

„...Weil Mobilität
Freiheit bedeutet!“

OPERATING MANUAL

HBL SERIES WHEELCHAIR LIFTS



Keep for further reference!

„...Weil Mobilität
Freiheit bedeutet!“

Lehmann
Rollstuhlrampen & Hebelifte



...because mobility means freedom!

2015 edition

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Subject to modifications in the interests of technical progress.
Illustrations are schematic and may differ from the finished product in execution and detail.

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1. Product description

1.1. *Manufacturer's declaration*

The declaration of conformity is provided as a separate document with these operating instructions. The HBL series of wheelchair lifts are classed as machines by the EC Machinery directive 06/42/EC, Appendix II A.

1.2. *Use for the intended purpose*

The HBL series of wheelchair lifts are used for moving a person sitting in a wheelchair or sitting on a rollator.

When the lift is operating the only person on its platform should be the person in the wheelchair. The lift must not be used by a standing individual! The maximum lifting capacity is 225 kg, see also Section 1.5, Technical data, p. 8.

Any use going beyond this, especially transporting loads, is not permitted.

The wheelchair lifts may only be used when the user or operating personnel have been instructed in their use. For safe use of the wheelchair lift we recommend a second, briefed individual.

Safe operation cannot be assured if the wheelchair lift is not used in accordance with this provision. The operator of the wheelchair lift will be responsible for all damage or loss incurred due to improper use and the manufacturer's warranty will be voided.

Use for the intended purpose also includes reading this operating manual and complying with all of the instructions it contains, especially those relating to safety. Use for the intended purpose also includes carrying out all inspection and maintenance work at the specified intervals.

Due to the size of the platform the over-corner wheelchair lifts (HBL300 E, HBL600 E, HBL1000 E) are not suitable for large wheelchairs. In particular, electric wheelchairs with steerable rear wheels have a large turning radius and in most cases will not fit on the lift.



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1.3. Scope of supply

The scope of supply of an HBL series wheelchair lift includes a control device, see also Section 4.3, p. 13. HB600 and HBL1000 lifts are standardly equipped with handrails (Fig. 1, p. 6). Handrails are available as an option for the HBL300.

1.4. Construction

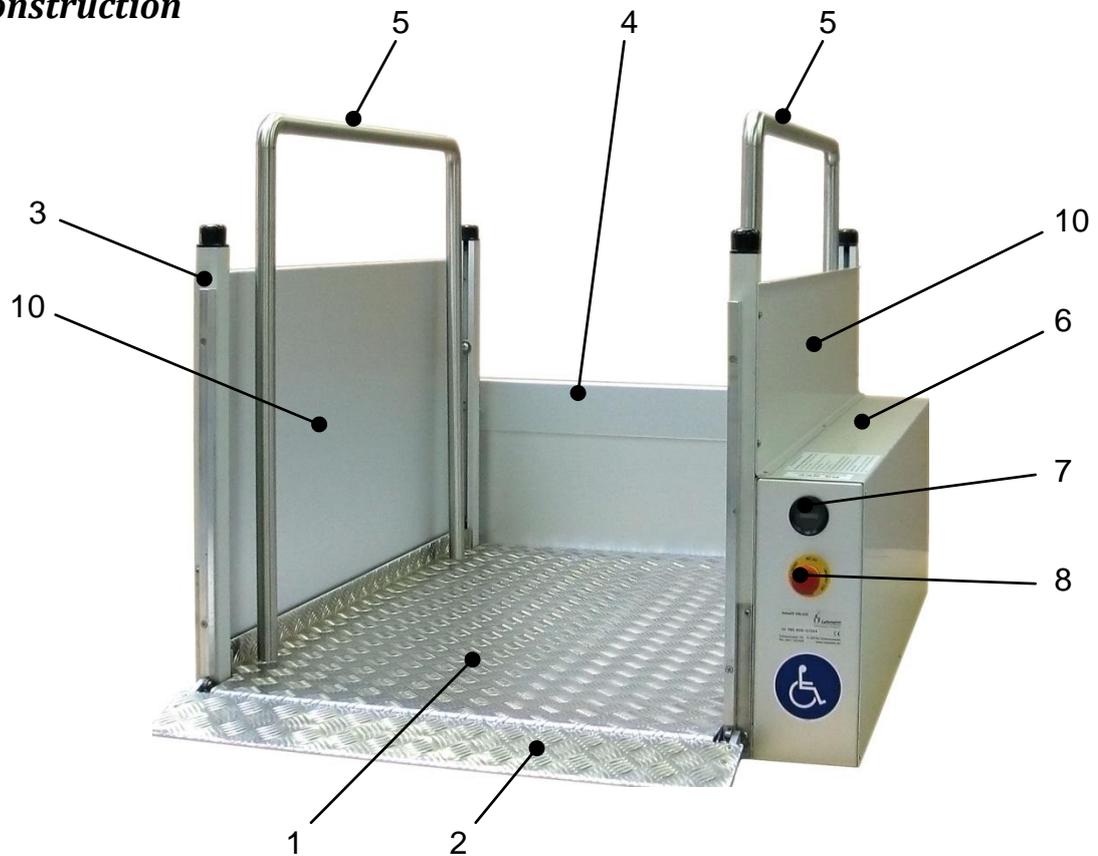


Fig. 1: HBL 600 G lift

1. Platform
2. Access ramp
3. Support column
4. Adjustable panel
5. Handrails
6. Motor housing
7. Lift counter
8. Emergency stop
9. Shutter
10. Side wall
11. Handrail panel, optional

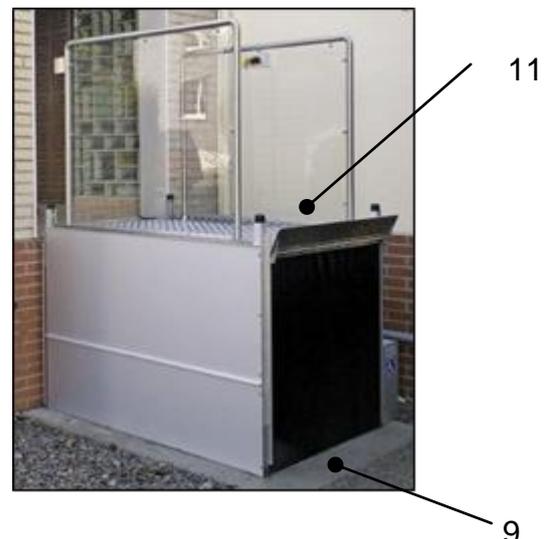


Fig. 2: HBL1000 G wheelchair lift

1.5. Technical data

1.5.1. Permissible ambient conditions

An HBL series lift can be installed indoors or outdoors. The permissible temperature range for safe operation is 0 °C to +40 °C, relative humidity up to 95%, with no condensation water. Protection type IP25.

1.5.2. Data

Model	HBL mini	HBL300 G	HBL300 E	HBL600 G	HBL600 E	HBL1000 G	HBL1000 E
Dimensions in mm							
Lifting height	170-400	300	300	600	600	1000	1000
Loading height	40	40	40	40	40	40	50
Total height	Lifting height + 150	490	490	940	940	1240*/1190**	1250*/1200**
Width overall	920	1055	1085	1055	1085	1155	1185
Length overall	1380-1650	1470	1440	1470	1440	1720	1730
Width of platform	800	800	800	800	800	900	900
Length of platform	900-1170	1170	1170	1170	1170	1420	1420
Other	* handrails without panels ** handrails with plastic panels						
Lifting capacity ***	225 kg						
Speed, load-dependent	max. 0.02 m/s						
Electrical connection	230 V / 10 A						
Weight	approx. 80 kg	approx. 90 kg	approx. 95 kg	approx. 95 kg	approx. 100 kg	approx. 170 kg	approx. 190 kg
Motor	24 V / 5 A / 120 W						

CAUTION!

*** Do not exceed the load-bearing capacity!

Maximum load at centre of platform 225 kg

Maximum loading capacity next to a support column (structure - 3) 100 kg

2. Safety

In this manual the following safety symbols are used. They are intended to draw the reader's attention primarily to the text of the safety instructions alongside them.



This symbol indicates the presence of hazards to the individual's life and health.



This symbol indicates the existence of dangers for the lift, material or the environment.



This symbol indicates information which contributes to better understanding.

2.1. Delivery check



Before first use a delivery check should be made. Here check the electrical connection for cable defects or for a torn out cable and whether free movement of access ramp and platform is assured.

2.2. Assembly and installation

Only authorised personnel may install and connect the wheelchair lift (see Section 8, p. 21).

2.3. Safety instructions for the operator

The basic requirement for operating the lift is for the user or operating personnel to have received instruction from authorized technicians.



Any use which harms living beings or impairs the operational safety of the lift is not permitted. In particular, overloading and transporting loads are prohibited.

The operator has an obligation to check the lift before use for visible damage or defects. Any changes which have occurred (including in operating behaviour) which are detrimental to safety must be reported immediately to manufacturer or specialist company.



Before use the platform and access ramp should be cleared of leaves, sand, snow and so on.

Under no circumstances, should there be any objects on the access ramp or its hinges.



In the rare case of electrical or mechanical failure of the lift precautions should be taken which allow the operator to notify an assistant. For safe use of the wheelchair lift we recommend deploying a second person briefed in its operation.



Depending on the lift model and load, carrying out five or more lifting operations in succession would result in thermal overload of the motor. In such a case a fuse is tripped and the drive unit will need to cool down for about 60 minutes. After this the lift will be once again ready for operation. The lift system is not intended for high-traffic use.

2.4. General safety instructions



- During the lifting operation do not touch or reach into the support columns (3 in Fig. 1, p. 6) or between the platform and side wall (1 and 10 in Fig. 1, p. 6).
- Do not make unnecessary movements (such as manoeuvring or rocking the wheelchair) during the lifting operation.
- The wheelchair should be equipped with anti-tilt protection.
- Apply the brake of the wheelchair or rollator during the lifting operation. **Users must be sitting down!**
- In public areas secure the wheelchair lift against unauthorised use.



- The space under the lift platform must be kept clear.
- In the event of a fire, do not use the lift.
- Do not use the lift in outdoor areas during a thunderstorm.
- Do not remove the signs from the lift.

2.5. Prohibition of unauthorized modifications and alterations



Components and accessories have been designed specifically for the product. We would expressly point out that fitting and / or using parts or accessories not supplied by ourselves may under certain circumstances negatively change properties of the product deriving from its design and thereby affect active and / or passive safety and lead to voiding of the warranty.

The manufacturer can accept no liability for loss or damage arising from the use of non-original parts or accessories.

Without our consent the wheelchair lift must not be modified either in its construction or in its safety features. Any unauthorized change in this sense will exclude all liability on our part.

3. Requirements

3.1. Place of installation

The route to the place of installation (for example, doors, corridors, garden gates, etc.) must be at least the width of the wheelchair lift. Removing individual components to reduce the lift's dimensions is not permitted.

There must be at least 50 mm clear space all around the lift. In the access area the gap between the lift's adjustable panel and the elevation height to be covered must not exceed 30 mm. For larger gaps we offer bridging ramps and step-equalizing platforms.



Hinweis

It must be possible to remove the wheelchair lift from the place of installation for maintenance and repairs. This must not be prevented by fixed structures around the lift.



Achtung

The owner must ensure that installing the wheelchair lift does not create a hazard in the overall situation in the building.

In addition, appropriately adjusted local lighting must be provided for use of the lift.

3.2. Ground



Hinweis

The wheelchair lift must be set up on a flat surface which is horizontal in all directions. It must have the necessary load-bearing capacity (for weight, see Section 1.5.2, p. 7) (such as screed, concrete, tiles, paving, asphalt, and so on).

It is not necessary to fasten the lift to floor or wall.

3.3. Entrance, stairs

If the lift is set up at an entrance with steps a step-equalizing platform (Fig. 3) will have to be installed. This is available as an option.



Fig. 3: Step-equalizing platform (left)



HBL600 G wheelchair lift with platform (right).

3.4. Electrical connection



Hinweis

The lift system is connected to a 230V socket (10A). The power cable is 2.5 m long. Outdoors, the system must be grounded in accordance with VDE guidelines by a qualified electrician.

4. Function

4.1. Control principle

The lift is controlled on the principle of dead man's control - in other words, the button on the control unit must be held down continuously during the lifting process. As soon as the button is released, all movement is stopped immediately.

4.2. Lifting / lowering operations

4.2.1. Lifting:

The lift platform (Fig. 4) must be in its lowest position. It is important to make sure that the access ramp is resting on the ground (Fig. 4, left). Bring your wheelchair or rollator to the middle of the lift platform and apply the parking brake. **Users must be sitting down!**



During lifting the access ramp pivots upwards (Fig. 4, right). This means it has to be able to move freely and must not be blocked by people, wheels, footrests or other objects.

No objects should be resting on the ramp hinge either..

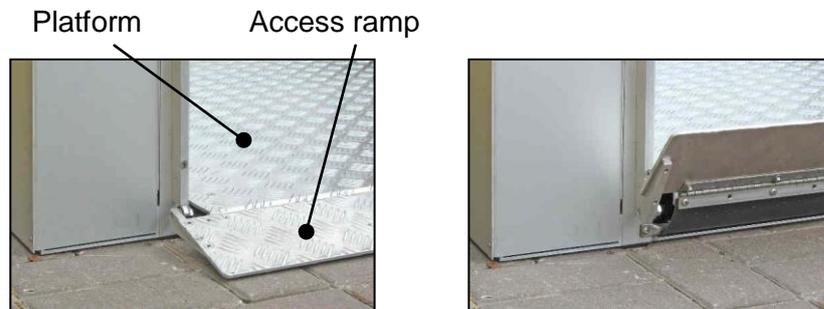


Fig. 4: Platform in its lowest position, access ramp resting on the floor (left); access ramp is pivoted upwards (right).

To raise the platform, keep the button or joystick held down for the lifting operation (see Section 4.3, p. 13) until the lift switches off automatically upon reaching the top position.

The access ramp in its raised position (Fig. 5) serves as a safety guard to prevent the wheelchair from rolling back off.



Caution:

The access ramp does not however absolutely guarantee the wheelchair is prevented from toppling off the lift! It is essential to apply the wheelchair or rollator brakes!

Users must be sitting down!



Access ramp

Fig. 5: Access ramp as protection against rolling off



Hinweis

If the lift system is fitted with a gate (Fig. 6) on the upper exit, it will be automatically unlocked when the platform has arrived at the upper position.

Gate

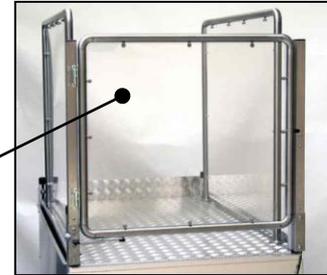


Fig. 6: Lift system with gate for the upper exit (optional)

4.2.2. Lowering

The lift platform must be in the top position. Make sure that the platform and the entry point are on the same level. Bring your wheelchair or rollator to the middle of the lift platform and apply the parking brake.



Hinweis

If the lift system is fitted with a gate (Fig. 6) it must be fully closed - in other words, the gate latch must be in the locked position shown in Fig. 7. If this is not the case the lift will not start.



Fig. 7: Door lock

To lower the platform, keep the button or joystick held down for the lowering operation (see Section 4.3, p. 13) until the access ramp rests on the ground (Fig. 4, p. 11) and the lift switches off automatically upon reaching the bottom position.

4.3. Control elements

4.3.1. Cable-connected remote control (standard)

The cable-connected remote control (Fig. 9) has two buttons which start upward or downward travel of the wheelchair lift.



Don't tug at the remote control cable as this may result in damage. If the cable or housing is visibly damaged do not use the lift and report this (see Section 8, p. 21).



Fig. 8: Cable-connected remote control

4.3.2. Wireless remote controls



The wireless remote controls are state-of-the-art devices which comply with recognised safety regulations. Nevertheless, improper or incorrect use may endanger life and limb of the user or others, or cause damage to the equipment or other property.

The wireless remote controls (Figs. 9, 10 and 11) have two buttons or a toggle switch or a joystick, which control the upward and downward travel of the lift.



The lift is **set in motion** by pressing a button or the toggle switch or moving the joystick **and remains moving until the control element is released**.



The radio transmitter has a very long range. To prevent the lift rising accidentally, only use a wireless remote control in the immediate vicinity of the lift and in visual contact with the lift and wheelchair user.

The wireless remote controls are powered by a standard 9 V battery (type 6LR61).



Fig. 9: Manual transmitter with toggle switch



Fig. 10: Control panel with mushroom buttons



Fig. 11: Control panel with joystick and magnetic pin

4.3.3. Emergency stop button

Pressing the emergency stop button (Fig. 12) cuts off the power supply and the lift stops. It is unlocked by turning the button clockwise until it visibly unlatches.

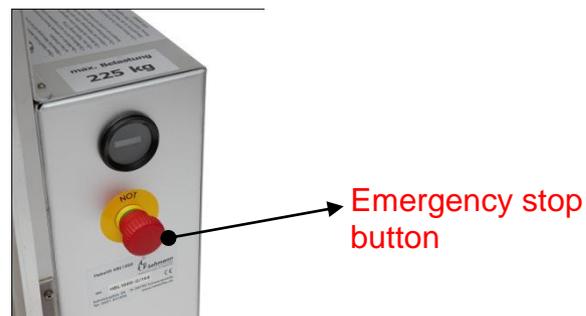


Fig. 12: Emergency stop button on the motor housing

4.3.4. Changing the battery

The control panel and handheld transmitter are each equipped with a standard 9 V battery (type 6LR61).

To change the battery the control panel must be opened by using a Phillips screwdriver to undo the 4 Phillips screws of the housing. In the case of a hand-held transmitter the back cover must be removed (Fig. 13). The battery can now be changed. Once the new battery has been fitted, screw the control panel cover back on or fit the hand-held transmitter cover again.



Hinweis

Discard the old battery into a battery recycling container.

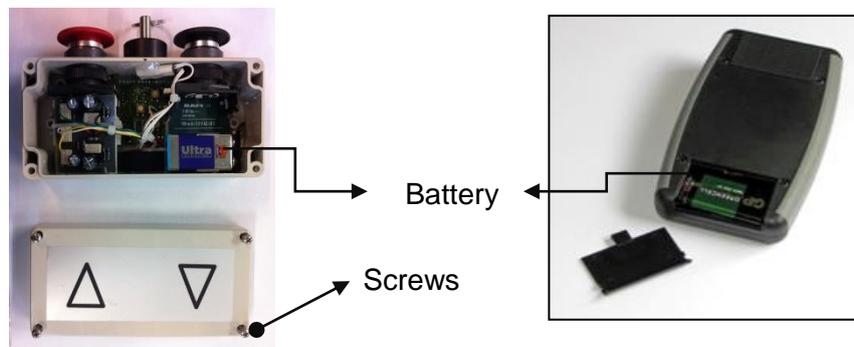


Fig. 13: Battery of handheld transmitter with toggle switch

5. Care and maintenance

5.1. Maintenance and settings



Achtung

Only authorised personnel may carry out maintenance of the wheelchair lift (see Section 8, p. 21).

Maintenance is required after 1000 lifting operations (from 2015, 1500) (see Section 1.3, p. 7) or at least once per year.

This is also important for conservation of the warranty!

If the wheelchair lift is installed in a special climatic environment or is exposed to the severe effects of sand, dust, leaves and so on, the owner should have the lift maintained every six months.

The lift is preset in the factory to the required lifting height. Only authorised personnel may change the lifting height.

5.2. Care instructions

The lift can be cleaned with a sponge or brush and soapy water. Solvents and aggressive cleaning agents are not permissible.



Achtung

Do not use a garden hose or pressure washer.

If the lift is installed outdoors, every 3 months or so foreign bodies (leaves, cigarette ends and so on) should be cleaned out from its interior (beneath the lifting plate). To do so, unscrew the side wall (10) and clean the base plate with a vacuum cleaner or hand brush.

Before each use make sure that the access ramp hinge can move freely.

6. Transportation



The wheelchair lift must be transported only when the platform is in the top position (Fig. 14, right). The platform must not be used as a 'lifting handle'.

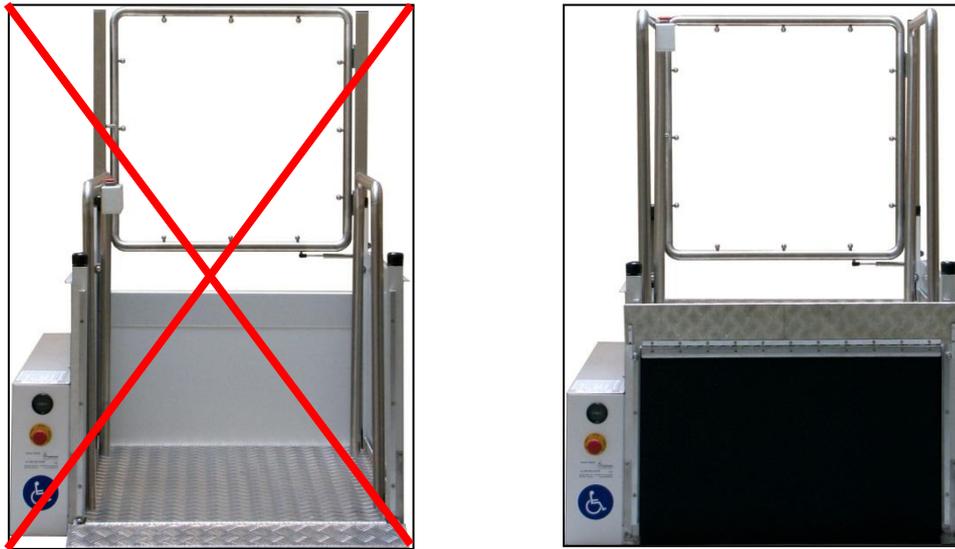


Fig. 14: Lift in an impermissible horizontal transportation position (left) and in the correct transportation position (right)

Use a commercially available roller board (hardware store) to transport the lift.

7. Troubleshooting

7.1. Lift does not start

Cause	Remedy
1. Has the emergency stop button been pressed?	Unlock the emergency stop switch by turning it clockwise. The switch must disengage visibly. This is indicated by a green ring.
2. Is the lift connected to the mains?	Plug the plug into the socket or use the socket switch if one is fitted.
3. Has there been a general power failure?	Check to see if other electrical equipment is working. Contact a qualified electrician.
4. Wireless remote control: battery is flat or the remote control has a fault.	Change the battery or replace the wireless remote control.
5. After several successive lifting operations the thermal protection of the motor may have tripped	The motor must be allowed to cool down for about 60 minutes. After this the lift will be once again ready for operation.

7.2. Lift stops during upward travel

Cause	Remedy
Has the permissible load been exceeded?	Reduce the load.
Is the control element button being held down?	Keep the button held down.

Have there been multiple lifting operations (see Section 7.1.5)?

7.3. Lift stops during downward travel

Cause	Remedy
Are there any objects beneath the lift?	Bring the lift back to the top stopping position. Clear the space beneath the lift.
Is the control element button being held down?	Keep the button held down.

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If the problem still persists, contact customer service immediately (see Section 8, p. 21). Do not fail to provide the serial number. This is located on the motor housing.

8. Additional information

8.1. Customer service or dealership

Contact details for customer service or the dealership are stamped on the back page of this operating manual.

8.2. Manufacturer

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Any other questions or requests? We'll be happy to provide further assistance.

