

Table of Contents

I. Fixed bodies, spatial units

1. INTRODUCTION	4
2. USE OF THE VEHICLE	6
2.1. Vehicle identification	6
2.2. Body identification	7
3. SAFETY RULES	8
4. COUPLING AND UNCOUPLING THE TRAILER	11
4.1. Coupling the trailer	11
4.2. Uncoupling the trailer	13
5. BRAKE SYSTEM	13
5.1. Parking brake	16
5.2. Parking and manoeuvring valve	17
6. TRAILER PNEUMATIC SUSPENSION SYSTEM	18
6.1. Levelling the trailer	19
6.2. Raising the axle	20
6.3. Wheel replacement	21
7. SUPPORT LEGS	22

7.1. Unhitching the trailer (lowering the leg)	22
7.2. Coupling the trailer (lifting the leg)	22
8. DRAWBAR	23
8.1. Centre-axle trailer	23
8.2. Trailer with a turntable	24
9. BUMPER	25
9.1. Vehicle ready to be coupled to a trailer	25
9.2. Vehicle without trailer	25
10. VEHICLE BODY	26
10.1. Side tarpaulin - box body	26
10.2. Side tarpaulin - curtain body	27
10.3. Sliding roof	28
10.4. Lifting sliding roof	29
10.5. Door	31
10.6. Sideboard	32
10.7. Stanchions - curtain body	33
10.8. Stanchions - box body	34
10.9. Extending the rear portal	35
10.10. Van body	36
10.11. Refrigerated body	36

11. OPERATION AND MAINTENANCE	37
11.1. Coupling	38
11.2. Drawbar (centre-axle trailer with turntable)	38
11.3. Brake system / suspension system	39
11.4. Electrical installation	40
11.5. Tarpaulin	40
11.6. Sliding roof / lifting sliding roof	40
11.7. Support legs	41
11.8. Van/refrigerated body	41
11.9. Cleaning instructions for printed tarpaulin	42
II. BDF Replacement System	
Placing a BDF container on a trailer or a car	45
Removing the container	54
Adjustment of the support legs of the BDF container	55
HVC container system with adjustable standoff height	57
Removing fender caps	59
III. Forklift truck transport system	
Forklift truck transport system	61
Forklift truck transport system	63
I. Instructions for mounting the forklift on the vehicle overhang	64
II. Mounting the forklift inside the body	70

1. INTRODUCTION

This publication is intended to help you learn about the range of Wecon products.

This manual explains how to use the devices applied in Wecon vehicles.

We present the main technical components of the vehicle. For details about this components, refer to the publications available at the Authorised Service stations.

We would like to remind you of some driving rules to remember, especially in certain circumstances. Here's how you can keep your Wecon fully operational for the longest possible time:

- carefully follow the instructions in the warranty booklet,
- be sure to carry out the vehicle maintenance in accordance with the maintenance schedule in this publication,
- it is recommended that only original factory parts are used to ensure that the vehicle's components are operating without any damage.

Following these recommendations will ensure continued vehicle performance and thus provide a lot of enjoyment and satisfaction with the use of the vehicle.

The manual contains a description of devices and equipment related to the range of vehicles manufactured by Wesob, therefore not all descriptions will apply to your vehicle.

If in any doubt, consult your Authorised Service Centre or the manufacturer directly.

Wesob recommends using only original factory replacement parts. When ordering spare parts, please provide the following details:

- Vehicle VIN / Body factory no
- part number according to spare parts catalogue

Please read the manual carefully and strictly follow its recommendations. In order to emphasize information of particular importance, it is indicated in the text by:

„Warning“

Read the information that follows these signals very carefully.

Wesob reserves the right to make changes to technical specifications and design at any time without notice and without incurring any liability whatsoever.

Your vehicle may not comply with the standards and regulations of other countries. Before submitting your vehicle for registration in another country, check the relevant regulations and, if necessary, make the required changes.

2. USE OF THE VEHICLE

2.1. Vehicle identification

CENTRE-AXLE TRAILER; TRAILER WITH TURNTABLE

Each trailer has its own unique VIN. Located on the front right-hand side of the vehicle. In the form of engraved marks on the frame (Photo 1a), as well as a nameplate (Photo 1b).

Example of marking:

SY9PC2CP900WB1096

Mark 01-03 = manufacturer's identification code.

Mark 04-09 = vehicle specifying part.

Mark 10-17 = vehicle distinguishing part.



Photo 1a



Photo 1b

2.2. Body identification

Each body has a nameplate on the front right on the front wall (Photo 2).

wecon® GmbH			
Nutzfahrzeuge " Containertechnik			
An der Hansalinie 10 · 59387 Ascheberg · Tel. 02593 / 921 - 0			
Typ	AWZ 780 NVSGA	Rok Prod. /Bj./	2014
Nr fabryczny /Aufbau Nr. /	33241405W	Masa wł. /Tara/	
Nr homologacji /Zert./		Dop.masa całkowita /zul.GG/	
Właściciel /Eigentümer/			
Wesob Sp. z o.o. Technika Kontenerowa - Pojazdy Użytkowe 43-246 Strumień, ul. Łondzina 65, tel.+48 33/ 857 14 93			

Photo 2

3. SAFETY RULES

1. Do not drive with an overloaded trailer or car body.
2. The load must be transported on pallets and distributed in such a way that the axle load meets the road traffic conditions and the technical conditions of the vehicle.
3. Each load must be transported in such a way that it cannot move in any direction.
4. Do not drive with open doors, half-doors, body sides.
5. Do not drive with an unsecured canvas cover (tarpaulin).
6. Check that the safety wheel chocks are in place.
7. Do not drive with the ABS/EBS power cable not connected to the vehicle and trailer.
8. Check the operation of the light and brake system before departure.
9. Observe health and safety regulations, occupational medicine and road engineering regulations.
10. If necessary, remove snow, ice from the vehicle roof.
11. Load in containers must be transported in such a way that it cannot move in any direction.
12. The container must be secured in such a way that it cannot move in any direction.
13. When connecting the vehicle to the trailer, the driver's assistant must not be between the vehicles to be coupled. That person should be in a position where he/she can see the vehicle in motion, the moment of coupling and the driver.
14. It is forbidden to transport liquid materials.
15. Unloading on uneven or soft ground is prohibited.

16. The maximum tilt angle of the drawbar from the vertical plane of 20° must not be exceeded when travelling uphill or downhill (Photo 3).
17. The tilt angle of the vehicle in relation to the trailer may be max. 4° (Photo 4). There is a risk of damage to vehicle bodies if the limit angle is exceeded.
18. The trailer's turning angle in relation to the car is 85° (Photo 5). Exceeding the limit angle may result in damage to the drawbar or vehicle body.
19. The side doors must be closed during unloading.



Photo 5



Photo 4

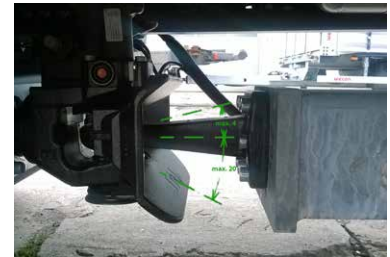


Photo 3

20. It is permitted to enter the floor of the vehicle by a lift truck with a maximum axle load of 5460 kg. Only and exclusively on bodies designed for this purpose [there is an illustration on the body indicating this, it is located on the rear door (Photo 6)].

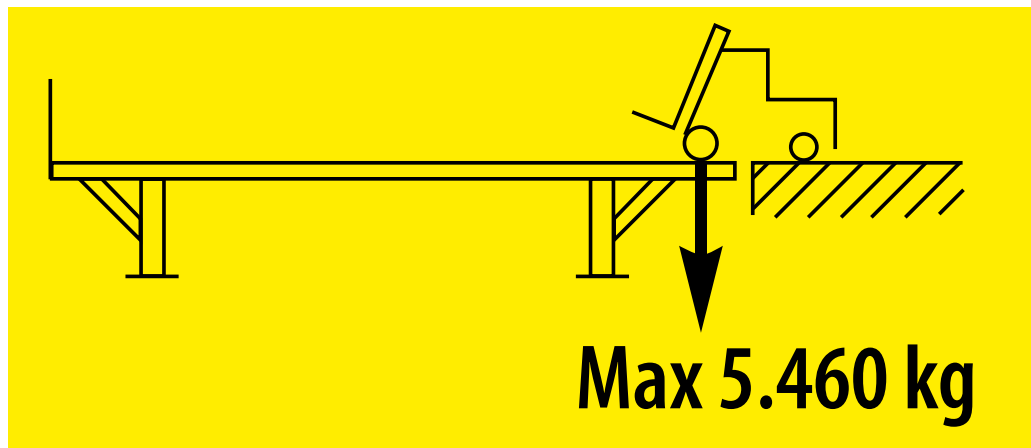


Photo 6

WARNING:

When loading and unloading a detached trailer, there is a risk of the vehicle tipping over, so these operations must be carried out with the vehicle hooked up.

4. COUPLING AND UNCOUPLING THE TRAILER

4.1. Coupling the trailer

- 1.Immobilize the trailer by applying the hand brake [red button (Photo 7)] and using wheel chocks (Photo 8).
- 2.When levelling the vehicle, adjust the height of the coupling according to the height of the drawbar.
- 3.Check that the mechanical closing of the coupling is in the correct position [the mechanism must be in the open position (Photo 9)].
- 4.Back up vehicle under trailer drawbar. The coupling closes automatically (Photo 10).
- 5.Connect the power cables (Photo 11), raise the parking stands, level the vehicle unit, remove the wheel chocks and release the hand brake.

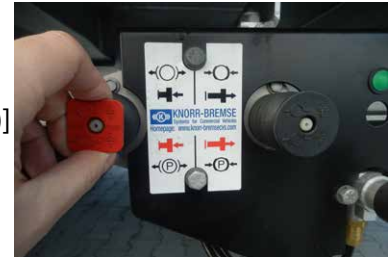


Photo 7



Photo 8



Photo 11



Photo 10



Photo 9

WARNING:

Nobody must be between the vehicles during coupling.

Do not start driving without checking that the coupling is correctly closed and secured (Photo 12). If this is not the case, repeat the operation. Before driving, check the operation of the brakes and lights, the correct protection of the rear beam and the levelling of the vehicle combination (Photo 13). Electrical connections should be made with the „ignition” off.



Photo 12



Photo 13

4.2. Uncoupling the trailer

1. Lower the supports (Photo 14), then level the vehicle to a point where the trailer supports are in contact with the ground (Photo 15).
2. Disconnect the power cables (Photo 16).
3. Unlock the coupling lever with the opening mechanism cable (Photo 17) and make sure that the coupling is in the „open” position (Photo 18).
4. Drive the vehicle away and the trailer will be unhitched.

WARNING:

Do not allow the trailer to “drop” when uncoupling. If the pin cannot be removed from the drawbar eye, reposition the vehicle and repeat the trailer unhitching procedure. Electrical connections must be disconnected with the „ignition” off.



Photo 14



Photo 15



Photo 18

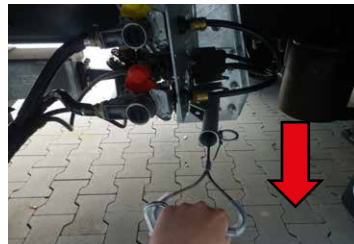


Photo 17



Photo 16

5. BRAKE SYSTEM

Our trailers can be equipped with one of two types of braking systems:

- ABS
- EBS

These systems improve the safety of the vehicle on the road by reducing the braking distance and by continuously monitoring the braking system.

In order to ensure maximum braking force and minimum brake lining wear, it is recommended that the vehicle and trailer be adapted to each other by a specialist service.

When connecting the brake lines between the vehicle and the trailer, first connect the control line „A“ [yellow] and then the supply line „B“ [red] (Photo (19)). When decoupling, the brake lines are disconnected in reverse order.



Photo 19

The ABS or EBS braking system is self-checked after the ignition is switched on. When the ABS or EBS indicator comes on while driving, there is an error in the system. The fault should be immediately rectified by an Authorised Service Station. However, even in the event of ABS failure – EBS, the braking system will continue to function (although without ABS – EBS without any immediate danger to driving safety). The above system can be checked using a diagnostic device that must be connected to the diagnostic socket.

5.1. Parking brake

When bleeding the cylinder, the force of the spring in the brake cylinder locks the driving wheels. To bleed air, pull the [red] parking brake button (Photo 20) located on the control panel. When the button is pressed, the brake cylinder is filled with compressed air and the wheel lock is released. **Each pneumatic system has a description of its operation in the form of illustrations on the valve console.**



Photo 21



Photo 20

In the event of a lack of pressure in the pneumatic system, the brakes may be unlocked as a result of re-aeration of the pneumatic system or mechanically by screwing a bolt located at each actuator into the rear part of the brake cylinder (Photo 21).

5.2. Parking and manoeuvring valve

Parking and manoeuvring valve (black button). This valve is used to unblock the trailer's brakes during service shunting (with no pneumatic conduit connections). To unlock the valve, push it in (Photo 22).

Each pneumatic system has a description of its operation in the form of illustrations on the valve console.



Photo 22

Do not change the manufacturer's settings for the braking systems.

For repair or inspection of the brakes, you will find the relevant information on the system data plate (Photo 23).

[illegible]

Photo 23

6. TRAILER PNEUMATIC SUSPENSION SYSTEM

6.1. Levelling the trailer

Levelling the trailer „for driving“ is done automatically using the levelling valve (Photo 24).

However, it is possible to manually control the levelling of the trailer when loading and unloading at the ramp.

Raising and lowering the body using the inflation and deflation of the cushions is carried out by means of the H-S valve, which is located on the left-hand side (Photo 25).

The platform levelling H-S valve is disabled when the lever is in the „Stop“ position. The platform is raised by releasing the lever and moving it into position. When the desired height is reached, return the lever to the „Stop“ position. Lowering is carried out in the same way by placing the lever in the „down“ position.

Each levelling valve has a description of its operation in the form of an illustration on the lever of the valve.



Photo 24

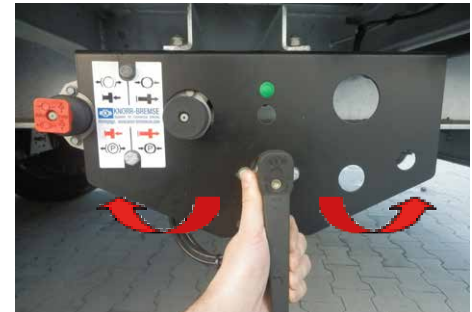


Photo 25

6.2. Raising the axle

The axle is raised and lowered automatically by the EBS system according to the factory data. In addition, the EBS system is powered by the BRAKE lights to protect it if the main power supply is lost (ABS function remains). This system has the option of starting assistance in accordance with Directive 97/20 EEC by raising the axle on a laden vehicle (but not more than 30% of the load or not more than 30 km/h). This function can be activated via the assistance switch on the vehicle, if fitted or via the assistance switch located on the valve panel (Photo 26).

WARNING: Check the position of the H-S valve (it should be in the „drive“ position) before each drive.



Photo 26

6.3. Wheel replacement

1. Block the wheels with the parking brake and chocks on the opposite side of the vehicle to the wheel being replaced.
2. Remove the nuts of the emergency spare wheel bolts (Photo 27), allowing it to be removed from the winch.
3. Loosen the wheel mounting nuts by approximately one turn.
4. Place a jack under the axle, positioning the jack base on a hard surface and lift until the wheel being replaced is a few centimetres above the ground.
5. Unscrew the wheel nuts and remove the wheel. It is recommended to place the nuts in such a place as to protect the threads from soiling, e.g. with earth.
6. Install the spare wheel on the hub and tighten the wheel nuts evenly in a crosswise pattern (Photo 28).
7. Lower the vehicle and remove the jack.
8. Using a torque wrench, tighten the wheel nuts evenly in a crosswise pattern. M18*1.5 320 Nm, M22*1.5 630-650 Nm.



Photo 27



Photo 28

9. Check the pressure of the replaced wheel.

Note: on newly mounted wheels, as well as after each wheel replacement, there is a possibility of loosening the nuts. Therefore, after driving 50 km, check the condition of the wheel nuts and tighten them with a torque wrench if necessary. Only use the correct wheel hardware. The pressure should only be checked with cold tyres.

7. Support legs

7.1. Unhitching the trailer (lowering the leg)

- Block the trailer wheels by actuating the parking brake and chock the wheels (Photo 7 and Photo 8).
- Remove/unlock the safety pin and lower the support (Photo 29 and Photo 30).
- Level the vehicle so that the trailer support leg rests on the ground.



Photo 29

7.2. Coupling the trailer (lifting the leg)

- After securing the coupling (Photo 31), lift the support and secure it with the pin (Photo 32).

WARNING: The vehicle may only be uncoupled from the trailer if the drawbar load is transferred to the trailer support.



Photo 30



Photo 32



Photo 31

8. Drawbar

8.1. Centre-axle trailer

On most trailers it is possible to adjust the drawbar length (adjustment every 50 mm).

- Unscrew the fixing screws (Photo 33 and Photo 34).
- Retract or extend the drawbar to the desired length.
- Tighten the bolts with the appropriate torque with a torque wrench. M16*2 237.4 Nm



Photo 33



Photo 34

Warning: For safety reasons, it is recommended to adjust the drawbar only at authorised workshops. When adjusting the drawbar length, observe the regulations on the total drawbar length. The maximum horizontal rotation angle of the trailer in relation to the vehicle is 85° (Photo 5). The maximum tilt angle of the drawbar from the vertical plane of 20° must not be exceeded when travelling uphill or downhill (Photo 3). Failure to comply with the above requirements can result in serious damage to the coupling and to the drawbar itself.

8.2. Trailer with a turntable

There are two types of drawbars:

- **Fixed (Photo (35)).**



Photo 35

- **Adjustable (Photo 36).**

- Unscrew the screws, extend or retract the drawbar in the mounting bracket.
- After determining the correct drawbar length, tighten the mounting bolts with the appropriate torque using a torque wrench.



Photo 36

9. Bumper

A movable bumper is used in the Wecon bodies.

9.1. Vehicle ready to be coupled to a trailer

- Unlock the bumper pin lever, raise the bumper and secure it by closing the bumper pin lever (Photo 37).
- Make sure that the hitch is in the "open" position (Photo 38).

9.2. Vehicle without trailer

- Unlock the pin lever, lower the bumper and secure it by closing the bumper pin lever (Photo 39).



Photo 37



Photo 39



Photo 38

10. VEHICLE BODY

10.1 Side tarpaulin - box body

1. Opening

- **Fixed non-sliding roof**

Unlock the tarpaulin by removing the hooks from the eyelets, pull out the customs cable, pull out the vertical safety straps (Photo 40). Place the sides of the tarpaulin over the roof on both sides of the body.

- **Sliding roof**

Unlock the tarpaulin by removing the hooks from the eyelets, pull out the customs cable, pull out the vertical safety straps. Release the rear protection, mo

2. Closing

- carry out the above operations in reverse order.

Warning: The fixing cables must be inserted through all the hooks. If the tarpaulin is not properly attached, it may become loose when driving and be damaged.



Photo 40



Photo 41

10.2. Side tarpaulin - curtain body

1. Opening the side tarpaulin

- release the tension lever by unlatching the vertical belt latches (Photo 42).
- by turning the crank on the curtain tension mechanism located in the lower part of the rear post, the curtain tension locking mechanism is released (Photo 43).
- lift the tension profile upwards by releasing it from the mechanism seat (Photo 44), the tarpaulin opens (Photo 45).

2. Closing the side tarpaulin

- closing the tarpaulin should be done in the reverse order. The tarpaulin tensioning mechanism is self-locking and does not require additional protection.



Photo 42



Photo 43



Photo 44



Photo 45

10.3. Sliding roofof

1. Opening the roof

- the opening is carried out from the rear to the front using a bar fitted on the rear door.
- open the rear door,
- lift the rear roof beam upwards (Photo 46),
- release the rear protection of the roof by pressing on the rear trolley cable (Photo 47),
- hang the roof slide bar on the outer strip (Photo 48) and open the roof. When the roof is fully opened, it will self-lock in the front protection.

2. Closing the roof

- unlock the roof by pulling the rear trolley cable (Photo 49).
- open the roof (the roof will automatically lock into the rear protection)

Warning: Driving with the roof open is prohibited. The roof cannot be moved by pulling on the safety cable

Note: Water and snow can accumulate on the roof tarpaulin. This may lead to its damage, therefore, in the event of the above situation, immediately remove the accumulated material.



Photo 46



Photo 47



Photo 48

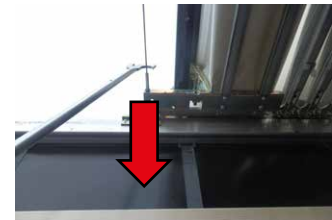


Photo 49

10.4. Lifting sliding roof

1. Raising the roof

- release the tension lever by unlatching the vertical belt latches (Photo 50).
- open rear, front passage door, if present (Photo 51).
- by turning the crank on the curtain tension mechanism located in the lower part of the rear post, the curtain tension locking mechanism is released (Photo 52).
- lift the rear tensioning profile upwards freeing it from the seat of the tensioning mechanism (Photo 53), detach the hook profile from the front post (Photo 57).
- secure the door with the side lock (Photo 54).
- the roof is lifted by turning the crank on the lifting mechanism located in the corner posts (Photo 55-59)



Photo 50



Photo 51



Photo 52



Photo 53



Photo 54



Photo 55



Photo 56



Photo 57



Photo 58

2. Lowering the roof

- carry out the above operations in reverse order. **Remember to unlock the door before lowering the roof.**

WARNING: The direction of raising or lowering of the roof is indicated by a sticker on the pole (Photo 59). It is forbidden to raise the roof above the maximum level marked on the roof lifting profiles (Photo 60 and Photo 61).



Photo 59



Photo 60



Photo 61

10.5. Door

1. Opening

- release the door locks by pressing the lock button and pulling the lever toward you (Photo 62).
- open the door by 270° blocking it against self-closing with a side safety device (Photo 63).

2. Closing

- to close the door again, carry out the above operations in reverse order.

Note: when opening the door, remember the order in which the door locks are opened - first open the internal lock, then the external one. Remember to fasten the straps that fasten the rear posts.



Photo 62



Photo 63

10.6. Sideboard

Hestal lock

1. Opening

- press the lever, then pull the latch handle toward you to open the sideboard (Photo 64) - the sideboard opens by 180°.

2. Closing

- carry out the above operations in reverse order.

Kinegrip lock

1. Opening

- pull the lock lever down by approx. 90°, the side will open (Photo 65)
 - the sideboard opens by 180°.

2. Closing

- carry out the above operations in reverse order.

Disassembly

- lift the sideboard and slide it backwards lengthwise to remove it from the hinges (Photo 66).



Photo 64



Photo 66



Photo 65

10.7. Stanchions - curtain body

1. Opening

- remove the rack planks (Photo 67).
- pull the post lever up [ADAICO (Photo 68)] / or down [FOCUS (Photo 69)], the latch will be released.
- pull the guide profile out of the pocket (Photo 70 and 71).
- move the post in either direction.

2. Closing

- carry out the above operations in reverse order.

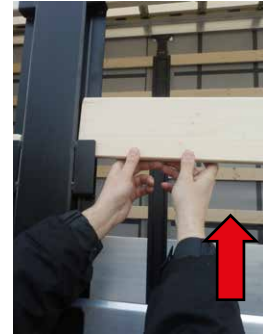


Photo 67



Photo 71



Photo 70



Photo 69



Photo 68

10.8. Stanchions - box body

1. Opening

- remove the rack planks (Photo 67).
- pull the post lever down, the bolt in the upper part of the post will be unlocked, the post will break slightly outwards at the pivot point (Photo 72)
- pull the lever all the way down and hold it there, the bolt in the anchor pocket will open (Photo 73)
- remove the lower section of the post
- pull the upper section of the pillar out of the pocket on the roof profile.

2. Closing

- the stanchions will be closed in reverse order.

WARNING: When closing the stanchion, do not hold your hands at the point where it is broken, as you may get your hand crushed.



Photo 73



Photo 72

10.9. Extending the rear portal

1. Extending

- Release the tension lever by unlatching the vertical belt latches (Photo 50).
- Release the tarpaulin “tensioning” lock by turning the crank of the tarpaulin tensioning mechanism located in the lower part of the rear pillar (Photo 52).
- Lift the tension profile upwards, releasing it from the seat of the “tension” mechanism - the tarpaulin opens (Photo 53).
- Open the rear door (Photo 51).
- Secure the door with the side lock (Photo 54).
- Release the cross straps that fasten the rear portal (Photo 74).
- The roof is lifted by turning the crank on the lifting mechanism located in the corner posts (Photo 55)
- Extend the portal with the use of gears located in the rear beam (Photo 75) [the portal will extend to a certain width, determined by a blockade].

2. Closing the rear portal

- The rear portal is closed in reverse order.

WARNING: Driving with an extended rear portal is forbidden. It is forbidden to raise the roof above the maximum level marked on the roof lifting profiles (see Photo 61).



Photo 74



Photo 75

10.10. Van body

The van-type body is manufactured from panels characterised by high strength, high-quality protective coating and low tare weight.

10.11. Refrigerated body

The body is made of glass fibre in multiple layers, guaranteeing high isothermal performance without thermal bridges and is completely impervious to vapour diffusion.

The outer surface of the board is covered with white gelcoat.

Refrigerated vehicles are tested for ATP certification – first after 6 years, and then after 3 years.

WARNING: Read the manufacturer's instructions for using the unit and the temperature recorder before use.



11. OPERATION AND MAINTENANCE

Remember to lubricate the following points on the body.

- coupler pin
- drawbar eye
- underrun protection beam locking mechanism
- door locks
- angle gears (for tensioning tarpaulin)
- rack gears (for lifting the roof)
- side door locks (holders)
- support legs (only with mechanism for this purpose)
- hinges of the internal passage door

11.1. Coupling

The coupling must be operated and maintained according to the manufacturer's instructions. Once a month or every 10,000 km, it should be checked for mechanical damage.

The coupling mechanism should be lubricated at each vehicle inspection, but at least every 2 months. Do not use high-pressure, steam-jet cleaners for cleaning.

11.2. Drawbar (centre-axle trailer with turntable)

The trailer drawbar should be checked for mechanical damage once a month or every 10,000 km.

Welding, bending, drilling or other operations not in accordance with the manufacturer's instructions are prohibited. If the drawbar is damaged, replace it with a new one.

After driving 1,000 or 2,000 km, then every 10,000 km, check the torque of the drawbar bolts with a torque wrench. If they become loose, tighten the bolts with the appropriate force.

The permissible abrasion of the drawbar eye opening and the method of its repair are specified in the manufacturer's instructions.

The steering bearings on the turntable trailer drawbar carriage are filled with special grease, which, in combination with the sealing rings, allows for extended maintenance intervals

11.3. Brake system / suspension system

- **Daily service**

- before connecting a vehicle to a trailer, check the air connections for cleanliness and possible damage.
- after connecting the sockets, check for leaks.
- after disconnecting the set, close the covers protecting the socket and plug of pneumatic conduits against soiling.
- drain water from the tank by pressing the mandrel in the drain valve; when it is dirty, unscrew the valve and clean it.

- **Semi-annual and annual service**

- mandatory technical inspection

The ABS/EBS braking system does not require any maintenance.

WARNING: During maintenance and cleaning of a vehicle with ABS / EBS system, disconnect its cable from the car. The towing vehicle must be equipped with a dryer and an oil separator. It is forbidden to lift the axle after it lowers automatically.

11.4. Electrical installation

- before hitching the car to the trailer, check the cleanliness of the connections and possible damage to electrical sockets and plugs.
- after disconnecting the set, close the covers protecting the socket and plug of electric installation against soiling.
- the electrical system does not have a fuse box, the system uses the fuses of the towing vehicle. All vehicles are equipped with a 24V lighting system. The trailer is connected to the tractor by cables 7 and 15 pin plugs. To prevent incorrect connection, plugs and sockets compliant with the applicable standards are used.

WARNING: It is required to maintain sockets and electrical plugs with technical petroleum jelly.

11.5. Tarpaulin

- check the technical condition of the tarpaulin, its fastening and connection to the body
- lubricate the tarpaulin tensioning gear (via the valve located at the bottom of the gear only)

11.6. Sliding roof / lifting sliding roof

- lubricate rack gears lifting the roof
- check the condition of the roof as well as the roof tarpaulin and its attachment points to roof structure
- keep the guide rails and the roof rollers and the tarpaulin clean

11.7. Support legs

- lubricate the lifting mechanism once a year through the lubrication valve (if equipped). The support leg should then be fully extended and slowly retracted during lubrication.

11.8. Van/refrigerated body

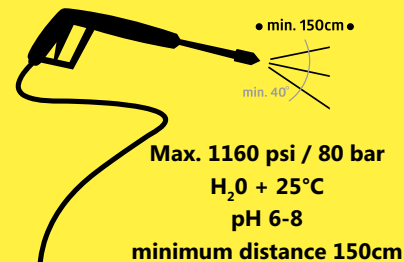
- the construction of the van and refrigerated body does not require any special maintenance apart from keeping the body clean

WARNING: Use normal cleaning agents for cleaning. Do not wash frozen body with hot water. Dry the interior thoroughly after washing. Replace damaged door seals immediately. Check the condition of the outer body shell. In the event of damage, repair immediately at an Authorised Service Centre.

11.9. Cleaning instructions for printed tarpaulin

Cleaning instructions for digitally printed tarpaulins, secured with CMR laminate

1. Rinse the surface adhering dirt with water
2. Apply a detergent to the tarpaulin (as instructed) to the necessary concentration that does not contain the following ingredients:
 - sodium hydroxide
 - potassium hydroxide
 - lactic acid
 - alcohols with a concentration above 40%
 - light penetrating oils
 - nitro-thinners, acrylic, toluene, carbamide, xylene, acetone.
3. Allow the cleaning system (as instructed) to absorb for 5-10 minutes
4. Clean the contaminated surface with a brush or pressure washer with a soft brush attached.
The water temperature should not be higher than 25 °C
5. Wash dirt and detergent with water.



II BDF Replacement System



BDF system consisting of removable containers and vehicles suitable for their transport. It is available in several lengths and standoff heights according to European standard EN 284/2006.

There are 3 types according to length: C782 (container overall length 7820 mm), C745 and C715 (Corresponding container types WECON / WESOB WPR782 ... and WSK 782 ...; WPR745 ... and WSK745 ... etc.)

Common standoff heights:

920-970 mm - cubic containers, C782, internal height approx. 3000 mm

1020 mm - C715 and C745 (e.g. UPS)

1120 mm - C745 and C782 (e.g. Dachser, Schenker)

1320 mm - C715 and C745 (e.g. DHL, Raben, Schenker)

Depending on the height of the containers to be fitted, the HVC system allows containers of different standoff heights from 920 to 1320 mm in two dimensionally adjacent categories.

The scope of the instructions for the BDF removable system includes:

- instructions for fitting containers to vehicles
- handling of the different components of the BDF container transport equipment,
- functioning of elements typical for BDF containers
- operating instructions for HVC system components

Placing a BDF container on a trailer or a car.

1. Position the container latches in the lower position flush with the beam (Photo 76)



Photo 76

2. The entry of the vehicle under the container shall be carried out parallel to the longitudinal axis of the container so that the guide rollers pass through the tunnel between the container's side members without hooking onto the front beam of the frame (Photo 77).



Photo 77

3. The height of the vehicle must be set so that the clearance between the vehicle frame and the container during the approach is approximately 2 to 5 cm (Photo 78).

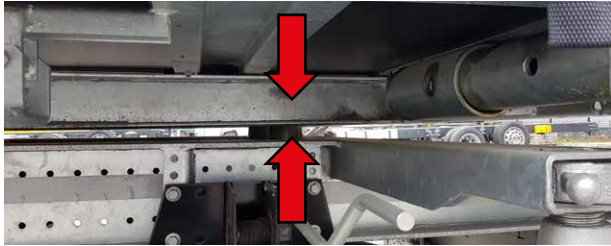


Photo 78

4. When driving under the container, make sure that the vehicle moves parallel to the axis of the container. Pay special attention that the vehicle is stopped after touching the stop bumper located in the front part of the trailer or behind the car cabin (Photo 79, 79a) (the bumper should be set to the appropriate type of container. The entry must be made carefully without hitting the bumper impetuously).



Photo 79



Photo 79a



Photo 79b



Photo 79c

Depending on the type of container bumper, it can be adjusted to suit the type of container (Photo 79b, c).



Photo 79d



Photo 79e



Photo 79f

The position of the adjustable container bumper is changed by unlocking the pin and shifting it according to the type of container (Photo 79d, e, f).

The exception is when the container has a platform, then the bumper is positioned horizontally (Photo 79g) to allow the door to be opened and the platform to be lowered.



Photo 79g

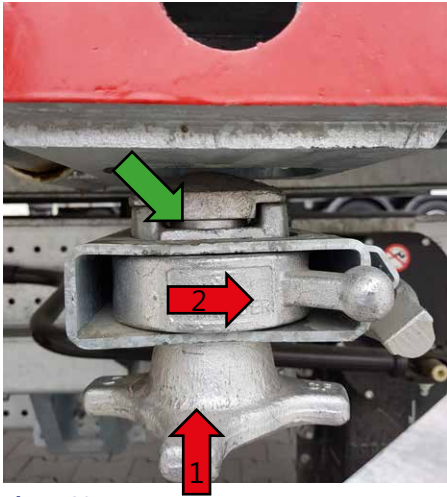


Photo 80

6. Raise the vehicle so that the legs of the container are above ground. The lock of the latch will then slide into the container lock slot (Photo 81)

5. Unscrew the container latch bolt. Lift the container latch up and move the lock to the right so that the latch is in the upper position and protrudes above the beam (Photo 80). The operation should be repeated on the other latches.



Photo 81

7. Lift the latch bolt upwards and turn it 90° so that the lock is "closed" (Photos 82a, 82b)



Photo 82a



Photo 82b

8. Finger tighten the latch bolt

9. Unlock the leg of the container (Photo 83a, 83b)



Photo 83a



Photo 83b

10. Unfasten the leg brace from the container (Photos 84a, 84b) and place it in the stopper on the leg.

In the event that the leg collides with the vehicle's trailing axle tyre, the telescopic support should be shortened.



Photo 84a



Photo 84b



Photo 84c Properly attached brace

11. While standing opposite the leg, pull it toward you, then turn it 90° and insert (away from you) into the holder in the container frame (Photo 85)



Photo 85

12. Close the support leg lock (Photo 82a). To ensure that the leg is properly secured, try pulling the leg toward you. A properly secured leg cannot be pulled out. For added safety, the leg has a second safety feature that must also be closed (Photo 86)

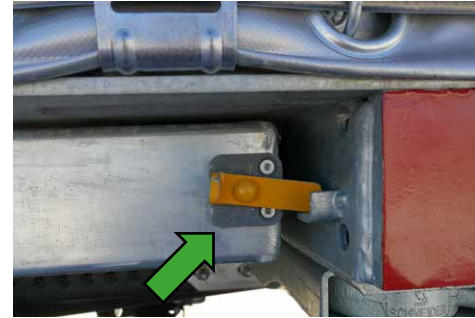


Photo 86

13. Tighten the container bolts with a wrench (Photo 87) and then secure the container bolt (Photo 88) to prevent loosening and secure by turning the cotter pin.



Photo 87



Photo 88

After tightening all of the container bolts, folding and securing the support legs and tightening and securing the bolts, the vehicle must be set in the driving position.

Removing the container

1. Position the vehicle where you want to leave the container.
2. Raise the vehicle up so that the unfolded legs do not touch the ground
3. Unlock the container screw (Photo 88) and loosen it with a wrench.
4. Unlock the protection of the supporting legs (Photos 86 and 83b)
5. Pull the support leg out and turn it 90° (Photo 84b)
6. Put the leg brace on (Photo 84c), press it and move it so that it does not jump off the pin.
7. Close the leg protection (Photo 83a). Retract the leg, the leg protection locks into the leg opening.
Make sure that the leg is secured properly by pulling it toward you. **The leg should not move.**
8. Repeat steps 3 through 7 on all support feet.
9. Loosen the bolt of the latch, lift it up and turn it 90°. The latch lock opens (Photo 82a).
10. **After unlocking all locks of the bolts and making sure that all supporting legs have the braces in place and are secured,** you can let the air out of the suspension. The container will rest on its own legs.
11. Align the container latches with the beam (Photo 76) and if the container is not in contact with the vehicle, the vehicle may be driven from under the container.

Adjustment of the support legs of the BDF container

The supporting legs of the container may be height-adjustable or not. The legs can be telescopically adjusted, depending on the respective stand-off heights or the need to shorten a container leg (Photo 89),



Photo 89



Photo 90



Photo 91

To adjust the telescope's extension, the leg should first be unloaded, i.e. it should be above the ground (Photo 90) and remain secured with a steel brace. Then remove the spring-locking pin so that the

telescope pin can be pulled out toward the centre of the container and lift the telescope (Photo 91) to secure it again with the pin (Photo 92).

Secure the pin with the cotter pin again to prevent the telescope from being extended (Photo 93).



Photo 92



Photo 93

It is not recommended to perform the above operations when the leg is not secured with a brace, as may result in injury to the fingers or blocking the extension of the pin.

Depending on the height of the containers to be fitted, the HVC system allows containers of different standoff heights from 920 to 1320 mm in two dimensionally adjacent categories.

HVC container system with adjustable standoff height

RAISING THE EQUIPMENT LEVEL:

1. Unlock the HVC system spring pins by turning 180° the lever located on either side of the bracket with fixing bolts (4 pcs) (Photo 94).



Photo 95



Photo 94

2. Using a little force, pull up the brackets of the fixing bolt and secure it again with pins on both sides (4 pcs) (Photo 95).

3. Pull out the pin securing the central supports located on the car frame and rotate the support so that it is on top of the base level frame (6 pcs) (Photo 96).
If there is no pin, simply turn the central support and slide it down into place in a vertical position (Photos 97 and 98).



Photo 96

4. Transferring the guide roller from the basic level to the higher level. The roller must be unsecured (cotter pin in the lower part), then removed from its seat and transferred to the seat in the upper level support (4-6 pcs.) (Photo 97 and 98).



Photo 97

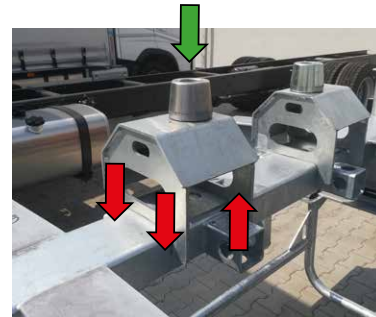


Photo 98

REMOVING FENDER CAPS

Fender Caps (Photo 99)- components which, together with the mudguards, form a complete (in accordance with the Highway Code) spray-suppression system for the wheels of the BDF container vehicle when driving without a container. They must be dismantled before loading the container.



Photo 99



Photo 100

Removing the caps:

- 1.Unsecure the clamping rubber (Photo 100)
- 2.Remove the cap from the hooks (Photo 101)
- 3.Insert the caps into the intended fixing between the side members and secure with expanders (Photos 102 and 103).



Photo 101

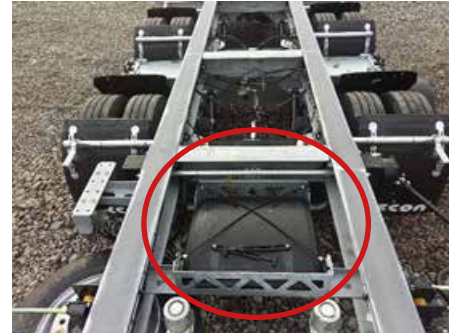


Photo 102

For containers designed for a standoff height of 1120 mm, single-piece spray-suppression systems are used which do not collide with the container and do not need to be dismantled.



Photo 103

Functionalities of the components that are specific to the chassis of vehicles and the components of bodies are described in Part I of this manual.

III Forklift truck transport system



Forklift truck transport system

A solution for loading and unloading goods in places where there is no ramp or forklift. The system is suitable for transporting special-purpose forklift trucks from manufacturers such as HMF, King Lifter, Moffet, Palfinger and others that meet the relevant construction requirements.

The instructions for the 2.5t forklift truck transport system include:

- Instructions for fitting the truck on the rear overhang of the vehicle
- Instructions for fitting the truck inside the vehicle (patent type: EKOÖ)
- Additional information for various equipment and truck variants.
(fixed wheels, folding beams, extendable beams, etc.)

I. Instructions for mounting the forklift on the vehicle overhang

Description of the components of the forklift truck transport system.

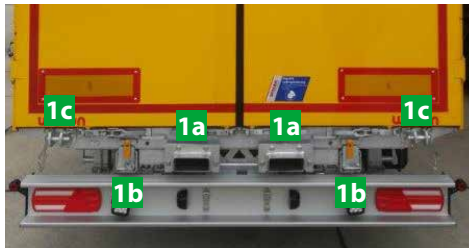


Fig. 1

- 1a – Tunnels for the forks of the truck
- 1b – Supports for transporting the truck with safety devices
- 1c – Chain safety device
- 2 – Folding bumper with lamps
- 3 – Side extendable components for transporting the truck

In the case of a trolley with fixed wheels, a folding bumper with retractable lamps is installed. (Fig. 2) or a bumper with retractable side elements of the rear beam. (Fig. 3)

Components may differ slightly in appearance depending on the type of construction or truck.



Fig. 2



Fig. 3

FURTHER STEPS IN MOUNTING THE FORKLIFT TRUCK ON THE VEHICLE OVERHANG

1. Preparing for the mounting

Remove the roof bar, unlock the truck supports. Remove the license plate (Fig. 4).

2. Positioning the truck

Align the truck symmetrically to the vehicle axis and set the forks facing the mounting tunnels, at the appropriate spacing, maintaining a distance of several centimetres from the vehicle bumper. (Fig. 4 and 5)



Fig. 4



Fig. 5

3. Extending the forks

Extend the outer forks straight out to the mounting tunnels (Fig. 6)



Fig. 6

4. Raising the truck on the forks (Fig. 7)



Fig. 7



Fig. 8

5. Folding the wheels



Fig. 9

I. Pulling out the pin (Fig. 8)

II. Turning the arm and securing (Fig. 9)

With both wheels folded, bring the truck closer to the rear door at a safe distance and raise it so that the bottom of the truck is at least 10-15 cm above the top of the supports.

If the wheels of the truck are not foldable, the trolley transport system must be equipped with a foldable rear beam or foldable rear lamp brackets (Fig. 2 and 3).

The truck is then raised as far as there is sufficient space under the body floor.



Fig. 10

6. Extending the supports

Extend the supports as far as possible (Fig. 11) and then mount the truck on them so that the protruding part passes between the structural members to ensure that the supports are as close as possible to the truck (Fig. 12).



Fig. 11



Fig. 12

7. Placing the truck on supports

After adjusting the position of the truck using the lever (Fig. 13), carefully lower the truck onto the supports (Fig. 14 and 15).

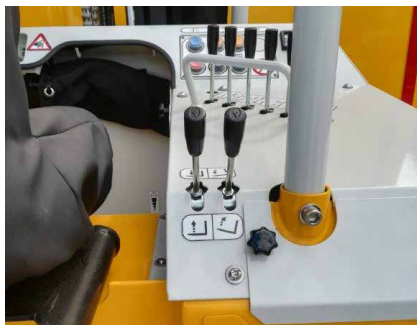


Fig. 13



Fig. 14



Fig. 15



Fig. 16



Fig. 17



Fig. 18

8. End of work

At the end of the work on mounting the truck on the vehicle, remember to:

- stop the engine of the forklift truck
- position the rear wheel perpendicular to the direction of travel (Fig. 16)
- fold the saddle and secure it if necessary
- attach the license plate of the truck – the forklift truck has an additional set of lights and a license plate holder according to the Traffic Code
- connect the spiral cable of the lighting system to the socket at the back of the vehicle (Fig. 17)
- secure the truck with additional chains or straps. (Fig. 18)

9. Removing the truck

To remove the truck from the vehicle overhang, proceed in reverse to the above instructions, i.e.:

1. Unfasten the truck's safety devices and set the rear wheel for driving.
2. Unfold the saddle and start the engine.
3. Raise the truck from the supports and store them.
4. Extend the truck and rest it on the ground.
5. Fold out the front arms with wheels (unless not applicable to a given type).
6. The truck leaves the mounting tunnels.

II. Mounting the forklift inside the body (EKOO system - WESOB patent)

The system for transporting a forklift truck inside a body has been developed for use in countries where a truck mounted on a trailer at the rear of the vehicle is included in the total length of the vehicle combination.

This solution makes it possible to plan transport using the full loading space. On the other hand, when the truck is partially unloaded, it is possible to move the truck inside the body without extending the road gauge in countries where this could be enforced by transport authorities and the police.

The order in which the truck is mounted inside the vehicle is similar to the suspension of the truck on the overhang:

1. Preparing for the mounting

Opening the door, moving the cross-straps away and transferring the inserts from the fork channels into the tool box, extending the supports for the intermediate support of the truck (Fig. 19-22).



Fig. 19

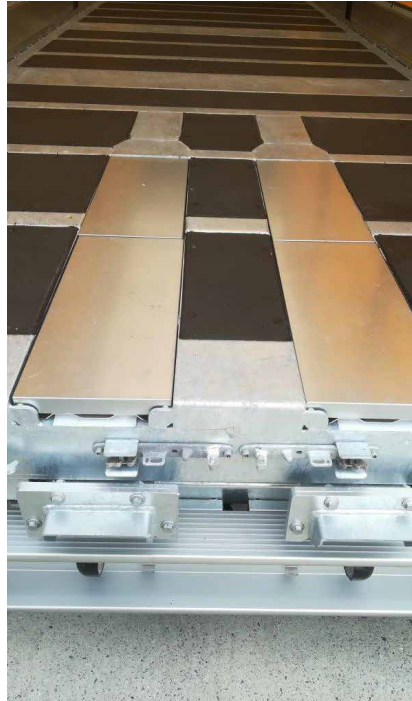


Fig. 20



Fig. 21



Fig. 22

2. Positioning the truck

Align the truck symmetrically to the axis of the vehicle and insert with care the outer fork caps into the mounting tunnels inside the vehicle at the correct spacing. (NOTE: The tunnels are made at an angle - the truck must be tilted away from you.) (Fig. 23-26)



Fig. 23



Fig. 24

3. Extending the forks

Extend the outer forks straight ahead into the mounting tunnels so that the front part of the forks (the farthest one) is in the tunnel on the floor, while the bars closest to the carriage are hooked on the protruding element at the rear of the trailer frame (Fig. 25).



Fig. 25

1. **Lifting the truck on the forks** (Fig. 26)
2. **Folding the wheels** (See truck mounting instructions, Part I)
3. **Moving the truck inside the trailer**

When the truck is raised above the supports extended from the trailer portal, insert the forks in so that the truck can rest on the supports, then rest the truck on these supports (Fig. 27). Once the truck is seated on the supports, the fork caps can be pulled out until they are completely hidden in the tunnel and secured against sliding out of the tunnels (Fig. 28).



Fig. 26

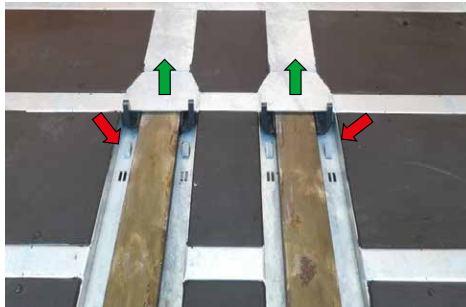


Fig. 28



Fig. 27

Then raise the truck slightly so that the wheels are above the floor surface and move the truck inside the trailer (Fig. 29, 30).

If required, the rear portal is equipped with a mechanism for extending on both sides (Fig. 30).

7. End of work

At the end of the work on mounting the truck inside the vehicle, remember to:

- lower the truck so that it rests on the floor,
- stop the engine of the forklift truck,
- secure the truck against unwanted movement,
- position the rear wheel perpendicular to the direction of travel (Fig. 30)
- fold the saddle and secure it if necessary
- put back the cross straps of the rear portal



Fig. 29



Fig. 30

8. Removing the truck

To remove the truck from the vehicle overhang, proceed in reverse to the above instructions, i.e.:

1. Unfasten the truck's safety devices and set the rear wheel for driving.
2. Unfold the saddle and start the engine
3. Raise the truck and move it onto the supports.
4. Move the truck beyond the supports and lower it accordingly above the ground.
5. Unfold the front arms with the wheels (unless not applicable to the type) and place the truck on the ground.
6. Draw out the forks from the mounting tunnels.

