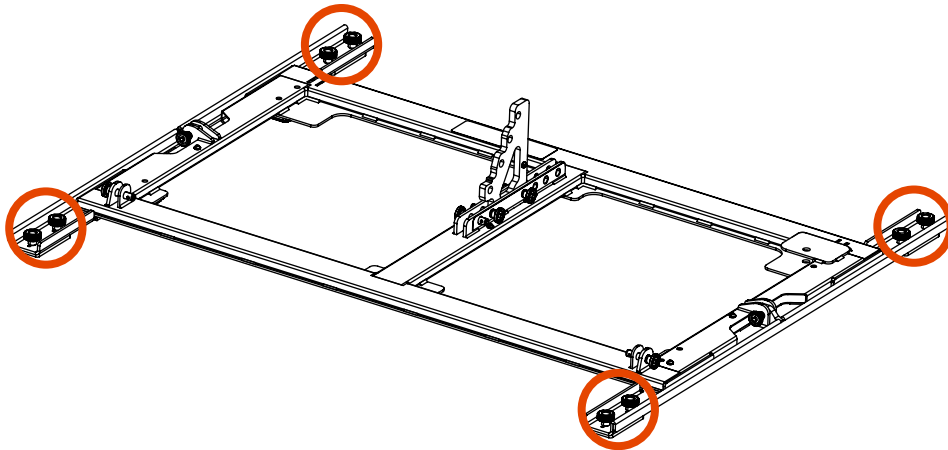
Place the **STABILIZER BRACKETS** on the ground and fix the **STACKING KIT** over them making the lateral seats match each other.



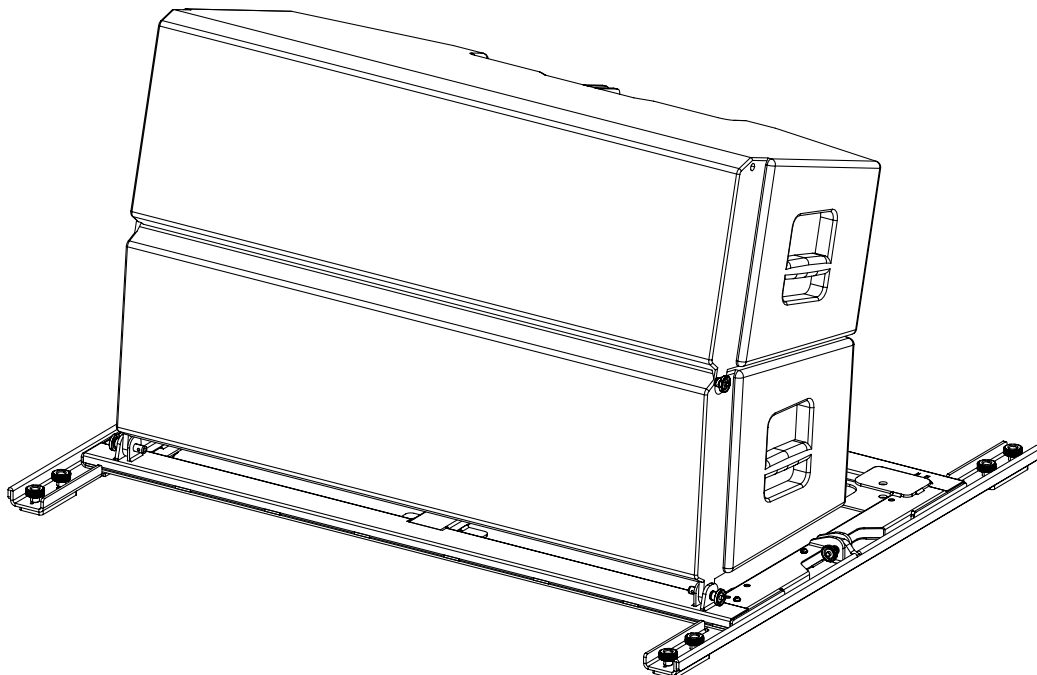
Fix the **STACKING KIT** to the **STABILIZER BRACKETS** with two Quick Lock Pins (one each side).



When using this configuration on the floor, make sure the SPACERS are correctly screwed to the **STABILIZER BASKETS** with the two knobs provided, as shown in the picture below.



Fix one or more GTX 12 over the STCKING KIT as described on chapter 7.9.







Acoustical specifications	Frequency Response (-10dB):	35 Hz ÷ 20000 Hz
	Max SPL @ 1m:	148 dB
	Horizontal coverage angle:	90°
	Vertical coverage angle:	10°
Power section	Amplification:	Quad-amp
	Nominal Impedance LF:	8 ohm
	Nominal Impedance LF2:	8 ohm
	Nominal Impedance MF:	8 ohm
	Nominal Impedance HF:	16 ohm
Transducers	Compression Driver:	2 x 1.4" neo, 3.0" v.c
	Midrange:	4 x 6.5" neo, 2.0" v.c
	Woofers:	2 x 12" neo, 3.5" v.c
Input/Output section	Input connectors:	P-COM 8POLE
	Output connectors:	P-COM 8POLE
Standard compliance	Safety agency:	CE compliant
Physical specifications	Cabinet/Case Material:	Birch plywood
	Hardware:	Array fittings
	Handles:	1 x side, 2 rear
	Grille:	Steel with clothing
	Color:	Black
Size	Height:	366 mm / 14.41 inches
	Width:	1177.5 mm / 46.36 inches
	Depth:	540.6 mm / 21.28 inches
	Weight:	64.2 kg / 141.54 lbs
Shipping information	Package Height:	605 mm / 23.82 inches
	Package Width:	1210 mm / 47.64 inches
	Package Depth:	400 mm / 15.75 inches
	Package Weight:	71.2 kg / 156.97 lbs

