ZEPRO Z-LYFTEN PRODUKTION AB

50157

INSTALLATION INSTRUCTIONS



SZH/SZD-75/100

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Page

Contents

1. CE marking	4
2. General	5
3. Dimensions for installation	7
4. Geometry of sliding lift installation	13
5. Slider installation	17
6. Electrical installation	23
7. Hydraulic unit	24
8. Electrical and hydraulic diagrams	25
9. Important information	28
10. Markings, positioning of decals on lift	29
11. Post installation maintenance	31
12. Testing the lift	32
13. Dismantling	34

1. CE marking

CE

From 1/1/1995 ZEPRO tail lifts sold to the European market wil be stamped with a CE mark. This is the manufacturer's guarantee that the product conforms to the European Machinery Directive.

The application of the European Machinery Directive is intended to harmonise product safety levels across Europe.

There are some general principals that should be made clear when performing the installation of ZE-PRO lifts.

Follow the installation instructions. If it is not possible to follow the installation instructions or if modifications are required, the modifications must be approved by your installer or by the manufacturer. This is a consequence of the CE marking regulations as it cannot be possible for a manufacturer to certify conformity to the Machinery Directive if the product is subsequently changed without his knowledge or approval. In order for the product's CE marking to remain applicable the forms supplied by ZEPRO must be completed in case of modification. Welding is **not necessary** unless specifically recommended by the manufacturer.

In order to increase security, additional decals, which are diagrammatic and easily understood independent of language will be sent with the lifts. Ensure that these decals are affixed so that the information contained on them is available for all users of the lift.

Position the control unit to ensure that the operator has a good view of the load, the working area and the loading area, whilst maintaining a safe distance from the risk zone between the platform and the body. Follow the operator's instructions for use of the control unit and its functions.

2.1 Technical description

The ZEPRO-lift is electro-hydraulically driven. An electric motor which gets its power from the truck's ordinary battery drives a hydraulic pump which supplies oil via hoses and in built tubes to the working hydraulic cylinders. The system is steered by electrical valves.

The hydraulic power unit with all details is either built into the lift's support frame (BZ) or contained in a separate box (RZ).

Both systems are easy to reach for service and maintenance.

The platform is supported by the lift arm which is very strong and rigid. The underrun bar is bolted to the lift arms or is directly attached to the support frame. The platform has a non-slip surface.

The lift arm lifting work is done by lift cylinders which have built in safety valves for protection against hose breakage. The lift cylinder circuit is equipped with 1 or 2 electric safety valves, which are leakproof. These safety valves can also act as an extra transport lock for the platform. The valves are built into the cylinders.

The platform's tilt function is also provided by cylinders with the same construction as the lift cylinders. Tilt cylinders can have either one or two speed operation. The tilt cylinder circuit is also equipped with 1 or 2 electric safety valves. Two speed tilt cylinders automatically slow around the horizontal position, therefore tilt speed is higher up to transport position or down from it. Lifting and tilting up speed are fixed by the pump capacity. Lowering and tilting down speeds are controlled by special constant flow valves. These valves give the same speed independent of the load.

The cylinder piston rods are treated with carbon nitriding which gives them very long life.

The hydraulic system is protected with a pressure regulator when lifting or tilting up.

Note! This regulator does not prevent overload at rest position or lowering.

The electric power is taken from the truck's ordinary starter motor. Control current is taken from the dash board. When the control current's isolator (cabin) switch is off, the lift is "locked". Fixed control units are electrically heated to prevent damp damage on switches.

To save current the control current ought to be switched off when the lift is not used.

The lift can be operated from optional units connected.

To ensure safe operation even with very long control cables, the hydraulic unit is equipped with relays. The relays situated in the electric connection box placed in the support frame steer current directly from the main cable to the valves and the main switch for the motor.

The electric motor is equipped with a thermostat which breaks the current if the motor becomes overheated. The motor will stop until it is cool again. The platform can be tilted to all positions from vertical to 10° below the horizontal. It has a mechanical or electric lock which must be activate during transport.

Hydraulic oil

A tail lift should operate just as well in tropical as in arctic climates. Heat does not adversely effect the hydraulic oil, however, low temperatures are more critical. ZEPRO therefore supply a hydraulic oil that meets the demands across the temperature range. ZEPRO oil (art.no 21963 for 1 litre) is made of a highly refined mineral oil, the lubricant additive is free from zinc and gives good protection against component wear. The hydraulic oil's low temperature properties and high viscosity index allow hydraulic system start in a very cold climate and give reliable functioning with varying temperature conditions. With ZEPRO oil the hydraulic system also receives a very good protection against corrosion.

ZEPRO also has a biologically degradable oil (art. no 21946 for 1 litre)available which is based on a synthetic base oil. This also provides very good properties at low and high temperatures. It is even liquid down to -50° C. Resistance to oxidation is extremely good which gives long lifetime with longer intervals between oil changes. Good filtration and air seperation together with low density make the oil easy to pump. This minimises risk for cavitation and development of scum. Contact us for more information.



2.3 Weights

Some components of the tail lift must be manipulated by ceiling cranes and therefore could represent hazards if their weights exceed the crane's permitted load. The following are the ranges of weights for various heavy components.

Lift model	Weight	Centre of gravity (G)
SZD-100-132 + (platform 700+605)	275+115 kg	582 mm
SZD-100-132 + (platform 850+750)	275+130 kg	578 mm
SZD-100-152 + (platform 700+605)	285+115 kg	662 mm
SZD-100-152 + (platform 850+750)	285+130 kg	655 mm
SZH-100-132 + (platform 500+910)	265+120 kg	543 mm
SZH-100-132 + (platform 640+860)	265+125 kg	503 mm
SZH-100-152 + (platform 500+910)	275+120 kg	511 mm
SZH-100-152 + (platform 640+860)	275+125 kg	463 mm
Hydraulic Unit	26 kg	
Liftarm	35 kg (-	132), 40 kg (-152)
Liftcylinders	7 kg (-1	32), 8 kg (-152)
Tilt cylinders	11,5 kg	(-132), 12,5 kg (-152)
Platform SZD	700+60	5=115 kg, 850+750=130 kg
Platform SZH	500+91	0=120 kg, 640+860=125 kg



2.5 Max Power Consumption

SZD/SZH-100-110/132/152 (150 bar)

(150 bar)	12 volt	24 volt
Pump - Motor Unit	140 A	75 A
Magnet (hydraulic unit)	4,2 A	2,1 A
Magnet (electric safety valve)	1,5 A	0,75 A
Solenoid	1,5 A	0,85 A
Cable area:		
Control cable	1,5 mm ²	1,5 mm ²
Main cable 0-8m	35 mm ²	35 mm ²
Main cable 8-15m	50 mm ²	35 mm ²
Main cable <15m	-	50 mm ²
Power source:		
Min. capacity	180 Ah	170 Ah
Min. voltage	9 Volt	18 Volt

2.6 Loading Diagram





IMPORTANT: Finding the installation position of the slider is very simple if these instructions are followed.

The platform and lift arm combinations described on this page are optimised for **minimum total overhang**, therefore always **install the slide profile rear edge level with the rear edge of the vehicle frame or tow hook device so that the platform can fold out**.

If the slide frame is placed further forward there is a risk (particularly for low ground clearance) that the platform will not be able to fold out. There are only two solutions. Either to move the slide frame to the position that we recommend or choose a different platform combination, but the new platform would either have a shorter folding part (and hence perhaps be too short for your needs) or a longer fixed part (and hence require a longer overhang).

With these short overhang models the working position is not the same as the folding out position.

Due to the shape of the mounting bracket and the nature of slider installations note that

IMPORTANT: C measures in the following tables are measured between the vehicle floor height and the bottom of the vehicle frame.

		-132	-152
Lift arm length		750	870
C max	С	500	600
C min	С	250	300
Max lift height (at Cmin)	Е	1070	1220
Max lift height (at Cmax)	E	1320	1520
Fixed part of platform	P1	500	500
Folding part of platform	P2	910	910
Total length platform		1410	1410
Height of lift	Н	300	300
Slide profile length		1102	1102
Total overhang required	0	1469	1589

Single	folding	platform,	models	SZH

	SZH-100-	SZH-100-
С	Α	Α
600		219
550		203
500	211	191
450	195	178
400	180	165
350	165	150

32

52

134

	All	dimensions	in	mm
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147 127

300

250

Single folding platform, models SZH

OVERHANG NECESSARY



The following equation can be used to calculate the minimum overhang necessary for the installation of a slider.

Distance forward of the beam (A) + Beam (B)+ Lift arm (C) + Fixed part of platform (E) - Liftarm/platform overlap (D).

- A. Distance forward of the beam = 92 mm
- B. Beam = 160 mm
- C. Lift arm = 750 mm (-132), 870 mm (-152)
- E. Fixed part of platform = depends on the platform ordered
- D. Liftarm/platform overlap = 33 mm (AVI)

eg 1. Minimum overhang necessary for the installation of a SZH-100-132 with an AVI 500 mm + 910 mm platform. 92+160+750+500-33 = 1469 mm



Double folding platform, models SZD



IMPORTANT: Finding the installation position of the slider is very simple if these instructions are followed.

The platform and lift arm combinations described on this page are optimised for **minimum total overhang**, therefore always **install the slide profile rear edge level with the rear edge of the vehicle frame or tow hook device so that the platform can fold out**.

If the slide frame is placed further forward there is a risk (particularly for low ground clearance) that the platform will not be able to fold out.

With these short overhang models the working position is not the same as the folding out position.

Due to the shape of the mounting bracket and the nature of slider installations note that

IMPORTANT: C measures in the following tables are measured between the vehicle floor height and the bottom of the vehicle frame.

Model		-110	-132	-152
Lift arm length		650	750	870
C max	С	400	500	600
C min	С	180	250	300
Max lift height (at Cmin)	Е	890	1070	1220
Max lift height (at Cmax)	Е	1110	1320	1520
First folding part of platform	P1	680	700	850
Second folding part of platform	P2	545	605	750
Total length platform		1270	1305	1600
Height of lift	Н	300	300	300
Slide profile length		835	987	1102
Total overhang required	0	910	1150	1270

	SZD-100-110	SZD-100-132	SZD-100-152
С	Α	Α	Α
600			219
550			203
500		211	191
450		195	178
400	200	180	165
350	181	165	150
300	163	147	134
250	142	127	
200	114		

All dimensions in mm



For SZD/SZH-100-132/152, X=1170 mm

On trucks, installation can take place on models SZD/SZH-100-132/152 with a chassis frame upto a maximum width of



There are 3 different slide lengths adapted to the overhang requirements of each model.

SZH models	1102mm
SZD-75/100-110	835 mm
SZD-100-132	987 mm
SZD-100-152	1102 mm



OVERHANG

NB. As the SZH-100-132 model has an overhang requirement of 1469 mm and a slidelength of 1170, the platform protrudes 299 mm rear of the slideprofile. Therefore the front edge of the slide must be installed 299 mm forward of the rear of the body to avoid platform damage at the dock. Note that the rear of the profiles will not be flush with the rear of the body.





SZD models with double folded platforms have an adjustable roll arm attached to the support frame to aid folding out of the platform. This is installed at the factory but should be adjusted 410-660 mm after platform installation. This is available as an option for SZH (single folding platform models).





If you want to avoid that the following installation problem occurs...

and would prefer the lift to be installed as in this diagram...



then take time to read these instructions carefully and follow them!!!

The nature of the installation geometry of sliding tail lifts is more complicated than standard models and therefore more thought and attention is required when considering which lift model is suited to which frame and the exact position on the frame at which the lift should be attached. The stowed lift must fit in the available overhang and the folding part of the platform must have clearance from the vehicle frame in order to be folded out for use. Short overhangs and long platforms can be mutually exclusive, so it is advisable to clearly understand the questions involved.

The points to be considered are the following:

a) What is the lifting height required to the highest possible position of the unladen vehicle bed.

b) Choose the ZEPRO SZH or SZD sliding lift with the next highest maximum lifting height:- **111**0 mm, **132**0 mm or **152**0 mm.

c) Consider the length of the lift arm that is supplied with that particular lift model.

d) SZH-100-110, SZD-100-110

the lift arm has a length of 650 mm

SZH-100-132, SZD-100-132

the lift arm has a length of 750 mm

SZH-100-152, SZD-100-152

the lift arm has a length of 870 mm

e) Total platform length is made up of the sum of the lengths of the fixed and folding part(s) (parts if double folding platform) of the platform.

f) The fixed part of the platform (to which the lifting arms and cylinders are attached) contributes to the total length of the lift in the stowed position.

g) 160 mm (for the support frame)

- + lift arm length
- + fixed part of the platform

the total lift length in the stowed position

h) The available overhang must be greater than the total lift length in the stowed position.

i) Let's consider the case of the single folded platforms. In the stowed position, the folding part of the platform cannot be longer than the space available above the fixed platform part and the lift arm, up to the wheeled mounting brackets. So the total platform length permissible is geometrically limited. j) Another point to bear in mind is when the lift is slid out from the stowed position and the lift arm is lowered to the ground so that the folding part of the platform can be folded out, the distance between the lower rear edge of the vehicle frame and the platform hinge between the two platform parts is the upper limit for the length of the folding platform part. This varies from vehicle to vehicle and is a factor dependent on ground clearance and chassis design. ZEPRO or their approved dealers can give advice on this point.



4. Geometry Of Sliding Lift Installation





Due to installation geometry the folding position and the working position are not always the same. For ZEPRO short overhang models the lift length and platform combination has been chosen for minimum overhang, not for coincident folding and working positions. In some cases however it is possible to obtain coincident folding and working positions. This requires a longer overhang and certain body and frame conditions.

As an example this figure shows an installation with the slide profiles forward of the recommended position for short overhang models.

As can be seen the platform, when being folded, touches the chassis frame. It would be possible to choose a shorter folding platform part or a longer fixed part to enable folding out, but the total overhang would be greater. The exact frame and body dimensions must be investigated in these cases to provide a guaranteed solution.

Installing a slider lift on a TRUCK frame

Safety

A palette truck should be used to support heavy components. Authorized and competent personnel only should install these lifts.

General

The SZH sliders with single folding platforms and SZD sliders with double folding platforms are identical except for the addition of a roll arm on the SZD models to aid the folding out of the platform. The roll arm is installed at the factory.

These slider lifts are premounted to a great extent at the factory. The work to be carried out before the lift can function is limited to :

- 1) attaching lift to the vehicle chassis,
- 2) attaching the platform

3) connecting the lift battery cable + cabin switch

4) installing the control units

Installing the slider frame

The installation is very simple if you follow the instructions for the positioning of the slider profiles in section 4. The slide profile mounting brackets are screwed into the outside of the truck chassis frame as on a standard lift installation (see diagram S2). The first bolt in each bracket should be bolted through the slot thus allowing subsequent adjustment (see diagram S1). <u>Holes for the other bolts must</u> be drilled after the final position adjustment is made, this is after test running the lift and platform. Bottom of the slider frames should be in alignment with bottom of vehicle frame (see diagram 3).

For installation on the outside of a normal truck frame the maximum chassis width is 700 mm for SZH/SZD-100-110 models and 900 mm for SZH/SZD-100-132/152 models.

Installing the lift chassis

Perform the electrical installation in section 6-8.









Diagram S3



Diagram S4

5.3.4 For aluminium platform fixed part for SZH or for SZD. Place the lift arm in its slot in the platform then push in the axle bolts and fix them with the locking screws. Bolt the tilt cylinders to the platform bracket (see diagram S7).

5.3.5 Install armstops vertically (see diagram S6) for both arms at the rear beam. The stops must extend downwards from the vehicle and upwards from the lift arm and meet horizontally.

5.3.6 Test run the lift carefully. Fine adjust the position of the slide profiles (forwards or backwards) if necessary.

5.3.7 Lower the platform to the ground. The hydraulic hoses leading to the tilt cylinder should be attached with clips to the lift mounting brackets. Ensure free movement with no components getting caught up or chafed during the lift's movement.

5.3.8 Test in/out movement and make the final attachment.

5.3.9 Drill holes 14.0mm through the slide profiles and chassis frame. Fasten slide profiles to frame with 2xM14 bolts in the front (of vehicle) bracket and 4xM14 bolts in the rear bracket (tighten to a torque 95Nm) **see diagram S3 + S4**.

5.3.10 The flexible hose which protects the control unit cables and the battery cable must be attached so that it is kept free of the slide movement. Select a suitable position on the frame above the centre of the slide profile at which to attach the plastic hose holder. Ensure that the hose is loose and away from moving parts during the complete range of movements.







Test all functions:

Working position function, slide out the lift, open the platform and lift to the floor height.



Run the lift into the body, then the lift should stop at right working position, if not, adjust the stop plate.



When parking the lift into transport position, drive the lift in with in-button and middle-button (middle-button disactivates working position lock).

6 Electrical installation

Install control units at suitable places, but the position of the control unit should ensure that the operator has a good view of the load, the working area and the loading area, whilst maintaining a safe distance from the risk zone between the platform and the body. Note that all cables must be connected from below so that water can't get into the units but condensation can drain out.

Fixed units are electrically heated. The heating cable must be well earthed. Note that 12 V (black) and 24 V (red) has different heating cables.

All control units must be connected in parallel. The control cable is connected to the circuit card in the hydraulic unit.

Install the control current cable from the dashboard of the truck according to the customers requirements. The control current swich should be located so it is possible to be reached from the ground 8A fuse between the current source and the switch.

The control current cable is connected to a fixed control unit. You can fasten the cable together with the main cable to the hydraulic unit.

Connect the main power cable to the starter motor (B+) of the truck, never to the battery. The cable should be protected with a plastic sheath. It must not be fastened together with brake pipes or other electric cables of the truck. When passing through holes the cables must be protected with rubber bushings.

A 160 A (24 V) or 250 A (12 V) fuse is to be installed on the main power cable running from the battery compartment**. This acts to protect the electrical systems from overloading and the risk of fire.

> **Note! The fuse should be placed on a well protected place and as near as possible to the battery.



If you have a spiral cable unit, its cable colours are different (see table below):

If you want an electrically heated spiral cable unit you can order a 5-part cable (spare-part no 21303) and use the blue conductor for earthing (the white part is nearly grey). Note that the spiral cable unit must have its fastening plate for the wall (spare-part no 20302).

Check that the hydraulic unit is well earthed according to truck manufacturer's instructions (earthing is made through leading in plate, se picture).

If you must lead a spiral cable up through the floor you must protect it with a sheath up from the floor. If you need to use power from the circuit card +ve connection point a fuse must be installed, eg. overload alarm 7.5 Ampere.

Test run all functions from all control units.





SZD/SZH-100-110/132/152









Repainting

NB. If the cylinders are to be repainted, ensure that the cylinder push rod and cover are not painted (this can damage the seals/gaskets).



Hydraulic hoses must not be painted, the paint's solvent can damage the hose's rubber compound and can adversely affect durability



Replace the transport plug

During installation the oil tank transport plug should be removed and replaced



Moveable parts - free movement

When the final post-installation testing is carried out, it is important that there is sufficient clearance between the cylinders working envelopes and all fixed points. During lift operation and cylinder movement there is a risk for conflict with the subframe, truck frame, number plate, lamp holders and even the mounting brackets when the overhang is very limited (due to lift arm angle). Hence it is important to thoroughly check all of these points on both sides.

The final test is performed with the platform at floor height tilted down 10° from the horizontal. The cylinders must have a minimum clearance of 40 mm to all fixed points from this position.



10 Information markings on lifts

(see pictures on next page)

The loading diagram plates should be placed near the control unit and in a clearly visible position on the platform. The plate clearly indicates the nominal loading and the diagram shows the

maximum permitted loading at different positions on the platform.

The name plate is installed on the support frame of the tail lift and contains the following information:

- -Lift type
- -Maximum permitted load in kg
- -Serial number
- -Year of manufacture
- -Address and tel. no. of the manufacturer
- -Country of manufacture
- -EU type no. for bumper bar certificate

Their is also a similar name plate in the form of a decal which is to be affixed to the cabin's door frame to ensure correct product identification.

ZEPRO Z-LYFTEN PRODUKTION	N AB, SWEDEN
TYPE	Z-LYFTEN PRODUKTION AB
Max Load Kg.	KATRINEHOLM +46 150-48 95 50
PROD.NO.	SWEDEN
PROD.YEAR	EG APPROVAL

The mark below represents the manufacturer's guarantee that the tail lift is designed and was supplied according to the requirements laid down in the European Machinery Directive. It is a customer's guarantee of high quality and safety.



A "danger area" decal is also to be placed on the platform warning drivers who are parking cars behind the vehicle that 5m are necessary to allow for platform opening and sufficient manoeuvring space for loading and unloading goods. An operating instructions decal should be placed next to the main control unit.

A danger zone decal, warning of the danger area between the platform and the vehicle bed is to be affixed on the inside of the vehicle body near to the spiral cable control, if installed.

We suggest that you stick the yellow/black warning tape along the side edge of the platform to make it more clearly visible when in the horizontal position.

Install the warning flags with reflection strips, as close to the top and to the side of the platform as possible, however, ensure that the flags will not detach when the platform reaches the ground. Crimp the ends of the flag profiles so that the flags stay in position.





LUBRICATION

Grease all bearings and platform locks with chassis lubricants.

Greasing at least 8 times / year

- 1. Right tiltcylinder, lower bearing.
- 2. Right liftcylinder, lower bearing.
- 3. Liftarm right side, lower bearing.
- 4. Left liftcylinder, lower bearing.
- 5. Left tiltcylinder, lower bearing.
- 6. Liftarm left side, lower bearing.
- 7. Left tiltcylinder, upper bearing.
- 8. Right tiltcylinder, upper bearing.
- 9. Liftarm right side, upper bearing.
- 10. Right liftcylinder, upper bearing.
- 11. Left liftcylinder, upper bearing.
- 12. Liftarm left side, upper bearing.
- 13. Wheels in slider profile.

Greasing frequency guide

Average number of drops per day	25	50	75	>100
Frequency of greasing per year	8	12	15	18
Approx. no. of weeks between greasing	6	5	4	3



Bleeding the cylinders <u>Lift cylinders</u>: Fully lower the platform a few times. You may have to lift the truck to fully lower the platform. <u>Tilt cylinders</u>: Tilt the platform max just above ground level completely a couple of times.

12 Testing the tail lift

Testing and verification of the tail lift. Carried out in accordance with the installation instruction and delivery check list.

Check that the tail lift chosen corresponds to the vehicle and to its foreseen use.

Static loading test

To be carried out when installation is complete. **Deformation**

Position the tail lift with the platform horizontal about half way between the ground and the vehicle floor. Measure the distances A,B,C,D as shown in the diagram. Place a test load on the platform according to the table (for the corresponding tail lift model and loading capacity). Remove the load from the platform. Repeat the measurements of A,B,C,D and check that there is no permanent deformation to the tail lift or its brackets.

Deflection

Place a test load on the platform according to the table (for the corresponding tail lift model and loading capacity). Remove the load from the

platform. Repeat the measurements of A,B,C,D and check that there is no permanent deformation to the tail lift or its brackets.

Measure the distances A,B,C,D as shown in the diagram. Leave the test load on the platform for 15 minutes. Repeat the measurements of A,B,C,D and check that the platform's deflection is not more than 15mm vertically and that it is not more than 2° in angular deflection.

Static loading (Test load 1,25 x tail lift loading capacity). For tail lifts with load centre of 600 mm

Capacity	Load 500 kg	Load 1000 kg
	Distance out in platform (L)	
450 kg	(450 kg) 675 mm	-
500 kg	750 mm	-
700 kg	1050 mm	-
750 kg	1125 mm	-
1000 kg	1500 mm	750 mm
1500 kg	2250 mm	1125 mm
2000 kg	(3000 mm)	1500 mm

Static loading (Test load 1,25 x tail lift loading capacity). For tail lifts with load centre of 750 mm

Capacity	Load 500 kg	Load 1000 kg
	Distance out in platform (L)	
1500 kg	(2815) mm	1410 mm
2000 kg	(3750 mm)	1875 mm



Dynamic load testing

Test with nominal load

Place a test load on the platform according to the table for the respective tail lift model and lifting capacity. Check that the tail lift operates correct in the normal range of movement allowed ie. up, down, tilting at the ground level and tilting at the vehicle floor level.

Test with over load.

Place a test load on the platform according to the table for the respective tail lift model and lifting capacity. The test load should be 1,25 x the lift models max load. Check that the tail lift cannot lift this load (it may, however, be possible to operate the tilting movement). Remove the test load from the platform.

Dynamic load (Test load 1,0 x tail lift loading capacity). For tail lifts with load centre of 600 mm

Capacity	Load 500 kg	Load 1000 kg
	Distance out in platform (L)	
450 kg	600 mm	-
500 kg	600 mm	-
700 kg	800 mm	-
750 kg	900 mm	-
1000 kg	1200 mm	600 mm
1500 kg	1800 mm	900 mm
2000 kg	(2400 mm)	1200 mm

Dynamic load (Test load 1,0 x tail lift loading capacity). For tail lifts with load centre of 750 mm

Capacity	Load 500 kg	Load 1000 kg
	Distance out in platform (L)	
1500 kg	1975 mm	1200 mm
2000 kg	(3000 mm)	1475 mm

Test of safety functions

The tail lifts safety functions must be tested Check:

- That the red lamp in the vehicle cabin turns off when the platform is completely closed against the body and that it turns on when the platform is opened (where applicable).

- That the tail lift will not operate if the cabin switch is in the off position.

- That the tail lift cannot be operated when the main current fuse is removed (where applicable).

- That the overflow valve is activated when the lift is run up to the floor level or armstops.

- That the tail lift cannot be lowered or tilted down respectively if the electrical connector from the lift and tilt cylinders respectively electric safety valve is removed.

-That the platforms max load marking has been included and is correctly positioned according to the loading diagram for the tail lift model concerned.

- That the warning flags are installed and fulfill their function correctly.

- That all safety and operating stickers are installed in their specified position.

- That the platform's mechanical lock functions correctly (where applicable).

- That the Operator's Handbook has been left in the driver's cabin.

- That the declaration of CE conformity has been filled in (where applicable).

1. In the event of dismantling the tail lift from the vehicle, in the case of transferring it to another vehicle, for storage or for modification please follow these instructions.

2. Support the platform by a crane or similar equipment that can safely carry the platform's weight. (NB. weight info).

3. Dismantle the tilt cylinders upper axle in the platform and rest the cylinders on the ground.

4. Run the tilt cylinders to their minimum stroke limit to remove pressure from the circuit.

5. Dismantle the tilt cylinder's lower axle at the support frame. Remove the cylinder and take away the hoses. NB. Oil can leak from the hoses and cylinder.

6. Dismantle the side profiles from the platform. Take away the grease nipples and the lock screws in the platform's axles. Screw the special tool (see diagram) into the axle. Using the sliding weight of the tool, hammer the axle out of the profile. Follow the sames procedure for the other side.

Lift away the platform, lower the liftarm to the ground. 7. Unscrew the lift cylinder's upper axle at the lift arm and lower the cylinders to the ground. Take the lift cylinder's lower axle away at the support frame and remove the cylinders completely. Loosen the connected hoses.

8. Unscrew the lift arm's axles at the support frame and take away the lift arm.

9. Support the support frame from its underside with a forklift or similar equipment with sufficient loading capacity. Unscrew all bolts from the mounting brackets. 10. Check that the battery is disconnected. Unscrew the cable from the battery to the tail lift and all the cables and wires between the hydraulic unit and the control unit. Lower the support frame and remove it from the truck chassis.

