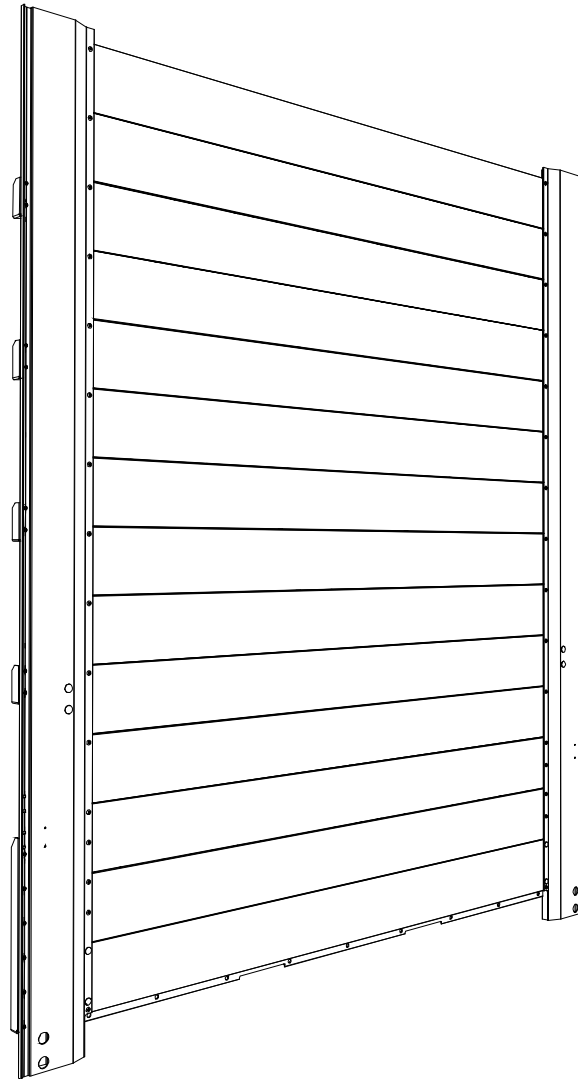


Mounting instruction front wall IV



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 instructions 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.

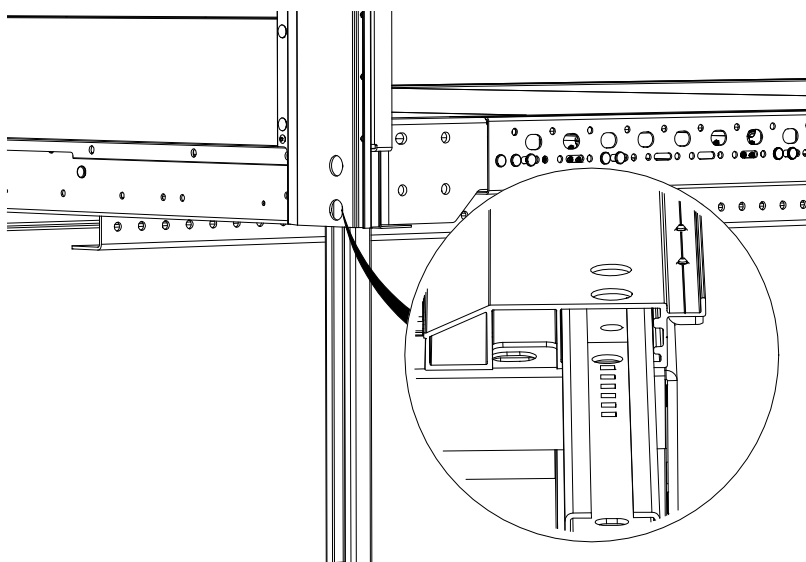
All technical information, descriptions and pictures shall be valid from the day of their printing - respectively the day of any supplements hereto - on. We reserve the right to make changes due to steady further development. No claims can be derived from applications and explanations of this publication.

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 stanchion and slider front wall IV

1

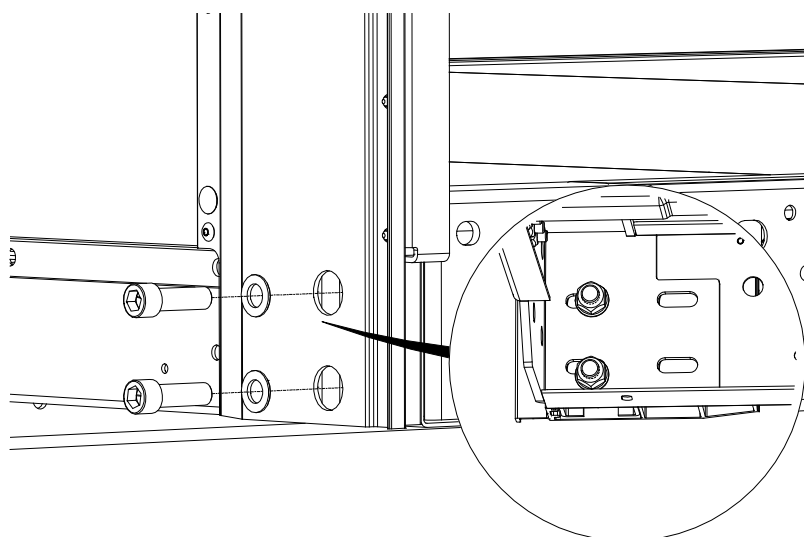
Insert the slider.



The slider has to be taken from mounting kit TSE no.: 1259317

2

Screw the stanchion together.



Cylinder screw with internal hex M16x50



Washer without chamfer



Hexagon nut with all-metal clamping part M16



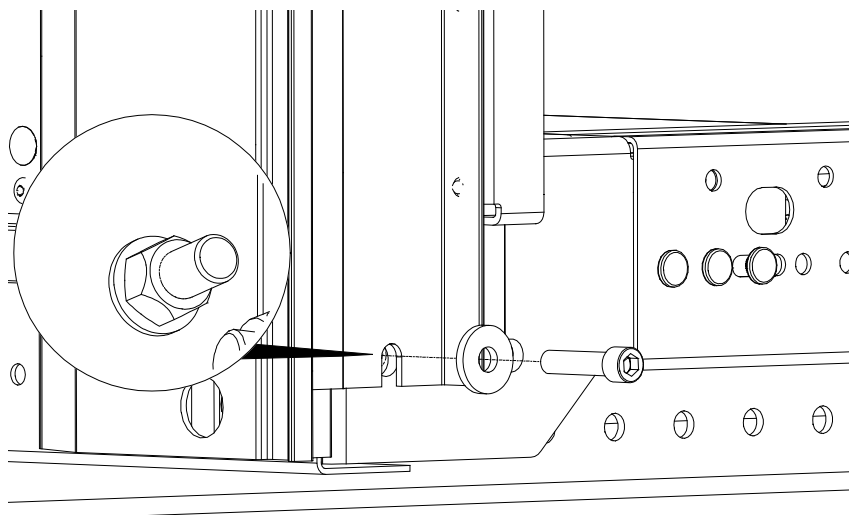
Torque 206 Nm

Screws, washers and nuts have to be taken from mounting kit TSE no.: 1259317.

Mounting of stanchion part II (only in connection with lifting systems)

1

Screw the stanchion together.



Cylinder screw with internal hex M12x50



Washer A12.5



Washer D13



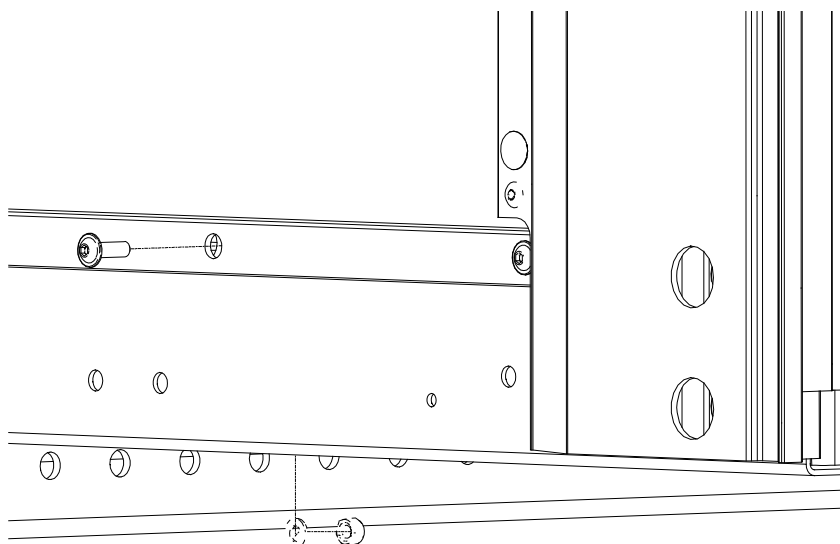
Hexagon nut with all-metal clamping part M12



Torque 85 Nm

Screws, washers and nuts have to be taken from
mounting kit
TSE no.: 1259318.

Fixation of front wall IV with the end profile downside

1


with
Fillister head screw
flange and internal hex
M8x25



Washer A8.4



Hexagon nut with all-
metal clamping part M8



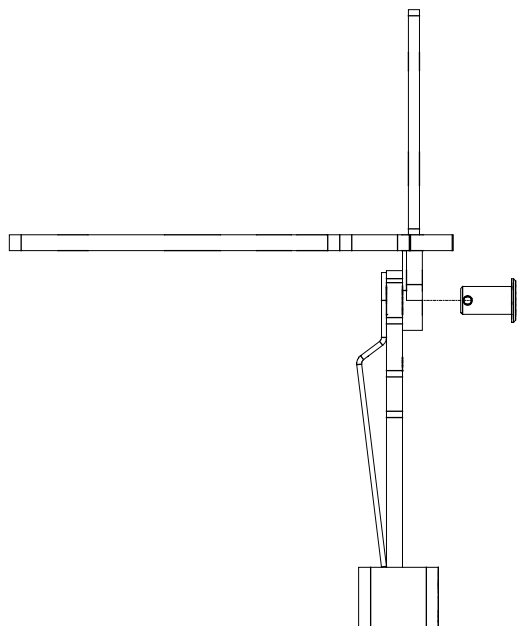
Torque 36 Nm

Screws, washers and
nuts have to be taken
from
mounting kit
TSE no. 1259317.

Mounting of sliders and top parts upside for standard and lifting system front wall IV

1

Mount the slider and top part.



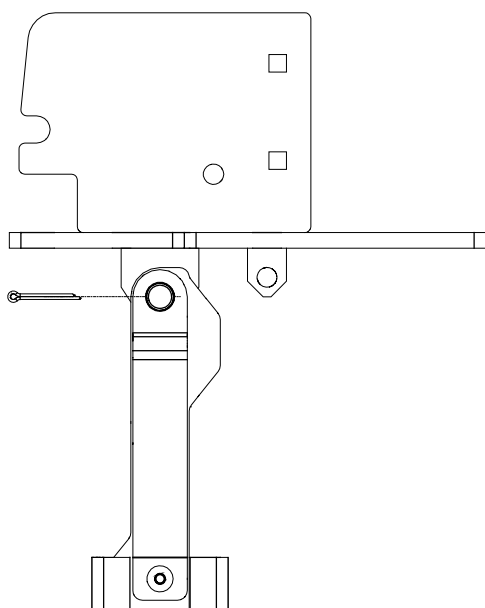
Bolt with head
TSE no.: 212-52.505

Top part complete
front side left
TSE no.: 1249892

Top part complete
front side right
TSE no.: 1249893

Slider front side left
TSE no.: 1256055

Slider front side right
TSE no.: 1256056

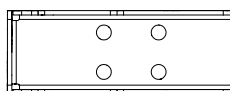
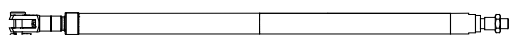
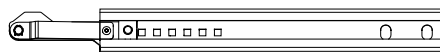
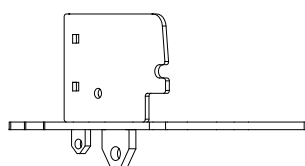
2


Splint
TSE no.: 212-52.506

Mounting of the central hydraulics

1

Overview material



Hoses, connectors and hydraulic cylinder have to be taken from the assembly kits **Hörbiger pump** TSE no.: 1359459 and **Hydro-pneumatic pump** TSE no.: 1359541.

Top parts and sliders are part of the applicable assembly kit for roof connection.

2

Dismantle the protective cap.



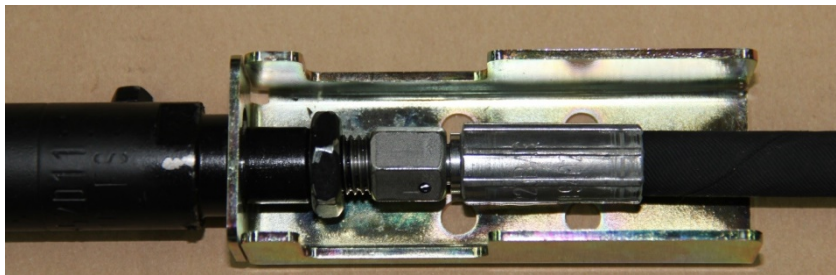
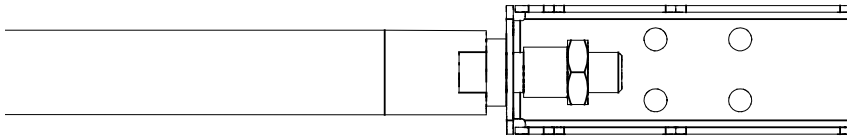
Remove the protective cap and loosen the nut.

Remove the nut and sleeve.

Open-end wrench size 22 and 14

3

Mount the cylinder admission.

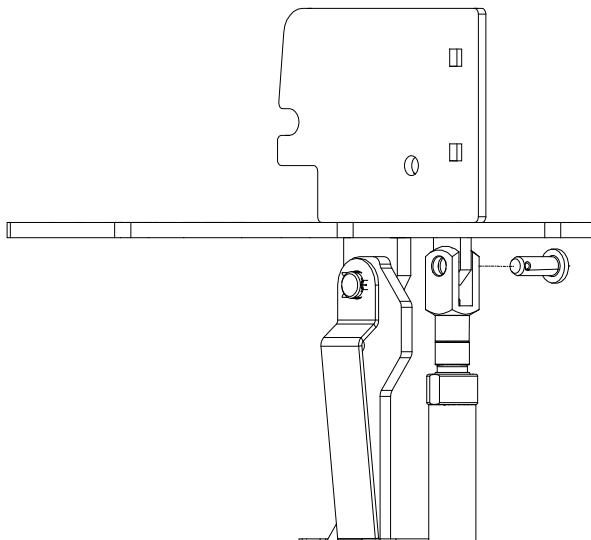


For mounting the cylinder the open-end wrench sizes **19** and **14** are needed.

For mounting the hose the open-end wrench sizes **22** and **14** are needed.

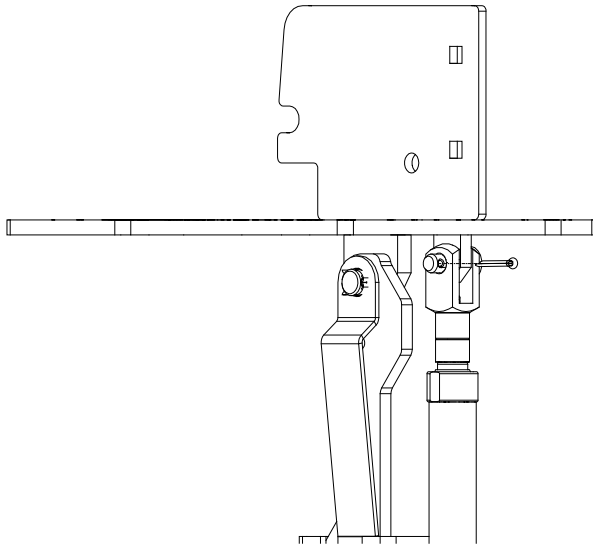
4

Mount the hydraulic cylinder and top part.



Splint bolt
TSE no.: 1118887

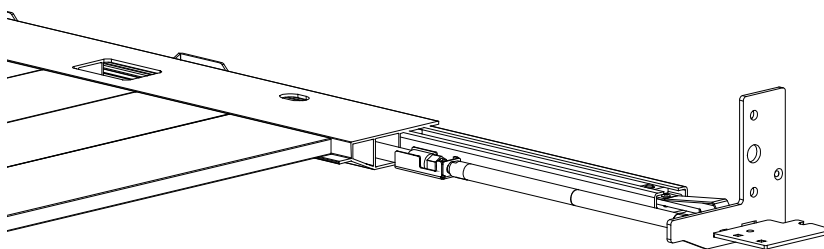
5



Splint
TSE no.: 212-52.506

6

Insert the top part.



Mounting the part in horizontal position is only a mounting suggestion and can differ according to conditions at customer's site.

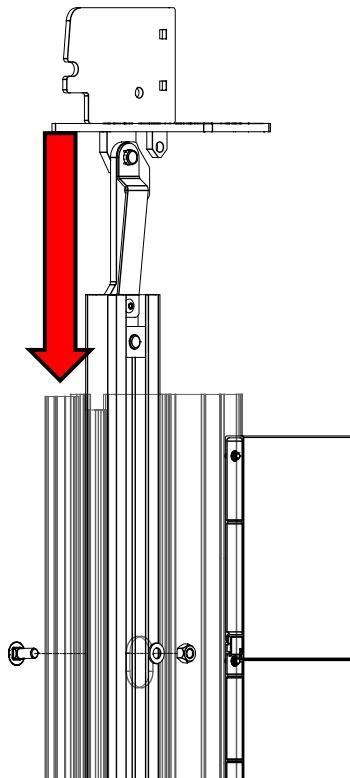
7

Rivet the cylinder admission
(central hydraulics).



7

Drill the fixing hole.



Carriage bolt M10x25



Washer A10.5



Hexagon nut M 10

Push the carriage bolt through the stanchion and the slider from the outside of the vehicle. Then fix it with nut and washer.



Drilling is only needed for a roof without hydraulics.

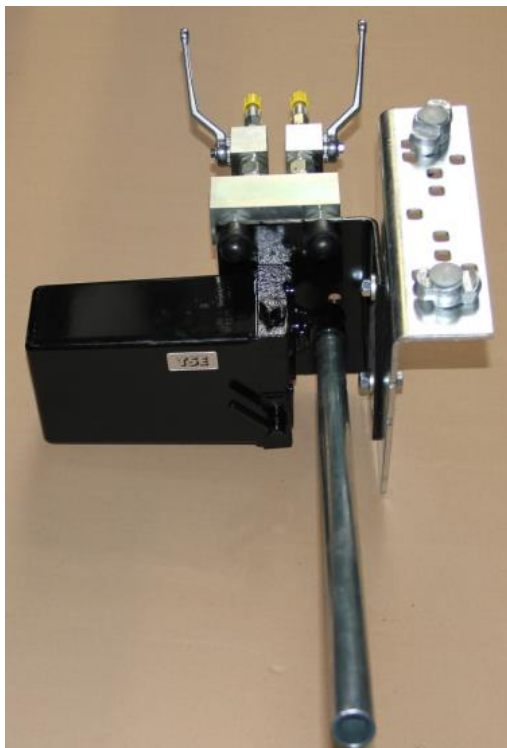


Torque 48 Nm

Mounting of hydraulics aggregate with hand pump

1

Mount the console.



The mounting depends on the type of vehicle.

2

Mount the hoses.

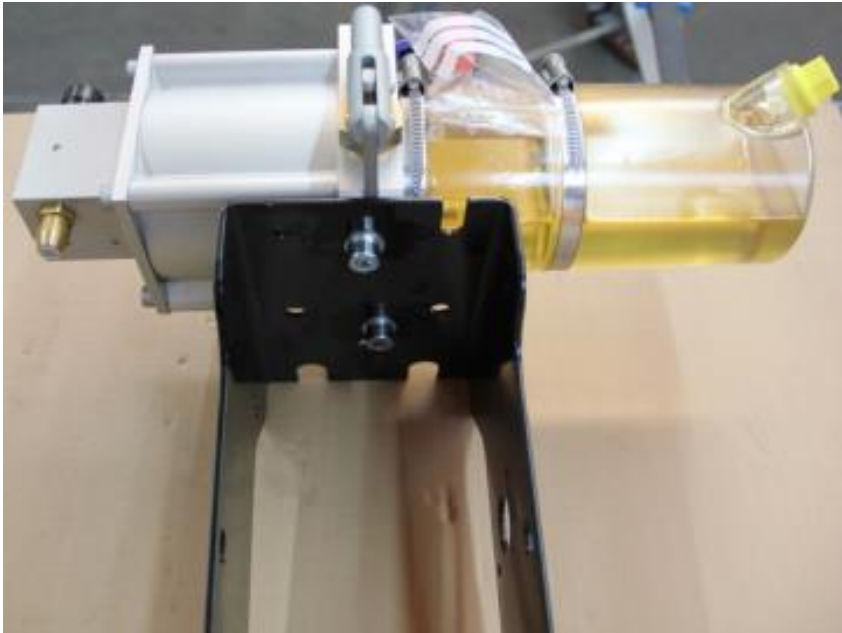


Mounting of the Hydro-pneumatic pump

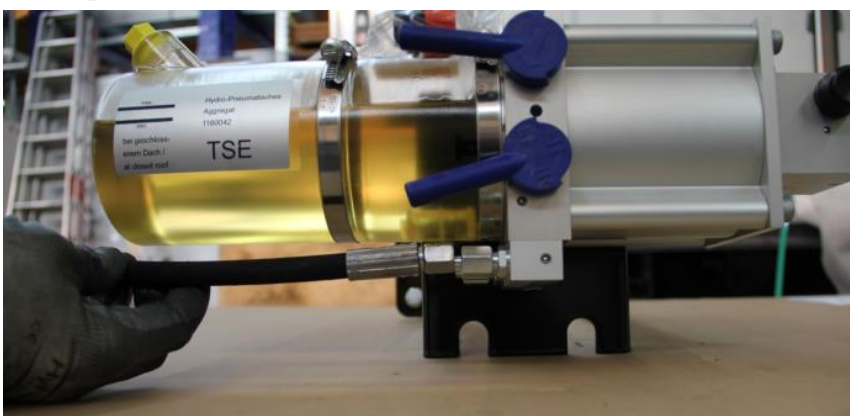
1

Mount the console.

The mounting depends on the type of vehicle.


2

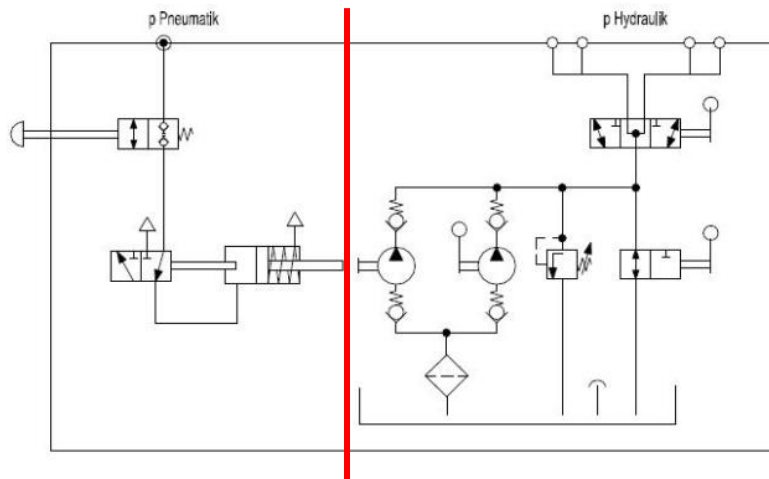
Mount the hoses.



Circuit diagram

1

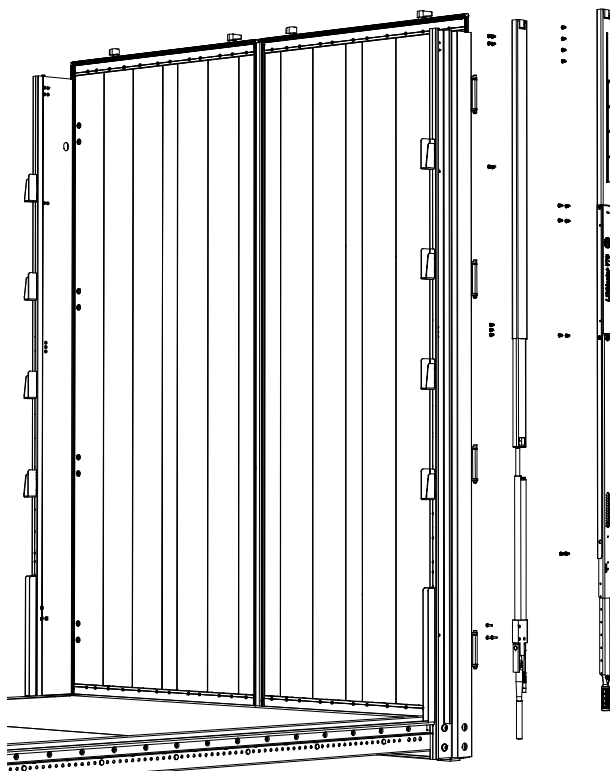
Pneumatics and hydraulics



Mounting of Liftmaster and compact hydraulics for front wall IV

1

Mounting Liftmaster or compact hydraulics



Fillister head screw
M6x25



Hemlok rivet
KL-BER4.8-6.8mm



Hemlok rivet
KL-BER6.8-8.8mm

Liftmaster and Hemlok
rivet

KL-BER6.8-8.8mm
have to be taken from
lifting system
TSE no.: 1119463.

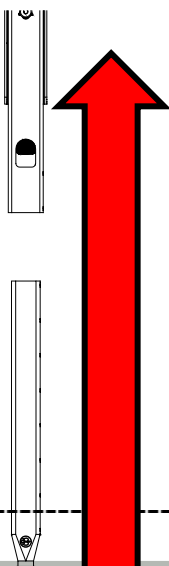
Compact hydraulics,
fillister head screw and
Hemlok rivet KL-BER4.8-
6.8 have to be taken from
lifting system
TSE no.: 1250648.



Torque 15 Nm

2

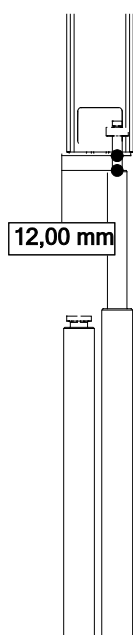
Mount the hand lever of the liftmaster.



The hand lever for
Liftmaster will be cut to
the needed length by the
customer, depending on
the S.H.i.L., and then
be pushed into the
direction of the arrow
and fixed.

3

Mount the compact hydraulics of the hydraulic stanchion lifter.



Two ear hose clamp

The two ear hose clamp has to be taken from

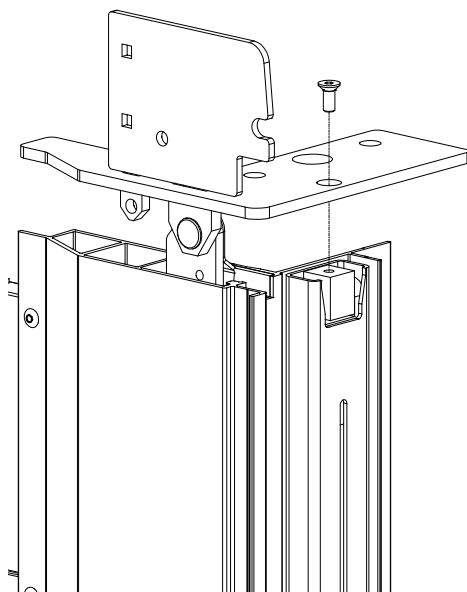
lifting system
TSE no.: 1250648.

The regulation of the lateral aperture height at the compact hydraulics is made by means of the balancing slider. The failover (two ear hose clamp) must be mounted.

Mounting of top parts with sliders upside (Liftmaster and compact hydraulics front wall IV)

1

Mount the top part with console and slider at
pivot bearing.



Pivot bearing



Countersunk screw
M8x20

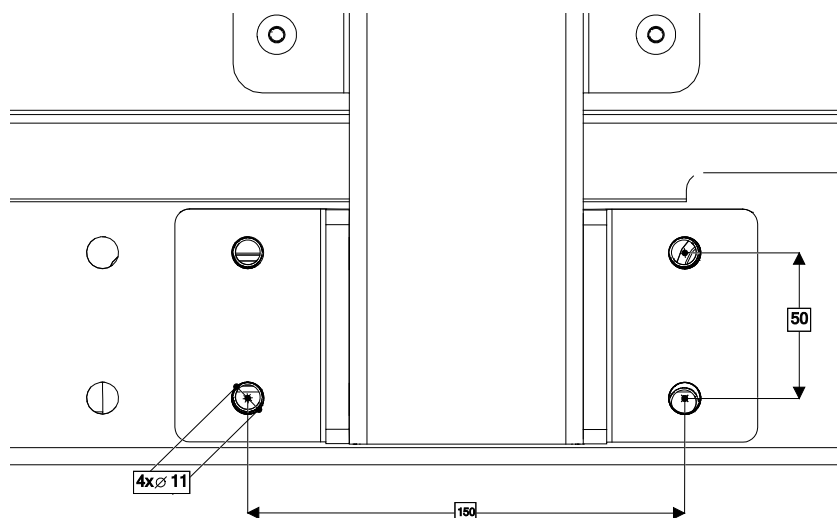
Pivot bearing and
countersunk screw
have to be taken from the
lifting systems
TSE no.: 1119463 and
TSE no.: 1250648.



Torque 36 Nm

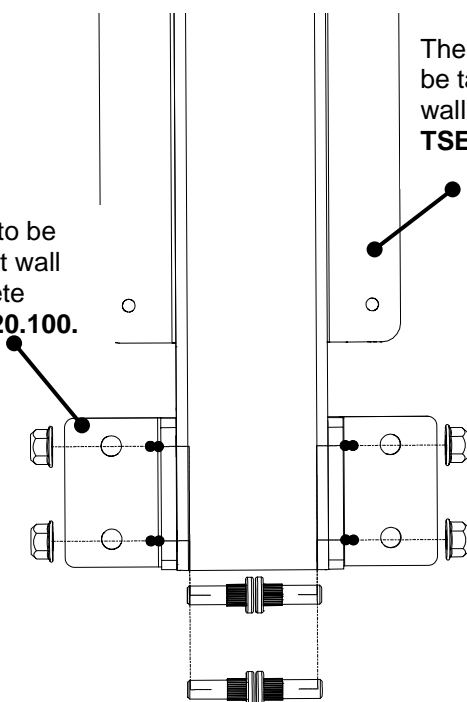
Mounting of front wall supports (optional)

1



2

Brackets have to be taken from front wall support complete
TSE no.: 600-20.100.



Knurled bolt M10x35

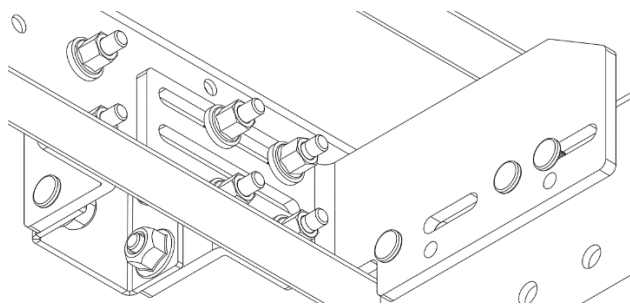
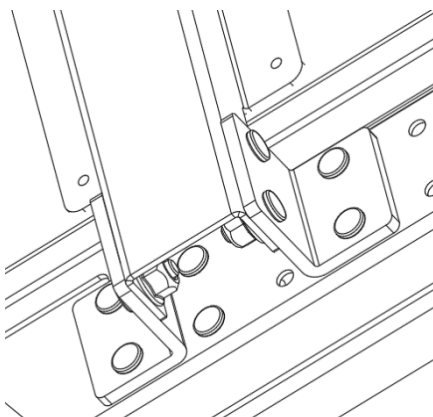


Hexagon nut with flange M10

Knurled bolt and hexagon nut have to be taken from **front wall support complete**
TSE no.: 600-20.100.



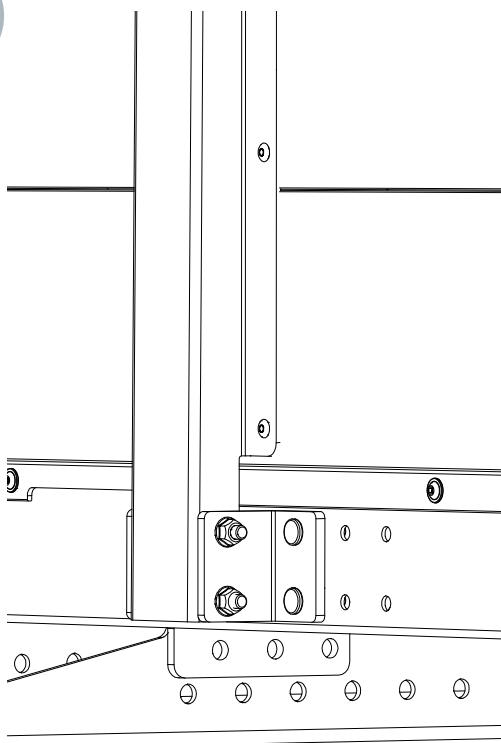
Torque 60 Nm

3


Knurled bolt M10x42


 Hexagon nut with
flange M10

Knurled bolt and
Hexagon nut have to be
taken from **front wall**
support complete
TSE no.: 600-20.100.


Torque 60 Nm
4

 Hemlock rivet
KL-BER6.8-8.8mm

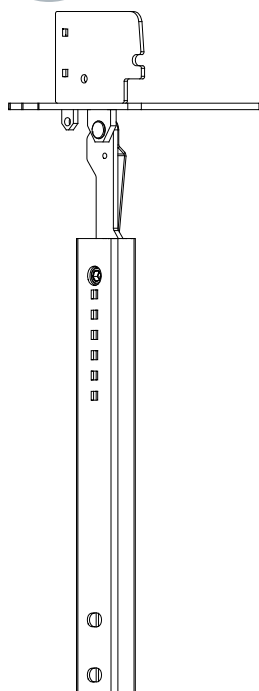
Rivets have to be
taken from **front wall**
support complete
TSE no.: 600-20.100.

Annexes

Total overviews of top parts / sliders front wall IV

1

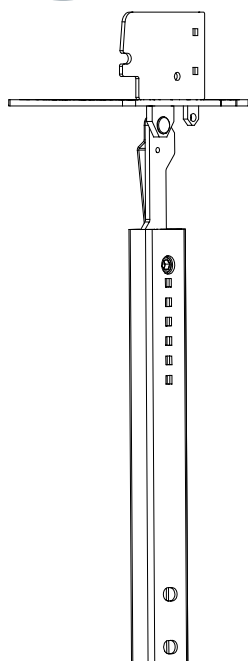
CS and UK top


Top part complete left
TSE no.: 1249892

Slider upside
complete left
TSE no.: 1256055

2

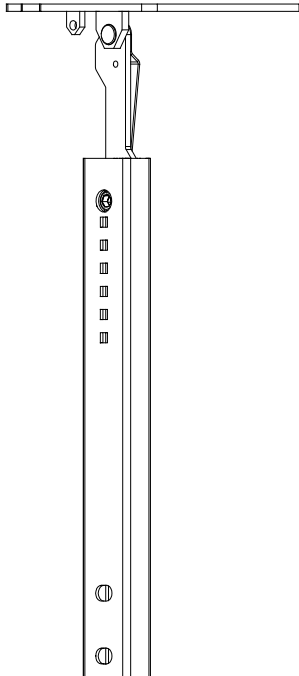
CS and UK top


Top part complete
right
TSE no.: 12498923

Slider upside
complete right
TSE no.: 1256056

3

FLAT top

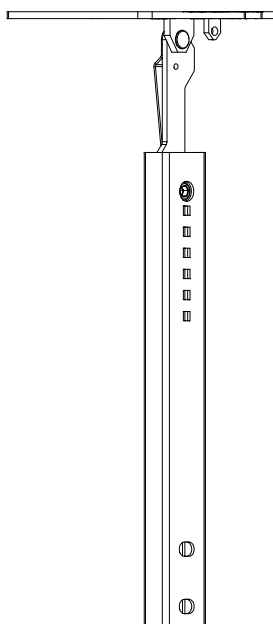


Top part complete left
TSE no.: 1249710

Slider upside
complete left
TSE no.: 1256055

4

FLAT top

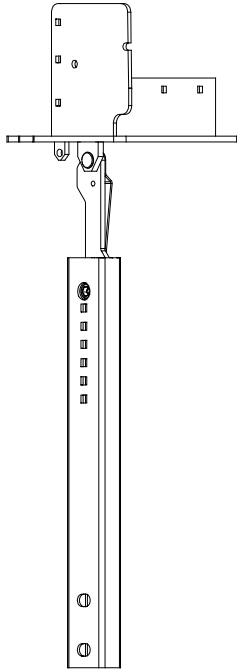


Top part complete
right
TSE no.: 1249711

Slider upside
complete right
TSE no.: 1256056

5

MEGA top

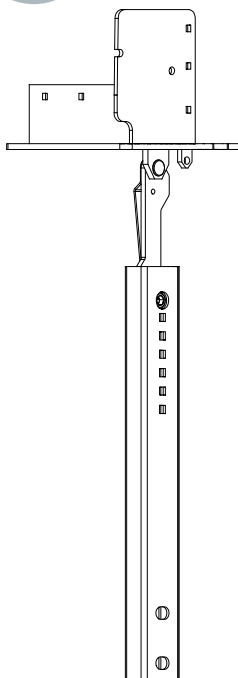


Top part complete left
TSE no.: 1249728

Slider upside
complete left
TSE no.: 1256055

6

MEGA top

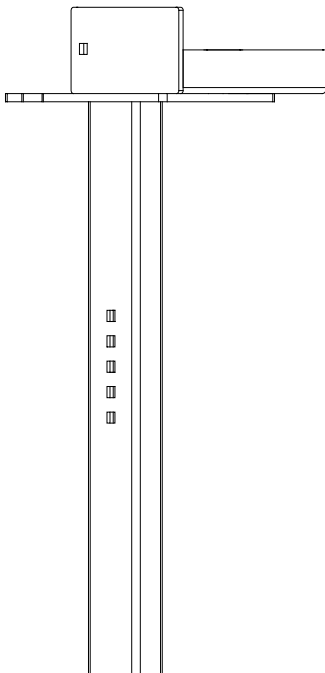


Top part complete
right
TSE no.: 1249729

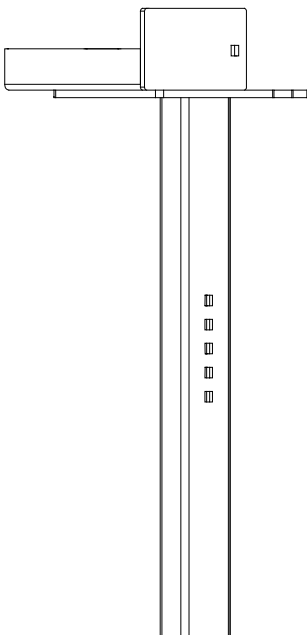
Slider upside
complete right
TSE no.: 1256056

7

Hamburger top

Slider complete right
TSE no.: 1264118**8**

Hamburger top

Slider complete left
TSE no.: 1264119

This image shows a single page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Revision levels

Revisions level	Kind of change	Date	Name
00	New creation of mounting instruction	25. Sept 2018	Laib / Maier
01	The safety hints have been supplemented	18. July 2019	Maier
02	Corrected tightening torques	29 September 2020	Boll
03	Page 22, Picture 3, changed	14.10.2020	Boll
04	Page 4 changed	23.11.2020	Boll

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