



# Assembly Instructions



## Standard Tail Lifts

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 the corresponding tail lift type available?
3. Does the tail lift's operating voltage correspond to that of the vehicle?
4. If an assembly proposal has been provided by **PALFINGER Tail Lifts**, check the correctness, the vehicle dimensions and the assembly drawing.
5. Do you intend to install a false floor (raised wear floor)?
6. For box body without doors:  
Is there a gasket?  
If yes, leave some space when installing the platform.
7. Check the supporting strap (25 mm of free space available between platform and strap).
8. When using a truck with a trailer, make sure that the trailer's drawbar can move freely.
9. Always adhere to the vehicle manufacturer's assembly instructions.

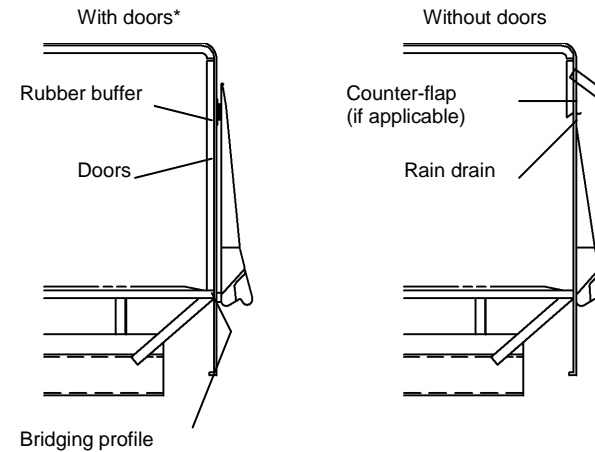
#### PREPARATORY WORK ON THE VEHICLE CHASSIS

If required, install an auxiliary frame. See the vehicle manufacturer's assembly instructions.  
If required, prepare and reinforce cutouts for the lift device according to the assembly drawing.

#### NOTE!

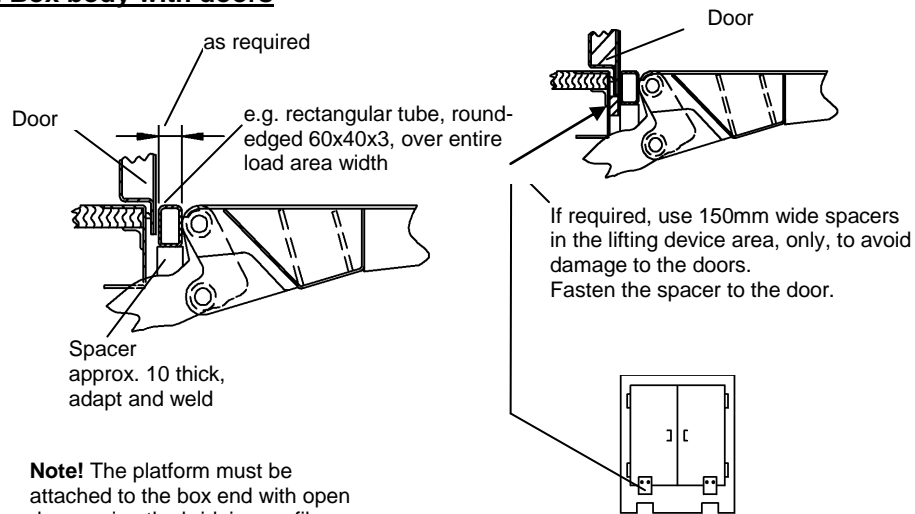
Special tools like assembly devices, assembly gauge, coil testers, pressure gauges etc. are available from **PALFINGER Tail Lifts** on request.

### 2. Box body



\*see also Fig.3

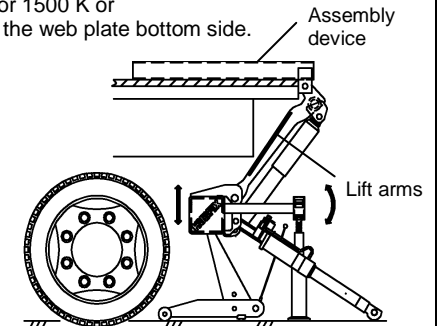
### 3. Box body with doors



**Note!** The platform must be attached to the box end with open doors using the bridging profile.

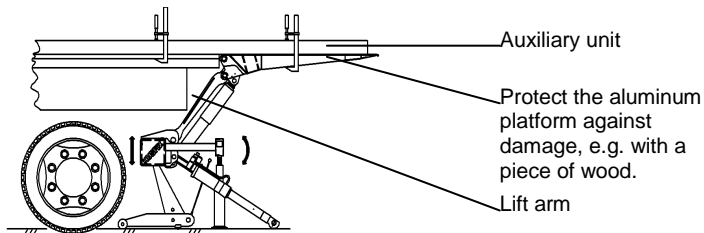
### 4. Mounting the tail lift using the assembly device

1. If required, order the appropriate assembly device for the device type from **PALFINGER Tail Lifts**.
2. Place the delivered assembly device in the truck's load area, adjust it and fasten it securely. With a box body you can e.g. block it against the box top using beams or screw it to the box floor.  
**CAUTION!** Fall hazard! The assembly device must hold the entire lifting device.
3. Bolt the lifting device with the assembly device and check the orientation towards the truck body.
4. Place the support tube at the height position specified in the assembly drawing. Provide for sufficient clearance height and free travel of all components.
5. Arrange square support tube horizontally. Top edge of the square support tube in parallel with body.
6. Fasten the tail lift to the vehicle chassis frame using console plates; observe the assembly drawing and the vehicle manufacturer's assembly instructions. For 1500 K or higher weld the delivered channel-section sheet steel to the web plate bottom side.  
**CAUTION!** When using a slide-in unit, prior to welding the left (direction of travel) or right web plate on the support tube pull out the unit to the right or left side to the extent required to ensure that the oil reservoir is not subject to the heat of the weld. Prior to welding visually check to ensure that no cables, hoses etc. are in the weld area at the inside.
7. Remove the assembly device.  
**CAUTION!** The lift arms may swivel down, as there is not yet enough oil in the lift cylinders. Bolt the platform with the lift arms, without tilt cylinder.



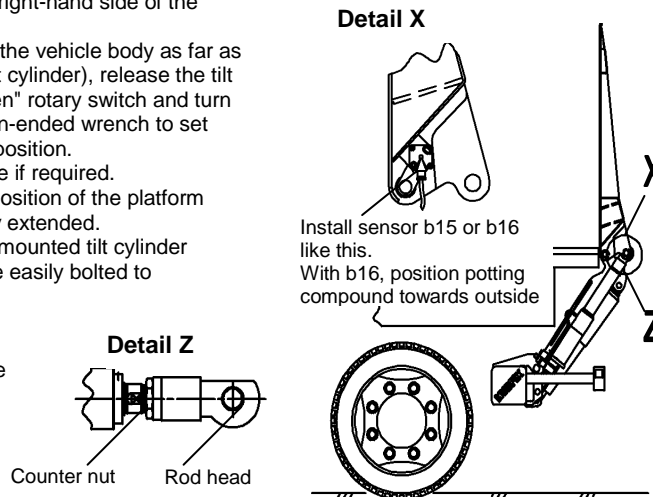
## 5. Mounting the tail lift with mounted platform

1. Bolt the platform with the lift arms (without tilt cylinder).
2. As an auxiliary unit, place two appropriate straight beams in the ready load area, between the lift arms and the vehicle side wall, align them and fasten them reliably. The auxiliary unit should protrude to the rear, matching at least the platform height.  
**CAUTION!** Fall hazard! The auxiliary units must carry the entire lifting device with platform.
3. Lift the tail lift under the vehicle tail using the appropriate hoist, lift the platform under the auxiliary unit and align it with the vehicle body. The lift arm heads must be flush with the rear wall apron (see also the corresponding assembly drawing).
4. Securely fasten the platform to the auxiliary unit, e.g. using sufficiently stable c-clamps and, additionally protect them against falling down, e.g. with supports.
5. Fasten the tail lift as specified in section 4, items 4, 5 and 6. It is recommended to use the adjustment gauge shown in the assembly drawing.



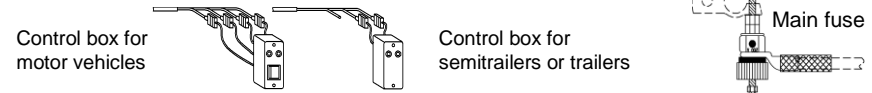
## 7. Mounting and adjusting the tilt cylinder

1. Remove the screw plug of the oil reservoir and replace it with the attached air filter (if existing).
2. Turn both rod heads of the tilt cylinders until reaching the piston rod stop. Actuate the Open and Close rotary switches to set the tilt cylinder to a length that allows you to connect the cylinders to the platform using bolts. For this purpose, hold down the tilt sensor b15 or b16 with the cable. Not necessary for basic control unit!  
**NOTE!** First bolt only one cylinder to the platform.
3. Move the lifting device up to the high end stop by using the lift cylinder. If applicable, remove the auxiliary device.
4. Mount the tilt sensor to the right-hand side of the platform as shown.
5. Close the platform towards the vehicle body as far as possible (fully extend the tilt cylinder), release the tilt cylinder by turning the "Open" rotary switch and turn the piston rod using an open-ended wrench to set the platform to the desired position. Repeat this setup-procedure if required.  
**NOTE!** In the desired end position of the platform the tilt cylinder must be fully extended.
6. Adjust the rod head of non-mounted tilt cylinder in such a way, that it can be easily bolted to the platform.
7. Release the tilt cylinder by opening the platform and fasten the counter nut of the piston rod according to the assembly drawing.



## 6. Installing the electrical system

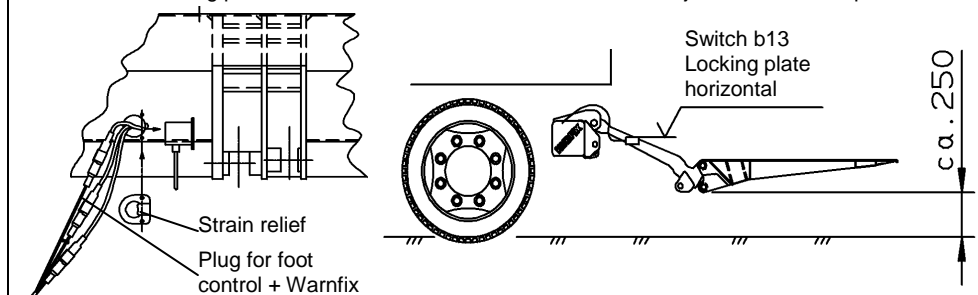
1. Use the corresponding circuit diagram accommodated in the sealing gap on the right-hand side (direction of travel) and observe the vehicle manufacturer's assembly instructions.
2. Run the battery cable to the battery, shorten it if required and install the cable lug.
3. Assemble the main fuse with the cable lug and connect it to the battery positive terminal.
4. 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 circuit diagram and attach the control box.
5. If a control box already exists in the vehicle, connect the tail lift acc. 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. **CAUTION!** For DGRTR vehicles, connect the ground cable to the battery or according to the vehicle manufacturer's assembly instructions.
8. Fasten the operating panel retainer with screws or weld it acc. to the assembly drawing.
9. **When installing the hand cable control, observe the following:** Install the cable with terminal box under the truck platform in such a way that the cable can be connected to the hand cable control from there. Connect the hand cable control cable to the terminal box as specified in the circuit diagram. Select a suitable and safe accommodation for the hand cable control.
10. **The hand cable control may be operated from the marked position on the platform, only.**

## 8. Adjusting and mounting prior to commissioning

1. Take the three connectors for the foot control (not with Basic) and Warnfix out of the platform, connect them to the connectors coming from the lift arm (yellow cable binder with yellow cable, black with black and connector marked with white cable binders), return the connectors connected in this way to the platform and install the strain relief.
2. Close the platform towards the vehicle body.
3. Make sure that all installed cables have been laid thoroughly and fastened reliably. Observe the required bending lengths.
4. Lower the platform to a level of approx. 250 mm above ground and set switch b13 at the right torsion lift arm to its horizontal position. Undo the switch fastening screw, re-tighten it after the setup and fold back the locking plate. With tilt sensor b 15 instead of b 13 this adjustment is not required.



5. Lift, lower, open and close the platform several times in order to de-aerate the cylinders.
6. 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.
7. With tilt sensor b16, if required adjust the platform's horizontal position on the ground by turning the tilt sensor b16 accordingly.