

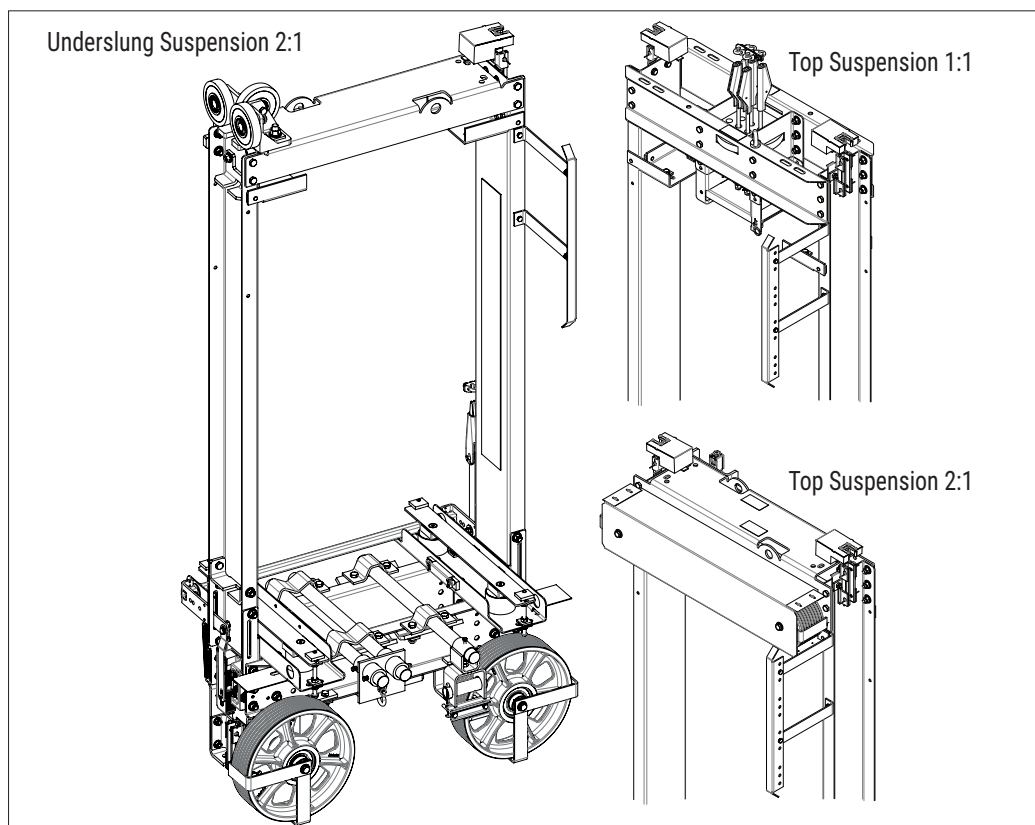
Car Frame WCF06

1:1 AND 2:1 SUSPENSION

Code **PM.3.002355.EN**

Version **I**

Date **19.04.2024**



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CAR FRAME WCF06
1:1 AND 2:1 SUSPENSION
Operating instructions

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1 General information prior to installation

1.1 Description and functions

The car frame WCF06 is a car frame used for passenger- and passenger-goods elevators. Because of its modularity structure and its variety of different (optional) equipment (safety gears, suspensions, ...) covers the WCF06 car frame a wide range of use.

The WCF06 can be also equipped with a braking system, which safeguards against uncontrolled lift car movement in up direction. A non-directional speed governor with corresponding tensioning weight must be fitted if this braking system is used.

The WCF06 car frames do have isolated car platform supports which guarantees excellent ride comfort.

The built-in safety devices are set, synchronized and lead sealed ex-works, according to the order. For reasons of safety, it is forbidden to readjust these settings once they have been made. The WCF06 operating range is defined as follows:

- Nominal speed $\leq 1.75 \text{ m/s}$
- All up load $\leq 1600 \text{ kg (Q=700 kg)}$
- Car depth $\leq 1500 \text{ mm}$
- Car width $\leq 1450 \text{ mm}$
- Safety gear devices: - Progressive type SG
- Bi-directional SG
- Guide: - Sliding guide shoe
- Roller guide shoe
- Suspension: - 1:1 Top Suspension
- 2:1 Top Parallel
- 2:1 Underslung Parallel



Car width depends on car construction type

Options:

- Load weighing system WLWD-M
- Compensation chain fixing
- Travelling cable hanger
- Limit switch ramp
- Blocking device (only 2:1 suspension)
- 2 buffer plates
- Retainer plate

1.2 Liability and guarantee

This instruction handbook is written for people who are familiar with lift servicing and installation. Sufficient knowledge of lifts is essential.

WITTUR accept no responsibility for damage caused by improper handling, or for damage caused as a result of actions other than those stated in these operating instructions.

The WITTUR guarantee may be voided if parts other than those described in these instructions are installed.

Unless stated otherwise, the following is not permissible due to technical safety reasons:

- The use of safety gear devices or brake components other than those installed
- Carrying out modifications, of any kind, on brake components
- Destroying of seals
- Frame modification
- Modification of the actuating mechanism
- Readjustment of settings have been made exworks
- Carrying out faulty or improper maintenance, maintenance or inspection checks
- using unsuitable accessories, spare parts or operating material which has neither been released by the WITTUR Company nor consists of original WITTUR spare parts

1.3 Safety precautions

WITTUR machine installation or repair engineers are chiefly responsible for the safe operation of machinery.

It is essential to comply with and keep abreast of all safety rules and legal obligations in order to avoid personal / product damage during installation, maintenance and repair work.

Important safety advice and danger warnings are emphasized with the following symbols:



General danger warning



High danger risk warning (i.e. crushing edge, cutting edge etc.).



Risk of damage to machinery parts (i.e. due to incorrect installation, or such like).



Important information sign

These operating instructions belong with the whole installation and must be kept in a safe place at all times (i.e. machine room).

The proper assembly and installation of WITTUR safety gears requires correspondingly well trained fitting engineers. The responsibility of training lies with the company appointed to carry out the work.

Before starting installation work:



Only properly trained personnel may carry out work, or be allowed access to the installation site.

- Attach safety devices to guard against falling (platform or harnesses)
- Cover any floor openings
- Secure installation tools or objects against accidental falling
- Lift shaft openings should be cordoned off and suitable warning signs should be erected when working in shaft openings
- Work involving electrical equipment should only be carried out by an electrical engineer or qualified personnel.

1.4 Preparation

Before beginning installation work it is in your own interest to ascertain the constructional and spatial conditions. Where (workshop or on site) and when which installation operations can or must be carried out. It is recommended therefore, taking into account all the given circumstances, to plan the various operational sequences in advance, rather than carrying them out prematurely and in an unconsidered manner.

On receipt of the delivery, the goods or components should be checked for correctness and completeness with the order sheet

The details on the name plates should be compared with the order sheet and also check:

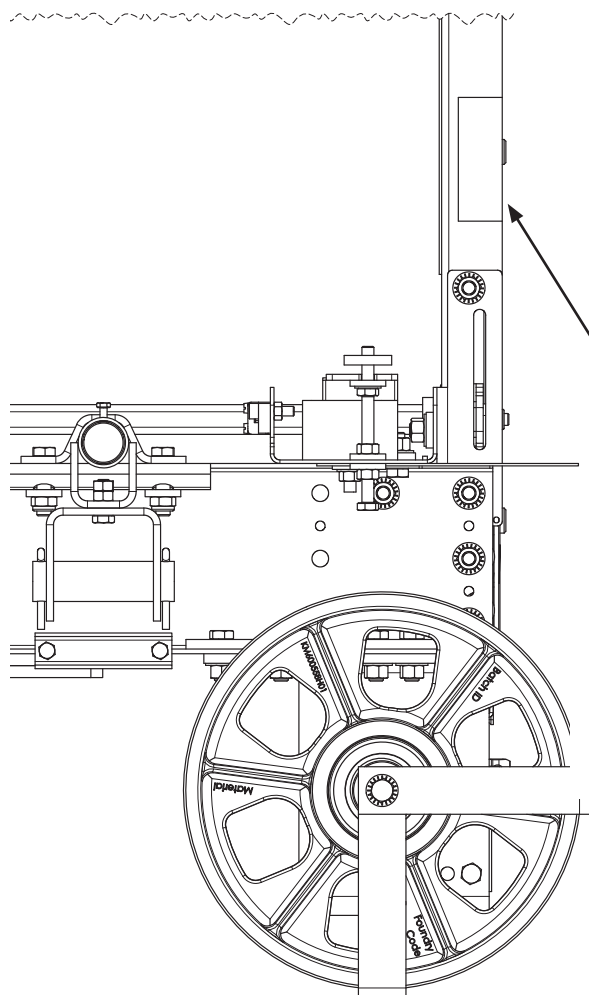
- that the factory and order number correspond
- the rail head width and model
- the total load (G)
- the tripping speed
- for 2:1 suspension: the rope pulley diameter, the number of rope grooves and rope groove diameter are suited to the ropes.

1.5 Safety gear name plate

The safety gear identification indicators are located near the safety gear housing.

These consist of a name plate and a identification sticker which gives following data:

- Type term of safety gear
- Serial number
- Elevator number
- Tripping speed
- Mass to be gripped



	type			F _{max} #### kg	0004435P02
	Serial - No : Serial number			V _{max} #.## m/s	
CE	Elevator - No : Elevator number			k  ##.## mm	
ID No.	Certificate number			guide rail surface condition  oil	
WITTUR AUSTRIA GmbH Sowilstrasse 1, 3270 Scheibbs, Austria			EAC	Prod. Date: JJJJ-MM-DD	

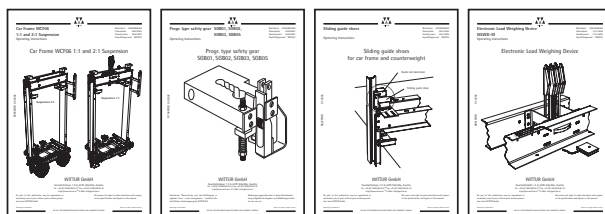


Type label depends on chosen safety gear

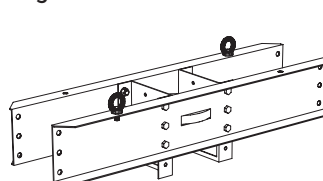
1.6 Content of supply

After delivery, check the lift car frame for damage and for full delivery of parts. The content of supply covers:

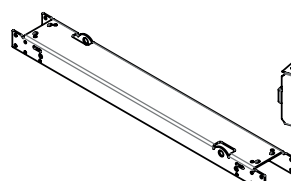
- Car frame operating instructions manual
- Safety gear operating instructions manual
- Guide shoe operating instructions manual
- Load weighing device operating instr. manual



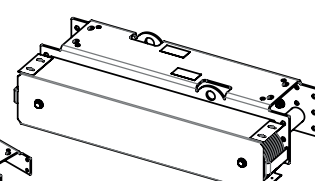
- Crosshead beam (pre-assembled)



Suspension 1:1

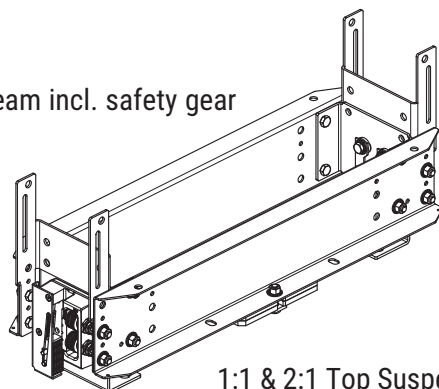


2:1 Suspension bottom

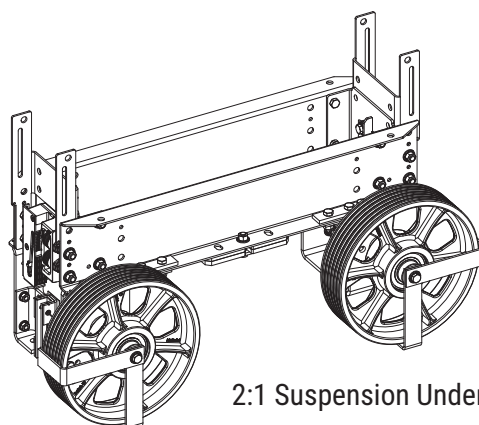


2:1 Suspension top

- Bottom Cross beam incl. safety gear (pre-assembled)

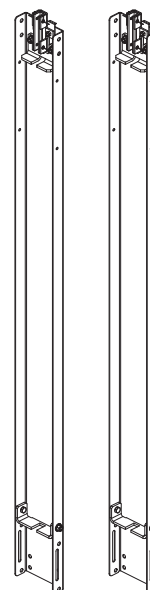


1:1 & 2:1 Top Suspension



2:1 Suspension Underslung

- Uprights with pre-assembled top sliding guides (if SLG6 guide shoes) & retaininer plate (if ordered)



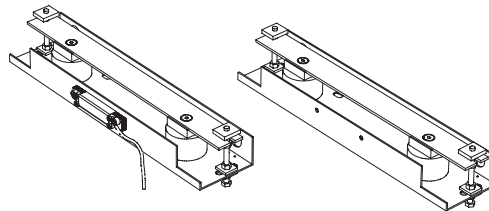
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1:1 AND 2:1 SUSPENSION

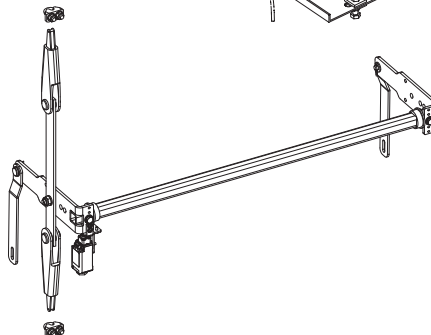
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- Platform supports
incl. load weighing device if ordered

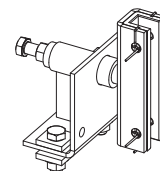
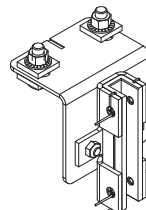
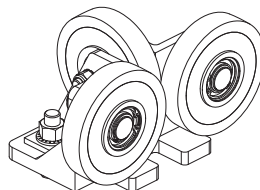
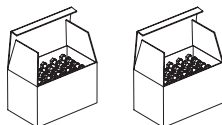
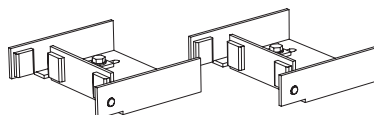
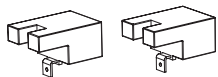


- Safety gear synchronization
(depending on safety gear type)



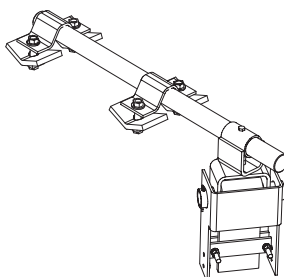
Accessories:

- Guide rail lubricator
if sliding guide shoes
- Upper car fixing (incl. isolations)
- Screw packages
- guide shoes (if not pre-assembled")

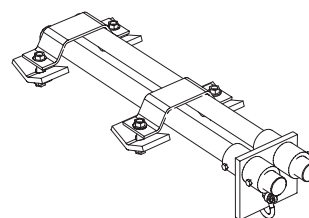


Optional parts:

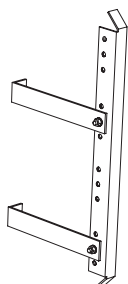
- Travelling cable hanger



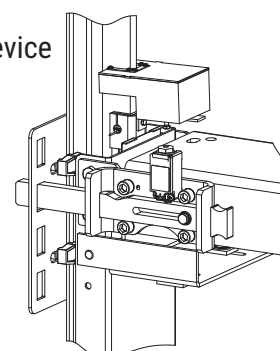
- Compensation chain fixing



- Limit switch ramp



- Blocking device



2 Installation



Car frame installation can either be carried out at the bottom of the lift shaft or on a stable installation platform in the lift shaft (also guide clamps could be used which can take the total load of frame and car)!.



The guide rails should have been already properly set. The distance between the guide rails should be checked before installing the car frame.

2.1 Placing the bottom cross beam between the rails


Bottom cross beam is pre-assembled (safety gear, buffer plate)

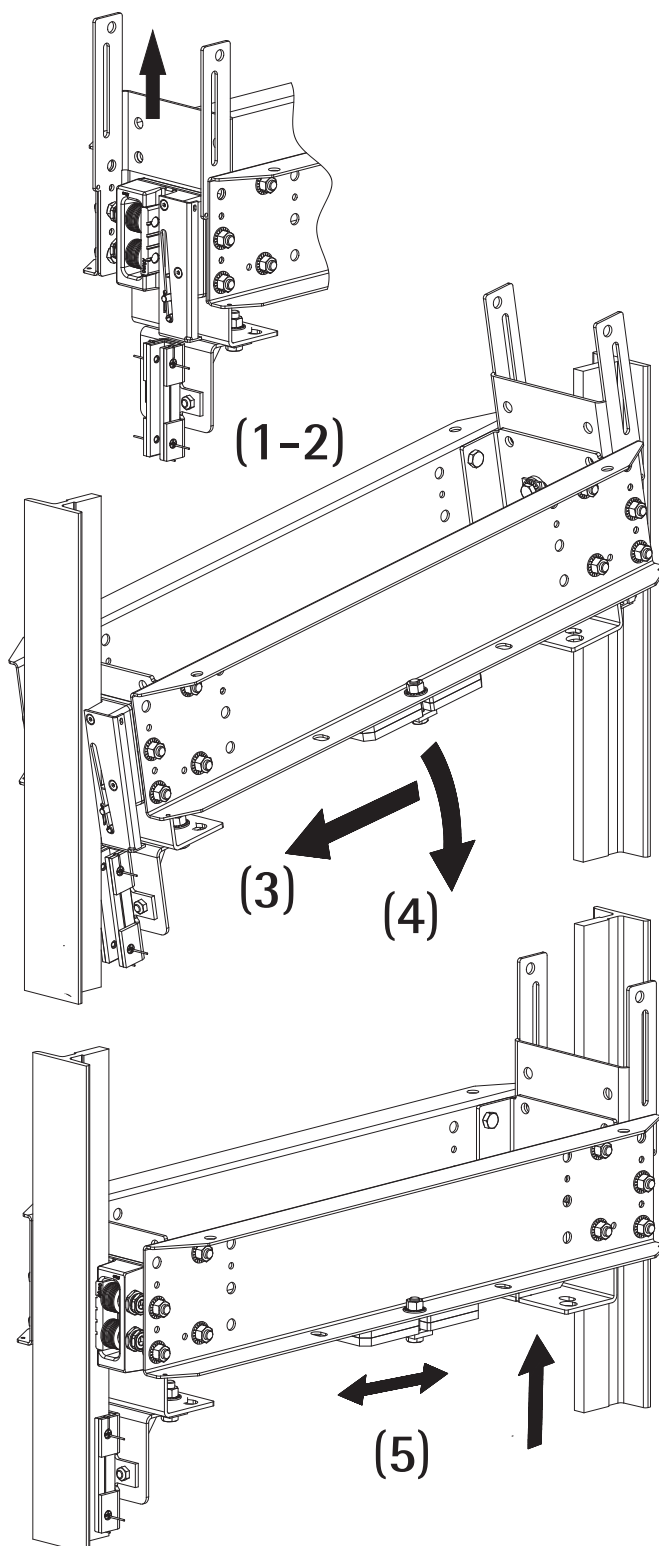


Check the correct position of the lower cross beam in relate to the governor rope.

Procedure:

Same procedure could be kept for 1:1 and 2:1 suspended WCF06 car frame.

- (1) a) with BSG-25P safety gear.
- Remove one guide rail
b) with CSGB-01 safety gear.
- Remove one guide rail or one guide shoe bracket (in case of 2:1 suspension also the rope pulley support) + the U-profile on the opposite side.
 - (2) Set cross beam at an angle (see Fig.)
 - (3) Clip one safety gear head onto the rail
 - (4) Turn Cross beam back into the horizontal position, pushing the second safety gear device onto the rail
 - (5) Adjust the cross beam in the middle of the guide rails (safety gear gripping wedge must overlap guide rail blade)
-  Check that the beam is horizontal in the lateral direction.



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1:1 AND 2:1 SUSPENSION

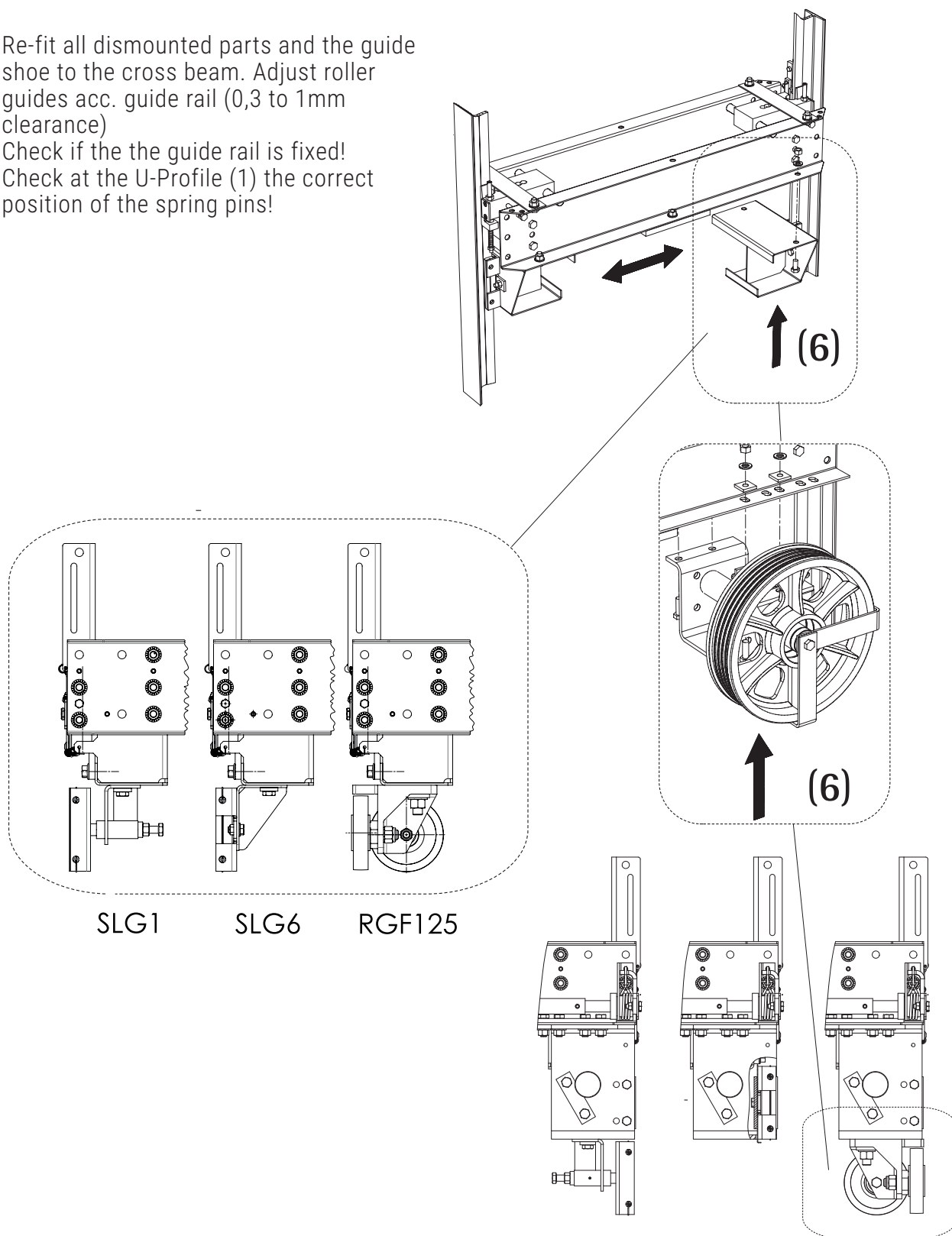
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- (6)** Re-fit all dismantled parts and the guide shoe to the cross beam. Adjust roller guides acc. guide rail (0,3 to 1mm clearance)



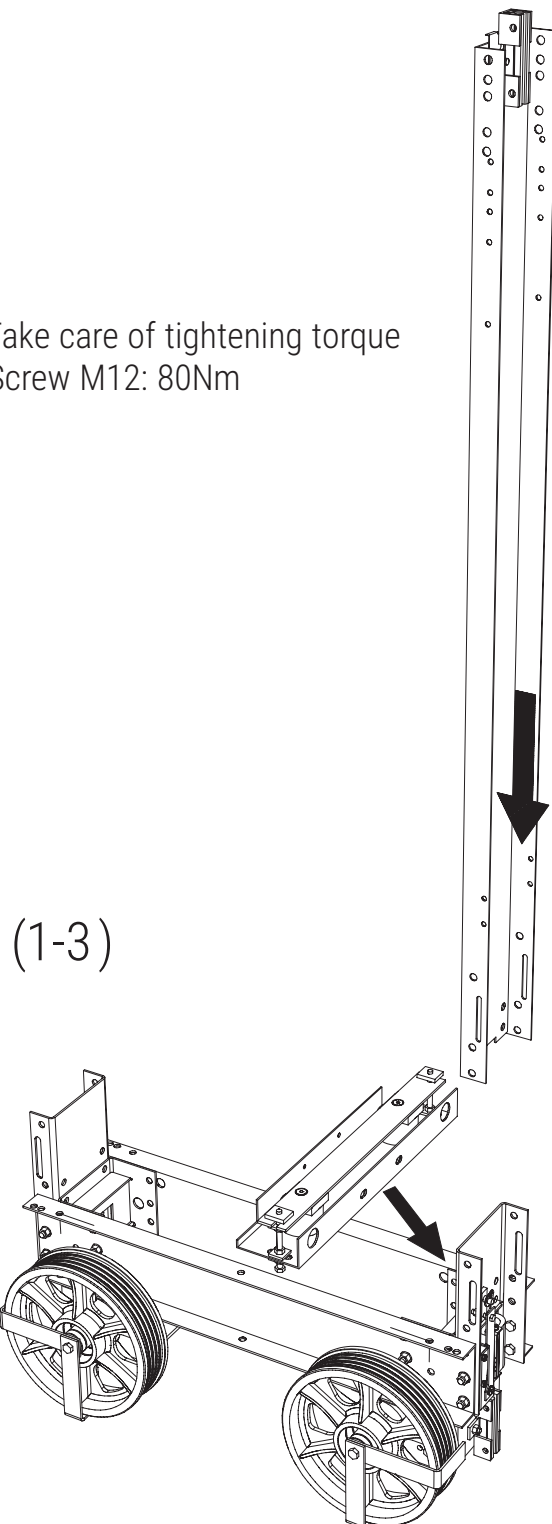
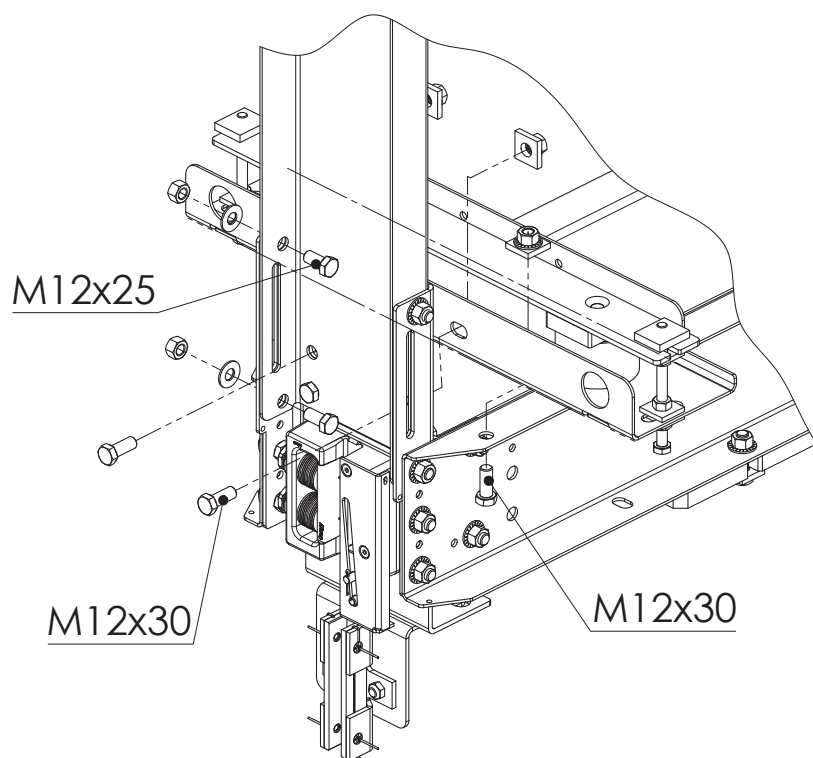
Check if the the guide rail is fixed!
Check at the U-Profile (1) the correct position of the spring pins!



2.2 Securing the uprights and platform supports

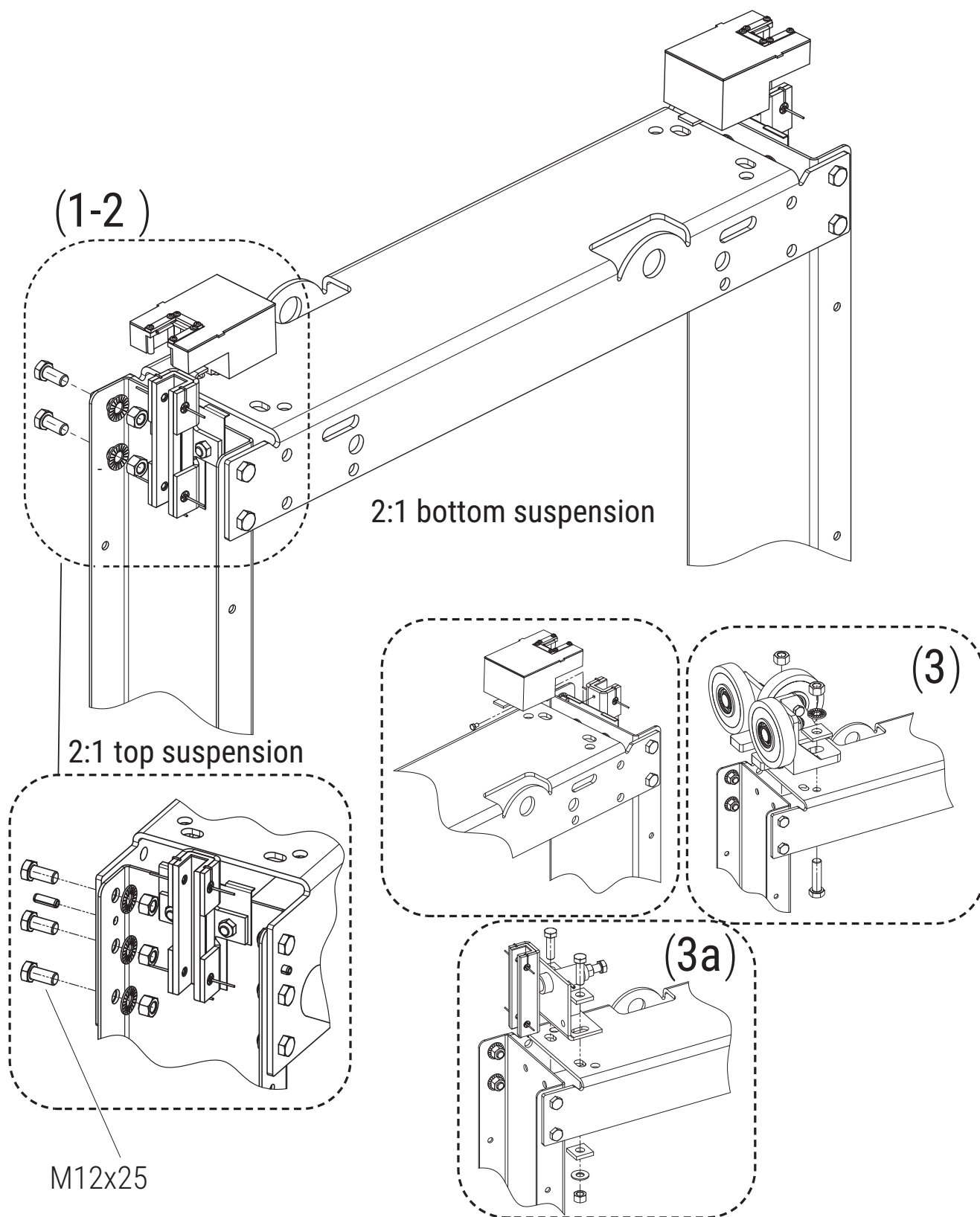
- (1) Loosely bolt the upright and the platform support to the bottom cross beam - handtighten only.
- (2) Adjust the uprights in plumb and in centre to the guide rails.
- (3) Tightening all screw joints.

! ⚙️ Take care of tightening torque
Screw M12: 80Nm



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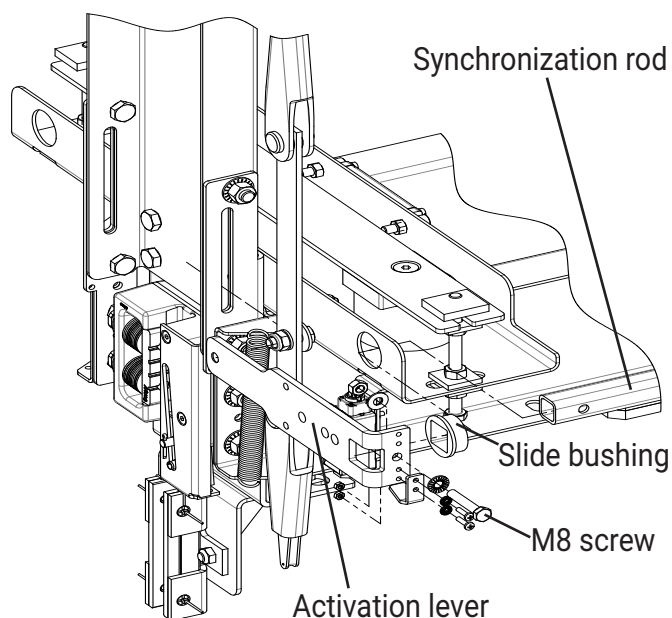
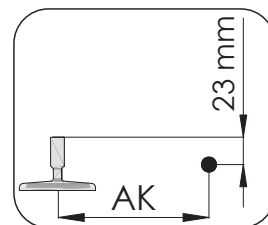


2.4 Safety gear synchronization

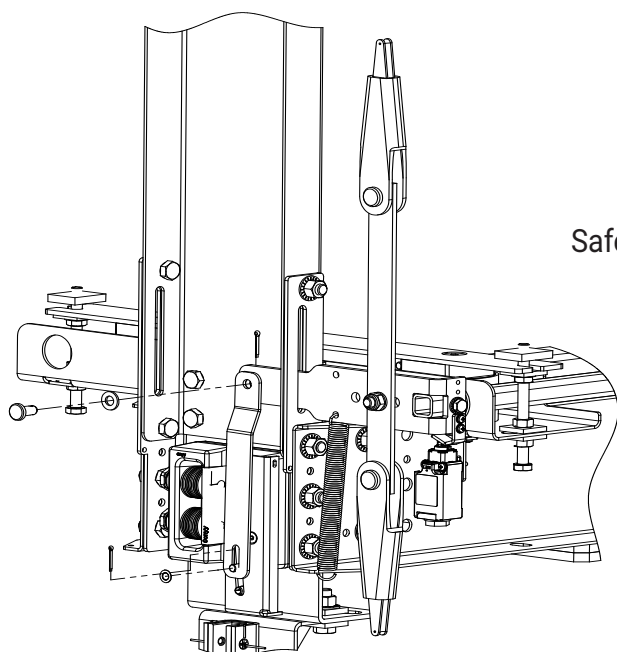
2.4.1 WCF06 with CSGB-01

- (1) Push the synchronization rod through the holes in the platform support. Put the slide bushing into the platform support hole.
- (2) Insert the activation lever through the longhole in the upright.
- (3) Fixing the synchronization rod and the activation lever with M8 screw.
- (4) Attach the spring into the holes in the bottom cross beam, and secure it on the activation lever.
- (5) Fixing activation lever and safety gear with accessory pack.
 - (5a) Remove the split pin from safety gear to install safety gear lever
 - (5b) Re-fit the clevis pin, the washer and the split pin to the activation lever
 - (5c) Re-fit the washer and the split pin to the safety gear

(1-4)

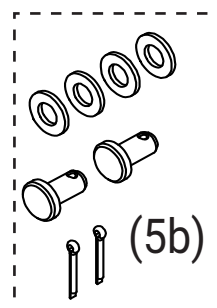


(5)



Accessory Pack

Safety gear lever




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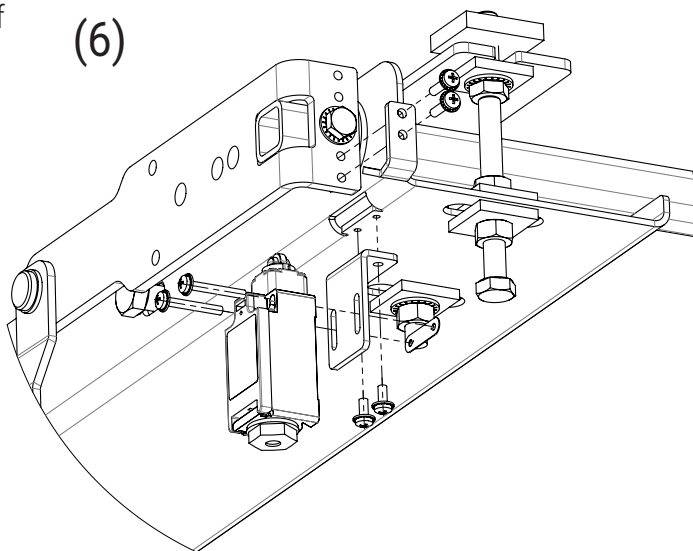
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(6) Mount the safety gear switch to the bottom of the platform support.

 Take care, that the whole system is easily movable.

 Take care of tightening torque Screw M8: 23Nm.

(6)




AK=165mm

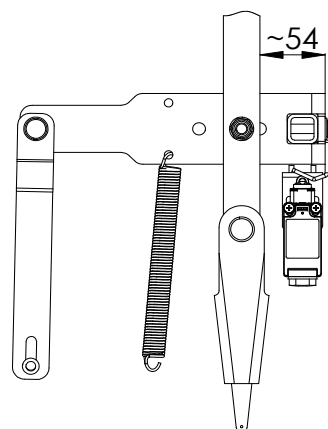
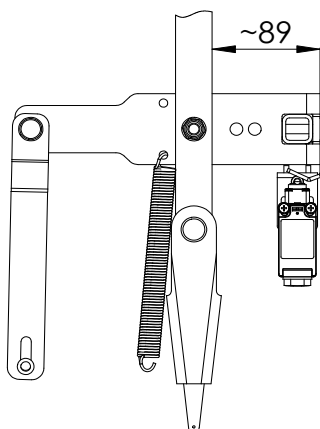
(SIDE=B)

AK=200mm

(SIDE=B)

 CSGB-01: AK=165 or 200 mm

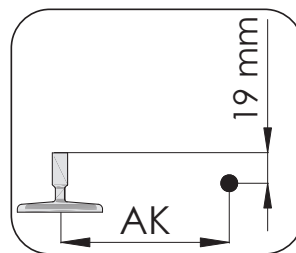
 Side=A is mirrored




2.4.2 WCF06 with bi-directional BSG-25P

If WCF06 is equipped with progressive type safetygear BSG-25P, the synchronization is delivered pre-assembled.

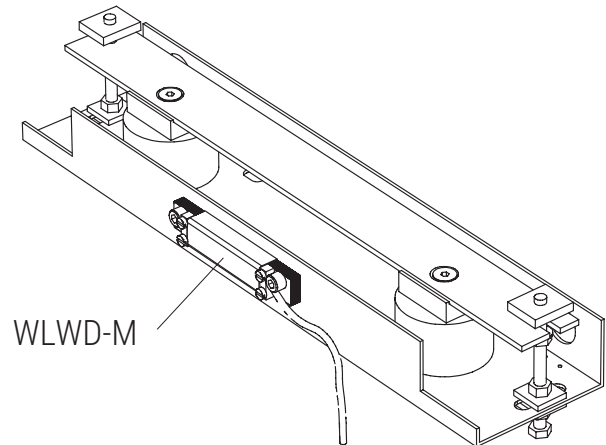
The overspeed governor rope fastener is directly fit to the activation lever - refer to chapter 2.9 "Overspeed governor rope fixing".



 BSG-25P: AK=160mm

2.5 Load weighing device

The load weighing device is mounted to the platform support. For setup of the load weighing device WLWD-M refer to the operating instruction manual.



2.6 Travelling cable hanger and compensation chain fixings

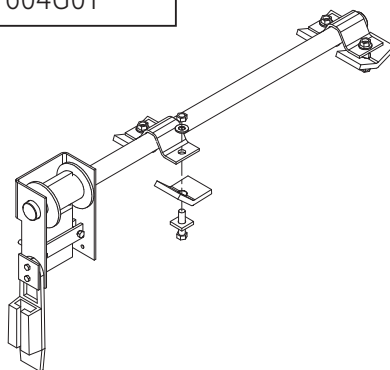
Before installing the car fix the cable hanger and chain fixings to lower cross beam (for position refer to layout drawing).



Take care of tightening torque
Screw M12: 80Nm.

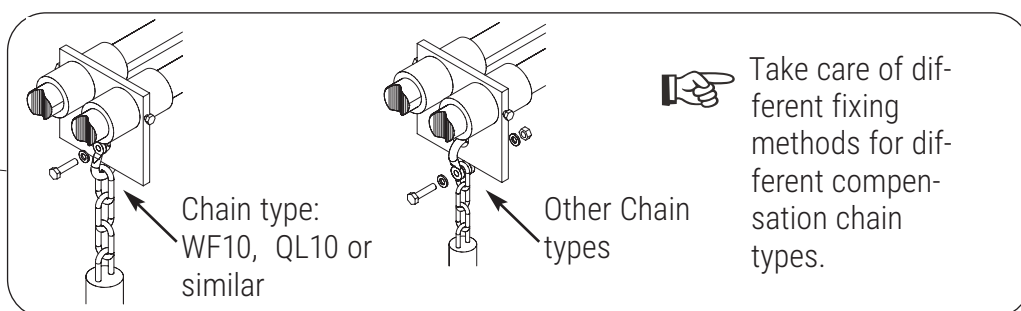
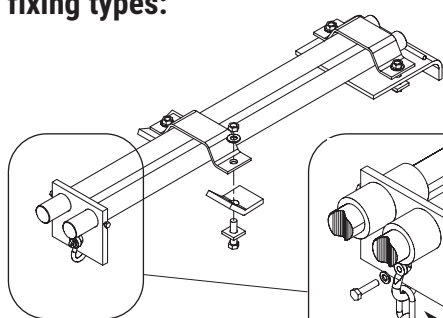
Travelling cable hanger types:

Screw package
611604G01




Compensation chain fixing types:

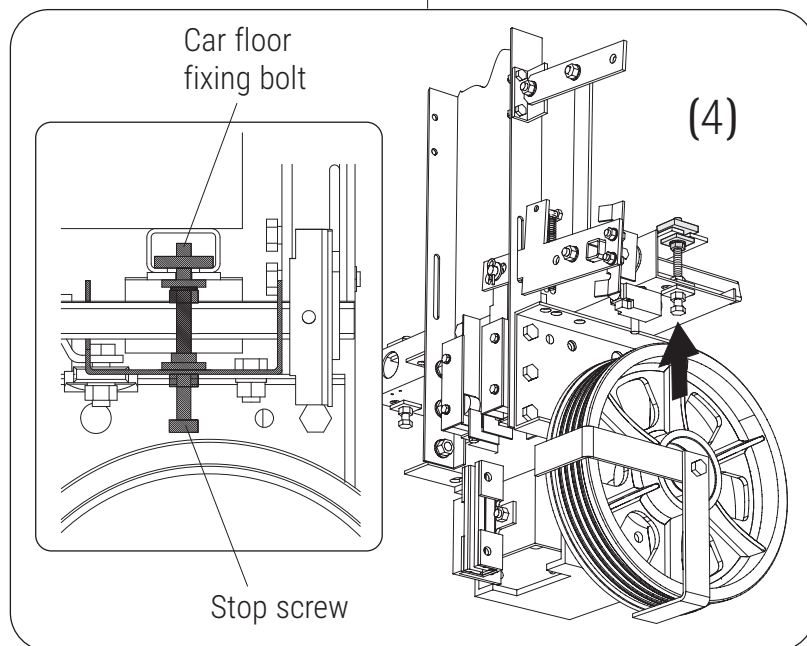
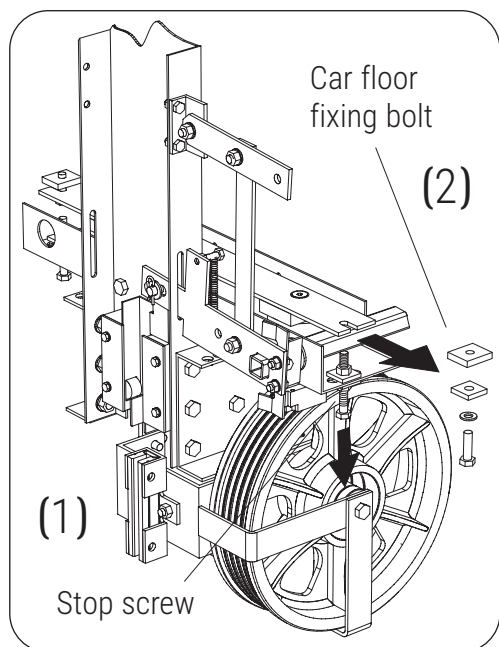
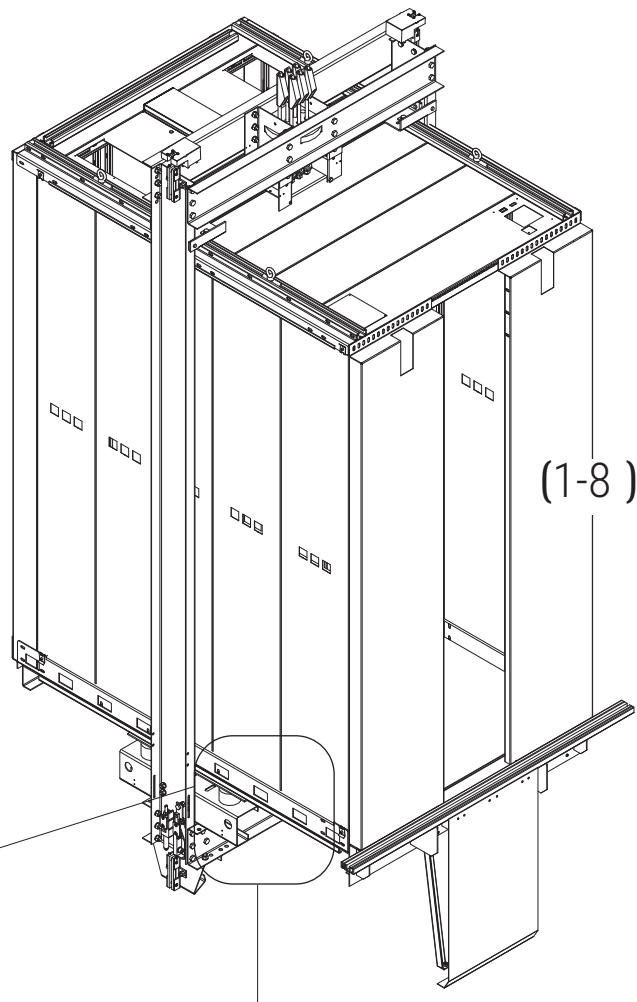
Screw package
611604G02



2.7 Car installation

- (1) Wind down the stop screw
- (2) Remove the car floor fixing bolts at the end of the platform support beams
- (3) Fit the car floor to the car frame (refer to the operating instruction manual of car)
- (4) Before going on with car installation, lock the car floor by winding up the stop screw slightly against the fixing bolts (lock with fixing nut)

 Do not overtighten



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(5) Fix the upper isolation to the car roof channel (handtighten bolts)

(6) Push the isolation tight against the upright

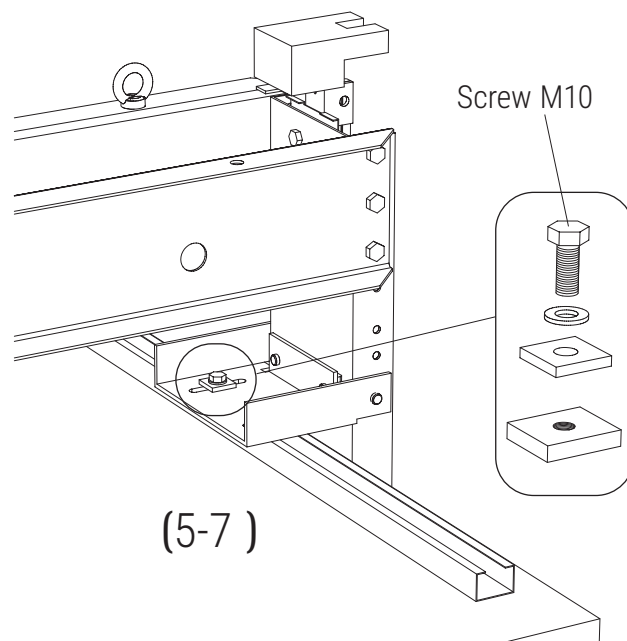
(7) Tighten the Screws



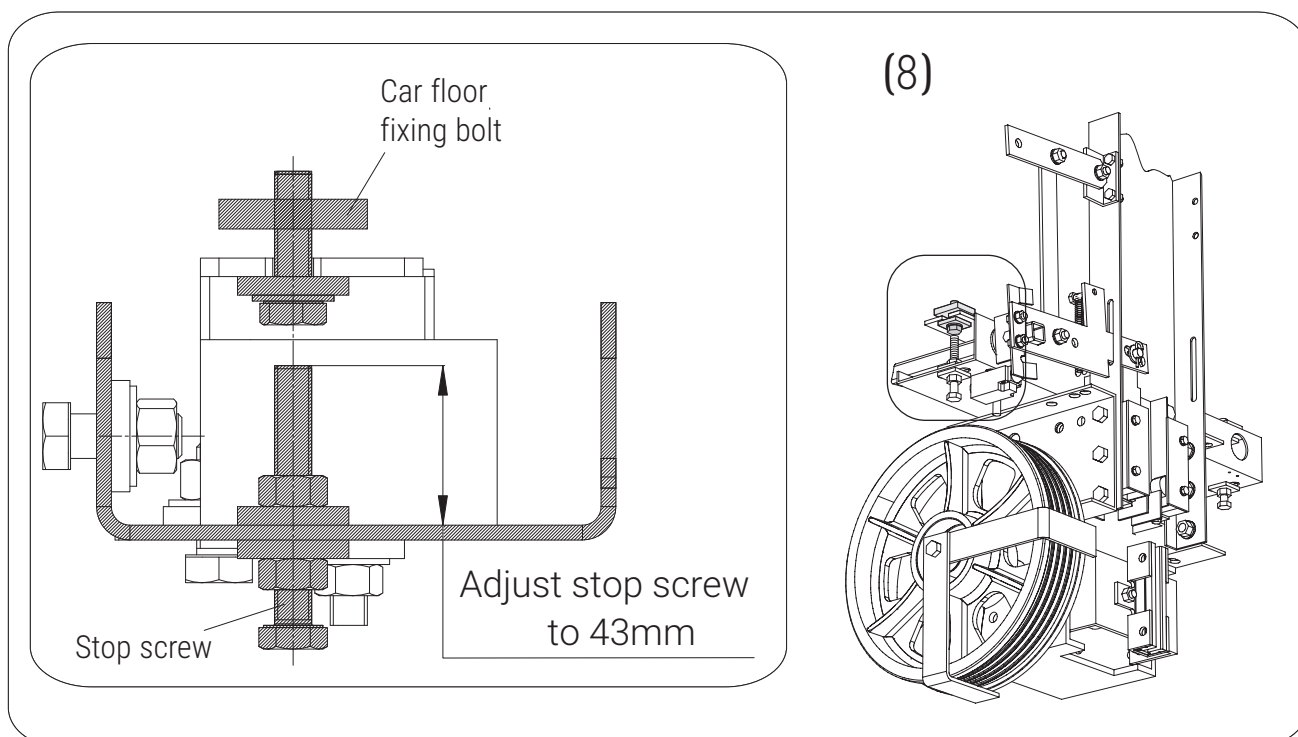
Take care of tightening torque
Screw M10: 46Nm



Check that the bracket can slide on the upright.



(8) After car installation, set stop screws to 43mm as shown on picture below!

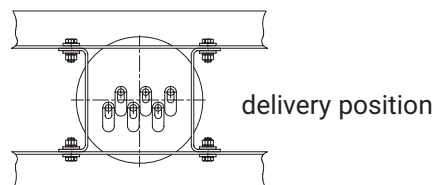


2.8 Roping of the car frame

2.8.1 Rotatable suspension 1:1



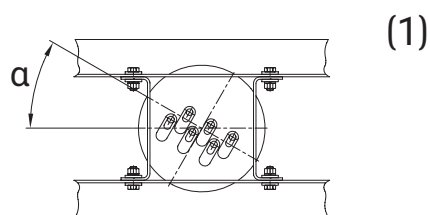
The rope hitch plate is rotatable and can be aligned with the corresponding rope arrangement of the elevator



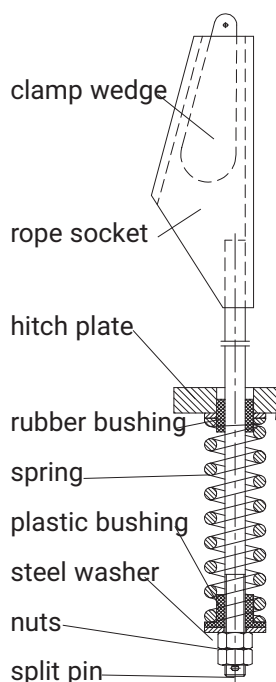
(1) Adjust the rope hitch plate according to layout (a)

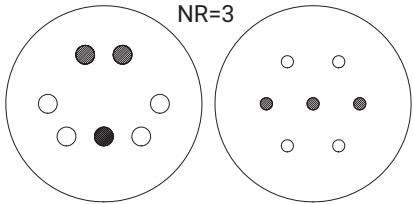
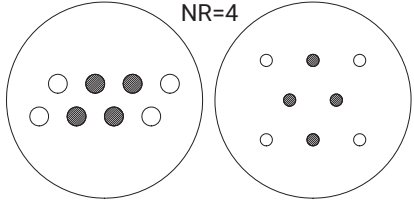
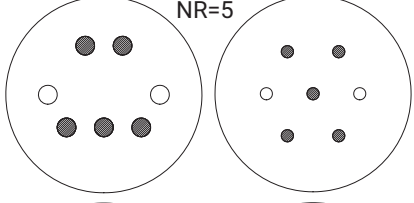
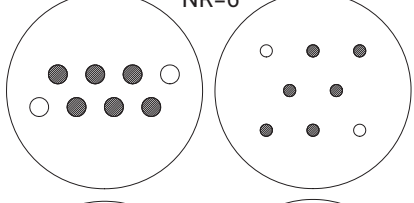
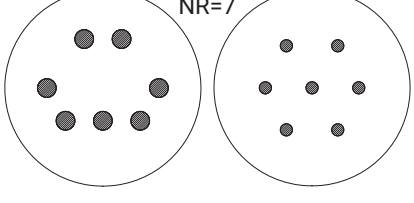
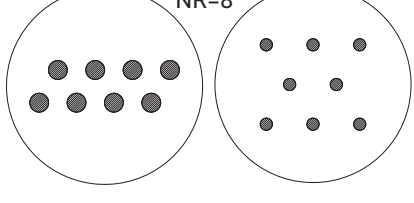


Rope arrangement depending on rope diameter and number of ropes see figure beside:



Rope anchor assembly see figure below:



Uneven number of ropes configuration of hitch plate	Even number of ropes configuration of hitch plate
<p>NR=3</p> 	<p>NR=4</p> 
<p>NR=5</p> 	<p>NR=6</p> 
<p>NR=7</p> 	<p>NR=8</p> 

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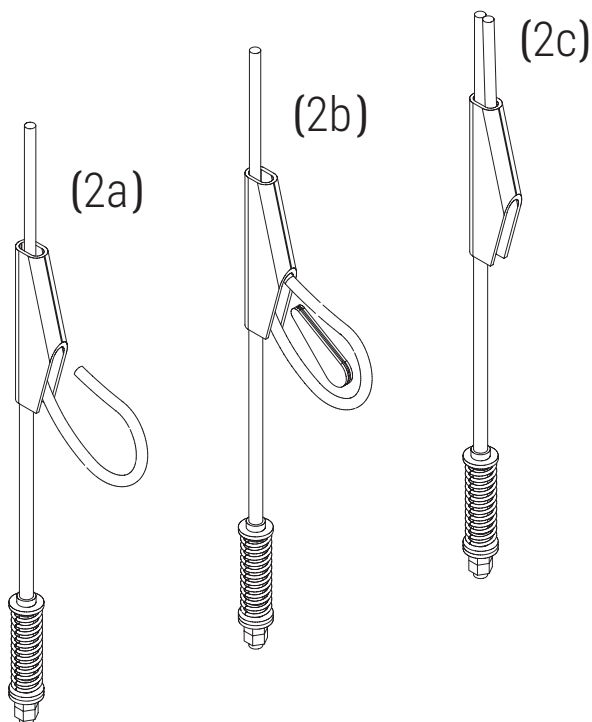
1:1 AND 2:1 SUSPENSION

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(2) Fasten the ropes to the rope anchor:

- Make a loop on the rope by feeding the end of the rope through the socket and then feed it back. Do not twist the rope, just turn it back.
- Insert the wedge and pull the loop into the socket
- Simultaneously with an other person pulling the ends of the rope, secure proper seating by hammering the wedge with wooden block.

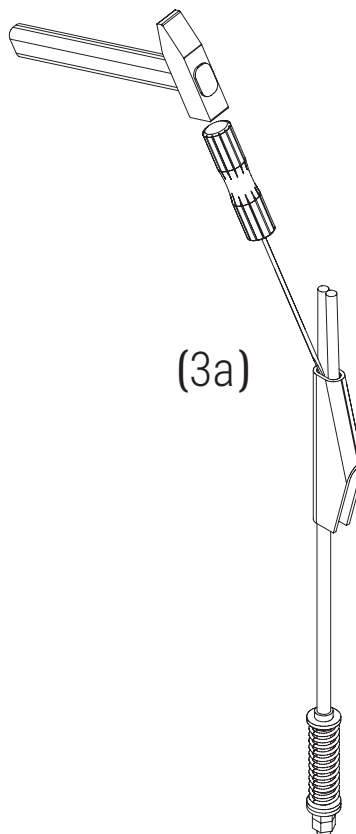


(3) Equalize the tension of ropes



After all ropes are installed as described above, let the weight of the car and/or counterweight rest on ropes to seat the wedges and ropes into the socket firmly. If any rope is tighter than the others, it can be equalized as follows:.

- Tap the wedge outwards until the rope slides, using a hammer and a drift pin, which is inserted into the top of the rope socket between



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(4) Secure the rope tail-end

Properly made tail-end securing will prevent wedge from falling out if rope suddenly get loose.



Be aware of local laws and regulations concerning tail-end handling methods.



The rope clip is not delivery content of the car frame!



The rope clips should be used and tighten to torque recommended by the manufacturer.

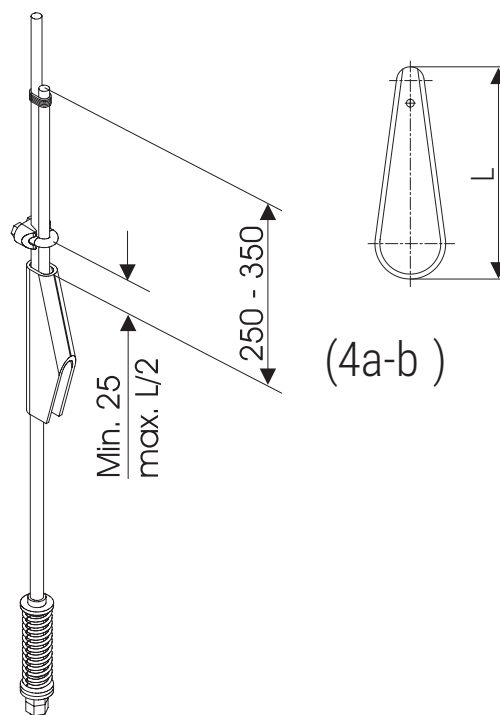
One main method is described below but any other acceptable local method can be used.

a) Secure the tail-end of the rope to the live-end with a rope clip from 25mm to $L/2$ of the wedge. The U-bolt must be fitted to the deadend of the rope and the saddle must be fitted to the load bearing end of the rope.

b) Tie the tail of the dead-end to the live rope using soft steel wire or bundle binder



If the wedges are not enough close to each other to prevent full rotation, tie the terminations together using e.g. soft wire. Do not prevent equalization springs working.



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1:1 AND 2:1 SUSPENSION

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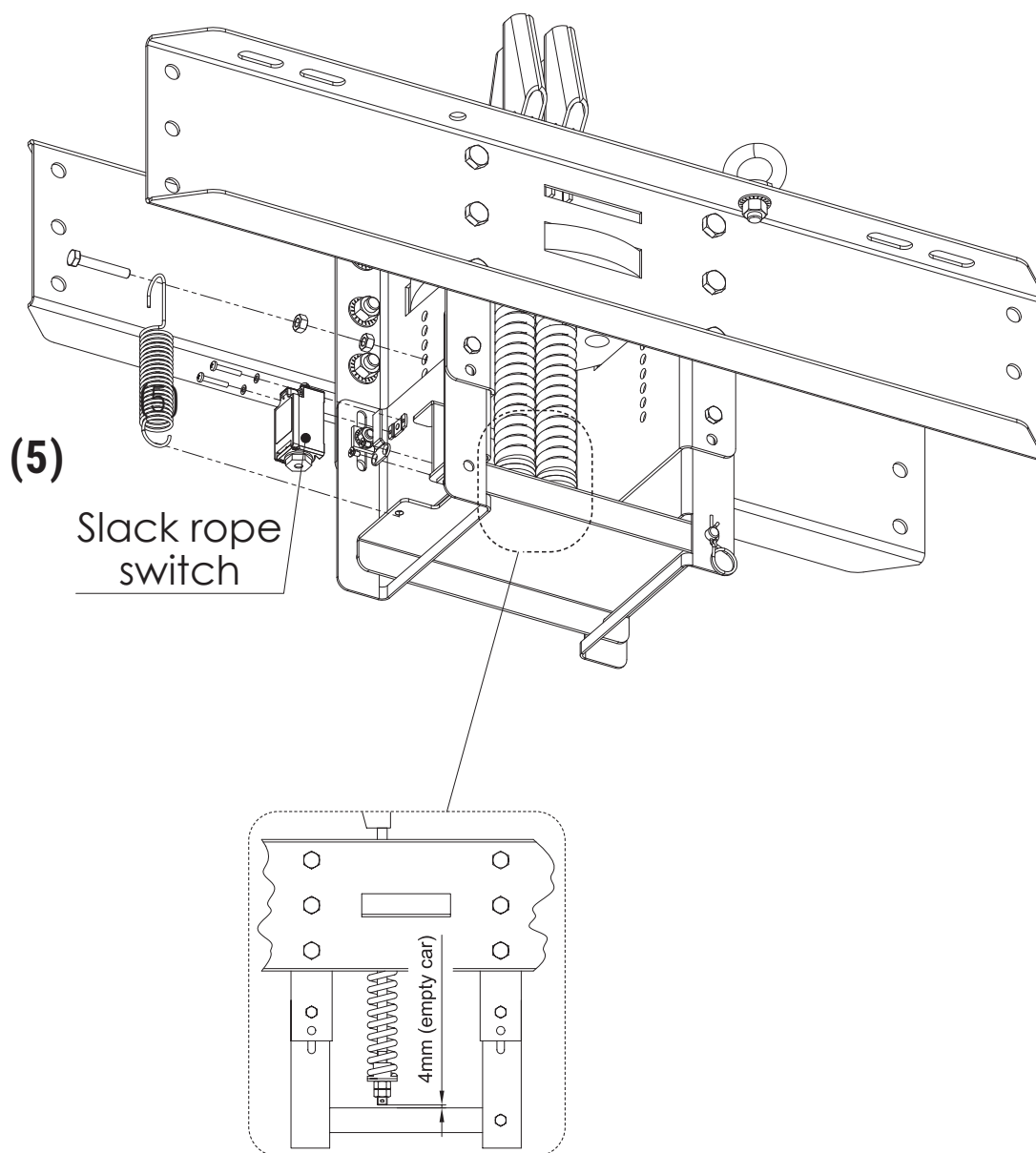
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- (5) Mount and adjust the slack rope device (if delivered)



Adjust a gap of $\leq 4\text{mm}$ between seesaw and rope anchor rod surface - the car must be empty when adjusting!.

Slack rope device with rope isolation springs



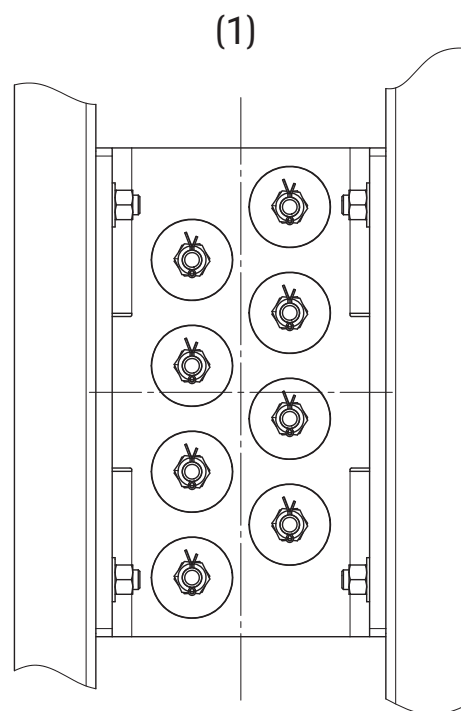
2.8.2 Fixed suspension 1:1

(1) Rope anchor assembly:

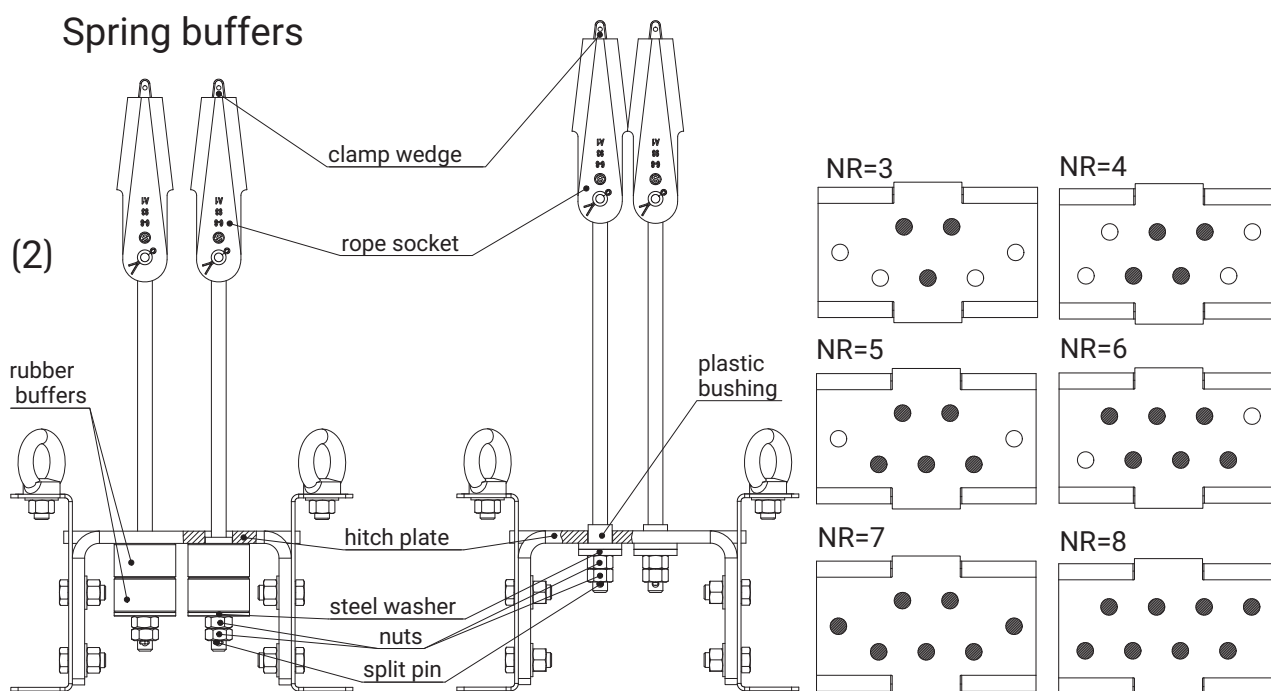
- a) The rope hitch plate is not rotatable and can only be mounted in the shown orientation.
- b) Rope arrangement depending on number of ropes, see figures beside.
- c) Rope anchor assembly see figure below.

(2) Fasten the ropes to the rope anchor:

- a) Make a loop on the rope by feeding the end of the rope through the socket and then feed it back. Do not twist the rope, just turn it back.
- b) Insert the wedge and pull the loop into the socket
- c) Simultaneously with an other person pulling the ends of the rope, secure proper seating by hammering the wedge with wooden block.



No rope equalisation



2.8.3 Top suspension 2:1

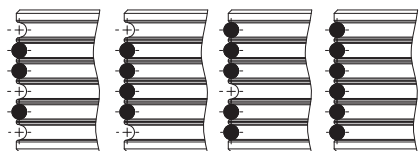
- (1) Remove the rope guards (A)
- (2) Pass the rope round the diverter pulleys



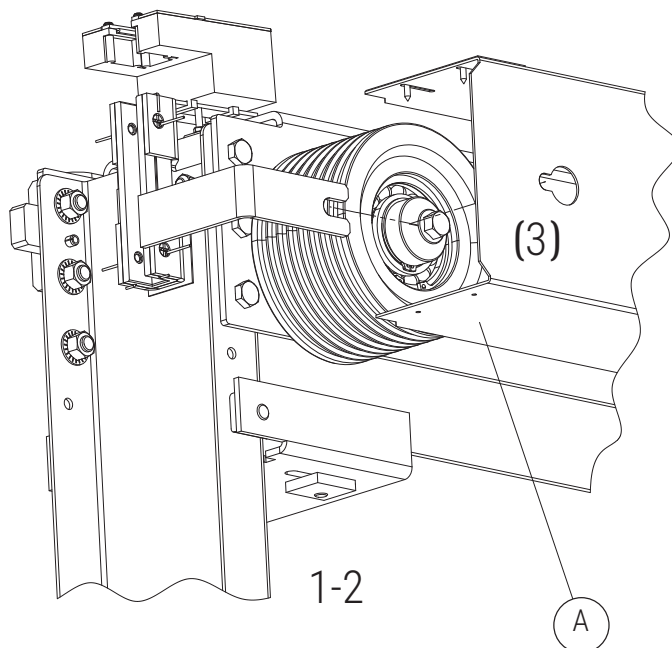
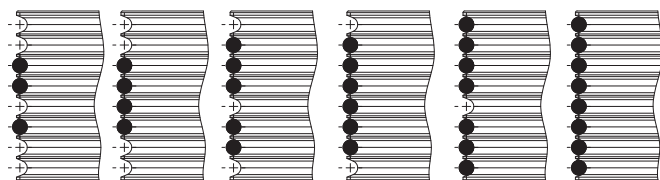
When used number of ropes is less than the number of grooves on the diverter pulley, the ropes are placed according to the figure below.

Rope arrangement depending on rope diameter and number of ropes see figure beside:

Pulley diameter 330mm



Pulley diameter 240&160mm

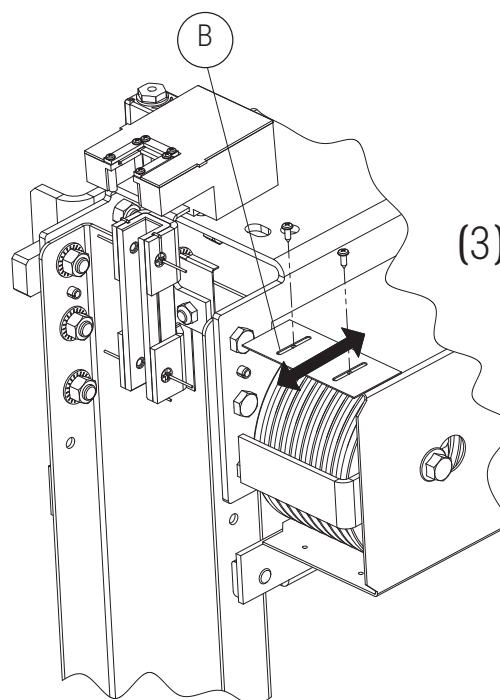
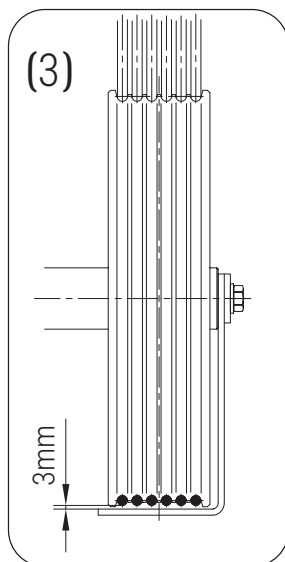


Take care of tightening torque
Screw M20: 385Nm

- (3) Re-fit and adjust the rope guards (A) and the rope pulley cover plates (B)



Ensure 3mm gap between rope guard and ropes. The car should be in the topmost floor when adjusting the cover plates.



2.8.4 Underslung suspension 2:1

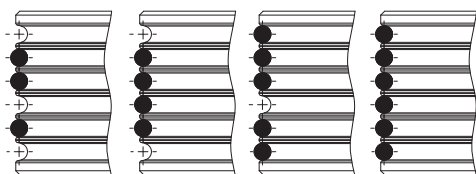
- (1) Remove the rope guards (A)
- (2) Pass the rope round the diverter pulleys



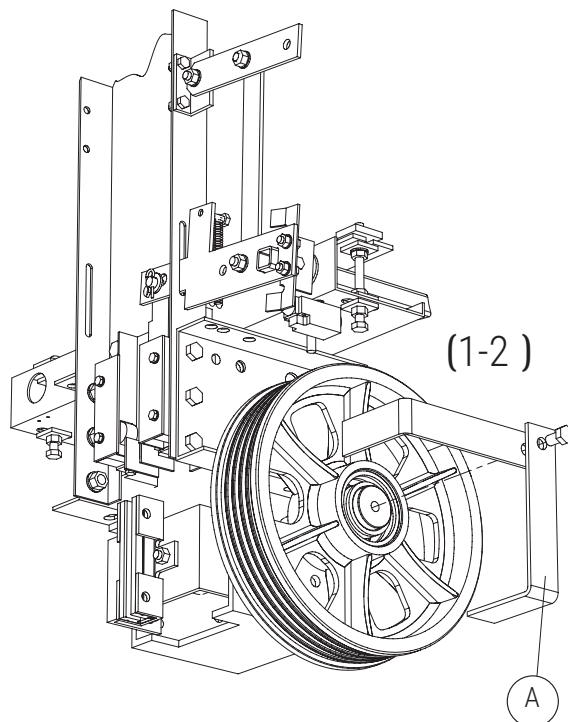
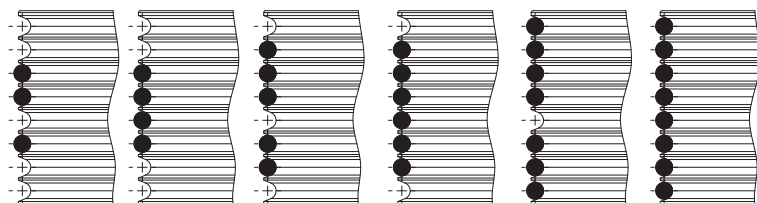
When used number of ropes is less than the number of grooves on the diverter pulley, the ropes are placed according to the figure below.

Rope arrangement depending on rope diameter and number of ropes see figure beside:

Pulley diameter 330mm



Pulley diameter 240&160mm

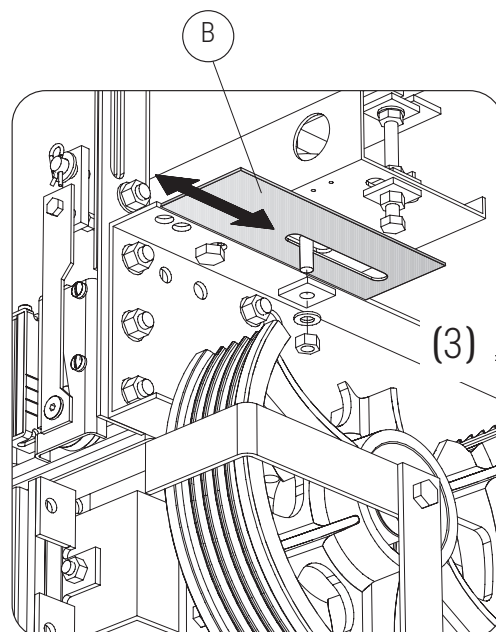
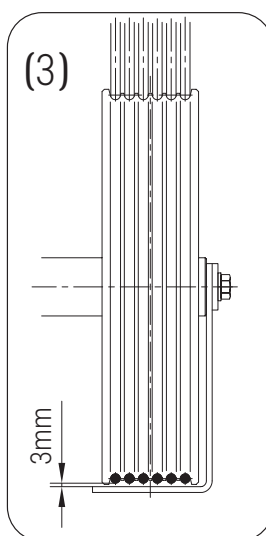


! Take care of tightening torque
Screw M20: 385Nm

- (3) Re-fit and adjust the rope guards (A) and the rope pulley cover plates (B)

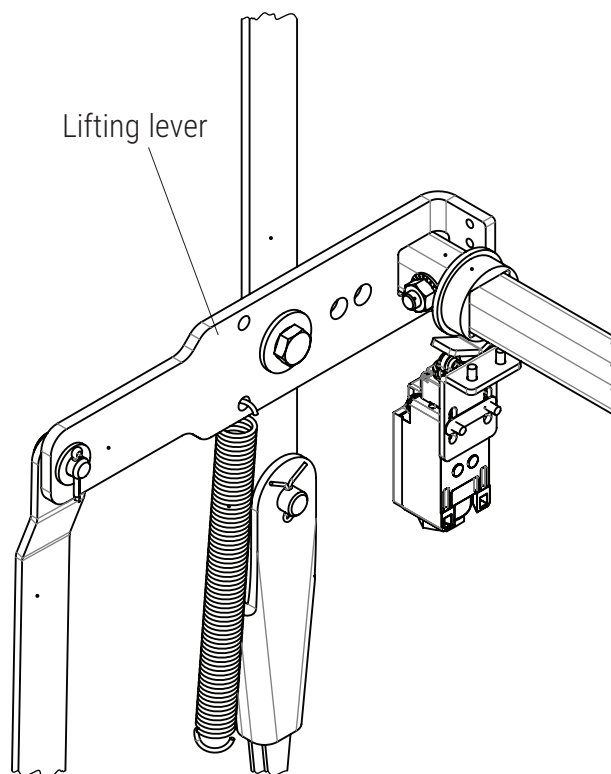
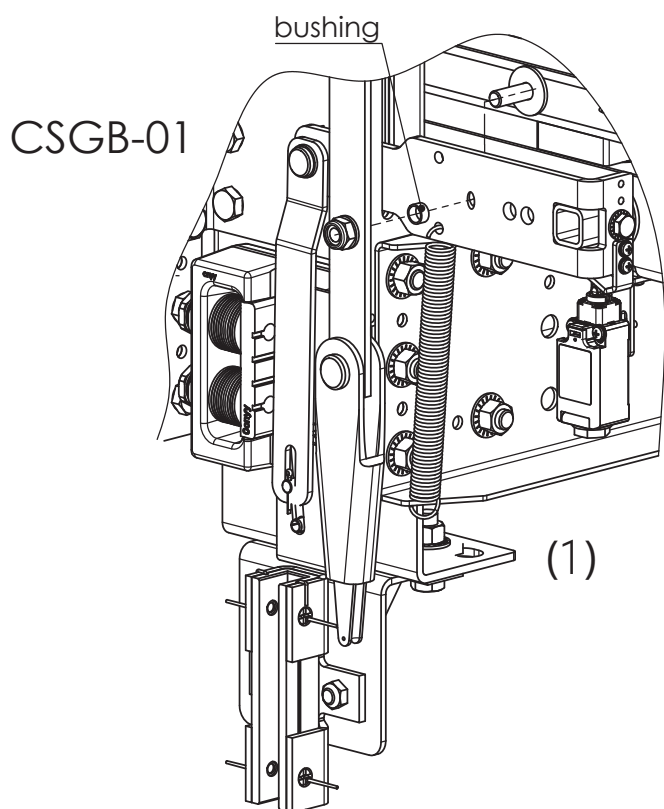


Ensure 3mm gap between rope guard and ropes. The car should be in the topmost floor when adjusting the cover plates.

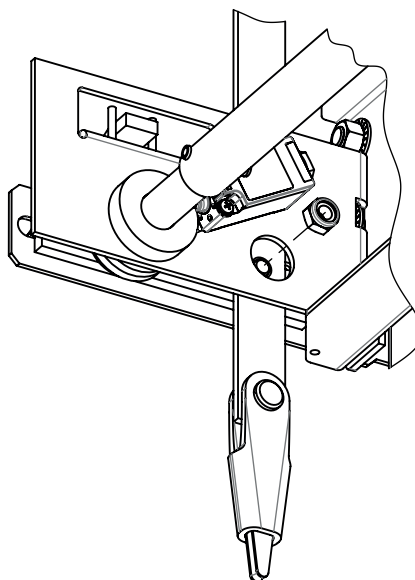


2.9 Overspeed governor rope fixing

- (1) Fix the rope housing to the safety gear activation (extension) lever.
- (2) Install the overspeed governor rope



BSG-25P



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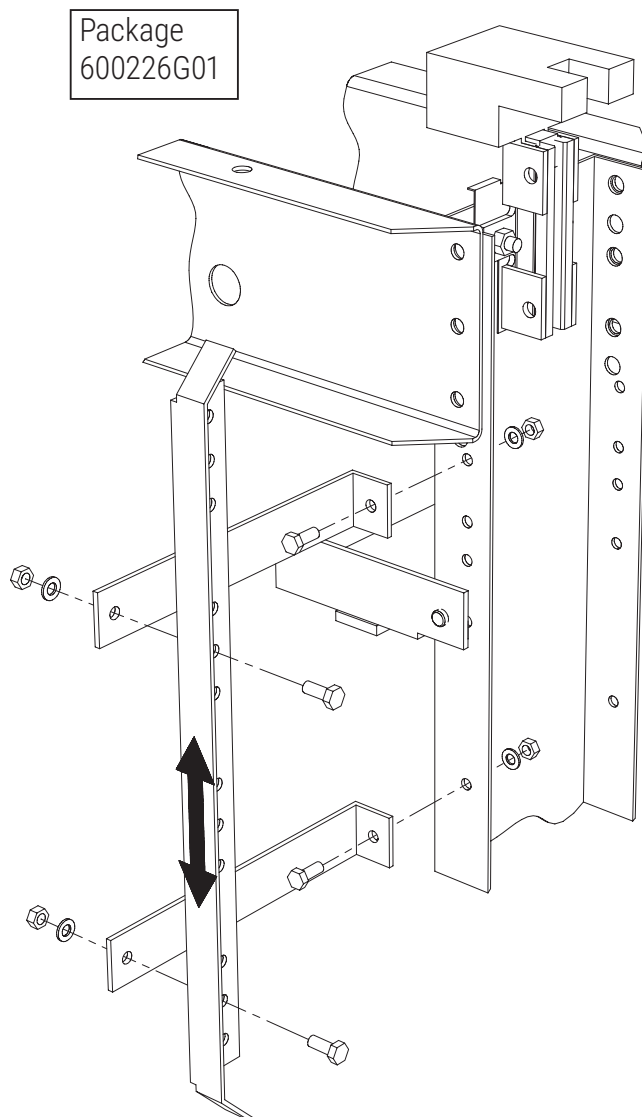
2.10 Limit switch ramp (optional)

The car frame WCF06 could be equipped optionally with limit switch ramp.

- (1) Mount the limit switch ramp with the delivered screws to the upper end of the car frame upright.



Take care of tightening torque
Screw M8: 23Nm



2.11 Adjustment of safety gear

- (1) Operate the safety gear lever by hand and check that both safety gears begin gripping at the same time
- (2) ... If not, check if the synchronization system is mounted / screwed in the correct way.
- (3) Check the safety gear contact function - adjust if necessary



The contact must brake just before safety gear gripping!

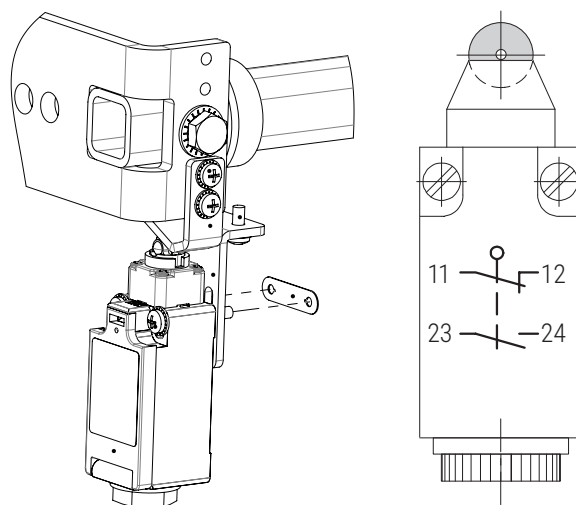
- (4) Adjust the safety gear in accordance with the operating instruction manual of the corresponding safety gear



Take care of required safety gear running clearance (referring also to the type of guide shoe used)

CSGB-01 safety gear contact (self reset type)

- use category: AC 15, A300, Ue/Ie 240V (3A)
- thermal current: I_{the} = 10A
- insulation voltage: U_i = 250V AC
- protection type: IP 54
- approved in accordance: VDE 0470 IEC/EN 60947-5-1



2.11.1 Electrical installation of the safety gear, slack rope device and blocking device contact



Work involving electrical equipment should only be carried out by an electrical fitter or qualified personnel.



Before carrying out work, switch off all voltage to installation equipment.

- (1) Connect the safety gear contact
- (2) Test the safety gear contact function - adjust if necessary
- (3) Adjust the switch horizontally on its fixing bracket



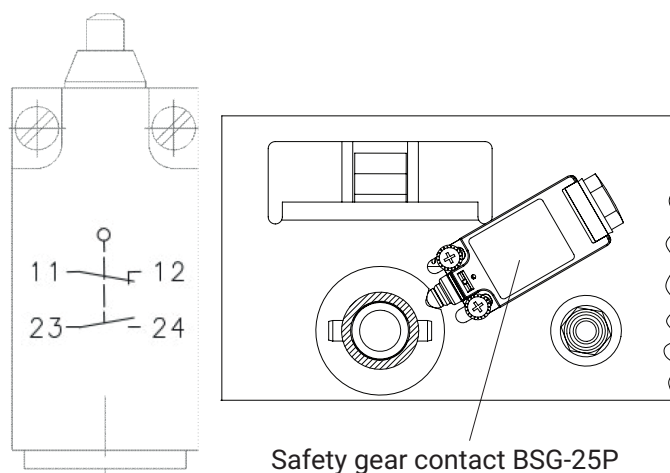
Adjusting dimension: 3-5 mm from the guard peak



The contact must trigger just before safety gear gripping!

BSG-25P safety gear contact (self reset type)-

- use category: AC 15, A300, Ue/Ie 240V (3A)
- thermal current: I_{the} = 10A
- insulation voltage: U_i = 250V AC
- protection type: IP 54
- approved in accordance: VDE 0470 IEC/EN 60947-5-1



Safety gear contact BSG-25P

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- (4) Connect the slack rope device and blocking device contact
- (5) Test the slack rope device and blocking device contact function - adjust if necessary
- (6) Adjust the switch vertically on its fix. bracket



Take note of the following when laying the connection cable:

- that the single polarity cables have double insulation
- the use and laying of cables is governed by the EMC

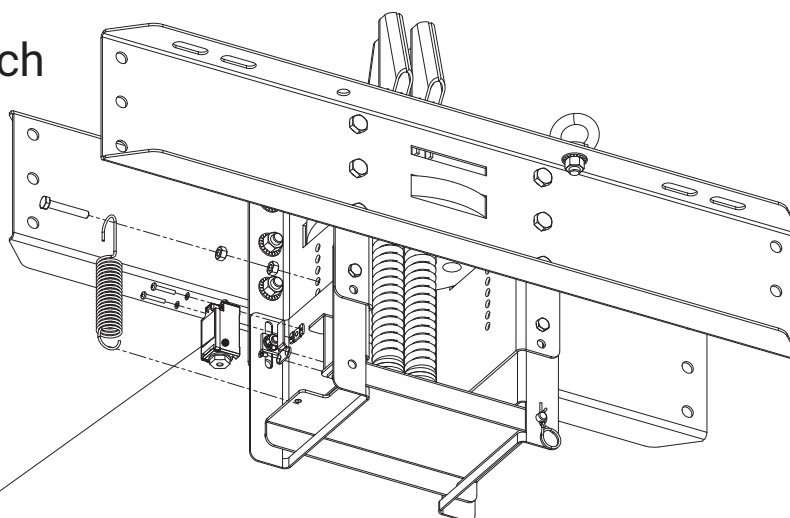
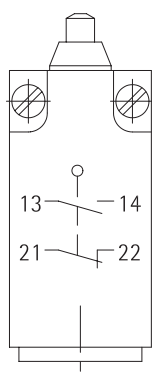
Slack rope & blocking device switch (manual reset type)

- use category: AC 15, A300, Ue/Ie 240V (3A)
- thermal current: I_{the} = 10A
- insulation voltage: U_i = 250V AC
- protection type: IP 54
- approved in accordance: VDE 0470 IEC/EN 60947-5-1

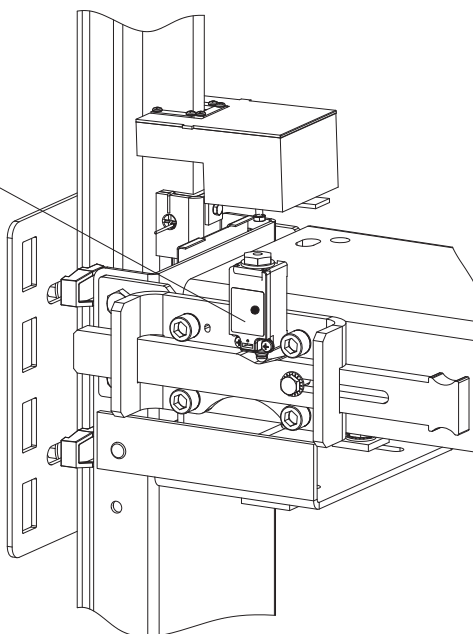


The safety gear contact opens the lift in - stal lation's remotely controlled safety circuit.

Slack rope switch

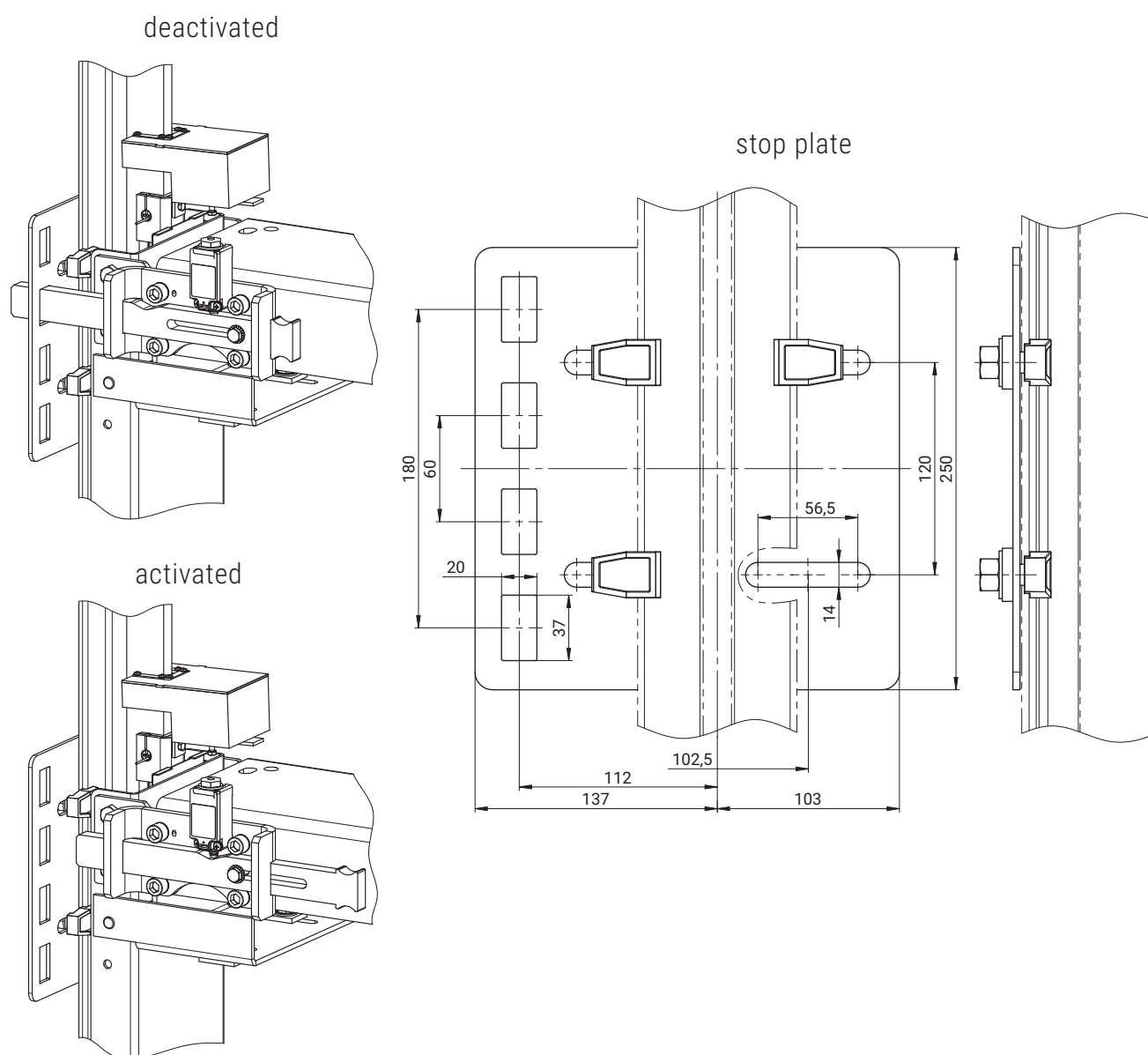


Blocking device switch



2.12 Blocking device (optional)

- Usage only for maintenance work in the roped elevator system allowed!
- Available for 2:1 suspensions
- Compatible with the following guide rails types:
T70, T75, T82, T89, T90



3 Function testing

Operational reliability of the installation is assured, assuming that all guide lines were adhered to during proper installation. The quality and function of individual components are subject to thorough inspection and is checked before dispatch from our works. Once installation fitting is complete, the lift car frame system should undergo an operational test before commissioning or before possible inspection from a technical institute.

First test run after installation



Before the first test run:
Clean the guide rails!



Clear all people and objects from the lift shaft before commencing the test run
Risk of crushing injuries!

Static & dynamic function testing

The procedures differ according to the safety gear device. Refer to the operating instructions of the relevant safety device.



Examine the lift car frame for changes after carrying out the safety gear test:

- deformation of components
- that the screws are firmly in place
- signs of damage or wear on the rope pulleys, guides and suspension points



Nobody should be in the lift car when carrying out test runs or functions tests!

The entire lift travel path should be slowly travelled

(in inspection mode) before the functions tests. Attention should be paid to the clearance of all fastened parts, especially with regards to the guide brackets/safety gear devices. Find and remove any protruding bolts or other dangerous restrictions well in advance.

Safety clearance inspections at the bottom of the shaft and shaft head (observe the applicable regulations/ guidelines):

- Check the following distances between the shaft floor, after descending the shaft passage:
 - Distance between guide - floor
 - Distance between cross beam - floor
- Check the following distances to the shaft ceiling, on completion of ascension of the lift shaft:
 - Distance between guide - ceiling
 - Distance between rope pulleys - ceiling
 - Distance between cross beam - ceiling

4 Maintenance, inspection and repair

4.1 Maintenance and inspection

The WITTUR lift car frame requires little servicing. Inspection checks must be carried out at regular intervals (minimum twice a year with each service) to guarantee safe operation. Alterations, damage or other irregularities should be reported, and repaired if possible. Frequent servicing and control checks not only make operation of the installation safer, but also ensure long and reliable service life.

It is recommended that control checks and servicing be carried out before legally prescribed functional tests (e.g. before TÜV tests).



The lift installation must be immediately taken out of use should any damage or irregularities to the lift car frame arise which could possibly impair operational safety.



Please contact us at WITTUR if you have any problems or queries.



Maintenance work should be expertly carried out with utmost care in order to guarantee safe installation operation.

WITTUR car frame maintenance and inspection check list (part 1)

General:

- Visual inspection for general irregularities (i.e. dirt build up, corrosion, deformation, fracturing etc.)
- Check the screw connections

Lubricators (if sliding guides):

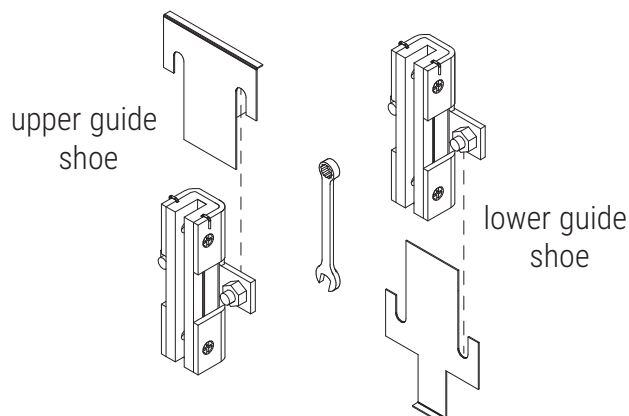
- Replenish
- Check the felt inserts for damage, replace if necessary

Safety gear devices:

- Check the operation of the safety gear device at every service call. Refer to the operating instructions of the installed safety device.
- The surface of the wedge area has to be clean. Wedge and roller must not be cracked (the roller function is OK if it can be turned easily by finger).
- Check the overspeed governor rope fixing

Guides:

- Check inserts or rollers at every service call. Replace the sliding inlays by new one if the running clearance is more than 2mm (refer to the Chapter "Carrying out repairs"). If there is such an excessive gap, but the inserts aren't worn out, add shims between guide shoe and upright. The surface of the roller has to be clean and not broken. The max. clearance between guides and roller have to be 0,3mm to 1mm



WITTUR car frame maintenance and inspection check list (part 2)

Platform support (isolation beams):

- Check visually that the platform support is not twisted, or rubber isolations are broken
- Check that the gap between stop screw and car floor fixing screw is at least **6mm** (without any load in the car)

Rope pulley:

- Signs of wear on the rope pulley; replace if necessary
- Check the condition of the rope pulley bearings by listening to the running noise (refer to the Chapter "Carrying out repairs")

Synchronization:

- Check the operation - the safety gear must grip at the same time on both ends

Rope fixing (1:1) and slack rope device:

- Check the springs of the rope fixing are not broken
- Measure the gap between seesaw and rope anchor rod surface (<4mm with empty car) - all the ends of the rope fixings have to be on the same horizontal line.

Load weighing device:

- If necessary, use test weight to test and adjust full load and overload function (use operating instructions of the load weighing device)

4.2 Carrying out repairs



As a rule, damage or deformation of a car frame (i.e. as result of bending or heating) cannot be repaired or straightened. The damaged parts should be replaced. Only use WITTUR spare parts.



Repairs should be expertly carried out with utmost care in order to guarantee safe installation operation.



Follow all the local safety instructions during the maintenance work.

The following repairs should be carried out on site by qualified fitters/service personnel:

- The sanding down of rust (i.e. caused as result of damage to the undercoat) and application of a suitable paint sealant.
- Changing the guides / guide shoe inserts
- Changing the rope pulleys



Please contact WITTUR if for any reason something is unclear, or you encounter damage that cannot be repaired with the help of these instructions..

4.2.1 Changing the guide inserts

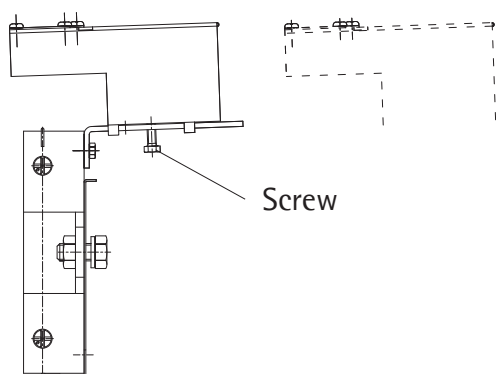
The components for the guides which are subject to wear (sliding guides: inserts) can be delivered individually as spare parts: (see "Spare parts document").

- (5)** Install the plastic pivots, sockets and the lubricator



The distance (play) to the rails (distance between guides) must be readjusted after replacement of the inserts and remounting.

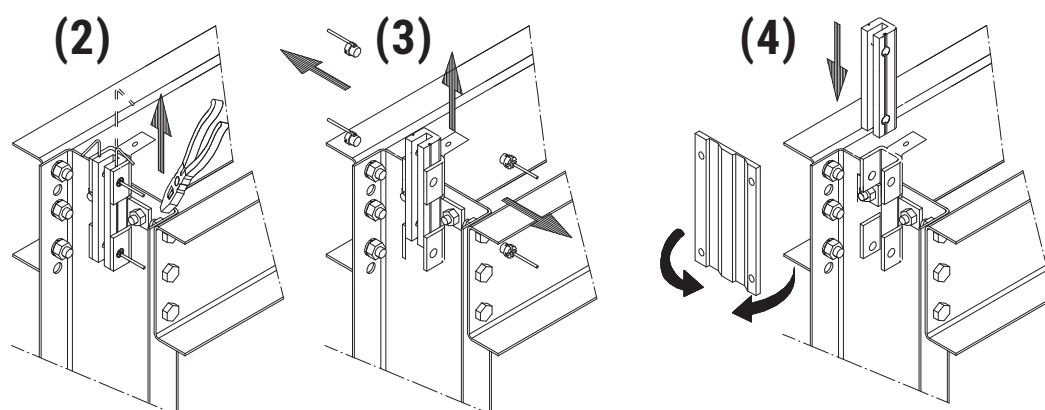
- (1)** Remove the screw and take off the lubricator



- (2)** Remove the socket pins if necessary

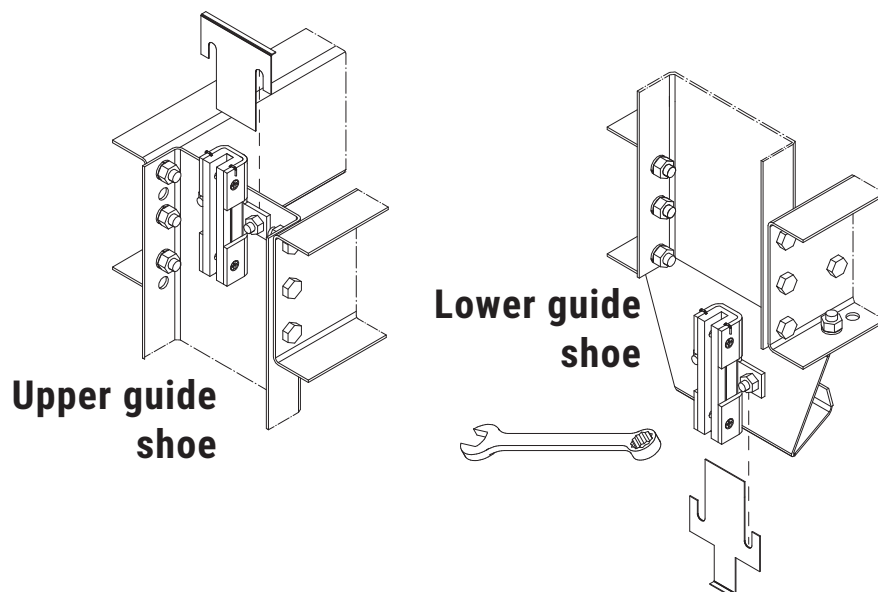
- (3)** Remove the plastic pivots, and take off the sliding piece

- (4)** Bend the new sliding piece by hand (white colored ones) and install it into the guide shoe body



4.2.2 Changing the guide shoes

Use shims to adjust in DBG direction (notice that different types of shims are used at top and bottom).



4.2.3 Changing platform isolation rubbers



If rubber isolations are damaged, contact the WITTUR engineering department.

Procedures for changing a isolation:

- Remove the car door panels
- Remove the upper isolation of the car
- Lift the car using a jack and extra support beam

4.2.4 Changing the rope pulley

The rope pulleys can be delivered individually as spare parts (refer to "Spare parts document").

Procedures for changing a rope pulley::

- Lower the lift car onto its contact buffer
- Safeguard the counterweight against falling
- Release the ropes
- Unscrew the complete rope pulley / axle / axle bracket unit
- Dismantle rope pulley / axle / axle bracket unit
- Replace the rope pulley, and remount the parts following the instructions above in reverse order



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