

SECTION 1 - GENERAL DATA

DESCRIPTION

Aluminium gantry crane (ASB/LSB series) is a complete, lightweight, fully customizable (modular design), portable and flexible device designed to be used in variety of lifting applications such as, drainage wells, reservoirs, wells, silos, rooftop, lift-shaft, waste water and many more. For faster device installation additional tools are not needed (device installation - Section 2).

Beam: from 2 to 7 meters.

Support for ABS: three basic types - A1 / B1 / C1.

Supports for LSB: three basic types - E1 / F1 / G1.

ASB Working Load Limit (WLL): from 1500kg up to 3500kg (depends on configuration - please see ASB Technical Data Table).

LSB Working Load Limit (WLL): from 500kg up to 2000kg (depends on configuration - please see LSB Technical Data Table).

Safety factor for lifting loads: 2,1:1.

Safety factor for personal rescue: 10:1.

ASB - Protection for maximum five people at the same time.

LSB - Protection for maximum three people at the same time.

DEVICE USE SCENARIOS

1. Lifting loads only

ASB/LSB can be used for lifting/lowering loads up to the related Working Load Limit (WLL - which is always indicated on the beam) with chain hoists, RUP50x-CT series devices and other lifting equipment. For lifting loads external trolley must be used. Lifting loads - Section 3.

2. Personal protection and lifting loads

ASB/LSB device can be used for personal protection (for ASB max. 5 people at the same time and for LSB max. 3 people at the same time) during lifting/lowering loads. During both operations at the same time (personal protection and lifting/lowering loads) WLL of the device indicated on the beam must be reduced - please refer to Section 3. For personal protection internal trolley must be used.

Personal protection - Section 4. Lifting loads and personal protection at the same time - Section 5.

3. Rescue and personal protection only.

ASB/LSB device can be used for rescue purposes and personal protection as component of personal protective equipment against fall from height. During rescue operation lifting/lowering loads IS NOT allowed. For rescue RUP50x-C or RUP50x-D rescue lifting device must be used. For personal protection internal trolley must be used.

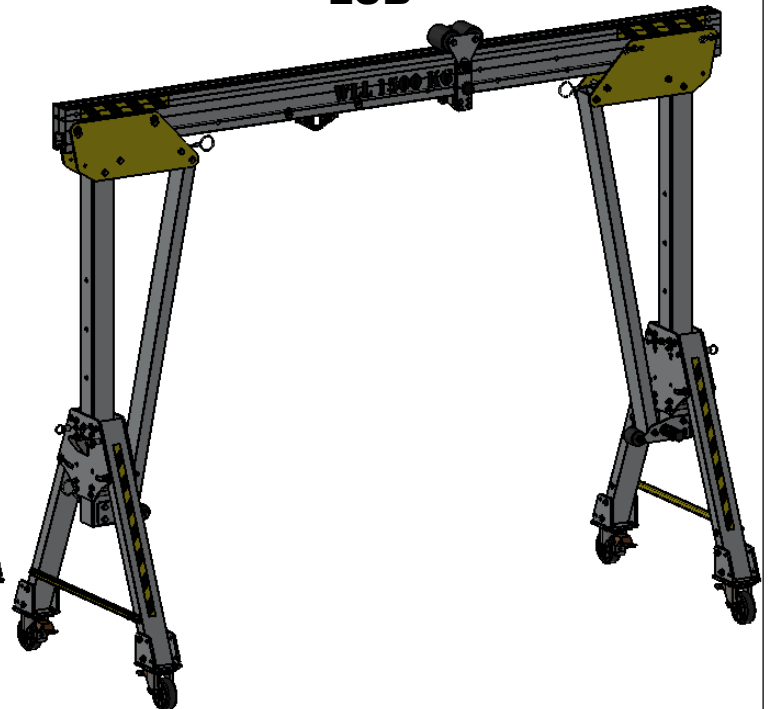
Rescue - Section 6.

Personal Protection - Section 4.

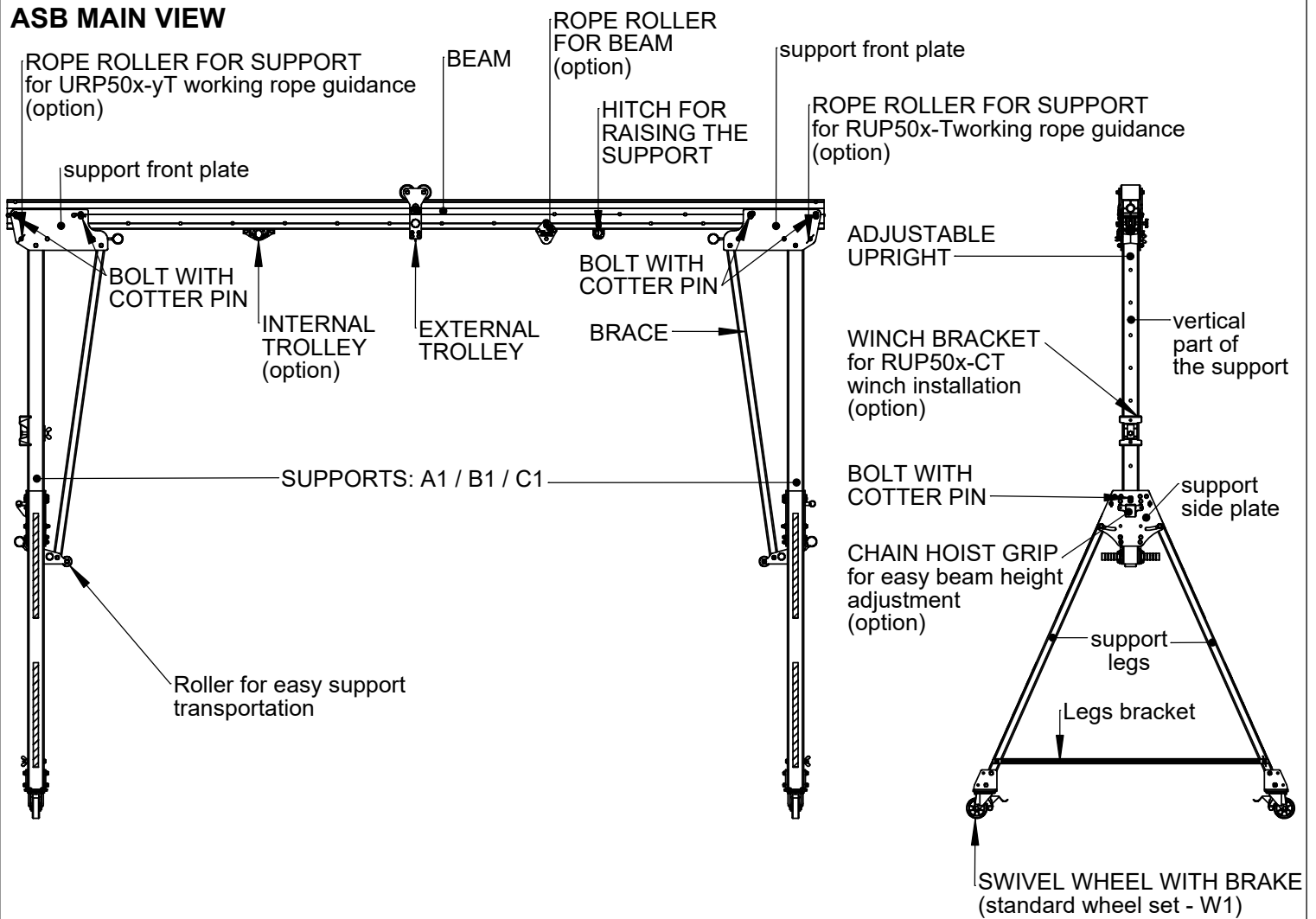
ASB



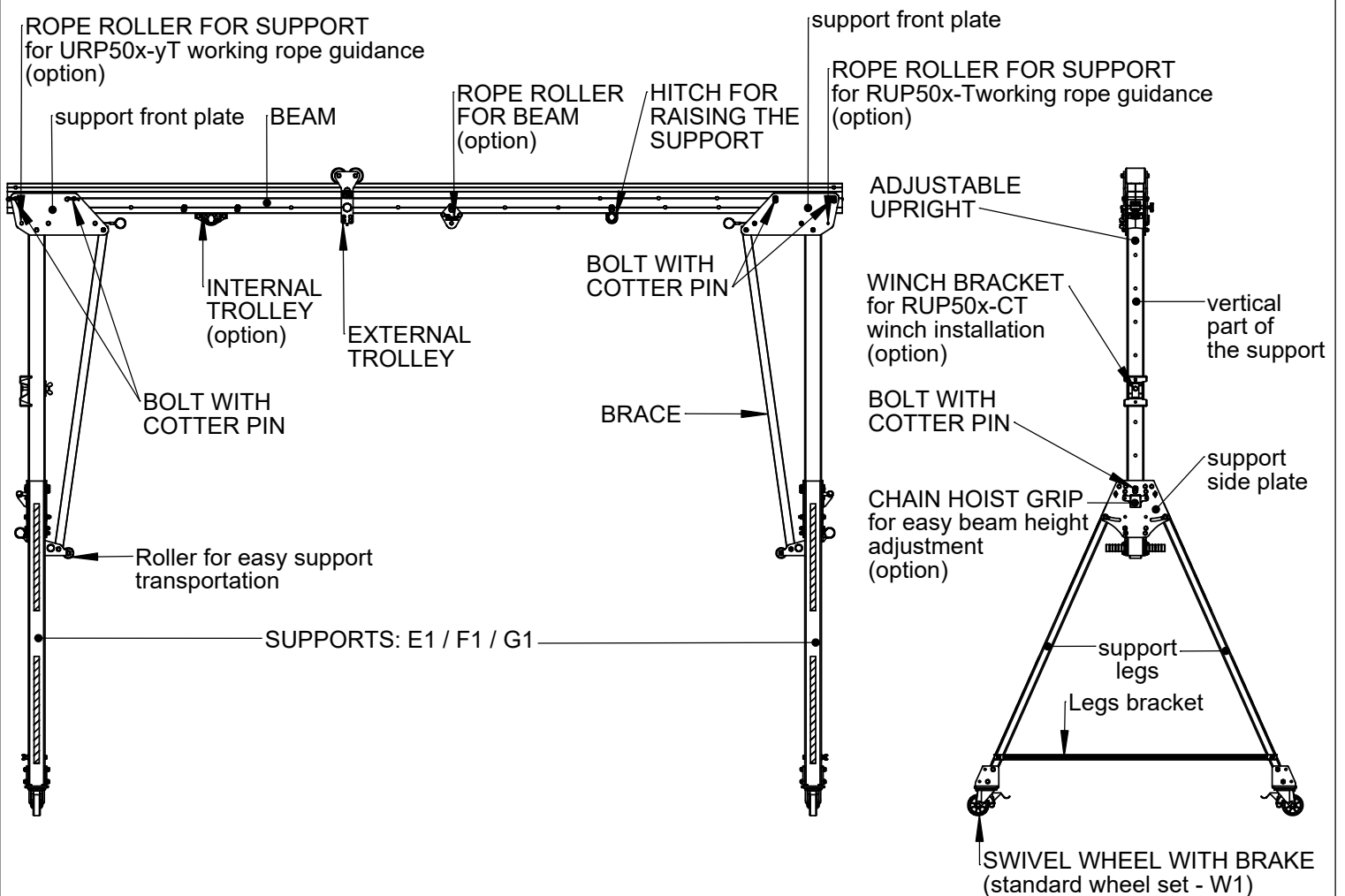
LSB



ASB MAIN VIEW



LSB MAIN VIEW



GENERAL SAFETY INSTRUCTION

INSPECTION BEFORE FIRST USE

ASB/LSB device must be visually and functionally inspected before first use by a competent person. Inspection must establish that all parts of the device are safe and has not been damaged by incorrect assembly, transport or storage. Inspections are carried out by the user.

INSPECTION BEFORE WORKING

Before each use it is obligatory to carry out a pre-use check of the equipment, to ensure that it is in a serviceable condition and operates correctly before it is used. During pre-use check it is necessary to inspect all elements of the equipment in respect of any damages, excessive wear, corrosion, abrasion, cutting or incorrect acting. Especially take into consideration:

- components visual defects,
- test the trolleys for free movement along the beam,
- ensure that WLL of the device is sufficient for the application and will not be exceeded.

Inspections are carried out by the user.

MAXIMUM LIFESPAN / PERIODIC INSPECTION

Maximum lifespan of the ASB/LSB device is unlimited but its depends on the intensity of usage and the environment of use. Using the device in rough environment, marine, contact with sharp edges, exposure to extreme temperatures or aggressive substances, etc. can lead to the withdrawal from use even after one use.

After every 12 months of utilization, equipment must be withdrawn from use to carry out periodical detailed inspection.

Periodic inspections must only be carried out by a competent person who has the knowledge and training required for personal protective equipment periodic inspections. Depending upon the type and environment of work, inspections may be needed to be carried out more frequently than once every 12 months. The periodic inspection can be carried out also by the manufacturer or his authorized representative.

During this inspection will be established admissible time of the device use till next manufacturer's inspection.

The result of the inspection must be recorded in Identity Card.

Regular periodic inspections are the essential for equipment maintenance and the safety of the users which depends upon the continued efficiency and durability of the equipment.

During periodic inspection it is necessary to check the legibility of the equipment marking.

MAINTENANCE AND REPAIR

If during the inspection any defects or damages are detected ASB/LSB device should be immediately withdraw from the use. Do not make any modifications or repair the device yourself.

WITHDRAWAL FROM THE USE

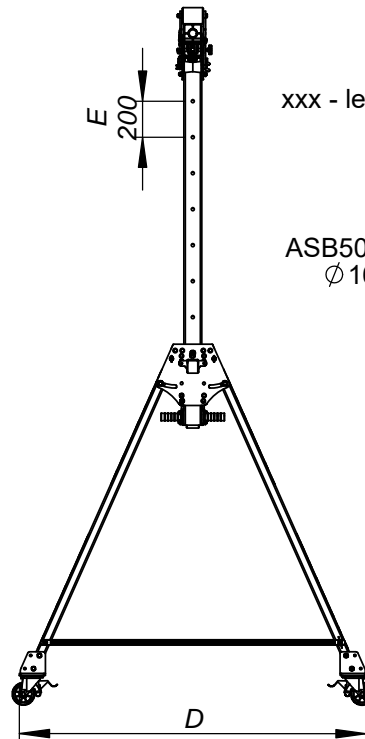
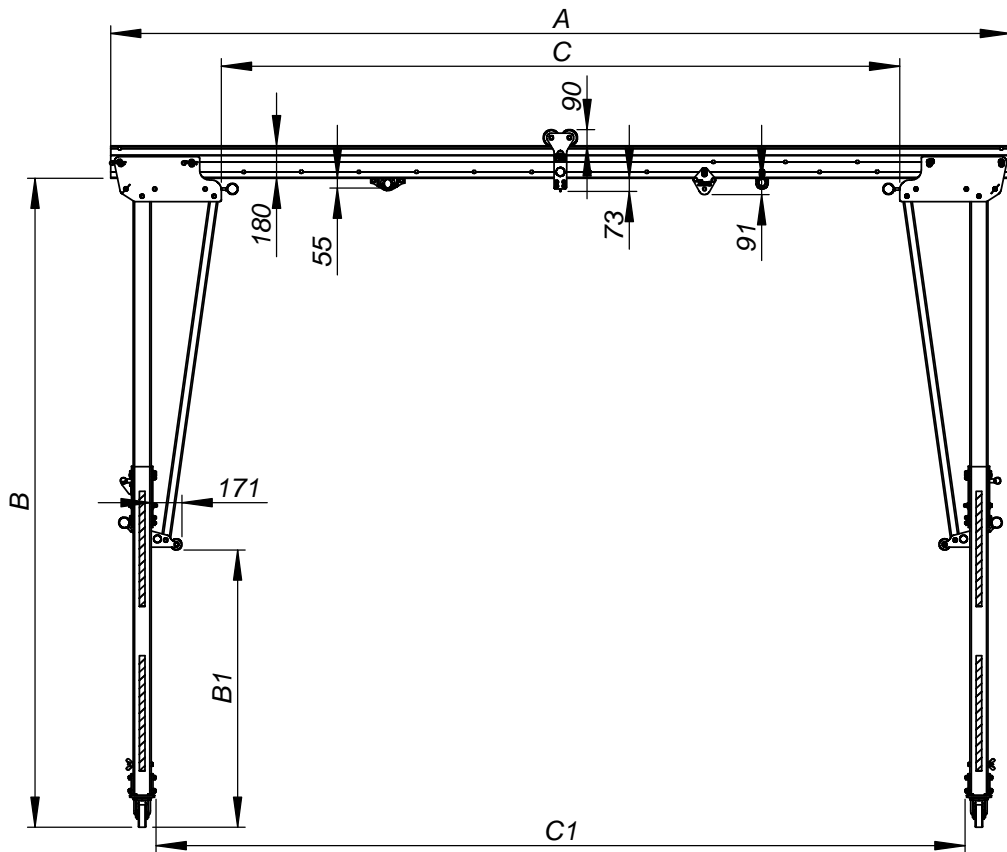
Device must be withdrawn from use immediately when any doubt arise about its condition for safe use and not used again until confirmed in writing by equipment manufacturer or his representative after carried out the detailed inspection.

GENERAL PRECAUTIONS

- ASB/LSB device must be installed in accordance with this instruction manual.
- ASB/LSB device can be used in the temperature range from -20°C to +50°C.
- **Working Load Limit (WLL) indicated on the beam MUST NOT be exceeded.**
- **Working Load Limit (WLL) indicated on the beam MUST BE REDUCED to the RWWL value when personnel is protected (attached to the internal trolley) during lifting/lowering loads in accordance with Section 5.**
- During rescue operation lifting/lowering loads IS NOT allowed - please refer to Section 6.
- Each lifting operation must be properly planned and the weight of the load to be lifted must be known by the operator.
- Before any lifting operation all wheel brakes MUST BE locked.
- Equipment for lifting loads (e.g. hoists, chains) MUST BE attached ONLY to the external trolley attachment point.
- DO NOT attach load to the internal trolley. Internal trolley is intended to be used ONLY as personal protective equipment only.
- The operator must ensure that the additional lifting equipment (e.g. hoists, chains) are properly attached and not expose him or other personnel to danger.
- **ASB/LSB device should NOT be moved under load. Any deviation from this should be supported by a risk assessment and method statement.**
- **Risk assessment and method statement must consider additional loading in "wet lift" situation.**
- Do not allow load to swing.
- Beam must be positioned horizontally during any lifting operation.
- Avoid side loads. Lift loads only when load chain is stretched in the vertical position between load and attachment point of lifting device.
- Do not lift or transport loads while personnel are in the danger zone.
- Personnel SHOULD NOT stand or pass under a suspended load.
- Suspended load MUST NOT be left unattended for a long period of time.
- BEFORE starting lowering the load ALWAYS make sure that personnel are not stand or pass under the load.

ASB TECHNICAL DATA TABLE

'A' Total beam length [mm]	'C' Working span [mm]	'C1' Bottom span [mm]	Beam weight [kg]	A1 SUPPORT	B1 SUPPORT	C1 SUPPORT
				WLL [kg]	WLL [kg]	WLL [kg]
2000	770	1496	26,7	3000 (3500 on request)	3000	3000
3000	1770	2496	40,1	3000 (3500 on request)	3000	3000
4000	2770	3496	53,4	3000	3000	3000
5000	3770	4496	66,5	2500	2500	2500
6000	4770	5496	80,1	2000	2000	2000
7000	5770	6496	93,5	1500	1500	1500
Support Weight [kg]				38,2	50,2	72,8
'B' - Support height (min...max) [mm]				1594...2194	2207...3607	3230...5430
'B1' - Under roller height (min...max) [mm]				34...634	141...1541	164...2364
'D' - Legs spacing [mm]				1115	1928	2834
'E' - Support height increment [mm]					200	



ASB REFERENCE

ASBxxx-yy-zz

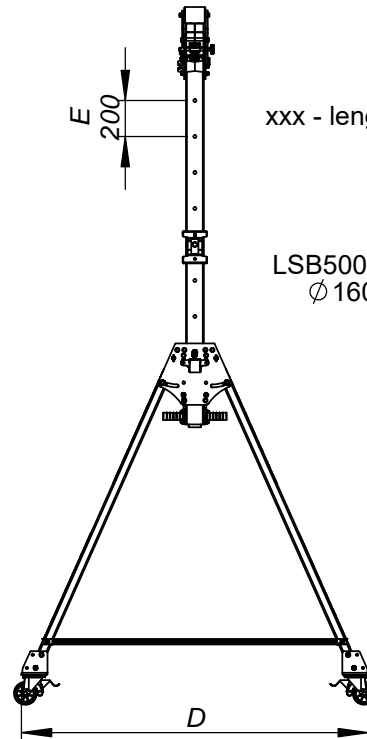
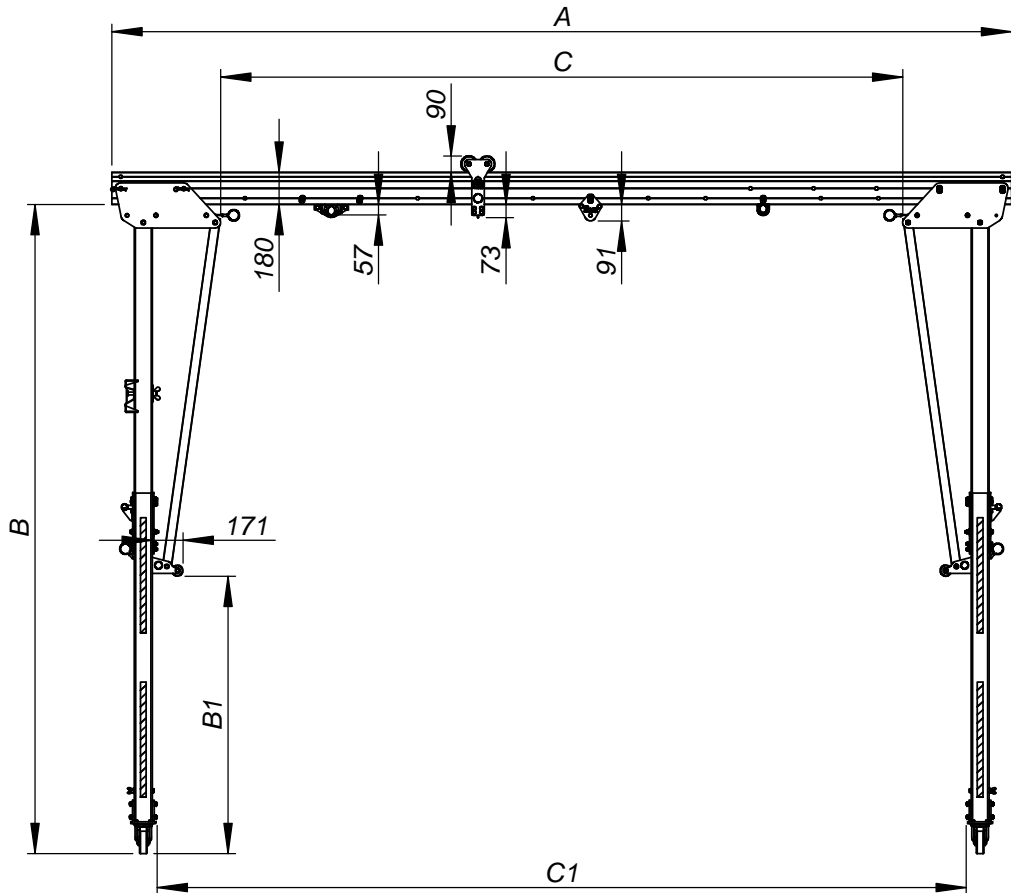
where:
 xxx - length of the beam [cm] [200 / 300 / 400 / 500 / 600 / 700]
 yy - support height option [A1 / B1 / C1]
 zz - wheels set type [W1 / W2 / W3]

EXAMPLE

ASB500-B1-W1 - 5-meter beam with support B1 with standard
 Ø 160mm galvanized steel with solid rubber tyre wheels.

LSB TECHNICAL DATA TABLE

'A' Total beam length [mm]	'C' Working span [mm]	'C1' Bottom span [mm]	Beam weight [kg]	E1 SUPPORT	F1 SUPPORT	G1 SUPPORT
				WLL [kg] <i>1750 (2000 on request)</i>	WLL [kg] <i>1750</i>	WLL [kg] <i>1750</i>
2000	770	1496	13,2			
3000	1770	2496	19,7	<i>1500</i>	<i>1500</i>	<i>1500</i>
4000	2770	3496	26,3	<i>1250</i>	<i>1250</i>	<i>1250</i>
5000	3770	4496	32,8	<i>1000</i>	<i>1000</i>	<i>1000</i>
6000	4770	5496	39,4	<i>750</i>	<i>750</i>	<i>750</i>
7000	5770	6496	46,0	<i>500</i>	<i>500</i>	<i>500</i>
Support Weight [kg]				34,0	45,0	62,0
'B' - Support height (min...max) [mm]				1594...2194	2207...3607	3230...5430
'B1' - Under roller height (min...max) [mm]				34...634	141...1541	164...2364
'D' - Legs spacing [mm]				1115	1928	2834
'E' - Support height increment [mm]					200	



LSB REFERENCE

LSBxxx-yy-zz

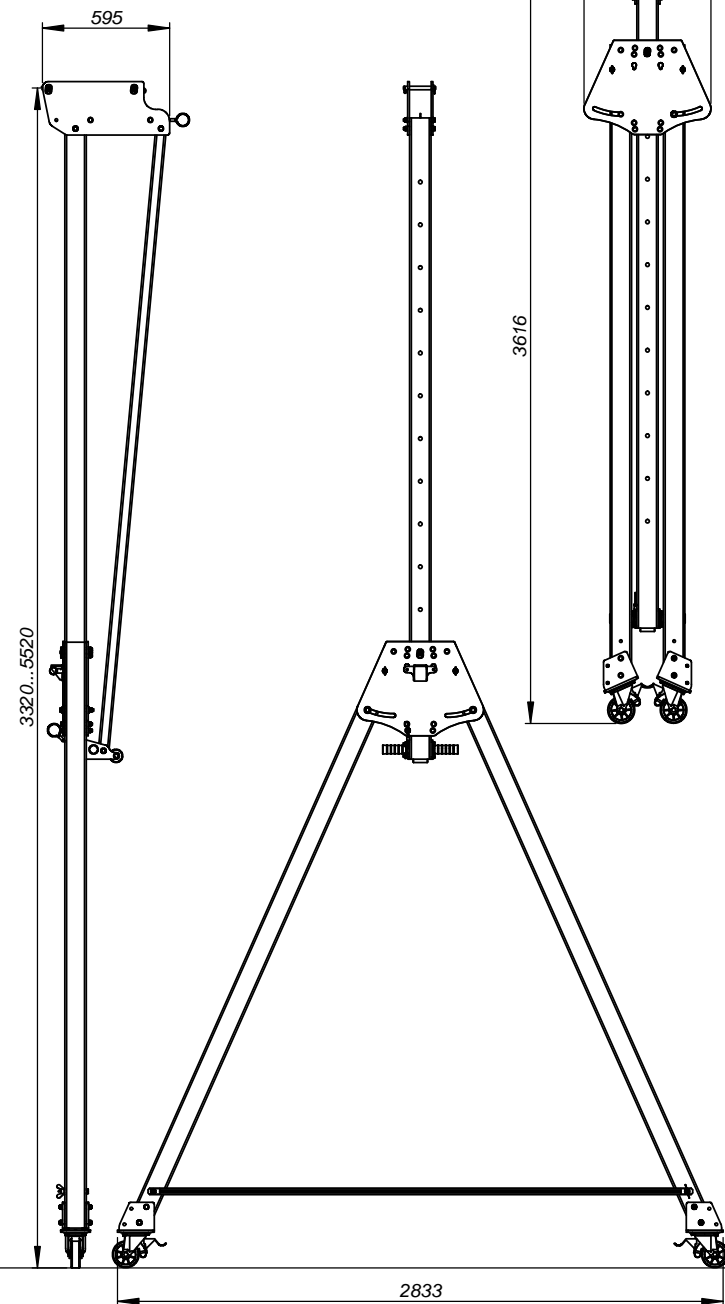
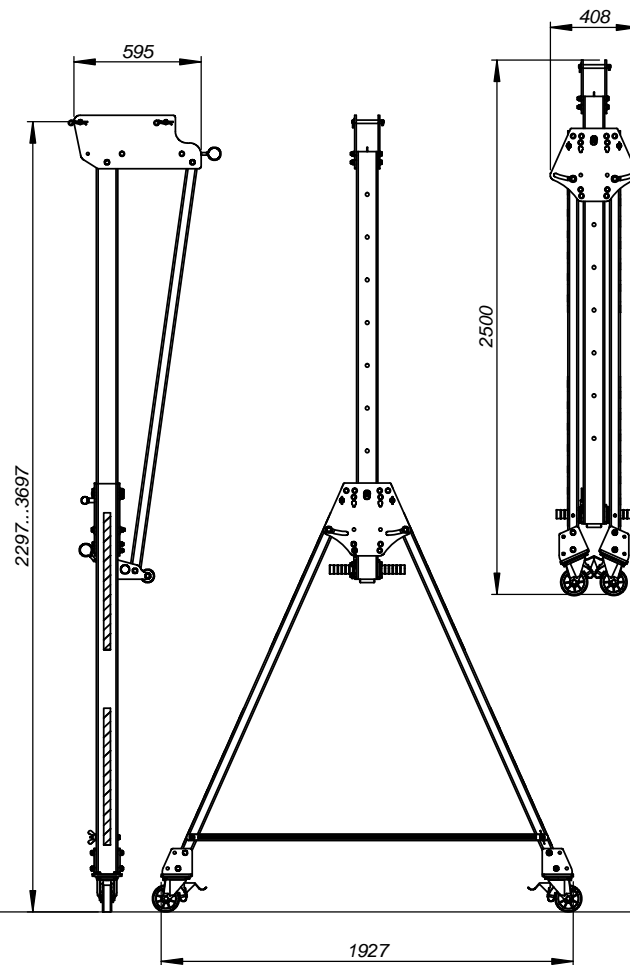
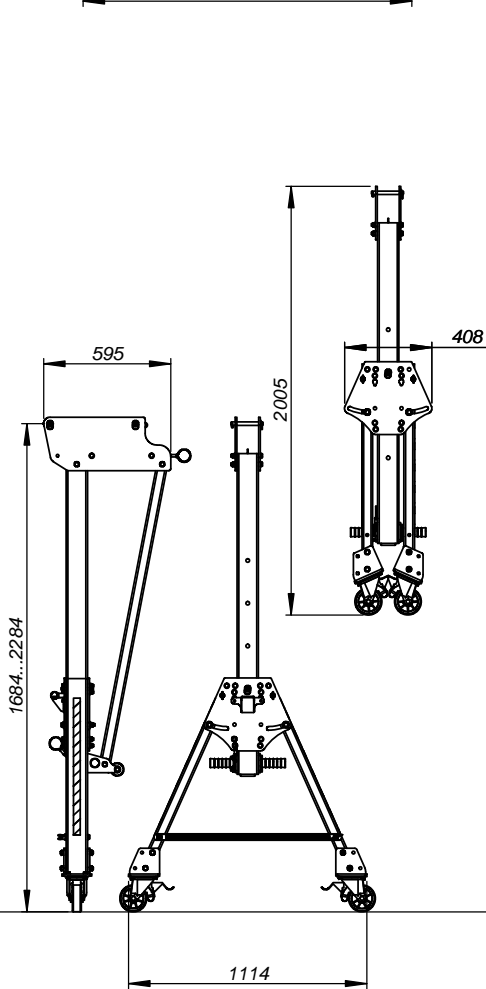
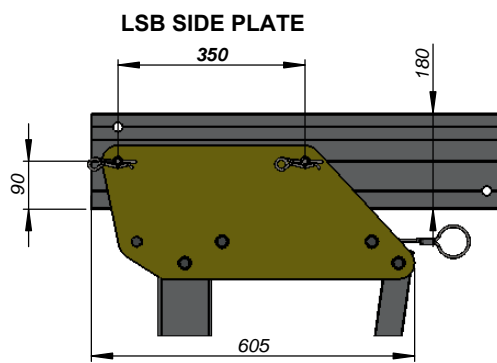
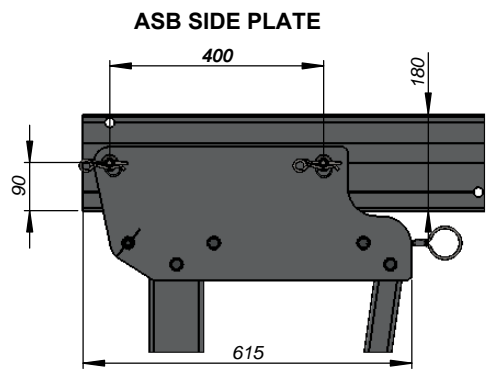
where:
 xxx - length of the beam [cm] [200 / 300 / 400 / 500 / 600 / 700]
 yy - support height option [E1 / F1 / G1]
 zz - wheels set type [W1 / W2 / W3]

EXAMPLE

LSB500-F1-W1 - 5-meter beam with support F1 with standard
 Ø 160mm galvanized steel with solid rubber tyre wheels.

ASB/LSB BASIC SUPPORT TYPES

NOTICE - HOLE SPACING FOR BEAM-SUPPORT CONNECTION IS DIFFERENT FOR ASB (400mm) AND LSB (350mm).

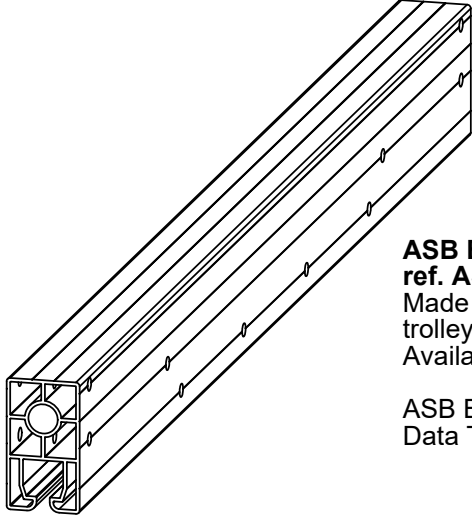


SMALL
 ASB SUPPORT "A1" weight: 38,2 kg
 LSB SUPPORT "E1" weight: 34,0 kg

MEDIUM
 ASB SUPPORT "B1" weight: 50,2 kg
 LSB SUPPORT "F1" weight: 45,0 kg

LARGE
 ASB SUPPORT "C1" weight: 72,8 kg
 LSB SUPPORT "G1" weight: 62,0 kg

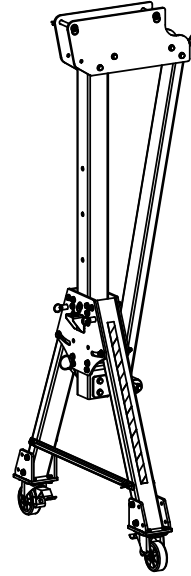
ASB BASIC EQUIPMENT



ASB BEAM

ref. **ASBxxx-001** (where 'xxx' - beam length in cm]
Made of aluminium alloy with inside rail (for internal trolley). Can be used with external and internal trolleys. Available beam length: 2 / 3 / 4 / 5 / 6 / 7 m.

ASB Beam length, weight and WLL - ASB Technical Data Table.



ASB SUPPORT

A1 - ref. **ASB500-450-1**

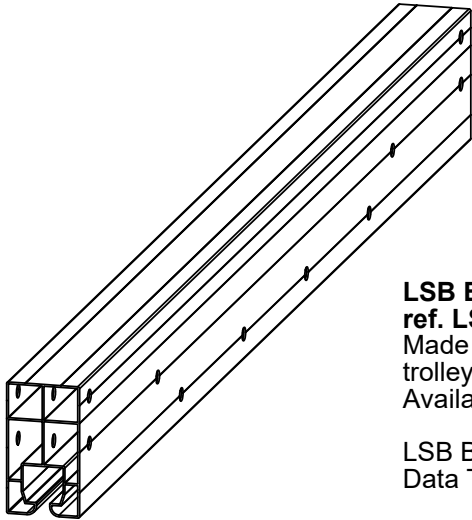
B1 - ref. **ASB500-100-1**

C1 - ref. **ASB500-500-1**

Made of aluminium alloy. Various height options. 200mm height adjustment. Foldable construction. Two the same supports are needed for one beam. Equipped with three bolts with cotter pin. Available support types: **A1 / B1 / C1.**

Support height and weight - ASB Technical Data Table and Basic support types section.

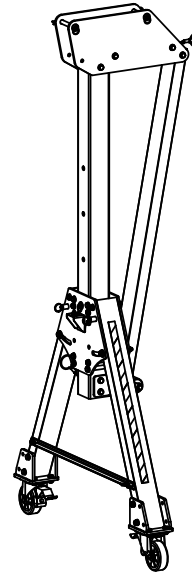
LSB BASIC EQUIPMENT



LSB BEAM

ref. **LSBxxx-001** (where 'xxx' - beam length in cm]
Made of aluminium alloy with inside rail (for internal trolley). Can be used with external and internal trolleys. Available beam length: 2 / 3 / 4 / 5 / 6 / 7 m.

LSB Beam length, weight and WLL - LSB Technical Data Table.



LSB SUPPORT

E1 - ref. **LSB500-450-1**

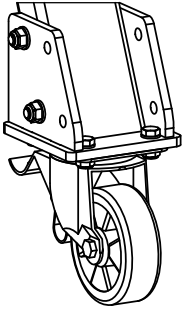
F1 - ref. **LSB500-100-1**

G1 - ref. **LSB500-500-1**

Made of aluminium alloy. Various height options. 200mm height adjustment. Foldable construction. Two the same supports are needed for one beam. Equipped with three bolts with cotter pin. Available support types: **E1 / F1 / G1.**

Support height and weight - LSB Technical Data Table and Basic support types section.

ASB/LSB ACCESSORIES



WHEELS SET (4 pcs)

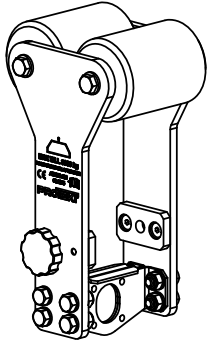
Support can be equipped with three types of swivel wheels with brake depending on the site of use:

- **W1, ref. ASB100-010** - \varnothing 160mm galvanized steel with solid rubber tyre - for general use (standard).
- **W2, ref. ASB100-020** - \varnothing 200mm galvanized steel with solid rubber tyre - for 'all-terrain'.
- **W3, ref. ASB100-030** - \varnothing 125mm aluminium with non-marking solid rubber tyre (polyurethane) - for cleanroom / manufacturing hall.

Complete ASB device must be equipped with four the same wheels.

Available types of wheels: **W1 / W2 / W3**.

It is recommended to use additionally Wheel Support set.



EXTERNAL TROLLEY

ref. **ASB500-200**

Made of aluminium alloy, stainless steel and polyamide parts. Position can be locked along the beam using knob.

External trolley can be used for lifting loads only.

INTERNAL TROLLEY

ref. **ASB500-250**

Made of galvanized and stainless steel. Space saving. Attachment point only 55mm under the beam. Position locking using bolts with cotter pin.

Internal trolley can be used for personal protection purposes only.

One trolley can be use for one person.

ASB - Max 5 trolleys on one ASB beam.

LSB - Max 3 trolleys on one LSB beam.

HITCH FOR RAISING THE SUPPORT

ref. **ASB500-360**

Made of aluminium alloy/galvanized steel. Used during raising and lowering the device support. Chain hoist is attached to the hitch ear.

MUST BE USED with B1 / C1 / F1 / G1 support.

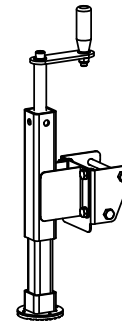
CHAIN HOIST GRIP

ref. **ASB500-140**

Made of stainless steel. Provides safety rising and lowering the vertical part of the support (adjustable upright) during device installation on the working site.

Chain hoist grip is installed on support's side plate.

One piece is needed for one support.



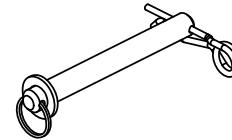
WHEEL SUPPORT

ref. **ASB500-300**

Made of galvanized and powder painted steel. Provides device leveling on uneven ground and stabilization during operation.

Equipped with locking bolts with wings nuts.

Complete ASB/LSB device should be equipped with four wheel supports.

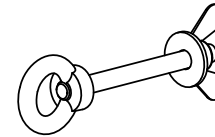


BOLT WITH COTTER PIN

ref. **ASB500-130**

Made of galvanized steel. Used for:

- locking vertical part of the support (one piece for one support),
- locking beam between support's front plates (two pieces for one support),
- locking internal trolley position along the beam (two pieces for one internal trolley),
- locking rope roller for beam on the beam's holes (two pieces for one rope roller for beam).



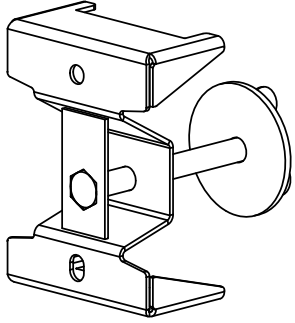
HITCH FOR LIFTING THE VERTICAL PART OF SUPPORT

ref. **ASB500-370**

Made of stainless steel. Used for easy beam height adjustment (vertical part of the support) with chain hoist.

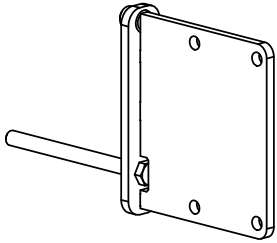
SHOULD BE USED with C1 / G1 support.

ASB/LSB WINCH ACCESSORIES



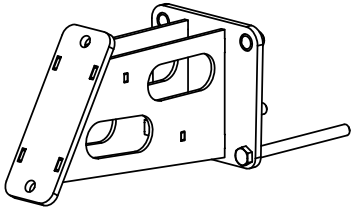
WINCH BRACKET (RUP50x-CT) **ref. ASB500-190**

Made of galvanized steel. Equipped with wing-nut for fast installation. Provides RUP50x-CT lifting devices installation to the vertical part of the support.
Fits for all Supports types (A / B / C / E / F / G).



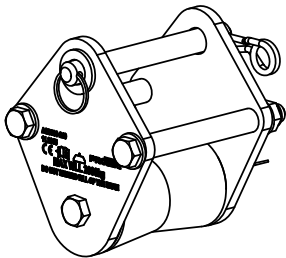
WINCH BRACKET (RUP502-DT) **ref. ASB500-610**

Made of galvanized steel. Equipped with wing-nut for fast installation. Provides RUP502-DT lifting device installation to the support side plate.
Fits to A / B / E / F Supports.



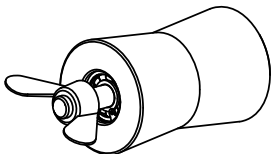
WINCH BRACKET (RUP503-DT) **ref. ASB500-190**

Made of galvanized steel. Equipped with wing-nuts for fast installation. Provides RUP503-DT lifting device installation to the support side plate.
Fits to A / B / E / F Supports.



ROPE ROLLER FOR BEAM **ref. ASB500-240**

Made of reinforced aluminium alloy, stainless steel and polyamide parts. Provides working rope guidance when RUP 50x-CT/DT lifting device is used. Installed to the beam using bolts with cotter pin.



ROPE ROLLER FOR SUPPORT **ref: ASB500-180**

Made of polyamide and galvanized steel. Provides working rope guidance when RUP 50x-CT/DT lifting device is used. Installed to the support using bolt with wing-nut. Installed between support front plates.

ASB MARKING

BEAM IDENTITY LABEL

Easy-Rig
Aluminium Gantry - Lifting Equipment

BEAM ASB300

SERIAL NUMBER: 00000000

MAX WLL OF THE BEAM: 3000 kg
ref.: ASB300-001

DATE OF MANUFACTURE: 01.2013

CE marking and information icon

CONTENT OF IDENTITY LABEL

- Device type.
- Reference number.
- Serial number.
- Month and year of manufacture.
- CE marking.
- Caution: Read the manual.
- Marking of the manufacturer or distributor.

WLL TABLE PLATE

TECHNICAL DATA TABLE						
„A“ BEAM LENGTH [MM]	„C“ WORKING SPAN [MM]	„C1“ BOTTOM SPAN [MM]	BEAM WEIGHT [KG]	A1 SUPPORT (ONE SIDE) 30.2 KG WLL [KG]	B1 SUPPORT (ONE SIDE) 50.2 KG WLL [KG]	C1 SUPPORT (ONE SIDE) 72.8 KG WLL [KG]
2000	770	1496	26.7	2500	3000	3000
3000	1770	2496	40.1	3500	3000	3000
4000	2770	3496	53.4	3000	3000	3000
5000	3770	4496	66.5	2500	2500	2500
6000	4770	5496	80.1	2000	2000	2000
7000	5770	6496	93.5	1500	1500	1500
SUPPORT WEIGHT (MIN. - MAX) [KG]				38.2	50.2	71.8
„B“ - SUPPORT HEIGHT (MIN. - MAX) [MM]				1594 - 2194	2207 - 3607	3230 - 5430
„B1“ - UNDER ROLLER HEIGHT (MIN. - MAX) [MM]				34 - 84	141 - 1541	164 - 2364
„D“ - LEGS SPACING [MM]				1115	1928	2834
„E“ - SUPPORT HEIGHT INCREMENT [MM]				200		



FRAME IDENTITY LABEL

Easy-Rig
Aluminium Gantry - Lifting Equipment

FRAME B1-W1

SERIAL NUMBER: 00000000/A

FRAME LOAD MUST NOT EXCEED BEAM WLL
ref.: ASB500-100-1-W1

DATE OF MANUFACTURE: 01.2013

CE marking and information icon

Easy-Rig
Aluminium Gantry - Lifting Equipment

FRAME B1-W1

SERIAL NUMBER: 00000000/B

FRAME LOAD MUST NOT EXCEED BEAM WLL
ref.: ASB500-100-1-W1

DATE OF MANUFACTURE: 01.2013

CE marking and information icon

NEXT INSPECTION LABEL

Month and year of the manufacturer's next inspection.
Don't use the device after this date.
Attention: Before the first use mark the date of inspection (date of first use + 12 months, e.g. first use 01.2013 - mark inspection 01.2014).
"Next inspection label" placed on Frame Identity Label.



LSB MARKING

BEAM IDENTITY LABEL

Easy-Rig
Aussendienst-Gesellschaft • Lifting Equipment

**BEAM
LSB300**

SERIAL NUMBER:
00000000

MAX WLL OF THE BEAM:
1500 kg

ref.: **LSB300-001**

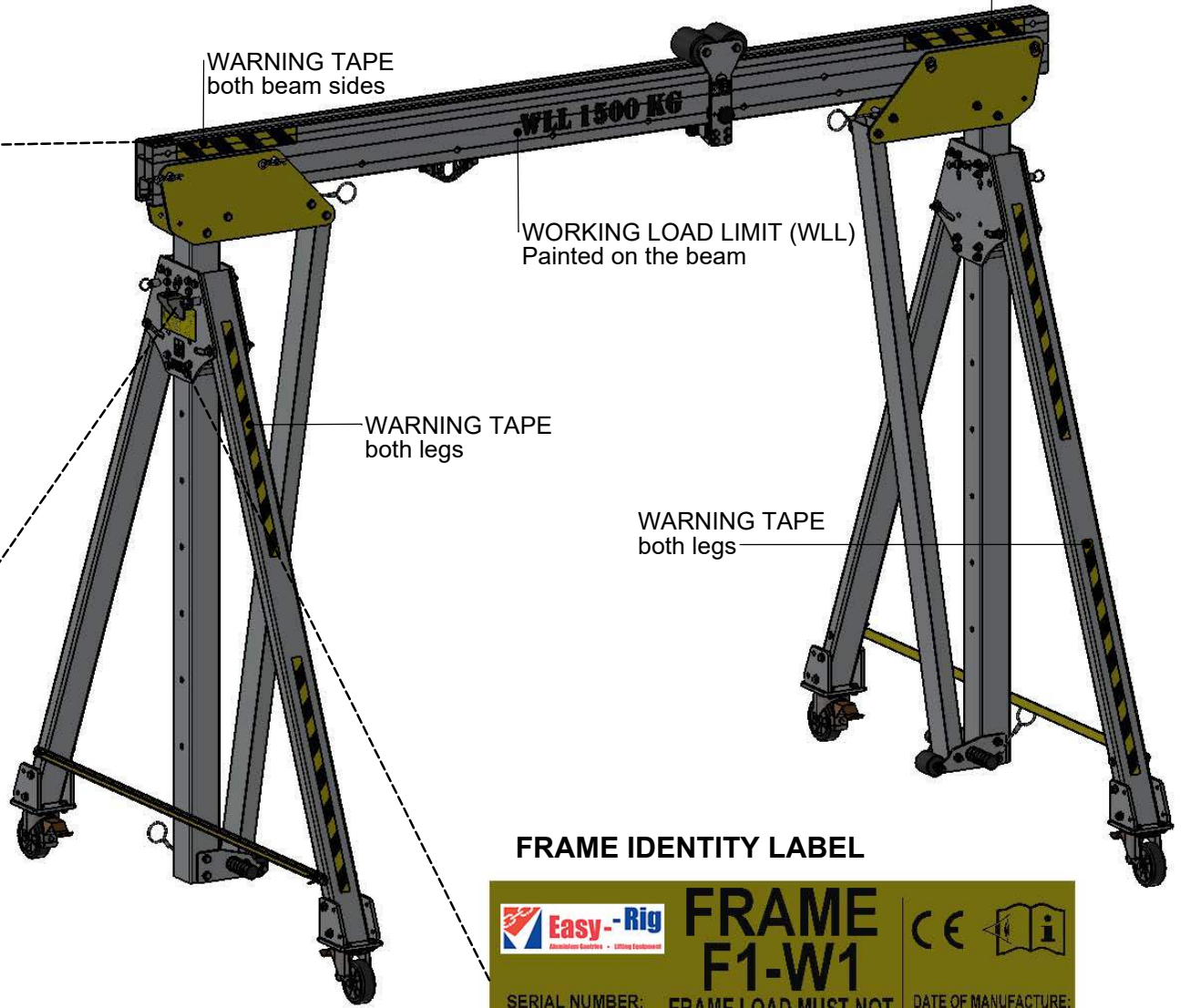
DATE OF MANUFACTURE:
01.2013

CONTENT OF IDENTITY LABEL

- Device type.
- Reference number.
- Serial number.
- Month and year of manufacture.
- CE marking.
- Caution: Read the manual.
- Marking of the manufacturer or distributor.

WLL TABLE PLATE

TECHNICAL DATA TABLE						
„A“ TOTAL BEAM LENGTH [MM]	„C“ WORKING SPAN [MM]	„C1“ BOTTOM SPAN [MM]	BEAM WEIGHT [KG]	F1 SUPPORT WLL [KG]	B1 SUPPORT WLL [KG]	C1 SUPPORT WLL [KG]
2000	770	1496	13,2	2000	1750	1750
3000	1770	2496	19,7	1500	1500	1500
4000	2770	3496	26,3	1250	1250	1250
5000	3770	4496	32,8	1000	1000	1000
6000	4770	5496	39,4	750	750	750
7000	5770	6496	46,0	500	500	500
SUPPORT WEIGHT (MIN. MAX) [KG]				34,0	45,0	62,0
„B“ - SUPPORT HEIGHT (MIN. MAX) [MM]				1594...2194	2207...3607	3230...5430
„D1“ - UNDER ROLLER HEIGHT (MIN. MAX) [MM]				34...634	341...1541	164...2364
„D“ - LEGS SPACING [MM]				1115	1928	2834
„E“ - SUPPORT HEIGHT INCREMENT [MM]				200		



FRAME IDENTITY LABEL

Easy-Rig
Aussendienst-Gesellschaft • Lifting Equipment

**FRAME
F1-W1**

SERIAL NUMBER:
00000000/A

FRAME LOAD MUST NOT
EXCEED BEAM WLL

ref.: **LSB500-100-1-W1**

DATE OF MANUFACTURE:
01.2013

Easy-Rig
Aussendienst-Gesellschaft • Lifting Equipment

**FRAME
F1-W1**

SERIAL NUMBER:
00000000/B

FRAME LOAD MUST NOT
EXCEED BEAM WLL

DATE OF MANUFACTURE:
01.2013

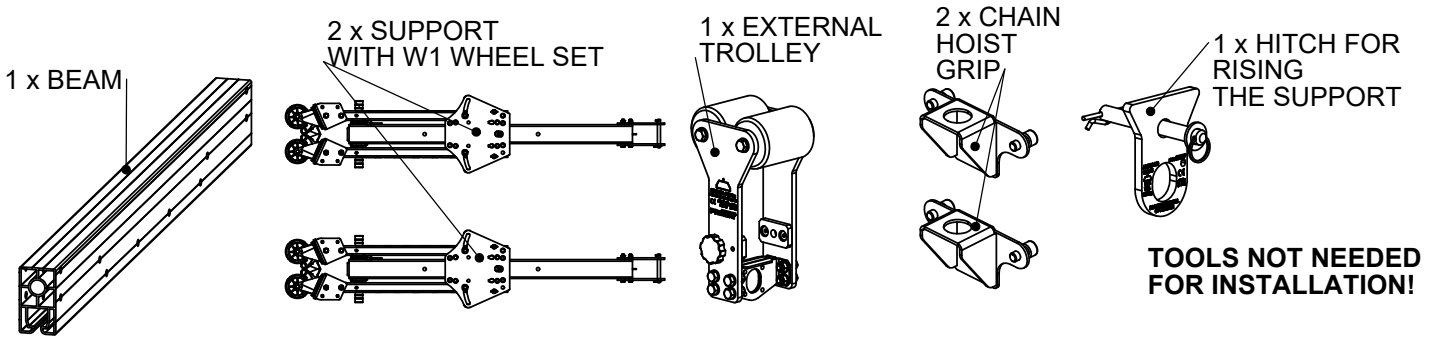
NEXT INSPECTION LABEL

Month and year of the manufacturer's next inspection.
Don't use the device after this date.
Attention: Before the first use mark the date of inspection
(date of first use + 12 months, e.g. first use 01.2013 - mark
inspection 01.2014).
"Next inspection label" placed on Frame Identity Label.



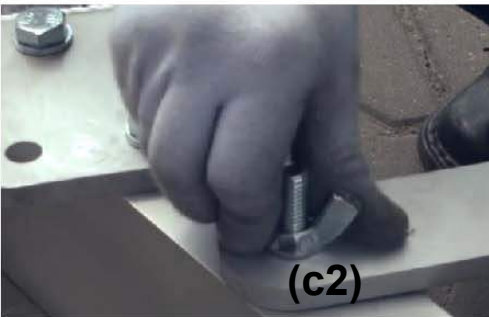
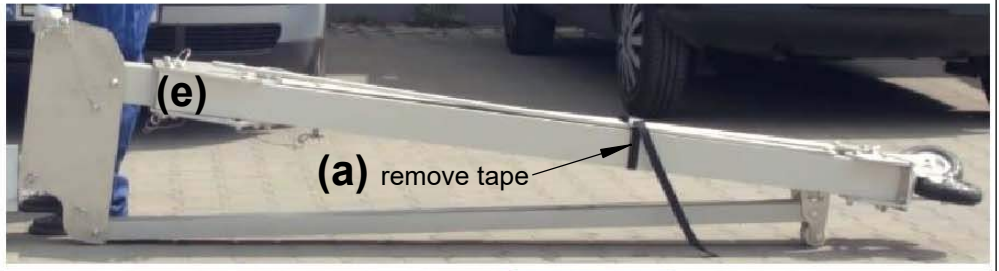
SECTION 2 - DEVICE INSTALLATION

ASB/LSB device should be installed by minimum two people equipped with hard hat, protective footwear and gloves. Basic ASB/LSB device consist of:

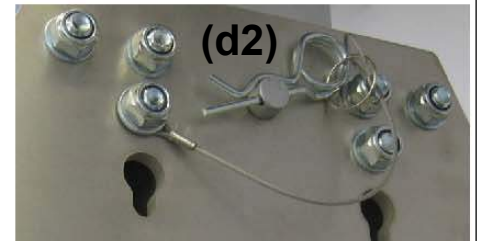
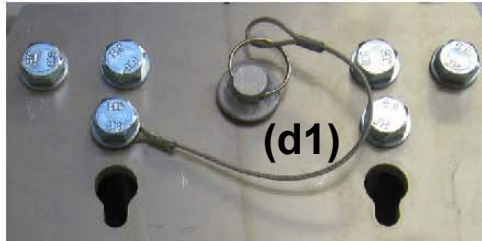


1. SUPPORT PREPARATION:

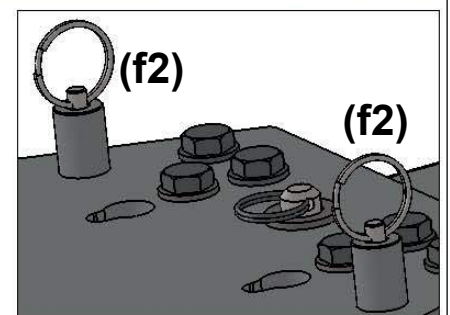
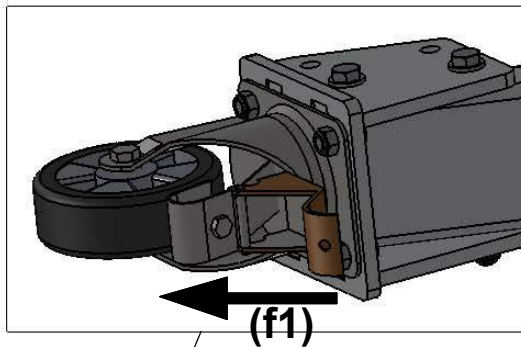
- Remove the tape (a) holding legs together.
- Spread the legs (b1, b2) and install between them legs bracket (c1) using bolt with wing nut (c2).



- Check proper installation of bolt (d1) with cotter pin (d2) in support. For easy device installation the vertical part of the support should be locked at the lowest position (e).

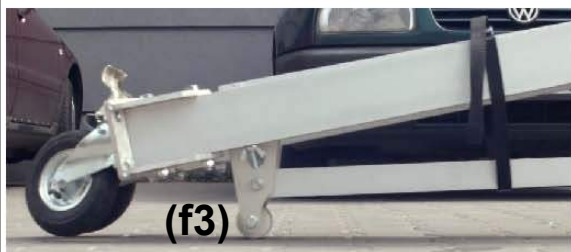


- Lock the wheel brakes (f1) using only protective footwear. DO NOT USE HANDS!



- When legs are fully opened they are automatically locked by pin (f2).

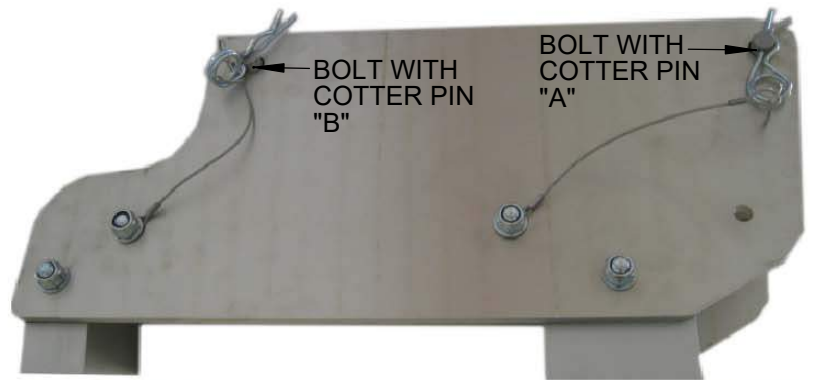
- Supports can be easily moved with special roller (f3).



Properly assembled support.

2. BEAM INSTALLATION

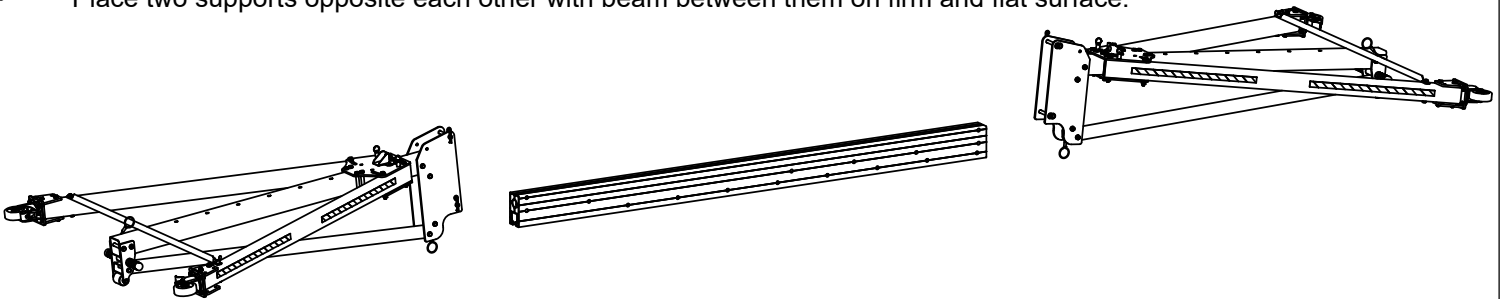
- Support is equipped with two bolts with cotter pin ("A" and "B") for beam installation.



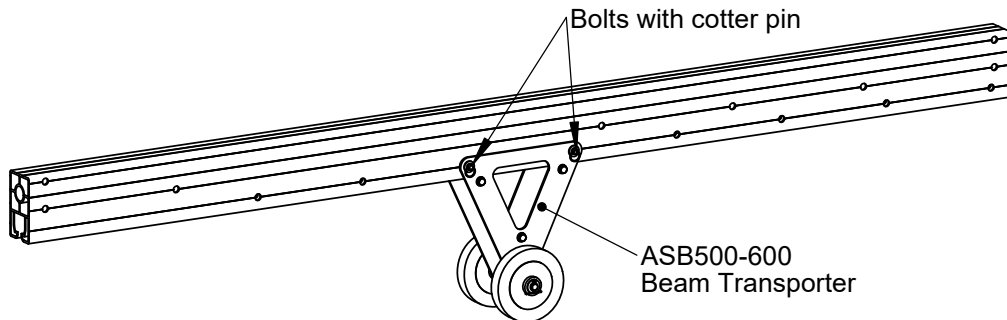
- Remove both "A" and "B" bolts with cotter pin.



- Place two supports opposite each other with beam between them on firm and flat surface.



- ASB beam can be easily transported using ASB500-600 Beam Transporter which can be installed to the beam using two bolts with cotter pin.



- Connect one end of the beam with support using "A" bolt. Secure the bolt with cotter pin!

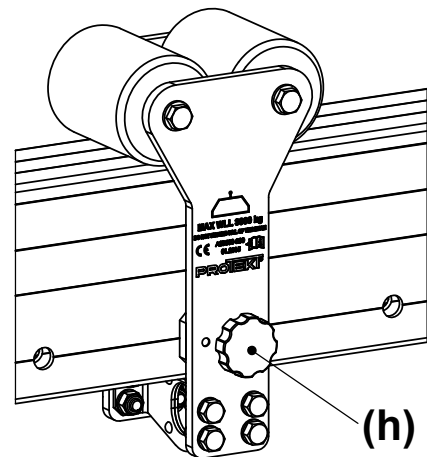
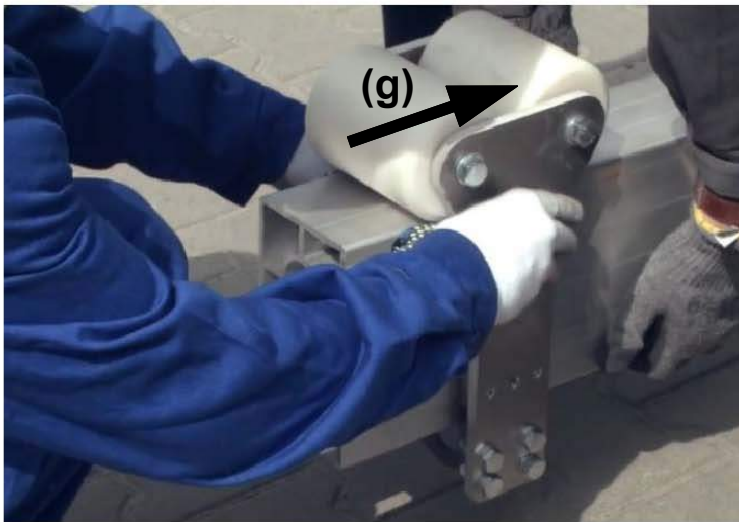


- BEFORE INSTALLATION OF SECOND SUPPORT PUT ON THE BEAM ALL NEEDED TROLLEYS!**

3. TROLLEYS INSTALLATION

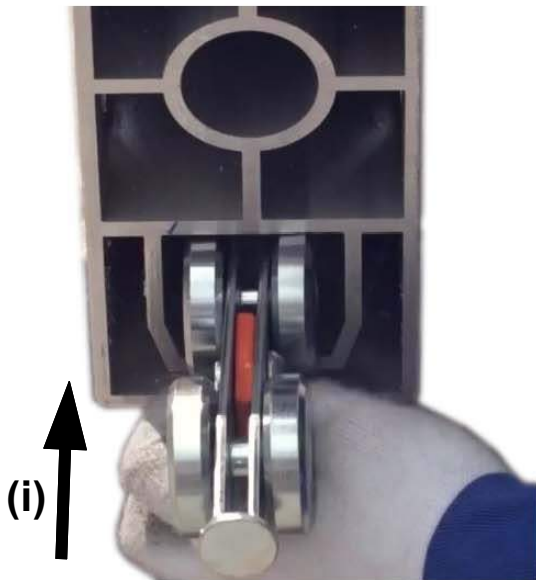
3.1. EXTERNAL TROLLEY INSTALLATION

- Put the external trolley on the free end of the beam (g) and secure trolley's position (h) near beam center with knob (friction brake).

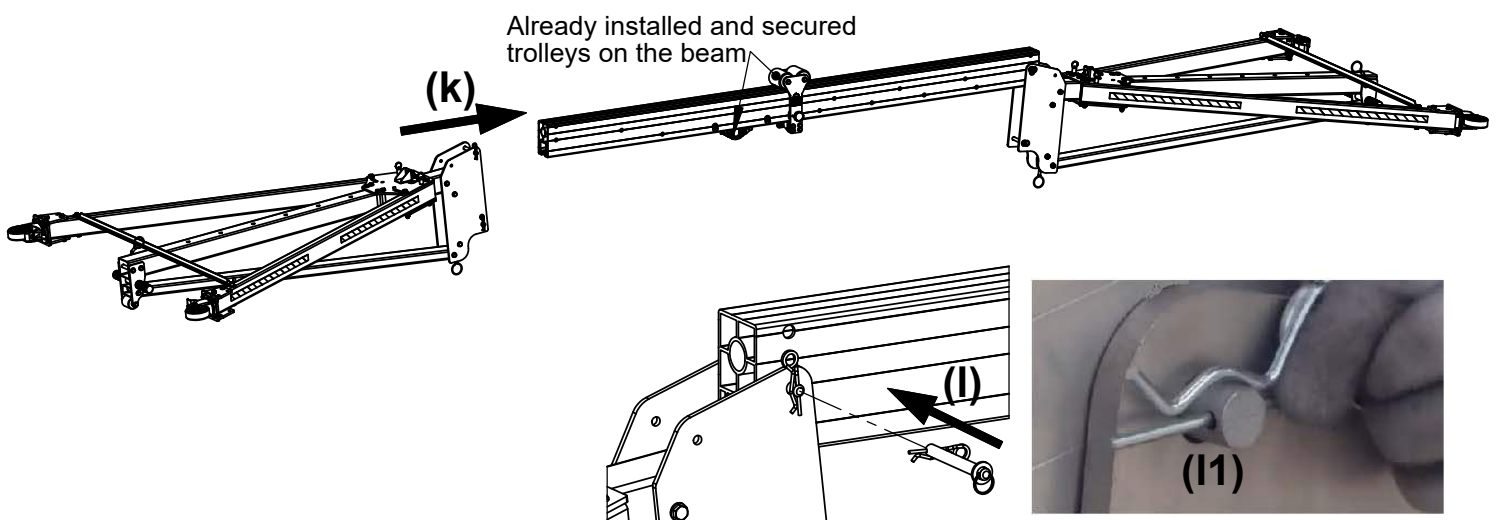


3.2. INTERNAL TROLLEY INSTALLATION

- Insert internal trolley into beam's rail (i) and secure trolley's position with two bolts with cotter pin (j).



- After installation of all needed trolleys install second support to the beam end (k) using "A" bolt (l).
- Secure the bolt with cotter pin (l1).
- In this stage there is easy way to remove ASB500-600 Beam Transporter.



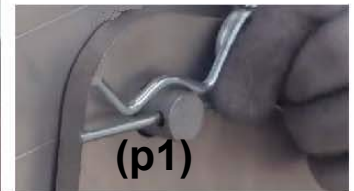
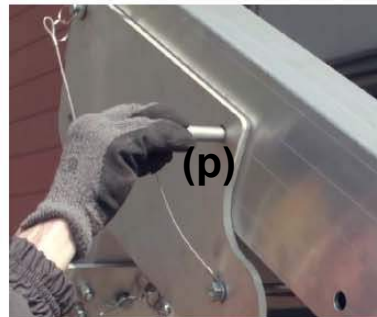
4. RAISING THE DEVICE SUPPORTS

It is recommended that supports should be raised using chain hoist (at least 1,5 tonne WLL) and hitch for raising the support (ASB500-360).

- Attach ASB500-360 hitch into third bottom line hole on the beam (o1).
- Attach chain hoist to the ASB500-360 hitch installed on the beam (o2).
- ASB500-360 hitch must be immobilized using bolt with cotter pin (j).
- Attach chain hoist hook to the end of the small steel rope (o3) located between support front plates.
- Be sure that bolt with cotter pin "B" is removed from support front plate (o4).
- Start raising the support using chain hoist lever (05).
- While raising ensure the sustainability of whole device.



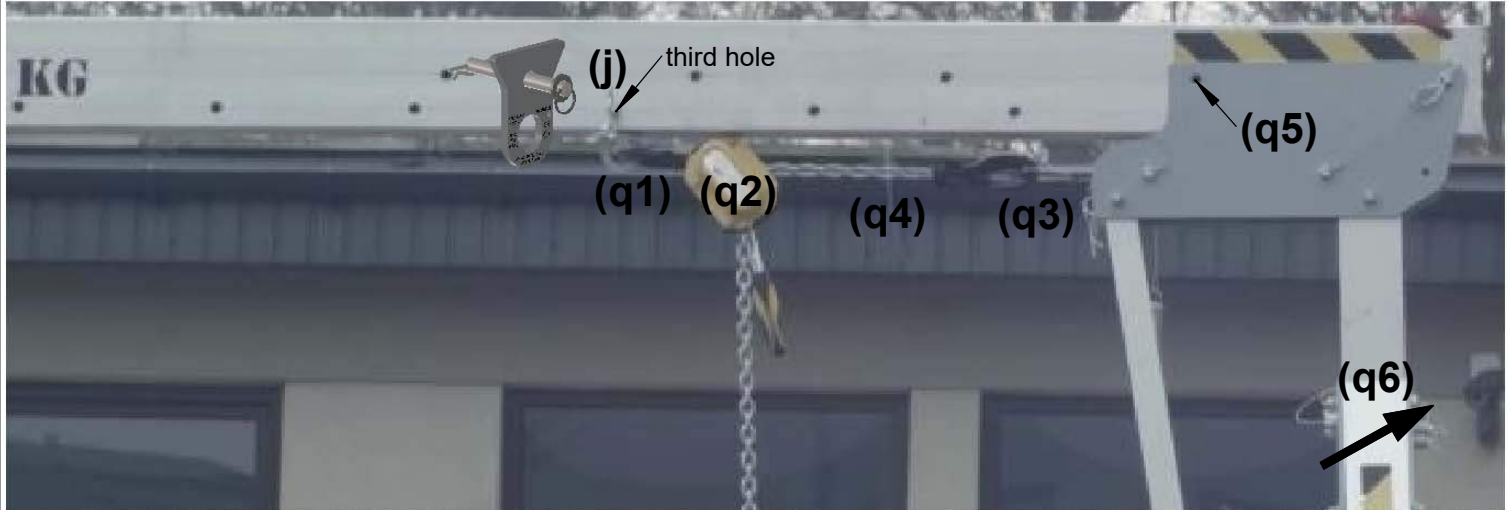
- Insert the second bolt "B" into support front plate (p).
- Secure bolt with cotter pin! (p1).
- Release chain hoist and remove steel rope.
- Repeat above instructions for second support.



5. LOWERING THE DEVICE SUPPORTS

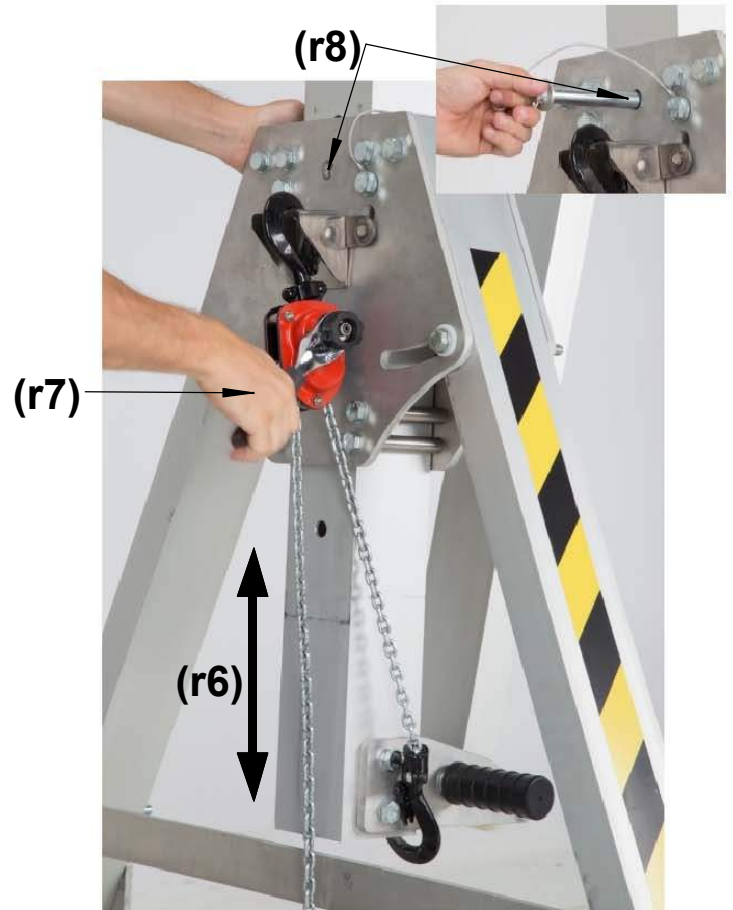
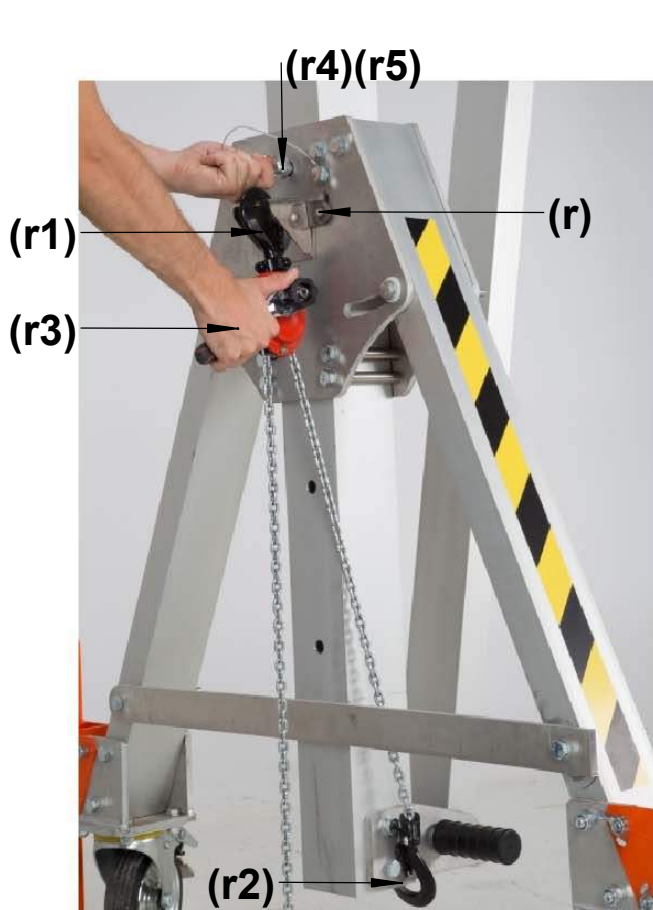
It is recommended that supports should be lowered using chain hoist (at least 1,5 tonne WLL) and hitch for raising the support (ASB500-360).

- Before lowering support be sure that all wheel brakes are locked (f1).
- Attach ASB500-360 hitch into third bottom line hole on the beam (q1).
- Attach chain hoist to the ASB500-360 hitch installed on the beam (q2).
- ASB500-360 hitch must be immobilized using bolt with cotter pin (j).
- Attach chain hoist hook to the end of the small steel rope (q3) located between support front plates..
- Be sure that the chain hoist mechanism is locked, chain strung (q4) and hook properly attached to the end of the steel rope. Small slack of the chain is allowed.
- Remove bolt with cotter pin "B" from support front plate (q5).
- Unlock the wheels and push support outside (q6).
- While lowering the device ensure the sustainability of whole device.
- Repeat above instructions for second support.

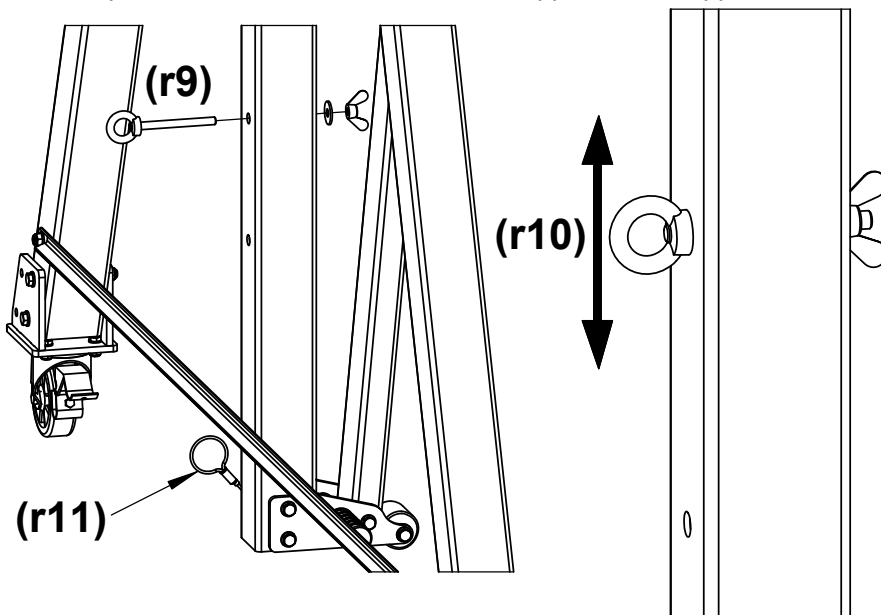


6. BEAM HEIGHT ADJUSTMENT

- Hang chain hoist grip on support side plate using two holes (r).
- Install chain hoist on the chain hoist grip (r1).
- Attach the chain hoist hook to the bottom edge of the vertical part of the support (r2).
- Pull up the chain and lock the mechanism (r3) so that the bolt with cotter pin was moveable (r4).
- Be sure that the chain hoist mechanism is locked and hook properly attached to the bottom edge of the vertical part of the support.
- Remove the bolt with cotter pin (r5).
- Adjust (up or down) height of the vertical part of the support (r6) using chain hoist lever (r7).
- Insert bolt through the support side plates and secure it with cotter pin (r8).



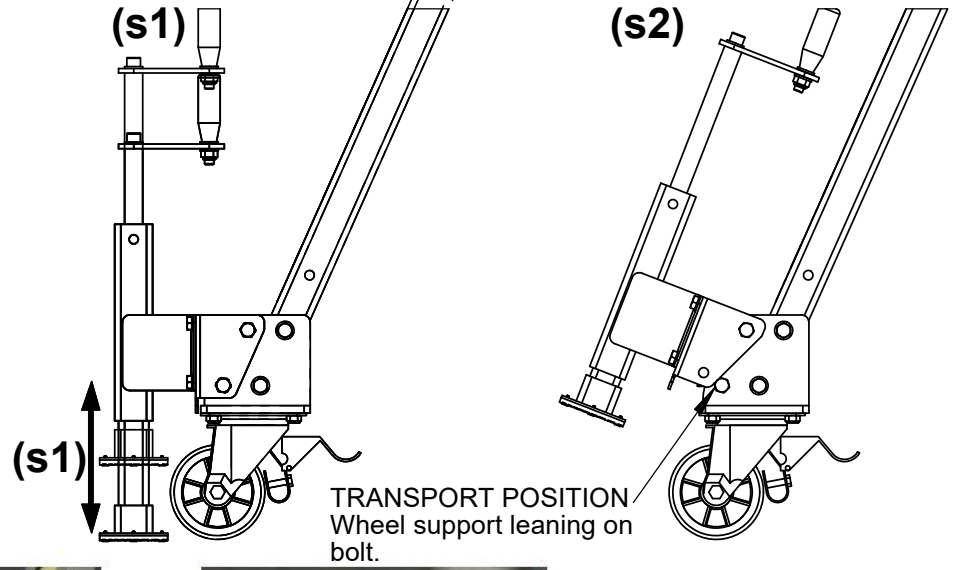
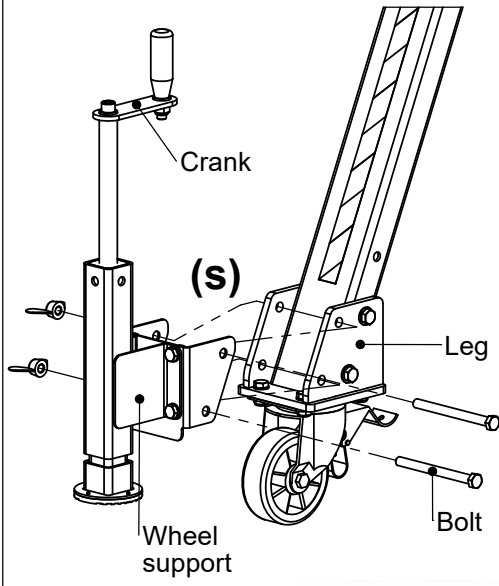
- If the chain is too short to attach it to the bottom edge of the vertical part of the support ASB500-370 hitch can be used (r9). Hitch should be installed on hole of the vertical part of the support. Chain hoist hook should be attached to the hitch ear (r10).
- Hook of the chain hoist can be attached to the small steel rope installed on vertical part of the support bottom (r11).
- Repeat above instruction for second support. Both supports must be set at the same height!



- **BOTH VERTICAL PARTS OF THE SUPPORT SHOULD BE RAISED POSSIBLY EVENLY!**

7. WHEEL SUPPORT INSTALLATION

- It is recommended to use additionally Wheel Support set.
- Attach the wheel support to the leg using two bolts with wing-nuts (s).
- Rotate the crank handle for height adjustment (s1).
- Additional wheel support position used during transport the ASB device. (s2).

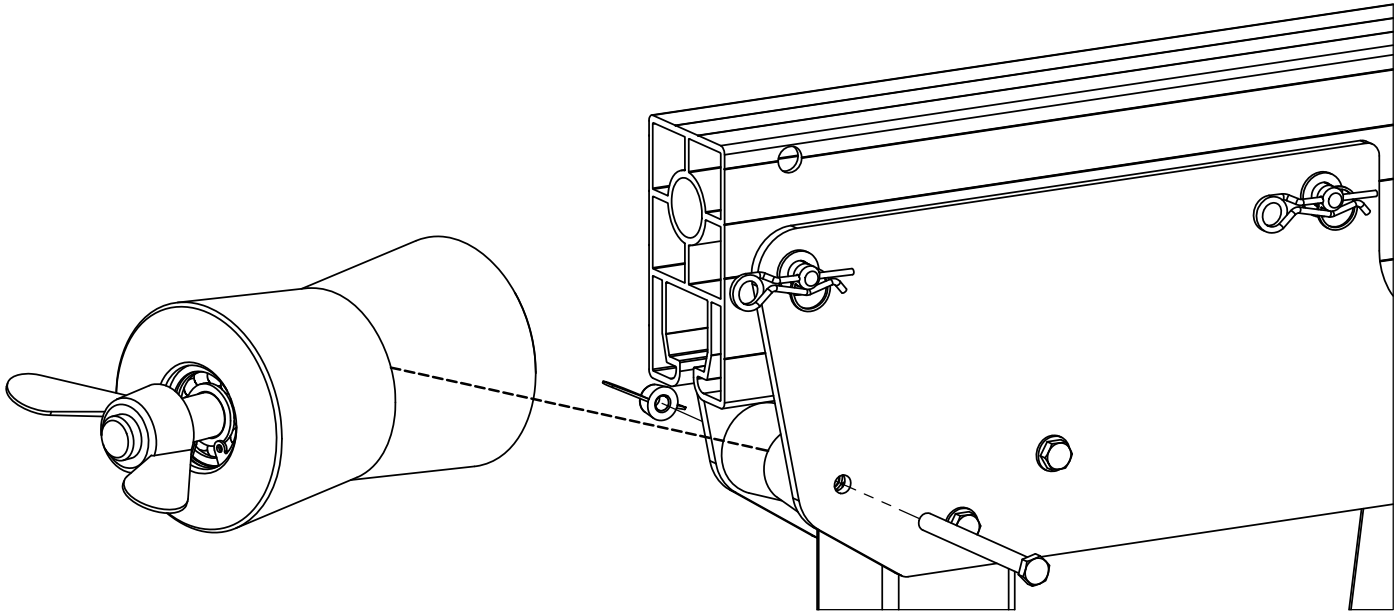


8. ROPE ROLLERS INSTALLATION

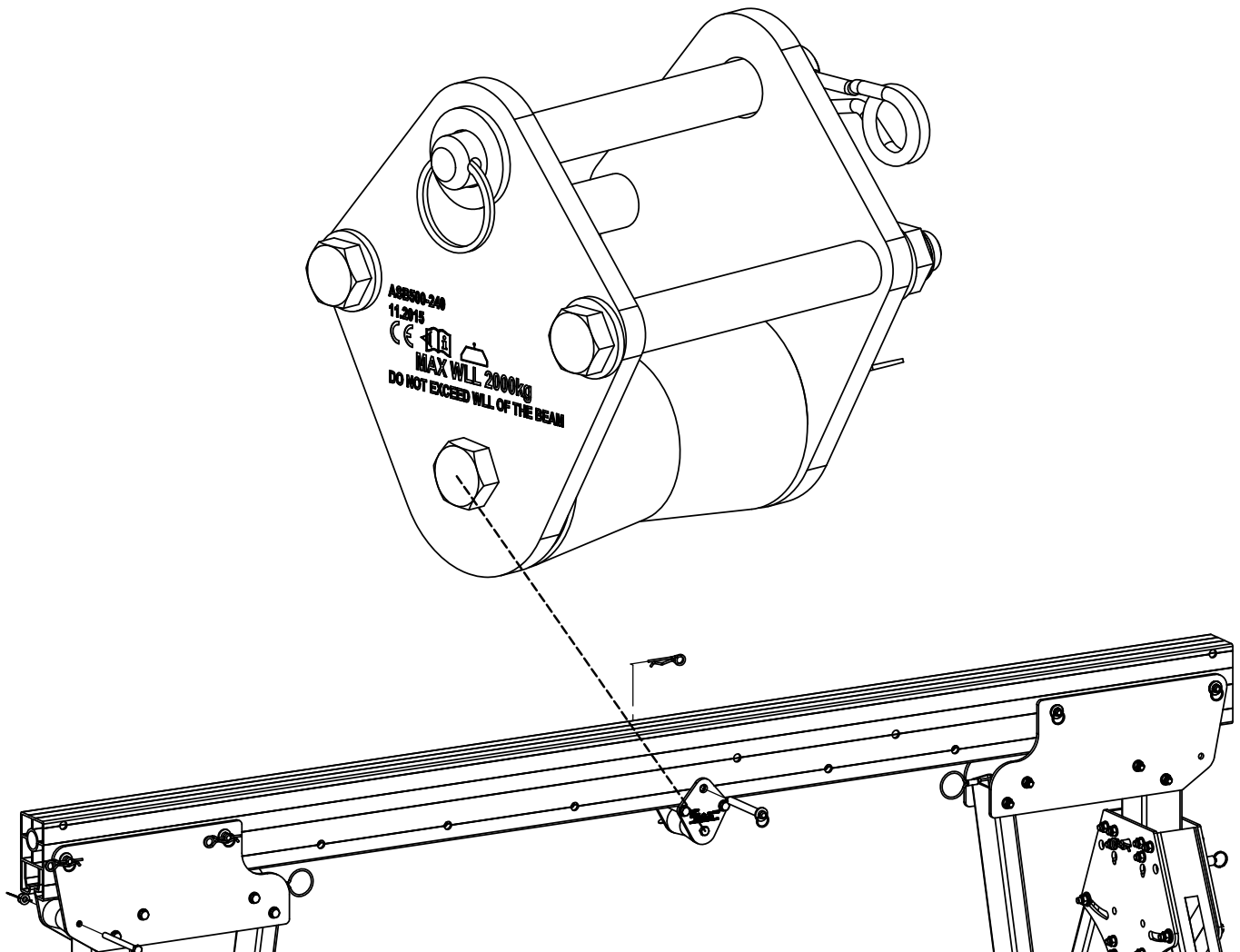
ASB device can be used with brake winch. For winch rope guidance two types of rope rollers should be used:

- ASB500-180 - rope roller for support
- ASB500-240 - rope roller for beam

8.1. Rope roller for support ASB500-180 should be installed between two support front plates using bolt and wing nut.



8.2. Rope roller for beam ASB500-240 should be installed in one hole on the beam using ASB500-130 bolt and cotter pin.

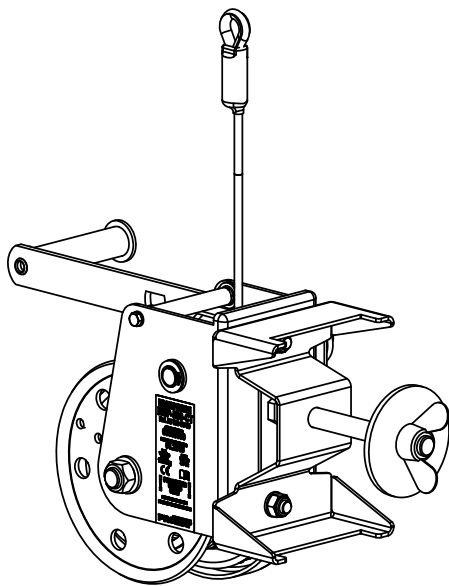
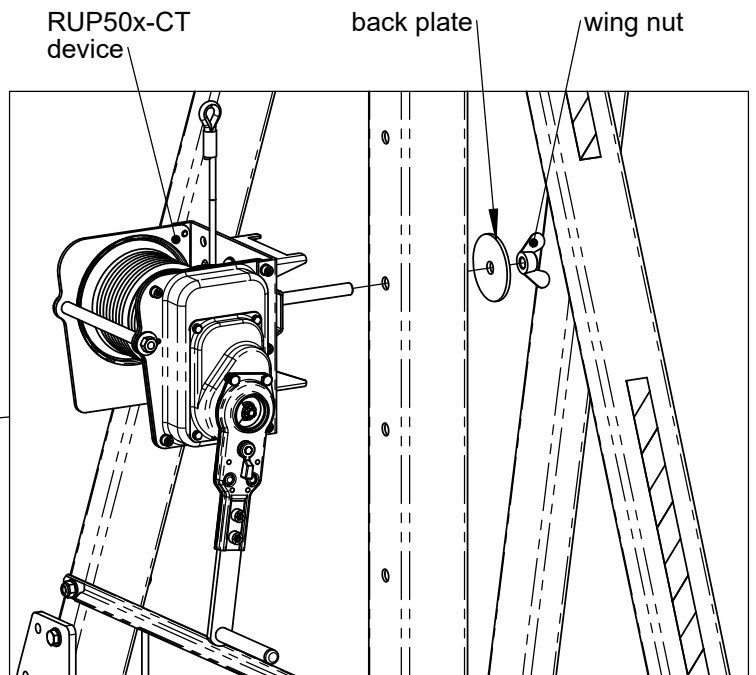
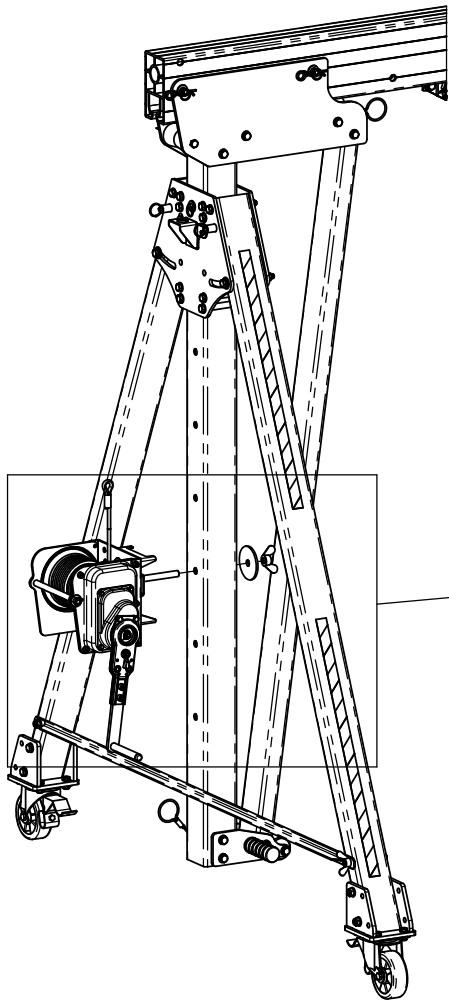


9. BRAKE WINCH INSTALLATION

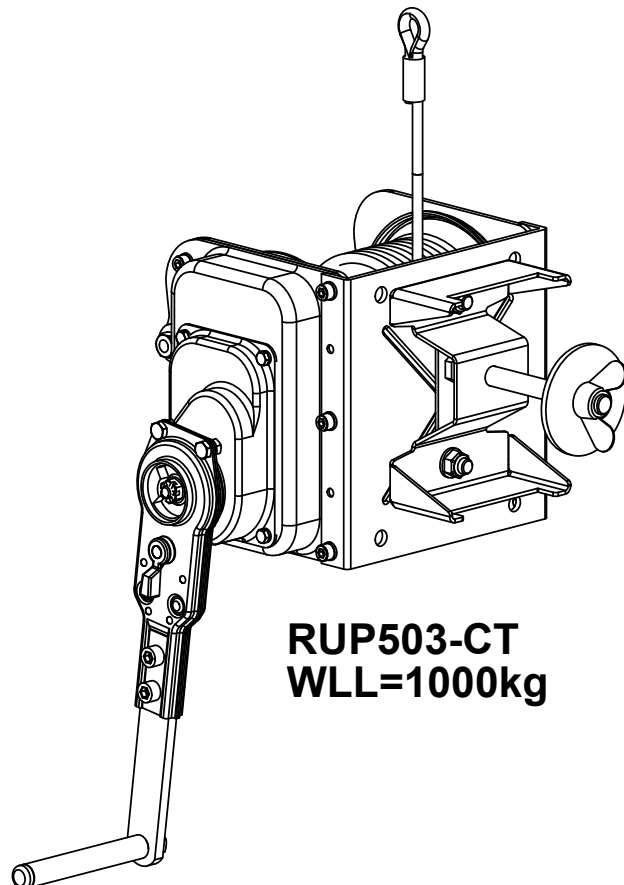
9.1. RUP50x-CT INSTALLATION

ASB/LSB device can be used with brake winch RUP50x-CT series.

RUP50x-CT device can be installed in one hole in vertical part of the support (all sizes A / B / C / E / F / G).



RUP502-CT
WLL=500kg

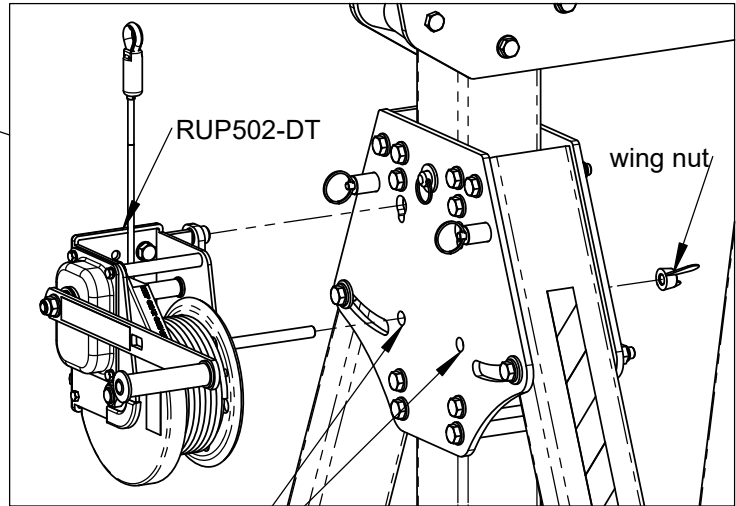
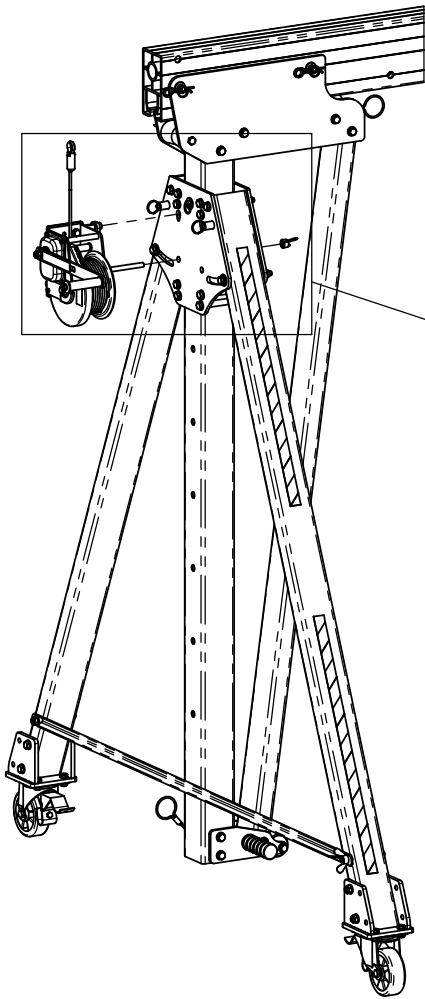


RUP503-CT
WLL=1000kg

9.2. RUP502-DT INSTALLATION

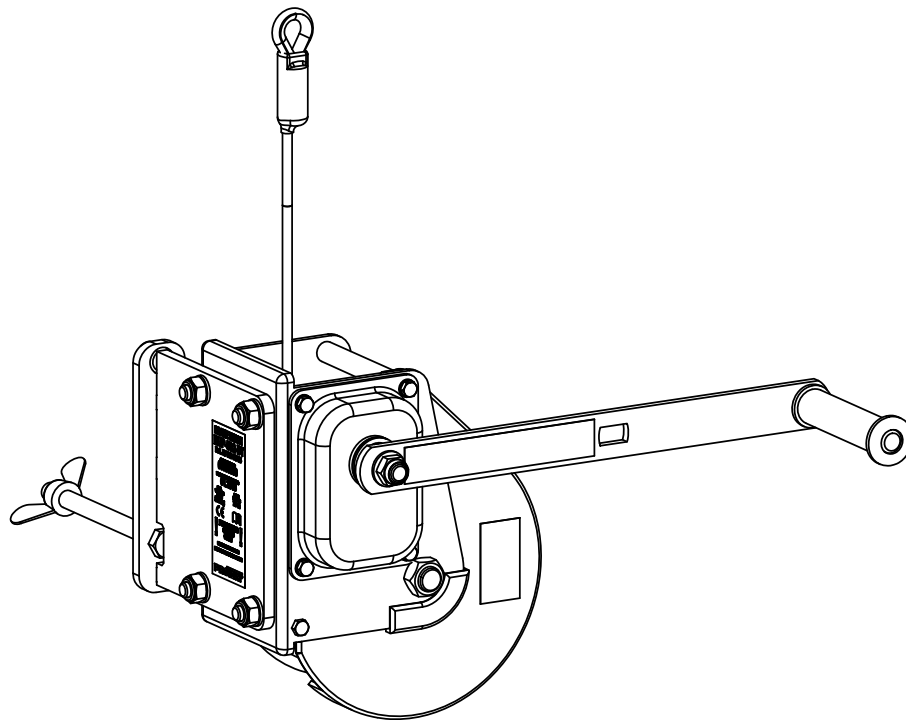
ASB/LSB device can be used with brake winch RUP502-DT.

RUP502-DT device can be installed on small and medium support side plate (A / B / E / F).



NOTICE!

RUP50x-DT device can be installed on support side plate equipped with two additional holes!

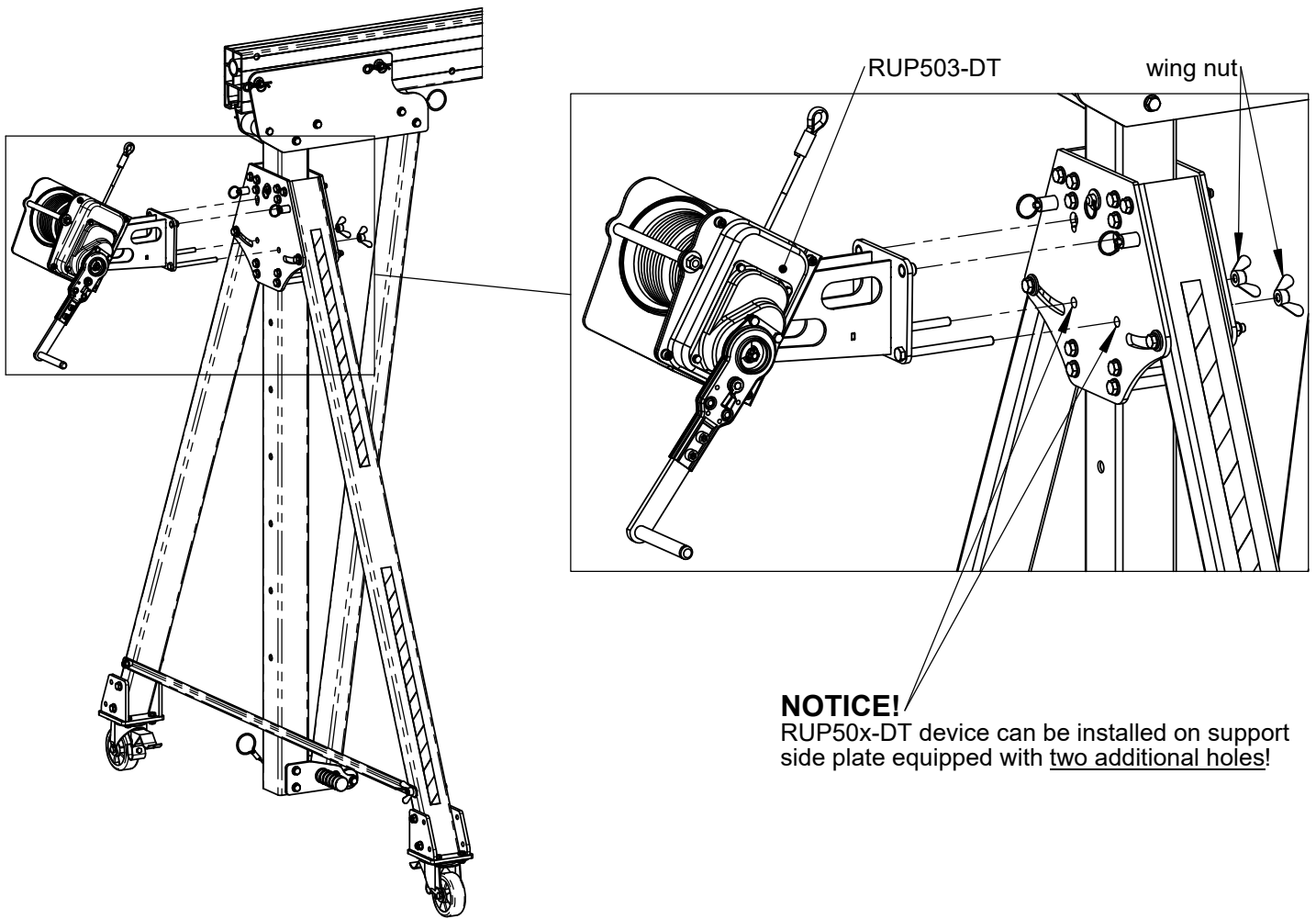


RUP502-DT
WLL=500kg

9.3. RUP503-DT INSTALLATION

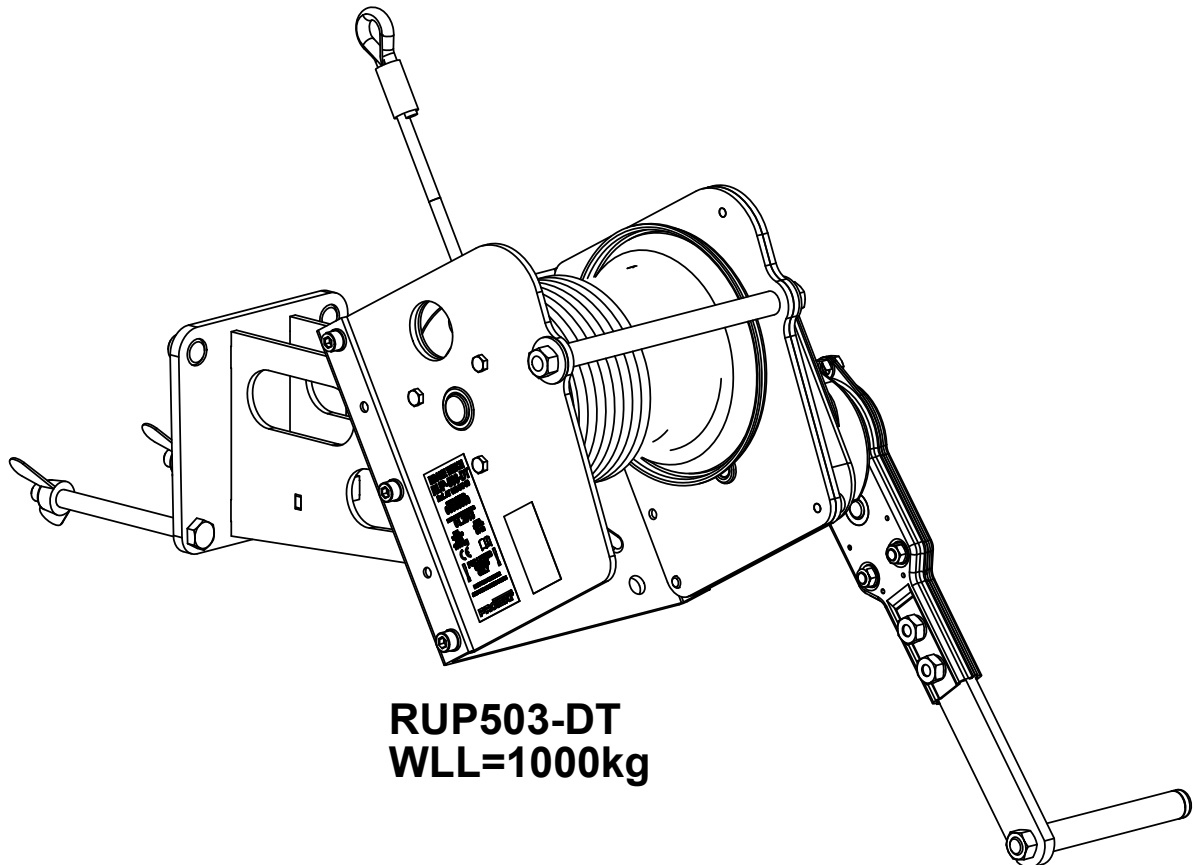
ASB/LSB device can be used with brake winch RUP503-DT.

RUP503-DT device can be installed on small and medium support side plate (A / B / E / F).



NOTICE!

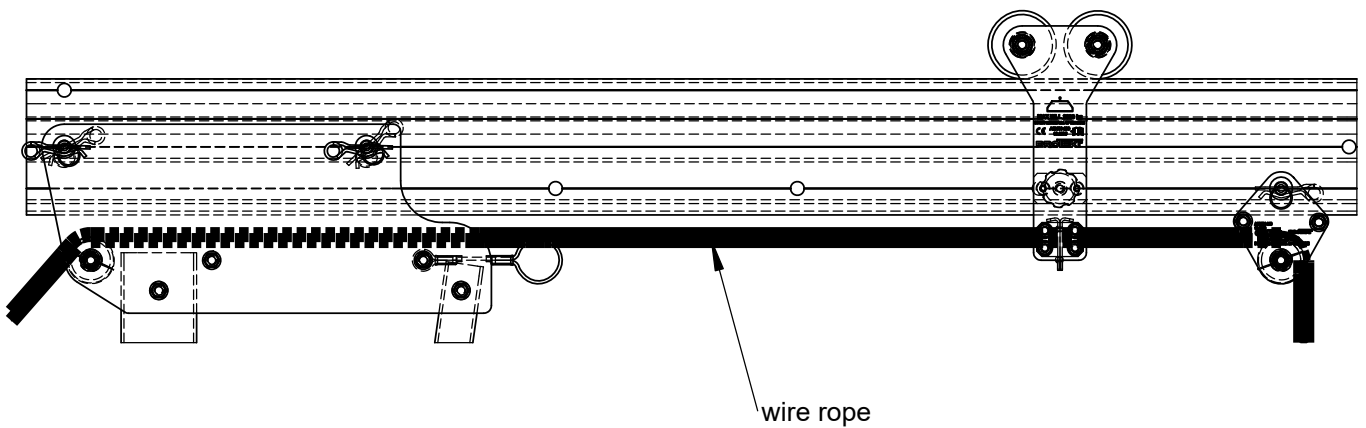
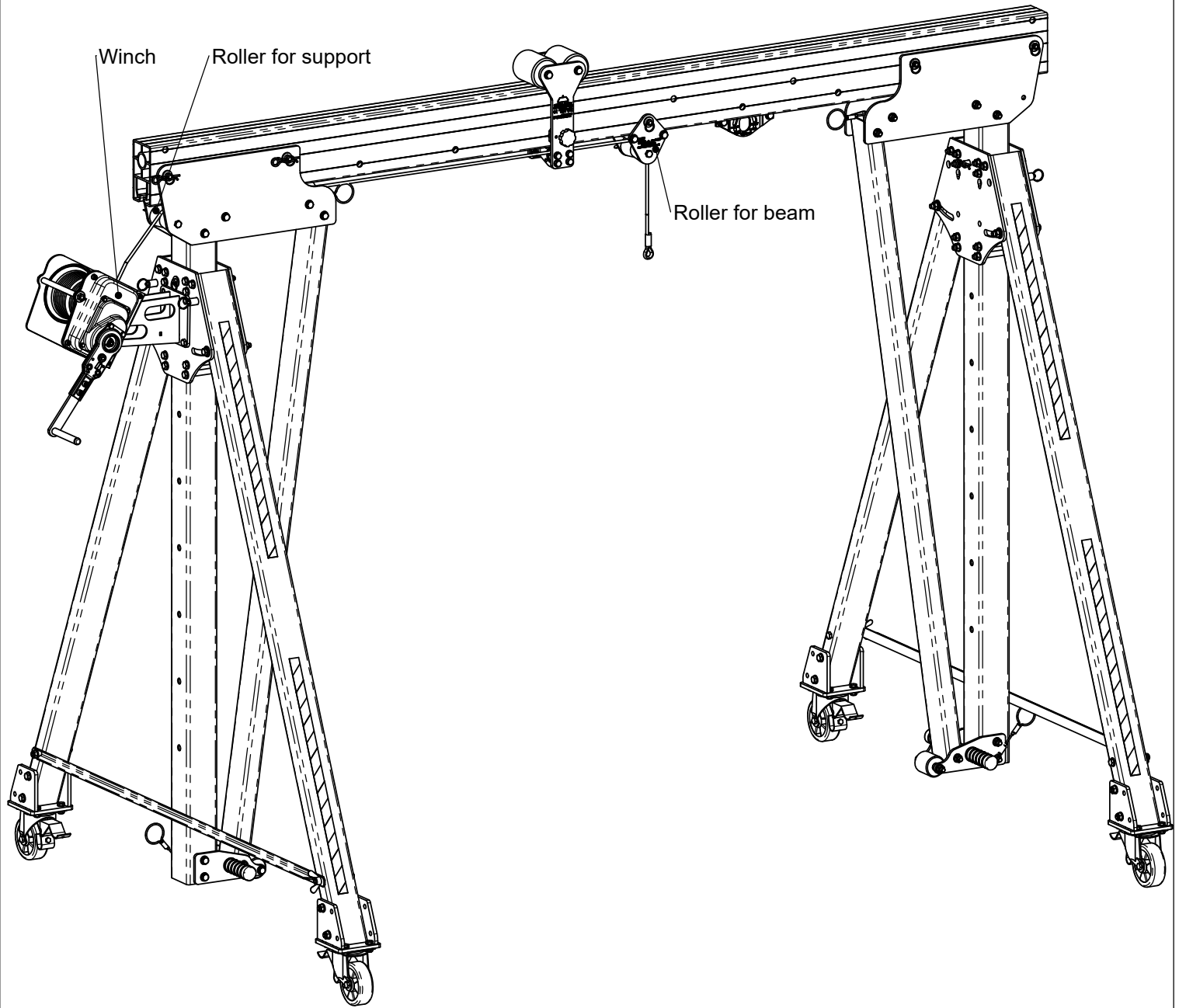
RUP50x-DT device can be installed on support side plate equipped with two additional holes!



RUP503-DT
WLL=1000kg

10. WINCH WIRE ROPE INSTALLATION

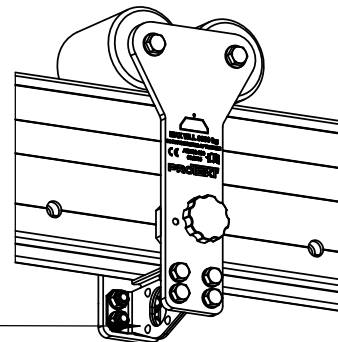
Wire rope from RUP50x-CT / RUP50x-DT devices should be guided through rope rollers (described in Section 2 Point 8). External trolley attachment point does not interfere with wire rope.



SECTION 3 - LIFTING LOADS

External trolley ASB500-200 can be used with ASB/LSB for lifting loads up to Working Load Limit (WLL) indicated on the beam. One beam can be used with more than one external trolley. Loads suspended on several external trolleys **MUST NOT** exceed WLL indicated on the beam. For personal protection during lifting loads please refer to Section 5.

ASB500-200 EXTERNAL TROLLEY ATTACHMENT POINT FOR LIFTING LOADS lifting loads up to Beam WLL.



DEVICE LOAD CARRYING CAPACITY

The load hoisted by the ASB/LSB device may be connected to the external trolley attachment point using chain hoists or other lifting devices with appropriate load carrying capacity. External trolley is installed on the beam. Maximum operating carrying capacity of the device is indicated on the beam.

DO NOT exceed Working Load Limit (WLL) indicated on the beam.

TRANSPORT

The device should be transported in packaging protecting it from damage or getting wet, e.g. bags made of impregnated fabric or in steel / plastic / waterproof wooden cases or boxes.

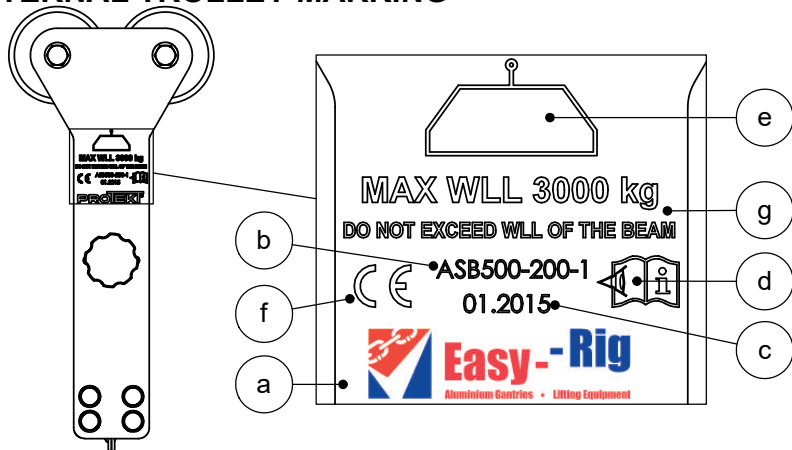
MAINTENANCE AND STORAGE

When using the device, protect it against mechanical, chemical and thermal damage. Do not use a damaged or malfunctioning parts. Clean a dirty device with a damp cloth. Store the device indoors, away from moisture and sources of heat.

THE ESSENTIAL SAFETY RULES AND ESSENTIAL PRINCIPLES OF USE

- ASB/LSB device is used for lifting and lowering loads weighing up to WLL indicated on the beam.
- External trolley is not an emergency device for lifting people and it should not be used for this purpose.
- Do not use a ASB/LSB device contrary to its intended use.
- Do not lift loads over an area occupied by people.
- Do not change the device design, repair or replaceable elements included in the kit.
- Before each use of the device, carry out thorough inspection to check the device condition and proper operation. Carefully check all parts, paying particular attention to any damage, excessive wear, corrosion, abrasion, cuts and malfunction.
- Periodic inspection: The device must be inspected at least once every 12 months from date of first use. Periodic inspections must only be carried out by a competent person who has the knowledge and training required for personal protective equipment periodic inspections. Depending upon the type and environment of work, inspections may be needed to be carried out more frequently than once every 12 months. Every periodic inspection must be recorded in the Identity Card of the equipment.
- Maximum lifespan of the ASB/LSB device is unlimited but its depends on the intensity of usage and the environment of use. Using the device in rough environment, marine, contact with sharp edges, exposure to extreme temperatures or aggressive substances, etc. can lead to the withdrawal from use even after one use.
- The device must be immediately withdrawn from use if there is any doubt about the condition of the device or its operation. The device may be readmitted for use only after a manufacturer's detailed inspection, and manufacturer's written consent for its use.
- Position ASB device on a flat, hard and stable surface, free of loose materials, such as rocks, debris etc.
- Check the stability of the load attached to the internal trolley attachment point or cable, on which it is hoisted, to prevent accidental detachment of any of the elements.
- The use of the device with other devices (such as devices for lifting and lowering loads) must be in accordance with the instruction for use of these devices.
- It is forbidden to use the kits in which the ASB/LSB device is included, in which the operation of any component disrupts the operation of other components.
- In case of any doubts as to the condition and usage of this device, please contact the manufacturer of the device.
- Avoid working where user may swing and hit an object or where lines may cross or tangle with that of another worker in the area.

EXTERNAL TROLLEY MARKING



CONTENT OF EXTERNAL TROLLEY MARKING:

- Marking of the manufacturer or distributor.
- Model symbol / reference number.
- Month and year of manufacture / Serial number.
- Caution: read the manual.
- Device for lifting loads.
- CE marking.
- Maximum Working Load Limit notice.

SECTION 4

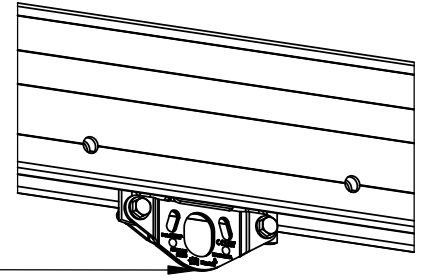
PERSONAL PROTECTION ACCORDING TO EN 795/B AND TS 16415/B

ASB/LSB with internal trolley (ASB500-250) can be used as a temporary anchorage according to EN 795/B and TS 16415/B.

ASB device provides protection for maximum five people at the same time.

LSB device provides protection for maximum three people at the same time.

For personal protection during lifting loads please refer to Section 5.



ASB500-250 INTERNAL TROLLEY ATTACHMENT POINT FOR PERSONAL PROTECTION one person (EN 795/A)

**ASB MAX 5 pcs.
LSB MAX 3 pcs.**

RULES FOR PERSONAL PROTECTION:

1. ONE internal trolley can be used by ONE person at the same time.
2. For ASB maximum FIVE people can be attached to the available attachment points at the same time.
3. For LSB maximum THREE people can be attached to the available attachment points at the same time.
4. Anchor points designed for personal protection should ONLY be used for personal fall protection equipment and NOT for lifting equipment.

GENERAL PRECAUTIONS

- AVOID working where the user may swing and hit an object or where lines may cross or tangle with that of another worker in the area.
- Fall arrest and rescue systems used with this device MUST MEET applicable EN standards requirements (EN 795 for anchor devices; EN 362 for connectors; EN 361 for full body harnesses; EN 360 for retractable type fall arresters; EN 1496 for rescue lifting devices; EN 1497 for rescue harnesses; EN 341 for descender devices).
- The Maximum Arrest Force (MAF) to which a user of a Fall Arrest System (FAS), who wears a full body harness, is exposed during an arrest of his/her fall is limited by law 6 kN in EU. The system used to protect user against fall from height must include fall protection equipment reducing the Maximum Arrest Force, acting on the user while arresting the fall, to maximum value of 6kN (e.g. fall safety energy absorber with lanyard or retractable fall arrester).
- Make sure that device is installed in a upright position on a flat, stable and hard surface. The surface must support the load.
- DO NOT use ASB device for more than five people at the same time.
- It is recommended that the device should be transported and installed by minimum two people.
- The anchor device or anchor point for the fall arrest system should always be positioned, and the work carried out in such a way, as to minimize both the potential for falls and potential fall distance. The anchor device/point should be placed above the position of the user. The shape and construction of the anchor device/point shall not allowed to self-acting disconnection of the equipment. Minimal static strength of the anchor device/point is 12 kN. It is recommended to use certified and marked structural anchor point complied with EN 795.

THE ESSENTIAL PRINCIPLES OF USE OF PERSONAL PROTECTIVE EQUIPMENT

- Personal Protective Equipment (PPE) shall only be used by a person trained and competent in its safe use.
- PPE must not be used by a person with medical condition that could affect the safety of the equipment user in normal and emergency use.
- A rescue plan shall be in place to deal with any emergencies that could arise during the work.
- It is forbidden to make any alterations or additions to the equipment without the manufacturer's prior written consent.
- Any repair shall only be carried out by equipment manufacturer or his certified representative.
- PPE shall not be used outside its limitations, or for any purpose other than that for which it is intended.
- PPE should be a personal issue item.
- Before use ensure about the compatibility of items equipment assembled into fall arrest system. Periodically check connecting and adjusting of the equipment components to avoid accidental loosening or disconnecting of the components.
- It is forbidden to use combinations of items of equipment in which the safe function of any one item is affected by or interferes with the safe function of another.
- It is essential for the safety of the user that if the product is re-sold outside the original country of destination the reseller shall provide instruction for use, for maintenance, for periodic examination and for repair in language of the country in which the product is to be sold.
- A full body harness (conforming EN 361) is the only acceptable body holding device that can be used in a fall arrest system.
- On full body harness use only attaching points marked with big letter "A" to attach a fall arrest system.
- It is obligatory to verify the free space required beneath the user at the workplace before each occasion of use the fall arrest system, so that, in the case of a fall, there will be no collision with the ground or other obstacle in the fall path. The required value of the free space should be taken from instruction manual of used equipment.
- There are many hazards that may affect the performance of the equipment and corresponding safety precautions that have to be observed during equipment utilization, especially:
 - trailing or looping of lanyards or lifelines over sharp edges,
 - any defects like cutting, abrasion, corrosion,
 - climatic exposure,
 - pendulum falls,
 - extremes of temperature,
 - chemical reagents,
 - electrical conductivity.

INSPECTION

Before each use of personal protective equipment it is obligatory to carry out a pre-use check of the equipment, to ensure that it is in a serviceable condition and operates correctly before it is used.

During pre-use check it is necessary to inspect all elements of the equipment in respect of any damages, excessive wear, corrosion, abrasion, cutting or incorrect acting, especially take into consideration:

- in full body harnesses and belts - buckles, adjusting elements, attaching points, webbings, seams, loops;
- in energy absorbers - attaching loops, webbing, seams, casing, connectors;
- in textile lanyards or lifelines or guidelines - rope, loops, thimbles, connectors, adjusting elements, splices;
- in steel lanyards or lifelines or guidelines - cable, wires, clips, ferrules, loops, thimbles, connectors, adjusting elements;
- in retractable fall arresters - cable or webbing, retractor and brake proper acting, casing, energy absorber, connector;
- in guided type fall arresters - body of the fall arrester, sliding function, locking gear acting, rivets and screws, connector, energy absorber;
- in connectors - main body, rivets, gate, locking gear acting;
- in tripods - legs, safety pins, eye bolts, feet, chain, connecting elements.

PERIODIC INSPECTION

After every 12 months of utilization, personal protective equipment must be withdrawn from use to carry out periodical detailed inspection. The periodic inspection must be carried out by a competent person who has the knowledge and training required for personal protective equipment periodic inspections. The periodic inspection can be carried out also by the manufacturer or his authorized representative. In case of some types of the complex equipment e.g. some types of retractable fall arresters the annual inspection can be carried out only by the manufacturer or his authorized representative.

During this inspection will be established admissible time of the device use till next manufacturer's inspection.

The result of the inspection must be recorded in Identity Card.

Regular periodic inspections are the essential for equipment maintenance and the safety of the users which depends upon the continued efficiency and durability of the equipment.

During periodic inspection it is necessary to check the legibility of the equipment marking.

MAXIMUM LIFESPAN

Maximum lifespan of the ASB500-250 internal trolley is unlimited but its depends on the intensity of usage and the environment of use. Using the device in rough environment, marine, contact with sharp edges, exposure to extreme temperatures or aggressive substances, etc. can lead to the withdrawal from use even after one use.

WITHDRAWAL FROM USE

Personal protective equipment must be withdrawn from use immediately when any doubt arise about its condition for safe use and not used again until confirmed in writing by equipment manufacturer or his representative after carried out the detailed inspection.

WITHDRAWN FROM USE AFTER ARRESTING A FALL

Device must be withdrawn from use immediately when it have been used to arrest a fall. After that must be carried out detailed manufacturer's inspection of the tripod.

The manufacturer's inspection can be carried out by:

- manufacturer
- person recommended by manufacturer
- company recommended by manufacturer.

During this inspection will be established if the tripod can be longer used and will be define the admissible time of tripod use till next manufacturer's inspection and recorded in Identity Card.

TRANSPORTATION

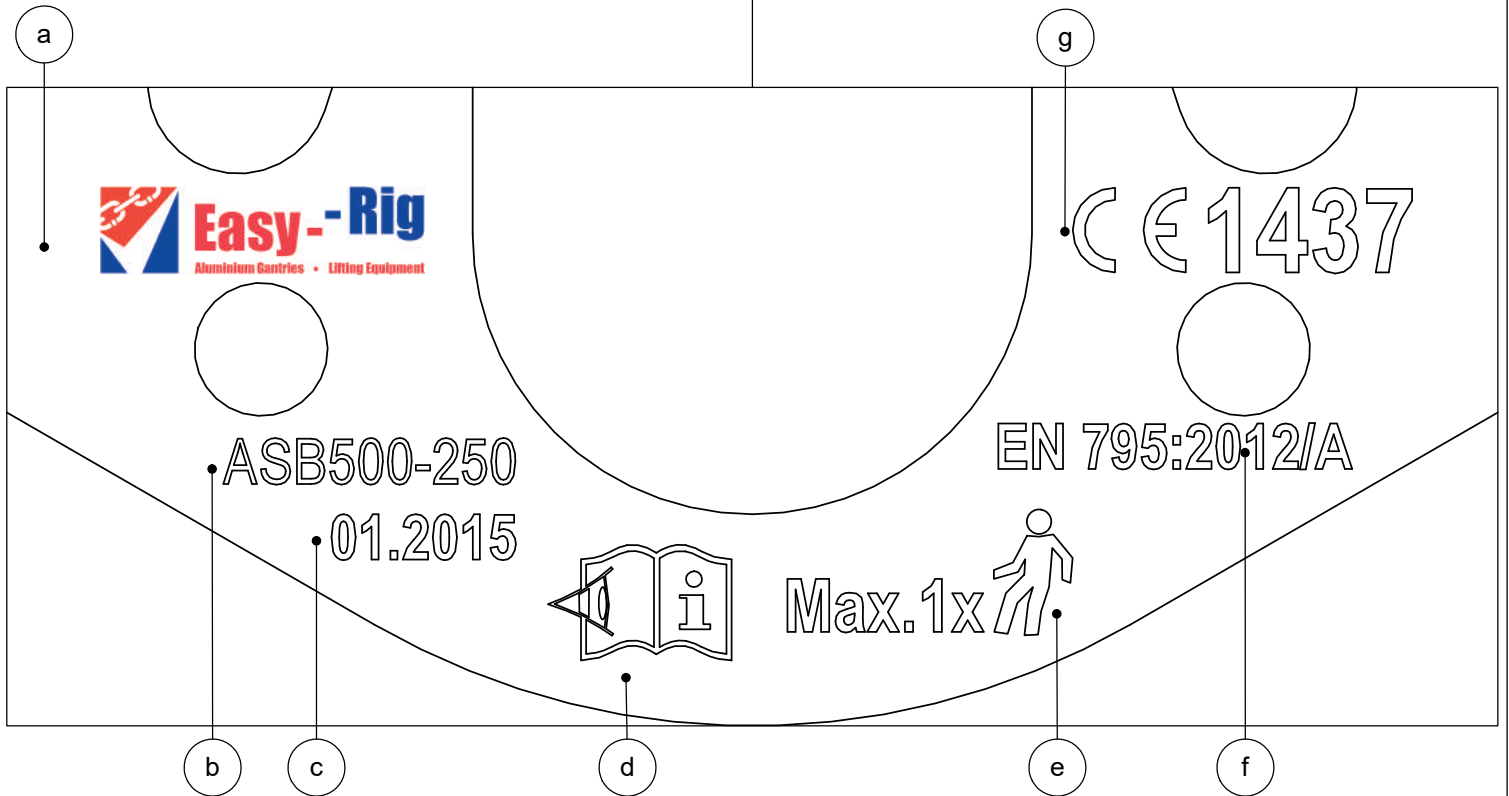
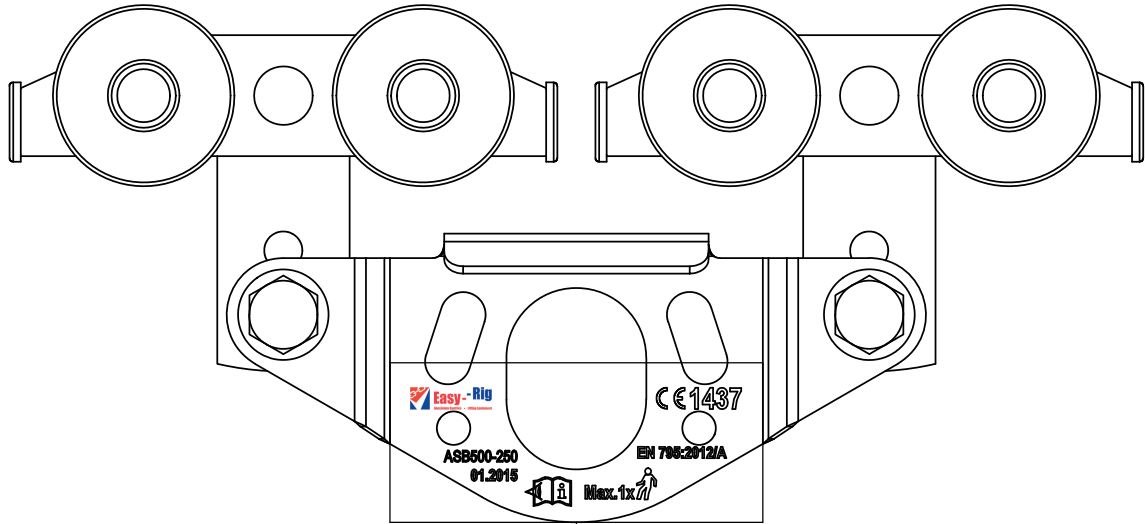
Personal protective equipment must be transported in the package (e.g.: bag made of moisture-proof textile or foil bag or cases made of steel or plastic) to protect in against damage or moisture.

MAINTENANCE AND STORAGE

The equipment can be cleaned without causing adverse effect on the materials in the manufacture of the equipment. For textile products use mild detergents for delicate fabrics, wash by hand or in a machine and rinse in water. Plastic parts can be cleaned only with water. When the equipment becomes wet, either from being in use or when due cleaning, it shall be allowed to dry naturally, and shall be kept away from direct heat. In metallic products some mechanic parts (spring, pin, hinge, tec.) can be regularly slightly lubricated to ensure better operation. Other maintenance and cleaning procedures should be adhered to detailed instructions stated in the manual of the equipment.

Personal protective equipment should be stored loosely packed, in a well-ventilated place, protected from direct light, ultraviolet degradation, damp environment, sharp edges, extreme temperatures and corrosive or aggressive substances.

INTERNAL TROLLEY MARKING



CONTENT OF INTERNAL TROLLEY MARKING:

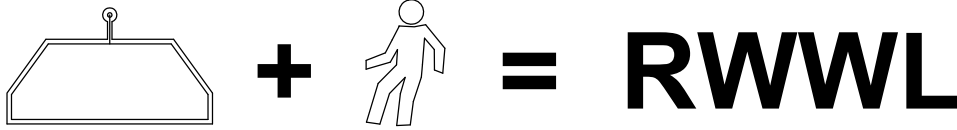
- Marking of the manufacturer or distributor.
- Model symbol / reference number.
- Month and year of manufacture / Serial number.
- Caution: read the manual.
- Maximum number of users permitted simultaneously.
- Number / year / type of the European standard.
- CE marking and number of the notified body controlling manufacturing of the equipment.

SECTION 5

LIFTING LOADS AND PERSONAL PROTECTION AT THE SAME TIME

Before read this section please refer to Section 3 and Section 4 (All recommendations contained in these Sections apply in Section 5).

- ASB/LSB device can be used for lifting/lowering loads and personnel protection at the same time.
- For lifting loads external trolley and other lifting equipment can be used.
- For personal protection internal trolley can be used.
- When personnel is protected using internal trolley(s) during lifting/lowering load(s) Working Load Limit (WLL) indicated on the beam must be reduced to the Reduced Working Load Limit (RWLL). RWLL depends on the amount of protected employees.



PERMITTED CONFIGURATION	REDUCED WORKING LOAD LIMIT RWLL =
Lifting loads only	RWLL =
Lifting loads + 1 person protected	= WLL - 600kg
Lifting loads + 2 people protected	= WLL - 650kg
Lifting loads + 3 people protected	= WLL - 700kg
Lifting loads + 4 people protected	= WLL - 750kg
Lifting loads + 5 people protected	= WLL - 800kg

**IF RWLL VALUE IS NEGATIVE
THE DEVICE CANNOT BE USED FOR
LIFTING/LOWERING LOADS AND PERSONNEL PROTECTION AT THE SAME TIME.**

example 1:

WLL indicated on the ASB 6-meter beam = 2000kg

3 people protected on three internal trolleys

$RWLL = WLL - 700kg = 2000kg - 700 kg = 1300 kg$

results: device can be used at the same time for personnel protection (3 people) and for lifting/lowering loads (up to 1300kg).

example 2:

WLL indicated on the LSB 6-meter beam = 750kg

5 people protected on three internal trolleys

$RWLL = WLL - 800kg = 750kg - 800 kg = -50 kg$

results: device CANNOT BE used at the same time for personnel protection and for lifting/lowering loads.

GENERAL PECAUTIONS:

- DO NOT exceed Reduced Working Load Limit (RWLL) during lifting/lowering loads when the people are protected using internal trolleys.
- **LSB device CANNOT be used for lifting/lowering loads and personnel protection at the same time if RWLL value is negative.**
- For personal protection please refer to Section 4!
- For lifting loads please refer to Section 3!

**RWLL VALUE [kg]
DEPENDING ON BEAM LENGTH AND NUMBER PROTECTED USERS**

	WLL material only		RWLL 1 person		RWLL 2 people		RWLL 3 people		RWLL 4 people		RWLL 5 people	
	ASB	LSB	ASB	LSB	ASB	LSB	ASB	LSB	ASB	LSB	ASB	LSB
2m beam	3000	1750	2400	1150	2350	1100	2300	1050	2250	1000	2200	950
3m beam	3000	1500	2400	900	2350	850	2300	800	2250	750	2200	700
4m beam	3000	1250	2400	650	2350	600	2300	550	2250	500	2200	450
5m beam	2500	1000	1900	400	1850	350	1800	300	1750	250	1700	200
6m beam	2000	750	1400	150	1350	100	1300	50	1250	n/a	1200	n/a
7m beam	1500	500	900	n/a	850	n/a	800	n/a	750	n/a	700	n/a

n/a - not applicable

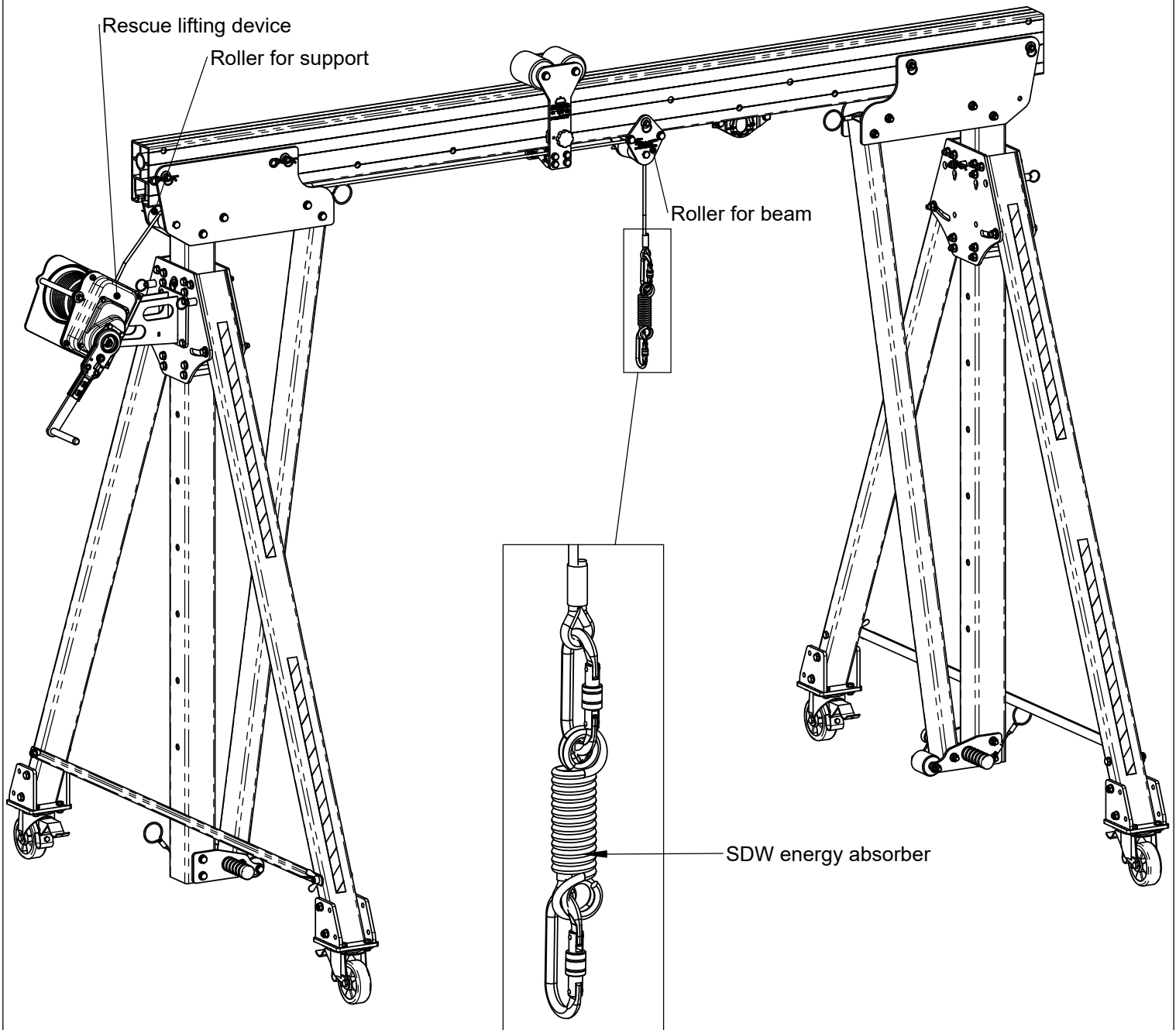
SECTION 6 - RESCUE ACCORDING TO EN 1496/B

GENERAL PECAUTIONS FOR RESCUE:

- Secondary fall arrest system (conforming EN 363) must be used when working with ASB/LSB and RUP 50x-C / RUP50x-D.
- Fall arrest and rescue system used with this device **MUST MEET** applicable EN standards requirements (EN 795 and TS 16415 for anchor devices; EN 362 for connectors; EN 361 for full body harnesses; EN 360 for retractable type fall arresters; EN 1496 for rescue lifting devices; EN 1497 for rescue harnesses; EN 341 for descender devices).

USAGE ASB DEVICE FOR RESCUE PURPOSES

- ASB/LSB device can be used for rescue purposes in conjunction with RUP 50x-C / RUP 50x-D rescue lifting devices.
- RUP50x-D devices can be installed only on supports side plates equipped with two additional holes - please refer to Section 2 Points 9.2 and 9.3.
- Rescue lifting device rope installation - please refer to Section 2 Point 10.
- **Rescue lifting device MUST BE used with SDW energy absorber installed on the end of the wire rope!**
- **During rescue operation lifting/lowering loads IS NOT allowed.**



IDENTITY CARD

IT IS RESPONSIBILITY OF THE USER ORGANISATION TO PROVIDE THE IDENTITY CARD AND TO FILL IN THE DETAILS REQUIRED. THE IDENTITY CARD SHOULD BE FILLED IN ONLY BY COMPETENT PERSON RESPONSIBLE FOR PROTECTIVE EQUIPMENT. THE IDENTITY CARD SHOULD BE FILLED IN BEFORE THE FIRST USE OF THE EQUIPMENT. ANY INFORMATION ABOUT THE EQUIPMENT LIKE: PERIODIC INSPECTIONS, REPAIRS, REASONS OF EQUIPMENT'S WITHDRAWN FROM USE SHALL BE NOTED. THE IDENTITY CARD SHOULD BE STORED DURING A WHOLE PERIOD OF EQUIPMENT UTILIZATION. DO NOT USE THE EQUIPMENT WITHOUT THE IDENTITY CARD.

MODEL AND TYPE OF EQUIPMENT

REF. NUMBER

SERIAL NUMBER

DATE OF MANUFACTURE

DATE OF PURCHASE

DATE OF FIRST USE

USER NAME

PERIODIC EXAMINATION AND REPAIR HISTORY

	DATE	REASON FOR SERVICING / REPAIR	REPAIRS CARRIED OUT	NAME AND SIGNATURE OF COMPETENT PERSON	DATE OF NEXT EXAMINATION
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

PRODUCER:

SafetyLiftinGear, Unit R1D Rockingham Gate, Poplar Way West, Cabot Park, Bristol, BS11 0YW, Tel: 0808 123 69 69, www.safetyliftinggear.com

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MODEL AND TYPE OF EQUIPMENT

**INTERNAL TROLLEY
(for personal protection)**

REF. NUMBER

ASB500-250

SERIAL NUMBER

DATE OF MANUFACTURE

DATE OF PURCHASE

DATE OF FIRST USE

USER NAME

PERIODIC EXAMINATION AND REPAIR HISTORY

	DATE	REASON FOR SERVICING / REPAIR	REPAIRS CARRIED OUT	NAME AND SIGNATURE OF COMPETENT PERSON	DATE OF NEXT EXAMINATION
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

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