

Operation of the LL12 stair lift

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! Important !

Please read the operating manual before using the lift.
Also make sure that each user of the lift has read and understood the operating manual.
No rights whatsoever can be derived from this operating manual.



EU Declaration of Conformity

The manufacturer

LIPPE Lift GmbH
Weststrasse 48, 32657 Lemgo,

hereby declares on its sole responsibility that the following product

Inclined stair lift / platform lift / type LL12

Serial number:

conforms to all relevant harmonising legal regulations of the following European Union product directives:

2006/42/EC Machinery Directive
2014/53/EU Radio Equipment Directive

Harmonised standards and technical specifications:
EN 81-40 (2009) EN ISO 12100 (2010)
EN ISO 13850 (2007) EN 60204-1 (2009)

Specific details according to the Machinery Directive 2006/42/EC:

The product was brought onto the market in accordance with Article 12 (3) b) of the Machinery Directive:

the machine falls under Annex IV of the Machinery Directive.

EU type testing according to Annex IX and internal production checking according to Annex VIII 3)

The EU type testing was carried out by TÜV AUSTRIA SERVICES GMBH, Deutschstrasse 10, 1230 Vienna, NB 0408 and the following EU type testing certificate was issued: TÜV-A-MHF/MG18-00004

Specific details according to the Radio Equipment Directive 2014/53/EU:

The product was brought onto the market in accordance with Article 17 (2) a) of the Radio Equipment Directive.

Responsible for the documentation: LIPPE Lift GmbH (Documentation Dept.)
Weststrasse 48, D-32657 Lemgo

Lemgo, 12.01.2018

F.-W. Mueller (Managing Director)

1. General

The rating plate provides the most important information about the platform lift.

Manufacturer

Type of machine


Type designation

Year of manufacture

Serial number


Load-carrying capacity of the platform

Dead weight of the platform



Treppenschrägaufzug (EN81-40)
Typ LL12
Baujahr: 2019
Fabriknr.: **L-00283**
Tragfähigkeit (KG): 225
Eigengewicht (KG): 150

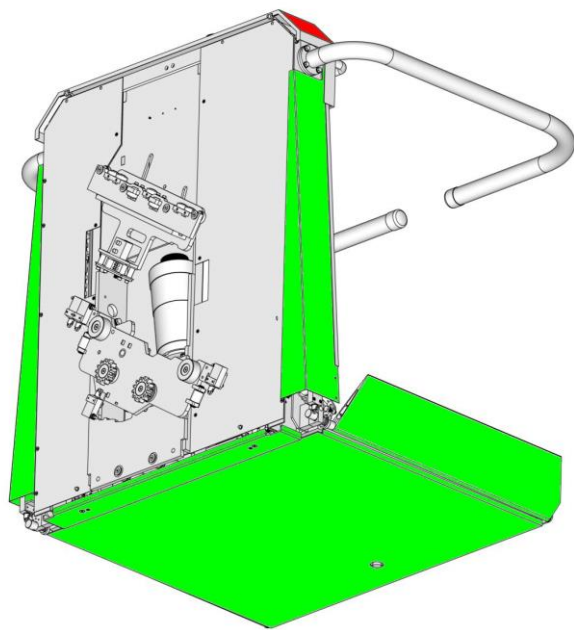
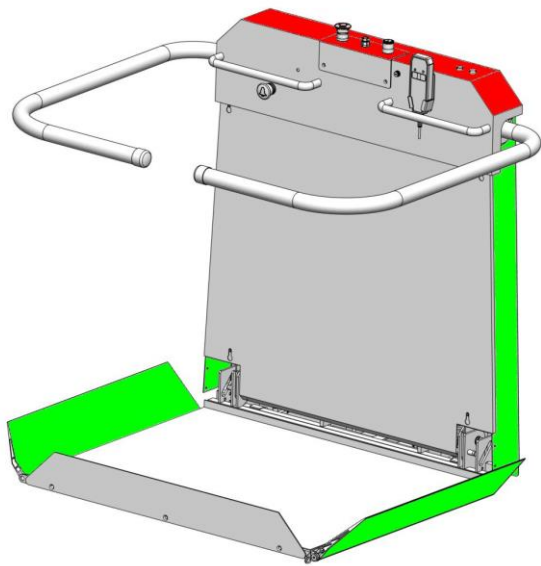
LIPPE Lift GmbH
Weststraße 48
D-32657 Lemgo



Tel +49 (0)5261-9666-0
Fax +49 (0)5261-9666-22
www.lippelift.de

Field for details of the importer/dealer

The LL12 platform lift is equipped with many sensitive surfaces. Here is an overview:



RED = integrated in the safety circuit (further travel is not possible if activated)
GREEN = direction-related power-off (the lift can travel in the opposite direction)

If one of the direction-related switching surfaces (item 2 / green) is activated, the platform stops moving and an acoustic warning signal is activated. After two seconds, the platform drives without any command for 1.5 seconds in the opposite direction and stops. Only then is the acoustic warning signal deactivated. The 'release drive' phase can be aborted only by the activation of another switching surface, a safety switch or the emergency stop. After the 'release drive' is finished, a travel command contrary to the last active travel command must be given in order to resume travel.

1.1 Technical data:

Permissible loading capacity:	max. 225 kg (standard is 160 kg)
Continuous sound pressure level:	< 70 dB (A)
Vibrations:	< 0.5 m/s ² (measurement inaccuracy ± 3%)
Speed:	approx. 0.1 m/s
Platform voltage:	24 V DC
Battery charger voltage:	230 V AC (55 W)

1.2 Ambient conditions:

Temperature range:	0 °C to +40 °C
Rel. humidity: max.	90% non-condensing
Place of installation:	Interior area

1.3 Testing obligations

Whether or not the LL12 platform lift is subject to an obligatory test depends on the respective national regulations and is the user's responsibility. These regulations must be checked and adhered to. In Germany, a test is obligatory for systems with a lifting height of ≥ 3 m.

In each case, proof must be provided and documented in accordance with EN81-40 before the first use.

The LL12 platform lift is to undergo maintenance in accordance with the maintenance instructions at least once per year. We recommend that you take out a service contract with your dealer.

2. Use as intended

The LL12 platform lifts are intended for the transport of wheelchair users and/or people with reduced mobility.

The platform travels between fixed access points along a permanently installed rail, which is implemented straight. The platform is guided over the stairs or an accessible inclined surface by the running rail.

The system may only be operated by persons who have been instructed how to do so.

2.1 The following transport profiles are foreseen:

- Transport of one person sitting in a wheelchair
- Transport of one person sitting on the folding seat.
- Transport of one person standing on the platform, provided that there is sufficient headroom and that the person has sufficient standing stability and can hold the hand grips securely (a separate set of documents is required, available on enquiry).
- Transport of an additional person, provided that there is sufficient room on the platform and that the permissible loading capacity is not exceeded.

A usage profile of 10 start-ups per hour is foreseen (with distances covered of max. 5 m for each start-up). In the case of longer distances covered, the number of start-ups should be reduced accordingly (and linearly).

The LL12 chair lift may be only operated if danger due to falling objects (such as flowerpots) is ruled out.

2.2 Inappropriate use must be prevented, e.g.:

- Exclusive use for loads (if, in rare cases, loads such as shopping or beverage crates are transported, it is essential to ensure that the load is sufficiently stable and that the permissible loading capacity is not exceeded).
- Loads that protrude beyond the surface area of the opened base may in general not be transported (e.g. large pieces of furniture).
- The LL12 platform lift is not a toy (children).
- Operation in potentially explosive atmospheres
- Operation outdoors

2.3 Operator qualification / technical personnel / qualified persons

The operator of the chair lift must have unrestricted mental abilities. Operators with seriously impaired vision may be transported only with an attendant, whereby the attendant issues the drive commands. Furthermore, the operator must have read and understood the operating instructions.

Technical personnel and/or qualified persons are described in the assembly and service manual.

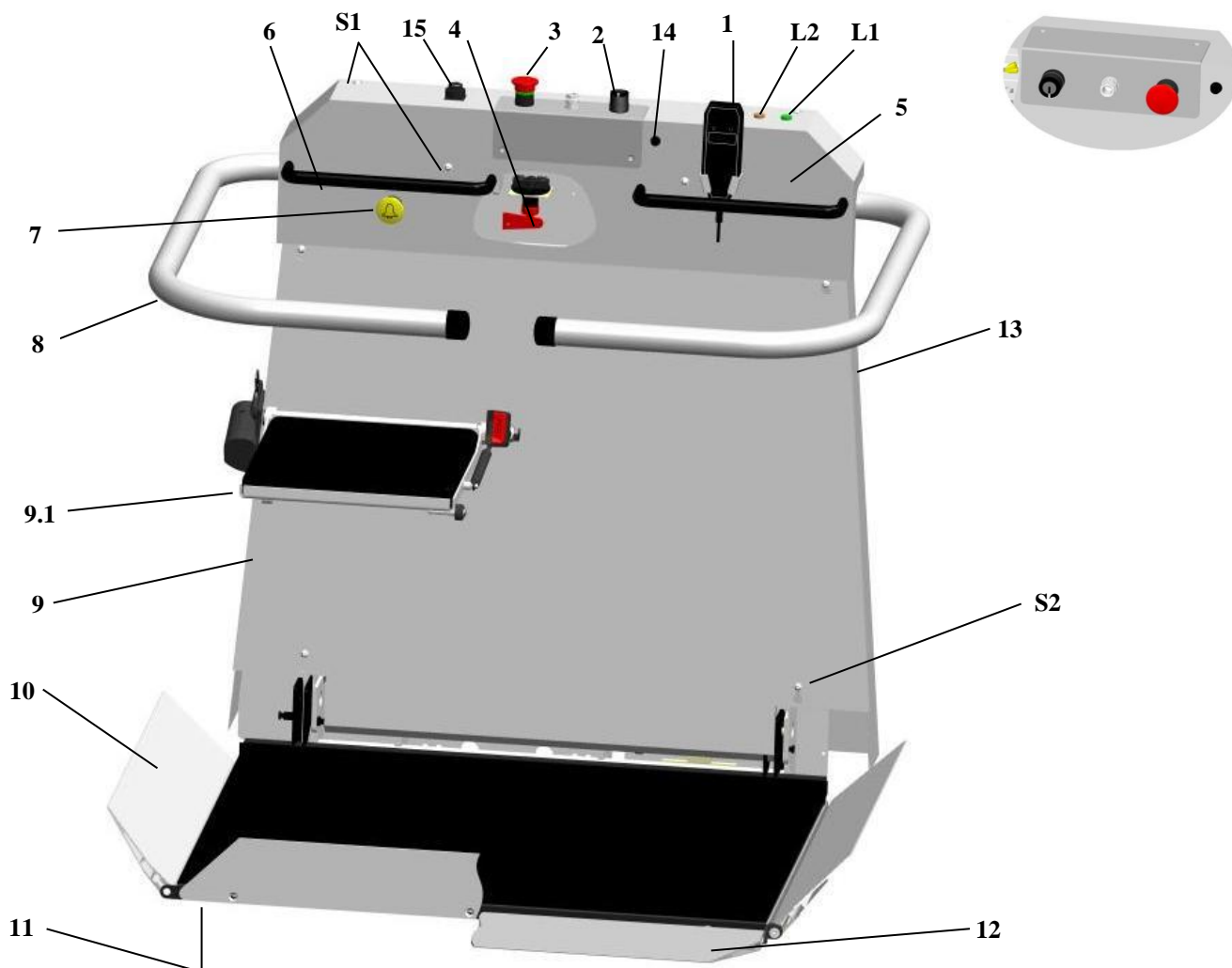
2.4 Product description

Our products combine the requirements for overcoming stairs with outstanding integration in the familiar environment in an appropriate way.

The maximum permissible load-carrying capacity is 225 kg, standard is 160 kg (measuring point for this is the centre of the platform base).

The continuous sound pressure level is less than 70 dB (A).

We recommend that you take out a service contract. This guarantees the technically optimum condition of your LL12 stair lift by means of regular maintenance. The maintenance interval is once a year.



Item	Designation
1	Control unit
2	Key switch
3	Emergency stop button
4	Main switch (located inside)
5	Platform hood
6	Handle
7	Emergency call
8	Left-hand safety barrier
9	Cover for motor / controller (front cladding)
9.1	Folding seat (option)
10	Left-hand drive-on ramp
11	Contact base
12	Lateral drive-on ramp (option)
13	Plug seal
14	Fuse for the charging current
15	Key switch emergency operation (option)
L1	Lamp: main switch ON
L2	Lamp: overload – load capacity exceeded
S1	Bolted connection – platform hood (4x)
S2	Bolted connection – front cladding (4x)

3. Safety and special instructions

Although your lift meets the latest safety regulations, it is essential that you observe the following safety instructions:



Put the lift into operation only after reading the operating instructions and adhere to the operating instructions.



Never exceed the permissible loading capacity.

(Residual danger: breakage/failure of the brakes)



Operate the lift only when seated (see transport profile for exceptions)



Do not use the lift in the case of fire.



Do not allow loosely hanging articles of clothing to get near to the running rail and the platform when the lift is moving.

(Residual danger: trapping of loose clothing, etc.)



Fold up the lift when not in use.

(Residual danger: tripping over)



Never place your hands near the running rail when the lift is moving.

(Residual danger: crushing)



Be sure to observe the track in the direction of travel when travelling.

(Residual danger: crushing)



Do not remove, cut through, deform, or use undue force to operate parts of the lift, cladding parts or operating elements.



Do not push the barriers with undue force, neither while travelling nor when raising or lowering them.

(Residual danger: falling from the platform)



Stop the drive command immediately if there are obstacles or articles in or on the track or platform or in the driving area.

(Residual danger: crushing)



Do not remove any labels or signs belonging to the lift.



Have repairs carried out exclusively by specialists.



Do not allow any parts of the body, wheelchair or loads to protrude beyond the base of the platform.



Do not make any unnecessary movements on the platform, such as rocking or swinging.

(Residual danger: falling from the platform)



Remove dirt from the lift with a little polish or a damp cloth, not with a water jet.



The load-bearing equipment and track must be sufficiently well lit by daylight or electric lighting. The electric lighting must be independent of timer circuits. Minimum 50 lux at the entry and exit points or in accordance with the national employee protection regulations.

4.1 Main switch

The main switch (red key) is located inside the platform, behind the cover (*p.7, item 4*). The key can be removed by turning it anti-clockwise, thus disconnecting the power supply. (For opening the cover, see 4.7.1). The main switch must be actuated by technical personnel.

4.2 Deep discharge protector and charging

The LL12 platform lifts are equipped with automatic battery chargers. Charging takes place automatically when the platform lift drives into a loading station. The batteries do not require any care.

All LL12 platform lifts are equipped with an acoustic deep discharge protector. This acoustic signal generator is intended to protect the batteries against deep discharge.

If the battery voltage drops below 22 V, a beep sounds at intervals of approx. 5 seconds. In this case you should drive immediately to the next charging station – if possible the lower charging station – and allow the lift to charge up there for several hours (this takes place automatically in the charging station). The beep stops after proper charging. The sound can be turned off by pressing the emergency stop button; this has no influence on the charging process.

4.3 Checking the loading / overload protection

The LL12 platform lift is equipped with an overload protector (acoustic and visual). On activation the orange lamp on the hood goes out (*p.7, item L2*). In addition, the internal beeper emits a continuous tone in the case of overload. This is based on the entire load being in the centre of the base of the platform. Reduce the weight if the overload protector is triggered. It may be sufficient just to shift the weight towards the running rail.

4.4 Battery charger (indicator lamps)

The indicator lamps on the battery charger indicate the respective condition of the battery charger. Distinction must be made between different versions of the battery charger.

The meaning of the various colours or indicator lamps is shown on the battery chargers. The installer will explain this to you in detail once again during the instruction.

Note: An acoustic signal sounds if the lift, outside a station, is not charged 30 seconds after the last motor movement.

4.5 **Fetching and sending the platform lift** (standard version)

Before each journey, make sure that the acoustic warning signal works. The LL12 platform lift can be fetched from or sent to another station from any station. To do this, the key switch must be inserted at the respective station, turned in the appropriate direction and held in this position.

The platform lift does not react immediately, but after a delay time of approx. 2 seconds.

Note: The platform lift drives from the external control point only in the folded up condition, i.e. the base of the platform must be folded up and the safety barriers folded downwards.

Note: an LED is mounted on the radio transmitter for fetching/sending the chair lift.

GREEN: batteries are OK

ORANGE: the battery power is diminishing; renew the batteries at your earliest convenience

RED: the battery power is very low; replace the batteries immediately

Fetching and sending the platform lift (special version 1) [via the external control unit, only with 3-position key switch (*p.7, item 2*) for a trip with the platform open via the external control unit]. This option must be activated by a specialist inside the controller. It must be ensured that no third person can suddenly get/jump into the path of the lift. **Condition: driving area is 100% in view!!!!**

The key switch (*p.7, item 2*) is to be set to position -II-, otherwise as in 4.5.

Fetching and sending the platform lift (special version 2) [via the internal controller, only with 3-position key switch (*p.7, item 2*)]. This option must be activated by a specialist inside the controller.

The platform can be driven via the internal controller in the folded up condition. The key switch (*p.7, item 2*) is to be set to position -II- in order to do this. The platform lift can now be driven via the internal controller (*p.7, item 1*).

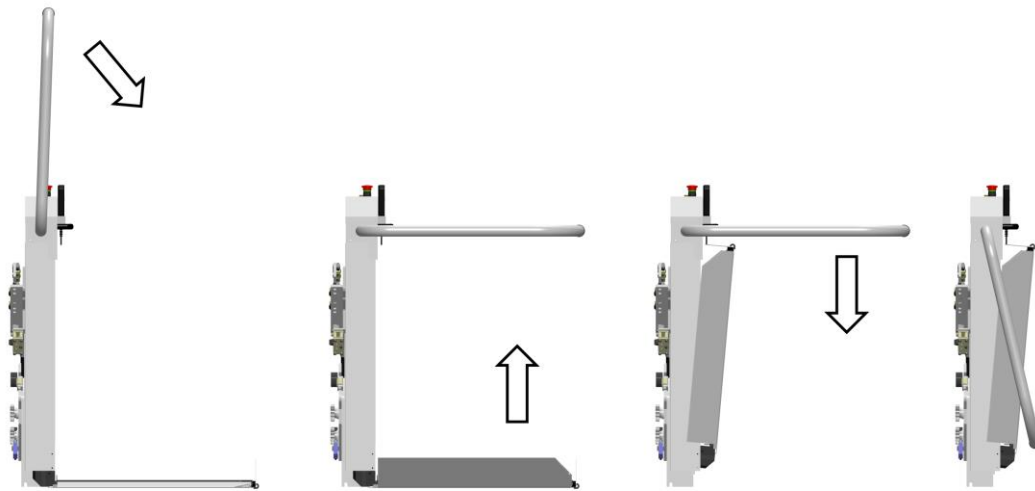
4.5.1 Folding procedure

In the case of the LL12 platform the base folds up and down electrically and the safety barriers raise and lower electrically. This is performed by means of an UP or DOWN command issued from a station (*see also paragraph 4.5*), or via the internal controller in the case of special version 2. The control button must be pressed and held (so-called jogging mode) until the folding procedure is complete.

If a malfunction should occur during the folding procedure, the platform must be folded up or opened manually (see below) and customer service must be informed.

The folding procedure at a step can/may only be carried out by an attendant.
Proceed as follows in order to fold up the platform by hand:

- a) Place the safety barriers in the horizontal position.
- b) Fold up the base of the platform.
- c) Lower the safety barriers so that they rest against the base of the platform.



Proceed in the reverse order to open the platform again and finally raise the safety barrier at the desired access point right up to the top (vertical).

4.6 **Travelling with the platform lift** (standard version)

Before each journey, make sure that the warning signal works. The following control elements are located on the platform:

- a) Key switch Function -I- and -0- (p.7, item 2)
- b) Control unit Function UP and DOWN (p.7, item 1)
- c) Pushbutton EMERGENCY STOP (red knob) (p.7, item3)

⇒ After driving the platform, insert the key and turn it to position -I-:

! In the case of the LL12 platform, the safety barrier closes electrically when the button is pressed and held in the desired direction of travel. The platform lift begins to move once the barrier has closed.

⇒ Upon reaching the destination station:

! The platform lift stops automatically (the respective position is set during the installation).

! In the case of the platform, press and hold the button until the safety barrier has opened.

Travelling with the platform lift (special version 1) [via the external control unit, with 3-position key switch (p.7, item 2) for a trip with the platform open via the external control unit]. This option must be activated by a specialist inside the controller. It must be ensured that no third person can suddenly get/jump into the path of the lift. **Condition: driving area is 100% in view!!!!**

The key switch (p.7, item 2) is to be placed in position -II-, otherwise the procedure is the same as described under 'standard version', with the difference that only the external control unit is used here.

Travelling with the platform lift (special version 2)

The key switch (p.7, item 2) is to be placed in position -I-, otherwise the procedure is the same as described under 'standard version'.

4.7 **What to do in the event of an unexpected standstill, e.g. due to a power failure?**

We recommend that a working mobile telephone be carried in order to alert the rescue services.

4.7.1 **Manual operation / operation with hand wheel**

The LL12 stair lift can also be operated manually. Manual operation must be performed by technical personnel! The procedure is as follows:

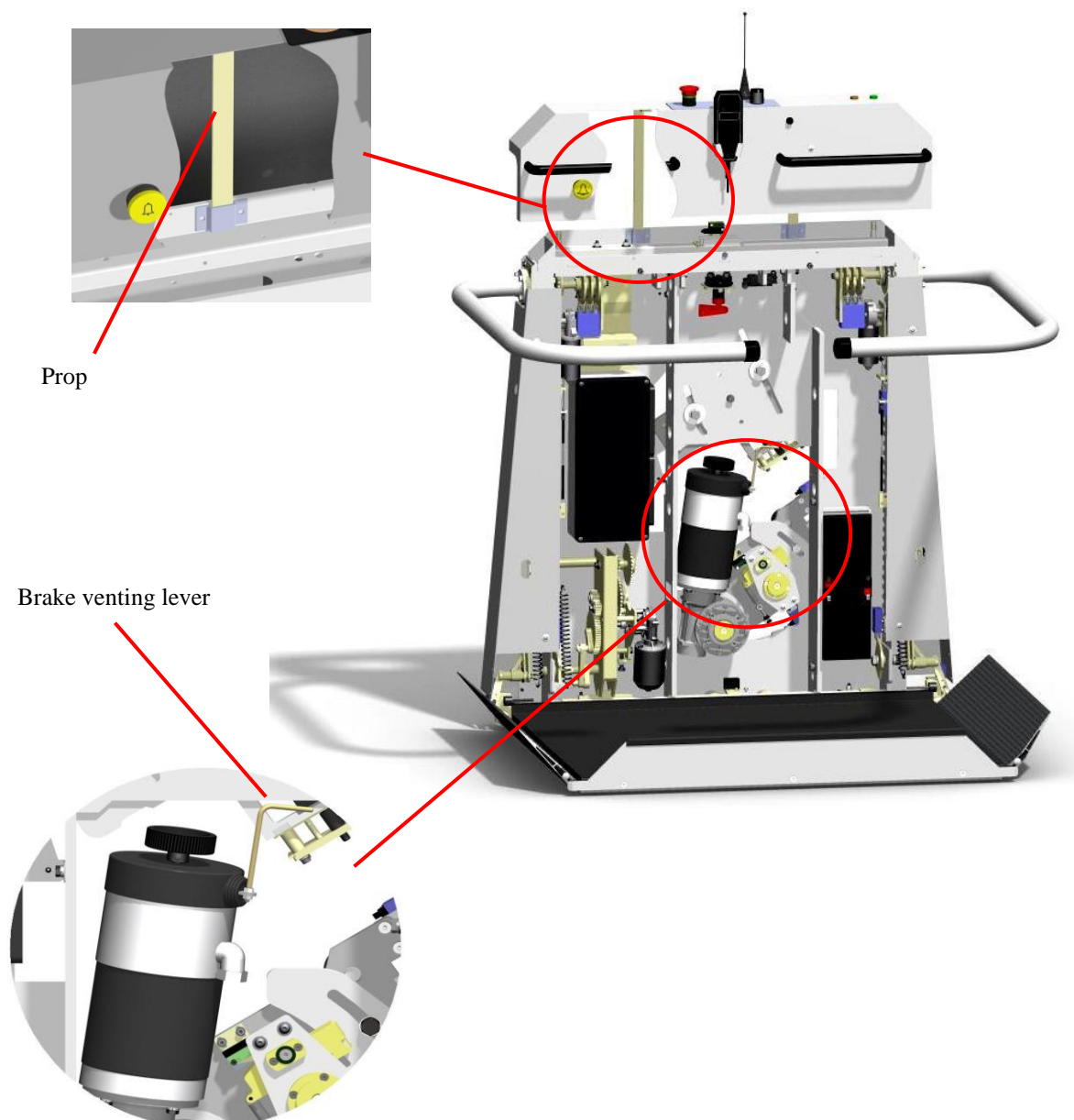
- a) Press the EMERGENCY STOP button (p.7, item 3) on the platform.
- b) The bolted connection of the platform hood must be removed using the hexagonal wrench (provided in the envelope).

- c) The platform hood is to be raised and secured against falling down by means of the insertable arms.
- d) The bolted connection of the front cladding must be undone using the hexagonal wrench (provided in the envelope) and the cladding removed.
- d) The brake venting lever is to be pressed upwards or downwards whilst at the same time turning the hand wheel on the end of the motor shaft (*see illustration below*).

In doing so, the direction of travel should always be towards the lower station (less energy expenditure when turning the hand wheel). The respective direction of rotation is indicated directly on the hand wheel.

Note: If the cause of the standstill is not clear, it should be assumed that the safety arrester has been triggered and that its safety switch has led to the lift switching off.

The safety arrester may only be reset by technical personnel. In this case, proceed as described in a) to e) above, but first turn the hand wheel in the UP direction (until the lift has moved approx. 5 cm along the rail), after which the hand wheel can be turned in the DOWN direction.

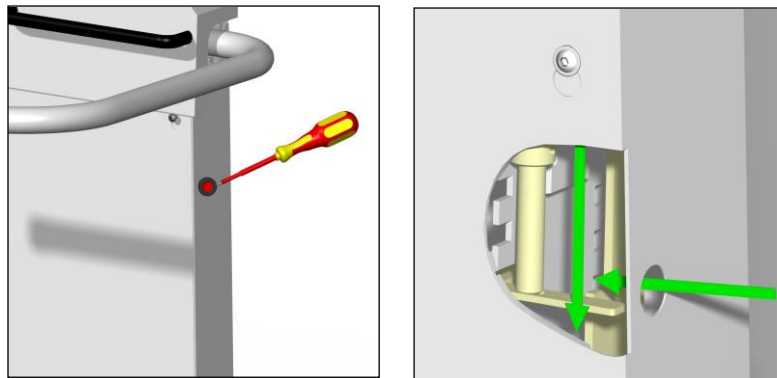


4.7.2 Evacuation / only by technical personnel

Proceed as follows in order to help the operator out of the lift:

- Press the EMERGENCY STOP button (p.7, item 3) on the platform.
- Remove the plug seal (for the emergency unlocking) on the front cladding on the uphill side using a screwdriver or similar.
- Press the lever shown in the picture (below right) downwards using a suitable tool.
- The operator can now be helped out at the uphill side.

The platform must be folded up by hand so that the lift does not block the staircase (see 4.5.2).



4.7.3 Electrical emergency operation (optional feature)

To activate the electrical emergency operation you need the second, red-marked key. Insert the key into the cylinder provided (marked with ) and turn the key.

Here, too, it is compulsory to hold the key the entire time in the activated position. On activation the lift drives downwards at a much slower speed (only downwards). During this journey all switches, safety contacts or switching surfaces are disabled, therefore particular attention must be paid to the environment. Since the switches for the stopping point position are also disabled, this position must be approached somewhat carefully, because the barrier only opens within a certain range. If you drive beyond this range the barrier is locked again. The platform may be damaged if you drive past the lower stopping point.

It is best to stop about 10 cm before the stopping point and then to drive section by section (2 – 3 cm) in the downward direction. After each section, try to push the barrier upwards on the side to which you wish to exit in order to open it. If the range has been reached in which the barrier can be opened, leave the platform and inform your customer service.

If the electrical emergency operation does not function (a possible reason could be a defective motor or energy supply), see 4.7 -> hand wheel operation.

If the emergency operation has been actuated beyond the stopping point that you were approaching and the barriers cannot be opened, the lift must be moved manually upwards a little as described in 4.7 until the barrier can be opened.

5 **Options / extras**

Depending upon requirements, the LL12 platform lifts are also equipped with the following extras.

5.1 **Lateral drive-on ramp**

In some cases (staircases) it is not possible to drive onto the platform over the two standard drive-on ramps due to the space in front of the first step. In these cases, an additional drive-on ramp is to be mounted on the long side of the platform (*p.7, item 12*).

5.2 **Folding seat**

All of our platform lifts can be equipped or retrofitted with a folding seat if desired (*p.7, item 9.1*). The folding seat is intended as a seat for non-wheelchair users who wish to use the platform lift. When folded up, the seat lies against the platform wall to save space. The folding seat is equipped with a seat belt, which must be fastened while travelling if the user is not able to hold on to the barrier or the hand grip with a hand.

6. In the event of a malfunction

Malfunction	Possible cause	Remedial action
Lift does not function at all	Is the key on the control unit set to -I- and are the others set to -0- or removed?	Set the key switches correctly (see 4.5 or 4.6)
	Is the EMERGENCY STOP switch unlocked?	Unlock the EMERGENCY STOP switch by turning or pulling (depending on the design)
	Is the main switch for the lift set to -I-? Batteries defective or deep discharged	Turn on the main switch (see 4.1) Replace the batteries (technical personnel)
	Safety arrester has triggered	Inform technical personnel
Lift does not start when platform is unfolded and occupied	Are the safety barriers in the horizontal position?	Actuate the safety barriers again or move them slightly up or down
	Are the drive-on flaps freely movable? Load-carrying capacity exceeded	Press the drive-on flaps slightly outwards. Drive in the <u>opposite direction</u> . Reduce weight
Lift does not fold automatically	Are all key switches at -0- except at the control station selected by you?	Set the key switches correctly (see 4.5 or 4.6)
	In the case of radio-controlled control stations: are the batteries OK?	Replace the transmitter batteries

If you cannot repair the error yourself in this way, please inform your customer service.

7. Acoustic warning signals

Duration [sec.]	Pause [sec.]	Reason	Remedial action
0.1	5.0	Low battery voltage (see also 4.2)	Drive to the charging station and charge the batteries
0.1	0.5	Acoustic drive warning	-----
0.1	0.25	Release drive (see page 4 for description)	-----
2x briefly	4.0	Overtemperature of motor/electronics, or defective fuse	It is possible to resume driving after a cooling down period of approx. 5 min. (If cooling is insufficient, the cooling period is extended by a further 5 min.)
3x briefly	4.0	Faulty electronics/motor	Inform customer service
Continuous tone	----	Emergency call by means of beeper on the platform, or overloading	Release the emergency call button. Shift centre of gravity closer to the rail or reduce the weight

Note: The acoustic warning signal can be suppressed by pressing the emergency stop button; the charging procedure is maintained (exception: continuous tone).

8. Services performed on your Konstanz stair lift at a glance

Installed on:		Serial no.:	
Installed by:		TÜV acceptance on:	
No.	Date	Service performed	Signature
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