

Multi-transport trailer

Operating Instructions

Part 2 - MTK



MACHT'S MÖGLICH

en



4000 series

humbaur.com

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Notes on use/Target group



PART 2 - Original - "MTK Operating Instruction Manual"

This "MTK operating instruction manual" (Part 2) is intended for you as a user of a ready-to-use trailer. It describes detailed steps for handling MTK trailers.

It contains all of the relevant details on safe operation, care/cleaning, maintenance/servicing, troubleshooting and decommissioning/disposing of the trailer.

This specific operating instruction manual (Part 2) for your trailer is on the enclosed CD. You can also download it from **www.humbaur.com under the section: Download - Operating Instructions.**

PART 1 - "Trailers up to 3.5 to" (General Points)

For all other general information on car trailers, see the operating instruction manual, "Trailers up to 3.5 to" (General Points - Part 1).

- PART 1 and PART 2 together form the complete documentation for your trailer, which you as the user should have at your disposal.



Read this operating instruction manual carefully and completely before using your trailer for the first time and observe all of the instructions, safety information and warnings. Comply with the steps for handling.

- Non-observance of any of the documentation can cause injuries to you and to other persons or can cause material damage.
- Non-observance may invalidate your guarantee entitlement.
- Keep this operating instruction manual in a safe place for the entire service life of your trailer.
- It forms part of the product and also serves as a CHECK LIST for regular inspections of your trailer.
- We advise you to store the operating instruction manual in the driver's cab and to keep it at hand in case you need to consult it.
- It should be passed on to the new user/owner if you rent out or sell your trailer.





In addition, as a road user, you are obliged to observe all national regulations for driving a vehicle and trailer and to comply with your obligations as the owner of a commercial vehicle.

- This includes carrying out regular maintenance and care tasks and periodically subjecting your trailer to an overall technical inspection.
- Observe any special stipulations that are specific to your country.

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1 Identification

- ▶  Put a cross next to the type of trailer you have acquired.
- ▶  Read the general operating instruction manual for "Trailers up to 3.5 to" (General Points - Part 1)..

Product name: Multi-transport trailer - tiltable

4000 Series:

Single-axle

- Type 4110: MTK 15 36 22
- Type 4111: MTK 18 36 22
- Type 4120: MTK 15 36 22 Allcomfort
- Type 4121: MTK 18 36 22 Allcomfort

Tandem

- Type 4113: MTK 25 42 22
- Type 4114: MTK 30 42 22
- Type 4115: MTK 35 42 22

- Type 4117: MTK 30 47 22
- Type 4118: MTK 35 47 22

- Type 4122: MTK 25 42 22 Allcomfort
- Type 4123: MTK 30 42 22 Allcomfort
- Type 4124: MTK 35 42 22 Allcomfort

- Type 4125: MTK 30 47 22 Allcomfort
- Type 4126: MTK 35 47 22 Allcomfort

1.1 Declaration of Conformity



Humbaur GmbH hereby confirms that all relevant EU directives for the registration and safe use of trailers of the 4000 series of MTK trailers with accessories have been complied with.

You can request a detailed EU declaration of conformity from us separately.

2 Product Description

- The MTK is a multi-transport kneeling trailer for transporting vehicles with a weight of up to 3.5 tonnes and other loads; it is robust and requires little maintenance.
- The cargo bed tilts automatically after releasing the eccentric clamping devices and locks - using integrated shock absorbers.
- After loading a vehicle using the loading aids, the cargo bed is automatically lifted into its original position by moving the weight forward.
- The complete chassis and its loading aids have been galvanised.
- The drop sides are made of aluminium.
- The MTK is generally braked with a loading device and comes in various versions: as a single-axle or tandem trailer, with loading ramps or a ramp wall, with drop sides of different heights (350 mm or 200 mm), with a wooden or aluminium floor or in the form of a chassis with stand rails.
- The MTK series comes equipped with a V drawbar, a jockey wheel and a tow ball coupling.
- The MTK chassis is always the same. The body can be retrofitted / converted at any time.
- The load is secured with the aid of 6 pairs of tie-down brackets recessed into the profile of the trailer frame.
- The tie-down points have been tested and can take loads of up to 400 daN (kg).

Optional accessories:

Adjustable manually or electrically operated cable winch, double-acting hydraulics, high cover / frame construction, wheel limit stop and wheel stop, shock absorber, intermediate chassis floor, side wall extension for 350 mm drop sides.

The individual parts of the MTK multi-transport trailer are explained in the illustrations below.

2.1 MTK - as a single-axle trailer

The MTK as a single-axle trailer for a gross weight of 1500 or 1800 kg, in box form.



MTK single-axle trailer with 350 mm drop sides and loading ramps

2.2 MTK - as a tandem trailer

The MTK as a tandem trailer for a gross weight of up to 3000 or 3500 kg, as a multi-transport vehicle for vehicles with different track widths. With double-acting hydraulics for controlled tilting of the cargo bed.



MTK tandem trailer with 200 mm drop sides and ramp wall

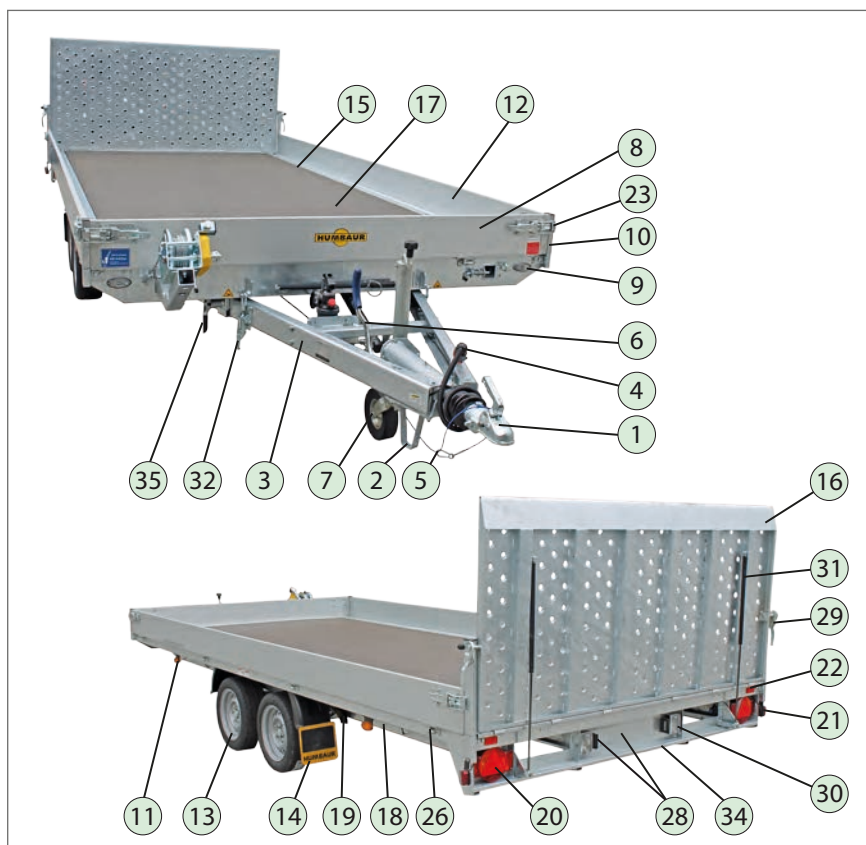
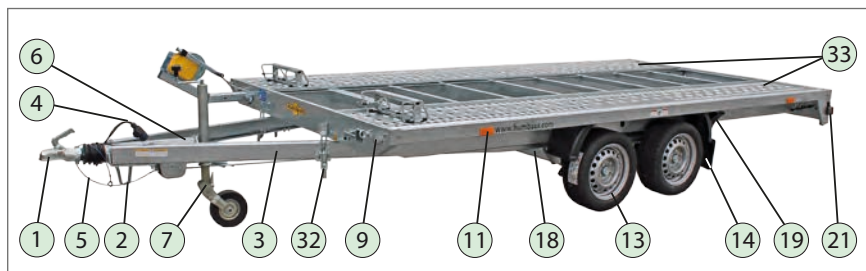
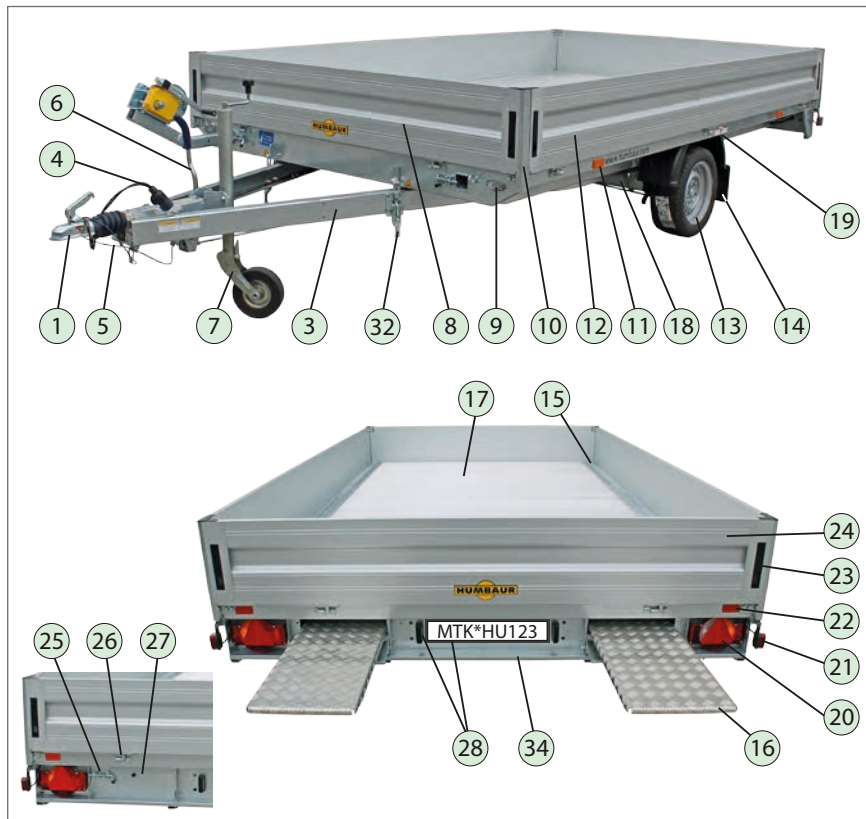
2.3 MTK - as a chassis with stand rails

The MTK as a chassis for a gross weight of 3000 or 3500 kg, for transporting vehicles.



MTK tandem chassis with stand rails (without drop sides)

Sample illustrations:



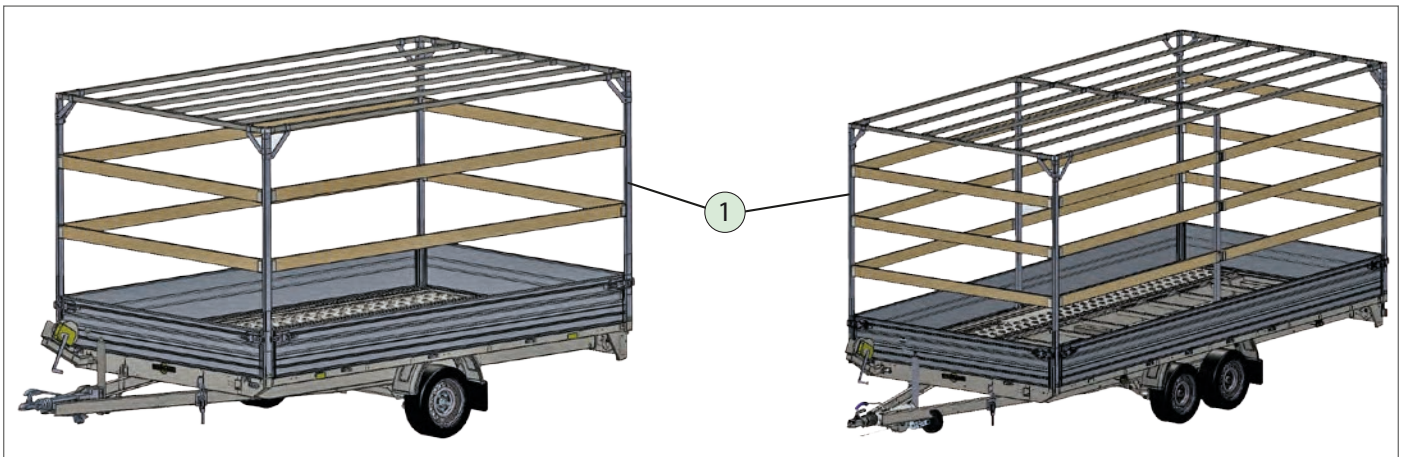
2.4 Components

1. Coupling ball
2. Drawbar support
3. V drawbar
4. Electric plug
5. Safety cable
6. Overrun hitch with hand brake lever, brake linkage, spring mechanism
7. Jockey wheel
8. Front drop side (facing drop side)
9. Front reflector / white reflector or front position lamp
10. Stanchion
11. Side reflector / yellow reflector
12. Lateral drop side
13. Wheel (tyre)
14. Mudguard (with / without mud flap)
15. Tie-down bracket, recessed
16. Loading aid (loading ramps, ramp wall)
17. Cargo bed / loading platform
18. Chassis, axle
19. Wheel chock
20. Tail light, combined with triangular reflector, indicator, brake light, rear fog light, possibly reversing light
21. Rear position lamp
22. Rear reflector / red reflector
23. Drop side lock
24. Rear drop side (back drop side)
25. Lock for flap
26. Drop side hinge
27. Flap for loading aids
28. Number-plate holder with number-plate light on side
29. Rotary lever lock
30. Reversing light (white)
31. Gas strut
32. Eccentric tension lock
33. Stand rails
34. Underride protection
35. Locking lever



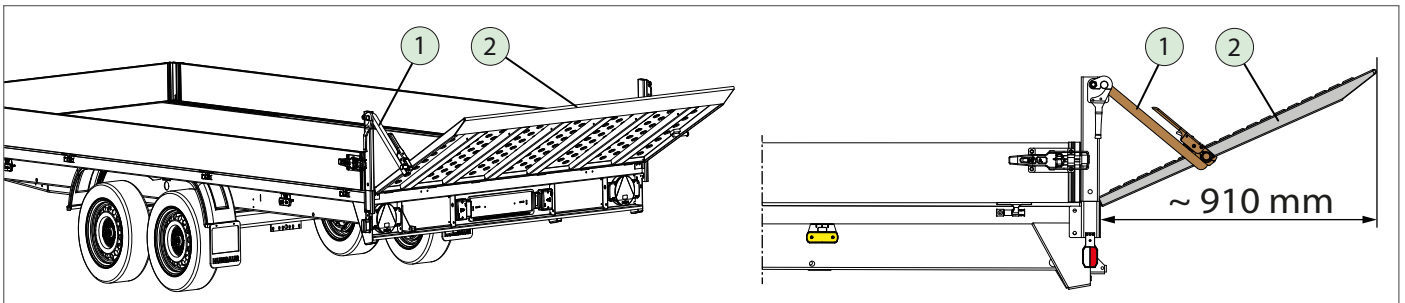
Accessories / extensions are explained separately in the part description below or in the operating instruction manual, "Trailers up to 3.5 t" (General Points - Part 1).

2.5 Optional fittings / accessories



MTK single-axle and tandem trailer with high cover / frame

1. Frame / high cover



MTK ramp wall with supports

1. Support
2. Ramp wall



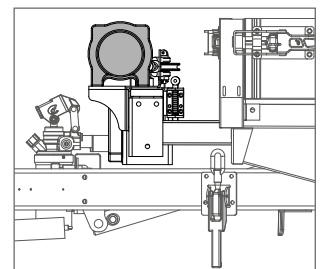
Wheel limit stop, both sides



Wheel stop, end-to-end



Cable winch (manual)



Cable winch (electrical)



Hydraulic pump (manual)



Spare wheel



Side wall extension



Shock absorber

3 Intended Use

- Transporting vehicles / construction machinery
- Transporting of goods, with the exception of hazardous goods, e.g. explosive, chemical or liquid materials.
- Transporting fixed loads.
- Transporting loose loads with corresponding equipment (with drop sides).
- The loading ramps should only be used by plastic caterpillar tracks or rubber wheels.

4 Foreseeable misuse

- Transporting of persons or animals.
- Driving with insufficient load securing.
- Driving with cargo bed not locked.
- Driving with incompletely lifted and secured loading ramps or ramp walls.
- Driving onto the loading ramps with steel-tracked vehicles.
- Driving onto the loading aids with vehicles exerting high point loads, e.g. vehicles with small wheels such as fork lifts, mobile lifting platforms, etc.
- Driving with unsecured cable winch.
- Loading / unloading the trailer with incorrectly set track width on the drive-up rails.
- Non-observance of the safety instructions in the operating instruction manual, "Trailers up to 3.5 to" (General Points - Part 1).

5 General Safety Instructions

WARNING



Automatic tilting of the cargo bed!

Crush hazard for hands / fingers caused by the front edge of the loading platform when loading.


- ▶ Keep your hands away from the crush area.
- ▶ Allow the cargo bed to tilt back automatically. Never try to stop it.

- ▶ Use  .



Automatic tilting of the cargo bed!

Crush hazard for feet / persons caused by rear underride protection when tilting the cargo bed.

- ▶  Keep persons away from the area around the underride protection during tilting.

CAUTION



Moving cargo bed!

You could fall if you step onto the cargo bed during the loading and unloading process and during automatic movement.

- ▶ Take particular care when stepping onto the cargo bed.


- ▶ Use .




Folding loading aids!

The loading aids may suddenly fold down after unlocking - risk of impact! This can result in feet being crushed.

- ▶ Stand to the side when unlocking the loading aids.
- ▶ Hold the loading aids with one hand from the side.
- ▶ Allow the ramp wall to fall to the floor if the gas struts are defective. Never try to stop it.

- ▶  Keep your feet away from the area around the loading aid.

- ▶  Keep persons away from the area around the loading aids during tilting.

- ▶ Use  .



Observe the other general safety recommendations in the operating instruction manual, "Trailers up to 3.5 to" (General Points - Part 1).

6 Loading and Unloading

6.1 Load distribution



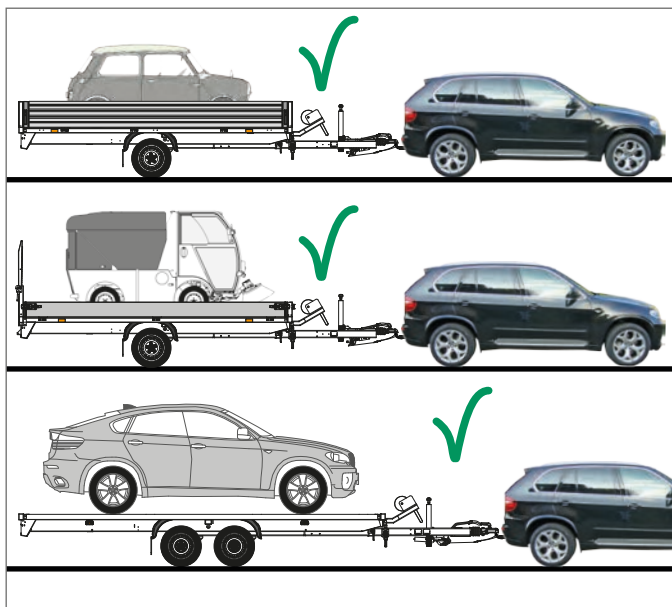
Negative / insufficient drawbar load! Maximum permissible drawbar load exceeded!

A negative / insufficient drawbar load or exceeding the maximum permissible drawbar load may result in accidents.

- ▶ Distribute the weight evenly across the trailer.
- ▶ Do not fall below the minimum drawbar load of the trailer (for trailers up to 750 kg gross weight, this is: 4% of the towed load or 25 kg).
- ▶ Do not exceed the maximum permissible drawbar load of the towing vehicle and trailer coupling.
- ▶ Where possible, make use of the maximum permissible drawbar load (see COC papers, Section 19).
- ▶ Observe the information on the maximum permissible drawbar load in your vehicle papers and the trailer coupling.
- ▶ Do not exceed the maximum permissible drawbar load of the trailer. Observe the information on the maximum permissible drawbar load in the COC papers, Section 19.

<p>VORSICHT</p> <p>Überschreitung der zul. Stützlast! Kann zu Unfällen führen-Schleudergefahr.</p> <p>▶ Min. 4 % der Anhängerlast einhalten, mehr als 25 kg nicht notwendig.</p> <p>▶ Zul. Stützlast des Zugfahrzeugs beachten!</p>		<p>CAUTION</p> <p>Exceeding the permissible vertical load! Can lead to accidents-risk of skidding.</p> <p>▶ Min. 4 % of the trailer load to comply, more than 25 kg are not necessary.</p> <p>▶ Perm. Note vertical load of the vehicle!</p>
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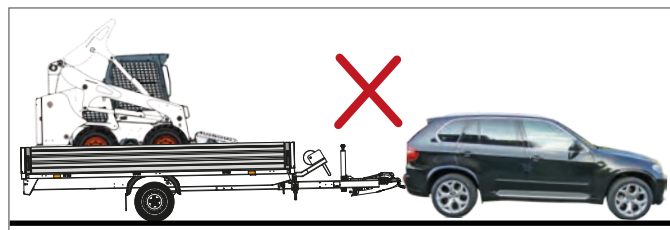
Correct load distribution



Vehicle loaded correctly

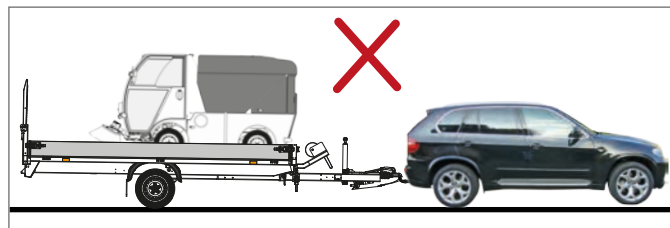
The trailer and the towing vehicle are stable with all wheels on the ground.
The overall centre of gravity of the load is centred over the axle(s).

Incorrect load distribution



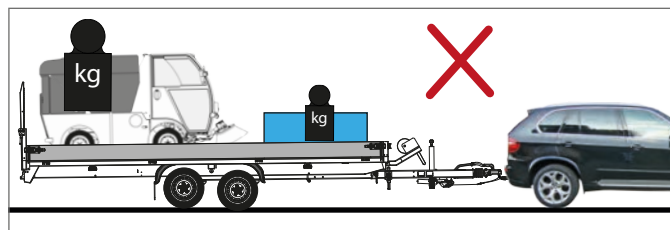
Vehicle loaded incorrectly

The trailer is tilting backwards; the towing vehicle is tilting forwards = the drawbar load is too low or negative.



Vehicle loaded incorrectly

The trailer tilts forward, the towing vehicle tilts backwards = the maximum permitted drawbar load is exceeded, the rear axle of the towing vehicle is overloaded.



Vehicle loaded incorrectly

The trailer tilts backward. The rear axle of the tandem trailer is overloaded = the trailer easily starts to skid, as the weight of the load is unevenly distributed.

6.2 Load securing

Tie down the vehicle!

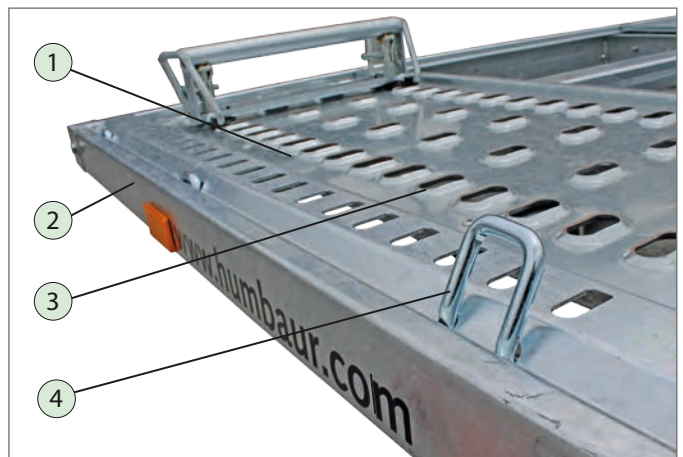


MTK - chassis / load securing

1. Wheel stop
2. Tie-down strap
3. Front wheel of loading vehicle
4. Rear wheel of loading vehicle

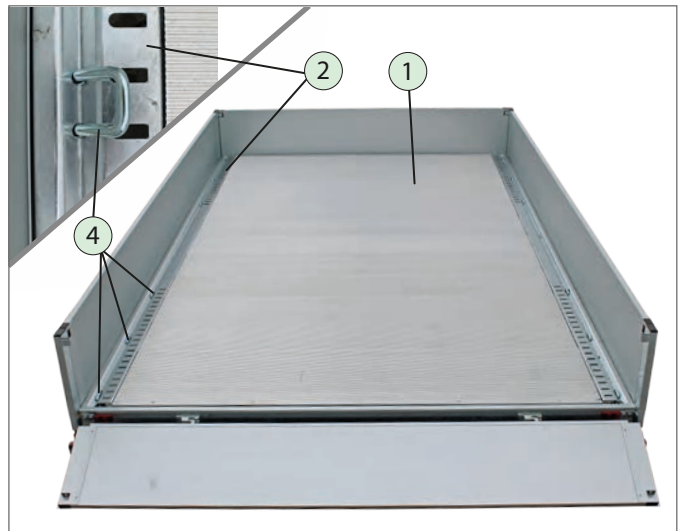
- ▶ Use the wheel limit stops as wheel stops when driving the vehicle onto the cargo bed and as a way of securing the load.
- ▶ Tie down all wheels of the vehicle with appropriate car tie-down straps for vehicle transport.

Tying down goods



MTK - chassis, tie-down points

1. Cargo bed (wood, aluminium) / stand rail
2. Frame profile with holed railing
3. Hole pattern for stand rails
4. Tie-down brackets, recessed



MTK - with cargo bed, tie-down points - arrangement on cargo bed

6 tie-down brackets per drop side

- ▶ Take note of the sticker providing information about the maximum tie-down forces on the trailer.



Securing a combined load

- ▶ Ideally, secure the load with a combination of form-fitting and force-fitting:

- Force-fitted by: Direct tie-down of the load.
- Form-fitted by: Supporting the various components of the load against each other, against the drop sides and against the cargo bed extensions, without spaces in-between.

Vehicle transport aids

- Wheel stoppers (for each stand rail) are used as wheel chocks for the vehicle being loaded and thus help in load securing.
- Wheel stops (end-to-end) are used to stop the advance of the vehicle being loaded and thus help in load securing.



WARNING

Non-secured wheel stoppers / wheel stops!

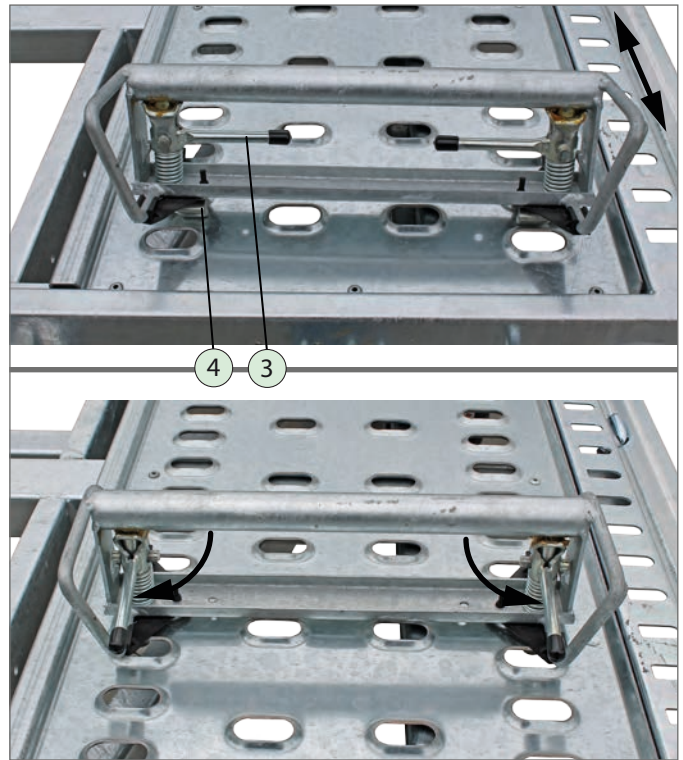
Unsecured wheel stops / wheel stoppers may be thrown off while driving, causing accidents / impact risk!

- ▶ Before driving off, check that the wheel stop / wheel stoppers are locked.

Tying vehicles down at the wheel stops / chocks!

Wheel stops / stoppers are not designed for securing vehicles. The loaded vehicle may come loose while driving and fall off the trailer - accident risk!

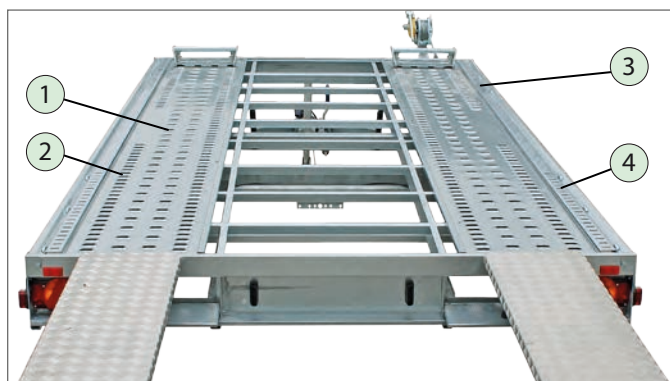
- ▶ Only tie down the vehicle to be loaded at the tie-down brackets or the hole pattern of the stand rails.



Insert wheel stop

3. Locking lever
4. Hook (lock)

- ▶ Position one wheel stop per side in the front area of the stand rail, depending on the vehicle.
 - Make sure that the wheel stop direction is correct.
- ▶ Turn the locking levers on both sides up to the stop - towards the drawbar.
- ▶ Before driving off, check that the wheel stops are locked.

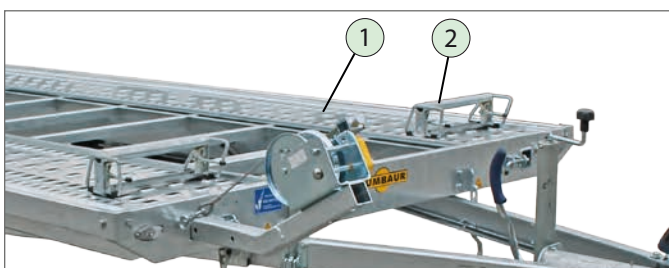


MTK - chassis, hole pattern

1. Hole pattern, inside (for tie-down equipment)
2. Hole pattern, outside (for wheel stop)
3. Holed railing, outside, front area (for wheel stop)
4. Holed railing, outside, rear area (for wheel stop)

Operate the wheel stops

- The wheel stops (360 mm long) are used on the right and left side of the chassis for each stand rail.



MTK - chassis, wheel stops

1. Hole pattern in stand rail
2. Wheel stops

Operate the wheel stops

- The wheel stop is used at the front and rear of the cargo bed.



WARNING

Wheel stops wrongly attached!

Wheel stops cannot absorb the centrifugal force in the event of an accident; this may result in overloading / failure of the locking system.

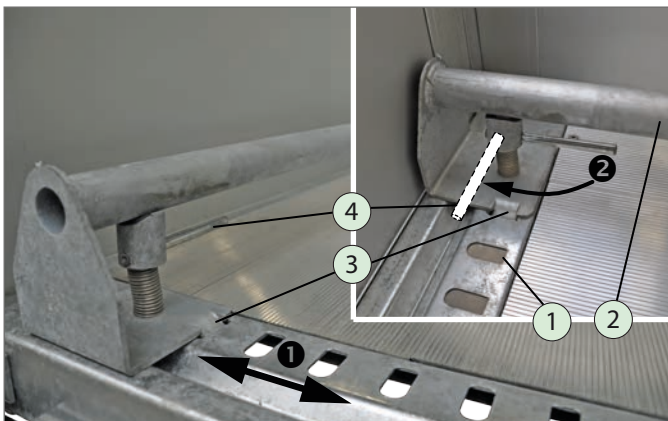
The loaded vehicle may fall off the trailer - accident risk!

- ▶ Before driving off, check that the wheel stop is facing in the right direction.



MTK - cargo bed, wheel stops

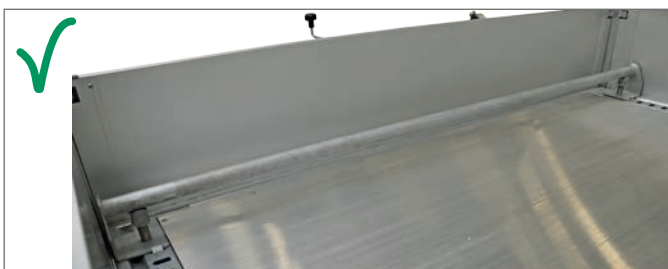
1. Holed railing in outer frame
2. Wheel stops



Position the wheel stops

3. Lug (lock)
4. Locking lever

- ▶ **1** Position the wheel stop at the front of the cargo bed, depending on the vehicle being loaded.
- ▶ **2** Insert the wheel stop into the right and left holed railing in the outer frame, with the wheel stop aligned and the locking system open.
- ▶ Insert the lug into the hole pattern.
 - Ensure that the lug points in the right direction, i.e. towards the wheel of the vehicle being loaded.
- ▶ Insert the locking levers on both sides.
- ▶ Ensure that the wheel stop is locked before driving off.



Wheel stop secured (driving position)

Tying down construction site vehicles

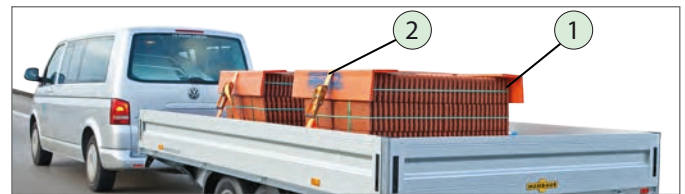


Example of "force-fitting load securing"

1. Construction site vehicle
2. Tie-down strap

- ▶ Use suitable tie-down straps to tie down the construction site vehicle at the tie-down points provided.
- ▶ Make use of anti-skid mats where necessary.

Tying down loads



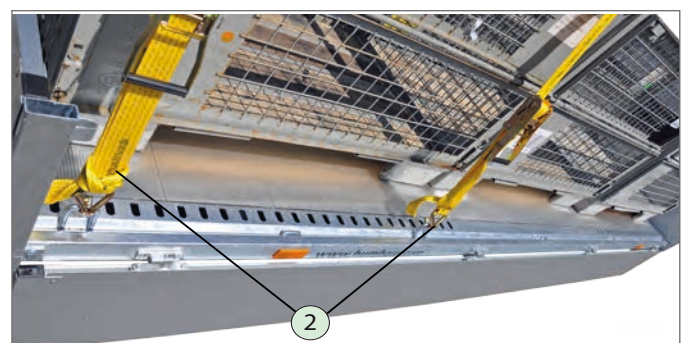
Example of "force-fitting load securing"

1. Loading unit (load)
2. Tie-down strap (tie-down equipment)

- ▶ Tie down the load units in a force-fitting way, using tie-down equipment. - Where possible, secure the load units in both a form-fitting and force-fitting way.



Example of "form-fitting load securing"



Example of "tie-down"

6.3 Securing the load with extension and accessories

6.3.1 Operating the drop sides

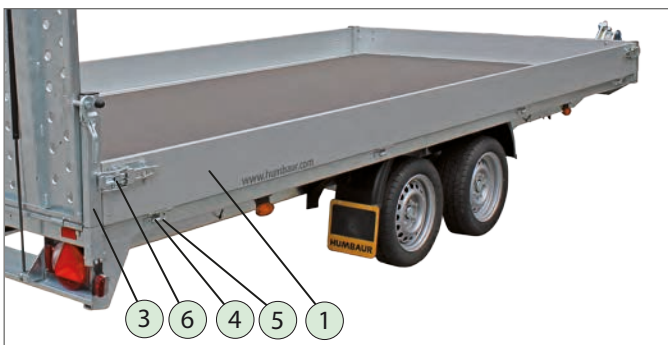
- The 350 mm high drop sides can be folded down or removed as required. The trailer can be used as a flat-bed trailer.
- When closed, the drop sides turn the trailer into a box trailer.



MTK drop sides 350 mm (4-sided)

1. Drop sides, foldable / removable
2. Covered lock
3. Stanchion
4. Side wall hinge
5. Securing split pin

- The 200 mm high drop sides enclose the cargo bed on 3 sides and can be folded down or removed as required.



MTK drop sides 200 mm (3-sided)

6. Tension lock

WARNING

Driving as flat-bed with stanchions inserted!

The stanchions may be flung out while driving - accident risk!
Someone may be injured - impact risk!

- ▶ Remove all stanchions before starting to drive.
- ▶ Remove all drop sides before starting to drive.

6.3.1.1 Drop sides 350 mm

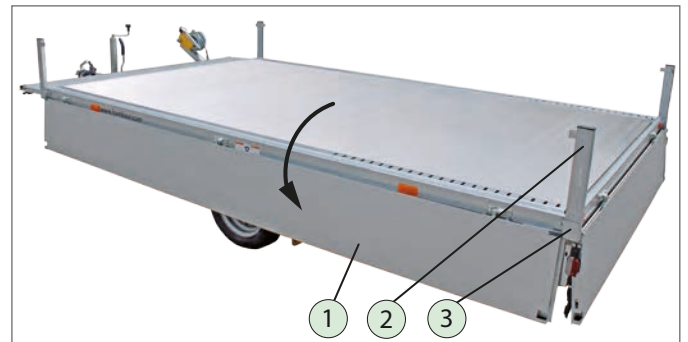
Unlocking



Open the MTK drop sides 350 mm

- ▶ Unlock the recessed locks on both sides.
- While doing so, hold the drop side with one hand.

Fold down



Drop sides folded down

1. Drop side
2. Corner stanchion, for insertion
3. Stanchion bracket

- ▶ Carefully fold down the drop side in a controlled manner.

Removing stanchions



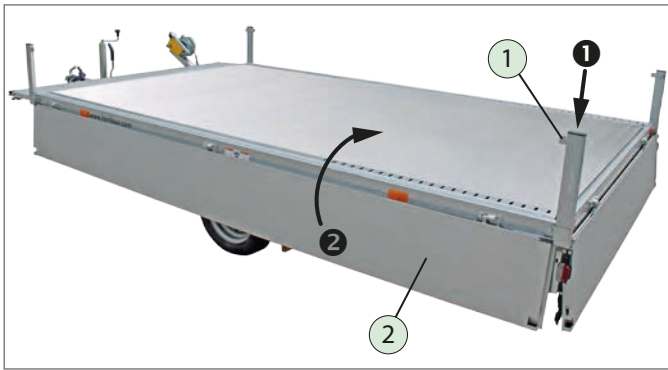
Stanchions, removed

- ▶ Pull the corner stanchions out of the stanchion brackets.
- Store them where they are safe from damage.



When driving with the cargo bed as a platform, all drop sides and corner stanchions must be removed!

Closing

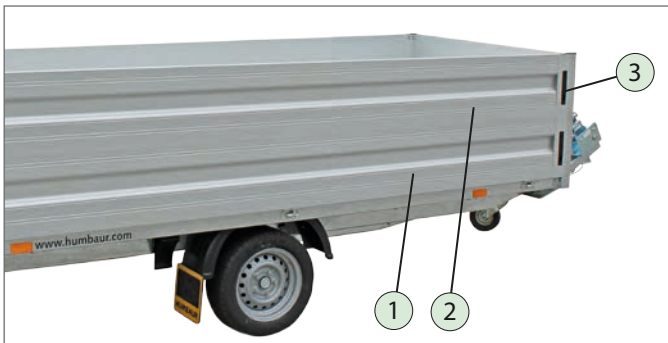


Stanchions inserted / close drop sides

1. Locking lugs on stanchions
2. Main drop sides
 - ▶ **1** Insert all stanchions into the stanchion brackets.
 - Ensure that the locking lugs point in the direction of the cargo bed.
 - ▶ **2** Fold up the main drop sides.
 - Ensure that the locks are open.
 - ▶ Lock all drop side locks.
 - While doing so, hold the drop sides firmly with one hand.
 - Ensure that they correctly engage with the locking lugs of the stanchions.

Drop side extensions (350 mm)

- The loading volume of the trailer can be increased with drop side extensions when required.



Mount / lock side wall extension

1. Main drop side
2. Side wall extension
3. Lock



Read and observe the assembly instructions.

- ▶ Mount the side wall extension on the locked main drop side.
 - Ensure that the lug on the tilt edge of the side wall extension points inwards towards the cargo bed and that the locks point outwards.
- ▶ Close the locks one by one.
 - While doing so, hold the side wall extension with one hand.

Remove the main drop sides



Remove the main drop side

1. Securing split pin
2. Drop side hinge
3. Main drop side
 - ▶ Remove the securing split pin from the drop side hinge.
 - ▶ Fold the drop side into a horizontal position.
 - ▶ Carefully pull out the drop side in the direction that is now unobstructed.



Front drop side removed

- ▶ Put the drop side where it is safe from damage.

Mounting

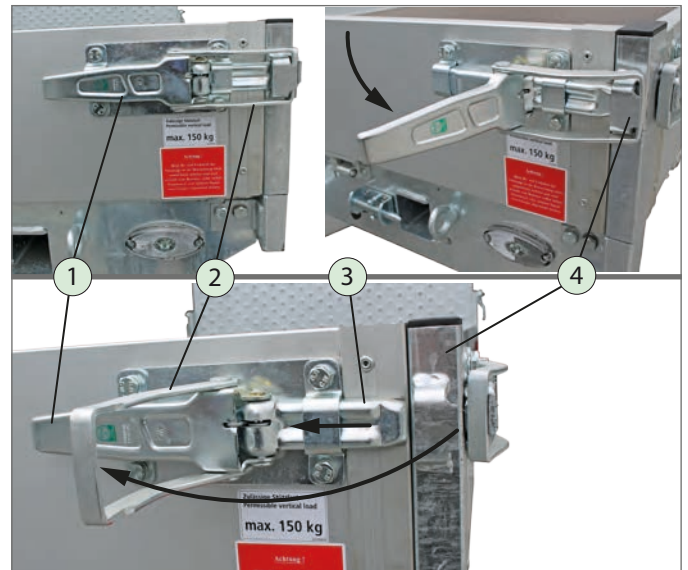


Mount / secure the main drop side

- ▶ Slide the drop side onto its hinges in a horizontal position.
- ▶ Push the securing split pin into one of the hinges and open the securing split pin slightly.
 - Deformed securing split pins must be replaced.
- ▶ Fold up the drop side.
 - Ensure that the locks are open.
- ▶ Lock the locks on both sides.

6.3.1.2 Drop sides 200 mm

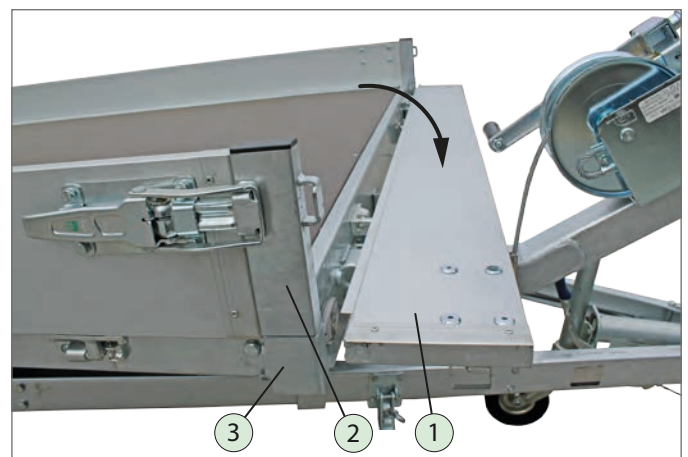
Unlocking



Open the MTK drop sides 200 mm

1. Bolt handle
 2. Bolt bracket
 3. Latch
 4. Stanchion
- ▶ Unlock the tension locks on both sides
 - ❶ Pull the bolt handle.
 - The locking bracket will open.
 - ❷ Pull off the locking bracket.
 - ❸ Push the bolt handle until it closes.
 - The latch will emerge from the corner stanchion.
 - While doing so, hold the drop side with one hand.

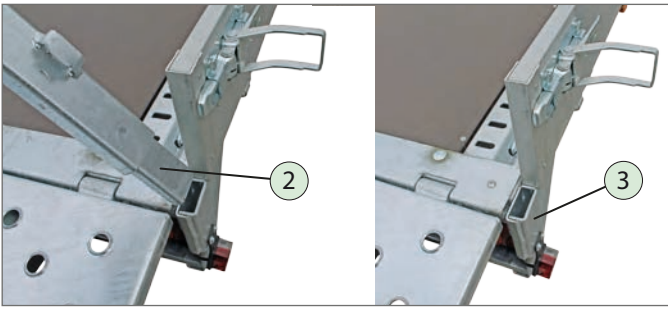
Fold down



Front drop side, folded down

1. Drop side
 2. Corner stanchion, for insertion
 3. Stanchion bracket
- ▶ Carefully fold down the drop side in a controlled manner.

Removing stanchions



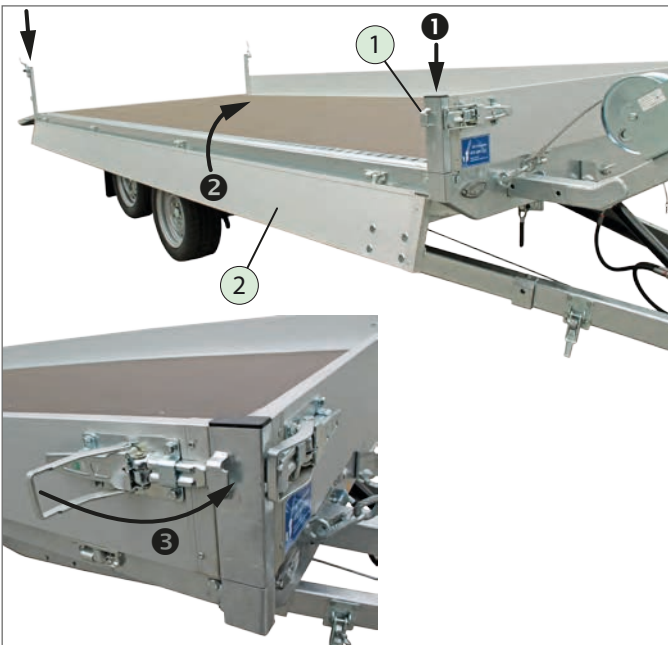
Stanchions, removed

- ▶ Pull the corner stanchions out of the stanchion brackets.
- Store them where they are safe from damage.



The rear corner stanchions must be inserted in order to lock the ramp wall!

Closing



Stanchions inserted / close drop sides

1. Locking lugs on stanchions
2. Main drop sides

- ▶ **1** Insert all stanchions into the stanchion brackets.
- Ensure that the locking lugs point outwards.
- ▶ **2** Fold up the main drop sides.
- Ensure that the locks are open.
- ▶ **3** Lock all drop side locks.
While doing so, hold the drop sides firmly with one hand.
- Ensure that they correctly engage with the locking lugs of the stanchions.

Remove the main drop sides

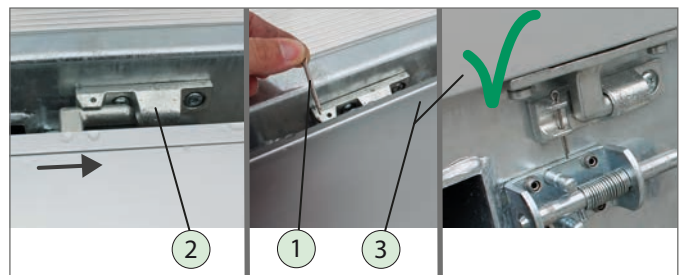


Remove the main drop side

1. Securing split pin
2. Drop side hinge
3. Main drop side

- ▶ Remove the securing split pin from the drop side hinge.
- ▶ Fold the drop side into a horizontal position.
- ▶ Carefully pull out the drop side in the direction that is now unobstructed.
- ▶ Put the drop side where it is safe from damage.

Mounting



Mount / secure the main drop side

- ▶ Slide the drop side onto its hinges in a horizontal position.
- ▶ Push the securing split pin into one of the hinges and open the securing split pin slightly.
- ▶ Fold up the drop side.
- Ensure that the locks are open.
- Deformed securing split pins must be replaced.
- ▶ Lock the locks on both sides.

6.3.2 Cover



The frame and cover is inserted into the corner stanchions of the HS trailer and secured all round the drop sides. The cover can be opened at the back and sides for easy loading / unloading.



High cover, closed (trailer example)

1. Eyelet
2. Belt
3. Cover
4. Buckle
5. Staple



High cover, secured

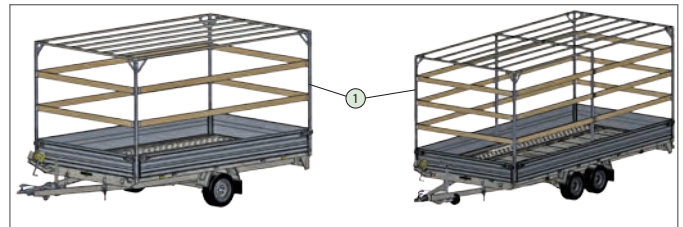


Instructions for operating the cover / frame are given in the operating instruction manual, "Trailers up to 3.5 to" (General Points - Part 1).



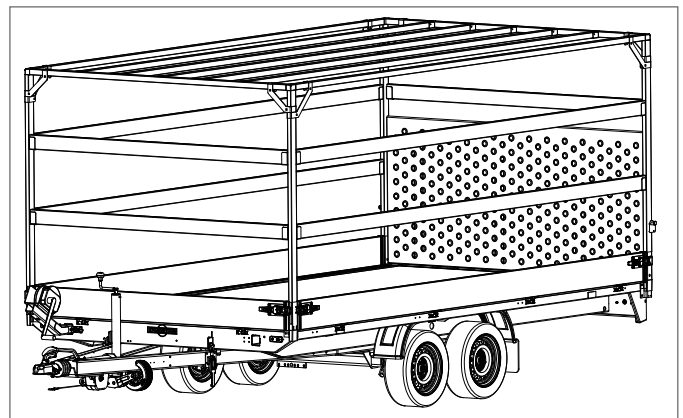
High cover, open (trailer example)

1. Rear cover section
2. Frame slat
3. Frame



Frame for box extension


1. Frame



Frame for ramp wall

- ▶ Close the ramp wall before you close the cover.

6.4 Loading / unloading the trailer

 Make sure that the trailer is secured so that it cannot roll away.

		
WARNUNG Unzureichende Beleuchtung beim Be- und Entladen! Erhöhte Unfallgefahr. ► Sichern Sie den Anhänger mit zusätzlichen Signaleinrichtungen.		WARNUNG Inadequate lighting during loading and unloading! Increased risk of accidents. ► Secure the trailer with additional signalling devices.

- Make sure that road traffic safety is not impaired when loading and unloading the trailer.
- If necessary, use additional signalling devices, e.g. signs, barriers.

Loading aids in general

WARNING



Folding loading aids during transportation!

If the loading aid is not properly secured with the locks, it can come open on its own - risk of impact / accident!

- Do not load your trailer so that the load protrudes over the loading aid.
- Secure the loading aids using the locks. Never tie them down with belts.
- Before starting out, ensure that the loading aids are securely locked (holding springs engaged).

CAUTION



Risk of crushing!

When you release and fold down the loading aid, your fingers/hands can be crushed between the loading aid and the ground or the loading aid and corner stanchion. They can also be crushed when the lock is opened / closed.

- Only operate the loading aids from the side - not from the back.
- When releasing the loading aid, make sure that your fingers are not near the corner stanchions.

- Use  

6.4.1 Tilting the cargo bed

WARNING



Automatic tilting of the cargo bed!

Crush hazard for feet caused by the rear under-ride protection when tilting the cargo bed.



► Keep persons away from the area around the under-ride protection during tilting.



MTK tilted

1. Under-ride protection

CAUTION

The cargo bed will tilt when unlocked!

Once the locking lever has been opened, a cargo bed not connected to a hydraulic pump will automatically drop down.

You may be hit!

- First open the cargo bed locks.
- Ensure that there are no other persons in the danger zone.
- Open the locking levers of the cargo bed.
- Move out of the danger zone.

NOTICE

Tilting with the drop sides folded down!

The rear / lateral drop sides will be jammed between the trailer and the ground and may become deformed.

- Only tilt down the cargo bed when the drop sides are closed or remove the rear drop side before tilting the trailer.

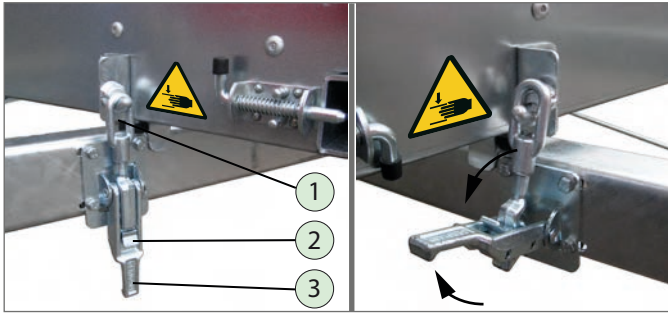
Preparing the trailer to be tilted



The trailer should not be able to slip away during the loading process.

- Place the trailer on solid ground.
- First couple the trailer to the towing vehicle!

Open the interlocks

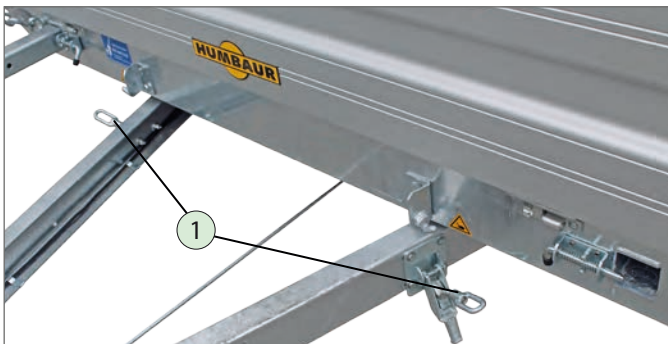


Unlock locks

1. Eyelet
2. Securing device
3. Handle

Unlock the interlocks on both sides, one after the other.

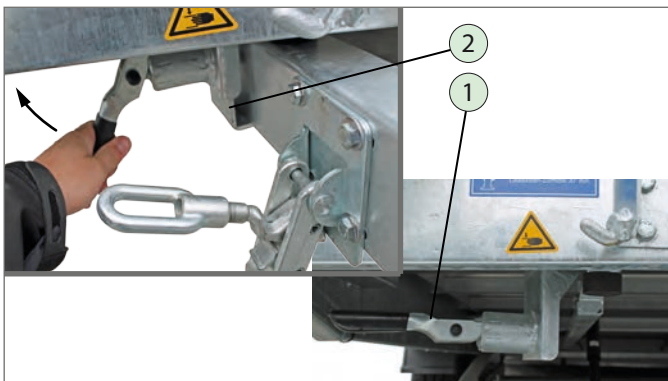
- ▶ Depress the safety catch on the handle.
- ▶ Pull out the handle at the same time.



Eyelets folded sideways

- ▶ Swivel the unlocked eyelets out of the hook.

Unlock the cargo bed

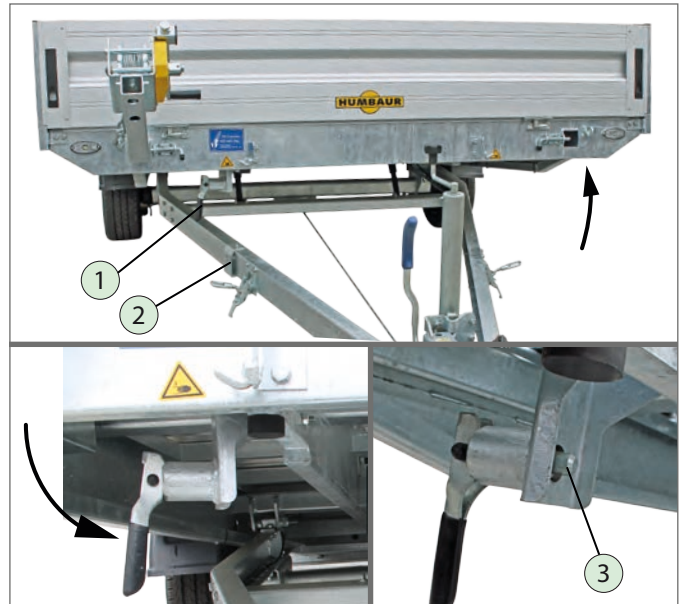


Open the locking lever

1. Locking lever
2. Locking console

- ▶ Before releasing the locks, ensure that the load has been secured on the cargo bed.
- ▶ Fold the locking lever upwards.

The locking bolt will emerge from the locking console and the cargo bed is released.



Cargo bed automatically folded down

1. Locking lever
2. Locking console
3. Locking bolt



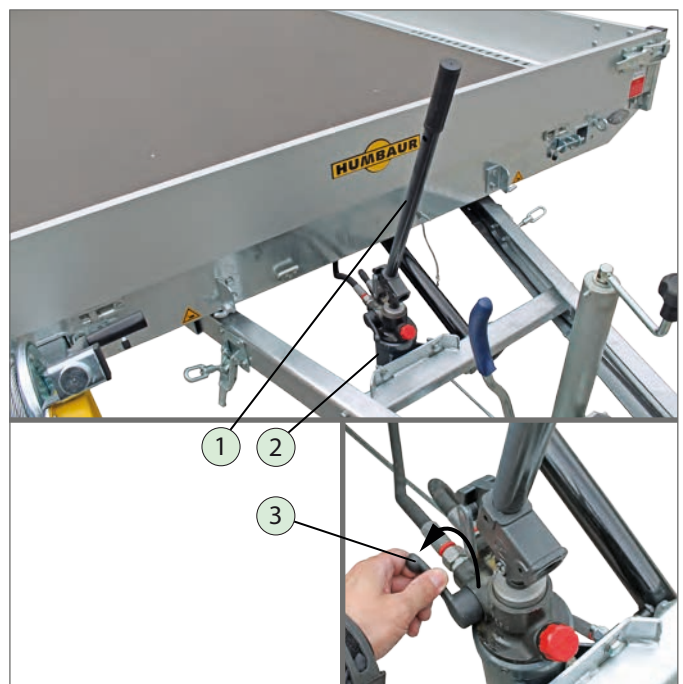
The cargo bed folds down automatically.

- ▶ Push the locking lever downwards.
 - This position ensures that the cargo bed is automatically locked after being tilted back.

Tilting the cargo bed with the hydraulic pump.



Instructions for operating the manual hydraulic pump are given in the operating instruction manual, "Trailers up to 3.5 to" (General Points - Part 1).



Operate the manual hydraulic pump

1. Pump lever
2. Hydraulic hand pump
3. Valve lever



The cargo bed must be unlocked, with the drop sides closed and/or removed.
The ramp wall must be closed.

- ▶ Open the valve lever.



Cargo bed hydraulically folded down

4. Hydraulic cylinder

- ▶ Pump until the underride protection is in contact with the floor / ground.



The underride protection is in complete contact with the ground.

6.4.2 Loading aids

6.4.2.1 Operate loading ramps



Risk of crushing!

Fingers / hands can be injured when removing and positioning the loading ramps.

- ▶ Remove and position the loading ramps carefully. Hold them at the sides.
- ▶ Keep your fingers away from the crush areas.

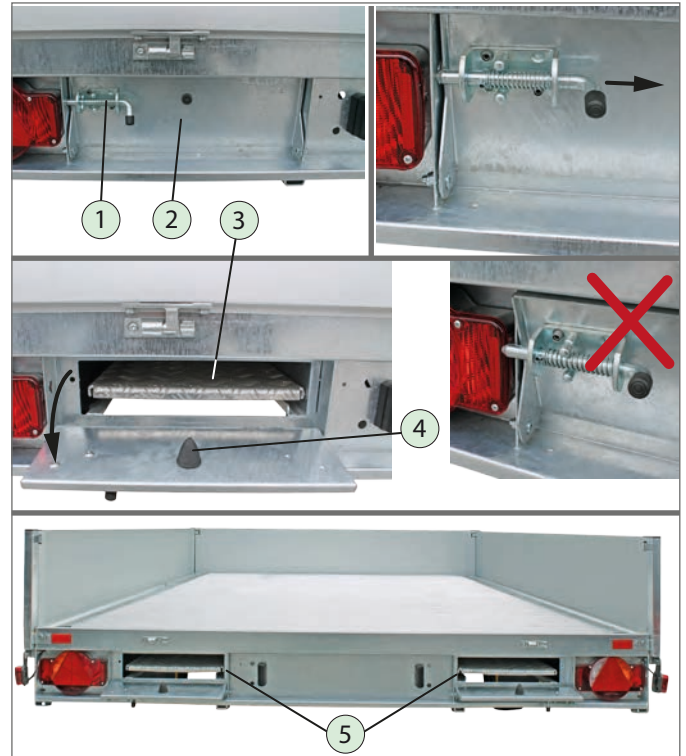


Sharp edges!

Fingers / hands can be cut on sharp edges when removing and positioning the loading ramps.

- ▶ Use .

- ▶ Remove the loading ramps one by one.



Removing the loading ramps

1. Lock
2. Flap
3. Loading ramp
4. Rubber support
5. Loading ramp shaft

- ▶ Pull the flap lock and engage it.
- ▶ Fold open the flap and place it onto the underride protection.
- ▶ Completely extract the loading ramp from the loading ramp shaft.

Position the loading ramps



Loading ramps positioned

6. Chassis edge

- ▶ Place the loading ramp on the edge of the chassis.



The loading ramps must be in secure contact with the edge of the chassis and engage.

Setting the track width



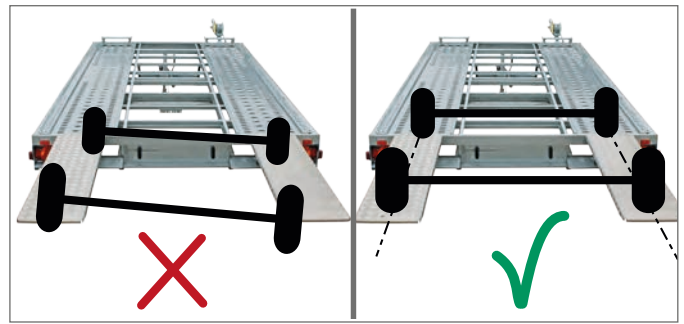
Setting the track width

- ▶ Adjust the loading ramps to the track width of the vehicle to be loaded.
 - Lift the loading ramp slightly, then push it sideways in the direction required.



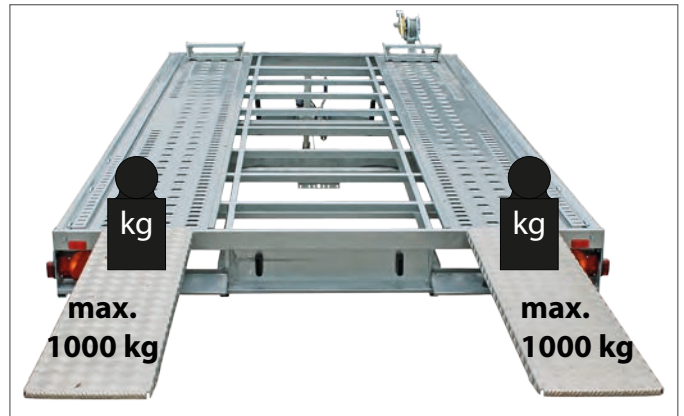
The loading ramps should be at equal distances from the centre of the trailer. The wheels of the vehicle to be loaded must be able to drive onto the centre of the loading ramps.

Driving



Positioning the vehicle to be loaded

- ▶ Slowly and carefully drive onto the loading ramps and slowly push the vehicle to be loaded upwards in a controlled manner.
- ▶ Ensure that the vehicle to be loaded is facing the loading ramps and the track is centred.



Maximum load on loading ramps



The loading ramps can support a maximum of 1000 kg of evenly distributed load.

- ▶ Avoid point loads, e.g. by driving over the loading ramps with vehicles with small wheels, such as platform trucks and mobile lifting platforms.

Stowing / securing

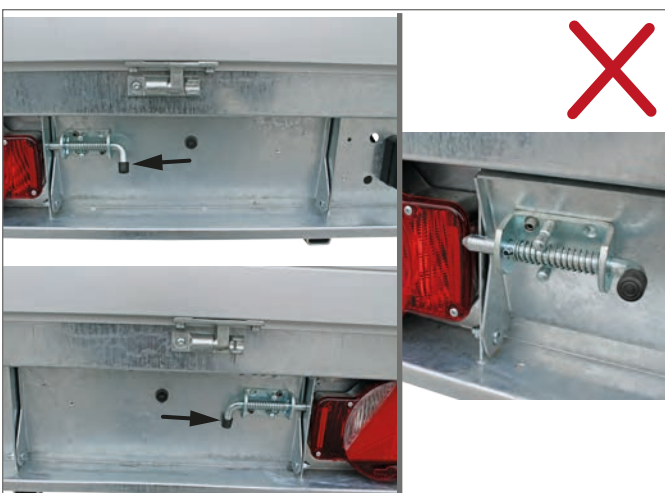
- ▶ Stow away the loading ramps one by one.



Loading ramps stowed away

1. Lock
2. Flap
3. Loading ramp
4. Rubber support
5. Loading ramp shaft

- ▶ Lift the loading ramp from the edge of the chassis.
- ▶ Insert the loading ramp into the loading ramp shaft and slowly insert the complete loading ramp.
- ▶ Close the flap.



Secure the flap

- ▶ Release the lock and push it into the hole. The loading ramps have been secured.

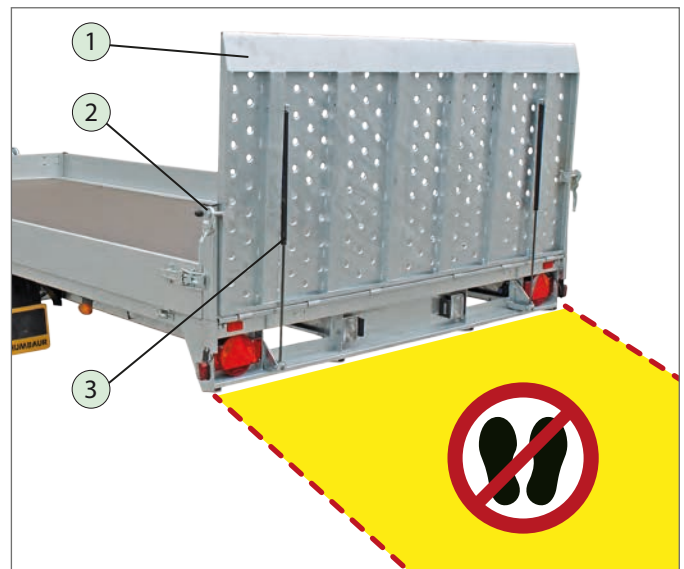
6.4.2.2 Operating the ramp wall

⚠ WARNING

Securing the load on the ramp wall!

The ramp wall is not designed for securing / tying down a load. The load may come loose while driving and be lost - accident risk!

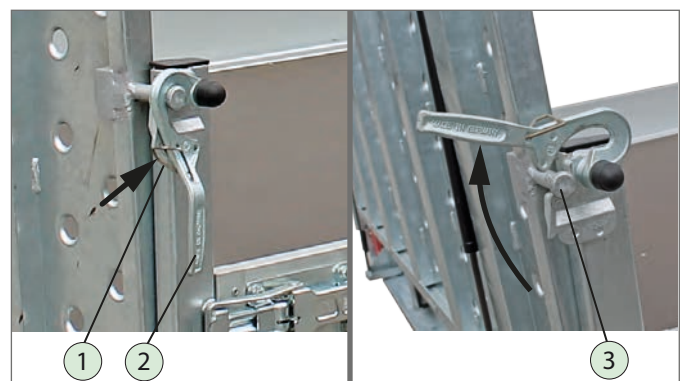
- ▶ Tie down the load, using only the tie-down brackets.
- ▶ Only use the ramp wall as a loading aid.



Operating the ramp wall

1. Ramp wall
2. Rotary lever lock
3. Gas strut

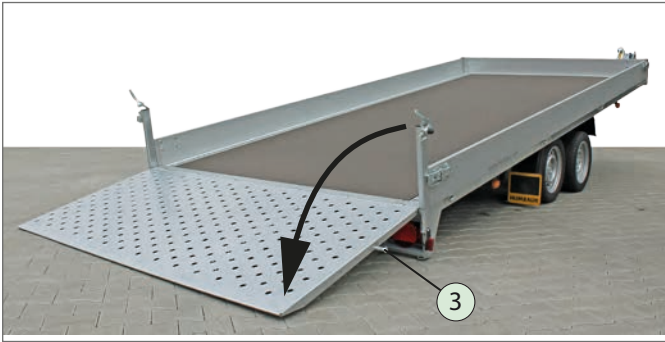
Unlocking




Unlocking the rotary lever locks

1. Locking spring
 2. Lever
 3. Spigot
- ▶ Unlock the rotary lever locks.
 - Push the locking spring in while turning the lever to the completely open position.
- This will release the spigot.

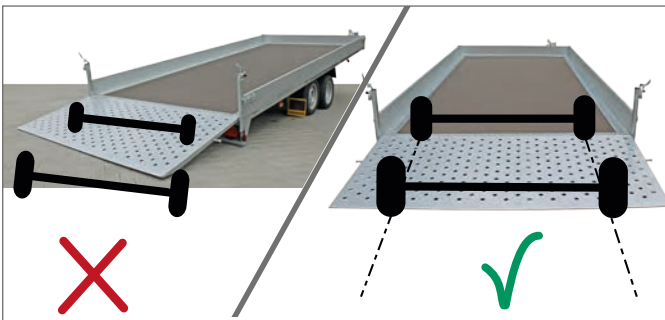
Opening / tilting



Ramp wall tilted

- ▶ Use  , .
- ▶ Open the ramp wall slightly and take hold of the spigot from the side.
- ▶ Carefully fold down the ramp wall.
 - If necessary, push it downwards.

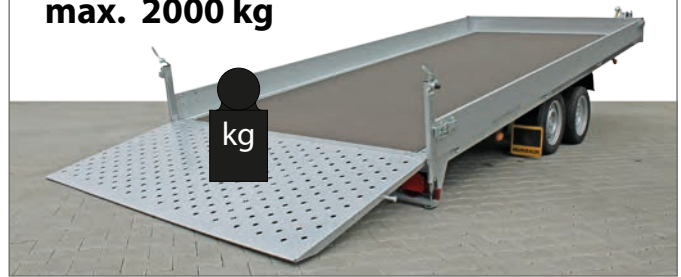
Driving




Positioning the vehicle to be loaded

- ▶ Slowly and carefully drive over the ramp wall and slowly push the vehicle to be loaded upwards in a controlled manner.
- ▶ Take care that the vehicle to be loaded is facing the ramp wall.

max. 2000 kg



Maximum load on ramp wall

 The ramp wall can support a maximum of 2000 kg of evenly distributed load.

- ▶ Avoid point loads, e.g. by driving over the ramp wall with vehicles with small wheels, such as platform trucks and mobile lifting platforms.

Closing / locking



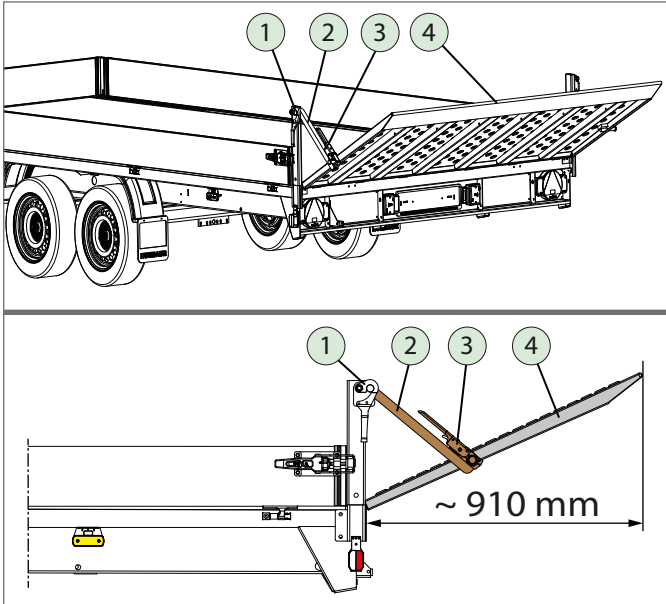
Ramp wall closed and locked

- ▶ Take hold of the spigot from the side.
- ▶ Pull the ramp wall upwards into a vertical driving position - the gas struts will assist you.
- ▶ Hold onto the ramp wall with one hand.
- ▶ Close the rotary lever locks on both sides.
 - The locking springs must engage.
 - Defective or lost locking springs must be replaced immediately.

6.4.2.3 Ramp wall with supports

Functional explanation

- The supports allow you to extend the cargo bed, e.g. for transporting vehicles with a long overhang.
- The supports arrest the ramp wall in its folded-down position.
- The ramp wall extends towards the back by less than 1 m and is at an angle of approximately 65° from the perpendicular.



Ramp wall with supports

1. Rotary lever lock
2. Support bar
3. Spring lock
4. Ramp wall

WARNING

Driving with the ramp wall folded down!

The ramp wall extends towards the back and constitutes a higher accident risk when driving around a bend or manoeuvring the vehicle.

- ▶ Only drive with the ramp wall folded down when the load (vehicle with overhang) prevents you from locking the ramp wall with rotary lever locks.
- ▶ Avoid longer drives while the ramp wall is folded down.
- ▶ Where possible, make use of an alternative transport solution.



Unsecured support!

Unsecured support locks may come open while driving, causing the ramp wall to fall down; this constitutes a risk of impact / crushing / accidents.




- ▶ Before driving off, check that the support locks are correctly closed and secured.

CAUTION

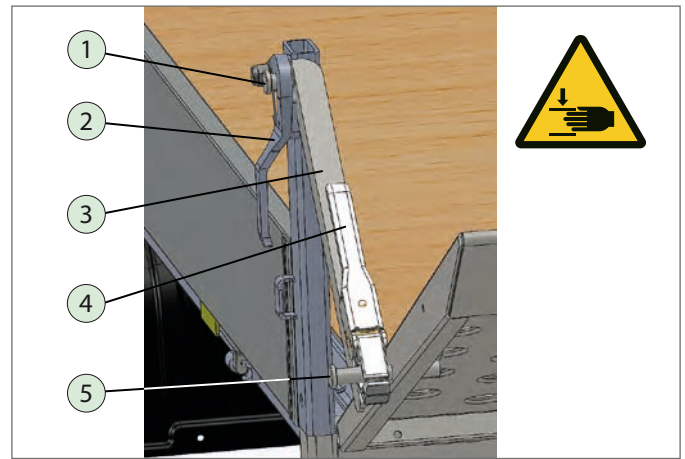


Fitting / removing the supports!

Fingers / hands can be crushed when positioning the supports.

- ▶ Use  , .
- ▶  It takes two people to fit / remove the supports.
- ▶ Keep your fingers away from the crush areas.

Fitting / removing the supports



Ramp wall secured with supports

1. Spigots, supports
2. Rotary lever lock
3. Support bar
4. Spring lock
5. Spigots, ramp wall

Fitting the supports

- ▶ Open both rotary lever locks
- ▶ Carefully fold down the ramp wall.
- ▶ Insert the spigot of the support bar into the rotary lever lock and engage the lock. - The locking spring must engage.
- ▶ Fold up the ramp wall until the spigot can engage with the spring lock.
- ▶ Push the spring lock into the ramp wall spigot.
- ▶ Lock the spring lock.

Remove the support

- ▶ Open the lever of the spring lock.
- ▶ Remove the support bar from the ramp wall spigot. - Keep firm hold of the ramp wall.
- ▶ Carefully fold down the ramp wall.
- ▶ Open the rotary lever lock at the corner stanchion and remove the support bar.
- ▶ Carefully stow away the supports where they are safe from damage.

6.5 Loading the trailer

WARNING



Automatic tilting of the cargo bed!

Crush hazard for hands / fingers caused by the front edge of the loading platform when loading.

- ▶ Keep your hands away from the crush area.
- ▶ Allow the cargo bed to tilt back automatically. Never try to stop it.

- ▶ Use .



Moving cargo bed!

You could fall if you step onto the cargo bed during the loading and unloading process and during automatic movement.

- ▶ Take particular care when stepping onto the cargo bed.

- ▶ Use .

Preparing the trailer to be loaded



Make sure that the trailer is secured so that it cannot roll away.

- ▶ First couple the trailer to the towing vehicle!



Interlocks opened

- ▶ Before driving onto the trailer, ensure that:
 1. the locks are open on both sides,
 2. the locking lever is in a vertical position.



The main load of the vehicle to be transported must be located at the front (drawbar) - so that the cargo bed of the trailer can tilt back automatically.

Pay attention to section: 6.1 Load distribution

6.5.1 Loading the vehicle



The maximum gross permitted weight and drawbar load of the trailer may not be exceeded.



Observe the maximum permitted vertical drawbar load of your towing vehicle and trailer coupling.



Loading process (example)

1. Loading ramps
2. ramp wall

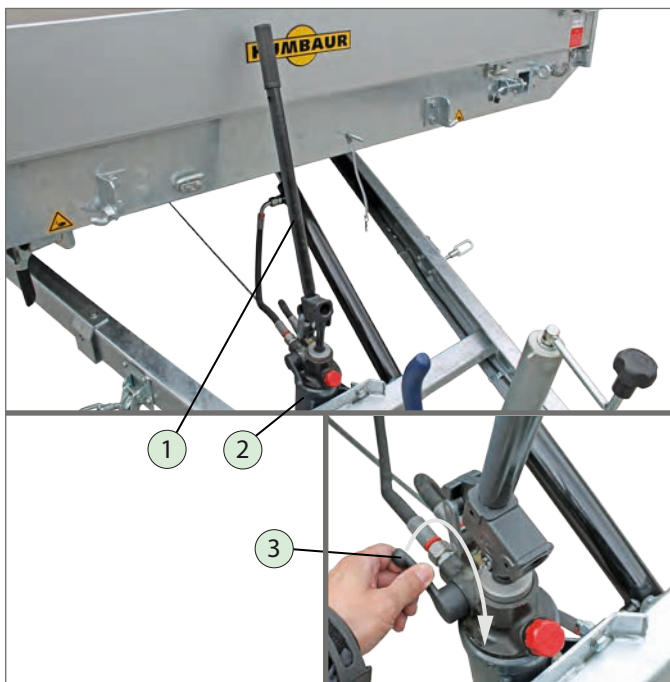
- ▶ Open / remove the drop sides. Remove the corner stanchions if necessary.
- ▶ Drive onto the trailer carefully and not too quickly - the cargo bed can tilt abruptly and can crash into the drawbar.
- ▶ Drive up to the wheel stopper / wheel stops (if present).
- ▶ Use the cable winch to load a broken-down vehicle.
- ▶ Make sure that the position of the cable winch (3 adjusting positions) is set to the vehicle to be loaded - danger of collision.



Secure the loaded vehicle

- ▶ Tie down the vehicle properly. Pay attention to section: 6.2 Load securing

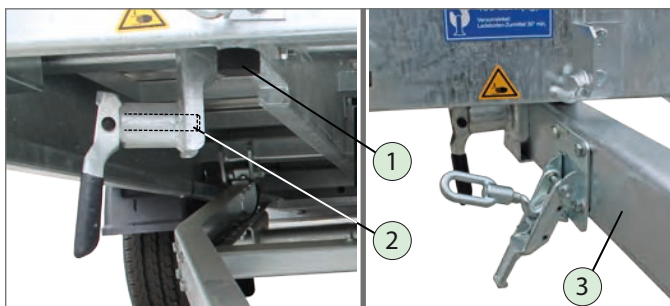
6.5.2 Tilting back the cargo bed using the hydraulic pump



Operate the manual hydraulic pump

1. Pump lever
2. Hydraulic hand pump
3. Valve lever

- ▶ Close the valve lever.
- ▶ Pump the lever until the cargo bed is in contact with the rubber buffers on the chassis and can be secured with the locking bolt.



Interlock

1. Rubber buffer
2. Locking bolt
3. Chassis

- ▶ Secure the cargo bed with the locks
- ▶ Place the pump lever into the holder.



Manual hydraulic pump in driving position

6.5.3 Securing the cargo bed



Cargo bed locked

1. Cargo bed
2. Cargo bed lock
3. Locking lever

- ▶ Ensure that the locking lever is in a vertical position.
 - The locking bolt must be engaged with the locking console.

The cargo bed is secured against tilting.



Locks closed

1. Eyelet
2. Securing device
3. Handle

Lock the interlocks on both sides, one after the other.

- ▶ Swing the eyelet onto the locking hook.
- ▶ Push the handle downwards.
 - The interlock engages and is interlocked.

The cargo bed is secured against automatic opening while driving.

6.5.4 Operating the cable winch

- The cable winch has been attached to a pluggable and adjustable cable winch frame.
- The cable winch frame can be inserted into the chassis on the left or right side.
- Defective vehicles can be pulled onto the cargo bed using the cable winch.

WARNING



Using a damaged cable winch!

A damaged cable will be weakened and may tear when placed under load. People could be hit or crushed by the cable and/or the load.

- ▶ Only use the cable winch if it is undamaged and in perfect condition.
- ▶ Regularly have the cable winch serviced and repair it immediately if it is faulty.


CAUTION



Operating the cable winch!

You could crush your hands / fingers in the cable winch while rolling or unrolling the cable. You could lacerate your hands on broken individual wires of the cable.



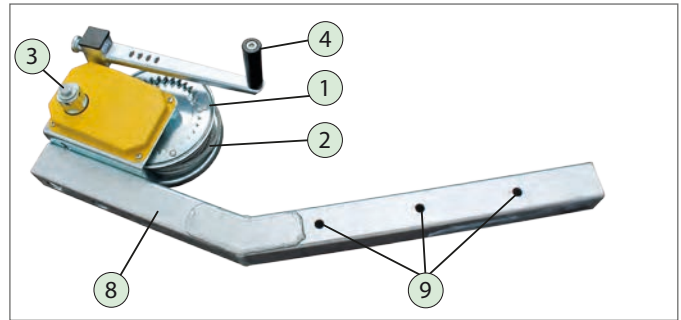
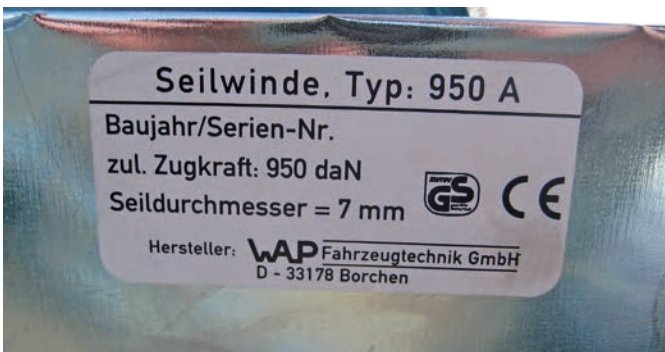
- ▶ Use .
- ▶ When operating the cable winch, ensure that the cable has no individual broken wires.
- ▶ Ensure that your fingers do not get caught in the cable winch when rolling up the cable.

NOTICE

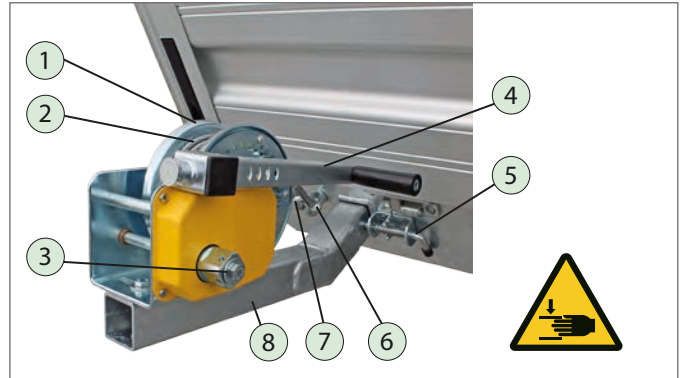
Overloading the cable winch!

Overloading the cable winch may result in breaking it off or tearing the cable.

- ▶ Adhere to the maximum permissible tractive force of the cable winch, i.e. 950 daN or approximately 900 kg.
- ▶ Observe the type label on the cable winch.



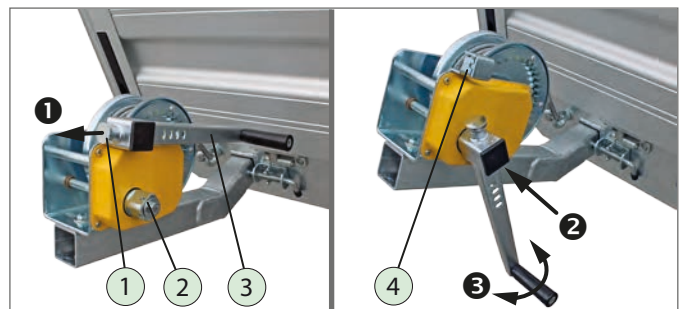
Cable winch, loose



MTK with cable winch, inserted

1. Cable winch
2. Cable (steel)
3. Crank base
4. Crank handle
5. Interlock winch block
6. Eyelet
7. Snap hook
8. Cable winch, adjustable
9. Fixing holes

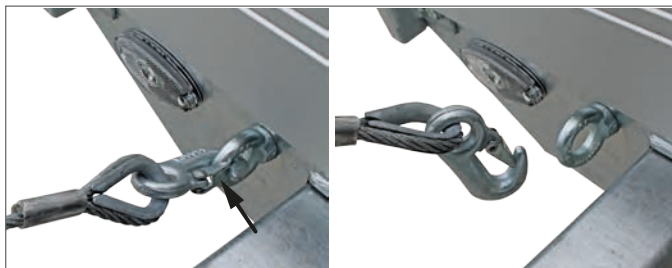
Preparing the cable winch



Insert the crank handle

1. Securing pin
2. Crank base
3. Crank handle
4. Parking holder for the crank handle

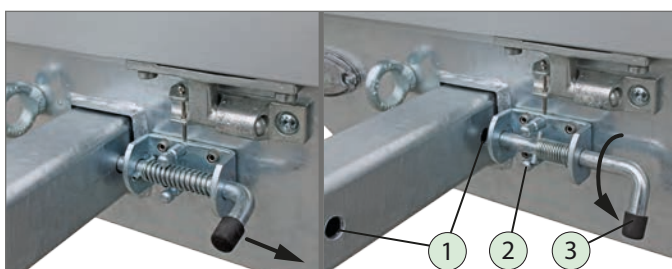
- ▶ **1** Pull on the securing pin, while at the same time removing the crank handle from its parking position.
- ▶ **2** Insert the crank handle into the crank base. - Simultaneously pull out the securing pin and place it into one of the holes.
- ▶ **3** The crank handle can be turned.



Loosening the snap hooks

- ▶ Relax the cable by turning the crank handle in an anti-clockwise direction.
- ▶ Unhook the snap hook from the eyelet.

Adjust / remove the cable winch



Lock opened

1. Fixing holes
2. Latching bolt
3. Locking bolt

- ▶ Pull the locking bolt.
- ▶ Turn the locking bolt around and engage it with the lock pin.
- ▶ Pull out the cable winch until it reaches the correct position (3x fixing holes)
- ▶ Loosen the locking pin and engage the cable winch with the corresponding fixing hole.



Remove the cable winch

1. Cable winch
2. Holder

! When not in use, the cable winch can be completely removed.

- ▶ Unhook the snap hook from the eyelet.
- ▶ Open the lock.
- ▶ Completely pull the cable winch out of the holder.
- ▶ Insert the cable winch on the other side of the chassis if required.
- ▶ Secure the cable winch and the cable.

Extending / unrolling the cable



Unroll the cable

- ▶ Unhook the snap hook from the eyelet.
- ▶ Manually extend the cable.
 - Ensure that the crank handle turns.
 - If necessary, remove the crank handle beforehand.

Pull up the vehicle, using the cable winch



Make sure that the trailer is secured so that it cannot roll away.

- ▶ First couple the trailer to the towing vehicle!
- ▶ Before loading the vehicle, ensure that the vehicle to be loaded cannot bump against the cable winch.
- ▶ Position the wheel stops / wheel stoppers.



Pull up the vehicle

- ▶ Fasten the snap hook, e.g. to the tow ring of the vehicle to be loaded.
- ▶ Turn the crank handle in a clockwise direction - the cable rolls up and pulls the vehicle onto the cargo bed.
 - Ensure that the vehicle is centrally mounted on the cargo bed.
- ▶ Tie down the loaded vehicle.
Read the section: "6.2 Load securing"

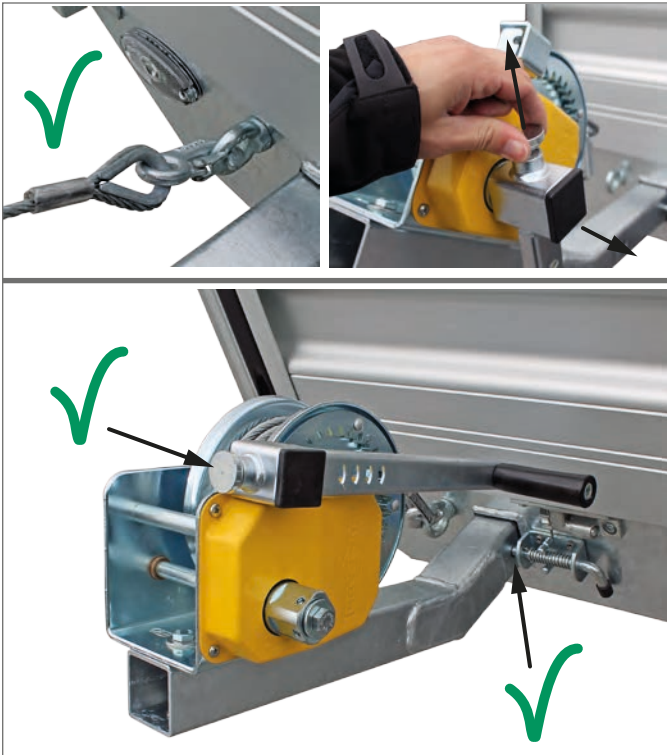
Roll up the cable and secure the cable winch

CAUTION

Unsecured cable / crank handle!

An unsecured cable / crank handle may rattle around while driving, be torn off and hit a person.

- ▶ Before driving off, ensure that the cable is fastened in the eyelet with the snap hook and pulled tight.
- ▶ Ensure that the crank handle is in the parked position and secured with the securing pin.



Cable rolled up / cable winch secured

- ▶ Carefully roll up the cable on the cable winch after use with the aid of the crank handle.
- ▶ Insert the snap hook into the eyelet.
- ▶ Slightly tighten the cable.
- ▶ Remove the crank handle from the crank base.
- ▶ Position the crank handle on the parking bracket.
 - Ensure that the crank handle points in the right direction (towards the cargo bed).
 - Ensure that the crank handle has been secured.
- ▶ Ensure that the lock is locked and that the cable winch cannot fall out.

6.6 Unloading the trailer

WARNING



Automatic tilting of the cargo bed!

Crush hazard for persons caused by the rear underride protection when tilting the cargo bed.



- ▶ Keep persons away from the area around the underride protection during tilting.



Moving cargo bed!

You could fall if you step onto the cargo bed during the loading and unloading process and during automatic movement.

- ▶ Take particular care when stepping onto the cargo bed.

- ▶ Use .



Loading ramps positioned for unloading

1. Underride protection
2. Loading ramp



Make sure that the trailer is secured so that it cannot roll away.

- ▶ Leave the trailer coupled to the towing vehicle.



- ▶ Make sure that road traffic safety is not impaired when loading and unloading the trailer.
- ▶ If necessary, use additional signalling devices, e.g. signs, barriers.

6.6.1 Unloading the vehicle (loading ramps)



Unloading process (example)

Prepare the unloading process

- ▶ Make sure that the vehicle to be unloaded is secured from rolling away. (Handbrake applied)
- ▶ Remove the loading ramps.
Adjust the loading ramps to the correct track width.
- ▶ Release all the car lashing straps and stow them away.
- ▶ Open the interlocks on the cargo bed.
- ▶ Unlock the cargo bed, using the locking lever.

Automatic tilting

- ▶ Slowly move / drive the vehicle to be unloaded down.
- ▶ Push the cargo bed down at the front edge until the cargo bed automatically locks.

Hydraulic tilting

- ▶ Complete tilt down the cargo bed using the hydraulic pump.
- ▶ Slowly move / drive the vehicle to be unloaded down.
- ▶ Tilt back the cargo bed, using the hydraulic pump, until the cargo bed automatically locks.

Complete the unloading process

- ▶ Secure the cargo bed with locks.
- ▶ Stow away and secure the loading ramps.
- ▶ Insert / close and secure the drop sides.

6.6.2 Unloading the vehicle (ramp wall)



Unloading process (example)

Prepare the unloading process

- ▶ Make sure that the vehicle to be unloaded is secured from rolling away. (Handbrake applied)
- ▶ Unlock the ramp wall.
- ▶ Carefully fold down the ramp wall.
- ▶ Release all the car lashing straps and stow them away.
- ▶ Open the interlocks on the cargo bed.
- ▶ Unlock the cargo bed, using the locking lever.

Automatic tilting

- ▶ Slowly move / drive the vehicle to be unloaded down.
- ▶ Fold up the ramp wall.
- ▶ Use the lock to interlock the ramp wall.
- ▶ Push the cargo bed down at the front edge until the cargo bed automatically locks.

Hydraulic tilting

- ▶ Complete tilt down the cargo bed using the hydraulic pump.
- ▶ Slowly move / drive the vehicle to be unloaded down.
- ▶ Fold up the ramp wall.
- ▶ Use the lock to interlock the ramp wall.
- ▶ Tilt back the cargo bed, using the hydraulic pump, until the cargo bed automatically locks.

Complete the unloading process

- ▶ Secure the cargo bed with locks.
- ▶ Ensure that the ramp wall has been secured.
- ▶ Insert / close and secure the drop sides.

7 Driving



Before setting off, make sure that the maximum permissible loads (load capacity and drawbar load) are not exceeded.



Observe the maximum permissible towing load and drawbar load of your towing vehicle and the trailer coupling.

- ▶ Where required, check the weight information for the goods to be loaded.
- ▶ Carry out a departure check (see operating instruction manual, "Trailers up to 3.5 to" (General Points - Part 1))



Driving in teams (example image)

- ▶ Check that:
 - the cargo bed,
 - cable winch / cable winch operating lever,
 - loading ramps or ramp wall,
 - Wheel stoppers, wheel stops,
 - high cover / frame slats have been secured.
- ▶ Take note of the safety / driving instructions for the towing vehicle and trailer as given in the operating instruction manual "Trailers up to 3.5 to" (General Points - Part 1).



8 Parking



Observe the general safety and warning instructions on parking your trailer safely in the operating instruction manual, "Trailers up to 3.5 to" (General Points - Part 1).



Wheel chocks

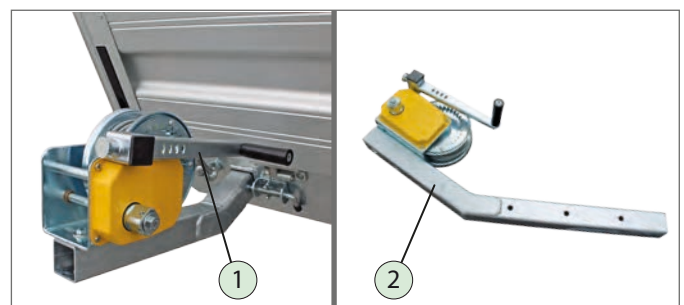
1. Chassis
2. Wheel chock

- ▶ Make use of the wheel chocks attached to the chassis.
- ▶ Also ensure that
 - the cargo bed is secured with the locks,
 - the loading ramps have been inserted and secured,
 - the ramp wall is closed and secured.

Securing individual parts



Easily removable individual parts should be secured against unauthorised use / theft when parking for longer periods.



Secure the cable winch

1. Crank handle (remove)
2. Cable winch (remove)

- ▶ Remove the crank handle to prevent improper use.
- ▶ Remove the cable winch to prevent theft.

9 Cleaning / Maintenance / Servicing

9.1 Care / Cleaning

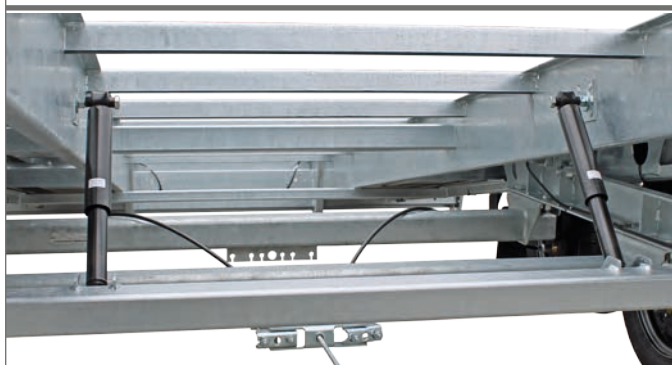
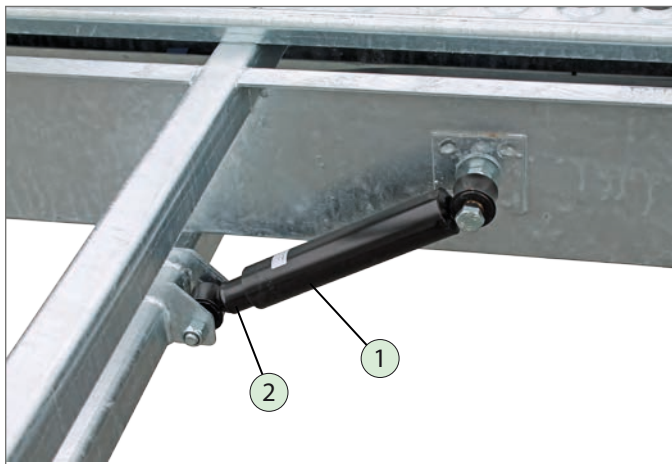


Observe the safety instructions and instructions for general cleaning/care of trailers in the operating instruction manual, "Trailers up to 3.5 to" (General Points - Part 1).

Cleaning the gas-struts




The service life, functionality and safety of your trailer depends to a large extent on the regular maintenance/care of the gas-struts.



Gas-struts retracted / extended

1. Shock absorber
2. Gas-strut piston

- ▶  During spraying, do not aim the water jet directly at the gas-struts.
- ▶ Check for any soiling of the gas-struts and remove this if necessary after each time you use the trailer.
- ▶ Clean the gas-strut piston in the extended condition with a clean dry cloth.
- ▶ Do not scratch or paint the gas-strut or treat it with aggressive media (abrasives).

9.2 Maintenance/Servicing



Maintenance instructions are given in the operating instruction manual, "Trailers up to 3.5 to" (General Points - Part 1). Further specific maintenance instructions may be found here.

9.2.1 Tyres/Wheels

The following tyre sizes can be used on MTK trailers:

Tyre type	$p_{max.}$ in bar
195 / 50 R 13 C	6.5

Table: Tyre pressure/tyre size

- ▶ Check the tyre pressure on all wheels on a regular basis and before long journeys. (See the table: "Maintenance instructions" in the operating instruction manual "Trailers up to 3.5 to" (General Points - Part 1))

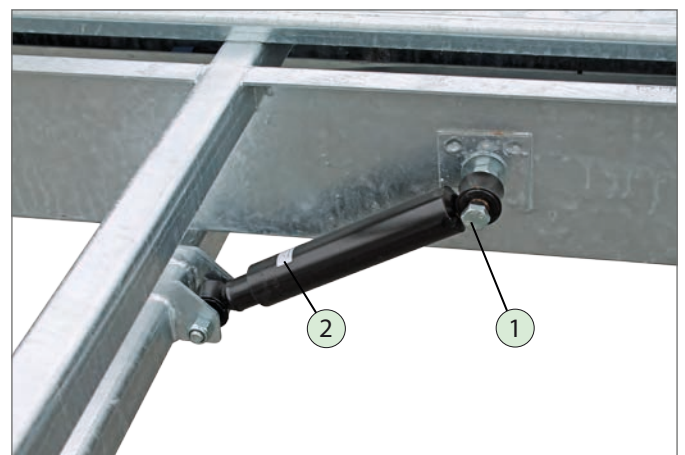
9.2.2 Shock absorbers



The shock absorbers are intrinsically maintenance-free. The damping effect will decrease after long periods of use and long intervals of use.

The shock absorbers and their attachment need to be regularly checked for oil leaks, damage, ageing, breakage and material fatigue.

Servicing work must only be carried out by qualified specialists.



Shock absorber

1. Fixing bolt / nut
2. Gas-strut designation

- ▶ Check the screwed connections for secure seating, and tighten if necessary.
- ▶ Check the shock absorbers visually for oil leaks.
- ▶ If the damping effect reduces or if there are visible oil leaks, replace the shock absorbers. Use only genuine spare parts, see designation / article no. on the shock absorber.

9.2.3 Gas strut

WARNING

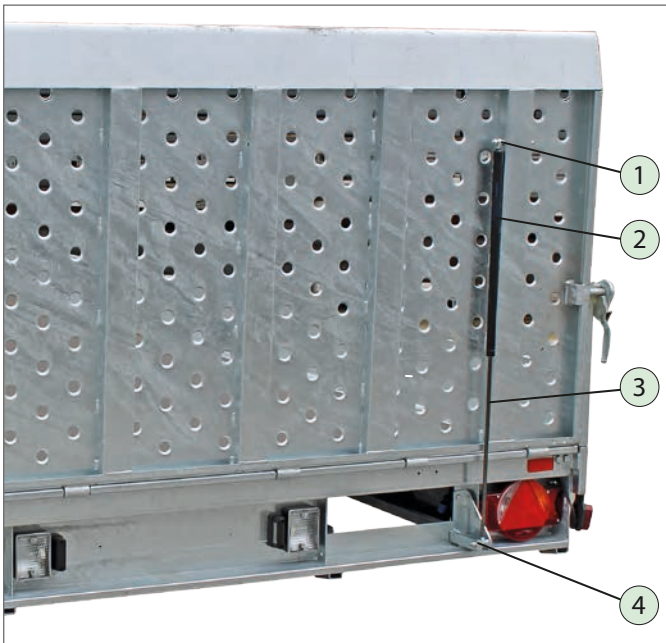
Removing gas struts!

The gas struts are subject to high pressure!
Improper fitting / removal may result in injury to persons
- Impact/collision risk!

- ▶ Observe the safety warnings on the gas struts.
- ▶ Take note of the instructions provided by the gas-strut manufacturer.
- ▶ Have worn / defective gas struts replaced by qualified staff only.



The working range of the gas struts is:
- 25°C to + 60°C.
Service life, functionality and safety depend largely on ensuring that the gas struts are serviced and maintained



Maintaining gas struts

1. Attachment (on ramp wall)
2. Gas strut (body)
3. Piston rod
4. Fixing system / attachment

- ▶ Secure the ramp wall against falling when fitting / removing the gas strut.



During spraying, do not aim the water jet directly at the gas struts.

- ▶ Keep films and paper packaging away (electrostatic charging is possible).
- ▶ Do not scratch or paint the piston rod or treat it with aggressive media (abrasives).
- ▶ Grease the piston rod.

9.2.4 Cable winch



The cable winch must be inspected by specialised staff at least once a year or every 10,000 km. If the cable winch is subject to heavy-duty use or operating conditions, the inspection intervals must be shorter.

The cable winch and its attachment must be checked for damage / crushing, ageing, broken individual wires or the cable as a whole and material fatigue.

Servicing work must only be carried out by qualified specialists.

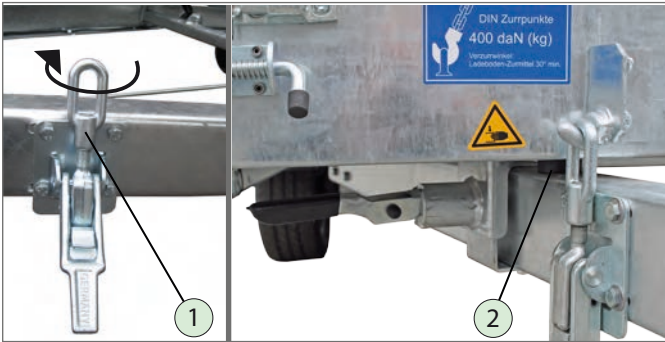


Testing / greasing the cable winch

1. Cable (steel)
2. Gear segment

- ▶ Completely extend the cable and clean both the cable and the gear segments with a clean cloth.
- ▶ Carry out a visual inspection for damage / tears / cracks.
- In the event of damage, have the cable winch repaired by qualified staff.
- ▶ Use a commercial machine grease to grease the cable slightly.
- ▶ Carefully wind the cable onto the drum.

9.2.5 Cargo bed interlocks



Adjusting the interlocks

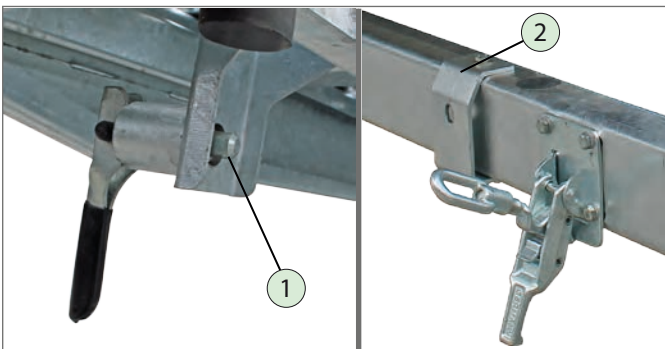
1. Eyelet
2. Rubber buffer

- ▶ Check the interlocks for signs of wear, fracture, secure closing (creation of tension).

If the build-up of tension by the interlocks reduces:

- ▶ Screw the eyelet in a little (a couple of threads) and close the interlock.
 - the cargo bed is drawn in - the interlock is under tension.
- ▶ The rubber buffers must be completely in contact with the drawbar.
- ▶ Check that the interlocks pull in with approximately the same tension on both sides (right and left).


9.2.6 Cargo bed lock



Lubricate the lock

1. Locking bolt
 2. Inlet plate
- ▶ Check the lock for signs of wear and tear, corrosion / fractures
 - ▶ Check that the lock functions smoothly.
 - Activate the locking lever several times.
 - ▶ Remove any dirt and old grease.
 - ▶ Lubricate the locking bolt and the inlet plate with multi-purpose grease.

10 Troubleshooting

 If a fault occurs, you can use this table to restore the specific operational functions of the trailer.

For further causes of faults and rectification measures, see the operating instruction manual "Trailers up to 3.5 to (General Points - Part 1)".

WARNING



Unsecured trailer! Unexpected start!

Do not go under the chassis when troubleshooting. There is a danger of you being crushed if the trailer starts to move unexpectedly.

- ▶ Make sure that the trailer is secured so that it cannot roll away.
- ▶ Do not actuate the cargo bed while you or anyone else are under the chassis.

11 Decommissioning/Disposal



Observe the safety instructions for decommissioning / disposal of trailers in the operating instruction manual, "Trailers up to 3.5 to" (General Points - Part 1).

11.1 Decommissioning the trailer

- ▶ Secure your trailer against unauthorised use by third parties, e.g. using wheel clamps.
- ▶ Park your trailer so that it cannot cause any further hazards for third parties, e.g. by tipping over, rolling away, or causing a traffic obstruction.

11.2 Disposal

- ▶ Take the individual parts or the entire trailer to a car/vehicle recycling facility. The specialists at the car/vehicle recycling facility will dispose of the individual components in the proper manner.

Malfunction	Possible cause	Solution
Cargo bed does not tilt automatically.	<ul style="list-style-type: none"> - Gas-struts are contaminated with dirt. - Damping effect has reduced. - Gas-struts are worn out. 	<ul style="list-style-type: none"> - Clean the gas-struts (piston). - Provide manual assistance. - Have the dampers replaced by expert personnel.
Cargo bed does not rise up automatically.	<ul style="list-style-type: none"> - The load is incorrectly distributed. 	<ul style="list-style-type: none"> - Correct the load distribution. - Load (vehicle) to be loaded with its heaviest end towards the drawbar.
Cargo bed does not lock automatically.	<ul style="list-style-type: none"> - Lock is maladjusted / worn. 	<ul style="list-style-type: none"> - Check the position of the lock plate. - Check the locking bolt for signs of wear and tear. - Replace any deformed lock.
ramp wall can only be actuated with difficulty.	<ul style="list-style-type: none"> - Gas struts have become too weak. - Gas struts are defective. 	<ul style="list-style-type: none"> - Check the gas struts for damage / oil leakage - Have the gas struts replaced by expert personnel.

Fault / repair table



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