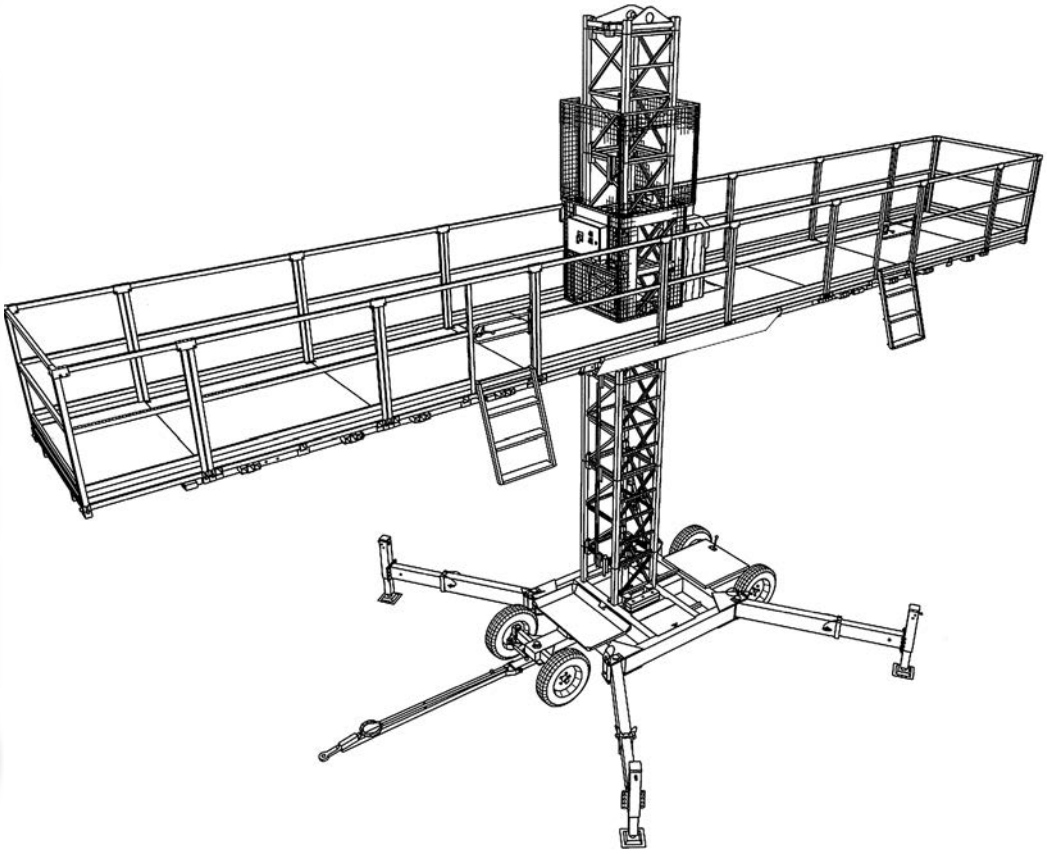
SCANCLIMBER®

SC4000



20-140295-1-2

INSTRUCTION MANUAL

SC4000 SERIAL NO:_____

SCANCLIMBER OY
• Turkkirata 26 • FI-33960 PIRKKALA, FINLAND •
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V23C_09.13

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CONTENTS

This document is the instruction manual for Scanclimber SC4000 mast climbing work platform.
This is a copy of the original instructions in English.
These instructions are made according to Directive 2006/42/EC on machinery and the European standard EN1495 + A2.

SCANCLIMBER®

Original

EC DECLARATION OF CONFORMITY

(Directive 2006/42/EC, Annex II A)

Manufacturer:

Scanclimber Oy
Turkkirata 26
33960 Pirkkala, Finland

Scanclimber Sp. z o.o.
ul. Surowieckiego 9
62-200 Gniezno, Poland

Herewith Scanclimber Oy and Scanclimber Sp. z o.o declare that mast climbing work platform

Scanclimber SC4000, serial number:___

and all separately certified available equipments for SC4000 MCWP are in conformity with the provisions of the Machinery Directive 2006/42/EC, as amended, and with national implementing legislation; European Standard EN1495:1997+A2:2009 and all other directives and European standards which are mentioned and required to be used together with EN1495:1997+A2:2009.

EC type-examination certificate:

Registered no. 44 205 09 376765-006 valid from 29.12.2009

TÜV NORD CERT GmbH
Langemarckstrasse 20
45141 Essen, Germany

Notified Body 0044

Pirkkala 05.06.2012

Eerik Nousiainen
CEO
Scanclimber Group

1. GENERAL INFORMATION

1. GENERAL INFORMATION

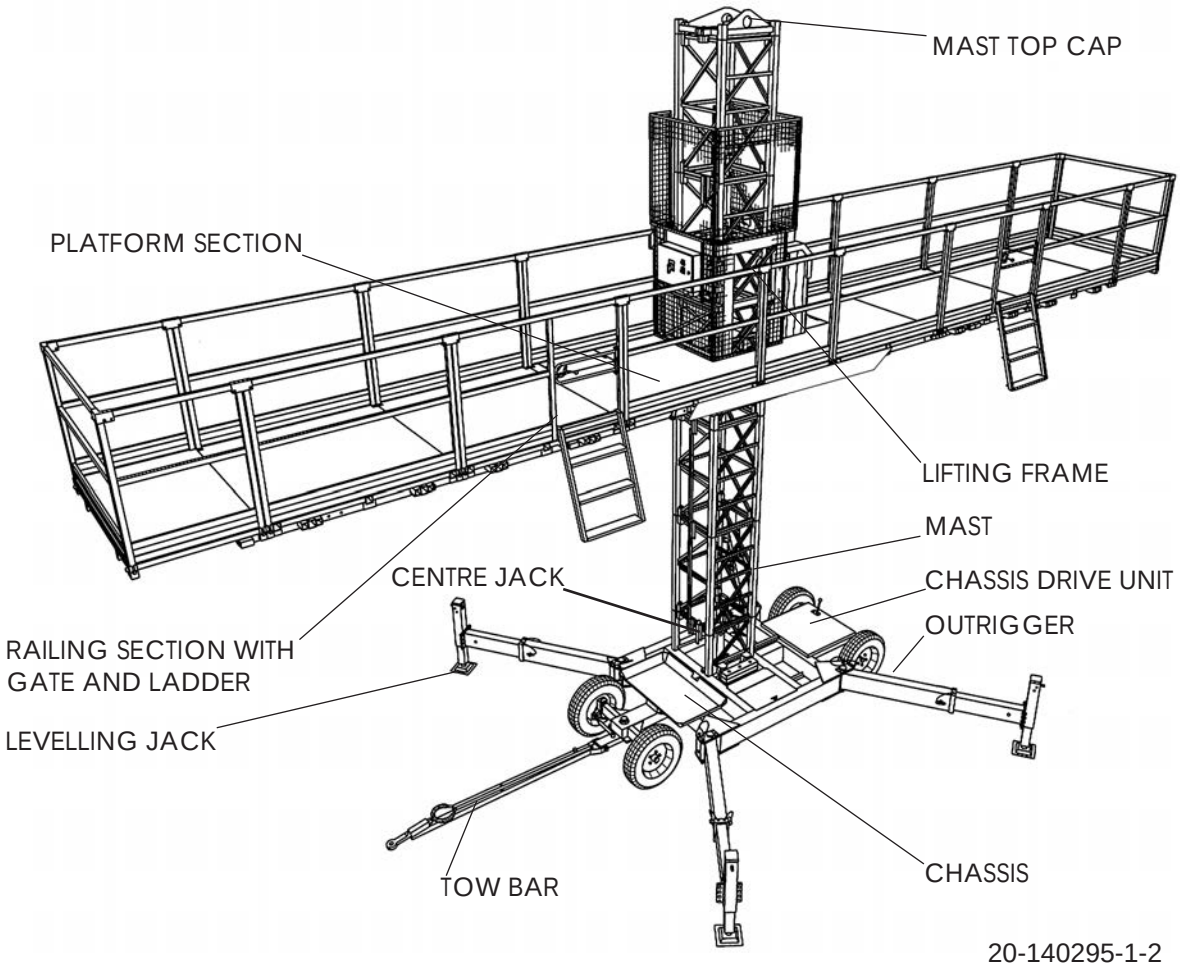
1.1. GENERAL DESCRIPTION

SCANCLIMBER SC4000 can be used either as a single or twin mast climbing platform. It is designed to position men/women with their tools and other necessary equipment and material for the working in great heights.

SCANCLIMBER SC4000 can be used during all kind of works: assembly, finishing, cladding and painting of buildings, facade work and industrial objects. It can be installed indoors as well as outdoors.

The unit is operated up and down with push-buttons of pendant control box. On the box there is also an emergency stop push-button.

SCANCLIMBER SC4000 consists of chassis, mast and platform sections which are connected to the lifting frame.



Drawing 1.1. SC4000 on wheel chassis.

Wheel chassis consists of a welded frame with four wheels, four telescopic outriggers can be turned out with levelling jacks, used for setting the chassis and mast in vertical position. Chassis drive unit is available for the wheel chassis to make the movements at worksite easier.

Towing of the **SCANCLIMBER SC4000** at worksite is possible with a tow bar.

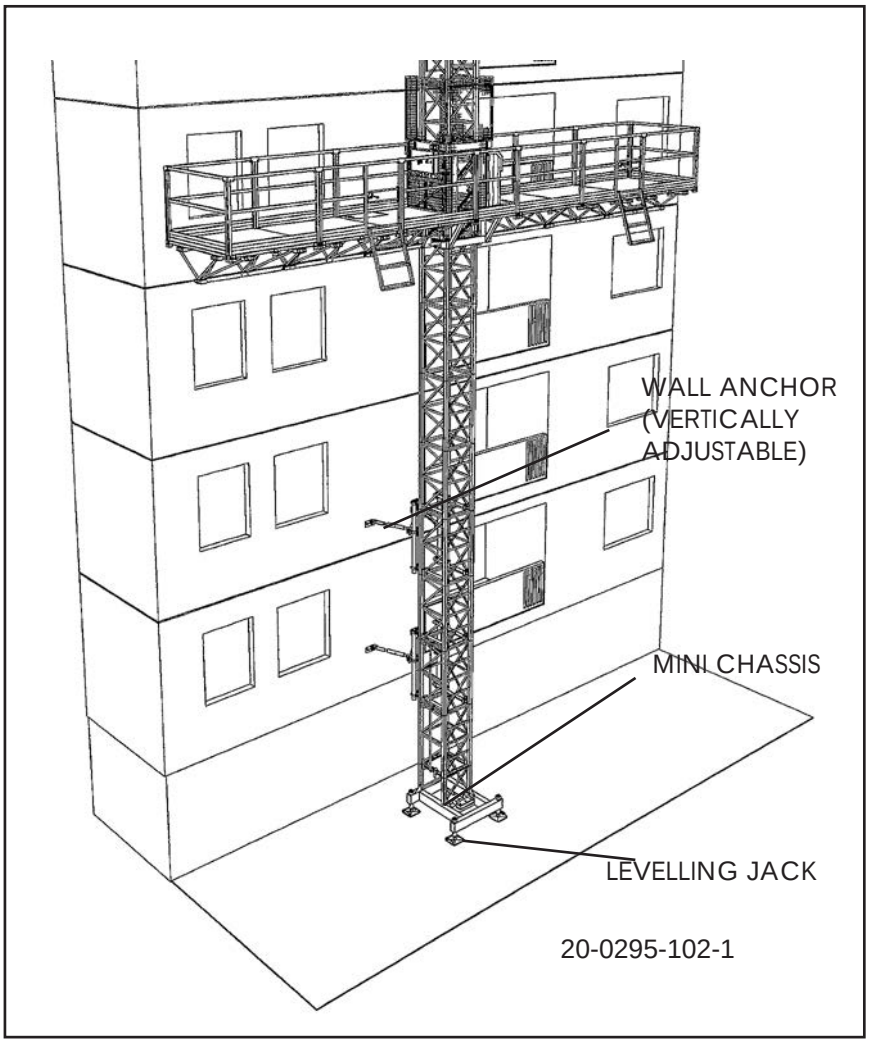
!! IT IS NOT ALLOWED TO TOW SC4000 ON PUBLIC STREETS !!

Mast consists of cross hatching structure mast sections which are assembled one on top of the other and connected with the mast screw sets. On one side of the mast section there is the rack.

Top cap is situated on the top of the mast. It works as a mechanical stopping device.

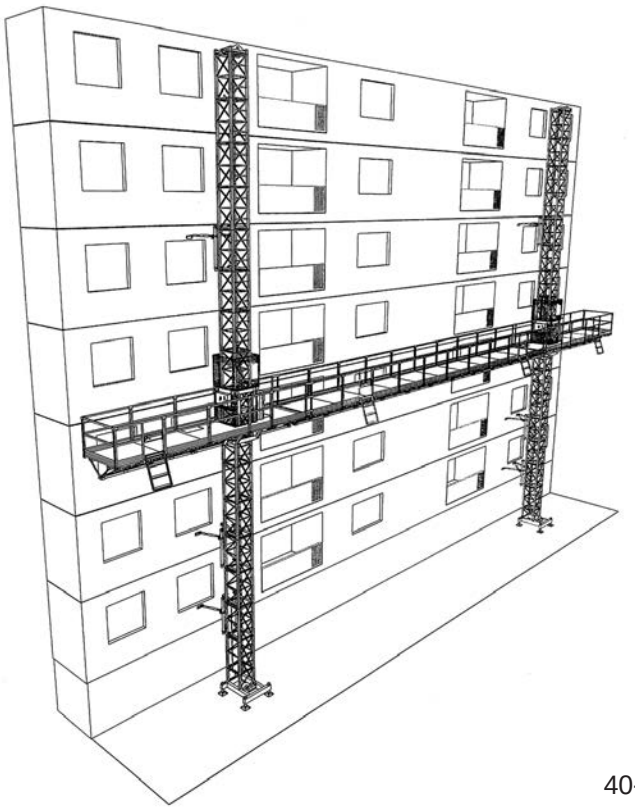
Top cap is also used as a hoist bracket when hoisting the mast or the whole **SCANCLIMBER SC4000**. The maximum hoisting capacity of the top cap is 5500 kg.

The freestanding height of mast, assembled onto the wheel chassis, is limited. By using the anchoring system it is possible to reach the maximum height of 100 m. The minichassis has been designed for the narrow and close worksites.



Drawing 1.2
SC4000 single on minichassis.

By connecting two **SC4000 SINGLES** together with platform hinged joints you will get a SC5000 **TWIN** with wider and more effecient working area.



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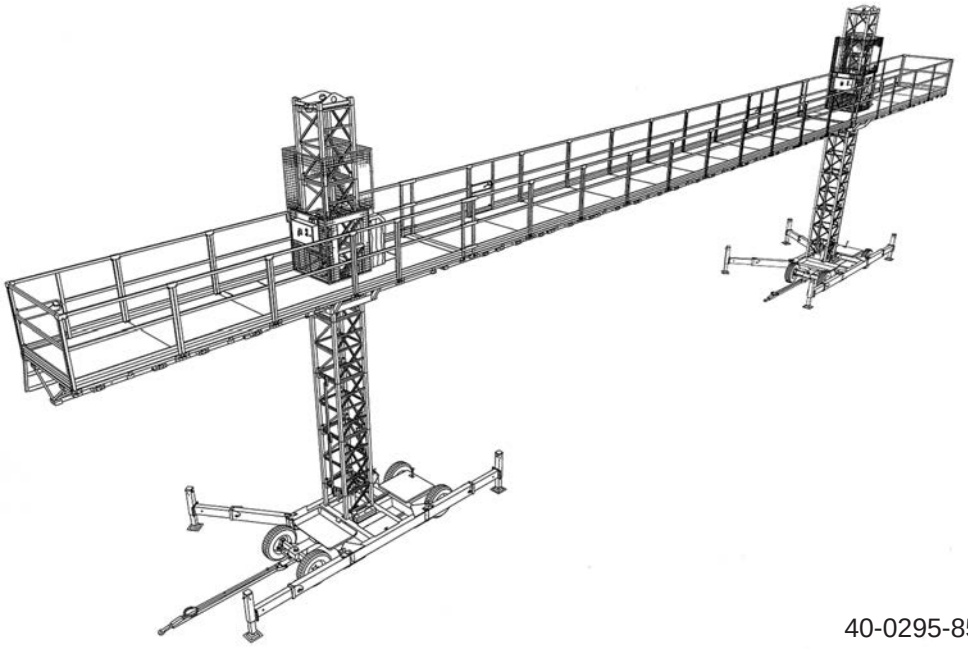
Drawing 1.3. SC4000 twin on minichassis.



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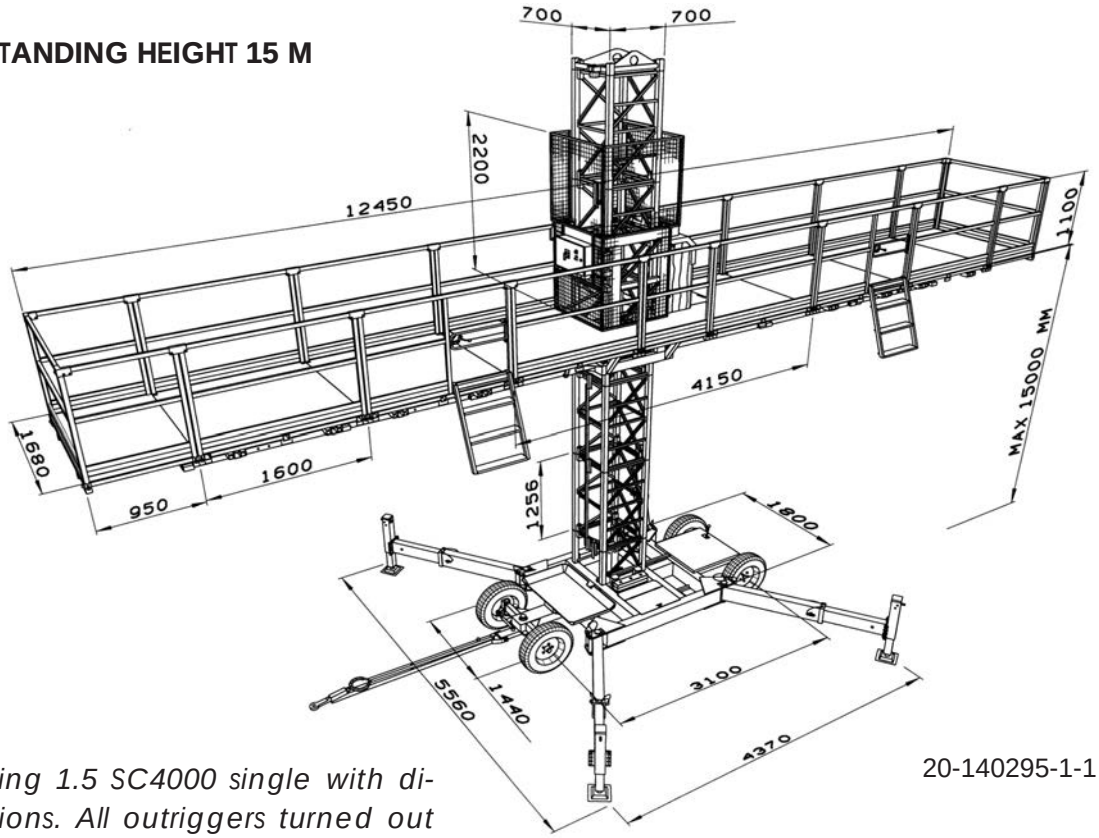
Drawing 1.4. SC4000 twin on wheel chassis.

FREESTANDING HEIGHT 15 M



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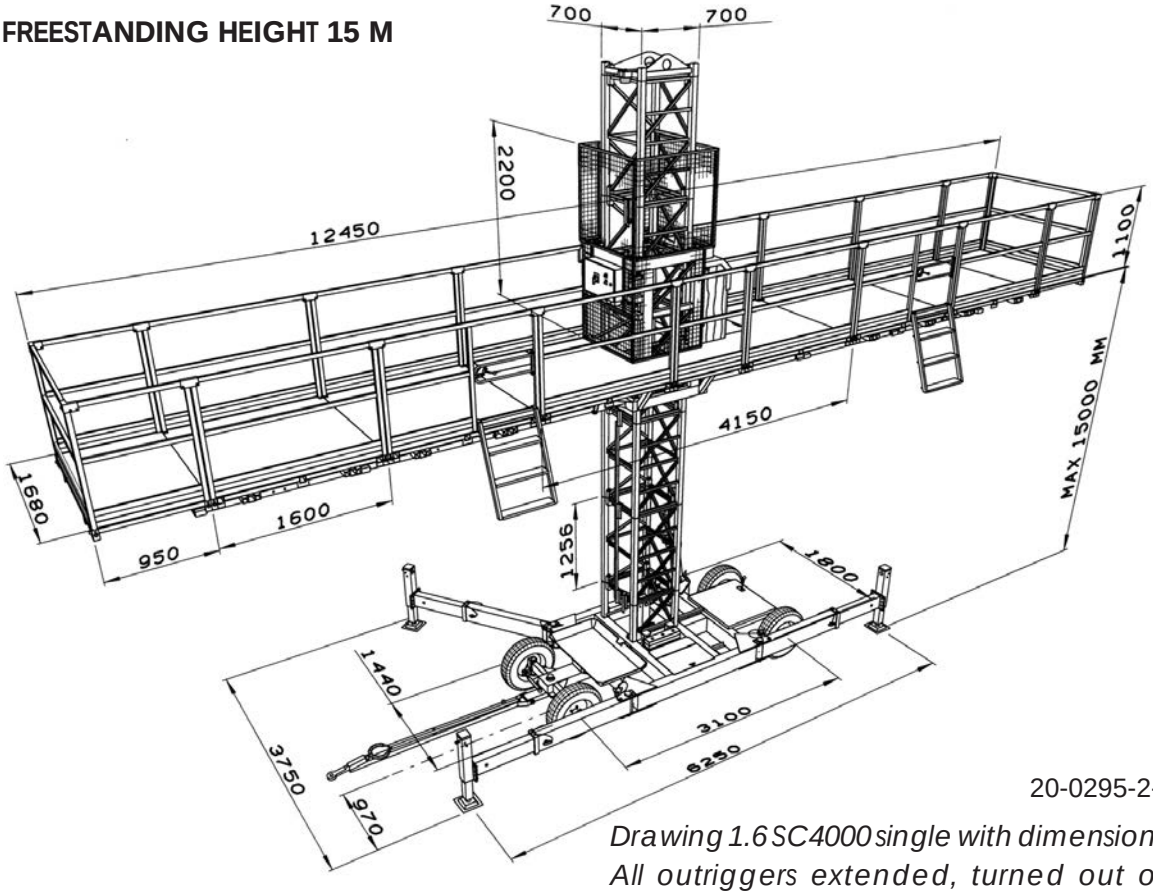
Drawing 1.5 SC4000 single with dimensions. All outriggers turned out and extended.

FREESTANDING HEIGHT 15 M



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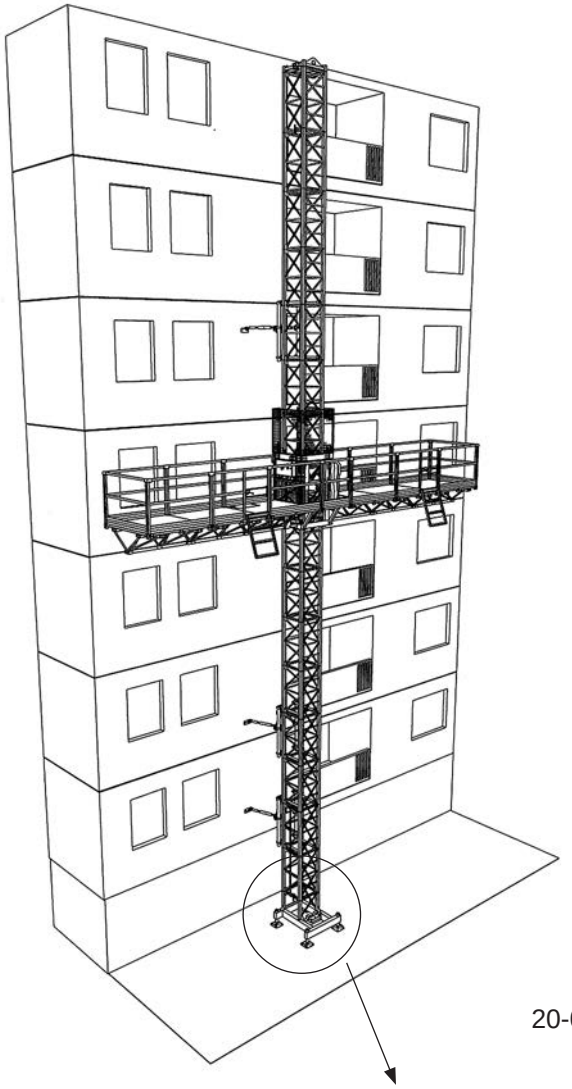
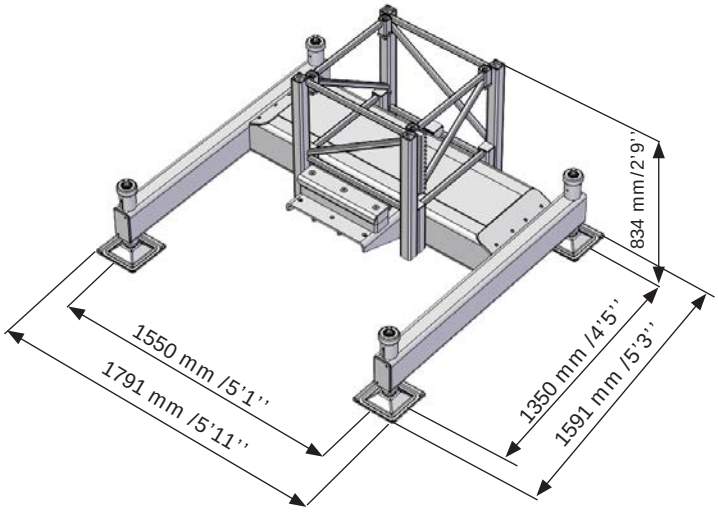
Drawing 1.6 SC4000 single with dimensions. All outriggers extended, turned out on mast side only.



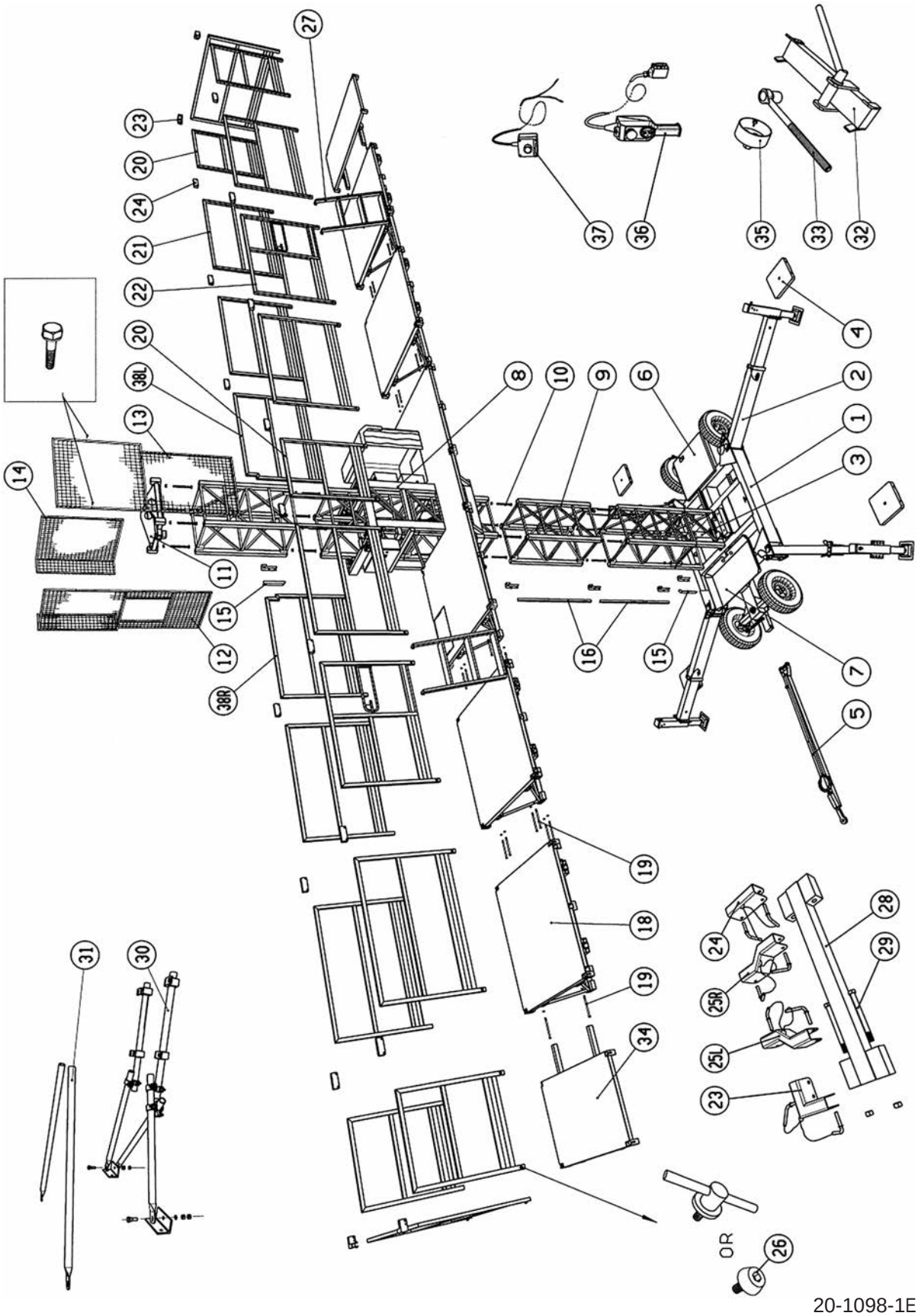


Drawing 1.7. SC4000 single on minichassis. Minichassis with dimensions.

1.2. BASIC DELIVERY SCOPE OF SC4000 ON WHEEL CHASSIS WITH 12.5 M PLATFORM (SEE PICTURE NO. 20-140295-1)

item	description	pcs
1.	Wheel chassis	1
2.	Telescopic outrigger with levelling jack	4
3.	Centre jack	1
4.	Ground plate	4+1
5.	Tow bar	1
6.	Chassis drive unit	1
7.	Cable tray	1
8.	Lifting frame	1
9.	Mast section	x)
10.	Mast screw set	4 pcs / mast section
11.	Mast top cap (with screw set 4 pcs)	1
12.	Mast guard net	1
13.	Mast guard net	1
14.	Mast guard net	1
15.	Counter part of limit switch (top and bottom position)	2
16.	Signalling bar	2
17.		
18.	Platform section (1,68 x1,6 m)	4
19.	Platform screw set	28
20.	Railing (1,0 m)	5
21.	Railing (1,6 m)	10
22.	Railing with gate (1,6 m)	2
23.	Railing coupler 2 (corner piece) with fastening screws	8
24.	Railing coupler 1 (straight) with fastening screws	14
25.R.	Railing coupler 3 (sidemounting) with fastening screws	2
25.L.	Railing coupler 4 (sidemounting) with fastening screws	2
26.	Hex-socket cap-screw	38
27.	Ladder	2
28.	Side platform support	2
29.	Side platform screw set	4
30.	Anchor set	x)
31.	Top anchor pipes	2
32.	Special tool (for platforms assembly)	1
33.	Special tool (for jacks)	1
34.	Platform section (1,68 x 1,0 m) (optional)	2
35.	Special key (for safety brake)	1
36.	Pendant control for drive of the chassis and horizontal and vertical drive of the platform	1
37.	Pendant control for safety brake test (single/twin unit)	1
38.R.	Railing for basic platform section	1
38.L.	Railing for basic platform section	1

x) *Depending on the mast height*



Drawing 1.8.
SC4000 single on wheel chassis with 12,5 m platform - basic delivery scope.

TABLE OF PART QUANTITIES, WHICH DEPEND ON LIFTING HEIGHT

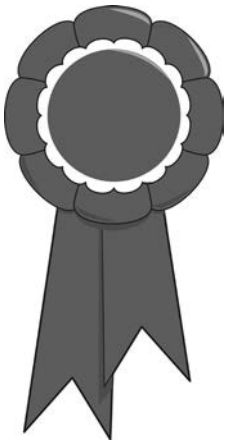
Parts and units, quantity of which depends on the lifting height are specified in the following table.
Quantity in brackets is for **SC4000 TWIN.**

Hoisting platform below 100 m

No.	Part	Drawing or spare Part No	Lifting height/m 20	30	40	50	60	70	80	90	100
			Quantity/pcs								
1.	**Mast section**	PG100323	16	24	32	40	48	56	64	72	80x)
			(32	48	64	80	96	112	128	144	160)
1.1.	Mast bolt set	10005932	64	96	128	160	192	224	256	288	320
2.	**Wall anchors**	PG140045	1	2	3	4	5	6	6	7	8
	Min. quantity of anchors for mast on wheel chassis		(2	4	6	8	10	12	12	14	16)
	Min. quantity of anchors for mast on minichassis		3	4	5	6	7	8	8	9	10
			(6	8	10	12	14	16	16	18	20)
3.	**Cables in metres** 5 x 6 mm²	m	28	38	48	58	68	78	88	98	108
			(56	76	96	116	136	156	176	196	216)

x) Basic unit includes one assembled mast section.

1.3. WARRANTY TERMS



The seller warrants new **SCANCLIMBER** mast climbing work platform is supplied free from defects in material and workmanship.

The warranty is valid for six (6) months from the date of delivery.

The warranty of the equipment and parts manufactured by sub-contractors is limited to the warranty of their respective manufactures.

The warranty does not cover:

1. damage or loss caused by transportation
2. damage or loss caused by misconduct, misapplication or accident
3. damage or loss caused by negligence of instructions, service, maintenance or storage
4. normal deterioration of the equipment and damage resulting from wearing parts: material like rubber tyres, electrical equipment etc.
5. damage or loss caused by maintenance or repairs performed by a nonauthorized service personnel
6. damage or loss caused by purchaser´s acts or omissions causing alternations to the quality or structure of mast climber
7. any such indirect damage or loss as loss of profit and downtime cost etc.

No claim will be accepted if non-original parts, not approved of by the seller, have been used.
Warranty claims should be done in writing describing the damage as completely as possible and sent to the address below within fourteen (14) days from the date of disclosure of the damage.

address:

SCANCLIMBER OY
- Turkkirata 26 • FI-33960 PIRKKALA, FINLAND •
- Tel. +358 10 680 7000 • Fax +358 10 680 7033 • www.scanclimber.com

The warranty liability is limited, at the sellers discretion to

(1) replacing the damaged part or
(2) repairing the damaged part by the seller or by a subcontractor or
(3) granting a price reduction

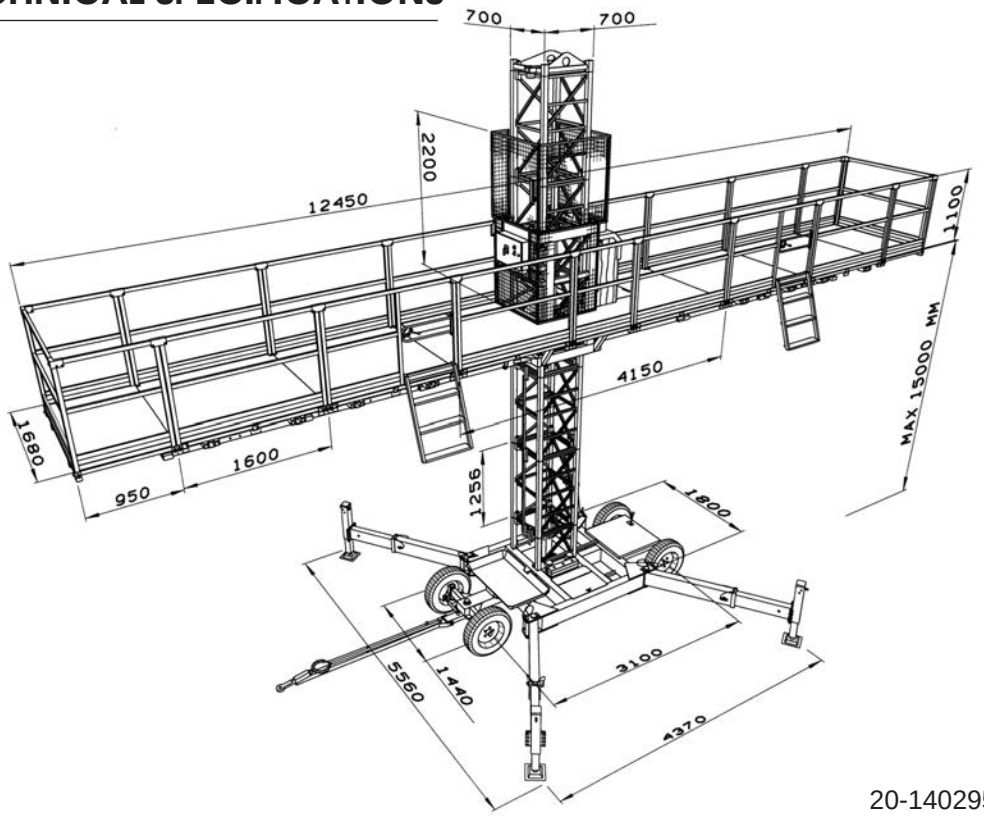
The warranty of replaced or repaired part expires at the expiration time of the warranty of the mast climber.

The purchaser is obliged to send the damaged part to the seller for inspection by a request. Replaced or refunded parts become the property of the seller.

2. TECHNICAL INFORMATION

2. TECHNICAL INFORMATION AND ELECTRICAL DIAGRAMS

2.1. TECHNICAL SPECIFICATIONS



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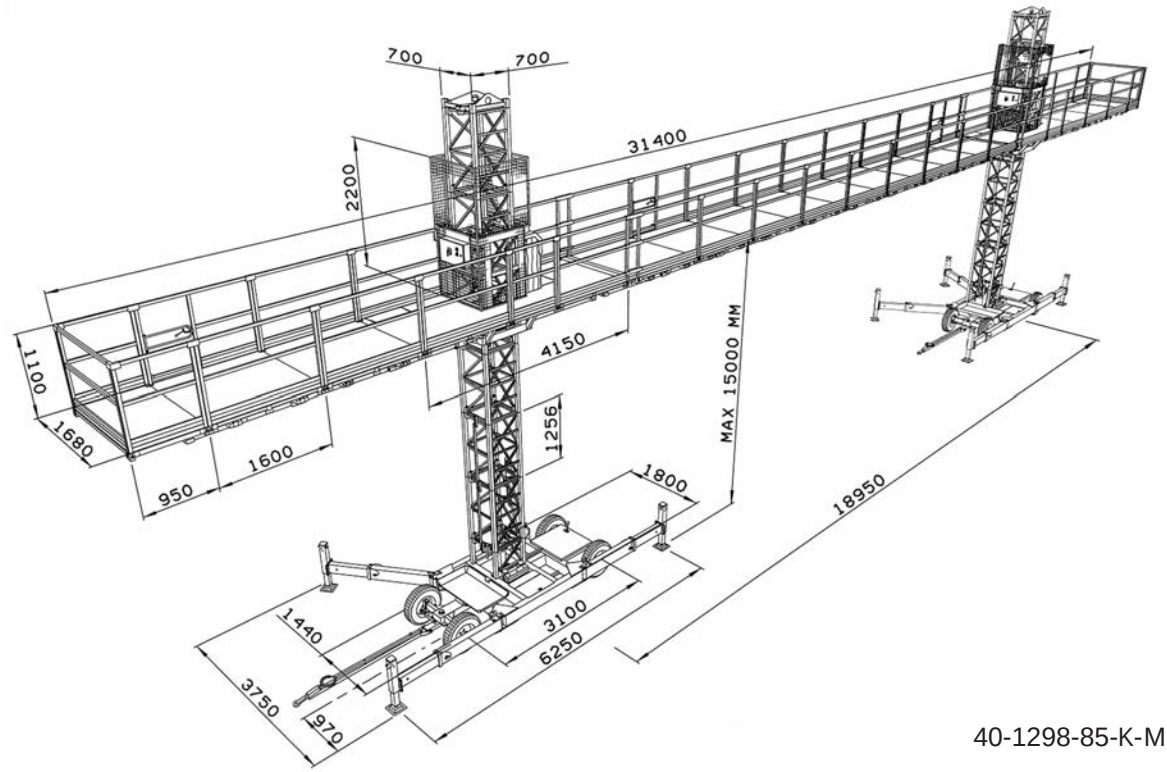
Drawing 2.1. SC4000 single freestanding with dimensions.



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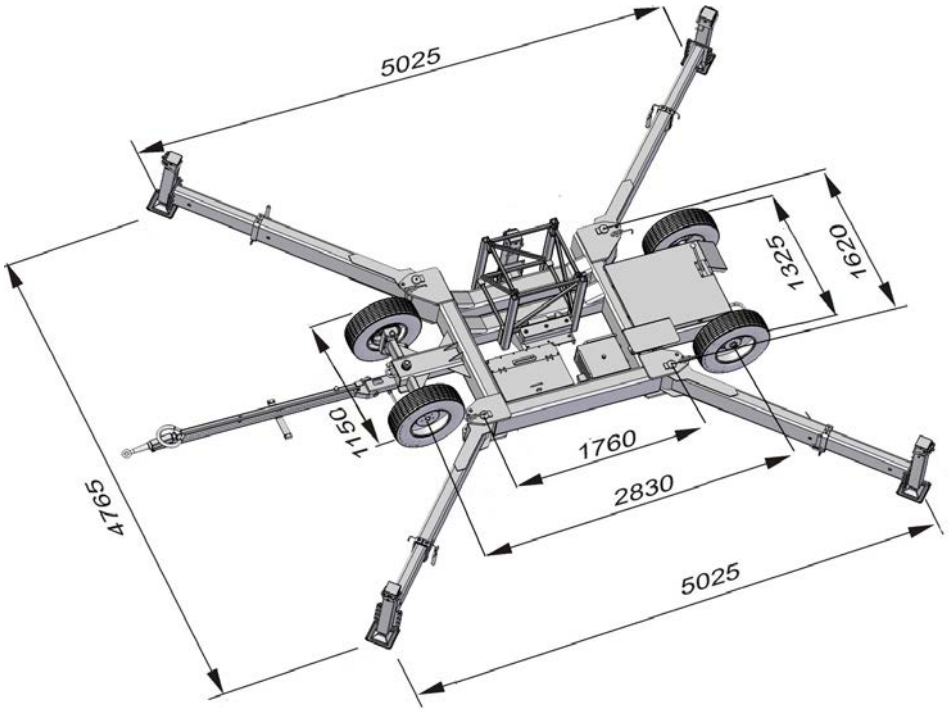
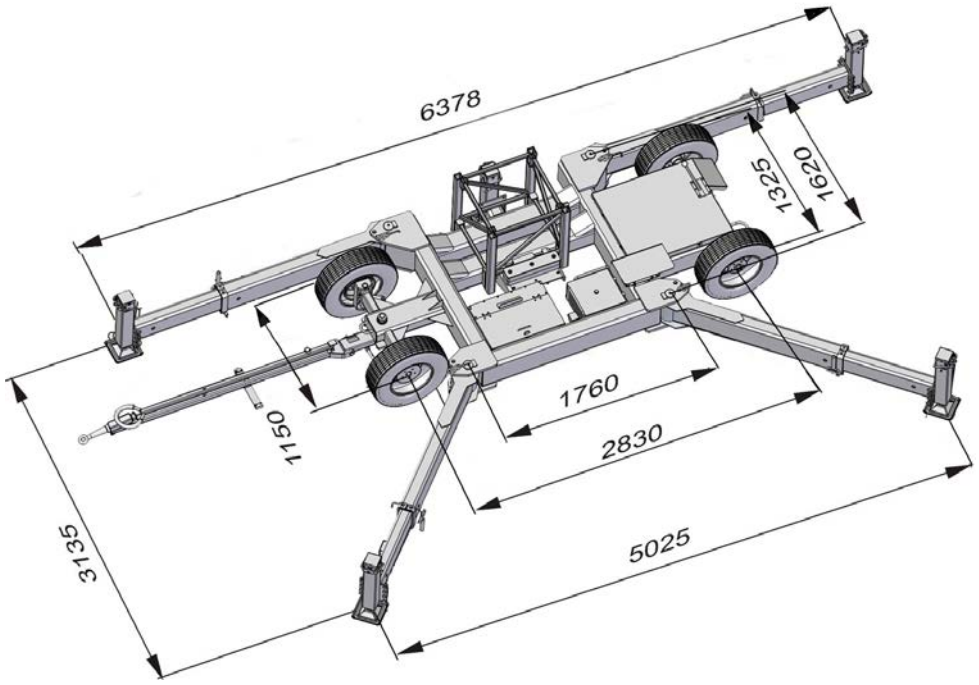
Drawing 2.2. SC4000 twin freestanding with dimensions.



Drawing 2.3. Universal wheel chassis with dimensions, X-position



Drawing 2.4. Universal wheel chassis with dimensions, K-position

CAPACITY			SINGLE	TWIN
• Max. platform length		m	13,75	31,4
• Max. lifting capacity				
- platform length	4,2 m	kg	2000	
	7,4 m	kg	1700	
	10,5 m	kg	1400	
	11,9 m	kg		4200
	12,5 m	kg	1200	
	13,75 m	kg	900	
	18,3 m	kg		3500
	24,7 m	kg		2680
	31,4 m	kg		2065
• Max . lifting height, freestanding				
- both sides outriggers extended and on mast side also turned	length	m/m	15/12,5	15/21,5
- both sides outriggers extended and turned	length	m/m	15/12,5	10/31,1
- indoor installation (no wind load)	length	m/m	25/12,5	25/31,1
- when using weather cover	length	m/m	10/10,5	10/18,3
• Max. lifting height, anchored mast		m	100	100
- Anchorage distance		m	12,5	12,5
- free overhang in operation		m	6,25	6,25
• Max. allowed windspeed during erection and dismantling		m/s	12,7	12,7
• Vertical travel speed		m/min	6	6
• Horizontal travel speed		m/min	13	13

DIMENSIONS AND WEIGHTS			SINGLE	TWIN
• Lowest transport height		m	2,35	2,35
• Lowest platform level		m	1,15	1,15
• Platform section	l x w	m	1,68x1,6	1,68x1,6
	weight	kg	155	155
• Platform extensions				
- in 10,5 m long platform		m	1,4	
- in 18,3 m long twin platform		m		1,4
• Mast section	l x w x h	m	0,7x0,7x1,25	0,7x0,7x1,25
	weight	kg	82	82
• Lifting case (fully equipped)	l x w x h	m	1,5x0,95x0,95	1,5x0,95x0,95
	weight	kg	1410	2 x 1410
• Chassis with outriggers	l x w	m	4,95x1,98	4,95x1,98
	weight	kg	1710	2 x 1710

ELECTRICAL DATA		SINGLE	TWIN
• Power- lifting machinery	kW	2 x 2,2	4 x 2,2
• Power- travel machinery	kW	1,1	2 x 1,1
• Supply voltage/frequency	V/Hz	400/50	2x400/50
• Control voltage/frequency	V/Hz	230/50	2x230/50
• Max. starting current	A	60	120
• Max. power consumption	kVA	8	16
• Power supply fuses	A	3x16	3x16+3x16
• Outlets for hand tools - voltage and current	V/A	2x230/16	4x230/16

SAFETY DEVICES	SINGLE	TWIN
• Mechanical safety brake	YES	YES
• Emergency stop push-button, top and bottom limit switches	YES	YES
• Electromagnetic brake	YES	YES
• Fault current relay	YES	YES
• Safety sensor during erection	YES	YES
• Chassis drive interlocking limit switch	YES	YES
• Mast guard nets	YES	YES
• Safety railing (height 1,10 m) and toeboards	YES	YES
• Automatic platform level control system on twin mast version		YES
• Emergency lowering system	YES	YES

WEIGHTS OF THE MAIN COMPONETS FOR SC4000 SINGLE AND TWIN

NO.	COMPONENT NAME	kg
1.	Wheel chassis with outriggers and jacks	1710
2.	Chassis drive unit	70
3.	Tow bar for wheel chassis	39
4.	Minichassis	270
5.	Jack	30
6.	Lifting frame - SC4000 steel frame - fully equipped	 650 1410
7.	Mast section	82
8.	Mast bolt set (4)	4,4
9.	Mast guard / set - front guard - left guard - right guard	57,4 13,2 24 20,2
10.	Mast top cap	45
11.	Platform section - 1,6 m - 1,0 m	 155 45
12.	Railing - 1,6 m - 1,6 m with gate - 1,0 m	 15,2 19,2 10,8
13.	Ladder	8,6
14.	Anchoring parts /set - standard - vertical with pipes - vertical with plates	 55 100 83,5
15.	Telescopic extension parts for one platform section	47,8
16.	Mast assembly crane (without winch)	45
17.	Hinge parts (twin)	12,5
18.	Weather cover/one (1) platform section without timber- and cover material	17

2.2. OPTIONAL EQUIPMENT

2.2.1. MINICHASSIS

Wheel chassis can be replaced by mini-chassis. If this replacement is needed, the instructions below should be followed.

1. Shorten the platform to 4,1 m.
2. Remove the mast top cap.
3. Assemble one mast section.
4. Switch on the main current switch
5. Drive the platform to the height of the first and the second mast section.
6. Assemble the mast top cap.
7. Switch off the main current switch
8. Remove the bottom limit switch counter part.
9. Remove the bottom fasten ing piece of the signalling bar.
10. Put on the lifting hooks to both lifting loops of the mast top cap.
11. Tighten the chains / cables of the lifting hooks.
12. Loose the screws of the bottom mast section.
13. After the mast screws have been loosed the platform is lifted onto the minichassis and fastened with mast screws.
14. Assemble the bottom limit switch counter part.
15. Assemble the bottom fastening piece of the signalling bar.

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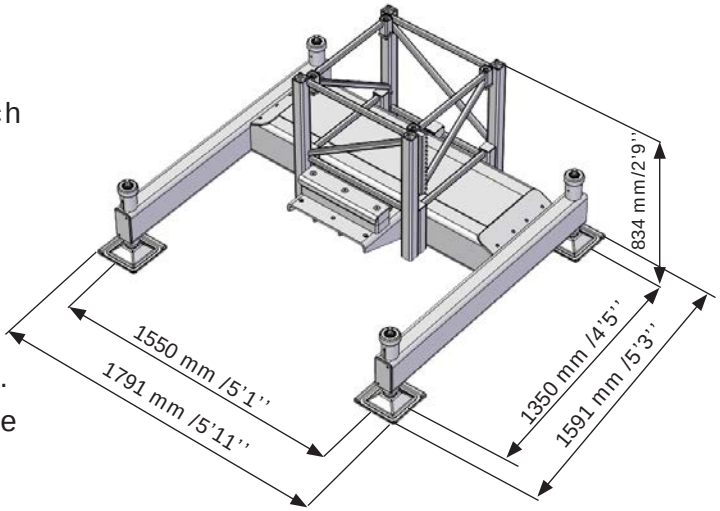
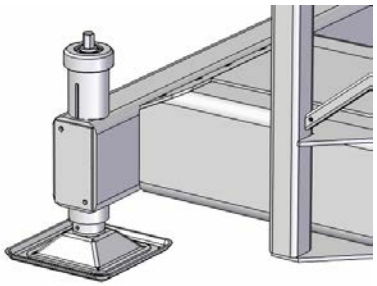
! WARNING !
TIGHTEN THE LIFTING CABLES PROPERLY TO PREVENT PLATFORM FROM FALLING WHEN THE MAST SCREWS ARE LOOSED.

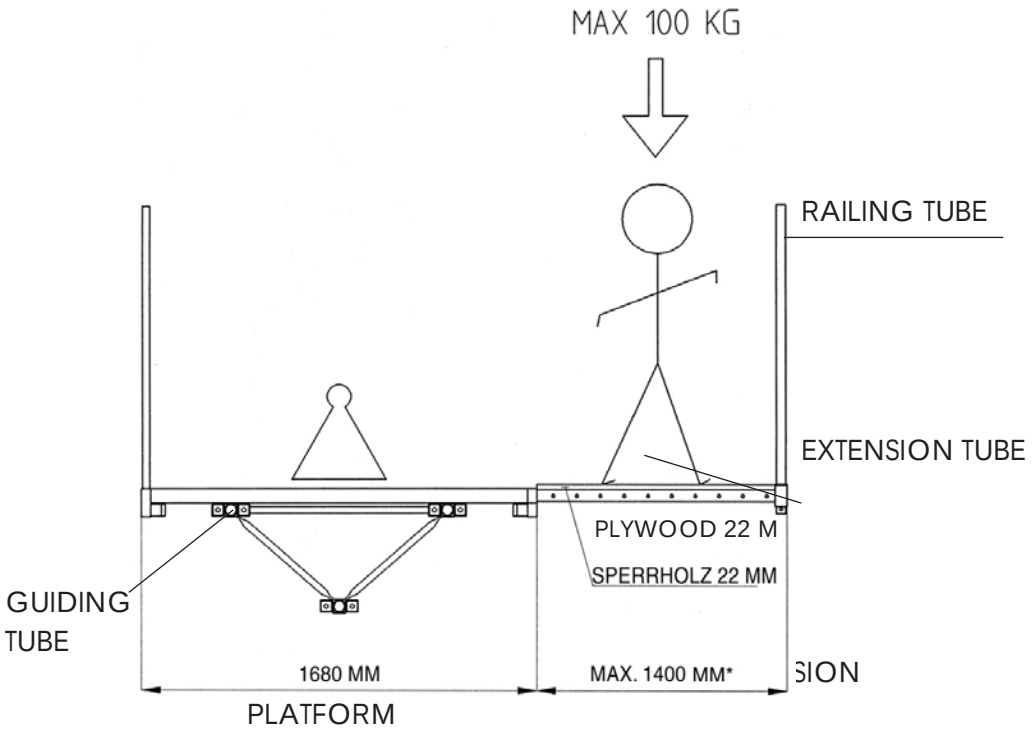




Drawing 2.5 Minichassis with dimensions.

2.2.2. TELESCOPIC EXTENSIONS

-Telescopic extensions max 1,4 m with max. load 100 kg



! THE LOAD ON THE TELESCOPIC EXTENSION RESPECTIVELY REDUCES THE MAX. LOAD CARRYING CAPACITY OF THE PLATFORM. USE RAILINGS.

! ***) ATTENTION !**
BEFORE FIXING THE EXTENSION GET ACQUAINTED WITH THE LOADING TABLES!

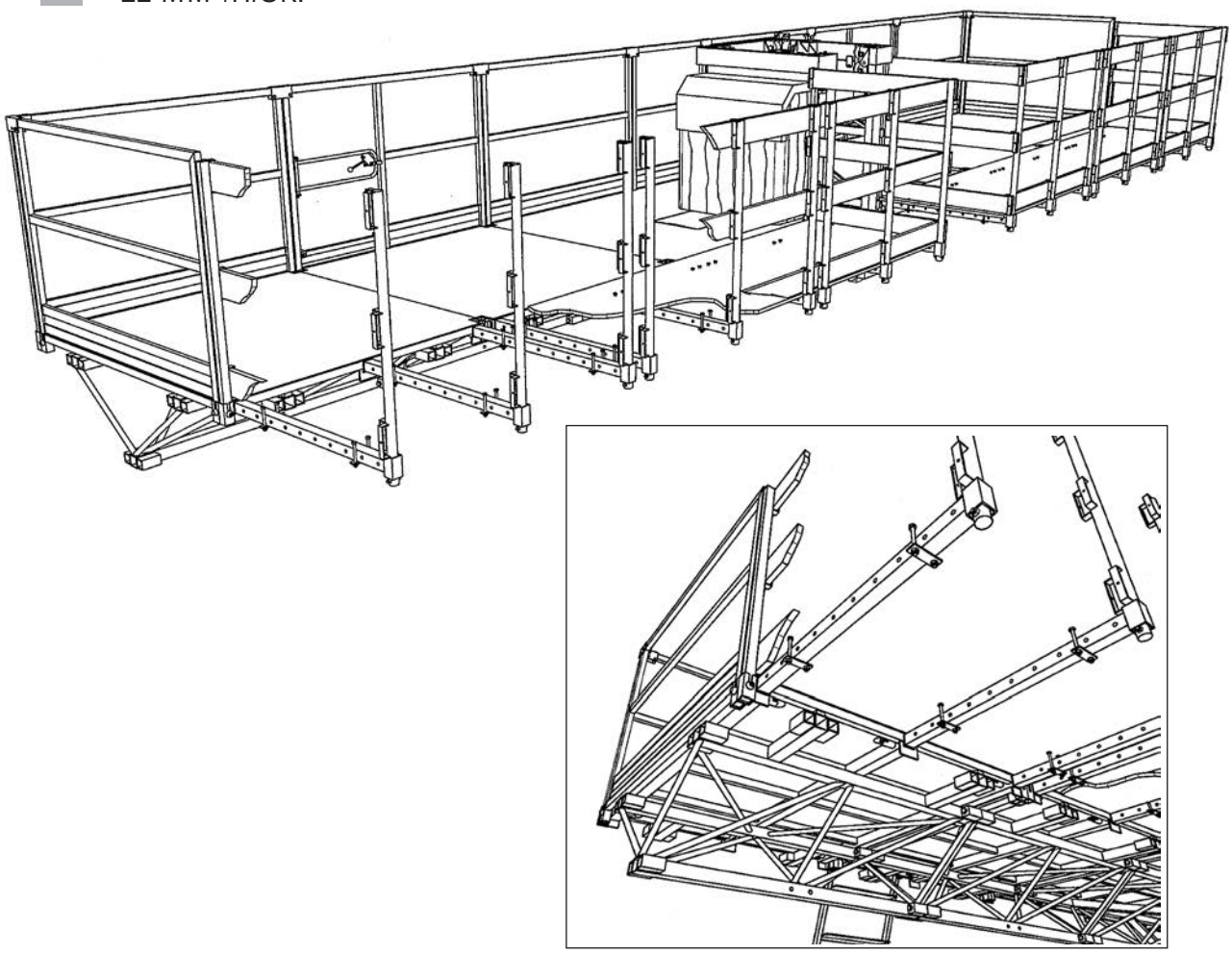
Drawing 2.6. Loading table for telescopic extensions.

The frame of the telescopic platform consists of fixed guiding tube, extension- and railing tubes. The guiding tube is under the platform section. The extension tube is situated inside the guiding tube and can be pulled out and locked to desired length. The railing tube should be locked to extension tube.
3 pieces of extension tubes and railing tubes are needed for each platform section. Furthermore 2 square railing tubes are needed for both ends of extension platform.
In pictures the extensions for **SC4000** will be described. According to the total length of the platform the extensions are as follows:

	Platform length	**Extension width**
SC4000	max. 10,5 m	1,4 m
SC4000 twin	max. 18,3 m	1,4 m

! **NOTE !**
THE PLYWOOD BOARD WHICH WILL BE ASSEMBLED ONTO THE EXTENSION TUBES MUST BE AT LEAST 22 MM THICK.

! !! GET ACQUAINTED WITH THE LOADING TABLES BEFORE ASSEMBLING EXTENSIONS !!



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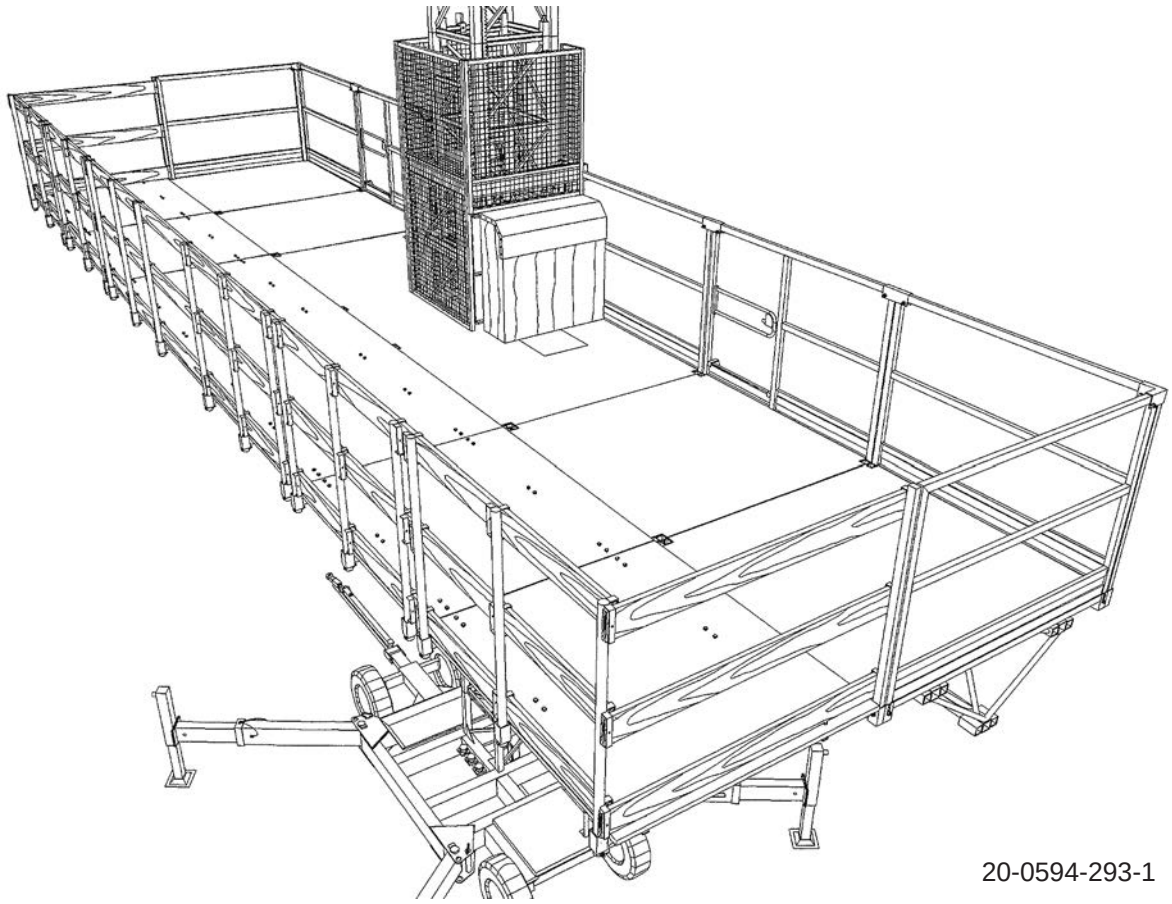
Drawing 2.7. Telescopic extension.



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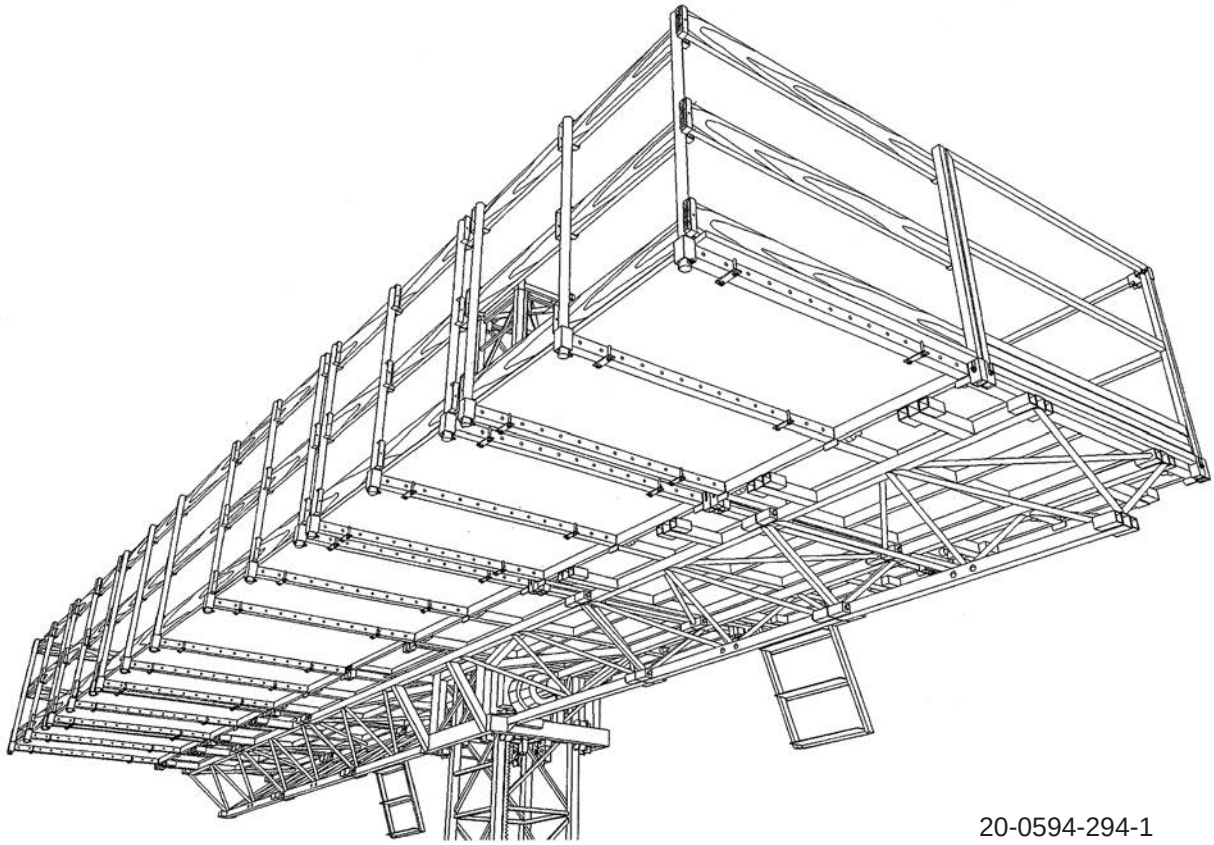

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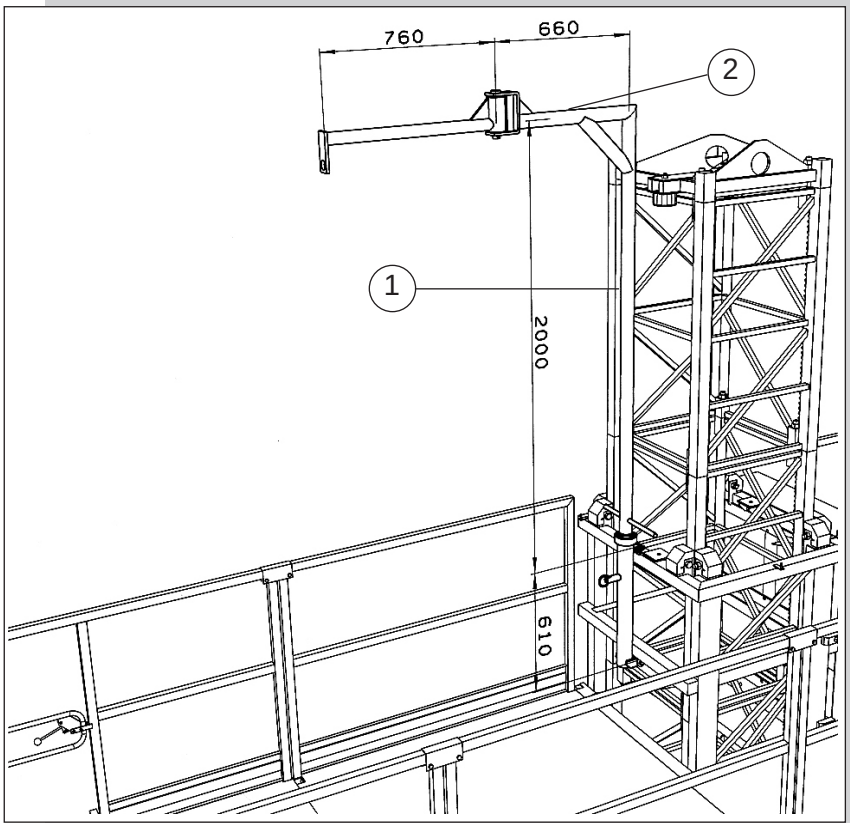
Drawing 2.8. SC4000 with telescopic extensions.

2.2.3. MAST ASSEMBLY CRANE



Drawing 2.10. Mast assembly crane with dimensions.

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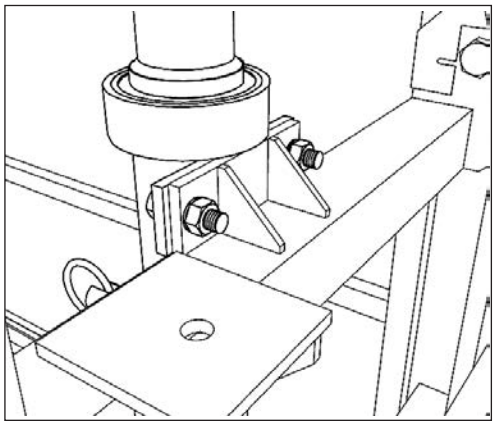
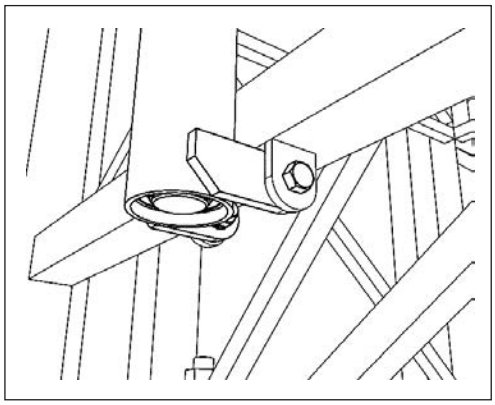


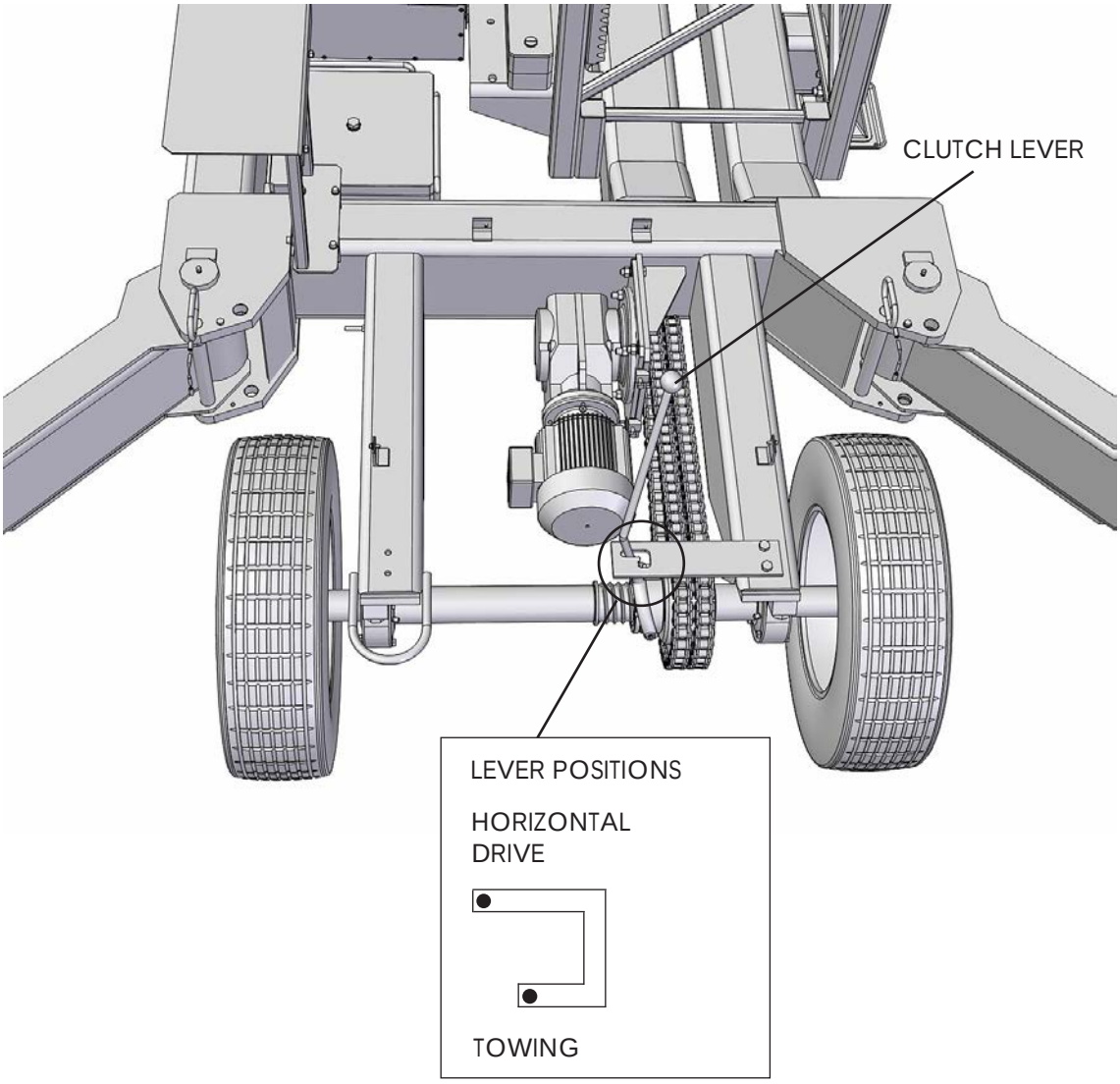


Maximum load capacity is 100 kg.

! WARNING !
THE USE OF THE MAST SECTION ASSEMBLY CRANE IS STRICTLY FORBIDDEN AT THE SAME TIME WITH THE USE OF THE PLATFORM.
NOTE!
THE MAST ASSEMBLY CRANE IS ONLY MEANT FOR THE HANDLING OF THE MAST SECTIONS.

The vertical part 1 of the assembly crane has to be locked so, that the horizontal part 2 of the assembly crane does not touch the mast when the platform is moving up and down.

2.2.4. CHASSIS DRIVE UNIT

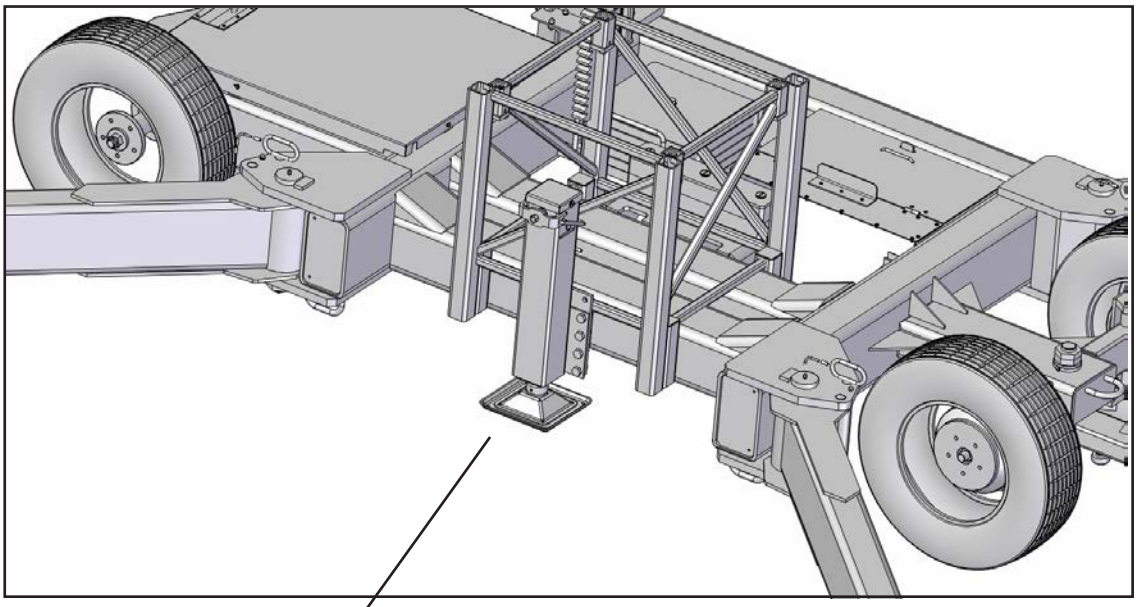


Drawing 2.11. Chassis drive unit and positions of the clutch lever.

The unit consists of two main parts; the gearmotor and the chain drive. It makes the horizontal movements of **SC4000** easier. Driving speed is 13 m/min.
Driving of the chassis can be done by the same remote control box as driving of the platform. The pendant control cable has to be connected to the socket on chassis electric box. Clutch is used by the clutch arm. When towing the machine by tow bar, move the clutch arm to towing-position.

! WARNING:
AFTER RELEASING THE DRIVING MECHANISM CLUTCH THE MACHINE HAS NO BRAKES!

2.2.5. CENTRE JACK

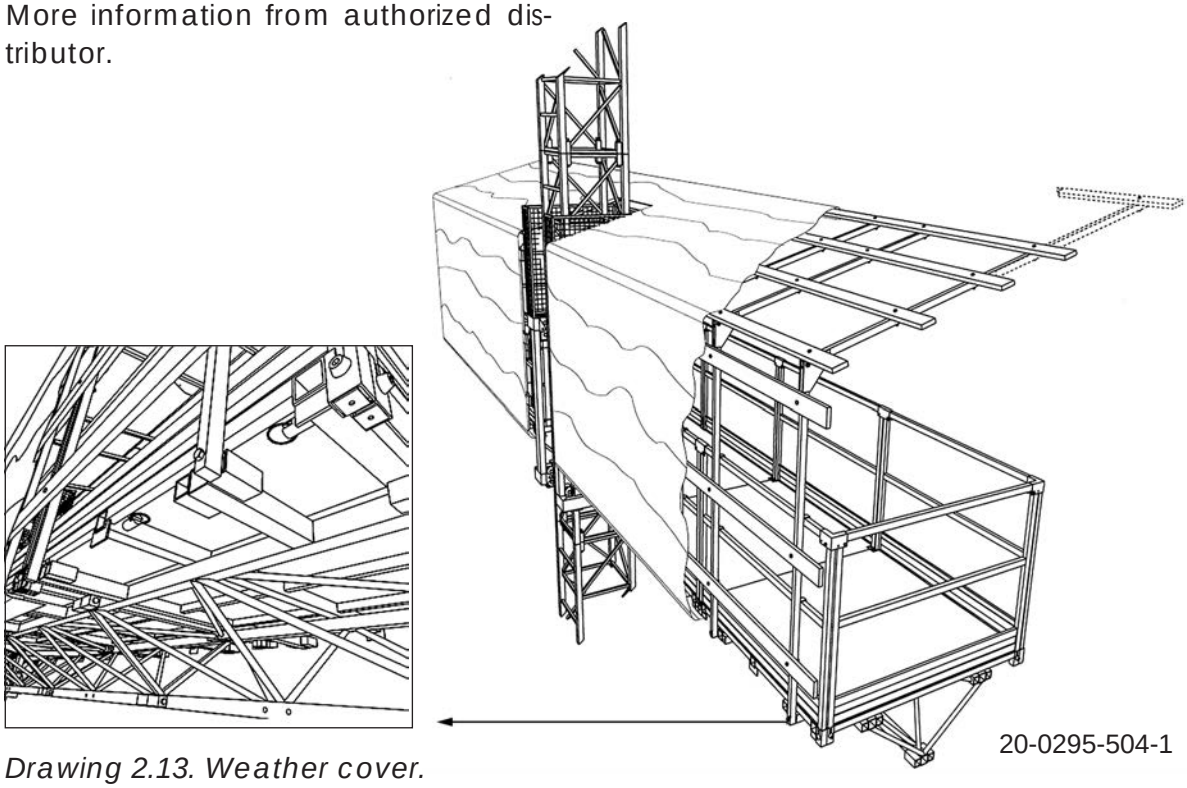


Drawing 2.12. Centre jack.

! NOTE!
ALWAYS USE CENTRE JACK.

2.2.6 WEATHER COVER

More information from authorized distributor.



20-0295-504-1

Drawing 2.13. Weather cover.

! PLEASE NOTE!
THE EXTRA LOAD OF THE WEATHER COVER HAS TO BE REDUCED FROM THE MAX. LOAD CAPACITY OF THE PLATFORM.

Max allowed freestanding height and platform lengths when using weather cover (wind speed < 12,7 m/s).

MAST	PLATFORM LENGTH	HEIGHT
SINGLE TWIN	10,5 m 18,3 m	10 m 10 m

2.2.7. WALL ANCHORING

Standard anchor
Top anchor
Vertically adjustable anchor
(See the Wall anchoring instructions chapter 4.)
Maxianchor

2.3. ELECTRICAL INSTALLATION

Platform is supplied with 400 V/50 Hz AC mains.
The electrical installation of the platform consists of the following circuits:

- Power circuit 3 x 400 V
- Control circuit, safety separated 48 V
- Signalling circuit 230 V
- Tool circuit for hand tools, protected against fault current / 30 mA 230 V

Power circuit

The pover circuit is responsible for feeding the electric motors (M1, M2 and M3) and the disk brake of the motors.

The control centre of the chassis is responsible for chassis drive. It consists of supply socket (X1), main switch (Q1), phase-inverter switch (Q1.1), motor protection fuses (F1, F2), directional contactors (K1-K3), and transformer (T1) for control circuit.

The control centre of the platform is responsible for vertical drive. It consists of main switch (Q2), motor protection fuses (F10, F11), phase control relay (F8), directional contactors (K4-K7) and protection fuse (F7) for the protection transformer (T2).

Main switches switch off power- and control circuits. Motor protection fuse closes power circuit in case of failures, overload and short-circuit. Phase control relay constitutes also protection of circuit in case of phase direction change.

! WARNING!
THE MAIN SWITCH (Q2) IN PLATFORM ELECTRIC BOX DOES NOT DISCONNECT THE ELECTRICITY OUT OF THE SOCKETS (E1 AND E2) AND THE HOOTER (H2).

Control circuit

Chassis drive control circuit in chassis drive electric box consists of chassis drive interlocking limit switch (S10) and contactor coils (K1-K3).

The circuit is protected against short circuit by automatic fuse (F3). The chassis will be controlled through the remote control (E3) which is connected to the chassis electic box socket X3.

Same remote control (E3) is used for both chassis and platform. For chassis drive there is a push-button (S4) forward, (S5) backward and an emergency stop (S6).

Platform control circuit in platform electric box consists of key switch (S3), safety brake switch (S13), limit switch (S11) for top and bottom position S, safety limit switch (S12) for S11, safety sensor (B1) for mast assembly (inductive), safety sensor (B2) for alarm hooter (H2) and contactor coils (K4-K10).

The circuit is protected against short circuit by protection fuse (F7). The control voltage 48 V is fed by protection transformer (T2).

The platform is controlled through a remote control (E3) which is the same as used for the chassis drive. Remote control consists of push-button (S4) up, (S5) down and emergency stop (S6).

Signalling circuit consists of hooter push-button (S2) and hooter (H2). The circuit is protected against short circuit through an automatic fuse (F6). The signal can be given by pushing the hooter push-button, which is on platform electric box.

When the platform is lowered or raised the hooter (H2) on the bottom-area of the platform signals automatically after the safety sensor (B2) is activated by the signalling bar at adjusted height.

Socked circuit for hand tools

Socked circuit includes two 230 V /50 Hz sockets (E1 and E2). The sockets are protected against electric shocks through an automatic fuse (F4) and with a fault current protection of 30 mA.

Electric cables

! WARNING!
THE MAIN SWITCH (Q2) IN PLATFORM ELECTRIC BOX DOES NOT DISCONNECT THE ELECTRICITY OUT OF THE SOCKETS (E1 AND E2) AND THE HOOTER (H2).

The electricity supply from the chassis electric box to the platform electric box will be supplied with a 5x6 mm^2 cable. The electric system of the platform consists of several electric equipment (motors, brakes, hooter, safety switches and remote control). This equipment has been connected by using cables 2.5 mm^2 and 1,5 mm^2 (Cu-cored cross-section).

Protection against electric shocks

As an additional system of anti-electric shock protection, neutralisation is applied. All accessible metal parts and casing of electric equipment such as sockets, switches, hooter, electric motor and brake are connected with the main protective terminal PE, situated inside the remote control device, with the help of protective conductors.

- **fault current protection in sockets 30 mA**
- **control power on the platform safety separated**

Protection against lightning

Platform should be connected to lightning protection system of the building / worksite. If there is no such system available, the earthing must be made according to local requirements. The earthing resistance should not exceed 10 Ohms.

2.4. REQUIREMENTS FOR THE SUPPLY VOLTAGE

380-400 V±5%, 50 Hz 3-phase

- Main fuses
  SC4000 single **3 x 32 A**
  SC4000 twin **3 x 32 A+ 3 x 32 A**
- Supply cable **5 x 6 mm^2 (min)**

An example:
5 % of 400 V is 20 V (min. supply voltage for proper operation of the platform is 400 V - 20 V = 380 V).
The max voltage drop of 20 V will be reached with a total cable (5 x 6 mm^2) length of appr. 100 metres. Total cable length = supply cable length + cable connecting the chassis and platform.

! !!! PAY ATTENTION TO THE LENGTH OF THE SUPPLY CABLE => VOLTAGE DROP

3. SAFETY REGULATIONS

3. SAFETY REGULATIONS AND LOADING TABLES

3.1. NOTES

1. Safety rules must be strictly observed.
2. Dangerous places around platform should be marked with well visible warning signs. The access of unauthorized persons to these premises should be prevented by means of proper enclosures, railings or fences.
3. Inspections and maintenance should be carried out according to the instructions.
4. Any modifications (or applications) done to the machine without a written approval from the manufacturer are not allowed.

3.2. SAFETY RULES

1. All persons employed at supervision, operation, assembly and disassembly, maintenance and repairs of the platform and all persons using the platform **are obliged to strict observance of local work and safety rules, laws and regulations.**
2. Only the authorized persons like the operators and maintenance technicians are allowed to use the machine.
3. It is forbidden to overload the platform during operation. Also the unprofessional use of the machine is forbidden.
4. It is forbidden to carry out assembly- or disassembly works in strong wind. (Wind speed exceeding 12,7 m/s.)
5. When working with the platform it must be controlled that all railings have been assembled into their places and the fastening of the railings has to be controlled also.
6. If a thunderstorm arises, stop working immediately, switch off the electricity and disconnect the feed cable.
7. It is forbidden to let the persons who are not in good physical or mental condition to operate or work with a platform.
8. It is forbidden to let any unauthorized persons to come to the premises of the machine during its assembly or operation.
9. There should not be any obstacles in the operation area of the platform.
10. Check that there is no material sticking out of the surface area of the platform. The movements of rolling and moving equipment or machinery must be prevented.
11. The platform must be stationed at the lowest position when entering, loading or leaving it.
12. It is forbidden to carry out any assembly- or disassembly works of the platform or the mast while any other works will be carried out on the platform.
13. All persons working at assembly and disassembly, operation and maintenance of the platform should be in good health and should fulfil the requirements for working at heights.

VOLTAGE RANGE (phase to phase)	MINIMUM SAFE APPROACH DISTANCE
0 V - 300 V	avoid contact
300 V - 50 kV	3,1 m
50 kV- 200 kV	4,6 m
200 kV - 350 kV	6,1 m
350 kV - 500 kV	7,7 m
500 kV - 750 kV	10,7 m
750 kV -1000 kV	13,8 m

Table 3.1 Minimum safety approach distance to energized power lines.

14. All persons using the platform and the other persons being within the reach of the platform area should obey the safety instructions.

15. The use of the platform out of its normal technical performance is not allowed.

16. It is strictly prohibited to use damaged elements and parts while assembling the platform. Do not use damaged lifting mechanism.

17. All the elements and parts should be handled correctly and carefully during assembly- or disassembly works of the platform.

18. It is forbidden to walk and stand under the lifted platform.

19. WARNING!
Access under the lifted platform is permitted for service- or repair personnel only. During those actions the platform has to be supported and the main current disconnected.

20. When working near the high tension voltage lines, the authorities of the local electricity works have to be contacted.

This distance will be measured from:

a) the part of the machine, as nearest voltaget conducting part.

b) a person holding a tool, which is nearest to the part conducting the voltage.

21. When leaving the worksite, unplug the feed cable.

22. The keys for electric boxes should be in the possession of the operator only.

! NOTE! ALWAYS BEFORE OPENING THE ELECTRIC CENTRE OF THE CHASSIS, PLATFORM OR TWIN PLATFORM, THE MAIN VOLTAGE HAS TO BE SWITCHED OFF WITH THE MAIN SWITCH Q1 OR IT HAS TO BE OTHERWISE CAREFULLY SECURED THAT THE ENERGIZED POINTS WILL NOT BE TOUCHED.

3.3. LOADING TABLES SC4000 SINGLE

BEFORE STARTING TO WORK WITH THE MACHINE ALWAYS GET ACQUAINTED WITH THE LOADING TABLES!!

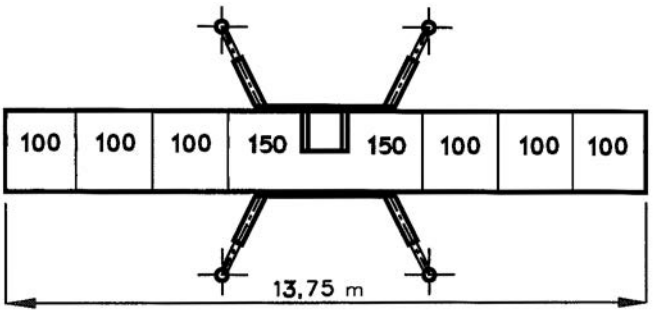
The most usual loading variations are shown on the loading tables. There you can find the maximum wind speeds too. If other variations than those shown on the loading tables are needed, please contact the distributor.

The following tables are situated on the next pages:

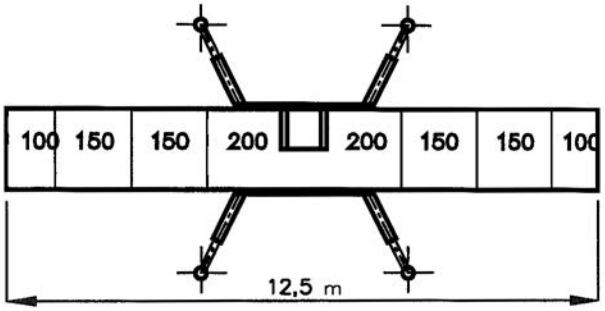
- Platform loadings on wheel chassis
- Platform loadings on minichassis
- Loading table 1, freestanding platforms
- Loading table 2, freestanding with side platforms
- Loading table 3, freestanding with telescopic extensions
- Loading table 4, top anchored mast
- Loading table 5, anchored mast with side platforms
  - 5.1, outriggers turned out
  - 5.2, outriggers extended
- Loading table 6, telescopic extension
  - 6.1 aluminium telescopic extension

PLATFORM LOADINGS ON WHEEL CHASSIS

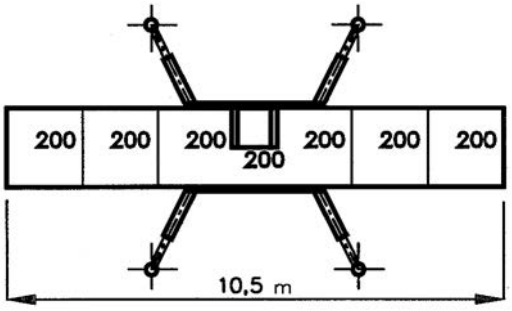
MAX. WIND SPEED 15,5 m/s
MAX. AL-DECK LOADING 150 kg/m^2
LOAD MUST BE EVENLY DISTRIBUTED
MAST ANCHORED



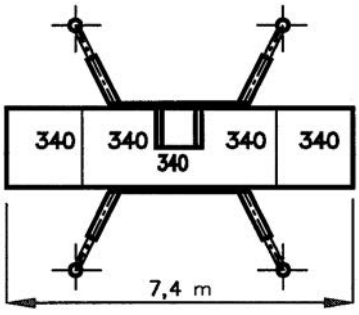
900 kg



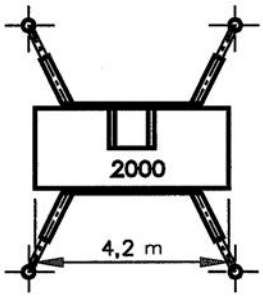
1200 kg



1400 kg



1700 kg

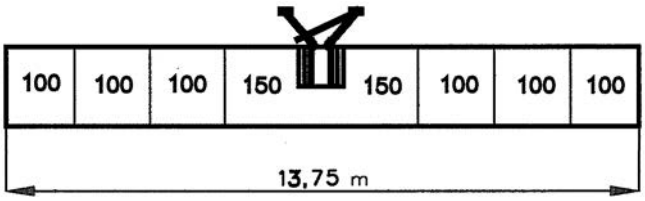


2000 kg

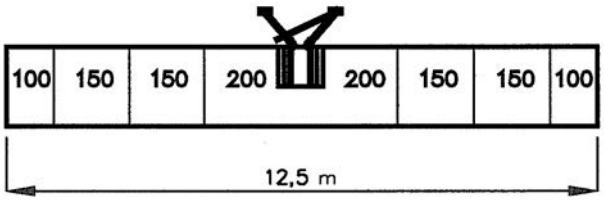
Mpi 950505
VS440281

PLATFORM LOADINGS ON MINICHASSIS

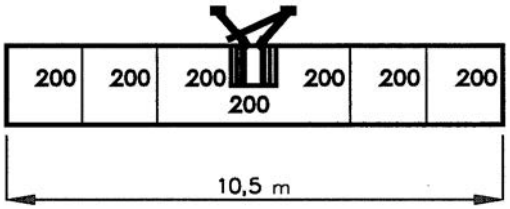
MAX. WIND SPEED 15,5 m/s
MAX. AL-DECK LOADING 150 kg/m^2
LOAD MUST BE EVENLY DISTRIBUTED



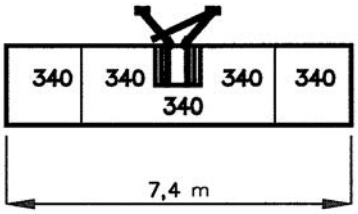
900 kg



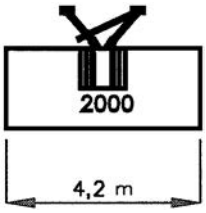
1200 kg



1400 kg



1700 kg



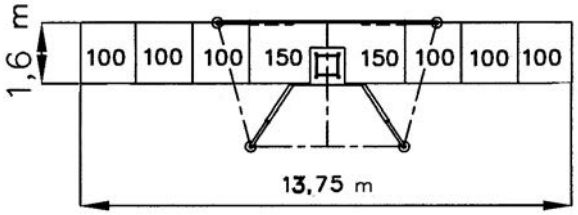
2000kg

Mpi 950504
VS440282

1. FREESTANDING PLATFORMS

MAX. WIND SPEED 12,7 m/s
LOAD MUST BE EVENLY DISTRIBUTED

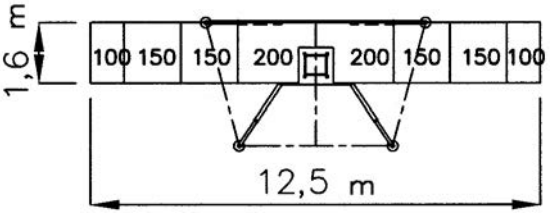
1



LOAD	P=900 kg
HEIGHT	H=12 m
LENGTH	L=13,75 m
WIDTH	B=1,6 m

OUTRIGGERS ON BOTH SIDES EXTENDED AND MAST SIDE TURNED OUT, JACKS SCREWED DOWN.

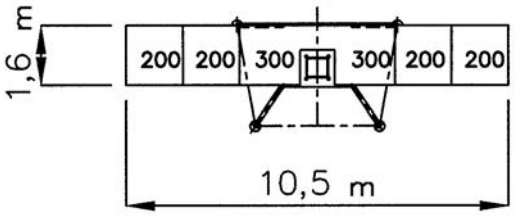
2.



LOAD	P=1200 kg
HEIGHT	H=15 m
LENGTH	L=12,5 m
WIDTH	B=1,6 m

OUTRIGGERS ON BOTH SIDES EXTENDED AND MAST SIDE TURNED OUT, JACKS SCREWED DOWN.

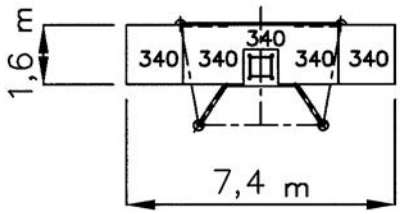
3.



LOAD	P=1400 kg
HEIGHT	H=15 m
LENGTH	L=10,5 m
WIDTH	B=1,6 m

OUTRIGGERS NOT EXTENDED, ON MAST SIDE TURNED OUT. JACKS SCREWED DOWN.

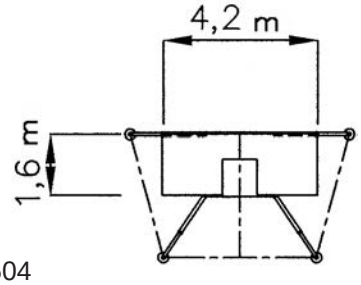
4.



LOAD	P=1700 kg
HEIGHT	H=15 m
LENGTH	L=7,4 m
WIDTH	B=1,6 m

OUTRIGGERS NOT EXTENDED, ON MAST SIDE TURNED OUT. JACKS SCREWED DOWN.

5.



LOAD	P=2000 kg
HEIGHT	H=20 m
LENGTH	L=4,2 m
WIDTH	B=1,6 m

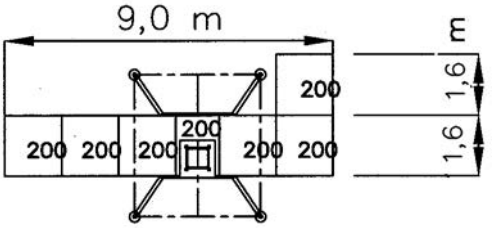
OUTRIGGERS ON BOTH SIDES EXTENDED AND MAST SIDE TURNED OUT, JACKS SCREWED DOWN.

Vto 950504
VS401257

2. FREESTANDING WITH SIDE PLATFORMS

MAX. WIND SPEED 12,7 m/s
LOAD MUST BE EVENLY DISTRIBUTED

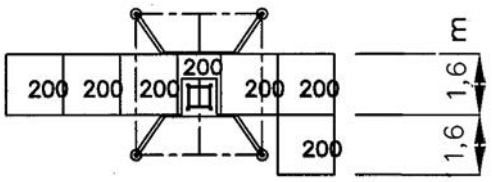
1.



LOAD	P=1400 kg
HEIGHT	H=15 m
LENGTH	L=9/7,4 m
WIDTH	B=1,6 m
SIDE PLATFORM WIDTH	b=1,6 m

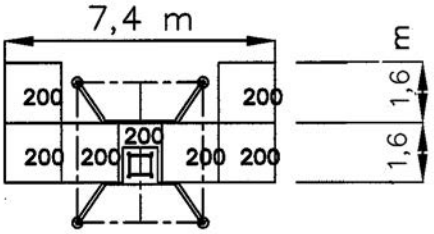
OUTRIGGERS NOT EXTENDED, ON BOTH SIDES TURNED OUT. JACKS SCREWED DOWN.

2.



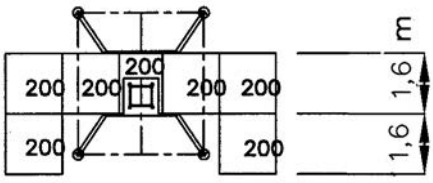
1400 kg

3.



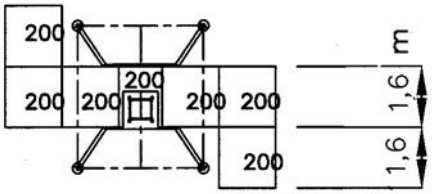
1400 kg

4.



1400 kg

5.



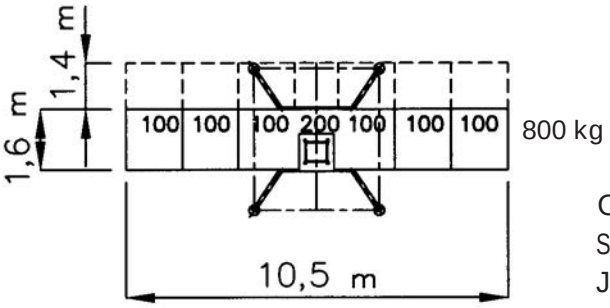
1400 kg

Vto 950420
VS401258

3. FREESTANDING WITH TELESCOPIC EXTENSIONS

MAX. WIND SPEED 12,7 m/s
LOAD MUST BE EVENLY DISTRIBUTED

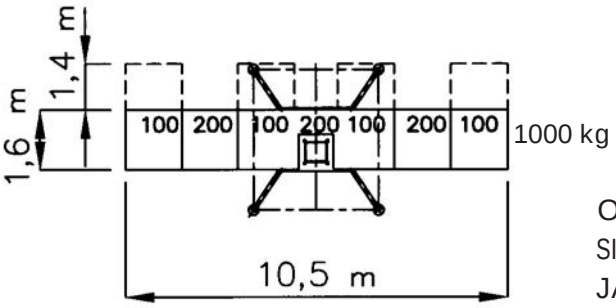
1.



LOAD	P=800 kg
HEIGHT	H=15 m
LENGTH	L=10,5 m
WIDTH	B=1,6 m
TELESCOPIC EXTENSION	b=1,4 m

OUTRIGGERS NOT EXTENDED, ON BOTH SIDES TURNED OUT.
JACKS SCREWED DOWN.

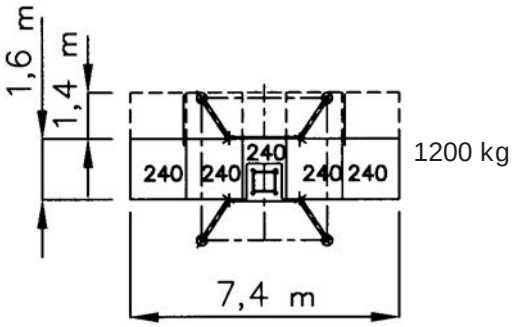
2.



LOAD	P=1000 kg
HEIGHT	H=15 m
LENGTH	L=10,5 m
WIDTH	B=1,6 m
TELESCOPIC EXTENSION	b=1,4 m

OUTRIGGERS NOT EXTENDED, ON BOTH SIDES TURNED OUT.
JACKS SCREWED DOWN.

3.



LOAD	P=1200 kg
HEIGHT	H=15 m
LENGTH	L=7,4 m
WIDTH	B=1,6 m
TELESCOPIC EXTENSION	b=1,4 m

OUTRIGGERS NOT EXTENDED, ON BOTH SIDES TURNED OUT.
JACKS SCREWED DOWN.

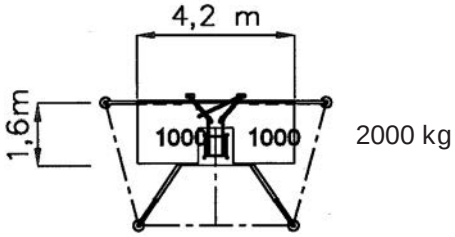
Vto 950420
VS401259

4. TOP ANCHORED MAST

MAX. WIND SPEED 15,5 m/s
LOAD MUST BE EVENLY DISTRIBUTED

MAX. ALLOWED WIND SPEED 8,0 m/s DURING ERECTION AND DISMANTLING. TOP ANCHOR MUST BE ASSEMBLED AFTER ERECTION.
THE PLATFORM LENGHT MUST BE 4,2 m WHEN ASSEMBLING OR DISASSEMBLING THE MAST.

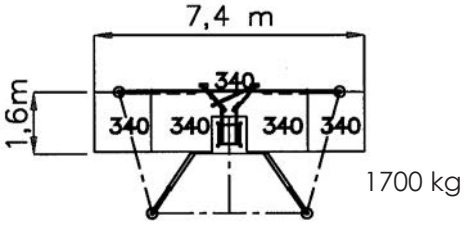
1.



LOAD	P=2000 kg
HEIGHT	H=25 m
LENGTH	L=4,2 m
WIDTH	B=1,6 m

ALL OUTRIGGERS EXTENDED AND ON MAST SIDE TURNED OUT.
JACKS SCREWED DOWN.

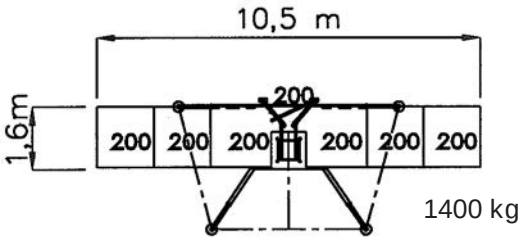
2.



LOAD	P=1700 kg
HEIGHT	H=25 m
LENGTH	L=7,4 m
WIDTH	B=1,6 m

ALL OUTRIGGERS EXTENDED AND ON MAST SIDE TURNED OUT.
JACKS SCREWED DOWN.

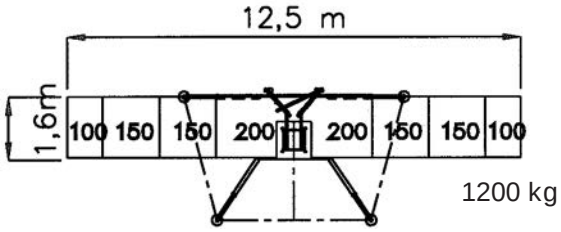
3.



LOAD	P=1400 kg
HEIGHT	H=25 m
LENGTH	L=10,5 m
WIDTH	B=1,6 m

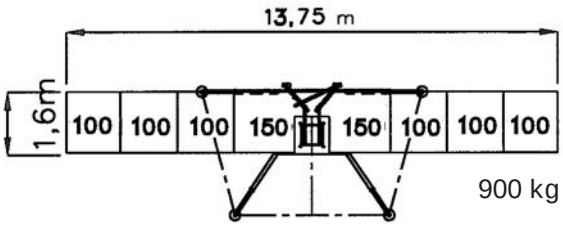
ALL OUTRIGGERS EXTENDED AND ON MAST SIDE TURNED OUT.
JACKS SCREWED DOWN.

4.



LOAD	P=1200 kg
HEIGHT	H=25 m
LENGTH	L=12,5 m
WIDTH	B=1,6 m

ALL OUTRIGGERS EXTENDED AND ON MAST SIDE TURNED OUT.
JACKS SCREWED DOWN.



LOAD	P=900 kg
HEIGHT	H=25 m
LENGTH	L=13,75 m
WIDTH	B=1,6 m

ALL OUTRIGGERS EXTENDED AND ON MAST SIDE TURNED OUT.
JACKS SCREWED DOWN.

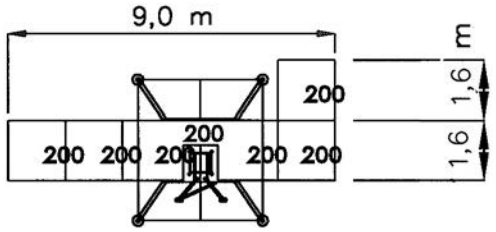
Mpi 950504
VS440276

5. ANCHORED MAST WITH SIDE-PLATFORMS

5.1. OUTRIGGERS TURNED OUT

MAX. WIND SPEED 15,5 m/s
LOAD MUST BE EVENLY DISTRIBUTED

1.



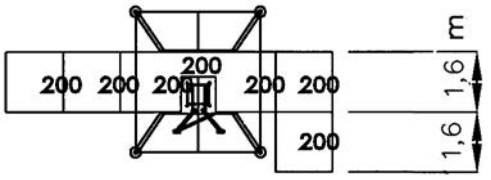
LOAD	P=1400 kg
HEIGHT	H=100 m
LENGTH	L=9/7,4 m
WIDTH	B=1,6 m
SIDE PLATFORM	b=1,6 m

WALL ANCHORING ACCORDING TO INSTRUCTIONS.

OUTRIGGERS NOT EXTENDED.
ON BOTH SIDES TURNED OUT.

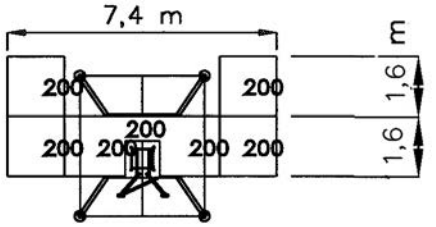
JACKS SCREWED DOWN.

2.



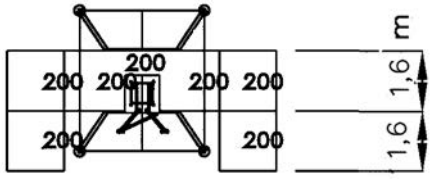
1400 kg

3.



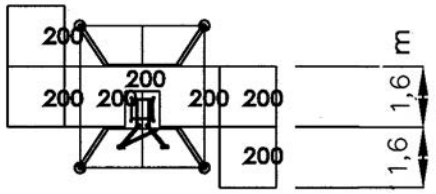
1400 kg

4.



1400 kg

5.



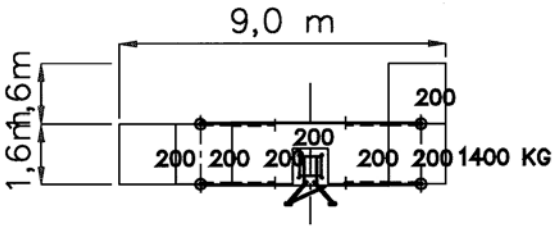
1400 kg

Mpi 950504
VS440278

5.2. OUTRIGGERS EXTENDED

MAX. WIND SPEED 15,5 m/s
LOAD MUST BE EVENLY DISTRIBUTED

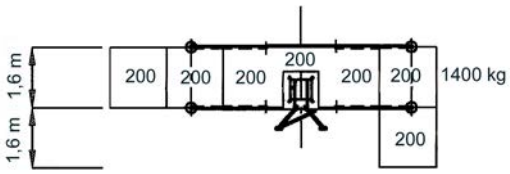
1.



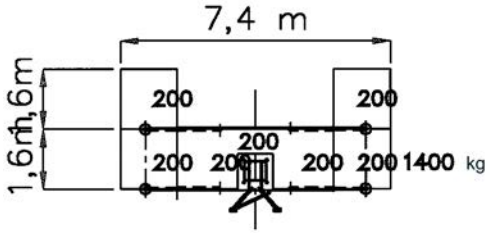
LOAD	P=1400 kg
HEIGHT	H=100 m
LENGTH	L=9/7,4 m
WIDTH	B=1,6 m
SIDE PLATFORM	b=1,6

OUTRIGGERS ON BOTH SIDES
LONGITUDALLY EXTENDED.
JACKS SCREWED DOWN.

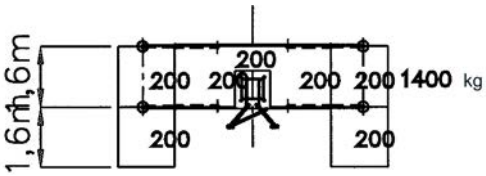
2.



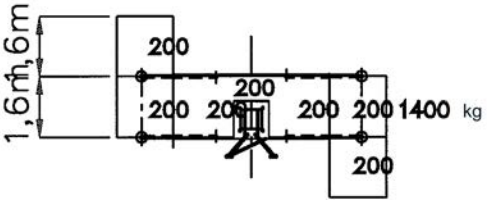
3.



4.

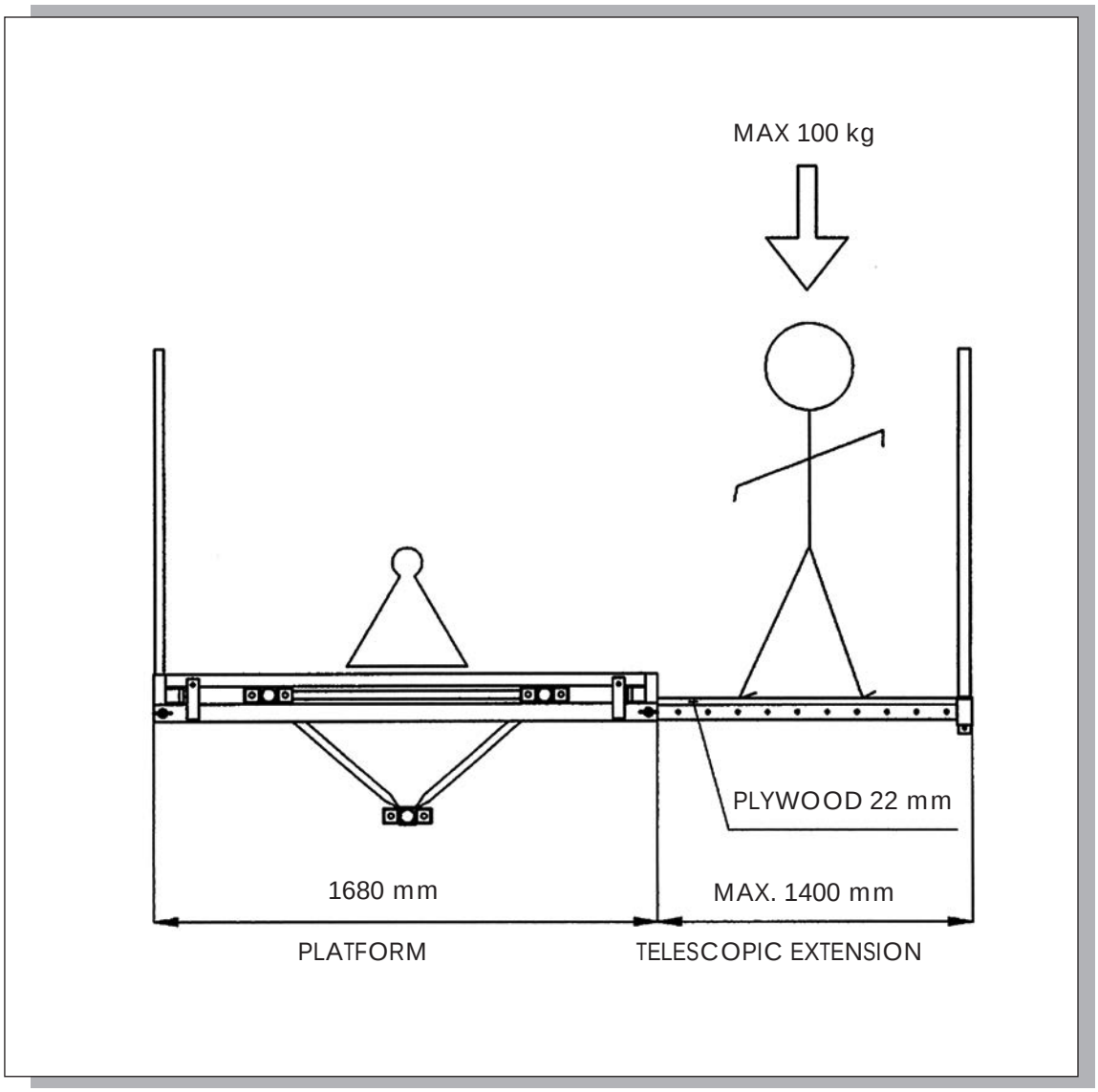


5.



Mpi 950504
VS440279

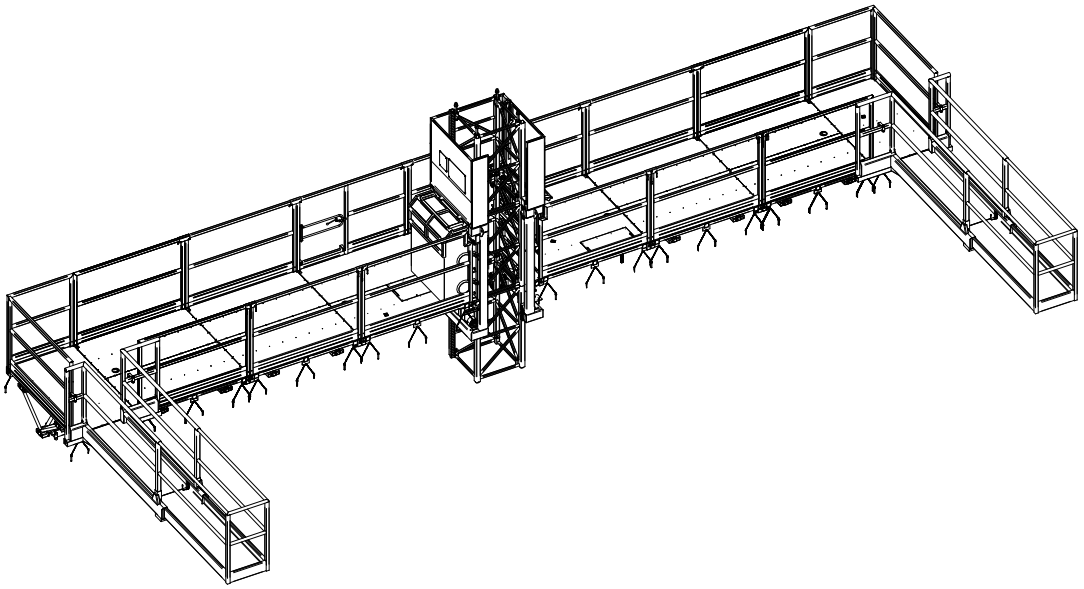
6. TELESCOPIC EXTENSION

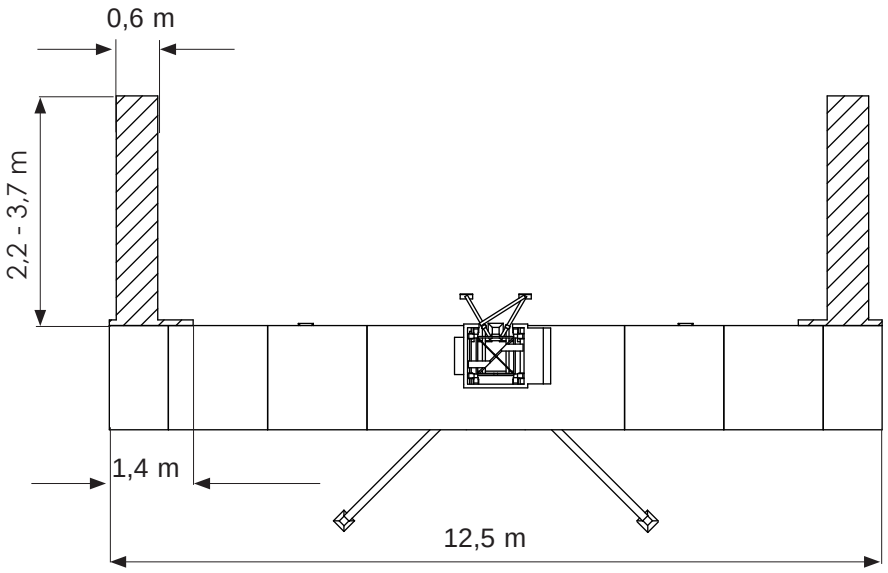


Mpi950424
VS440280

THE LOAD ON THE TELESCOPIC EXTENSION RESPECTIVELY REDUCES THE MAX. LOAD CARRYING CAPACITY OF THE PLATFORM. USE RAILINGS.

6.1 ALUMINIUM TELESCOPIC EXTENSION 2,2 - 3,7 m





TOTAL LOADING 800 kg
- Max. 2 persons + tools (240 kg)
on one extension (hatched)

MAX. 2 EXTENSIONS ON PLATFORM
- 1 on each side of mast

ALL OUTRIGGERS EXTENDED AND
JACKS SCREWED DOWN

3.4 LOADING TABLES SC4000 TWIN

! BEFORE STARTING TO WORK WITH THE MACHINE ALWAYS GET ACQUAINTED WITH THE LOADING TABLES!!

The most usual loading variations are shown on the loading tables. There you can find the maximum wind speeds too. If other variations than those shown on the loading tables are needed, please contact the distributor.

The following tables are situated on the next pages:

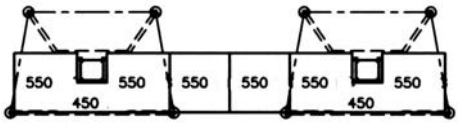
- Loading table 7.1, freestanding, platform length L= 11,9 - 21,5 m
- Loading table 7.2, freestanding, platform length L= 23,1 - 31,4 m
- Loading table 8, freestanding with telescopic extensions
- Loading table 9, top anchor
- Loading table 10, anchored

7.1. FREESTANDING, PLATFORM LENGTH L=11,9-21,5 m

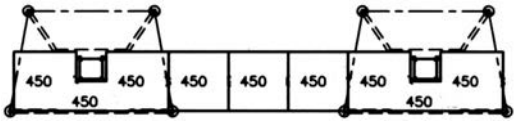
MAX. WIND SPEED 12,7 m/s
LOAD MUST BE EVENLY DISTRIBUTED

LOAD	P=3020-4200 kg
HEIGHT	H=15 m
LENGT	L=11,9-21,5 m
WIDHT	B=1,6 m

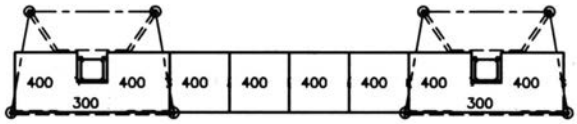
OUTRIGGERS NOT EXTENDED, ON MAST SIDE TURNED OUT,
JACKS SCREWED DOWN.
NOTE: ALWAYS WHEN IT IS POSSIBLE, IT IS GOOD TO EXTEND THE OUTRIGGERS.

1. 

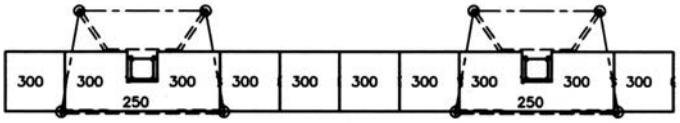
MAX 4200 kg/11.9 m

2. 

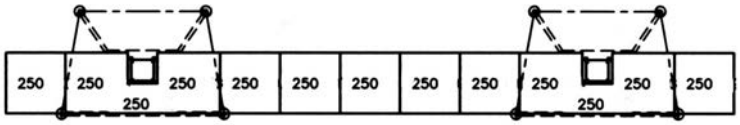
MAX 4050 kg/13.5 m

3. 

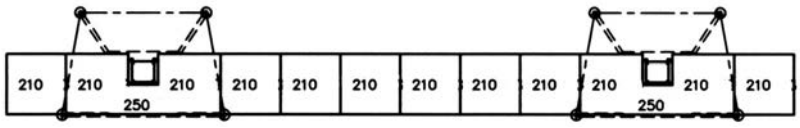
MAX 3800 kg/15.1 m

4. 

MAX 3500 kg/18.3 m

5. 

MAX 3250 kg/19.9 m

6. 

MAX 3020 kg/21.5 m

Vto 9500504
VS401260

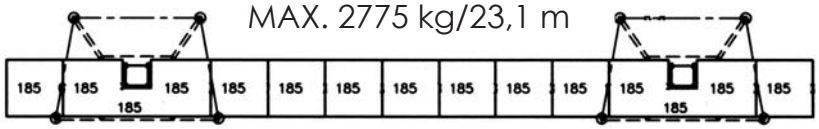
7.2. FREESTANDING PLATFORM LENGTH L = 23,1-31,4 m

MAX. WIND SPEED 12,7 m/s
LOAD MUST BE EVENLY DISTRIBUTED

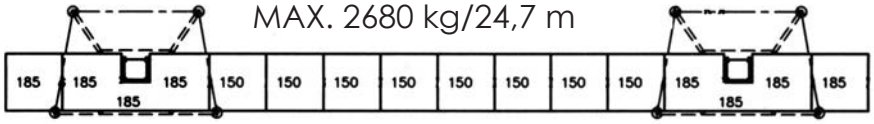
LOAD	P=2065-2775 kg
HEIGHT	H=10 m
LENGTH	L=23,1-31,4 m
WIDTH	B=1,6 m

OUTRIGGERS NOT EXTENDED, ON MASTSIDE TURNED OUT,
JACKS SCREWED DOWN.
NOTE: ALWAYS WHEN IT IS POSSIBLE, IT IS GOOD TO EXTEND THE OUTRIGGERS.

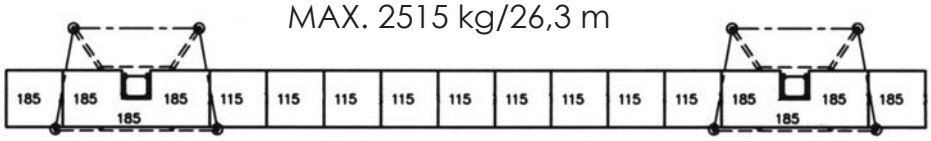
1. MAX. 2775 kg/23,1 m



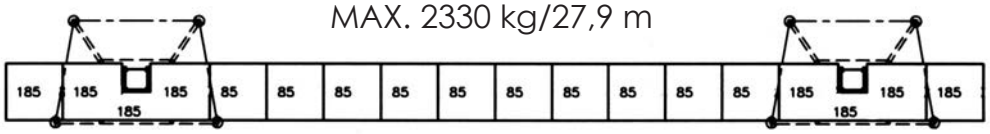
2. MAX. 2680 kg/24,7 m



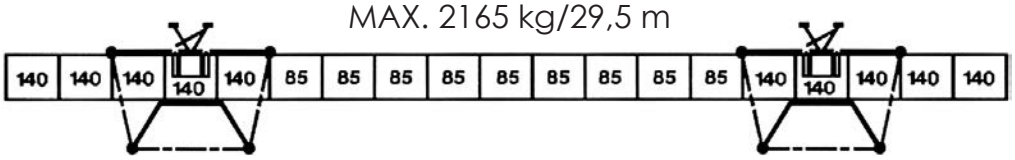
3. MAX. 2515 kg/26,3 m



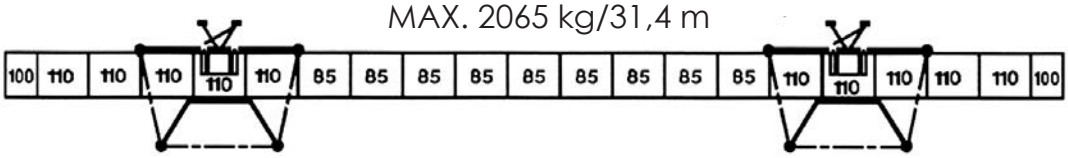
4. MAX. 2330 kg/27,9 m



5. MAX. 2165 kg/29,5 m



6. MAX. 2065 kg/31,4 m



Vto 950504
VS401261

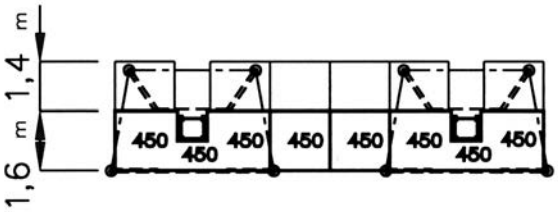
8. FREESTANDING WITH TELESCOPIC EXTENSIONS

MAX. WIND SPEED 12,7 m/s
LOAD MUST BE EVENLY DISTRIBUTED

LOAD	P=2520-3600 kg
HEIGHT	H=15 m
LENGTH	L=11,9-18,3 m
WIDTH	B=1,6 m
TELESCOPIC EXTENSION WIDTH	b=1,4 m

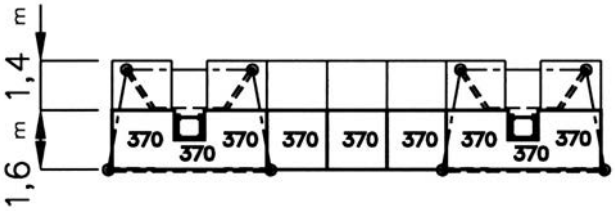
OUTRIGGERS NOT EXTENDED, ON MAST SIDE TURNED OUT,
JACKS SCREWED DOWN.
NOTE: ALWAYS WHEN IT IS POSSIBLE, IT IS GOOD TO EXTEND THE OUTRIGGERS.

1.



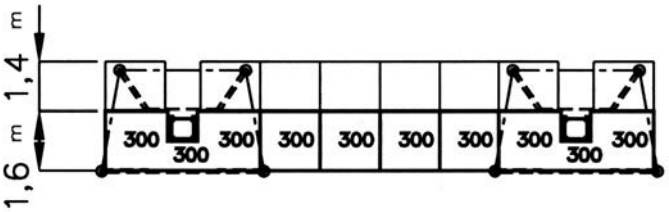
MAX 3600 kg/11.9 m

2.



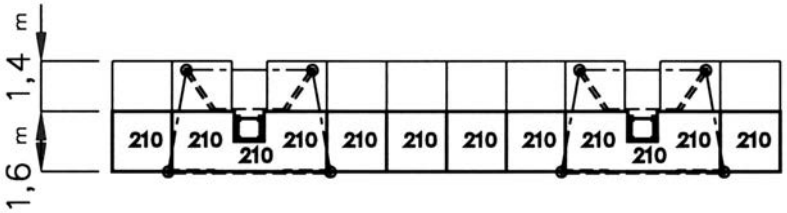
MAX 3330 kg/13.5 m

3.



MAX 3000 kg/15.1 m

4.



MAX 2520 kg/18.3 m

9. TOP ANCHOR

MAX. WIND SPEED 15,5 m/s
LOAD MUST BE EVENLY DISTRIBUTED

LOAD	P = 2680-4200 kg
HEIGHT	H = 25 m
LENGTH	L = 11,9-24,7 m
WIDTH	B = 1,6 m

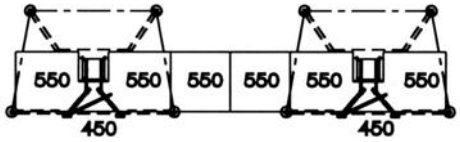
OUTRIGGERS NOT EXTENDED, ON MAST SIDE TURNED OUT.
JACKS SCREWED DOWN.

MAX. ALLOWED WIND SPEED 8,0 m/s DURING ERECTION.
TOP ANCHOR MUST BE ASSEMBLED AFTER ERECTION.
WHEN ASSEMBLING THE MAST, THE PLATFORM LENGHT CAN BE MAX. 4,2 m.

THE LENGTHENING AND THE CONNECTING OF THE PLATFORMS CAN BE MADE WHEN THE TOPANCHORING HAS BEEN FINISHED.

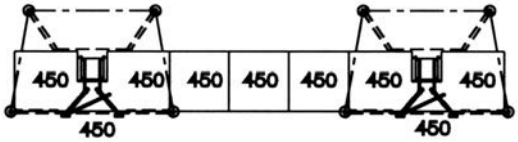
NOTE: ALWAYS WHEN IT IS POSSIBLE, IT IS GOOD TO EXTEND THE OUTRIGGERS.

1.



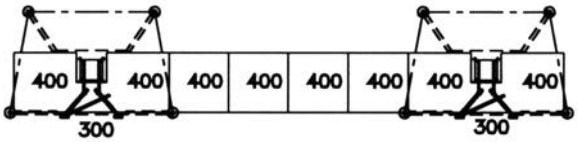
MAX 4200 kg/11.9 m

2.



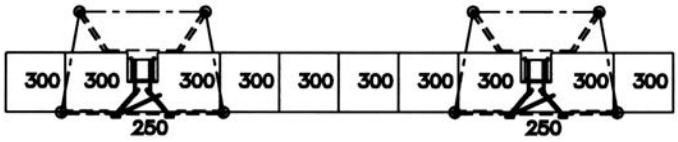
MAX 4050 kg/13.5 m

3.



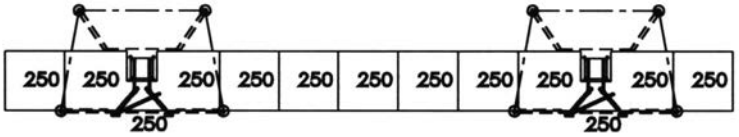
MAX 3800 kg/15.1 m

4.



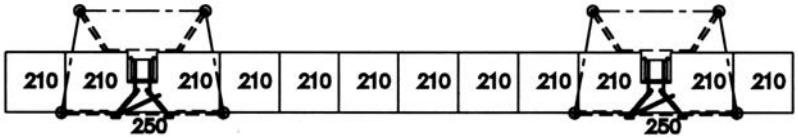
MAX 3500 kg/18.3 m

5.



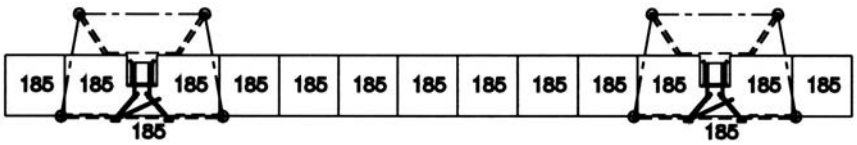
MAX 3250 kg/19.9 m

6.



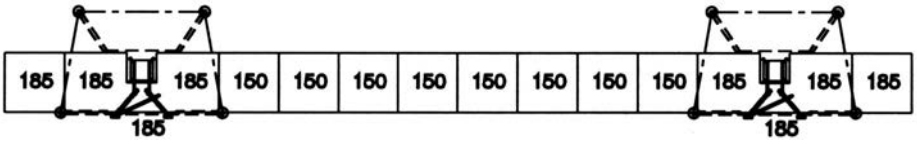
MAX 3020 kg/21.5 m

7.



MAX 2775 kg/23.1 m

8.



MAX 2680 kg/24.7 m

Mpi 950425
VS440285

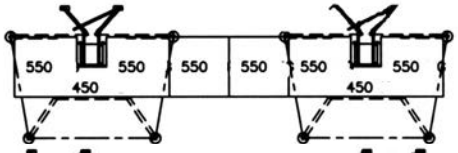
10. ANCHORED

LOAD P = 2065-4200 kg
HEIGHT H = 100 m
LENGTH L= 11,9-31,4 m
WIDTH B = 1,6 m
MAX. WIND SPEED 15,5 m/s
LOAD MUST BE EVENLY DISTRIBUTED.

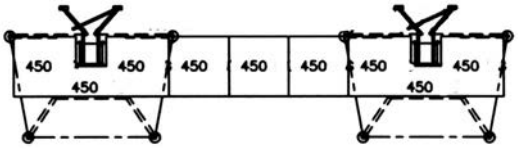
OUTRIGGERS NOT EXTENDED ON THE OPPOSITE SIDE OF THE MAST TURNED OUT.
JACKS SCREWED DOWN.

NOTE: ALWAYS WHEN IT IS POSSIBLE, IT IS GOOD TO EXTEND THE OUTRIGGERS.

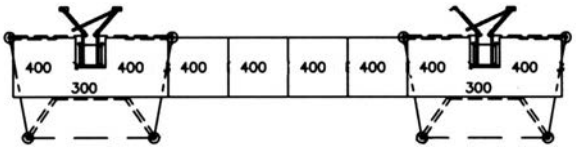
1. MAX. 4200 kg/11,9 m



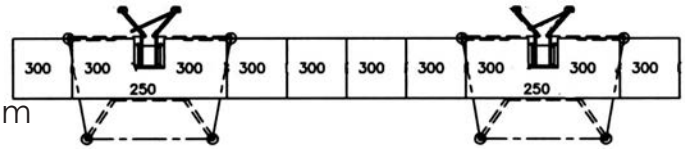
2. MAX. 4050 kg/13,5 m



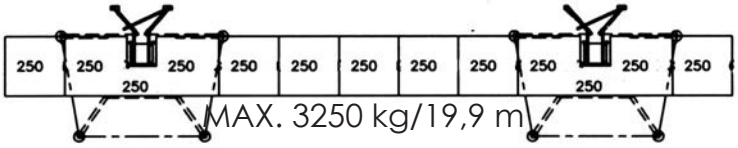
3. MAX. 3800 kg/15,1 m



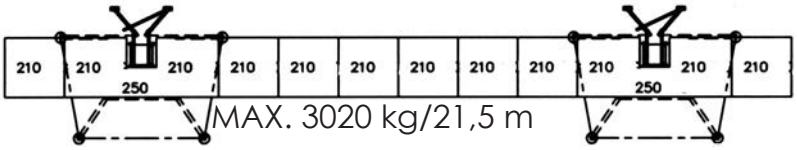
4. MAX. 3500 kg/18,3 m



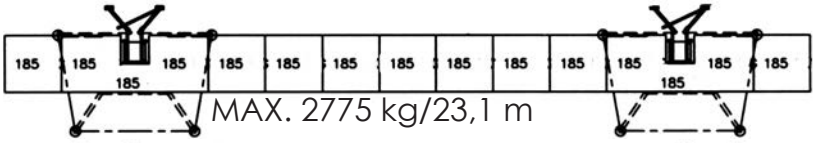
5. MAX. 3250 kg/19,9 m



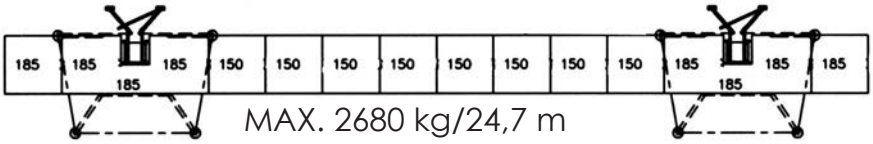
6. MAX. 3020 kg/21,5 m



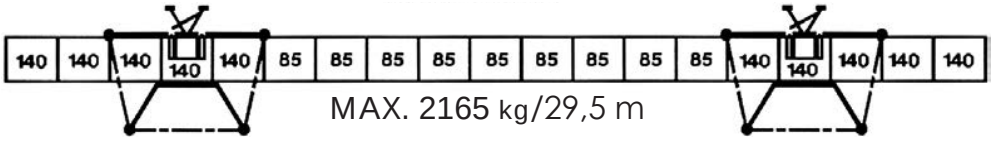
7. MAX. 2775 kg/23,1 m



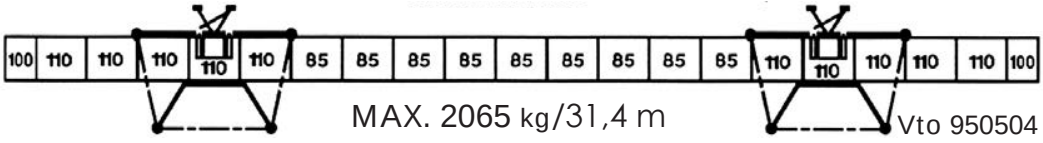
8. MAX. 2680 kg/24,7 m



9. MAX. 2165 kg/29,5 m



10. MAX. 2065 kg/31,4 m



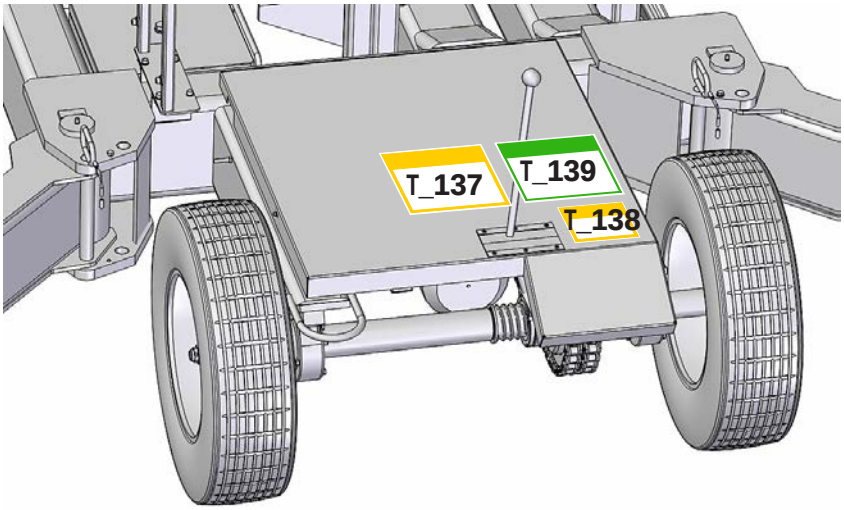
Vto 950504
VS401262

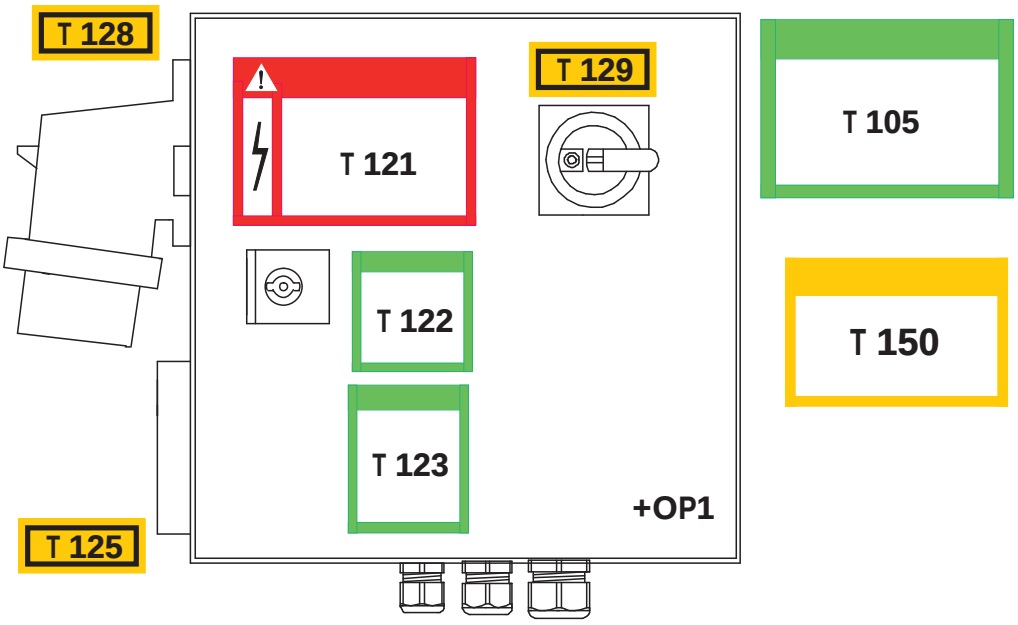
3.5. INSTRUCTION AND WARNING DECALS

Decals must not be removed from the machine and they must be clean!
NOTE! If the decals are damaged and/or unclear, new decals can be ordered from the dealer or the manufacturer.
The decal installation can be seen from the drawings on the following pages.

Scan code		Decal	Description	Qty
61101	Ta101	Warning	Wind speed	
61103	Ta103	Caution	Operator instructions	
61105	Ta105	Caution	Daily inspection	
61106	Ta106	Caution	Anchorage instructions	
61108	Ta108	Caution	Anchoring, Mini chassis	
61110	Ta110	Caution	Top anchoring	
61118	Ta118	Danger	Voltage lines	
61121	Ta121	Danger,	Energized objects	2
61122	Ta122	Warning,	Instructions	2
61123	Ta123	Warning,	Transportation	
61124	Ta124		Horn	
61125	Ta125		Remote control socket	2
61127	Ta127		Safety switch	
61128	Ta128		Inlet	
61129	Ta129		Main current switch	
61133	Ta133		Mast assembly crane	
61137	Ta137	Warning,	Transport brakes	
61138	Ta138	Warning,	Driving	
61139	Ta139	Caution,	Towing	
61142	Ta142	Caution,	230 V	
61144	Ta144	Danger,	Safety switch	
61148	Ta148	Caution,	Telescopic extension	
61150	Ta150	Warning,	Transport dimensions	
61153	Ta153	Caution,	Platform loadings	
61154	Ta154		Phase inverter	
61155	Ta155		Wheel chassis	
61166	Ta166	Caution	Platform loadings, twin	
61180	Ta120	Warning	Emergency lowering	2
	Ta196		Aluminium telescopic extension 2,2 - 3,7 m	
	T_197		Aluminium telescopic extension 2,2 - 3,7 m	

THE LOCATION OF THE INSTRUCTION AND WARNING STICKERS ON 4000 UNIT



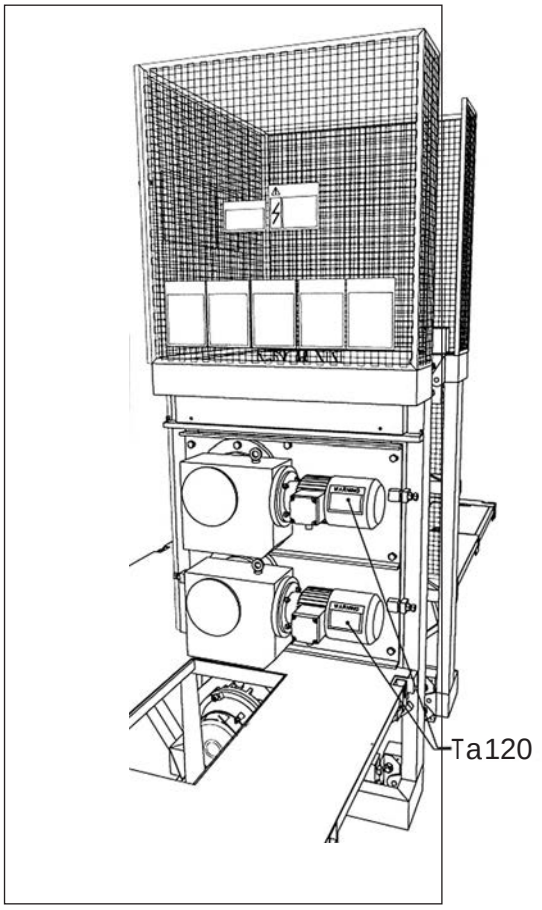


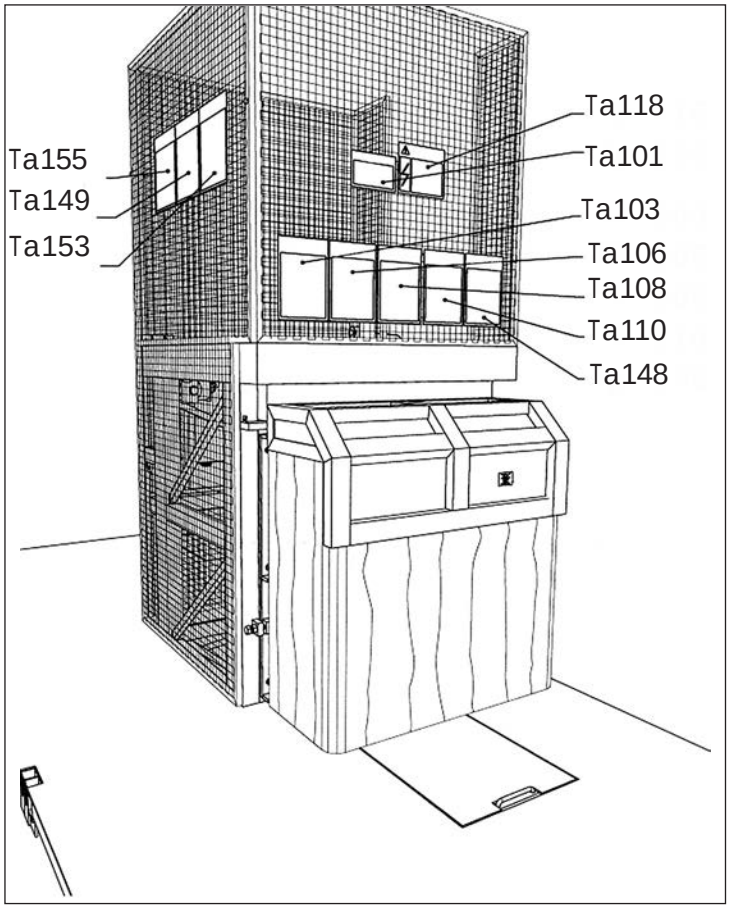
Chassis electric box.

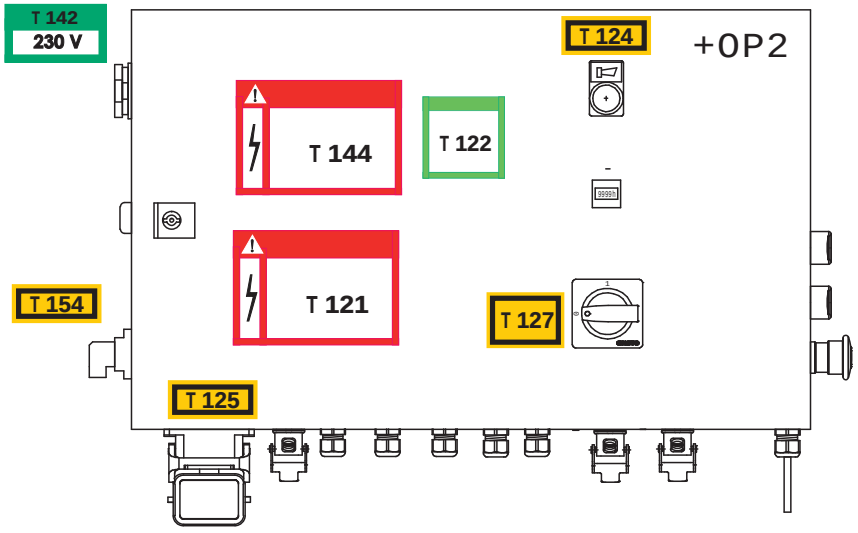
THE LOCATION OF THE INSTRUCTION AND WARNING STICKERS ON 4000 UNIT

V-01

V-04



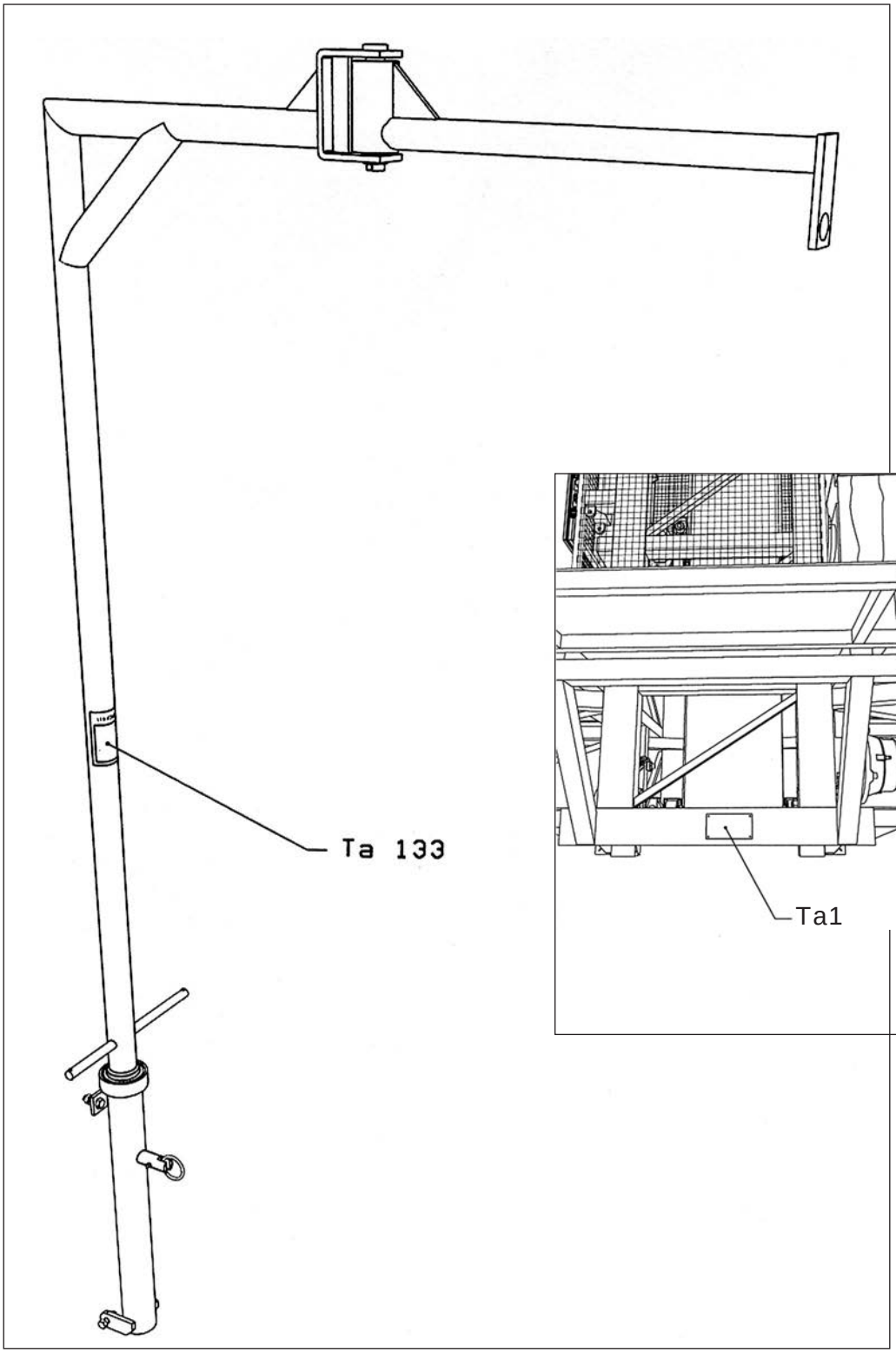




Platform electric box.

THE LOCATION OF THE INSTRUCTION AND WARNING STICKERS ON 4000 UNIT

V-01



00-0396-1935

WARNING

DO NOT OPERATE WHEN WIND SPEED EXCEEDS 12,7 m/s -freestanding 15,5 m/s -mast anchored

Ta101

Ta101

CAUTION

DAILY INSPECTION

- BASEMENT GROUND
- OUTRIGGERS
- HORIZONTAL AND VERTICAL POSITION OF PLATFORM AND MAST
- FUNCTION OF REMOTE CONTROL
- FUNCTION OF EMERGENCY STOP
- FUNCTION OF EMERGENCY LOWERING
- CONTACT AND CONDITION OF RACK AND PINION
- CONDITION OF ELECTRIC CABLES/ CABLES ARE HANGING FREE
- PLATFORM FIXING AND RAILINGS
- MAST SECTION AND FIXING SCREWS
- FUNCTION OF LIMIT SWITCHES COUNTERPARTS
- GUIDING ROLLERS
- SAFETY BRAKE
- WALL ANCHORING
- MAST GUARDS
- LOOSE OR MISSING PARTS
- THAT WORKSITE IS SAFETY FENCED
- WARNING AND INSTRUCTION PLATES
- WORKING AREA

Ta105

Ta105

CAUTION

INSTRUCTIONS FOR THE OPERATORS

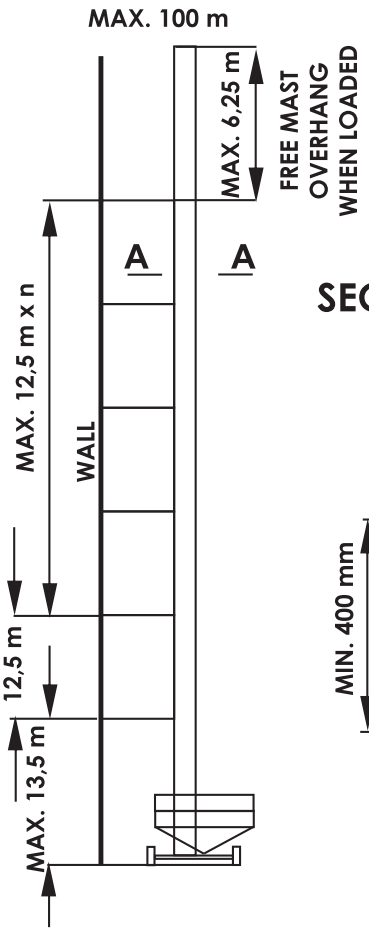
- Operator must be trained for the operation
- Become acquainted with the operating instructions
- Follow the safety regulations
- Check ground is suitable for load bearing
- Check the jacks are against ground and outrigger jack pins are locked
- Use ground plates under the jacks
- Check chassis levelling
- Do not exceed safe working load and height limitation
- Distribute load evenly
- Place load inside the railings
- Limit manual force to 400 N/2 persons
- Do not use the mastclimber when wind speed exceeds
  12,7 m/s /28mph - freestanding
  15,5 m/s/35mph - mast anchored
- Check railing and mast guard connections
- Pay attention to the operation temperature
- Do not lean over platform railings
- Do not use ladders or scaffolding on the platform
- Follow minimum distances to the electric lines nearby
- Be careful with the obstacles on the working side of platform
- Do not use faulty machine
- Do not work if your physical condition is not well or you have fear of heights
- Prevent unauthorised use of platform
- Carry out the daily inspections
- Report on all faults

Ta103

CAUTION

SCANCLIMBER SC1300/4000

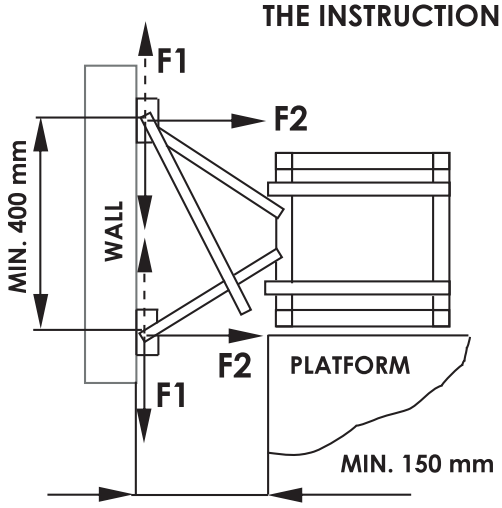
ANCHORAGE INSTRUCTIONS



MAX. ALLOWED WIND SPEED 15,5 m/s

SECTION A - A

NOTE! CHECK THE ANCHORING FORCES F1 AND F2 FROM THE INSTRUCTION MANUAL.



NOTE! CHECK THE STRENGTH OF THE WALL ANCHORAGE.

ALL OUTRIGGERS FULLY EXTENDED AND OPPOSITE TO THE MAST ALSO TURNED OUT.

SC1300: USE MIDDLE JACK WHEN MAST HEIGHT OVER 30 m.

SC4000: USE ALWAYS MIDDLE JACK.

Ta106

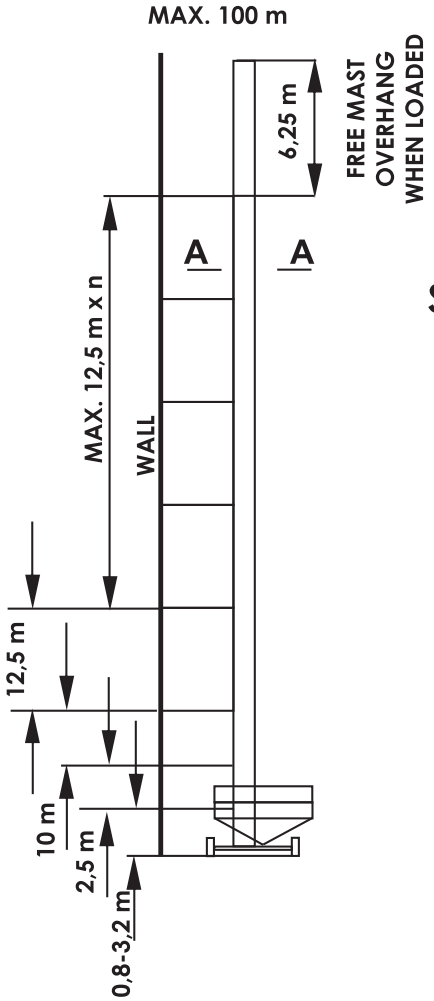
CAUTION

SCANCLIMBER SC1300/4000

ANCHORAGE INSTRUCTIONS FOR THE MAST ON THE MINICHASSIS

NOTE!

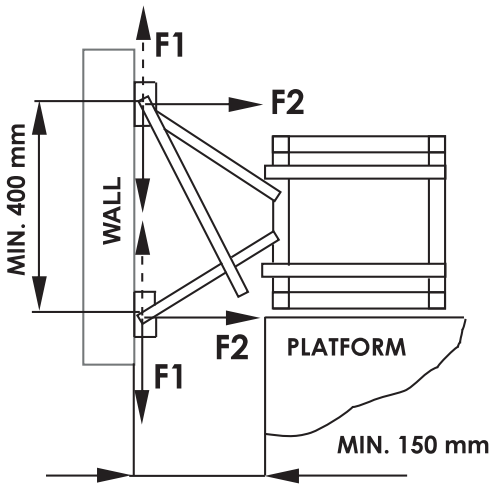
- THE 1ST ANCHOR HEIGHT 0,8 m - 3,2 m
- THE 2ND ANCHOR HEIGHT 2,5 m ABOVE THE 1ST ANCHOR
- THE 3RD ANCHOR HEIGHT 10,0 m ABOVE THE 2ND ANCHOR
- THE MAX. ALLOWED PLATFORM LENGHT WHEN ERECTING AND DISMATLING THE MAST
- BENEATH THE 3RD ANCHOR 4,2 m
- ABOVE THE 3RD ANCHOR
  10,50 m (SC1300)
  12,50 m (SC4000)



SECTION A - A

MAX. ALLOWED WIND SPEED 15,5 m/s

NOTE! CHECK THE ANCHORING FORCES F1 AND F2 FROM THE INSTRUCTION MANUAL.



NOTE! CHECK THE STRENGTH OF THE WALL ANCHORAGE.

Ta108

Ta108

CAUTION

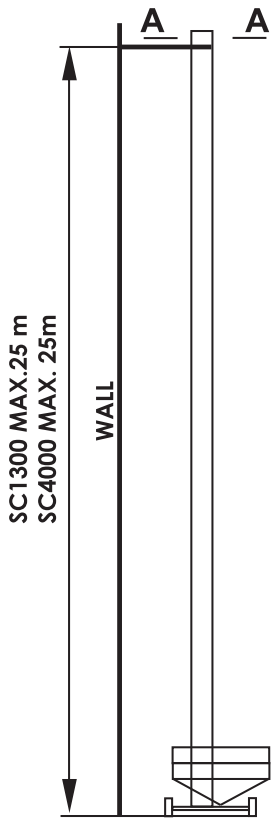
SCANCLIMBER SC1300/4000

ANCHORAGE INSTRUCTIONS WITH TOP ANCHOR

MAX. ALLOWED PLATFORM LENGHT DURING ERECTION AND DISMANTLING OF THE MAST 4,20 m AND WIND SPEED UNDER 8 m/s.

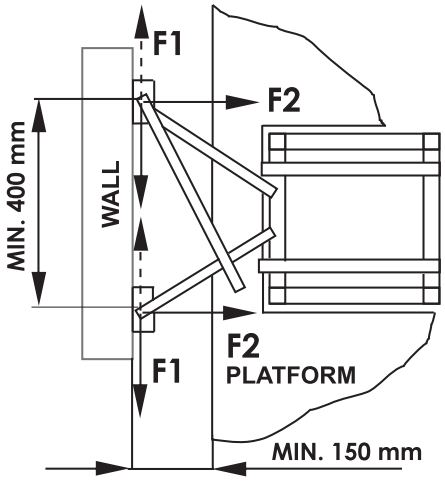
MAX. ALLOWED PLATFORM LENGHT WHEN OPERATING:
SC1300 - 10,5 m
SC4000 - 12,5 m

MAX. ALLOWED WIND SPEED 15,5 m/s



SECTION A - A

NOTE! CHECK THE ANCHORING FORCES F1 AND F2 FROM THE INSTRUCTION MANUAL.



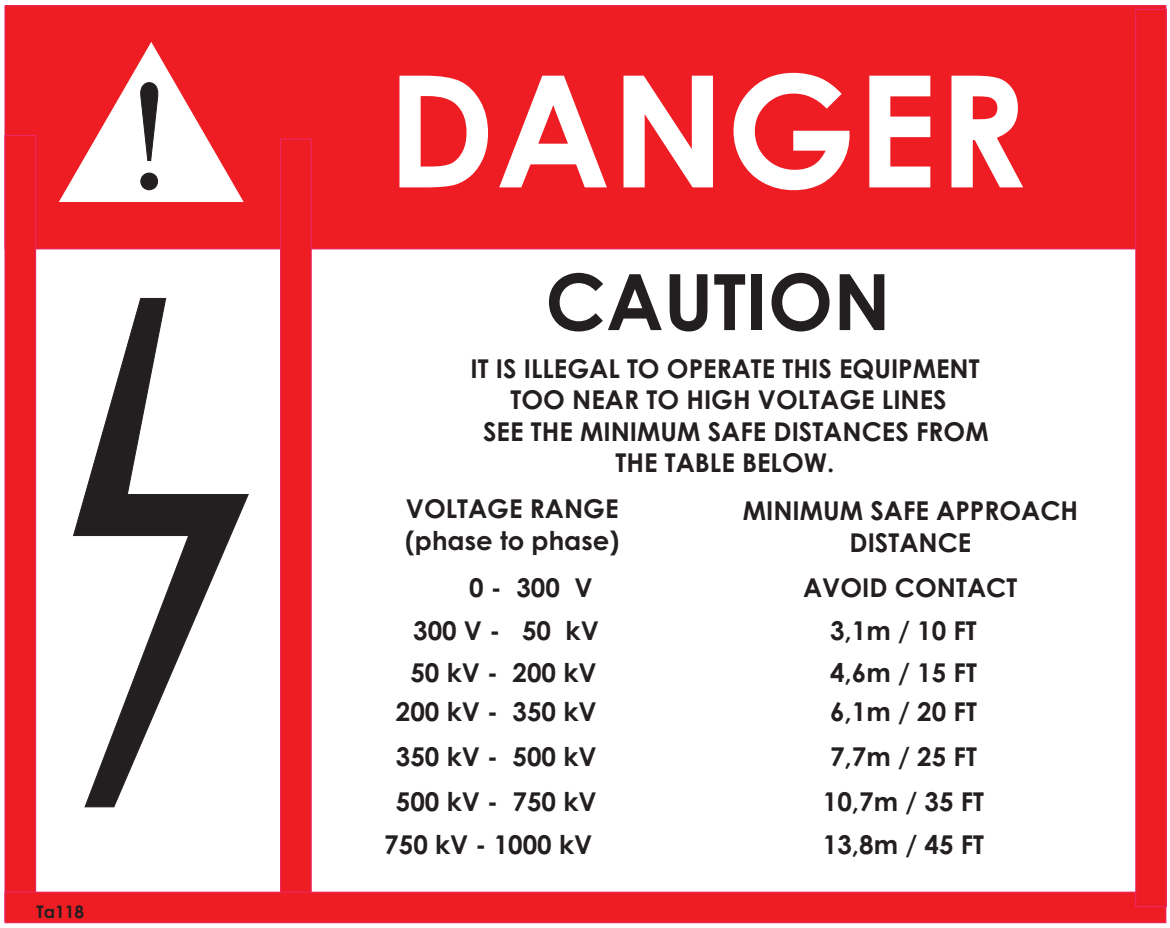
ALL OUTRIGGERS FULLY EXTENDED.
MASTSIDE OUTRIGGERS ALSO TURNED OUT.
SC4000: USE ALWAYS MIDDLE JACK.

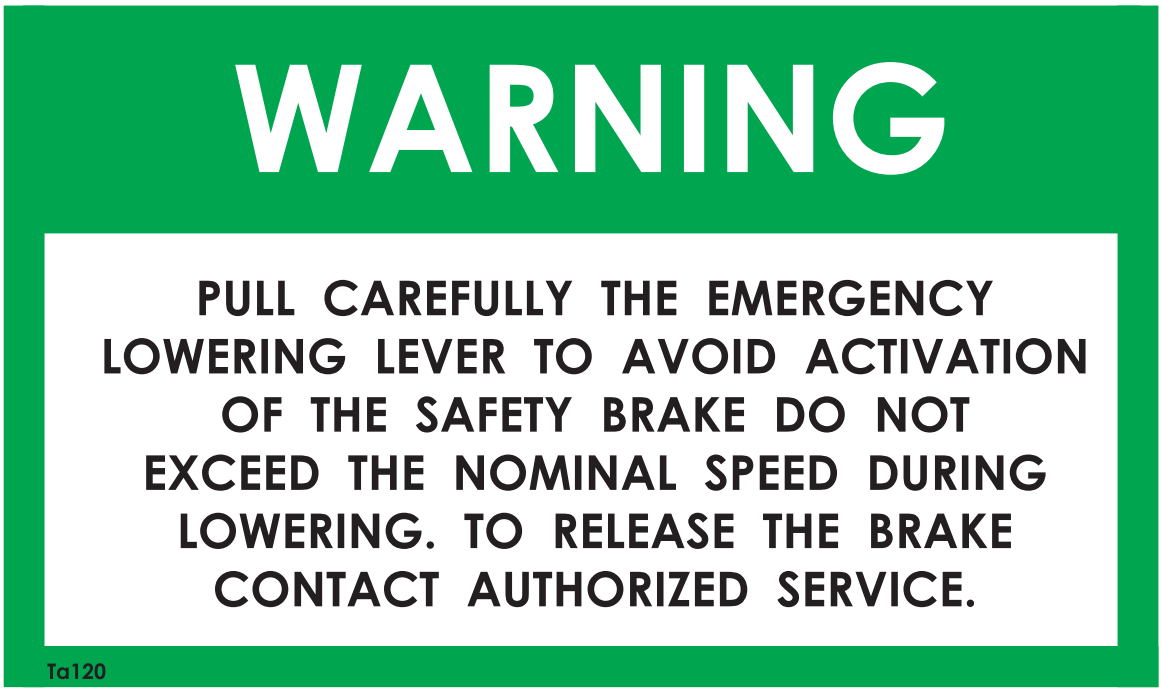
NOTE! CHECK THE STRENGTH OF THE WALL ANCHORAGE.

NOTE! ADJUST THE TOP LIMIT SWITCH COUNTER PARTS TO PREVENT THE MAST GUARD GETTING IN TOUCH WITCH THE TOP ANCHOR.

Ta110

Ta110


DANGER
CAUTION
IT IS ILLEGAL TO OPERATE THIS EQUIPMENT
TOO NEAR TO HIGH VOLTAGE LINES
SEE THE MINIMUM SAFE DISTANCES FROM
THE TABLE BELOW.
VOLTAGE RANGE (phase to phase)
MINIMUM SAFE APPROACH DISTANCE
0 - 300 V
AVOID CONTACT
300 V - 50 kV
3,1m / 10 FT
50 kV - 200 kV
4,6m / 15 FT
200 kV - 350 kV
6,1m / 20 FT
350 kV - 500 kV
7,7m / 25 FT
500 kV - 750 kV
10,7m / 35 FT
750 kV - 1000 kV
13,8m / 45 FT
Ta118

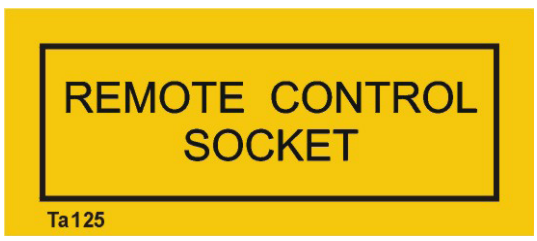

WARNING
PULL CAREFULLY THE EMERGENCY LOWERING LEVER TO AVOID ACTIVATION OF THE SAFETY BRAKE DO NOT EXCEED THE NOMINAL SPEED DURING LOWERING. TO RELEASE THE BRAKE CONTACT AUTHORIZED SERVICE.
Ta120


DANGER
WARNING !
DEATH OR SERIOUS INJURY
CAN RESULT FROM
CONTACT WITH ELECTRICALLY
ENERGIZED OBJECTS.
Ta121


WARNING
STOP
READ AND UNDERSTAND SAFETY
AND OPERATION INSTRUCTIONS
BEFORE OPERATING MACHINE.
SAFETY AND OPERATION
INSTRUCTIONS ARE IN THE
PROTECTIVE POCKET UNDER
THE MOTOR PROTECTION CLOTH.
Ta122


WARNING
LOWER THE PLATFORM
USING THE EMERGENCY
LOWERING ON TO
RUBBER BUFFERS
FOR TRANSPORTATION.
Ta123


HORN
Ta124


REMOTE CONTROL
SOCKET
Ta125

SAFETY SWITCH
FOR MAIN
CURRENT AND
CONTROL CURRENT

Ta127

INLET

Ta128

MAIN CURRENT
SWITCH

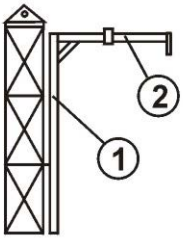
Ta129

WARNING

MAST SECTION ASSEMBLY CRANE

TYPE: SC100

LIFTING CAPACITY: 100KG



THE USE OF THE MAST SECTION ASSEMBLY CRANE AT THE SAME TIME WITH THE USE OF THE PLATFORM IS FORBIDDEN.
THE LIFTING ARM 1 HAS TO BE LOCKED SO, THAT THE LIFTING ARM 2 CAN'T TOUCH THE MAST WHEN MOVING.
THE PLATFORM UP/DOWN.
WARNING: THE MAST SECTION ASSEMBLY CRANE IS ONLY MEANT FOR HANDLING OF THE MAST SECTIONS.
THE LIFTING OF OTHER THINGS IS FORBIDDEN.

Ta133

Ta137

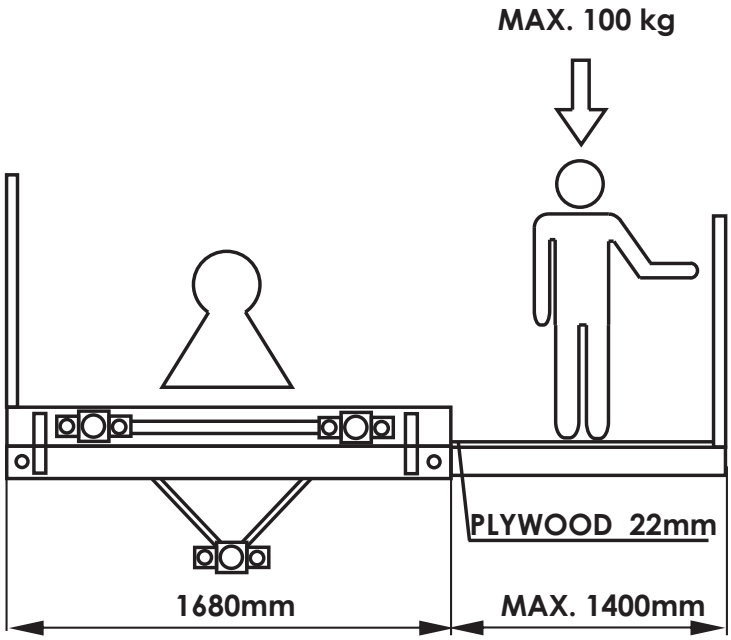
Ta138

Ta139

CAUTION

SCANCLIMBER SC4000

TELESCOPIC EXTENSION



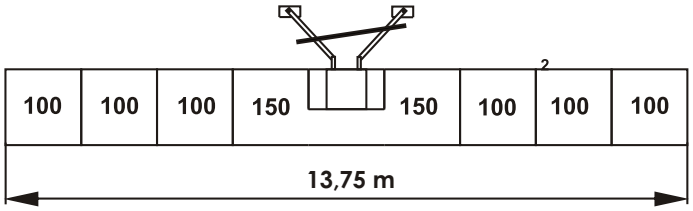
THE LOAD ON TELESCOPIC EXTENSION RESPECTIVELY REDUCES THE MAX. LOAD CARRYING CAPACITY OF THE PLATFORM.
USE RAILINGS.

Ta148

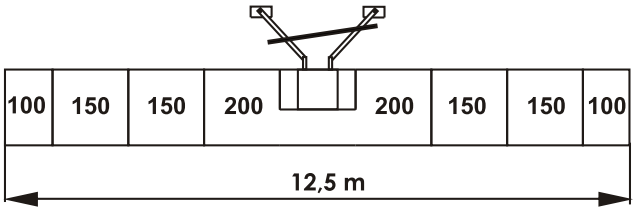
CAUTION

PLATFORM LOADINGS ON MINI - CHASSIS / SC4000

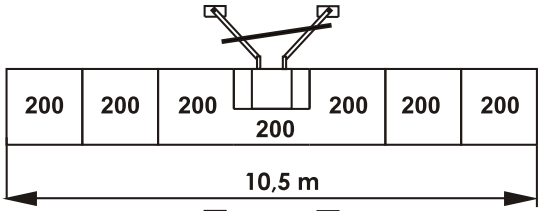
MAX. WIND SPEED 15,5 m/s
MAX. AL - DECK LOADING 150kg/m
LOAD MUST BE EVENLY DISTRIBUTED.



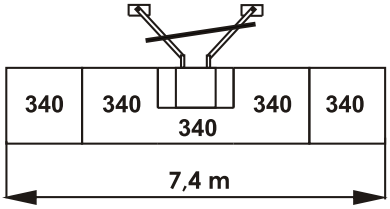
900 kg



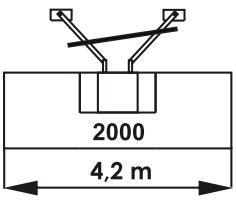
1200 kg



1400 kg

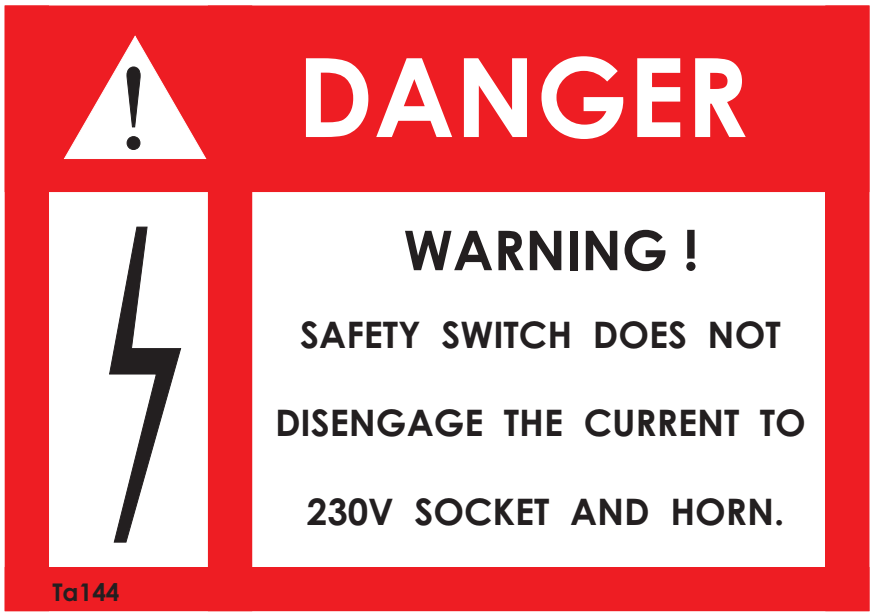


1700 kg



2000 kg

Ta149



WARNING !

TRANSPORT DIMENSIONS

PLATFORM LENGTH m	WEIGHT kg
4,2 m	3350 kg
7,4 m	3720 kg
10,5 m	4090 kg
MAST SECTION	82 kg

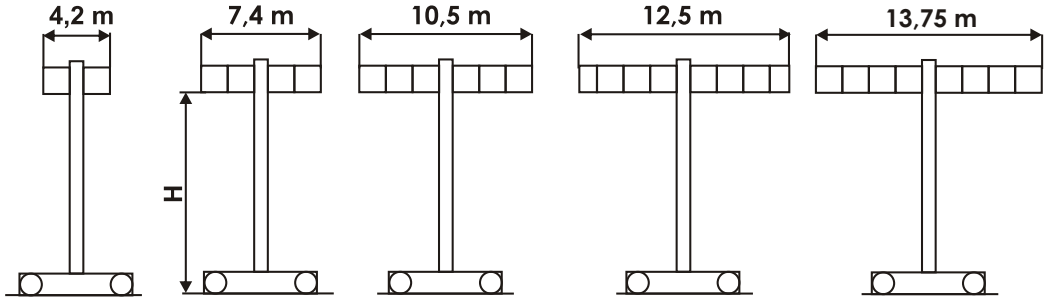
Ta150

CAUTION

SC4000 LOADING TABLE

H=15 m	FREESTANDING BY THE WALL SIDE. OUTRIGGERS ON THE MAST SIDE FULLY TURNED AND PULLED OUT ON THE WALL SIDE FULLY PULLED OUT. WITH PLATFORM L=13,75 m H_{max}=12 m
H=15 m	FREESTANDING, ALL OUTRIGGERS FULLY TURNED AND PULLED OUT.
H=25 m	WITH TOP ANCHOR.
H=100 m	WALL ANCHORS WITH 12,5 m INTERVALS. AFTER 30 m MIDDLE JACK MUST BE USED.

MAX. WIND SPEED
12,7 m/s FREESTANDING
15,5 m/s MAST ANCHORED
MAX. 150 kg/m^2



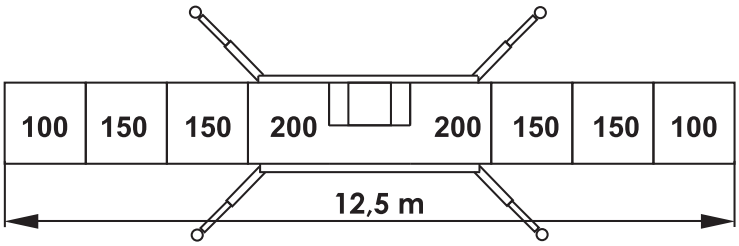
4,2 m	7,4 m	10,5 m	12,5 m	13,75 m
MAX. 2000 kg OR 3 PERS + 1680 kg	MAX. 1700 kg OR 3 PERS + 1380 kg	MAX. 1400 kg OR 3 PERS + 1080 kg	MAX. 1200 kg OR 3 PERS + 880 kg	MAX. 900 kg OR 3 PERS + 580 kg

Ta153

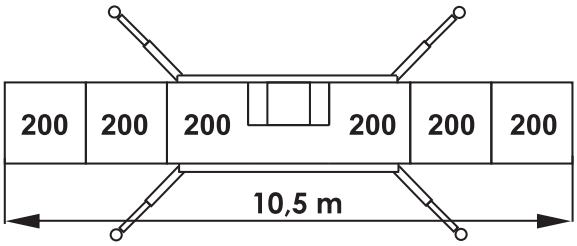
CAUTION

PLATFORM LOADINGS ON WHEEL CHASSIS / SC4000

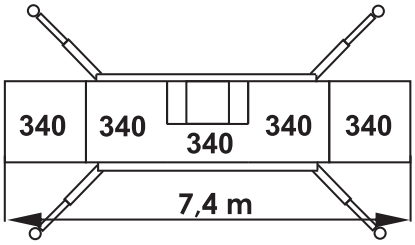
MAX. WIND SPEED 15,5 m/s
MAX. AL - DECK LOADING 150 kg/m^2
LOAD MUST BE EVENLY DISTRIBUTED.
MAST ANCHORED



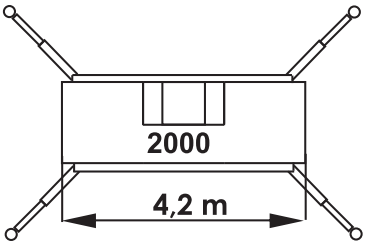
1200 kg



1400 kg



1700 kg



2000 kg

Ta155

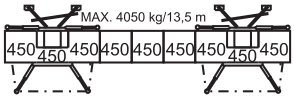
CAUTION

PLATFORM LOADINGS ON **SC4000** TWINMAST

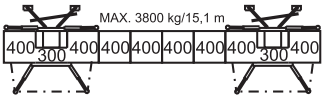
MAX. WIND SPEED 15,5 m/s
LOAD MUST BE EVENLY DISTRIBUTED
LOAD P = 2065 - 4200 kg
HEIGHT H = 100 m
LENGHT L = 11,9 - 31,1 m
WIDTH B = 1,6 m
OUTRIGGERS NOT EXTENDED ON THE OPPOSITE SIDE OF THE MAST TURNED OUT JACKS SCREWED DOWN.

1. MAX.4200 kg/11,9 m

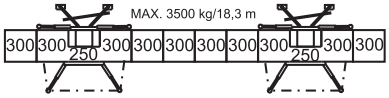
2. MAX. 4050 kg/13,5 m



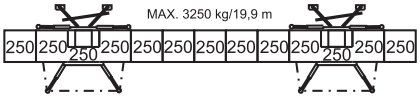
3. MAX. 3800 kg/15,1 m



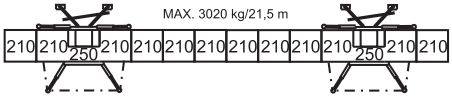
4. MAX. 3500 kg/18,3 m



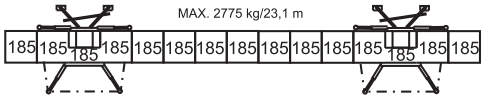
5. MAX. 3250 kg/19,9 m



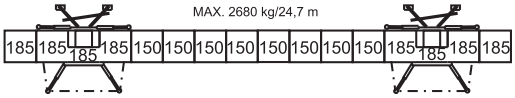
6. MAX. 3020 kg/21,5 m



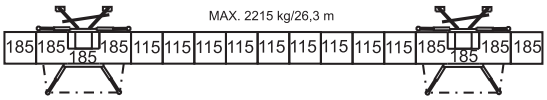
7. MAX. 2775 kg/23,1 m



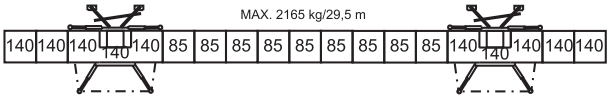
8. MAX. 2680 kg/24,7 m



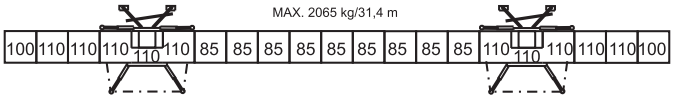
9. MAX. 2215 kg/26,3 m



10. MAX. 2165 kg/29,5 m

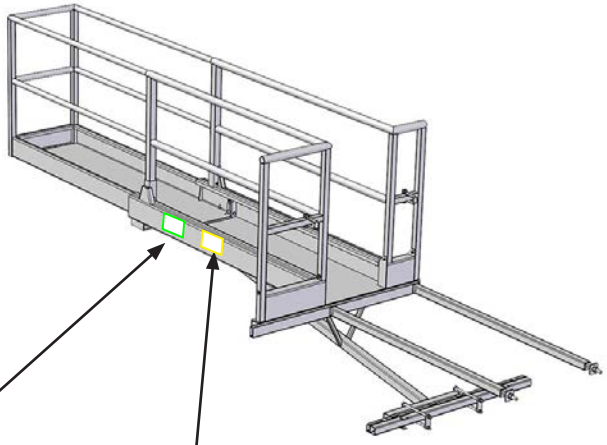


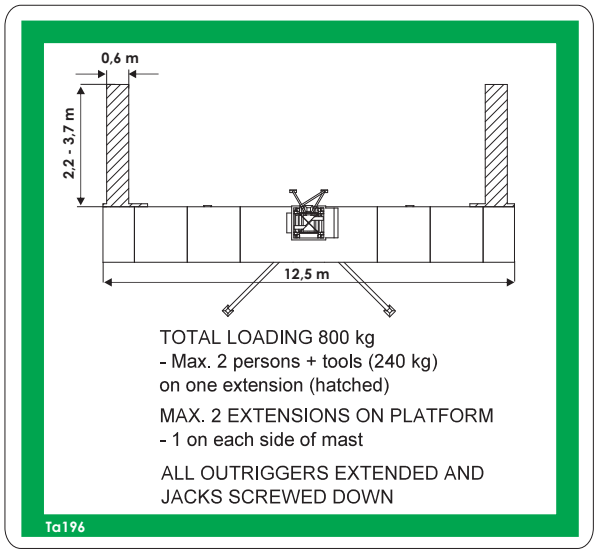
11. MAX. 2065 kg/31,4 m



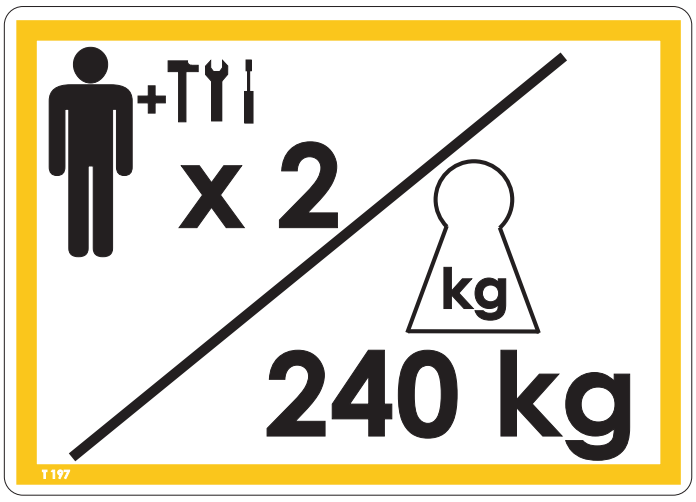
Ta166

ALUMINIUM TELESCOPIC EXTENSION 2,2 - 3,7 m





Ta196



T_197

4. ERECTION AND DISMANTLING

4. ERECTION AND DISMANTLING

4.1. INTRODUCTORY NOTES

SC4000 mast climbing work platform has been designed with intention of its easy and quick assembly. Partial assembly, that should be checked before taking the **Scanclimber** into use:

1. the assembly of the chassis
2. the screwing of the first mast section
3. the assembly of the lifting mechanism
4. the assembly of the main platform
5. the assembly of the limit switch counter parts
6. the assembly of the limit switches

Mast sections, platform sections and wall anchors must be installed according to the instructions given in the manual.

4.2. REQUIRED TOOLS

B = Screw **W** = Wrench **x)** = Delivery with the standard unit

	Screw and wrench	Object
1.	B: M24-10.9 W: 36 mm	to connect the mast sections
2.	B: M18 x 240-10.9 W: 24 mm	to connect the platform sections with each other
3.	W: 19 mm	wall anchor coupler
4.	B: M20-8.8 W: 30 mm	fixing flanged nuts of wall anchor tubes
5.	B: M8 W: 13 mm	to connect the signalling bar and limit switch counter parts to the mast section, to fasten the mast guard nets

6.	W: 22 mm	to tighten the wheel rims on the chassis	
7.	B: M20-8.8 W: 30 mm	to adjust the guiding rollers of the lifting case	
8.	Special tool	to support the platform sections during the assembly works	x)
9.	Special tool	to level the unit with jacks	x)
10.	Special key	to reset the safety brake	x)

4.3. TIGHTENING TORQUES FOR SCREWS AND NUTS

No.	Screw or nut	Location screws or nuts	Tightening torque Nm
1.	M24-10.9	nuts of screws connecting the mast sections	350
2.	M20-8.8	nuts of the guiding rollers	200
3.	M20-8.8	fixing flanged nuts of the wall anchor tubes	190
4.	M16 x 40-8.8	screws connecting the assembly plate to the lifting frame	100
5.	M14 x 120-10.9	screws connecting the safety brake to the assembly plate	135
6.	M16 x 40-8.8	screws connecting lifting gear to the assembly plate	195
7.	M18 -10.9	screws connecting the platforms to each other	195
8.	M14 x 1,25	wheel bolts	160

4.4. PREPARATORY WORKS

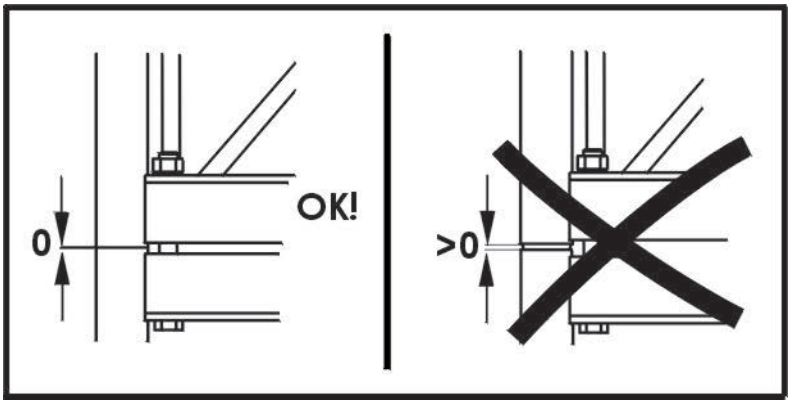
The preparatory works to be carried out:

- Fence the site where you erect the platform with the information and warning signs according to the local work and safety rules, laws and regulations.
- Prepare the base for the platform.
  The base must be flat and horizontally levelled. Disturbed ground should be rammed in order to prevent non-uniform settlement.
- Always use wooden ground plates under the jacks.

! NOTE!
MAX. JACK LOAD IS 60 kN/OUTRIGGER.

- Check drop-offs, holes, bumps, floor obstructions, debris and hazardous locations.
- Check overhead obstructions and high voltage conductors.
- Check wind and weather conditions.
- Check attachments. Prevent the access of unauthorized persons to the working place and pay attention to the traffic.

! WARNING!
The tightening torque for all screws in section joints is 350 Nm. Check the torque of the screw connections before bolting on the next mast.



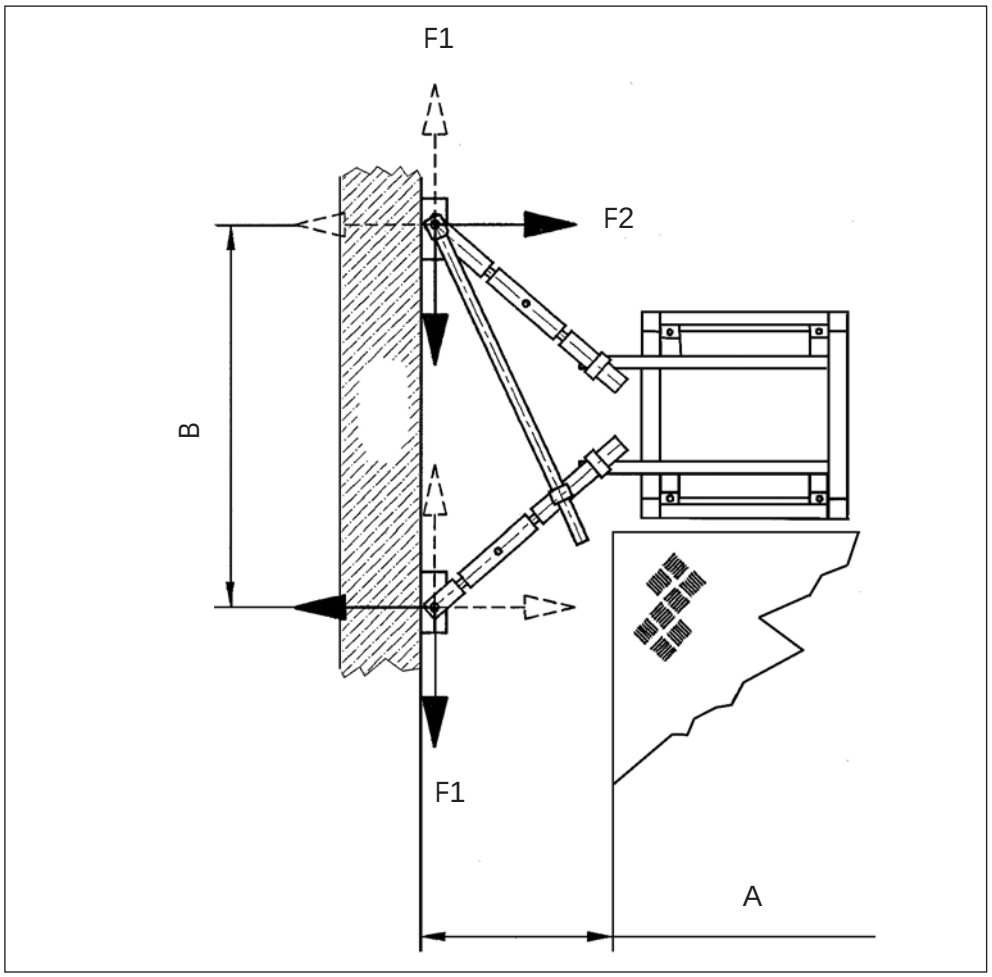
4.5. WALL ANCHORING INSTRUCTIONS

Read carefully the anchoring instructions shown on the following drawings 4.1 - 4.7.
Also carefully read through the loading tables.

The anchoring force indicates how much one anchoring has to hold.

! When choosing the size of the anchoring screw and the anchoring distance, the quality of the wall as the responsibility of the builder, has to be considered.

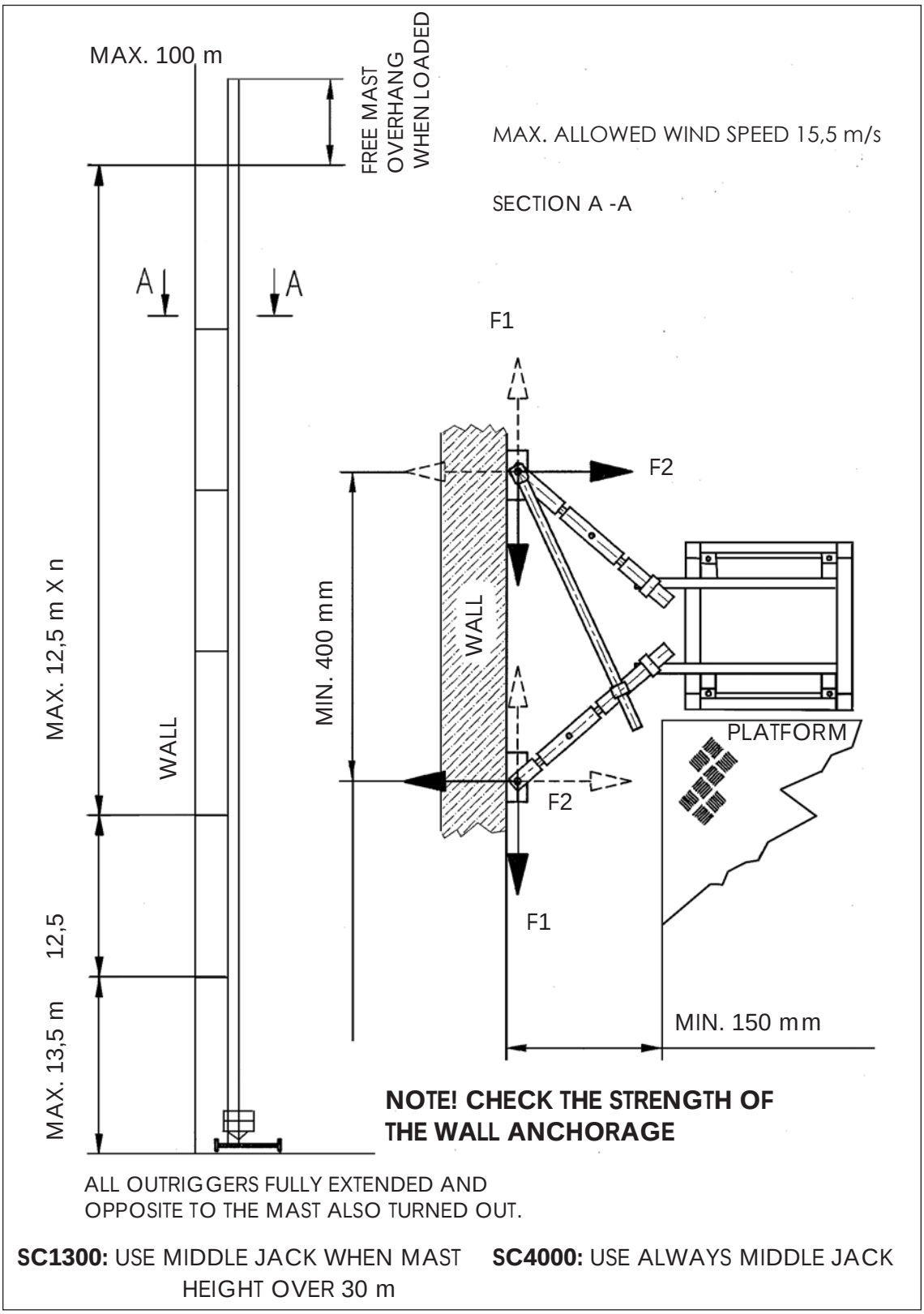
Manufacturer of the anchoring screws is obliged to inform the pull-out strength of the anchoring screws.
Anchoring forces appearing on one anchoring set (anchoring distance 12.5 m) is shown on the following drawings.
See the figures of A/B and F1/F2 on the table 20-0895-1206.



Drawing 4.1. Anchoring forces.

SCANCLIMBER SC1300/SC4000

ANCHORAGE INSTRUCTION



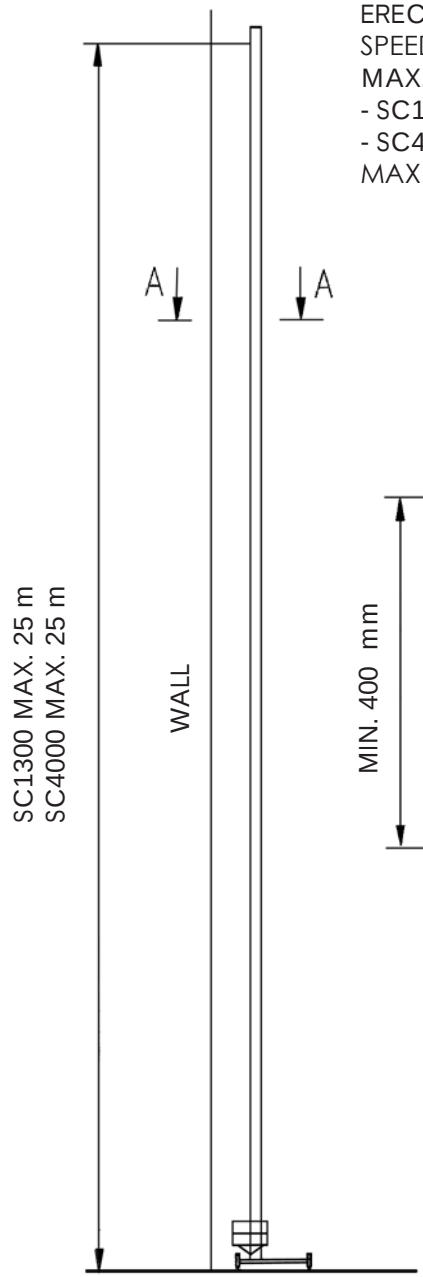
Drawing 4.2. Wall anchorage instructions for wheel chassis. VS440230

SCANCLIMBER SC1300/SC4000

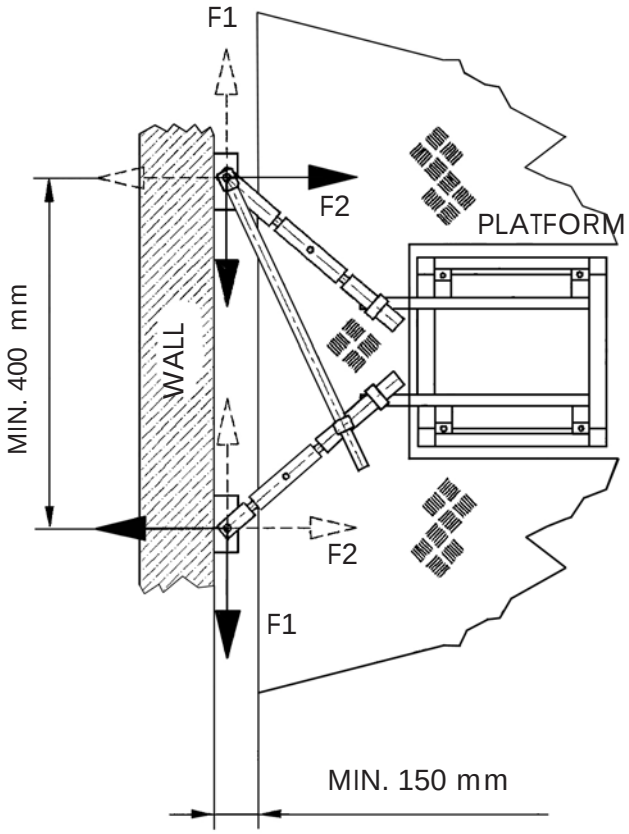
ANCHORAGE INSTRUCTIONS WITH TOP ANCHOR

MAX. ALLOWED PLATFORM LENGTH 4,2 m DURING ERECTION AND DISMANTLING OF THE MAST AND WIND SPEED UNDER 8 M/S.
MAX. ALLOWED PLATFORM LENGTH WHEN OPERATING
- SC1300 10,5 m
- SC4000 12,5 m

MAX. ALLOWED WIND SPEED 15,5 m/s



SECTION A -A



ALL OUTRIGGERS FULLY EXTENDED.
MASTSIDE OUTRIGGERS ALSO TURNED OUT.

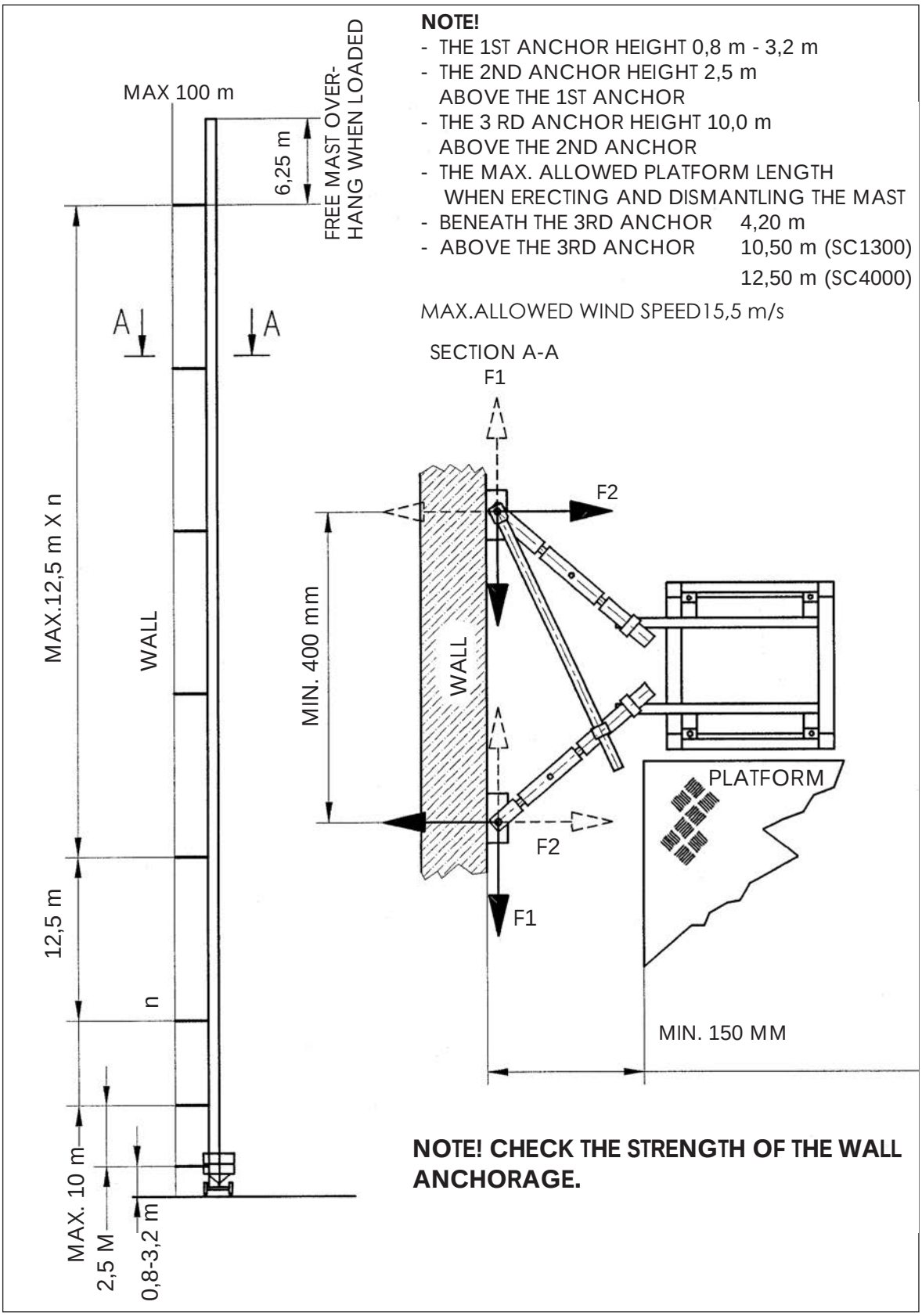
SC4000: USE ALWAYS MIDDLE JACK.

NOTE! CHECK THE STRENGTH OF THE WALL ANCHORAGE.

NOTE! ADJUST THE TOP LIMIT SWITCH COUNTER PARTS TO PREVENT THE MAST GUARD GETTING IN TOUCH WITH THE TOP ANCHOR.

Drawing 4.3. Wall anchorage instructions with top anchor. VS440234

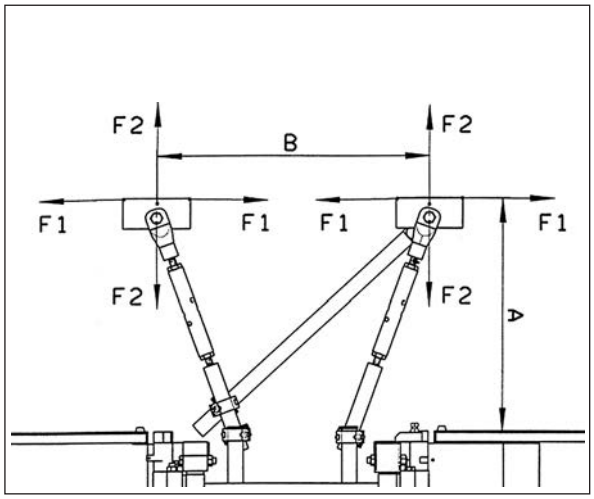
SCANCLIMBER SC1300/SC4000
ANCHORAGE INSTRUCTIONS FOR THE MAST ON THE MINICHASSIS

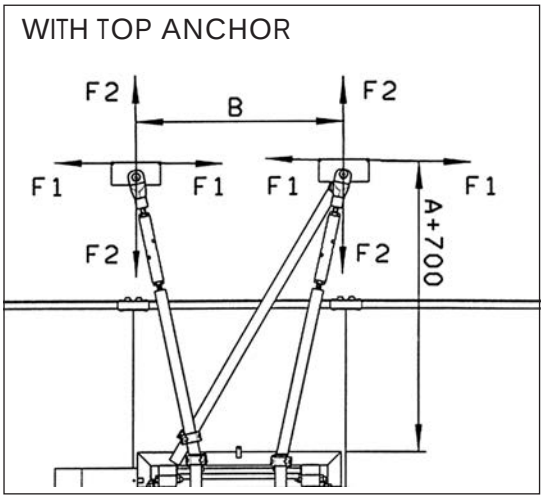


Drawing 4.4. Wall anchorge instructions for minichassis.

VS440238

ANCHOR FORCES SC4000 WITH 12,5 m PLATFORM
MAX. WIND SPEED 15,5 m/s
MAX. 3 PERSONS ON THE PLATFORM





20-0895-1206

FORCE F2 WITH DIFFERENT A AND B VALUES

A and B mm

F2 N (1N = 0.1kp)

B \ A	150	300	450	600	750	900	1050	1200	1350	1500
400	6616	7260	7903							
500	5547	6062	6576	7091	7778					
700	4325	4692	5060	5428	5796	6268	6980	7692		
900		3932	4218	4504	4790	5076	5429	5983	6537	7091
1100		3448	3682	3916	4150	4384	4618	4895	5348	5801
1300		3112	3310	3508	3706	3904	4102	4300	4525	4909
1500			3038	3210	3382	3553	3725	3896	4068	4254
1700			2830	2982	3133	3284	3436	3587	3739	3890
1900				2801	2937	3072	3208	3343	3479	3614
2100				2655	2778	2901	3023	3146	3268	3391
2300					2647	2759	2871	2983	3094	3206
2500					2537	2640	2743	2845	2948	3051

SEE PAGE 16

FORCE F 1 WITH DIFFERENT A AND B VALUES

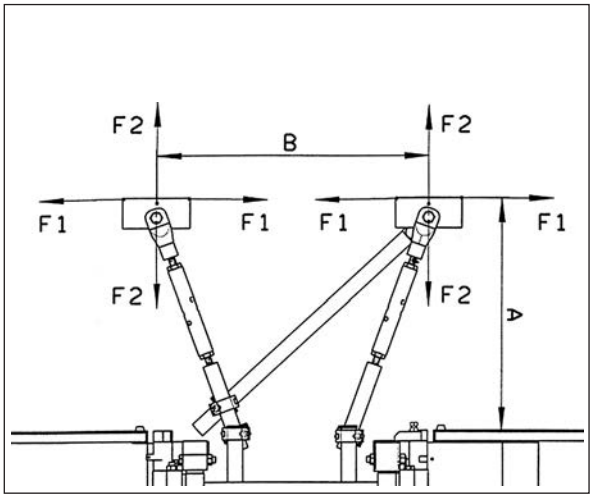
A and B mm

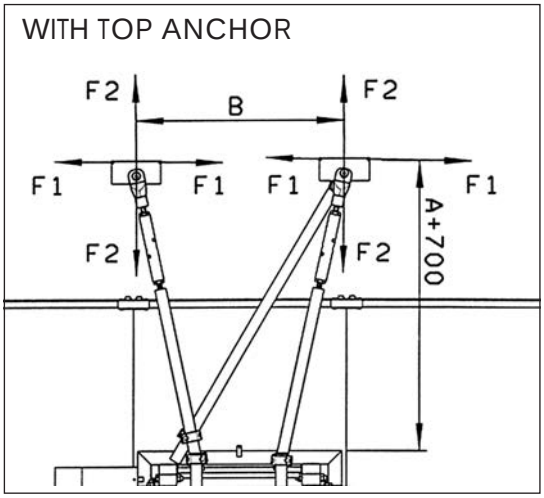
F1 N (1N = 0.1kp)

B \ A	150	300	450	600	750	900	1050	1200	1350	1500
400	2822	3094	3154							
500	3850	2122	2437	2576	2654					
700	8090	3175	2089	1884	2034	2130	2197	2246		
900		4333	2837	2180	1811	1811	1896	1958	2006	2044
1100		5267	3433	2627	2175	1884	1705	1775	1829	1872
1300		6080	3947	3010	2483	2146	1911	1739	1717	1753
1500			4412	3354	2759	2379	2114	1919	1769	1666
1700			4845	3673	3014	2592	2299	2083	1917	1786
1900				3974	3254	2793	2472	2236	2055	1911
2100				4264	3484	2984	2636	2381	2185	2030
2300					3706	3168	2795	2520	2309	2143
2500					3922	3348	2949	2655	2430	2252

SEE PAGE 16

ANCHOR FORCES SC4000 WITH 13,75 m PLATFORM
MAX. WIND SPEED 15,5 m/s
MAX. 3 PERSONS ON THE PLATFORM





20-0895-1206

FORCE F2 WITH DIFFERENT A AND B VALUES

A and B mm

F2 N (1N = 0.1kp)

B \ A	150	300	450	600	750	900	1050	1200	1350	1500
400	7278	7986	8693							
500	6102	6668	7234	7800	8556					
700	4758	5161	5566	5971	6376	6895	7678	8461		
900		4325	4640	4954	5269	5584	5972	6581	7191	7800
1100		3793	4050	4308	4565	4822	5080	5385	5883	6381
1300		3423	3641	3859	4077	4294	4512	4730	4976	5400
1500			3342	3531	3720	3908	4098	4286	4475	4679
1700			3113	3280	3446	3612	3780	3946	4113	4279
1900				3081	3231	3379	3529	3677	3827	3975
2100				2921	3056	3191	3325	3461	3595	3730
2300					2912	3035	3158	3281	3403	3527
2500					2791	2904	3017	3130	3243	3356

SEE PAGE 16

FORCE F 1 WITH DIFFERENT A AND B VALUES

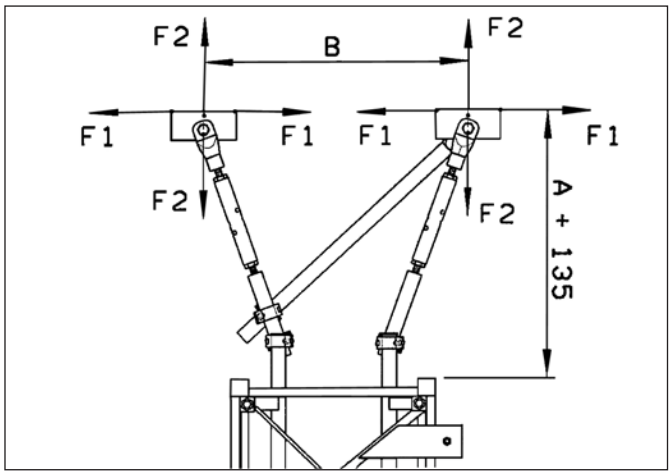
A and B mm

F1 N (1N = 0.1kp)

B \ A	150	300	450	600	750	900	1050	1200	1350	1500
400	3104	3403	3469							
500	4235	2334	2681	2834	2919					
700	8899	3493	2298	2072	2237	2343	2417	2471		
900		4766	3121	2398	1922	1992	2086	2154	2207	2248
1100		5794	3776	2890	2393	2072	1876	1953	2012	2059
1300		6688	4342	3311	2731	2361	2102	1913	1889	1928
1500			4853	3689	3035	2617	2325	2111	1946	1833
1700			5330	4040	3315	2851	2529	2291	2109	1965
1900				4371	3579	3072	2719	2460	2261	2102
2100				4690	3832	3282	2900	2619	2404	2233
2300					4077	3485	3075	2772	2540	2357
2500					4314	3683	3244	2921	2673	2477

SEE PAGE 16

ANCHOR FORCES IN STORM PLATFORM DOWN
ANCHORING DISTANCE 12,5 m
MAX. WIND SPEED 42 m/s



FORCE F2 WITH DIFFERENT A AND B VALUES

A and B mm

F2 N (1N = 0.1kp)

B \ A	150	300	450	600	900	1200	1500
400	9713	12008	14302				
500	7770	9606	11442	13277			
700	5550	6861	8173	9484	12106	14729	
900		5337	6356	7376	9416	11455	13495
1300		3694	4400	5106	6518	7931	9343
1700			3365	3905	4985	6064	7144
2100				3161	4035	4909	5783
2500					3389	4124	4858

SEE PAGE 16

FORCE F1 WITH DIFFERENT A AND B VALUES

A and B mm

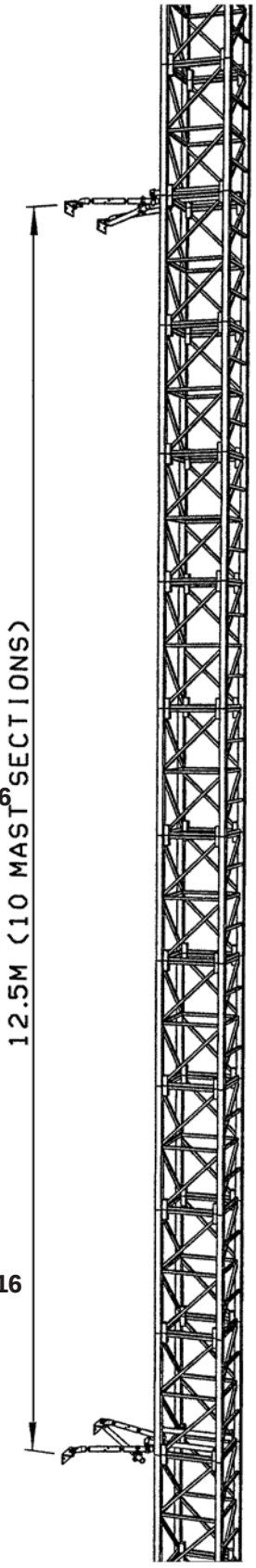
F1 N (1N = 0.1kp)

B A	150	300	450	600	900	1200	1500
400	5090	5658	5784				
500	5393	3706	4365	4654			
700	10383	4642	3375	3300	3813	4055	
900		5882	4276	3571	3198	3504	3683
1300		7216	5246	4381	3583	3207	3130
1700			5760	4810	3934	3521	3281
2100				5075	4151	3715	3462
2500					4299	3847	3585

SEE PAGE 16

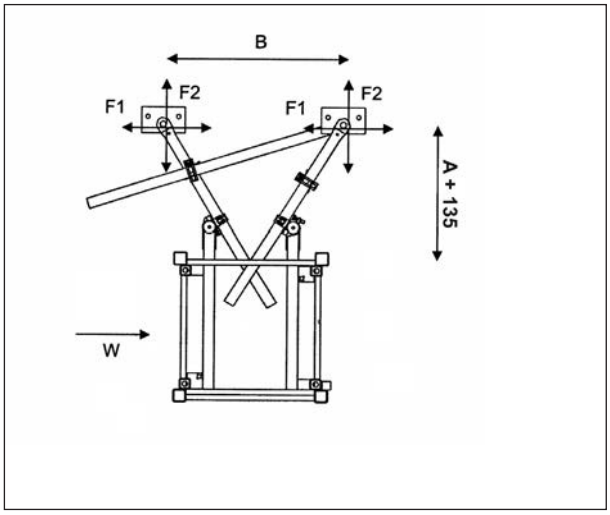
FORCES WITH ANCHORING DISTANCES LESS THAN 12.5 M OR OTHER WIND SPEEDS CAN BE FOUND FROM FORMULA:

F	= (AD/12,5) x (W/42)^2 x F $_{table}$
WHERE: AD	= ANCHORING DISTANCE METRES
W	= WIND SPEED M/S
F$_{table}$	= FORCE FROM TABLE



00-0895-1207

ANCHOR FORCES IN STORM PLATFORM DOWN
ANCHORING DISTANCE 12,5 m
MAX. WIND SPEED 42 m/s



FORCE F2 WITH DIFFERENT A AND B VALUES

A and B mm
F2 N (1N = 0.1kp)

B / A	250	300	450	600	750
350	16970	13880	16780	22380	28650
400	12230	13130	16600	19530	24930
500	10940	11620	14170	16480	20270
700	8800	9270	10810	12410	14590
900	7180	7550	8650	9890	11340
1200	5480	5770	6580	7530	8460
1400	3760	4940	5650	6480	7040

SEE PAGE 16

FORCE F1 WITH DIFFERENT A AND B VALUES

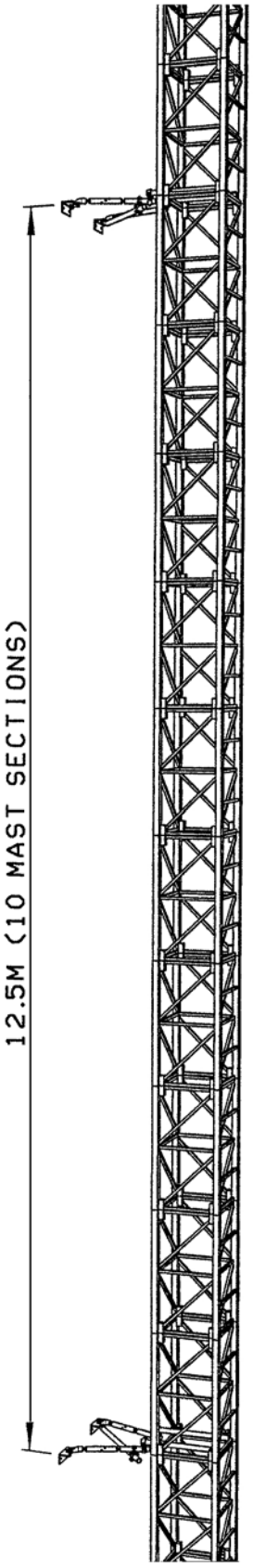
A and B mm
F1 N (1N = 0.1kp)

B / A	250	300	450	600	750
350	4200	4150	6040	8510	8590
400	4130	4710	7410	7490	8150
500	4120	4130	6380	6540	7040
700	4120	4120	4820	5190	5580
900	4120	4120	4440	4300	4660
1200	4130	4120	5360	4730	4430
1400	4110	4120	5720	5080	4660

SEE PAGE 16

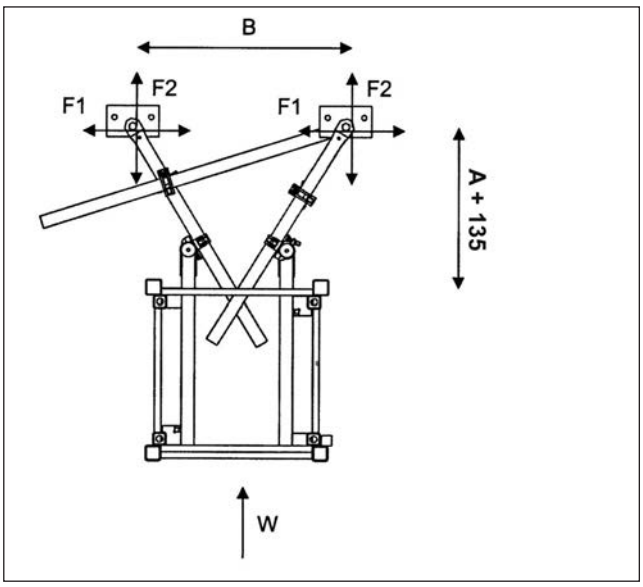
FORCES WITH ANCHORING DISTANCES LESS THAN 12.5 M OR OTHER WIND SPEEDS CAN BE FOUND FROM FORMULA:

F	= (AD/12,5) x (W/42)^2 x F $_{table}$
WHERE: AD	= ANCHORING DISTANCE METRES
W	= WIND SPEED M/S
F $_{table}$	= FORCE FROM TABLE



00-0895-1208

ANCHOR FORCES IN STORM PLATFORM DOWN
ANCHORING DISTANCE 12,5 m
MAX. WIND SPEED 42 m/s



FORCE F2 WITH DIFFERENT A AND B VALUES

A and B mm
F2 N (1N = 0.1kp)

B / A	250	300	450	600	750
350	4250	4390	4230	4230	4380
400	4380	4330	4260	4120	4130
500	4280	4230	4140	4120	4120
700	4140	4110	4140	4170	4190
900	4130	4140	4180	4190	4210
1200	4170	4170	4200	4190	4220
1400	4190	4180	4200	4190	4160

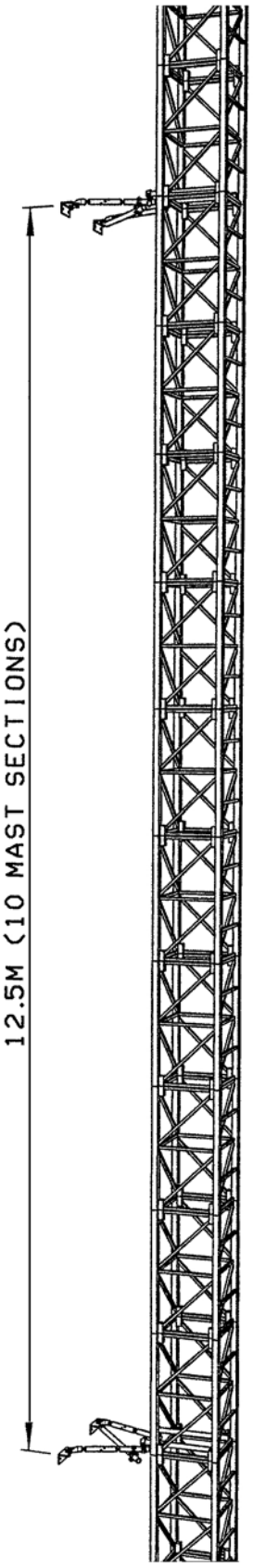
FORCE F1 WITH DIFFERENT A AND B VALUES

A and B mm
F1 N (1N = 0.1kp)

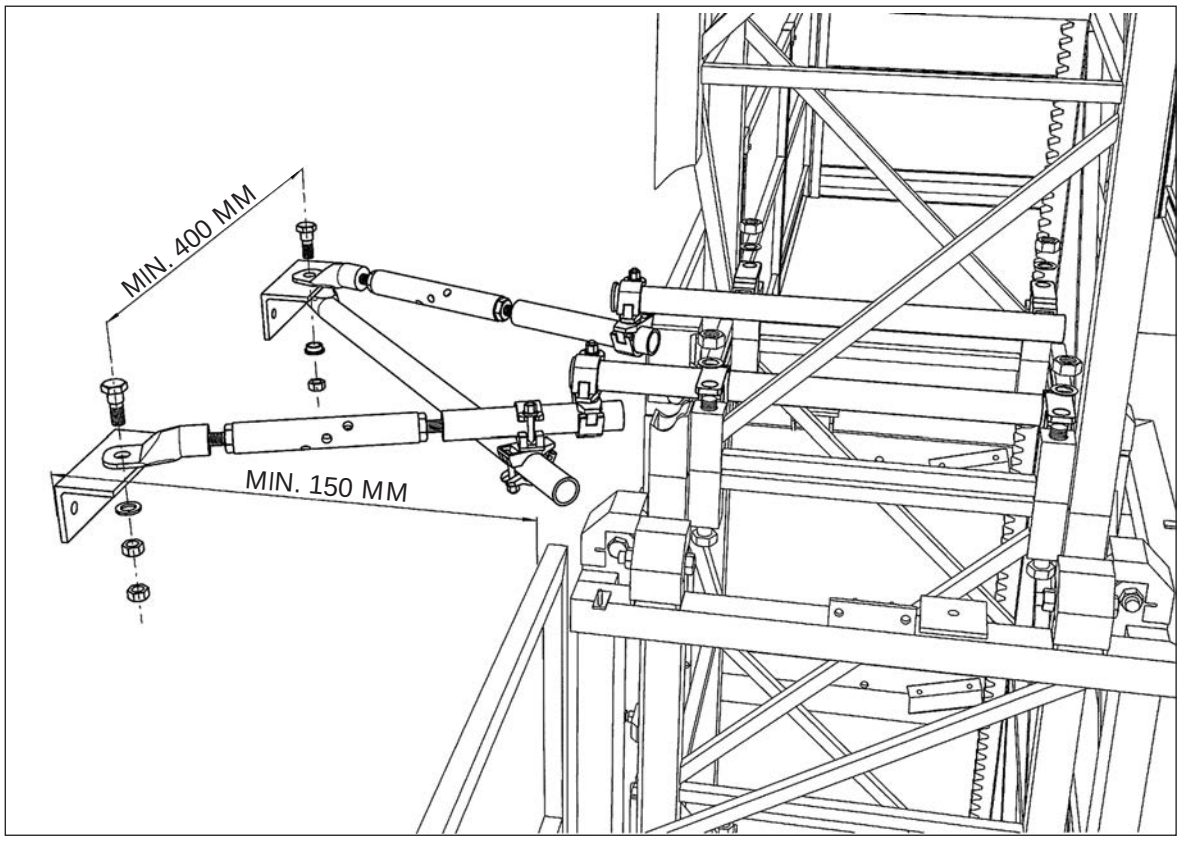
B / A	250	300	450	600	750
350	120	410	350	210	40
400	50	130	190	40	50
500	900	710	310	310	320
700	2540	2140	1240	980	830
900	4100	3510	2140	1640	1340
1200	6340	5480	3490	2650	2130
1400	6820	6760	4400	3320	2750

FORCES WITH ANCHORING DISTANCES LESS THAN 12.5 M OR OTHER WIND SPEEDS CAN BE FOUND FROM FORMULA:

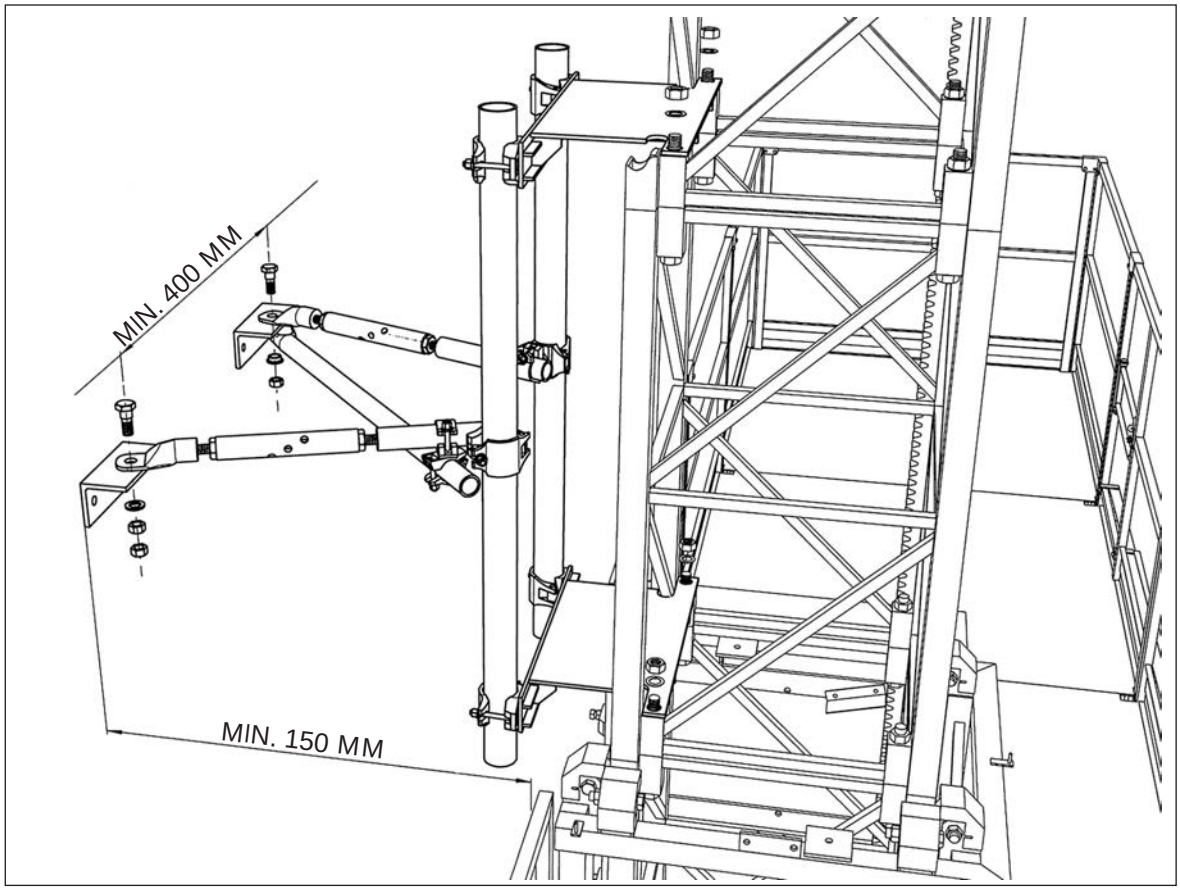
F	= $(AD/12,5) \times (W/42)^2 \times F_{table}$
WHERE: AD	= ANCHORING DISTANCE METRES
W	= WIND SPEED M/S
F_{table}	= FORCE FROM TABLE



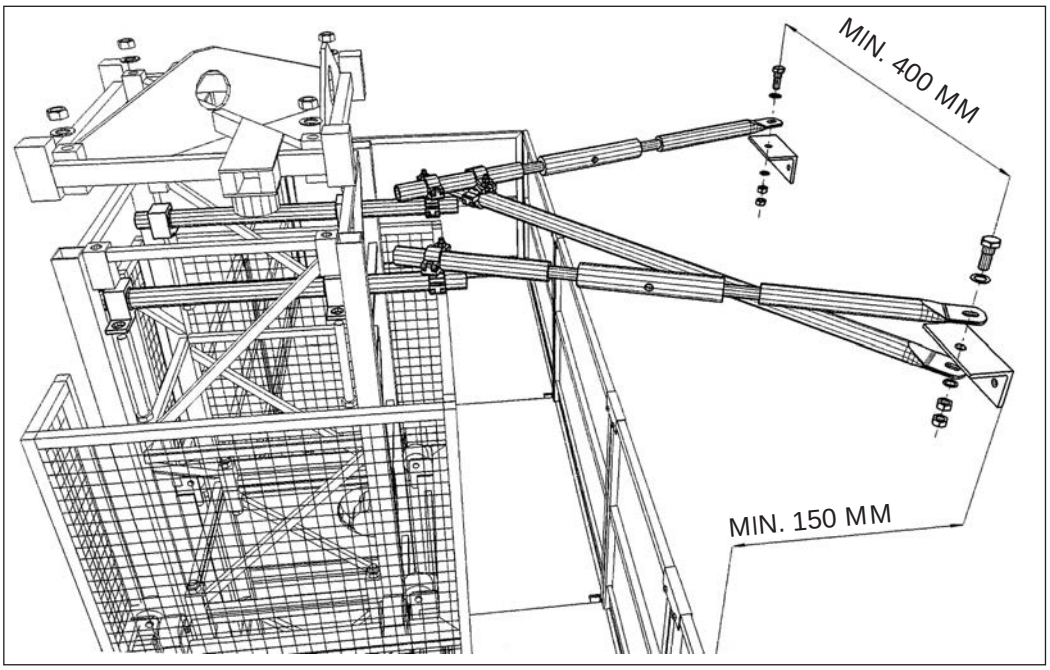
00-0895-1208



Drawing 4.5. Standard anchoring. 00-0994-51-1



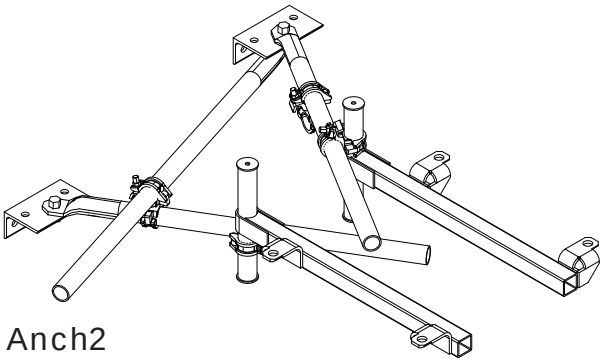
Drawing 4.6. Vertically adjustable anchoring. 00-0994-53-1



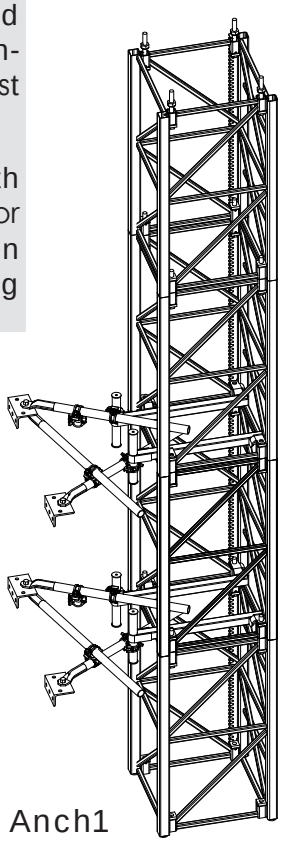
Drawing 4.7. Top anchoring. 00-1293-52-1

Maximum load to anchor system swivel couplers is 5.5 kN. The limit is same also for top anchoring. If load to couplers is bigger (see the shadowed area on the table pages 10-12)a double anchoring or a different type of anchoring must be used.

Maximum load to anchor system couplers with fixed angle in new anchoring is 9.5 kN except for diagonal 5.5 kN, when a swivel coupler is used in diagonal. Picture below describes the anchoring code PG100166.



Anch2

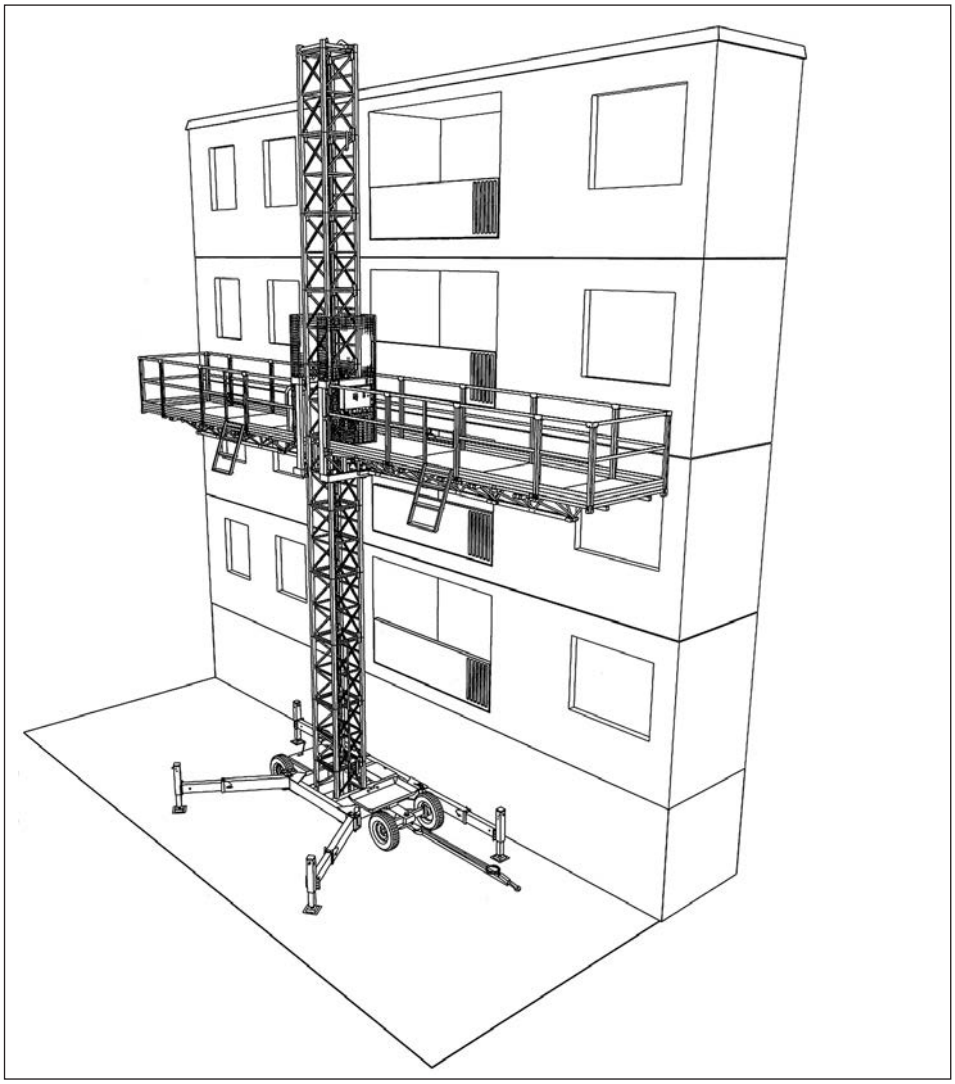


Anch1

If load is too big for anchoring, can double anchoring be used. In this case results are divided by 1,5.

4.6. ASSEMBLY INSTRUCTIONS

! NOTE! DURING ASSEMBLY DO NOT FORGET TO FILL IN THE ERECTION FORM (CHAPTER 10).



Drawing 4.8. SC4000 single. 20-0295-106-5-2

4.6.1. SC4000 SINGLE

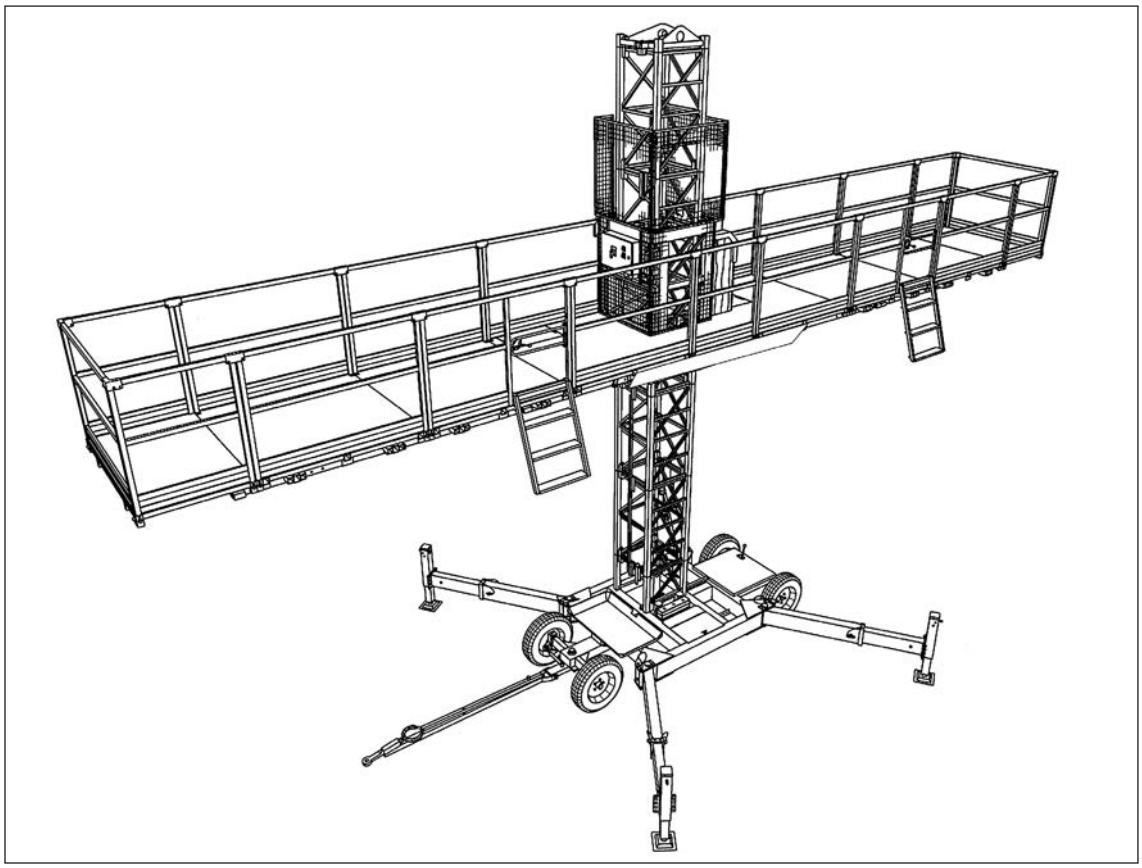
1. Partly assembled platform should be erected on well prepared base at a suitable distance of the wall. The suitable distance between the machine and the wall is approx. 150- 250 mm.

2A. Freestanding

Max. lifting height/platform length: 15/12,5 m.

Max. wind speed 12,7 m/s.

- The outriggers on the mast side turned out, extended and locked with pins (the mast side = the side of the chassis where the mast is erected),
- extend the outriggers on the wall side. Lock with pins.



Drawing 4.9. SC4000 single - freestanding. 20-140295-1-2

2B. Freestanding

Max. lifting height / platform length: 15/12,5 m

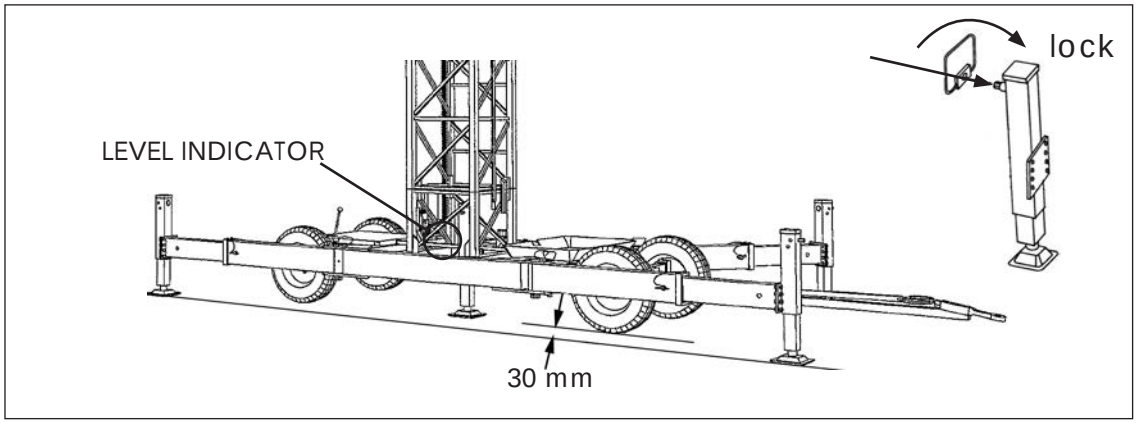
Max. wind speed: 12,7 m/s.

- All outriggers turned out, extended and locked with pins.

! WARNING !
Drive shafts of all jacks shall be locked

3. Lift the chassis by turning the drive shafts equally so that the tyres do not touch the ground. The distance between the tyres and the ground is usually about 30 mm. Do not forget to use the wooden ground plates under jacks.

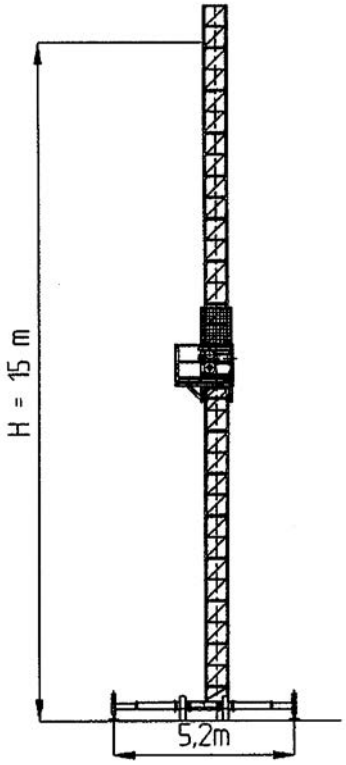
- level the chassis and a mast on vertical position with the level indicator.
- lock drive shafts

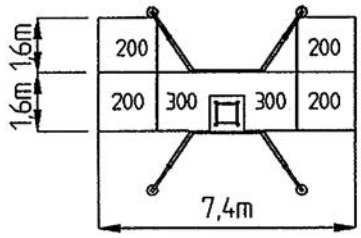


Drawing 4.10. Location of the level indicator. Air gap 30 mm.

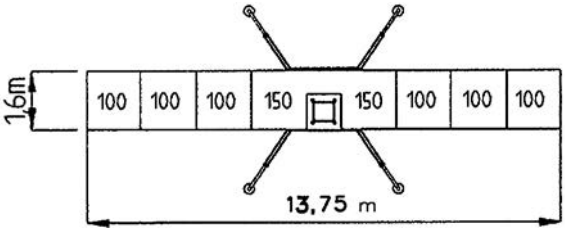
FREESTANDING VARIATION

MAX. WIND SPEED 12,7 m/s
LOAD MUST BE EVENLY DISTRIBUTED
OUTRIGGERS ON BOTH SIDES MUST BE FULLY TURNED AND PULLED OUT JACK SCREWED DOWN

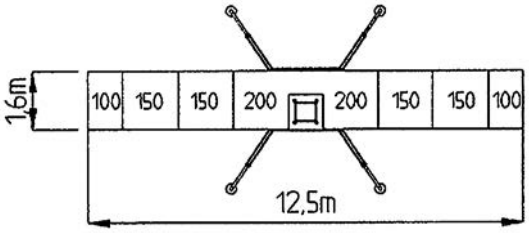




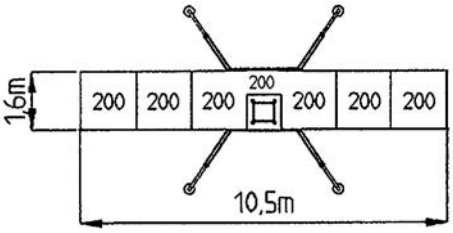
1400 kg



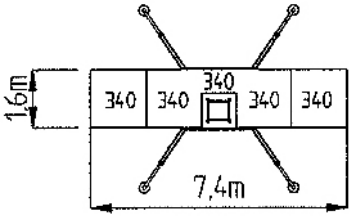
900 kg



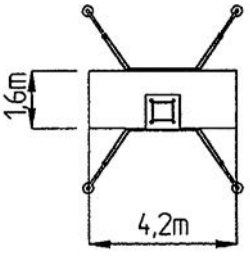
1200 kg



1400 kg



1700 kg



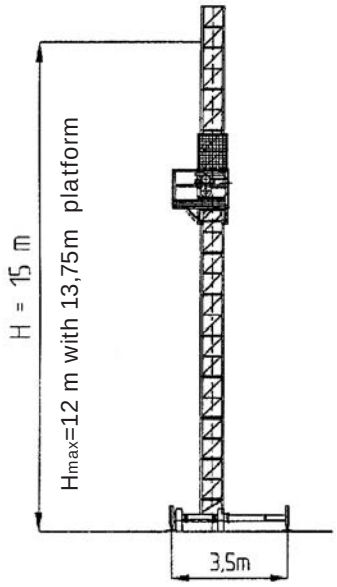
2000 kg

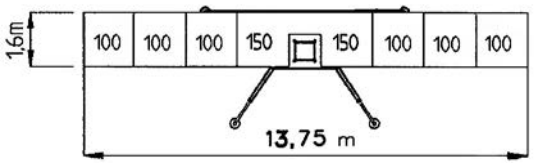
Mpi 950504
VS440286

FREESTANDING VARIATION

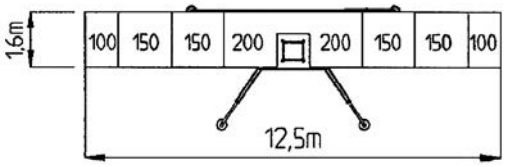
MAX. WIND SPEED 12,7 m/s
LOAD MUST BE EVENLY DISTRIBUTED

ATTENTION!
ALL OUTRIGGERS PULLED OUT AND ON MAST SIDE ALSO TURNED JACKS SCREWED DOWN.

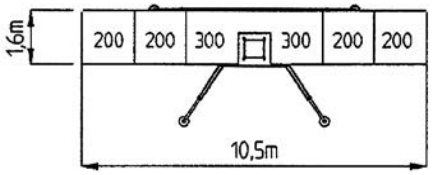




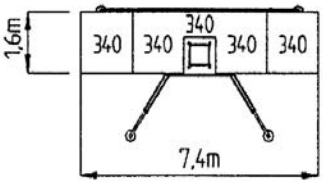
900 kg



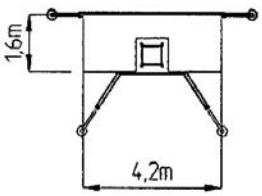
1200 kg



1400 kg

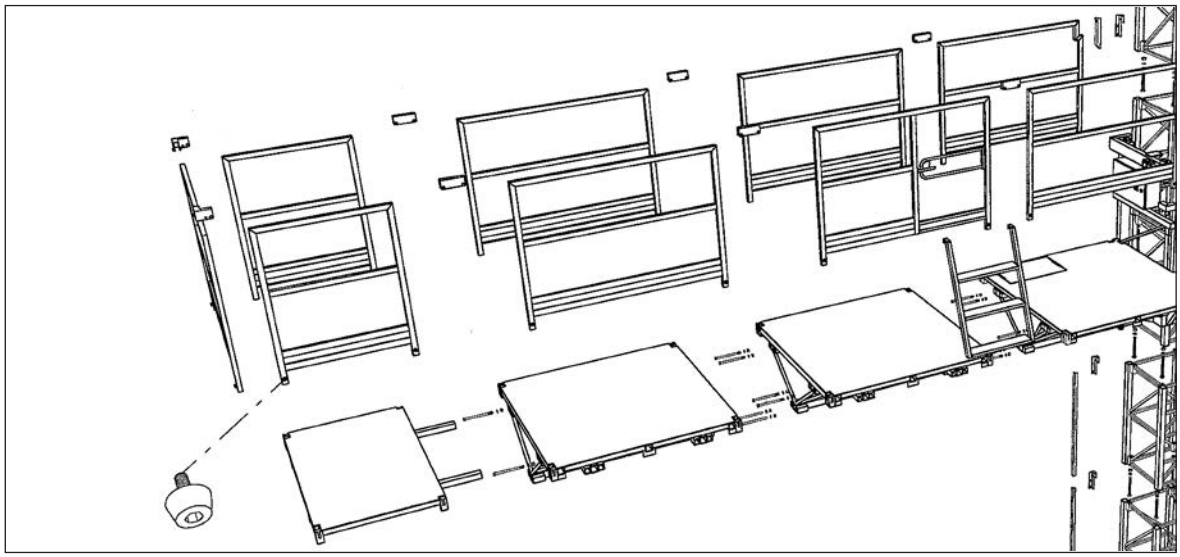


1700 kg



2000 kg

Mpi 950504
VS440283



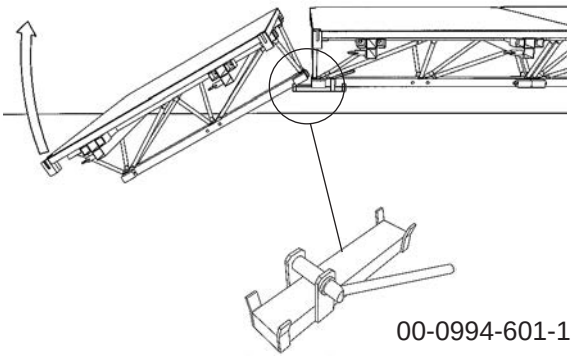
Drawing 4.11. Assembly of platform sections. 20-140295-1

4. Screw the platform sections symmetrically to each other by using a special tool which has been designed for platforms assembly. Use only screws delivered by the manufacturer. Tighten the screws 195 Nm.

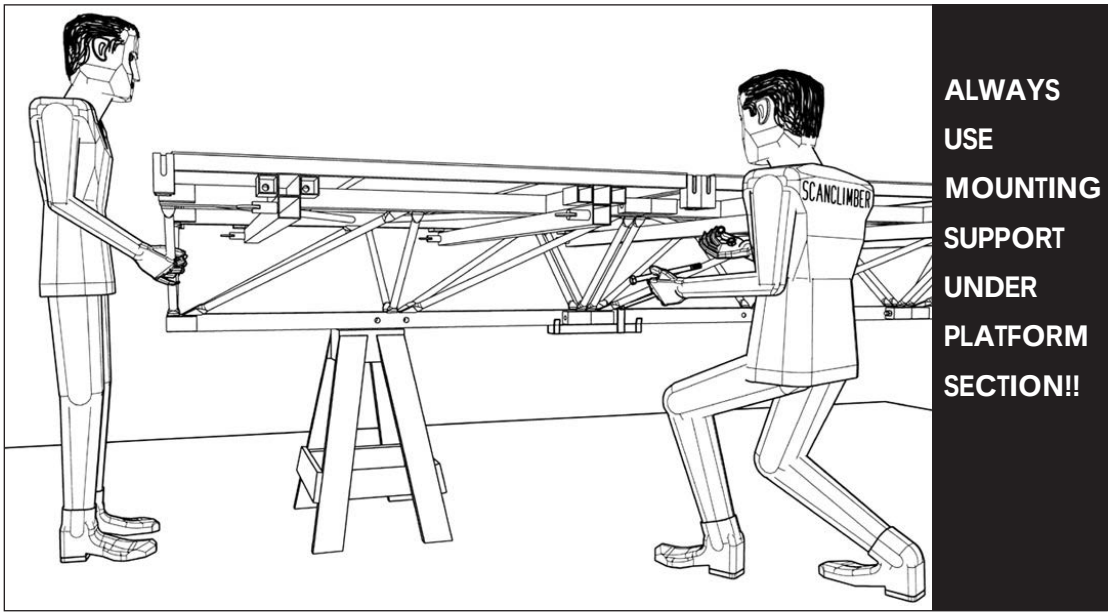
NOTE: THE RAILINGS SHALL ALSO BE ASSEMBLED, SO THAT THE WHOLE PLATFORM IS SURROUNDED BY RAILINGS.

Platform section can be used also as a side platform. Use only screws delivered by the manufacturer. Tighten the screws 195 Nm.

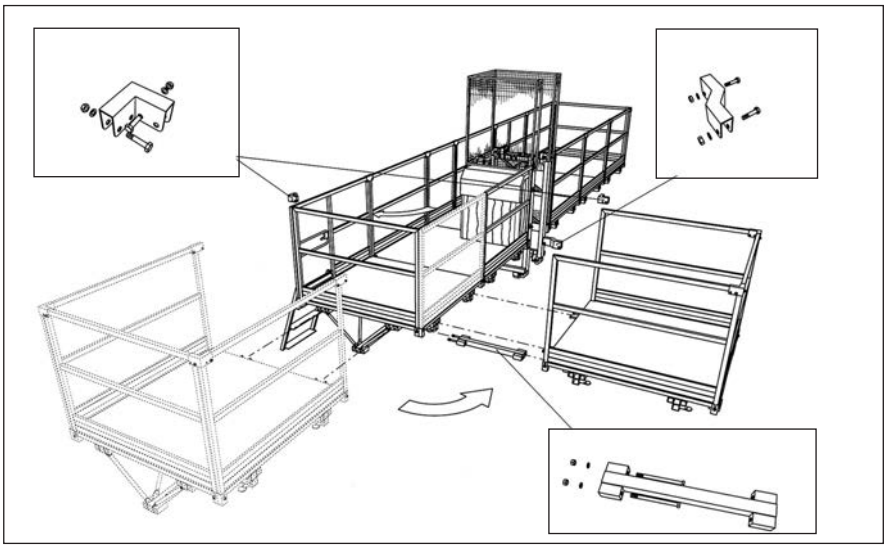
SEE LOADING TABLES (CHAPTER 3).



00-0994-601-1



Drawing 4.12. Use of special tool. 00-0994-603-2



13-0994-803-1C

Drawing 4.13. Platform section as a side platform.

5. Assemble the first mast section. Use only screws delivered by the manufacturer. Tighten the screws 350 Nm.

6. Connect the supply cable (400 V/ 16 A 5-poles) to socket X1 of the chassis electric box.

7. Check the power phase

The following should be done:

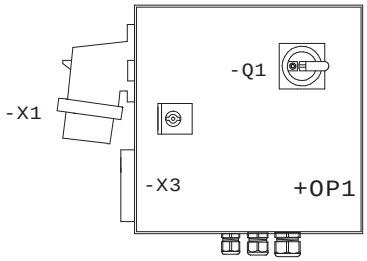
a) switch on power with platform electric box main switch Q2

b) switch on power with chassis electric box main switch Q1

c) check, if the control lamp for the phase order in the platform electric box is on:

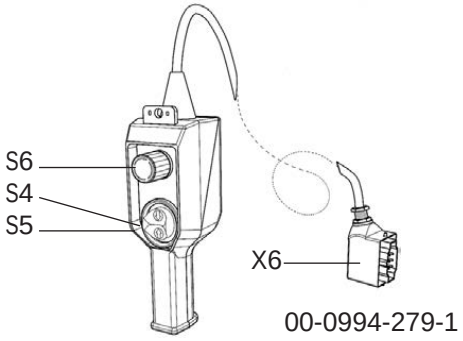
if not, then:

- change the phase order with the phase inverter switch Q1.1 on the chassis electric box,
- push the button UP on the pendant control and note the movements of the platform.



X1 = SUPPLY VOLTAGE SOCKET
X3 = Pendant CONTROL SOCKET
Q1 = MAIN SWITCH

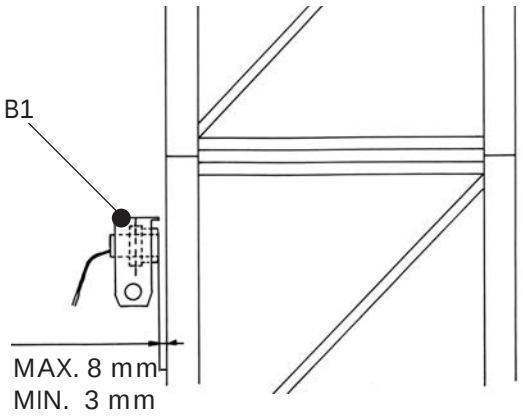
Drawing 4.14. Chassis electric box.



S4- PUSH-BUTTON - FORWARD/UP
S5- PUSH-BUTTON - REWARD/DOWN
S6- EMERGENCY STOP
X6- PLUG

Drawing 4.15. Pendant control E3 (horizontal/vertical drive).

8. Test the function of the mast section installation safety sensor B1. When lifting the platform and the inductive safety sensor B1 runs over the last mast section top, the platform stops immediately.



Drawing 4.16. Inductive safety sensor.

9. Test the function of bottom limit switch S11.
When lowering the platform it will stop on the bottom position.

10. Test the function of the hooter safety sensor B2.
When lowering the platform, the hooter will be activated on its function area.

11. Test the function of the platform electric box signal push-button S2. The hooter should function by pressing the push-button S2.

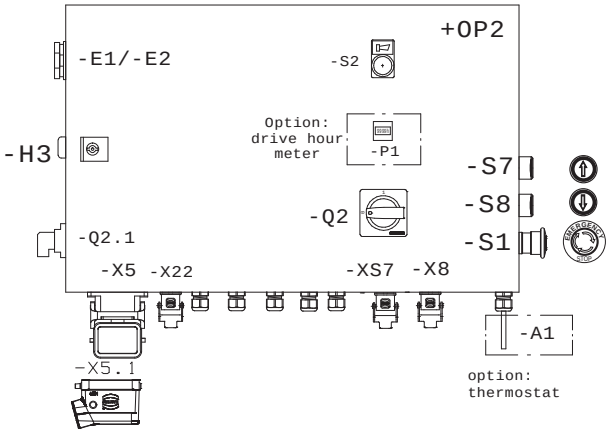
12. Assemble the third mast section and the second part of hooter limit signalling bar.
Assemble following two mast sections.

13. After assembling of the first five mast sections the test of the safety brake should be carried out.

14. Platform driving control can be realised by:

a) using the drive buttons located on the platform electric box + OP2,

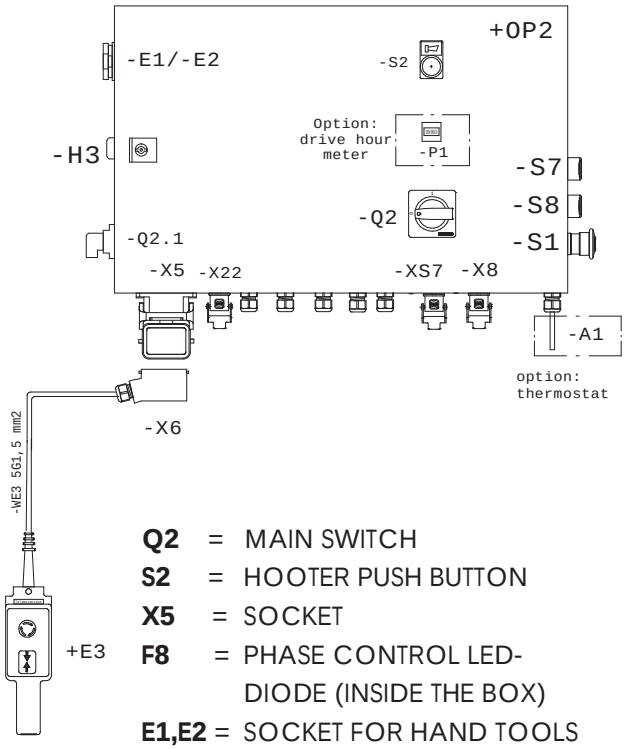
- connect the special plug -X5.1 to the socket -X5



Drawing 4.17 Platform driving control realised by the drive buttons located on the platform electric box + OP2

b) using the pendant control box E3,

- connect the plug of the pendant control box E3 to the socket X5



Q2 = MAIN SWITCH
S2 = HOOTER PUSH BUTTON
X5 = SOCKET
F8 = PHASE CONTROL LED-DIODE (INSIDE THE BOX)
E1,E2 = SOCKET FOR HAND TOOLS
S7,S8 = DIRECTION BUTTONS
S1 = EMERGENCY STOP
XS7 = SOCKET FOR GATE
X8 = SOCKET FOR TEST
XS.1 = SPECIAL PLUG
Q2.1 = PHASE INVERTER SWITCH
H3 = CONTROL LAMP "PHASES OK"

Drawing 4.18 Platform driving control realised by the pendant control box E3

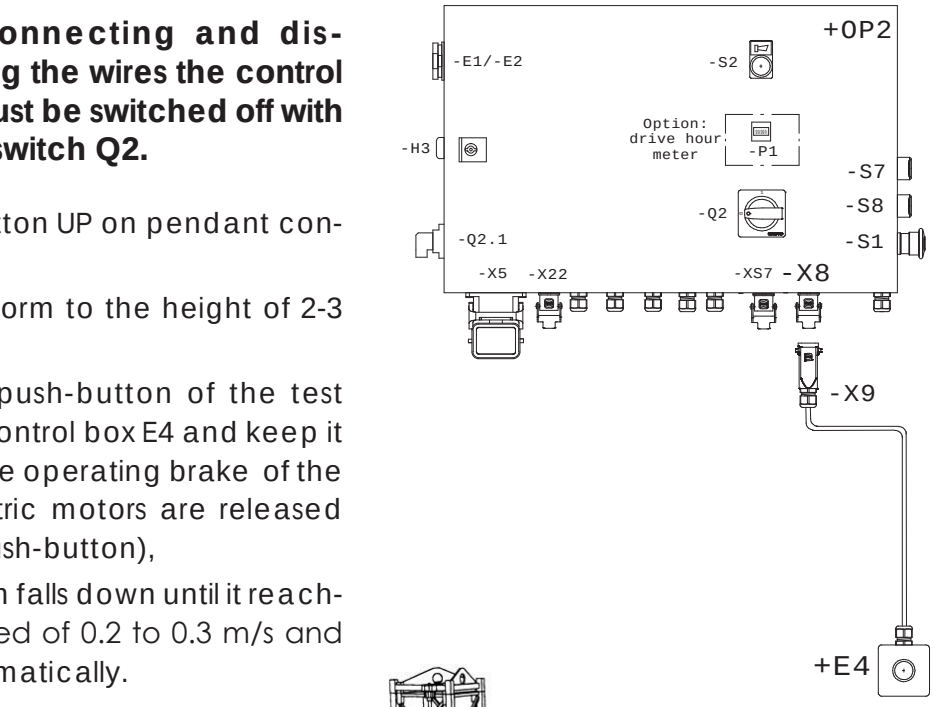
a) SAFETY BRAKE TEST

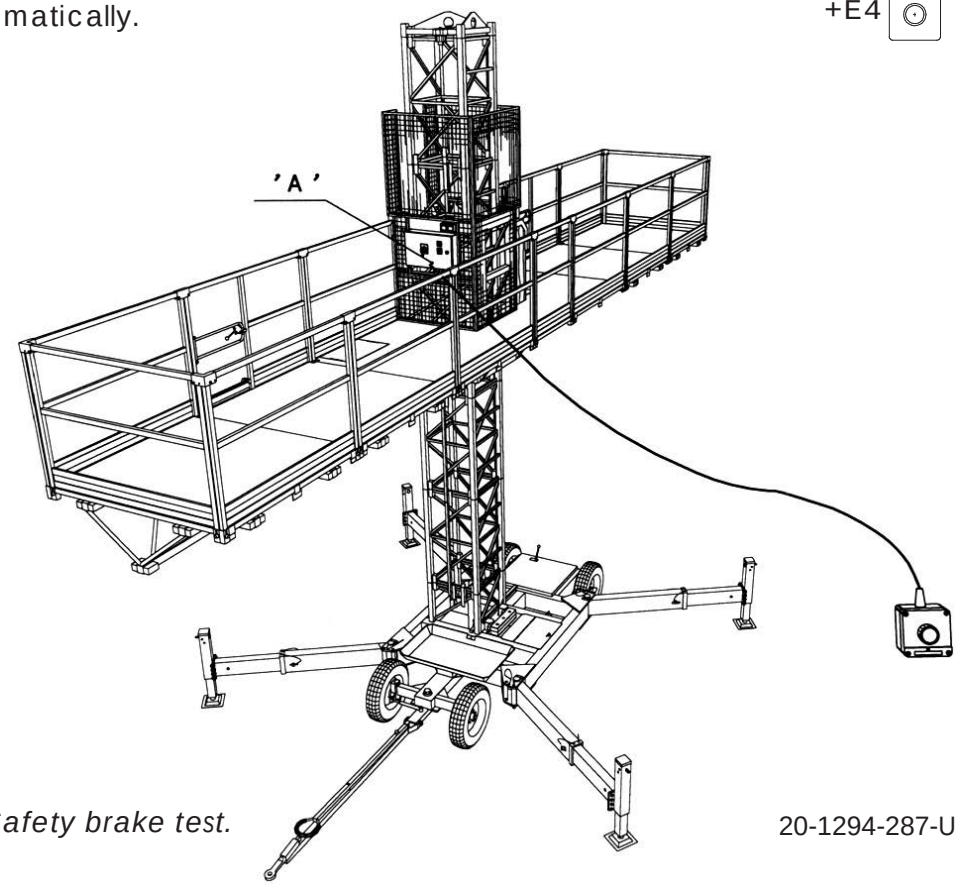
- Connect the plug X9 of an extra test pendant control box E4 to socket X8 on platform electric box, (see the platform electric chart at the end of chapter 2 and drawing no 4.18. below).

! NOTE !
Before connecting and disconnecting the wires the control current must be switched off with the main switch Q2.

- press the button UP on pendant control box E3,
- lift the platform to the height of 2-3 m,
- press the push-button of the test pendant control box E4 and keep it pressed (the operating brake of the lifting electric motors are released with the push-button),
- the platform falls down until it reaches the speed of 0.2 to 0.3 m/s and stops automatically.

! NOTE!
IF SAFETY BRAKE DOESN´T ENGAGE AFTER THE PLATFORM HAS MOVED ABOUT 1 M, PLATFORM HAS TO BE STOPPED BY RELEASING THE PUSH-BUTTON OF THE TEST PENDANT CONTROL E4.





Drawing 4.19. Safety brake test.

20-1294-287-U

WITH POSITIVE RESULT:

- switch off the main switch Q1
- disconnect the test pendant control E4
- release the safety brake according to the instructions b)

! WARNING!
THE USE OF THE PLATFORM IS FORBIDDEN WITHOUT TESTED SAFETY BRAKE!

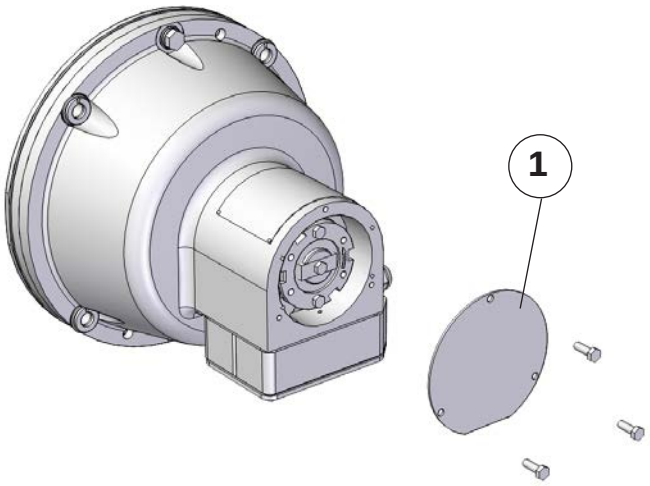
! Evacuate the platform during the test.
The test is to be carried out by trained or authorized person only.

WITH NEGATIVE RESULT (SAFETY BRAKE DOESN´T ENGAGE):

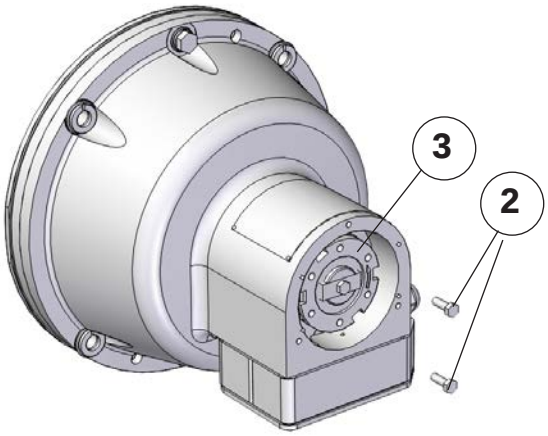
- lower platform to the bottom position,
- switch off the main switch Q1,
- dismount the safety brake, send it for repair to the manufacturer and afterwards reassemble or replace it with a new one, and repeat the test

b) RESETING THE SAFETY BRAKE

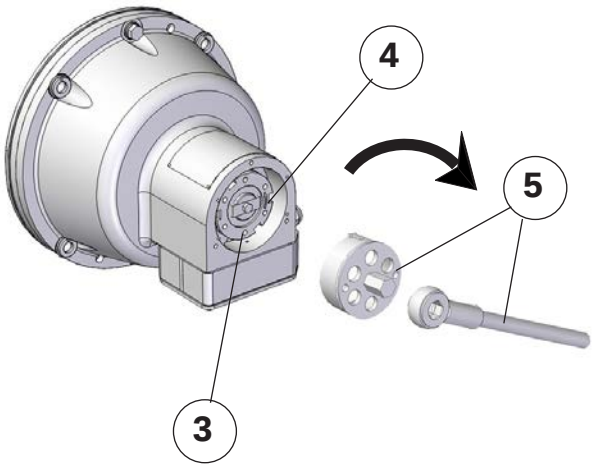
- *Open the safety brake cover (1) with 10 mm wrench.*



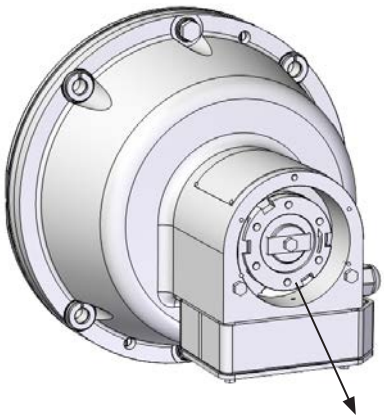
- *Open the two screws (2) of the bronze nut (3) with 10 mm wrench.*



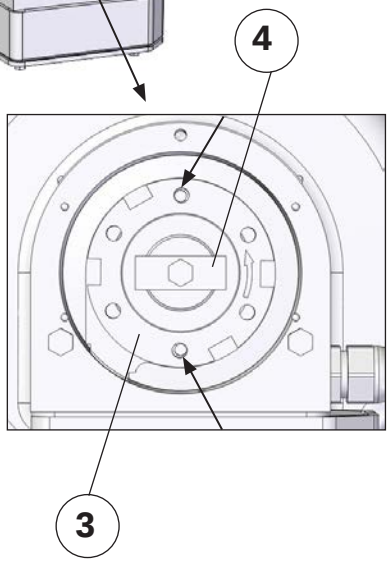
- *Rotate the bronze nut (3) clockwise (unscrew) until it rests against the top plate(4).*
  Do not bend the plate.
  Use the special key(5).



- *Rotate the bronze nut (3) by hand to align the two screws.*

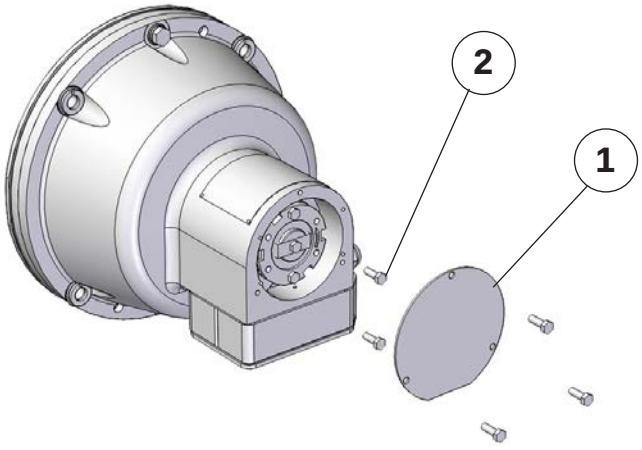


- *Install the two screws (2).*



- *Mount the cover (1)*

- *Release the safety brake by lifting the platform.*



15. Carry out the further assembly of the mast.
If not freestanding, pay attention to the anchoring instructions (4.5).

16. Fasten the counter part of the top limit switch to the second last mast section and assemble the mast top cap.

17. Clean and grease the rack (see the lubrication instructions chapter 6.).

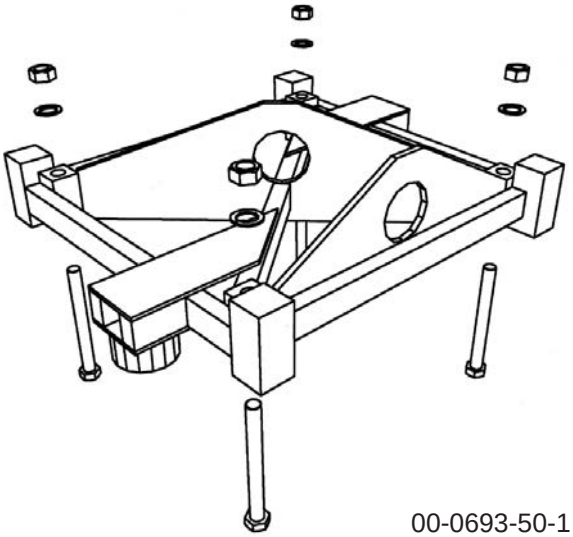
18. Assemble the mast guard around the mast.

19. Platform can be taken into use first after technical inspection. This inspection should be carried out by an authorized inspector. See 4.7.

20. The mast sections can be assembled on each other by using the mast assembly crane (see optional equipment, chapter 2.).

Remember that the crane is meant for handling the mast sections only.

MAST TOP CAP



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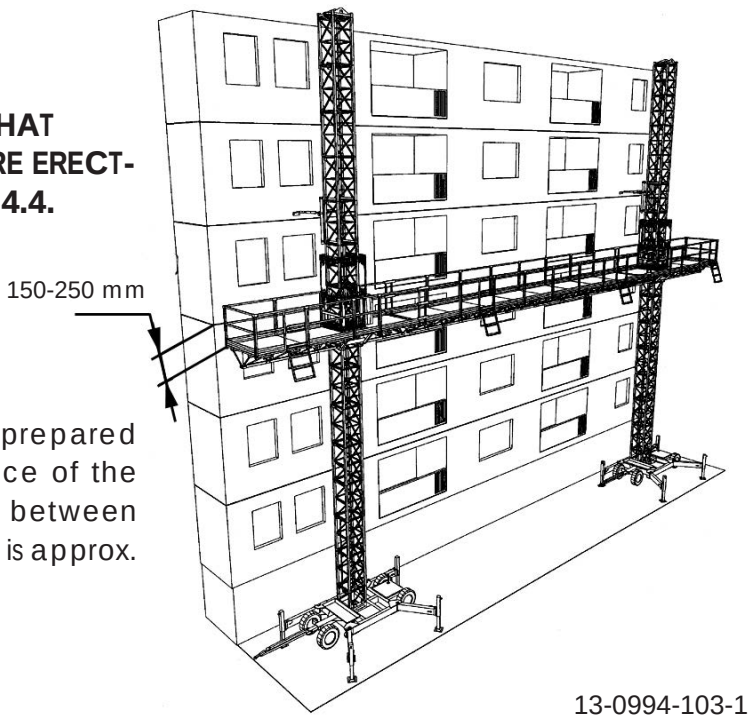
When you drive platform up or down the crane has to be turned to the side.
In normal use of the platform the mast section assembly crane has to be removed.

4.6.2. SC4000 TWIN

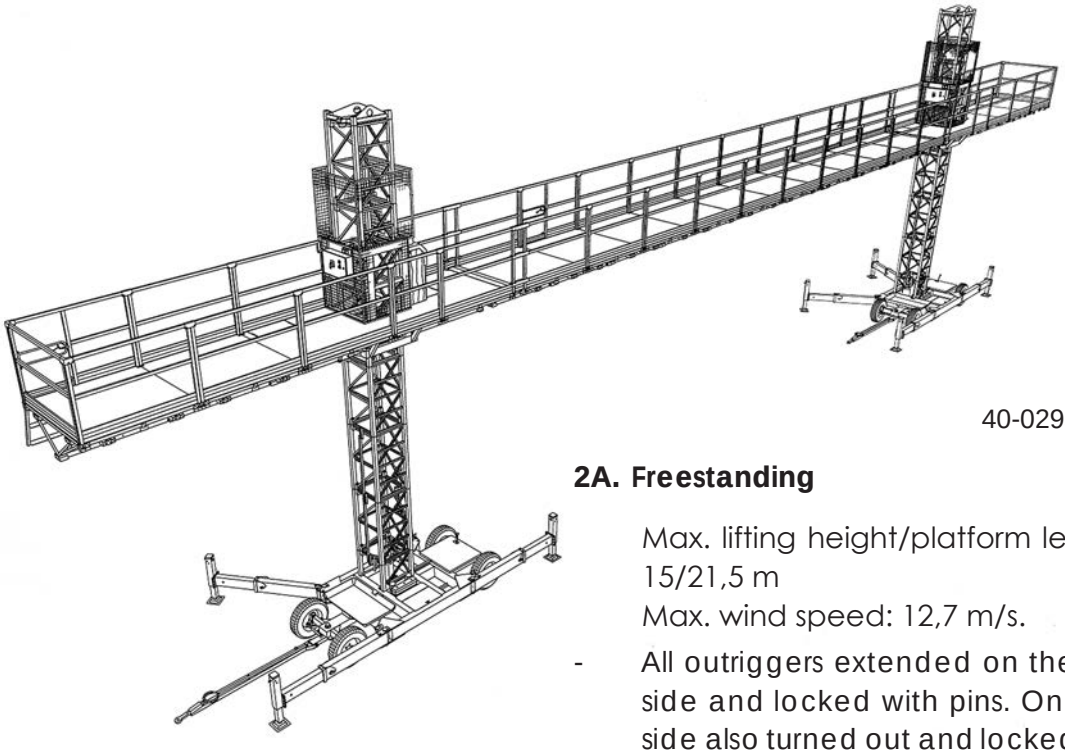
! NOTE!
PREPARATORY WORKS THAT SHOULD BE DONE BEFORE ERECTING THE PLATFORM! SEE 4.4.



13-0994-103-1

Drawing 4.21. SC4000 twin.

1. Erect the masts on well prepared base at a suitable distance of the wall. The suitable distance between the machines and the wall is approx. 150-250 mm.



40-0295-85-K

Drawing 4.22. SC4000 twin.

2A. Freestanding

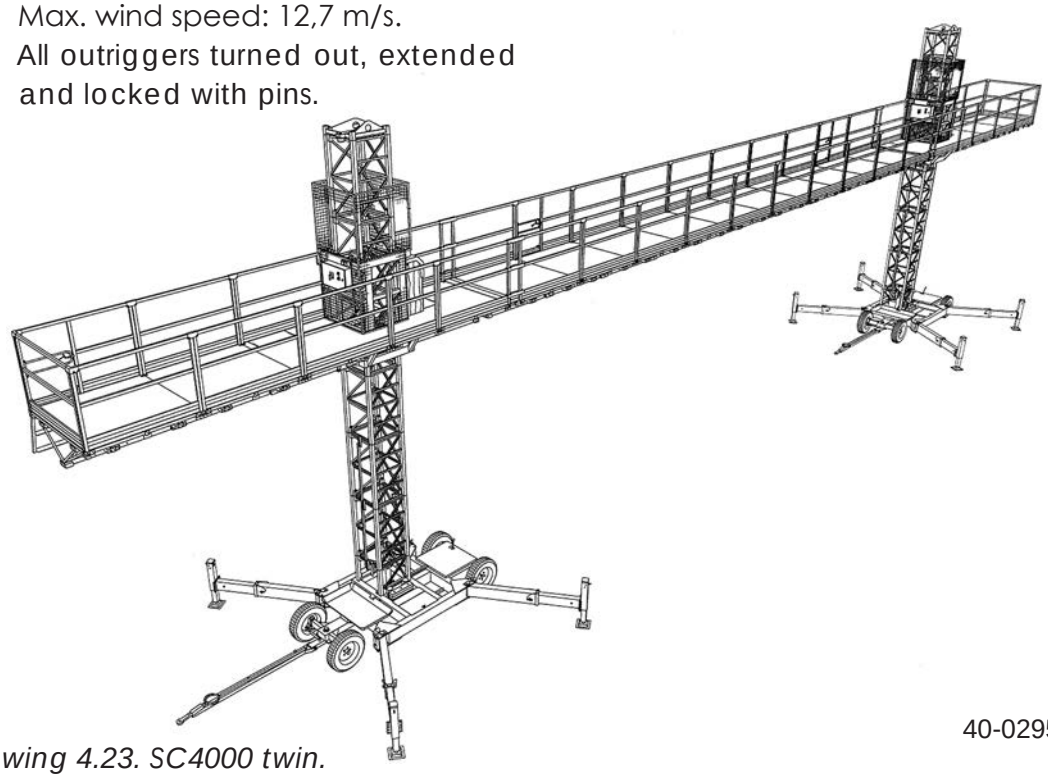
Max. lifting height/platform length: 15/21,5 m
Max. wind speed: 12,7 m/s.

- All outriggers extended on the wall side and locked with pins. On mast side also turned out and locked with pins (mast side = the side of chassis where the mast is erected).

2B. Freestanding

Max. lifting height/platform length: 10/31,4 m.
Max. wind speed: 12,7 m/s.

- All outriggers turned out, extended and locked with pins.



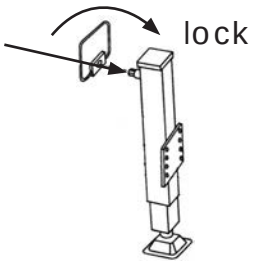
40-0295-85-X

Drawing 4.23. SC4000 twin.

3. Lift the chassis by turning the drive shafts equally so that the tyres do not touch the ground. The air gap between the tyres and the ground is usually about 30 mm.

- level the chassis and a mast on vertical position with the level indicator, use the wooden ground plates under jacks.
- lock drive shafts

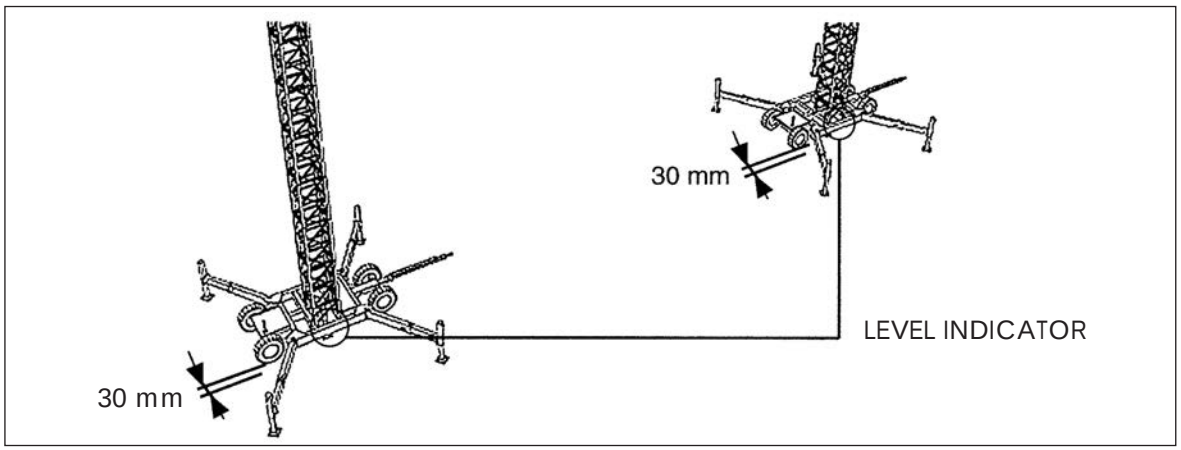
! WARNING ! Drive shafts of all jacks shall be locked



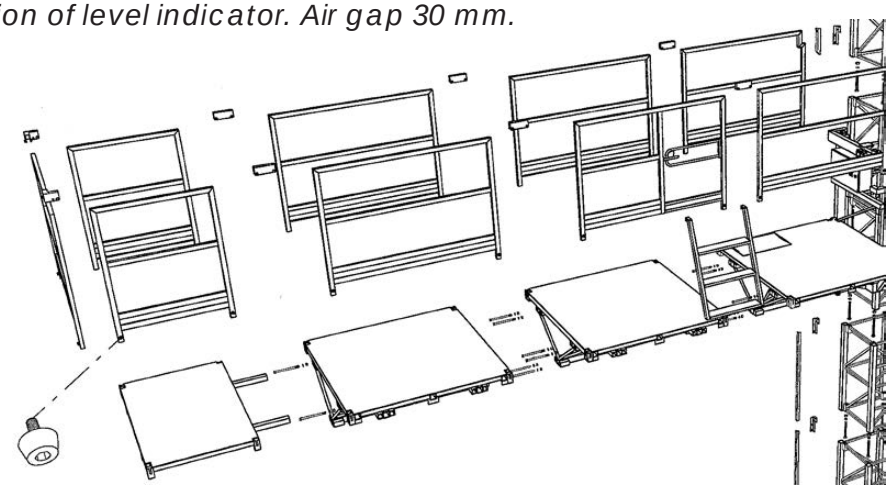
4. Screw the platform sections (the railings included) the symmetrically to each other the with help of a special tool which has been designed for platform assembly. Use only screws delivered by the manufacturer. Tighten the screws 195 Nm.

5. Assemble the first mast section. Use only screws delivered by the manufacturer. Tighten the screws 350 Nm.

6. Fasten the middle platform sections to the right side mast basic section viewed from the mast side of the platform (min. two pieces, max. nine pieces) acc. to the needed total length of the platform. While assembling the middle platform remember to support the platform from the bottom e.g. by using mast sections.
NOTE: THE RAILINGS SHALL ALSO BE ASSEMBLED, SO THAT THE WHOLE PLATFORM IS SURROUNDED BY RAILINGS.



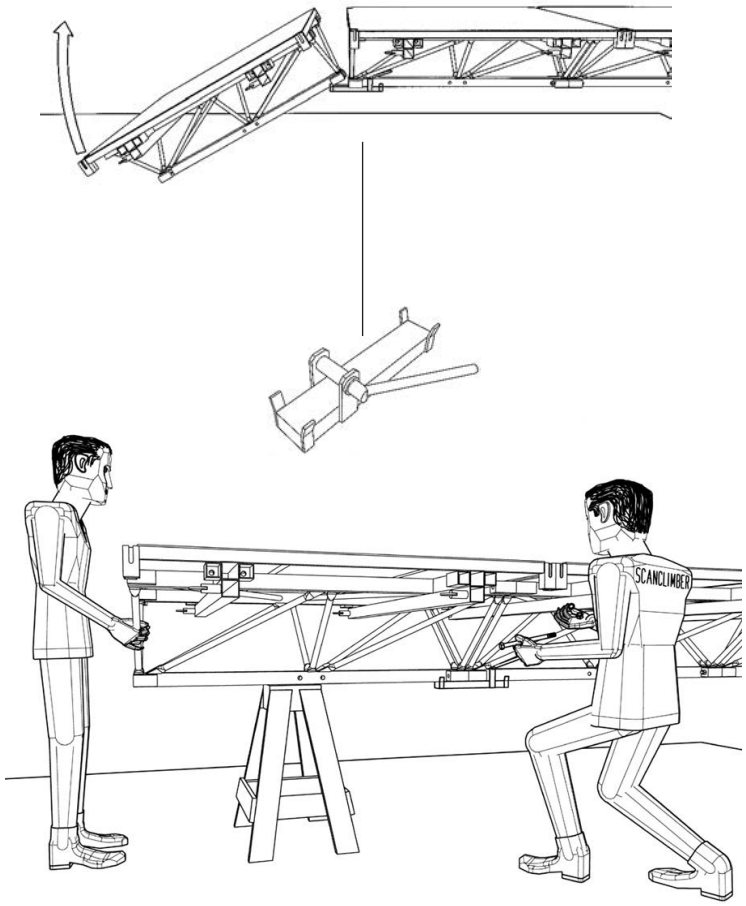
Drawing 4.24. Location of level indicator. Air gap 30 mm.



Drawing 4.25. Assembly of platform sections.

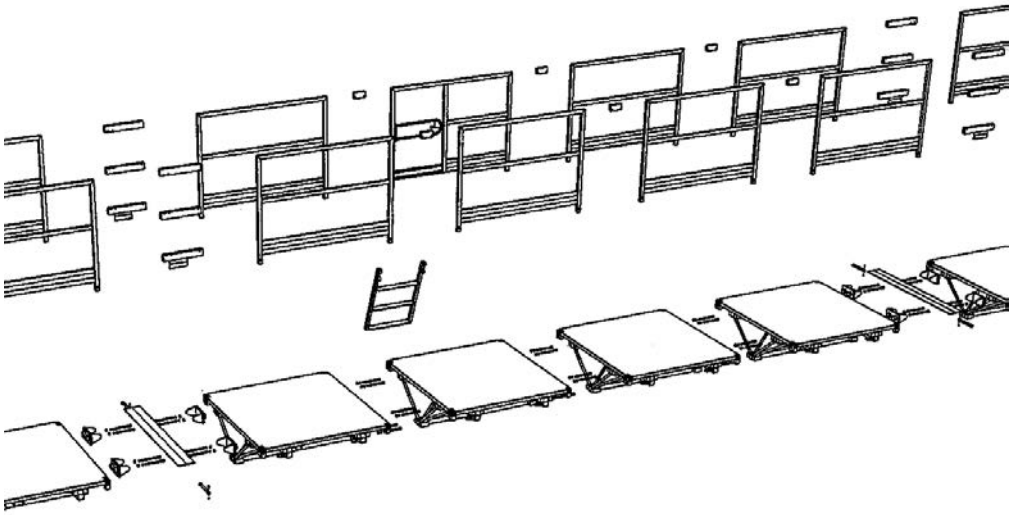
20-140295-1

Use of special tool.



USE ALWAYS MOUNTING SUPPORT UNDER
PLATFORM SECTION!!

Drawing 4.26. Use of special tool.

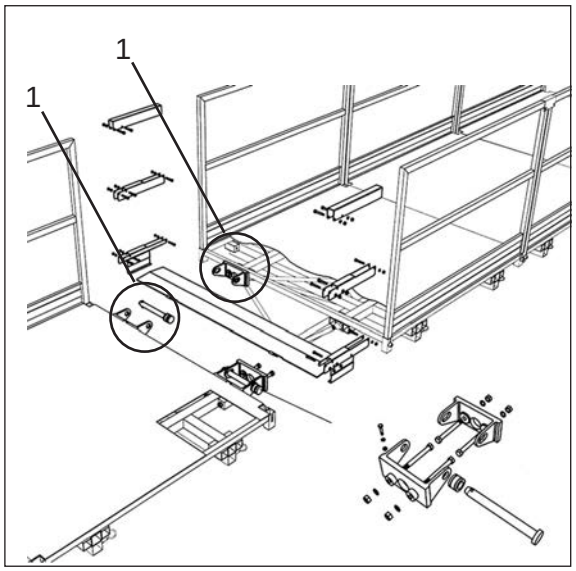


Drawing 4.27. Assembly of middle platform.

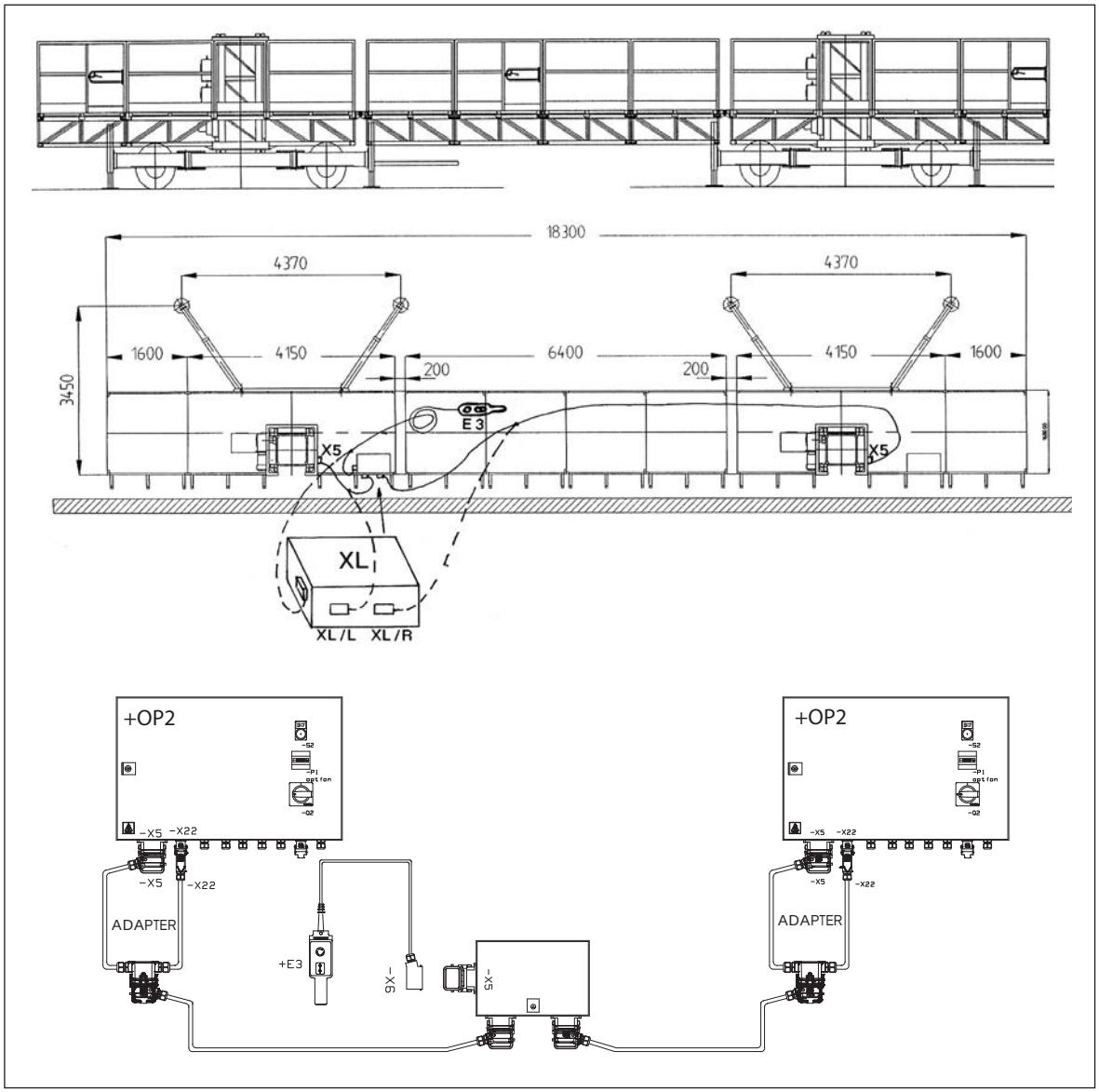
7. After the needed length has been achieved, assemble the opposite hinge-halves (1) to the middle platform section and to the basic platform section of the other unit. Drive then the other unit towards the unit with already mounted middle sections till the hinge halves go together and can be locked with pins. See drawing 4.28. Note that the platform levelling device goes to its place.

8. Support the other work platform with outriggers as per point 3.

9. Assemble the steering cable according to drawing.



Drawing 4.28. Assembly of the hinge-halves to middle the platform.

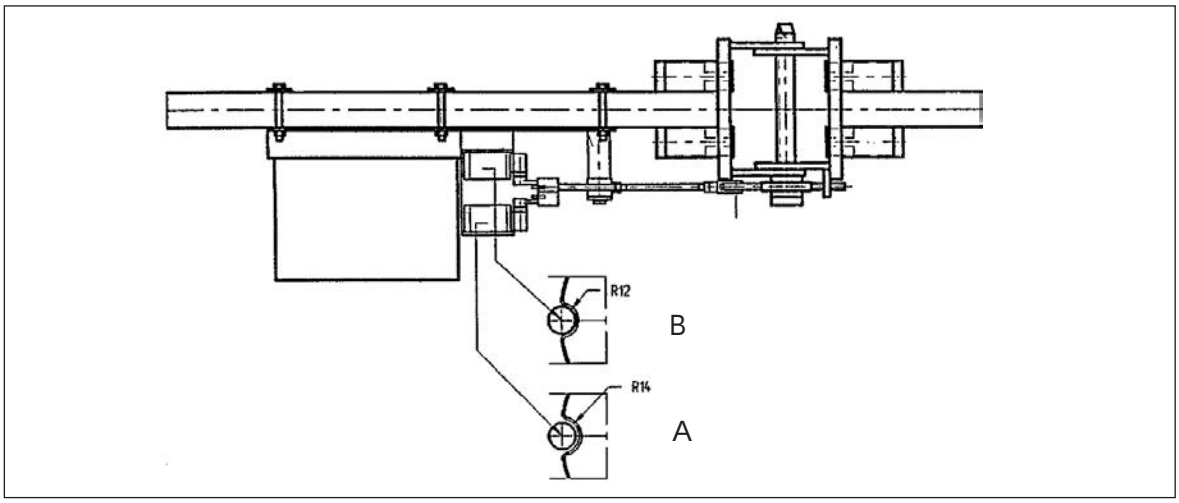


Drawing 4.29. Assembly of the steering cable.

10. Assemble the next mast section onto the left and the right side basic mast sections and screw in with four screws per mast section.

11. Assemble the levelling rod No. 4. (drawing 4.30) so that the pin on the lever No 3 will fit to the plate opening on the hinge-half of the last mounted middle platform section.

! (PLEASE NOTE THAT THIS HINGE HALF WITH OPENING FOR THE PIN ON THE LEVER OF THE LEVELLING SYSTEM IS ON ONE MIDDLE PLATFORM SECTION ONLY).



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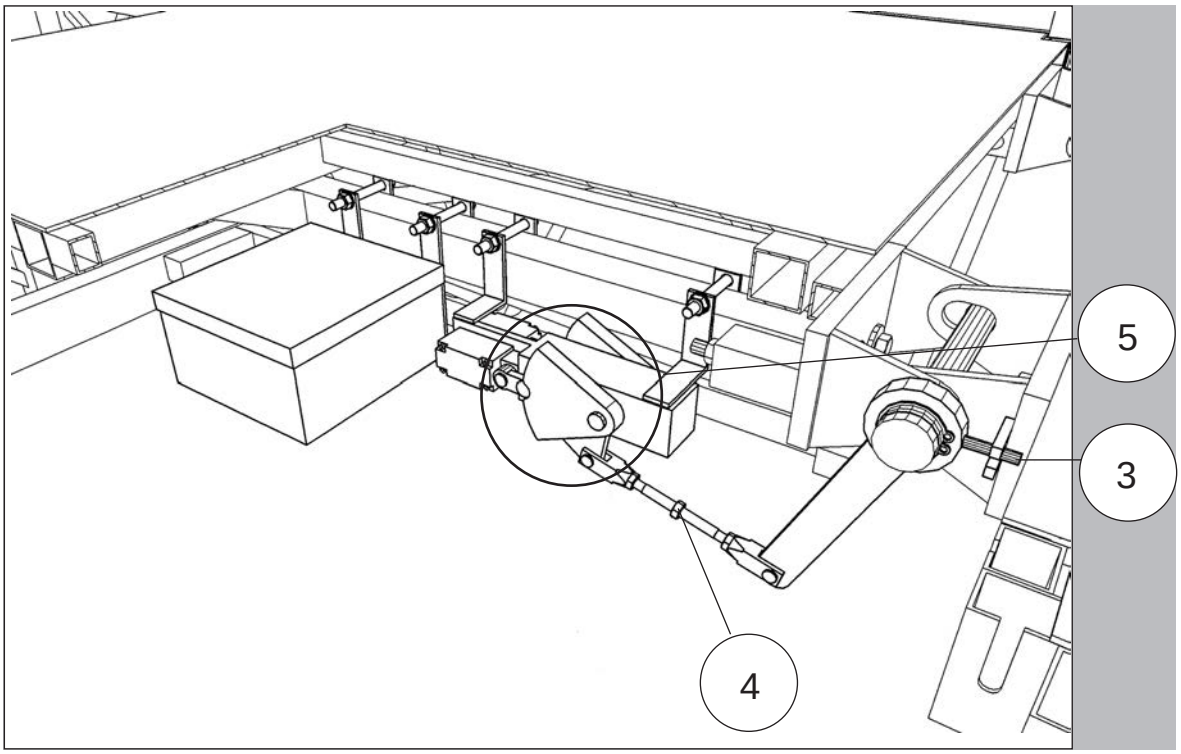
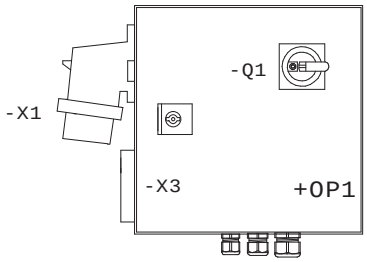
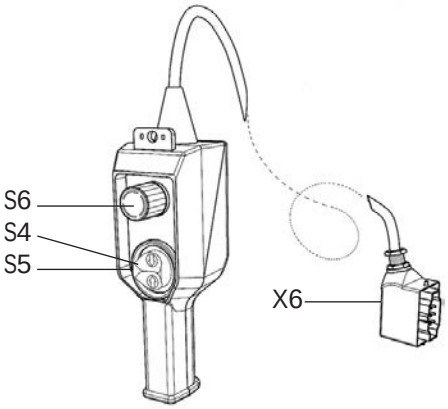


Drawing 4.30. Levelling device - levelling rod (4).



X1 = SUPPLY VOLTAGE SOCKET
X3 = Pendant CONTROL SOCKET
Q1 = MAIN SWITCH

Drawing 4.31. Chassis electric box.



S4- PUSH-BUTTON - FORWARD/UP
S5- PUSH-BUTTON - REWARD/DOWN
S6- EMERGENCY STOP
X6- PLUG

Drawing 4.32. Pendant control E3 (horizontal/vertical drive).

12. Connect 400 V / 32 A 5-poles supply cable to socket X1 on electric boxes on both units.

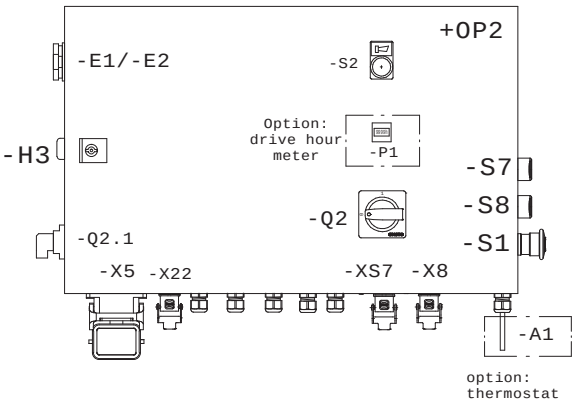
13. Check the power phase.

The following should be done:

a) switch on power with platform electric box main switch Q2
b) switch on power with chassis box main switch Q1
c) check, if the control lamp for the phase order is on;

if not, then:

- change the phase order with the phase inverter switch Q2.1 on the platform electric box,
- push the button UP on the pendant control and note the move ments of the platform.



Q2 = MAIN SWITCH
S2 = HOOTER PUSH BUTTON
X5 = SOCKET
F8 = PHASE CONTROL LED-DIODE (INSIDE THE BOX)
E1,E2 = SOCKET FOR HAND TOOLS
S7,S8 = DIRECTION BUTTONS
S1 = EMERGENCY STOP
XS7 = SOCKET FOR GATE
X8 = SOCKET FOR TEST
XS.1 = SPECIAL PLUG
Q2.1 = PHASE INVERTER SWITCH
H3 = CONTROL LAMP "PHASES OK"

Drawing 4.33. Platform electric box.

14. Test the function of the mast section installation safety sensor B1. When lifting the platform and the inductive safety sensor B1 runs over the last mast section top, the platform stops immediately.

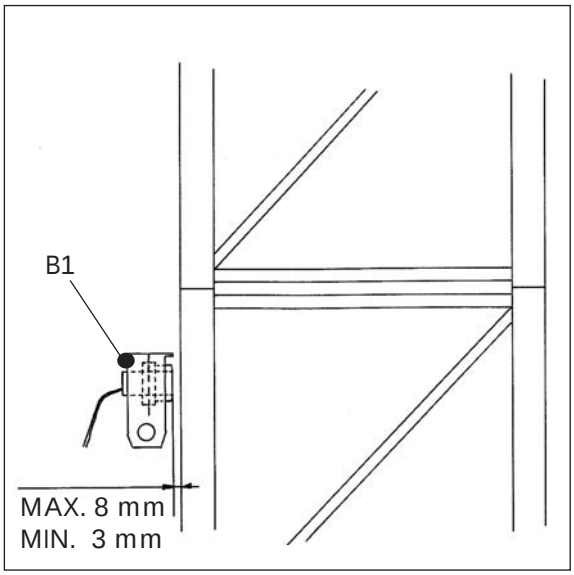
15. Test the function of the bottom limit switch S11.
When lowering the platform it will stop on the bottom position.

16. Test the function of the hooter safety sensor B2.
When lowering the platform, the hooter will be switched on its function area.

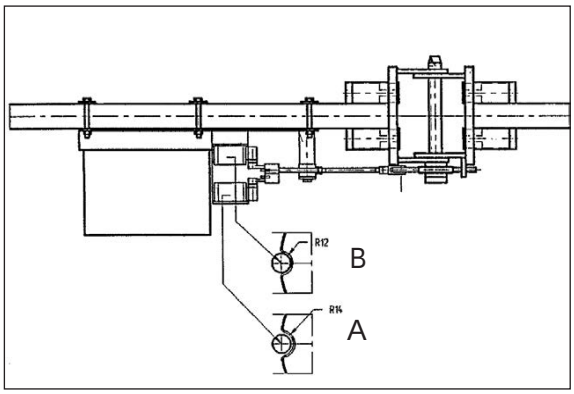
17. Test the function of the platform electric box signal push-button S2.
The hooter should function by pressing the push-button S2.

18. Adjust the stabilizing mechanism:

- Drive the lower platform up to the same level with intermediate platform. Adjust the stabilizing mechanism with help of the stabilizing rod (4) in the drawing below so that the limit switch roller will fit to the hole on the plate (5). Limit switch in 0-position.



Drawing 4.34. Inductive safety sensor.



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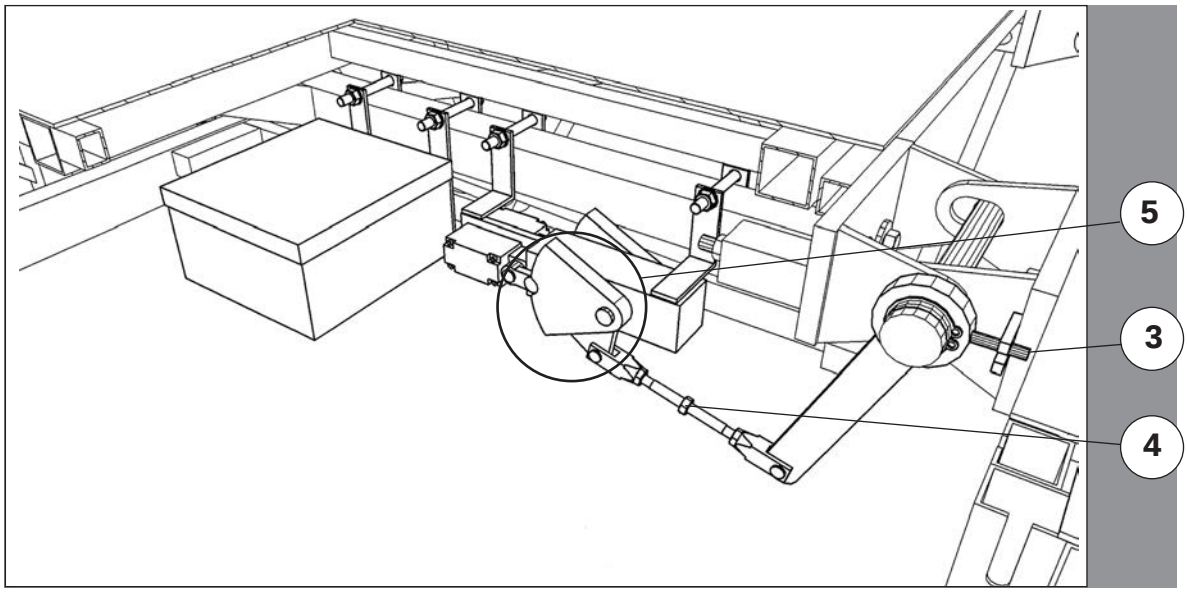


Drawing 4.35. Adjustment of the stabilizing mechanism.

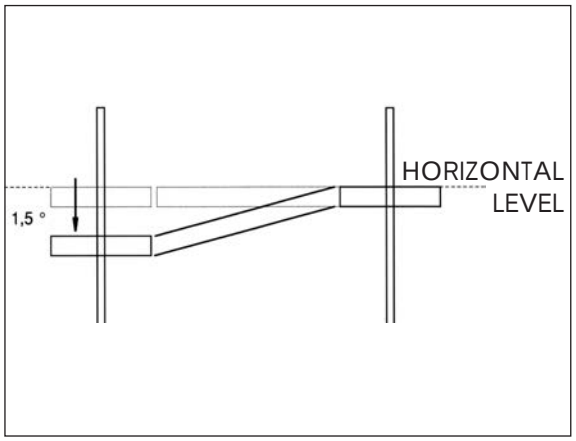
19. Test function of levelling device sensor switch (B).

1. Level the middle platform horizontally.

2. Lower one unit by using the emergency-lowering levels (situated at the end of the platform lifting motor) about 1,5° from its horizontal level.

3. Lift the platform by using the pendant control. After the lower unit has reached the same level with the upper one will the middle platform work simultaneously with them.

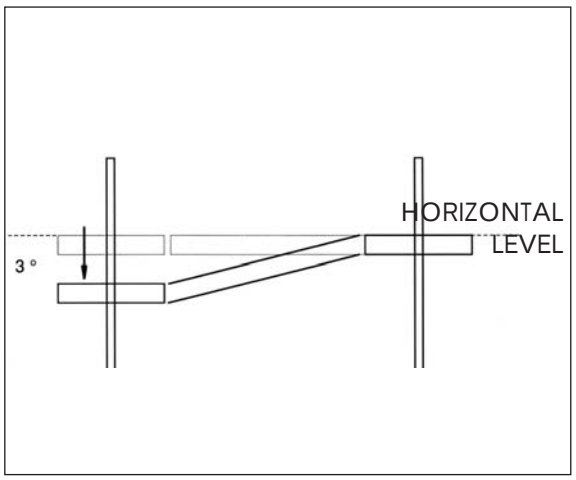
4. Test also the other unit respectively.



20. Test function of levelling device safety switches (A).

1. Level the middle platform horizontally.

2. Lower one unit by using the emergency-lowering level (situated at the end of the platform lifting motor) about 3° from the horizontal level. Three (3°) degrees angle off the platform in normal use will cut off the control current by safety switch (B).

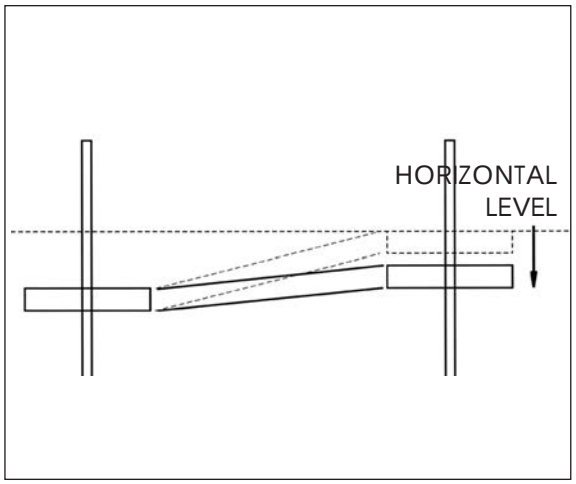


! TEST THE CONTROL CURRENT CUT OFF BY Pendant CONTROL PUSH-BUTTONS

3. Lower the other unit by using the emergency-lowering level to a tilt angle of about 1,5° to reset the platform`s normal control i.e. pendant control.

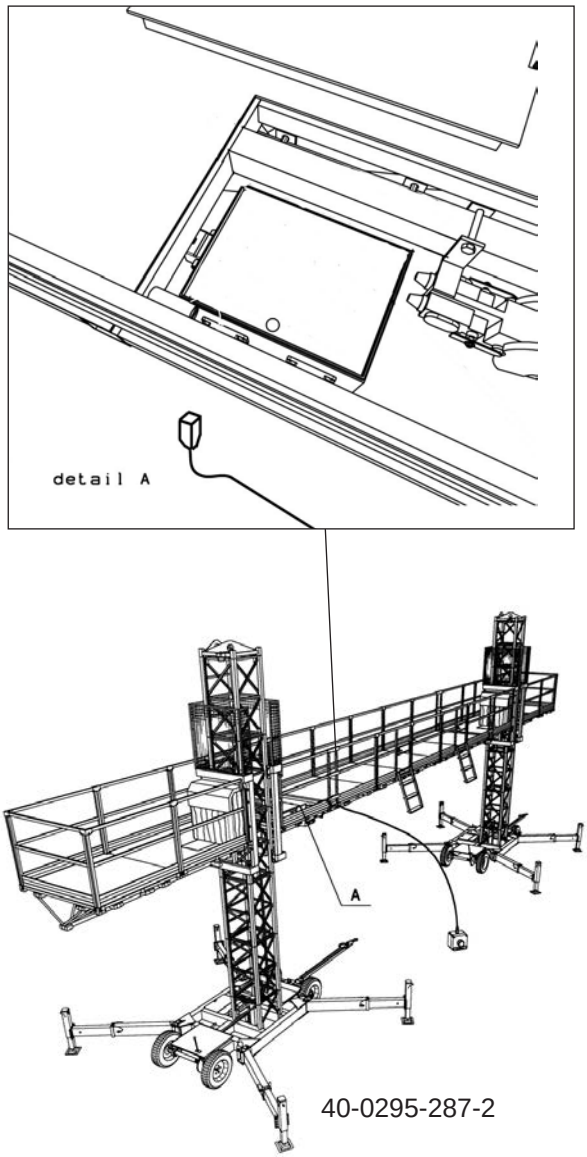
4. Level the platform by using the pendant control

5. Test also the other unit respectively.



21. Assemble the third mast section and the second part of hooter limit signalling bar.
Assemble the following two mast sections.

22. After an assembly of the first five mast sections the test of the safety brake should be carried out. The platform should be loaded with a weight corresponding the length of the platform (see loading tables chapter 3).

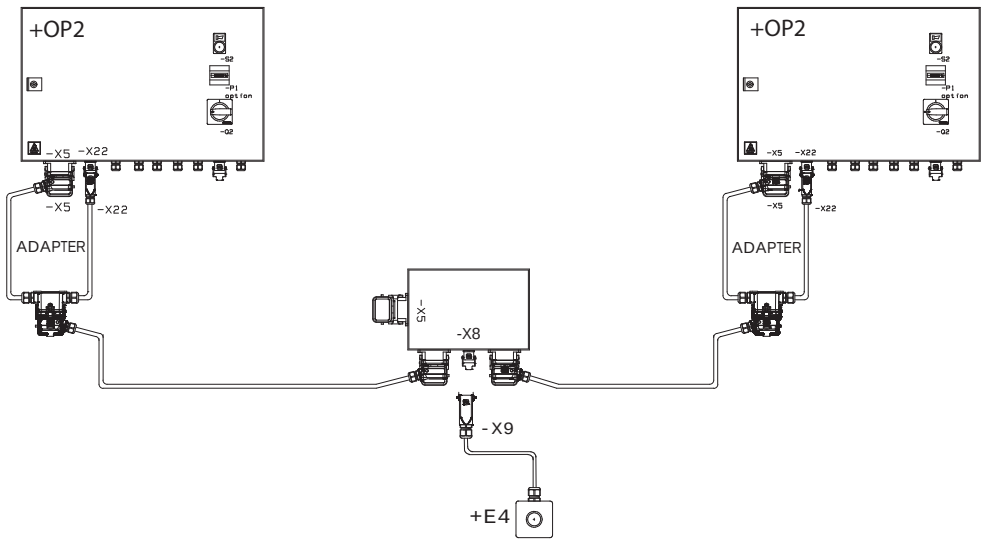


Drawing 4.36. Safety brake test.

a) SAFETY BRAKE TEST

- Connect the wires of the test pendant control box E4 into the level- ing electric box (see the platform electric chart at the end of chapter 2. and drawing no. 4.36 below).

Evacuate the platform during the test.
The test is to be carried out by trained or authorized person only.



- press the button UP on the pendant control box E3,
- lift the platform to the height of 2-3 m,
- press the push-button of the test remote control E4 and keep it pressed (the operating brakes Y2 and Y2.1 of the lifting electric motors M2 and M2.1 in both units are released with the push-button),
- the platform falls down until it reaches the speed of 0,2 to 0,3 m/s and it stops automatically.

WITH POSITIVE RESULT

- switch off the main switches Q1 on both units
- disconnect the test pendant control box from levelling electric box
- reset the safety brake according to the instructions on both units.

! WARNING !
THE USE OF THE PLATFORM IS FORBIDDEN WITHOUT TESTED SAFETY BRAKE !

! NOTE:
Before connecting and disconnecting the wires the control current must be switched off with the main switch Q2 from both platform control boxes.

! NOTE:
IF THE ENGAGEMENT OF THE BRAKE OR BRAKES FAILS OR FAIL AFTER THE PLATFORM HAS MOVED ABOUT 1 M, PLATFORM HAS TO BE STOPPED BY RELEASING THE PUSH-BUTTON OF THE TEST Pendant CONTROL E4.

WITH NEGATIVE RESULT (EITHER ONE OR BOTH SAFETY BRAKES DO NOT ENGAGE)

- lower platform to the bottom position,
- switch off the main switches Q1,
- dismount the safety brake or brakes, send it or them for repair to the manufacturer and afterwards reassemble or replace with it a new one(s), and repeat the test.

23. Carry out the further assembly of the mast.
If not freestanding, pay attention to the anchoring instructions (4.5).

24. Fasten the counter part of the top limit swich to the second last mast section and assemble the mast top cap.

25. Assemble the mast guard around the mast.

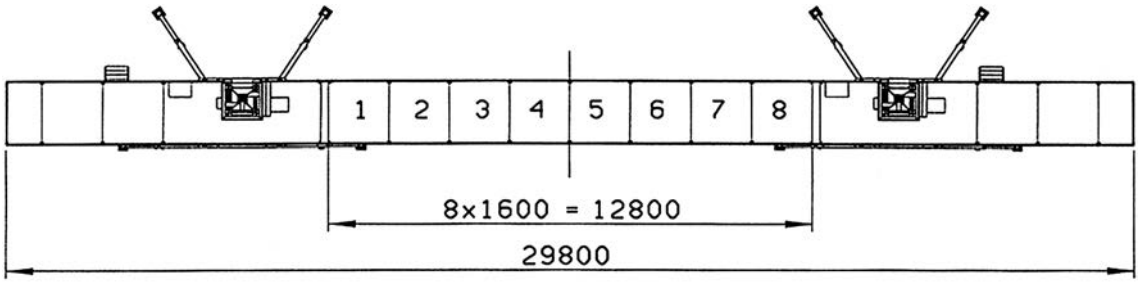
26. Clean and grease the rack (see the lubrication instructions chapter 6).

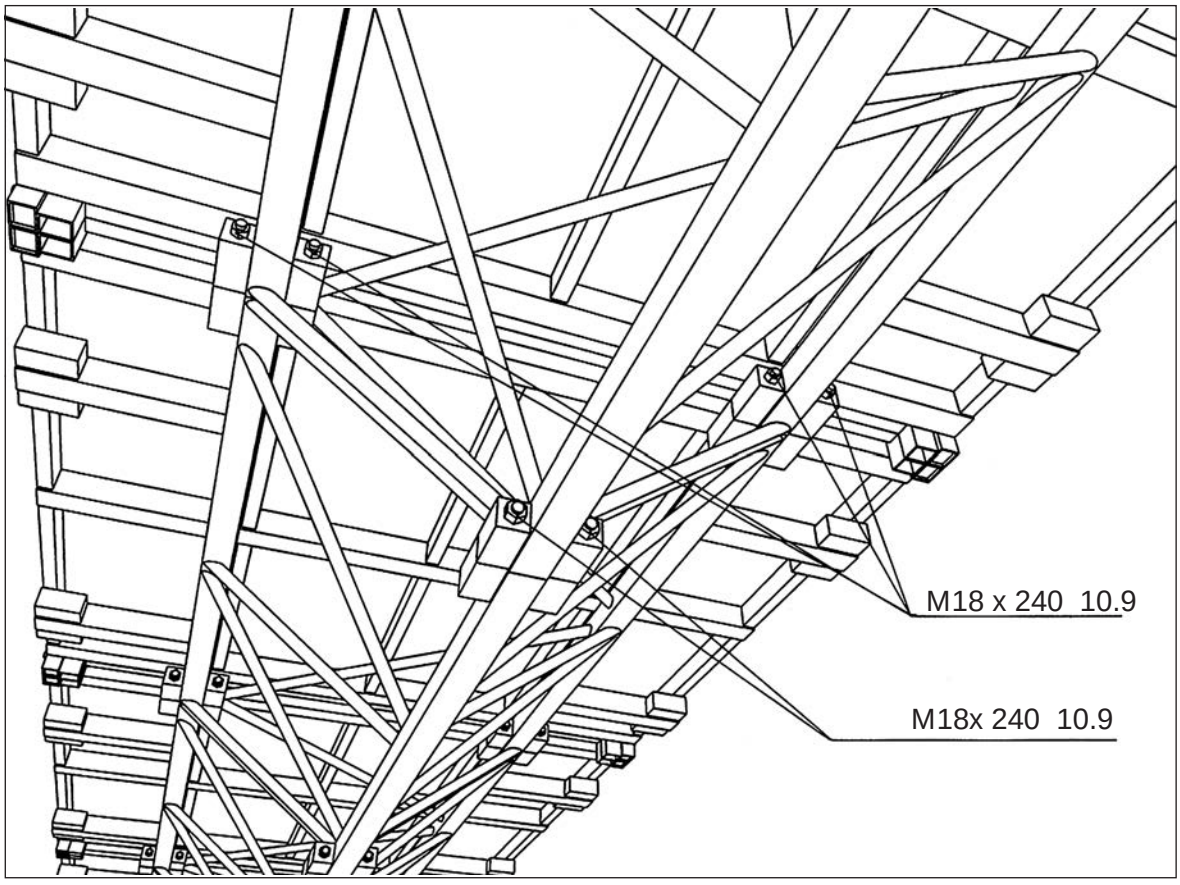
27. Platform can be taken into use first after tecnical inspection. This inspection should be carried out by an authorized inspector. See 4.7.

28. The mast sections can be assembled on top of each other by using the mast assembly crane arm (see optional equipment, chapter 2).
Remember that the crane is meant for handling of the mast sections only.
When you drive platform up or down the crane has to be turned to the side.
In the normal use of the platform the mast section assembly crane has to be removed.

4.6.2.1 CONNECTION BOLTS OF THE PLATFORM SECTIONS BY LONG PLATFORMS IN TWIN UNITS

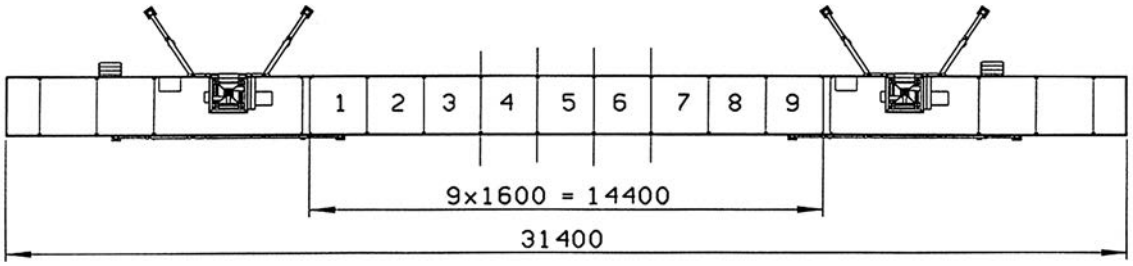
1. If there are eight (8) platform sections in the middle platform, the connection bolts shall be M18 x 240 10.9.

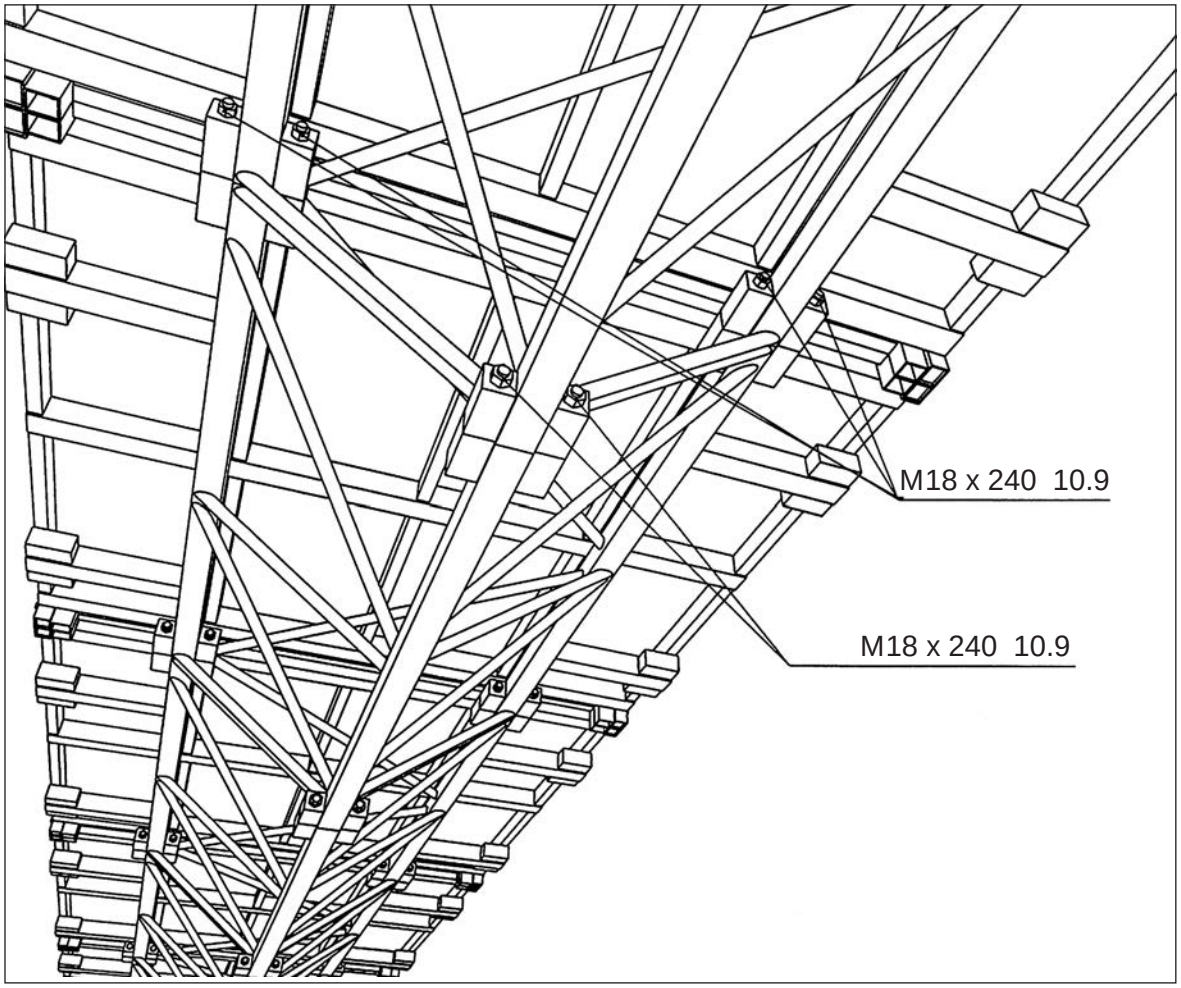




Drawing 4.39.

2. If there are nine (9) platform sections in the middle platform, the connection bolts shall be M18 x 240 10.9.





Drawing 4.40.

4.6.3 ASSEMBLY OF THE TELESCOPIC EXTENSIONS

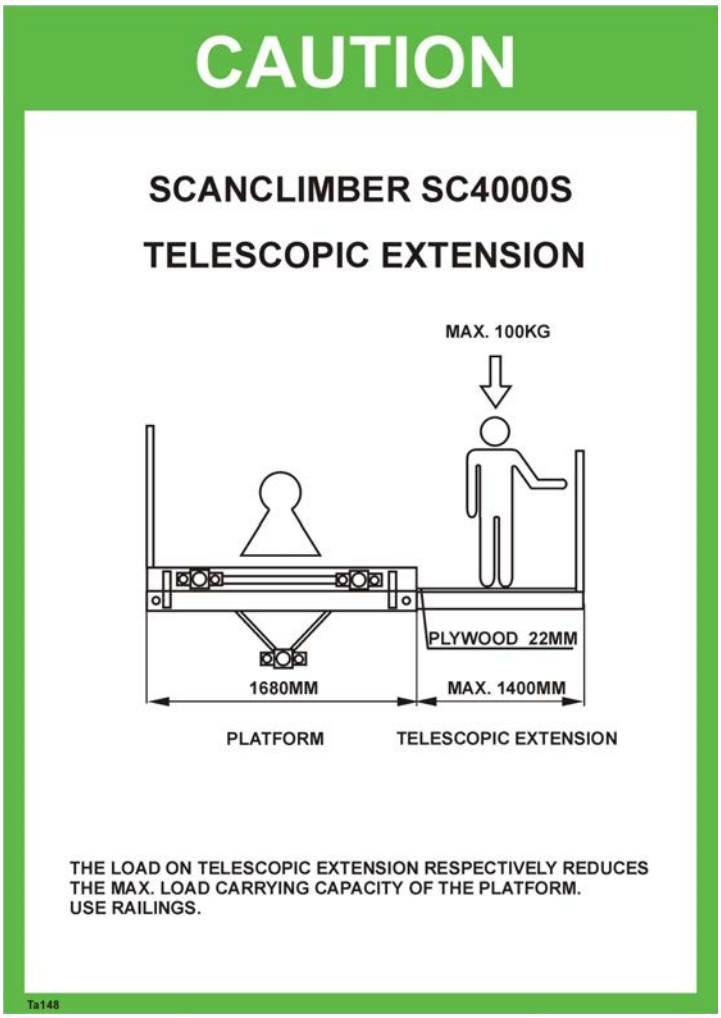
See also 2.2.2.

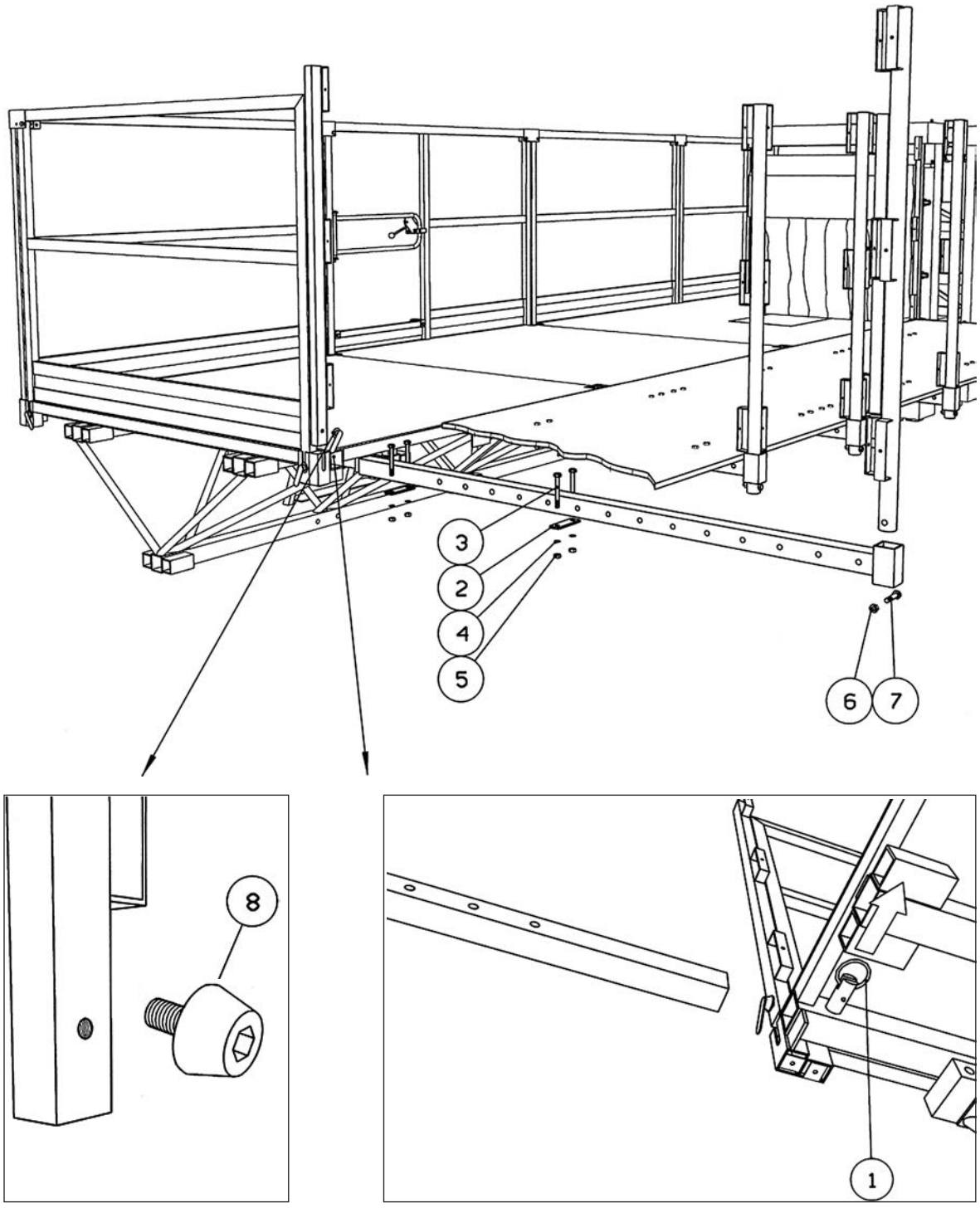
The max. width of the telescopic extension is 1,4 m.
The assembly of the telescopic extension must always be carried out when the platform is in its lowest position.

The assembly of the telescopic extension will be carried out as follows:

- The telescopic pipes will be assembled to the required length, the locking of the telescopic pipe must be severed with the locking pin (item 1 in the picture).
- The plywood board will be assembled onto the telescopic pipes.
- The fastening of the plywood board will be secured by the fastening plates and screws and nuts (items 2-5 in the picture).
- The railing pipes will be assembled and their fastening will be secured
  - the round railing pipes will be fastened with screws and nuts (item 6-7)
  - the rectangular railing pipes will be fastened with the railing fitting screw (item 8)
- The railing board will be assembled to the railing pipes. The fastening of the board will be secured with screws.

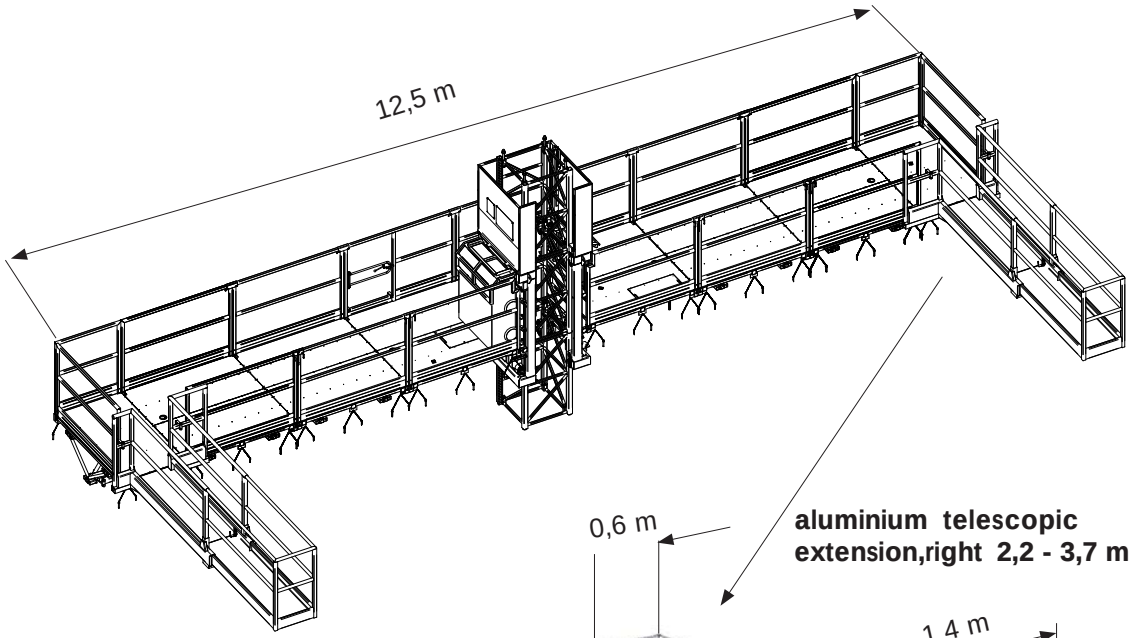
! NOTE!
THE RAILING BOARD MUST BE USED IN THE RAILINGS.
IN THE ASSEMBLY OF THE TELESCOPIC EXTENSIONS IT IS ALLOWED TO USE ONLY PARTS AND MATERIAL RECOMMENDED BY THE MANUFACTURER, SEE SECTION 8.

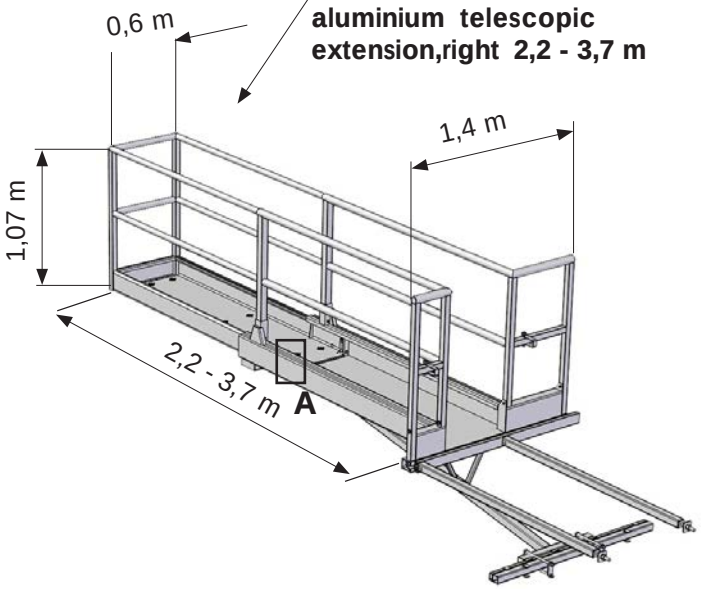




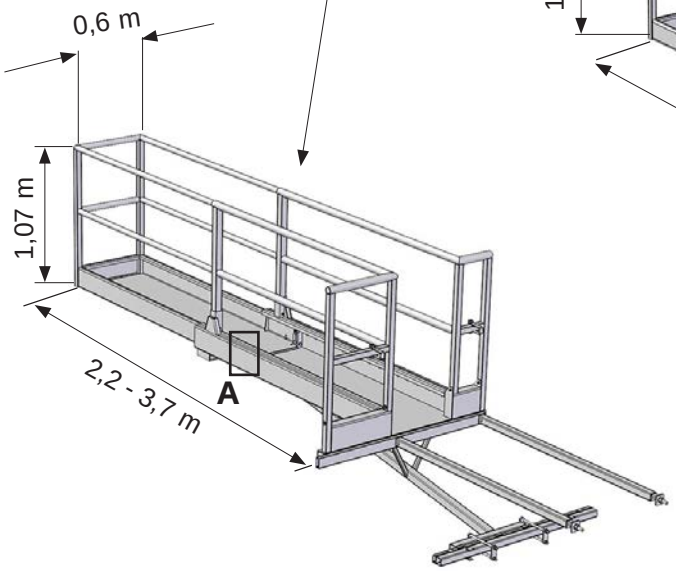
Drawing 4.41. Assembly of the telescopic extension. 20-1096-2134

ALUMINIUM TELESCOPIC EXTENSION 2,2 - 3,7 m



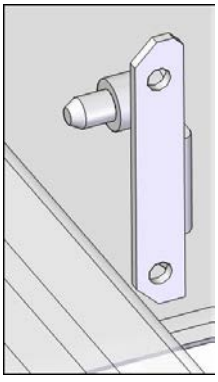


aluminium telescopic extension,right 2,2 - 3,7 m



aluminium telescopic extension,left 2,2 - 3,7 m

A



locking pin

4.7. THE CHECK OF ASSEMBLED PLATFORM

After the completion of the assembly and before taken into use, a technical inspection of the platforms has to be carried out. It is obligatory to check the operation of the platform mechanisms and systems in the scope specified below by an authorized inspector:

Scope of check	Procedure
1. Checking of the pendant control E3.	**1.** Connect the supply cable to the wall socket X1. **2.** Connect the plug X6 of the pendant control box E3 to the socket X3 on the chassis electric box. **3.** Switch on the main switch Q1 on the chassis electric box. Control light H1 must burn. **4.** Switch on the main switch Q2 on the platform electric box. **5.** Press the button S2 on the platform electric box. Warning signal should signalize. **6.** Press by turns the buttons S4 "UP" and S5 "DOWN" on pendant control E3, Platform should move to corresponding direction. When lowering the platform to the bottom position the hooter turns on and stays on until the platform has stopped automatically. **! NOTE!** **The platform moves as long as the pendant control button is pushed** **7.** Press the emergency stop S6 when driving to any direction and the platform should stop immediately. Check the connections of all mast sections, which should be tightened with a torque of 350 Nm.

Scope of check	Procedure
2. Check the tightening torque of the mast section screws.	
3. Check the function of the limit switche S11 top and bottom limits.	Activate the limit switches by moving the platform up and down. The switche operates properly if the movement stops and moving is possible only to opposite direction.
4. Check the functions of the platform.	
5. Check the latitude between guiding rollers and mast section pipes.	
6. Check the latitude of the rack and the pinion .	
7. Check the guiding rollers latitude to the rack.	

Remember to fill in the erection form (chapter 10) after assembling and checking the platform.

ERECTION FORM

WORKSITE: ____________________
TYPE OF MACHINE: ____________ SERIAL NO: ________
PLATFORM LENGTH: ________ MAX. LIFTING CAPACITY: ______ HEIGHT: ______
ERECTION COMPANY: ____________________
PERSON IN CHARGE: ____________ TEL.: ________
ORDER COMPANY: ____________________
PERSON IN CHARGE: ____________ TEL.: ________

	CHECK POINT	OK	REMARKS
1.	GROUND PLATES UNDER JACKS AND BEARING CAPACITY OF THE GROUND		
2.	OUTRIGGERS FULLY TURNED, EXTENDED AND LOCKED WITH PIN		
3.	JACKS SCREWED DOWN AGAINST GROUND PLATES		
4.	PLATFORM AND MAST ARE VERTICALLY AND HORIZONTALLY ADJUSTED		
5.	CENTRE JACK: SC4000 ALWAYS, SC1500 MAST HEIGHT > 30M		
6.	PLYWOOD BOARD ON TELESCOPIC EXTENSIONS (MIN. 22 MM)		
7.	DISTANCE BETWEEN PLATFORM AND WALL (MANUAL CHAPTER 4)		
8.	CHECKING THE RAILINGS ASSEMBLY		
9.	MAST GUARD NET ASSEMBLED		
10.	MAST SECTION BOLTS TIGHTENED -350 Nm		
11.	COUNTERPARTS FOR LIMIT SWITCHES (TOP AND BOTTOM)		
12.	TOP CAP ASSEMBLED		
13.	FUNCTION OF THE EMERGENCY STOP		
14.	FUNCTION OF THE PUSH-BUTTONS UP AND DOWN		
15.	FUNCTION OF THE LIMIT SWITCHES (TOP, BOTTOM, MAST ASSEMBLY)		
16.	FUNCTION OF THE EMERGENCY LOWERING		
17.	FUNCTION OF THE PLATFORM LEVELLING DEVICE (TWIN)		
18.	WALL ANCHORING (MANUAL CHAPTER 4.)		
19.	FASTENING OF THE ANCHORING BOLTS -190 Nm		
20.	LATITUDE OF THE GUIDING ROLLERS		
21.	MEASURING THE ELECTRIC POWER SUPPLY IN CABLES		
22.	ELECTRIC CABLES ARE HANGING FREE AND STRAIGHT		
23.	RACK AND PINION CONTACT		
24.	FUNCTION OF THE SAFETY BRAKE		
25.	PLATFORMS STATIC AND DYNAMIC TEST (MANUAL CHAPTER 4.)		
26.	NO VISIBLE PLATFORM DAMAGES		
27.	FUNCTION OF THE ELECTROMAGNETIC BRAKES		
28.	NO UNUSUAL NOISE FROM MECHANISMS AND MOTORS		
29.	NO OIL LEAKS FROM GEAR BOXES		
30.	RACKS ARE CLEAN AND LUBRICATED		
31.	WORKSITE FENCED OFF		
32.	EXPIRATION DATE OF THE SAFETY BRAKE. THE BRAKE MUST BE REPLACED (OVERHAULED AT THE FACTORY) EVERY FOUR (4) YEARS		
33.	UNIT FREE FROM UNNECESSARY EQUIPMENT		
34.	ASSEMBLY OF POSSIBLE WEATHER COVER		
35.	OPERATORS HAVE GOT ENOUGH INFORMATION AND TRAINING IN THE USE OF THE UNIT		
36.	HANDBOOK AVAILABLE		
37.	ALL SIGNS AND LABELS POSITIONED AND READABLE		

SIGNATURES /DAY: ________ MONTH: ________ YEAR: ________

PERSON IN CHARGE (ERECTOR)

PERSON IN CHARGE (ORDERER)

10.1.1294 (E1)

Drawing 4.42. Erection form.

4.8. PLATFORM DISASSEMBLY

Platform disassembly should be carried out in the reverse order to the assembly.

1. Prepare the site for the storage of platform and mast sections.
2. Dismount the mast guard nets.
3. Dismount the mast sections and detached wall anchors.
4. Before dismounting the last three mast sections remember to dismount the signalling bar.
5. On the bottom position remove the railings.
6. Remove the pendant control.

!

NOTE:
DO NOT OVERLOAD THE PLATFORM WITH DISMOUNTED MAST SECTIONS!

NOTE; WHEN USING MINICHASSIS DO NOT FORGET TO UNLOAD AND SHORTEN THE PLATFORM (MAX. LENGTH OF PLATFORM 4.2 M) BEFORE DISMOUNTING THE THREE LAST WALL ANCHORS!

All the dismounted elements should be cleaned, protected and well prepared for transportation.

5. OPERATIONAL INSTRUCTIONS

5. OPERATIONAL INSTRUCTIONS

5.1. INSTRUCTIONS/WARNINGS FOR THE OPERATORS

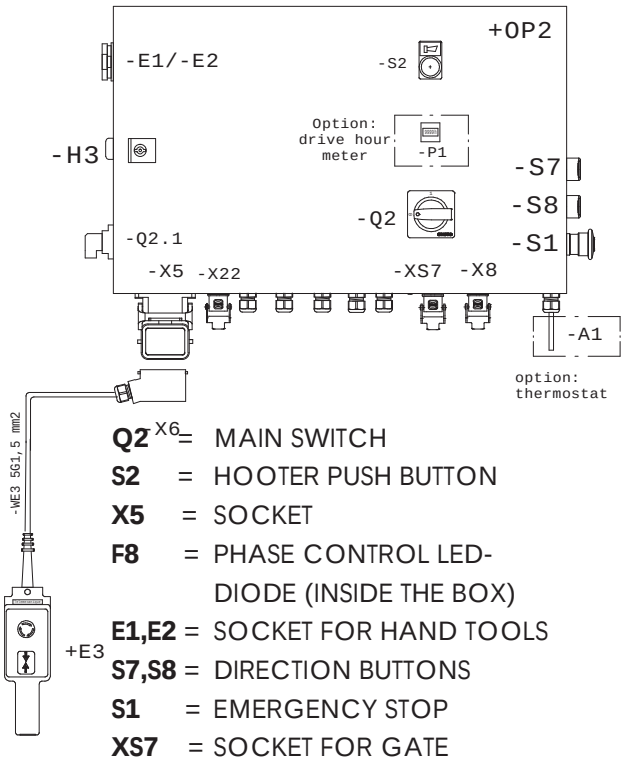
- Operator must be authorized and trained for the operation.
- Become acquainted with the operating instructions.
- Follow the safety regulations.
- Inspect the carrying capacity of the ground.
- Place the outriggers properly and lock with pin.
- Always use wooden ground plates under the jacks.
- Regulate the mastclimber horizontally and vertically.
- Make the daily inspections, chapter 5.
- Use signal hooter before starting.
- Do not exceed load and height limits.
- Distribute the load evenly.
- The load is not allowed to hang over the railings.
- Do not cause any lateral forces by pulling or pushing.
- Do not use the mastclimber when wind speed exceeds
  - 12,7 m/s freestanding
  - 15,5 m/s mast anchored
- Guard railings and mast guard net must be secured.
- Pay attention to the operation temperature.
- Do not lean over platform guard railings.
- Do not use ladders or scaffolds on the platform.
- Be careful with the electric cables nearby.
- Be careful with the obstacles on the work site.
- Do not use faulty machine.
- Do not work if your physical condition is not well.
- Inform of any suspected faults.
- Prevent the unauthorized use of the platform.
- Provide adequate lighting for safe operation.

5.2. OPERATION INSTRUCTIONS

You can easily operate the platform with the pendant control E3. The pendant control is connected to a plug X6 with a cable. You can use the pendant control for two different purposes:

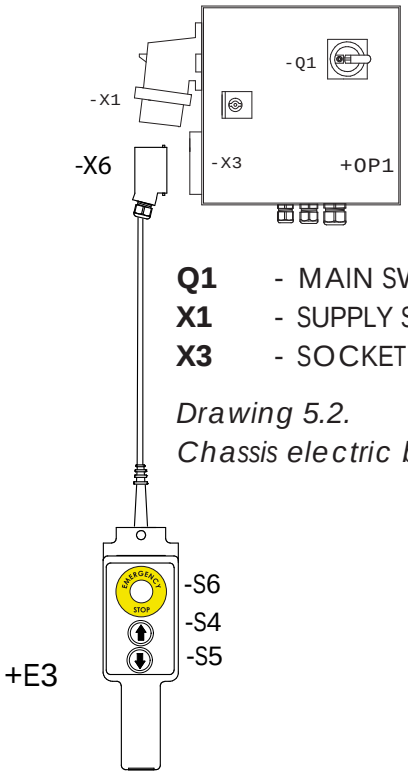
a) for lifting the platform, when it is connected to a socket X5 on the lifting mechanism or

b) for moving the chassis, when it is connected to a socket X3 on the chassis electric box.



Q2 = MAIN SWITCH
S2 = HOOTER PUSH BUTTON
X5 = SOCKET
F8 = PHASE CONTROL LED-DIODE (INSIDE THE BOX)
E1,E2 = SOCKET FOR HAND TOOLS
S7,S8 = DIRECTION BUTTONS
S1 = EMERGENCY STOP
XS7 = SOCKET FOR GATE
X8 = SOCKET FOR TEST
XS.1 = SPECIAL PLUG
Q2.1 = PHASE INVERTER SWITCH
H3 = CONTROL LAMP "PHASES OK"

Drawing 5.1. Platform electric box OP2.



Q1 - MAIN SWITCH
X1 - SUPPLY SOCKET
X3 - SOCKET

Drawing 5.2.
Chassis electric box OP1.

S4 - PUSH-BUTTON - FORWARD/UP
S5 - PUSH-BUTTON-REWARD/ DOWN
S6 - EMERGENCY STOP
X6 - PLUG

Drawing 5.3. Pendant control E3 (horizontal/vertical drive).

5.2.1. SCOPE OF OPERATOR´S RESPONSIBILITIES

OPERATOR MUST BE TRAINED FOR USING THE PLATFORM.

1. Operator´s responsibilities before operating the equipment

Before the operator starts using the platform he must:

- check the ground, that the jacks are will against the ground and that the unit is in the horizontal position,
- inspect the platform and particularly check the fastening of the railings and supports,
- check all the individual modules and that the modules are functioning,
- inform all the failures to a superior,
- not use the platform before repairing the failures found,
- check the daily inspection form, whether there are any notes on failures or interruptions,
- carry out the maintenance activities accordingly
- check, that the area where platform has been erected is fenced according to the instructions,
- determine the method of communication with other using the hooter,
- refuse to start working with technically inefficient platform,
- check the wall anchors

2. Operator´s responsibilities during work

During the work the operator should:

- observe the perfomance of all individual mechanisms,
- take care that the permitted platform loadings are not exceeded,
- not use the platform as a lift. Do not transport materials to upper stores,
- not make any rapid movements or lean over the railings,
- use determined warning signals,
- not make any repairs, adjustments and maintenance during platform operation,
- act according to instructions in case of supply voltage shortage

3. Operator´s responsibilities after the work has been completed

After the work the operator should:

- drive the platform to the bottom position,
- switch off the power supply from the main switch on the platform and the chassis electric box,
- switch off the power supply off the unit,
- clean the platform, driving motor, rollers, guides and other mechanisms,
- carry out the general techical inspection of running mechanisms and mobile elements,
- note all remarks and observations,
- remove pendant control

5.2.2. PROCEDURES IN EMERGENCY CASES

After engagement of the safety brake, stop working and contact the nearest authorized service company.

After engagement of the safety brake, it is necessary to find out the reason before releasing the safety brake.

Following points should be checked:

1. brake function grade of the lifting motor,
2. meshing of the pinions: driving and safety brake with rack,
3. condition of the lifting gear,

4. condition of the rollers,

5. connection of the supply voltage cable to the motor

6. lead and condition of the supply cable,

7. operation of the safety brake by pressing push-button DOWN on pendant control box (motor should not operate).

NOTE:
THESE ACTIONS ARE TO BE CARRIED OUT BY AUTHORIZED SERVICE PERSON ONLY.

After carrying out these controls, switch off the main switch Q2 on platform electric box and release the safety brake according the instructions on chapter 4.

In case to the safety brake is engaged due to damage of bearing element (e.g. pinion), it is prohibited to release it.

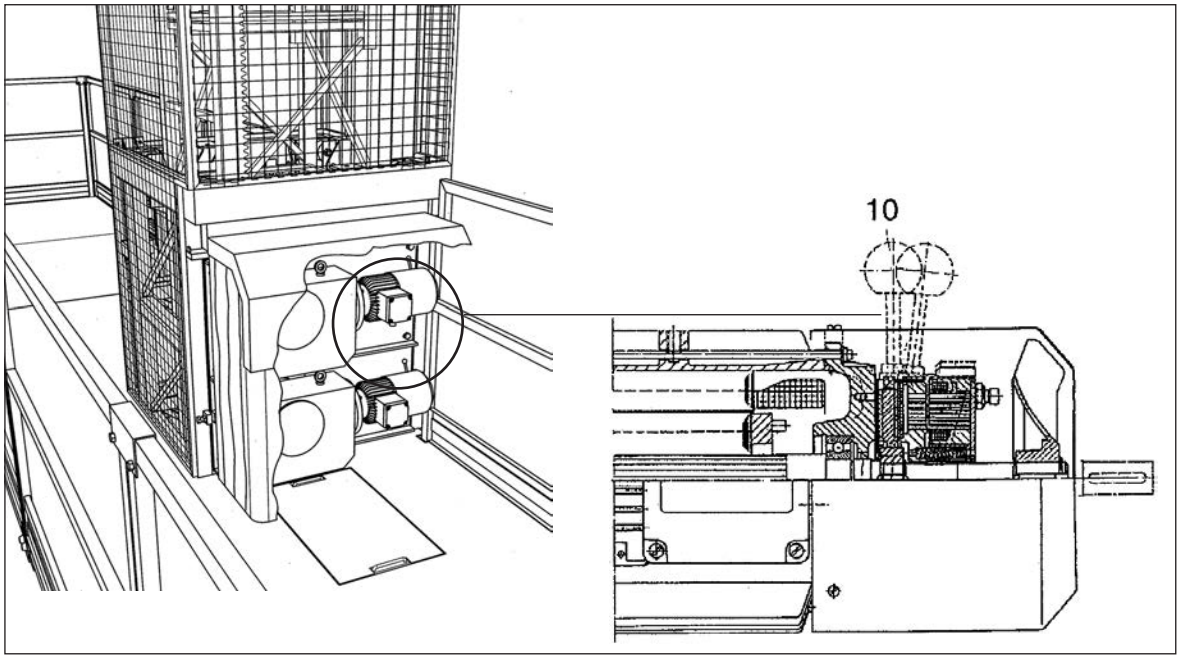
In such case following steps should be taken:

- evacuate all the persons working on the platform,
- fasten the platform to the mast or support it in a manner that ensures its position after releasing,
- release the safety brake and bring the platform to the bottom position. Use disposable technical means and extra precautions.

if the voltage decreases or the control system fails

- if the voltage decreases, push the emergency stop S6
- switch off the voltage using the main switch Q2 of the platform eletric box and wait for the reconnection of the voltage,
  - **if supply voltage cannot be reconnected,**

  lowering can be done by using the emergency-lowering system at the end of platform´s lifting motor.



Drawing 5.4. Emergency-lowering system.

I Pull emergency-lowering system level (10) in both lifting motors simultaneously VERY CAREFULLY NOT, TO THE MAXIMUM POSITION. (If the normal lowering speed is exceeded the safety brake will be engaged).

II After every 5 meters of the emergency-lowering, an appr. 15 min break should be taken in order to avoid overheating of the brake.

- if the control system fails, look for the fault in electric supply and repair it.

When operating with the twinmasted, the emergency lowering must be carried out by two persons, one person by each lifting equipment. The emercency lowering must be carried out simultaneously from both places and it must be secured that the platform will stayin the horizontal position all the time.

If the other unit is higher than the other unit, the unit which is higher must be lowered to the same level with the other unit before continuing the emergency lowering.

The angle of the middle platform **may never exceed 5 degrees** compared to the horizontal level.

Below is the height difference between basic units when the angle of the middle platform is 5 degrees.

	Height difference between basic units
2 platform section in middle platform	28 cm
3 platform section in middle platform	42 cm
4 platform section in middle platform	56 cm
5 platform section in middle platform	70 cm
6 platform section in middle platform	84 cm
7 platform section in middle platform	98 cm
8 platform section in middle platform	112 cm
9 platform section in middle platform	126 cm

UPPER LIMIT SWITCH OPERATING

Leave the zone of operating the switch by carefully pulling back the manual brake release lever. Then go down using the button on the control box.
Inform the maintenance technician about this situation, which has to find and remove the reason of operating the limit switch.

LOWER LIMIT SWITCH OPERATING

Call the maintenance technician which has to find and remove the reason.
To leave the zone of operating the lower limit switch, the maintenance technician should do the following steps:
- open the box door of the platform
- push the yellow button S3 and hold in this position
- push the button of going up and leave the zone of operating the limit switch

5.3. CONTROL INSTRUCTIONS

5.3.1. LIFTING / LOWERING

Preparation for control

- connect the supply cable to the socket X1 on the chassis electric box
- switch on the main switch Q1 of the chassis electric box
- switch on the main switch Q2 of the platform electric box
- load the platform evenly, following the max. loading table:

MAST	LOAD	PLATFORM LENGTH	PERSONS
SINGLE	1200 kg 1400 kg 1700 kg 2000 kg	12,5 m 10,5 m 7,4 m 4,2 m	Max. 3 persons on the platform
TWIN	2065 kg 2680 kg 3500 kg 4200 kg	31,4 m 24,7 m 18,3 m 11,9 m	Max. 4 persons on the platform

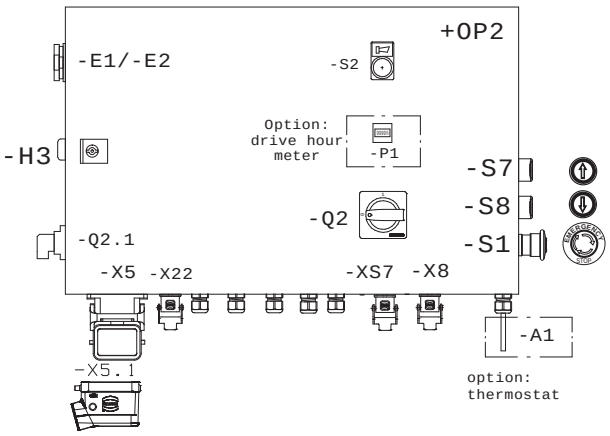
Control of the platform

- use hooter push-button S2 on the platform electric box before starting
- the platform is driven up or down by pushing the up or down button S4, S5 on the pendant controller or S7, S8 on the platform electric box OP2.

Platform driving control can be realised by:

a) using the drive buttons S7, S8 located on the platform electric box OP2,

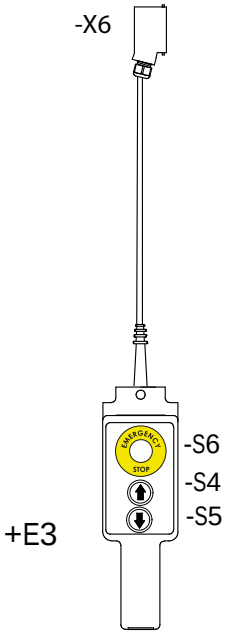
- connect the special plug X5.1 to the socket -X5



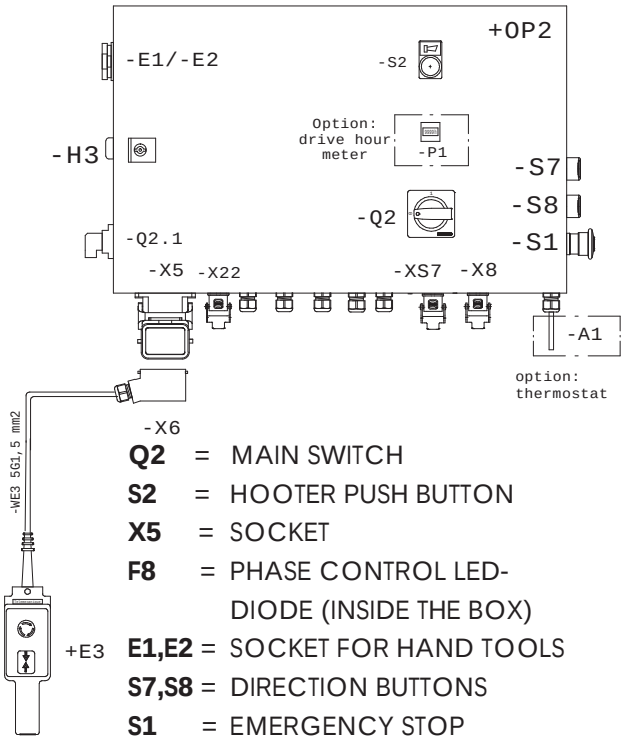
Drawing 5.5 Platform driving control realised by the drive buttons located on the platform electric box + OP2

b) using the pendant control box E3,

- connect the plug of the pendant control box E3 to the socket X5



S4 - PUSH-BUTTON - UP
S5 - PUSH-BUTTON- DOWN
S6 - EMERGENCY STOP
X6 - PLUG



Q2 = MAIN SWITCH
S2 = HOOTER PUSH BUTTON
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F8 = PHASE CONTROL LED-DIODE (INSIDE THE BOX)
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S7,S8 = DIRECTION BUTTONS
S1 = EMERGENCY STOP
XS7 = SOCKET FOR GATE
X8 = SOCKET FOR TEST
XS.1 = SPECIAL PLUG
Q2.1 = PHASE INVERTER SWITCH
H3 = CONTROL LAMP "PHASES OK"

Drawing 5.6 Platform driving control realised by the pendant control box E3

Stopping the platform

- platform stops by releasing the control push-button S4, S5 on the pendant control device E3 or S7, S8 on the platform electric box OP2
- platform must stop by itself on the bottom- and top-positions through the limit switches
- use emergency stop S6 on the pendant control device E3 or S1 on the platform electric box OP2 in emergency situations and the platform stops immediately

Finishing the work

- when finishing the work the platform has to be lowered to the bottom position
- disconnect the supply voltage using main switches Q1 and Q2 on the chassis and the platform electric box
- disconnect the supply cable from the socket X1 of the chassis electric box and put it to a safety place **(Note: The cable is under tension until the supply cable is disconnected from the wall socket)**

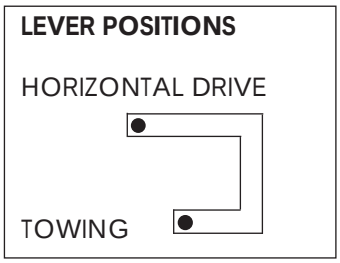
5.3 2. TRANSFER WITH CHASSIS DRIVE UNIT

The transfer to the following work site can be done with platform lowered down to its transport position and with max. 2 mast sections. The transfer can be achieved by 2 persons.

Following steps have to be done:

.

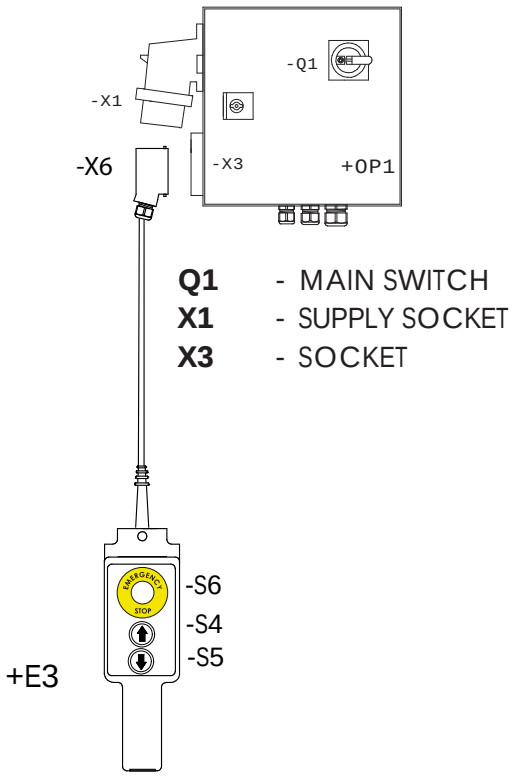
- Lower the platform on the rubber buffers by manual lowering.
- Put the clutch lever to horizontal drive position. Note that the chassis has no brakes when the clutch lever is in towing position.



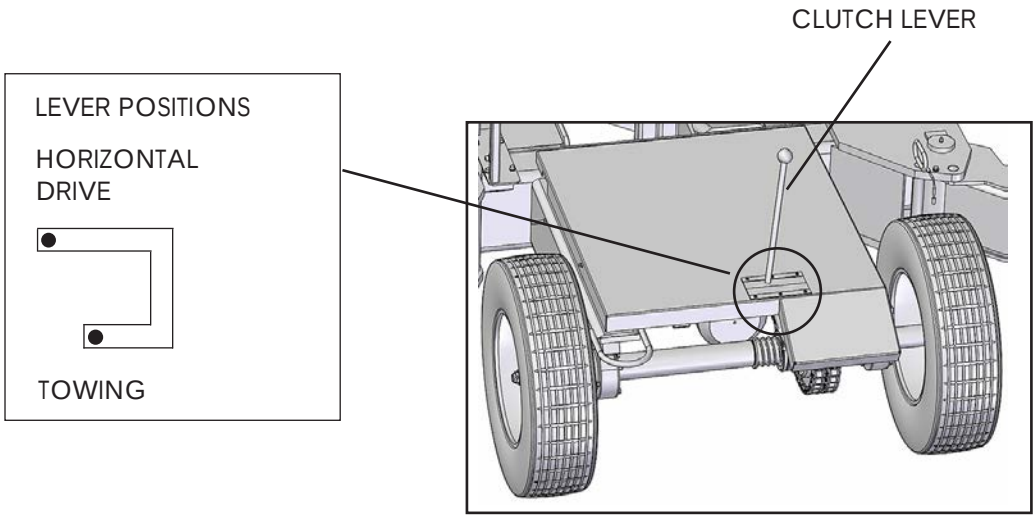
- Turn the outriggers out.
- Keep the jacks as near the ground as possible.
- Connect the pendant controller to the chassis electric box connector X3.
- Connect the power supply cable to chassis electric box socket X1.
- Turn the chassis electric box main switch Q1 to position 1.
- The platform moves forward pushing the up-button S4 and backwards pushing the down-button S5 on pendant controller E3.
- The chassis is steered by the towing bar.

After relocation:

- Turn the outriggers out.
- Lower the jacks.
- The lower safety limit shall be bypassed when lifting the platform from rubber buffers. The bypass switch is in the platform electric box.



Drawing 5.7. Pendant control E3 (horizontal/vertical drive).



Drawing 5.8. Chassis drive unit and arm positions.

NOTE!
IT IS RECOMMENDED THAT TWO (2) PERSONS WILL TAKE CARE OF THE PLATFORM´S TRANSFER: ONE WILL CONTROL THE Pendant CONTROL AND THE OTHER WILL STEER THE UNIT BY TOW BAR.

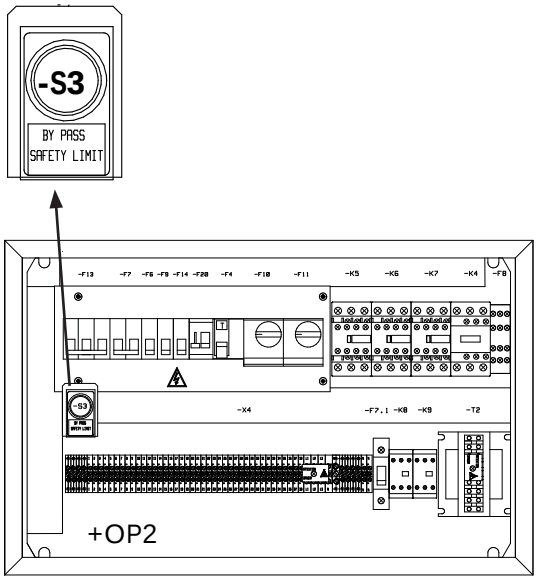
NOTE!
DURING THE TOWING THE CLUTCH OF DRIVING GEAR MOTOR HAS TO BE DISCONNECTED.

LIMIT SWITCH BYPASS

When the platform has been lowered to the rubber buffers the lower safety limit shall be bypassed to lift the platform to the normal operational height.

The lower safety limit is bypassed pushing a bypass button on the platform electric box and pushing simultaneously up-button.

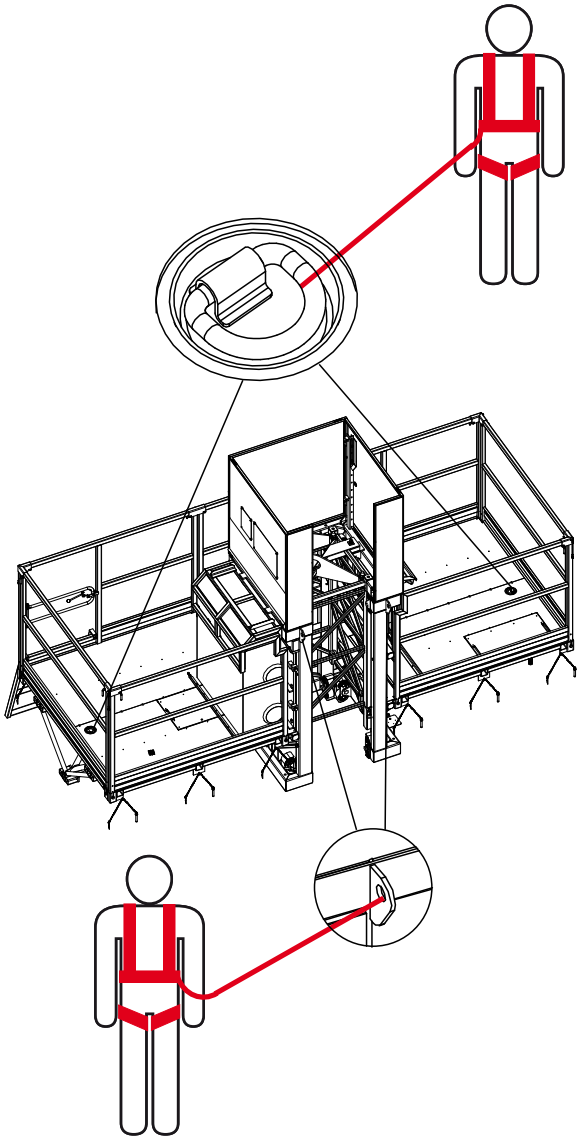
Before bypassing the limit switch it must be settled out why the platform has reached the safety limit!



5.3.3 Safety Harness

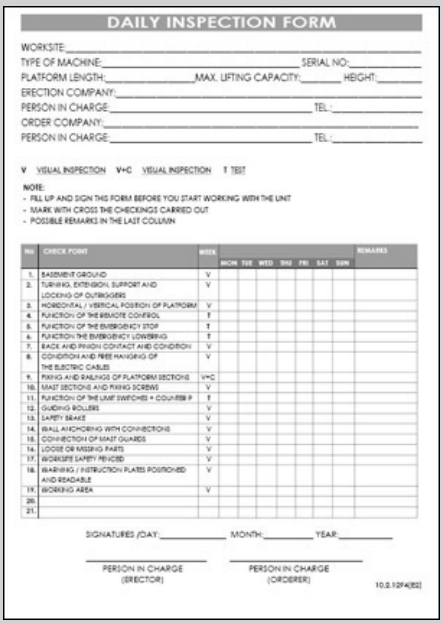
The safety harness must be used if the distance between the wall and platform is more than 250 mm and the platform is not fully rounded with railing.

The safety harness is fastened to the hook on the top frame or platform section.



5.4 DAILY INSPECTIONS

BEFORE OPERATING THE PLATFORM CHECK THE FOLLOWING POINTS 1-19 AND FILL UP THE DAILY INSPECTION FORM (CHAPTER 10) !!!


DAILY INSPECTION FORM

WORKSITE:_____

TYPE OF MACHINE:_____ SERIAL NO:_____

PLATFORM LENGTH:_____MAX. LIFTING CAPACITY:_____ HEIGHT:_____

ERECTION COMPANY:_____

PERSON IN CHARGE:_____ TEL.:_____

ORDER COMPANY:_____

PERSON IN CHARGE:_____ TEL.:_____

V VISUAL INSPECTION V+C VISUAL INSPECTION T TEST

NOTE:
- FILL UP AND SIGN THIS FORM BEFORE YOU START WORKING WITH THE UNIT
- MARK WITH CROSS THE CHECKINGS CARRIED OUT
- POSSIBLE REMARKS IN THE LAST COLUMN

No	CHECK POINT	WEEK	MON	TUE	WED	THU	FRI	SAT	SUN	REMARKS
1.	BASEMENT GROUND	V								
2.	TURNING, EXTENSION, SUPPORT AND LOCKING OF OUTRIGGERS	V								
3.	HORIZONTAL / VERTICAL POSITION OF PLATFORM	V								
4.	FUNCTION OF THE REMOTE CONTROL	T								
5.	FUNCTION OF THE EMERGENCY STOP	T								
6.	FUNCTION THE EMERGENCY LOWERING	T								
7.	RACK AND PINION CONTACT AND CONDITION	V								
8.	CONDITION AND FREE HANGING OF THE ELECTRIC CABLES	V								
9.	FIXING AND RAILINGS OF PLATFORM SECTIONS	V+C								
10.	MAST SECTIONS AND FIXING SCREWS	V								
11.	FUNCTION OF THE LIMIT SWITCHES + COUNTER P	T								
12.	GUIDING ROLLERS	V								
13.	SAFETY BRAKE	V								
14.	WALL ANCHORING WITH CONNECTIONS	V								
15.	CONNECTION OF MAST GUARDS	V								
16.	LOOSE OR MISSING PARTS	V								
17.	WORKSITE SAFETY FENCED	V								
18.	WARNING / INSTRUCTION PLATES POSITIONED AND READABLE	V								
19.	WORKING AREA	V								
20.										
21.										

SIGNATURES /DAY:_____ MONTH:_____ YEAR:_____

PERSON IN CHARGE (ERECTOR) PERSON IN CHARGE (ORDERER)

10.2.1(F4)(ES)

Drawing 5.96. Daily inspection form.

1. Check the basement ground.
2. Check the outriggers.
3. Check the horizontal and vertical position of the platform and the mast.
4. Check the function of the pendant control.
5. Check the function of the emergency-stop.
6. Check the function of the emergency-lowering.
7. Check the contact and the condition of the rack and the pinion.
8. Check the condition of the electric cables. Check also that the cables are hanging free.
9. Check the platform fixings and railings.
10. Check the mast sections and fixing screws.
11. Check the function of the limit switches. Check the counterparts too.
12. Check the guiding rollers.
13. Check the safety brake.
14. Check the wall anchoring.
15. Check the mast guards.
16. Checkthe loose or missing parts.
17. Check that worksite is safety fenced.
18. Check the warning and instruction plates.
19. Check the working area.

5.5. FUNCTIONAL TROUBLES

Trouble	Possible cause	Corective action
Chassis doesn´t move	**1.** plug of supply cable disconnected => voltage drop	Check the connections. Always pay attention to the length of supply cable
	2. supply cable defected	change/repair the cable
	3. wrong supply cable	change cable (5x4 mm^2)
	4. main switch Q1 switched off	switch on
	5. cable of pendant control disconnected from socket X3 (chassis electric box)	connect pendant control to socket.
	6. ”emergency stop” - switch down	lift ”emergency stop” - switch
	7. Platform isn´t in the bottom position Limit switch of chassis´drive S10 doesn´t function.	lower the platform with the help of the emergency lowering and check that S10 functions
	8. main fuse F1 gone off	push automatic fuse on*
Platform doesn´t move	**1.** supply cable disconnected	Check the connections. Always pay attention to the length of the supply cable => voltage drop
	2. main switch Q1 or Q2 switched off.	swich on
	3. cable between the chassis and platform defected	change/repair the cable
	4. wrong phase order control light H3 doesn’t light	turn the phase inverter switch Q1.1
	5. phase is missing	check the condition of the supply cable and fuses.*
	6. ”emergency stop” - switch down	release ”emergency stop” - switch
	7. protective earthing	check that the supply

Trouble	Possible cause	Corrective action
	is missing	cable is ? poled and all poles are connected
	8. main fuse F1 or motor protection fuse F10, F11 gone off	push automatic fuse on*
	9. automatic fuse F7 for control current gone off	push automatic fuse on*
Lifting motor "snarls" doesn´t move	**1.** phase is missing	Check supply cable and fuses.* Always pay attention to the length of supply cable => voltage drop.
	2. supply voltage too low	call maintenance technician
	3. magnetic brake of lifting motor defective	call maintenance technician
Platform moves up but not down	**1.** lower limit switch S11 broken or stuck	change the limit*
	2. safety brake gone on	release the safety brake according to the instructions (call maintenance technician)
	3. push button S6 in pendant control E3 broken	change the pendant control E3
	4. safety limit switch S13 has moved (adjustment changed)	adjust safety limit switch S13 of the safety brake (call maintenance technician)
Platform moves down but not up	**1.** upper limit switch S11 broken or stuck	change upper limit S11* (call maintenance technician)
	2. inductive limit B1 broken	change inductive limit B1* (call maintenance technician)
	3. push-button S4 broken	change pendant control E3*

Trouble	Possible cause	Corrective action
Safety brake does not operate engagement is too easy	changed adjustment of limit speed	stop operation.Call maintenance or the technician send, device for repair to the manufacturer
Oil leak from safety brake or lifting gear	cover not tight	stop operation. Call maintenance technician

Note!

REQUIREMENTS FOR THE SUPPLY VOLTAGE

380 - 400 V ± 5 %, 50 Hz 3-phase

Main fuses:

- **SC4000 single** **3 x 32 A**
- **SC4000 twin** **3 x 32 A + 3 x 32 A**
- **Supply cable** **5 x 6 mm² (min.)**

Example:

5 % of 400 V = 20 V (min. voltage for proper functioning in the machine is 400 V - 20 V =380 V).

The max. allowed voltage drop 19 V is reached by the 5 x 6 mm² cable with the total cable length of appr. 100 M (supply cable length + the cable length from chassis to the platform).

! ***) NOTE!**
THE MAIN SWITCH Q1 HAS TO BE SWITCHED TO 0-POSITION BEFORE OPENING THE ELECTRIC BOX CENTRE.

6. SERVICE INSTRUCTIONS

6. SERVICE INSTRUCTIONS

6.1. PLATFORM MAINTENANCE

1. Maintenance of the load-bearing steel structure

The load-bearing steel structure of the platform should be subject to a special care during loading, transport, unloading, storing, assembly and disassembly.
It is forbidden to use damaged elements.
Do not damage weldings and screw joints.
All parts should be protected against corrosion.

2. Maintenance of the lifting mechanism

The maintenance of the lifting mechanism requires very accurate and careful services.
Pay attention to the following maintenance activities:

- the fastening of the lifting gear to the assembly plate
- the fastening of the assembly plate to the lifting frame
- protect all the lifting mechanism elements against corrosion.

Follow the instructions given by the gearmotor manufacturer on chapter 9.

3. Maintenance of the safety brake

The maintenance of the safety brake consists of:

- control the fastening of the safety brake to the assembly plate

! NOTE! THE SAFETY BRAKE MUST BE REPLACED WITH A NEW ONE EVERY FOUR (4) YEARS.

4. Maintenance of the electrical equipment

All damaged or worn electric wires must be replaced.

! NOTE!
ALWAYS BEFORE OPENING THE ELECTRIC CENTRE OF THE CHASSIS, PLATFORM OR TWIN PLATFORM, THE MAIN VOLTAGE HAS TO BE SWITCHED OFF WITH THE MAIN SWITCH Q0 AND Q1OR IT HAS TO OTHERWISE BE CAREFULLY SECURED THAT THE ENERGIZED POINTS WILL NOT BE TOUCHED.

6.2. INSPECTIONS

6.2.1. DAILY INSPECTION

BEFORE OPERATING THE PLATFORM CHECK THE FOLLOWING POINTS 1-19 AND FILL UP THE DAILY INSPECTION FORM (CHAPTER 10) !!!

DAILY INSPECTION FORM

WORKSITE:_____

TYPE OF MACHINE:_____SERIAL NO:_____

PLATFORM LENGTH:_____MAX. LIFTING CAPACITY:_____ HEIGHT:_____

ERECTION COMPANY:_____

PERSON IN CHARGE:_____TEL.:_____

ORDER COMPANY:_____

PERSON IN CHARGE:_____TEL.:_____

V VISUAL INSPECTION V+C VISUAL INSPECTION T TEST

NOTE:
- FILL UP AND SIGN THIS FORM BEFORE YOU START WORKING WITH THE UNIT
- MARK WITH CROSS THE CHECKINGS CARRIED OUT
- POSSIBLE REMARKS IN THE LAST COLUMN

No	CHECK POINT	WEEK	MON	TUE	WED	THU	FRI	SAT	SUN	REMARKS
1.	BASEMENT GROUND	V								
2.	TURNING, EXTENSION, SUPPORT AND LOCKING OF OUTRIGGERS	V								
3.	HORIZONTAL / VERTICAL POSITION OF PLATFORM	V								
4.	FUNCTION OF THE REMOTE CONTROL	T								
5.	FUNCTION OF THE EMERGENCY STOP	T								
6.	FUNCTION THE EMERGENCY LOWERING	T								
7.	RACK AND PINION CONTACT AND CONDITION	V								
8.	CONDITION AND FREE HANGING OF THE ELECTRIC CABLES	V								
9.	FIXING AND RAILINGS OF PLATFORM SECTIONS	V+C								
10.	MAST SECTIONS AND FIXING SCREWS	V								
11.	FUNCTION OF THE LIMIT SWITCHES + COUNTER P	T								
12.	GUIDING ROLLERS	V								
13.	SAFETY BRAKE	V								
14.	WALL ANCHORING WITH CONNECTIONS	V								
15.	CONNECTION OF MAST GUARDS	V								
16.	LOOSE OR MISSING PARTS	V								
17.	WORKSITE SAFETY FENCED	V								
18.	WARNING / INSTRUCTION PLATES POSITIONED AND READABLE	V								
19.	WORKING AREA	V								
20.										
21.										

SIGNATURES /DAY:_____ MONTH:_____ YEAR:_____

PERSON IN CHARGE (ERECTOR) PERSON IN CHARGE (ORDERER)

10.0.1(P4)(B2)

Drawing 6.1.Daily inspection form.

1. Check the basement ground.
2. Check the outriggers.
3. Check the horizontal and vertical position of the platform and the mast.
4. Check the function of the remote control.
5. Check the function of the emergency stop.
6. Check the function of the emergency- lowering.
7. Check the contact and condition of the rack and the pinion.
8. Check the condition of the electric cables.
   Check also that the cables are hanging free.
9. Check the platform fixings and railings.
10. Check the mast sections and fixing screws.
11. Check the function of the limit switches. Check the counterparts too.
12. Check the guiding rollers.
13. Check the safety brake.
14. Check the wall anchoring.
15. Check the mast guards.
16. Check the loose or missing parts.
17. Check that the worksite is safety fenced.
18. Check the warning and instruction plates.
19. Check the working area.

6.2.2. FREQUENT INSPECTIONS

6.2.2.1. WEEKLY INSPECTION

CHECK THE FOLLOWING POINTS 20-26 AND FILL UP THE FREQUENT INSPECTION FORM (CHAPTER 10)

20. Check the condition of the rack and the pinion.
21. Clean the guiding rollers.
22. Check the condition of the welded joints.
23. Check the possible oil leaks.
24. Check the screwed joints of the anchoring.
25. Perform lubrications shown on platform lubrication schedule (6.3.4) for every 30 hours of operation.
26. Check the condition of the profile tubes of platform sections and basic platform

FREQUENT INSPECTION FORM

WORKSITE:__________
TYPE OF MACHINE:__________ SERIAL NO:__________
PLATFORM LENGTH:__________ MAX. LIFTING CAPACITY:__________ HEIGHT:__________
ERECTION COMPANY:__________
PERSON IN CHARGE:__________ TEL.:__________
ORDER COMPANY:__________
PERSON IN CHARGE:__________ TEL.:__________

W = WEEKLY
M = MONTHLY
Q = QUARTER-OF-A-YEAR (3 MONTHS)
Y = YEARLY

- MARK WITH CROSS CHECKINGS CARRIED OUT
- POSSIBLE REMARKS IN THE LAST COLUMN

NO	CHECK POINT	W	M	Q	Y	REMARKS
1.	CONDITION OF THE RACK AND THE PINION	o				
2.	CLEAN GUIDING ROLLERS	o				
3.	CONDITION OF THE WELDED JOINTS	o				
4.	OIL LEAKS	o				
5.	BOLTED JOINTS OF ANCHORING	o				
6.	PERFORM LUBRICATIONS (MANUAL CHAPTER 6)	o	o	o	o	
7.	CONDITION OF THE PLATFORM SECTIONS	o				
8.	TIGHTENING THE MAST SECTION BOLTS -350 Nm		o			
9.	TIGHTENING THE PLATFORM SECTION BOLTS -195 Nm		o			
10.	TIGHTENING THE LIFTING GEAR TO ASSEMBLY PLATE -195 Nm		o			
11.	TIGHTENING THE SAFETY BRAKE TO ASSEMBLY PLATE -135 Nm		o			
12.	TIGHTENING OF ASSEMBLY PLATE TO LIFTING FRAME -100 Nm		o			
13.	CONDITION THE OF CONDUCTORS IN ELECTRIC BOXES		o			
14.	CONDITION THE OF ELECTRIC INSTALLATION IN ELECTRIC BOXES		o			
15.	TIGHTENING THE WHEEL NUTS -100Nm, WHEEL PRESSURE 4,5 BAR		o			
16.	FUNCTION OF THE ELECTROMAGNETIC BRAKE			o		
17.	CLEANNESS OF THE COVER-LATTICE AT THE FAN BONNET OF THE MOTOR HOUSING			o		
18.	CONDITION OF THE PINION AND RACK - MEASURE TOOTH			o		
19.	FUNCTION OF THE PLATFORM LEVELLING DEVICE (TWIN)			o		
20.	SAFETY BRAKE TEST AND EXPIRATION DATE OF THE SAFETY BRAKE			o		
21.	ADJUST AIR PEEP OF DISK BRAKE (SEE CHAPTER 9.)				o	
22.	CONNECTIONS OF ELECTRIC CABLES				o	
23.	FACTORY OVERHAUL OF THE SAFETY BRAKE (EVERY FOUR (4) YEARS				o	

SIGNATURES / DAY:__________ MONTH:__________ YEAR:__________

PERSON IN CHARGE (ERECTOR
PERSON IN CHARGE (ORDERER)

10.3-1294(E3)

Drawing 6.2. Frequent inspection form

! **NOTE:**
THE DAILY INSPECTION (POINTS 1-19) SHOULD ALSO BE CARRIED OUT.

6.2.2.2. MONTHLY INSPECTION

CHECK THE FOLLOWING POINTS 27-35 AND FILL UP THE FREQUENT INSPECTION FORM (CHAPTER 10)

27. Check the tightening of the mast section screws - 350 Nm.
28. Check the tightening of the platform section screws -195 Nm.
29. Check the tightening of the lifting gear to the assembly plate - 195 Nm.
30. Check the tightening of the safety brake to the assembly plate - 135 Nm.
31. Check the tightening of the assembly plate to the lifting frame - 100 Nm.
32. Check the condition of conductors in the electric boxes Check also mechanical damages.*

FREQUENT INSPECTION FORM

WORKSITE:__________
TYPE OF MACHINE:__________ SERIAL NO:__________
PLATFORM LENGTH:__________ MAX. LIFTING CAPACITY:__________ HEIGHT:__________
ERECTION COMPANY:__________
PERSON IN CHARGE:__________ TEL.:__________
ORDER COMPANY:__________
PERSON IN CHARGE:__________ TEL.:__________

W = WEEKLY
M = MONTHLY
Q = QUARTER-OF-A-YEAR (3 MONTHS)
Y = YEARLY

- MARK WITH CROSS CHECKINGS CARRIED OUT
- POSSIBLE REMARKS IN THE LAST COLUMN

NO	CHECK POINT	W	M	Q	Y	REMARKS
1.	CONDITION OF THE RACK AND THE PINION	o				
2.	CLEAN GUIDING ROLLERS	o				
3.	CONDITION OF THE WELDED JOINTS	o				
4.	OIL LEAKS	o				
5.	BOLTED JOINTS OF ANCHORING	o				
6.	PERFORM LUBRICATIONS (MANUAL CHAPTER 6)	o	o	o	o	
7.	CONDITION OF THE PLATFORM SECTIONS	o				
8.	TIGHTENING THE MAST SECTION BOLTS -350 Nm		o			
9.	TIGHTENING THE PLATFORM SECTION BOLTS -195 Nm		o			
10.	TIGHTENING THE LIFTING GEAR TO ASSEMBLY PLATE -195 Nm		o			
11.	TIGHTENING THE SAFETY BRAKE TO ASSEMBLY PLATE -135 Nm		o			
12.	TIGHTENING OF ASSEMBLY PLATE TO LIFTING FRAME -100 Nm		o			
13.	CONDITION THE OF CONDUCTORS IN ELECTRIC BOXES		o			
14.	CONDITION THE OF ELECTRIC INSTALLATION IN ELECTRIC BOXES		o			
15.	TIGHTENING THE WHEEL NUTS -100Nm, WHEEL PRESSURE 4,5 BAR		o			
16.	FUNCTION OF THE ELECTROMAGNETIC BRAKE			o		
17.	CLEANNESS OF THE COVER-LATTICE AT THE FAN BONNET OF THE MOTOR HOUSING			o		
18.	CONDITION OF THE PINION AND RACK - MEASURE TOOTH			o		
19.	FUNCTION OF THE PLATFORM LEVELLING DEVICE (TWIN)			o		
20.	SAFETY BRAKE TEST AND EXPIRATION DATE OF THE SAFETY BRAKE			o		
21.	ADJUST AIR PEEP OF DISK BRAKE (SEE CHAPTER 9.)				o	
22.	CONNECTIONS OF ELECTRIC CABLES				o	
23.	FACTORY OVERHAUL OF THE SAFETY BRAKE (EVERY FOUR (4) YEARS				o	

SIGNATURES / DAY:__________ MONTH:__________ YEAR:__________

PERSON IN CHARGE (ERECTOR
PERSON IN CHARGE (ORDERER)

10.3-1294(E3)

Drawing 6.3. Frequent inspection form.

33. Check the condition of the electric installation connections in the electric boxes and tighten them if necessary.*
34. Check the tightening of the wheel nuts -100 Nm. Check also the wheel pressure -4,5 bar.
35. Perform lubrications shown on the platform lubrication schedule (6.3.4) for every 120 hours of operation.

! **NOTE:**
DAILY AND WEEKLY INSPECTIONS, POINTS 1-26 SHOULD ALSO BE CARRIED OUT.

*) The main switch Q0 and Q1 has to be switched to 0-position before opening the electric centre.

6.2.2.3. QUARTER-OF-A-YEAR INSPECTION

CHECK THE FOLLOWING POINTS 36-41 AND FILL UP THE FREQUENT INSPECTION FORM (CHAPTER 10)

36. Check the function of the motor brakes.
37. Check and clean the cooling fan covers of the electric motors.
38. Check the condition of the pinion and the rack. Measure tooth (6.4.).
39. Check the function of the platform levelling device (twin).
40. Perform lubrications shown on the platform lubrication schedule (6.3.4) for every 360 hours of operation.
41. Carry out the safety brake test (Chapter 4.) and check the expiration date of the safety brake.


FREQUENT INSPECTION FORM

WORKSITE:_____
TYPE OF MACHINE:_____ SERIAL NO:_____
PLATFORM LENGTH:_____MAX. LIFTING CAPACITY:_____ HEIGHT:_____
ERECTION COMPANY:_____
PERSON IN CHARGE:_____ TEL.:_____
ORDER COMPANY:_____
PERSON IN CHARGE:_____ TEL.:_____

W = WEEKLY - MARK WITH CROSS CHECKINGS CARRIED OUT
M = MONTHLY - POSSIBLE REMARKS IN THE LAST COLUMN
Q = QUARTER-OF-A-YEAR (3 MONTHS)
Y = YEARLY

NO.	CHECK POINT	W	M	Q	Y	REMARKS
1.	CONDITION OF THE RACK AND THE PINION	o				
2.	CLEAN GUIDING ROLLERS	o				
3.	CONDITION OF THE WELDED JOINTS	o				
4.	OIL LEAKS	o				
5.	BOLTED JOINTS OF ANCHORING	o				
6.	PERFORM LUBRICATIONS (MANUAL CHAPTER 6)	o	o	o	o	
7.	CONDITION OF THE PLATFORM SECTIONS	o				
8.	TIGHTENING THE MAST SECTION BOLTS -500 Nm		o			
9.	TIGHTENING THE PLATFORM SECTION BOLTS -195 Nm		o			
10.	TIGHTENING THE LIFTING GEAR TO ASSEMBLY PLATE -195 Nm		o			
11.	TIGHTENING THE SAFETY BRAKE TO ASSEMBLY PLATE -135 Nm		o			
12.	TIGHTENING OF ASSEMBLY PLATE TO LIFTING FRAME -100 Nm		o			
13.	CONDITION THE OF CONDUCTORS IN ELECTRIC BOXES		o			
14.	CONDITION THE OF ELECTRIC INSTALLATION IN ELECTRIC BOXES		o			
15.	TIGHTENING THE WHEEL NUTS -100 Nm, WHEEL PRESSURE 4,5 BAR		o			
16.	FUNCTION OF THE ELECTROMAGNETIC BRAKE			o		
17.	CLEANNESS OF THE COVER-LATTICE AT THE FAN BONNET OF THE MOTOR HOUSING			o		
18.	CONDITION OF THE PINION AND RACK - MEASURE TOOTH			o		
19.	FUNCTION OF THE PLATFORM LEVELLING DEVICE (TWIN)			o		
20.	SAFETY BRAKE TEST AND EXPIRATION DATE OF THE SAFETY BRAKE			o		
21.	ADJUST AIR PERP OF DISK BRAKE (SEE CHAPTER 9.)				o	
22.	CONNECTIONS OF ELECTRIC CABLES				o	
23.	FACTORY OVERHAUL OF THE SAFETY BRAKE (EVERY FOUR (4) YEARS				o	

SIGNATURES / DAY:_____ MONTH:_____ YEAR:_____

PERSON IN CHARGE (DIRECTOR) PERSON IN CHARGE (ORDERER)

10.3-1274(ES)

Drawing 6.4. Frequent inspection form.

NOTE:
DAILY, WEEKLY AND MONTHLY INSPECTIONS, POINTS 1-34 SHOULD ALSO BE CARRIED OUT.

6.2.2.4. YEARLY INSPECTION

CHECK FOLLOWING POINTS 42-45 AND FILL UP THE FREQUENT INSPECTION FORM (CHAPTER 10).

42. Check and adjust the air gap of the motor brakes. See instructions on chapter 9.
43. Check the connections of the electric cables. Detailed check of electrical equipment with the help of measuring instruments should be done.
44. Perform lubrications shown on platform lubrication schedule (6.3.4) for every 1400 hours of operation.
45. Check that the safety brake is overhauled (must be replaced every 4 years)


FREQUENT INSPECTION FORM

WORKSITE:_____
TYPE OF MACHINE:_____ SERIAL NO:_____
PLATFORM LENGTH:_____MAX. LIFTING CAPACITY:_____ HEIGHT:_____
ERECTION COMPANY:_____
PERSON IN CHARGE:_____ TEL.:_____
ORDER COMPANY:_____
PERSON IN CHARGE:_____ TEL.:_____

W = WEEKLY - MARK WITH CROSS CHECKINGS CARRIED OUT
M = MONTHLY - POSSIBLE REMARKS IN THE LAST COLUMN
Q = QUARTER-OF-A-YEAR (3 MONTHS)
Y = YEARLY

NO.	CHECK POINT	W	M	Q	Y	REMARKS
1.	CONDITION OF THE RACK AND THE PINION	o				
2.	CLEAN GUIDING ROLLERS	o				
3.	CONDITION OF THE WELDED JOINTS	o				
4.	OIL LEAKS	o				
5.	BOLTED JOINTS OF ANCHORING	o				
6.	PERFORM LUBRICATIONS (MANUAL CHAPTER 6)	o	o	o	o	
7.	CONDITION OF THE PLATFORM SECTIONS	o				
8.	TIGHTENING THE MAST SECTION BOLTS -500 Nm		o			
9.	TIGHTENING THE PLATFORM SECTION BOLTS -195 Nm		o			
10.	TIGHTENING THE LIFTING GEAR TO ASSEMBLY PLATE -195 Nm		o			
11.	TIGHTENING THE SAFETY BRAKE TO ASSEMBLY PLATE -135 Nm		o			
12.	TIGHTENING OF ASSEMBLY PLATE TO LIFTING FRAME -100 Nm		o			
13.	CONDITION THE OF CONDUCTORS IN ELECTRIC BOXES		o			
14.	CONDITION THE OF ELECTRIC INSTALLATION IN ELECTRIC BOXES		o			
15.	TIGHTENING THE WHEEL NUTS -100 Nm, WHEEL PRESSURE 4,5 BAR		o			
16.	FUNCTION OF THE ELECTROMAGNETIC BRAKE			o		
17.	CLEANNESS OF THE COVER-LATTICE AT THE FAN BONNET OF THE MOTOR HOUSING			o		
18.	CONDITION OF THE PINION AND RACK - MEASURE TOOTH			o		
19.	FUNCTION OF THE PLATFORM LEVELLING DEVICE (TWIN)			o		
20.	SAFETY BRAKE TEST AND EXPIRATION DATE OF THE SAFETY BRAKE			o		
21.	ADJUST AIR PERP OF DISK BRAKE (SEE CHAPTER 9.)				o	
22.	CONNECTIONS OF ELECTRIC CABLES				o	
23.	FACTORY OVERHAUL OF THE SAFETY BRAKE (EVERY FOUR (4) YEARS				o	

SIGNATURES / DAY:_____ MONTH:_____ YEAR:_____

PERSON IN CHARGE (DIRECTOR) PERSON IN CHARGE (ORDERER)

10.3-1274(ES)

Drawing 6.5. Frequent inspection form.

NOTE:
DAILY, WEEKLY, MONTHLY AND QUARTER-OF-A-YEAR INSPECTIONS, POINTS 1-41 SHOULD ALSO BE CARRIED OUT.

6.3. LUBRICATION

Lubrication is one of the most important platform maintenance operation.
Recommended greases and oils are shown on table 6.3.2.

Lubrication instructions:

1. The platform must be lowered down before any lubrication activities take place. Also the electricity must be switched off.
2. Lubrication should be done according to a lubrication schedule where you will find all necessary information concerning time limits, lubrication points and oils and greases. Lubrication points are shown on drawing 6.6.
3. Lubrication points should be kept clean.
4. When lubricating slide bearings with a grease gun, it is necessary to make sure that grease will enter to both surfaces. The grease should be pressed in until the surplus is running out.
5. At every change of grease in bearings, the condition of bearing seals should be checked and damaged seals replaced with new ones.

6.3.1. CAPACITY OF GEAR OIL TANKS

Gear of the drive motor	RF 73	1,2 l
Gear of the lifting motor	KF 87	3,7 l

Please see the service instructions of manufacturer (chapter 9A).

6.3.2. DENOTATION OF OILS AND GREASES USED

GRAPHICAL SYMBOL	OIL OR GREASE GRADE
	GREASE
	MACHINE OIL
	GRAPHITE GREASE
	GEAR OIL (read manufactures service instructions, chapter 9)

6.3.3. LUBRICATION PERIODS

To avoid the operational breaks, it is recommended to observe the following periods for lubrication:

30 h	**or**	**1**	**week**
120 h	**or**	**1**	**month**
360 h	**or**	**3**	**months**
1400 h	**or**	**12**	**months**

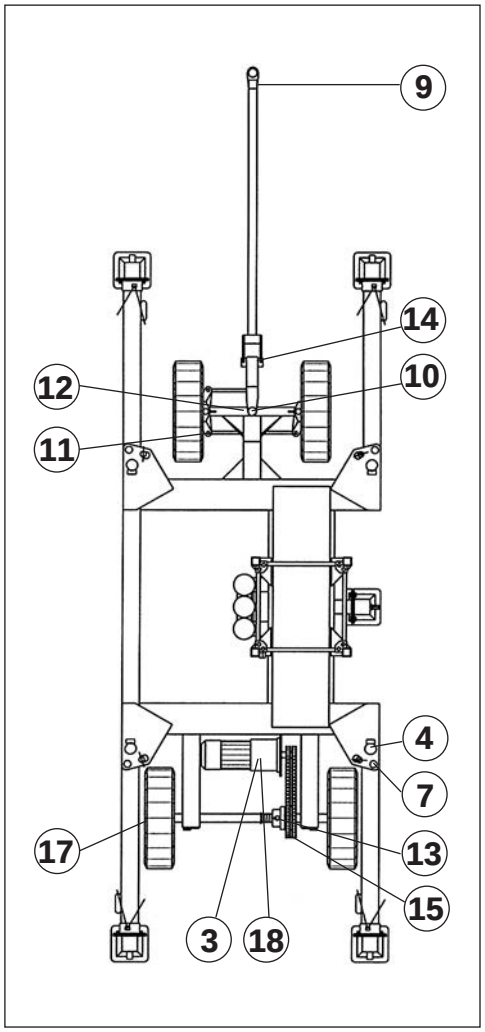
6.3.4. PLATFORM LUBRICATION SCHEDULE

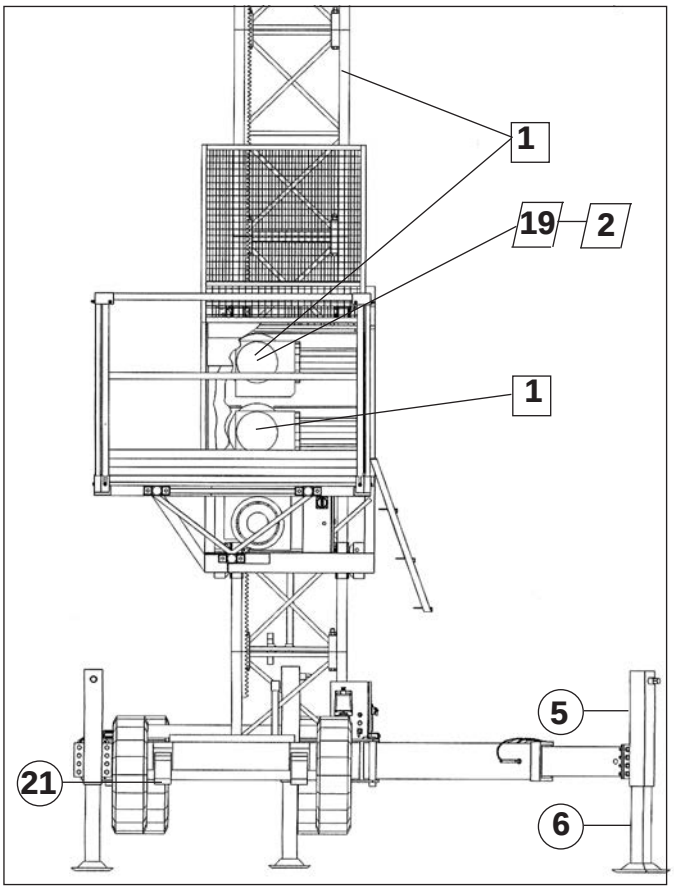
Lubrication period	Point on diagram	Amount of lubrication points	Lubrication point	Lubrication operation	Grade of lubricant
Every 30 hours of operation	1	all	racks x), pinions of safety brake and lifting motors (clean, lubricate)	smear with brush	graphite grease
Every 120 hours of operation	2	2+5	gear box of the lifting motors	check the oil level	see manufactures service instructions
	3	1	gear box of the chassis drive unit	check the oil level	see manufactures service instructions
Every 360 hours of operation	4	4	axle of the outrigger	press with grease gun	grease
	5	5	screw inside the jack	press with grease gun	grease
	6	5	ball joint of the jack	smear with brush	grease
	7	4	locking tap for the outrigger	smear with brush	grease
	8	1	platform levelling device	smear with brush	machine oil
	9	1	tow bar	smear with brush	grease
	10	1	centre joint of the control mechanism	press with grease gun	grease
	11	all	joint of the chassis steering mechanism	press with grease gun	grease

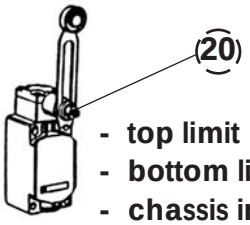
x) all new racks have to be lubricated before use.

Lubrication period	Point on diagram	Amount of lubrication points	Lubrication point	Lubrication operation	Grade of lubricant
	12	2	front axle	press with grease gun	grease
	13	1	sleeve of the clutch	press with grease gun	grease
	14	1	connecting tap	smear with brush	grease
	15	1	chain of the chassis drive unit	smear with brush	grease
	16	1	adjusting screws of the anchoring	smear with brush	grease
every 1400 hours of operation	17	4	ball bearing of the wheel hub	with spatula	grease
	18	1	gear box of the chassis	oil change drive unit	see manufactures service instructions
	19	2+gear	gear box of the lifting boxes	oil change motor	see manufactures service instructions
	20	single 3 twin 5	arm and axles of the limit switches	smear with brush	machine oil
	21	2	bearing of rear the axle	smear with brush	grease

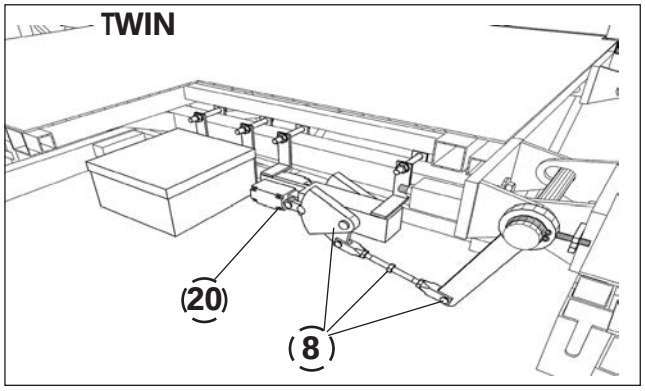
LUBRICATION POINTS

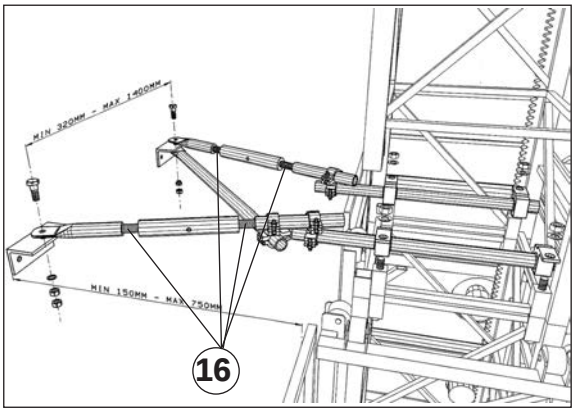






- top limit
- bottom limit
- chassis interlock





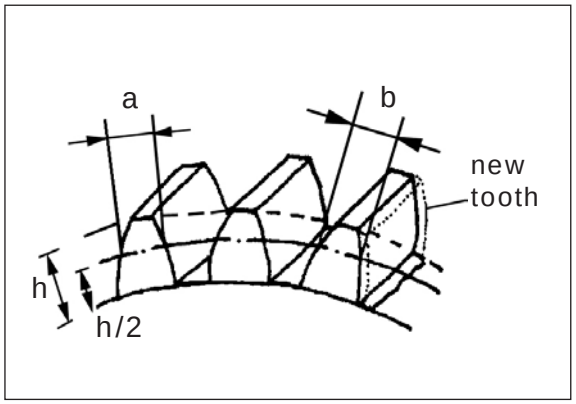
- Graphite grease
- grease
- machineoil
- gear oil (read manufacturer service instructions, chapter 9)

6.4. DRAWINGS ILLUSTRATING THE MEASUREMENTS AND ADJUSTMENT PROCEDURES

The measurement is done with slide calliper.

a) new tooth (13 mm)

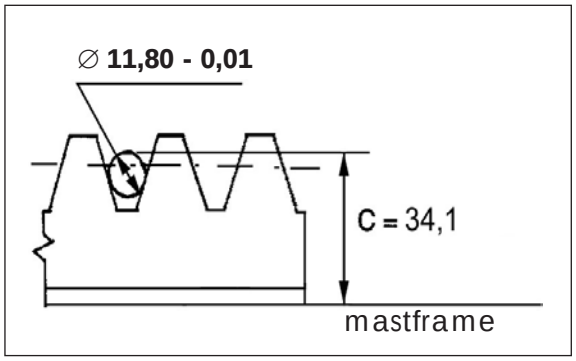
b) min. tooth thickness (12 mm)



Drawing 6.7. Pinion.

The measurement is done with measuring wire ∅ 11,8 – 0,01 mm and slide calliper

c) worn tooth

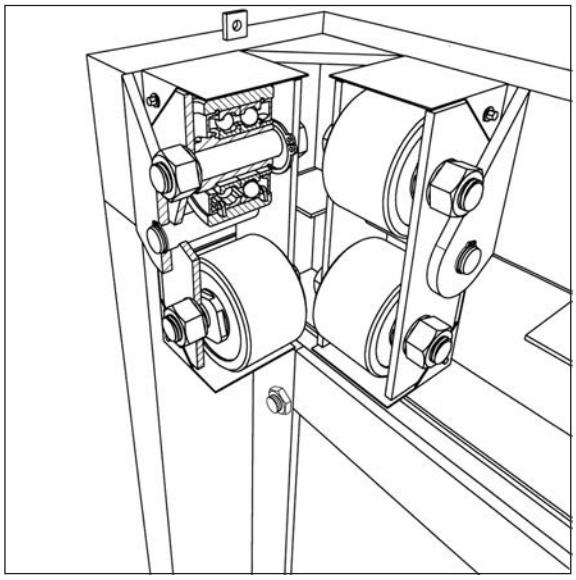


Drawing 6.8. Rack.

The adjustment of the guiding rollers will always be made with on unloaded platform. The guiding rollers will be adjusted, when the clearance between the mast edge bars and the guiding rollers will exceed 1,5 mm.

The locking nuts of the guiding rollers will be slackened (see drawing 6.9).

The eccentric shafts of the guiding rollers will be turned until the right clearance will be reached (1,0). The clearance is measured between the guiding rollers and the mast edge bars.



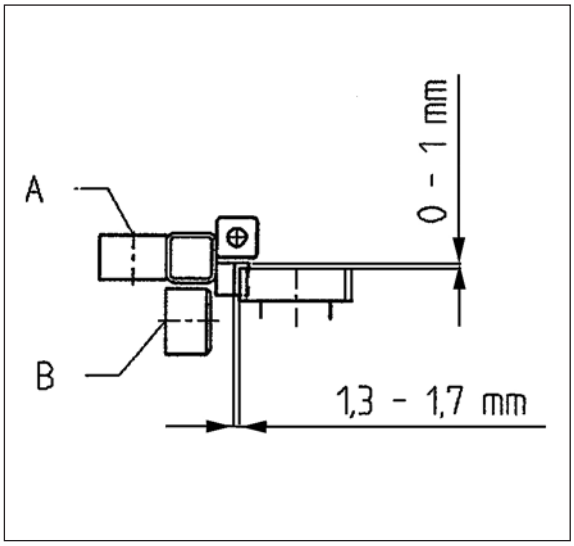
Drawing 6.9. Guiding rollers.

The adjustment order of the guiding rollers

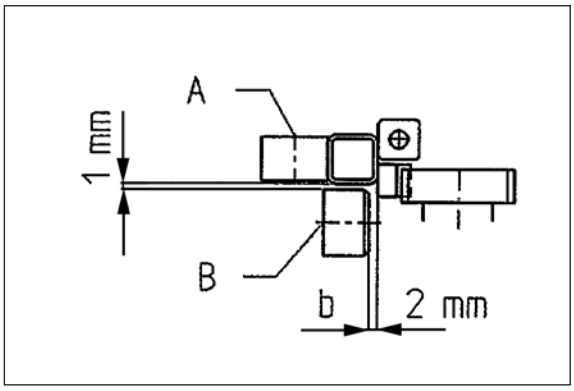
1. The rollers A on the rack edge will be adjusted first (see drawings 6.10 and 6.11) so, that the top clearance of the lifting mechanism and the safety brake pinion to the bottom of the rack is 1,3-1,7 mm (see drawing 6.10).
The clearance (b) between the back of the rack and the guiding rollers B has to be 2 mm (see drawing 6.11). If the clearance is not in the tole- rance, the assembly plate of the lifting mechanism has to be adjus- ted.

2. Then the guiding rollers (B) will be adjusted (see drawing 6.11) so, that the pinions are in the middle of the rack. The clearance between the guiding rollers and the mast edge bars will be adjusted to 1,0 mm.

3. After the adjustment of the above points, the remaining rollers will be adjusted so, that the clearance between the mast edge bars and the guiding rollers is 1,0 mm.



Drawing 6.10.



Drawing 6.11.

6.4.1. TIGHTENING TORQUES FOR SCREWS AND NUTS

See table on 4.

7. STORAGE AND TRANSPORT

7. STORAGE AND TRANSPORT

7.1. STORAGE INSTRUCTION

This instruction applies to storage of the platform in dismantled condition for a period of 30 days or longer. Before storing the following actions should be taken:

- clean and wash all main component units of the platform,
- cover with consistent grease layer all parts machined and not painted,
- store all smallerloose parts and units of the platform in appropriate place protected against weather changes by oiling,
- store electrical equipment in separate place,
- place platform component units in place assigned for this purpose - best of all under the roof - and protect the place against access of unauthorized persons.

In case of longer storage time, check the external condition of all platform component units occasionally.

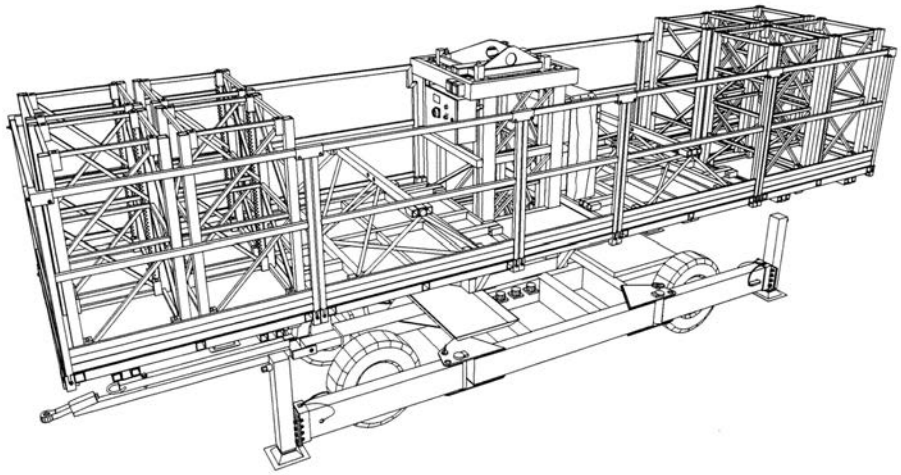
7.2. TRANSPORT INSTRUCTION

! When disassembling SC4000 for transport, don´t forget to lower the platform onto the rubber cushion of the chassis with help of the emergency lowering levers at the end of the lifting gear motors.

ATTENTION!

Check that:

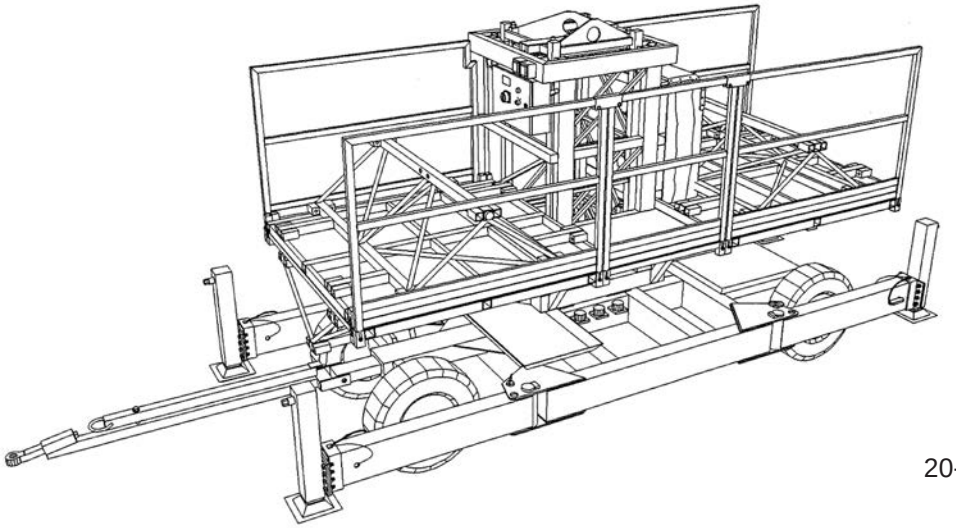
- There are no loose equipment on the machine,
- The electric cable isn´t squeezed.
- During the transport the maximum load of a 7,4 m longplatform is 900 kg, evenly distributed. Platform must be supported e.g. with wooden beams.
- Always tighten the vertical outriggers against the transport carriage.
- Fasten carefully.



20-0594-55-1

Drawing 7.1. 8 mast sections and 2 platform sections.

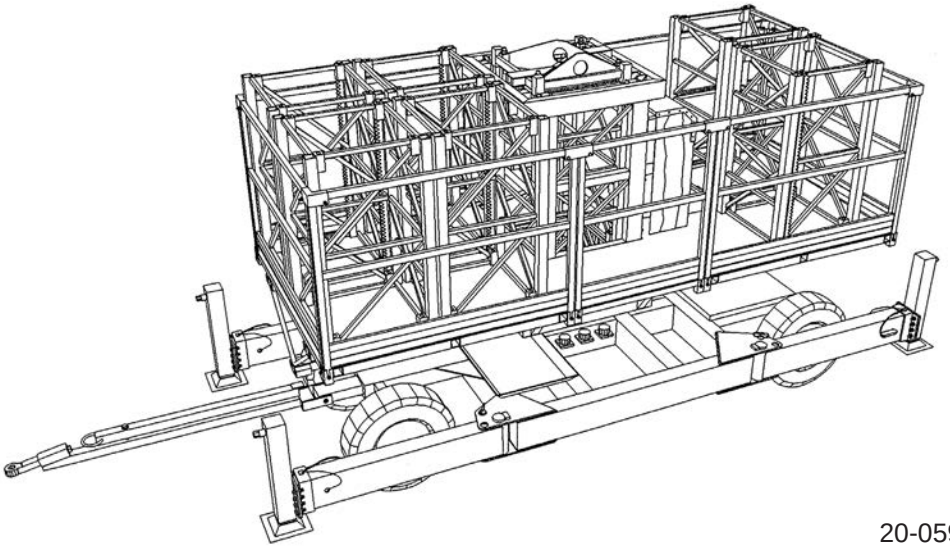
TRANSPORT DIMENSIONS	PLATFORM LENGTH	WEIGHT
LENGTH 7,4 m HEIGHT 2,35 m WIDTH 1,98 m	7,4 m	4 520 kg



20-0594-56-2

Drawing 7.2. 2 platform sections.

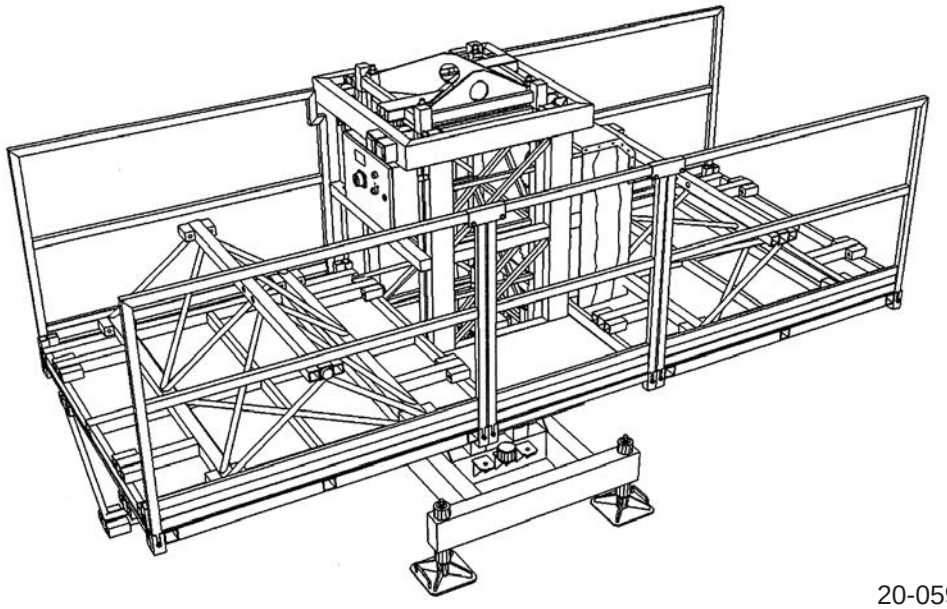
TRANSPORT DIMENSIONS	PLATFORM LENGTH	WEIGHT
LENGTH 5,0 m HEIGHT 2,35 m WIDTH 1,98 m	4,2 m	3 650 kg



20-0594-57-1

Drawing 7.3. 6 mast sections.

TRANSPORT DIMENSIONS	PLATFORM LENGTH	WEIGHT
LENGTH 5,0 m HEIGHT 2,35 m WIDTH 1,98 m	4,2 m	3 750 kg



20-0594-58-2

Drawing 7.4. 2 platform sections.

TRANSPORT DIMENSIONS	PLATFORM LENGTH	WEIGHT
LENGTH 4,2 m HEIGHT 2,35 m WIDTH 1,98 m	4,2 m	1 620 kg

10. INSPECTION FORMS

ERECTION FORM

WORKSITE:_____

TYPE OF MACHINE:_____ SERIAL NO:_____

PLATFORM LENGTH:_____MAX. LIFTING CAPACITY:_____ HEIGHT:_____

ERECTION COMPANY:_____

PERSON IN CHARGE:_____ TEL.:_____

ORDER COMPANY:_____

PERSON IN CHARGE:_____ TEL.:_____

	CHECK POINT	OK	REMARKS
1.	GROUND PLATES UNDER JACKS AND BEARING CAPACITY OF THE GROUND		
2.	OUTRIGGERS FULLY TURNED, EXTENDED AND LOCKED WITH PIN		
3.	JACKS SCREWED DOWN AGAINST GROUND PLATES		
4.	PLATFORM AND MAST ARE VERTICALLY AND HORIZONTALLY ADJUSTED		
5.	CENTRE JACK: SC4000 ALWAYS, SC1300 MAST HEIGHT > 30M		
6.	PLYWOOD BOARD ON TELESCOPIC EXTENSIONS (MIN. 22 MM)		
7.	DISTANCE BETWEEN PLATFORM AND WALL (MANUAL CHAPTER 4.)		
8.	CHECKING THE RAILINGS ASSEMBLY		
9.	MAST GUARD NET ASSEMBLED		
10.	MAST SECTION BOLTS TIGHTENED -350 Nm		
11.	COUNTERPARTS FOR LIMIT SWITCHES (TOP AND BOTTOM)		
12.	TOP CAP ASSEMBLED		
13.	FUNCTION OF THE EMERGENCY STOP		
14.	FUNCTION OF THE PUSH-BUTTONS UP AND DOWN		
15.	FUNCTION OF THE LIMIT SWITCHES (TOP, BOTTOM, MAST ASSEMBLY)		
16.	FUNCTION OF THE EMERGENCY LOWERING		
17.	FUNCTION OF THE PLATFORM LEVELLING DEVICE (TWIN)		
18.	WALL ANCHORING (MANUAL CHAPTER 4.))		
19.	FASTENING OF THE ANCHORING BOLTS -190 Nm		
20.	LATTITUDE OF THE GUIDING ROLLERS		
21.	MEASURING THE ELECTRIC POWER SUPPLY IN CABLES		
22.	ELECTRIC CABLES ARE HANGING FREE AND STRAIGHT		
23.	RACK AND PINION CONTACT		
24.	FUNCTION OF THE SAFETY BRAKE		
25.	PLATFORMS STATIC AND DYNAMIC TEST (MANUAL CHAPTER 4.)		
26.	NO VISIBLE PLATFORM DAMAGES		
27.	FUNCTION OF THE ELECTROMAGNETIC BRAKES		
28.	NO UNUSUAL NOISE FROM MECHANISMS AND MOTORS		
29.	NO OIL LEAKS FROM GEAR BOXES		
30.	RACKS ARE CLEAN AND LUBRICATED		
31.	WORKSITE FENCED OFF		
32.	EXPIRATION DATE OF THE SAFETY BRAKE. THE BRAKE MUST BE REPLACED (OVERHAULED AT THE FACTORY) EVERY FOUR (4) YEARS		
33.	UNIT FREE FROM UNNECESSARY EQUIPMENT		
34.	ASSEMBLY OF POSSIBLE WEATHER COVER		
35.	OPERATORS HAVE GOT ENOUGH INFORMATION AND TRAINING IN THE USE OF THE UNIT		
36.	HANDBOOK AVAILABLE		
37.	ALL SIGNS AND LABELS POSITIONED AND READABLE		

SIGNATURES /DAY:_____MONTH:_____ YEAR:_____

_____ _____

PERSON IN CHARGE (ERECTOR)

PERSON IN CHARGE (ORDERER)

DAILY INSPECTION FORM

WORKSITE:_____

TYPE OF MACHINE:_____ SERIAL NO:_____

PLATFORM LENGTH:_____MAX. LIFTING CAPACITY:_____ HEIGHT:_____

ERECTION COMPANY:_____

PERSON IN CHARGE:_____ TEL.:_____

ORDER COMPANY:_____

PERSON IN CHARGE:_____ TEL.:_____

V VISUAL INSPECTION **V+C** VISUAL INSPECTION **T** TEST

NOTE:

- FILL UP AND SIGN THIS FORM BEFORE YOU START WORKING WITH THE UNIT
- MARK WITH CROSS THE CHECKINGS CARRIED OUT
- POSSIBLE REMARKS IN THE LAST COLUMN

No	CHECK POINT	WEEK	MON	TUE	WED	THU	FRI	SAT	SUN	REMARKS
1.	BASEMENT GROUND	V								
2.	TURNING, EXTENSION, SUPPORT AND LOCKING OF OUTRIGGERS	V								
3.	HORIZONTAL / VERTICAL POSITION OF PLATFORM	V								
4.	FUNCTION OF THE REMOTE CONTROL	T								
5.	FUNCTION OF THE EMERGENCY STOP	T								
6.	FUNCTION THE EMERGENCY LOWERING	T								
7.	RACK AND PINION CONTACT AND CONDITION	V								
8.	CONDITION AND FREE HANGING OF THE ELECTRIC CABLES	V								
9.	FIXING AND RAILINGS OF PLATFORM SECTIONS	V+C								
10.	MAST SECTIONS AND FIXING SCREWS	V								
11.	FUNCTION OF THE LIMIT SWITCHES + COUNTER P	T								
12.	GUIDING ROLLERS	V								
13.	SAFETY BRAKE	V								
14.	WALL ANCHORING WITH CONNECTIONS	V								
15.	CONNECTION OF MAST GUARDS	V								
16.	LOOSE OR MISSING PARTS	V								
17.	WORKSITE SAFETY FENCED	V								
18.	WARNING / INSTRUCTION PLATES POSITIONED AND READABLE	V								
19.	WORKING AREA	V								
20.										
21.										

SIGNATURES /DAY:_____ MONTH:_____ YEAR:_____

_____ _____

PERSON IN CHARGE (ERECTOR)

PERSON IN CHARGE (ORDERER)

FREQUENT INSPECTION FORM

WORKSITE:_____

TYPE OF MACHINE:_____ SERIAL NO:_____

PLATFORM LENGTH:_____MAX. LIFTING CAPACITY:_____ HEIGHT:_____

ERECTION COMPANY:_____

PERSON IN CHARGE:_____ TEL.:_____

ORDER COMPANY:_____

PERSON IN CHARGE:_____ TEL.:_____

W = WEEKLY - MARK WITH CROSS CHECKINGS CARRIED OUT
M = MONTHLY - POSSIBLE REMARKS IN THE LAST COLUMN
Q = QUARTER-OF-A-YEAR (3 MONTHS)
Y = YEARLY

NO	CHECK POINT	W		M		Q		Y		REMARKS
1.	CONDITION OF THE RACK AND THE PINION	o								
2.	CLEAN GUIDING ROLLERS	o								
3.	CONDITION OF THE WELDED JOINTS	o								
4.	OIL LEAKS	o								
5.	BOLTED JOINTS OF ANCHORING	o								
6.	PERFORM LUBRICATIONS (MANUAL CHAPTER 6)	o		o		o		o		
7.	CONDITION OF THE PLATFORM SECTIONS	o								
8.	TIGHTENING THE MAST SECTION BOLTS -350 Nm			o						
9.	TIGHTENING THE PLATFORM SECTION BOLTS -195 Nm			o						
10.	TIGHTENING THE LIFTING GEAR TO ASSEMBLY PLATE -195 Nm			o						
11.	TIGHTENING THE SAFETY BRAKE TO ASSEMBLY PLATE -135 Nm			o						
12.	TIGHTENING OF ASSEMBLY PLATE TO LIFTING FRAME -100 Nm			o						
13.	CONDITION THE OF CONDUCTORS IN ELECTRIC BOXES			o						
14.	CONDITION THE OF ELECTRIC INSTALLATION IN ELECTRIC BOXES			o						
15.	TIGHTENING THE WHEEL NUTS -100Nm, WHEEL PRESSURE 4,5 BAR			o						
16.	FUNCTION OF THE ELECTROMAGNETIC BRAKE					o				
17.	CLEANNESS OF THE COVER-LATTICE AT THE FAN BONNET OF THE MOTOR HOUSING					o				
18.	CONDITION OF THE PINION AND RACK - MEASURE TOOTH					o				
19.	FUNCTION OF THE PLATFORM LEVELLING DEVICE (TWIN)					o				
20.	SAFETY BRAKE TEST AND EXPIRATION DATE OF THE SAFETY BRAKE					o				
21.	ADJUST AIR PEEP OF DISK BRAKE (SEE CHAPTER 9.)							o		
22.	CONNECTIONS OF ELECTRIC CABLES							o		
23.	FACTORY OVERHAUL OF THE SAFETY BRAKE (EVERY FOUR (4) YEARS							o		
24.	PAINTING CONDITION OF PLATFORM-REPAIR OF PAINTING SCRATCHES							o		

SIGNATURES / DAY:_____ MONTH:_____ YEAR:_____

_____ _____

PERSON IN CHARGE (ERECTOR

PERSON IN CHARGE (ORDERER)