Assembly Instructions

MBB R 750 S – MBB R 2500 S not pre-assembled
(former: retractable not pre-assembled)

Types acc. to:
96-522.99

1. Checking before assembly

1. Have the items been delivered according to your order?
2. Does the tail lift's operating voltage correspond to that of the vehicle?
3. Is the vehicle suitable for mounting the tail lift?
4. Are the assembly drawing and the special installation drawing for this tail lift type available?
5. Have you cross-checked all dimensions in the assembly and installation drawings with the actual vehicle dimensions and are all dimensions correct?
6. When folding out the platform, is there enough free space to the towing coupling or vehicle tail?
7. Do you intend to install a false floor (raised wear floor)? If yes, install the platform in a higher position.
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

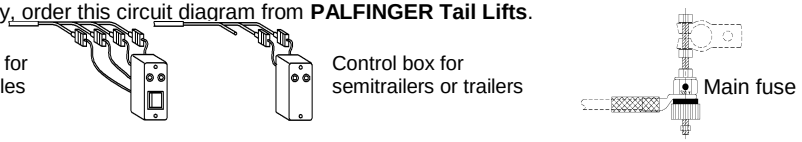
If required, install an auxiliary frame. See the vehicle manufacturer's assembly instructions.
If required, prepare and reinforce cut-outs for the lifting device according to the assembly drawing.
Make sure there is sufficient free space for the overall travel of the entire tail lift; check the frame width including the assembly width of the guide rails.

NOTE!

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

3. Installing the electrical system

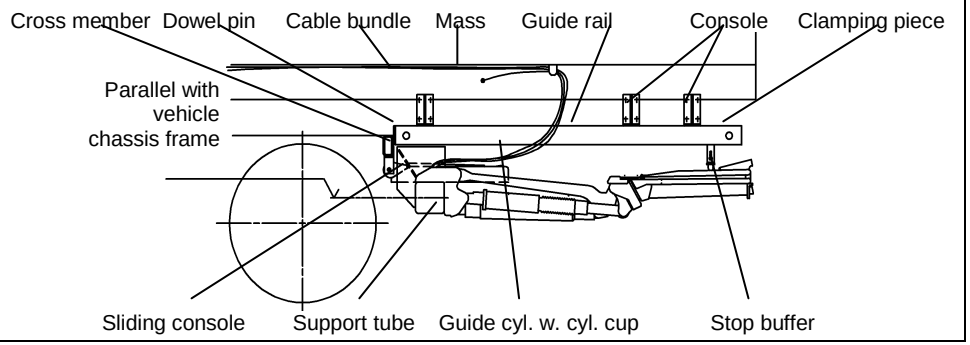
1. Refer to the corresponding circuit diagram (accommodated in the operating panel) and follow the vehicle manufacturer's assembly instructions.
2. Run the battery cable, mass cable, end switch and cable for control box under the vehicle platform in such a way they can be fastened in this place without kinking and that a sufficiently long loop is formed when the tail lift is extended and retracted.
3. Run the battery cable to the battery, shorten it if required and install the cable lug.
4. Assemble the main fuse with the cable lug and connect it to the battery positive terminal.
5. 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.
6. 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**.



7. Establish a ground connection according to the vehicle manufacturer's assembly instructions.
8. **CAUTION!** For DGRTR vehicles, connect the ground cable to the battery or according to the vehicle manufacturer's assembly instructions.
9. Install proximity switches for the control box lamps at the sliding console.
10. Fasten the operating panel with screws or weld it acc. to the assembly drawing.
11. **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 th circuit diagram. Select a suitable, safe accommodation for the hand cable control.
12. **The hand cable control may be operated from the marked position on the platform, only.**

2. Assembling the tail lift

1. Measure the width of the vehicle chassis frame to see if the width matches the clearance between the guide rails and the adjustable clearance between the sliding consoles.
2. When mounting between the vehicle chassis frames, assemble and reinforce sufficiently dimensioned cross members.
   CAUTION! These members carry the entire tail lift, including the payload.
3. Place the guide rails acc. to the special installation drawings in parallel with the vehicle chassis frame and in the same vehicle depth, using auxiliary tools (e.g. square timber, c-clamps, etc.); distribute 3 consoles per guide rail depending on the local requirements and the assembly drawing; position bores depending on the local requirements; observe the drill pattern and drill all bores in the console.
4. Screw the drilled consoles to the guide rails.
5. Accurately align the guide rails, pay special attention to parallelism, vehicle depth and mounting height.
6. Drill holes in the vehicle chassis frame, fasten all delivered screws with the specified fastening torque and mount the dowel pins.
7. Apply paint lubricant to the guide rails' inside.
8. Follow the instructions under items 9, 10 and 11 for loose sliding consoles. For welded sliding consoles (e.g. KUZK) proceed as described under item 12.
9. Acc. to the installation drawing, move the sliding consoles with web towards the inside along the guide rails, until reaching the dowel pin.
10. Use the appropriate hoist to position the tail lift under the vehicle tail and fit it into the sliding consoles from the bottom side. Align the tail lift laterally with the vehicle and in parallel with the vehicle chassis frame. Push against the dowel pin via the sliding consoles and tack weld the support tube without gap to the sliding consoles.
11. Displace the hydraulic unit according to the instruction plate in such a way, that it cannot be affected by welding. Weld both consoles and the support tube according to the welding specifications.
12. Assemble the guide cylinder with cylinder cup as specified in the assembly drawing.
13. According to the special installation drawing, place the assembled cylinder cup at the support tube as centrally as possible, align and tack weld.
14. Cut the cross member to the appropriate length, bolt it to the retracted guide cylinder and place it according to the local conditions.
15. Mount the cross member to the vehicle chassis frame and weld all weld joints.
    Install the hydraulic hoses acc. to the hydraulic diagram



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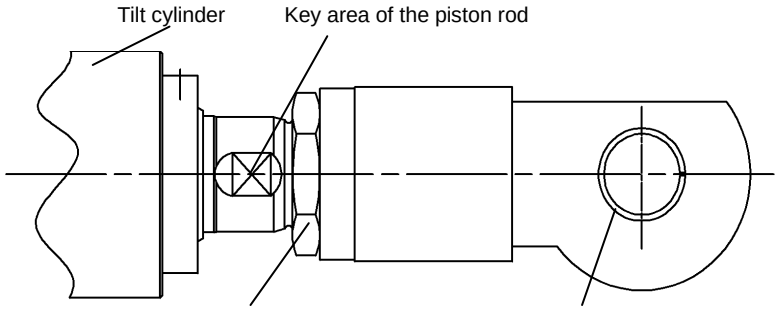
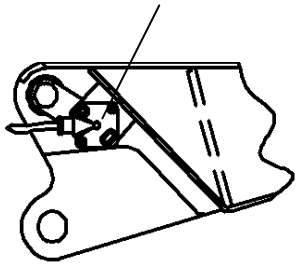
4. Mounting the platform and adjusting the tilt cylinder

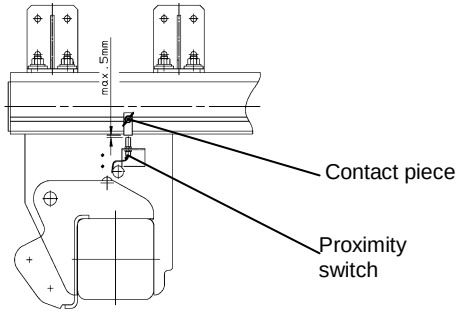
1. Remove the screw plug of the oil reservoir and replace it with the attached air filter.
2. Fully extend the tail lift and move up the lift arm to the extent required to mount the platform. In order to be able to move (lift, lower, displace, etc.) the platform, hold down the tilt sensor b15 with the cable vertically (not required with Basic control unit).
3. Use the appropriate hoist and place the platform in such a way that first only the lift arm can be bolted to the platform.
4. Retract the tilt cylinders until reaching the stop and check if their lengths are equal in the retracted state. If required, turn the rod head to adjust the lengths.
5. First set one tilt cylinder to a length that allows you to easily bolt it to the platform, then bolt the second tilt cylinder.
6. Attach the tilt sensor b15 or b16 to the platform on the right-hand side as shown.
7. Fasten both counter nuts with the fastening torque specified in the assembly drawing.
8. Attach the two stop buffers to the vehicle chassis frame in such a way that the tail lift can be operated without any obstructions and the platform can be moved against the stop buffer when the vehicle is in its driving position.
9. If required, shorten the guide rails to ensure that:
   - trailer operation is possible without any limitations.
   - the platform can be folded in and out even with loaded vehicle.
   - the platform reaches the vehicle's load area.
   - there is enough space to the towing coupling to avoid collisions.

   When shortening the guide rails, make sure that the clamping pieces are re-placed in any case.



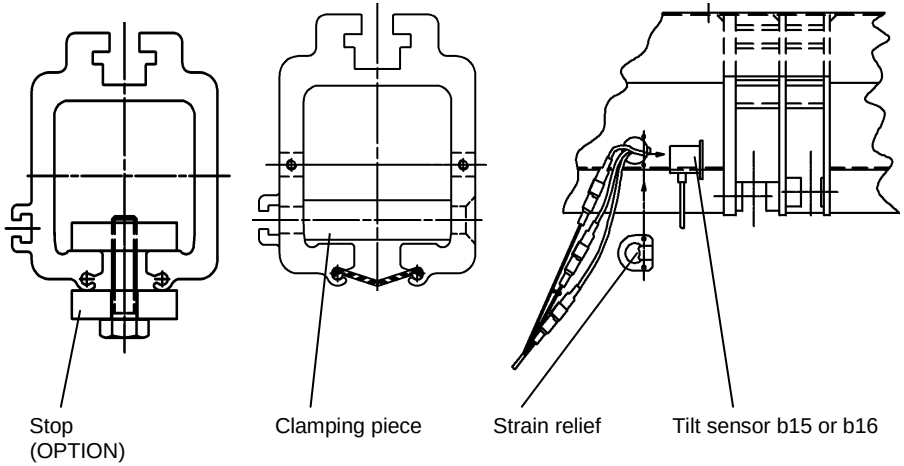
Install sensor b15 or b16 like this.
With b16, potting compound t outside

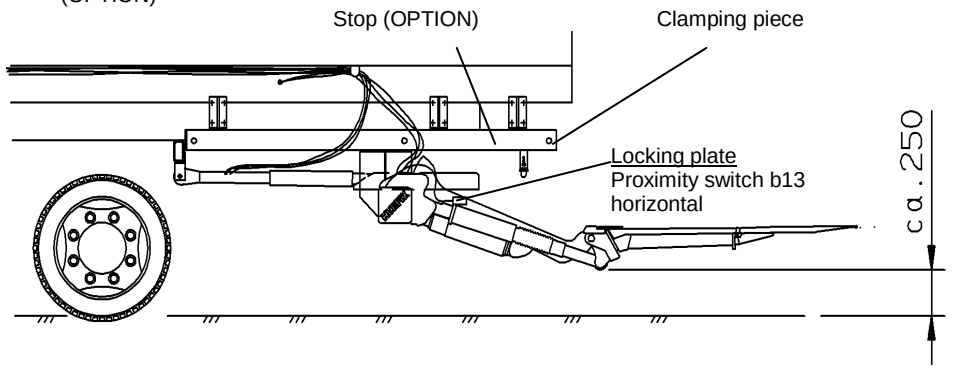




5. Adjusting and mounting prior to commissioning

1. If required, take the three connectors for foot control and Warnfix out of the platform, connect them to the connectors coming from the lift arm (green with yellow cable, black with black and connectors marked with cable binders), return the connectors connected in this way to the platform and install the strain relief.
2. Check that all cables have been laid and connected properly.
3. Read the operating instructions and put the tail lift into operation.
4. Fold out the platform, lower it until reaching a level of approx. 250 mm above ground and set the switch b13 at the right torsion lift arm to its horizontal position. For this purpose, undo the switch fastening screw and, after setup, re-fasten them tightly. After the setup, fold back the locking plate. With tilt sensor b15 instead of b13 this adjustment is not required.





5. Lift, lower, extend and retract the platform several times in order to de-aerate the cylinders.
6. Place the contact piece above the proximity switch in such a way, that the control box lamps are off when the tail lift is in transport position. Carefully tighten the wing nuts.
7. Check the oil level with lowered and retracted 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.
8. With proximity sensor b16 adjust the platform's horizontal position on the ground if required by turning the tilt sensor accordingly.

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