# Assembly Instructions

MBB F 1000 SH – F 2000 LH / MBB F 1000 SX – F 1500 LX

(former KF, KFN)

## 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, check the correctness, the vehicle dimensions and the assembly drawing.
5. Do you intend to install a false floor (raised wear floor)?
   If yes, install the platform and rear profile in a higher position.
6. For folding in/out at least 25 mm finger room must be provided between platform and rear profile bottom edge.
7. When using a truck with a trailer, make sure that the trailer's drawbar can move freely.
8. Always adhere to the vehicle manufacturer's assembly instructions.

**Preparatory work on the vehicle chassis**

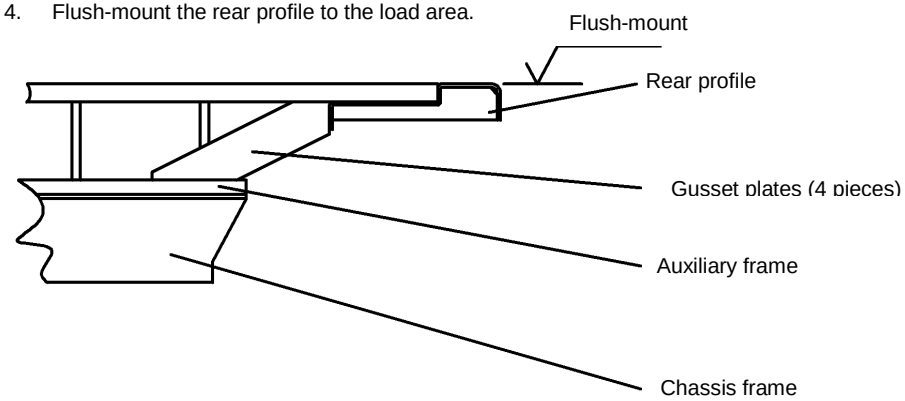
If required, install an auxiliary frame. See the vehicle manufacturer's assembly instructions. Prepare the vehicle chassis and auxiliary frame acc. to the assembly drawing and assembly proposal.

**Note!**

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

## 2. Mounting the rear profile

1. Shorten the rear profile evenly on each side acc. to the body width.
2. Provide free space in the loading floor area for assembling the rear profile; if required take care of the door gaskets.
3. The rear profile terminates the loading area.
4. Flush-mount the rear profile to the load area.



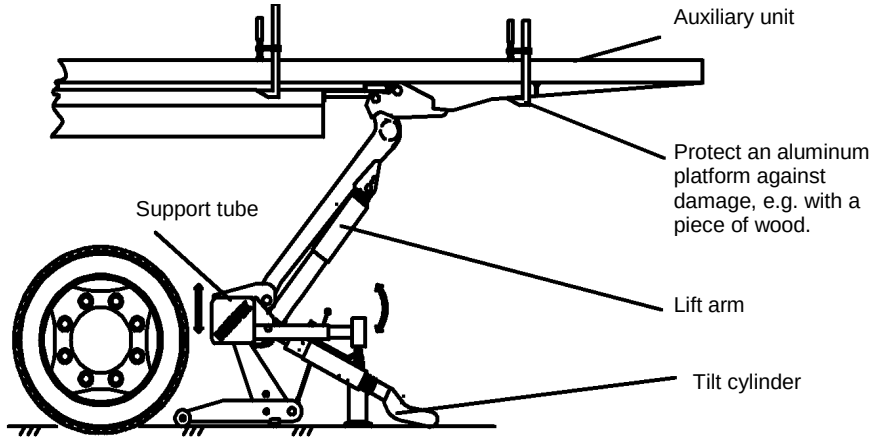

## 3. Mounting the tail lift with mounted platform

1. Bolt the platform with the lifting device (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 inside wall, align them and fasten them reliably. The auxiliary unit should protrude to the rear, matching at least the platform height.
   **NOTICE!** Fall hazard! 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 platform front edge 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. Place the support tube at the height position specified in the assembly drawing. Provide for sufficient clearance height and free travel of all components. Turn the support tube in such a way that the underrun bumper is in parallel with the body.

   It is recommended to use the adjustment gauge shown in the assembly drawing.

   **Note:**
   Between the rear profile bottom edge and the top edge of the platform moving to the vehicle's driving position at least 25 mm free finger space must be provided.

   Mount the tail lift to the vehicle chassis frame using the consoles acc. to the assembly drawing and the vehicle manufacturer's assembly instructions.



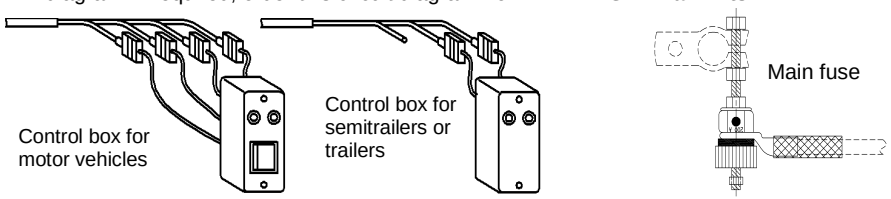




**PALFINGER Tail Lifts GmbH** | Fockestraße 53 | D-27777 Ganderkesee | T + 49 4221 853-0 | infombb@palfinger.com | www.palfinger.com

## 4. Installing the electrical system

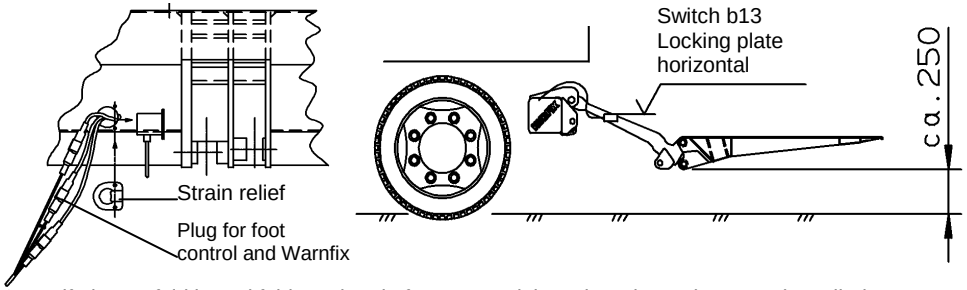
1. Use the corresponding circuit diagram accommodated in the sealing cap on the right-hand side (direction of travel) and observe the vehicle manufacturer's assembly instructions.
2. Run the battery cable to the battery, shorten it if required and connect the cable lug.
3. Assemble the main fuse with the cable lug and connect it to the battery positive terminal.
4. Run the control box cable to the driver's cab, 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 is already present in the vehicle, connect the tail lift according to the additional circuit diagram. If required, 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. Fasten the operating panel 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.**

## 5. Adjusting and mounting prior to commissioning

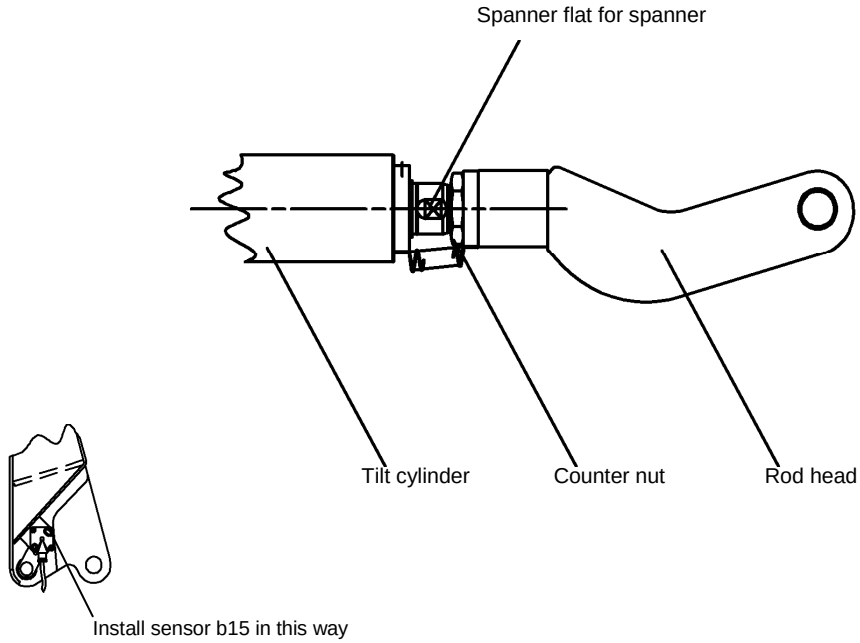
1. Raise the platform until reaching the stop.
2. Take the three connectors for the foot control (not with Basic) and Warnfix out of the platform, connect them to the connectors coming from the lift arm (yellow cable binders with yellow cable, black with black and connector marked with white cable binders), return the connectors connected in this way to the platform and install the strain relief.
3. Securely fasten the cables to the lift arm using cable binders. Make sure that the platform can move freely, provide sufficient cable length.
4. Make sure that all installed cables have been laid thoroughly and fastened reliably. Observe the required bending lengths.
5. Lower the platform until reaching a level of approx. 250 mm above ground and set the switch b13 at the right lift arm to its horizontal position. For this purpose, undo the switch fastening screw, re-tighten it after the setup and fold back the locking plate.




6. Lift, lower, fold in and fold out the platform several times in order to deaerate the cylinders.
7. 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.

## 6. 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 Fold in and Fold out rotary switches to set the tilt cylinder to a length that allows you to connect the cylinders to the tailboard using bolts.
   **Note!** First bolt only one cylinder to the tailboard.
3. Move up the lifting device using the lift cylinders until reaching the top end stop and dismount the auxiliary unit.
4. Attach the tilt sensor to the platform as shown.
5. Lower the platform until reaching the ground, fold the platform head and then raise the platform package with the bolted cylinder to such an extent that the extended tilt cylinder gets in contact with the inner stop.
   Turn the tilt cylinder's piston rod using a spanner until the platform is at an angle of around 75° to the ground. Then tighten it with a counter nut towards the rod head.
   Also move the other tilt cylinder to the inner stop and turn its piston rod to allow for bolting it. Secure the rod head using a counter nut.
6. Swivel down and raise again the platform package several times. If the lifting device should be lifted when raising, evenly turn in the piston rods into the rod head.
   This reduces the angle between the platform and the ground and, thus, the tilt angle for lifting the lifting device.
7. Tighten the counter nut and mount the bellows.
8. Attach the end position switches to the vehicle chassis frame in such a way that the pilot lamps of the control box are off when the platform is in the vehicle driving position.






**PALFINGER Tail Lifts GmbH** | Fockestraße 53 | D-27777 Ganderkesee | T + 49 4221 853-0 | infombb@palfinger.com | www.palfinger.com