



## CONVEYOR SYSTEM WLX

### Assembly manual

<b>1</b>	<b>Safety</b>	<b>1</b>
<b>2</b>	<b>Working with stainless steel</b>	<b>5</b>
2.1	General	5
2.2	Cuts	5
2.3	On site cuts	6
2.4	Drilling	6
2.5	Assembly	6
<b>3</b>	<b>Introduction</b>	<b>9</b>
3.1	Assembly information	9
3.2	Scope	9
3.3	Audience	9
3.4	Prerequisites	9
<b>4</b>	<b>Assembly WLX</b>	<b>11</b>
4.1	Support modules WLUFx S01/S04	12
4.2	Connect two conveyor beams	15
4.3	Connect a Bend, End drive or Idler end unit to a conveyor beam	21
4.4	Connect a Bend, End drive or Idler end unit to each other	25
4.5	Connecting Belt tensioner unit	29
4.6	End drive unit Easy Clean, radius flush grid	37
4.7	Plain bends WLBPx 60° and 90° 374/526/678	41
4.8	Mounting Slide rail	49
4.9	Mounting Modular belt	61
4.10	Assembly modular belt	69
4.11	Disassembly Modular belt	73
4.12	Belt tensioner tool	77
4.13	Mounting Guide rails	79



# 1 Safety

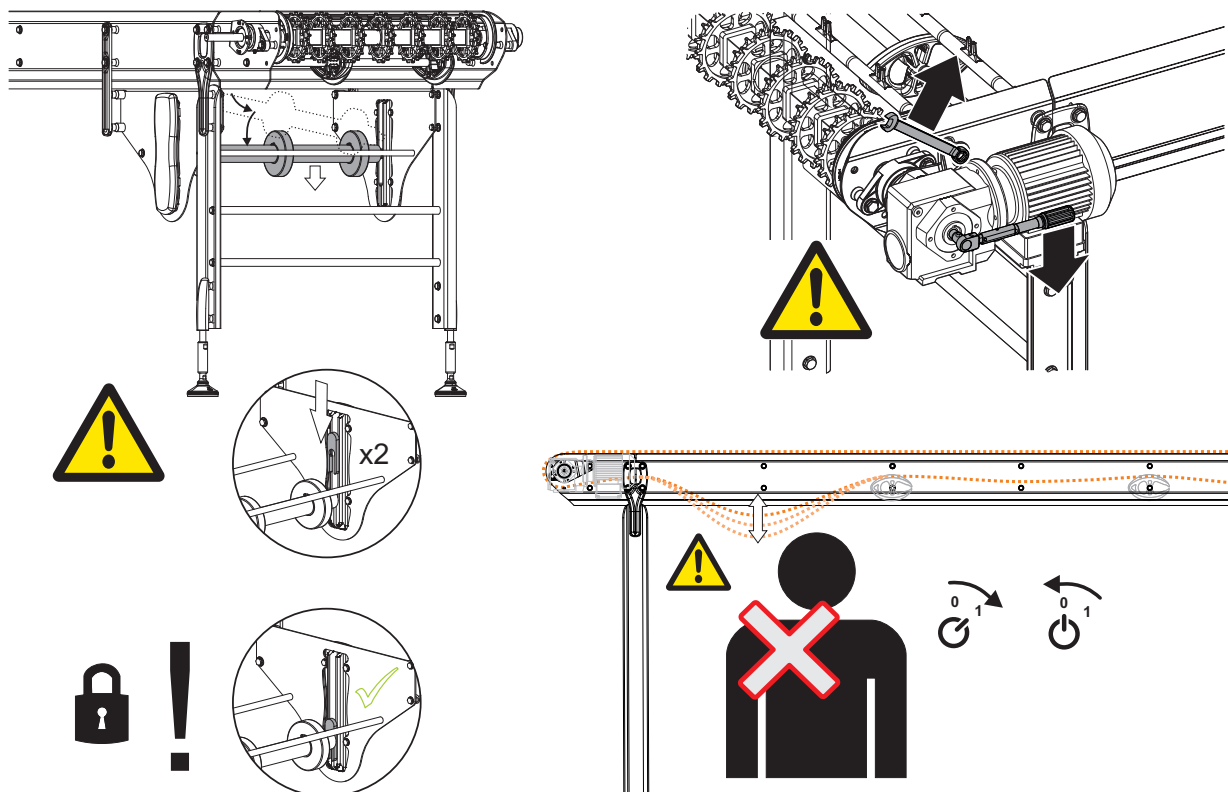
The machine has been designed in such a way, that it can be used and maintained in a safe way. This holds for the application, the circumstances and the instructions described in the manual. Any person working with or on this machine should study the manual and follow the instructions. It is the responsibility of the employer to make sure that the employee is familiar with and follows these instructions.

The company or the country in which the machine is used may require extra safety measures. This particularly applies to the working conditions. This manual does not describe how these are to be complied with. In case of doubt, consult your government or safety officer!

## System information

The project number and/or general drawing number shall always be specified when communicating with FlexLink with respect to the machine.

Before handling the system, check safety around these areas.





## Important safety conditions

At the moment that the machine is going to be operated by a user, the following safety conditions must be met:

- Make sure that children or animals have no access to the machine and its surrounding area by, for example, screening off the machine with a fence.
- Only persons who have read and understood the operating instructions are allowed to operate, maintain and clean the machine.
- Do not reach into the machine while it is running or on. Even if the machine is not running, it can be 'on', which means start operating automatically.
- Safety provisions, such as side plating, bottom plating, emergency stops and detectors may not be removed or deactivated while the machine is running.
- Provide good ambient lighting to enable the operator to work well and orderly with the machine.



### General

- Incorrect use of the equipment can cause personal injury.
- Do not stand or climb on the equipment.
- Do not wear clothing or other articles that can fasten in the machine.
- Follow the instructions in this user manual when transporting the machine. FlexLink AB must approve all modifications or changes to this machine.
- Only use recommended spare parts.
- Only authorised personnel may open electrical units.
- FlexLink is not responsible for damage if service on the equipment is not performed in accordance with this maintenance manual.



### Maintenance and Service technicians

Service technicians must have:

- Sufficient knowledge for reading technical information
- Ability to comprehend technical drawings
- Basic knowledge of mechanics
- Sufficient knowledge in the use of hand tools
- Skilled (EN /ISO 12100:100)



### Electricians

Electricians must have:

- Experience from similar installations
- Sufficient knowledge to work from drawings and wiring diagrams
- Knowledge of local safety regulations for electrical power and automation
- Skilled (EN /ISO 12100:100)

To avoid risks, only experienced personnel with technical knowledge and experience may perform repair work on the machine's electronics components.



### Operators

To correctly use the equipment, operators must have appropriate training and/or experience.



## 2 Working with stainless steel

### 2.1 General

- Important not to mix tools for stainless steel with tools used for aluminum and mild steel
- Good saw and tools for cutting is a must
- If you know how to cut you will save a lot of time
- Use sharp tools
- Pre-cuts is preferred
- Drilling is tough and right drills is a must
- If you buy pre-cut the holes will be punched by PC
- Components are heavier

### 2.2 Cuts

- Need a good saw that is only used for stainless steel
- Contamination from mild steel might require passivation
- Keep it clean and make sure that you do not damage the surface when you clamp the beam
- Always use a sharp blade
- Possible to send it for sharpening at least 2-3 times
- Change before is worn out
- Done right you will not build up any heat and there will be no discoloring of the beam

## 2.3 On site cuts

- Need a good portable saw that is only used for stainless steel
- Should have 2-3 blades for stainless steel
- Press gently with constant speed

## 2.4 Drilling

- Do all drilling in a workshop with a rigid drilling machine with clamps
- Contamination from mild steel might require passivation
- Keep it clean and make sure that you do not damage the surface when you clamp the beam
- Run at slow speed
- Use the right type of drills, we have added drills in the catalogue that works very well. See section "Tools for conveyor beams" in X85X product catalogue section.
- Hand held machines are very difficult to use with good result
- There are portable machines available with good framework that can run slow speed and possible to apply enough pressure
- Check with customer if they have a workshop that can be used

## 2.5 Assembly

- One toolbox for stainless steel
- Do not use the tools for anything else than stainless steel
- Select tool drills for stainless steel
- Separate material and work areas
- Do not store stainless steel material in same racks as mild steel and aluminum

- Do not use same work benches for stainless steel as for mild steel and aluminum
- Keep your work surface clean, the surfaces are very sensitive to scratches and chips cause very bad scratches
- Use wax on the screws, especially if they are tightened and un-tightened several times
- Stainless steel is a less forgiving material and the threads will be damaged
- Stainless steel items are heavier, sometimes it is better to use two persons
- Use gloves to protect the hands from sharp edges





## 3 Introduction

### 3.1 Assembly information



### 3.2 Scope

This information is part of an information collection describing the implementation of the *WLX system* like assembling of hardware, verifying safety equipment etc.

This information can therefore differ from your actual system.

### 3.3 Audience

This information is mainly written for application engineers and installation personnel involved in the installation. The contents may also be of use in training courses.

It is assumed that the application engineers implementing the FlexLink conveyor system have attended the FlexLink Basic training.

### 3.4 Prerequisites

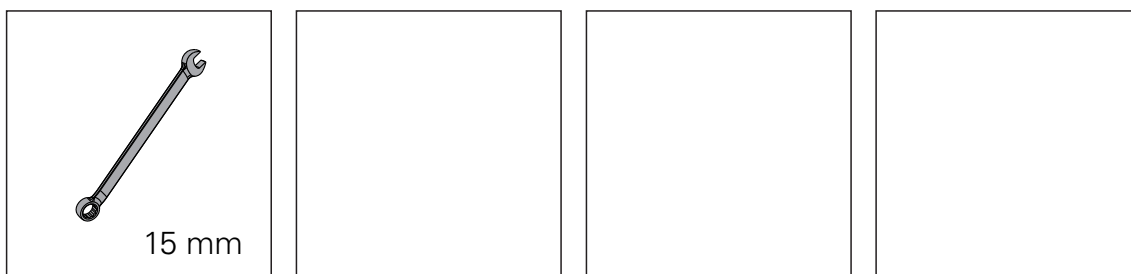
Relevant tools for each step are described in the respective sections.



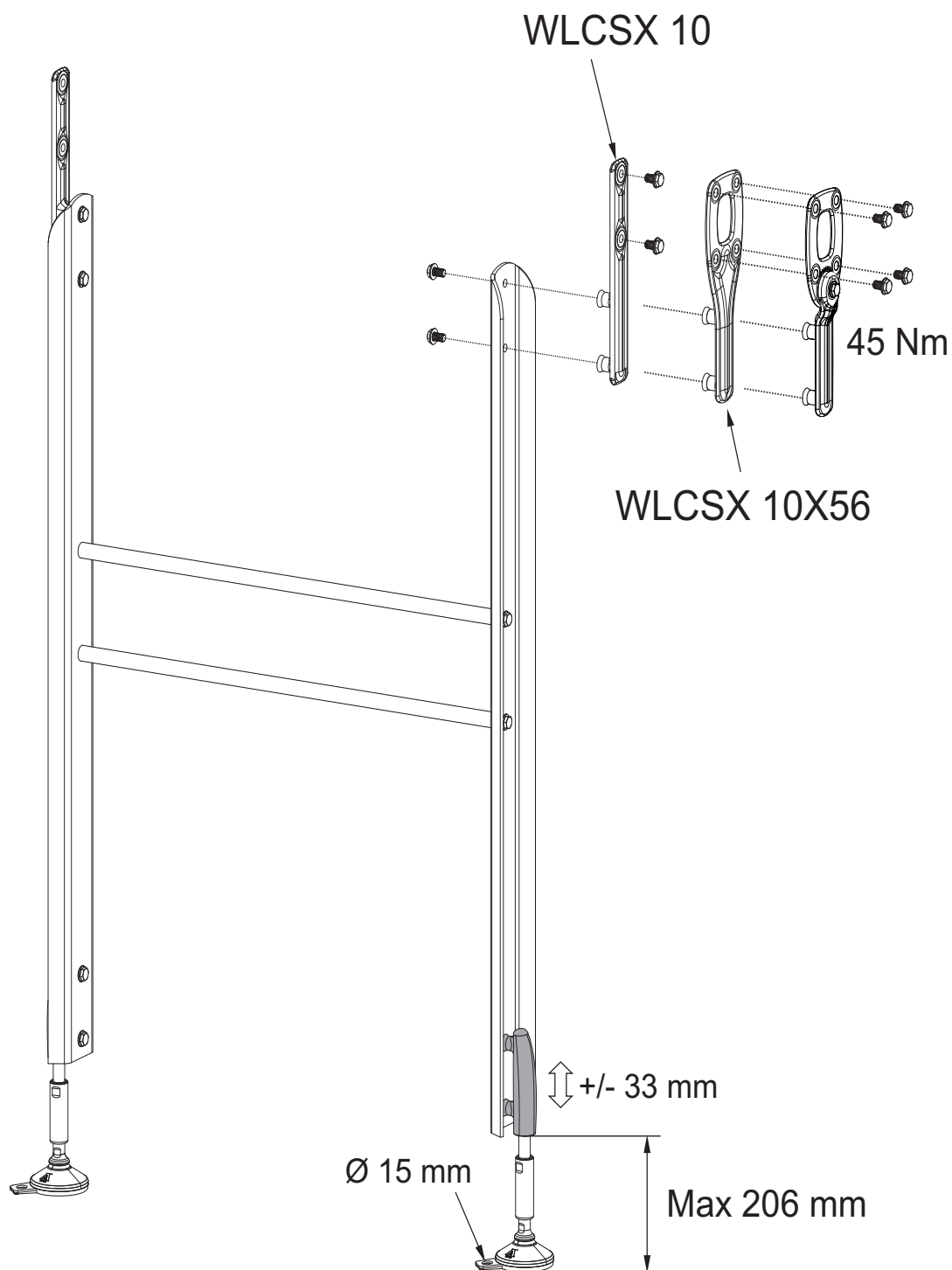
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## 4 Assembly WLX

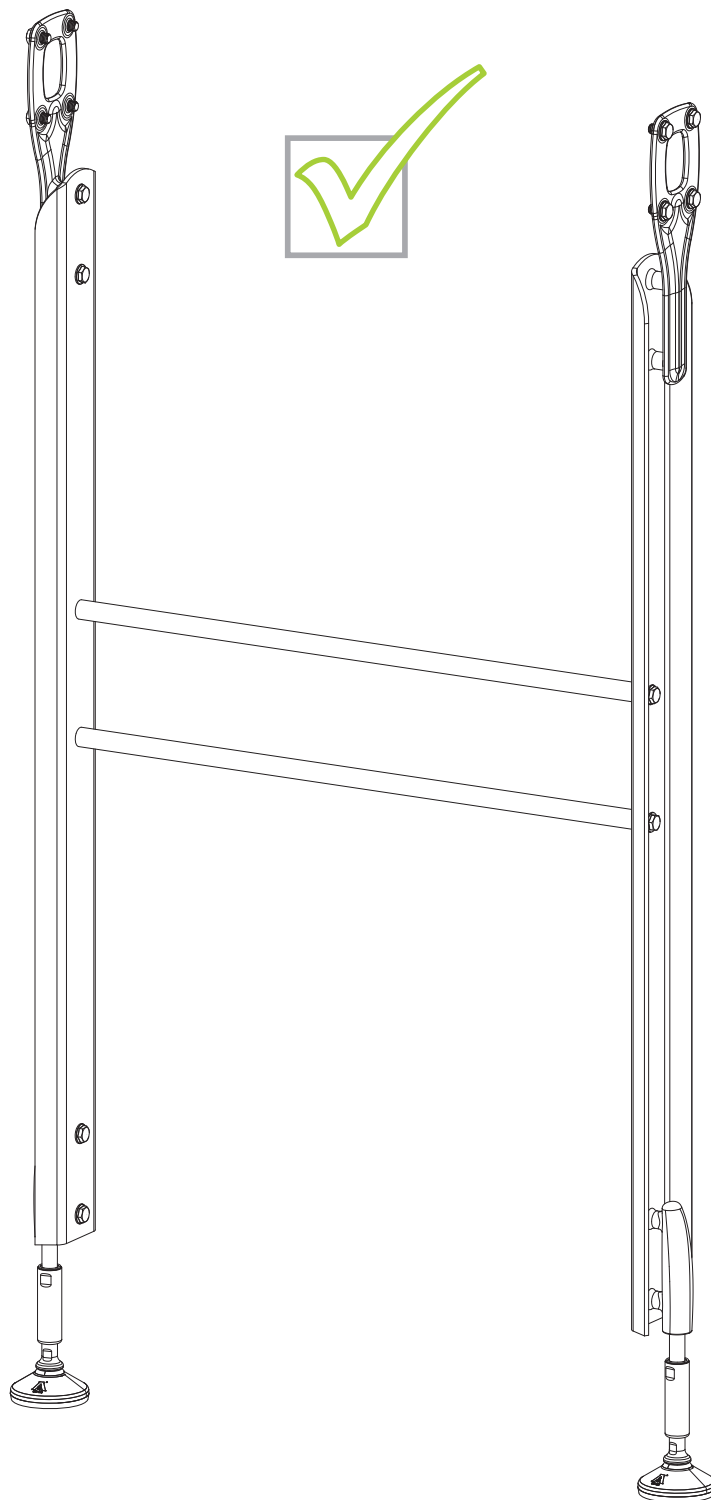
## 4.1 Support modules WLUFX S01/S04



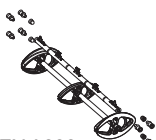
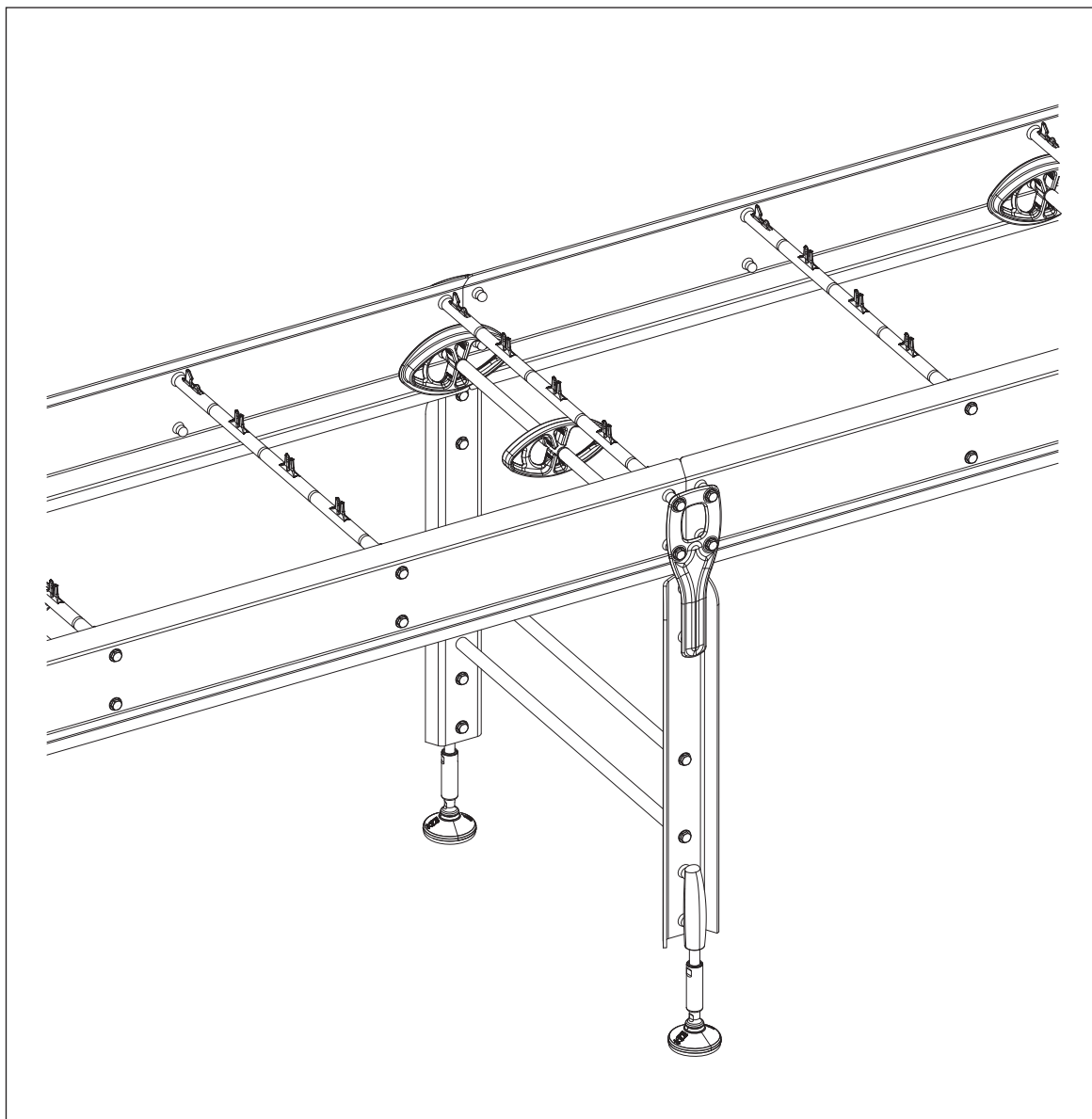
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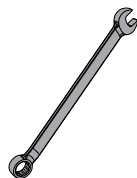
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## 4.2 Connect two conveyor beams



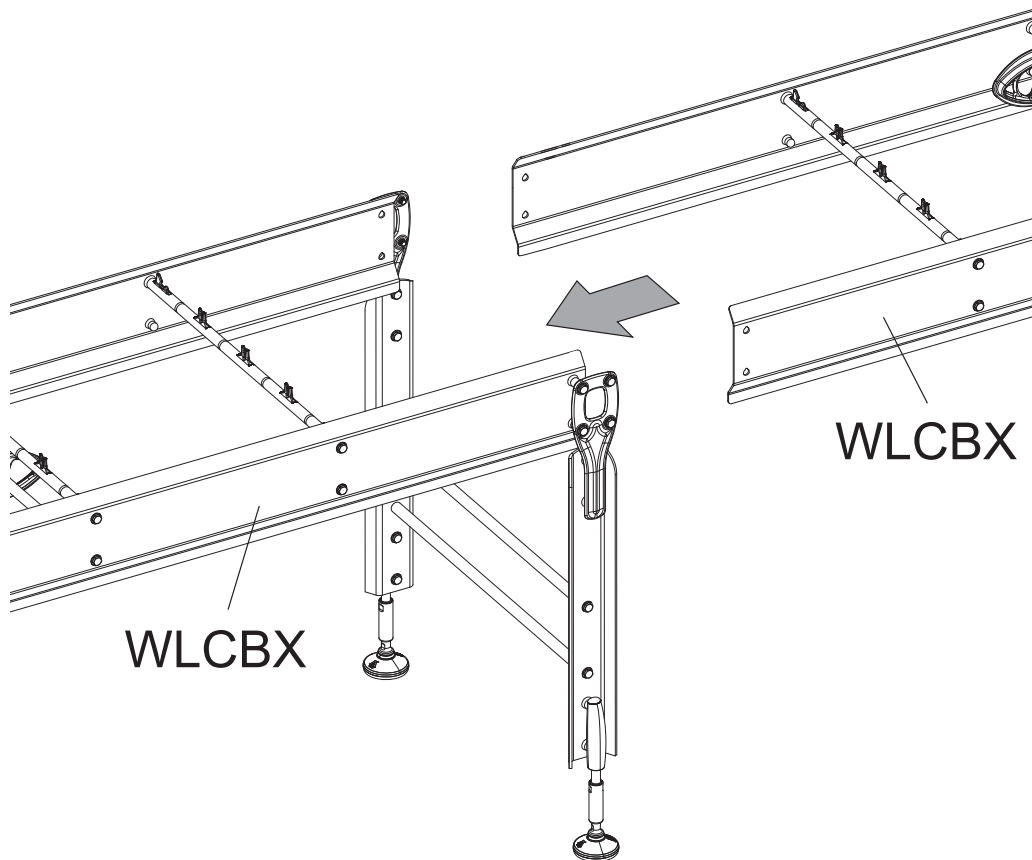
WLCEX A222  
WLCEX A273  
WLCEX A374  
WLCEX A526  
WLCEX A678



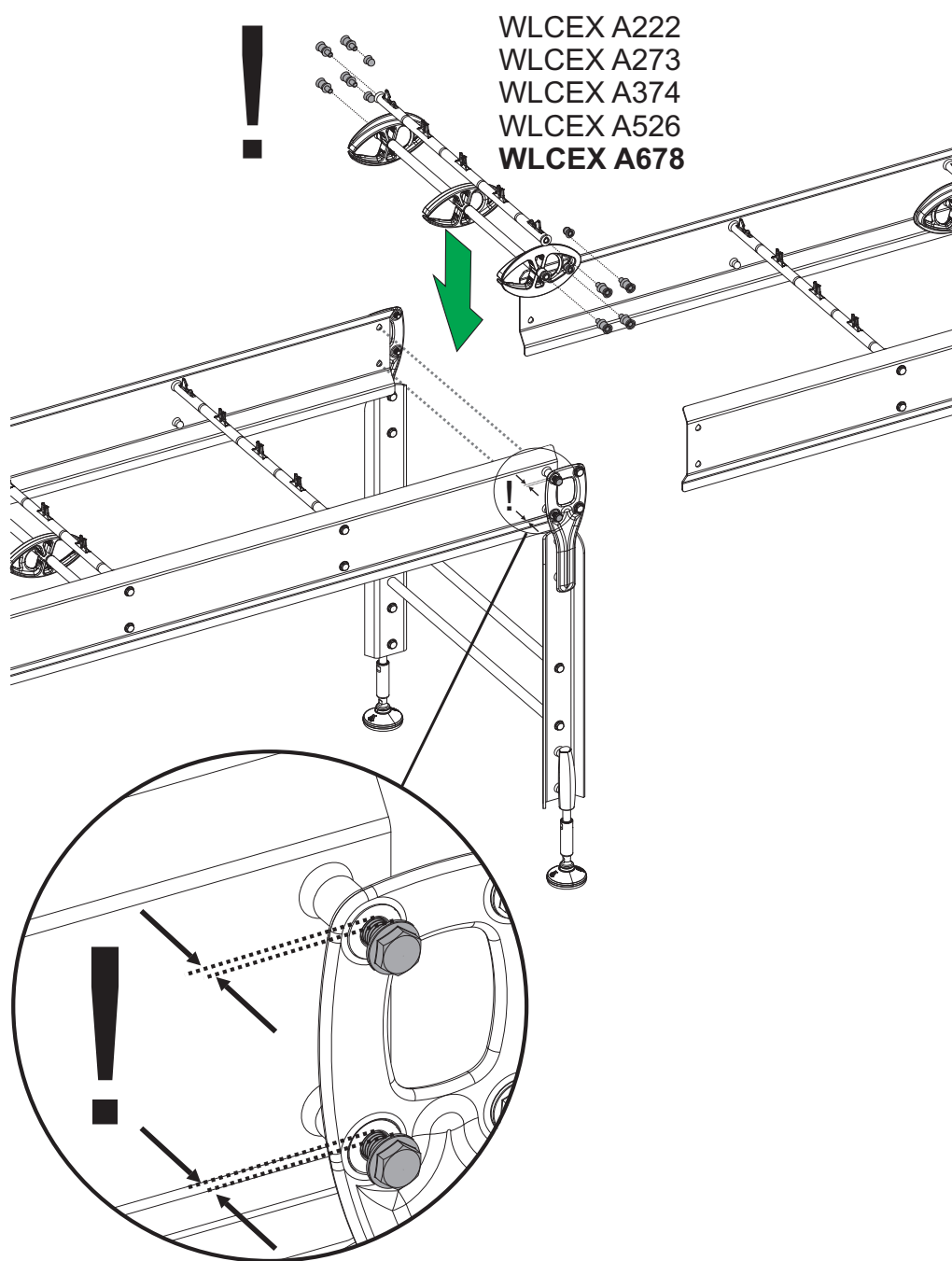
15 mm



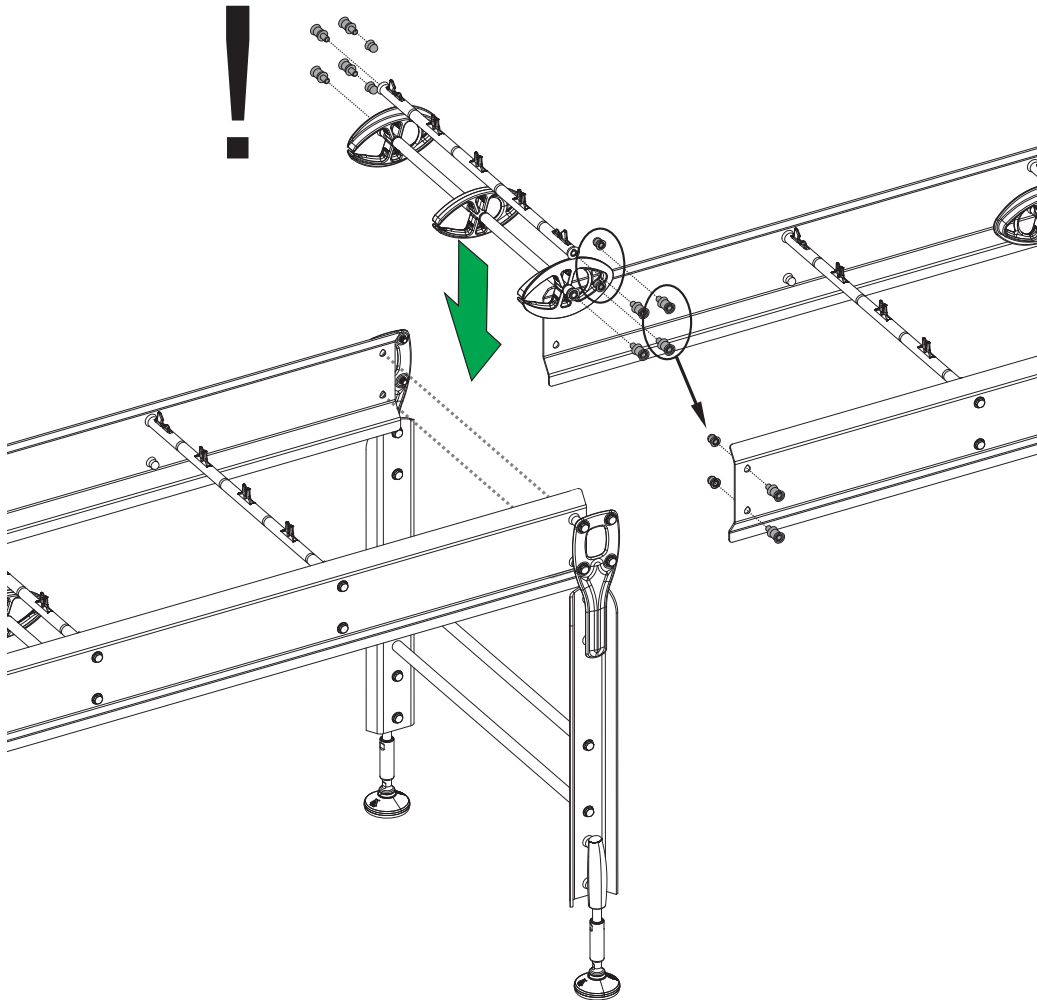
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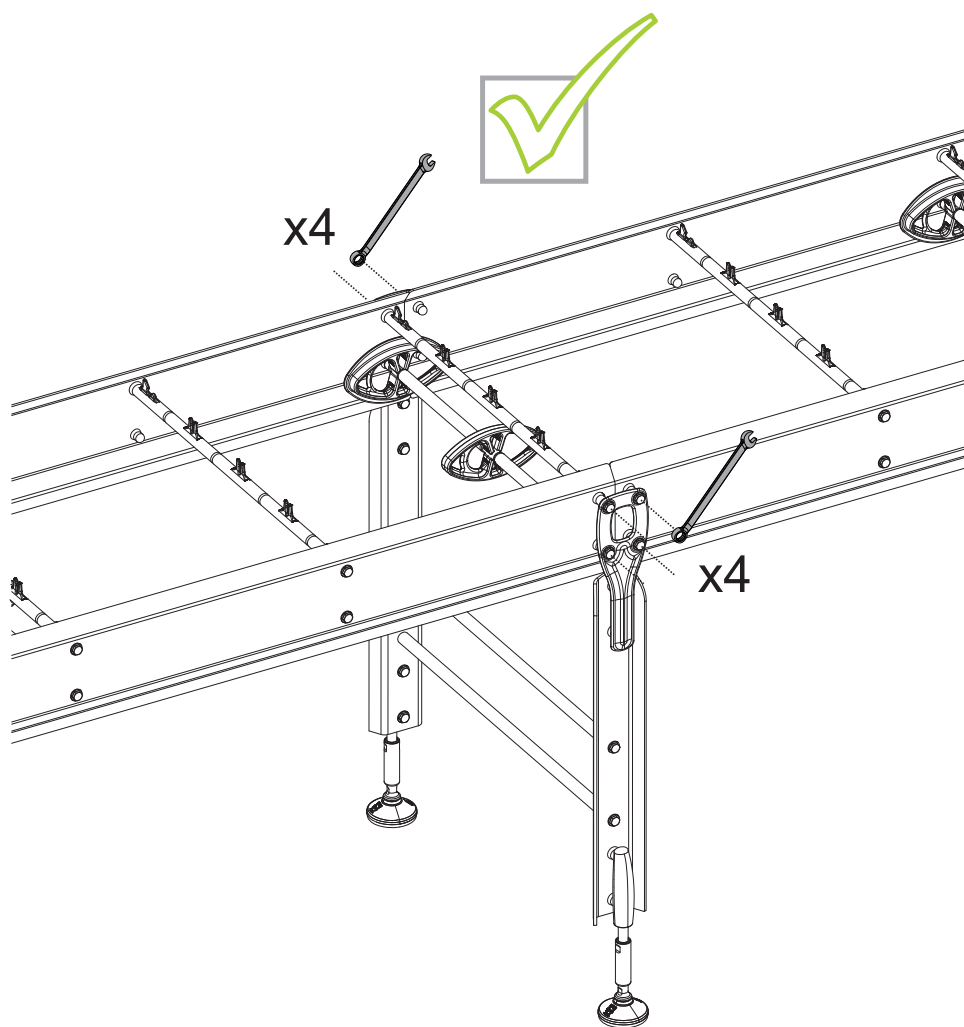
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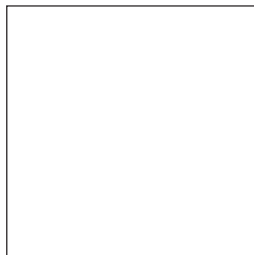
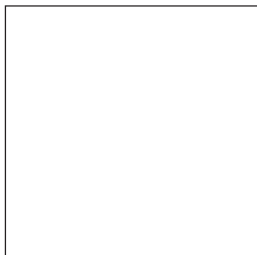
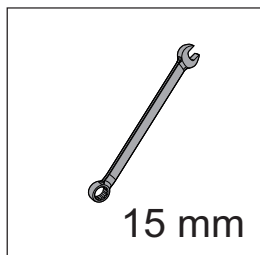
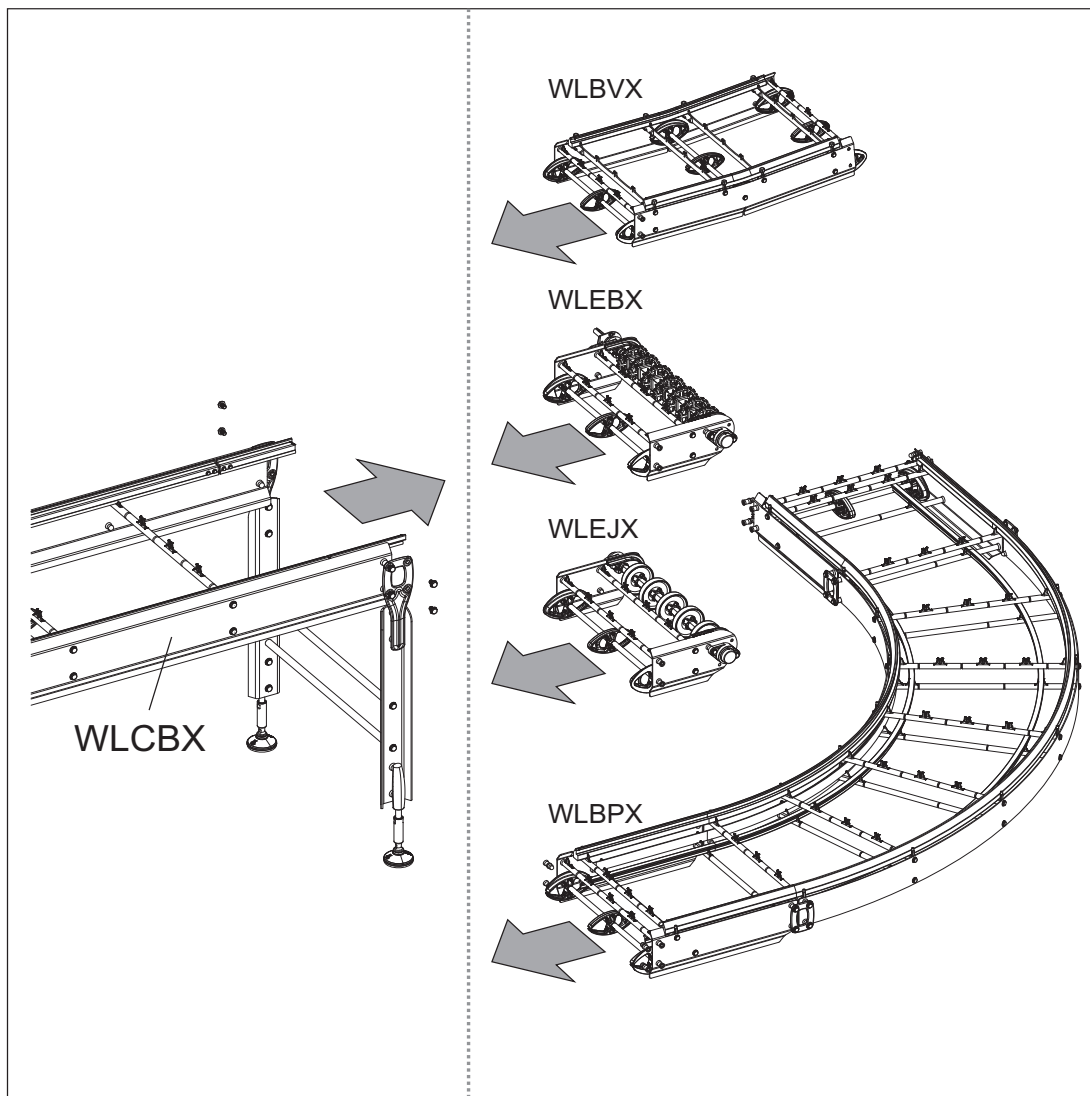


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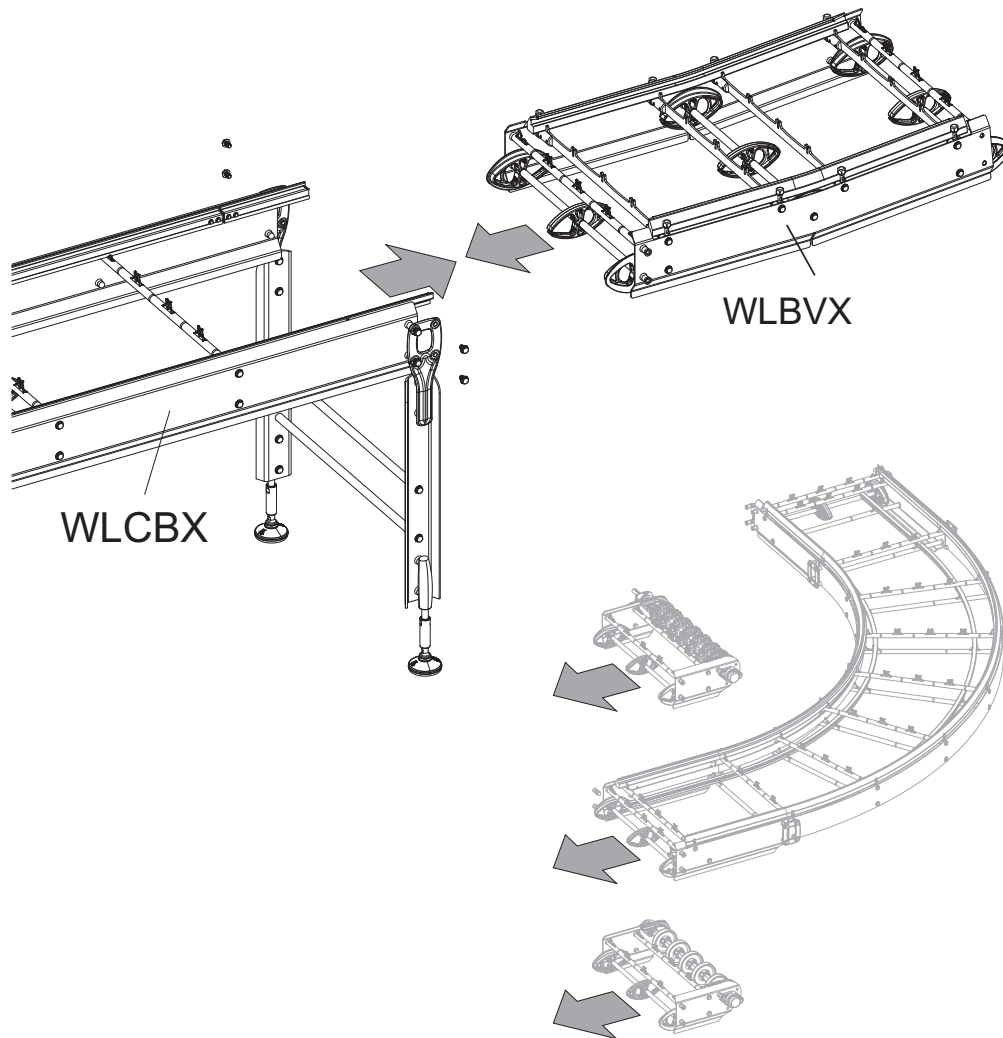




## 4.3 Connect a Bend, End drive or Idler end unit to a conveyor beam

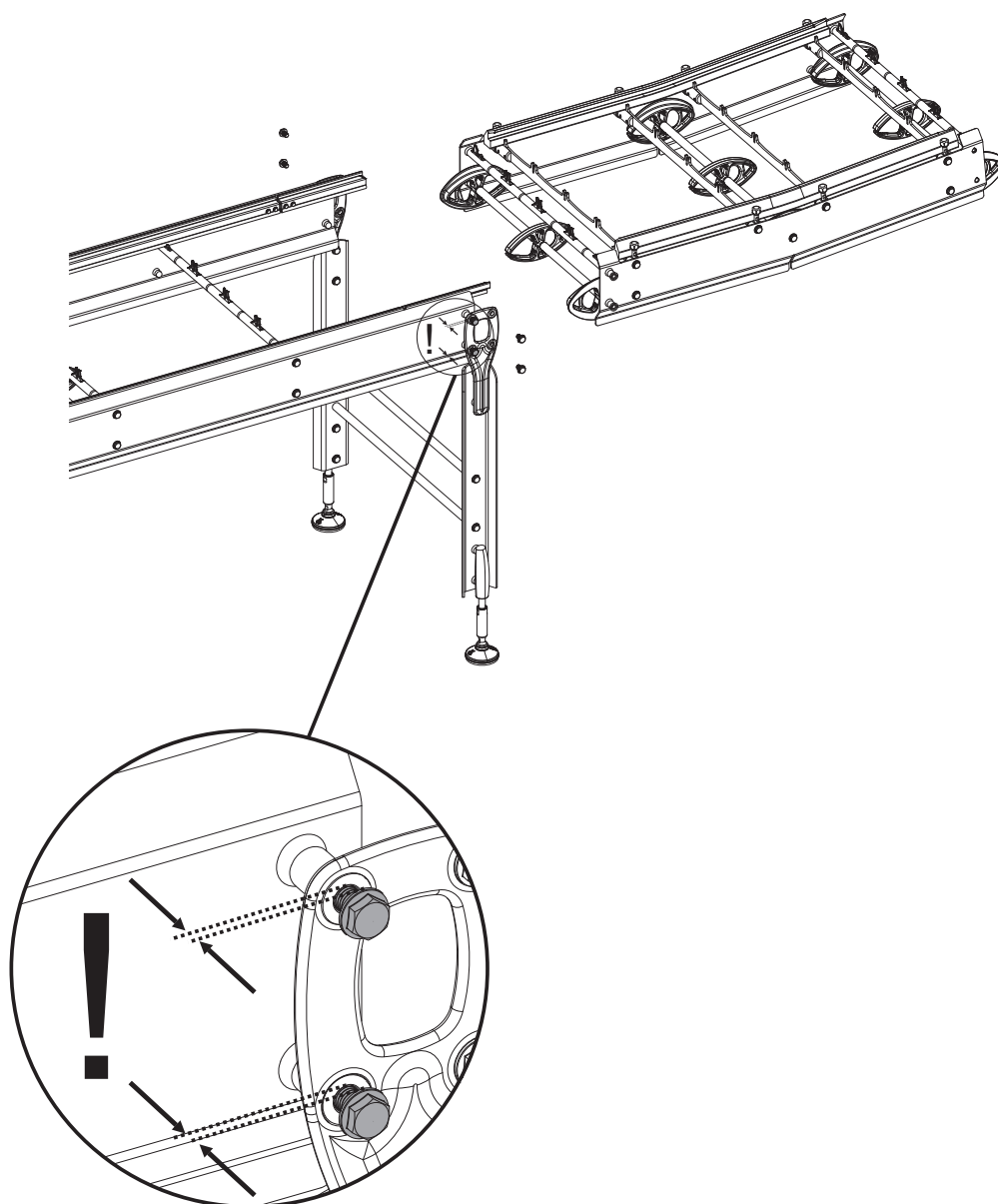


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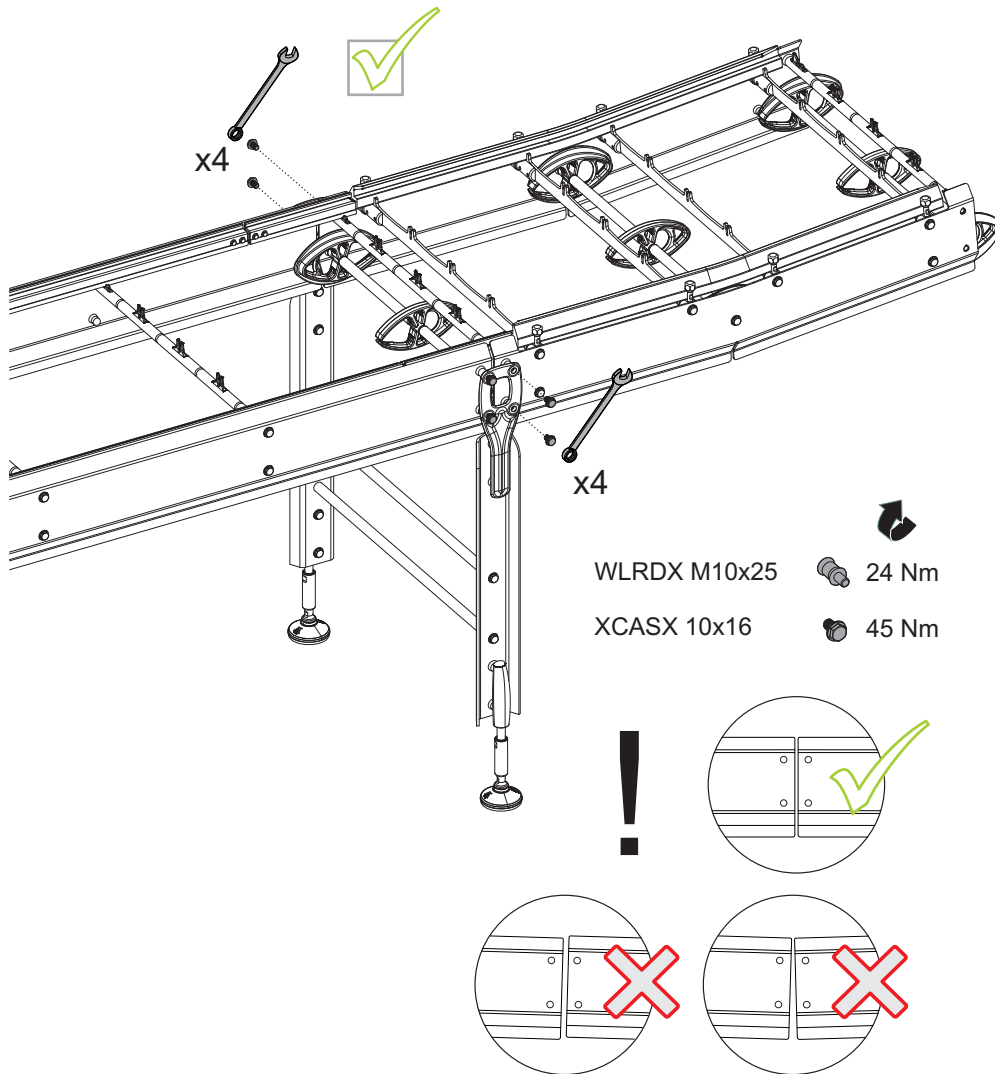




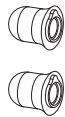
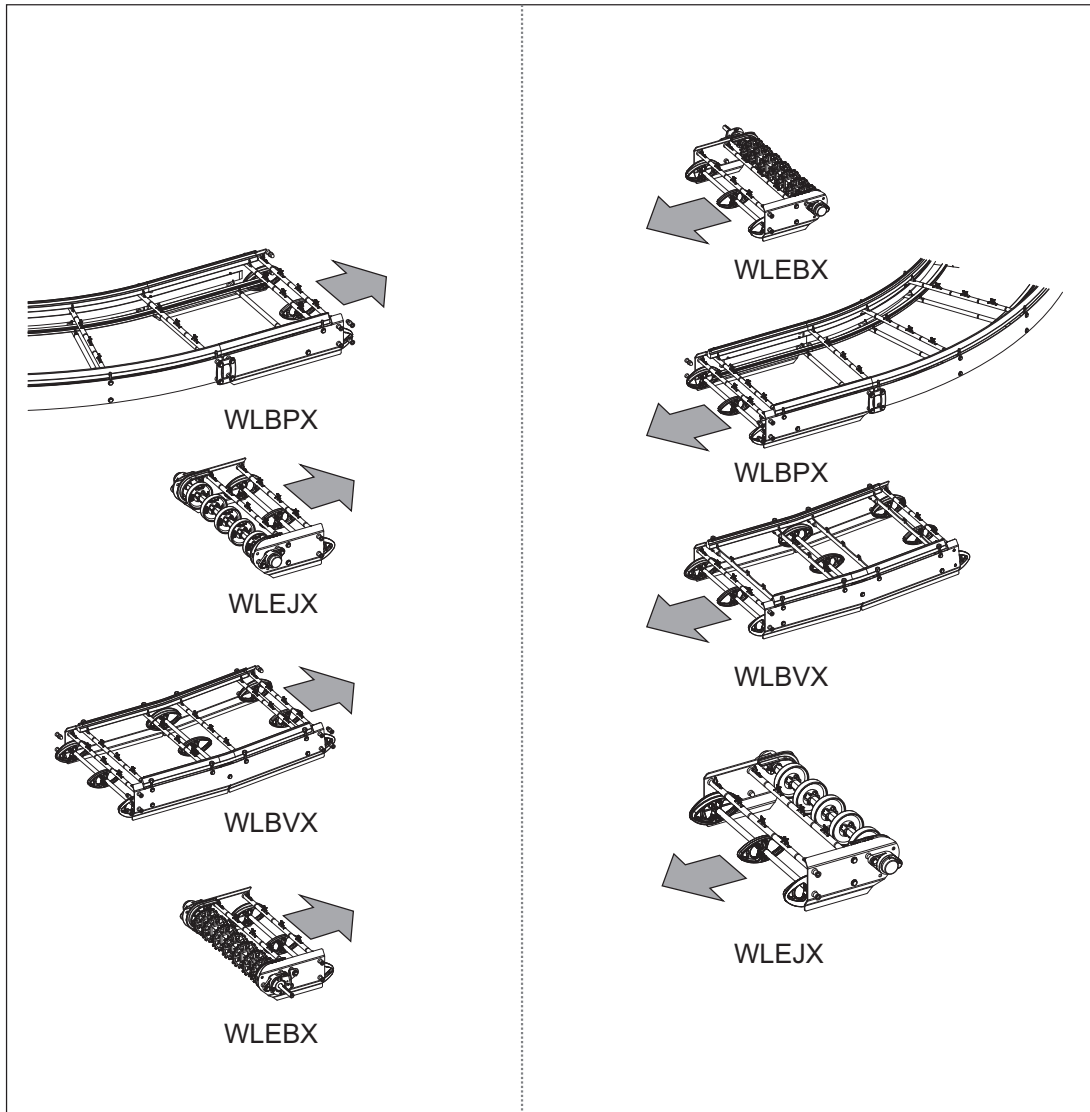
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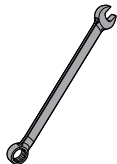
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#### 4.4 Connect a Bend, End drive or Idler end unit to each other

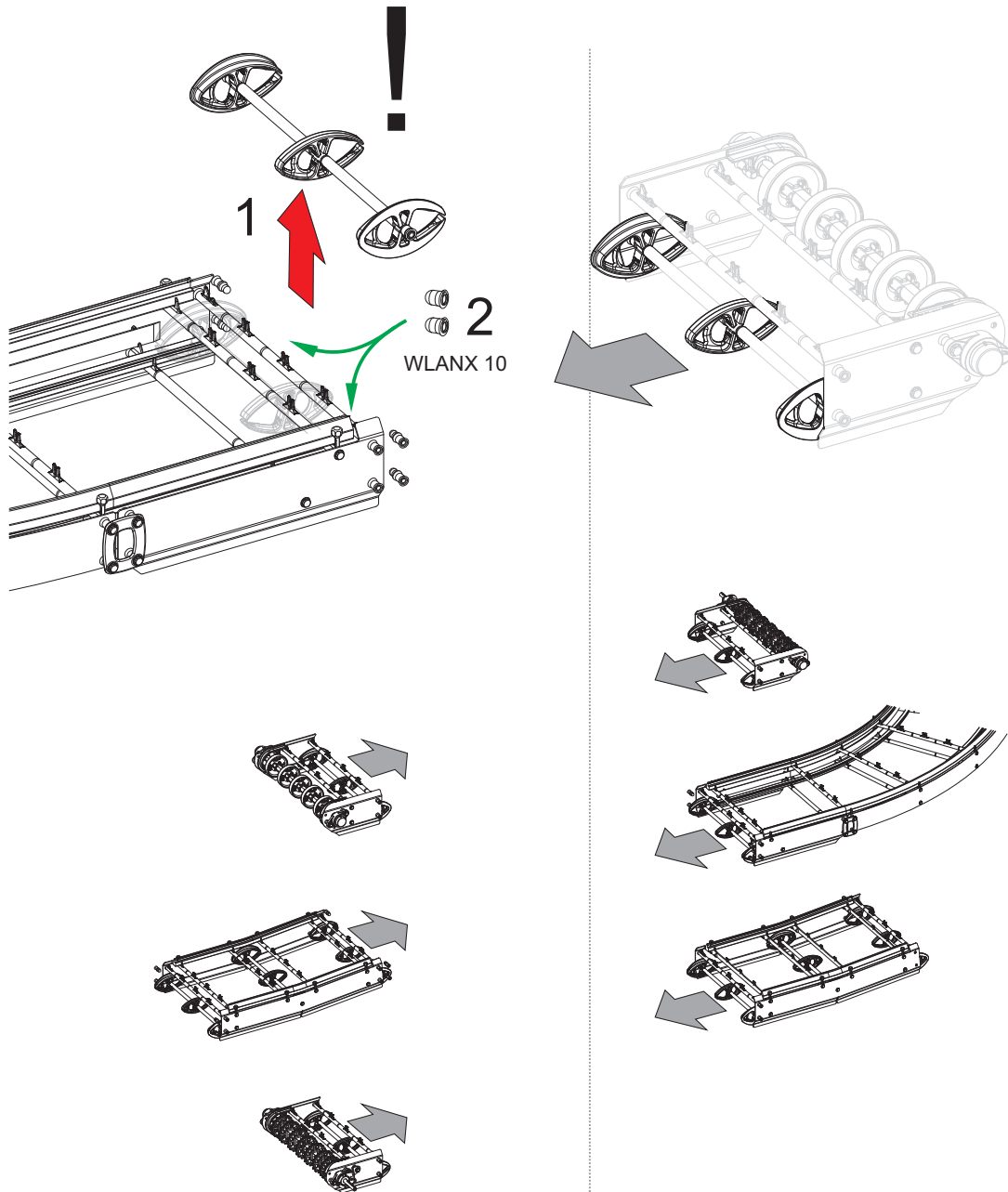


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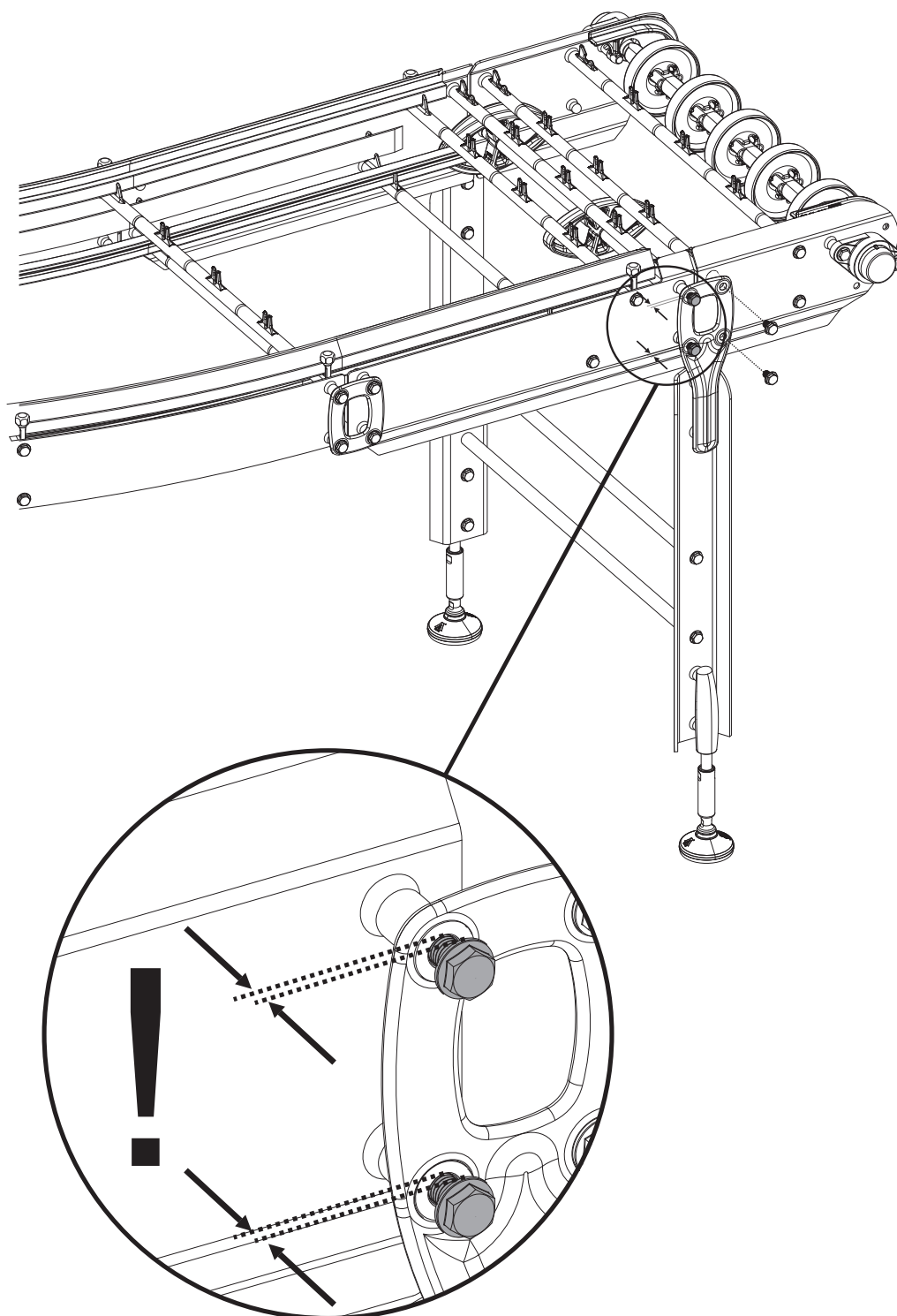


15 mm

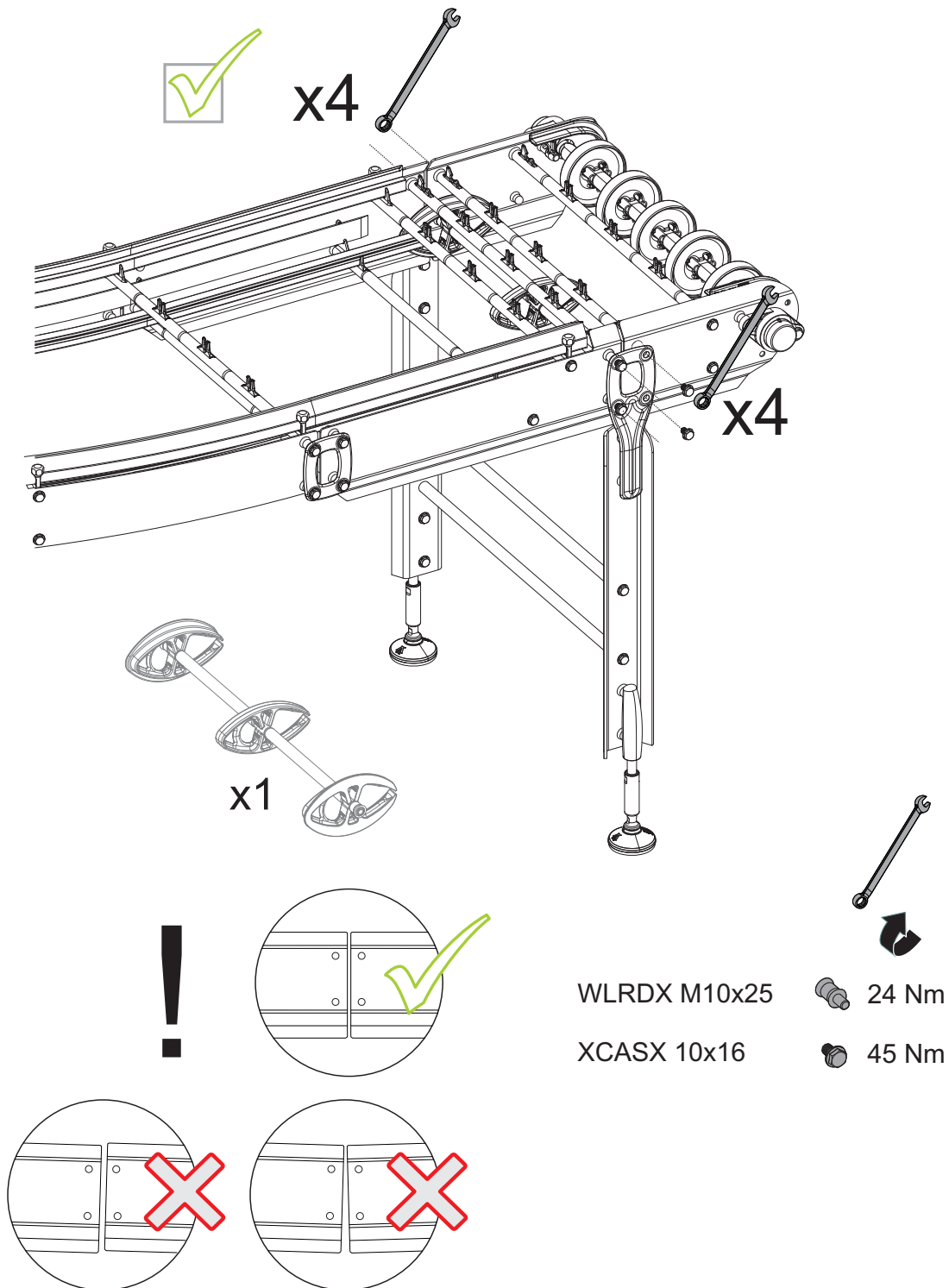
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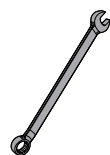
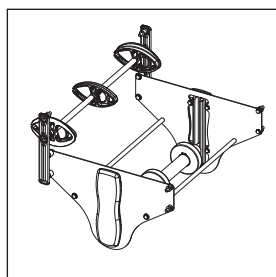
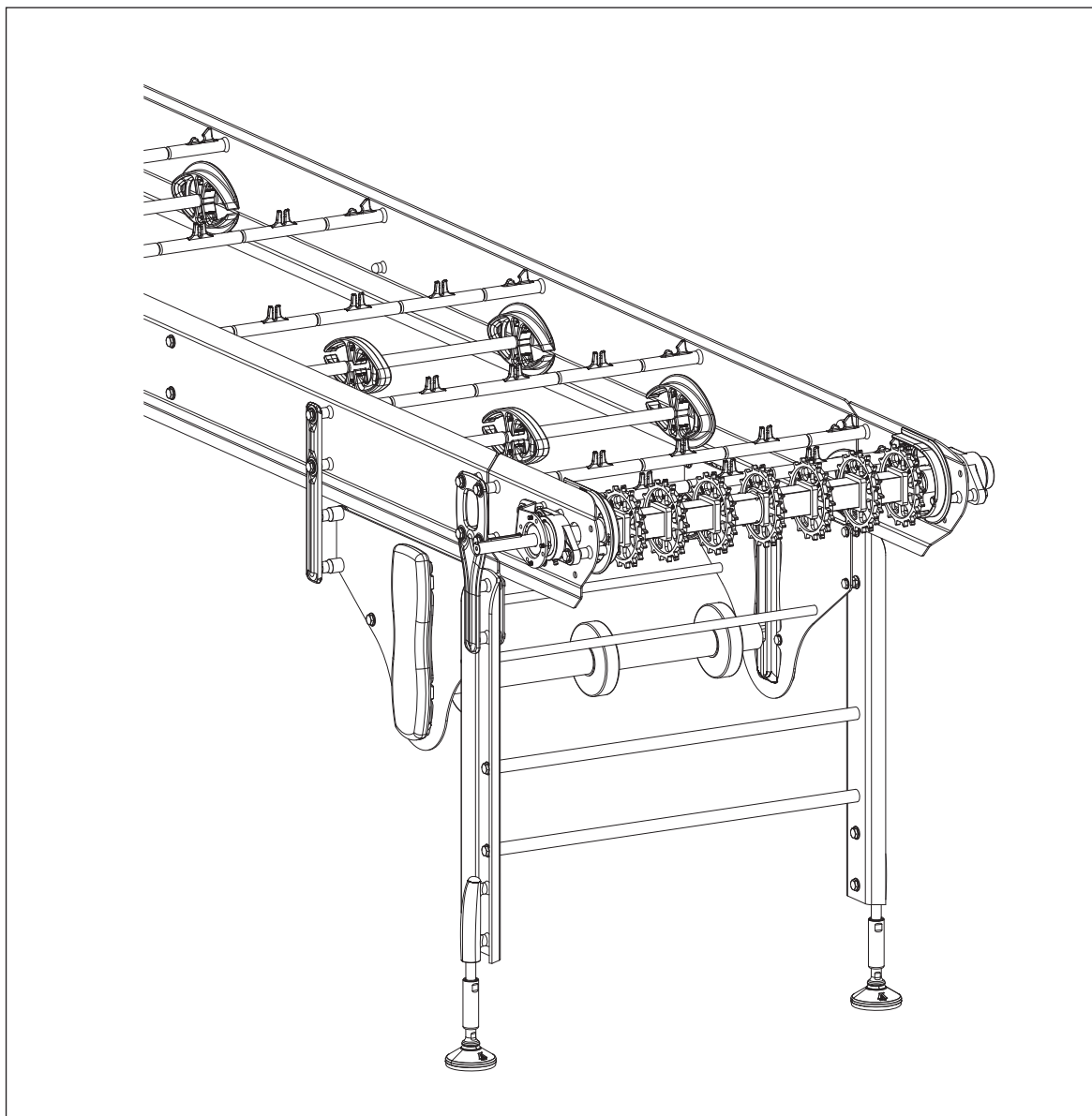
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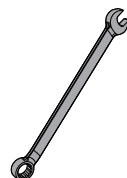
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## 4.5 Connecting Belt tensioner unit



13 mm



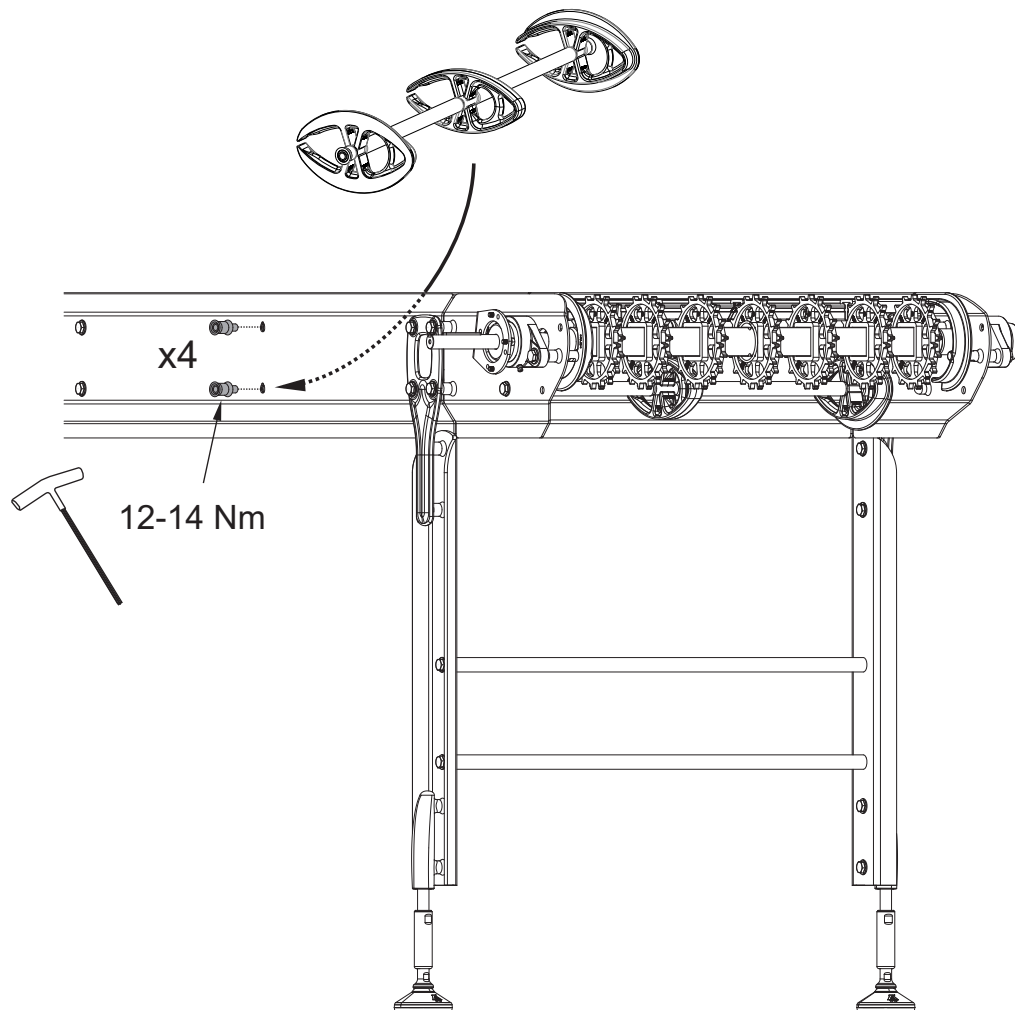
15 mm



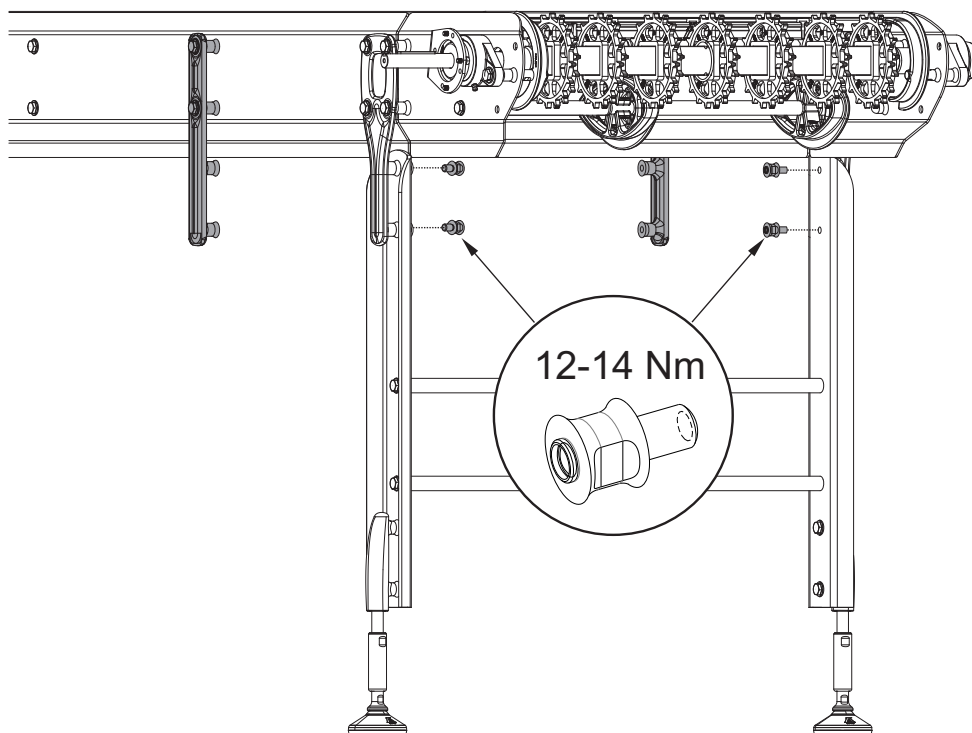
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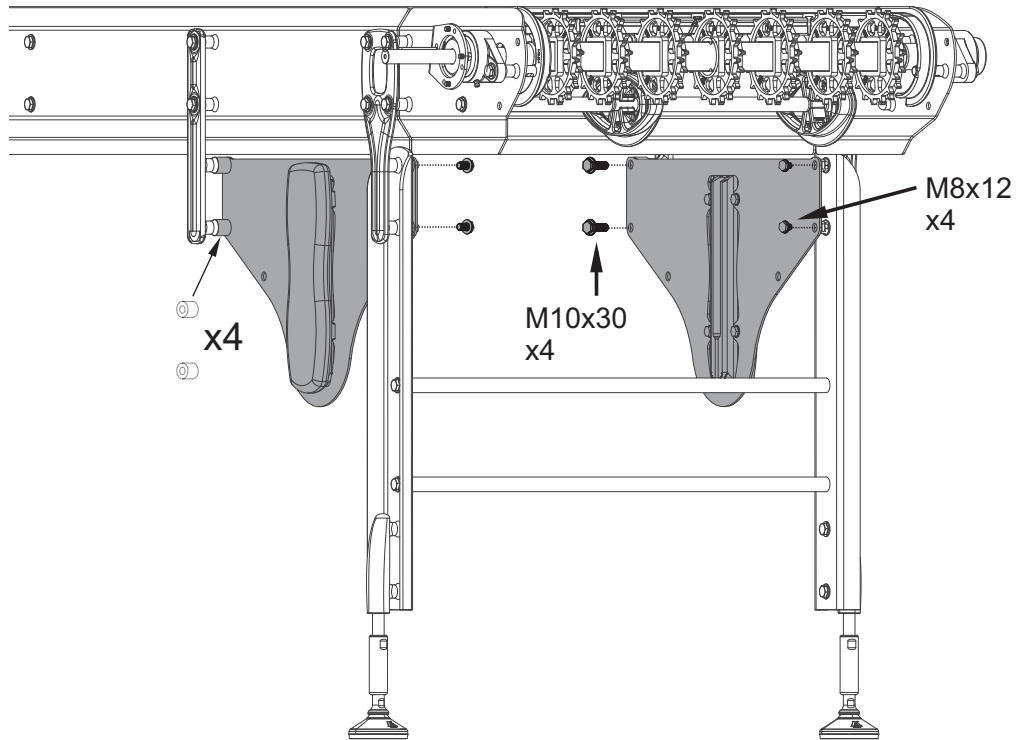
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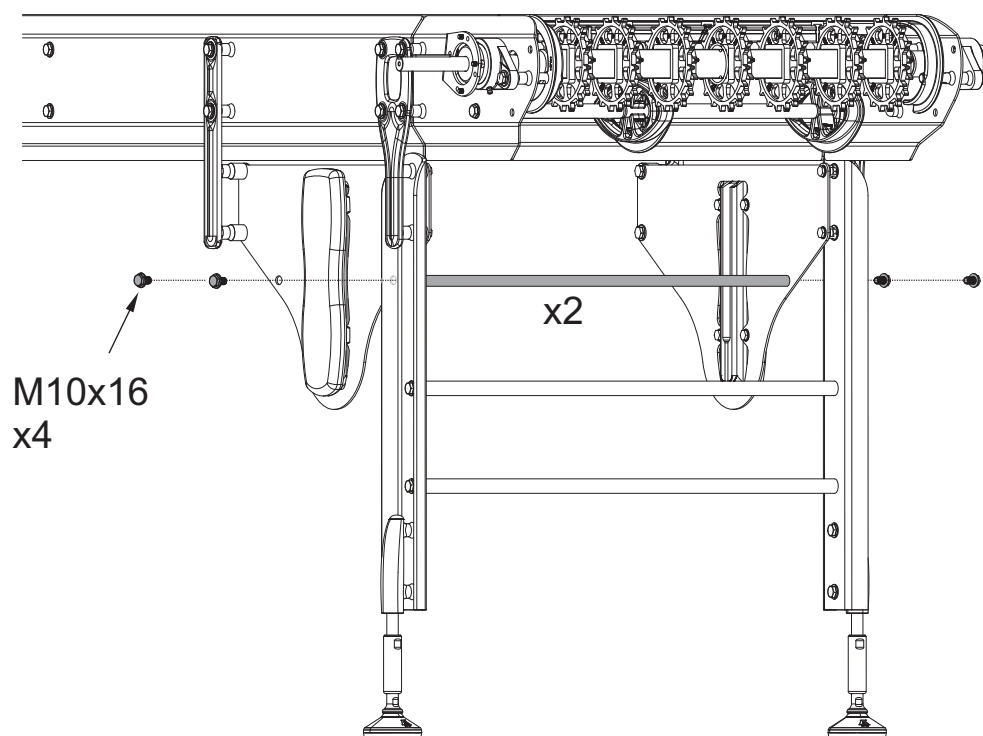
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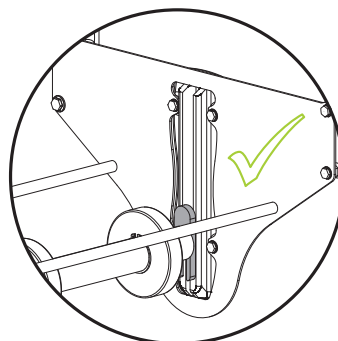
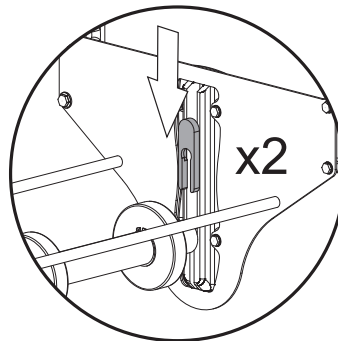
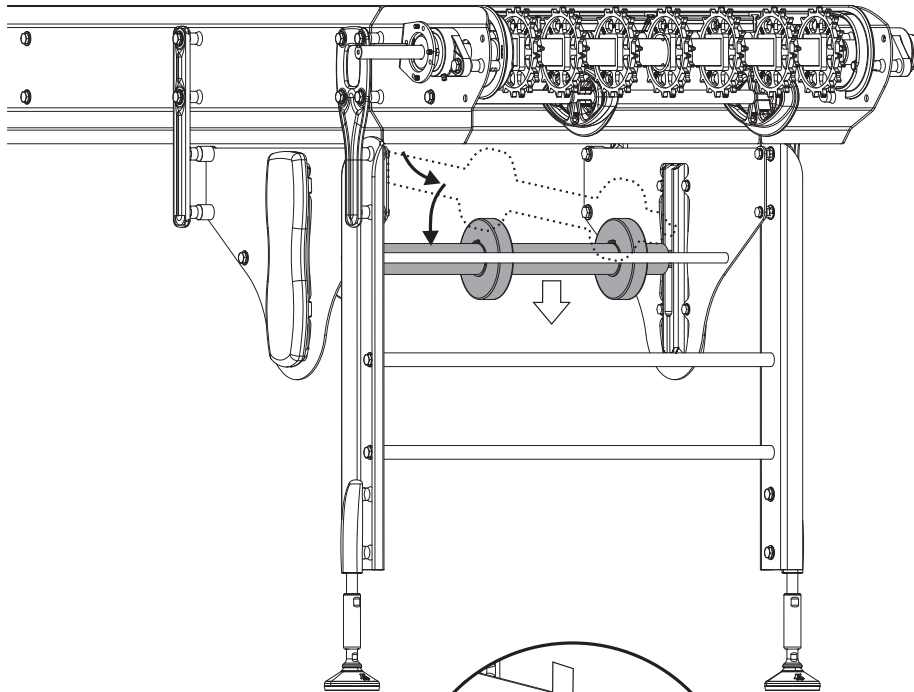
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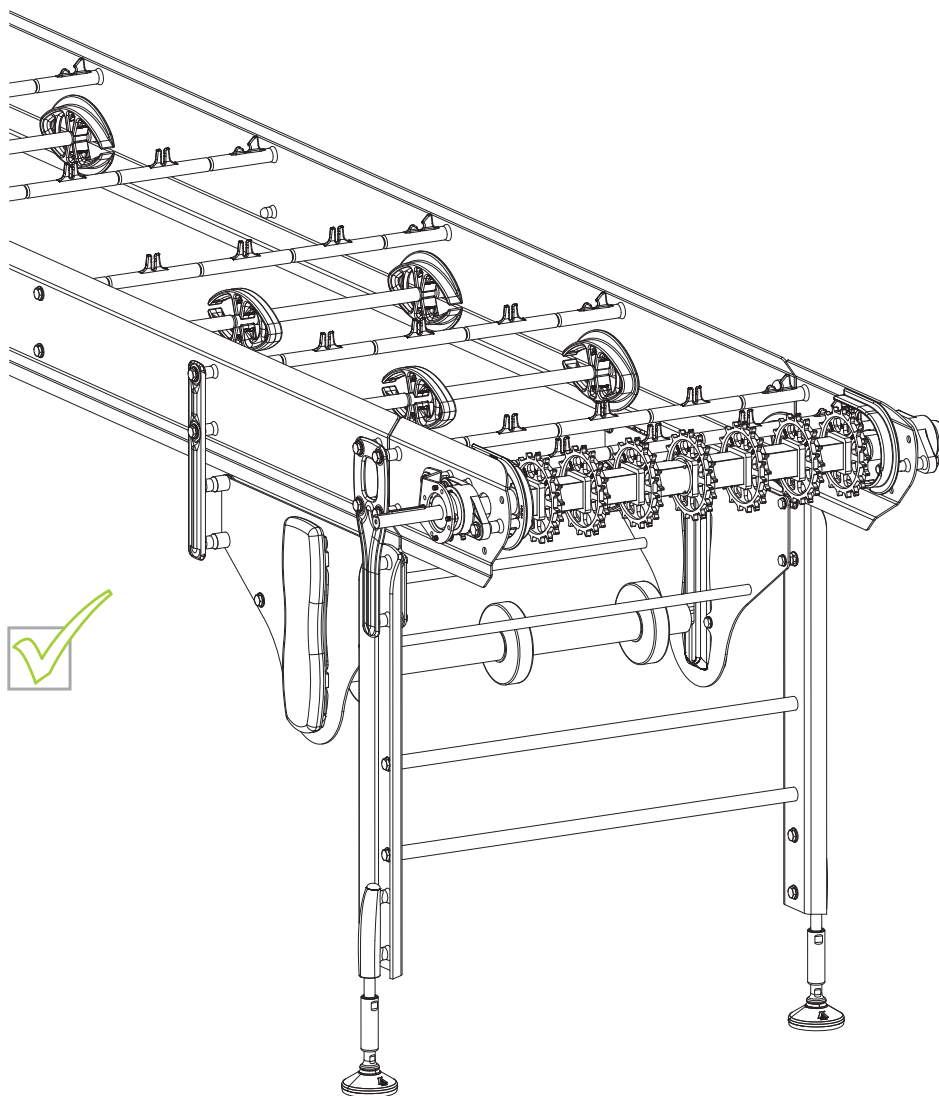
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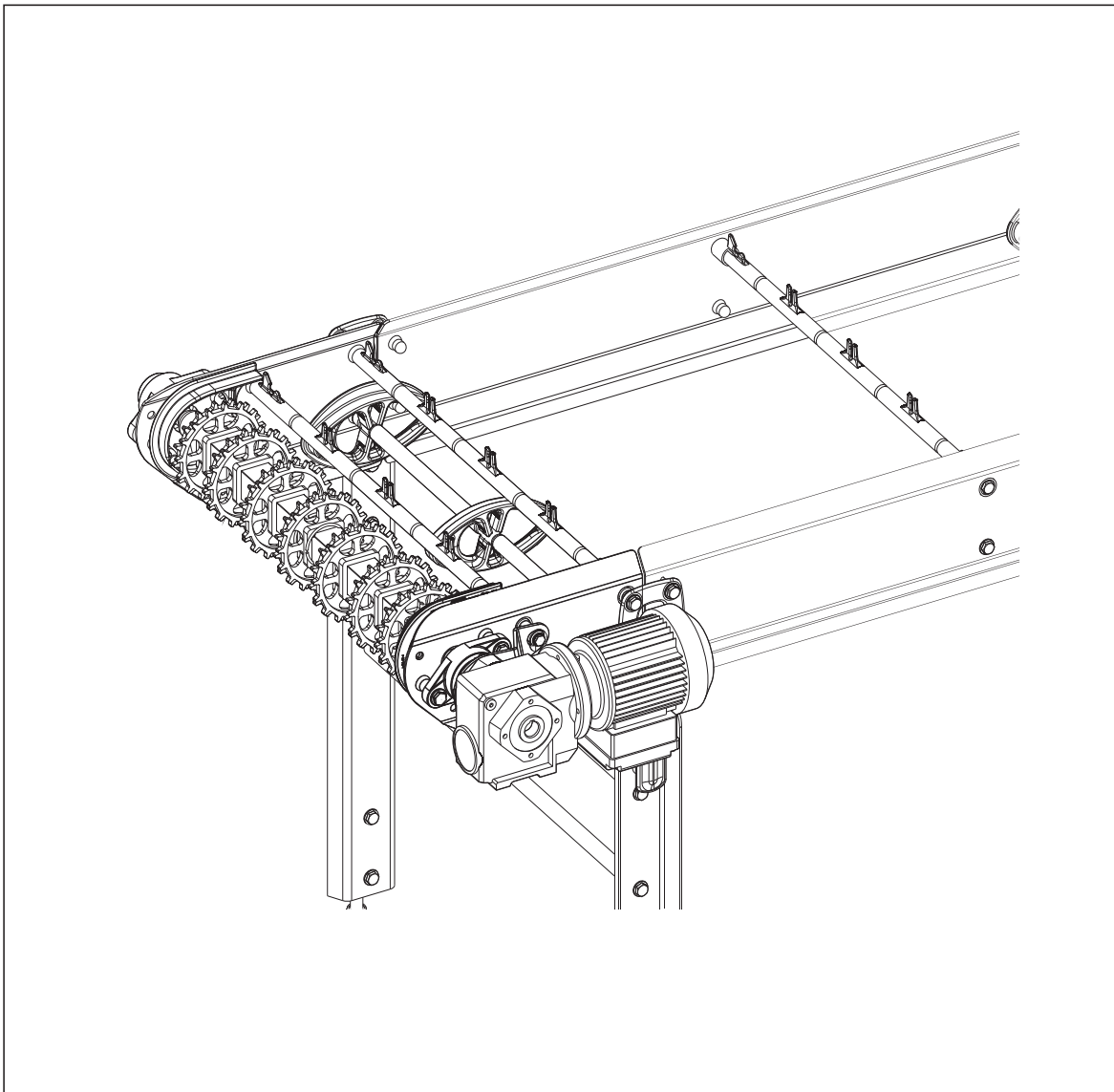


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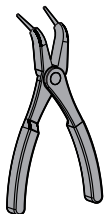
## 4.6 End drive unit Easy Clean, radius flush grid



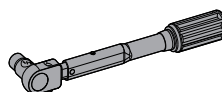
10 mm  
13 mm  
15 mm



Snap ring pliers



10 mm

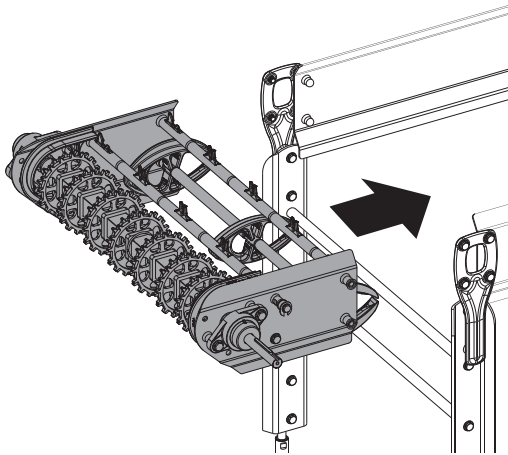


NOCO-Fluid, NFS H1  
or similar

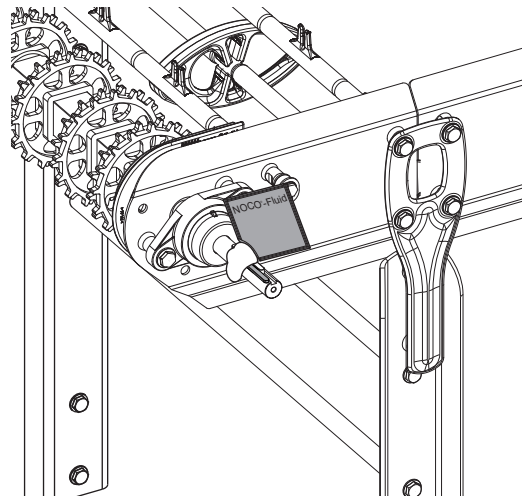




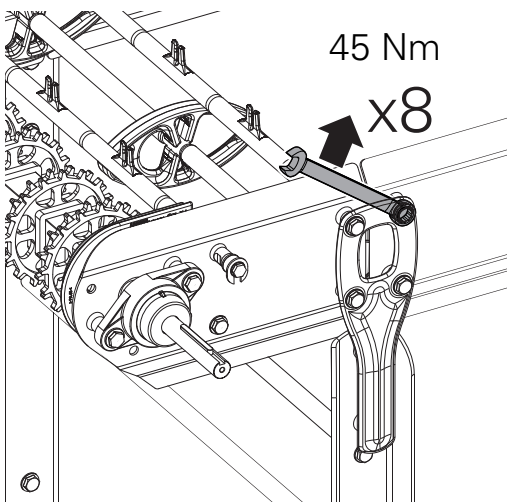
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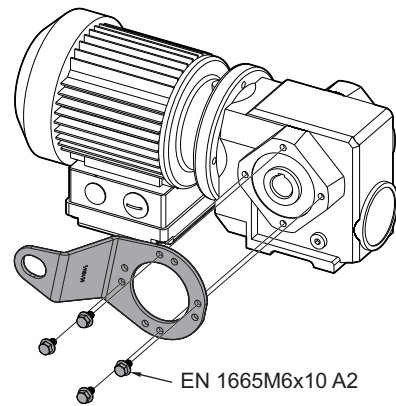
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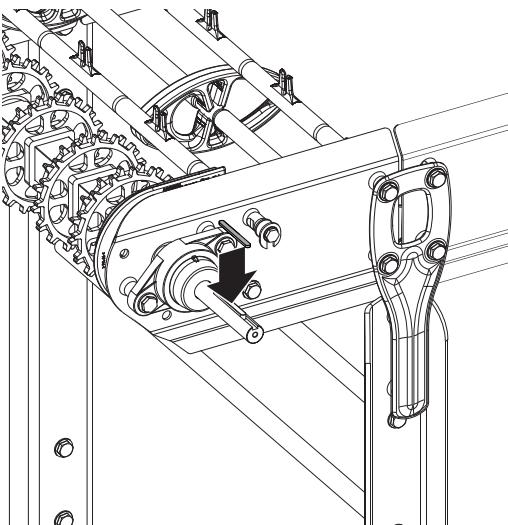
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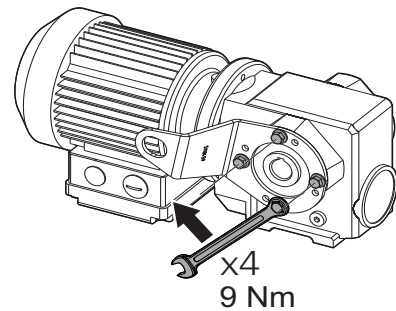
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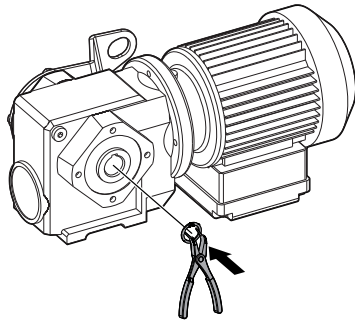
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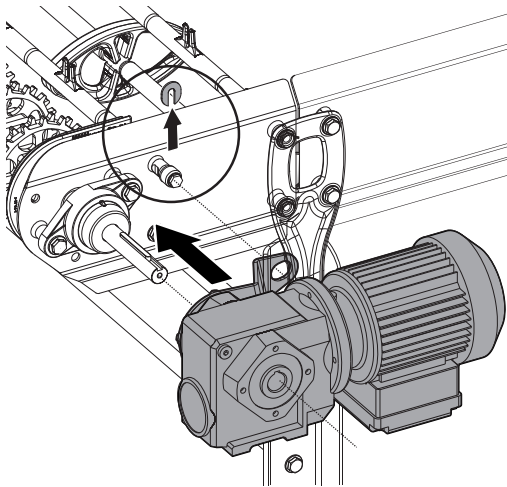
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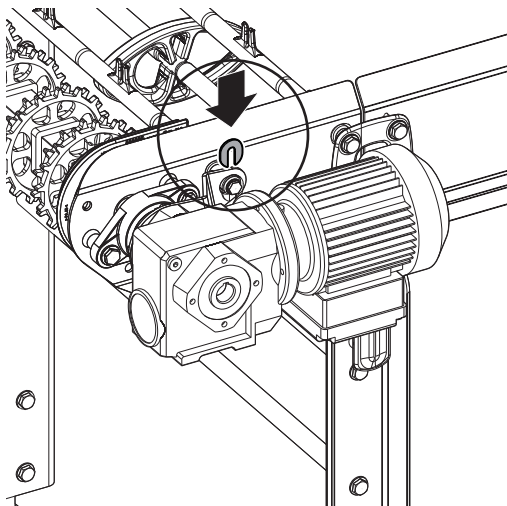
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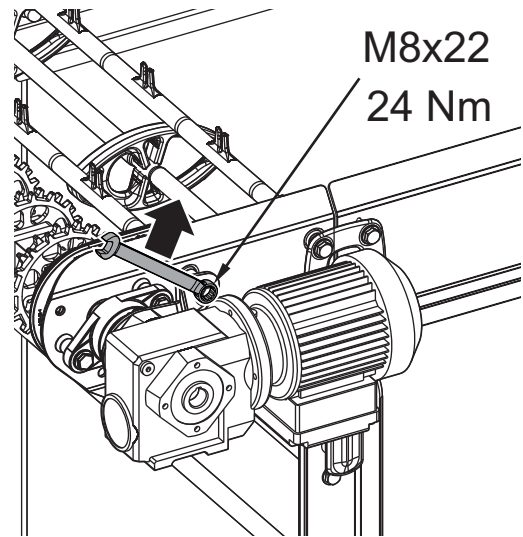
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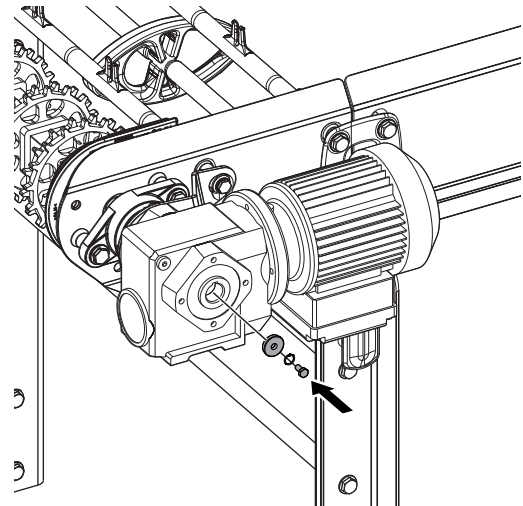
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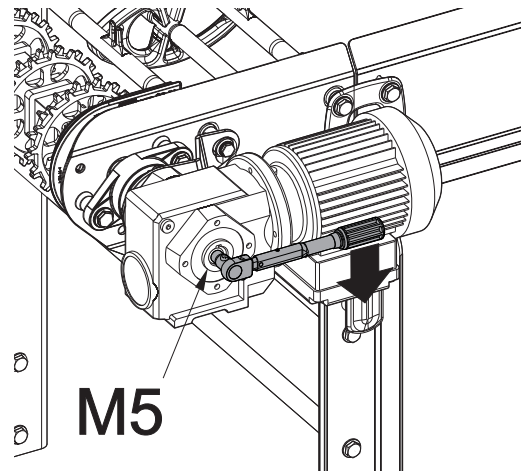
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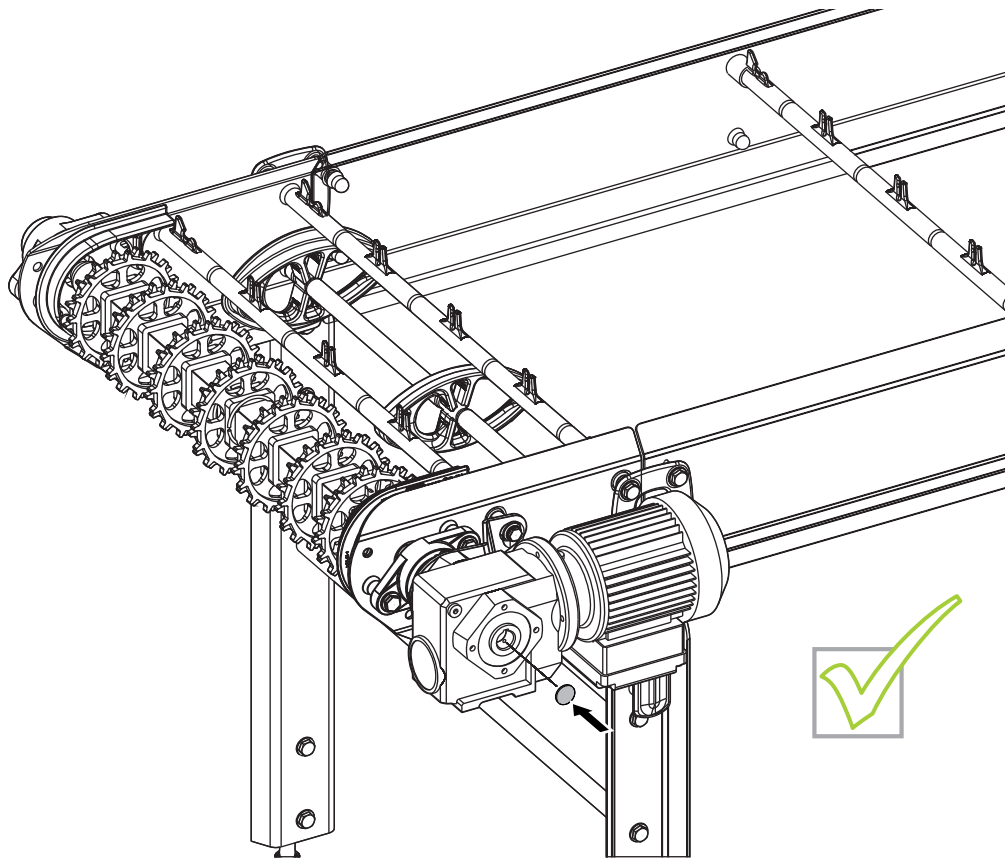
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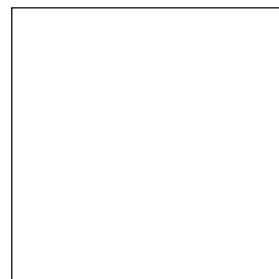
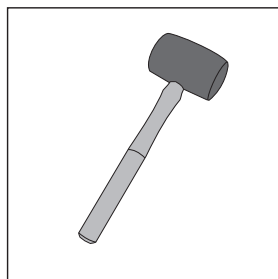
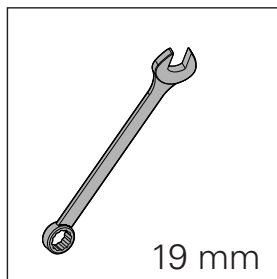
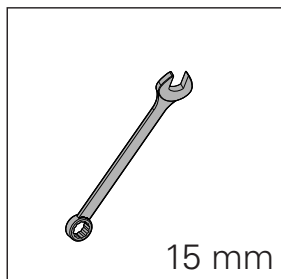
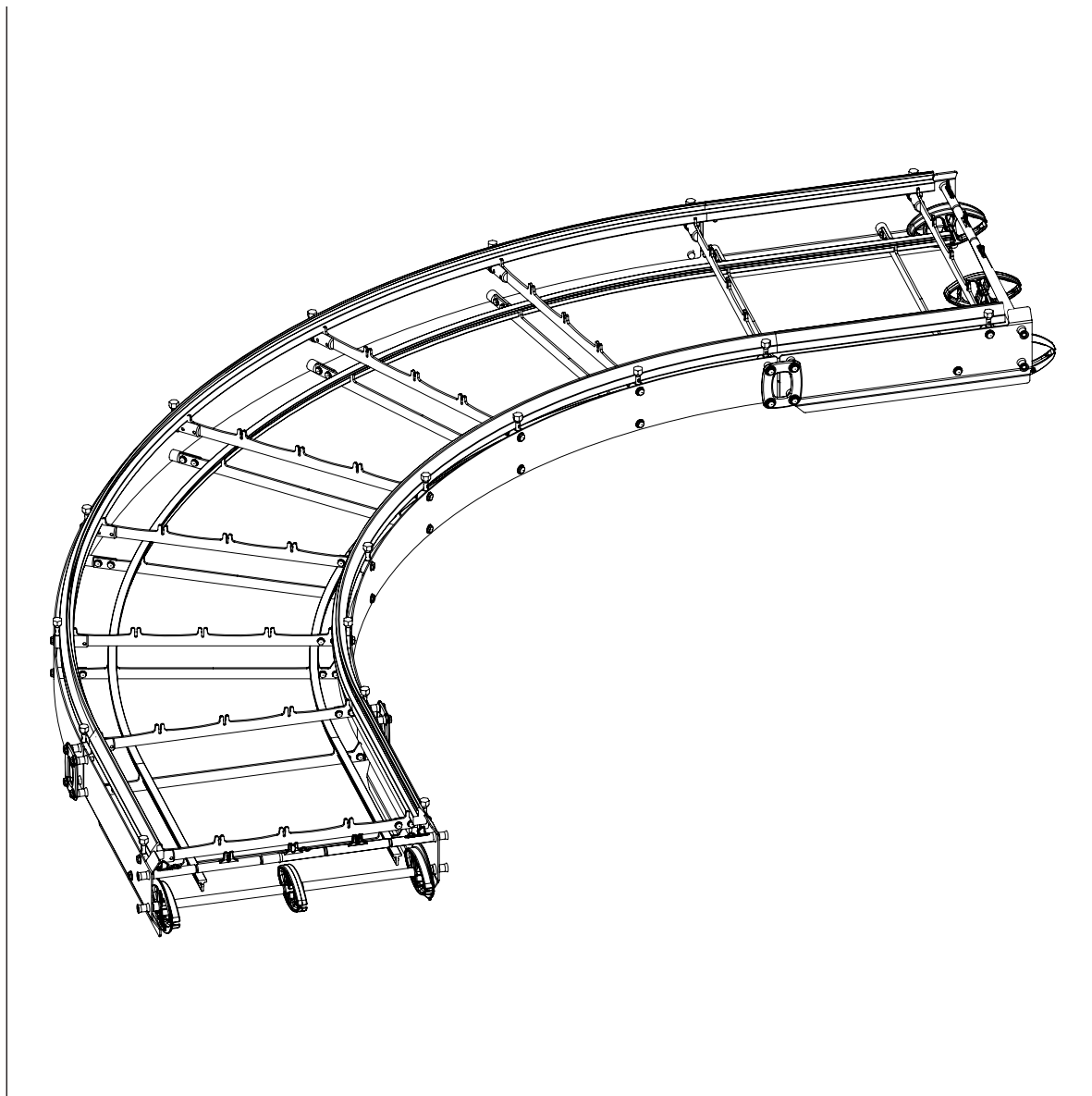
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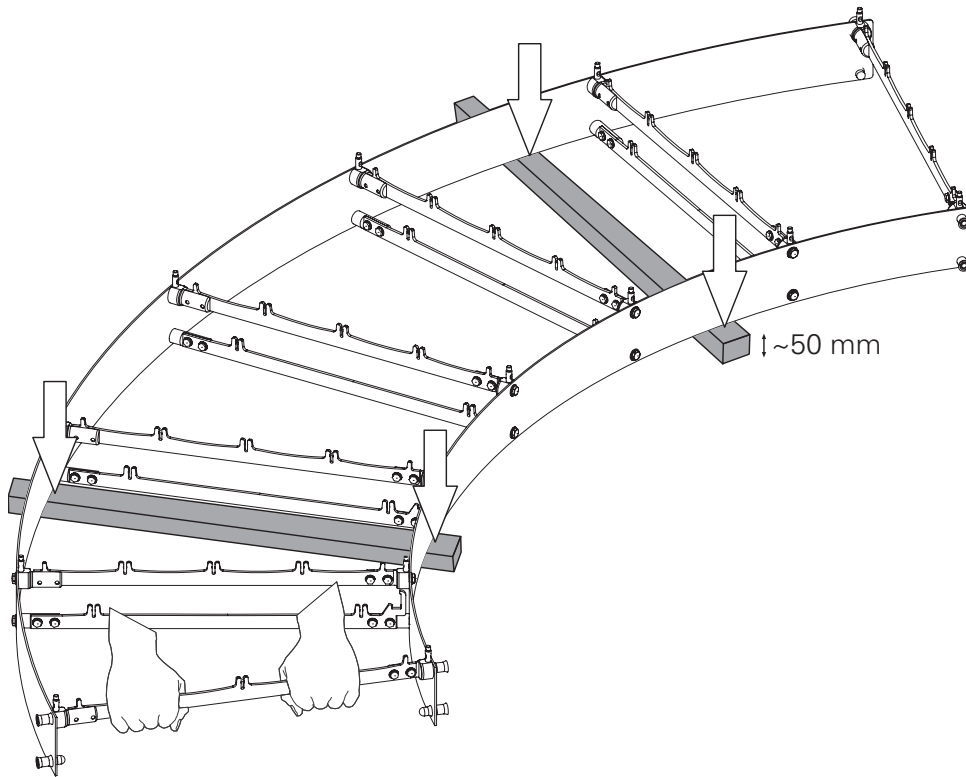
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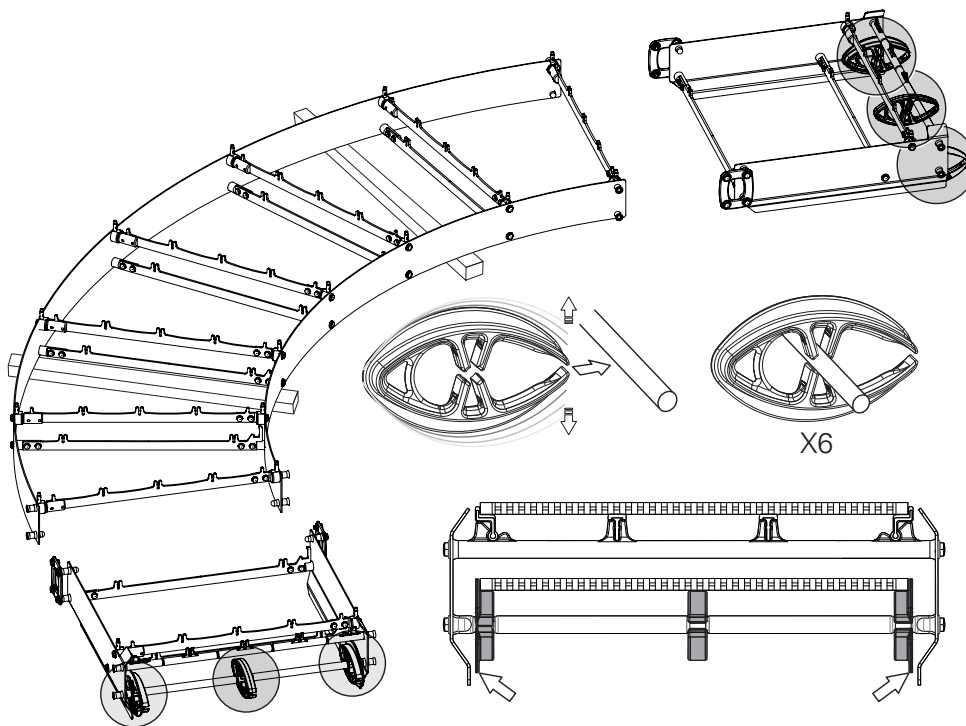
## 4.7 Plain bends WLBPX 60° and 90° 374/526/678



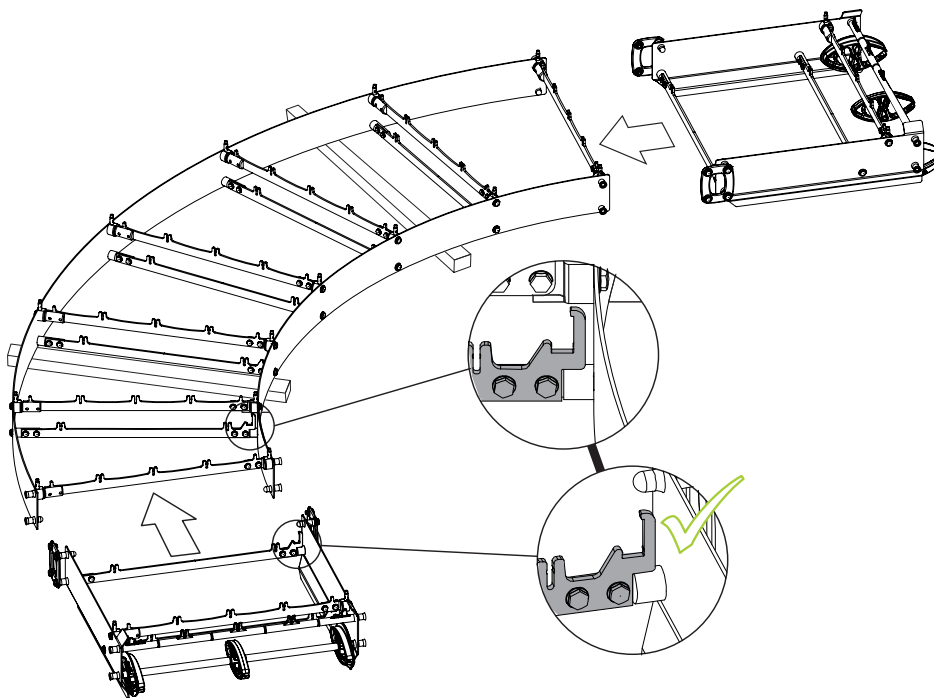
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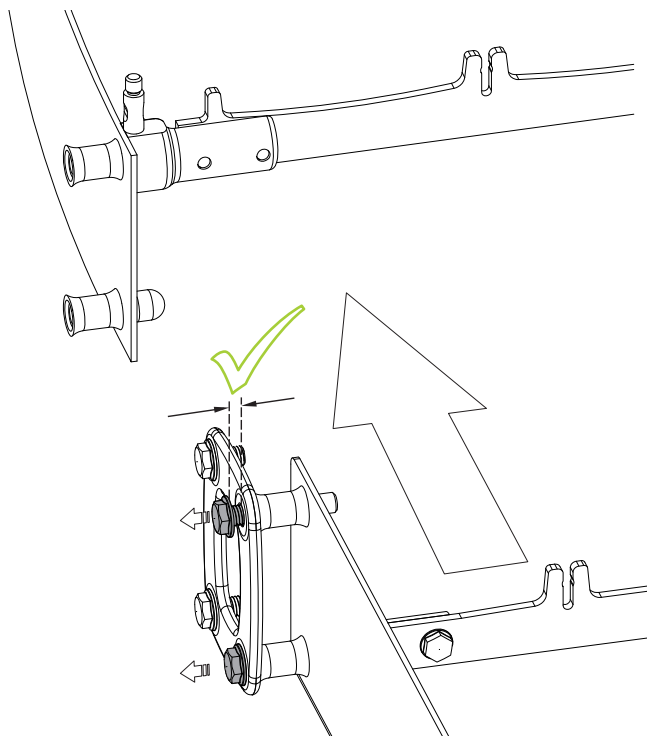
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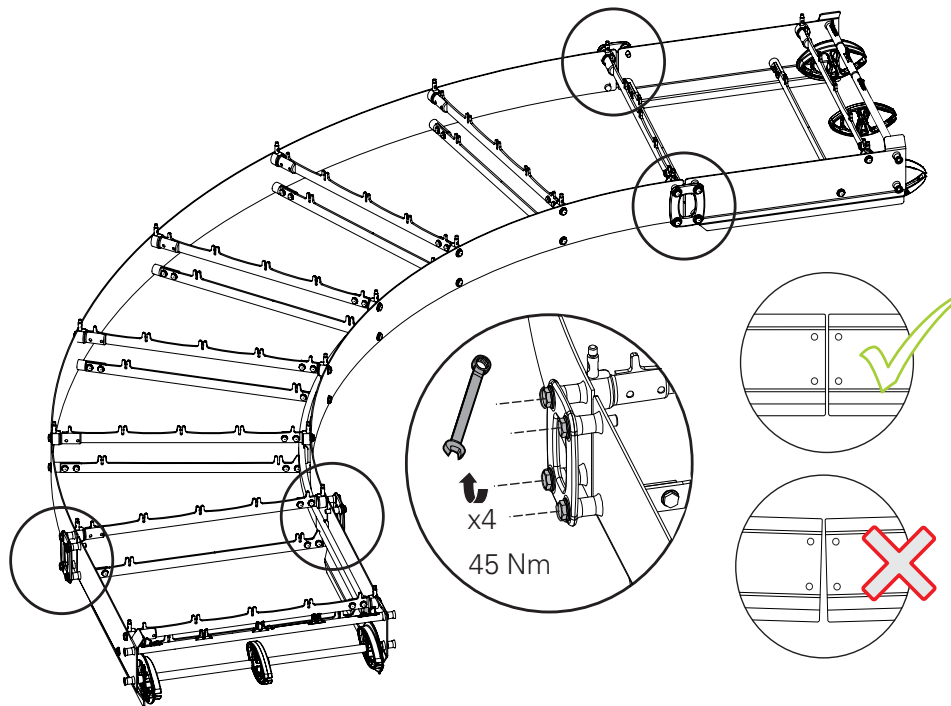
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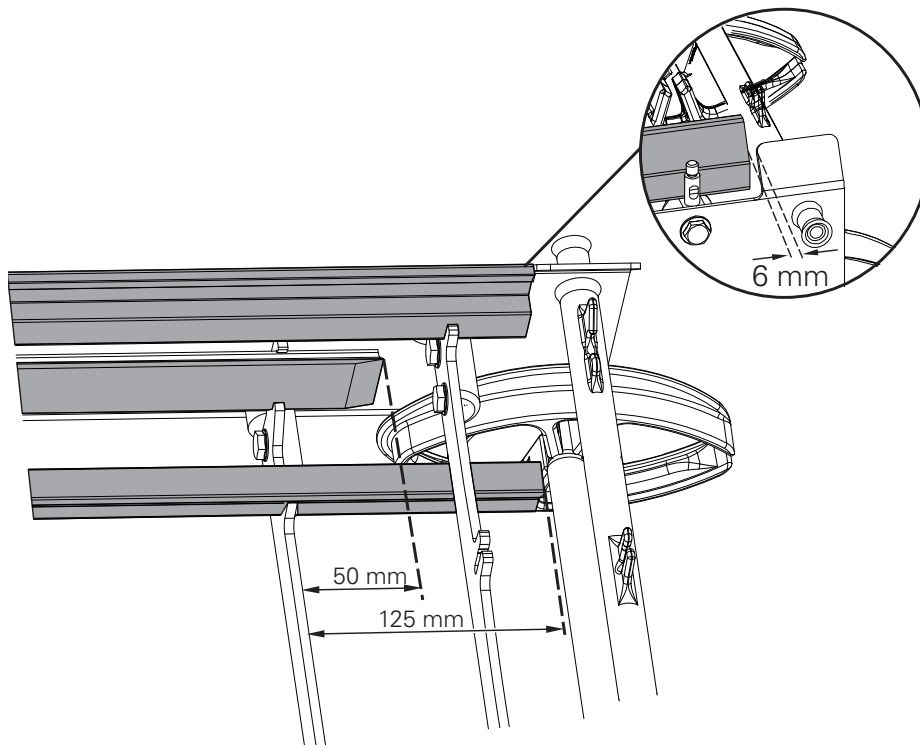
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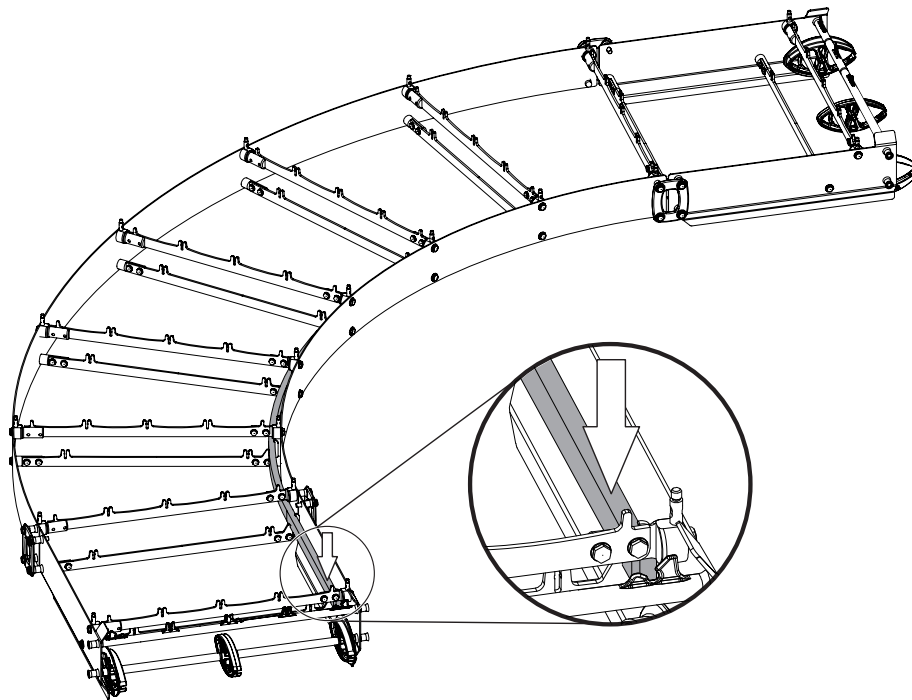
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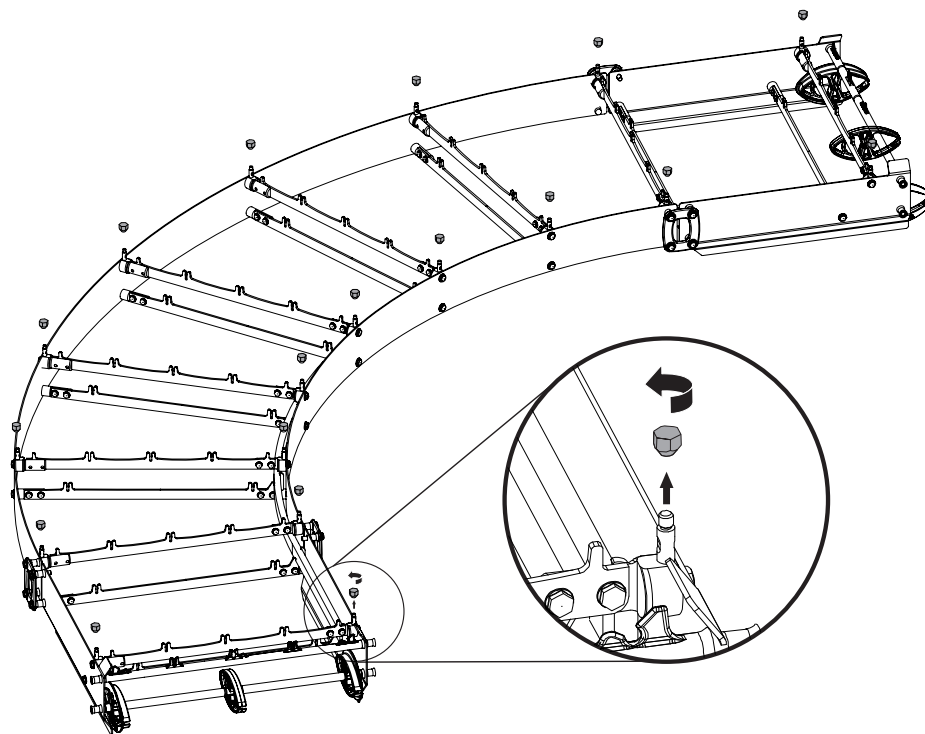
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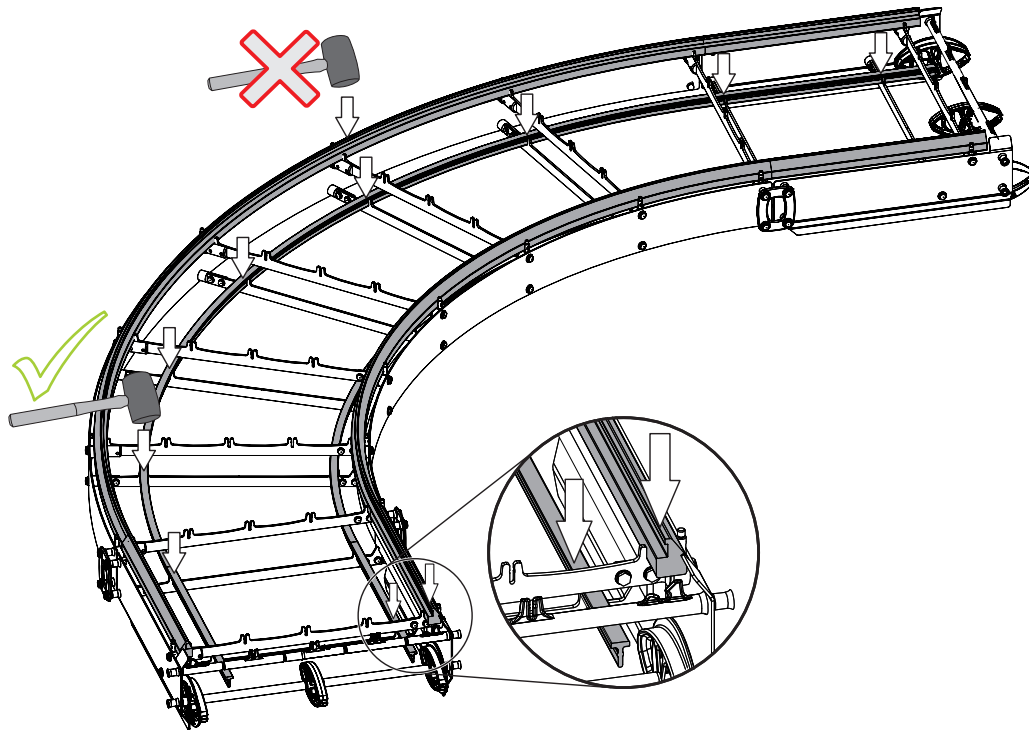


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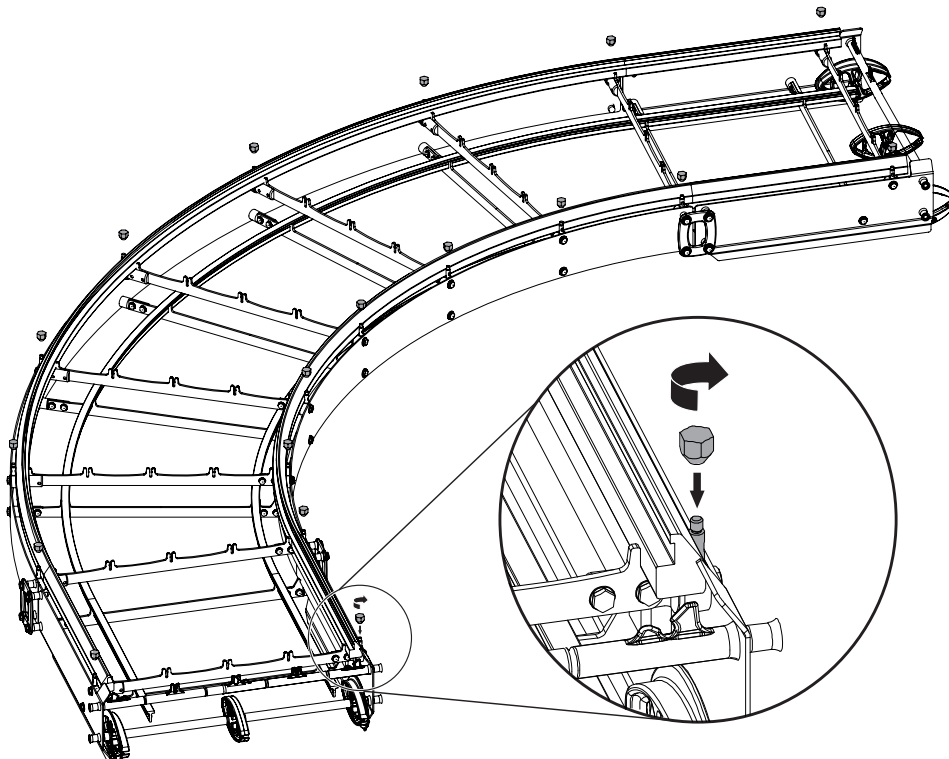




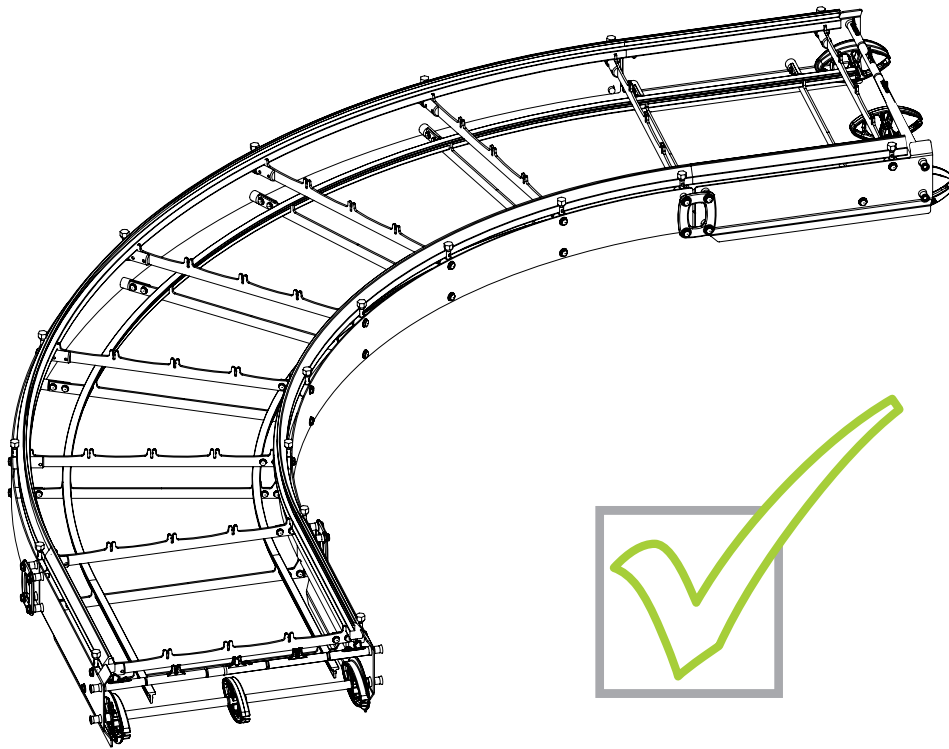
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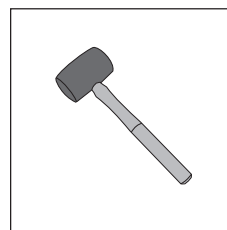
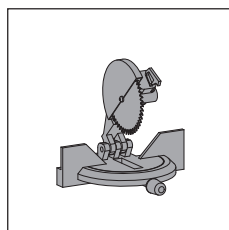
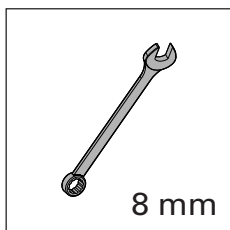
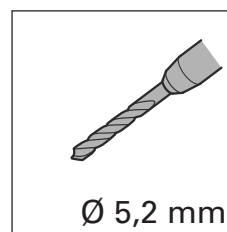
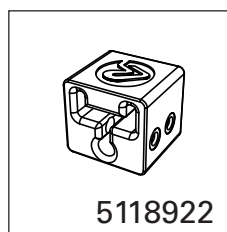
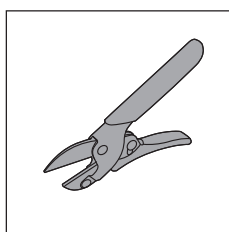
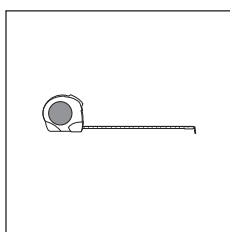
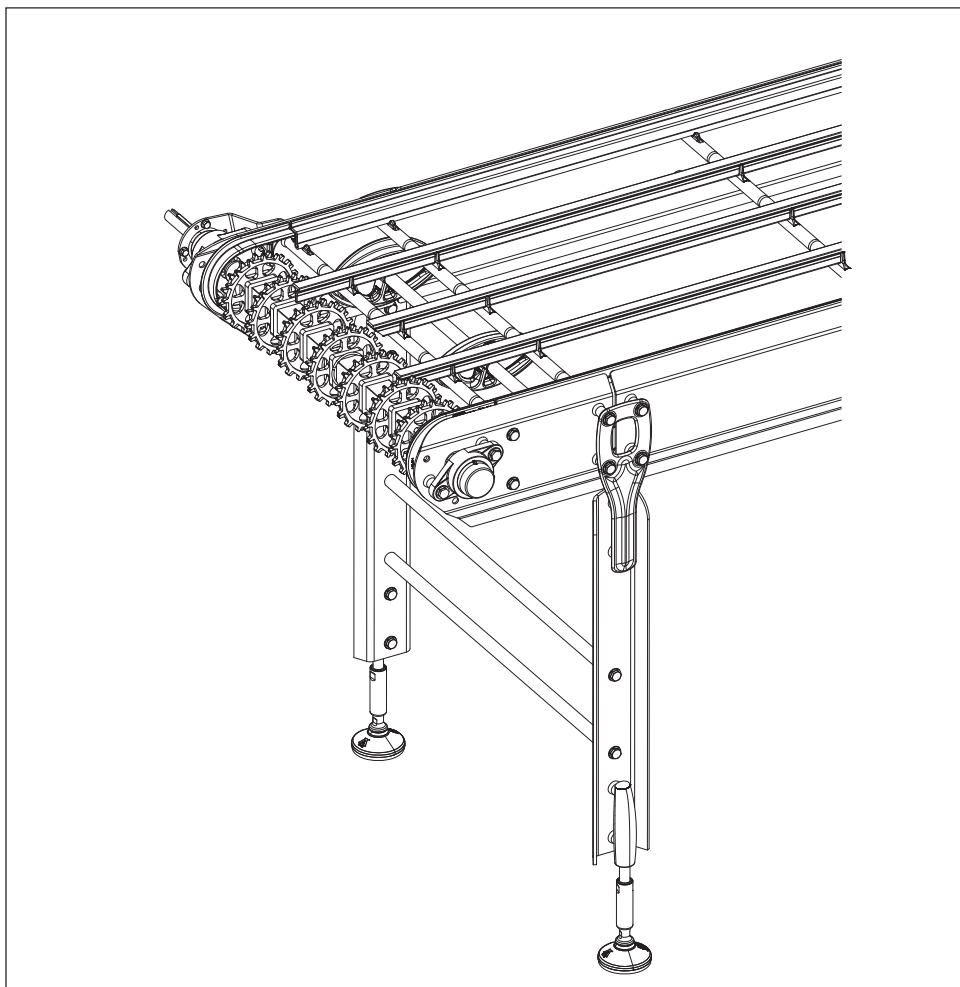


11

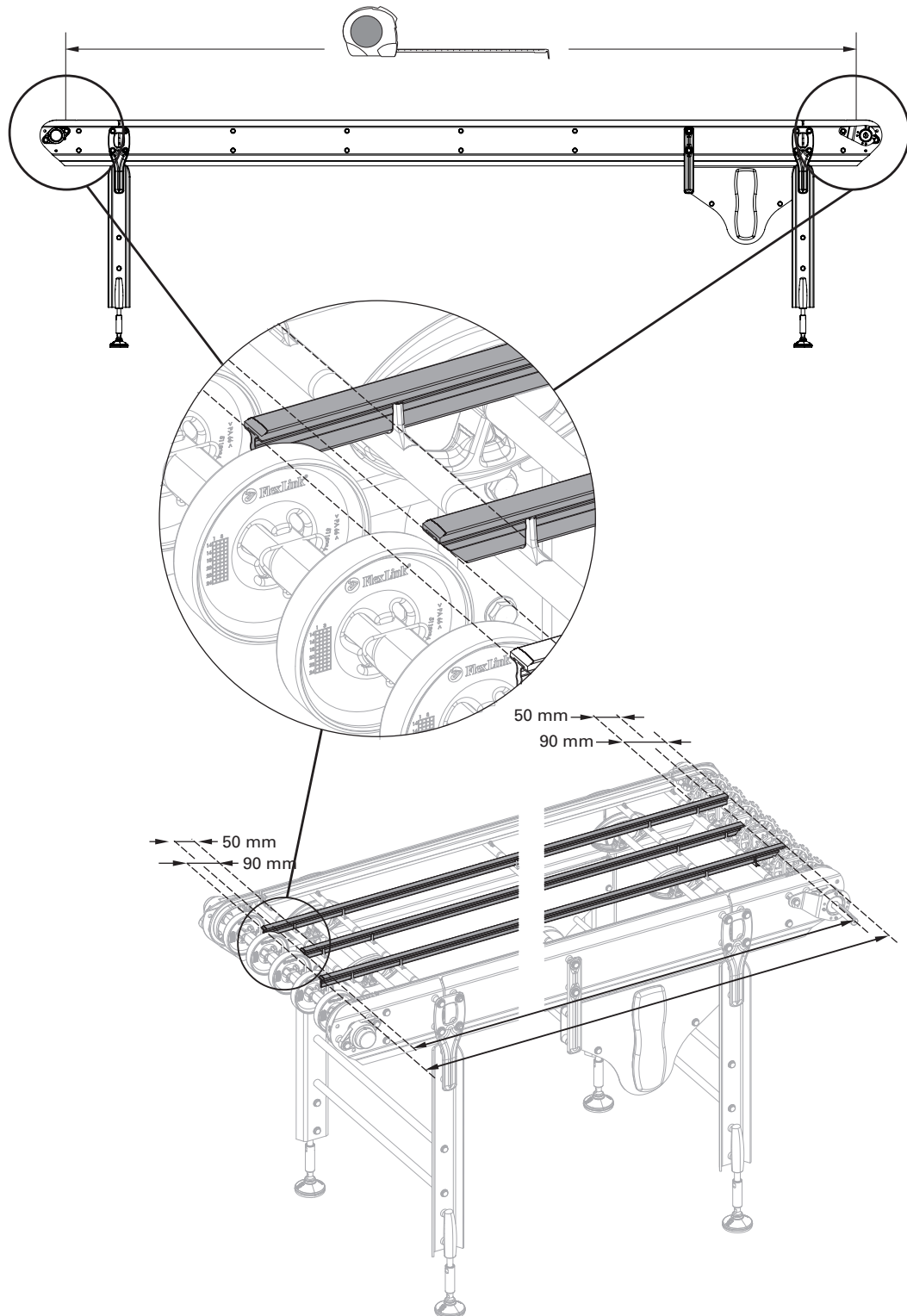




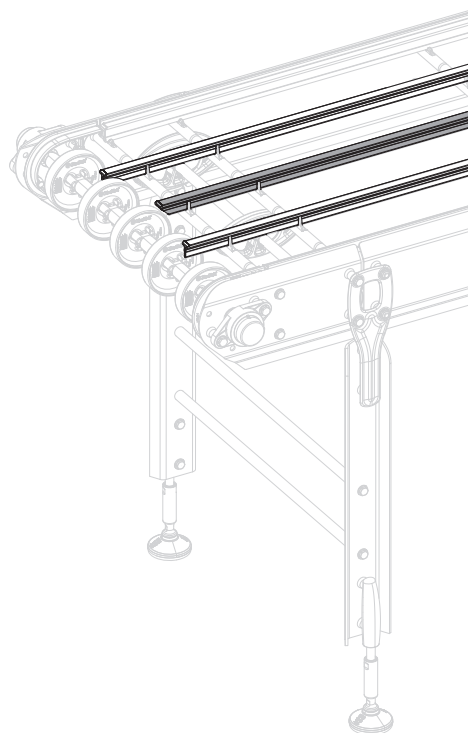
## 4.8 Mounting Slide rail



1



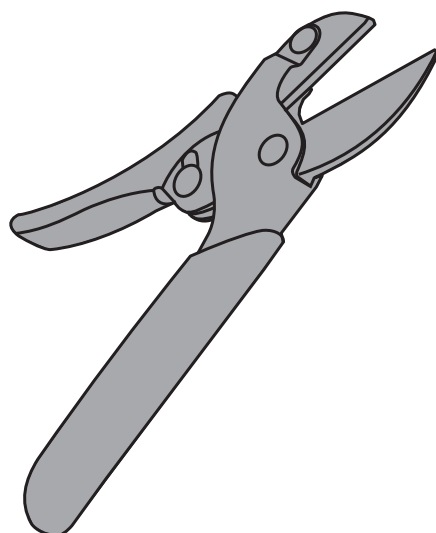
2



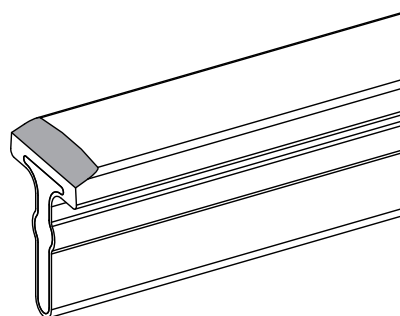
1 - WL222X, WL273X, WL526X, XWL678X

2 - WL374X, WL678X

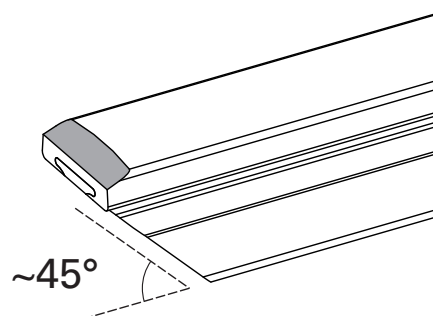
1 - WL222X, WL273X, WL526X, XWL678X



1

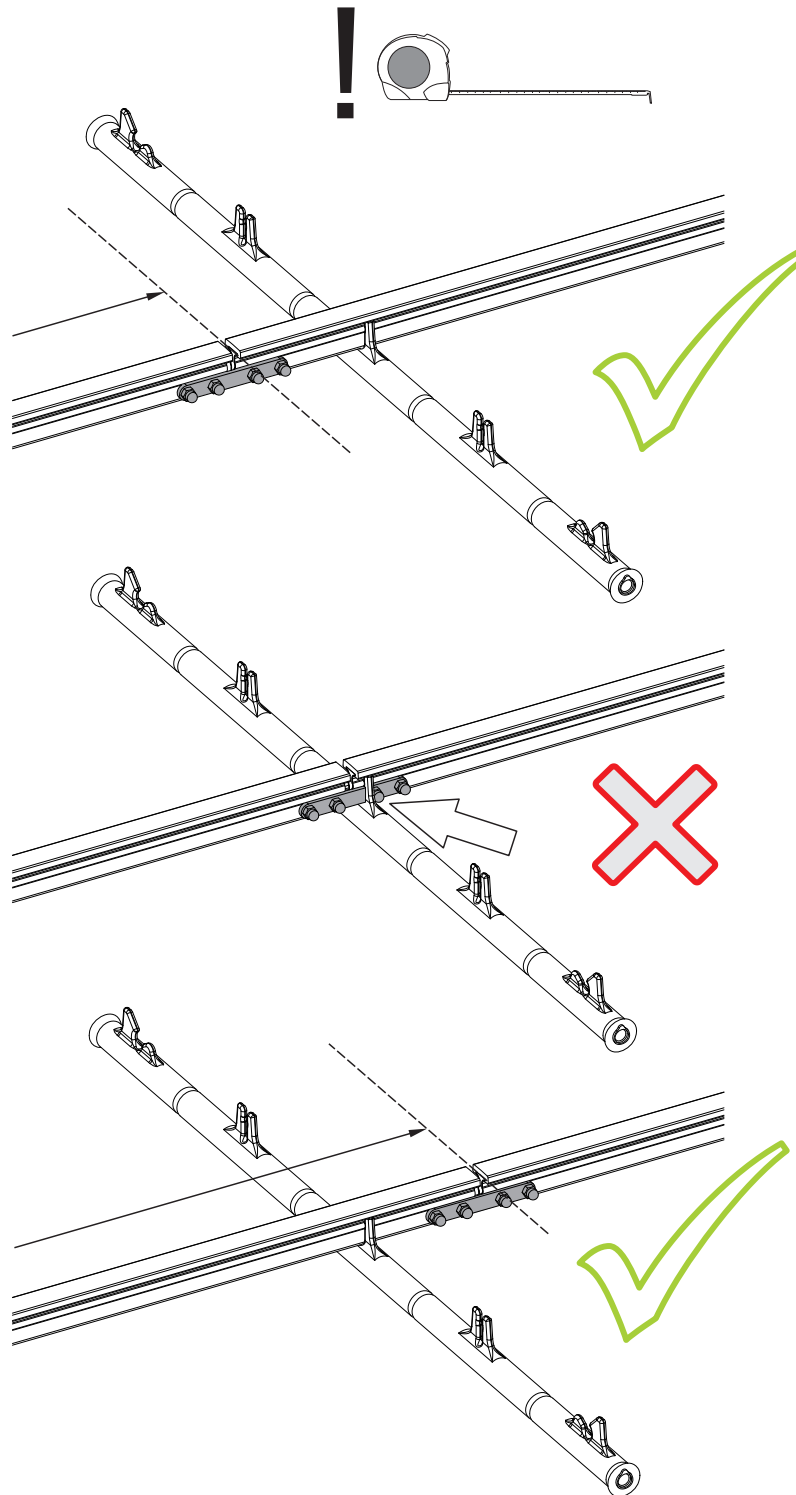


2

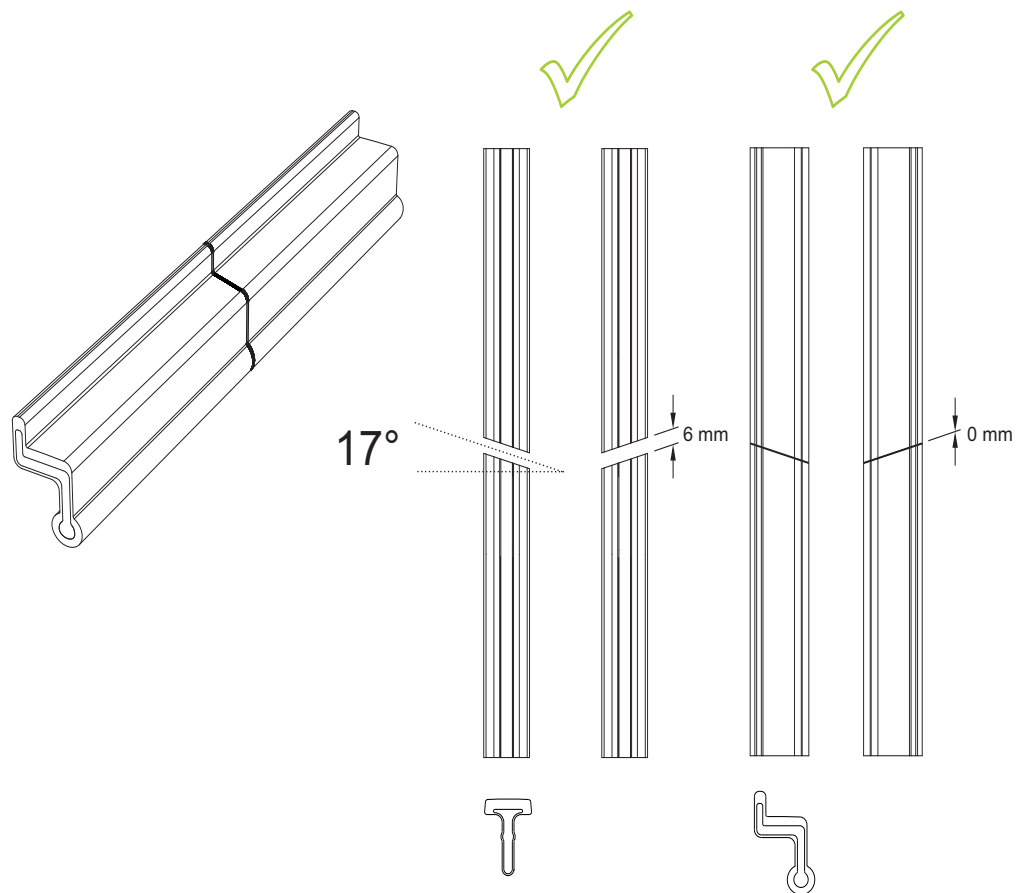
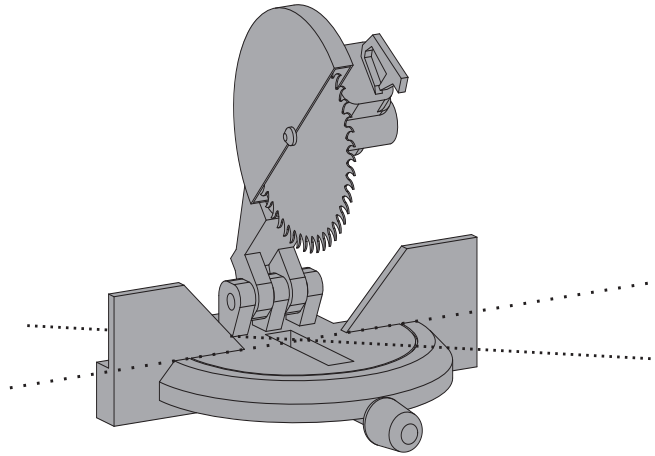


~45°

3

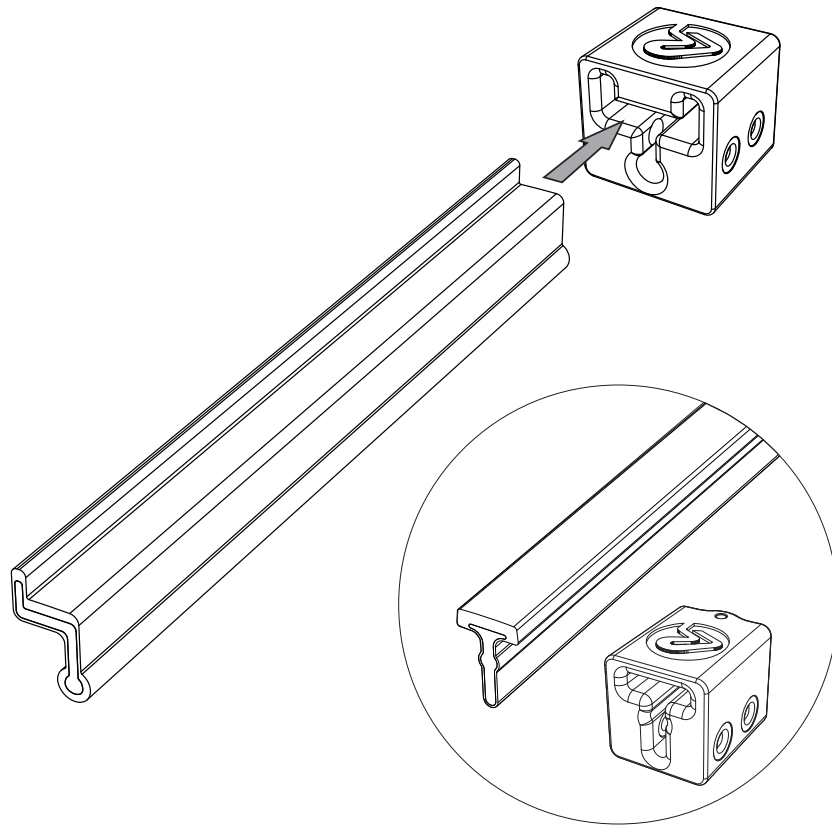


4

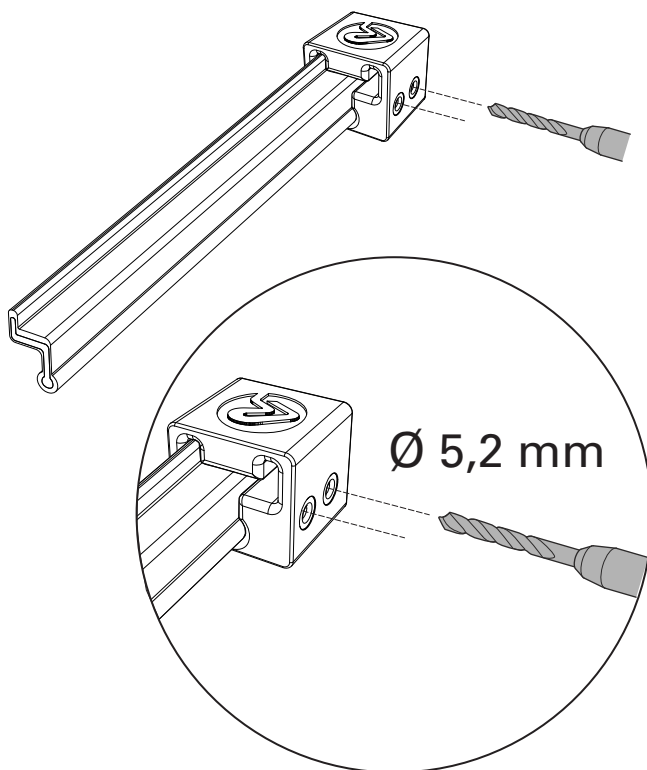




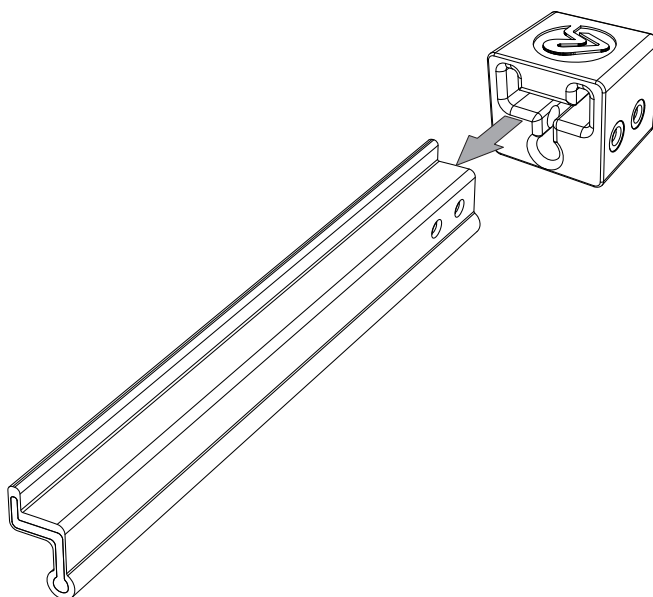
5



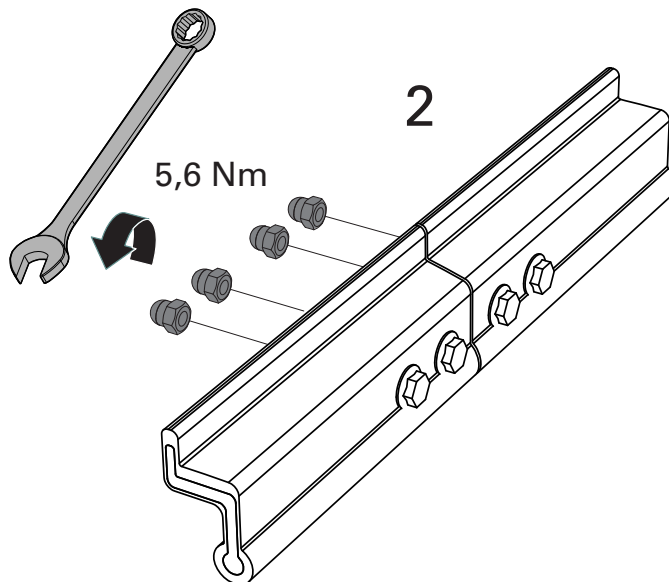
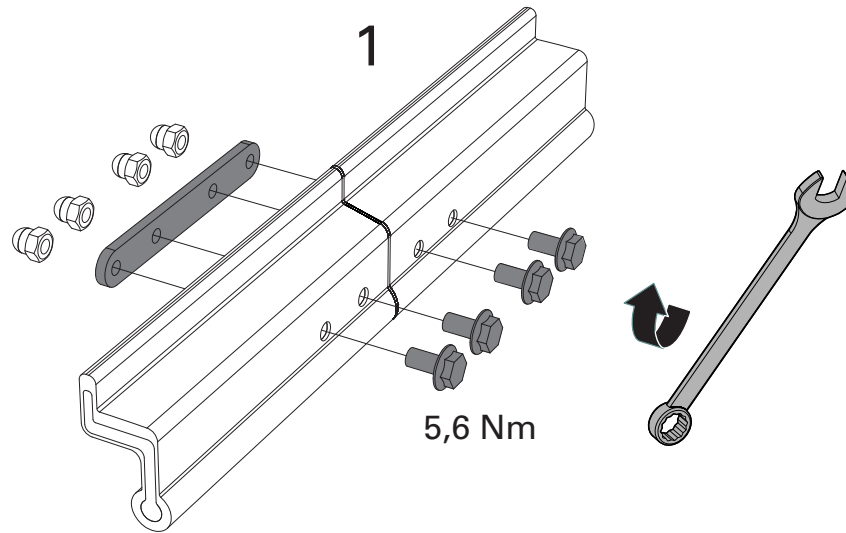
6



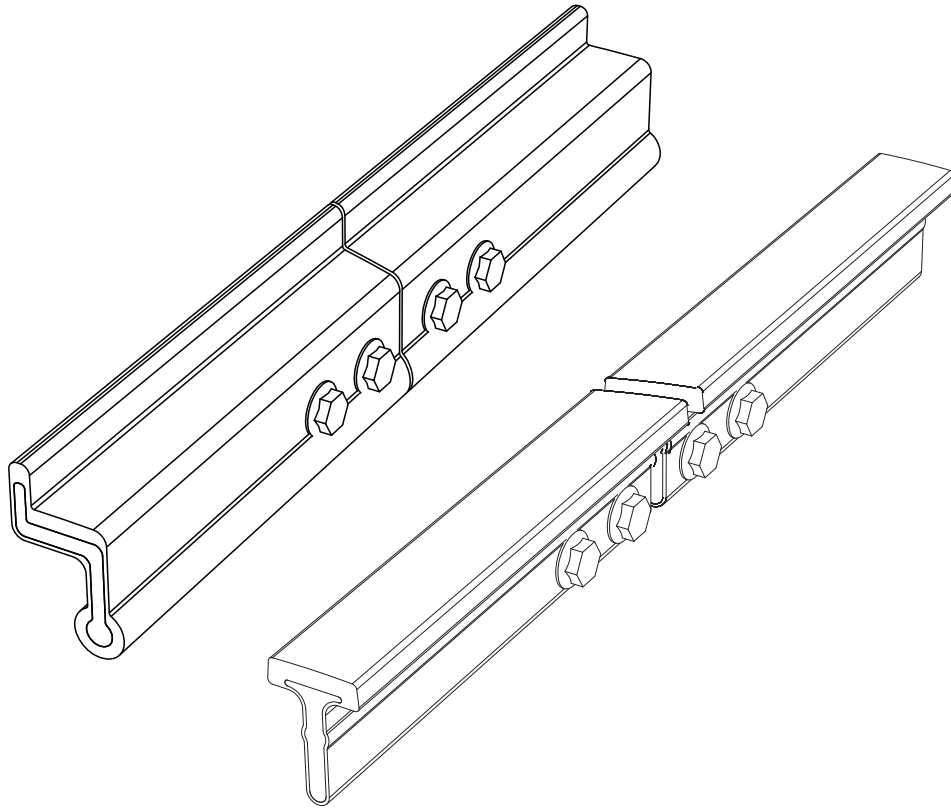
7



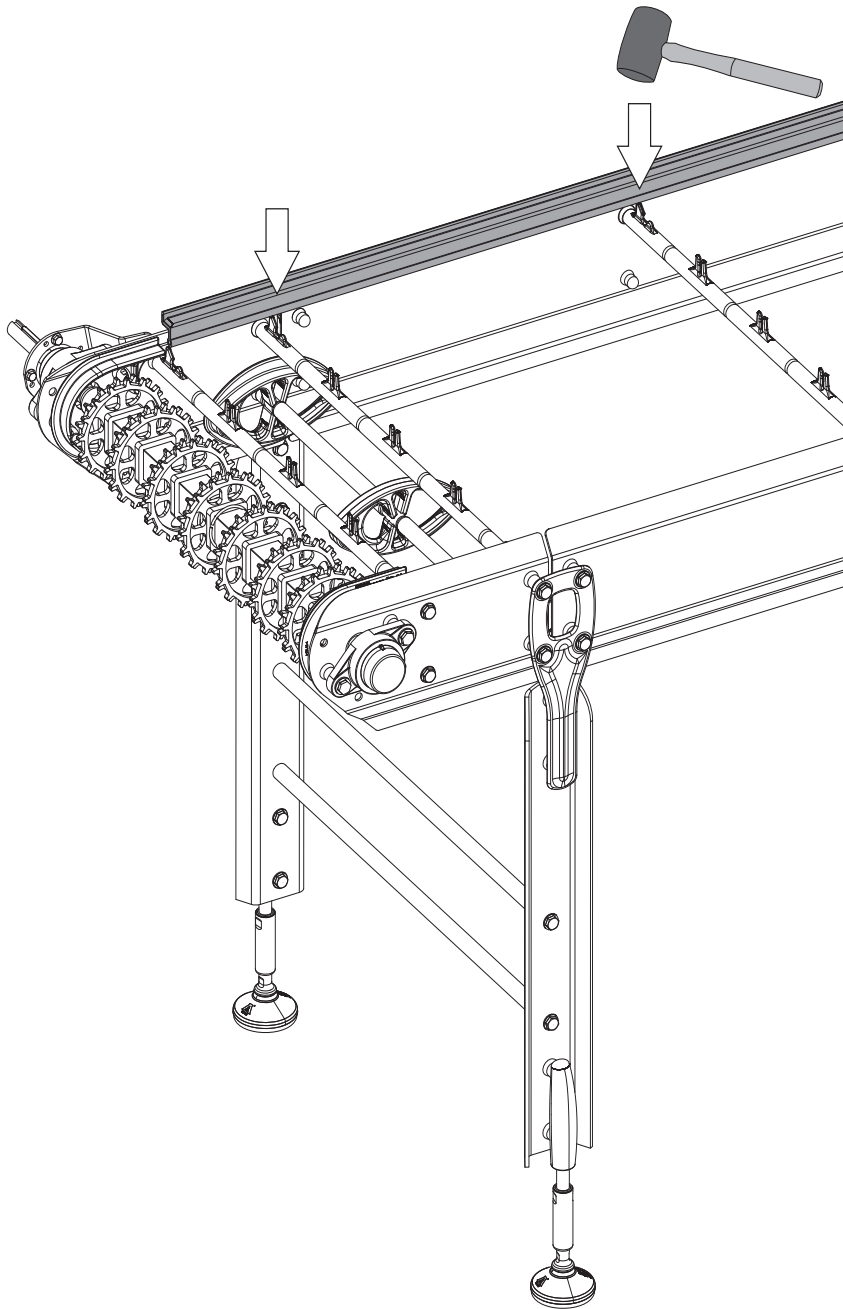
8



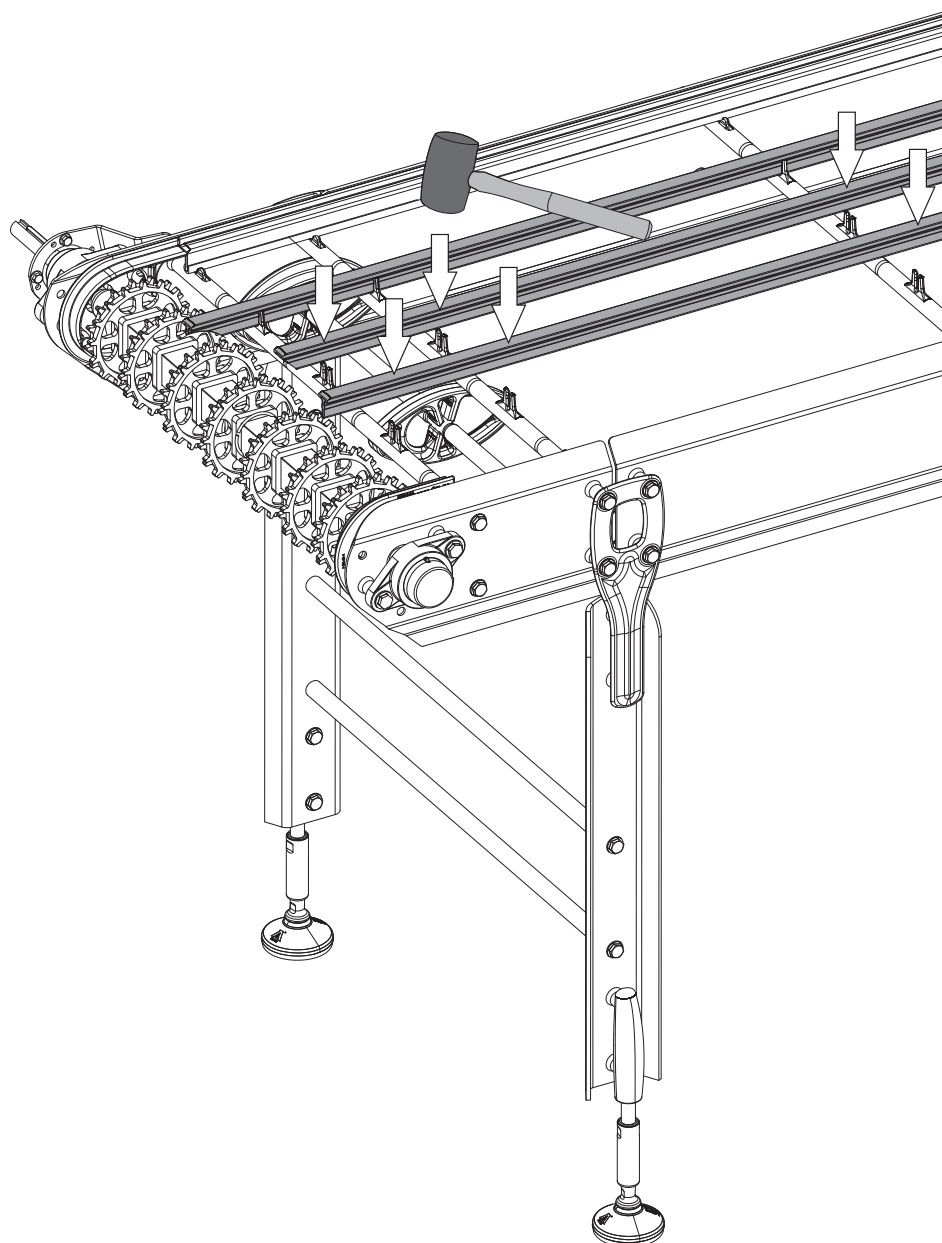
9



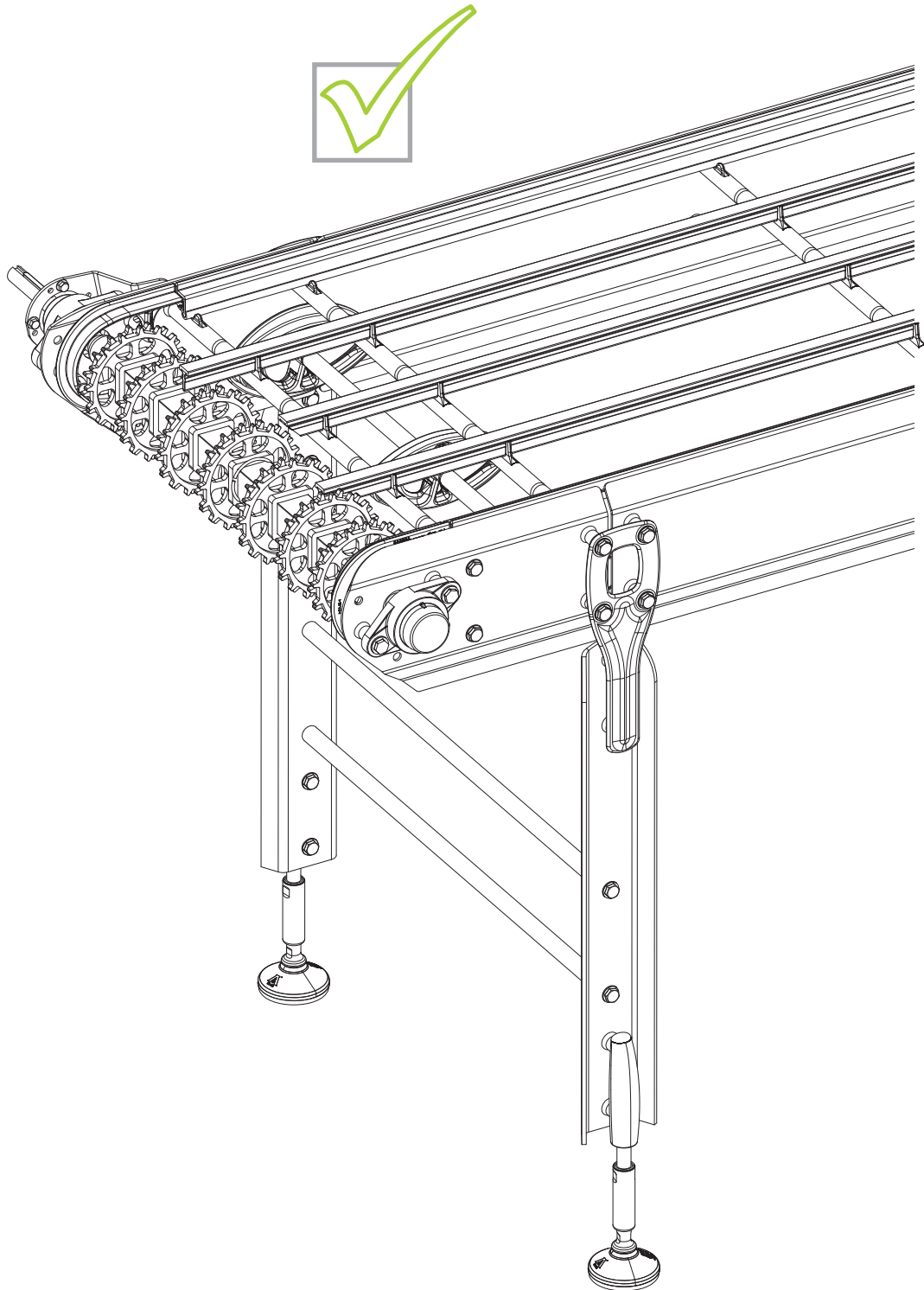
10



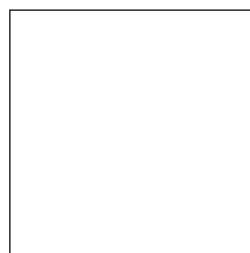
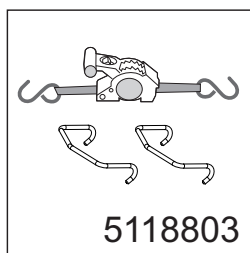
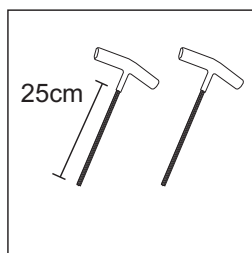
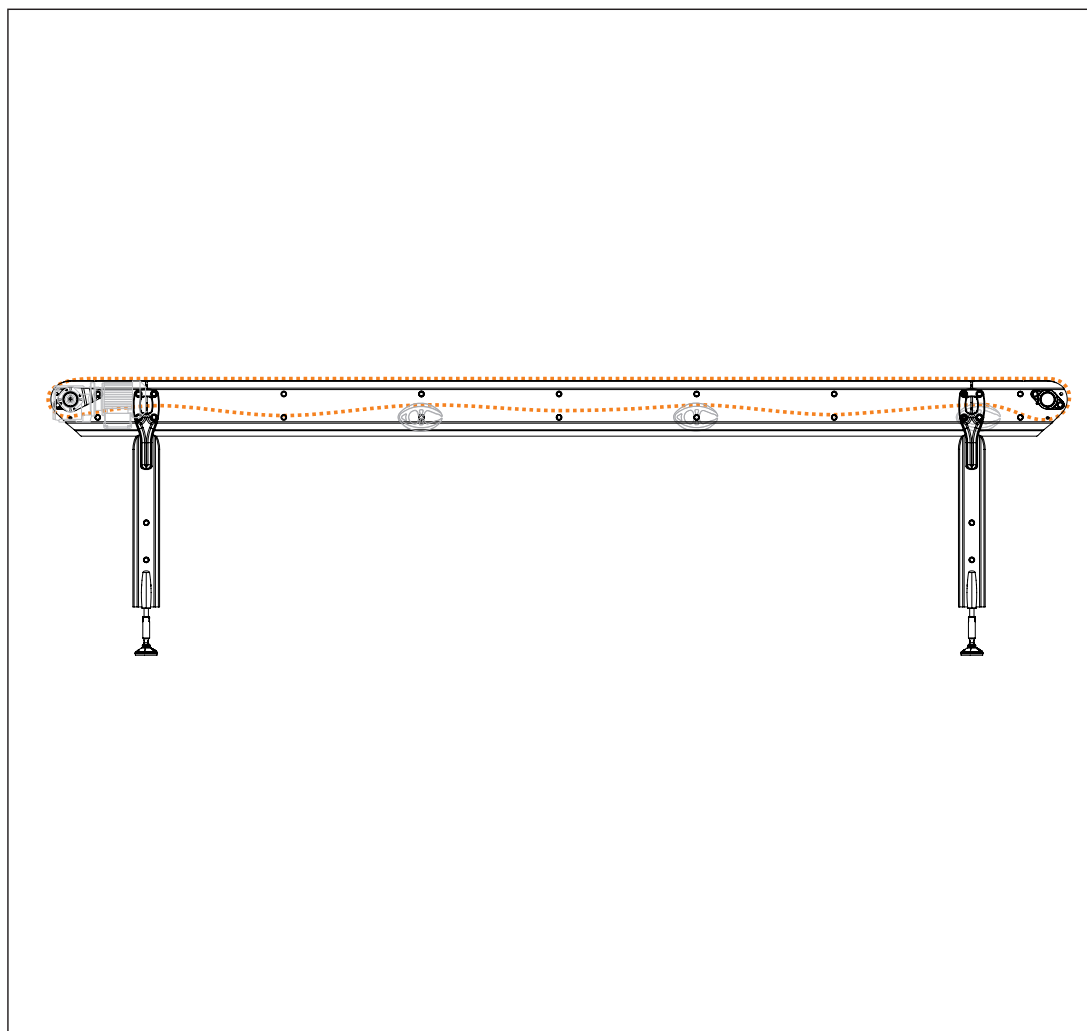
11



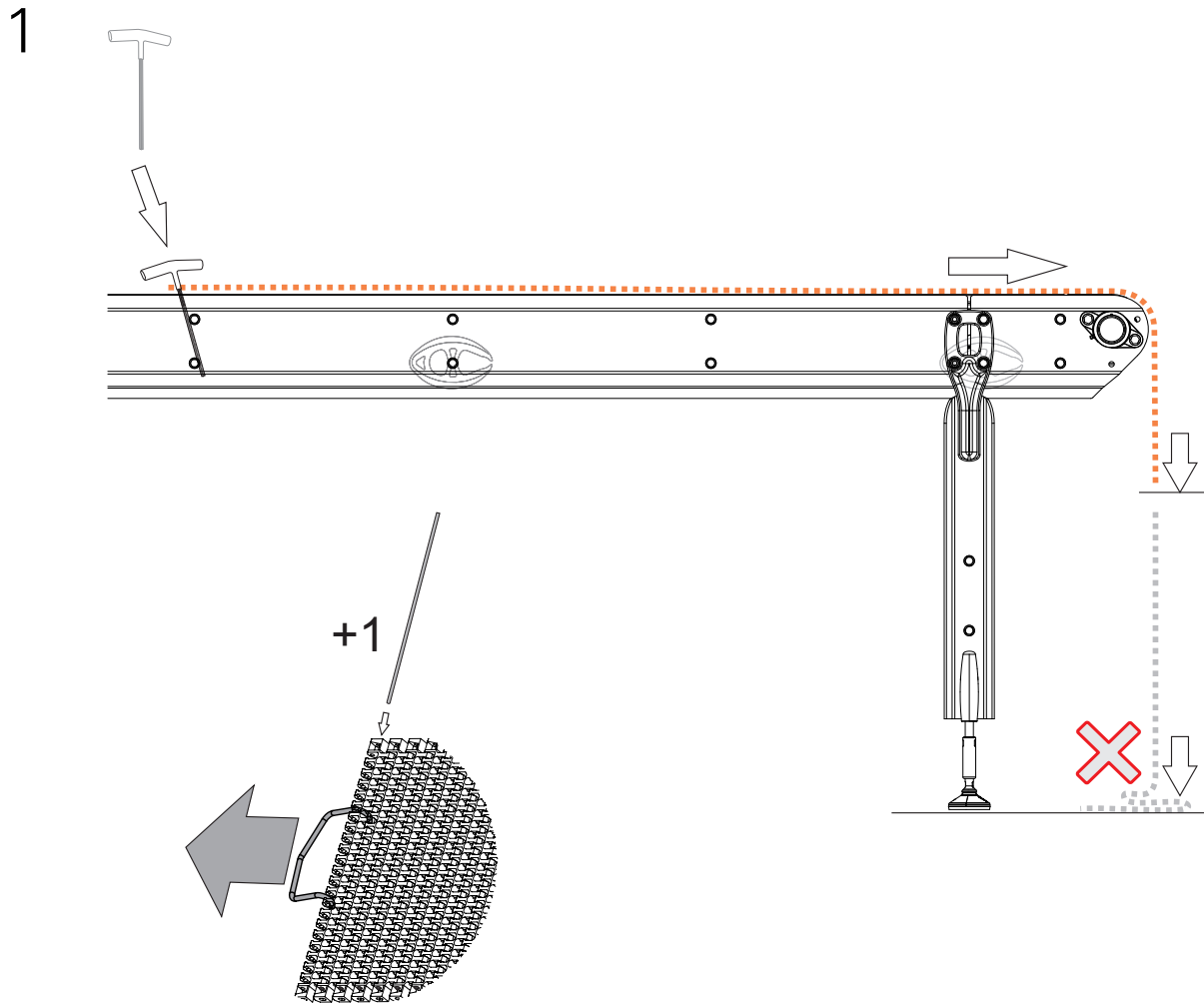
12



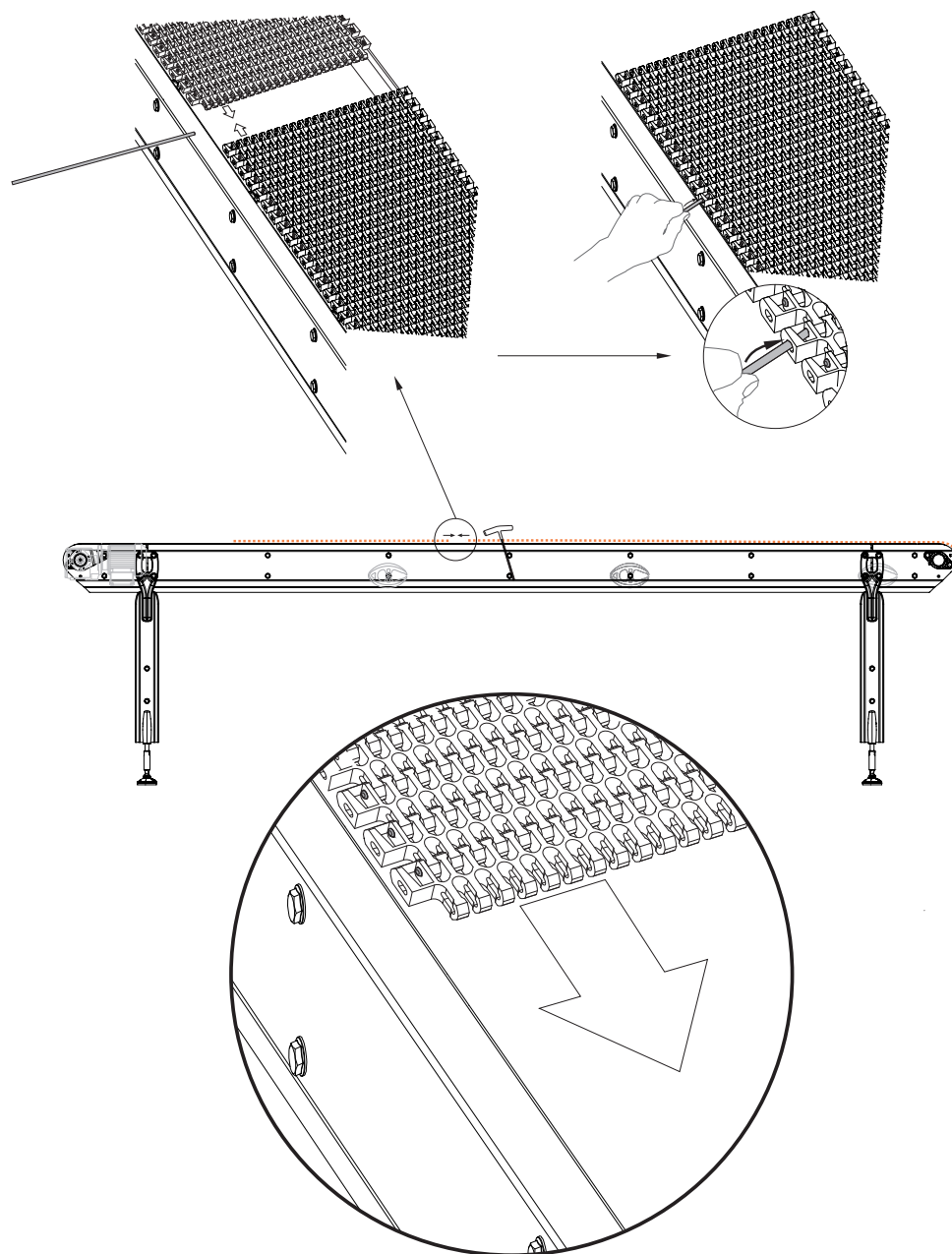
## 4.9 Mounting Modular belt



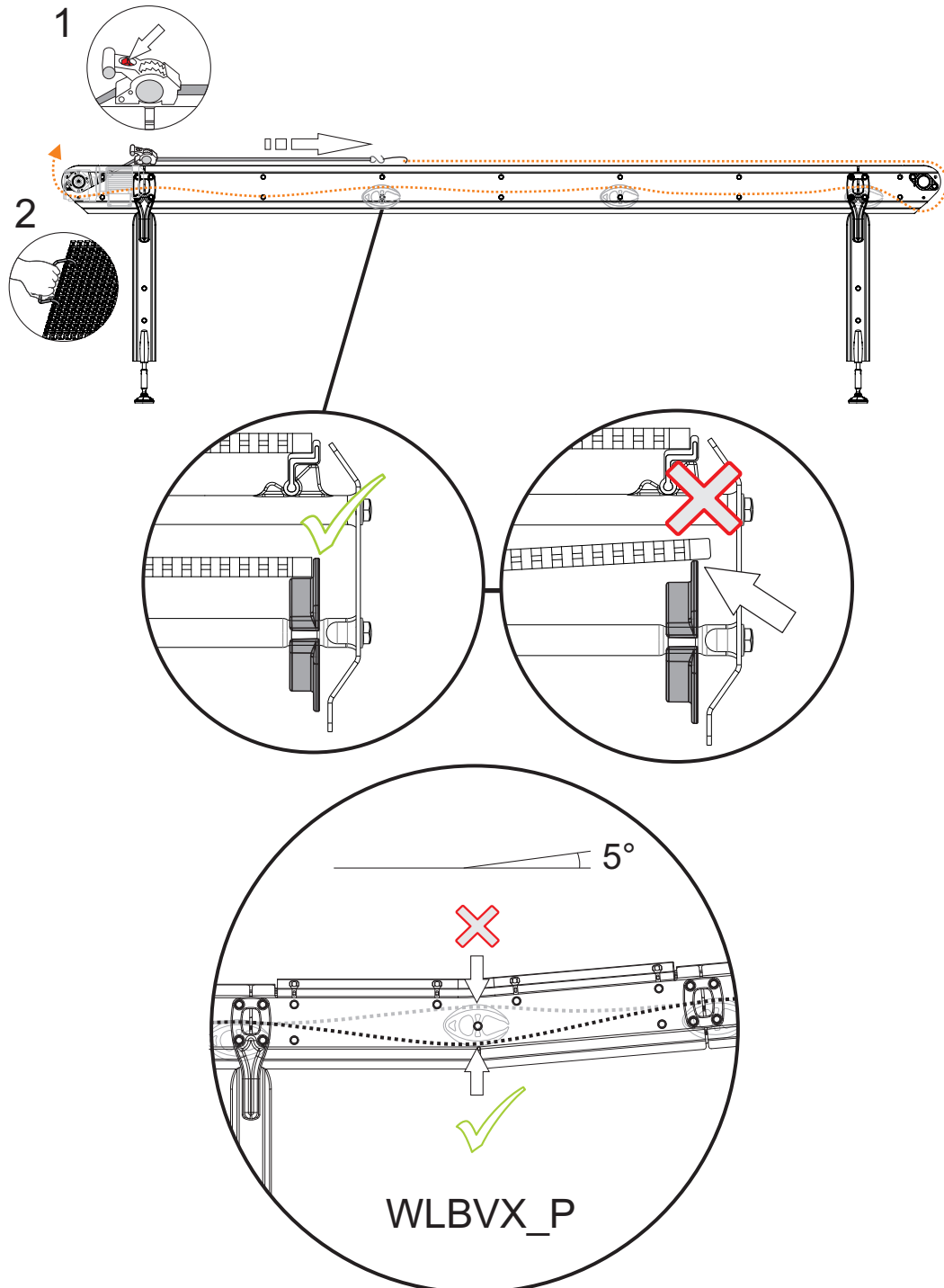




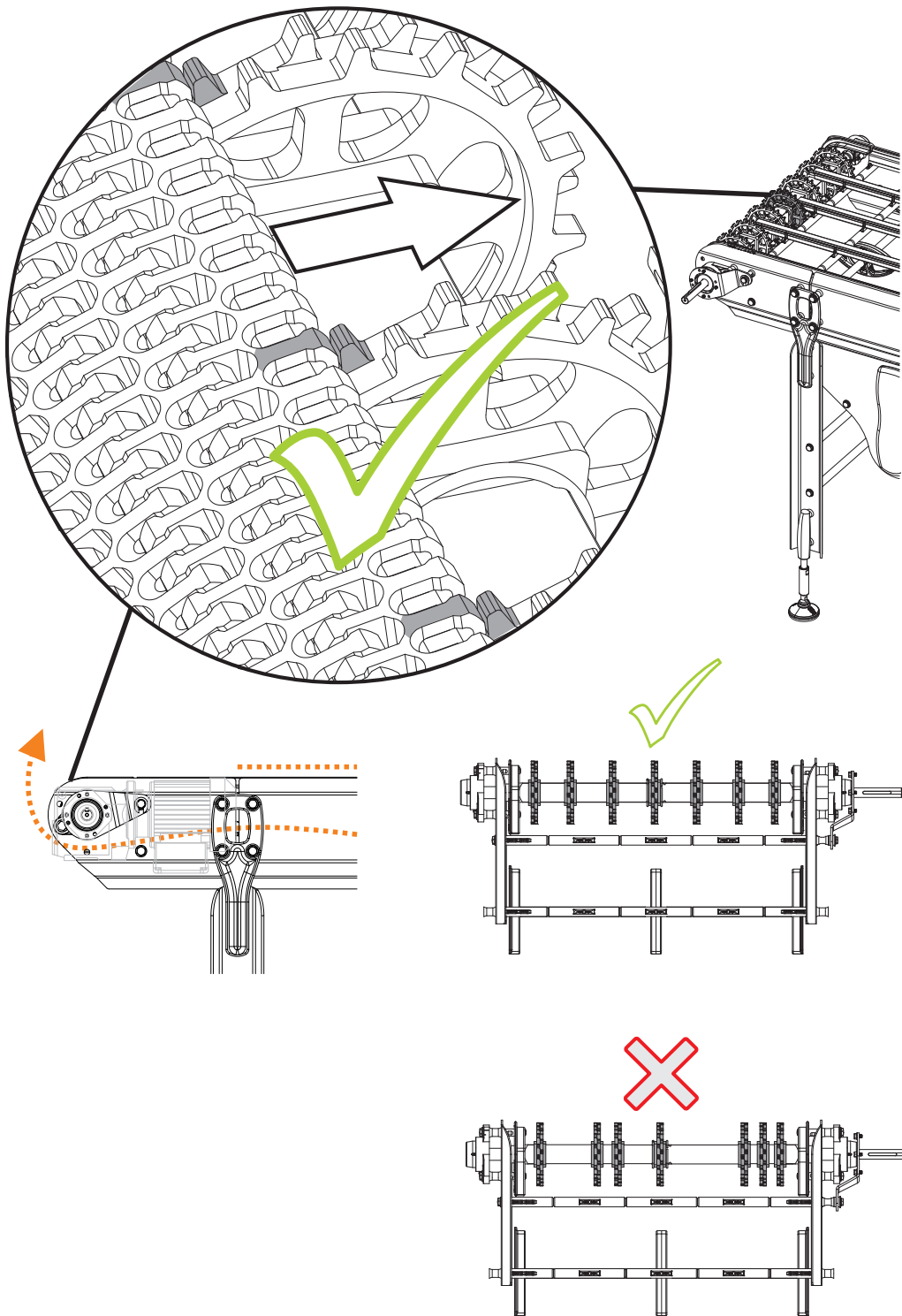
2



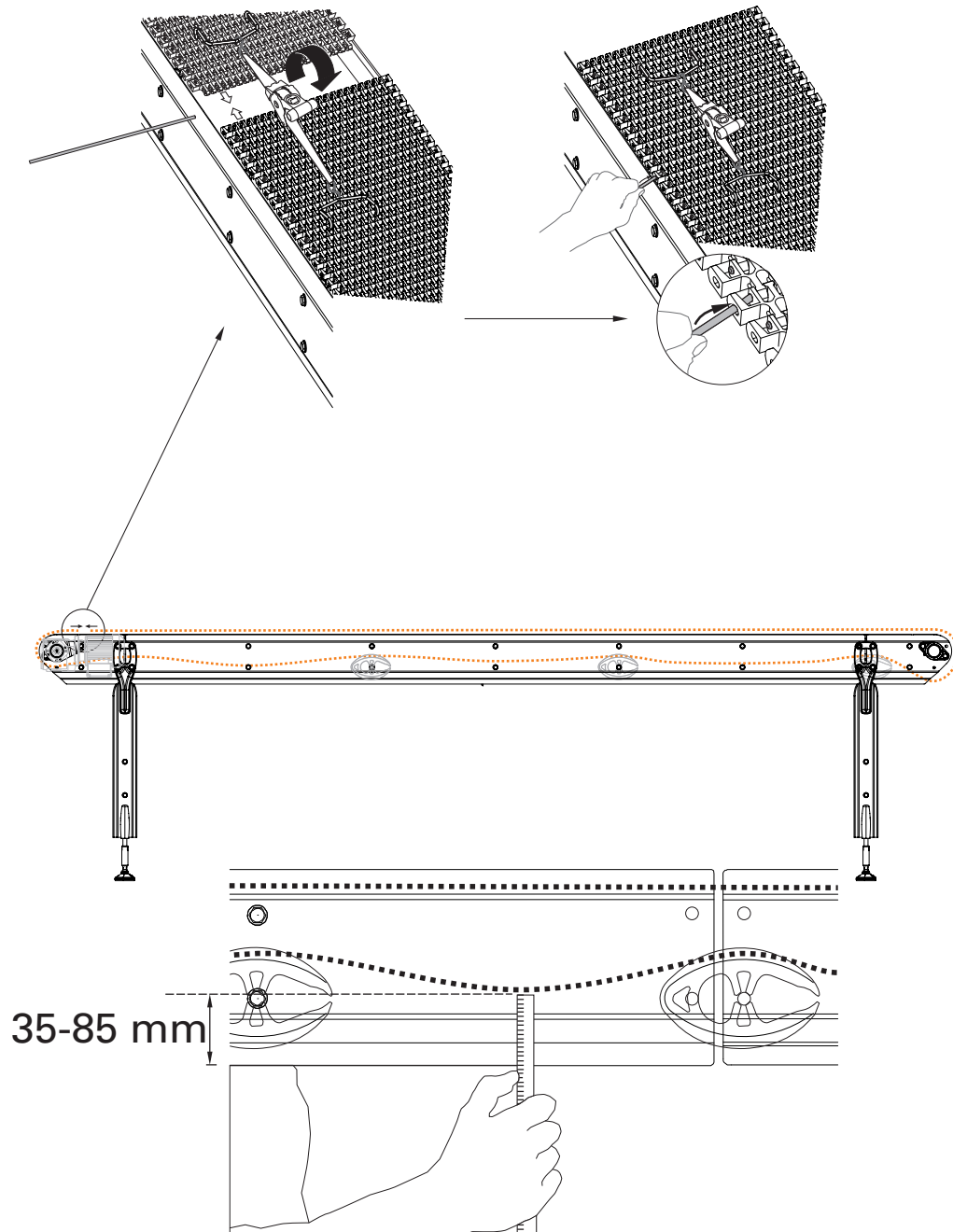
3



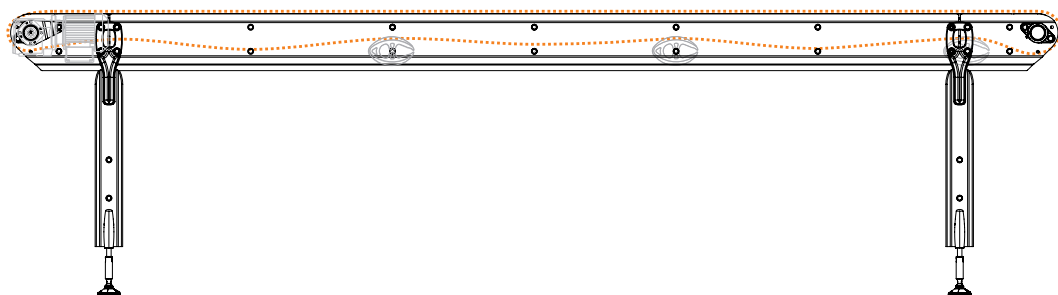
4



5

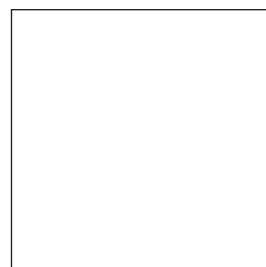
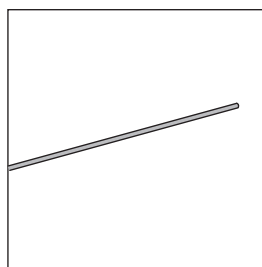
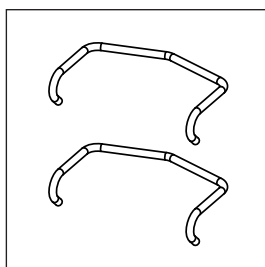
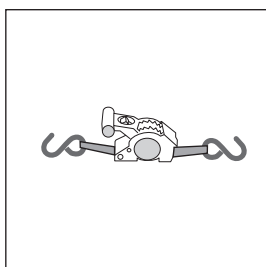
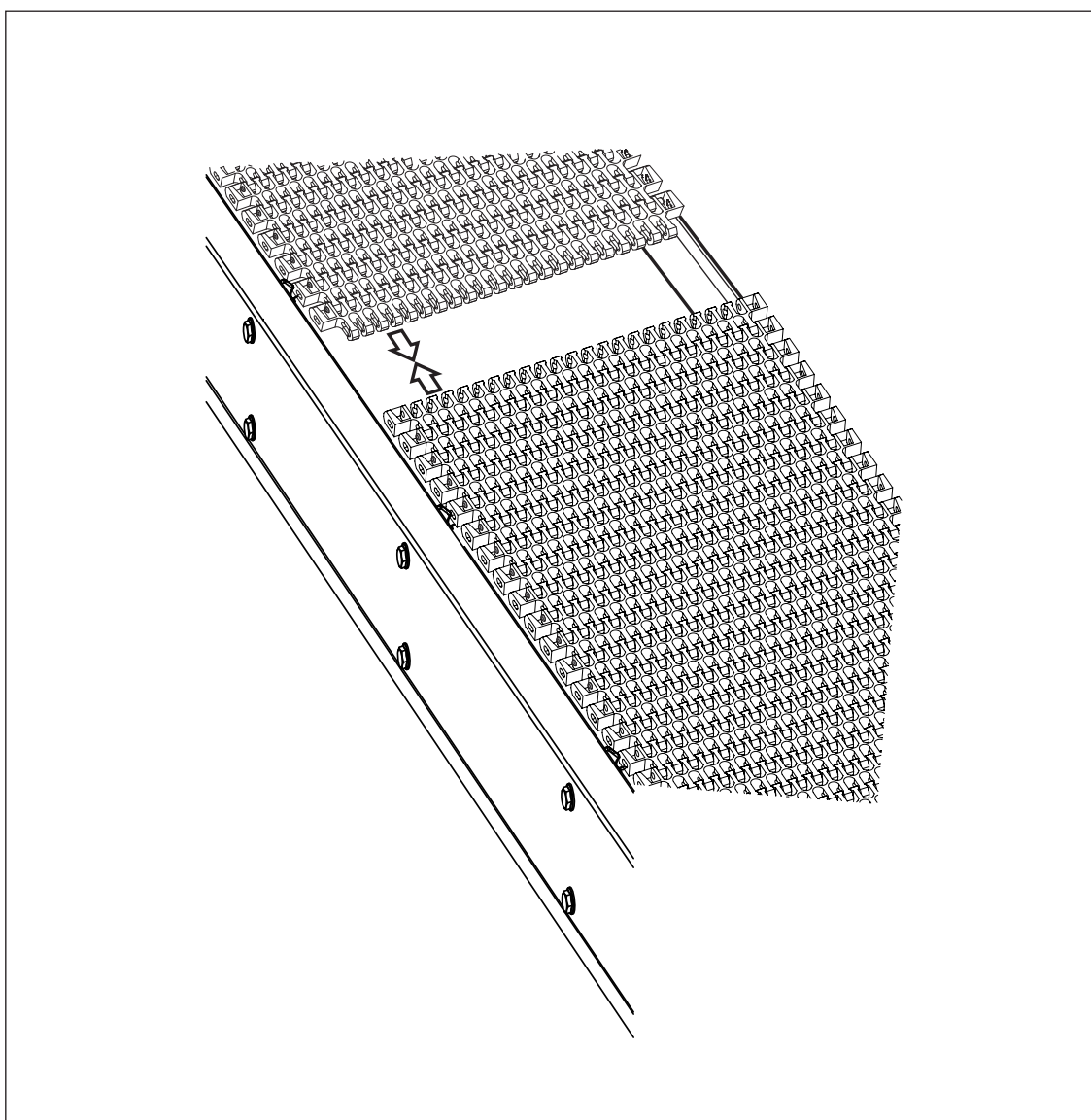


6



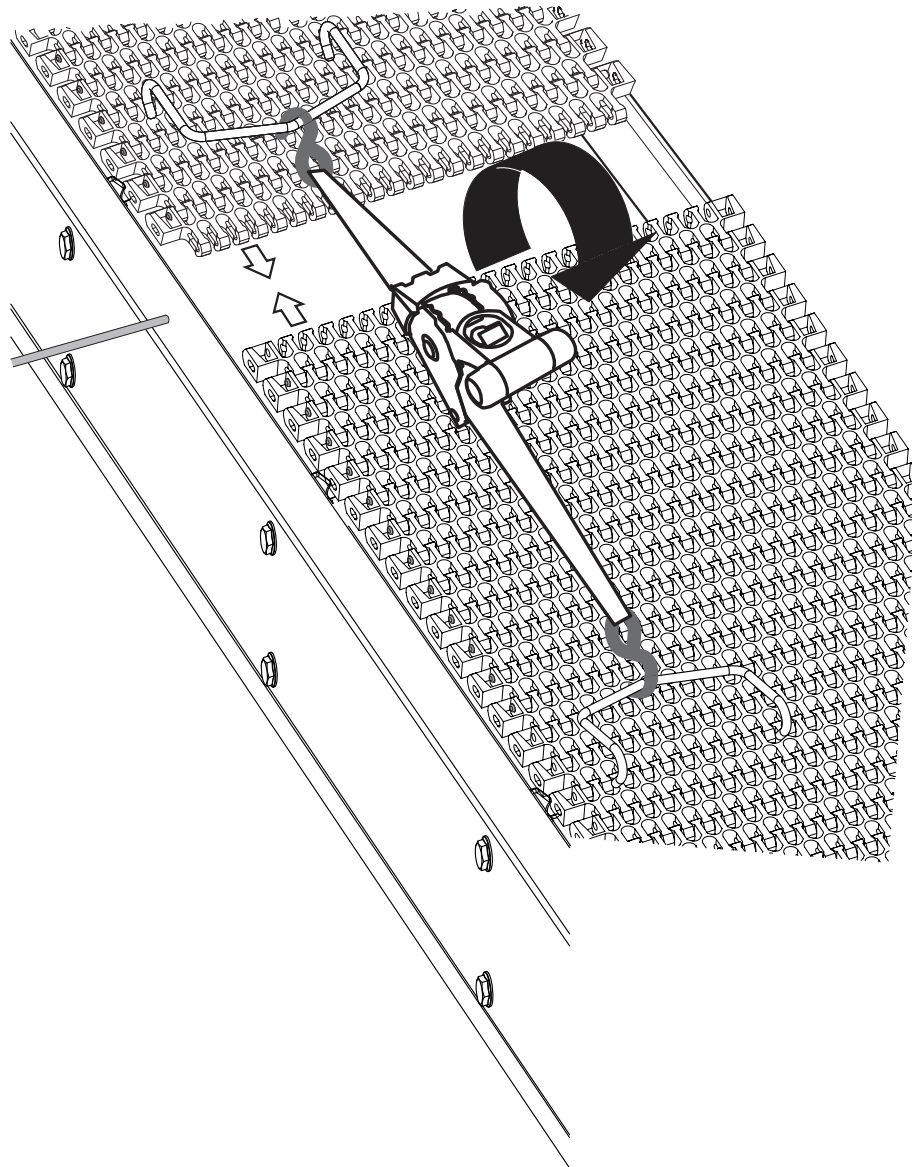


## 4.10 Assembly modular belt

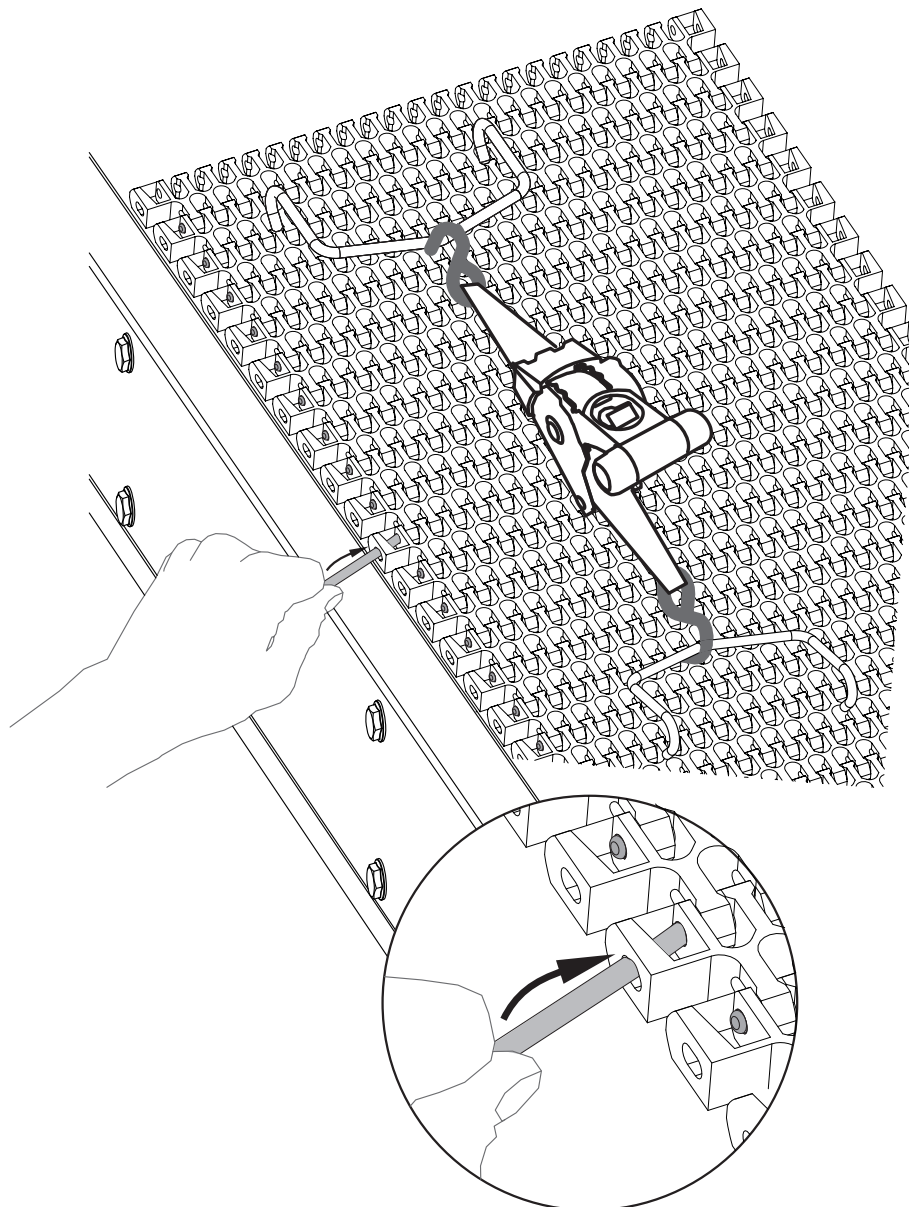




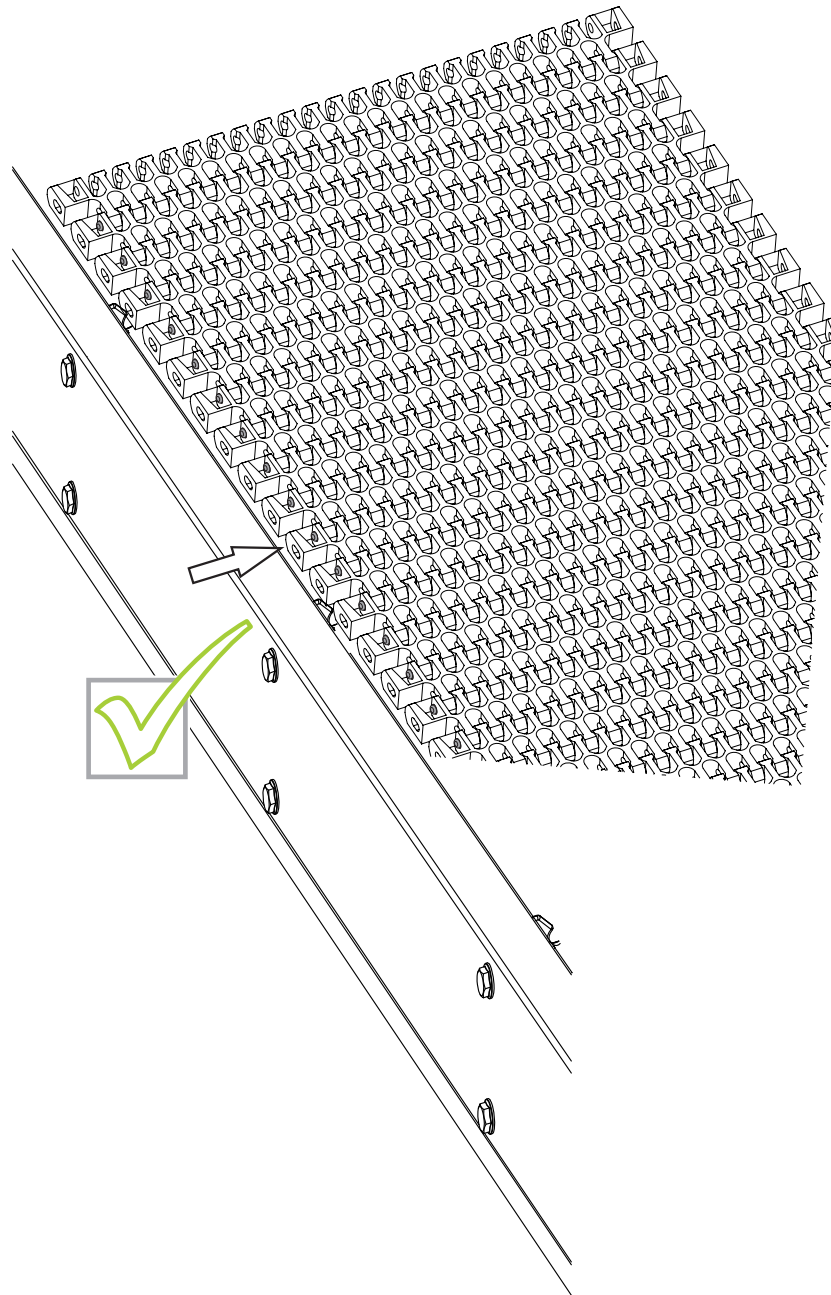
1



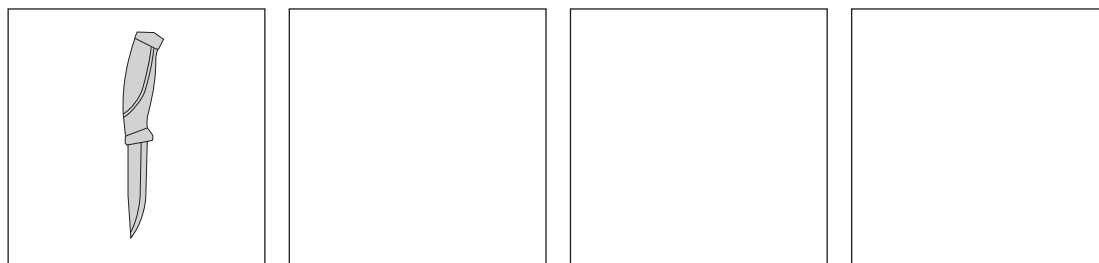
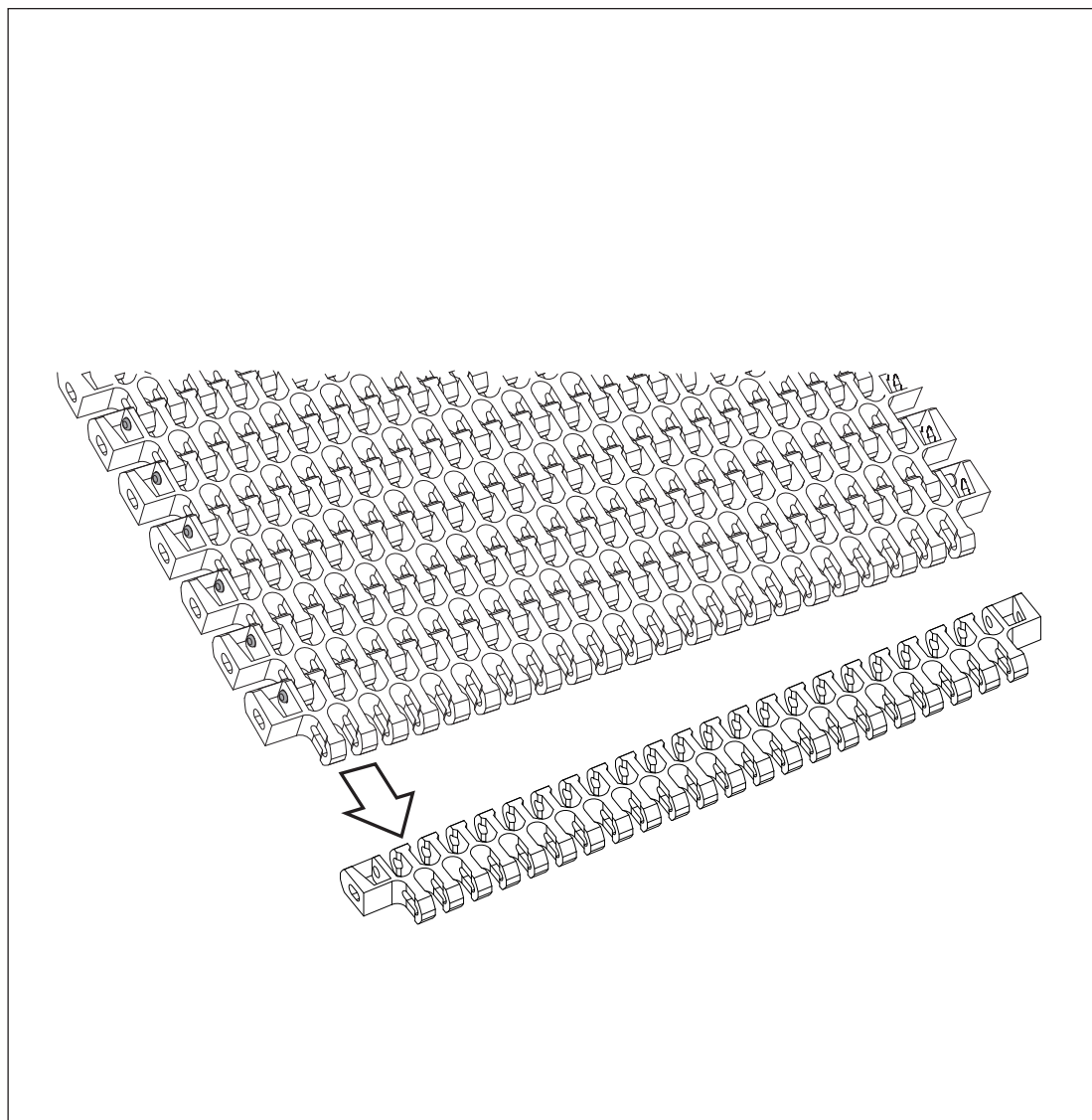
2



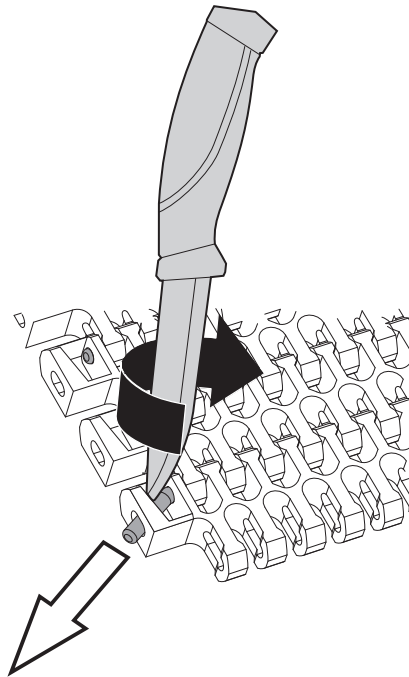
3



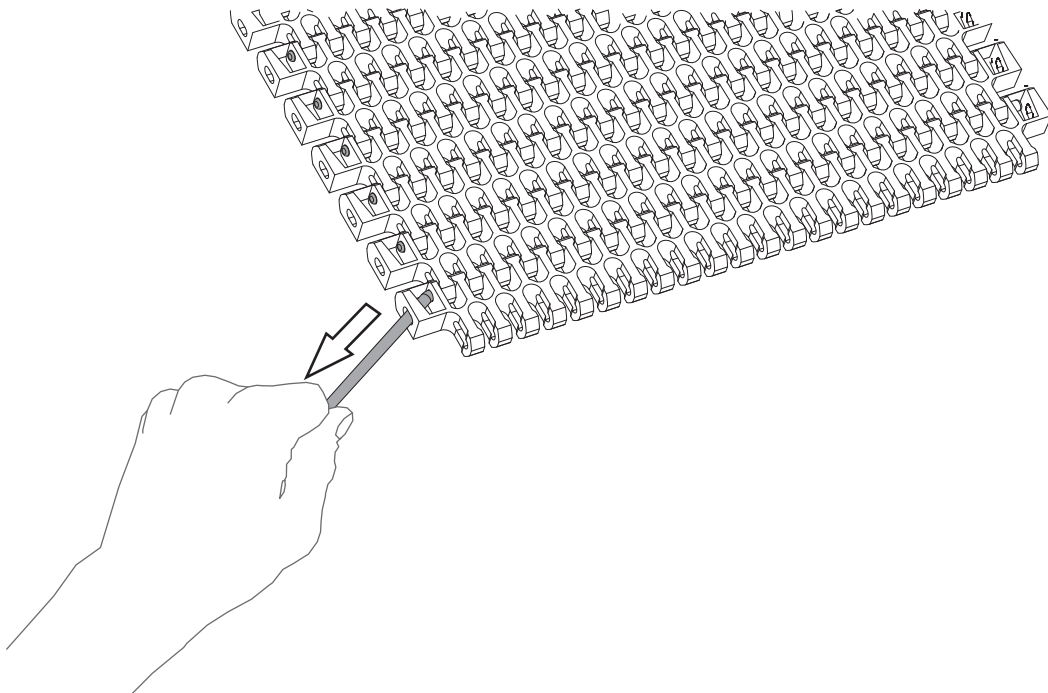
## 4.11 Disassembly Modular belt



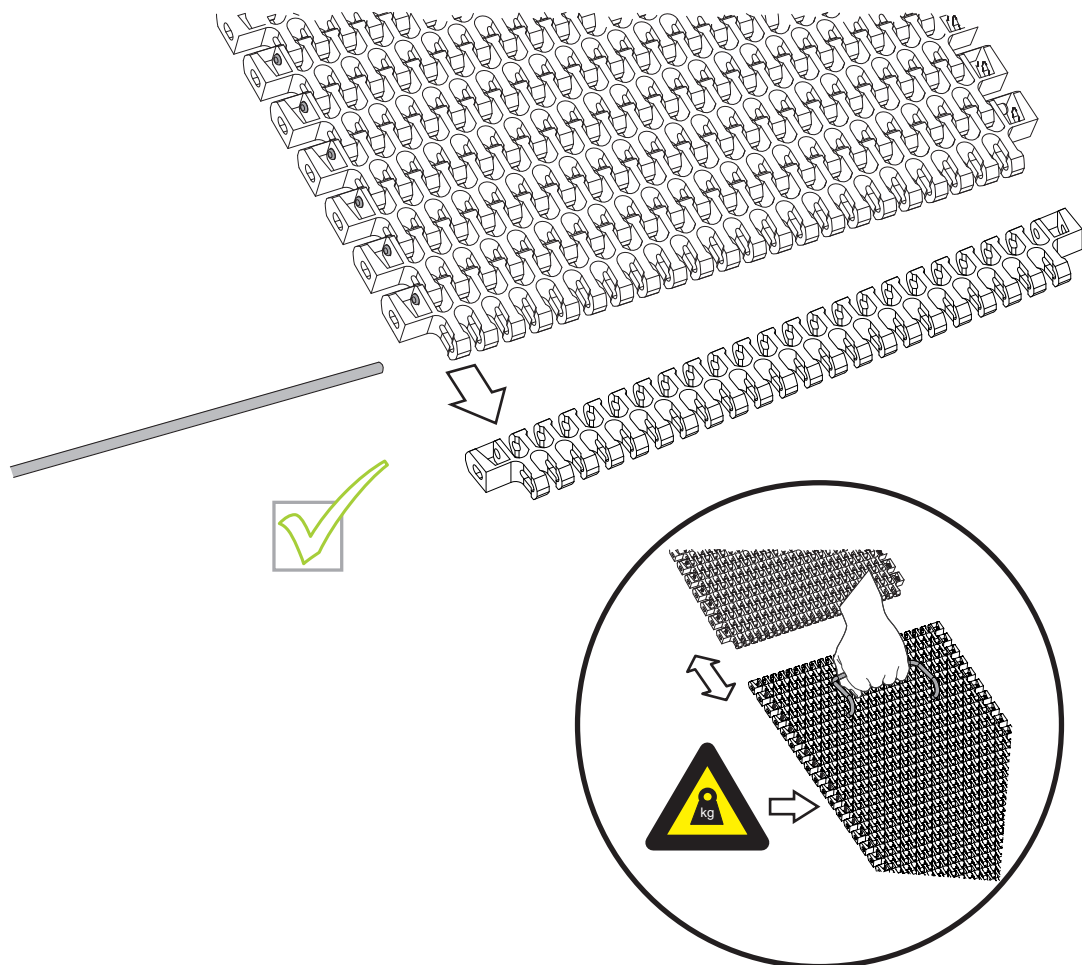
1



2

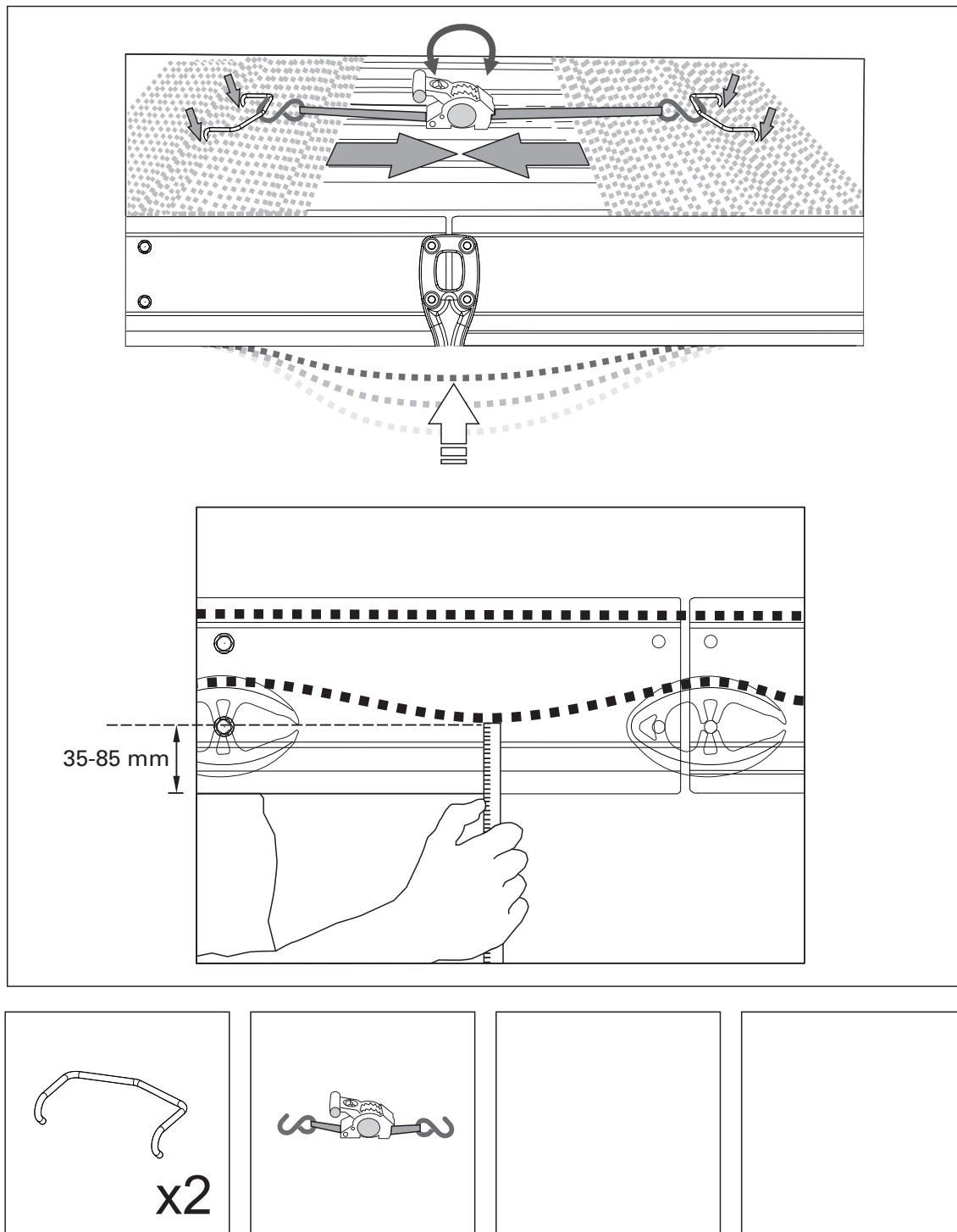


3





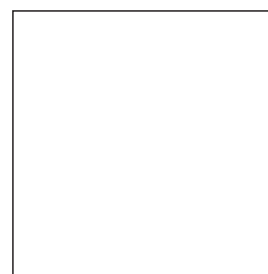
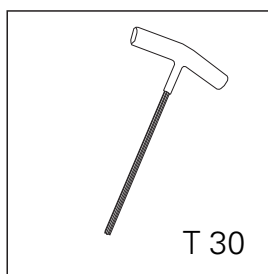
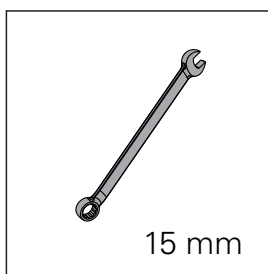
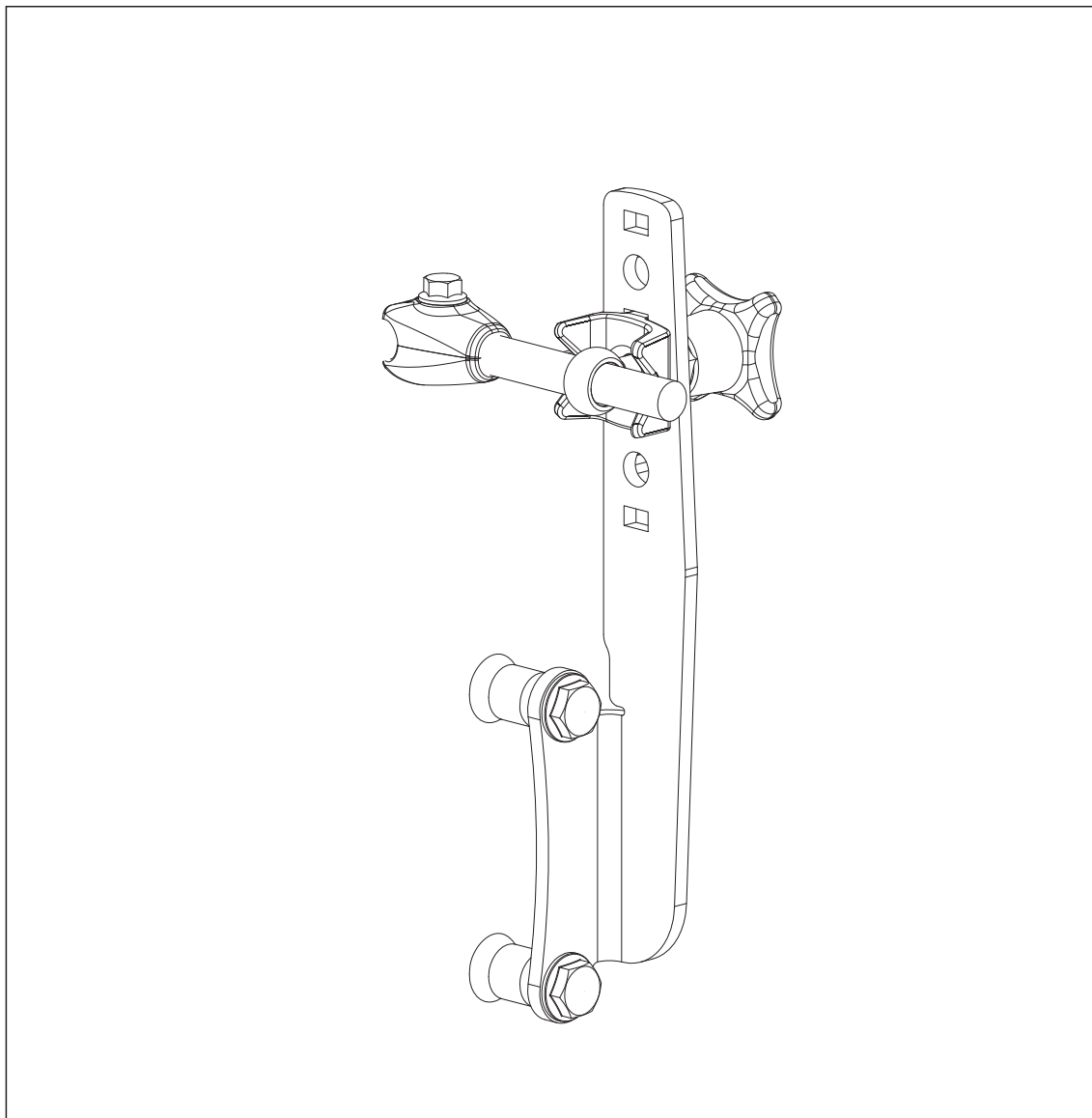
## 4.12 Belt tensioner tool



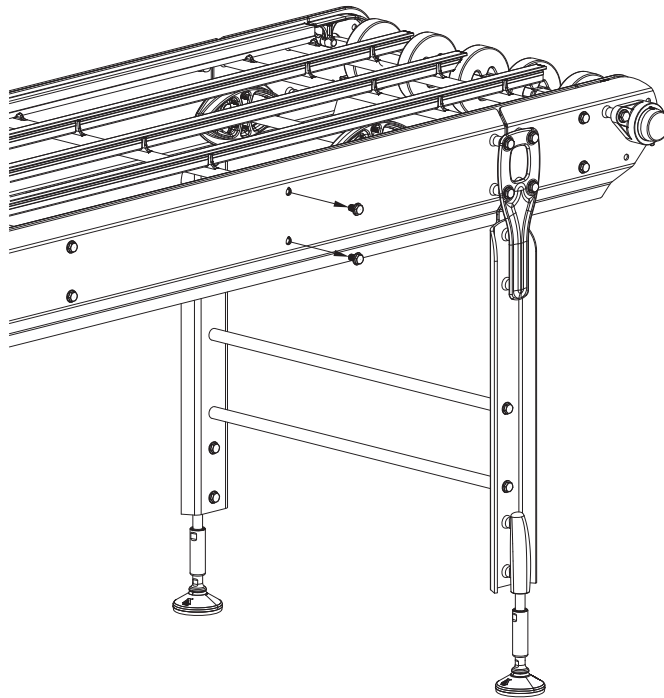




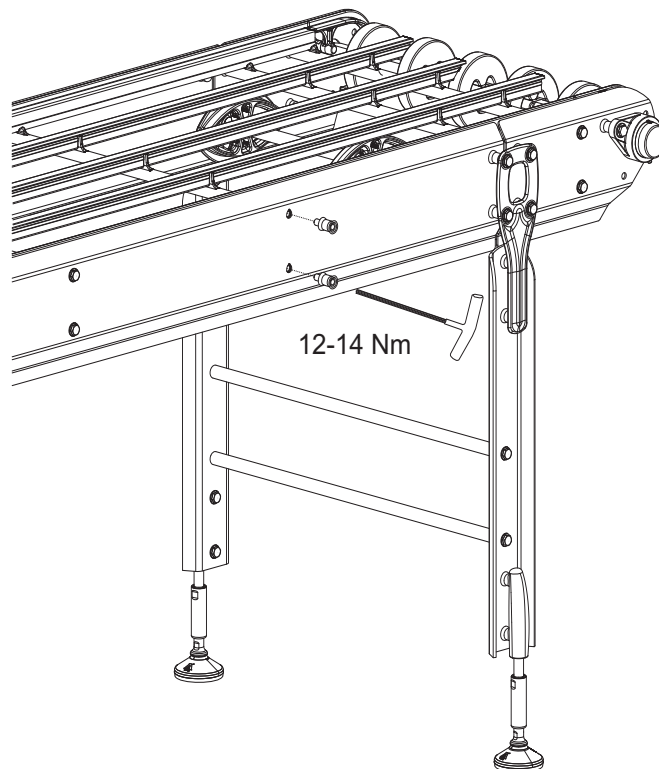
## 4.13 Mounting Guide rails



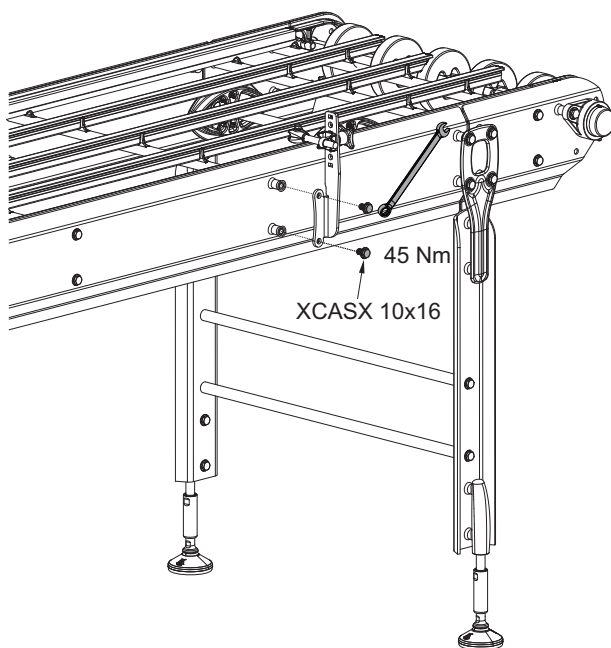
1



2



3



4

