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# **Assembly Instructions**



MBB C 500 VAN

Types acc. to: 96-522.99

## 1. Checking before assembly

- 1. Have the items been delivered according to your order?
- 2. Is the appropriate assembly drawing for type C 500 VAN available?
- 3. Does the operating voltage of the C 500 VAN tail lift correspond to that of the vehicle?
- 4. Do you intend to install a false floor (raised wear floor)?
- 5. Check the supporting strap (25 mm of free space available between platform and strap).
- 6. Always adhere to the vehicle manufacturer's assembly instructions.

#### PREPARATORY WORK ON THE VEHICLE

Remove any spare wheels and their retainers that may be mounted under the vehicle tail. Dismount any towing coupling, towing hook or climbing aids that may be present at the vehicle tail. Replace special bumpers having integrated climbing aids with standard bumpers.

Remove the vehicle license plate from the rear doors and re-attach it in a location that will be visible after assembly of the C 500 VAN (observe the national regulations pertaining to the license plate location).

Install the delivered link bridge in the vehicle. Place the link bridge directly behind the vehicle's closed rear doors. If required, adapt the link bridge width. Fasten the link bridge to the vehicle floor using the delivered screws.

# PREPARATORY WORK ON THE VEHICLE CHASSIS (VEHICLES WITH HOLLOW SECTION CHASSIS)

The C 500 VAN is delivered with vehicle-specific consoles and has to be assembled using the enclosed assembly kit. Use any existing base on the vehicle chassis (e.g. towing coupling retainer) for assembly. Drill additional holes in the vehicle chassis frame in the locations where fastening points are provided in the console. Weld the corresponding tubes of the enclosed assembly kit into the van's hollow section chassis in flush position on both sides. When drilling, make sure that the console is assembled in parallel with the vehicle's main chassis beams. The tubes are used to prevent deformation of the hollow section chassis.

# PREPARATORY WORK ON THE VEHICLE CHASSIS (VEHICLES WITH CHANNEL SECTION CHASSIS)

The C 500 VAN is delivered with vehicle-specific consoles and has to be assembled using the enclosed assembly kit. Use any existing base on the vehicle chassis (e.g. towing coupling retainer) for assembly. Drill additional holes in the vehicle chassis frame in the locations where fastening points are provided in the console.

#### NOTE

Special tools like coil testers, pressure gauges etc. are available from PALFINGER Tail Lifts on request.

## 3. Assembling the tail lift

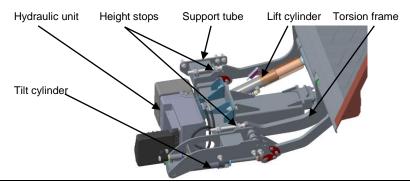
- 1. Assemble the vehicle-specific consoles using the enclosed assembly kit.
- Lift the pre-assembled lifting device under the vehicle using the appropriate hoist and use the delivered hexagon head screws M 14 (6 pieces) to screw it to the consoles.

**CAUTION!** The lifting device may swivel down as there is not yet enough oil in the lift cylinder.

 Lift the torsion frame using the appropriate hoist until reaching the loading floor level with lift arm contour.

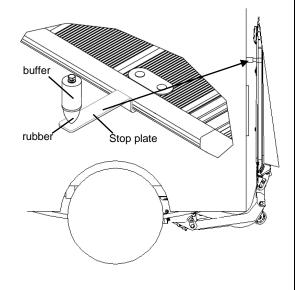
**CAUTION!** Take care of interfering contours while lifting.

- 5. Adjust and fix the height stops of the lifting device at the support tube. Important: Make sure that both height stops are at the same level.
  - Otherwise, the lifting device may be damaged (see illustration on right side).
- 6. Then bolt the platform to the lift arms. The platform is to be installed vertically behind the vehicle.



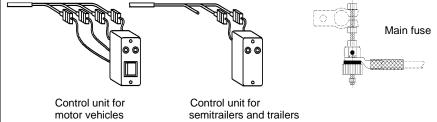
# 3. Installation of Platform Buffer

- The buffer is going to be installed at the rear door hinge. Please drill a 10.5mm hole at the hinge.
- Mount the buffer with the delivered screw and washer at the hinge.
- Now mount the stop plate at the platform.
   Drill two holes of 10.5 mm for the plate in
   the way that the rubber buffer would rest
   against it in the center. See drawing
   07-525.20-00.20-00.
- 4. Mount the stop plate at the platform.
- Depending on type of vehicle you might shorten the rubber buffer to close the platform completely with the rubber showing 90° directly to the platform.
- Shorten the stop plate if it stands too far off one side.



## 4. Installing the electrical system

- 1. Refer to the corresponding C 500 VAN circuit diagram (see the Operating Instructions manual) and follow the vehicle manufacturer's assembly instructions.
- 2. Run the battery cable to the battery, shorten it if required and install the cable lug.
- 3. Assemble the main fuse with the cable lug and connect it to the battery positive terminal.
- Run the control box cable to the driver's cab. In the driver's cab, select the appropriate place at the instrument panel, establish an electrical connection according to the C 500 VAN circuit diagram and attach the control box.
- 5. If a control box already exists in the vehicle, connect the C 500 VAN according to the additional circuit diagram. If necessary, order this circuit diagram from PALFINGER Tail Lifts.
- 6. Establish a ground connection according to the vehicle manufacturer's assembly instructions.



- 7. **NOTICE!** For DGRTR vehicles, connect the ground cable to the battery or according to the vehicle manufacturer's assembly instructions.
- 8. The hand cable control may be operated from the marked position on the platform, only.

## 5. Mounting and adjusting the tilt cylinder

- Turn the tilt cylinder's rod head until reaching the piston rod stop.
   Actuate the Open or Close control switch to set the tilt cylinder to a length that allows you to bolt the cylinder to the platform.

   For this purpose, hold down the tilt sensor b15/b16 with the cable.
- 2. Move the lifting device up to the height stop using the lifting cylinder. If required, remove the auxiliary unit.
- 3. Attach the tilt sensor b15/b16, as seen in the diagram, to the dedicated platform strap on the right-hand side so that the potting compound is oriented towards the outside.

4. Close the platform towards the vehicle body as far as possible (fully extend the tilt cylinder), release the tilt cylinder by actuating the "Open" pushbutton switch and turn the piston rod using an open ended wrench to put it into the desired position.

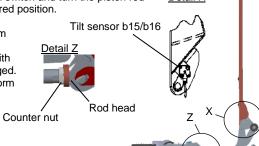
Repeat this setup procedure if required.

Tilt sensor h15/h16

**NOTICE!** In the desired end position of the platform the tilt cylinder must be fully extended.

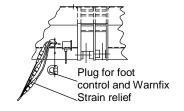
**CAUTION!** The platform must not get in contact with the vehicle body, which, otherwise, may be damaged.

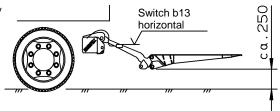
Depressurize the tilt cylinder by opening the platform and fasten the piston rods' counter nut according to the assembly drawing.



# 6. Adjusting and mounting prior to commissioning

- 1. Loosen the strain relief (plastic cap at the platform head profile). Pull the cable with the connector plug for the foot control and Warnfix out of the platform (make sure that the cable length is sufficient) and then reinstall the strain relief. Run the cable along the hydraulic hoses to the hydraulic unit. Use cable binders. Connect the plug to the appropriate receptacle on the PCB according to the circuit diagram. Insert the cable through the entry into the hydraulic unit housing and position the protection sleeve. Close the hydraulic unit.
- 2. Close the platform towards the vehicle body





- Make sure that all installed cables have been laid thoroughly and fastened reliably. Observe the required bending lengths.
- 4. Lower the platform until reaching a level of approx. 250 mm above ground and set the switch b13 at the torsion frame to its horizontal position. For this purpose, undo the switch fastening screw, re-tighten it after the setup and fold back the locking plate.
- 5. Lift, lower, open and close the platform several times in order to de-aerate the cylinders. If required, adjust the platform's horizontal position on the ground by turning the tilt sensor b16 accordingly.
- Check the oil level with lowered platform and check that all screw connections made according to the assembly drawing are tight. Perform an acceptance test according to the test data booklet and record the test results in the test data booklet.