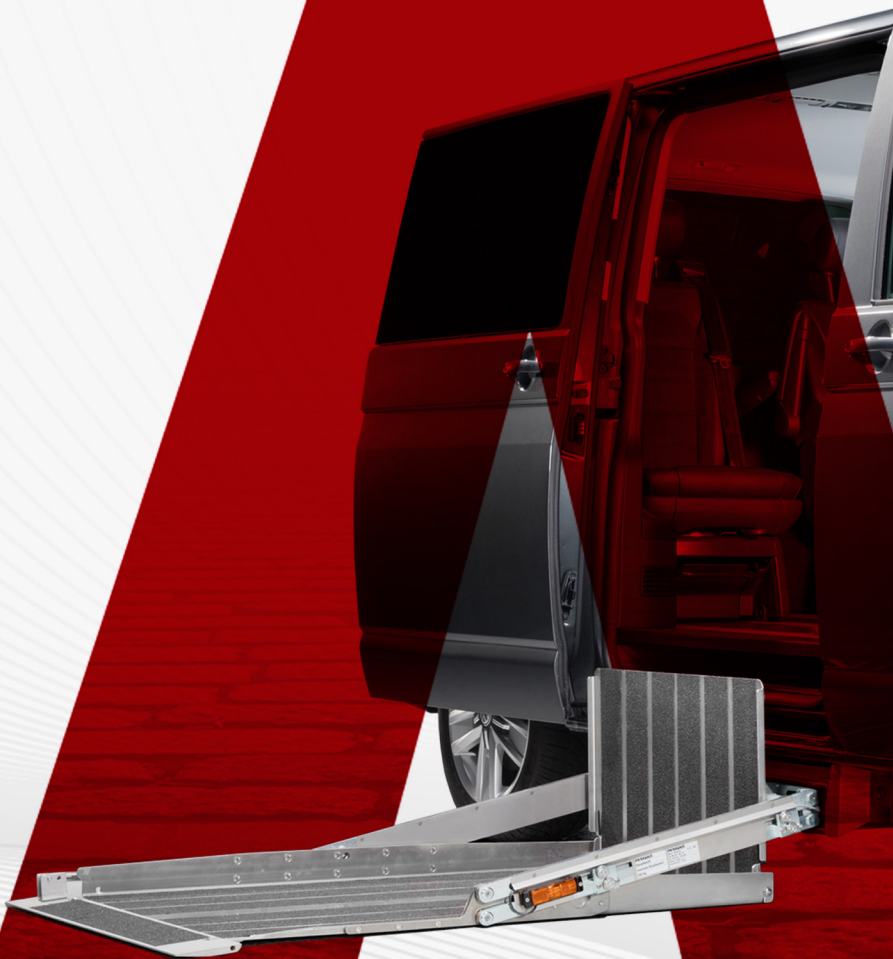


**PARAVAN®**

PARAVAN MOBILITY

*User manual*  
**cassette lift**

 **EN/US** V6.3



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PARAVAN GmbH

09/08/2022

cassette lift\_V6.3 EN

Dear Customer,

Thank you for choosing our PARAVAN cassette lift.

These operating instructions provide you with all important information and information about your cassette lift. Please read the following pages carefully, so that your cassette lift will still work for many years. Keep these operating instructions „hand“ for future reference. Our manual contains answers to questions concerning the equipment and operation of the cassette lift. If you have any questions or suggestions, do not hesitate to contact us.

Your PARAVAN Team

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# 1. Company details

## 1.1 Your manufacturer

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Fig. 1: QR-Code

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- > Internet: [www.paravan.de](http://www.paravan.de)
- > Managing Director: Mr. Roland Arnold



Many smartphones and tablets have built-in cameras and software which allows the interpretation of QR codes, and with these you can directly transfer out contact information into the address book of your smartphone or tablet. .



## 1.1.1 Copyright

This documentation and all of its parts are protected by copyright. The rights arising from this copyright, especially those of the translation, reprint, presentation, use of illustrations and tables, radio broadcasting, microfilming or reproduction of information in other ways and saving of it in data processing systems, also when using specific extracts only, remain reserved. Reproduction of this text or parts of this text is also permitted in isolated cases only and within the limits of the legal provisions of the Federal Copyright Act of Germany of 9th September 1965 in its respective up-to-date version. It is generally subject to remuneration. Contraventions are subject to the penal provisions of the Copyright Act.

> Copyright © PARAVAN GmbH 2016. All rights reserved!!

## 1.1.2 Technical nature of documentation

All details on technical data/ specifications, illustrations and information in these operating instructions describe the position at the editorial deadline in March 2017.

The operating instructions for the PARAVAN cassettelift have been produced on the German language and can be translated into other languages, however in the case of potential differences the German version is legally binding.

## 2. *Regarding these operating instructions*

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These operating instructions do not constitute a maintenance and repair manual and therefore are not suitable to use for the private carrying out of maintenance and repair work, or to provide instruction on this. They provide you with information about the nature of the design and operation of the rotating seat base. The most significant product features are listed and described in the following.



These operating instructions are an essential part of the rotating seat base product and must always be kept in the vehicle so that you can quickly access all important information. All page and directional information in this documentation is always specified from the point of view of the operator and in the direction of travel!

## 2.1 *Liability exclusion*

The operation of the PARAVAN cassette lift without faults or malfunctions can only be guaranteed if the knowledge gained from these operating instructions is observed and implemented. PARAVAN GmbH does not accept any liability or guarantee for damage or malfunctions which result during operation due to the non-observance of these operating instructions or due to modifications made to the cassette lift.

To ensure trouble-free operation of your PARAVAN cassette lift, please observe the maintenance instructions and intervals.



see section 12 „Maintenance Schedule“

## 2.1.1 Guarantee

Guarantee services are based entirely on the respective Paravan guarantee provisions.

Excluded from guarantee claims is damage which has occurred due to:

- Wear
- Improper operation or use
- Incorrect/ infrequent maintenance
- Incorrect/ infrequent care



see your personal „warranty card“.



## 2.1.2 Technical modifications

All modifications to safety installations and technical modifications to the cassette lift, even of minor, are strictly prohibited. All modifications and improvements to the product in the interest of our customers and progressive development.

PARAVAN GmbH reserves the right to undertake technical modifications and improvements to the product in the interest of our customers and progressive development.



Claims relating to the guarantee and warranty shall expire in the case of all modifications made to the PARAVAN cassette lift not authorised by PARAVAN GmbH. Furthermore, dangerous malfunctions cannot be ruled out!



## WARNING

**Danger of injury** for persons when operating cassette lift which does not correspond to the original or delivered condition.

**Material damage** to the cassette lift by the use of non-authorized parts or incorrectly installed parts.

- > Do not carry out any technical modifications to the cassette lift.
- > Only operate the cassette lift in its original or delivered condition..
- > Only use original or authorized spare parts.

## 2.2 Target group

The operator must acquire or gain a level of knowledge relating to the following points before operating the PARAVAN cassette lift:

- > Knowledge of the content of the operating instructions in order to safely operate and also be able to move the cassette lift.
- > Knowledge of the safety and operating provisions listed herein in order to recognise potential danger of dangerous and event these for the user and the environment.



As a user, please ensure you receive sufficient training when the product is supplied. If necessary, please contact us.



See section „1.1 Your manufacture“





## 2.3 Explanation of symbols

When reading the operating instructions you will encounter the following symbols and warning symbols.



### The „Caution Danger!“ logo

Indicates danger points. The counteraction measures specified in the respective text must be followed in all cases. This symbol is always used in combination with the respective signal word which reflects the level of danger:

- >  **Danger!** - Direct danger to life and limb (irreversibel).
- >  **Warning** - potential danger to life and limb (irreversibel).
- >  **Caution** - potential danger to life and limb (reversibel).
- >  **Caution** - potential damage to the vehicle.



Additional information for the user e.g. in order to simplify the operation of the cassette lift and/ or avoid damage to the cassette lift.



This symbol refers the user to further sections or further documentation e.g.



### 2.3.1 Structure of safety information

The safety information provides the following information:

- > Warning or hazard symbol ①.
- > Type and source of danger ②.
- > Signal word ③.
- > Consequences upon the occurrence of danger ④.
- > Measures to counteract danger ⑤.

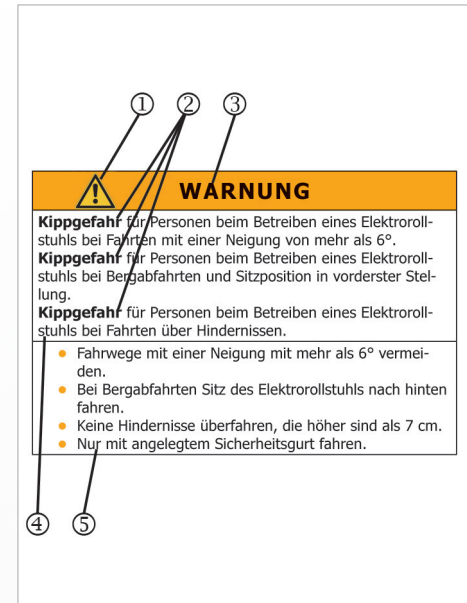


Fig. 2: Safety instruction

### 3. **Hazard warnings**

#### 3.1 **General Hazard warnings**

##### 3.1.1 Notes on operation

For your protection, as well as to protect the people in your environment and the environment, the following safety instructions must be observed and strictly followed.



## **DANGER!**

**Risk** of injury to persons in case of faulty operation of the Paravan rotating seats.

**Crushing due** to intervention in moving parts

**Danger** of falling by driving off the vehicle

**Property damage** through the use of seta covers

- > Do not bring objects into the area of moving parts.
- > Do not reach into the moving area of the moving parts with your hands.
- > Do not press the swivel seat console while driving
- > Always secure the electrical console in accordance with the technical specifications. Do not increase the safety instructions!.



## WARNING

**Damage** to the cassette lift and the environment due to insufficient safety distance

- > The vehicle has less ground clearance.
- > Always be aware of your surroundings and maintain an adequate lateral safety distance to other objects and persons.

### 3.1.2 Instructions for use



#### ATTENTION

**Damage** to the cassette lift by using the cassette as a step

- > Enter the vehicle as a pedestrian only when the cassette lift is retracted.

### 3.1.3 Notes for maintenance or repairs




#### WARNING

**Risk of crushing and shearing** between the ramp and the ground as well as the support of the electric cylinder and the surrounding area.

- > Before carrying out maintenance or repairs on the lift the control unit must be disconnected from the power supply.
- > To do this, fuse 1 in the fuse box must be removed. (See chapter 10)



### 3.1.4 Disposal notice

 <b>ATTENTION</b>
<b>Health and environmental damage</b> due to improper disposal of equipment.
<ul style="list-style-type: none"><li>&gt; Observe local regulations when disposing of equipment.</li><li>&gt; Sort and split all parts.</li><li>&gt; In case of doubt, obtain information about the local waste disposal company.</li></ul>

## 4. **Specifications**

### 4.1 **Manufacturing standard**

The Paravan cassette lift is in principle a lifting device for lifting loads, which is permanently installed underneath the vehicle. The cassette opening is located below the rear sliding door on the passenger side. The cassette lift consists of an electrically extendable platform, which can be extended horizontally from the cassette mounted on the vehicle floor. When extended, the platform can be hydraulically lowered or raised. After the loading or unloading process, the platform automatically retracting position to the cassette by pressing a button and it can be automatically retracted into it.

The cassette lift is operated via a wired remote control, optionally also via a wireless remote control, via smartphone or tablet.

Paravan cassette lifts are manufactured and tested according to:

- > EN ISO 12100:2010      Security of machines -  
General Principles of Design - Risk Assessment and  
Risk Mitigation
- > EN 60204-1:2006      Safety of machinery - Electrical equipment of  
Machines - Part 1: General requirements
- > EN 1756-2:2009-12      Tail lifts - platform lifts for attachment to wheeled  
vehicles - Safety requirements - Part 2:  
Dumpers for passengers

## 4.2 *Intended Use*

The Paravan cassette lift is intended to be used and transported by a person in a wheelchair from the inside to the outside and vices versa.



The cassette lift is intended exclusively for the applications listed in the chapter „Usability of the cassette lift“



see section „3 Saftey instructions“



see section „4.2.1 Usability of the cash desk lift“

## 4.2.1 Usability of the cassette lift

### - unproblematic

- Lifting a load with a maximum weight of 330 kg.
- In single passenger transport
- Use in the area of the StVO (public roads and paths), complete and intact lighting provided.

### - problematic or prohibited

- Use as a means of transport of loads or several persons..
- Use of the cassette lift in extreme climatic conditions (heat/ cold/ humidity) .



see section „2.1 Disclaimer“



see section „3 Safety instructions“



## 5. **Product specific information**

### 5.1 **Technical Data**

- Control: electronic programmable logic controller
- Operation: wired or wireless remote control
- Platform size: 1182/1000 x 788 mm.
- Load capacity: 330 kg.
- Dead weight: approx. 190 kg.
- Lifting height: approx. 914 mm.
- Retracing/ extending time: approx. 12 sec. (12V DC electric drive).
- Lowering time: approx. 9 sec.
- Lifting time: approx. 9 sec. (12V BC electro-hydraulic drive)).
- Flashing lights on the side and acoustic signal during operation to warn bystander.
- Electric override for all functions in the event of an emergency.
- Mechanical override for all functions in the event of an emergency.

## 5.2 ***Important instructions for use and safety notices***

- The cassette lift should only be used on a level surface.
- Apply the vehicle handbrake before use. .
- The PARAVAN cassette lift is mounted on the underside of the vehicle, necessarily reducing the ground clearance. If the vehicle floor comes into contact with the ground this could result in damage to the cassette lift. Avoid driving up high kerbs. Take extra care when driving over large ramps (e.g. in car parks, the entrance to multi-story car parks etc.) .
- Ensure there is sufficient space between your own and other vehicles or obstructions.
- The PARAVAN cassette lift has been designed to transport people who use wheelchair. Do not use it to transport other persons, animals or loads.
- Overloading the cassette lift could result in permanent damage.
- During operation of the cassette lift no other persons, animals or objects are permitted within the range of movement of the lift - risk of injury!
- Note that the lever mechanism poses a crushing hazard. Make sure no body parts or other objects come within range of the lever mechanism during operation.
- Always ensure you drive onto the middle of the platform with your back to the vehicle. Always apply the wheelchair brakes. See the diagrams on the next page.
- Keep the operating instructions in the vehicle for future reference.
- All bearing surfaces are maintenance-free. However, if it should be necessary to lubricate surfaces, never use oil or grease; use Teflon spray instead.

### 5.3 **Benefits of the PARAVAN cassette lift**

- High load capacity up to 330 kg.
- Lifting position can be individually adjusted to the level of the vehicle interior..
- Easy to operate using wired remote control with inductive symbols.
- Wireless remote control option available.
- No mechanical limit switches
- Sensor- controlled positioning.
- Compact hydraulic unit, variable positions possible.
- Emergency electrical override of all functions if sensor fails.
- Emergency manual override of all functions if power fails.
- Override controls easily accessible from outside.
- Safety cut-out when sliding door is closed.
- Non-slip surface on platform, roll stop device and ramp.

## 6. **Handover of the cassette lift**

### 6.1 **Reception of your new cassette lift**

Check your PARAVAN cassette lift on delivery for function and condition. If in doubt, contact PARAVAN GmbH immediately! Check (visual inspection) the cassette lift to its proper condition. Report damages that are due to delivery or transport immediately in writing to your

- > Dealer **and the** PARAVAN GmbH.



see Chapter „1.1 their manufacturer“

### 6.2 **This is how your cassette lift is handed over to you**

The cassette lift has the following ready-to-drive and ready-to-use condition when handed over to you:

- > Fully assembled and equipped according to your specifications when ordering.

## 6.3 Supplied tools

You will receive the following tools with the delivery of your cassette lift:

> Hand lever, for lifting the cassette lift



Fig. 3: Hand lever

> Allen key size 5.



Fig. 4: Allen key





- > Angle for folding protection

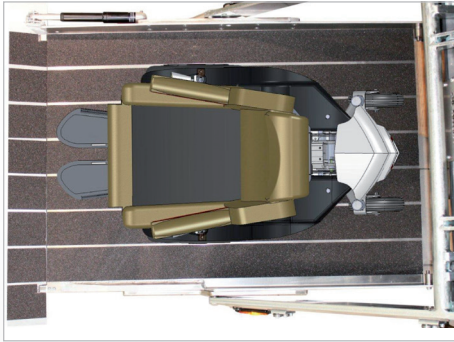
Fig. 5: Angle flap safety



- > unlocking tool, to unlock the lift manually

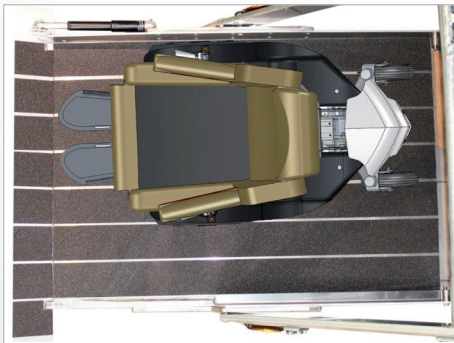
Fig. 6: Unlocking tool

## 7. Placement of the wheelchair on the cassette lift



> correct placement

Fig. 7: Placing wheelchair



> wrong placement

Fig. 8: Placing wheelchair

Placement of the wheelchair on the cassette lift

- > wrong placement

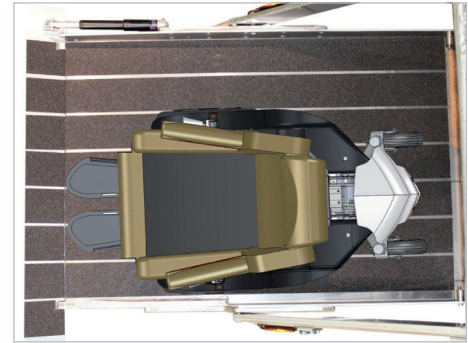


Fig. 9: Placing wheelchair



## WARNING

**Risk of injury** when driving on the not completely lowered platform.

- > Only ride on the platform if it has driven completely upwards or downwards and is safely in its final position.

## 8. **Mode of operation**

### 8.1 **Getting into the vehicle using the lift**

- Park the vehicle safely on a level surface ensuring a sufficient gap to any obstructions.
- Open the sliding door on the passenger's side (when the door is closed the cassette lift cannot be extended for safety reasons).
- Extend the platform out of the cassette and lower the platform to the ground.
- Fold out the roll stop device (if a wireless remote control is used this takes place automatically).
- Drive the wheelchair backwards onto the platform and position centrally (with your back to the vehicle).
- Raise the platform, after the roll stop device has automatically folded up.
- The platform automatically stops when it reaches the level of the internal floor of the vehicle and the ramp folds out, forming a level surface between the platform, ramp and internal floor of the vehicle.
- Drive the wheelchair into the vehicle.
- Put the platform away. This is simply a matter of pressing the appropriate button (if an electrical ramp is fitted, this folds up first and you need to press the button once more). The platform then automatically moves to the precise retraction position.
- When you press the button again, the platform automatically retracts until it is fully stowed away in the cassette.
- Close the sliding door
- Before driving off, check to make sure that the platform is in the cassette!
- The vehicle is now ready to use once again.



## 8.2 Getting out of the vehicle using the lift

- Park the vehicle safely on a level surface ensuring a sufficient gap to any obstructions.
- Open the rear sliding door on the passenger's side (when the door is closed the cassette lift cannot be extended for safety reasons).
- Extend the platform out of the cassette.
- The platform is raised to the level of the internal floor of the vehicle, and if necessary the ramp folds out, forming a level surface between the platform, ramp and internal floor of the vehicle.
- Drive the wheelchair forwards onto the platform and position it centrally (with your back to the vehicle).
- Lower the platform to the ground.
- Fold out the roll stop device by pressing the button on the wired remote control. When using a wireless remote control, the roll stop device folds out automatically.
- Drive the wheelchair off the platform.
- Put the platform away. This is simply a matter of pressing the appropriate button (if an electrical ramp is fitted, this folds up first and you need to press the button once more). The platform then automatically moves to the precise retraction position.
- When you press the button again, the platform automatically retracts until it is fully stowed away in the cassette.
- Close the sliding door.
- This concludes the unloading procedure.

If you use the cassette lift with the ignition on, a warning tone will sound to alert you to this.



## 9. Description of functions

### 9.1 Functions using the wired remote control

The wired remote control is connected to the vehicle and, through the vehicle, to the cassette lift by a flexible helix cable. All of the cassette lift functions can be controlled using the remote control, which has 7 operating buttons.

There is the option to order a wireless remote control, on which buttons 1 to 3 are used.

For safety reasons, the lift can only be extended when the sliding door is open.

#### 9.1.1 Extend platform

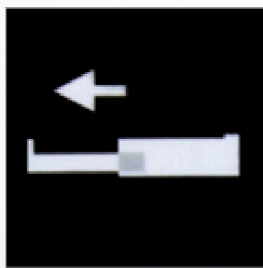


Fig. 10: extend

When the platform is stowed away in the cassette, it can be extended electrically by pressing this button on the wired remote control. When you let go of the button the movement is instantly halted.

### 9.1.2 Retract platform

To retract the platform into the cassette press the button shown. When you let go of the button the movement is instantly halted. This button should not be used to put the platform away; use the „stow platform“ button for this purpose.

### 9.1.3 Raise platform

When you press this button the platform is raised until it reaches the level of the internal floor of the vehicle. When you let go of the button the movement is instantly halted. If the platform has not yet been extended, it first extends completely before it is lifted.

If the platform has been completely lowered to the ground, close the roll stop device first before raising the platform. If you are raising the platform without a load, it may travel slightly too far. To correct this, keep the button held down and the lift will lower slightly.

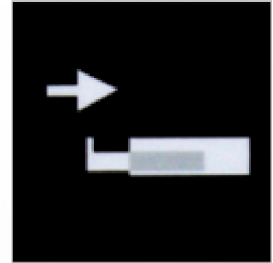


Fig. 11: retract

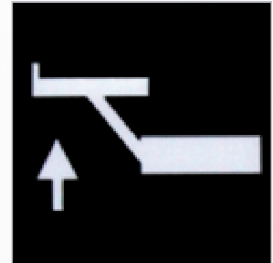


Fig. 12: raise

### 9.1.4 Lower platform

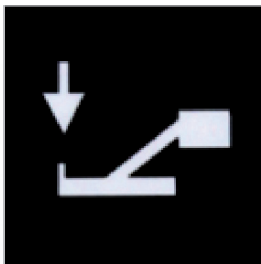


Fig. 13: lower

Press this button to lower the platform. When you let go of the button the movement is instantly halted. If the platform is not yet extended, it first extends completely before it is lowered.

### 9.1.5 Let down roll stop device

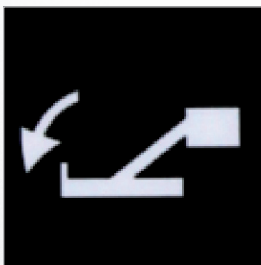


Fig. 14: let down

The roll stop device has a number of functions: It acts to prevent the wheelchair rolling while the platform is being raised. It also drops down below the level of the retraction position to allow the wheelchair to be driven onto the platform when the platform is at ground level. This button is used to let the roll stop device down. When you let go of the button the movement is instantly halted. For safety reasons, the roll stop device cannot be let down above the retraction position.

### 9.1.6 Draw up roll stop device

When the platform is raised from the lower position the roll stop device is automatically drawn up. However, it can also be manually drawn up before raising the platform by pressing this button. When you let go of the button the movement is instantly halted.

### 9.1.7 Stow platform

This button is used to put the platform away. This requires several steps:

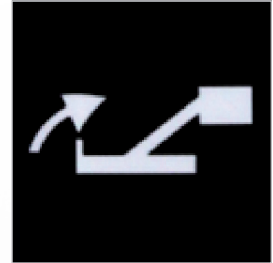


Fig. 15: draw up

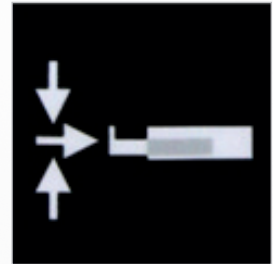


Fig. 16: stow

### 1. Finding the entry position

When the platform is in the lowered position, all you need to do is touch the key to raise the platform until the entry position to the cassette is reached.

If the platform is in the raised position, the key must be held down briefly to lower the platform until the retracted position to the cassette is reached

### 2. Retracting the platform

By pressing the button again (after the retracted position has been reached) the platform is automatically retracted into the cassette.

### 3. Step

The key is also used to extend the platform to a step position. The lift must be completely retracted for this. Hold the button until the platform is extended and the roll-off safety is in the desired position



## 9.2 All function of the wired remote control at a glance

General

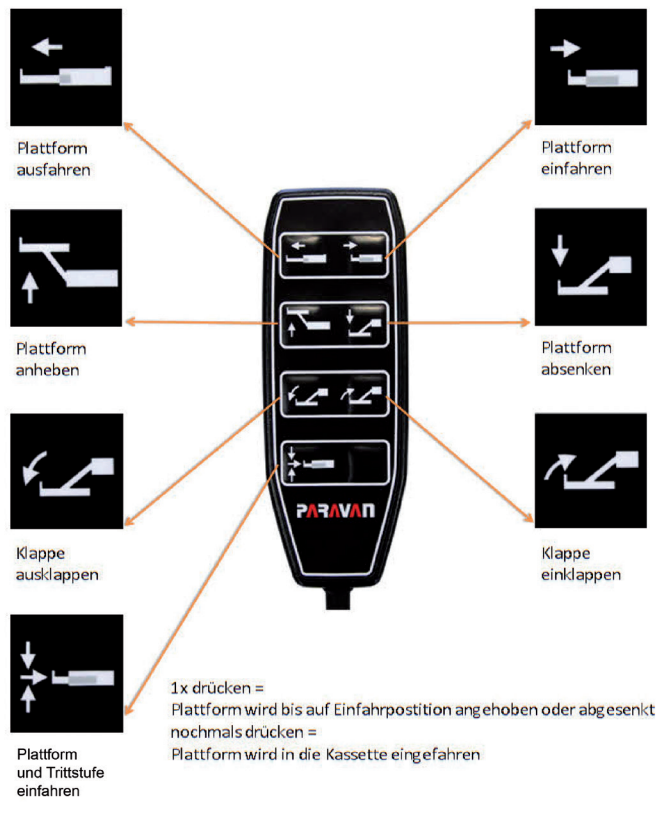
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## 9.3 Wireless remote control



Fig. 17: Radio remote control

Your lift can optionally be fitted with a wireless remote control. This allows you to operate all the main functions of the lift. It cannot be used to operate the electrical override..

### Button 1

This button is used to lower the lift, irrespective of what position the platform is in. If it is retracted, the platform must first be extended before lowering. When you let go of the button the movement is instantly halted. When the platform has lowered, the roll stop device automatically opens..

### Button 2

Use this button to raise the lift to the level of the internal floor of the vehicle, irrespective of what position the platform is in. If it is retracted, the platform must first be extended before being raised. If it is lowered, the roll stop device must first be closed before the platform is raised. When you let go of the button then movement is instantly halted.

### Button 3

This button is used to retract the platform into the lift. This is done in the same steps as with the wired remote control:



see Chapter „9.1.7 Stow platform“

## 9.4 Function via PARAVAN Touch and PARAVAN App

The cassette lift can also be optionally controlled via the PARAVAN Touch and PARAVAN App.

- ① "Access" tab
- ② Lift up
- ③ Lift down
- ④ Stow lift
- ⑤ Door open
- ⑥ Door closed

First select the „Access“ tab. Open the door and tap on „Lift up“ or „Lift down“ to extend the lift and move it in the desired direction. To retract the lift, touch „Clean up lift“. The lift moves to the level of the cassette. By touching the command „Clean up lift“ again, the cassette lift moves back into the cassette.

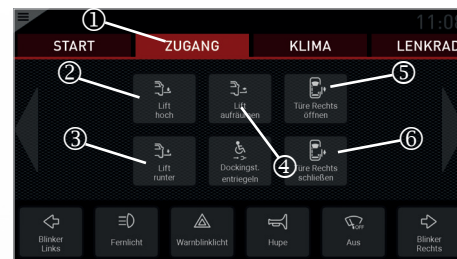


Fig. 18: PARAVAN App



## WARNING

**Material damage** to the cassette lift and objects in the immediate vicinity..

- > Check your surroundings sufficiently before the cassette lift extends or retracts automatically.
- > In case of danger, interrupt the fully automated process immediately.



# 10. Fuses

General

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Fig. 19: Fuses

The fuses for all functions of the cassette lift can be found on the front of the extendible carriage.

- ① Control system power supply (1A, black)
- ② Programming unit power supply (1A, black)
- ③ Control system power supply (15A, blue)
- ④ Control system power supply (15A, blue)
- ⑤ Flap motor + flashing lights/buzzer power supply (10A, red)
- ⑥ Retraction/extension motor power supply (20A, yellow)
- ⑦ --
- ⑧ Unassigned (1A, black)

There are a further two fuses in the vehicle itself:


- > 1 fuses for the entire control system power supply: 20A
- > 1 fuses for the hydraulic unit power supply: 100A



# 11. **Emergency override**

The Paravan cassette lift has a number of emergency override features. This gives you the ability to resolve the problem yourself, should one occur. However, you should still get the problem checked by a workshop and have the fault rectified. There are two override modes:

- > Electric override
- > Manual override

 <b>CAUTION</b>	
<b>Damage</b> to the cassette lift due to failure to observe the technical fault	
<ul style="list-style-type: none"><li>&gt; In emergency mode. move the cassette lift to its original position only</li><li>&gt; Immediately visit a suitable workshop or Paravan directly</li><li>&gt; Raise or lower platform only when it is completely extended out of the cassette.</li></ul>	

**CAUTION**

**Damage** to the cassette lift due to incorrect operation of the emergency operation.

- > There is no logic active. The keystroke is passed on directly to the functional parts.
- > Each function is executed until the key is released.
- > The operator is responsible in this case should come to harm when performing a movement of the lift or people.

## 11.1 Electric override

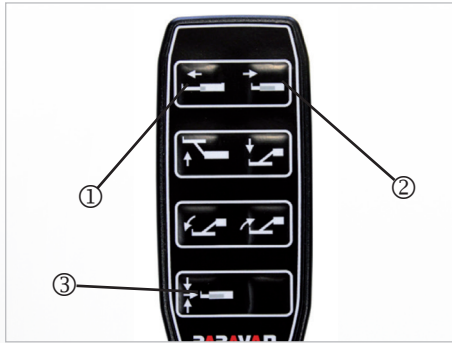


Fig. 20: Cable remote control

To operate the electric emergency override, hold down a specific key combination on the wired remote control.

Press the buttons for retraction ① and extending ② the platform at the same time and keep the held down for 5 seconds.

The electric emergency override is signalled optically and acoustically by a distinct rapid flashing and buzzer sequence (approx. 10Hz). After 10 seconds the electric emergency override will automatically be deactivated again if no buttons are pressed (identifiable from the normal approx. 0.8 Hz flashing and buzzer sequence). To cancel emergency override immediately, press the „Stow platform“ button ③.



Please note that use of the electric override is logged in the control system, which will show whether and when the cassette lift has been operated in electric override mode.

## 11.2 Manual override

If the vehicle electrical system fails (e.g. due to a flat battery) there is the option to operate the cassette lift manually. The following facilities are provided for this purpose.

The hydraulics box with the hydraulic unit for the lift movement can be found on the right-hand side (on the left for left-hand drive vehicles) in the cassette. There are three emergency override devices on the side of this box.

- ① lower platform manually
- ② raise platform manually
- ③ manually release the drive motor for extension/retraction movement.

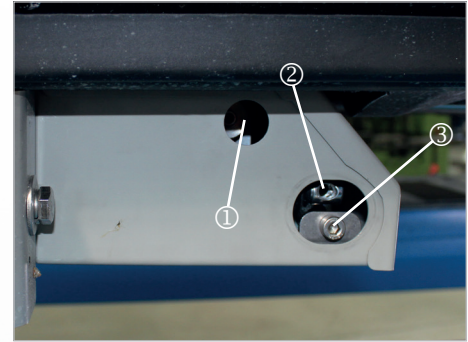


Fig. 21: Emergency operations



## 11.2.1 Lowering platform manually

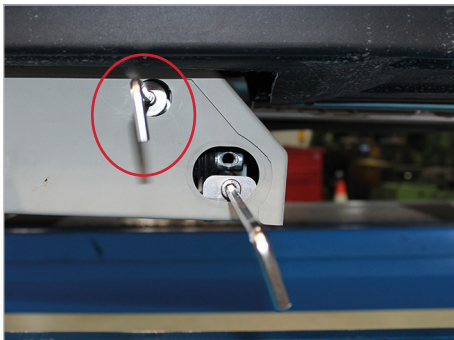


Fig. 22: manual lowering

The hydraulic system incorporates an emergency relief valve to allow the platform to be lowered manually, independently of the controls. First remove the sealing plug. The valve is located behind the plug. It can be actuated using the supplied Allen key. The platform can also be lowered manually when loaded. It is important to actuate the valve with extreme caution to ensure the platform lowers slowly.



Once the lowering function is no longer needed, shut off the calce again, remove the Allen key and replace the plug.





## CAUTION

**Damage** to the cassette lift due to missing flap safety..

- > After inserting the cassette lift, attach the flap lock until the lift has been inspected in a workshop.

### 11.2.2 Raising platform manually

The platform can be raised manually. First remove the sealing plug. Behind this you will find a small hand pump that is connected to the rest of the hydraulic system. The pump control element can be found behind the opening. Insert the supplied hand lever into the opening in the housing and screw it into the hand pump control element. Moving the hand lever horizontally from side to side operates the pump and raises the platform. You can also raise the platform when loaded; in this case, a little more effort will be needed.

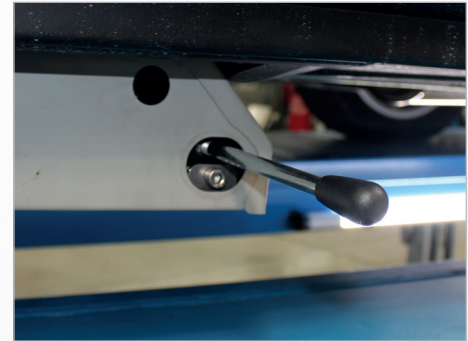


Fig. 23: Hand lever for lifting

### 11.2.3 Manually release the extension/ retraction movement

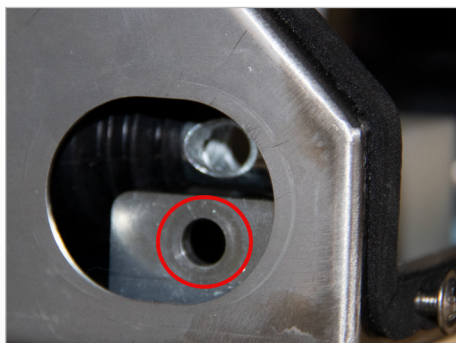


Fig. 24: Opening of the emergency release

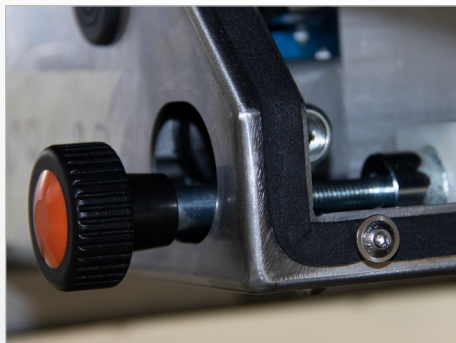


Fig. 25: Emergency unlocking retraction and extension

Fuses

The electric drive for the extension and retraction movement can be disengaged using the thread located under the oval sealing plug. First remove the oval sealing plug. There is an opening and a thread underneath. To extend the lift by hand, insert the unlocking tool supplied into the lower opening and the thread behind it and turn it to the right until you encounter resistance. The motor is now decoupled by means of the screw and the platform can be pulled out or pushed in from the cassette without much effort.

To lock the motor again, turn the tool to the left until it can be removed again. After use, the tool must be removed and safely stored in the vehicle



The tool may only be turned slightly in both directions against the mechanical stop!

To move the platform back into the cassette, e.g. to continue driving in the event of a fault, first manually return the platform to the retraction position by manually raising or manually lowering it. You have reached this position when the lever arms are horizontal and the platform retaining plates are parallel to the lever arms.



see Chapter 12.2.5 „safety Lid“



## CAUTION

**Damage** to the cassette lift due to missind securing of the cassette in emergency mode. Insufficient security can cause the platform to leave the cassette and cause serious damage..

- > Turn the screw back to its original position (to the left) and replace the sealing plug.
- > Mechanically lock the platform with the locking device.
- > After repair, check whether the platform can only be moved electrically. the platform must not be able to be moved by hand eben wiit great effort.
- > If it can noch be ensured that the platform is held in the cassette, be sure to attach the flap lock as described in chapter 12.2.5.

## 11.2.4 Manual operation of the roll stop device



Fig. 26: Roll-off protection too

The roll stop device drive motor can be mechanically disconnected from the flap. For this purpose, remove the spring clip and the small locking pin from the drive/ flap interface. (Shown here in retracted position).

The flap will now move freely at the front end of the platform. If the platform needs to be retracted into the cassette in this condition, the drive can be screwed into the drive housing by turning the position rod to the right, if it is extended when dismantled. The locking pin can then be used to connect the drive to the flap again so as to close the flap when the platform is in the cassette.



Fig. 27: Roll-off on

It is essential to re-engage the mechanical release for the retraction/extension motor before driving off. The flap security device must be put in place to provide additional safety.



## 11.2.5 Flap security device

If you have used the manual release for the extension/ retraction movement, it is essential to use the flap security device until the lift has been repaired!

The mechanical emergency flap security device can be fitted on the left side of the cassette. It consists of a red metal angle and a knurled screw.

Once this step has been correctly carried out, it will not be possible to pull the platform out of the cassette and you can continue with your journey.



Fig. 28: Corner safety Lid

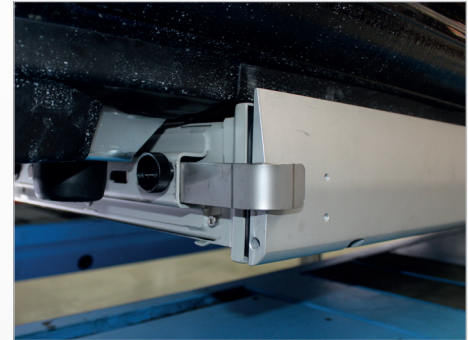




Fig. 29: safety Lid



### 11.3 *Emergency operation software solution*

The PARAVAN cassette lift includes an additional safety device which is controlled by the software of the cassette lift to prevent uncontrolled lowering. However, if the lift automatically - i.e. without actuating the remote control - returns to its previous position several times in succession, a visit to the nearest PARAVAN workshop is necessary.

 <b>ATTENTION</b>	
	<p><b>PLEASE NOTE:</b>                  For service or maintenance work on the cassette lift, please switch off the power supply beforehand.                  Risk of injury.</p>

## 12. Maintenance Schedule

### 12.1 Work plan 12 months annual service

Der Paravan- cassette lift is largely maintenance-free. Nevertheless, it is necessary to have PARavan serviced once a year.

Stamp:

Customer: \_\_\_\_\_

Operating hours: \_\_\_\_\_

VIN/  
serial number: \_\_\_\_\_




Date: \_\_\_\_\_

Name fitter: \_\_\_\_\_

Signature: \_\_\_\_\_

General:

Function check of all functions. Visual inspection for damage (cassette, hydraulic box, platform, roll-off protection, remote control)

<b>Mechanics</b>				Comment
Check for conspicuous noises.				
Check for obvious damage of the mechanism.				
Open cover on underside.				
Grease gears and racks for extension / extension, check for wear.				
Bevel gear unit: remove cover, check gear unit for wear.				
Emergency release Check mechanism for functionality.				
Removing the platform from the cassette without the emergency release being activated may not be possible.				
Tools for emergency release complete? (Swivel for pump, Allen key SW 5/6).				

General




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				Comments
All bearings are maintenance-free, some are plastic bearings. These must not be lubricated with oil or grease (thereby destroying the bearings). If necessary, use only Teflon spray.				
Check the brackets for the vehicle for tightness, loosened or missing screws, retighten or replace if necessary.				
Check all seals and replace if necessary.				

<b>Hydraulic</b>				Comments
Check for leakage at the interfaces if necessary retighten.				
Check hoses for leaks and kinks.				
Oil level check (top up hydraulic oil if necessary) Extend platform completely and lower completely - then the oil level in the storage tank must be approx. 2 cm below the upper edge.				

<b>Electrical</b>				Comments
Checking all electrical connections for damage.				
Testing the visual and audible warning devices.				

Checking and, if necessary, correcting the parameters stored in the controller for:

<b>Control</b>				Comments
Retracted position.				
Position extended.				
Exact position retraction position.				
vehicle position				
Checking all safety-relevant functions.				
The cassette lift must not be able to work when the sliding door is closed.				
Read meter reading and enter in maintenance booklet, as well as operating hours.				
Read out information about el. Emergency control, if necessary enter counter reading and operating hours in maintenance booklet.				
Possibly. Reset information about electrical emergency operation.				



## 12.2 *Work plan 24 months annual service*

General

Information

Prepare

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Technology

Stamp:

Customer:

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Operating hours:

---

VIN/  
serial number:

---

Date:

---

Name fitter:




---

Signature:

---

General:

Function check of all functions. Visual inspection for damage (cassette, hydraulic box, platform, roll-off protection, remote control)

<b>Mechanics</b>				Comment
Check for conspicuous noises.				
Check for obvious damage of the mechanism.				
Open cover on underside.				
Grease gears and racks for extension / extension, check for wear.				
Bevel gear unit: remove cover, check gear unit for wear.				
Emergency release Check mechanism for functionality.				
Removing the platform from the cassette without the emergency release being activated may not be possible.				
Tools for emergency release complete? (Swivel for pump, Allen key SW 5, unlocking tool).				

General




Information




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Technology

				Comments
All bearings are maintenance-free, some are plastic bearings. These must not be lubricated with oil or grease (thereby destroying the bearings). If necessary, use only Teflon spray.				
Check the brackets for the vehicle for tightness, loosened or missing screws, retighten or replace if necessary.				
Check all seals and replace if necessary.				

<b>Hydraulic</b>				Comments
Check for leakage at the interfaces if necessary retighten.				
Check hoses for leaks and kinks.				
Oil level check (top up hydraulic oil if necessary) Extend platform completely and lower completely - then the oil level in the storage tank must be approx. 2 cm below the upper edge.				

<b>Electrical</b>				Comments
Checking all electrical connections for damage.				
Testing the visual and audible warning devices.				

Checking and, if necessary, correcting the parameters stored in the controller for::

<b>Control</b>				Comments
Retracted position.				
Position extended.				
Exact position retraction position.				
vehicle position				
Checking all safety-relevant functions.				
The cassette lift must not be able to work when the sliding door is closed.				
Read meter reading and enter in maintenance booklet, as well as operating hours.				
Read out information about el. Emergency control, if necessary enter counter reading and operating hours in maintenance booklet.				
Possibly. Reset information about electrical emergency operation.				

## 12.3 **Work plan 36 months annual service**

Stamp:

Customer: \_\_\_\_\_

Operating hours: \_\_\_\_\_

VIN/  
serial number: \_\_\_\_\_

Date: \_\_\_\_\_




Name fitter: \_\_\_\_\_

Signature: \_\_\_\_\_



General:

Function check of all functions. Visual inspection for damage (cassette, hydraulic box, platform, roll-off protection, remote control)

<b>Mechanics</b>				Comment
Check for conspicuous noises.				
Check for obvious damage of the mechanism.				
Open cover on underside.				
Grease gears and racks for extension / extension, check for wear.				
Bevel gear unit: remove cover, check gear unit for wear.				
Emergency release Check mechanism for functionality.				
Removing the platform from the cassette without the emergency release being activated may not be possible.				
Tools for emergency release complete? (Swivel for pump, Allen key SW 5, unlocking tool).				

General




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				Comments
All bearings are maintenance-free, some are plastic bearings. These must not be lubricated with oil or grease (thereby destroying the bearings). If necessary, use only Teflon spray.				
Check the brackets for the vehicle for tightness, loosened or missing screws, retighten or replace if necessary.				
Check all seals and replace if necessary.				

<b>Hydraulic</b>				Comments
Check for leakage at the interfaces if necessary retighten.				
Check hoses for leaks and kinks.				
Oil level check (top up hydraulic oil if necessary) Extend platform completely and lower completely - then the oil level in the storage tank must be approx. 2 cm below the upper edge.				

<b>Electrical</b>				Comments
Checking all electrical connections for damage.				
Testing the visual and audible warning devices.				

Checking and, if necessary, correcting the parameters stored in the controller for:

<b>Control</b>				Comments
Retracted position.				
Position extended.				
Exact position retraction position.				
vehicle position				
Checking all safety-relevant functions.				
The cassette lift must not be able to work when the sliding door is closed.				
Read meter reading and enter in maintenance booklet, as well as operating hours.				
Read out information about el. Emergency control, if necessary enter counter reading and operating hours in maintenance booklet.				
Possibly. Reset information about electrical emergency operation.				

## 12.4 **Work plan 48 months annual service**

Stamp:

Customer: \_\_\_\_\_

Operating hours: \_\_\_\_\_

VIN/  
serial number: \_\_\_\_\_




Date: \_\_\_\_\_

Name fitter: \_\_\_\_\_




Signature: \_\_\_\_\_




General:




Function check of all functions. Visual inspection for damage (cassette, hydraulic box, platform, roll-off protection, remote control)

<b>Mechanics</b>				Comment
Check for conspicuous noises.				
Check for obvious damage of the mechanism.				
Open cover on underside.				
Grease gears and racks for extension / extension, check for wear.				
Bevel gear unit: remove cover, check gear unit for wear.				
Emergency release Check mechanism for functionality.				
Removing the platform from the cassette without the emergency release being activated may not be possible.				
Tools for emergency release complete? (Swivel for pump, Allen key SW 5, unlocking tool).				






				Comments
All bearings are maintenance-free, some are plastic bearings. These must not be lubricated with oil or grease (thereby destroying the bearings). If necessary, use only Teflon spray.				
Check the brackets for the vehicle for tightness, loosened or missing screws, retighten or replace if necessary.				
Check all seals and replace if necessary.				

<b>Hydraulic</b>				Comments
Check for leakage at the interfaces if necessary retighten.				
Check hoses for leaks and kinks.				
Oil level check (top up hydraulic oil if necessary) Extend platform completely and lower completely - then the oil level in the storage tank must be approx. 2 cm below the upper edge.				

<b>Electrical</b>				Comments
Checking all electrical connections for damage.				
Testing the visual and audible warning devices.				

Checking and, if necessary, correcting the parameters stored in the controller for:

<b>Control</b>				Comments
Retracted position.				
Position extended.				
Exact position retraction position.				
vehicle position				
Checking all safety-relevant functions.				
The cassette lift must not be able to work when the sliding door is closed.				
Read meter reading and enter in maintenance booklet, as well as operating hours.				
Read out information about el. Emergency control, if necessary enter counter reading and operating hours in maintenance booklet.				
Possibly. Reset information about electrical emergency operation.				

## 12.5 **Work plan 60 months annual service**

Stamp:

Customer: \_\_\_\_\_

Operating hours: \_\_\_\_\_

VIN/  
serial number: \_\_\_\_\_




Date: \_\_\_\_\_

Name fitter: \_\_\_\_\_

Signature: \_\_\_\_\_

General:

Function check of all functions. Visual inspection for damage (cassette, hydraulic box, platform, roll-off protection, remote control)

<b>Mechanics</b>				Comment
Check for conspicuous noises.				
Check for obvious damage of the mechanism.				
Open cover on underside.				
Grease gears and racks for extension / extension, check for wear.				
Bevel gear unit: remove cover, check gear unit for wear.				
Emergency release Check mechanism for functionality.				
Removing the platform from the cassette without the emergency release being activated may not be possible.				
Tools for emergency release complete? (Swivel for pump, Allen key SW 5, unlocking tool).				

General




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				Comments
All bearings are maintenance-free, some are plastic bearings. These must not be lubricated with oil or grease (thereby destroying the bearings). If necessary, use only Teflon spray.				
Check the brackets for the vehicle for tightness, loosened or missing screws, retighten or replace if necessary.				
Check all seals and replace if necessary.				

<b>Hydraulic</b>				Comments
Check for leakage at the interfaces if necessary retighten.				
Check hoses for leaks and kinks.				
Oil level check (top up hydraulic oil if necessary) Extend platform completely and lower completely - then the oil level in the storage tank must be approx. 2 cm below the upper edge.				



<b>Electrical</b>				Comments
Checking all electrical connections for damage.				
Testing the visual and audible warning devices.				

Checking and, if necessary, correcting the parameters stored in the controller for:

<b>Control</b>				Comments
Retracted position.				
Position extended.				
Exact position retraction position.				
vehicle position				
Checking all safety-relevant functions.				
The cassette lift must not be able to work when the sliding door is closed.				
Read meter reading and enter in maintenance booklet, as well as operating hours.				
Read out information about el. Emergency control, if necessary enter counter reading and operating hours in maintenance booklet.				
Possibly. Reset information about electrical emergency operation.				

## 12.6 *Work plan 72 months annual service*

Stamp:

Customer: \_\_\_\_\_

Operating hours: \_\_\_\_\_

VIN/  
serial number: \_\_\_\_\_




Date: \_\_\_\_\_

Name fitter: \_\_\_\_\_

Signature: \_\_\_\_\_

General:

Function check of all functions. Visual inspection for damage (cassette, hydraulic box, platform, roll-off protection, remote control)

<b>Mechanics</b>				Comment
Check for conspicuous noises.				
Check for obvious damage of the mechanism.				
Open cover on underside.				
Grease gears and racks for extension / extension, check for wear.				
Bevel gear unit: remove cover, check gear unit for wear.				
Emergency release Check mechanism for functionality.				
Removing the platform from the cassette without the emergency release being activated may not be possible.				
Tools for emergency release complete? (Swivel for pump, Allen key SW 5, unlocking tool).				

General




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				Comments
All bearings are maintenance-free, some are plastic bearings. These must not be lubricated with oil or grease (thereby destroying the bearings). If necessary, use only Teflon spray.				
Check the brackets for the vehicle for tightness, loosened or missing screws, retighten or replace if necessary.				
Check all seals and replace if necessary.				

<b>Hydraulic</b>				Comments
Check for leakage at the interfaces if necessary retighten.				
Check hoses for leaks and kinks.				
Oil level check (top up hydraulic oil if necessary) Extend platform completely and lower completely - then the oil level in the storage tank must be approx. 2 cm below the upper edge.				



<b>Electrical</b>				Comments
Checking all electrical connections for damage.				
Testing the visual and audible warning devices.				

Überprüfung und ggf. Korrektur der in der Steuerung hinterlegten Parameter für:

<b>Control</b>				Comments
Retracted position.				
Position extended.				
Exact position retraction position.				
vehicle position				
Checking all safety-relevant functions.				
The cassette lift must not be able to work when the sliding door is closed.				
Read meter reading and enter in maintenance booklet, as well as operating hours.				
Read out information about el. Emergency control, if necessary enter counter reading and operating hours in maintenance booklet.				
Possibly. Reset information about electrical emergency operation.				

## 12.7 *Work plan 84 months annual service*

General

Information

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Stamp:

Customer:

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Operating hours:

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VIN/  
serial number:

---

Date:

---

Name fitter:




---




Signature:




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General:

Function check of all functions. Visual inspection for damage (cassette, hydraulic box, platform, roll-off protection, remote control)

<b>Mechanics</b>				Comment
Check for conspicuous noises.				
Check for obvious damage of the mechanism.				
Open cover on underside.				
Grease gears and racks for extension / extension, check for wear.				
Bevel gear unit: remove cover, check gear unit for wear.				
Emergency release Check mechanism for functionality.				
Removing the platform from the cassette without the emergency release being activated may not be possible.				
Tools for emergency release complete? (Swivel for pump, Allen key SW 5, unlocking tool).				

				Comments
All bearings are maintenance-free, some are plastic bearings. These must not be lubricated with oil or grease (thereby destroying the bearings). If necessary, use only Teflon spray.				
Check the brackets for the vehicle for tightness, loosened or missing screws, retighten or replace if necessary.				
Check all seals and replace if necessary.				

<b>Hydraulic</b>				Comments
Check for leakage at the interfaces if necessary retighten.				
Check hoses for leaks and kinks.				
Oil level check (top up hydraulic oil if necessary) Extend platform completely and lower completely - then the oil level in the storage tank must be approx. 2 cm below the upper edge.				



<b>Electrical</b>				Comments
Checking all electrical connections for damage.				
Testing the visual and audible warning devices.				

Überprüfung und ggf. Korrektur der in der Steuerung hinterlegten Parameter für:

<b>Control</b>				Comments
Retracted position.				
Position extended.				
Exact position retraction position.				
vehicle position				
Checking all safety-relevant functions.				
The cassette lift must not be able to work when the sliding door is closed.				
Read meter reading and enter in maintenance booklet, as well as operating hours.				
Read out information about el. Emergency control, if necessary enter counter reading and operating hours in maintenance booklet.				
Possibly. Reset information about electrical emergency operation.				

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## 12.8 *Work plan 96 months annual service*

General

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Stamp:

Customer:

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Operating hours:

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VIN/  
serial number:

---

Date:

---

Name fitter:




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Signature:

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General:

Function check of all functions. Visual inspection for damage (cassette, hydraulic box, platform, roll-off protection, remote control)

<b>Mechanics</b>				Comment
Check for conspicuous noises.				
Check for obvious damage of the mechanism.				
Open cover on underside.				
Grease gears and racks for extension / extension, check for wear.				
Bevel gear unit: remove cover, check gear unit for wear.				
Emergency release Check mechanism for functionality.				
Removing the platform from the cassette without the emergency release being activated may not be possible.				
Tools for emergency release complete? (Swivel for pump, Allen key SW 5, unlocking tool).				

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				Comments
All bearings are maintenance-free, some are plastic bearings. These must not be lubricated with oil or grease (thereby destroying the bearings). If necessary, use only Teflon spray.				
Check the brackets for the vehicle for tightness, loosened or missing screws, retighten or replace if necessary.				
Check all seals and replace if necessary.				

<b>Hydraulic</b>				Comments
Check for leakage at the interfaces if necessary retighten.				
Check hoses for leaks and kinks.				
Oil level check (top up hydraulic oil if necessary) Extend platform completely and lower completely - then the oil level in the storage tank must be approx. 2 cm below the upper edge.				

<b>Electrical</b>				Comments
Checking all electrical connections for damage.				
Testing the visual and audible warning devices.				

Überprüfung und ggf. Korrektur der in der Steuerung hinterlegten Parameter für:

<b>Control</b>				Comments
Retracted position.				
Position extended.				
Exact position retraction position.				
vehicle position				
Checking all safety-relevant functions.				
The cassette lift must not be able to work when the sliding door is closed.				
Read meter reading and enter in maintenance booklet, as well as operating hours.				
Read out information about el. Emergency control, if necessary enter counter reading and operating hours in maintenance booklet.				
Possibly. Reset information about electrical emergency operation.				

General

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## Space for notes

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## Space for notes

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**Space for notes**

A series of ten horizontal dashed lines spanning the width of the page, providing a space for handwritten notes.



PARAVAN MOBILITY

*User manual*  
**Cassette lift**

ORIGINAL INSTRUCTION MANUAL



**Paravan GmbH**

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