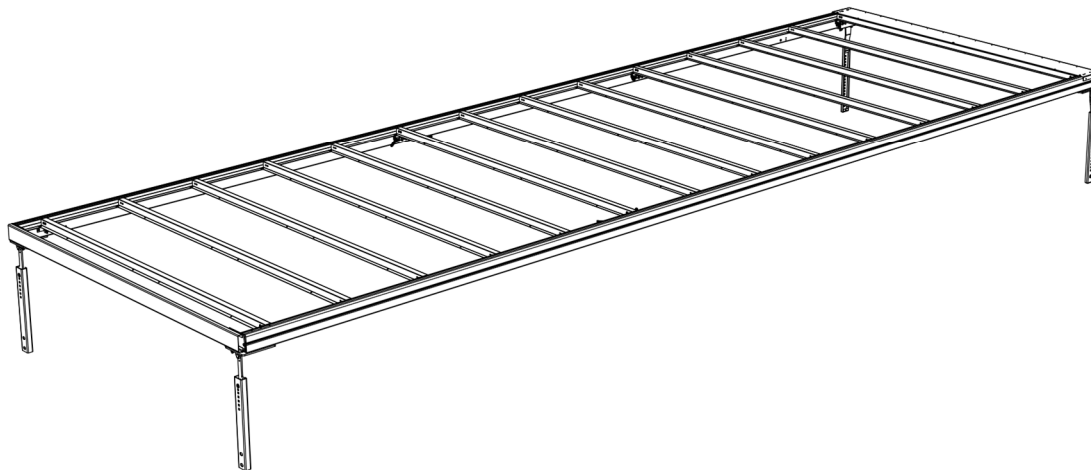


Mounting instruction UK top



Translation of the original mounting instruction



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GENERAL REMARKS

Introduction to Mounting Instruction

Alteration service: Yes

Staff: According to curriculum for apprenticeship as a body and vehicle mechanic and a body and vehicle construction mechanic.

This Mounting Instruction is part of the delivery and an important help for successful mounting. Therefore, it must be available to the mechanic during the mounting works.

Furthermore, the assembly guidelines of the applicable vehicle producers must be obeyed.

Copyright:

The copyright for this mounting instruction is reserved by TSE Trailer System Engineering GmbH & Co. KG

If you need any further information, do not hesitate to contact us:

TSE Trailer System Engineering GmbH & Co. KG
Bei der Mühle 4
72365 Ratshausen
Germany
Phone: +49 (0)7427 / 92 33-0
Fax: +49 (0)7427 / 92 33-75
Email: verkauf@tse-trailersystems.de
Homepage: www.tse-trailersystems.de

Instruction and training support

As an employer, you are obliged to inform and instruct your personnel about existing legal and accident prevention regulations.

The personnel must have understood these instructions, and it must be safeguarded that the instructions are obeyed.

Only in this way you will reach safety and danger awareness of your personnel at work.

Example for training topics

1. About safety
 - Accident prevention regulations
 - General legislation
 - General safety hints
 - Measures in emergency cases
 - Personal protective equipment
2. Maintenance and repair regulations
 - Correct use of cleaning agents and lubricants
 - Special experience of the mechanic in maintenance, repair, cleaning and upkeep of the product

Hints

Attention:

The surfaces of the TSE modules must not be contaminated with caustic cleaning fluids. Cleaning fluids with the appropriate labeling are aggressive and can cause damage to all component surfaces. These should expressly not be used for gentle cleaning.

Nummer	Symbol
GHS05	corrosivity


ATTENTION!

Texts with this symbol will warn you against possible mistakes in mounting and, therefore, against potential material damages.


HINT!

Texts with this symbol will give you tips or additional information.


TIGHTENING TORQUE!

Texts with this symbol will give you necessary tightening torques.


You need holes!

Texts with this symbol indicate the setting of holes.

Safety

General

Although our products are in accordance with the state of the art, they may pose a risk if:

- they are mounted by unskilled personnel
- they are maintained improperly.

Safety hints

This safety instruction informs you about the products of TSE Trailer System Engineering GmbH & Co. KG. It contains information about maintenance and repair of the parts and their components. The service instruction has only been written for skilled personnel of qualified and authorized specialized companies in motor vehicle crafts. The service instruction is not applicable for other target groups.

We want to support specialized companies with the present mounting instruction during the mounting works with our products.

TSE Trailer System Engineering GmbH & Co. KG accepts no liability for the installation of inapplicable or unreleased parts in their products.

Defects due to wrong handling, aggressive cleaning agents, use of force or subsequent changes of the delivered product or single components of it, as well as non-observance of the safety hints and consequential damages caused thereby, are not covered by our warranty.

Only use unchanged original parts and accessories supplied by the manufacturer.

We do not accept any warranty for the correctness, completeness or currency of the given information. The contents and information of this mounting instruction are neither a warranty or warranted characteristics within the meaning of German legislation, respectively the German Civil Code (Bürgerliches Gesetzbuch (BGB)), nor can they be interpreted as such.

No claims can be derived from provision of information, recommendation or consulting. Liability for damages is generally excluded as far as we are not responsible in the sense of intent or gross negligence, or as far as this does not contradict mandatory legal

provisions. Texts and graphics are subject to our rights of use; copy rights or right of distribution in any form require our agreement.

Mentioned brand names, even if they are not marked as such in every case, are still subject to the regulations of the trade mark law.

If any disputes of legal nature occur from applying information found in this mounting instruction, they shall solely be subject to the regulations of German law.

The Amtsgericht Stuttgart (Local Court in Stuttgart) is deemed to be agreed on as place of jurisdiction. If some clauses of this declaration about limitation of liability do not or no longer comply with the applicable legal provisions, the validity of the other clauses shall remain unaffected thereof.

Read the information in this mounting instruction carefully. Especially, obey the hints for your own safety.

All technical information, descriptions and pictures shall be valid from the day of their printing - respectively the day of any supplements hereto - on. We reserve the right to make changes due to steady further development.

No claims can be derived from applications and explanations of this publication.

Safety hints for the technician:

Unauthorized people are not allowed to enter the vehicle and the area around it.

Your working area should be in good order.

Only works which you are commissioned and acquainted with have to be executed.

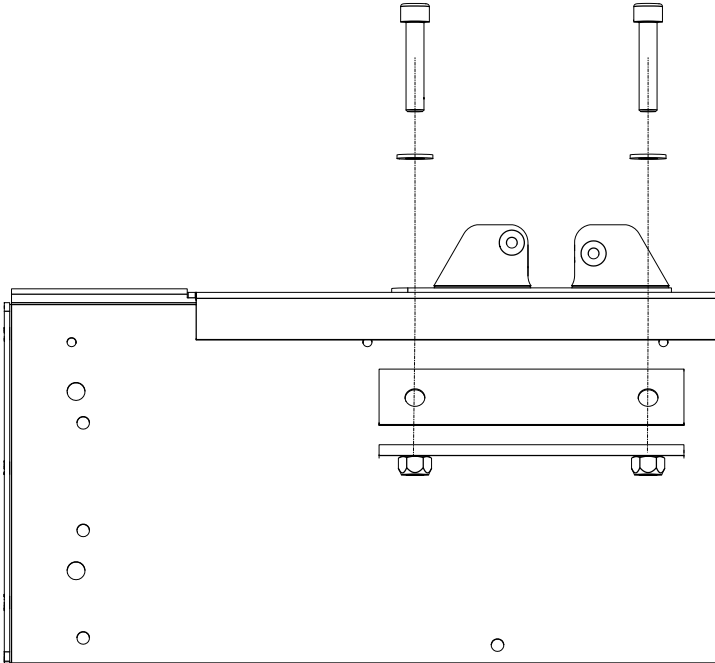
Increased caution is advisable in dangerous areas.







Obey the producer's information and safety hints for the applicable product when you deal with operation materials (oils, grease etc.).

Only applicable lifting devices may be used.

Mounting of locking counter bearings upside

1



-  Cylinder screw with Internal hex M10x50
 -  Washer without chamfer A10.5
 -  Locking counterbearings upside left/right
 -  Sealing plate
 -  Clamping plate complete
 -  Torque 48 Nm
- Cylinder screws, Washern, Verschluss-Counter bearings, sealing plate and clamping plate complete have to be taken from the **accessories kit of the applicable door**.



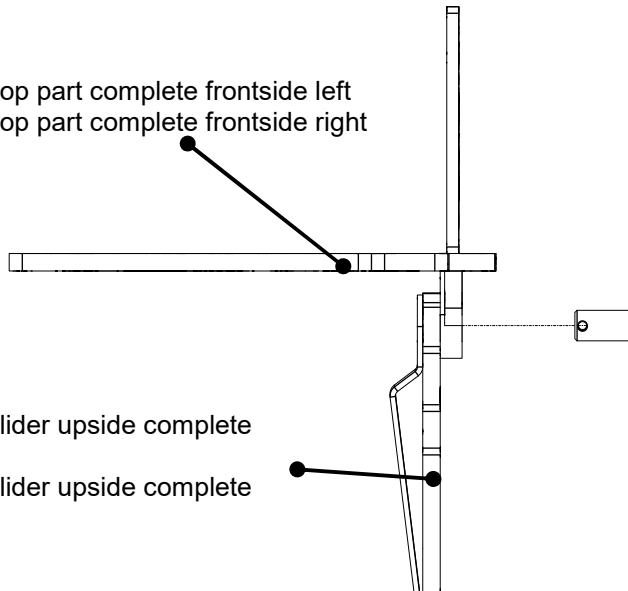
After the complete mounting of the top it is possible - if an upper flap is mounted- to use this instead of the locking counter bearings. The exact mounting procedure can be found in the mounting instruction „Upper flap UK“.

Premounting of sliders front wall IV


1

Connect top part and slider with bolt

Front wall IV top part complete frontside left
 Front wall IV top part complete frontside right



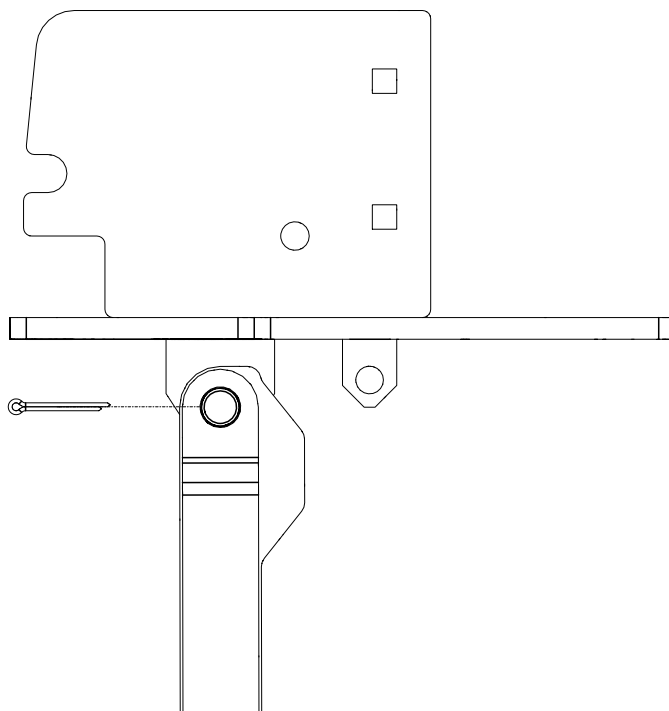
Front wall IV slider upside complete frontside left
 Front wall IV slider upside complete frontside right

 Bolt with head and cotter pin hole

The bolt has to be taken from the **applicable assembly kit**.

2

Fix the bolt with the cotter



Cotter

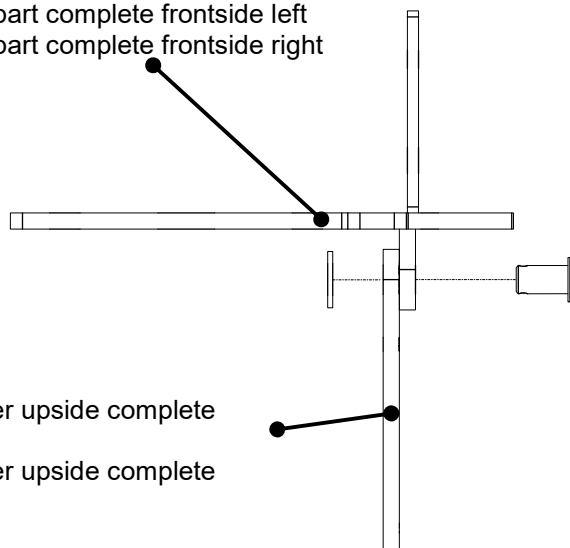
The cotter has to be taken from the **applicable assembly kit**.

Premounting sliders front wall II


1


Connect top part and slider with bolt and washer

Front wall II top part complete frontside left
 Front wall II top part complete frontside right



Front wall II slider upside complete frontside left
 Front wall II slider upside complete frontside right

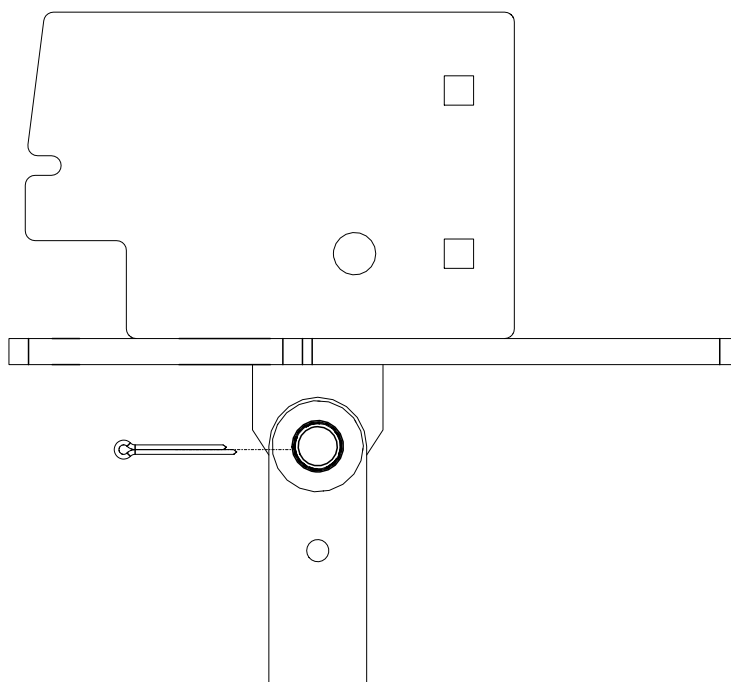
 Bolt with head and cotter pin hole

 Washers without chamfer A15

Bolt and washers have to be taken from the **applicable** assembly kit.

2

Fix the bolt with the cotter

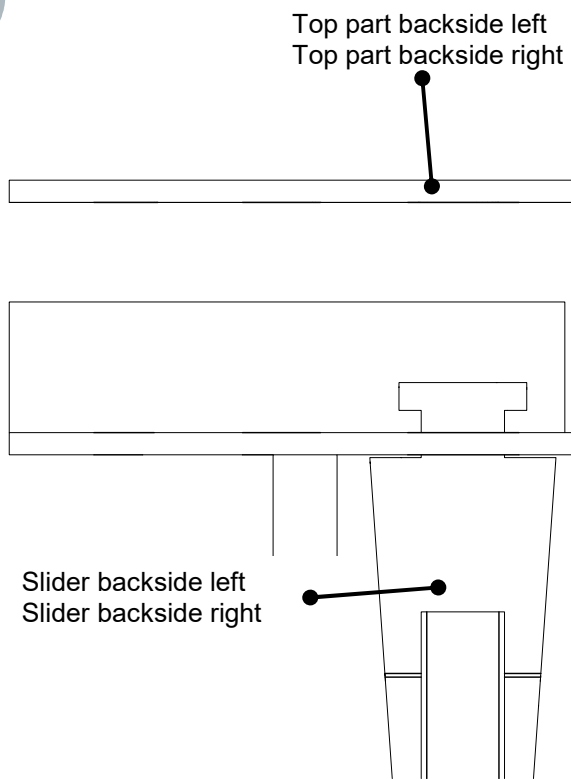


 Cotter

The cotter has to be taken from the **applicable** assembly kit.

Premounting sliders rear door III

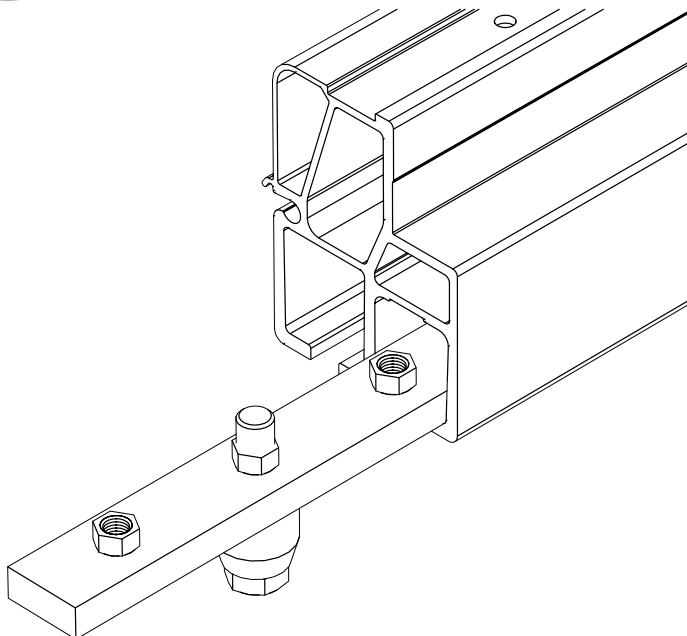
1



Top parts and sliders have to be taken from the **applicable** assembly kit.

Mounting of the clamping strip and sealing profile

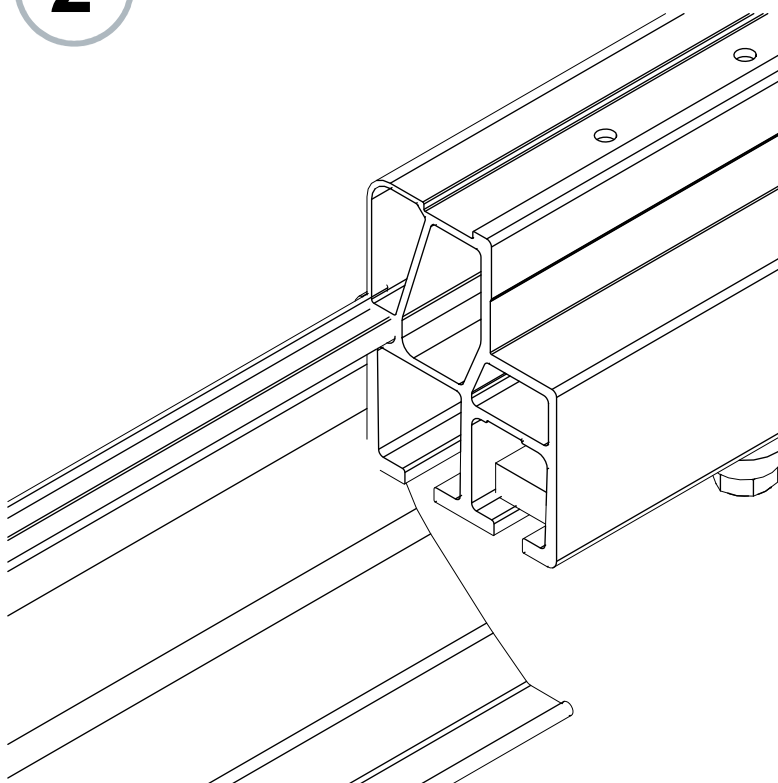
1



The clamping strips are mounted in the inner channel!

The clamping strips are part of the **accessories**
TSE no.: 1285111

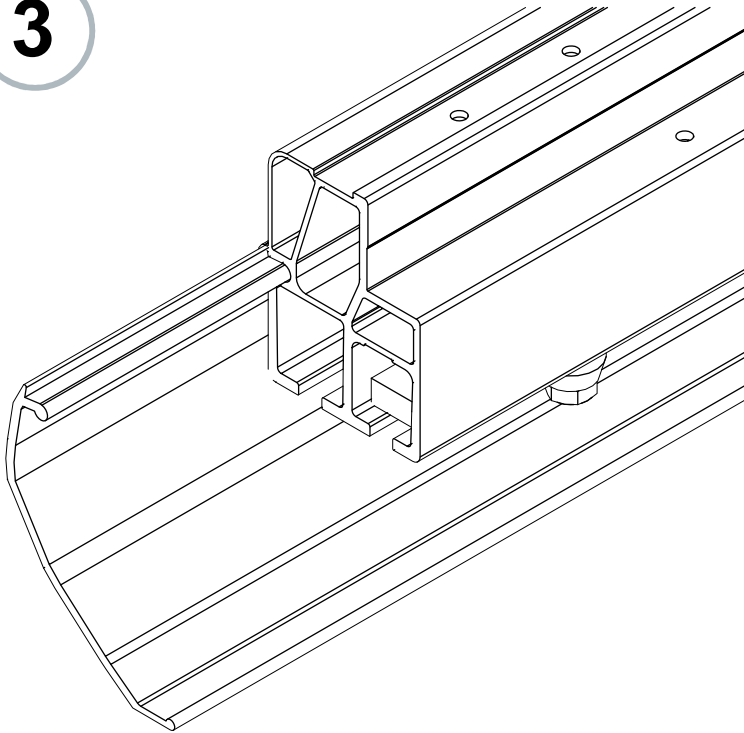
2



The slot for the sealing profile has to be deburred at the frontside of the outer rail.
For better mobility during the insertion of the sealing profiles into the slot, we recommend to apply a lubricant.

The sealing profile is part of the applicable top.

3

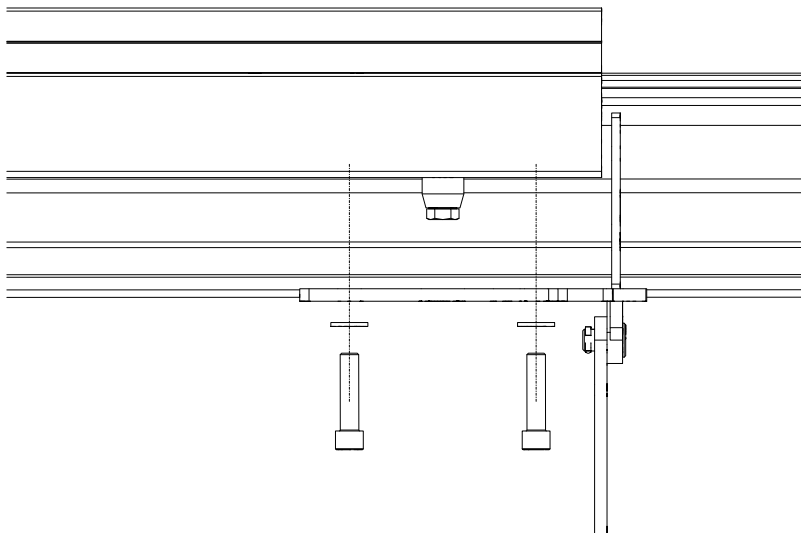


The sealing profile should – after insertion into the slot of the outer rail – protrude approximately for the same length on the frontside and on the backside.

These protruding sealing profiles are needed by the tarp producer and will be processed further on.

Mounting of the front and back sliders

1



Cylinder screw with
internal hex M12x50



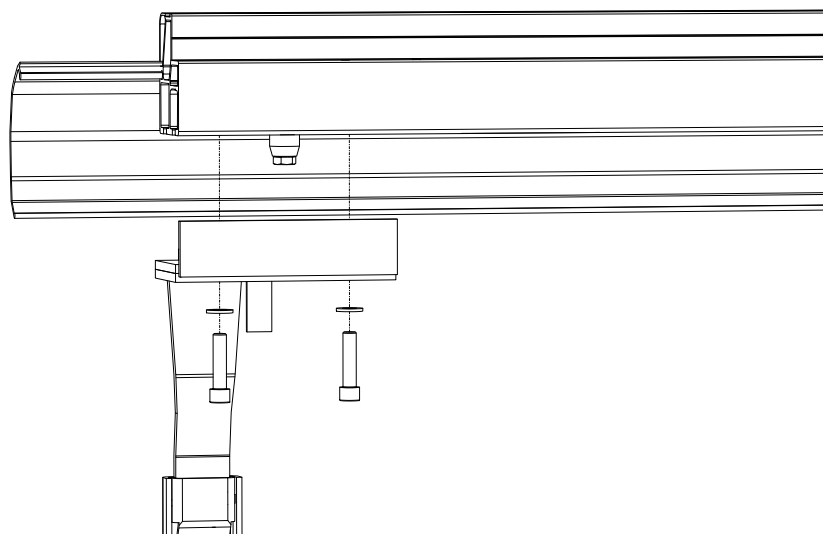
Washer without chamfer
A12.5



Torque 84 Nm

Cylinder screws and
washers have to be taken
from the **applicable**
assembly kit.

2



Cylinder screw with
internal hex M12x50



Washer without chamfer
A12.5

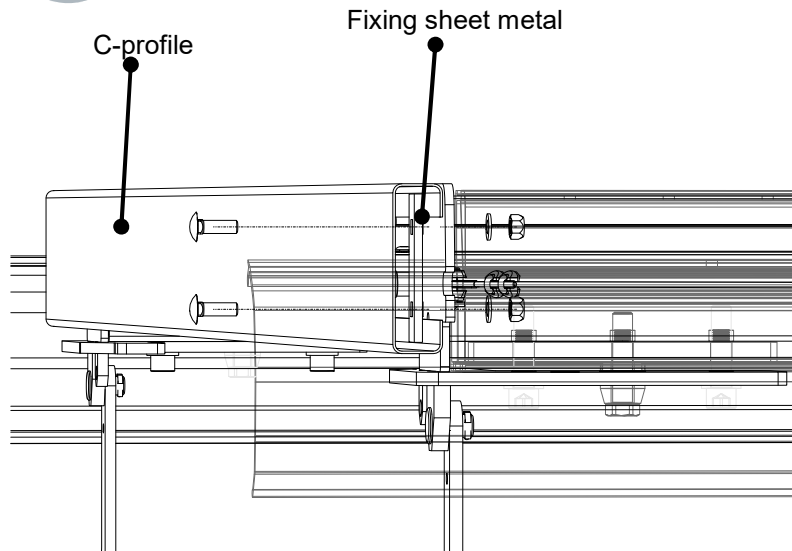





Torque 84 Nm

Cylinder screws and
washers have to be taken
from the **applicable**
assembly kit.

Mounting of C-profile

1

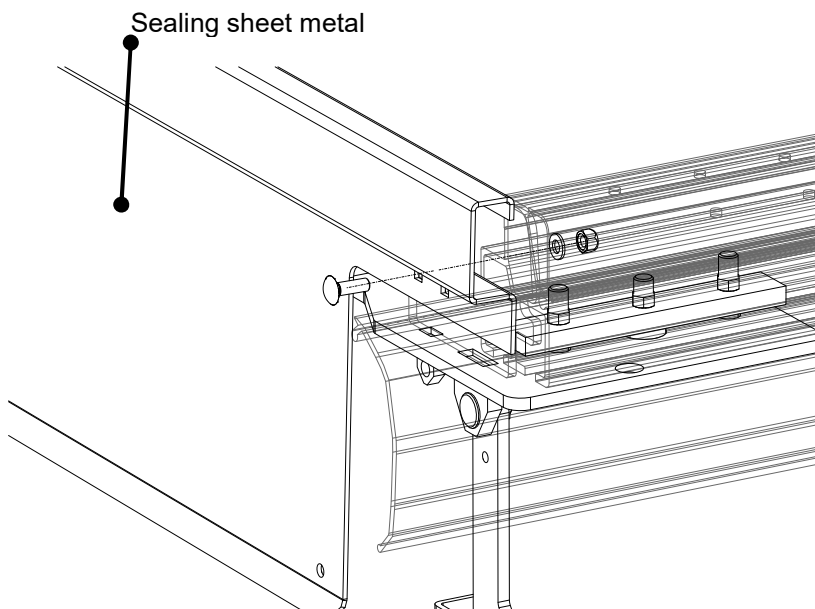


-  Round-head screw with square neck M8x25
-  Washer without chamfer
-  Hexagon nut with full metal clamping device M8

Round-head screws, washers, hexagon nut, C-profile and fixing sheet metal are part of the **applicable assembly kits**.

Mounting of sealing sheet metal (only for tops with lifting device)

1



Round-head screw with square neck M8x25



Washer without chamfer



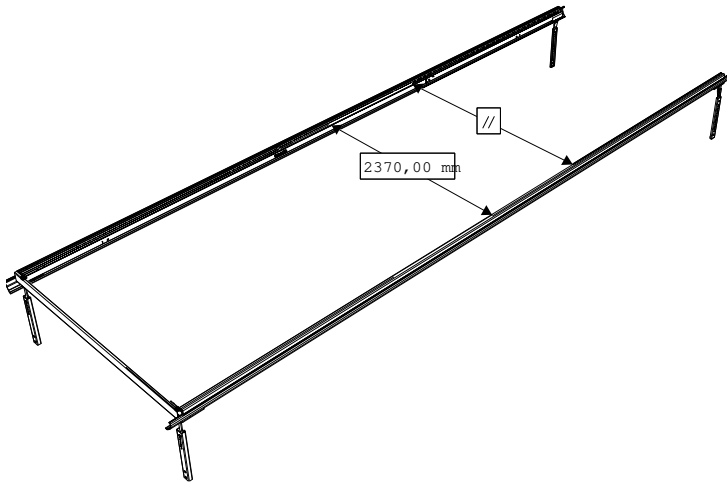
Hexagon nut with full metal clamping device M8



Due to the necessary turn function during the lifting process, the outer screwing position must always be used.

Round-head screws, washers, hexagon nut and sealing sheet metal are part of the **applicable assembly kit**.

Checking the parallelism and rail distances

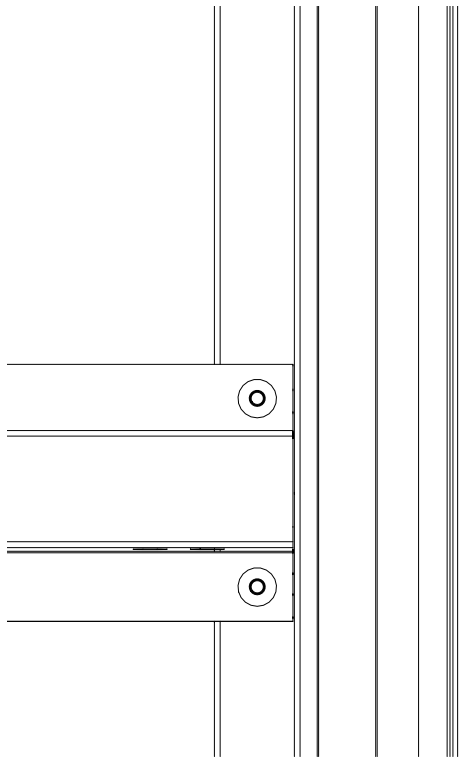
1

The parallelism and the rail distance must be ensured.

Mounting of the crossbeams

1

Rivet the crossbeams



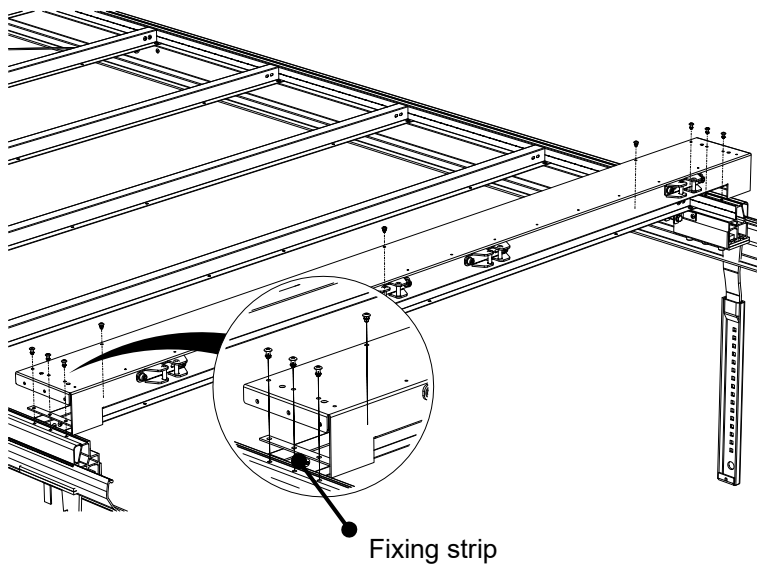
The crossbar distance follows the given boreholes.

The mean of the crossbeams must be taken according to the width of the top because of the tolerance.



The mounting of crossbeams is generally started from the backside.

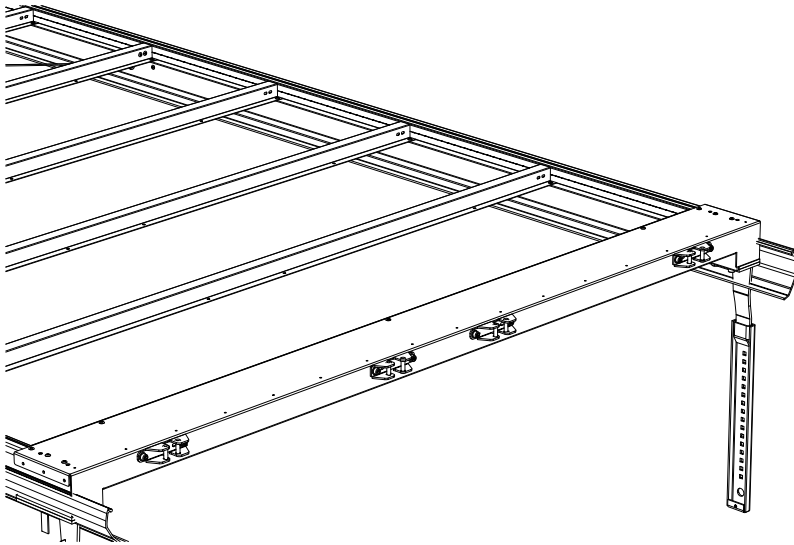
Mounting of the crossbar

1

Hemlok rivet,
KL-BER8.8-10.8mm

The mean of the crossbar must be taken according to the width of the top because of the tolerance.

2



Checking the parallelism again

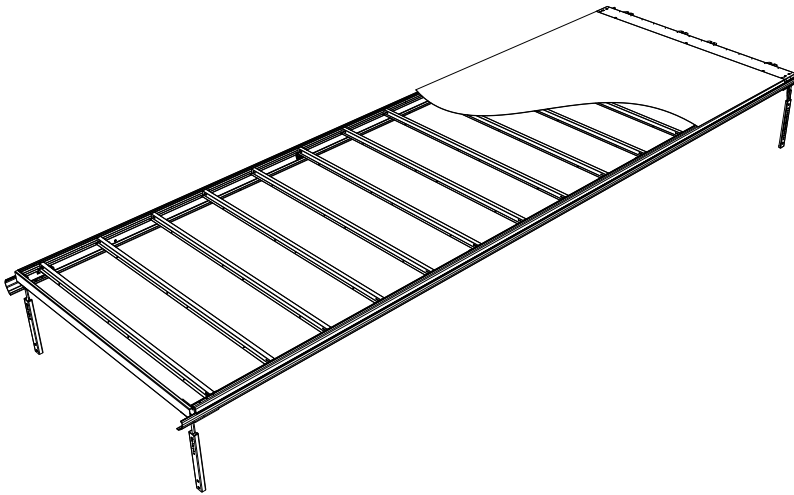
1

Without steel wire bracing



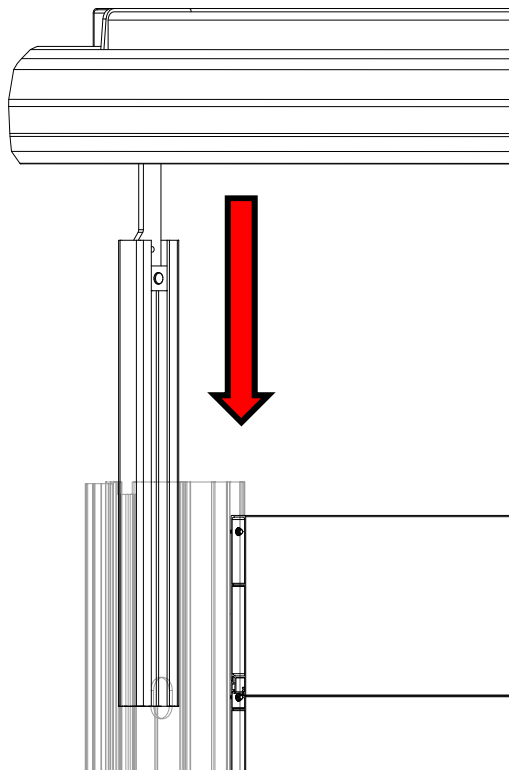
The parallelism must be checked again at both versions.

Mounting of the roof tarp (normally done by tarp maker)

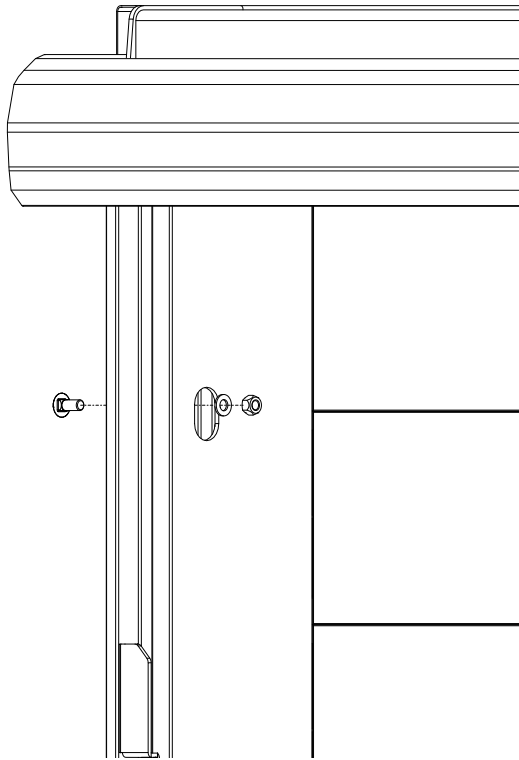
1

The mounting of the roof tarp has only been shown in simplified manner.

Inserting sliders into the front wall

1

2



Carriage bolt 10x25

Washer A10.5

Hexagon nut M10



Torque 48 Nm

The fixing borehole has to be opened up by drilling. Push the carriage bolt through the stanchion and the slider from the outside of the vehicle, and then fix it with washer and nut.

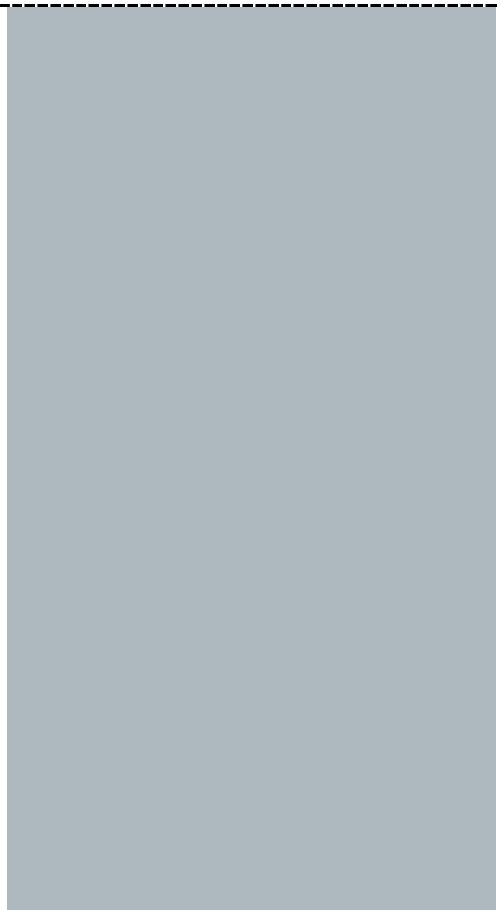
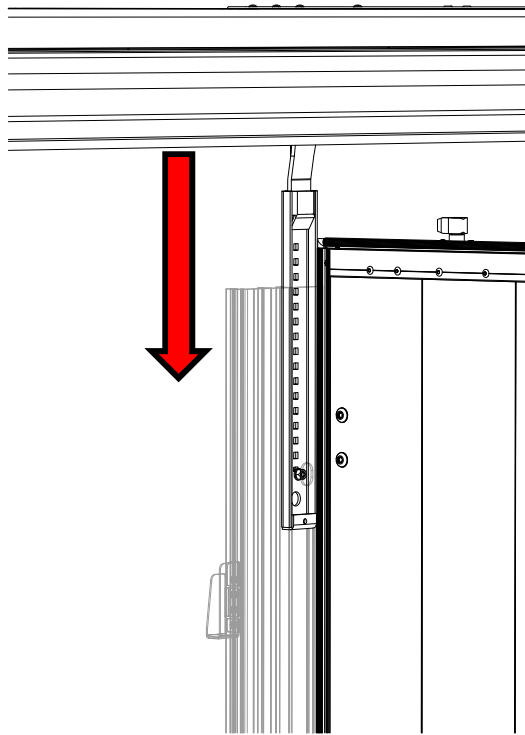


This borehole is only necessary at a roof without hydraulics.

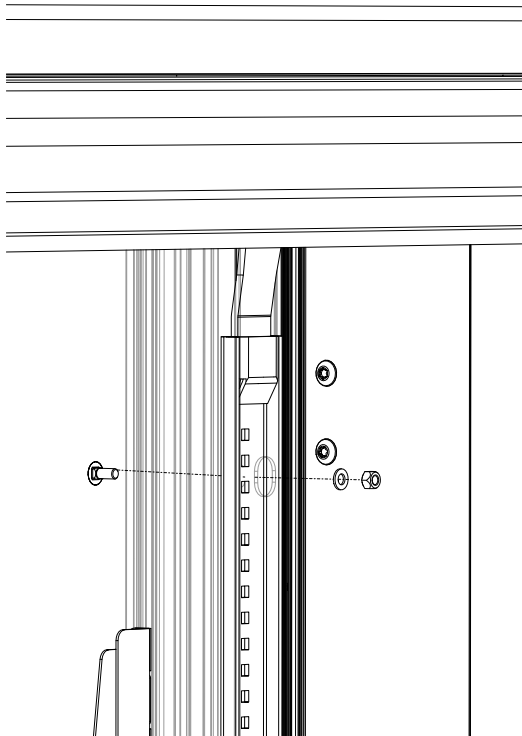
The carriage bolt, washer and nut are part of the **applicable mounting kit**.

Insert sliders into the rear door

1



2



Carriage bolt 10x25



Washer A10.5



Hexagon nut M10

**Torque 48 Nm**

The fixing borehole has to be opened up by drilling. Push the carriage bolt through the stanchion and the slider from the outside of the vehicle, and then fix it with washer and nut.

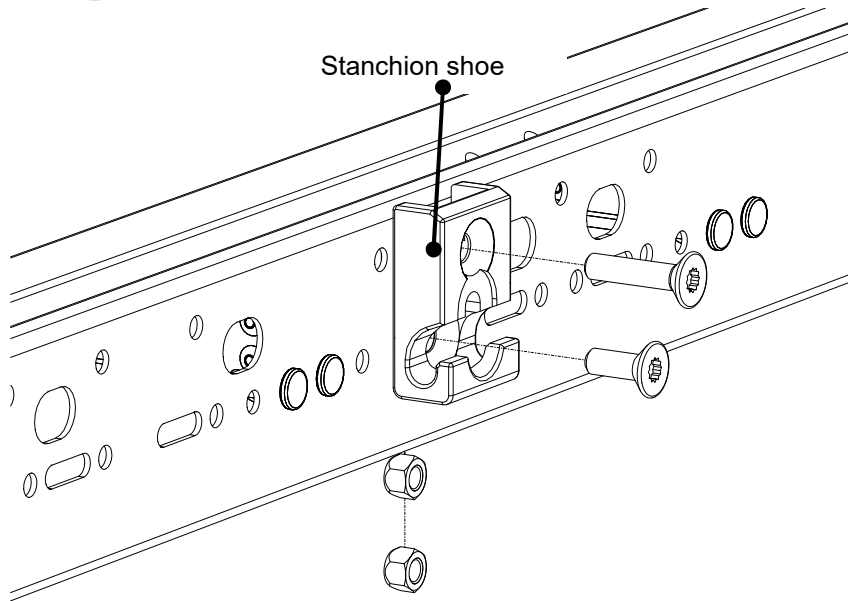



This borehole is only necessary at a roof without hydraulics.


The carriage bolt, washer and nut are part of the **applicable mounting kit**.


Mounting of the hinge stanchion


1



 Countersunk screw with Torx drive M14x55

 Countersunk screw with Torx drive M14x40

 Hexagon nut M14

 **Torque 190 Nm**

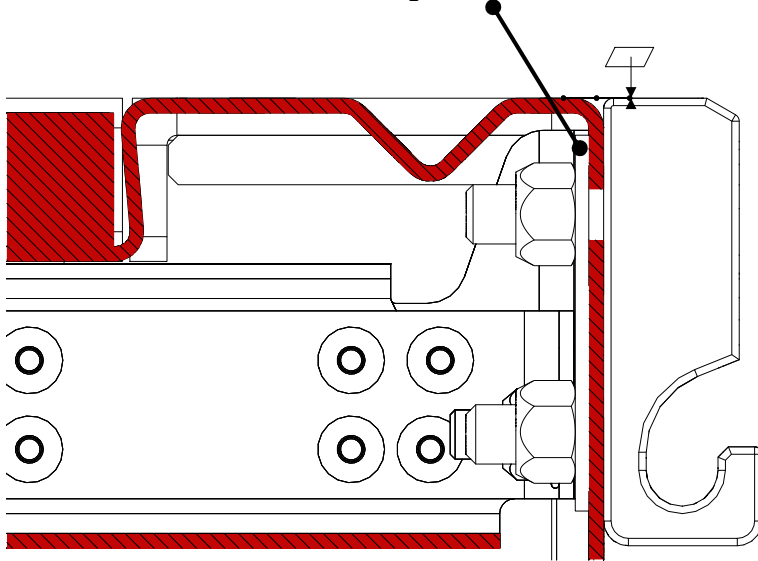
Position of the stanchion shoe according to calculation sheet

Boreholes are made by the customer.

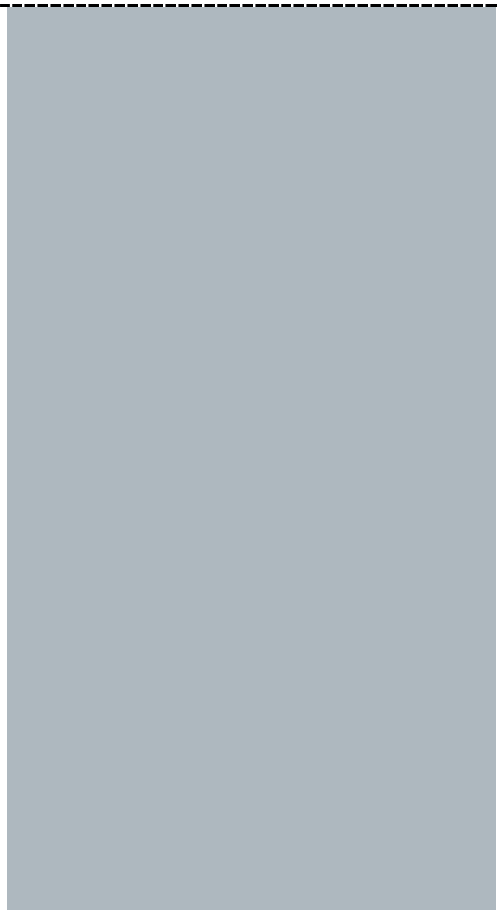
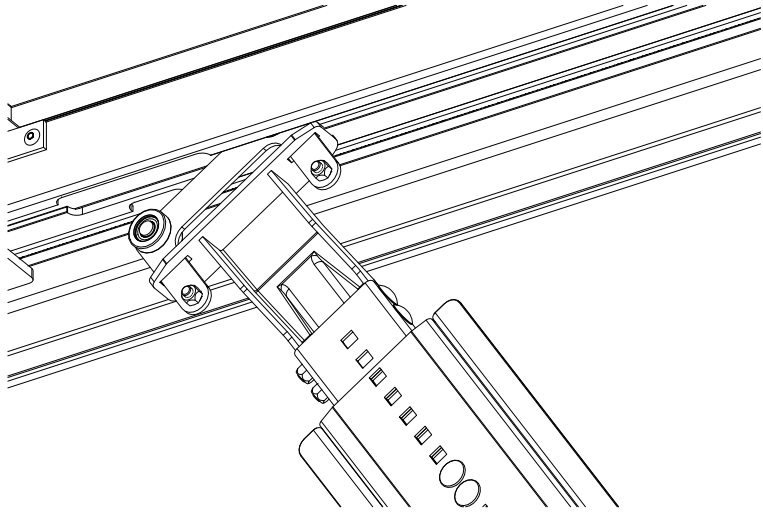
Countersunk screws, stanchion shoe, hexagon nut and counterbearings are part of the applicable stanchion.

2

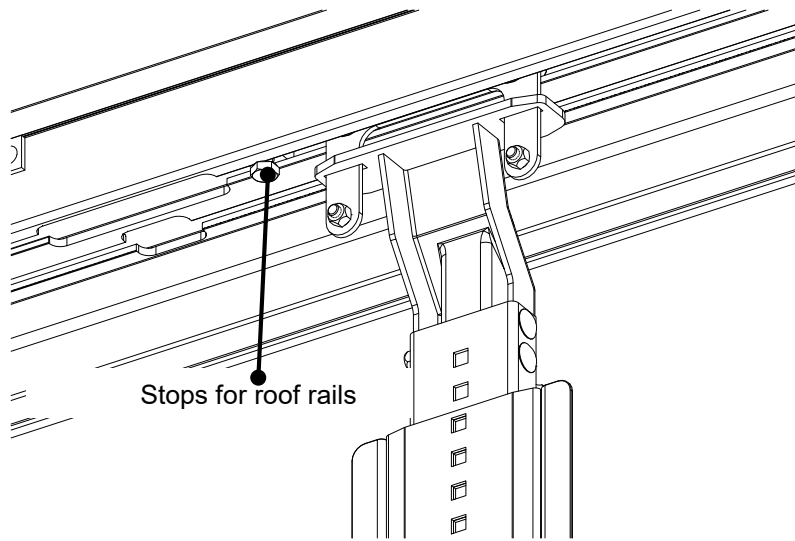
Counterbearings for stanchion shoe



3



4



Stop for roof rails



Hexagon nut, fully threaded
M10x35



Torque 48 Nm

Mount all hinge stanchions
and then fix them with the stop
for roof rails.

The number of the hinge
stanchions depends on the
length of the construction.

Stops for roof rails and
hexagon nuts are part of **the
applicable top.**

Revision levels

Revision level	Kind of change	Date	Name
00	New creation of mounting instruction	01.Oct 2018	Laib / Maier
01	Assembly VDI-KIT not applicable	24. March 2020	Laib / Maier
02	Corected tightening torques	20.09.2020	Boll
03	Page 4 changed	23.11.2020	Boll
04	Page 25, screw from M12 to M14	11 January 2023	Laib

Erstellt	Geprüft und Freigegeben
Datum: Name/Abt. Unterschrift	Datum: 29.09.2020 Name/Abt. U.Boll
Dokument: FB45120A	