OWNER'S MANUAL

INFORMATION FOR OWNERS AND USERS

Tail lift CANTILEVERS

74584TL - Owner's Manual, English translation

2024-01-31

Must be kept in the vehicle on which the tail lift is installed



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1 Important information

Before using the ZEPRO tail lift, you must read and understand the contents of this manual and especially the sections describing safety.

The owner's manual is primarily intended to inform you about the tail lift's functions and characteristics and how to use it in the best way. It also contains important safety and maintenance information and describes any problems that might occur during operation.

Always keep the owner's manual in the vehicle, as the need for important information regarding operation, safety and maintenance may be necessary.

Information about our products is also available on our website. You can find us at www. zepro.com.

All information, images, illustrations and specifications are based on the product information available when this manual was printed. Images and illustrations contained in the Instructions for use are generic and not intended to be exact depictions of various parts of the product.

We reserve the right to make changes to the product without prior notice.

1.1 Technical support

If technical support is required, contact your nearest service workshop.

Always quote the tail lift's serial number to make sure you receive the correct information. The serial number is found on the rating plate located on the tail lift frame.

1.2 Location of the type plate

The type plate is positioned on the tail lift frame. The location differs from model to model.

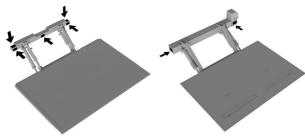


Figure 1. Location on a tail lift with a max load lower than 1000 Kg

Figure 2. Location on a tail lift with a max load equal to or greater than 1000 Kg.



Figure 3. Type plate

1.3 Spare parts & accessories

If spare parts or accessories are required, contact your nearest service workshop.

1.4 Service

If service is required, contact your nearest service workshop.

1.5 Product discontinuation

For information on product discontinuation, see section "9 Product discontinuation" on page 91.

1.6 Warranty

1.6.1 Warranty period

The tail lift comes with a 24-month warranty valid from the ex-works delivery date.

If the tail lift is stored before being put into service or delivered to the end customer, the warranty period may be extended by a period corresponding to the storage period, but not more than 6 months, i.e. the warranty is valid for a maximum of 30 months from the factory delivery date.

Spare parts are supplied with a 24-month warranty from the ex works delivery date.

When storing spare parts before installation on the tail lift, the warranty period may be extended by a period corresponding to the storage period, but not more than 6 months, i.e. the warranty is valid for a maximum of 30 months from the factory delivery date. The spare parts warranty is subject to proof of purchase.

1.6.2 Warranty conditions

ZEPRO warranty rights are only valid if the following conditions are met:

- Claims are made within the normal warranty period.
- The delivery card is completed in C-care before the guarantee application is completed.
- Installation was carried out in accordance with ZEPRO installation instructions and also by a ZEPRO-approved superstructure builder.
- Delivery acceptance inspection was carried out in accordance with ZEPRO's instructions and certified in this owner's manual. See section "14 Declaration of conformity during assembly" on page 107.
- The annual service was carried out according to ZEPRO's instructions and by a ZEPRO-approved service workshop. Service must be noted in the service record. See section "10 Service record" on page 92.
- Warranty work may only be carried out by ZEPRO-approved workshops.

There is information on our website about service workshops and distributors by country. If no service workshop information is available, contact your distributor.

Warranty rights cannot be exercised in countries where there is no distributor.

1.6.3 Warranty compensation:

Tail lift

Following an approved tail lift claim during the ordinary warranty period, the warranty will cover material and labour costs for the person performing the warranty work.

Spare Parts

Following an approved part claim within the ordinary warranty period, the warranty will cover material costs for the person performing the warranty work. The warranty on parts does not cover labour costs.

1.6.4 The warranty covers:

Factory and material defects on:

- Zepro original parts found to be defective.
- Zepro original spare parts found to be defective.
- Zepro original accessories found to be missing.

The warranty does not apply in the case of:

Damage caused by electrical overload:

Damage to electrical parts caused by insufficient battery capacity, e.g. insufficient installed battery capacity and/or insufficient battery charge in relation to the amount of lift use.

Damage caused by hydraulic overload:

Damage to lift parts caused by tampering with the hydraulic system

Damage caused by mechanical overload:

Damage to lift parts caused by overloading or external force.

Wear parts:

e.g. support wheels, bearings, shafts, worn or damaged paint, warning flags, stickers, batteries, rubber bellows, seals between the tail lift and vehicle.

Service and maintenance related:

Measures of a purely service and maintenance character. Replacing fuses, adjusting hydraulic pressure, adjusting tilt cylinders, adjusting torque. Hydraulic components contaminated by dirty hydraulic oil. Dissonance caused by neglected maintenance (lubrication).

Incorrect installation:

Damage caused by incorrect installation. Claims for this type of damage must be submitted to the tail lift seller or installer, or to the service workshop that installed the spare part.

External equipment:

Damage caused by external equipment or materials not approved by ZEPRO. For example, equipment connected to the tail lift electrical system. Parts that have previously been repaired without Z-lyften's consent.

Parts that have been disassembled:

For example, motors, cylinders, solenoids, pressure switches, valves and similar parts.

Corrosion:

Surface corrosion on standard fasteners or on components with damaged surface treatment.

External costs:

Emergency actions, on-call, travel expenses, vehicle hire, lost income, damage to goods.

Missing parts:

If multiple parts are submitted with a claim application, parts that have no identified defects covered by the warranty will not be replaced. Example: An electrical hose rupture valve is found to be faulty and the valve and solenoid are both submitted; however, only the part that has a defect covered by the warranty will be replaced.

Transportation costs:

Transportation costs for returned goods (claims). The claimant is liable for transportation costs for returned goods (claims).

Painted-over parts:

Hoses, piston rods, control devices, cables and similar. Parts where the ID plate has been painted over, making identification impossible.

1.7 REACH regulation

All tail lifts produced by Z-lyften Produktion AB comply with Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006, aka the REACH regulation.

All accessories supplied by Z-lyften Produktion AB comply with the REACH regulation.

All suppliers engaged by Z-lyften Produktion AB are contractually bound to comply with the REACH regulation, which is a basic requirement in Z-lyften Produktion AB's supplier development program.

1.8 Information concerning the clause on remote diagnostics

ZEPRO, or a third party designated by ZEPRO, shall at all times have the right to (i) install, maintain and dismantle a remote diagnostics device in and from the Products; and (ii) access, send, receive, collect, store, copy, aggregate, combine with other information, process, make available, further develop and use any and all information and data gathered through the remote diagnostics device, including but not limited to, information concerning equipment identity, efficiency, availability, downtime, operation, operating environment, movement, condition, logon, location and similar information relating to the Products (the "Information"). Such Information may be used for providing, delivering, optimizing, developing, servicing and offering the Products or any related products, equipment, and services. The Information may also be used for example for sales and marketing, ZEPRO's internal business and/or operating purposes as well as for regulatory, warranty and contract compliance and for proactive maintenance and diagnostics. The Information may be shared to ZEPRO's group companies and to ZEPRO's and its group companies' dealers, subcontractors, service providers and other business partners for the above described purposes.

1.9 Privacy

For administrative purposes relating to the warranty program and in order to fulfil the obligations under the contract and the law, and to manage the customer relationship, the Seller, and ZEPRO Group as the manufacturer of the Products, is required to collect and process information regarding the Customer, which may include personal data of the contact persons and other possible representatives and employees of the Customer. Information collected may also be used, among other things, to satisfy requests made by the Customer, to inform the Customer about new products and services, as well as for other promotional or marketing purposes. The information may be shared within the ZEPRO Group of companies and its associated companies, and ZEPRO's authorised dealers, distributors and service workshops, and other companies providing services for the Customer's benefit for the above described purposes. ZEPRO Group may also receive and use of the information provided to ZEPRO Group through ZEPRO's authorised dealer and service network (such as from the authorised ZEPRO distributor or dealer from whom the Customer has purchased the Product).

A more detailed description of how ZEPRO processes personal data is available in ZEPRO's privacy policy (https://hiab.com/en/privacy-policy). The ZEPRO Privacy Policy applies to the processing of personal data by ZEPRO Group of companies. Please note that in case you have purchased the Product from a ZEPRO distributor or dealer, personal data may be further processed by the seller of the Product. In such case, please refer to the applicable policies of the seller of the Product.

1.10 Regular inspections

Rules and regulations concerning regular tail lift inspections differ from country to country. Failure to carry out inspections in compliance with national legislation may lead to penalty charges and a prohibition on the use of the tail lift. Find out the regular inspection requirements applicable to your tail lift and make sure you meet them.

1.11 Attention!

The Instructions for use contain the following warning signs. They are intended to alert you to conditions that could cause problems, incidents, injury, and/or damage to the product, etc.



⚠ WARNING!

WARNING indicates a potential hazard, which if ignored may lead to serious, life-threatening injury.



⚠ CAUTION!

CAUTION indicates a potential hazard, which if ignored, may lead to minor injuries.

IMPORTANT!

IMPORTANT indicates a risk of equipment damage.

NOTE!

NOTE! refers to additional information that may help the reader understand, or perform, a given operation.

2 Safety rules

2.1 General

Because the tail lift is used for handling heavy loads, extra care must be taken when using it. It is important that you read and follow the instructions and safety regulations in these instructions for use before using the tail lift. Improper use may result in injury, or damage to the tail lift and the vehicle to which it is fitted.

NOTE!

ZEPRO is not liable for any injury to persons or damage to property that may result from failure of the operator or other person to comply with the recommendations, warnings and instructions set forth in these instructions for use.

2.2 Damage and malfunctions

If in any situation you feel the tail lift and its various functions are not behaving as expected, or if you suspect something is wrong, discontinue use as soon as possible, switch off the main power supply to the tail lift and contact your authorised dealer for assistance without delay.

2.3 Max permissible load

Under no circumstances may the lift be burdened with more weight than the specified maximum load. Under no circumstances may the max load centre be placed further out on the platform than the load centre distance specified for the tail lift.

Information about the max permissible platform load and the load centre distance for max load is shown on stickers affixed to the tail lift or vehicle.



Under no circumstances is it permitted to load the platform with loads greater than those specified on the stickers. Excessive load can cause structural damage. Risk of material damage and life-threatening injury.

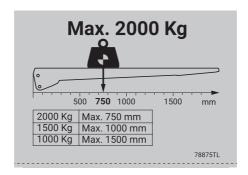


Figure 4. Sticker, max permissible load 2000 kg. Load centre distance 750 mm.

Example: This tail lift has a maximum load of 2000 kg when the load's centre of gravity is no more than 750 mm from the edge of the vehicle floor. If the load's centre of gravity is placed 1500 mm from the edge of the vehicle floor, max permissible weight decreases to 1000 kg.

2.4 Maintenance, repairs and service

Only perform the service and maintenance procedures specified in this manual. All other service, repairs, modifications or actions on the tail lift and the vital systems of its accessories must be carried out by an authorised workshop.

When working on the tail lift, switch off the main power supply.

Use only spare parts and accessories approved or recommended by ZEPRO. Any other use may lead to changes that impair tail lift function and safety. This may also render your tail lift warranty invalid.

2.5 Modifications

Modifications not described or approved by ZEPRO may not be made. Such modifications may entail an increased risk of accidents, a negative impact on product life and render the product warranty invalid.



Modifications to the tail lift may affect safety. In the case of deviations from the documented CE-marked tail lift, the CE-marking will cease to apply. Risk of material damage and life-threatening injury.

2.6 Operation

2.6.1 General

Because the tail lift is used for handling heavy loads, extra care must be taken when using it. It is important that you read and follow the instructions and safety regulations in these instructions for use before using the tail lift. Improper use may result in injury or damage to the tail lift and the vehicle to which it is fitted.



WARNING!

Do not allow heavy loads to drop onto the platform. Risk of material damage and life-threatening injury.



⚠ WARNING!

Exercise caution when present or working on or in the immediate vicinity of the platform or tail lift with respect to protruding parts and sharp edges. Never leave the tail lift with the platform raised and extended. Risk of material damage and life-threatening injury.



A CAUTION!

ZEPRO is not liable for any injury to persons or damage to property that may result from failure of the operator or other person to comply with the recommendations, warnings and instructions set forth in these instructions for use.

2.6.2 Working in the dark



⚠ CAUTION!

Make sure the necessary and appropriate lighting is available when working in the dark. ZEPRO recommends fitting the tail lift with warning lights for working in poorly lit areas. Risk of injury.

2.6.3 Working on the platform



WARNING!

The greatest risk for cut and crush injuries is in the hazard area between the tail lift and the vehicle floor when the lift is raised to vehicle floor height. Anyone standing on the tail lift or the vehicle floor must keep their feet and other parts of the body away from this hazard area when the tail lift is in operation. Risk of life-threatening injury.



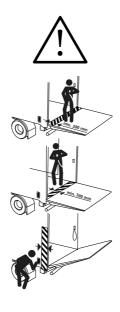
! CAUTION!

To reduce the risk of foot injuries, wear safety shoes with protective steel toe-caps when working on the platform. Even though the platform has a non-slip surface, take care when transferring goods. ZEPRO recommends the use of anti-slip safety shoes with protective toecaps in accordance with EN ISO 20345. Risk of injury.



⚠ CAUTION!

Always be aware of the platform edges to avoid stepping off by mistake. Also be aware of the risk of tripping, especially if the platform is fitted with warning lights or wheel stops. Risk of injury.



2.7 Intended use



⚠ WARNING!

The tail lift may only be used for its intended purpose, i.e. the loading and unloading of goods, and then only in accordance with the regulations contained in this owner's manual. No other type of use is permitted as this may damage the tail lift and give rise to dangerous situations. Risk of material damage and life-threatening injury.

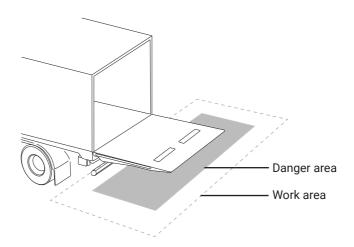
Use of the tail lift in a manner not described in these instructions for use may also render the product warranty invalid.

2.8 Danger area



⚠ WARNING!

The hazard area is the area in which the tail lift moves during operation. Under no circumstances may the operator or any other person enter this area when the tail lift is in operation. Risk of material damage and life-threatening injury.



2.9 Work area

The operator must make sure that the working area behind the tail lift is free from persons and every kind of object when the tail lift is used. The operator must also pay attention to the surroundings beyond the working area to have good forewarning of approaching persons or objects that may cause a hazardous situation. Negligent tail lift operation may entail a risk of injury and material damage.

⚠ WARNING!

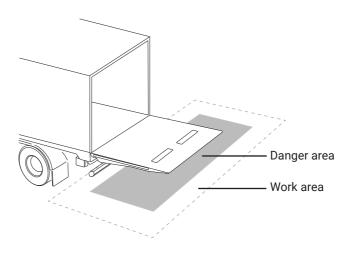
Make sure other vehicles are parked no closer than 5 m from the rear of the vehicle.

Make sure the work area is clear of persons and objects. Be especially aware of children and animals.

Pay attention to the surroundings to have good forewarning of approaching persons or objects that may cause a hazardous situation. Stop work immediately if unsure.

During loading and unloading, handle cargo as described in this manual. In the event of instability, loads may move uncontrollably. Risk of material damage and life-threatening injury.

When handling loads with wheels, the tail lift platform must be equipped with roll stops. Risk of material damage and life-threatening injury.



2.10 Operator working position

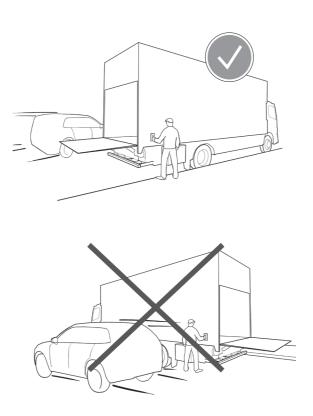
Always position the vehicle to allow tail lift operation without danger from passing traffic. Also make sure the work area is clear.



The vehicle must be positioned to allow tail lift operation without danger from passing traffic. Risk of material damage and life-threatening injury.

⚠ CAUTION!

Always make sure the work area is clear during platform operation. Risk of injury.



3 Design and Function

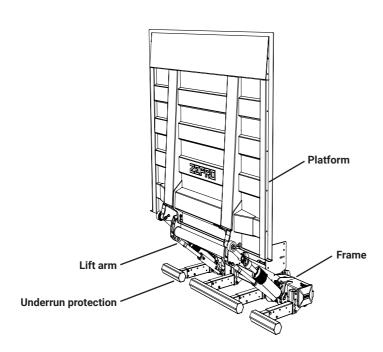
3.1 General

The ZEPRO tail lift consists of a number of main components, namely the frame, lift arms, platform and chassis bracket. The tail lift is operated electro-hydraulically. A hydraulic pump supplies hydraulic oil to the actuating hydraulic cylinders. The hydraulic system is controlled by the control system, which is operated by control devices.

3.2 Frame

The frame constitutes the tail lift's chassis to which other components such as the chassis brackets, lift arms and hydraulic units are mounted.

Overview



3.3 Lift arm

The lift arms connect the platform to the frame. Lift and tilt is accomplished with associated cylinders.

3.4 Underrun protection

Underrun protection reduces the risk of serious or life-threatening injuries in a collision by another vehicle from behind.

3.5 Platform

The platform is made of steel or aluminium and has a non-slip top surface. The platform can be a single piece or foldable to take up less space when not in use.

3.6 Hydraulic system

The hydraulic system is engineered to ensure the tail lift enjoys high performance and reliability. An electrically-driven hydraulic pump supplies oil to the product's hydraulic cylinders via hoses and valves and to power the hydraulic functions.

Great importance has been given to safety. A bypass valve protects against overloading. The hydraulic pump motor is fitted with a thermostat that cuts the power supply should the motor overheat. The hydraulic system is designed to meet statutory lifting speed requirements.

The hydraulic cylinders equipped with hose rupture valves protect the platform and any load from dropping suddenly in the event of a hydraulic hose failure. The tail lift is also equipped with electrically operated lowering valves on the tilt and lift cylinders. These valves allow hydraulic oil flow only when electrically actuated, i.e. only when the operator is operating the lift with one of the control devices. In the event of a hydraulic system leak, the platform is locked in position by the hydraulic oil captive in the cylinders. The electric lowering valve also acts as a locking device during transport.

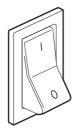
3.7 Control system

ZEPRO tail lifts may be fitted with advanced types of control systems adapted to the specific product. The control system controls the hydraulic system and thus the tail lift's various functions. The system interprets the operator's pushbutton commands as well as signals from various sensors in the tail lift structure. In this way, all of the tail lift's functions can be controlled by the operator, while the system sensors control automatic functions and improve safety.

3.8 Cab and the main switch

The tail lift can be fitted with a cab switch to switch control power On/Off. When the control circuit is switched off, the lift is 'locked'. The cab switch should always be in the OFF position during transport and whenever the tail lift is not in use.

The tail lift can also be fitted with a main switch. It is used to switch the main power supply On/Off. When the main power supply is off, the lift is 'locked'. If the tail lift is not fitted with a cab switch, the main switch must always be in the Off position during transport and whenever the tail lift is not in use.



Typical cab switch



Typical main switch

3.9 Timer

The tail lift may be fitted with a timer that automatically cuts control power at a given time after the cab switch has been set to "ON". This prevents the control system from draining the battery unnecessarily should the operator forget to set the cab switch to "OFF" after use. Some control systems do not need a timer for this purpose as they do not consume any power when the lift is not in use.

3.10 Safety devices

3.10.1 Two-handed operation

To reduce the risk of crush injuries, the control system and its control devices require the operator to use both hands. Depending on tail lift type and configuration, this requirement may apply in all situations or where the risk of crush injuries is greatest.

3.10.2 Limiting to a single operator

The tail lift may only be operated by one person at a time. The control system has a safety feature that prevents two people from operating the tail lift simultaneously from different control devices. The active control device temporarily disconnects other control devices while it is in use.

3.10.3 Warning flags

In order to draw attention to an extended platform, warning flags are installed to make it more conspicuous when deployed.

3.10.4 Open platform alarm

There must be an open platform alarm in the form of a warning lamp in the cabin. The lamp comes on if the platform leaves its transport position.

3.10.5 Warning lighting (accessory)

Optional warning lights are located on the outer corners of the platform to make it more conspicuous when deployed, especially in low light conditions. The warning light is activated when the platform is tilted back to the horizontal position.

3.10.6 Main fuse

A fuse is fitted between the battery and the tail lift to reduce the risk of electrical overload and thus the risk of fire.

3.10.7 Wheel stop (accessory)

The platform must be equipped with wheel stops, which are then used to reduce the risk of wheeled loads rolling out of control when standing on the platform.

3.11 Controllers

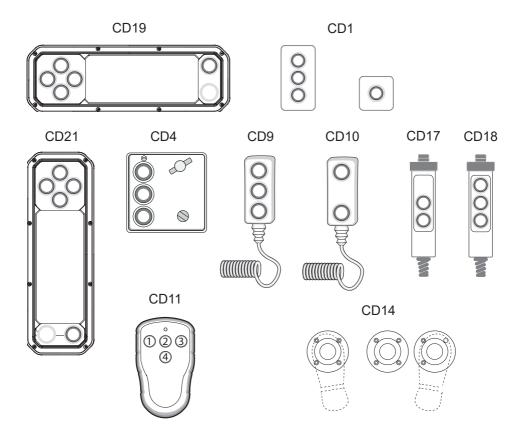
All tail lift functions are controlled by one or more control devices. The lift can be operated by several different types of fixed, hardwired control devices and remote (radio) control devices.

One of the control devices is the primary control device, which means it includes all possible functions for the tail lift concerned. The remaining control devices are secondary, which may mean the number of functions is limited for safety reasons.

3.11.1 Applicable control devices

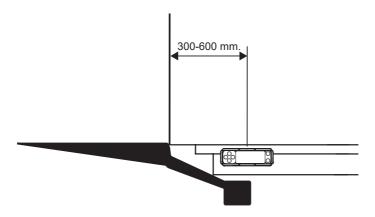
A selection of the most commonly available controllers is shown below. Possible models vary depending on lift model, configuration and relevant market.

CD= Control Device

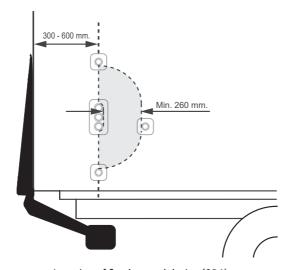


3.11.2 Location of fixed control device

The tail lift is fitted with one or more control devices. Only control devices approved by ZEPRO may be used. Fixed control devices are installed on the vehicle superstructure or on brackets below the superstructure. The control devices must be positioned according to applicable regulations, with a certain distance from the crush hazard area between the platform and the superstructure, but without restricting the operator's clear view of the working area.



Location of fixed control device



Location of fixed control device (CD1)

3.12 Electric autotilt

The optional electric autotilt feature simplifies tail lift operation.

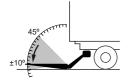
Autotilt-down is enabled automatically when the Down function is used and when the platform rests on the ground, provided that the platform angle is less than 45°. This function automatically tilts the tip of the platform down towards the ground.

In autotilt down, the tilt function is driven solely by gravity. For fastest operation, the platform should first be tilted manually to the horizontal position before enabling autotilt.

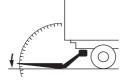
Autotilt-up is enabled when using the Up function with the platform in the ground position. When this function is enabled, the platform is automatically tilted up to the set angle (horizontal position) before moving upwards.



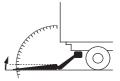
Autotilt symbol



Zone where autotilt is available



Lowering to ground

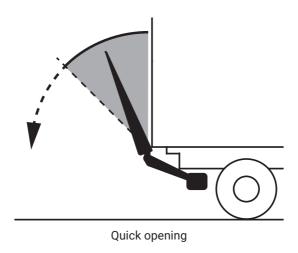


Raising from ground

3.13 Quick opening (option)

The quick opening function is available as an option. The function allows faster operation of the platform from the vertical to the horizontal.

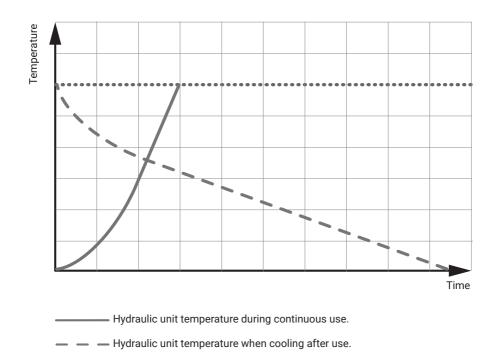
The function is activated automatically when 'Tilt down' is used on the condition that the operation takes place using the two-hand function. Tail lifts with the ZePRO1 control system also require the platform angle at the beginning of the movement is above the tail lift's working area. The working area is factory set and can differ between markets.



3.14 Overheating protection

The hydraulic system is equipped with a thermostat which cuts control circuit power and reduces the risk of damage to the motor if it overheats, which may occur during e.g. continuous, intensive use.

The amount of continuous work the tail lift is able to perform is influenced by ambient temperature and the load the tail lift is exposed to. Generally speaking, it takes considerably longer for the motor to cool down after use than the time spent working. Insufficient pauses between intensive periods of work cause the motor to grow increasingly hot until the thermostat cuts the control circuit and prevents further use. When the motor has cooled to a permissible temperature, the thermostat resets automatically and the tail lift can be used again.



Temperature at which the temperature switch prevents use.

4 **Operation**

4.1 General

NB!

Always operate the lift calmly and with due care and attention. This enhances safety and reduces maintenance costs and the risk of downtime.

ZEPRO is not liable for any injury to persons or damage to property that may result from failure of the operator or other person to comply with the recommendations, warnings and instructions set forth in this owner's manual.



⚠ CAUTION!

Check and secure the load before operating the tail lift. Otherwise, there is a risk that the load will topple or fall off. Risk of injury and material damage.

NB!

In the event of damage or accident:

- Immediately report such to the person responsible for action.
- If damage to the tail lift is suspected, contact an authorised workshop.

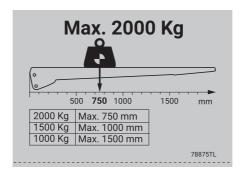
4.2 Max load

Under no circumstances may the tail lift be laden with more weight than the specified maximum load. Under no circumstances may the max load centre be placed further out on the platform than the load centre distance specified for the tail lift.

Information about the max permissible platform load and the load centre distance for max load is shown on stickers affixed to the tail lift or vehicle.



Under no circumstances is it permitted to load the platform with loads greater than those specified on the stickers. Excessive load can cause structural damage. Risk of material damage and life-threatening injury.



Sticker, max permissible load 2000 kg. Load centre distance 750 mm.

Example: This tail lift has a maximum load of 2000 kg when the load's centre of gravity is no more than 750 mm from the edge of the vehicle floor. If the load's centre of gravity is placed 1500 mm from the edge of the vehicle floor, max permissible weight decreases to 1000 kg.

421 Working in the dark



A CAUTION!

Make sure the necessary and appropriate lighting is available when working in the dark. ZEPRO recommends fitting the tail lift with warning lights for working in poorly lit areas. Risk of injury.

4.3 **Operator working position**

Always position the vehicle to allow tail lift operation without danger from passing traffic. Also make sure the work area is clear.



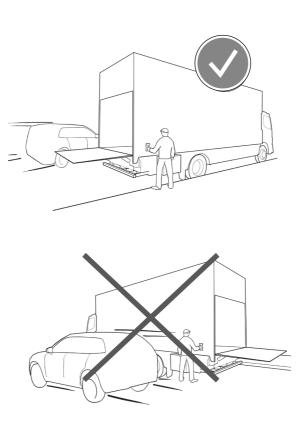
⚠ WARNING!

The vehicle must be positioned to allow tail lift operation without danger from passing traffic. Risk of material damage and life-threatening injury.



⚠ CAUTION!

Always make sure the work area is clear during platform operation. Risk of injury.



Working on the platform 4.4



A CAUTION!

To reduce the risk of foot injuries, wear safety shoes with protective steel toe-caps when working on the platform. Even though the platform has a non-slip surface, take care when transferring goods. ZEPRO recommends the use of anti-slip safety shoes with protective toecaps in accordance with EN ISO 20345. Risk of injury.



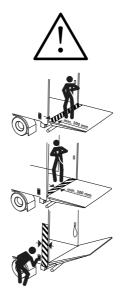
⚠ CAUTION!

Always be aware of the platform edges to avoid stepping off by mistake. Also be aware of the risk of tripping, especially if the platform is fitted with warning lights or wheel stops. Risk of injury.



A CAUTION!

The greatest risk for cut and crush injuries is in the hazard area between the tail lift and the vehicle floor when the lift is raised to vehicle floor height. Anyone standing on the tail lift or the vehicle floor must keep their feet and other parts of the body away from this hazard area when the tail lift is in operation. Risk of injury.



⚠ CAUTION!

Always stand inboard of the load when rolling it onto the platform. If necessary, turn the load and hand pallet truck around on the vehicle floor before rolling them out. Standing outboard of the load when rolling it onto the platform increases the risk of tripping and falling over the edge. Risk of injury and material damage.



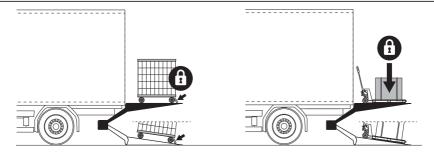
↑ WARNING!

Make sure the load is placed securely on the platform when the tail lift is operated:

When handling wheeled goods the platform must be equipped with functioning wheel stops, which are then used to reduce the risk of wheeled loads rolling out of control when standing on the platform. For function control, see Section "5.3 Daily checks".

When handling loads with a hand pallet truck, always lower the load so that it rests on the platform when operating the tail lift.

Risk of material damage and life-threatening injury.



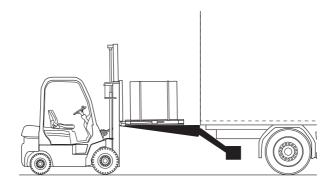
4.5 Loading and unloading from ground level

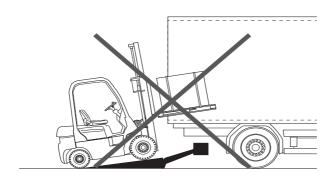
IMPORTANT!

It is forbidden to drive forklifts onto the platform. Risk of damage to materials.

When using a forklift to load and unload at ground level, place the platform in horizontal alignment with the truck bed. Manoeuvre the load to and from the truck bed with a hand pallet truck.

The weight of the load may not exceed the maximum capacity of the tail lift. Refer to the tail lift's load diagram.





It is forbidden to drive forklifts onto the platform

4.6 Loading and unloading with the platform on a loading dock

IMPORTANT!

Maximum overrunning weight = Tail lift load capacity x 0.5. Exceeding tail lift load capacity may cause material damage.

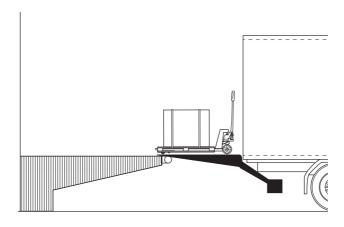
It is forbidden to drive forklifts onto the platform as the load on the tail lift would be too great. Risk of material damage.

When loading, the vehicle will get lower and the pressure on the lift increase by the weight loaded in the vehicle. In cases where the total laden weight exceeds the maximum capacity of the tail lift, the platform must be tilted up slightly and then lowered back to the dock before loading may continue. The platform must be unladen when tilting.

When unloading, the platform will rise relative to the dock depending on the weight of the load removed from the vehicle. It can happen that the platform rises so far that it must be tilted down to the dock before unloading can continue, especially when unloading heavy goods.

The transfer load may not exceed half the load capacity of the lift.

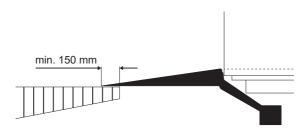
Example: Lift with lifting capacity 2000 kg = maximum permissible overrunning weight 1000 kg.



Loading with the platform on a loading dock

4.6.1 Adapt the platform to the dock

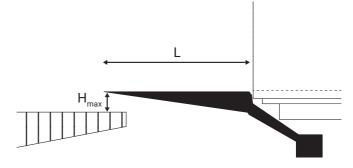
As the vehicle is unloaded, the platform will rise relative to the loading dock. Tilt the platform down at regular intervals. Check that the platform has sufficient overlap (min 150 mm) and that it rests safely and stably on the dock.



4.6.2 Maximum tilt-down angle

It is forbidden to tilt the platform down more than 10° while laden. Use the table below to check that the angle is not exceeded.

Platform length (L)	H _{max}
1200 mm	210 mm
1500 mm	260 mm
1700 mm	300 mm
2000 mm	350 mm
2500 mm	435 mm

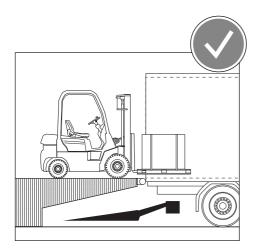


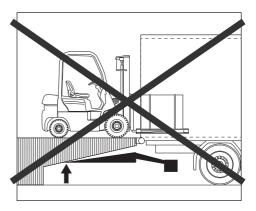
4.7 Loading/unloading with the platform under the loading dock

WARNING

Overloading the lift may cause material damage.

Always make sure there is sufficient space for the platform under the loading dock. As loading/unloading takes place, the vehicle height will rise/drop. If the platform is resting on a fixed point under the dock when unloading or lowered onto the surface when loading, a load corresponding to the weight removed from the vehicle will be applied to the lift, or added to the vehicle. There is a great risk of overloading.





Loading and unloading with the platform under the loading dock

4.8 Moving load from one vehicle to another

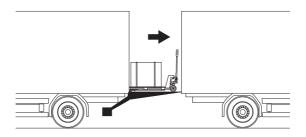
IMPORTANT!

Maximum overrunning weight = Tail lift load capacity x 0.5. Exceeding tail lift load capacity may cause material damage.

It is forbidden to drive forklifts onto the platform as the load on the tail lift would be too great. Risk of material damage.

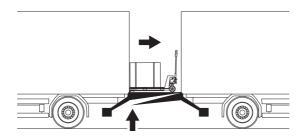
If possible, use the tail lift on the vehicle from which the load will be transferred as the transfer ramp. The transfer load may not exceed half the load capacity of the lift.

Example: Tail lift with lifting capacity 2000 kg = maximum permissible overrunning weight 1000 kg.



Maximum overrunning weight = Tail lift load capacity x 0.5

If the receiving vehicle is equipped with a tail lift, make sure the tip of its platform is always free and clear when transferring loads.



The tip of the receiving vehicle platform should always be free and clear

4.9 Wheel stop (accessory)

The wheel stop is an option used to reduce the risk of wheeled loads rolling out of control when standing on the platform.

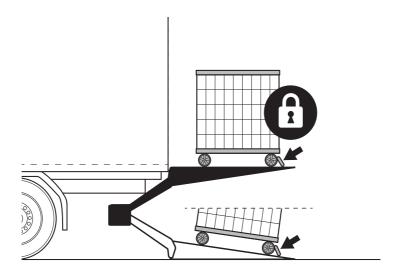
⚠ WARNING!

Make sure the goods are placed securely on the platform when the tail lift is operated:

Goods with wheels may only be handled if the platform is equipped with working wheel stops. The wheel stop is used to reduce the risk of wheeled loads rolling out of control when standing on the platform. For function control, see Section "5.3 Daily checks".

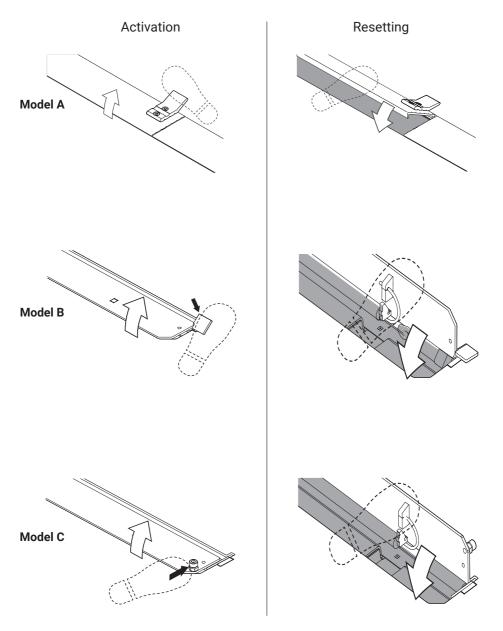
Risk of material damage and life-threatening injury.

Wheel stops are available in a number of different designs and models, the function is the same for all but the handling differs. How to operate the most common wheel stops is covered in this section.



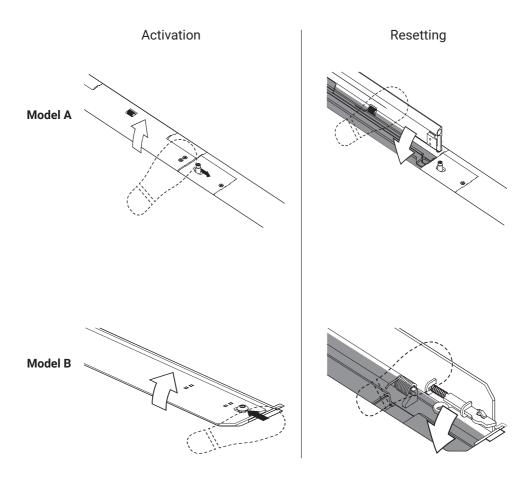
4.9.1 Sprung to open and closed position

The wheel stop has a spring function that keeps in the fully open and closed position.



4.9.2 Sprung to open position

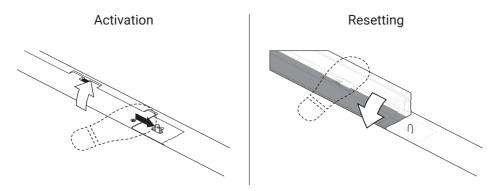
The wheel stop has a spring function that keeps it in the fully open position. A foot-operated latch automatically fixes the wheel stop after it has been pressed down to the closed position again.



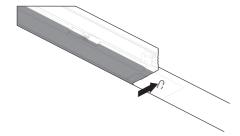
4.9.3 Sprung to open position with dual function

The wheel stop has a spring function that keeps it in the fully open position. A foot-operated latch automatically fixes the wheel stop after it has been pressed down to the closed position again.

The latch can be disabled by fixing it in the narrow part of its groove. The wheel stop then always springs back to the open position after it is pressed down by a foot or wheel on goods that are rolled up on the platform when loading.



Block disabled



4.10 Before use

 On tail lifts with cab switches, switch on control power by setting the cab switch to ON.

NB! Some tail lifts may be fitted with timers that automatically switch off control power after a given time. To reset the timer and switch on control power, first set the cab switch to OFF and then back to ON.

 On tail lifts without cab switches, switch on the main power supply by setting the main switch to ON.

4.11 After use

- Move the tail lift to its transport position
 See the section on the current controller for detailed information.
- Lock the tail lift

On tail lifts with cab switches, switch off the operating current by setting the cab switch to Off.

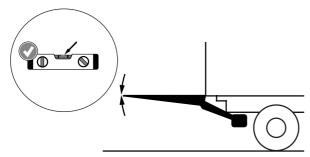
On tail lifts with cab switches, switch off the main power supply by setting the main switch to Off

4.12 Autotilt (Option)

4.12.1 Unloading

Steps 1-7 below describe the complete unloading process from transport position to unloading on the ground.

- 1. Ensure that the area behind the vehicle has a level surface on which the platform can rest.
- 2. Move the platform to a horizontal position level with the floor of the vehicle.
- 3. Move the load safely out to the platform.
- 4. Make sure the load is in a stable and safe position and place yourself in a safe position before proceeding.
- 5. Use the Down function to lower the platform until the castors touch the ground and continue holding the control button until the top of the platform reaches the ground (autotilt down).
- 6. Unload the goods safely.
- 7. Place yourself in a safe position and then use the Up function to raise the platform until it is in a horizontal position (autotilt up) and continue holding the control button until the platform is level with the floor of the vehicle.

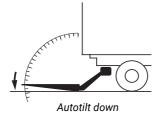


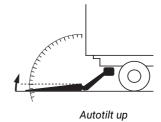
Before using the autotilt function, make sure that the platform is really horizontal

4.12.2 Loading

Steps 1-7 below describe a complete loading process from transport position to loading onto the vehicle.

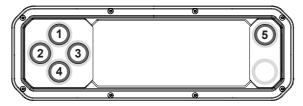
- 1. Ensure that the area behind the vehicle has a level surface on which the platform can rest.
- 2. Move the platform to its horizontal position.
- 3. Use the Down function to lower the platform until the castors touch the ground and continue holding the control button until the top of the platform reaches the ground (autotilt down).
- 4. Load the goods safely onto the platform.
- 5. Make sure the load is in a stable and safe position and place yourself in a safe position before proceeding.
- 6. Use the Up function to raise the platform until it is in a horizontal position (autotilt up) and continue holding the control button until the platform is level with the floor of the vehicle.
- 7. Move the goods safely to the load floor of the vehicle.



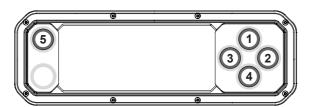


4.13 Fixed controller (CD19)

The controller controls all tail lift functions. The control device is fitted with dead-man's buttons; when a button is released, tail lift movement stops immediately. The controller has a customised layout for mounting on the left and right sides of the vehicle.



Control device installed on the right side of the vehicle



Control device installed on the left side of the vehicle

FUNCTIONS

- **1.** Up
- 2. Tilt down
- 3. Tilt up
- 4. Down
- 5. Two-handed function

4.13.1 Operation

This procedure describes how to operate the tail lift. The illustrations show a control device installed on the right side of the vehicle.

Tilt down

Depress and hold down the two-hand function (5) and Tilt (2) in that order. The platform is then tilted down at an even pace.



Down

Depress and hold down the two-hand function (5) and Down (4). The platform is lowered at an even pace.



Up

Depress and hold down the two-hand function (5) and Up (1) in that order. The platform is then raised at an even pace.



Tilt up

Depress and hold down the two-hand function (5) and Tilt (3) in that order. The platform is then tilted up at an even pace.



4.14 Fixed controller (CD21)

The controller controls all tail lift functions. The control device is fitted with dead-man's buttons; when a button is released, tail lift movement stops immediately. The controller has a customised layout for mounting on the left and right sides of the vehicle.



Control device installed on the right side of the vehicle



Control device installed on the left side of the vehicle

FUNCTIONS

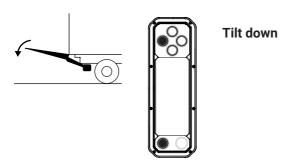
- **1.** Up
- 2. Tilt down
- 3. Tilt up
- 4. Down
- 5. Two-handed function

4.14.1 Operation

This procedure describes how to operate the tail lift. The illustrations show a control device installed on the right side of the vehicle.

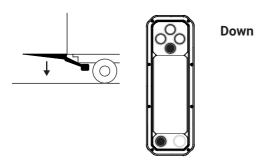
Tilt down

Depress and hold down the two-hand function (5) and Tilt (2) in that order. The platform is then tilted down at an even pace.



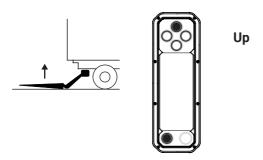
Down

Depress and hold down the two-hand function (5) and Down (4). The platform is lowered at an even pace.



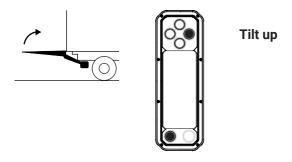
Up

Depress and hold down the two-hand function (5) and Up (1) in that order. The platform is then raised at an even pace.



Tilt up

Depress and hold down the two-hand function (5) and Tilt (3) in that order. The platform is then tilted up at an even pace.

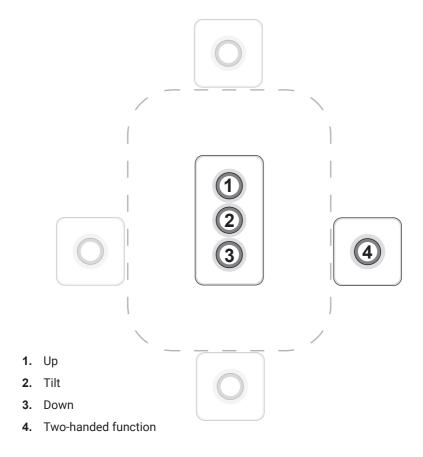


4.15 Fixed control devices, standard lift (CD1)

The control device governs all tail lift functions. The control device is fitted with dead-man's buttons; when a button is released, tail lift movement stops immediately.

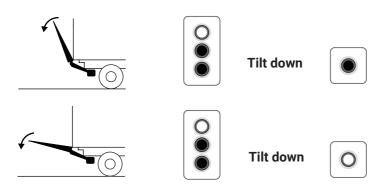
Two-hand operation is used to avoid crush injuries. This means the two-hand button (4) must be activated together with the fixed control device to operate the lift when there is a high risk of crush injuries.

The location of the two-hand button (4) varies from vehicle to vehicle. It may be mounted to the right or left of the fixed control device (CD 1), or above or below it. See illustration below. In the description on the following pages, the two-hand button is shown mounted to the right of the fixed control device (CD 1). Regardless of the location of the two-hand button, its function is always the same.



Tilt down

Press and hold the Tilt (2) and Down (3) buttons in that order. The control system reads the angle of the platform. If the crush risk is considered high, the two-hand function button (4) must also be depressed. The platform is then tilted down at an even pace.

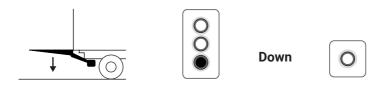


NOTE!

On some lift models, the platform can be tilted more than -10° if two-hand operation is used. When tilting downwards without two-hand operation, the tilt movement stops at -10 degrees. As long as the angle of the platform is -10 degrees or less, operation is only possible with the primary control device and with the two-hand function button (4) pressed down.

Down

Press and hold the Down button (3). The platform is lowered at an even pace.

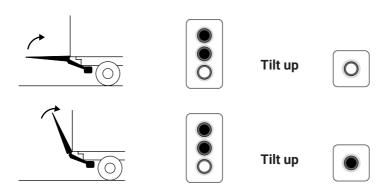


UpDepress and hold down the Up button (1). The platform is raised at an even pace.



Tilt up

Two-hand operation is used when tilting up. Press and hold down the Tilt (2) and Up (1) buttons in that order. The control system reads the angle of the platform. If the crush risk is considered high, the two-hand function button (4) must also be depressed. The platform is then tilted up at an even pace.



NOTE!

On some lift models, the platform can be tilted more than -10° if two-hand operation is used. When tilting downwards without two-hand operation, the tilt movement stops at -10 degrees. As long as the angle of the platform is -10 degrees or less, operation is only possible with the primary control device and with the two-hand function button (4) pressed down.

NOTE!

Always lift the platform towards the top stop before tilting it to transport position.

4.16 Fixed control devices, standard lift (CD1) Horizontal

The control device governs all tail lift functions. The control device is fitted with dead-man's buttons; when a button is released, tail lift movement stops immediately.

Two-hand operation is used to avoid crush injuries. This means the two-hand button (4) must be activated together with the fixed control device to operate the lift when there is a high risk of crush injuries.

The location of the two-hand button (4) varies. It may be mounted to the right or left of the fixed control device (CD 1). See illustration below. In the description on the following pages, the two-hand button is shown mounted to the right of the fixed control device (CD 1). Regardless of the location of the two-hand button, its function is always the same.





Control device installed on the left side of the vehicle



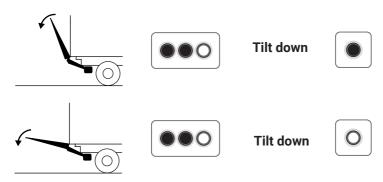


Control device installed on the right side of the vehicle

- **1.** Up
- 2. Tilt
- 3. Down
- 4. Two-handed function

Tilt down

Press and hold the Tilt (2) and Down (3) buttons in that order. The control system reads the angle of the platform. If the crush risk is considered high, the two-hand function button (4) must also be depressed. The platform is then tilted down at an even pace.

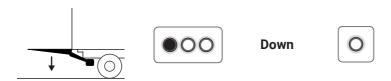


NOTE!

On some lift models, the platform can be tilted more than -10° if two-hand operation is used. When tilting downwards without two-hand operation, the tilt movement stops at -10 degrees. As long as the angle of the platform is -10 degrees or less, operation is only possible with the primary control device and with the two-hand function button (4) pressed down.

Down

Press and hold the Down button (3). The platform is lowered at an even pace.

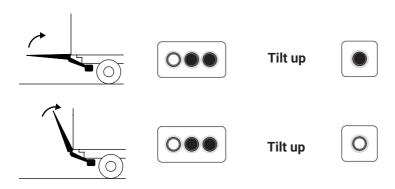


UpDepress and hold down the Up button (1). The platform is raised at an even pace.



Tilt up

Two-hand operation is used when tilting up. Press and hold down the Tilt (2) and Up (1) buttons in that order. The control system reads the angle of the platform. If the crush risk is considered high, the two-hand function button (4) must also be depressed. The platform is then tilted up at an even pace.



NOTE!

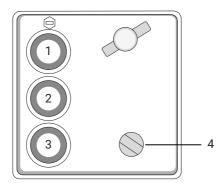
On some lift models, the platform can be tilted more than -10° if two-hand operation is used. When tilting downwards without two-hand operation, the tilt movement stops at -10 degrees. As long as the angle of the platform is -10 degrees or less, operation is only possible with the primary control device and with the two-hand function button (4) pressed down.

NOTE!

Always lift the platform towards the top stop before tilting it to transport position.

4.17 Operating with the fixed control device (CD4)

The control device controls all tail lift functions. The control device is fitted with deadman's buttons; when a button is released, tail lift movement stops immediately.



FUNCTIONS

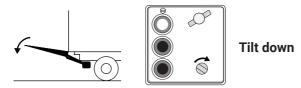
- **1.** Up
- 2. Tilt
- 3. Down
- 4. Two-handed function

4.17.1 Operation

This procedure describes how to operate the tail lift with the fixed control device (CD 14).

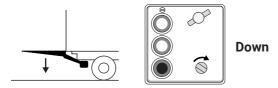
Tilt down

Turn the two-handed function knob clockwise; depress and simultaneously hold down the Tilt (2) and Down (3) buttons in that order. The platform is then tilted down at an even pace.



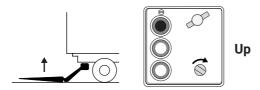
Down

Turn the two-handed function knob clockwise; depress and simultaneously hold down the Down (3) button. The platform is lowered at an even pace.



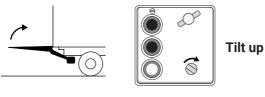
Up

Turn the two-handed function knob clockwise; depress and simultaneously hold down the Up (1) button. The platform is then raised at an even pace.



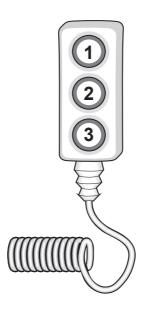
Tilt up

Turn the two-handed function knob clockwise; depress and simultaneously hold down the Tilt (2) and Up (1) buttons in that order. The platform is then tilted up at an even pace.



4.18 Operating with the coiled cable control device (CD9)

The control device is used when the tail lift is in the working position and to control the Up, Down and Tilt functions. The control device is fitted with dead-man's buttons; when a button is released, tail lift movement stops immediately.

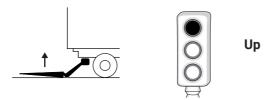


FUNCTIONS	
1	Up
2	Tilt
3	Down

4.18.1 Operation

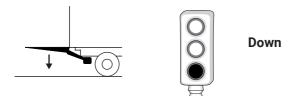
This procedure describes how to operate the tail lift with the fixed control device (CD 10).

UpDepress and hold down the 'Up' button (1). The platform is then raised at an even pace.



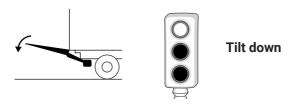
Down

Depress and hold down the 'Down' button (3). The platform is lowered at an even pace.



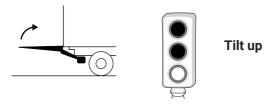
Tilting down

Depress and hold down the 'Tilt' (2) and 'Down' (3) buttons in that order. The platform is then tilted down at an even pace.



Tilting up

Depress and hold down the 'Tilt' (2) and 'Up' (1) buttons in that order. The platform is then tilted up at an even pace.



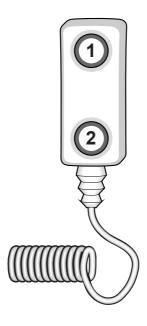


Use of the 'Tilt up' and 'Tilt down' functions is strictly forbidden at all times while standing on the platform. Risk of life-threatening injury.



4.19 Operating with the coiled cable control device (CD10)

The control device is used to control the Up and Down functions. The control device is fitted with dead-man's buttons; when a button is released, tail lift movement stops immediately.

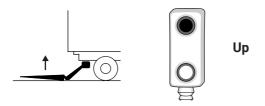


FUNCTIONS	
1	Up
2	Down

4.19.1 Operation

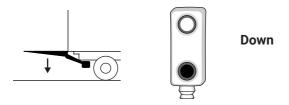
This procedure describes how to operate the tail lift with the fixed control device (CD 10).

UpDepress and hold down the 'Up' button (1). The platform is raised at an even pace.



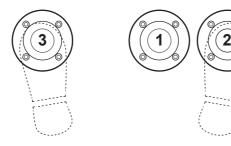
Down

Depress and hold down the 'Down' button (2). The platform is lowered at an even pace.



4.20 Operating with the foot operated control device (CD14)

The control device is used to control the Up and Down functions. The control device is fitted with dead-man's buttons; when a button is released, tail lift movement stops immediately.



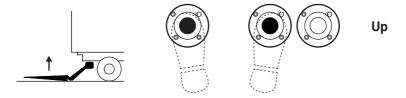
FUNCTIONS	
1	Up
2	Down
3	Activation

4.20.1 Operation

This procedure describes how to operate the tail lift with the foot-operated control device (CD 14).

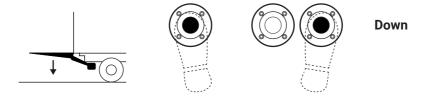
Up

Depress and hold down the 'Activation' (3) and 'Up' (1) buttons in that order. The platform is raised at an even pace.



Down

Depress and hold down the 'Activation' (3) and 'Down' (2) buttons in that order. The platform is lowered at an even pace.



4.21 Operating with the radio control device (CD11)

The control device is used to control the Up, Down, Tilt and Lock/Unlock functions. Buttons 1-3 are dead-man's buttons; when a button is released, tail lift movement stops immediately.



FUNCTIONS	
1	Up
2	Tilt+Unlock
3	Down
4	Lock

4.21.1 Lock/unlock

This procedure describes how to lock/unlock the radio control device.

Lock

Press the 'Lock' button (4). The radio control device is now locked and cannot be used to operate the tail lift.

Unlock

Press the 'Unlock' button (2). The radio control device is now unlocked and can be used to operate the tail lift. In the unlocked mode, button 2 has the function 'Tilt'.

4.21.2 Operation

This procedure describes how to operate the tail lift with the radio control device (CD 11).

UpDepress and hold down the 'Up' button (1). The platform is raised at an even pace.



Down

Depress and hold down the 'Down' button (3). The platform is lowered at an even pace.



Tilting up

Depress and hold down the 'Tilt' (2) and 'Up' (1) buttons in that order. The platform is then tilted up at an even pace.



Tilting down

Depress and hold down the 'Tilt' (2) and 'Down' (3) buttons in that order. The platform is then tilted down at an even pace.



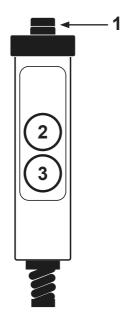


Use of the 'Tilt up' and 'Tilt down' functions is strictly forbidden at all times while standing on the platform. Risk of life-threatening injury.



4.22 Control device, 2-button with switch (CD17)

The control device with switch enables manual selection of the active device if the lift is fitted with two of them (primary and secondary). The control device is used to control the Up and Down functions. The control device is fitted with dead-man's buttons; when a button is released, tail lift movement stops immediately.

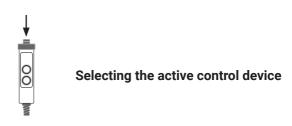


FUNCTIONS

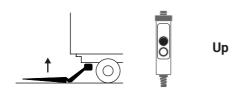
- 1. Selecting the active control device
- **2.** Up
- 3. Down

Selecting the active control device

Turn switch (1) 90° to switch between primary and secondary control devices.

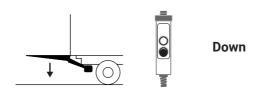


UpDepress and hold down the Up button (2). The platform is raised at an even pace.



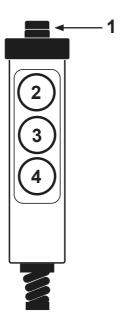
Down

Depress and hold down the 'Down' button (3). The platform is lowered at an even pace.



4.23 Control device, 3-button with switch (CD18)

The control device with switch enables manual selection of the active device if the lift is fitted with two of them (primary and secondary).

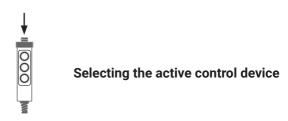


FUNCTIONS

- 1. Selecting the active control device
- **2.** Up
- 3. Tilt
- 4. Down

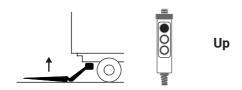
Selecting the active control device

Turn switch (1) 90° to switch between primary and secondary control devices.



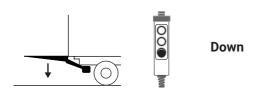
Up

Depress and hold down the Up button (2). The platform is raised at an even pace.



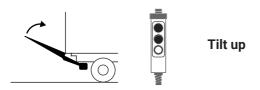
Down

Depress and hold down the Down button (4). The platform is lowered at an even pace.



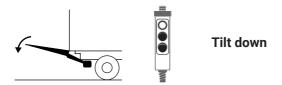
Tilt up

Depress and hold down the Tilt (3) and Up (2) buttons in that order. The platform is then tilted up at an even pace.



Tilt down

Press and hold the Tilt (3) and Down (4) buttons in that order. The platform is then tilted down at an even pace.





Use of the 'Tilt up' and 'Tilt down' functions is strictly forbidden at all times while standing on the platform. Risk of life-threatening injury.



5 Service and maintenance

Regular service and maintenance are essential for keeping maintenance costs low, safety high and product life long. Daily and weekly maintenance and regular lubrication as described in this owner's manual must be carried out for the best results. Once a year, the tail lift must also be handed to an authorised workshop for service.

This manual includes ZEPRO's recommendations for checks, lubrication and service.

- 5.3 Daily checks
- 5.4 Weekly checks
- 5.5 Lubrication
- 5.6 Service

5.1 Hydraulic oil

If the hydraulic oil needs to be replenished, only the oil recommended by ZEPRO is permitted to be used.

Hydraulic systems with hydraulic oil tanks without labelling are only permitted to be filled with highly refined mineral oil (art. no. 21963, 1 litre).

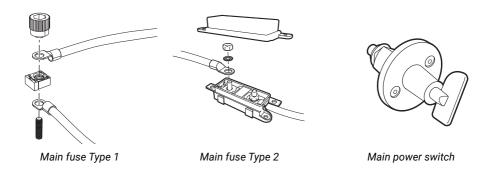
Hydraulic systems with hydraulic oil tanks marked with a specification for the hydraulic oil May only be filled with the oil specified on the label.

5.2 Before starting work

IMPORTANT!

Carry out the following before starting any service or maintenance:

- Lower and tilt the platform down so that it rests on the ground to reduce pressure in the hydraulic system to a minimum.
- Cut the power supply by disconnecting the cable at the main fuse or by switching off the
 main power supply with the main switch, where fitted. Main fuses and main switches come
 in several different designs; below are some typical examples.



5.3 Daily checks

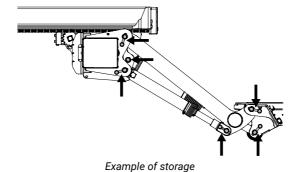
Perform the following checks before using the lift.

- Check all stickers for damage and legibility. Replace as necessary. See section "6
 Marking" on page 82.
- 2. Check flags for damage. Replace as necessary. See section "6.7 Warning flags" on page 88.
- Check the warning lights (accessory) for function and damage. See section "3.10.5
 Warning lighting (accessory)" on page 25. Contact a qualified service engineer for
 troubleshooting or repair.
- 4. Check the functionality of the two-hand function; see Section 3.10.1 for a description of the function and Sections 4.12 4.17 for operation with the control device in question. Contact a qualified service engineer for troubleshooting or repair.
- 5. Look beneath the tail lift to check for oil leaks. Contact a qualified service engineer for troubleshooting or repair.
- 6. Visually inspect all tail lift components for cracks and deformations. Contact a qualified service engineer for troubleshooting or repair.
- 7. Check that the open platform alarm is working as intended. See section "3.10.4 Open platform alarm" on page 25
- 8. Check that the platform is clean and safe to access. Remove any snow, mud, dirt, rubbish or slippery fluids. ZEPRO recommends the use of anti-slip safety shoes with protective toecaps in accordance with EN ISO 20345. Risk of injury.
- 9. Check the wheel stops (accessory) for function and damage. Make sure that the wheel stops do not jam, lubricate if necessary with thin penetrating oil. Also ensure that the wheel stops remain in the fully raised position (mechanical stop) even if the platform is subjected to strong vibration (similar to when heavy goods are rolled on and off the platform). Contact a qualified service engineer for troubleshooting or repair.

5.4 Weekly checks

Carry out the following checks:

- Test all tail lift functions using all control devices. Contact a qualified service engineer for troubleshooting or repair.
- 2. Check hoses, connections and cylinders for cracks and leaks. Contact a qualified service engineer for troubleshooting or repair.
- 3. Check the hydraulic cylinder boots for damage and secure fit. Contact a qualified service engineer for troubleshooting or repair.
- 4. Check operation of the cab switch and main switch. Their function is described in section "3.8 Cab and the main switch" on page 24. Contact a qualified service engineer for troubleshooting or repair.
- 5. Check that visible cables, cable glands and connectors are securely fastened and undamaged. Contact a qualified service engineer for troubleshooting or repair.
- 6. Check that the hydraulic unit's cover is securely fastened and undamaged. Contact a qualified service engineer for troubleshooting or repair.
- 7. Check that bearings and locking screws are securely fastened and undamaged. See example below. Contact a qualified service engineer for troubleshooting or repair.
- 8. Check electrical hose rupture valves (located on cylinders) for wear and damage. Contact a qualified service engineer for troubleshooting or repair.



5.5 Lubrication

5.5.1 General

Check all grease nipples for damage and function. Defective grease nipples must be replaced. If grease cannot be charged even if a new grease nipple is fitted, the bearing must be removed. Contact service workshop. Use LE lubricant 4622.

See lubrication instruction IE-0101.

5.5.2 Interval

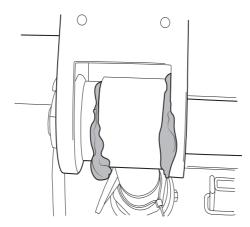
At a minimum, lubrication must be done every 3 months. More frequent intervals may be necessary when driving in aggressive surroundings or the lift is washed often. Contact ZEPRO for advice.

5.5.3 Before lubrication

Before lubricating, clean the lift, especially the lubrication points and grease nipples.

5.5.4 Correct design

Lubrication must be carried out such that a ring of grease is visible on both sides of the bearings to protect against the intrusion of water, salt, sand and dirt. See illustration below.



Lubrication must be carried out such that a ring of grease is visible on both sides of the bearings.

5.6 Service

Service the lift regularly to keep maintenance costs low, safety high and product life long. An annual service must be carried out by a ZEPRO approved workshop for the warranty to remain valid. For information about the nearest workshop, visit the ZEPRO website or contact your distributor. The service record must be completed and signed following service or repairs.

Year 1 L Service

Year 2 L Service

Year 3 XL Service

Year 4 L Service

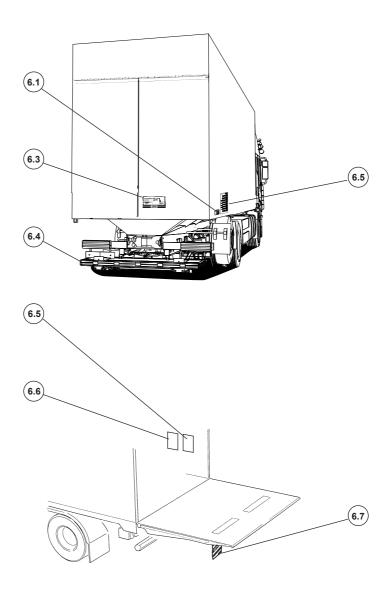
Year 5 L Service

Year 6 XL Service

The service record sheets for years 1-6 can be found in section 10 of this Owner's Manual.

6 Marking

Below is an overview showing the location of the different markings. Marking illustrations and other information can be found under the relevant subheadings in the following pages.



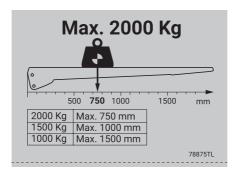
6.1 Maximum load rating

The marking shows the max permissible load on the platform. The tail lift must never be laden with weights higher than permitted by the marking.

Max permissible load only applies at a specific distance from the vehicle body (load centre distance). Behind this point, max permissible load is reduced. Refer to the marking on the platform or vehicle.



Under no circumstances is it permitted to load the platform with loads greater than those specified on the marking. Excessive load can cause structural damage. Risk of material damage and life-threatening injury.



Sticker, max permissible load 2000 kg. Load centre distance 750 mm.

Example: This tail lift has a maximum load of 2000 kg when the load's centre of gravity is no more than 750 mm from the edge of the vehicle floor. If the load's centre of gravity is placed 1500 mm from the edge of the vehicle floor, max permissible weight decreases to 1000 kg.

6.2 Identification plate

Type plates are mounted on the tail lift frame and on the cab door pillar.

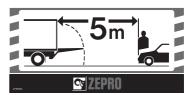
The identification plate contains the following information:

- Type of lift
- Max. permitted load in kg
- Serial number
- Year of manufacture
- Address and tel. no. of manufacturer
- · Country of manufacture
- Type number for approved underrun protection (RUPD)
- Type number for electromagnetic compatibility (EMC)

ZEPRO, Z-Lyften Produktion AB SWEDEN ZEPRO, Z-Lyften Produktion AB SWEDEN ZEPRO, Z-Lyften Produktion AB KATRINEHOLM +46 150-48 95 50 BISPOARDEN +46 696-172 00 SWEDEN PROD YEAR INTO

6.3 Work area

The sticker is positioned clearly visible at the rear of the vehicle and describes the working area that must be kept clear for loading and unloading.



6.4 Warning tape

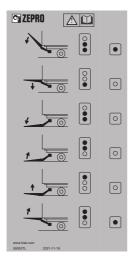
The warning tape is affixed along the edges of the platform to make them more conspicuous when the platform is deployed.



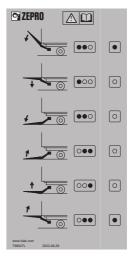
6.5 Control device sticker

The control device sticker is affixed next to or on the relevant control device depending on its type.

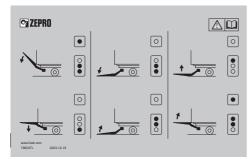
The stickers are available in standard versions and in a latterally reversed version (option) for affixing on the opposite side of the vehicle.



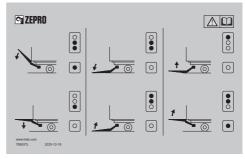
Control device sticker for CD1, CD 9 and CD18. The sticker comprises two parts. The narrow strip is only use with control device CD1.



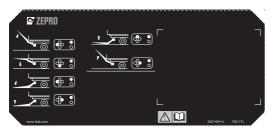
The decal has two parts. The narrow strip is only used with the CD1 control device, and then only when the two-hand button is mounted next to the control device.



Control device decal for CD 1 with the two-hand button mounted above the control device.



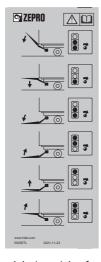
Control device decal for CD1 with two-hand button mounted below the control device.



Control device sticker for CD 19



Control device sticker for CD 10 and CD17



Control device sticker for CD 3

6.5.1 Additional decal: Two-hand operation

An additional decal for two-hand operation may be installed next to the control device decal.

The requirement for two-hand operation varies depending on the angle of the platform.



Additional decal for two-hand operation

6.5.2 Additional Autotilt sticker

There is an additional sticker affixed next to the control device sticker on tail lifts fitted with autotilt.

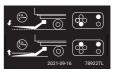
The stickers are available in standard versions and in a latterally reversed version (option) for affixing on the opposite side of the vehicle.



Additional Autotilt sticker for CD 3



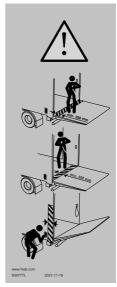
Additional Autotilt sticker for CD1, CD 9 and CD18



Additional autotilt sticker for CD 19

6.6 Danger area

The sticker is affixed on the inside of the superstructure next to the manual control device where fitted. The sticker informs of the hazards area between the vehicle floor and platform where the risk of crush injuries is especially great when operating the tail lift.



Danger area

6.7 Warning flags

Warning flags are mounted near the tip of the platform and the left and right edges to improve conspicuity when the platform is in the horizontal position.



Warning flags

7 Troubleshooting

The table below provides information about the most common problems and suggests steps to resolve them. If this simple guide does not help or in case of doubt, contact a qualified service engineer.

Problem	Probable cause	Action
	Cab switch and/or main switch in Off position.	Set the cab switch and/or main switch in the On position. For information about the cabin switch and main switch, see section "3.8 Cab and the main switch" on page 24.
	Motor overheated.	Wait for the motor to cool and try again (may take up to 30 minutes depending on external conditions). See section "3.14 Overheating protection" on page 30.
	Radio control device locked.	Unlock radio control device. See section "4.21 Operating with the radio control device (CD11)" on page 68.
Tail lift not working, hydraulic pump does not start.	Blown fuse / tripped circuit breaker.	Check fuses in cab and tail lift. in the case of a blown fuse, check that visible cables, cable glands and connectors are securely fastened and on damaged. Contact a qualified service engineer for troubleshooting or repair. Replace blown fuse / reset tripped circuit breaker.
		Check the main fuse. The cause of the blown main fuse / tripped main circuit breaker should be carefully investigated before replacing/resetting. Contact a qualified service engineer.
	Other fault	Contact a qualified service engineer
The platform does not tilt all the way up.	Oil level too low.	Lower the platform to the ground, fill with oil to the maximum level. If uncertain, contact a qualified service engineer
Other problems		Contact a qualified service engineer

8 Technical specifications

8.1 Noise declaration

Average emission sound pressure level does not exceed 70 dB

Noise Directive 2000/14/EC

Noise measurement according to EN ISO 11200-11204

Measurement was carried out in accordance with EN ISO 3741-3746 Class II

9 Product discontinuation

9.1 General

Tail lift disassembly must be carried out by personnel with the necessary knowledge and experience to ensure no dangerous incidents or environmental impact can occur due to ignorance.

9.2 Applicable regulations and legislation

When disassembling and/or recycling, comply with local and national regulations and guidelines.

9.2.1 Before disassembly

Before disassembly, drain the hydraulic oil tank, hoses and cylinders. The oil must be handed in for destruction.



Make sure the platform is resting completely on the ground and that the hydraulic system is depressurised before beginning to drain. Always wear personal protective equipment as per the safety data sheet when handling hydraulic oil. Risk of personal injury.

9.2.2 Disassembly

Disassembly is best carried out in the following order:

- Platform
- 2. Hydraulic cylinders and hoses
- 3. Hydraulic unit
- 4. Lift arms
- 5. Frame including brackets



Always use lifting aids and exercise great caution when lifting heavy loads. Make sure that heavy parts are completely resting on the ground or secured by a lifting device before removing shafts, bolts or other fasteners. Risk of injury.

9.2.3 Recycling

Metals, cables, electronic parts, plastics, rubber, ceramic, etc., must be separated from each other and disposed of in the manner prescribed for the respective materials. Also refer to the safety data sheets for hydraulic oil.

Year 1

10 Service record

Service Protocol L-Service (annual)

Customer: Vehicle:			Vehicle:	icle:		
	Reg.No:					
Lift r	nodel:		F	Prod.No:		
C=C	heck	R=Re	eplace L=Lubrication * If the lift ha	s the equipment		
Com OK -	ments		Service points	Information		See instructions for resp. lift models
	\downarrow	\downarrow	Mecanics (Visual inspection of an	y cracks and / o	r damage)	IE-0110
С			1.1 Mounting bracket	Any cracks / da	mage, Torques	IE-0105 / IE-0104
С			1.2 Support frame	Any cracks / da	mage, drainage holes	IE-0105
С			1.3 Liftarm	Any cracks / da	mage	IE-0105
С			1.4 Platform	Any cracks / da	mage	IE-0105
С			1.5 Bumper bar	Any cracks / da	mage, Torques	IE-0105 / IE-0104
С			1.6 Cylinders	Any cracks / da	mage, gaiters	IE-0105
С			1.7 Pivot bolt, bushing (all)	Wear and tear,	Torques	IE-0105 / IE-0104
С			1.8 Slide system*	Any cracks / da check	mage, Torques, and functional	IE-0105 / IE-0104
L			1.9 Lubrication	All lubrication p	oints	IE-0101
С			1.10 Sealings against bodywork*	IE-0106		
			Hydraulics (sequence) of an oil ch	ange (Visual ins	pection of oil leak on the	
С	$\overline{}$		entire hydraulic system) 2.1 Main fuse Cleanliness, contact surfaces		IE-0109 IE-0103	
_	Н				Service IF equipped with oil	IE-0103
R			2.2 Hydraulic oil	filter	Service in equipped with oil	12-0102
			2.3 Oil filter*	Changes at XL-	Service. Every three years	
С			2.4 Hydraulic hoses	Oil leak, wear a	nd tear, free movement	IE-0104
С			2.5 The system's leakproofness	Hydr.connection	n.unit+tank, cyl. torques	IE-0104
С			2.6 Pressure Relief Valve	Valve should op check pressure	en when tilting against body, if not opening.	IE-0108
С	Ш		2.7 Velocity lifting, lowering, tilting	That the lifts sp	eed is within the correct range	IE-0111
			Electrical equipment (check all the	points cable an	nd interfaces)	
С			3.1 Main power cable, ground cable	Wear and tear,	attachment, contact surface	IE-0103
С			3.2 Control units. function of the lift	All functions of	the lift and all control units	IE-0103
С			3.3 Connection box for control units	Tightness, clear	nliness	IE-0103
С			3.4 Circuit card	Function, conne	ections, wear and tear	IE-0103
С			3.5 Alarm for open platform	That the lamp s	hine when platform is not closed	IE-0103
С			3.6 Battery voltage, vehicle and lift inactive	Difference betw unit (not more the	een the battery and hydraulic han 6% dfference)	IE-0103
С			3.7 Cabin switch*	Functional test		IE-0103
			Signs, stickers (Visual inspection	of the function a	and interpretable)	
С			4.1 Warning flags, -tape	2 pcs on platfor	m, platfrom edge	IE-0107
С			4.2 Load chart	1 pc on platform	n, 1 pc outside control unit	IE-0107
С			4.3 Working area	Sticker on platfo	orm	IE-0107
С			4.4 Instruction control units	Outside control	unit	IE-0107
С			4.5 Type plate	Is firmly attache	d and is INTERPRETABLE	IE-0107

If there are remarks	concerning a	ny of the se	ervice items,	indicate any	action belov	w:

Service checks (in the table below, confirm actions have been carried out for each service item.

Service item	Remark/Action
ecks and act	ions have been carried out:

Company stamp

Signature

Date

Service Protocol L-Service (annual)

Lift model: Prod No: Prod No: C=Check R=Replace L=Lubrication * If the lift has the equipment Service points Information See instructions for resp. lift models Service points Information See instructions for resp. lift models IE-0105 IE-0104 IE-0105 IE-0104 IE-0105	Cust	tomer:				Vehicle:		
C=Check R=Replace L=Lubrication * If the lift has the equipment Comments						Reg.No:		
Comments OK	Lift r	nodel:		F	Prod.No:			
Comments	C=C	heck	R=Re	eplace L=Lubrication * If the lift ha	s the equipment			
Mecanics (Visual inspection of any cracks and / or damage)		ments		Service points	Information			
C	OIX	\downarrow	\downarrow	Mecanics (Visual inspection of an	y cracks and / o	r damage)	IE-0110	
C	С			1.1 Mounting bracket	Any cracks / da	mage, Torques	IE-0105 / IE-0104	
C 1.4 Platform	С			1.2 Support frame	Any cracks / da	mage, drainage holes	IE-0105	
C	С			1.3 Liftarm	Any cracks / da	mage	IE-0105	
C 1.6 Cylinders Any cracks / damage, gallers IE-0105 / IE-0104 C 1.8 Slide system* Any cracks / damage, gallers IE-0105 / IE-0104 C 1.8 Slide system* Any cracks / damage, Torques, and functional check IE-0105 / IE-0104 L 1.9 Lubrication All Iubrication points IE-0105 / IE-0104 C 1.10 Sealings against bodywork* Wear and tear, condition IE-0106	С			1.4 Platform	Any cracks / da	mage	IE-0105	
C	С			1.5 Bumper bar	Any cracks / da	mage, Torques	IE-0105 / IE-0104	
C 1.8 Slide system* Any cracks / damage, Torques, and functional check L 1.9 Lubrication C 1.10 Sealings against bodywork* Wear and tear, condition Hydraulics (sequence) of an oil change (Visual inspection of oil leak on the entire hydraulic system) C 2.1 Main fuse Cleanliness, contact surfaces IE-0103 R 2.2 Hydraulic oil Sliter* Changes at XL-Service. Every three years C 2.4 Hydraulic hoses Oil leak, wear and tear, free movement IE-0104 C 2.5 The system's leakproofness Hydr.connection.unit+tank, cyl. torques IE-0104 C 2.7 Velocity lifting, lowering, tilting That the lift speed is within the correct range IE-0111 Electrical equipment (check all the points cable and interfaces) C 3.2 Control units. function of the lift S. 2.3 Connection box for control units Tightness, cleanliness IE-0103 All Circuit card Function, connections, wear and tear IE-0103 C 3.5 Alarm for open platform That the lamp shine when platform is not closed C. 3.7 Cabin switch* Functional test IE-0103 Signs, stickers (Visual inspection of the function and interpretable) C 4.1 Warning flags, -tape 2 pos on platform, platfrom edge IE-0107 C 4.3 Working area 1.5 April 2 points of the lift IE-0107 C 4.4 Instruction control units IE-0107 C 4.4 Instruction control units Coulsed control unit IE-0107	С			1.6 Cylinders	Any cracks / da	mage, gaiters	IE-0105	
L 1.9 Lubrication	С			1.7 Pivot bolt, bushing (all)	Wear and tear,	Torques	IE-0105 / IE-0104	
C	С			1.8 Slide system*	Any cracks / da check	mage, Torques, and functional	IE-0105 / IE-0104	
Hydraulics (sequence) of an oil change (Visual inspection of oil leak on the entire hydraulic system) C	L			1.9 Lubrication	All lubrication p	oints	IE-0101	
entire hydraulic system) C	С	1.10 Sealings against bodywork* Wear and tear, condition				IE-0106		
C					ange (Visual ins	pection of oil leak on the	IE-0109	
R	С				Cleanliness, co	ntact surfaces		
C 2.4 Hydraulic hoses Oil leak, wear and tear, free movement IE-0104 C 2.5 The system's leakproofness Hydr.connection.unit+tank, cyl. torques IE-0104 C 2.6 Pressure Relief Valve Valve should open when tilting against body, check pressure if not opening. C 2.7 Velocity lifting, lowering, tilting That the lifts speed is within the correct range IE-0111 Electrical equipment (check all the points cable and interfaces) C 3.1 Main power cable, ground cable 3.2 Control units, function of the lift G 3.3 Connection box for control units G 3.3 Connection box for control units Tightness, cleanliness IE-0103 C 3.4 Circuit card Function, connections, wear and tear IE-0103 C 3.5 Alarm for open platform That the lamp shine when platform is not closed Difference between the battery and hydraulic unit (not more than 6% difference) C 3.7 Cabin switch* Functional test IE-0103 Signs, stickers (Visual inspection of the function and interpretable) C 4.1 Warning flags, -tape 2 pcs on platform, 1 pc outside control unit IE-0107 C 4.3 Working area Sticker on platform IE-0107 C 4.4 Instruction control units Outside control unit IE-0107	R			2.2 Hydraulic oil		Service IF equipped with oil	IE-0102	
C 2.5 The system's leakproofness Hydr.connection.unit+tank, cyl. torques IE-0104 C 2.6 Pressure Relief Valve Valve should open when tilting against body, check pressure if not opening. C 2.7 Velocity lifting, lowering, tilting That the lifts speed is within the correct range IE-0111 Electrical equipment (check all the points cable and interfaces) C 3.1 Main power cable, ground cable 3.2 Control units, function of the lift G 3.2 Control units, function of the lift G 3.3 Connection box for control units Tightness, cleanliness IE-0103 C 3.4 Circuit card Function, connections, wear and tear IE-0103 C 3.5 Alarm for open platform That the lamp shine when platform is not closed IIE-0103 C 3.6 Battery voltage, vehicle and lift inactive Functional test IE-0103 Signs, stickers (Visual inspection of the function and interpretable) C 4.1 Warning flags, -tape 2 pcs on platform, 1 pc outside control unit IE-0107 C 4.3 Working area Sticker on platform IE-0107 C 4.4 Instruction control units Outside control unit IE-0107				2.3 Oil filter*	Changes at XL-	Service. Every three years		
C 2.6 Pressure Relief Valve Valve should open when tilting against body, check pressure if not opening. C 2.7 Velocity lifting, lowering, tilting Electrical equipment (check all the points cable and interfaces) C 3.1 Main power cable, ground cable 3.2 Control units, function of the lift 3.3 Connection box for control units Tightness, cleanliness IE-0103 C 3.4 Circuit card Function, connections, wear and tear IE-0103 C 3.5 Alarm for open platform That the lamp shine when platform is not closed IE-0103 C 3.6 Battery voltage, vehicle and lift inactive Signs, stickers (Visual inspection of the function and interpretable) C 4.1 Warning flags, -tape 2 pcs on platform, 1 pc outside control unit IE-0107 C 4.3 Working area Sticker on platform IE-0107 C 4.4 Instruction control units IE-0107 C 4.4 Instruction control units IE-0107 C 4.4 Instruction control units IE-0107	С			2.4 Hydraulic hoses	Oil leak, wear a	nd tear, free movement	IE-0104	
C 2.7 Velocity lifting, lowering, tilting Electrical equipment (check all the points cable and interfaces) C 3.1 Main power cable, ground cable C 3.2 Control units, function of the lift C 3.3 Connection box for control units C 3.4 Circuit card C 3.5 Alarm for open platform C 3.6 Battery voltage, vehicle and lift inactive C 3.7 Cabin switch* Electrical equipment (check all the points cable and interfaces) Wear and tear, attachment, contact surface IE-0103	С			2.5 The system's leakproofness	Hydr.connection	n.unit+tank, cyl. torques	IE-0104	
Electrical equipment (check all the points cable and interfaces) 3.1 Main power cable, ground cable C 3.2 Control units. function of the lift C 3.3 Connection box for control units C 3.4 Circuit card C 3.5 Alarm for open platform C 3.6 Battery voltage, vehicle and lift inactive C 3.7 Cabin switch* Eurotion, connections, wear and tear Function, connections, wear and tear IE-0103 C 3.6 Battery voltage, vehicle and lift inactive Difference between the battery and hydraulic unit (not more than 6% difference) Functional test Signs, stickers (Visual inspection of the function and interpretable) 4.1 Warning flags, -tape 2 pcs on platform, platfrom edge IE-0107 C 4.2 Load chart 1 pc on platform, 1 pc outside control unit IE-0107 C 4.4 Instruction control units Outside control unit IE-0107	С			2.6 Pressure Relief Valve			IE-0108	
C 3.1 Main power cable, ground cable C 3.2 Control units. function of the lift All functions of the lift and all control units IE-0103 C 3.3 Connection box for control units Tightness, cleanliness IE-0103 C 3.4 Circuit card Function, connections, wear and tear IE-0103 C 3.5 Alarm for open platform That the lamp shine when platform is not closed IE-0103 C 3.6 Battery voltage, vehicle and lift inactive Tightness Control units IE-0103 C 3.7 Cabin switch* IE-0103 Signs, stickers (Visual inspection of the function and interpretable) C 4.1 Warning flags, -tape 2 pcs on platform, 1 pc outside control unit IE-0107 C 4.3 Working area Sticker on platform C 4.4 Instruction control units Outside control unit IE-0107 C 4.4 Instruction control units Outside control unit IE-0107	С			2.7 Velocity lifting, lowering, tilting	That the lifts sp	eed is within the correct range	IE-0111	
C 3.2 Control units. function of the lift C 3.3 Connection box for control units C 3.4 Circuit card C 3.5 Alarm for open platform C 3.6 Battery voltage, vehicle and lift inactive C 3.7 Cabin switch* Signs, stickers (Visual inspection of the function and interpretable) C 4.1 Warning flags, -tape C 4.2 Load chart C 4.3 Working area C 4.4 Instruction control units C 4.1 Instruction control units C 4.4 Instruction control units C 5.5 Alarm for open platform C 6.5 That the lamp shine when platform is not closed C 7.6 Inches platform is not closed C 8.6 Battery voltage, vehicle and lift unit (not more than 6% difference) C 9.7 Cabin switch* Signs, stickers (Visual inspection of the function and interpretable) C 9.7 Con platform, platfrom edge C 9.7 Con platform, 1 pc outside control unit C 9.7 Con platform C 9.8 Con platform C 9.7 Con platform C 9.8 Con platform C 9.7 Con platform C 9.8 Con platfo				Electrical equipment (check all the	points cable ar	nd interfaces)		
C 3.3 Connection box for control units C 3.4 Circuit card Function, connections, wear and tear IE-0103 C 3.5 Alarm for open platform That the lamp shine when platform is not closed IE-0103 C 3.6 Battery voltage, vehicle and lift inactive That the lamp shine when platform is not closed IE-0103 C 3.7 Cabin switch* Functional test IE-0103 Signs, stickers (Visual inspection of the function and interpretable) C 4.1 Warning flags, -tape 2 pcs on platform, platfrom edge IE-0107 C 4.2 Load chart 1 pc on platform, 1 pc outside control unit IE-0107 C 4.3 Working area Sticker on platform C 4.4 Instruction control units Outside control unit IE-0107	С			3.1 Main power cable, ground cable	Wear and tear,	attachment, contact surface	IE-0103	
C 3.4 Circuit card Function, connections, wear and tear IE-0103 C 3.5 Alarm for open platform That the lamp shine when platform is not closed inactive Difference between the battery and hydraulic unit (not more than 6% difference) Signs, stickers (Visual inspection of the function and interpretable) C 4.1 Warning flags, -tape 2 pcs on platform, platfrom edge IE-0107 C 4.2 Load chart 1 pc on platform 1 pc outside control unit IE-0107 C 4.3 Working area Sticker on platform C 4.4 Instruction control units Outside control unit IE-0107	С	П		3.2 Control units. function of the lift	All functions of	the lift and all control units	IE-0103	
C 3.5 Alarm for open platform That the lamp shine when platform is not closed inactive Difference between the battery and hydraulic unit (not more than 6% difference) Signs, stickers (Visual inspection of the function and interpretable) C 4.1 Warning flags, -tape 2 pcs on platform, platfrom edge 1E-0107 C 4.2 Load chart 1 pc on platform 1 pc outside control unit 1E-0107 C 4.3 Working area Sticker on platform C 4.4 Instruction control units Outside control unit 1E-0107	С	П		3.3 Connection box for control units	Tightness, clear	nliness	IE-0103	
C 3.6 Battery voltage, vehicle and lift inactive 2 3.7 Cabin switch* Difference between the battery and hydraulic unit (not more than 6% dfference) Signs, stickers (Visual inspection of the function and interpretable) C 4.1 Warning flags, -tape 2 pcs on platform, platfrom edge 1 IE-0107 C 4.2 Load chart 1 pc on platform, 1 pc outside control unit 1 IE-0107 C 4.3 Working area Sticker on platform 1 IE-0107 C 4.4 Instruction control units Outside control unit 1 IE-0107	С			3.4 Circuit card	Function, conne	ections, wear and tear	IE-0103	
C inactive unit (not more than 6% dfference) IE-0103	С			3.5 Alarm for open platform	That the lamp s	hine when platform is not closed	IE-0103	
Signs, stickers (Visual inspection of the function and interpretable) 4.1 Warning flags, -tape 2 pcs on platform, platfrom edge 1E-0107 4.2 Load chart 1 pc on platform, 1 pc outside control unit 1E-0107 C 4.3 Working area Sticker on platform 1E-0107 C 4.4 Instruction control units Outside control unit 1E-0107	С				Difference betw unit (not more the	een the battery and hydraulic han 6% dfference)	IE-0103	
C 4.1 Warning flags, -tape 2 pcs on platform, platfrom edge IE-0107 C 4.2 Load chart 1 pc on platform, 1 pc outside control unit IE-0107 C 4.3 Working area Sticker on platform IE-0107 C 4.4 Instruction control units Outside control unit IE-0107	С			3.7 Cabin switch*	Functional test		IE-0103	
C 4.2 Load chart 1 pc on platform, 1 pc outside control unit IE-0107 C 4.3 Working area Sticker on platform IE-0107 C 0.4.4 Instruction control units Outside control unit IE-0107				Signs, stickers (Visual inspection	of the function a	and interpretable)		
C 4.3 Working area Sticker on platform IE-0107 C 4.4 Instruction control units Outside control unit IE-0107	С						IE-0107	
C 4.4 Instruction control units Outside control unit IE-0107	С	П		4.2 Load chart	1 pc on platform	n, 1 pc outside control unit	IE-0107	
 	С	П		4.3 Working area	Sticker on platfo	orm	IE-0107	
C 4.5 Type plate Is firmly attached and is INTERPRETABLE IF-0107	С	П		4.4 Instruction control units	Outside control	unit	IE-0107	
10 1111 1111 1111 1111 1111 1111 1111 1111	С	П		4.5 Type plate	Is firmly attache	d and is INTERPRETABLE	IE-0107	

If there are remarks	concerning any	of the carvice items	indicate any action help	۱۸/۰

Service checks (in the table below, confirm actions have been carried out for each service item.

Service item	Remark/Action
ecks and act	tions have been carried out:
	· · · · · · · · · · · · · · · · · · ·

Date Signature

Company stamp

Service Protocol XL-Service Incl. replacement of parts in Service Kit

Cust	omer:				Vehicle:		
					Reg.No:		
Lift n	nodel:		F	Prod.No:			
C=C	heck	R=Re	eplace L=Lubrication * If the lift ha	s the equipment	**If the service kit contains the de	etail	
Comi	ments		Service points	Information		See instructions for resp. lift models	
	\downarrow	$ \Psi $	Mecanics (Visual inspection of an	y cracks and / o	or damage)	IE-0110	
С			1.1 Mountng bracket	Any cracks / da	mage, Torques	IE-0105 / IE-0104	
С			1.2 Support frame	Any cracks / da	mage, drainage holes	IE-0105	
С			1.3 Liftarm	Any cracks / da	mage	IE-0105	
С			1.4 Platform	Any cracks / da	mage	IE-0105	
С			1.5 Bumper bar	Any cracks / da	mage, Torques	IE-0105 / IE-0104	
С			1.6 Cylinders	Any cracks / da	mage, gaiters	IE-0105	
R			1.7 Support wheel*	Replace in con	nection with control of pivot bolts		
С			1.8 Pivot bolt, bushing (all)	Wear and tear,	Torques	IE-0105 / IE-0104	
С			1.9 Slide system*	Any cracks / da control	mage,Torques, funktional	IE-0105 / IE-0104	
L			1.10 Lubrication	All lubrication p	oints	IE-0101	
С			1.11 Sealings against bodywork*	Wear and tear,	condition	IE-0106	
Hydraulics (sequence) of an oil change (Visual inspection of oil leak on the entire hydraulic system) IE-0109			IE-0109				
С			2.1 Main fuse	Cleanliness, co	ntact surfaces	IE-0103	
R			2.2 Hydraulic oil	Oil, Strainer, o-	ring tank,	IE-0102	
R			2.3 Oil filter*	Changes at XL-	-Service. Every three years**	IE-0102	
R			2.4 Hydraulic hoses	Also replace the	e supplied rubber steel washers	IE-0104	
R			2.5 Solenoid	Changes in con	nection with oil change		
R			2,6 Filler cap	Changes in con	nnection with oil change		
С			2.7 The system's leakproofness	Hydr.connection	n, -unit+tank, cyl. torques	IE-0104	
С			2.8 Pressure Relief Valve	Valve should op check pressure	oen when tilting against body, if not opening.	IE-0108	
С			2.9 Velocity lifting, lowering, tilting	That the lifts sp	eed is within the correct range	IE-0111	
			Electrical equipment (check all the points cable and interfaces)				
С			3.1 Main power cable, ground cable	Wear and tear,	attachment, contact surface	IE-0103	
С			3.2 Control units. function of the lift	All functions of	the lift and all control units	IE-0103	
С	Ш		3.3 Connection box for control units	Tightness, clear		IE-0103	
R			3.4 Circuit card**, Relay**	Function, conne if incl. in service	ections, wear and tear **Change e kit	IE-0103	
С			3.5 Alarm for open platform	That the lamp s	shine when platform is not closed	IE-0103	
С			3.6 Battery voltage, vehicle and lift inactive	Difference betw unit (not more t	reen the battery and hydraulic han 6% dfference)	IE-0103	
С			3.7 Cabin switch*	Functional test		IE-0103	
<u></u>			Signs, stickers (Visual inspection	of the function a	and interpretable)		
R	Ш		4.1 Warning flags, -tape	Replace flag an	nd profile	IE-0107	
С	Ш		4.2 Load chart	1 pc on platforn	n, 1 pc outside control unit	IE-0107	
С	Щ		4.3 Working area	Sticker on platfo		IE-0107	
С			4.4 Instruction control units	Outside control	unit	IE-0107	
С			4.5 Type plate	Is firmly attache	ed and is INTERPRETABLE	IE-0107	

If there are remarks concerning any of the service items, indicate any action below:

Service checks (in the table below, confirm actions have been carried out for each service item.

Service item	Remark/Action
Checks and act	tions have been carried out:
Date	Signature

Company stamp

Service Protocol L-Service (annual)

Cust	tomer:				Vehicle:	
					Reg.No:	
Lift r	nodel:		F	Prod.No:		
C=C	heck	R=Re	eplace L=Lubrication * If the lift ha	s the equipment		
Com OK -	ments		Service points	Information		See instructions for resp. lift models
	\downarrow	$ \downarrow $	Mecanics (Visual inspection of an	y cracks and / o	r damage)	IE-0110
С			1.1 Mounting bracket	Any cracks / da	mage, Torques	IE-0105 / IE-0104
С			1.2 Support frame	Any cracks / da	mage, drainage holes	IE-0105
С	П		1.3 Liftarm	Any cracks / da	mage	IE-0105
С			1.4 Platform	Any cracks / da	mage	IE-0105
С	П		1.5 Bumper bar	Any cracks / da	mage, Torques	IE-0105 / IE-0104
С			1.6 Cylinders	Any cracks / da	mage, gaiters	IE-0105
С	П		1.7 Pivot bolt, bushing (all)	Wear and tear,	Torques	IE-0105 / IE-0104
С			1.8 Slide system*	Any cracks / da check	mage, Torques, and functional	IE-0105 / IE-0104
L			1.9 Lubrication	All lubrication po	pints	IE-0101
С	П	1.10 Sealings against bodywork* Wear and tear, condition				IE-0106
			Hydraulics (sequence) of an oil che entire hydraulic system)	ange (Visual ins	pection of oil leak on the	IE-0109
С			2.1 Main fuse	Cleanliness, cor	ntact surfaces	IE-0103
R	П		2.2 Hydraulic oil	· '	Service IF equipped with oil	IE-0102
			2.3 Oil filter*	l	Service. Every three years	
С			2.4 Hydraulic hoses	*	nd tear, free movement	IE-0104
С	П		2.5 The system's leakproofness	Hydr.connection	uunit+tank, cyl. torques	IE-0104
С			2.6 Pressure Relief Valve	Valve should op check pressure	en when tilting against body, if not opening.	IE-0108
С			2.7 Velocity lifting, lowering, tilting	That the lifts sp	eed is within the correct range	IE-0111
			Electrical equipment (check all the	points cable an	d interfaces)	
С			3.1 Main power cable, ground cable	ı İ	attachment, contact surface	IE-0103
С			3.2 Control units. function of the lift	All functions of	he lift and all control units	IE-0103
С			3.3 Connection box for control units	Tightness, clear	nliness	IE-0103
С	П		3.4 Circuit card	Function, conne	ctions, wear and tear	IE-0103
С			3.5 Alarm for open platform	That the lamp s	hine when platform is not closed	IE-0103
С			3.6 Battery voltage, vehicle and lift inactive	Difference betw unit (not more the	een the battery and hydraulic nan 6% dfference)	IE-0103
С			3.7 Cabin switch*	Functional test		IE-0103
			Signs, stickers (Visual inspection	of the function a	nd interpretable)	
С			4.1 Warning flags, -tape	ı	m, platfrom edge	IE-0107
С	П		4.2 Load chart		, 1 pc outside control unit	IE-0107
С	П		4.3 Working area	Sticker on platfo	orm	IE-0107
С	П		4.4 Instruction control units	Outside control	unit	IE-0107
С	П		4.5 Type plate	Is firmly attache	d and is INTERPRETABLE	IE-0107
				•		•

If there are remarks	s concerning any	of the service	items, indicate an	v action below:

Service checks (in the table below, confirm actions have been carried out for each service item.

Service tem	Remark/Action
	I

Checks and actions have been carried out:				
Date	Signature			

Company stamp

Service Protocol L-Service (annual)

Cust	Customer: Vehicle:			Vehicle:		
					Reg.No:	
Lift n	Lift model: Prod.No:					
C=C	heck	R=Re	eplace L=Lubrication * If the lift ha	s the equipment		
Comi	ments		Service points	Information		See instructions for resp. lift models
	\downarrow	$ \downarrow $	Mecanics (Visual inspection of an	y cracks and / o	r damage)	IE-0110
С			1.1 Mounting bracket	Any cracks / da	mage, Torques	IE-0105 / IE-0104
С			1.2 Support frame	Any cracks / da	mage, drainage holes	IE-0105
С			1.3 Liftarm	Any cracks / da	mage	IE-0105
С			1.4 Platform	Any cracks / da	mage	IE-0105
С			1.5 Bumper bar	Any cracks / da	mage, Torques	IE-0105 / IE-0104
С			1.6 Cylinders	Any cracks / da	mage, gaiters	IE-0105
С			1.7 Pivot bolt, bushing (all)	Wear and tear,	Torques	IE-0105 / IE-0104
С			1.8 Slide system*	Any cracks / da check	mage, Torques, and functional	IE-0105 / IE-0104
L			1.9 Lubrication	All lubrication po	oints	IE-0101
С			1.10 Sealings against bodywork*	Wear and tear,	condition	IE-0106
	Hydraulics (sequence) of an oil change (Visual inspection of oil leak on the entire hydraulic system)				IE-0109	
С			2.1 Main fuse	Cleanliness, cor	ntact surfaces	IE-0103
R			2.2 Hydraulic oil	NB! Only at XL-Service IF equipped with oil filter		IE-0102
			2.3 Oil filter* Changes at XL-Service. Every three years			
С			2.4 Hydraulic hoses	Oil leak, wear a	nd tear, free movement	IE-0104
С			2.5 The system's leakproofness	Hydr.connection	n.unit+tank, cyl. torques	IE-0104
С			2.6 Pressure Relief Valve	Valve should op check pressure	en when tilting against body, if not opening.	IE-0108
С			2.7 Velocity lifting, lowering, tilting That the lifts speed is within the correct range		IE-0111	
			Electrical equipment (check all the	points cable an	nd interfaces)	
С			3.1 Main power cable, ground cable	Wear and tear,	attachment, contact surface	IE-0103
С			3.2 Control units. function of the lift		IE-0103	
С			3.3 Connection box for control units	Tightness, clear	nliness	IE-0103
С			3.4 Circuit card Function, connections, wear and tear		IE-0103	
С			3.5 Alarm for open platform That the lamp shine when platform is not closed		IE-0103	
С			3.6 Battery voltage, vehicle and lift inactive Difference between the battery and hydraulic unit (not more than 6% dfference)		IE-0103	
С			3.7 Cabin switch*	Functional test		IE-0103
	Si		Signs, stickers (Visual inspection of the function and interpretable)			
С			4.1 Warning flags, -tape 2 pcs on platform, platfrom edge IE-0107		IE-0107	
С			1		IE-0107	
С			4.3 Working area Sticker on platform		IE-0107	
С			4.4 Instruction control units Outside control unit		IE-0107	
С			4.5 Type plate Is firmly attached and is INTERPRETABLE IE-01			IE-0107

If there are remarks concerning any	of the service items	, indicate any action below:
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Service checks (in the table below, confirm actions have been carried out for each service item.

Service item	Remark/Action
ecks and act	tions have been carried out:

Company stamp

Signature

Date

Service Protocol XL-Service Incl. replacement of parts in Service Kit

Cust	Customer: Vehicle:					
l					Reg.No:	
Lift r	Lift model: Prod.N					
<u> </u>						
C=C	heck	R=Re	eplace L=Lubrication * If the lift ha	s the equipment	**If the service kit contains the de	etail
Com OK -	ments	∟ [S	Service points	Information		See instructions for resp. lift models
	\downarrow	\downarrow	Mecanics (Visual inspection of an	y cracks and / o	r damage)	IE-0110
С			1.1 Mountng bracket	Any cracks / da	mage, Torques	IE-0105 / IE-0104
С			1.2 Support frame	Any cracks / da	mage, drainage holes	IE-0105
С			1.3 Liftarm	Any cracks / da	mage	IE-0105
С			1.4 Platform	Any cracks / da	mage	IE-0105
С			1.5 Bumper bar	Any cracks / da	mage, Torques	IE-0105 / IE-0104
С			1.6 Cylinders	Any cracks / da	mage, gaiters	IE-0105
R			1.7 Support wheel*	Replace in con	nection with control of pivot bolts	
С			1.8 Pivot bolt, bushing (all)	Wear and tear,	Torques	IE-0105 / IE-0104
С			1.9 Slide system*	Any cracks / da control	mage,Torques, funktional	IE-0105 / IE-0104
L			1.10 Lubrication	All lubrication p	oints	IE-0101
С			1.11 Sealings against bodywork*	Wear and tear,	condition	IE-0106
	Hydraulics (sequence) of an oil change (Visual inspection of oil leak on the entire hydraulic system)			IE-0109		
С			2.1 Main fuse	Cleanliness, co	ntact surfaces	IE-0103
R			2.2 Hydraulic oil	Oil, Strainer, o-	ring tank,	IE-0102
R			2.3 Oil filter*	Changes at XL-Service. Every three years**		IE-0102
R	$oxed{oxed}$		2.4 Hydraulic hoses	Also replace the supplied rubber steel washers		IE-0104
R	Ш		2.5 Solenoid	Changes in con	nection with oil change	
R	Ш		2,6 Filler cap	Changes in con	nection with oil change	
С			2.7 The system's leakproofness	Hydr.connection	n, -unit+tank, cyl. torques	IE-0104
С			2.8 Pressure Relief Valve	Valve should open when tilting against body, check pressure if not opening.		IE-0108
С			2.9 Velocity lifting, lowering, tilting		IE-0111	
$oxed{oxed}$			Electrical equipment (check all the	points cable ar	nd interfaces)	
С	Щ		3.1 Main power cable, ground cable	1 Main power cable, ground cable Wear and tear, attachment, contact surface		IE-0103
С	Щ		3.2 Control units. function of the lift	units. function of the lift		IE-0103
С	\sqcup		3.3 Connection box for control units			IE-0103
R	Ш		3.4 Circuit card**, Relay** Function, connections, wear and tear **Change if incl. in service kit		IE-0103	
С	Щ		3.5 Alarm for open platform That the lamp shine when platform is not closed		IE-0103	
С			3.6 Battery voltage, vehicle and lift inactive	Difference between the battery and hydraulic unit (not more than 6% dfference)		IE-0103
С	c		3.7 Cabin switch* Functional test		IE-0103	
			Signs, stickers (Visual inspection of the function and interpretable)			
R	Щ		4.1 Warning flags, -tape	-tape Replace flag and profile		IE-0107
С	Щ		4.2 Load chart	1 pc on platform, 1 pc outside control unit		IE-0107
С	Щ		4.3 Working area	4.3 Working area Sticker on platform		IE-0107
С	Щ		4.4 Instruction control units	Instruction control units Outside control unit		IE-0107
С	Ш		4.5 Type plate Is firmly attached and is INTERPRETABLE		IE-0107	

If there are remarks	concerning any	of the service items	. indicate any action below:

Service checks (in the table below, confirm actions have been carried out for each service item.

Service item	Remark/Action
ecks and act	ions have been carried out:

Company stamp

Date

Signature

Own remarks

12 Product approval

EC Declaration of Conformity.

ZEPRO, Z-Lyften Produktion AB

Allévägen 4, SE 844 41 Bispgården SWEDEN

hereby declares that tail lift

Z10/15/20, Z10-135, Z 100

Z 1500/2000/2500, ZDK 250

Z3N/Z3NU/Z3NN/Z3NNU/Z3NW/Z3NWU

Z/ZU/ZL/ZLU/ZN/Z 45/75

ZAHD/ZAEHD 150/200

ZHZ 500/600

ZHD 3000

ZN 2500

with serial numbers from 380000 onwards, are manufactured in compliance with the following EC directives:

- Machinery Directive 2006/42/EG
- EMC Directive 2004/108/EG

and designed in accordance with the following standard:

SS-EN 1756-1:2021

Technical documentation in accordance with Directive 2006/42/EC, Annex VII A compiled by:

Name: Mikael Åsell

Address: ZEPRO, Z-Lyften Produktion AB

Milicel Feer

Allévägen 4, SE844 41 Bispgården

SWEDEN

This declaration was raised by:

Mikael Åsell Factory Manager

Bispgården 01/12/2023

13 Declaration of conformity

In accordance with UK Government Guidance.

1. Product Model / Type:

Product: ZEPRO Tail lift

Model: Z10/15/20, Z10-135, Z 100

Z 1500/2000/2500, ZDK 250

Z3N/Z3NU/Z3NN/Z3NNU/Z3NW/Z3NWU

Z/ZU/ZL/ZLU/ZN/Z 45/75 ZAHD/ZAEHD 150/200

ZHZ 500/600 ZHD 3000 ZN 2500

Serial: 380000 onwards

2. Manufacturer:

Name: Z-Lyften Produktion AB

Address: Allévägen 4, SE844 41 Bispgården, Sweden

- 3. This declaration is issued under the sole responsibility of the product manufacturer.
- 4. The object of the declaration described above is in conformity with the relevant UK Statutory Instruments and their amendments:

2008 No 1597

2016 No 1101

The supply of Machinery (Safety) Regulations 2008

The Electrical Equipment Safety Regulations 2016

The Electromagnetic Compatibility Regulations 2016

The Restriction of the Use of Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

5. We hereby declare that the product described above, to which this declaration of conformity refers to, is in conformity with the essential requirements of the following standards:

EN 1756-1:2021 Tail lifts - Platform lifts for mounting on wheeled vehicles -

Safety requirements - Part 1: Tail lifts for goods

Milicel Feer

The technical documentation for the machinery is available from:

Signed for & on behalf of: Z-Lyften Produktion AB

Place of issue: Allévägen 4, SE844 41 Bispgården, Sweden

Date of Issue: 2023-12-01
Name: Mikael Åsell
Function: Factory Manager

Signature:

14 Declaration of conformity during assembly

The installer hereby declares/assures under his sole responsibility that the tail lift has been fitted in accordance with ZEPRO's instructions and that the assembly/delivery checks have been carried out. The vehicle manufacturer's instructions were also taken into account when building the superstructure.

Because ZEPRO's installation instructions have been followed and any modifications are approved by ZEPRO, this document constitutes confirmation that the tail lift and its installation are in compliance with the following directives.

Machinery Directive 2006/42/EG

The	instal	ller	hereb	v certifies	that

Superstructure builder (Company)

- installation was carried out according to ZEPRO's instructions
- installation/delivery inspections have been performed

- installation, delivery inspections have bee	en performed
Installer's signature	Date
Serial number (manufacturing number) See the type plate located on the tail lift frame.	
Paste the enclosed copy of the type plate on the back of the owner's manual.	: Company details/stamp
15 Certificate of registi	ration, delivery card
The delivery card must be registered in C-C	Care for the warranty to be valid.
w.c-office.com). User name and password	for registering the delivery card in C-Care (ww- are required to log in. There is no need to file rd supplied with the tail lift documentation after
This is to certify that the delivery card is re	egistered in C-Care:

Date

Affix a copy of the tail lift rating plate here!
ZEPRO Dealer / Importer

ZEPRO

Phone: +46 (0)10-459 05 00

Email: zepro@zepro.com | zepro.com



BUILT TO PERFORM

ZEPRO, Del and Waltco are Hiab tail lift brands. Hiab is a world-leading supplier of equipment, intelligent services and digital solutions for on-road load handling. As an industry pioneer, our company commitment is to increase the efficiency of our customers' operations and to shape the future of intelligent load handling.