

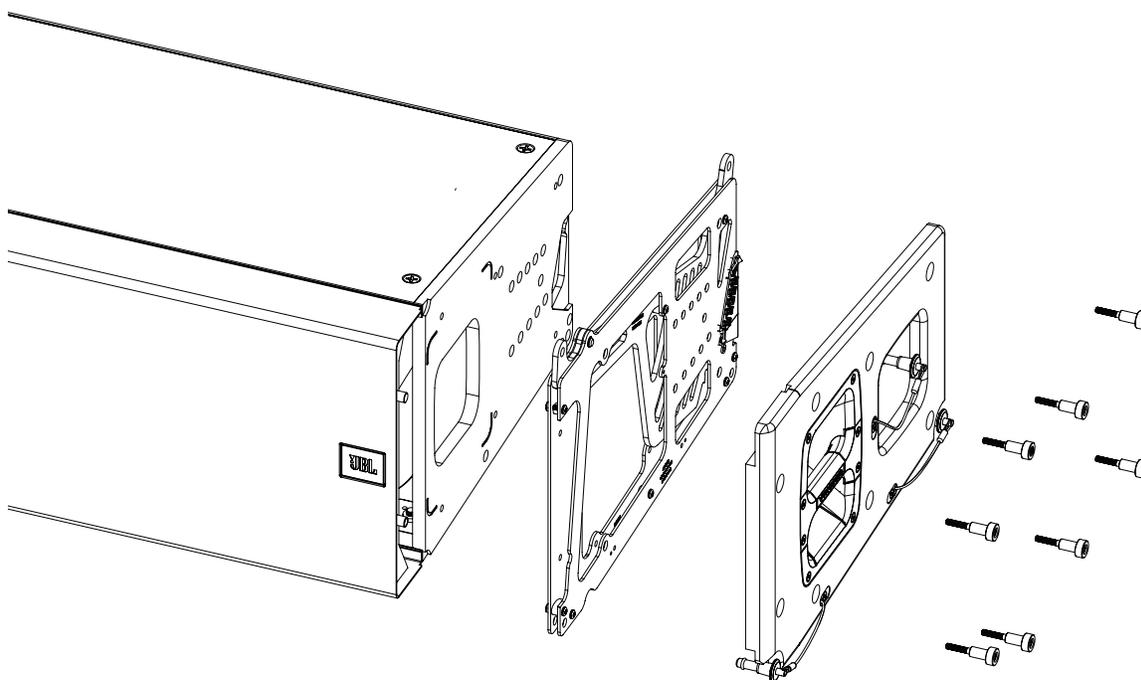
The JBL logo is displayed in a bold, black, sans-serif font within a white rectangular box. The background of the entire page is a dark grey with a faint, white line-art illustration of various audio equipment components, including speakers and mixing consoles, arranged in a perspective view.

PROFESSIONAL

SERVICE BULLETIN

SB-202301-001

VTX A12 RIGGING UPGRADE



GENERAL INFORMATION

Type: Service Bulletin

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Topic: VTX A12 Rigging Upgrade

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JBL PROFESSIONAL

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1 - SAFETY

1.1 SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not expose the product to direct rain or sea spray.
6. Clean only with a dry cloth.
7. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as if liquid has been spilled or objects have fallen into the apparatus, or if the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
8. Contact JBL Professional for advanced servicing issues.
9. **CAUTION - DO NOT PERFORM ANY SERVICING UNLESS YOU ARE QUALIFIED TO DO SO.**
10. Prolonged exposure to excessive SPL can cause hearing damage. The loudspeaker is easily capable of generating sound pressure levels (SPL) sufficient to cause permanent hearing damage to performers, production crew, and audience members. Caution should be taken to avoid prolonged exposure to SPL in excess of 90 dB.
11. Read the **System Rigging Manual** before installation and use of the product.

1.2 GENERAL HARDWARE INFORMATION

Any hardware used in an overhead suspension application must be load rated for the intended use. Generally, this type of hardware is available from rigging supply houses, industrial supply catalogs, and specialized rigging distributors. Local hardware stores do not usually stock these products. Compliant hardware will be referenced with a working load limit (WLL) and a traceability code.

1.3 INSPECTION AND MAINTENANCE

Suspension systems are comprised of mechanical devices and, as such, require regular inspection and routine maintenance to ensure proper functionality. Before suspending or pole mounting any speaker system, always inspect all components (enclosure, suspension frames or brackets, pins, eyebolts, etc.) for cracks, deformations, corrosion, or missing/loose/damaged parts that could reduce strength and safety of the array. Do not suspend or pole mount a speaker until the proper corrective action has been taken.

Installed systems should be inspected at least once a year. The inspection must include a visual survey of all corners and load-bearing surfaces for signs of cracking, water damage, delamination, or any other condition that may decrease the strength of the loudspeaker enclosure.

Accessory suspension hardware provided with or for VTX systems must be inspected for fatigue at least once a year or as required by local ordinance. The inspection must include a visual survey of the material for signs of corrosion, bending, or any other condition that may decrease the strength of the fastener. Additionally, any eyebolts must be checked for possible spin-out of the enclosure.

Refer to the manufacturer's guidelines for inspection and maintenance of all other hardware and fittings.

JBL is not responsible for the application of its products for any purpose or the misuse of this information for any purpose. Furthermore,

JBL is not responsible for the abuse of its products caused by avoiding compliance with inspection and maintenance procedures or any other abuse.

Prior to suspending the system, an expert, trained and experienced in suspending speaker systems, should inspect all parts and components.

1.4 SYMBOLS

The following symbols are used in this document:



CAUTION: This symbol gives notice of a potential risk of harm to the individual or the equipment. Instructions marked with this symbol must be strictly followed.



TIP: This symbol gives notice of helpful, relevant information about the topic.



INSTRUCTIONS: This symbol gives notice of instructions that must be followed for proper installation or use of the product.



TOOLS REQUIRED: This symbol gives notice of tools that must be used for proper installation and or use of the product.

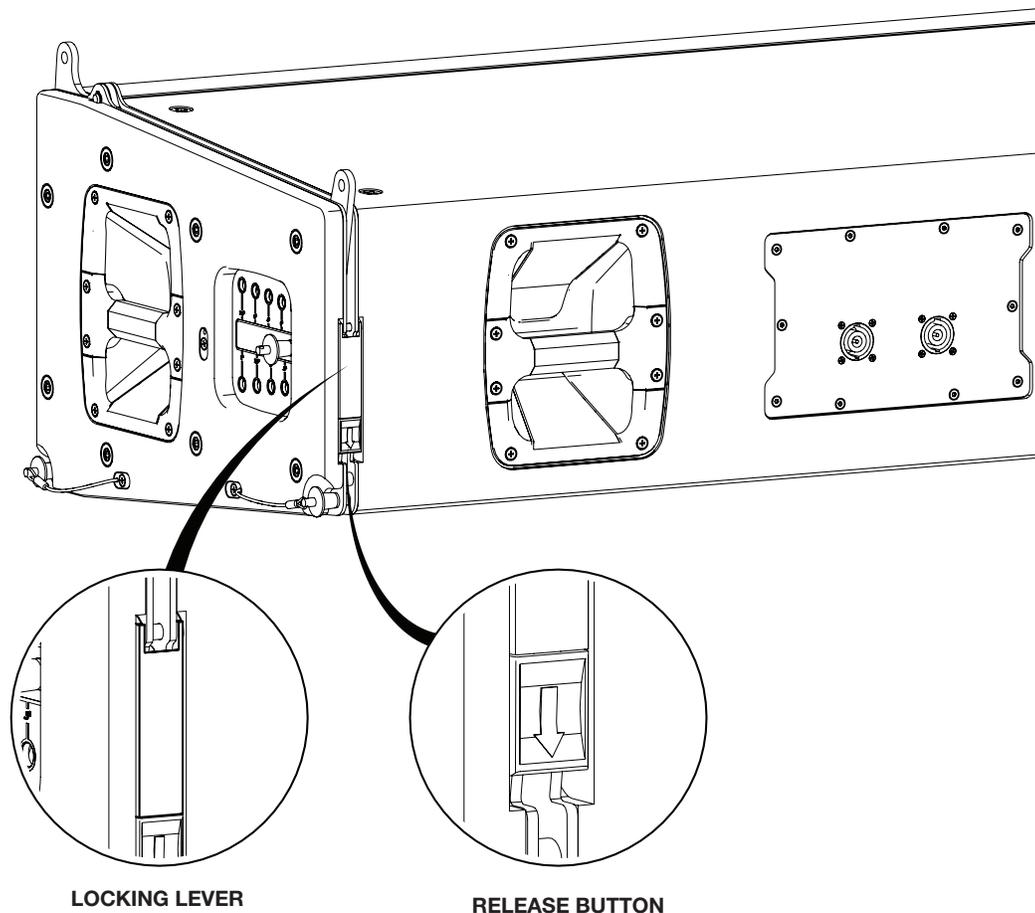
2 - INTRODUCTION

2.1 DESCRIPTION

Some VTX A12 and VTX A12W speakers might be affected by a potential rigging issue related to the locking mechanism jamming when set to the 2.5-degree position. The purpose of this document is to provide notification of this potential problem and describe the steps necessary to correct it. New A12 rigging frames developed to eliminate this issue are available for users to order as replacements for frames exhibiting the problem described in this bulletin. Any VTX A12 cabinets affected by this condition are covered under warranty. Refer to the **Warranty** chapter for more information on how to obtain the parts. Systems developed after the A12, such as the A8 and A6, are not impacted by this specific issue.

2.2 SYMPTOMS

The VTX A12 rigging includes an **Angle Lock** mechanism that automatically engages when cabinets are suspended and reach their selected angle positions. The Angle Lock mechanism consists of two main parts: the red **Locking Lever** and the black **Lock Release** button. In situations where speakers set to the **2.5 degree position** are bearing loads exceeding **400 kg (882 lbs)**, some A12 units can jam, creating a condition where pressing the **Lock Release** button does not release the **Locking Lever**, and the angle selection pin cannot be removed. These circumstances occur most commonly with cabinets at the very top of a long array.



2.3 ANALYSIS OF PROBLEM

The A12 angle lock is a ratchet mechanism consisting of a set of teeth and pins. Depending on the angle selected by the user, a set of pins engages with the proper teeth to lock the angle. Due to manufacturing tolerances, the dimensions of some A12 rigging plates can vary to the point that an incorrect set of pins can engage when the load exceeds a certain threshold. This results in a condition where the mechanism jams and cannot be opened. The range of these dimensional variances are in the sub-millimeter range and cannot be seen by eye or easily measured without sophisticated equipment.

2.4 CORRECTIVE ACTION

Several improvements have been implemented to eliminate this issue. Manufacturing tolerances are now tightly controlled, and parts are thoroughly inspected to ensure that out of spec parts are rejected at the time of manufacturing. More importantly, **a geometry change has been implemented** to the A12 inner rigging arm to complete eliminate the possibility of this condition.

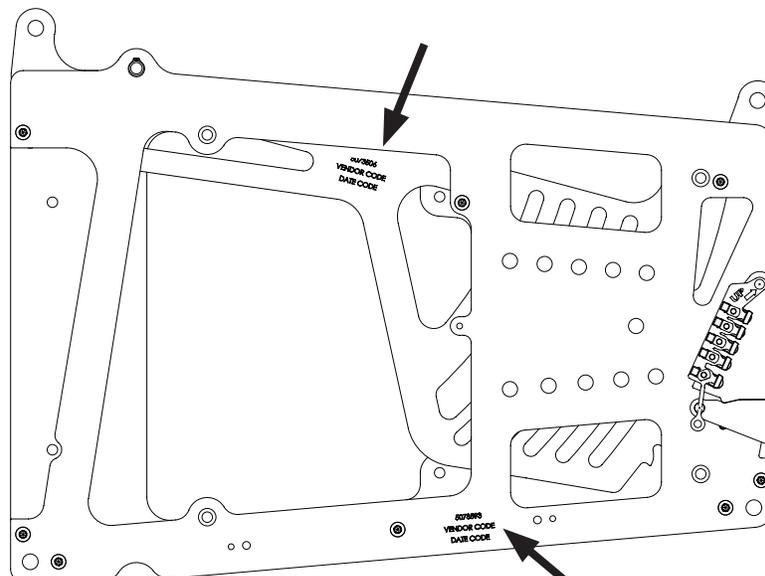
2.5 COMPATIBILITY

All improvements outlined in this documents are purely manufacturing-related, and all A12 speakers are fully compatible with each other, regardless of which generation of rigging they use.

2.6 PART IDENTIFICATION

The generation of rigging frames on a cabinet can be identified using the manufacturing codes that are laser engraved onto the rigging plates. Below are the new and old part numbers. A12 rigging frames not bearing the new part numbers are susceptible to (but not necessarily affected by) this problem and are eligible for an upgrade. All three part numbers must be of the same generation. **The part numbers listed below are for identification purposes only and cannot be used for ordering. Use the part numbers listed in Section 4 to order rigging frames.**

DESCRIPTION	OLD PART NUMBERS	NEW PART NUMBERS
VTX A12 rigging, inner moving arm	5073506	5137678-00
VTX A12 rigging, outer plate	5078593	5137679-00
VTX A12 rigging, inner plate	5078594	5137680-00



2.7 SAFETY

There are **no safety concerns** related to this issue since the locking mechanism is not a load-bearing component, and arrays are safe even when the locking lever is open (unlocked position) during use. This problem is purely functional, and it is highly recommended that **only cabinets exhibiting the symptoms of the problem receive the upgrade**, in order to avoid incurring unnecessary risk.

2.8 SERIAL NUMBER RANGE

VTX A12 and VTX A12W cabinets manufactured prior to the serial numbers below **could (but are not automatically)** be affected by this issue.

SKU	DESCRIPTION	SERIAL NUMBER
VTX A12	Dual 12-inch line array speaker, 3-Way, 90-degree	P2037-20000
VTX A12W	Dual 12-inch line array speaker, 3-Way, 120-degree	P3016-20000

3 - WARRANTY

Speakers bearing serial numbers below the specified range, are covered under warranty. United States dealers, authorized service centers, and international distributors are eligible to place orders for service parts. Orders shall be placed using the part numbers given in this document. Harman Professional will charge for the replacement parts, then credit the amount back once the original parts have been returned to Harman Professional.

3.1 ORDERING INFORMATION

Companies within the United States should contact Harman Professional directly using the contact information below:

HARMAN Professional Solutions

US Customer Service

+1 (844) 776-4899

HProServiceUSA@harman.com

International distributors shall contact Harman Professional directly by reaching out to their regional Sales Operations team to purchase parts and initiate credit returns.

3.2 WARRANTY PROCESS

To receive credit for the new parts, the following conditions must be met:

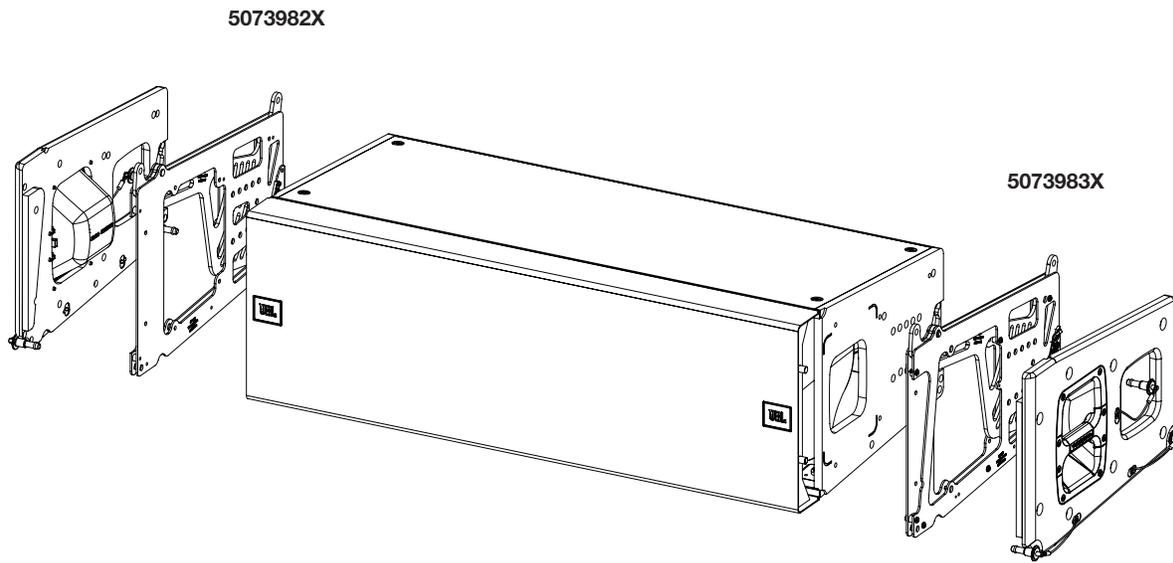
- Provide Harman Professional with the serial numbers of the A12 cabinets.
- Provide proof of purchase.
- Return the original rigging frames back to Harman Professional.

Once these conditions have been met, Harman Professional will issue credit for the full amount of the parts.

4 - PARTS

4.1 REQUIRED PARTS

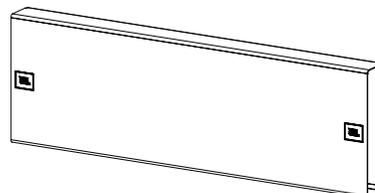
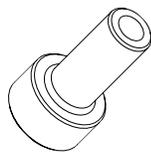
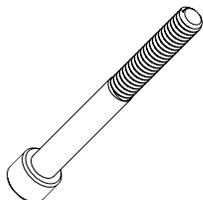
PART #	DESCRIPTION	NOTES
5073982X	Complete suspension frame for VTX A12, Left	
5073983X	Complete suspension frame for VTX A12, Right	



4.1 OTHER PARTS

The parts below might be necessary, depending on the condition of the original parts. If a part is lost or damaged during the upgrade process, use the part numbers below to obtain replacements.

PART #	DESCRIPTION	NOTES
5080754	Rigging frame screw: M6 x 50 mm, socket head, partial thread, black	(16) per speaker
5073648	Rigging screw aluminum bushing	(16) per speaker
5075135	VTX A12/VTX A12W complete grille, includes logos	



5 - TOOLS AND SUPPLIES

5.1 TOOLS

TYPE	DESCRIPTION	NOTES
Torque Wrench	Calibrated torque wrench, Recommended range: 1-9 Nm (9-80 in-lb)	
Allen key/bit	5 mm Allen key/bit for hexagon socket head screws	

5.2 GENERAL SUPPLIES

TYPE	DESCRIPTION	NOTES
Threadlocker	Non-permanent medium strength threadlocker	Example: Loctite 37087 Blue 248

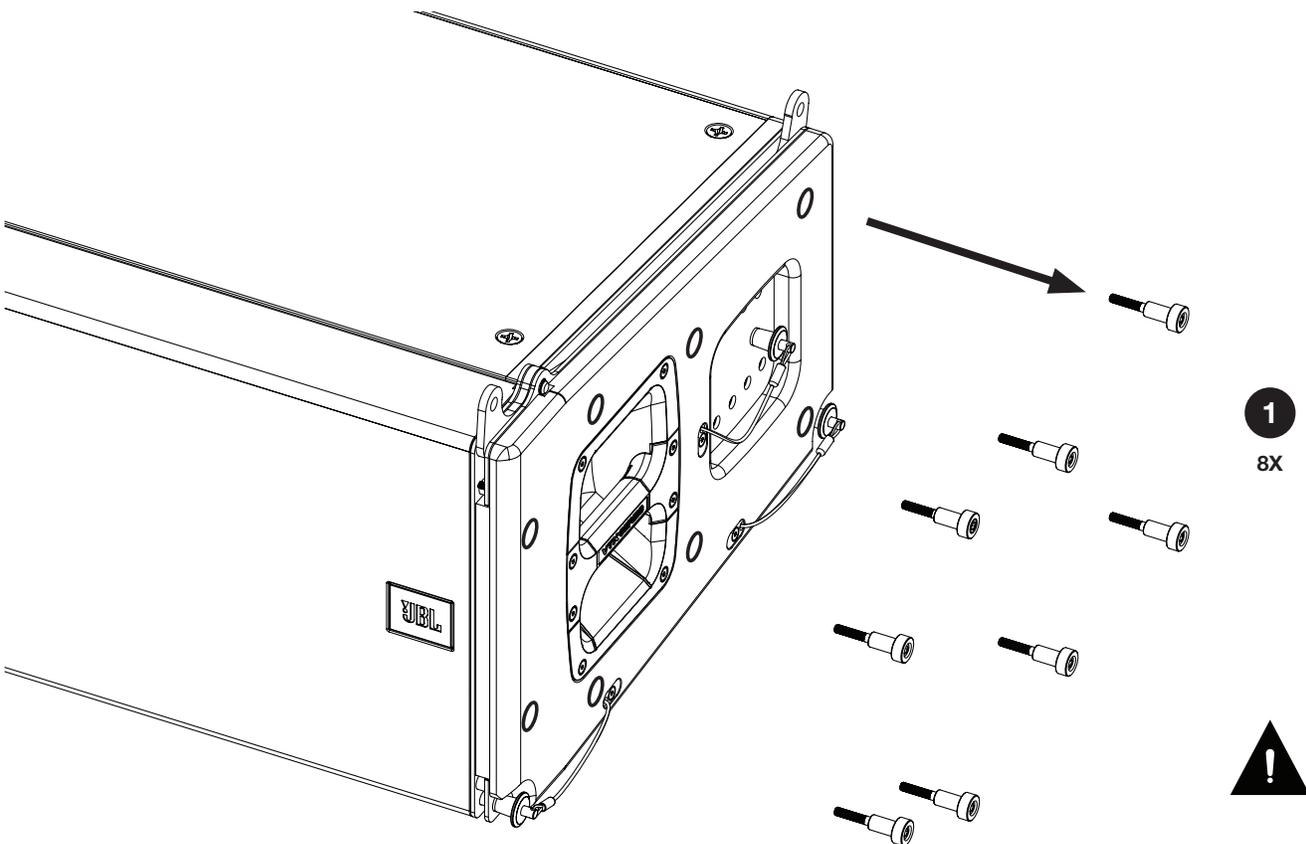
6 - UPGRADE PROCESS

6.1 REMOVING THE RIGGING FRAMES

Follow the steps below to remove the existing rigging frames from an A12 cabinet. It is recommended to complete one side at a time. Cabinets should be removed from the VTX A12 VT Vertical Transporters and placed on a flat surface so that the rigging is not under load. The screws holding the quick release pins and handles should remain attached to the side panel.

STEPS:

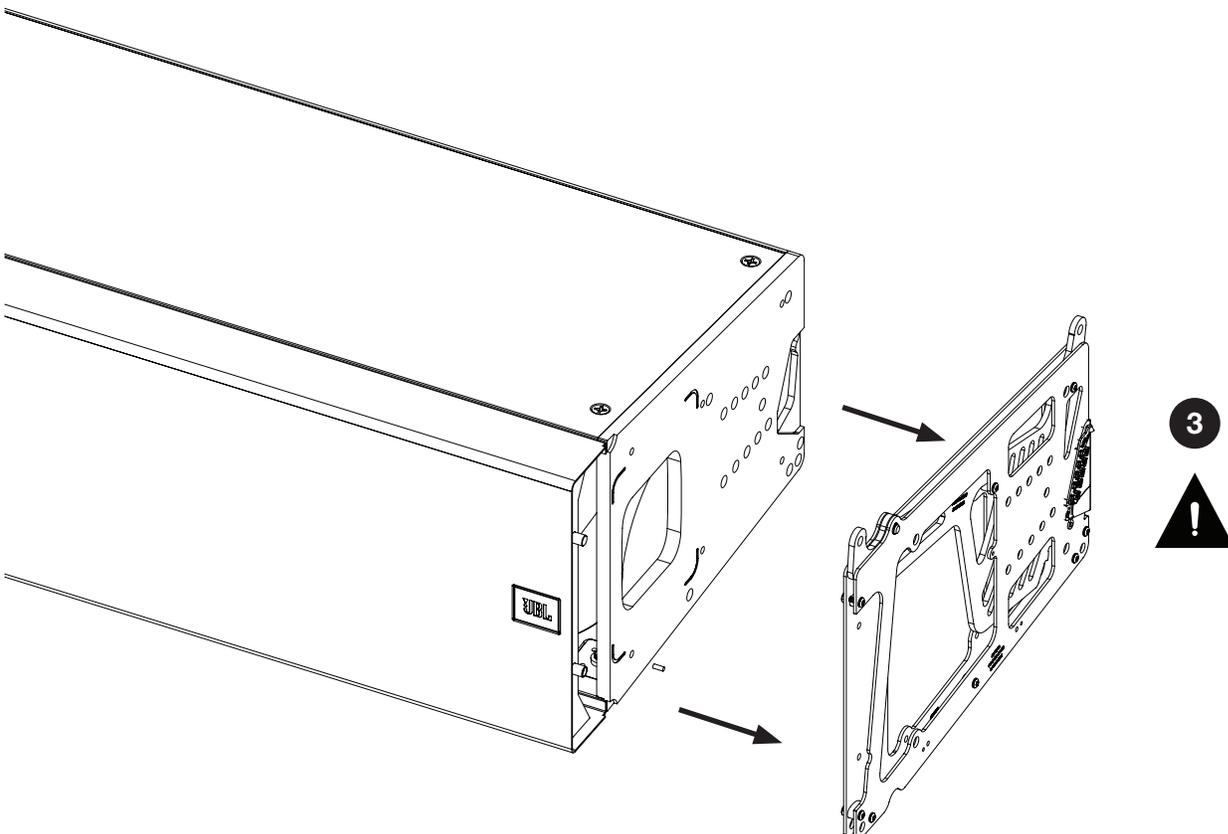
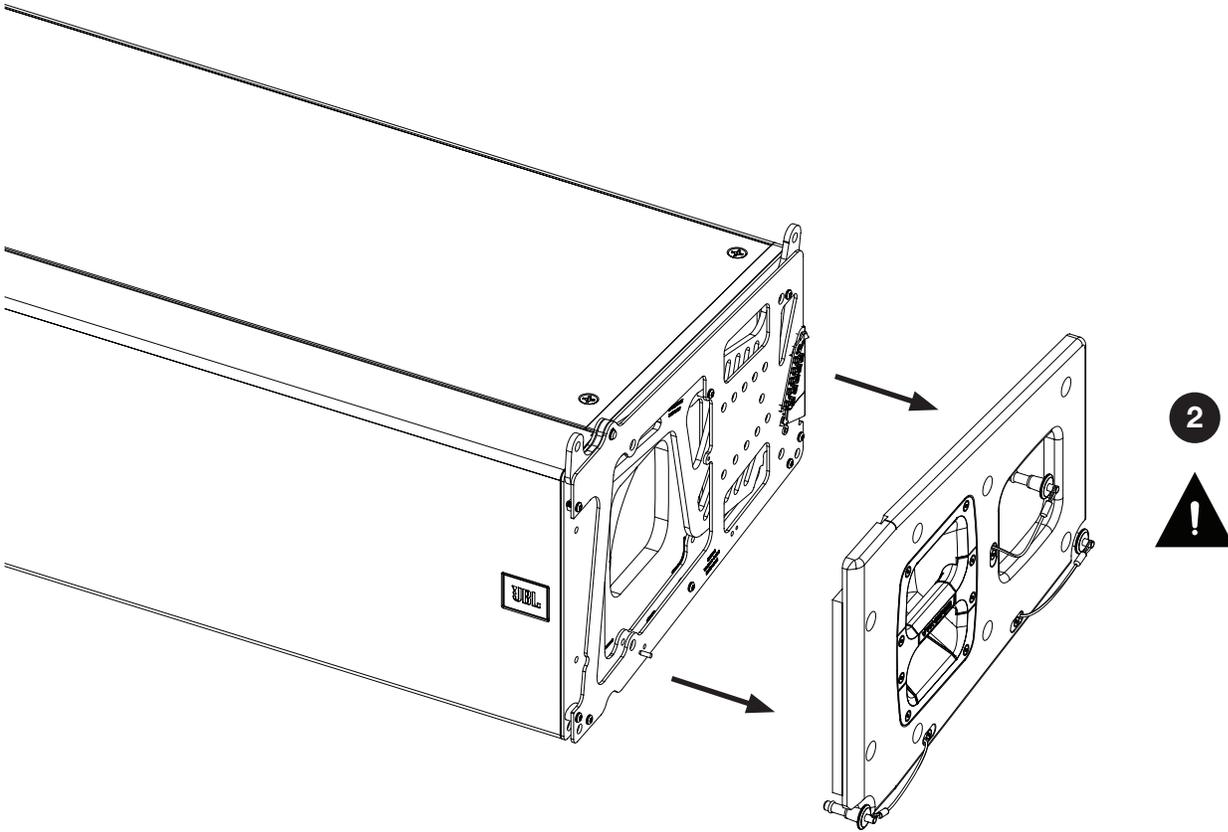
- 1 Use a 5 mm Allen key to remove all eight screws holding the side panel and rigging.
- 2 Disengage all three quick release pins and remove the side panel.
- 3 Remove the rigging frame from the A12 cabinet.



TIP: The eight screws holding the side panel and rigging frame are coated with threadlocker. Use caution not to damage the screws during the process. Avoid using power tools.



CAUTION: Use caution when removing the screws as the side panel and rigging frame are free to move once all eight screws have been removed. Hold the side panel using the handle during this process.



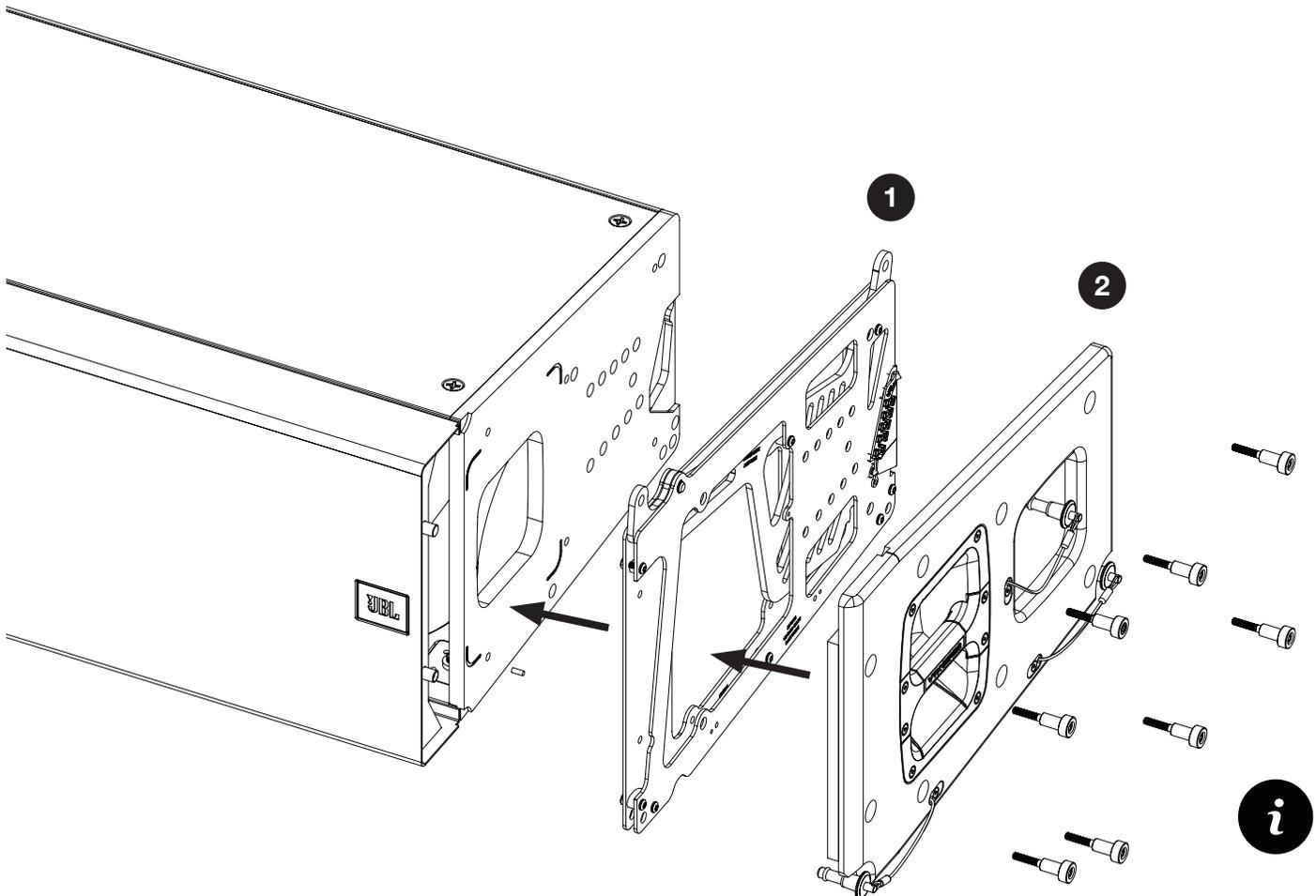
CAUTION: Use caution when removing the screws as the side panel and rigging frame is free to move once all eight screws have been removed. Hold the side panel using the handle during this process.

6.2 INSTALLING THE NEW RIGGING FRAMES

Follow the steps below to install new rigging frames onto an A12 cabinet. It is recommended to complete one side at a time.

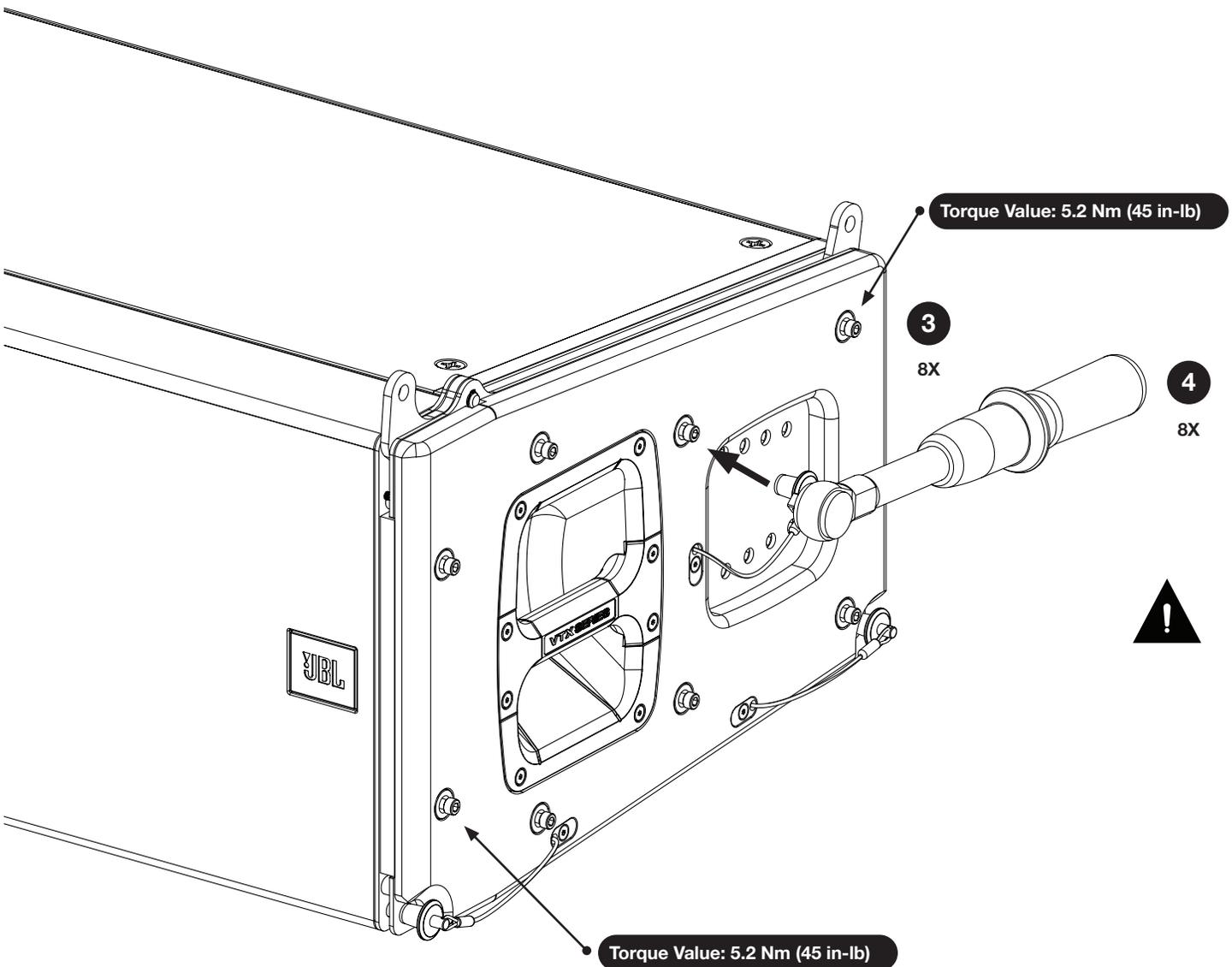
STEPS:

- 1 Align the rigging frame with the A12 cabinet.
- 2 Place the side panel over the rigging frame and align the two parts.
- 3 Loosely install all eight screws. Don't tighten the screws until all screws are in place and all parts are aligned.
- 4 Set screws to the correct torque value using a torque wrench.
- 5 Once all components are fixed in place, test the mechanism.



TIP: When installing the screws, take care not to damage the threads, especially when reusing the original screws, which are already coated with threadlocker. Avoid using power tools for this step.

A torque value of **5.2 Nm (45 in-lb)** must be applied to all eight screws holding the rigging. Use a calibrated torque wrench and check values twice. Test the rigging mechanism before use.



CAUTION: Apply non-permanent, medium strength threadlocker to all screws before installation. Any damaged screws should be replaced and not reused. Apply specified torque value.



TIP: Brand new factory M6 screws (#5080754) purchased from JBL Professional come precoated with threadlocker. In this case, there is no need to apply additional threadlocker.

7- CONTACT INFORMATION

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