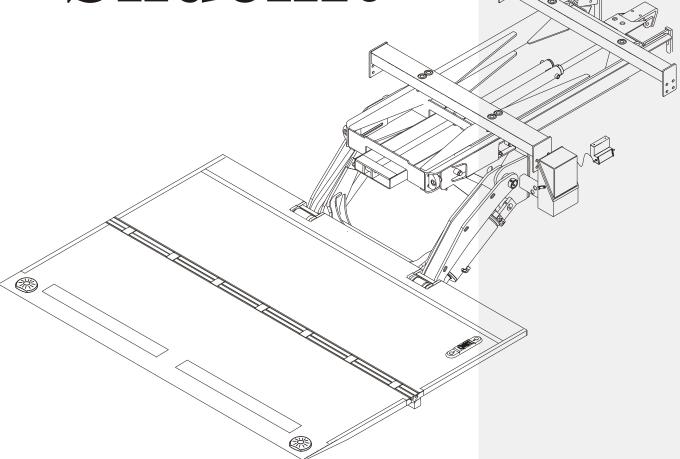
MAXON Slidelift



## **Installation manual**

GPS 44 X1 GPS 55 X1



MAXON®
Lift CORP.

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# Installation Manual GPS-44 X-1 and GPS-55 X-1

#### Introduction

This installation manual contains all instructions necessary to install the Slidelift and adjust it to the chassis or trailer it was designed for. To determine whether the Slidelift may be installed on a certain vehicle, please contact us. We will provide the necessary information.

If the Slidelift needs to be modified or if it is necessary to deviate from these installation instructions, a written approval from MAXON Lift Corp. needs to be obtained first. Unapproved modifications and deviations from this installation manual may lead to failure and to operating interruptions as well as to hazards for the operator. The warranty for the Slidelift will be voided by "unapproved modifications" and "deviations from the installation directions."

#### The mounting guidelines of the chassis manufacturer need to be complied with!

#### Transport damages

The shipping company is responsible for damages on the Slidelift occuring during transportation. The lift needs to be checked for damages immediately after unloading. If any damages occured during transportation, they must be approved in writing on the waybill, so that claims can be raised. Insurance claims can only be settled between Maxon Lift Corp. and the shipping company, or its insurance company.

#### Trailer hitch

If the vehicle is equipped with a trailer hitch, the clearance of the shaft axle to the Slidelift and the vehicle overall length need to be guaranteed by the installer.

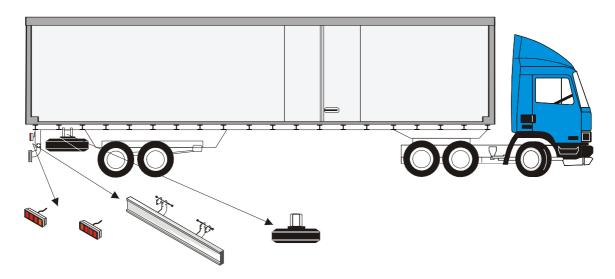
## Installation safety precautions

- Before installing the Slidelift, the battery of the vehicle needs to be disconnected. The vehicle needs to be secured against all unintentional shifting.
- The plugs of the antiblock braking system and the electronic power shift need to be pulled before welding. Fuel lines, air hoses of the brake system and cables in the installation area need to be protected against damages.
- Any special safety regulations (if applicable) need to be complied with.
- Safety gear, like protective goggles, working gloves and working boots, must be available before installing the Slidelift and are to be used if necessary.
- Safety devices on cranes, forklift trucks, and other lifting gear necessary for installation are to be checked to see if they are in proper working condition before they are used.



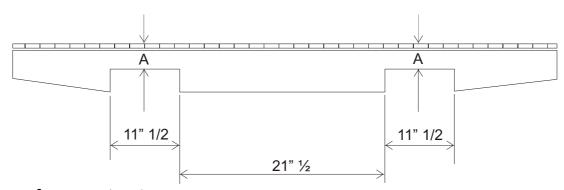
## Vehicle preparation

Remove the underride bumper and the tail lights. If there are any U-shaped mounting brackets with threads on both sides, brackets, rivets, spare wheels, or couplings in the installation area of the mounting plates, they need to be removed. If necessary, remove hinges and latches. Cut out openings in the rear frame according to our suggestions chapter "openings in the Rear Frame".



The cabin of the truck should be protected against dirt using protective cloth material

#### Rear frame cut outs



#### Table rear frame cut outs

short arm 30" 1/2 version

E1	S1 max.	S1 min.	A max.
7" 7/8	5" 1/2	2"	3" 1/8
9" 1/16	4" 3/4	1" 1/8	3" 1/8
10" 1/4	4" 1/8	9/16"	3" 1/8
11" 4/5	3"	0	3" 3/8
13"	2" 3/16	0	3" 1/2

long arm 34" 1/2 version

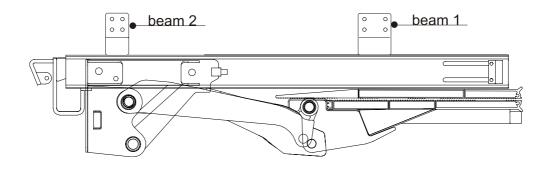
E1	S1 max.	S1 min.	A max.
10" 1/4	8" 2/3	5" 1/8	3" 1/2
11" 4/5	7" 11/16	4" 1/8	3" 1/2
13"	6" 8/9	3" 3/8	4"
14" 3/16	5" 14/16	2" 1/3	4" 5/16
15" 3/4	4" 3/4	1" 1/8	4" 1/2
17"	3" 3/4	3/16"	4" 3/4
18" 1/8	2" 3/4	0	4" 15/16
19" 5/16	1" 3/8	0	5" 1/8

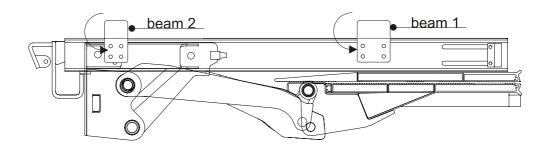
Other masses page 4 to 7



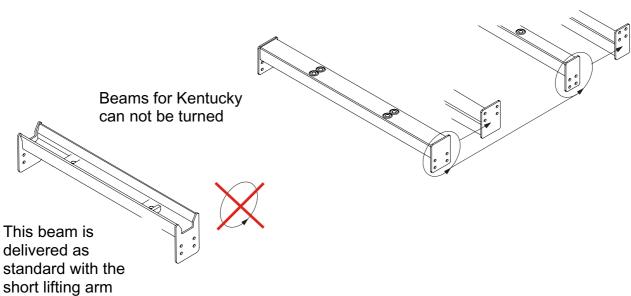
#### Crossbeam 1 and Crossbeam 2

Both crossbeams can be assembled by turning them at 180°, which gives an additionnal assembly height.



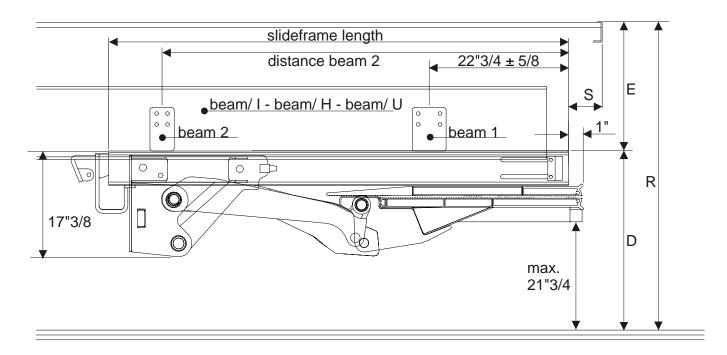


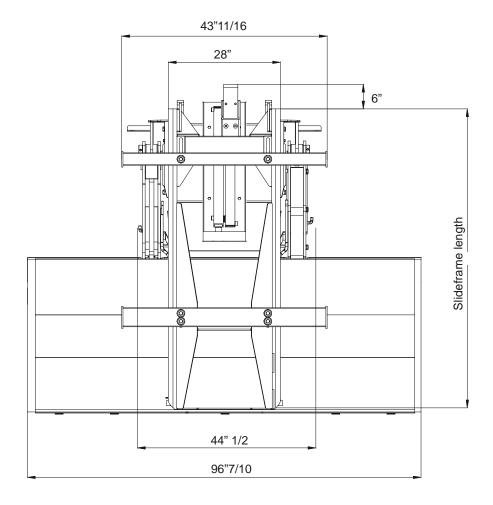
Turning of the beams possible





## **Dimensions of the Slidelift**





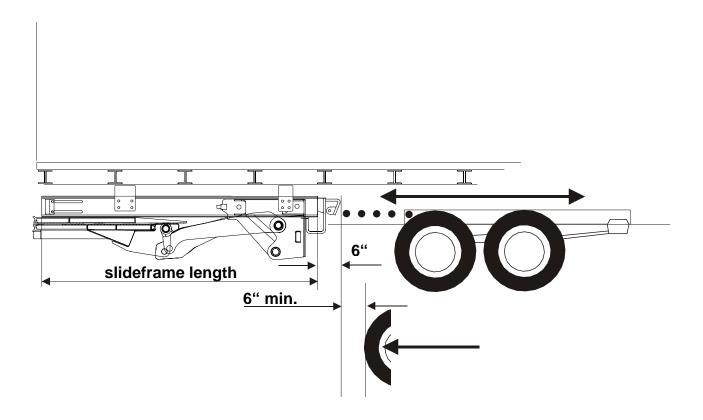


## **Installation Table**

000 44 V 4				
GPS 44-X-1 short arm 30 ½" version Platform depth 72"				Platform depth 82"
Length folding part 37"1/2			Length folding part 42"3/8	
Distance beam 2	58"1/16 ± 1	"1/2		62"1/4 ± 1"1/2
Length sliding frame	67"			71"
R max.	49"			
E max.	13"	E min.	6"3/4	
D max.	36"	D min.	27"	
S max.	14"3/4	S min.	0	
GPS 44-X-1				
	m 34 ½" ver orm depth 7			Platform depth 82"
Length for	olding part 3	7"1/2		Length folding part 42"3/8
Distance beam 2	62"1/4 ± 1"	1/2		66"1/4 ± 1"1/2
Length sliding frame	71"			75"
R max.	55"			
E max.	19"	E min.	10"	
D max.	36"	D min.	27"	
S max.	14"3/4	S min.	0	
GPS 55-X-1				
	m 30 ½" ve orm depth 7			Platform depth 82"
Length folding part	37"1/2			Length folding part42"3/8
Distance beam 2	62"1/4 ± 1"	1/2		66" ± 1"1/2
Length sliding frame	71"			75"
R max.	49"			
E max.	13"	E min.	6"3/4	
D max.	36"	D min.	27"	
S max.	14"3/4	S min.	0	
GPS 55-X-1				
long Arm 34 ½" version Platform depth 72"				Platform depth 82"
Length folding part 37	7"1/2			Length folding part 42"3/8
Distance beam 2	68"			72" ± 1"1/2
Length sliding frame	75"			79"
R max.	55"			
E max.	19"	E min.	10"	
D max.	36"	D min.	27"	
S max.	14"3/4	S min.	0	



## Maße für die Achsverschiebung beachten



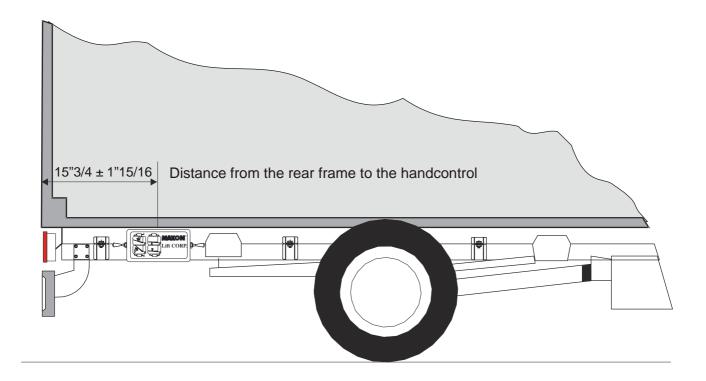


## Installation instructions

## Installation of the electrical equipment

The installation of the electrical equipment should be done before the mounting of the Slidelift itself because at this stage it will be easier to do so (more space available).

Mount the hand control box at the right end of the vehicle so that the platform can be observed from the operating position. The minimum distance should be  $15^{\circ}3/4 \pm 1^{\circ}15/16$ .



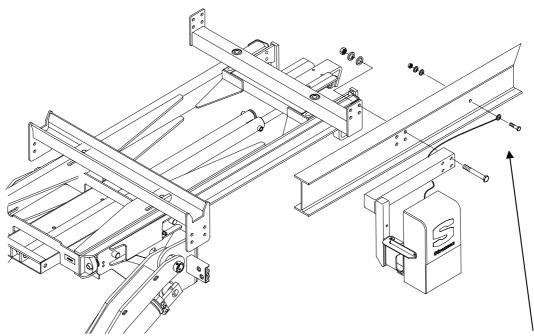
Connect the set "main circuit fuse" to the battery terminal clip at the positive pole of the battery. Connect the main circuit cable (positive from the main circuit fuse) to the pump box of the Slidelift. Connect it to the power relay. Connect the earth cable from the motor to the negative pole of the battery or, if authorized by the vehicle manufacturer, to the chassis at a scraped clean spot. Take the platform foot control cable along the lifting arm to the pump box and connect it according to the wiring diagram.

The mounting guidelines of the chassis manufacturer need to be complied with!



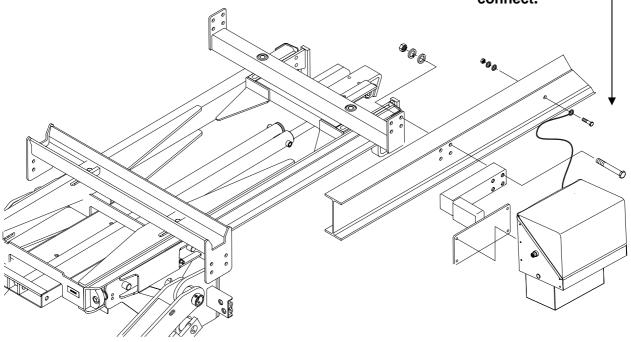
## **Installation Power Pack**

## **Single Power Pack**



**Doppel Power Pack** 

Ground cable by the vehicle frames connect.





#### Slidelift Installation

The Slidelift is completely pre-mounted. The installation is fast and easy. Simply load the Slidelift onto a forklift truck or a pallet jack, drive it under the vehicle's chassis and adjust it according to the maximum vehicle measurements (see installation table underneath) in height and length.

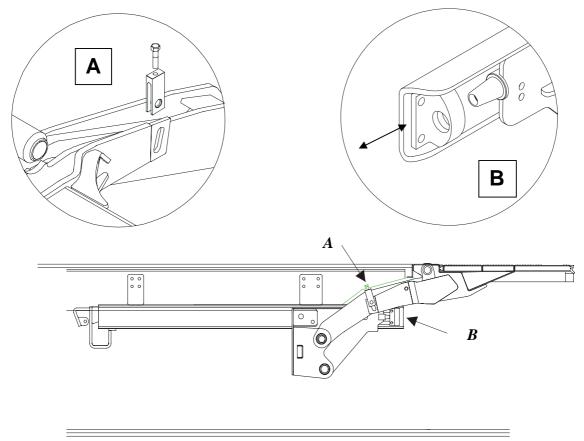
The Slidelift must be installed parallel to the truck's and/or trailers loading platform.

Weld the mounting plates located on beam 1 and 2 on both sides and in addition from underneath or from above on their full length.

If you obtained an installation drawing from Maxon Lift Corp. (serial number of the Slidelift stated on the drawing) the installation must be performed according to the measurements given with that drawing.

### Final adjustments of the platform to the vehicle bed (A):

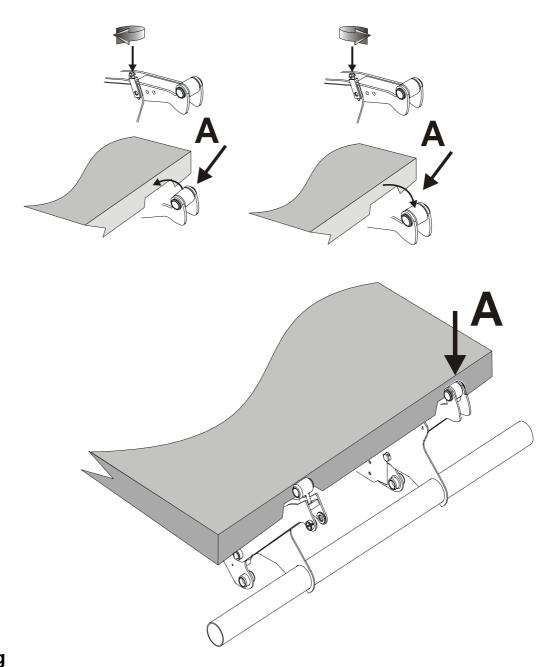
Move the hoisting gear with the opened platform hydraulically behind the rear frame. For the adjustment, the lift arms are not to touch the rear frame. Between the rear frame and lift arms, there should be a space of 3/8". With the adjusting screws, the hoisting gear will be adjusted until the vehicle floor and the platform are parallel. After the adjustment, both screws of the anti-underride fastening are to be tightened.



## Adjusting the liftheight (B).

After the installation of the Slidelift, please slide out the frame completely, lift the platform to the same height than the vehicle floor, and in that position, slide it back against the chassis frame of the vehicle. Then slide the stops on both sides against the sliding frame of the lift and secure them.

# **MAXON®**





## Welding

Prior to any welding operations, the battery and additional equipment such as anti-blocking and anti-slide controls are to be disconnected (see instructions given by the vehicle manufacturer). For steel, please use E 5153 B 10 DIN 1913 as additional welding material.

Model	Joint	
	thickness	
	a min	
GPS 44-X1	1/4"	
GPS 55-X1	1/4"	



# **A** Warning

The ground clamp of the welding device must be attached directly to one of the parts to be welded. Otherwise, the hydraulic cylinders may be damaged.



## **Operating the Slidelift**

## First operation

Check operation readyness. Check all moving parts for free move (no abrasion on hoses, cables, etc.). Check the hydraulics for leaks.

#### Hydraulic oil - recommendations

#### **OIL SPECIFICATIONS**

Grade ISO - (32)

Gravity, API - 29.5 Degrees

Pour Point, F - (-54 Degrees)

#### VISCOSITY

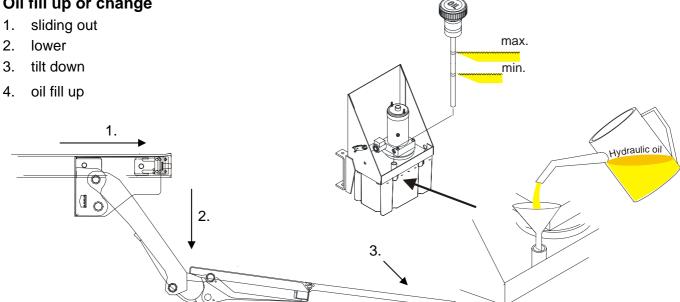
@ 40 Degrees C - 31.2 cSt

@ 100 Degrees C - 6.2 cSt

**VISCOSITY INDEX - 154 VI** 

Flash Point, F - 325 Degrees

## Oil fill up or change



## Painting the lift gear

The lift gear is powder-coated black. If another color is required, the bodybuilder or installer needs to provide for this. (Note that the powder-coated surface needs to be roughened before it can be painted.)



## Warning

Please observe that the black cylinder rods need to be covered before they can be painted; remove color paint and covering material from the cylinder rods after painting. Otherwise, the Cylinder seals get damaged and the warranty will be void.

#### Operating information's

Stick "Operating Information" decal on the hand control box.

#### For problems please contact our Technical Service Department.



#### Load trial run

#### Static test

Move the platform vertically to the ground. Place a test load of up to 50% of the rated capacity within the loading distance onto the platform. The loading distance and the rated capacity are engraved on the identification plate which should be fixed to the Slidelift. The loading diagram shows the possible load when changing the loading distance. Test to capacity additional 5 times.

The installer must check the Slidelift for deformation after the static test.

#### **Dynamic test**

The functions lifting, lowering, and tilting are to be checked using loads as indicated in the loading diagram.

For problems please contact our Technical Service Department.

#### Check against lifting an overload

A test needs to guarantee that a load of more than 125% of the maximum rated capacity can not be lifted off the ground.

#### Safety device check

Let all functions reach their maximum points until the safety devices respond.

Prior to delivery to customer, make sure the platform carriage moves smoothly out without side to side interference and locks into the Quick Lock position. See page (8) for drawings.

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## Torque table for all supplied and installed screws on Maxon liftgates

Screw Size	Tightening Torque	Screw Connections	Tightening Torque
8.8	in ft. lb		in ft. lb
M4	2	G1/4"	29
M6	7	G3/8"	70
M8	17	G1/2"	96
M10	33	Connection Nuts	
M12	59	M16 x 1.5	44
M14	96	M18 x 1.5	44
M16	143	Plugs	
M20	283	G1/8"	11
10.9		G1/4"	24
M12	85	G3/8"	51
M14	132		
M16	202		
M20	398		
Y1 – Y3 – YA - YN - YM	18		
Starter Solonoid			
M8	8		

## **Battery Capacity**

Model	GPS 44-X1	GPS 55-X1	
Size	2 group 31 - 12VDC - parallel		

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