

Troubleshooting

Behaviour in case of malfunctions

Basic Information



Lift tables must be immediately shut down if safety devices do not function properly or other deficiencies occur that can impact safety.



Any repair work on the lift table may only be performed by authorised, respectively qualified expert personnel while carefully complying with the safety regulations.



Any work required underneath the risen platform may only be performed without load and the maintenance supports engaged (see section 8.2). Lock the aggregate to prevent unintentional restarting while the work is in progress.



Only perform welding at or on the lift table such that no current flows through the bearings. Otherwise, bearing damage will occur.



Work on the hydraulic system, where the hydraulic circuit must be opened, may only be performed with the system depressurised.



Do not remove or cut shafts or pins without additional safeguarding. The existing maintenance supports do not provide sufficient protection for these tasks.



In the case of questions or uncertainties, please contact our Service department.



Troubleshooting

1. Drive aggregate is not working (no noise development either)
2. Lift table does not lift, although aggregate is working
3. Lift table does not reach the full lifting height
4. Lift table does not lower
5. Lift table does not lower from upper end position
6. Lift table does not lower completely
7. Lift table and/or box tilting device lowers very slowly only
8. Foot protection bar does not stop the lowering process
9. Lift table deflects excessively during load reversals
10. Oil loss/leaks



1.1. Drive aggregate is not working (no noise development either)

<p>Cause 1:</p> <p>Main switch switched off or "Emergency Stop" locked after actuation.</p>	<p>Remedy:</p> <p>Switch on main switch and/or pull out Emergency Stop button to release it.</p>	
<p>Cause 2:</p> <p>Power supply is interrupted.</p>	<p>Remedy:</p> <p>Check power supply, fuses, contactors.</p>	<p>Caution! Work on the electrical system by authorized expert personnel only!</p>
<p>Cause 3:</p> <p>Operating switch, control line or circuit elements defective .</p>	<p>Remedy:</p> <p>Check switch, lines and components of the control according to the electrical diagram.</p>	<p>Caution! Work on the electrical system by authorized expert personnel only!</p>
<p>Cause 4 (for versions with thermal switch):</p> <p>Overheated motor was switched off by thermal sensor.</p>	<p>Remedy:</p> <p>Have motor cool down.</p>	<p>Determine reason for overheating: Possibly: Oil loss.</p>
<p>Cause 5</p> <p>Motor is defective.</p>	<p>Remedy:</p> <p>Replace drive aggregate.</p>	<p>Replacement aggregate can be obtained from the manufacturer at short notice.</p>



AC motor does not restart after actuation

<p>Cause:</p> <p>Design-related. AC aggregate (type HCW22 only) does not start under full load against high hydraulic pressure (motor just hums silently).</p>	<p>Remedy:</p> <p>Actuate »Lower« briefly to relieve pump. Lifting is possible again afterwards.</p>	<p>Prevention:</p> <p>If possible, pass through the lower lifting range without interruption in one cycle, in particularly under full load.</p>
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2.1. Lift table does not lift, although aggregate is working

<p>Cause 1:</p> <p>Lift table is overloaded, overpressure valve triggers.</p>	<p>Remedy:</p> <p>Reduce load.</p>	<p><i>Caution:</i></p> <p><i>Do not change the factory setting of the overpressure valve!</i></p>
<p>Cause 2:</p> <p>Three-phase AC connection with wrong polarity.</p>	<p>Remedy:</p> <p>Check that clockwise rotating field is applied. Connect phases correctly</p>	<p><i>Caution! Work on the electrical system by authorized expert personnel only!</i></p>
<p>Cause 3:</p> <p>Hydraulic aggregate is not coupled correctly.</p>	<p>Remedy:</p> <p>Release coupling, remove possible dirt particles, couple again.</p> <p>Replace damaged quick couplings.</p>	<p>See section 6.6</p>



<p>Cause 4:</p> <p>Lowering valve (solenoid valve) does not close accurately.</p>	<p>Remedy:</p> <p>Possible foreign object in valve seat. Flush the valve clean by lifting-lowering several times.</p> <p>Replace defective valve.</p>	
<p>Cause 5:</p> <p>Leak in the hydraulic system.</p>	<p>Remedy:</p> <p>See section 9.2.11</p>	
<p>Cause 6:</p> <p>Pump defective, does not build up pressure. (Although the aggregate is running, the disconnected hydraulic hose does not stiffen at the aggregate).</p>	<p>Remedy:</p> <p>Replace aggregate.</p>	<p>Replacement aggregate can be obtained from the manufacturer.</p>
<p>Cause 7 (for lift tables with pneumatic hydraulic pump):</p> <p>Air inlet pressure is too low.</p>	<p>Remedy:</p> <p>Increase air inlet pressure.</p>	<p>Air pressure of at least 4 bar must be applied to the pump</p>

3.1. Lift table does not reach the complete lifting height

<p>Cause 1:</p> <p>Not enough hydraulic oil.</p>	<p>Remedy:</p> <p>Refill hydraulic oil.</p>	<p>Determine cause for oil loss!</p> <p>Check oil level regularly (monthly)!</p>
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Cause 2: Lift table is overloaded.	Remedy: Reduce load.	
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4.1. Lift table does not lower

Cause 1: Control is locked after »Emergency Stop« actuation.	Remedy: Not-Halt-Taste zur Entriegelung wieder herausziehen To release, pull out Emergency Stop button.	
Cause 2: Lowering valve (at aggregate) is stuck.	Remedy: It may be possible to loosen stuck valve by slight tapping using a plastic hammer. Otherwise, repair or replacement.	
Cause 3: Lowering valve defective.	Remedy: Replace valve.	



<p>Cause 4:</p> <p>Hydraulic quick coupling connected incorrectly.</p>	<p>Remedy:</p> <p>Release coupling, remove possible dirt particles, couple again.</p> <p>Replace damaged quick couplings.</p>	
<p>Cause 5:</p> <p>The safety valve of the foot protection bar is closed.</p>	<p>Remedy:</p> <ul style="list-style-type: none"> – If the safety valve is closed, actuate lifting first to unlock the valve. – Release the tilted or stuck protection bar by hand by actuating it several times. 	<p>After works on the foot protection bar, check its switching function.</p>
<p>Cause 6:</p> <p>(for three-phase current aggregate only)</p> <p>The neutral conductor is not or not correctly connected.</p>	<p>Remedy:</p> <p>Check power supply, including used extension cables.</p>	<p>Caution! Work on the electrical system by expert personnel only!</p>
<p>Cause 7:</p> <p>Safety valve of the foot protection bar is defective.</p>	<p>Remedy:</p> <p>Check valve by mechanical lever actuation. Do not apply excessive force.</p> <p>Replace defective valve.</p>	<p>Caution!</p> <p><i>Lift tables with defective safety valve must be immediately shut down!</i></p>



<p>Cause 8:</p> <p>(for lift tables with stop valve at the cylinder) .</p> <p>Stop valve or power supply is defective.</p>	<p>Remedy:</p> <p>Check power supply and “Harting” connector, replace defective stop valve.</p>	
<p>Cause 9:</p> <p>Lift table is blocked by inserted maintenance supports.</p>	<p>Remedy:</p> <p>Ensure the correct fit of the tapered rollers (between the expansion wedges). Lift the lift table and remove the maintenance supports (locking screws).</p>	<p>Caution:</p> <p>Do not reach into the unsecured scissors to correct the fit of the tapered roller!</p>

5.1. Lift table does not lower from upper end position

<p>Cause 1:</p> <p>The foot protection bar was pressed in upper end position.</p> <p>(Actuating »Lift« again may not unlock) .</p>	<p>Remedy:</p> <p>Pull the foot protection bar down manually close to the valve. At the same time, actuate »Lift« at the aggregate.</p>	<p>Prevention:</p> <p>Do not actuate the foot protection bar unnecessarily.</p>
<p>Cause 2:</p> <p>Incorrect setting of the foot protections bar .</p>	<p>Remedy:</p> <p>Recalibrate the foot protection bar (see section 8.11, S. 43).</p>	



6.1. Lift table does not lower completely

<p>Cause 1:</p> <p>Foreign object actuates the foot protection bar or is under the lift table.</p>	<p>Remedy:</p> <p>Lift lift table, remove foreign object.</p>	
<p>Cause 2:</p> <p>Moving parts are contaminated.</p>	<p>Remedy:</p> <p>Clean.</p>	<p>Prevention:</p> <p>Always keep parts such as shaft, pins, rollers, and rails clean and grease them.</p>

7.1. Lift table just lowers very slowly

<p>Cause 1:</p> <p>Hydraulic oil becomes viscous at low ambient temperatures.</p>	<p>Remedy:</p> <p>Hydraulic oil reaches operating temperature after several lifting cycles.</p>	<p>In case of continuous use at low ambient temperature, use higher-viscosity hydraulic oil after consultation with the manufacturer.</p>
<p>Cause 2:</p> <p>Moving parts are extremely contaminated.</p>	<p>Remedy:</p> <p>Clean.</p>	<p>Prevention:</p> <p>Always keep parts such as shaft, pins, rollers and rails clean and grease them.</p>



<p>Cause 3:</p> <p>Hydraulic oil is contaminated.</p>	<p>Remedy:</p> <p>Oil change</p>	<p>Note:</p> <p>In the case of frequent coupling and uncoupling, dirt particles can enter the hydraulic circuit via the coupling.</p>
<p>Cause 4:</p> <p>Bearing damage or other mechanical defect.</p>	<p>Remedy:</p> <p>Repair after consultation with the manufacturer.</p>	<p>Note:</p> <p>Pay attention to noise development and material abrasion during operation and inspection to prevent any major damage.</p>

8.1. Foot protection bar does not stop the lowering process

Caution! Shut down lift table if foot protection bar does not work properly!

<p>Cause 1:</p> <p>Foot protection bar is not connected correctly with the safety valve.</p>	<p>Remedy:</p> <p>Replace switching connection between foot protection bar and valve.</p>	
<p>Cause 2:</p> <p>Foot protection bar is calibrated incorrectly.</p>	<p>Remedy:</p> <p>Recalibrate (see section 8.11, page 43).</p>	
<p>Cause 3:</p> <p>The valve of the foot protection bar is defective.</p>	<p>Remedy:</p> <p>Replace valve.</p>	



9.1. Lift table deflects excessively during load reversals

<p>Cause 1:</p> <p>Air in hydraulic system</p>	<p>Remedy:</p> <p>Vent hydraulic system (see section 8.5, page 41).</p>	<p>Prevention:</p> <p>Vent hydraulic system regularly (monthly).</p>
<p>Cause 2:</p> <p>Deflection due to excessively long hose lines.</p>	<p>Remedy:</p> <p>Avoid hose lines longer than 3 m from hydraulic coupling.</p>	<p>Note:</p> <p>Fixed piping is generally recommended for stationary use.</p>

10.1. Oil loss/leaks

<p>Cause 1:</p> <p>Small oil loss under normal lift table operation.</p>	<p>Remedy:</p> <p>Refill oil (see section 8.3, page 40).</p>	<p>Note:</p> <p>Check oil level always with the lift table lowered!</p>
<p>Cause 2:</p> <p>Hydraulic line leaking.</p> <p>Hydraulic cylinder is leaking.</p>	<p>Remedy:</p> <p>Re-tighten or replace leaking hydraulic couplings, replace leaking valves and hydraulic hoses.</p>	<p>Works at hydraulic components by qualified expert personnel only!</p>
<p>Cause 3:</p> <p>Hydraulic cylinder is leaking.</p>	<p>Remedy:</p> <p>Replace or reseal hydraulic cylinder.</p>	<p>Pay attention to the correct installation position of the tapered roller fork! (See exploded view).</p>

Spare parts stock-keeping



Not all spare parts (e.g., aggregate) are available from the manufacturer at short notice. It is recommended to maintain a spare parts package on hand.



Spare parts are sensitive to damage and contamination. They must be stored in dry conditions.