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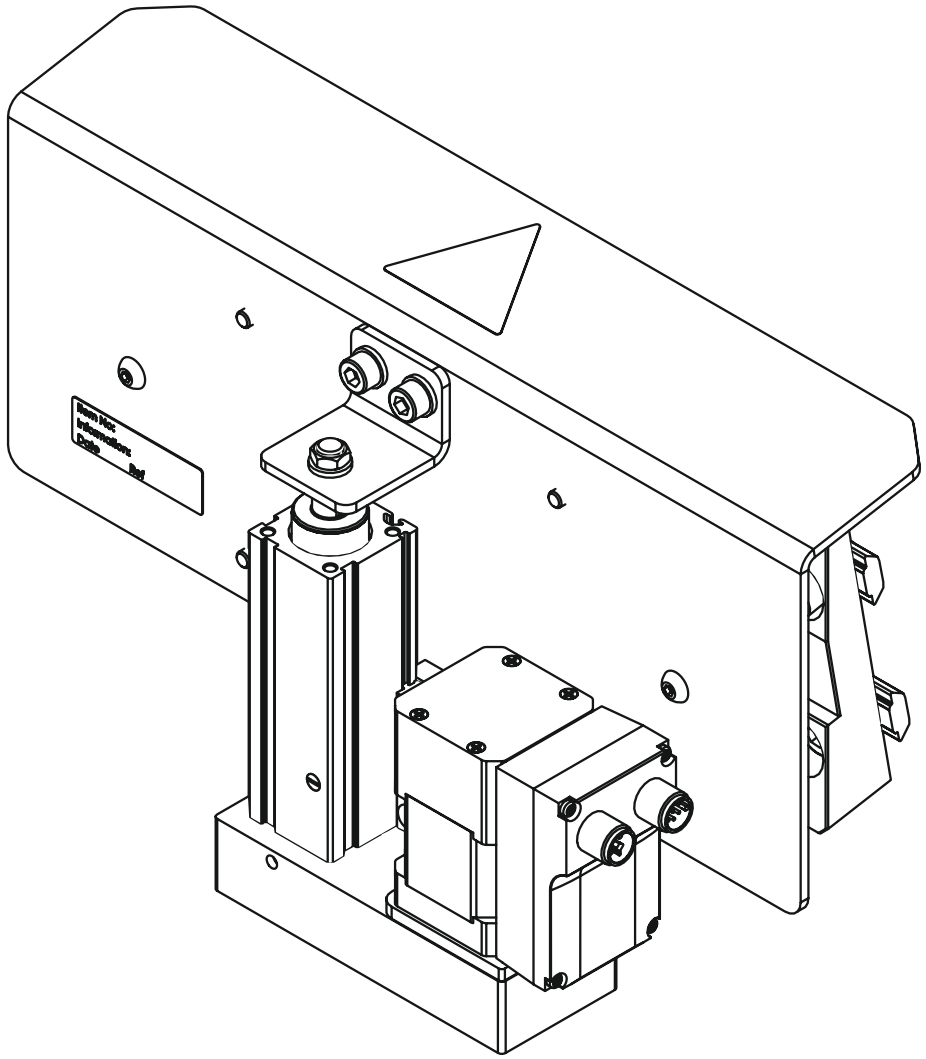

Assembly instruction

Alignment unit FLX1011553

FLX1014083-02
2026-02-16

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1. Preface

FlexLink accepts no responsibility if the machine/item is not used in accordance with this document. This instruction contains safety notices which you must observe to ensure your personal safety, the safety of others involved in the operations as well as to prevent damage to machine/item.

The following safety symbols are used:

DANGER
Description of imminent hazard and failure if not avoided will result in serious injury or death.

WARNING
Description of imminent hazard and failure if not avoided could result in serious injury or death.

CAUTION
Description of minor personal injury, malfunction or damage on machine or environmental risks.

NOTE
This is not a safety precaution but will give valuable detailed information.

Risk levels inspired by SS-ISO 3864-2:2016 (E).

1.1. Explanation of safety signs

Pinch point

Sharp edges

Electrical hazard

1.2. Document scope

This document cater for the FlexLink machine stated on the front page.

The document describes, with information and procedures, how to install, operate and maintain this machine in a safe way.

It is mandatory to read this document before using the machine it describes. For your own safety and to minimize the risk of injury, read the document thoroughly, make sure to understand the information and acknowledge all instructions.

Save the document, it contains important information needed throughout the product's lifetime.

The document is structured in a way where information and operations easily can be found. Pay special attention to all safety information.

Images may look different from the actual product.

2. Unhandled essential health and safety requirements

NOTICE

The following unhandled or partly unhandled essential health and safety requirements in DIRECTIVE 2006/42/EC ***are to be taken care of by the system integrator of the final complete machine***.

The safe guarding to use for these requirements depends on the application, the environment and the complete system where the partly completed machinery is integrated. Guidance may be provided on some of them.

1.2.1	**1.2.2**	**1.2.3**	**1.2.4.1**	**1.2.4.2**	**1.2.4.3**
1.2.4.4	**1.2.5**	**1.2.6**	**1.5.1**	**1.7.4.3**	

1.6.1 Machinery maintenance

The control system must avoid start-up during maintenance.

1.6.3 Isolation of energy sources

The control system needs to avoid start up during maintenance. The control system will be set up by the customer/system integrator for CE-marking of the final complete machine.

1.7.4 Instructions

This assembly instruction allows the system integrator of the complete machine to compile the user instruction.

1.7.4.1 General principles for the drafting of instructions

This assembly instruction allows the system integrator of the complete machine to compile the user instruction.

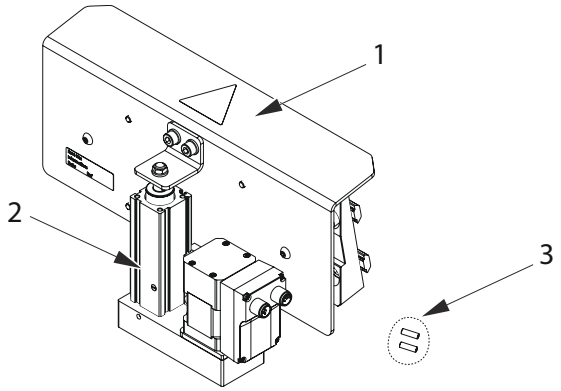
1.7.4.2 Contents of the instructions

This assembly instruction allows the system integrator of the complete machine to compile the user instruction.

3. Scope of delivery

Alignment unit including cylindrical pins for adjustment.

FLX1011553

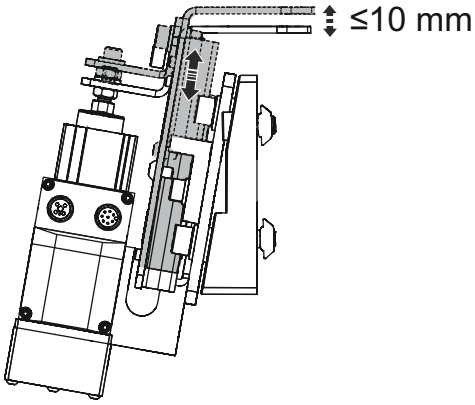


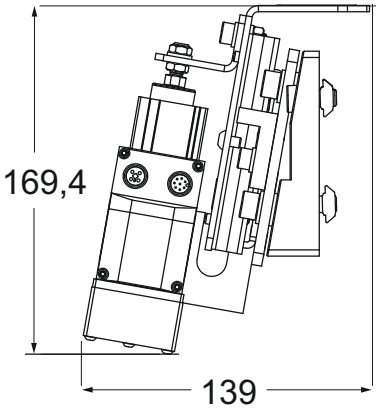
1. Plate
2. Actuator
3. Cylindrical pins

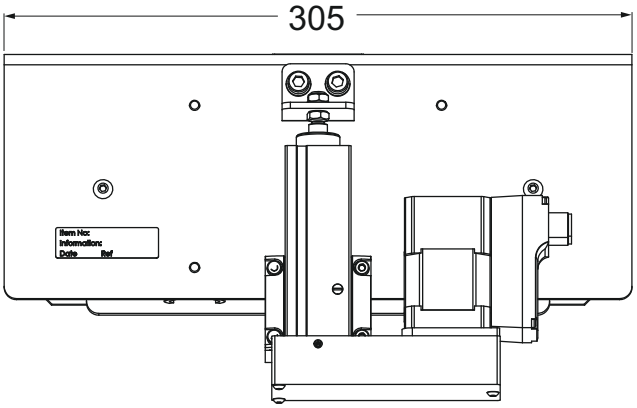
4. Product description

The alignment unit function is to stop and align pallets.

- The plate moves up to stop the pallet.
- The plate moves down to let a pallet pass.



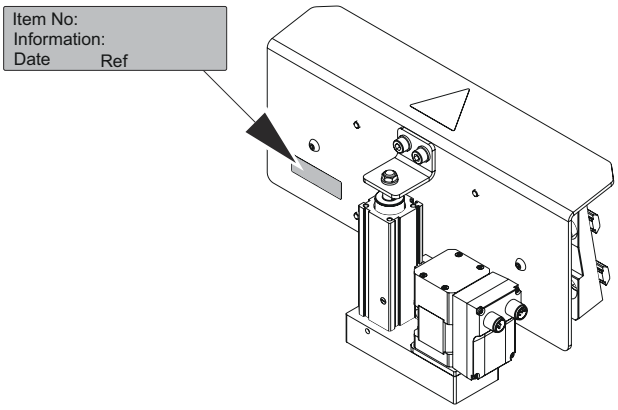




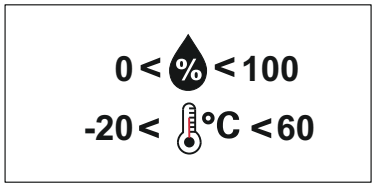
The alignment unit is suitable for clean room environments with a requirement for minimal dust.

Compatible to MTT widths: 400 - 640.

4.1. Location of machine sign



5. Requirements



- The machine should only be used with the intended FlexLink conveyor.
- This unit is not intended for direct food contact.
- Heights up to max. 2000 m above sea level.
- Use in an area with normal ambient lighting.
- Do not use with corrosive substances/ vapors.
- Do not use in an environment with explosive mixtures, explosive dust, explosive gases or in an explosive atmosphere.
- Do not use in an environment with heavy dust that contains abrasive substances.
- Keep indoors without direct sunlight.
- Space requirements: 500 mm in all directions.

5.1. User requirements

General requirements:

- User must be adult.
- Do not wear loose hanging clothes, accessories or long hair as it can get entangled in the machine (moving parts).

Electrician, maintenance personnel or specialists

- Skilled (ISO 12100:2010).
- Good technical knowledge.
- Sufficient knowledge for reading technical information.
- Ability to understand technical drawings.
- Ability to read English.
- High safety awareness, competence and experience for risks associated with the machine see; Safety chapter.

Operator

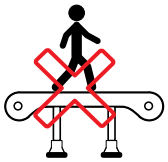
- Unskilled or skilled (ISO 12100:2010).
- Limited in action and is not allowed to perform maintenance.
- Must have performed training of how to use the machine and must understand this document.

6. Safety

6.1. General safety

- The chain and slide rails must be completely installed to start the conveyor.
- Do not remove or deactivate safety provisions while the machine is running.
- Connectors are not allowed to be connected/disconnected when electrically loaded.
- Do not reach in to the machine while it is running or on.
- See illustrations at the end of this section for more safety information.
- Use personal protective equipment (PPE).
- The alignment unit is intended for industrial use only.

More safety information



6.2. Residual risks

References to essential health and safety requirements in DIRECTIVE 2006/42/EC.

Normal operation

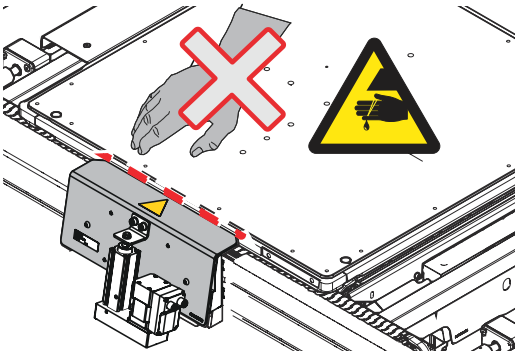
CAUTION

1.1.5 Design of machinery to facilitate its handling

Be careful when lifting the alignment unit to avoid muscle strain.

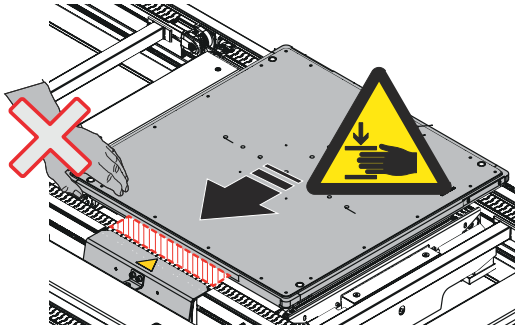
WARNING

1.3.4 Risks due to surfaces, edges or angles



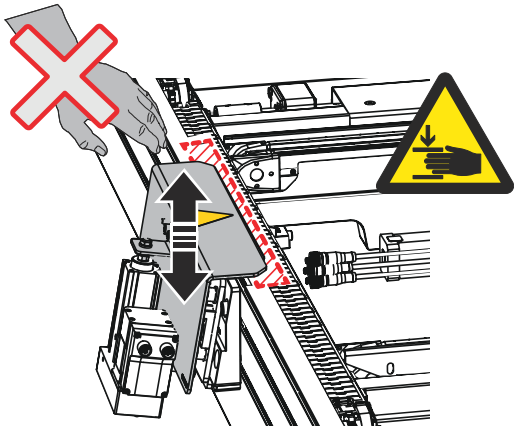
WARNING

1.3.5 Risks related to combined machinery



WARNING

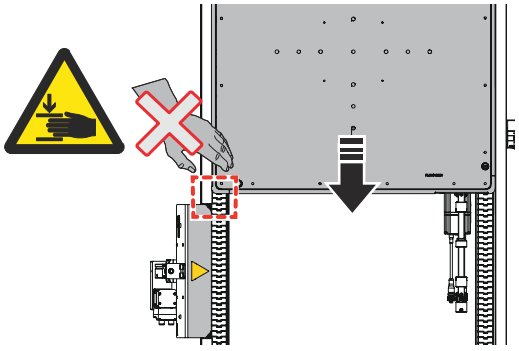
1.3.7 Risks related to moving parts



Not normal operation

WARNING

1.3.7 Risks related to moving parts



CAUTION

1.5.2 Static electricity

The unit must have an earth bonding to the main structure of the conveyor. This is done via the fastening elements.

CAUTION

1.5.8 Noise

The noise level of this unit does not exceed 70dB (A).

6.3. Noise

Noise below 70dB (A).

7. Unpacking and lifting

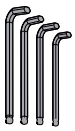
Weight: ~10 kg

7.1. Unpacking instruction

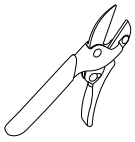
1. Remove the packaging.
2. Check delivery for visible damage.
3. Make sure the delivered content is complete.
4. Keep attached documents.

8. Assembly and installation

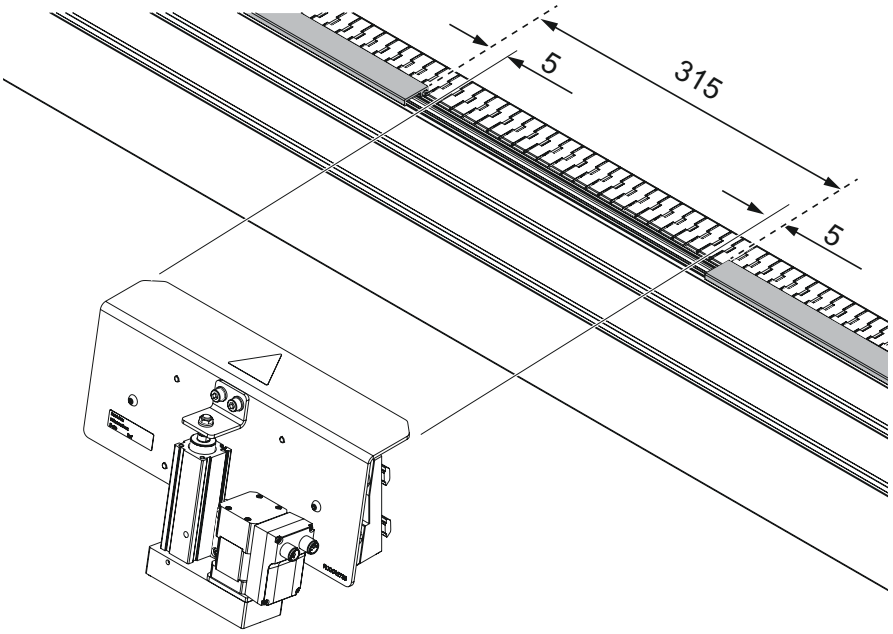
This must be performed by skilled personnel.



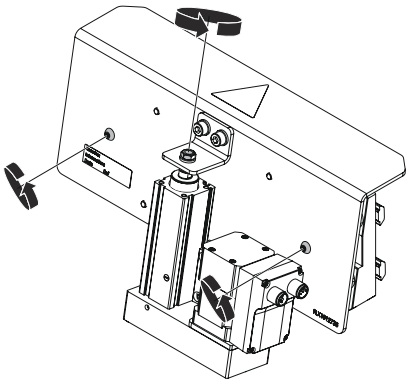
10/13 mm



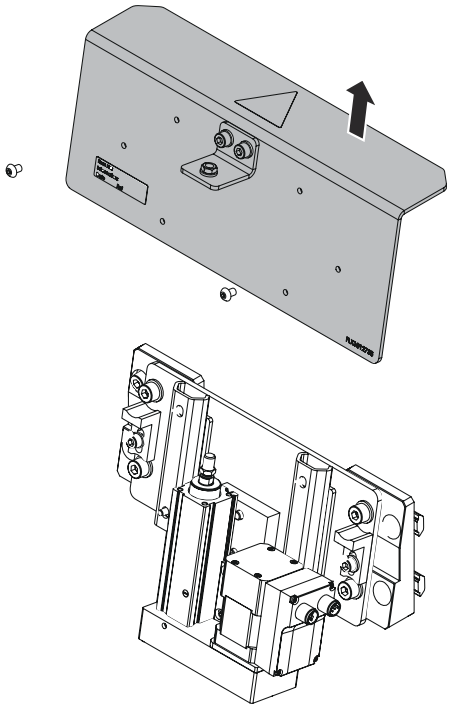
1. Cut out 315 mm of the slide rail.



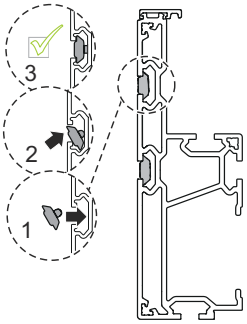
2.



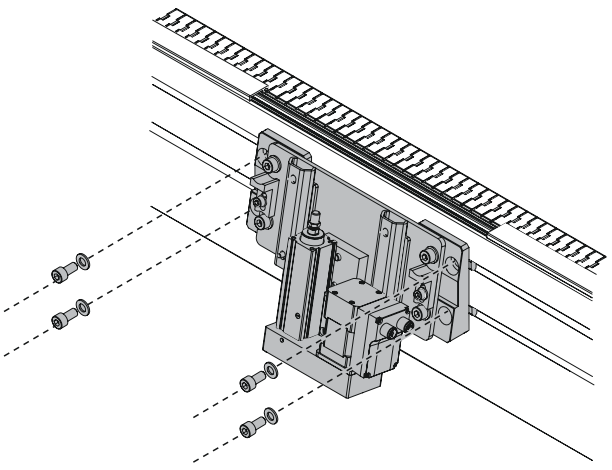
3.



4. Fasten 4x XCAN8 NC in the beam.

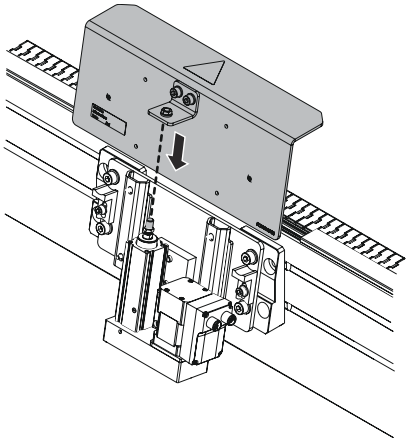


5.

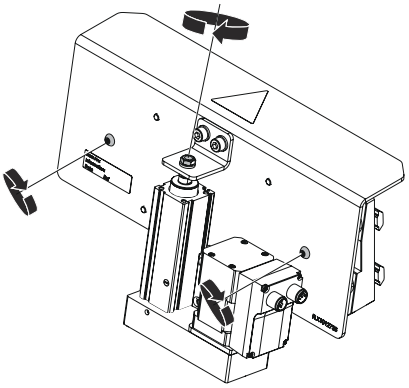


17 Nm

6.

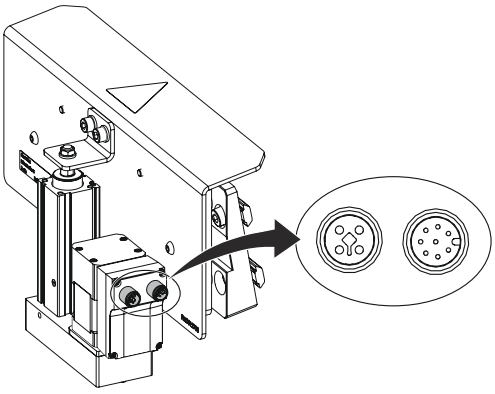


7.



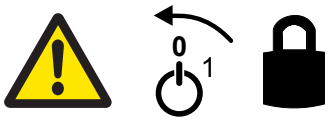
8.1. Installation

The alignment unit can now be connected.

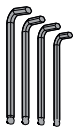


- Power: 24VDC, M12, 4pin
- Signal: M12, 8pin

9. Adjustments

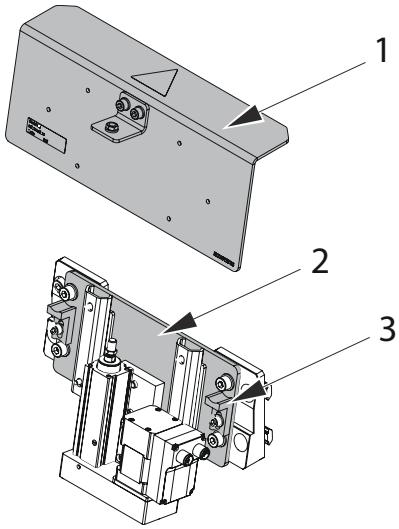


These adjustments should be performed before the machine is started after installation and/or maintenance.



D4

9.1. Adjusting travel range of the plate



1. Plate
2. Level bracket
3. Base plate

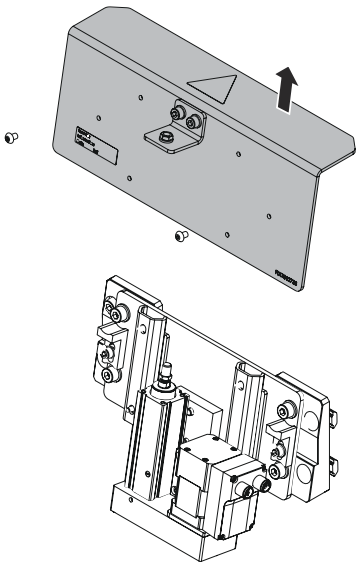
NOTE

The travel range of the plate is set in the system software from 0-10mm.

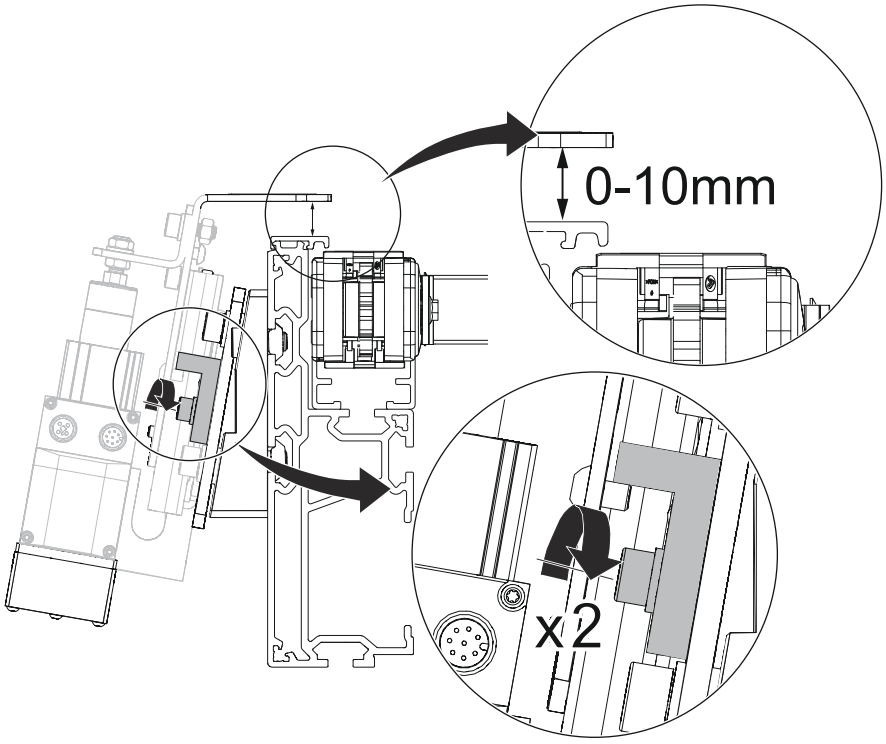
Recommendation: 8mm between the plate and the beam.

Make sure both level brackets, one on each side, are set correctly so the plate is horizontal in upper and lower position.

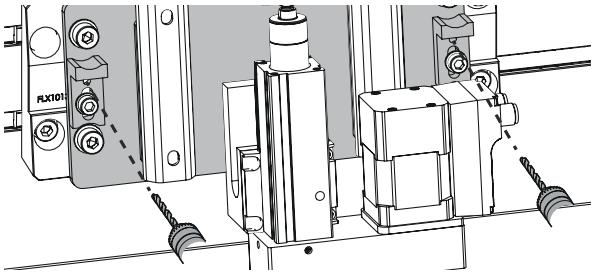
1. Remove the plate, see Assembly and installation (page 16)



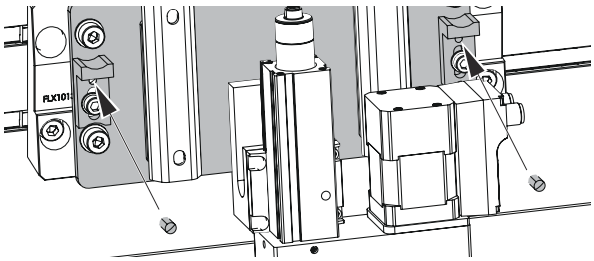
2. Set the position of the level brackets (x2).
   Tighten the screws (x2). 6,3 Nm.



3. Drill a hole through the level bracket and the base plate.



4. Put a cylindrical pin through the level brackets and the base plate. This will secure the position over time.

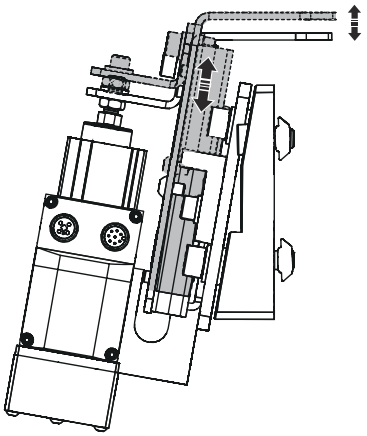


5. Put the plate back in position and tighten the nuts. See Assembly and installation (page 16)

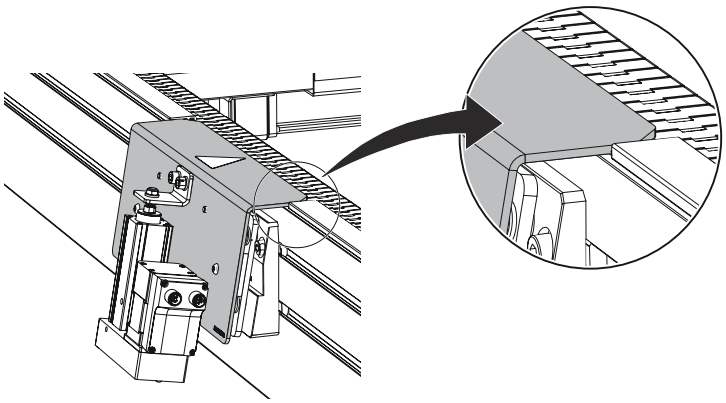
10. Commissioning

This must be performed by skilled personnel.

1. Test drive the alignment unit up and down.



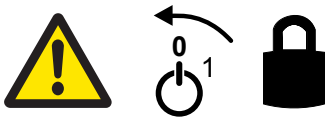
2. In the lower position, the plate shall align to the beam.



11. Troubleshooting

This must be performed by skilled personnel.				
	Issue	**Cause**	**Action**	**Reference**
1.	Plate not moving correctly.	Adjustment needed in control system.	Check control system and do necessary adjustments.	Outside scope of this document. See Unhandled essential health and safety requirements (page 7).
2.	Plate not horizontal.	Travel range incorrectly adjusted.	Inspect the level brackets.	See Adjustments (page 19).
Troubleshooting executed with power on, must be executed only by skilled personnel which have taken necessary safety precautions				

12. Maintenance



See recommended intervals in the table.

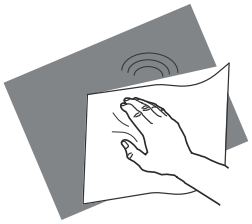
Perform **lock out tag out procedure** before doing any maintenance.

NOTE
Perform maintenance more often for a demanding environment or product.

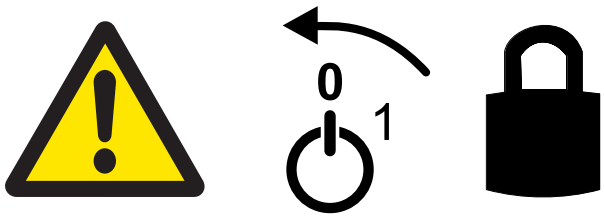
WARNING
The control system must avoid start-up during maintenance.

If conditioned maintenance instructions are followed:

- Life time [Years] 10
- Warranty [Years] 2

This must be performed by skilled personnel.		
Interval	**Description**	**Reference**
Every 14 days	Keep the alignment unit clean.	
*The run in period demands more frequent cleaning intervals.		

13. Decommissioning



This must be performed by skilled personnel.

1. Switch off all power.
2. Disassemble the unit. See Assembly and installation (page 16) in reverse.
3. Please observe regional regulations on recycling of components. Ensure that disposal is done in accordance with local regulations.

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