

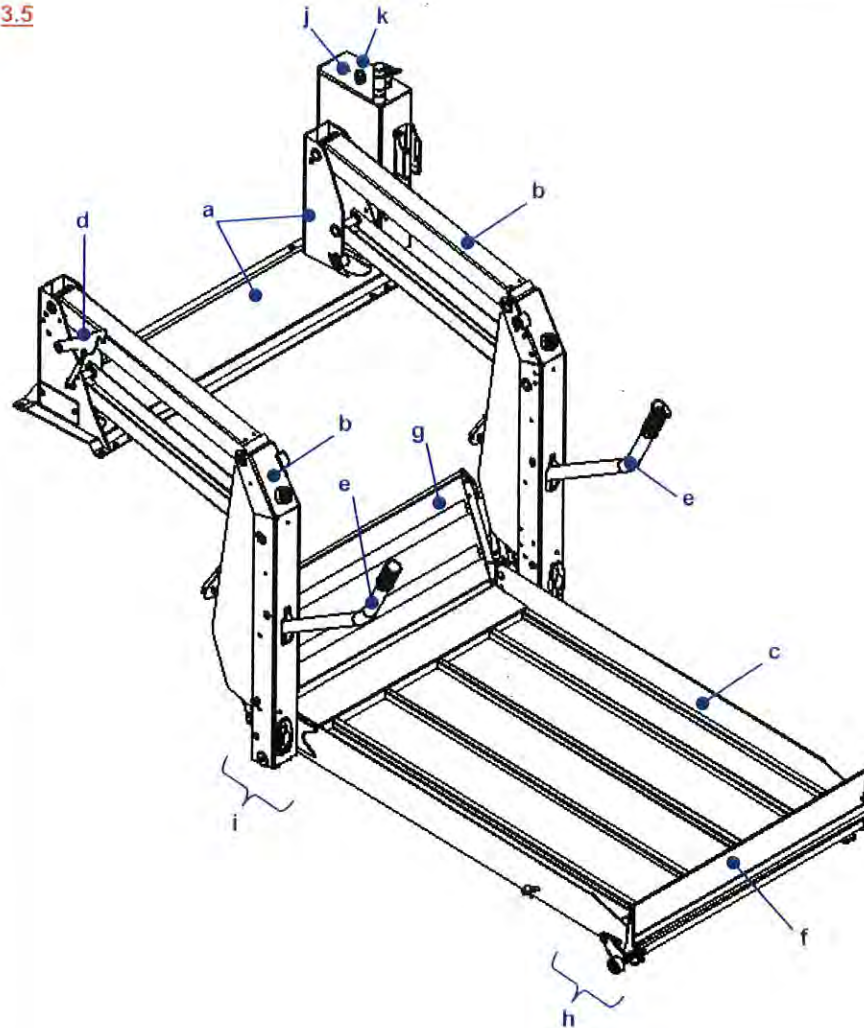


- The **DH-P2 commercial lifts** and **DH-PH2 passenger lifts** are operated by 2 lift arms, holding the platform at both sides, providing maximum platform stability. It can be mounted at the rear or side doors of the vehicle, left and right.
- Further details & terminology [See Fig. 3.5]:



N°	Description of DH-P2 / PH2 [see Fig. 3.5]
a	<b>Lift frame</b> , mounted inside the vehicle, carrying the lifting mechanism and the platform.
b	<b>Lift arms + lift cylinders</b> , used to lift / lower and close / open the platform.
c	<b>Platform</b> : carries the load or wheelchair during lifting / lowering.  P2: platform in aluminium with a non-slip working surface. PH2  : Platform in meshed steel, evacuating rainwater, dirt, snow,... very quickly off the platform
d	<b>Mechanical platform lock</b> , used as secondary locking mechanism for the platform, to prevent it from opening in case of pressure loss in the hydraulic circuit.
e	<b>Safety rails</b> (→ PH2  ) mounted left & right, opening / closing automatically when the platform itself is opened / closed. Provides a hand-hold for the platform occupant.
f	<b>Automatic roll-stop</b> at the rear edge of the platform. Is lowered automatically when the platform touches the ground. Is raised automatically when the platform is lifted off the ground. Prevents wheeled goods or the wheelchair from slow, unexpected rolling off the platform during the lifting / lowering.
...	...

## 3.5



#### 4. SAFETY DEVICES

- DHOLLANDIA lifts are equipped with a wide range of safety devices, to enable its intended use [see section 1] with a maximum degree of safety for the operator, the wheelchair passenger and / or the load on the platform.
- The following safety features are incorporated on DHOLLANDIA lifts :

Fig.	Description
4.1	<b>Anti-slip surface</b> : platform surface providing optimum protection against slipping.
a	P1 / P2: platform in aluminium with a non-slip working surface.
b	PH1 / PH2  : platform in meshed steel, evacuating rainwater, dirt, snow,... very quickly off the platform.
4.2	<b>Automatic roll-stop</b> at the rear edge of the platform. Prevents wheeled goods or the wheelchair from slow, unexpected rolling off the platform during the lifting / lowering.
4.3	<b>Automatic bridge plate</b> to the loading floor of the vehicle. Functions as toe-guard during the lift cycle.
4.4	<b>Safety rails</b> (→ PH1 / PH2  ), opening / closing automatically when the platform itself is opened / closed. Provides a hand-hold for the platform occupant.
4.5	<b>Platform lights</b> : any platform protruding beyond the extremities of the vehicle, must be clearly visible from all approachable sides in daylight and at night.
...	...

4.1.a



4.1.b



4.2



4.3



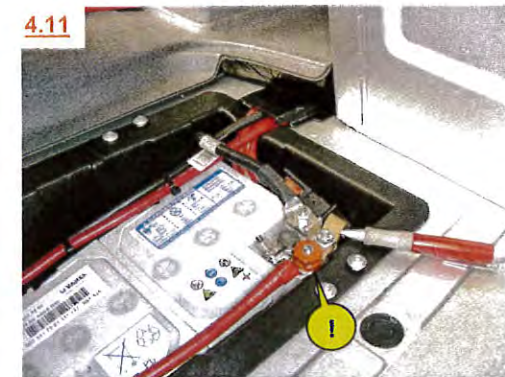
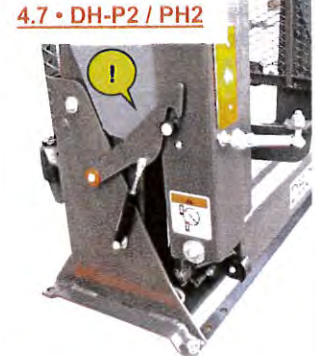
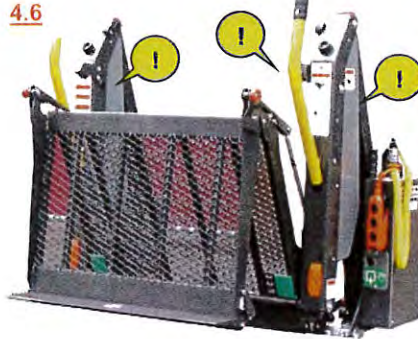
4.4



4.5



Fig.	Description
...	...
4.6	<b>Side skirts on lift arms</b> : prevents finger / hand traps between the different elements of the lift arms.
4.7	<b>Mechanical platform lock</b> , used as secondary locking mechanism for the platform, to prevent it from opening in case of pressure loss in the hydraulic circuit.
4.8	<b>Electric emergency stop</b> : Allows to switch-off the electric power to the control unit, and to cause an immediate stop of all electrically actuated movements.
4.9	<b>Emergency hand pump</b> (→ PH1 / PH2 ♿) : enables the operator to lift & close the platform in case of electric failure (battery deficiency, blown fuse, damaged electrical controls...)
4.10	<b>Emergency exit button</b> (→ PH1 / PH2 ♿) : enables the operator to open & lower the platform in case of electric failure (battery deficiency, damaged fuse, damaged electric controls,...)
4.11	<b>Main battery fuse</b> on (+) battery cable
4.12.	<b>15A fuse</b> on the control wiring
a	Both fuses are used to protect the electrical system of the lift and the vehicle against short-circuits and amperage peaks.
...	...



## 5) SAFETY INSTRUCTIONS FOR THE USE OF THE LIFT

### §5.1 - Introduction



#### Warning !

- In order to ensure the safety of the operator, (if applicable) the wheelchair passengers, and occasional bystanders, the use of the lift is strictly reserved to skilled operators, who have been duly trained; who know, understand and conscientiously apply the safety instructions below.
- Also consult the warnings in the "General Introduction", and Section 1 "Intended Use" in Chapter A prior to manipulating the lift.
- Negligence can put the operator and third parties at great risk.
- The operator should have passed the minimum age of 18 years.
- These safety instructions are of general nature, applicable for the whole range of lifts. Some images might show deviating products, but the principles apply.

5.1





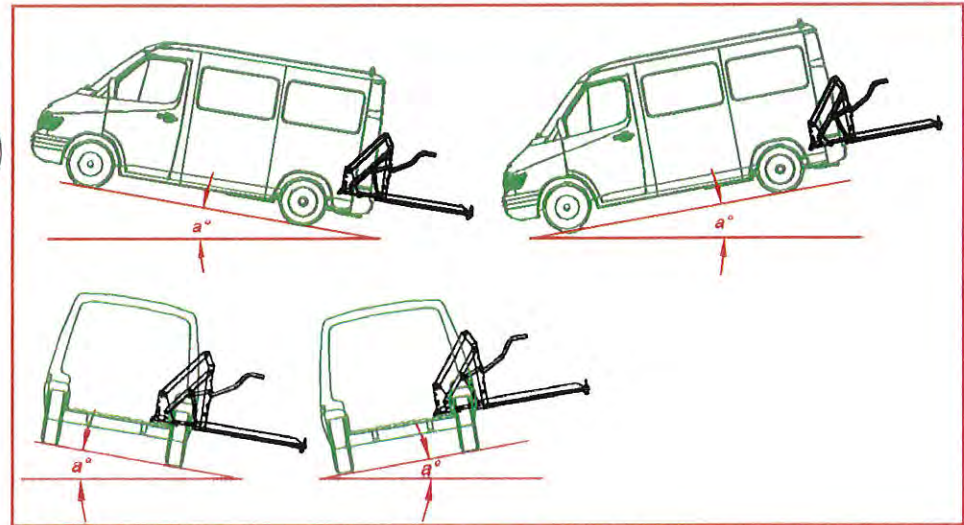
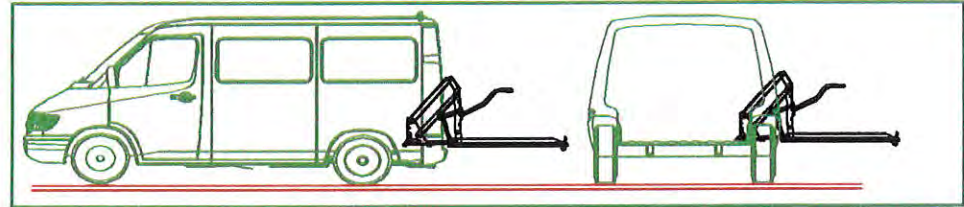
### §5.2 - General safety instructions

- The operator should use appropriate working clothes. Never wear loose-fitting clothes that may be trapped in the moving parts of the lift. It is strongly recommended to wear safety footwear with steel protection tips and a good non-slip sole, and protective gloves.
- Prior to opening the vehicle doors and releasing the mechanical platform lock of the lift, check if the lift can be used safely. Take precautions to guarantee your own safety, (if applicable) the safety of the platform occupants, and the safety of occasional bystanders and third parties in traffic.
- Clear the working area of any objects that could potentially impede the movements of the lift
- Make sure the platform is visible from all approach directions (flashing lights, platform flags, traffic cones, etc...), and that the working area is sufficiently illuminated.
- The vehicle must be safely parked with the hand brake on, and the engine must be switched off. Only use the lift if the vehicle is parked on level ground. It is dangerous to use the lift when the vehicle is parked on a slope. [see Fig. 5.3]. Lock the vehicle doors, and fasten all other moving parts of the vehicle body.
- Ensure that the vehicle cannot tip-over when putting heavy weights on the platform.

5.2



5.3



- Never leave the lift behind in open position. Before leaving the vehicle behind unattended, store the lift away, and close the doors of the vehicle.
- Don't move the vehicle with the lift in open position. Store the lift away, and close the doors of the vehicle before moving position. Never move the vehicle while a person stands on the platform of the lift, or inside the vehicle body.



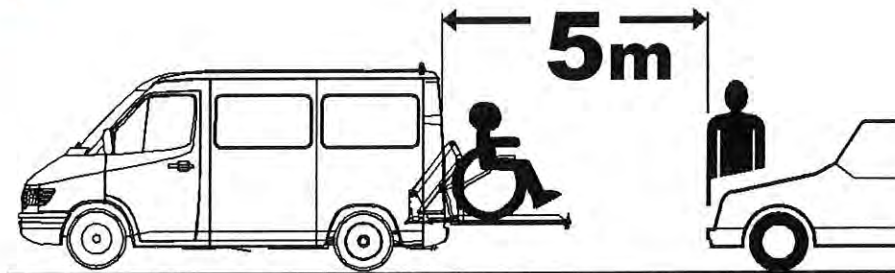
- To prevent injury by slipping, always wear professional safe footwear with a good non-slip sole. If the platform surface is slippery because covered with snow, mud and dirt, or slippery liquids, DO NOT use the lift and clean the platform first. Do not run on a tail lift platform.



- To prevent injury by tripping, pay attention to protruding items on the platform surface at all times (ex. platform lights, roll-stops and their lever, foreign objects, etc...).

- The lift should not be used if the operator is intoxicated or impaired in any way.
- The tail lift should be used by means of original control units only.
- In traffic, always respect a safety distance of 5m to the following car, and ask other drivers to respect an equivalent distance when parking behind your tail lift. [see Fig. 5.5]

5.5





### §5.3 - Danger zones, risk of crushing & sheering



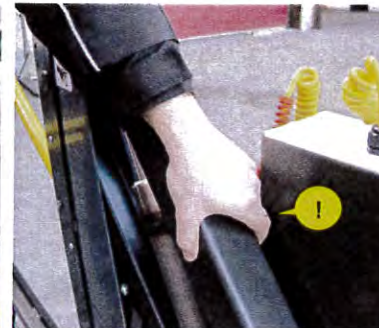
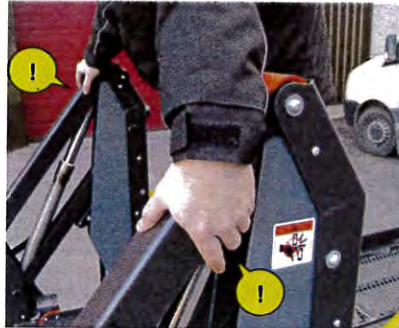
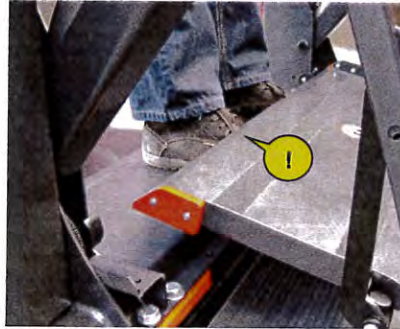
#### Warning !

- Stay out of the operation radius of the platform.
- Keep clear of moving parts.
- Beware of hand, foot and head traps at all times.



- Hold arms, feet and clothing well clear of all moving parts of the lift. Beware at all times for potential risks of crushing or sheering fingers or hands, toes or feet between the moving parts of the lift arms, hydraulic cylinders and the moving platform. On the platform, the operator and wheelchair passenger should take hold of no other parts but the safety rails foreseen for this purpose. [See Fig. 5.6]
- Avoid the hazardous crushing zone between the raising platform and the rear frame of the vehicle floor. Ensure that the feet are not squeezed between the platform and the bumper, or any other protruding parts of the vehicle body.

5.6





- Do not allow anybody to stand on, or hinder the bridge plate at the front edge of the platform. [See Fig. 7]
- Do not allow anybody to stand on, or hinder the automatic roll-stop at the rear end of the platform. [See Fig. 8]
- The operator and the wheelchair passenger should not leave the platform before it has reached its final parking position, either at ground level, or at the loading floor of the vehicle. Third persons assigned to help the wheelchair passenger embark or disembark, should stay out reach of the platform until its has reached its final parking position, and has come to a complete stop.



#### §5.4 - Additional instructions for the wheelchair passengers

- It is recommended that wheelchair passengers are lifted / lowered facing outward, with the small front wheels of the wheel chair adjacent to the roll-stop at the rear edge of the platform. This roll-stop is not designed to bring the big rear wheels of a wheelchair to a positive stop in case of abrupt or fast movement. [See Fig. 5.9]
- Use extreme care, board the platform slowly. Always lock the parking brakes of the wheelchair. Electric wheelchairs should have the power switched off, and the wheelchair brakes should be locked.
- Standees should use the lift facing the direction of travel, toward the vehicle when embarking, or away from the vehicle when disembarking.

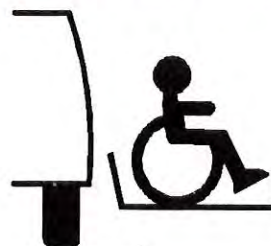
5.7



5.8



5.9





- Ensure the wheelchair fits safely on the platform, and doesn't extend over the edges of the platform, nor doesn't interfere with the automatic roll-stop at the rear, nor the bridge plate at the front of the platform.
- When exiting the vehicle, never back onto the platform. Always face outward, ensure the platform is safely in place at the loading floor of the vehicle, the side safety rails are locked into position, and the automatic roll-stop is up and locked into position.
- Use extreme care in wet or slippery conditions. Wheelchair brakes are less effective if the platform and / or wheels of the wheelchair are wet or dirty.
- Ensure the passengers take a central position between the lift arms. [See Fig. 5.10]



- If available, the platform occupants should grip both side safety gates. [See Fig. 5.11 - 5.12]



#### §5.5 - Loading diagram

- Hydraulic lifts are not designed to LIFT / LOWER weights corresponding to their nominal capacity over the full surface of the platform. The nominal capacity is valid at a **centre of gravity of 500mm** behind the vehicle body. Behind that point, the maximum safe working load diminishes.
- When LIFTING, the lift is normally protected against overload by the pressure relieve valve in the hydraulic circuit. Most of the overload, and consequential damage, hap-

5.10



5.11



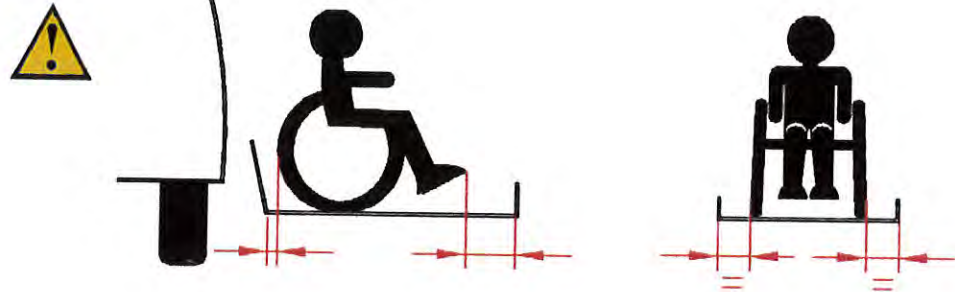
5.12



pens when LOWERING loads.

- In order to prevent premature wear or damage of the lift, possibly resulting in accidents with injuries, it is important to follow the instructions below.
- The **nominal capacity** is indicated on the identification sticker and on the CE certificate of conformity [See Fig. 5.14]. It is the maximum weight allowed to be carried on the platform in the best possible circumstances. This is under the following conditions [See Fig. 5.13]:
  1. In longitudinal direction: the load or wheelchair is placed as close as possible to the floor of the vehicle
  2. In lateral direction: the load or wheelchair is placed at a central position between the lift arms (not out of centre to one of the sides of the platform).
- Whenever the loading circumstances deviate from these best possible conditions, the **safe working load (=SWL)** decreases by 30%.
- The dimensions of the wheelchair should never exceed those of the platform. The wheelchair should never protrude beyond the perimeter of the platform.

5.13



5.14

EXAMPLE

<b>DHOLLANDIA</b>		
Zoomstraat 1 BE-9160 Lokem Rijksweg 2 DE-52674 A1-11-10100000-0000-00		
<b>1008 2130</b>		
Type DHPH2.03	Capacity 350 kg	CE

**2. CE-DECLARATION OF CONFORMITY**  
Corresponding Directive 2006/42/EC, annex 2, A)

Identification of the lift device:

<b>DHOLLANDIA</b>		
Zoomstraat 1 BE-9160 Lokem Rijksweg 2 DE-52674 A1-11-10100000-0000-00		
<b>1008 2130</b>		
Type DHPH2.03	Capacity 350 kg	CE

We hereby declare that the **DHOLLANDIA** lift device identified in the certificate, based on its design and its construction, complies to the relevant fundamental health and safety requirements of the CE Directives, and is destined to be mounted on a vehicle.

This declaration of conformity is only valid, and the use of the lift device is only permitted, once the following conditions are met:

- The lift device is fitted to a vehicle and the fitting complies with the conditions of the CE Directives, with the fitting instructions of **DHOLLANDIA** and the Fitting and Body Building Instructions of the vehicle manufacturer.
- After the fitting of the lift device, the risk analysis, the weight test and put into service test has been carried out with positive results and the fitting declaration has been filled out completely and correctly.

This Declaration of Conformity and the responsibility of the manufacturer are no longer valid if any modification to the lift device is made without the prior written permission of the manufacturer, or if the maintenance instructions have been neglected and/or the periodic inspections have not been executed.

Applicable CE Directives:

- 2006/42/EC

Dignities + stamp manufacturer

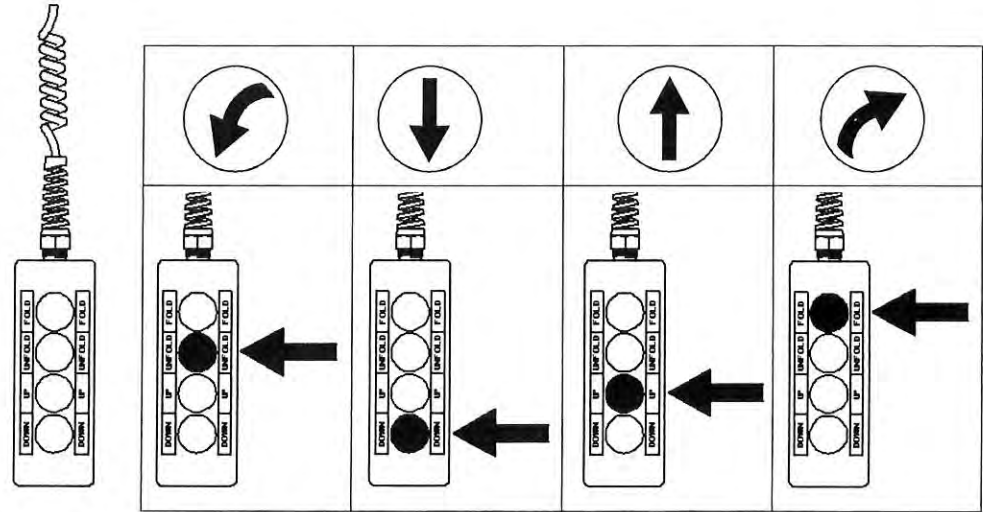
Date: / /

**DHOLLANDIA NV**  
Oudestraat 49  
9111 BELSLEB  
Tel: +32 (0)30 149 16 92  
Fax: +32 (0)30 149 16 77  
BTW 432.147.371

**6.4 - 4-button wander lead with spiral cable**

- The 4-button wander lead with spiral cable is available on the lift model DH-PH2 (=option S962.B)
- The 4 functions OPEN / LOWER / LIFT / CLOSE are fully separated and addressed by an individual button.
- Any load should be removed from the platform prior to closing.
- See Fig.6.3 for a summary of its use.

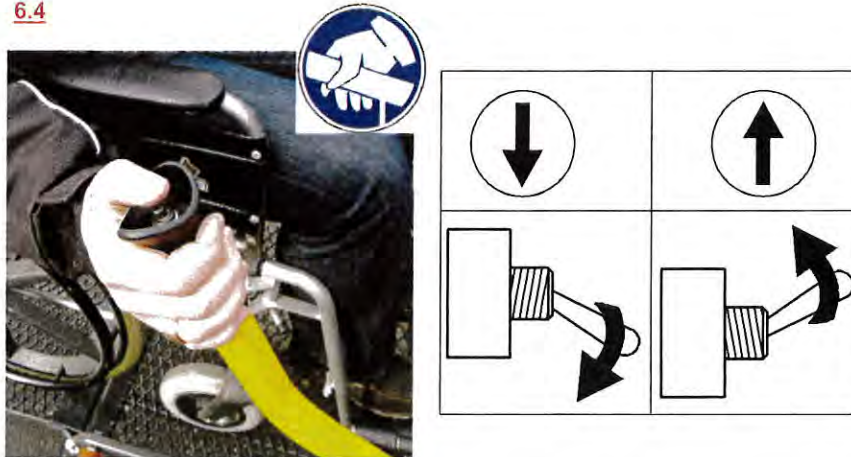
**6.3**



**6.5 - Toggle switch on the hand rail**

- The toggle switch on the hand rail is available on the lift model DH-PH2 (=option S961)
- It can be used the LIFT / LOWER only. To CLOSE / OPEN the platform, the wander lead with spiral cable must be used.
- See Fig.6.4 for a summary of its use.

**6.4**



...	...
<b>Fig.</b>	<b>Loading &amp; unloading</b>
-	Follow the safety instructions and loading diagram at all times.
6.5.g	Use the controls to LOWER the platform to the ground.
6.5.h	The bridge plate will automatically raise upon departure of the platform off the loading floor. The roll-stop will automatically drop down upon arrival of the platform at the ground.
6.5.g	Use the controls to LIFT the platform to the loading floor of the vehicle.
6.5.h	The roll-stop will automatically raise upon departure of the platform off the ground. The bridge plate will automatically drop down upon arrival of the platform at the loading floor.
<b>Fig.</b>	<b>Closing up in travel position</b>
6.5.i	Use the controls to LIFT the platform to the loading floor of the vehicle.
6.5.j	Use the controls to CLOSE the platform until it reaches the closed vertical position, and you hear the hydraulic system turn in overpressure. The bridge plate at the front end of the platform, and the safety rail, are stowed away automatically.
6.5.k	Close the mechanical platform lock
6.5.l	If option S959 (articulated column): pull the lever to unlock the column, and swing the platform from its work position to its travel position.
6.5.m	Switch off the electrical power to the lift. (cabin switch in the driver's cabin, and battery switch on the hydraulic power pack)



**6.7- Operation instructions for DH-P2 / PH2**

**Operating instructions for DH-P2 / PH2**

Fig.	Opening the platform
6.6.a	Consult the user's manual before getting started. Follow all safety instructions.
6.6.b	Switch on the electrical power to the lift (cabin switch in the driver's cabin, and battery switch on the hydraulic power pack)
6.6.c	Press the button LIFT / CLOSE. Check if the hydraulic system is building up pressure, and the platform is pressurized hard against the lift arms. Check if the mechanical platform lock is disengaged.
6.6.d	Use the controls to OPEN the platform 90° into horizontal work position. The bridge plate at the front end of the platform and the safety rails are automatically deployed.
...	...

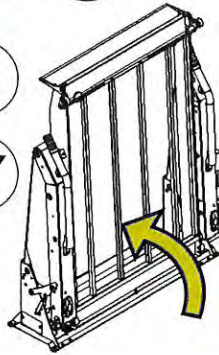
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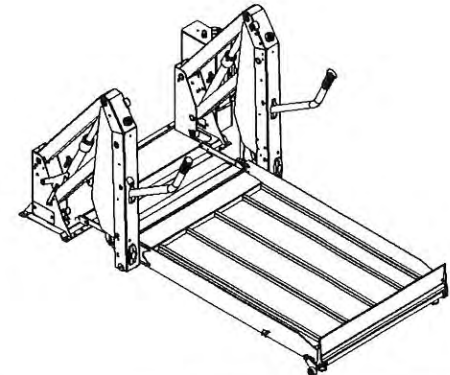
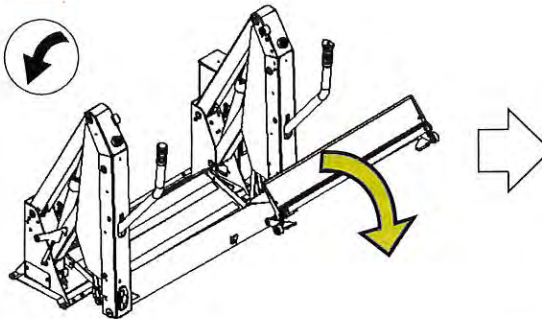
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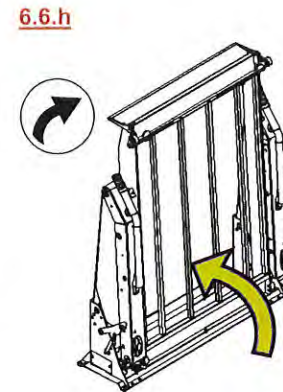
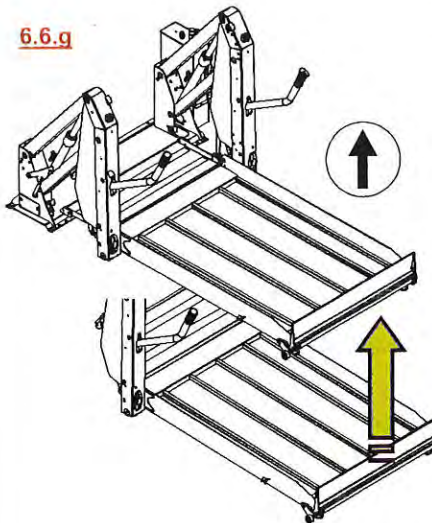
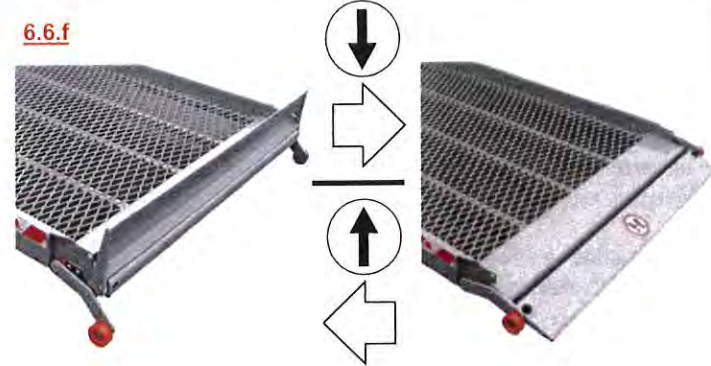
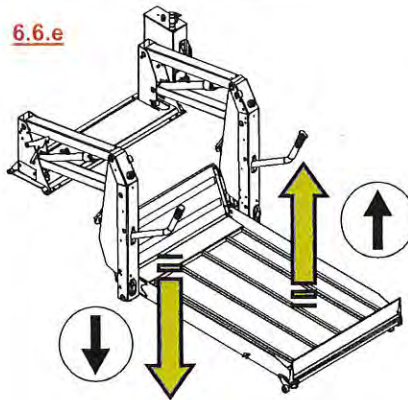
6.6.c



6.6.d



...	...
<b>Fig.</b>	<b>Loading &amp; unloading</b>
-	Follow the safety instructions and loading diagram at all times.
6.6.e	Use the controls to LOWER the platform to the ground.
6.6.f	The bridge plate will automatically raise upon departure of the platform off the loading floor. The roll-stop will automatically drop down upon arrival of the platform at the ground.
6.6.e	Use the controls to LIFT the platform to the loading floor of the vehicle.
6.6.f	The roll-stop will automatically raise upon departure of the platform off the ground. The bridge plate will automatically drop down upon arrival of the platform at the loading floor.
<b>Fig.</b>	<b>Closing up in travel position</b>
6.6.g	Use the controls to LIFT the platform to the loading floor of the vehicle.
6.6.h	Use the controls to CLOSE the platform until it reaches the closed vertical position, and you hear the hydraulic system turn in overpressure. The bridge plate at the front end of the platform, and the safety rails, are stowed away automatically.
6.6.i	The mechanical platform lock engages automatically in case of accidental pressure loss
6.6.j	Switch off the electrical power to the lift. (cabin switch in the driver's cabin, and battery switch on the hydraulic power pack)



**6.5.j**



**§6.8 - Emergency operation**

- In case of electrical failure (battery deficiency, damaged fuse, damaged electrical controls,...), the various functions of the lift can be operated manually as explained below.
- To proceed, refer to the working sequences under §5.6 - 5.7, and replace each electrical function by its manual emergency back-up system.



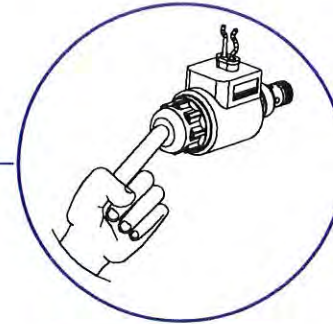
- In order to avoid any unexpected movement of the lift and personal injuries, the electric power to the lift must be switched off (switch in the vehicle cabin, and the main battery switch on the power pack) prior to starting the emergency operation.



- Follow the safety instructions of this manual strictly. Keep all persons out of the operation radius of the platform. Beware of hand, foot and head traps at all times.

Emergency operation to OPEN / LOWER the platform	
<b>Fig.</b>	<b>Manual operation DOWN</b>
6.7	Locate the electrovalve on the power pack, easily accessible from outside.
6.7	This valve has an emergency button, concealed under the elastic skin of the nut.
6.7	Push-in the elastic skin, and the emergency button under it to OPEN / LOWER the platform.
6.7	The platform stops as soon as the button is released.

**6.7**



open



close

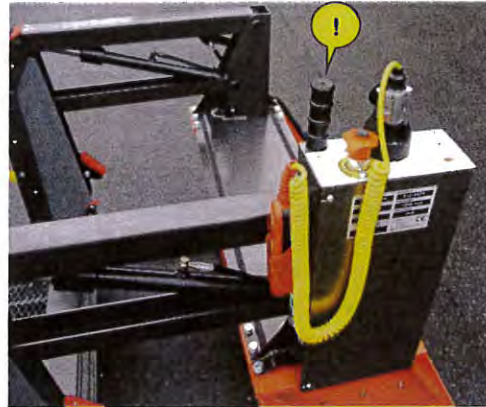


### Emergency operation to LIFT / CLOSE the platform

#### Fig. Manual operation UP

- |     |   |
|-----|---|
| 6.8 | Locate the handle for the hand pump on top of the power pack. Fit it over the lever arm of the hand pump. |
| 6.9 | Move the lever up and down to LIFT / CLOSE the platform.  |
| 6.9 | The platform stops as soon as the pump action is ended.   |

6.8



6.9



## 7) WARRANTY TERMS



- The warranty terms on **DHOLLANDIA** lifts may vary from one country to another, and are subject to specific conditions regarding the use, maintenance and inspection of the device.
- Consult your national **DHOLLANDIA** distributor to obtain a copy of the local conditions.