



INSTRUCTION MANUAL

UNIVERSAL

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1 Identification

Name of product: Vehicle transporter UNIVERSAL

The UNIVERSAL vehicle transporter is available in four different versions:

Type 1

Type designation: UNIVERSAL 3000 WOOD FLOOR

Type 2

Type designation: UNIVERSAL 3000 ALU FLOOR

Type 3

Type designation: UNIVERSAL 3500 WOOD FLOOR

Type 4

Type designation: UNIVERSAL 3500 ALU FLOOR

Name and address of the trader:

Name: _____

Name and address of the manufacturer:

Address: _____

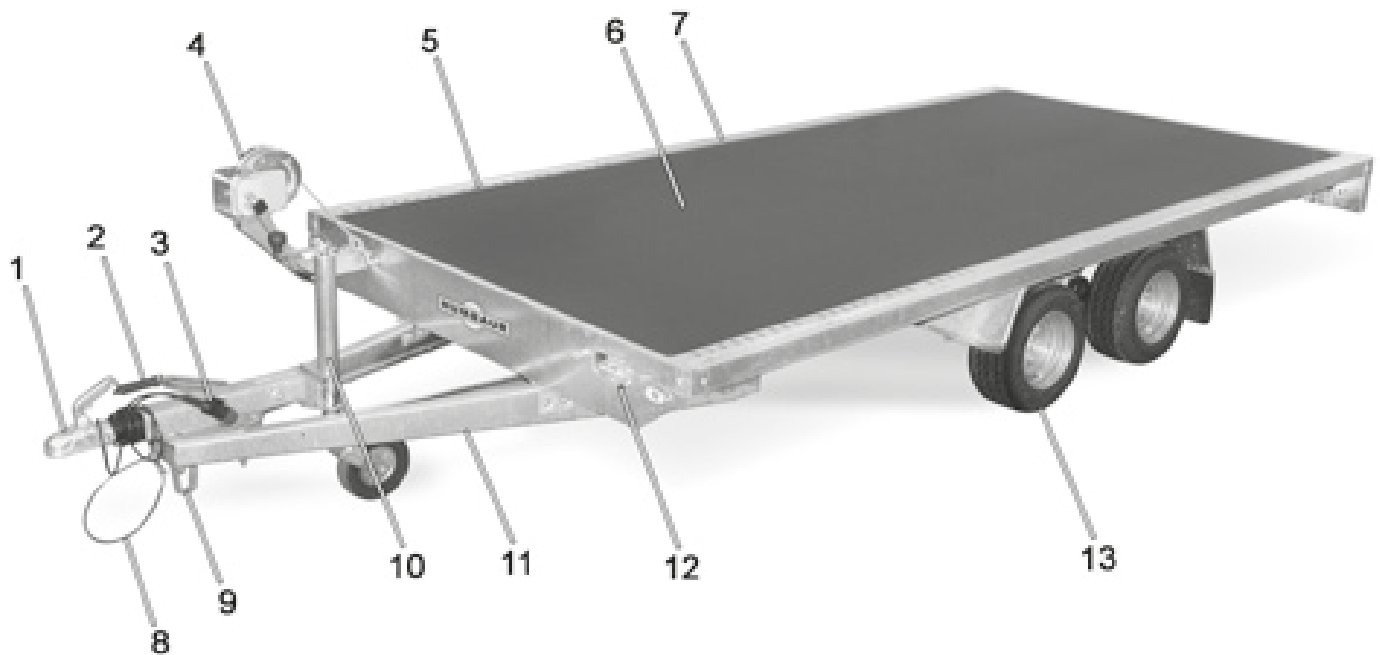
Humbaur GmbH
Mercedesring 1
D-86368 Gersthofen
Tel. 0049/(0)821/24929-0
Fax 0049/(0)821/249-100

Phone: _____

2 Product specification

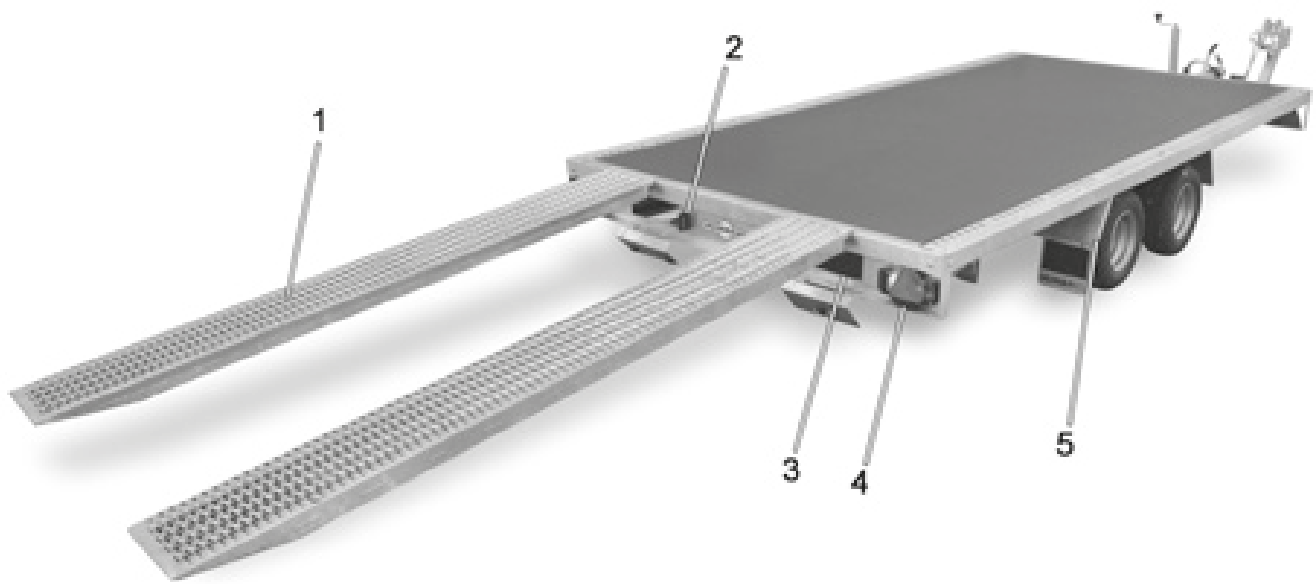
The UNIVERSAL is a real allrounder. The welded construction of the frame and chassis of the UNIVERSAL are hot-dip galvanised and thus optimally protected against corrosion. Designed as a transfer loader, the UNIVERSAL is equipped with a continuous base plate, which also makes it suitable for other transport solutions apart from motor vehicles. The UNIVERSAL is loaded with vehicles by means of drive-on planks made of hot-dip galvanised grating. These are stored in a shaft under the loading area during the journey. The drive-on ramps can be easily moved across the entire width so that you can load regardless of the track

width of the vehicles. Seven lashing rings per side, which are integrated into the outer frame, provide load securing. Furthermore, the UNIVERSAL has an additional hole embossing in which the optionally available wheel stoppers can be attached. The standard cable winch with cable is attached to the front left or right of the trailer frame by means of a 3-position depth-adjustable tube bracket. A wide range of accessories such as aluminium drop sides and a tarpaulin with frame make the UNIVERSAL a multifunctional trailer.



UNIVERSAL from the front

1. Overrun device with coupling ball
2. Handbrake
3. Electrical plug
4. Cable winch with pipe bracket
5. Hole embossing to accommodate the wheel stops
6. Load area
7. Lashing bracket
8. Breakaway rope
9. Drawbar support
10. Support wheel
11. V-Drawbar
12. Securing the pipe bracket for cable winch
13. Wheel



UNIVERSAL from behind

1. Drive-on ramp
2. Licence plate light
3. Plank shaft
4. Rear light
5. Mudguard

3 Intended use

The UNIVERSAL vehicle transporter is designed to be attached to a permissible towing vehicle. It may be loaded within the permissible total weight.

The transport of dangerous goods, e.g. chemical substances, is not permitted. It must be possible to distribute the weight of the load evenly through the load. When loading the trailer with a single load, this must allow an even weight distribution. The centre of gravity of the load must be in front of the axles. The permissible drawbar load must be observed. The driver of the towing vehicle is responsible for securing the load or equipment for securing the load. The driver must observe the respective country-specific laws and standards for load securing.

The trailer may only be operated in technically perfect condition.

Danger of life!



Driving without the jockey wheel fully cranked up and in the upright position.. The support wheel can break off and be thrown away and hit people. This can lead to injuries or even death.

Ensure that the jockey wheel is fully raised and cranked up for travel

4 Use contrary to intended purpose

For all types of the UNIVERSAL vehicle transporter, the following shall be deemed to be improper use:

- Loaded with a too high payload.
- Transporting people with the trailer.
- Driving with an unsecured load.
- Exceeding the drawbar load and the trailer load
- Unauthorised structural modifications to the trailer.
- Transport of hot materials (e.g. tar).

Danger of life!



Driving with incorrect load distribution.

The trailer can skid and break off or cause the towing vehicle to skid as well. This can injure or kill people and damage property.

Danger!

Distribute the load for the journey in accordance with the applicable laws and regulations.

5 General safety instructions

Danger of life!



Danger!

Driving with incorrectly raised support wheel. The support wheel blocks the brake system. The brakes do not react and the trailer is completely unbraked in critical situations. In resulting accidents, people can be injured, killed or objects damaged.

Crank this support wheel for travel completely and up so that nothing can block the support wheel.

Danger of life!



Danger!

Driving at excessive speed.

The trailer may skid and break off or cause the towing vehicle to skid as well. This can injure or kill people or damage property.

The applicable laws of the respective country for the maximum permissible speed when driving as a trailer combination must be observed.

Danger of life!



Danger!

Driving with an unsecured load.. The load or parts of the load can be thrown out and hit people. This can lead to injuries or even death.

Secure the load every time you drive.

Danger of life!



Danger!

Driving with the drive-up ramps suspended.

The drive-up ramps can be lost while driving. In the event of an accident, persons may be injured, killed or objects damaged.

Stow the drive-up ramps in the ramp compartment before driving of.

Danger of life!



Driving with the plank compartment open. The drive-up ramps can be lost during the journey. People can be injured or even killed by the drive-up ramps.

Danger!

Before driving off, check that the plank compartment is correctly closed.

Danger of life!



Loading/unloading the trailer when uncoupled.

The trailer can snap open in the process. Persons may be injured or even killed.

Danger!

Always hitch the trailer for loading/unloading.

Danger of life!



Driving without the breakaway cable attached.

The trailer is not braked if the hitch fails. It can hit people and property. This can lead to injuries or even death.

Danger

Put the breakaway cable around the coupling of the towing vehicle every time you drive.

Risk of injury!

Stepping on the drawbar.



Dirt, wetness or ice can make the drawbar slippery. The person slips, falls and is injured.

Caution!

Do not step on the drawbar of the trailer.

Danger of life!



Loading the trailer on a slope.

The load shifts the centre of gravity and the trailer can tip over. People can be fatally injured.

Danger!

Do not load the trailer if it is perpendicular to the slope..

Risk of injury!

Entering the loading area with unsuitable footwear.



The cargo bed may be slippery due to dirt or wetness. The person may be injured.

Risk of slipping!

Only enter the trailer with sturdy footwear that has sufficient tread.

Danger of life!



Loading the trailer with incorrectly adjusted ramps.

During loading and unloading, the vehicle to be loaded tips over. This can injure or kill people or damage property.

Danger!

Adjust the planks to the correct track width.

Property damage!

By raising the entire trailer to one side.



The underride guard or other parts of the trailer may be damaged under the load of its own mass.

Caution!

Never place the trailer in this way. Store the trailer only in a horizontal position.

Danger of life!



Loading the trailer on loose ground.

The drive-up ramps sink in during loading and unloading. The vehicle to be loaded tips over. This can injure or kill people or damage property.

Danger!

Only load and unload the trailer on firm ground.



Tighten the wheel nuts again after the first 50 km, after a wheel change. Regularly check the wheel nuts for tightness.

Caution!



Never move the trailer with the support wheel lowered.

Caution!

6 How do I hitch and connect the trailer to my car?

6.1 Tightening and releasing the handbrake.

Danger of life!

Release the handbrake if the wheel chocks are not attached.



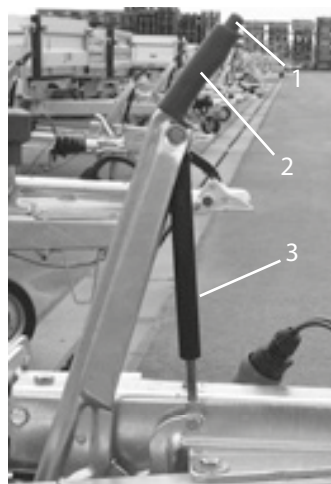
The trailer may start moving in an uncontrolled manner and injure persons. This can lead to injuries or even death.

Danger!

Secure the trailer with wheel chocks before releasing the hand brake.

The trailers have either a hand brake without gas spring or a hand brake with gas spring.

Handbrake with gas spring



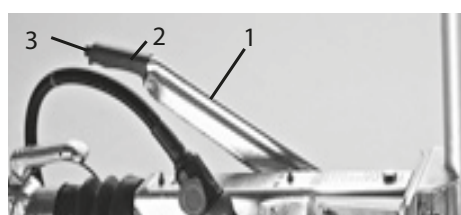
Handbrake lever with gas spring

1. Push button
2. Brake lever
3. Gas spring

To apply the handbrake, pull the brake lever until the resistance decreases and the lever automatically moves in the direction of pull. Further movement is carried out by the gas spring until the brake is fully applied.

To release the handbrake, press the push button at the tip of the handle and at the same time put the lever back down.

Handbrake without gas spring



Handbrake lever without gas spring

To apply the handbrake, pull the brake lever until it is in the vertical up position. Only in the vertical position is the braking power of the parking brake guaranteed.
To release the handbrake, press the push button at the tip of the handle and at the same time put the lever back down.

6.2 Extending and retracting the support wheel

Danger of life!



Driving without the support wheel fully cranked up and in the upright position.

The support wheel can break off and be thrown away. This can injure or kill people or damage property.

Danger!

Ensure that the support wheel is fully raised and cranked up for driving.

Danger of life!

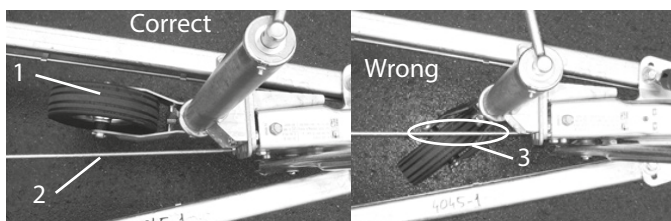


Driving with the support wheel incorrectly cranked up.

The support wheel blocks the brake system at the brake rod. The brakes do not react and the trailer is completely unbraked in critical situations. In resulting accidents, this can cause injury or even death to persons.

Danger!

Crank the support wheel for travel completely and up so that the support wheel cannot block anything.



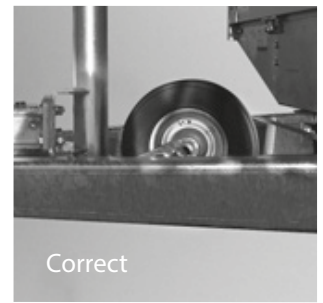
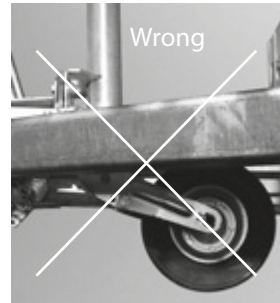
Support wheel (from above) cranked up correctly / incorrectly

1. Support wheel
2. Brake bar
3. Support wheel blocks brake rod

The trailers with 3500 kg permissible total weight are equipped with a reinforced standard support wheel. All other trailers are equipped with an automatic support wheel.

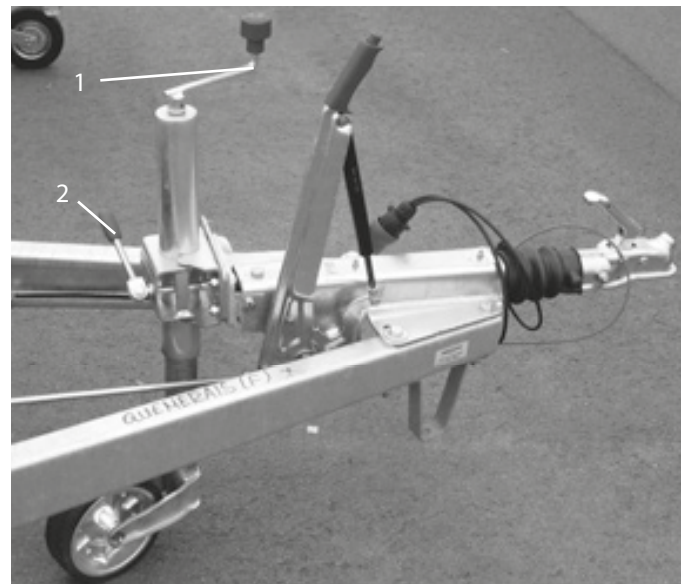
The automatic support wheel

When cranking up, always make sure that the support wheel does not block the brake rod. Always crank the support wheel up completely with the crank until the wheel is fully folded in.



Raising, automatic support wheel

The reinforced standard support wheel



Reinforced standard support wheel

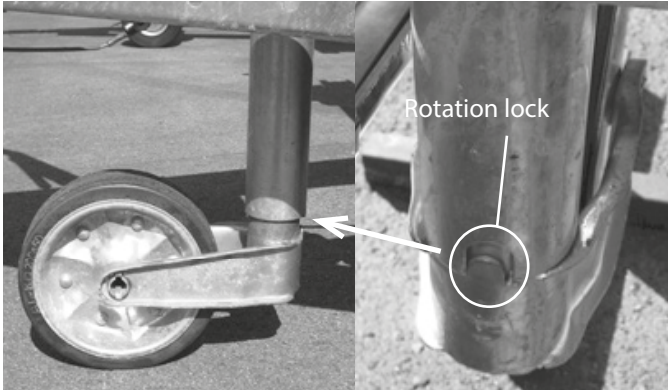
1. Crank
2. Lever

Lowering the support wheel

Hold the support wheel with one hand. With the other hand, turn the lever until you can lower the support wheel. Lower the support wheel completely. Turn the lever back to close. Crank down the support wheel with the crank.

Raising the support wheel

Crank the support wheel completely up with the crank.



Rotation lock

Make sure that the pin slips into the groove of the rotation lock (Fig.: Rotation lock). Hold the support wheel with one hand. Turn the lever open with the other hand until the support wheel can be pulled up. Pull the support wheel all the way up and hold it firmly. Make sure that the support wheel does not block the braking device. Close the lever. Now you can release the support wheel again

6.3 Coupling with the ball head coupling

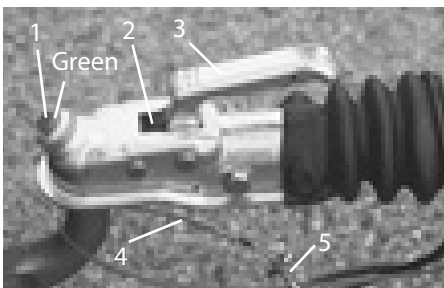
Apply the handbrake of the trailer. Remove the wheel chocks from the tyres. Insert them into the holder provided. Crank down the support wheel until the trailer ball hitch is higher than the hitch ball of the towing vehicle. Drive the towing vehicle in front of the trailer until the ball head is under the coupling of the trailer. Turn off the engine. Apply the handbrake of the towing vehicle. Now leave the towing vehicle and go to the trailer drawbar. Place the breakaway rope around the coupling of the towing vehicle (Fig.: Ball head coupling with breakaway cable).

Danger of life!



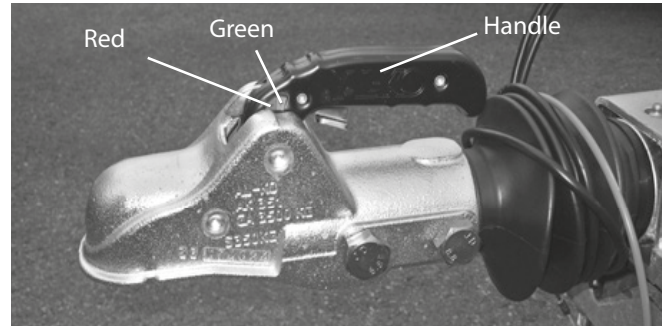
Danger!

Driving without the breakaway rope attached. The trailer is not braked if the hitch fails. It can hit persons and things. This can lead to injuries and even death. Place the breakaway rope for the journey around the coupling of the towing vehicle.

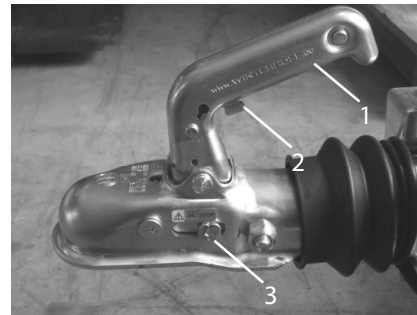


Ball head coupling type 1

1. Safety display
2. Wear indicator
3. Handle
4. Breakaway rope
5. Carabiner hook



Ball head coupling type 2



Ball head coupling type 3

1. Handle
2. Safety handle
3. Wear and safety indicator

Turn the jockey wheel down so that the coupling ends lie on top of each other. Pull up the handle of the ball head coupling and at the same time press the coupling onto the ball head. Now push the handle down again until the coupling is engaged.

Check whether the green edge of the safety indicator is visible or the wear and safety indicator points to the green area. Crank up the jockey wheel completely. Plug the power cable into the socket located on your towing vehicle. If you cannot find it, refer to the owner's manual of the towing vehicle. Check that the lights are working. Release the handbrake. The trailer is now correctly hitched and connected.

Danger of life!



Danger!

Driving without the jockey wheel fully cranked up and in the upright position.

The jockey wheel can break off, be thrown away and hit people. This can lead to injuries or even death.

Ensure that the jockey wheel is fully raised for driving.

Check before each trip:

- Whether the lighting works.
- Whether the trailer is correctly hitched.
- Whether the jockey wheel is completely raised.
- Whether the load is properly lashed down.
- Whether the total weight, drawbar load and axle loads are complied with.
- Whether the drive-up ramps are properly stowed and secured.

7 How do I uncouple and secure the trailer?

Danger of life!



Danger!

Unhitching the trailer without the handbrake and wheel chocks applied.

The trailer may roll away and injure people.

Always apply the handbrake and place the wheel chocks under the wheels when unhitching the trailer.

Risk of injury!



Caution!

Unhitching the trailer without the jockey wheel cranked down.

The trailer will tip downwards and injure the person.

Crank down the support wheel before unhitching the trailer.

Property damage!



Caution!

Uncoupling the trailer.

The breakaway cable or electrics are not removed. When driving away the towing vehicle, the rope or cables are torn off.

Before driving away the towing vehicle, make sure that the trailer is properly uncoupled.

Apply the handbrake of the trailer. Crank down the support wheel. Unplug the power cable from the socket of your towing vehicle. Insert the cable into the holder located on your trailer so that the contacts do not become dirty. Loosen the breakaway cable. Wrap the breakaway cable around the hitch so that it does not hang on the ground. Pull up the hitch lever and disconnect the trailer.

If the trailer is too heavy to raise the hitch, crank the support wheel down further at the same time as uncoupling. This will move the coupling of the trailer upwards and it will be

higher than the ball head of the towing vehicle.

Place the wheel chocks under the wheels so that the trailer is secured against rolling away on slopes. Now you can drive the towing vehicle away.



Wheel chock for securing on slopes

8 How do I load and unload the trailer?

Danger to life!



Danger!

Loading/unloading the trailer when uncoupled.

The trailer can snap open in the process. People are injured, even to the point of death.

Always hitch the trailer to a towing vehicle for loading/unloading.

8.1 Load distribution

Danger to life!



Danger!

Driving with incorrect load distribution.

The trailer can skid and break off or cause the towing vehicle to skid. This can injure or kill people or damage property.

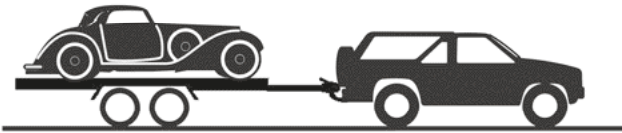
Distribute the load for the journey according to the regulations.

Distribute the load evenly and centred over the loading area of the trailer. The centre of gravity of the load must be in front of the front axle.

When loading vehicles, the engine must always be at the front in the direction of travel.

Furthermore, you must comply with all applicable laws and standards of the country in which you are travelling with regard to load securing. You must also comply with all applicable laws and standards concerning your cargo.

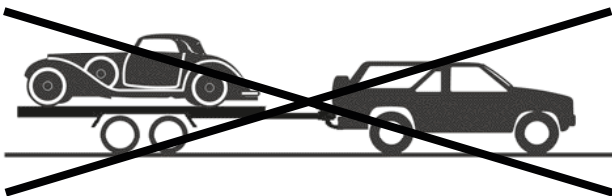
Correct charge distribution.



Vehicle (engine in front) properly charged.

All wheels of the trailer and the towing vehicle rest evenly on the ground. Neither the trailer nor the towing vehicle are tilted. Negative drawbar load is not permitted. The permissible drawbar load of the towing vehicle must also not be exceeded. The maximum drawbar load of the trailer is indicated on the front of your trailer. The information can also be taken from the vehicle documents. The drawbar load must be within the permissible drawbar load.

Incorrect load distribution



Vehicle (engine in front) incorrectly charged.

The load's centre of gravity is too far back. The drawbar load becomes negative. This increases the risk of skidding. The axles are loaded unevenly. The rear axle of the tandem axle of the trailer and the front axle of the towing vehicle are loaded too much.

8.2 Cargo securing

Danger to life!



Danger!

Driving with an unsecured load.

The load or parts of the load can be thrown out and hit people. This can lead to injuries or even death.

Secure the load for the journey.

The load must be adequately secured. You must check this before and during the journey. To secure the load, the vehicle transporter has lashing rails integrated in the loading area, each with 7 lashing brackets. A maximum weight of 400 kg may be attached to each lashing bracket.

In addition, the trailer has a perforation in the outer frame profile where wheel stops can be attached.

If vehicles are loaded, you must apply the handbrake (parking brake) of the vehicle.

8.3 Loading and unloading the trailer

Risk of injury!



Risk of slipping!!

Entering the loading area with unsuitable footwear.

The cargo bed may be slippery due to dirt or wetness. The person may be injured.

Only enter the trailer with sturdy footwear that has sufficient tread.

Risk of injury!



Danger!



Sturdy shoes

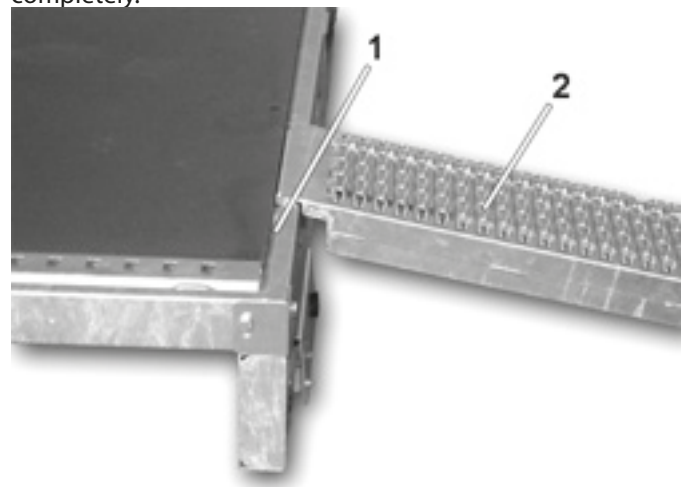
When entering and leaving the load platform.

It is easy to trip when entering and leaving the cargo bed because the cargo bed does not have aids for entering and leaving. Incorrect footwear makes stumbling even more likely. The person may be injured.

Only enter the trailer with sturdy shoes that have sufficient tread. Do not enter the trailer hastily, but carefully.

The drive-up ramps are used for loading and unloading the trailer with vehicles.

Open the plank compartment by opening the cotter pins on the plank compartment flap. Pull out the drive-up planks completely.



Hanging up drive-up ramps

1. Continuous rail
2. Drive-on plank

Hook the drive-up ramps into the rail at the rear. To do this, lift the drive-up ramp to the rail. Lift the rear end of the drive-up ramp until you have inserted the front end of the drive-up ramp into the rail. Lower the rear end. Adjust the drive-up ramps to the track width of the vehicle to be loaded.



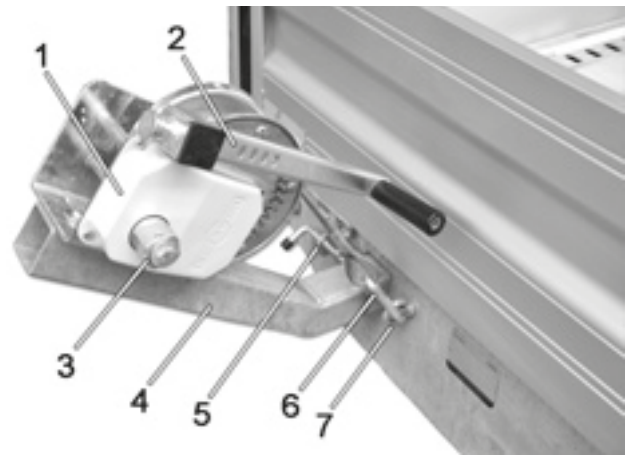
Distance between the planks Tyre centre = plank centre

The tyres of the vehicle must be centred on the drive-up ramps.

Beyond the loading area

Load the trailer so that the load does not interfere with the front swing range. If this is not observed, the load may damage the towing vehicle during travel. Ensure correct load distribution and securing in accordance with the relevant, valid regulations for load securing.

8.4 Handling the cable winch



Cable winch with pipe support

1. Cable winch
2. Crank
3. Crank attachment
4. Tube holder
5. Locking pipe bracket
6. Snap hook of the pull rope
7. Eyelet with attached pull rope

The cable winch is designed to pull vehicles onto the trailer. The tube holder of the cable winch can be attached to the side on both sides of the trailer. The 3-fold adjustment of the tube holder allows the cable winch to be adapted to the vehicle to be pulled up.

Danger to life!



Load on the cable winch with too high a tractive force.

The pull rope can break under the load. People can be hit by the pull rope and fatally injured.

Danger!

Observe the maximum pulling force of the cable winch of 950 kg.

Danger to life!



Working with the cable winch. The rope is weakened by damage and breaks under load. In the process, one person is hit by the rope and the load is unsecured. This can lead to accidents resulting in death. Replace damaged ropes.

Danger!

Danger to life!



Danger!

The lever of the winch is not properly fixed.
The lever points forward. When cornering, the lever or the tube holder can damage the towing vehicle or catch people.
Attach the lever to the fixture that it points backwards. Push the tube holder in completely in for the ride. If the load prevents the tube holder from being pushed in, it must be dismantled for the journey.

Property damage!



Caution!

The load is lashed to the eye of the towing rope.
The eyelet of the pull rope is not suitable for this. The eyelet can tear out and damage the trailer. Do not lash the load to the eyelet, but only to the lashing brackets provided for this purpose.

Danger to life!



Danger!

The pipe bracket is not secured for travel or operation.
The tube holder can be lost during the ride and be flung through the air. In the event of accidents resulting from this, people can be injured, killed or property damaged.
Secure the tube holder for travel and operation with the cotter pin.

Risk of injury!



Caution!

Touching the steel rope.
The rope is grasped with the bare hand. The operator can tear open his hand on broken individual wires.
Wear gloves when handling the steel cable.

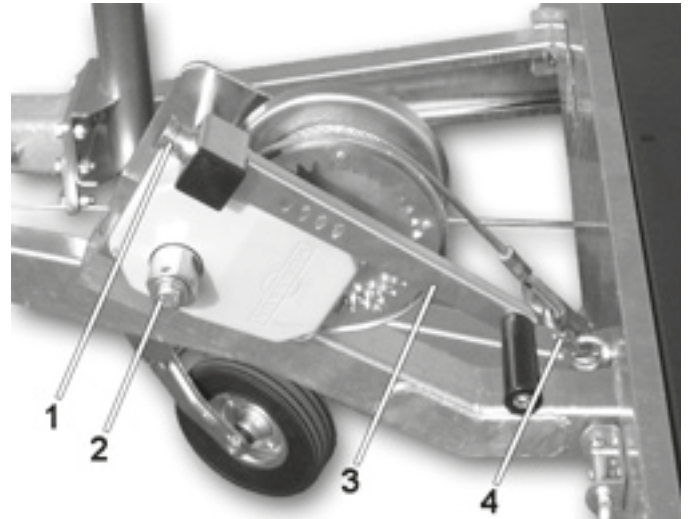
Property damage!



Caution!

The steel cable of the cable winch is not attached to the eyelet on the trailer for travel or is not brought under tension.
The rope can damage other components and in extreme cases be torn off.
Always attach the steel cable to the eyelet and bring it slightly under tension.

Operating the cable winch



Cable winch

1. Safety device
2. Crank handle
3. Crank
4. Carabiner hook

Pull the safety catch on the crank and remove it from its attachment. Put the crank onto the crank attachment. When doing so, the safety catch must lock the crank. Unhook the snap hook at the end of the rope from the eyelet on the end plate. Turn the crank counterclockwise by approx. 360°, pull the safety catch on the crank and remove it. Now you can pull out the rope by hand.

The tube holder has a 3-fold depth adjustment for loading and unloading the vehicle. The tube holder must be secured in every position with the cotter pin. For driving, the tube holder must be pushed in completely. If the load prevents the tube holder from being pushed in, it must be dismantled.

Hook the hook of the steel cable e.g. to the towing eye of the vehicle to be loaded/unloaded. Put the crank back on the crank attachment. Turn the crank clockwise to wind up the rope and anti-clockwise to unwind the rope further. For travel, hook the hook into the eyelet on the front of the trailer and roll up the rope again. The rope should be slightly under tension.

Also remove the crank from the crank attachment. Put the crank onto the attachment so that the handle points to the rear and the safety catch engages.

9 How do I look after the trailer?



Caution!

Property damage!

When cleaning with a high pressure cleaner.

Too little distance, too high pressure or too high temperature can damage the trailer.

Keep the specified values.

Check whether the lubrication points are lubricated to the point of grease leakage. If not, lubricate them. When cleaning the trailer with a high pressure cleaner, note that it may be operated with a max. pressure of 50 bar. Ensure that the water temperature does not exceed a maximum value of 80°C. Maintain a minimum distance of 70 cm. Please note that the following parts must not be directly illuminated.

- All electrical parts
- The tyres
- The clutch

Do not use abrasive, acidic or alkaline cleaning agents, as these may destroy the surface coating.

After driving on roads where salt has been spread or after transporting fertilisers or other acidic or saline substances, clean the trailer thoroughly with a high-pressure cleaner. Acids, salts and certain chemicals may otherwise attack the surface coating of the parts and destroy the effect of the coating.

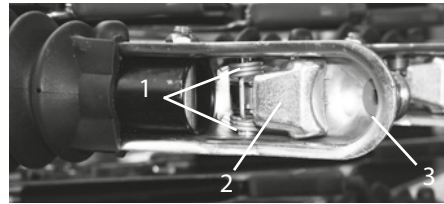
Special features of galvanized parts

Galvanised parts lose their shine over time. This effect is desirable, as the rust protection effect of a galvanised coating only works in the oxidised state. To protect galvanised surfaces, they can be treated with a commercially available corrosion protection agent.

Aluminium drive-up ramps

To remove heavy soiling and maintain the aluminium shine, use the Original Humbaur aluminium and tarpaulin cleaner or equivalent cleaning agents.

Clean the clutch



Ball head coupling from below

1. Spring
2. Safety mechanism
3. Clutch shell

Clean the ball head coupling from the inside as well. Wipe out the coupling shell with a damp cloth. Remove impurities such as blades of grass, leaves or small branches that have become caught in the spring or the gaps. Impurities can prevent the coupling from engaging!

10 How do I maintain the trailer?

10.1 Maintenance rules

Maintenance includes regular checks of individual components and appropriate action based on the check. Lubricating individual components is also a regular maintenance task. The rhythm is to be adapted to the usage behaviour. The following information refers to normal use of the trailer with a maximum of 10,000 km driven per year. Instructions for this can be found in the following sub-chapters.

Maintenance work	after the first 50 km	500 km or 1x per month	2000 km or every 3 months	5000 km or every 6 months	10000 km or every 12 months
Check tyre pressure	x		x		
Check wheel nuts for tightness	x	x			
Tyre wear				x	
Check the clutch				x	
Lubrication work				x	
Check all fastening screws for tightness					x

All other maintenance work must be carried out regularly every 6 months by a specialist. Grease specification: Multi-purpose grease according to DIN 51825 of type K with an application range of -30° C to +120° C.

Maintenance list for the professional:

- Brake system
- Wheel bearing
- Shaft
- Tyres
- Drawbar / overrun device
- Electrical equipment
- Break-away rope
- Support wheel
- Superstructures
- Accessories (if any)

Thread metric	Tightening torque (Nm)		Thread metric	Tightening torque (Nm)	
	8.8	10.9		8.8	10.9
M 5	5,5	8,1	M 20	425	610
M 6	9,6	14	M 20x 1,5	475	980
M 8	23	34	M 22	580	820
M 8x1	25	37	M 22x1,5	630	900
M 10	46	67	M 24	730	1050
M 10x1,25	49	71	M 24x2	800	1150
M 12	79	115	M 27	1100	1550
M 12x1,5	83	120	M 27x2	1150	1650
M 14	125	185	M 30	1400	2000
M 14x1,5	135	200	M 30x2	1500	2150
M 16	195	290	M 36	2450	3500
M 16x1,5	210	310	M 36x2	2650	3780
M 18	300	430	M 42	3930	5600
M 18x1,5	340	485	M 42x2	4280	6050

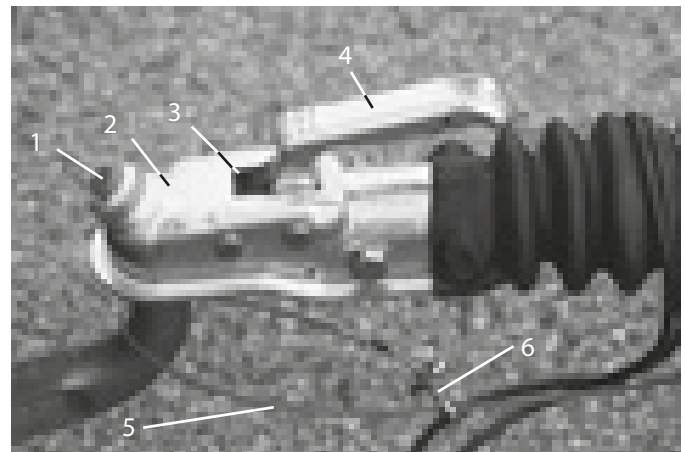
10.2 Checking the tyres

Check the tyre pressure and tread depth. Refer to the table below for the correct tyre pressure for your trailer's tyres. If the tyre you are using is not listed in the table, please contact the tyre manufacturer.

Tyre pressure table

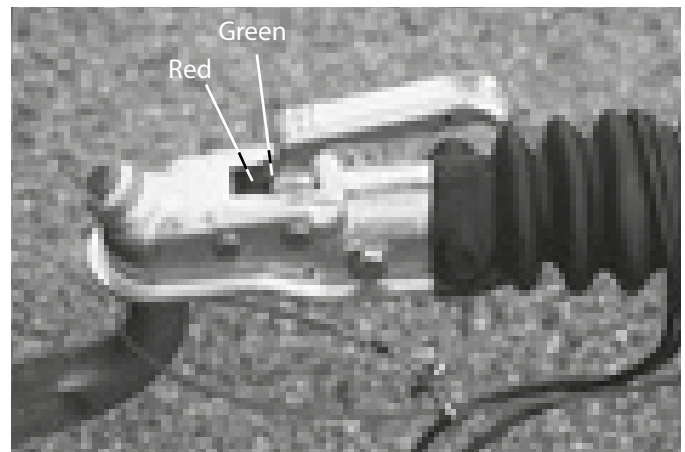
Tyre description	Air pressure in bar
195/50 R13C	6,5
195/55 R10C	6,25

10.3 Checking the clutch wear



Ball head coupling with breakaway cable

1. Safety indicator
2. Ball head coupling
3. Wear indicator
4. Handle closed
5. Break-away rope
6. Carabiner hook

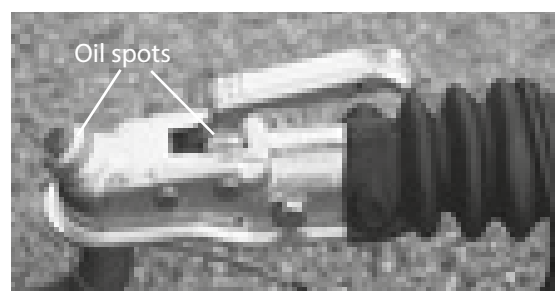


Wear indicator colouring

Check the wear indicator of the ball head hitch (Fig.: Ball head hitch with breakaway cable). When the trailer is hitched, the green area must be visible. If this is no longer visible, but only the red area, then you must have the coupling checked by a specialist.

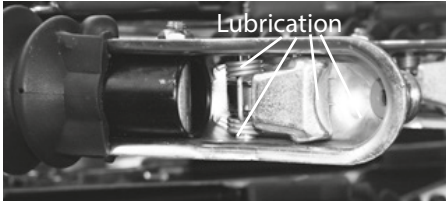
10.4 Lubricating and oiling the clutch

Before oiling and lubricating, clean the areas to be oiled and lubricated with a clean cloth.



Oil spots on the ball head coupling

You must oil the coupling with a commercially available machine oil at the points shown in the picture Oil points of the ball head coupling. A few drops of oil are sufficient. Wipe off excess oil with a cloth so that it does not get into the environment.



Lubrication points of the ball head coupling

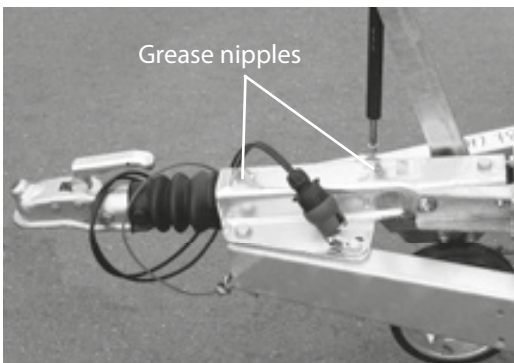
You must lubricate the coupling with a commercially available multi-purpose grease at the points shown in the picture Lubrication points of the ball head coupling.

10.5 Lubricating the brake system

Before lubricating, clean the areas to be lubricated with a clean cloth.

There are three areas in the brake system where lubrication points are located.

The overrun device

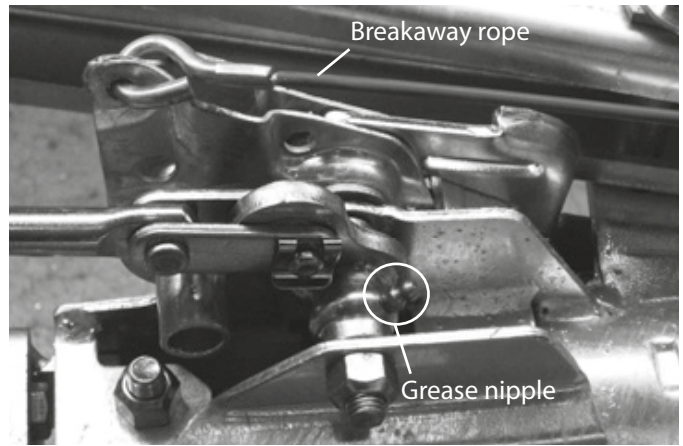


Lubrication points overrun device

Use a commercially available multi-purpose grease for lubrication. Lubricate the overrun device with a grease gun via the grease nipples

The handbrake lever

This is located on the underside of the trailer in the front area. If you go to the attached end of the breakaway cable, you will find the handbrake lever at this end (Fig.: Handbrake lever from below).

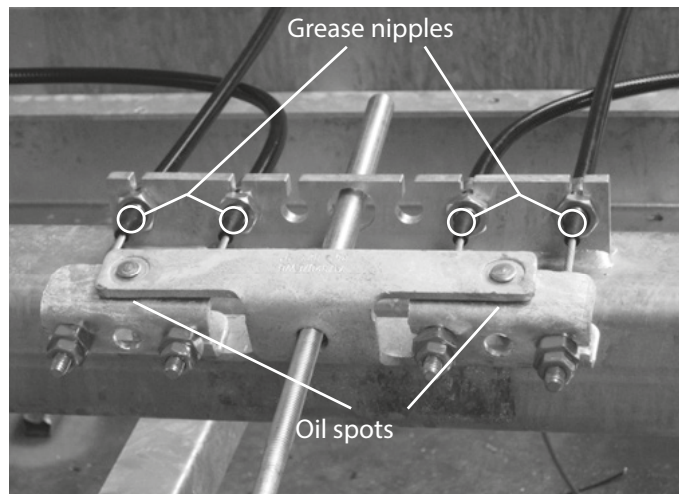


Handbrake lever seen from the underside of the trailer

You must lubricate the grease nipple with a commercially available multi-purpose grease.

Tandem balance

The tandem balance is located centrally on the underside of the trailer. You must lubricate the grease and oil points shown in the tandem compensation picture, viewed from the underside of the trailer, with a commercially available multi-purpose grease or oil for vehicles. The grease is worked in by applying and releasing the handbrake.



Tandem balance seen from the underside of the trailer

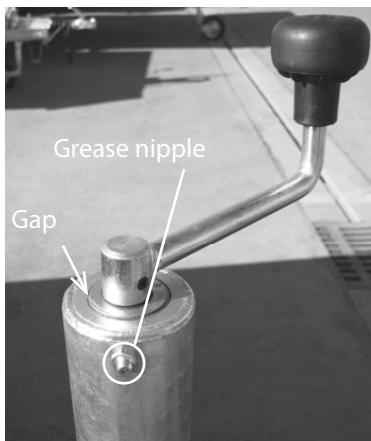
10.6 Lubricate and oil the support wheel

Before oiling and lubricating, clean the areas to be oiled and lubricated with a clean cloth.



Cylinder

Lubricate the extended cylinder (picture: cylinder) with a commercially available multi-purpose grease. Crank the jockey wheel up completely once. Crank the support wheel down again. This distributes the multi-purpose grease evenly.



Lubricate support wheel

Use a commercially available multi-purpose grease for lubrication. Lubricate the jockey wheel with a grease gun via the grease nipples (Fig.: Lubricating the jockey wheel). If there is no grease nipple on your version of the jockey wheel, drip commercial machine oil into the gap (picture: Lubricating jockey wheel-). Wipe off excess oil with a cloth so that it does not get into the environment.

10.7 Wheel change

Danger to life!



Jacking up the trailer to change the wheel when it is loaded.

The load slips. The trailer tilts. The load and the trailer can hit people and cause injuries or even death.

Danger!

Only jack up the trailer when it is empty.

Risk of life!



The handbrake is not applied when changing the wheel.

The trailer slips and tips off the jack. One person is injured and even killed.

Apply the handbrake to change the wheel.

Danger!

Risk of life!



Stay of a person under the trailer during the wheel change.

The trailer tips over from the jack or the jack fails. The person is injured or even killed.

Do not stay under the trailer.

Danger!

Only carry out a wheel change when the trailer is unladen. Use a jack suitable for the empty weight of the trailer. If you do not have a suitable jack, you must consult a specialist workshop.

Uncouple the trailer. Apply the handbrake. Secure the trailer against rolling away with the wheel chocks on the side of the trailer on which the tyres are intact. Loosen the wheel nuts of the wheel to be changed using a suitable torque spanner. Place the jack centrally between the two wheels on the frame. Remove the wheel nuts. Change the wheel. Tighten the wheel nuts hand-tight. Lower the trailer again. Tightening torques for tightening the wheel nuts with a torque spanner:

Steel wheels	90 Nm
Aluminium wheels	120 Nm

Tighten the wheel nuts crosswise with the torque spanner (see table). Before loading the trailer again, drive to the nearest petrol station and check the tyre pressure.



Caution!

Tighten the wheel nuts again after 50 km. Regularly check the wheel nuts for tightness.

10.8 Changing a light bulb



Rear and number plate light

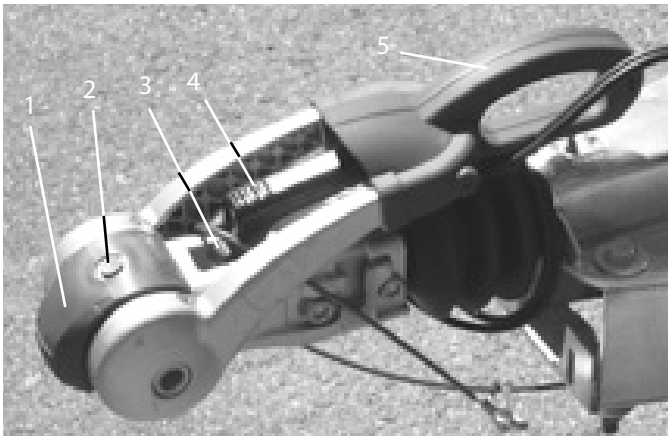
Unscrew the combination rearlight by the screws. Open the cover. Remove the defective bulb from the socket. Insert the new bulb. Close the cover. Screw the cover back on.

Observe the prescribed power (watts), which is indicated on the respective lamps.

11 Accessory

11.1 Anti-wobble clutch (AWC)

Product description



AKS

1. Soft-Dock
2. Safety indicator
3. Wear indicator friction pads front and rear
4. Clutch handle
5. Stabilisation handle

The AWC is a safety coupling that suppresses any slipping and pitching movements that occur. It has a safety and wear indicator. The coupling and stabilising handle are separate and are each operated manually.

Intended use

The AWC is only designed for trailers with a maximum weight of 3000 Kg

Use contrary to intended use

The AWC must not be used with trailers that are not listed in the intended use

How do I use the anti-wobble clutch?

Have the installation carried out by a professional.

Property damage!



Caution!

Coupling the AWC when the ball head is dirty or greasy.

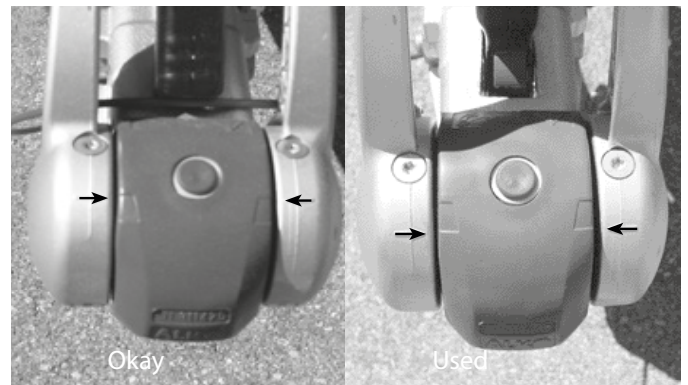
The friction between the friction linings and the ball head is reduced, which means that the AWC can no longer suppress the rolling and pitching movements.

Before coupling, make sure that the ball head is clean and free of grease.

Pull up the clutch lever and at the same time press the clutch onto the ball head. Now press the lever down again until the coupling is engaged.

Check whether the green edge of the safety indicator is visible (Fig: colour of safety indicator). If the edge is visible, the trailer is correctly coupled. Now press the stabilising handle down.

Check whether the friction linings are worn. This can only be done when the trailer is hitched and the stabiliser handle is closed. For the friction linings at the rear and front, the indicator is located directly on the clutch lever. If the green area is no longer visible, these friction linings must be replaced. For the friction linings on the left and right, there are control markings on the clutch (Fig.: wear marking friction linings right and left).



Wear mark friction linings right and left.

What changes in care and maintenance?

Property damage!



Caution!

Cleaning with a high pressure cleaner. The pressure of the water can damage parts of the coupling.

Do not use a highpressure cleaner to clean this accessory.

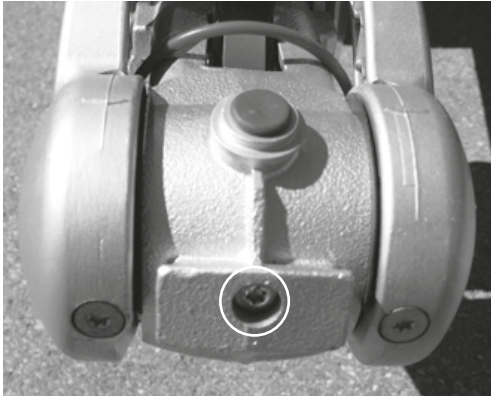
Do not use abrasive, acid-containing or lye-containing cleaning agents, as these may destroy the surface coating. Clean the trailer carefully after driving on roads where salt has been spread.

Clean the parts of this accessory with a normal garden hose and a clean cloth or sponge.

Replacing the friction linings

Friction linings front

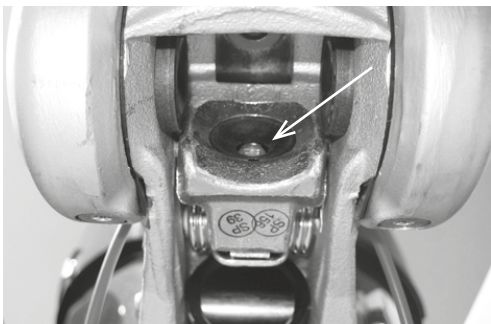
Remove the soft dock.



Screw connection front friction lining

Loosen the Torx screws at the front of the clutch. Replace the front friction lining. Fit the Torx screws. Put the soft dock back on.

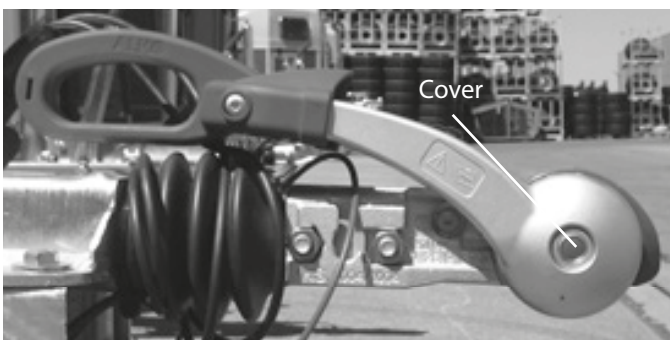
Friction linings rear



Screw connection rear friction lining

Loosen the Torx screw at the back of the clutch shell. Replace the friction lining. Fit the Torx screw.

Lateral friction linings

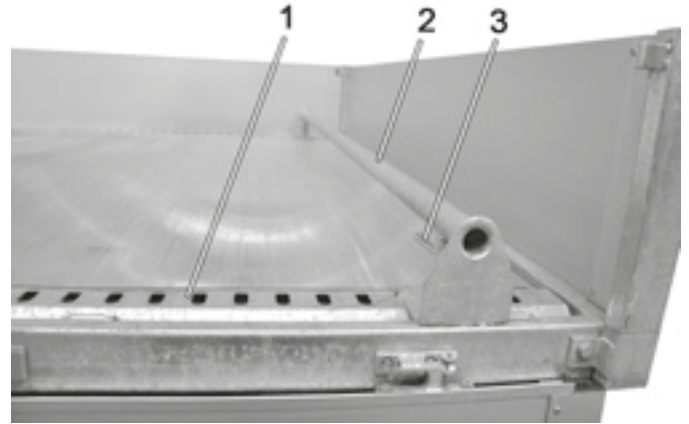


AWC from the side

Remove the red cover caps on the left and right. Knock out the friction linings from the outside inwards. Press in the new friction linings from the inside.

11.2 Wheel stopper

Product description



Wheel stopper

1. Hole embossing in the outer frame profile
2. Wheel stopper
3. Verriegelung Radstopper

The wheel stops serve as a stop when loading vehicles. This allows you to place the vehicle correctly on the trailer. The wheel stopper is attached to the hole embossing.

Intended use

The wheel stops may only be used with the UNIVERSAL vehicle transporters.

Use contrary to intended use

The wheel stops must not be used with trailers that are not listed in the intended use.

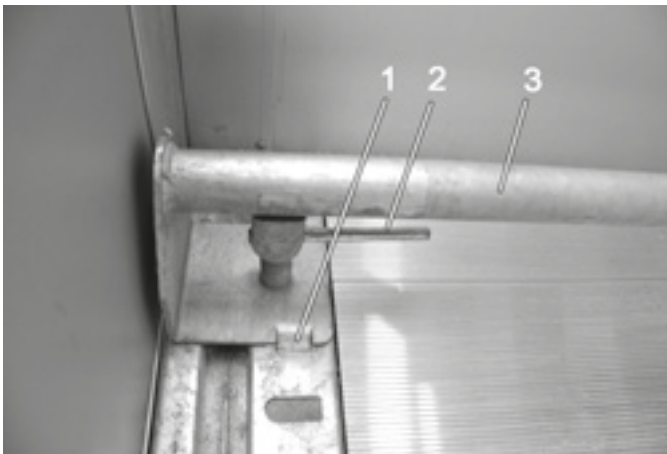
Danger to life!



Danger!

Driving with the wheel stoppers on the wrong way round
 The wheel stop cannot absorb the forces and the locking mechanism fails. The loaded vehicle may start moving. Parts of the load can be lost. In the event of an accident, persons may be injured, killed or objects damaged.
 Always fit the wheel stops so that the nose of the wheel stop lock points towards the wheels of the loaded vehicle.

How do I use the wheel stops?



Locking wheel stopper secured

1. Nose for wheel stopper lock
2. Wheel stop lock
3. Wheel stopper

To attach the wheel stoppers, turn the lock by 90°. Now you can hook the nose of the wheel stopper lock into the hole embossing. Make sure that the nose points towards the wheel of the loaded vehicle. Turn the lock back 90°. This secures the wheel stop properly.

The wheel stop is spread between the left and right perforated railings with a spring. Insert the long, unpadded end of the wheel stop into one of the holes in the perforated railing. Press the wheel stop against the railing until you have compressed the spring so much that you can thread the wheel stop into the opposite hole of the other railing.

Property damage!



Caution!

Cleaning with a high pressure cleaner. Too little clearance, too high pressure or too high temperature can damage the wheel stop.
 Dismantle the wheel stop when cleaning the trailer with the pressure washer.

Do not use any cleaning agents that are abrasive, contain acids or lye, as these can destroy the surface coating. After driving on roads where salt has been spread or after transporting fertilisers or other acidic or saline substances, clean the trailer thoroughly with a high pressure cleaner.
 Clean the parts of this accessory with a normal garden hose and a clean cloth or sponge.

11.3 Wheel shock absorber

Product description

The wheel shock absorbers are for better damping of impacts during driving. The wheel shock absorbers may only be fitted by a specialist workshop. After installation of the wheel shock absorbers, acceptance by the technical service is mandatory. Otherwise the driving licence expires.

Assembly of the wheel shock absorbers

Have the installation carried out by a professional.

Danger to life!



Danger!

Driving with loose fastening screws. The fastening screws loosen while driving and the wheel shock absorbers fall off. The falling off wheel shock absorbers can lead to injuries or even death.

Check the fastening screws for correct seating.

What changes in care and maintenance?

Check the fastening of the wheel shock absorbers every 6 months or every 5000 km and retighten the fastening bolts if necessary.

Property damage!



Caution!

Cleaning with a high pressure cleaner. Too little clearance, too high pressure or too high temperature can damage the trailer. Keep the specified values.

When cleaning the trailer with a high-pressure cleaner, please note that it may be operated with a max. pressure of 50 bar. Make sure that the water temperature does not exceed a maximum of 80°. Maintain a minimum distance of 70 cm.

Do not use any cleaning agents that are abrasive, contain acids or lye, as these can destroy the surface coating. After driving on roads where salt has been gritted, carefully clean the trailer including the wheel shock absorbers with a high-pressure cleaner. Salts can otherwise attack the surface coating of the parts and destroy the material.

11.4 Side walls

Product description

The drop sides are used to raise the loading area. They consist of corner stanchion pockets, corner stanchions, dropsides hinges and dropside walls. This increases the load volume.

Intended use

The drop sides are designed exclusively for Humbaur GmbH trailers and are therefore only to be used with these. They are adapted to the dimensions of the trailer and can only be used with a trailer of the appropriate dimensions

Use contrary to intended use

Using the drop sides with trailers other than Humbaur GmbH trailers is considered improper use. Modifications to the drop sides are not permitted.

General safety instructions!

Risk of life!



Danger!

Driving with the drop sides open but not removed. The drop sides can be flung away together with the stanchions and hit people. This can lead to injuries and even death. Close the drop sides or remove the drop sides together with the inserted corner stanchions for the journey.

Risk of life!



Danger!

Driving without drop sides, but with corner stanchions inserted. The corner stanchions can be thrown away and hit people. This can lead to injuries or even death. Remove the corner stanchions for the journey when the drop sides are dismantled.

Risk of injury!



Entering the side walls.
The person can slip away, fall and injure themselves.
Do not step on the side walls.

Caution!

Risk of injury!



The drop sides are not secured with a safety cotter pin.
When opening the drop sides, they can detach uncontrollably from the drop side hinge and fall down. The operator can injure himself.
Secure each drop side with a drop side hinge.

Caution!

Property damage!

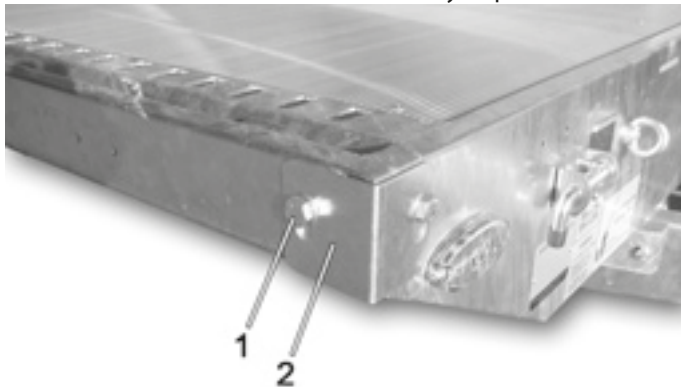


Öffnen der Grundbordwand bei montiertem Bordwandaufsatz.
This will damage the base shelf and/or the top shelf.
To open the base drop side, first remove the respective drop side attachment.

Caution!

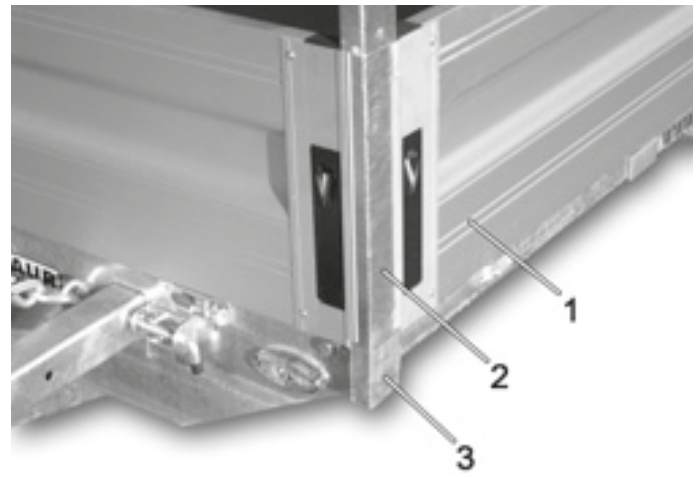
Assembly of the side walls

Have the initial installation carried out by a specialist.



Corner cover

1. Screw connection corner cover
2. Corner cover



Corner stanchion side wall

1. Side wall
2. Corner stanchion
3. Corner stanchion support

To attach the drop sides, the corner panels must be dismantled and replaced by the corner stanchion bracket. Screw the drop side hinges to the holes already provided for them on the outer frame profile. Attach the drop side hinges so that the drop side is pushed onto the drop side hinges from the right.
Insert the corner stanchions into the corner stanchion holders. Slide the drop sides onto the drop side hinges and secure each drop side with a safety cotter pin. Afterwards, the side walls can be closed.

What changes in care and maintenance?

Clean the drop sides if they are dirty. Maintain and clean the drop sides like other aluminium parts of the trailer.

Property damage!



When cleaning with a high pressure cleaner.
Too little clearance, too high pressure or too high temperature can damage the trailer.
Keep to the specified values.

Caution!

When cleaning the trailer with a high-pressure cleaner, please note that it may be operated with a max. pressure of 50 bar. Make sure that the water temperature does not exceed a maximum of 80° C. Maintain a minimum distance of 70 cm.
Do not use any cleaning agents that are abrasive, contain acids or lye, as these can destroy the surface coating.
After driving on roads where salt has been spread or after transporting fertilisers or other acidic or saline substances, clean the trailer thoroughly with a high pressure cleaner. Acids, salts and certain chemicals can otherwise attack the surface coating of the parts and destroy the effect of the coating.

Aluminium parts

To remove heavy soiling and maintain the aluminium shine, use the original Humbaur aluminium and tarpaulin cleaner or equivalent cleaning agents.

11.5 Side wall attachment

Product description

The dropside extension is an increase in height of the actual dropside. It consists of additional drop sides that are mounted on the basic drop sides. This increases the cargo volume. The top drop sides cannot be folded down and must be dismantled in order to fold down the base drop side.

Intended use

The drop side attachment is designed exclusively for Humbaur GmbH trailers and can therefore only be used with them. They are adapted to the dimensions of the trailer and can only be used with a trailer of the matching dimensions.

Use contrary to intended use

The use of the dropside attachment with trailers other than Humbaur GmbH trailers is considered improper use. Modifications to the dropside attachment are not permitted.

General safety instructions!

Risk of life!



Danger!

Driving with the drop sides open but not removed.
The drop sides can be flung away together with the stanchions and hit people. This can lead to injuries and even death. Close the drop sides before driving off.

Risk of life!



Danger

The add-on corner pieces are not screwed to the standard corner profiles. During the journey, the top boards and parts of the load can be lost. This can cause accidents with fatal consequences.

Screw the attachment corner pieces to the standard corner profiles.

Property damage!

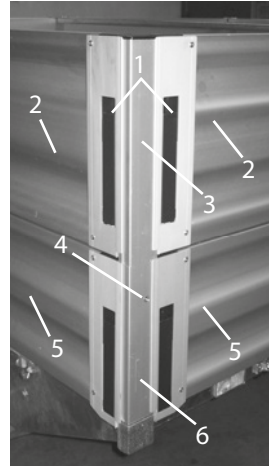


Opening the base drop side with the drop side attachment mounted. This will damage the base shelf and/or the top shelf.
To open the base drop side, first remove the respective drop side attachment.

Caution!

Assembly of the dropside attachment

Have the initial installation carried out by a specialist



Side wall attachment

1. Recessed dropside fasteners
2. Top panels
3. Top corner stanchion
4. Screw connection
5. Base board wall
6. Basic corner stanchion

Remove the lamella plugs from the basic corner stanchions. To attach the extension boards, drill holes 7 mm in the centre of all standard corner profiles on the sides of the trailer 21 mm below the top edge. Insert the top extensions into the insertion opening from which you previously removed the slat plugs. Screw the top corner pieces to the base corner pieces. Hold the extension sideboards onto the base sideboards with the sideboard locks open. Make sure that the lugs on the lower edge of the extension sideboards point inwards and the recessed dropside locks point outwards. Close the drop side locks.

The disassembly of the top panels works in reverse order. To be able to open a basic drop side, you must first remove the respective top drop side.

What changes in care and maintenance?

Clean the drop side attachment when it is dirty. Maintain and clean the drop side attachment like other aluminium parts of the trailer.

Property damage!



When cleaning with a high pressure cleaner.
Too little clearance, too high pressure or too high temperature can damage the trailer.
Keep to the specified values.

Caution!

When cleaning the trailer with a high-pressure cleaner, please note that it may be operated with a max. pressure of 50 bar. Make sure that the water temperature does not exceed a maximum of 80° C. Maintain a minimum distance of 70 cm. Do not use any cleaning agents that are abrasive, contain acids or lye, as these can destroy the surface coating. After driving on roads where salt has been spread or after transporting fertilisers or other acidic or saline substances, clean the trailer thoroughly with a high pressure cleaner. Acids, salts and certain chemicals can otherwise attack the surface coating of the parts and destroy the effect of the coating.

Aluminium parts

To remove heavy soiling and maintain the aluminium shine, use the original Humbaur aluminium and tarpaulin cleaner or equivalent cleaning agents.

11.6 Tarpaulin and bow

Product description

The tarpaulin with frame is a body with tarpaulin and can only be fitted to the UNIVERSAL vehicle transporters in combination with drop sides.

The hoop frame is inserted into the corner stanchions of the drop sides of the trailer and consists of a metal frame and wooden crossbars as additional cross bracing. The tarpaulin is pulled over it and connected to flaps at the corners with a plastic rope. At the bottom, the tarpaulin is attached to the side wall of the trailer with staples.

Intended use

The tarpaulin with the hoop frame is designed for Humbaur GmbH trailers.

Use contrary to intended use

The tarpaulin with the hoop frame is not suitable for use with trailers or equipment which are not listed in the intended use.

General safety instructions

Danger to life!



Danger!

Driving with the tarpaulin not completely closed. Through the opening, wind can blow into the trailer and cause it to lurch. The airstream can also cause the tarpaulin to come loose and fly through the air. Both can lead to accidents with fatal injuries. Only drive with a closed tarpaulin.

Danger to life!



Danger!

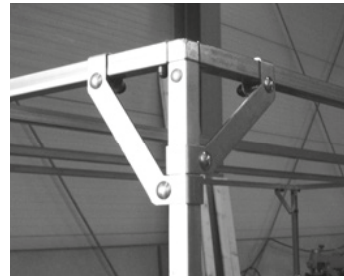
Driving without tarpaulin. Parts of the frame are lost during the journey. These can lead to injuries and even death. Never drive without a tarpaulin.

Risk of life!



Danger!

Ice, snow and water loads on the trailer's tarpaulin. Ice, snow and water loads can damage the trailer's tarpaulin or be thrown onto the road. In the event of accidents resulting from this, people can be injured, killed or property damaged. Remove ice, snow and water loads from the trailer's tarpaulin regardless of whether the trailer is in use or not.



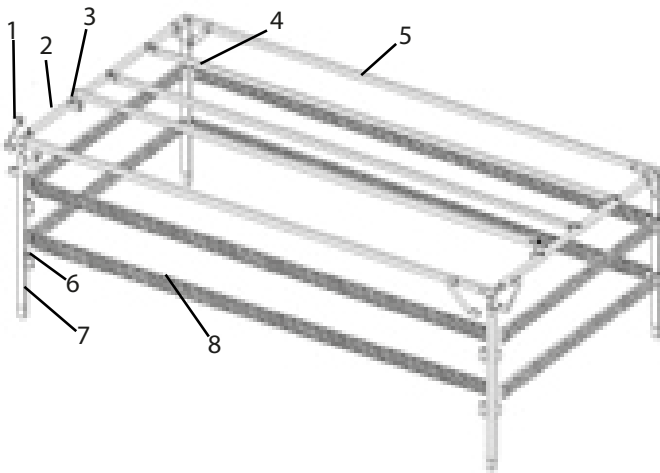
Diagonal struts

For each corner there is a small and a large diagonal brace. Pin the diagonal braces onto the corner. Screw the diagonal braces together. Place the other side members in the holders provided. Secure the side members to the brackets with cable ties. The frame is now ready. Insert the hoops into the hoop pockets.

From a body length of 5.10 m, the bumper frame has centre posts. On trailers with split drop sides, these centre posts are inserted into the mast stanchions. On trailers with a continuous dropside, the centre post is hooked into the V lashing rail.

How do I use the tarpaulin with the hoop frame?

Assembling the sprinkler frame



Frame

1. Diagonal strut
2. Cross beam
3. Tab for side member
4. Side member inside
5. Side member outside
6. Tab for bow
7. Corner post
8. Bow

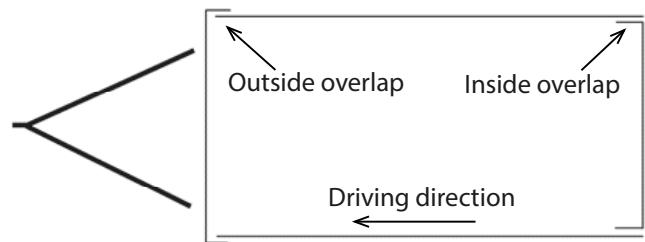
Assembling the frame is easier if you work in pairs. Remove the lamella plugs from the standard covers. Insert the corner posts into the corner stanchions so that the spray pockets are above the drop sides. Now put the upper outer longitudinal members and cross members together. Screw them together. Insert the resulting frame into the corner posts at the top. Now mount the diagonal braces.

Dismantle bending frame

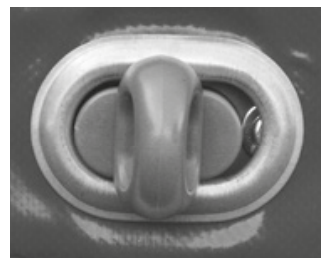
Remove the batten braces by unhooking them. Open the cable ties with a knife. You will need new cable ties to reassemble. Remove the side members. Unscrew and remove the diagonal braces. Pull the top frame out of the corner bars. Pull the longitudinal and cross members apart. Pull the corner post out of the corner stanchions. Insert the slat plugs into the corner stanchions.

Closing the tarpaulin

Pull the tarpaulin over the frame. Fold down the tarpaulin completely. Make sure that the flaps at the corners of the tarpaulin are on the outside.

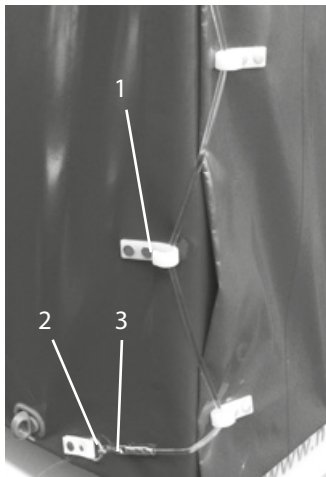


Tarpaulin pulled up correctly



Closed cramp

Put the holes in the tarpaulin over the staples. Pull on them and turn them 90°. Close all staples around the trailer. Now close all corners.



Corner closed

1. Tabs
2. Carabiner hook
3. Eyelets

To do this, place the rope around the lugs from top to bottom, always alternating sideways. When you reach the bottom, hook the carabiner into the eyelet at the bottom. Do the same with the other corners. When all corners are closed, the trailer is closed.

Opening the tarpaulin

Open the snap hook at the corners and unhook it from the eyelet. Detach the rope from the tabs. Do the same with the other corners. Open all the staples on one side. Pull the tarpaulin down from the staples. The tarpaulin on one side is now open. To open the other pages, proceed in the same way.

Driving with a trailer with tarpaulin and hoop body

When driving with the body, remember that a high body makes the trailer more susceptible to wind. React accordingly with your driving behaviour. Especially on bridges or when driving out of the slipstream, driving stability is impaired. Only drive with the tarpaulin closed, otherwise parts of the superstructure may be lost during the journey. This can cause accidents in which people are injured, killed or property damaged.

What changes in care and maintenance?

Danger to life!



Danger!

When cleaning with a scouring agent or an acid- or alkali-based cleaning agent. Cleaning with such cleaning agents can damage the tarpaulin. This can cause it to tear while driving. This makes the tarpaulin open. The wind can blow into the trailer and cause it to lurch. The wind can blow into the trailer and cause it to lurch. Both can lead to accidents with injuries resulting in death. Only use cleaning agents suitable for tarpaulins.

Danger to life!



Danger!

Cleaning with a high pressure cleaner. The tarpaulin is damaged by water pressure. This can cause it to tear while driving. This makes the tarpaulin open. The wind can blow into the trailer and cause it to lurch. The airstream can also cause the tarpaulin to come loose and fly through the air. Both can lead to accidents with injuries resulting in death. Do not clean the tarpaulin with a high-pressure cleaner.

Do not use abrasive, acid-containing or lye-containing cleaning agents, as these can destroy the material. It then becomes porous and tears more quickly. After driving on roads where salt has been spread, or after transporting fertilisers or other acidic or saline substances, carefully clean the trailer, including the tarpaulin. Acids, salts and certain chemicals can otherwise attack the material. Use a normal garden hose and a clean cloth or sponge for cleaning.

11.7 H-Frame

What changes in care and maintenance?

Product description



UNIVERSAL with H-Frame

The H-frame is a rung frame for the front side of the trailer. It is for leaning against and tying down large loads.

Intended use

The H-frame may only be used with a trailer from Humbaur GmbH.

Use contrary to intended use

The following shall be deemed to be contrary to the provisions: Using the H-frame with trailers from other manufacturers. Using an H-frame for other purposes not related to a trailer. Modify the H-frame. Climbing on the H-frame.

How do I use the H-Frame?

To attach the H-frame, remove the slat plugs from the front corner stanchions. You can then insert the H-frame into the corner stanchions of the end wall.

Property damage!



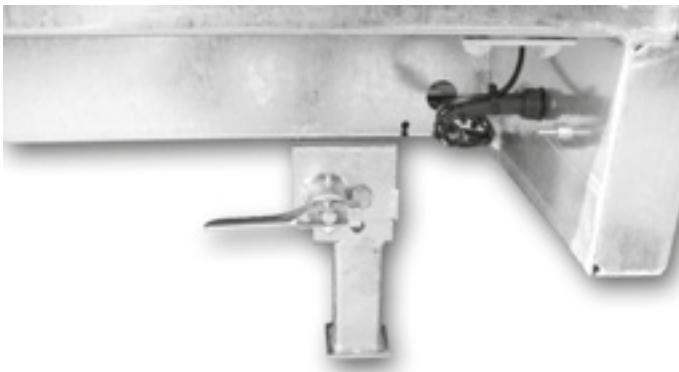
Caution!

When cleaning with a high pressure cleaner. Too little clearance, too high pressure or too high temperature can damage the trailer. Keep to the specified values.

When cleaning the trailer with a high pressure cleaner, please note that it may be operated with a max. pressure of 50 bar. Make sure that the water temperature does not exceed a maximum of 80° C. Keep a minimum distance of 70 cm. Do not use any cleaning agents that are abrasive, contain acids or lye, as these can destroy the surface coating. After driving on roads where salt has been spread or after transporting fertilisers or other acidic or salty substances, carefully clean the trailer including the H-frame with a high pressure cleaner. Acids, salts and certain chemicals can otherwise attack the surface coating of the parts and destroy the material.

11.8 Support foot

Product description



Support foot

The support feet are located at the rear of the vehicle frame. These are used to support the UNIVERSAL trailer for loading and unloading. The support feet are fitted as standard on UNIVERSAL 3500 vehicles.

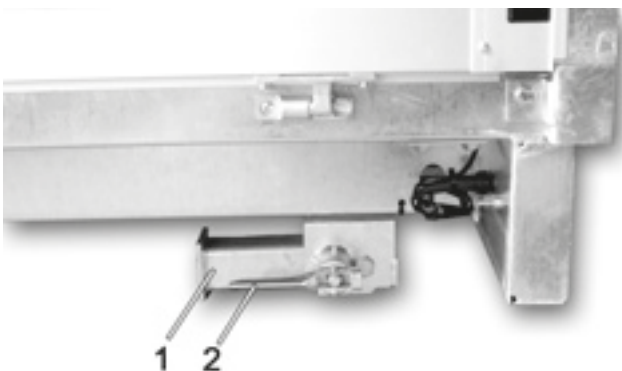
Intended use

The support feet may only be used with the UNIVERSAL vehicle transporter from Humbaur GmbH. These are used to support the trailer for the loading and unloading process.

Use contrary to intended use

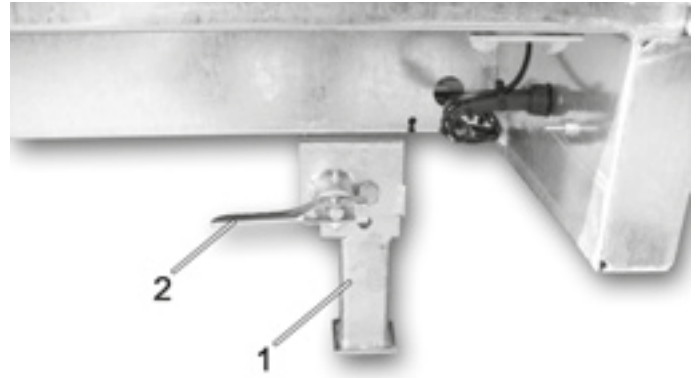
The use of the stabilisers with trailers other than Humbaur GmbH trailers is considered improper use. Use of the support feet for purposes other than those specified in the intended use.

How do I use the support foot?



Support foot in driving position

1. Support foot
2. Locking lever



Support foot in support position

1. Support foot
2. Locking lever

To fold down the support legs, open the locking levers on the two supports at the rear until the support legs fold down automatically. Release the lever again. Close the locking levers. When the support feet are in the correct position, the levers lock automatically. To fold up in driving position, proceed in reverse order. Make sure that the locking levers are engaged.

What changes in care and maintenance?

Property damage!



When cleaning with a high pressure cleaner. Too little clearance, too high pressure or too high temperature can damage the trailer. Keep to the specified values.

Caution!

When cleaning the trailer with a high pressure cleaner, please note that it may be operated with a max. pressure of 50 bar. Make sure that the water temperature does not exceed a maximum of 80° C. Maintain a minimum distance of 70 cm. Do not use any abrasive, acid-containing or lye-containing cleaning agents, as these can destroy the surface coating. After driving on roads where salt has been spread or after transporting fertilisers or other acidic or salty substances, carefully clean the trailer including the support legs with a high pressure cleaner. Acids, salts and certain chemicals can otherwise attack the surface coating of the parts and destroy the material. Lubricate the support feet every 6 months.

11.9 Toolbox

Product description



Toolbox

The tool box is mounted under the loading platform and is used to store small parts, e.g. tools. The toolbox can be locked via a lock in the handle.

Intended use

The toolbox is intended for transporting tools. The toolbox may be filled with a maximum of 25 kg.

Use contrary to the intended use

The toolbox must not be filled above the maximum load of 25 kg.

General safety instructions

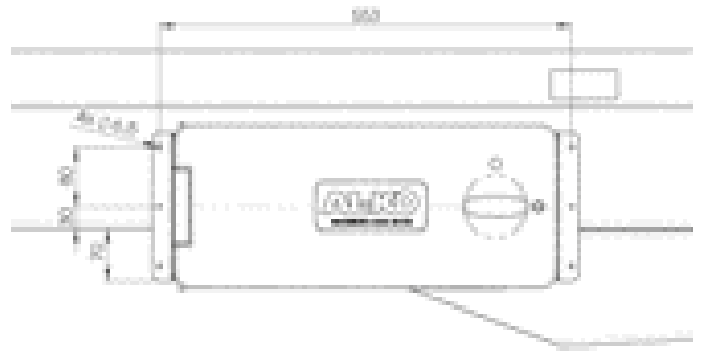


Caution!

Risk of injury!

Opening the toolbox. Objects that were transported in the toolbox have slipped due to the journey. When the flap is opened, they fall out and injure the operator. Open the toolbox carefully.

How do I use the toolbox?



Installation dimensions tool box

Have the initial installation carried out by a specialist workshop.

Attach the toolbox to the chassis of the UNIVERSAL vehicle transporter according to the drawing Installation dimensions toolbox. Screw the toolbox to the chassis of the vehicle using the M8x16 screws provided. To open the toolbox, pull off the dirt cap on the handle and unlock the toolbox by the handle. Open the toolbox by turning the handle horizontally. Close the toolbox by turning the handle to the vertical position. Lock the toolbox and protect the lock from contamination with the dirt cap.

What changes in care and maintenance?

Property damage!



Caution!

Cleaning with a high pressure cleaner. The toolbox is made of plastic and is therefore not robust enough to be blasted directly with the high pressure cleaner. Never clean the toolbox with a high pressure cleaner.

Clean the toolbox with a garden hose and a clean cloth or sponge.

Do not use any cleaning agents that are abrasive, contain acids or lye, as these can destroy the surface coating. After driving on roads where salt has been spread, carefully clean the trailer including the tool box.

12. How do I dispose of the trailer or parts of the trailer?

You must always dispose of the trailer or parts of the trailer properly. Always take the trailer or parts of the trailer to the car recycling centre. The specialist staff of the car recycling company will dispose of them properly there. The trailer or parts of the trailer must be disposed of in accordance with the laws currently in force at the time of disposal.

13. What do I have to do in case of malfunctions?

Malfunction	Possible errors	Correct the error
Braking the trailer when reversing.	The handbrake was not released.	Release the handbrake.
	The reversing lock locks due to reversing too fast.	Drive a little forwards and then slowly backwards.
	The brake system is not lubricated properly.	Regrease all lubrication points according to the lubrication schedule.
	The brake system is set too tight.	Go to a specialist workshop.
The handbrake lever can no longer be moved.	The lever was not lubricated or not sufficiently lubricated.	Lubricate the lever and try to move it again and again.
	The lever is frozen.	Defrost the brake
The trailer is braked constantly.	The brake system is not lubricated or not lubricated properly.	Lubricate the system.
	The brake system has not been properly maintained.	Go to a workshop and have the brake system serviced.
	The reversing lock has not jumped back again.	Go to a workshop.
	The handbrake was not released.	Release the handbrake.
The trailer does not brake or brakes poorly.	The brake system is adjusted too loosely.	Have the brake system readjusted in the workshop.
	The brake linkage has seized.	Disconnect the brake linkage.
	The brake is worn out.	Go to a workshop.
The trailer brakes already when the accelerator is released.	The shock absorber is defective.	Go to a workshop.
Handbrake effect is too weak.	The gas spring is defective.	Go to a workshop.
The clutch does not engage.	The coupling shell or the head are dirty.	Clean the parts.
	The clutch was not sufficiently lubricated.	Lubricate the parts.
	The ball or the shell is worn out. Pay attention to the wear indicator.	Go to a workshop.
The trailer has a right or left twist when driving.	The charge is not evenly distributed.	Distribute the load evenly.
	The tyre pressure is uneven.	Top up with air or deflate until the tyre pressure is even and in accordance with regulations.
	The load is not adequately secured and is slowly shifting.	Secure the cargo sufficiently.
	The size of the towing vehicle is not suitable for a trailer of this size and weight.	Use the trailer with another towing vehicle.
	The brake of a wheel is incorrectly adjusted and brakes.	Go to a workshop.
The trailer quickly starts to lurch during the journey.	The tyre pressure is too high.	Deflate the tyres until they have a normal tyre pressure.
	The speed driven is too high for the load and the road conditions.	Drive slower.
	The load centre of gravity is too far back.	Move the centre of gravity of the load further forward.

Malfunction	Possible errors	Correct the error
The trailer rattles while driving.	The cargo is not secured.	Secure the cargo.
	Cables or hoses become loose.	Drive to the next workshop.
	The jockey wheel was not cranked up and comes loose.	Crank up the jockey wheel and have it properly reattached at a workshop.
	The handbrake is still engaged.	Release the handbrake.
The trailer squeaks while driving.	There was insufficient lubrication at the lubrication points.	Relubricate all lubrication points.
	A wheel bearing is defective.	Go to a workshop.
	The handbrake is still engaged.	Release the handbrake.
The trailer smokes while driving.	The brake locks one wheel because the reverse drive automatic has jumped on and does not jump back again.	Go to a workshop.
The trailer is not in a horizontal position after hitching.	The charge is distributed unevenly.	Ensure even distribution.
	The coupling height is not set correctly.	Readjust the coupling height.
	The coupling height of the towing vehicle does not match the coupling height of the trailer.	Get another towing vehicle with a suitable coupling height.
	The support wheel is still cranked down.	Crank up the support wheel.

14. Service and warranty conditions

The warranty includes:

Defects occurring during proper and prescribed use of the trailer, which are due to construction or material defects. Repairs carried out during the warranty period do not extend it.

The dealer is responsible for the warranty as a contractual partner.

Requirements:

The manufacturer's maintenance instructions and regulations, which are listed in this operating manual, must have been observed.

The use of original spare parts is required for repairs. Repairs must be carried out by a specialist workshop.

Defects must not be traceable to:

Failure to comply with the technical and legal regulations listed in these operating instructions.
Improper use of the trailer or lack of experience of the user.
Unauthorised modifications to the trailer or attachments not approved by Humbaur GmbH will invalidate the warranty.
Failure to comply with the respective legal requirements.

No defects are:

Each trailer is a handcrafted product. Despite the greatest care, slight, superficial scratches may occur during assembly, which have no influence on the intended use.
Production-related stress cracks in the surface (hairline cracks) cannot be avoided. These hairline cracks have no influence on the stability or use of the trailers.
Gap between dropside and loading bridge.
Furthermore, polyester components are not 100% colourfast. Here, too, fading can occur due to UV and weather influences.



It should also be noted that rubber parts generally age due to UV influences; cracking and bleaching of the surface may also be possible. Parts coated with cathodic dip painting (CDP) are not colourfast. They can fade due to UV radiation.

Galvanised parts are normally not shiny, but lose their shine after a short time. This is not a defect, but desirable, as only oxidation ensures full protection against rusting of the metal. Wood is a natural material. Therefore, it is subject to natural, weather-dependent expansion or shrinkage, which can lead to distortions, despite the various types of processing and coating. Natural wood grains and unevenness are normal for this natural material and may show in the surface. Fading is possible due to UV radiation and weathering. The thickness of the timber components used must not exceed a manufacturing tolerance. Deviations within the tolerance range are not subject to complaint. As the trailers are usually not insulated, condensation can form under tarpaulin and polyester covers during temperature fluctuations. In this case, ensure sufficient ventilation to avoid mould growth. Also, the trailers are not 100% waterproof. Water ingress at the doors, flaps and windows is possible even with the use of rubber seals and the most careful workmanship.

The warranty expires:

In case of non-compliance with the operating, maintenance and inspection instructions. In the event of technical modifications to the trailer. For independent attachments and superstructures that have not been approved by Humbaур. When overloading the trailer and improper use. When using non-original Humbaур spare parts. If the safety instructions on the trailer are not observed. In case of non-compliance with the service intervals, also of the parts mounted by Humbaур such as axle, brake, overrun device, hydraulic systems, etc. In case of incorrect surface treatment of the materials used. In case of further use of the trailer, although defects are already known and reported and the use has been prohibited by the manufacturer until repair.

repair is impossible, or more costly or only possible at considerable additional expense and the use of the trailer is reduced. Expenses for ongoing maintenance. Costs that are due to normal wear and tear or also because the trailer has not been used for a long time. Faults resulting from improper handling of the trailer. Defects resulting from the use of non-original Humbaур spare parts. Defects that are the result of a repair that was not carried out by a specialist workshop. Defects that can be traced back to structural modifications or installations on the vehicle. The manufacturer reserves the right to make design changes.

Safety notice! The trailers may only be used in express compliance with all road traffic law, trade association and load securing regulations. No liability is accepted for errors and misprints. We reserve the right to make technical changes. Printed in Germany.

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