ÖZBEŞLER MAKİNA

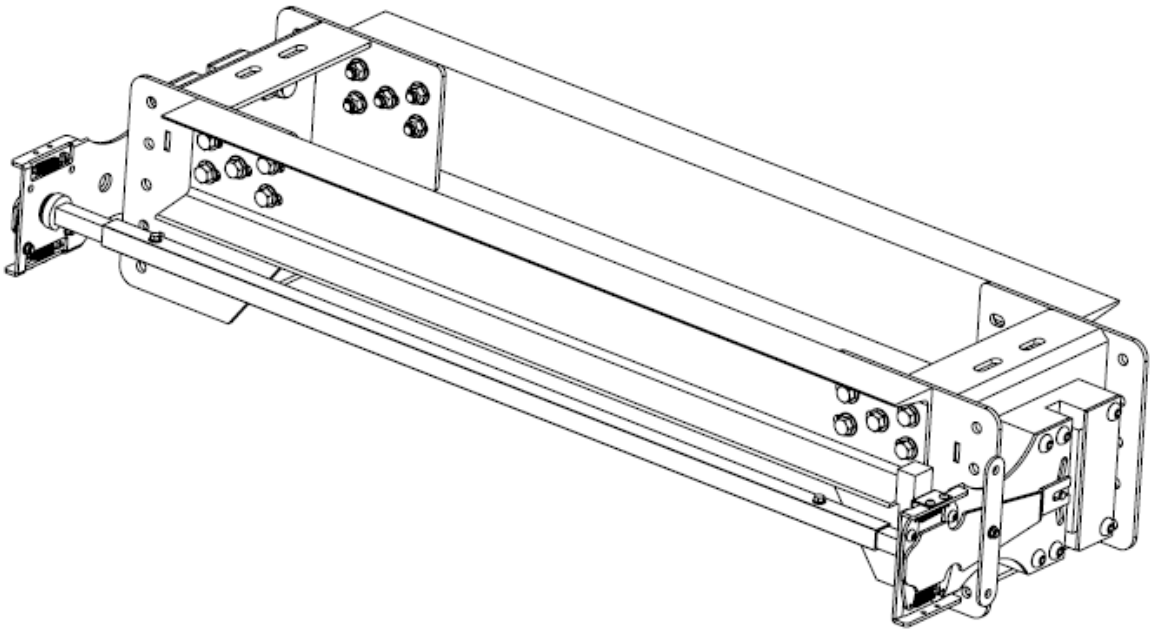
SKY 4000-A3
PROGRESSIVE SAFETY GEAR

INSTALLATION, OPERATION
And
MAINTANENCE MANUAL

2019

CONTENTS

1. General Information and Instructions



Data(type)	SKY 4000-A3-9	SKY 4000-A3-16
Slide-way head thickness	9 mm	16 mm
Type of slide-ways	70x65x9	70x65x9
Carriying capacity-min.max (kg)	2350-4550	2350-4550
Max. tripping speed	1.5 m/s	1.5 m/s
Slide –way surface quality	Cold-drawn/Machined	Cold-drawn/Machined

Data(type)	SKY 4000-A3-9	SKY 4000-A3-16
Slide-way head thickness	9 mm	16 mm
Type of slide-ways	70x65x9	70x65x9
Carriying capacity-min.max (kg)	2055-4125	2055-4125
Max. tripping speed	2.16 m/s	2.16 m/s
Slide –way surface quality	Cold-drawn/Machined	Cold-drawn/Machined

Data(type)	SKY 4000-A3-9	SKY 4000-A3-16
Slide-way head thickness	9 mm	16 mm
Type of slide-ways	70x65x9	70x65x9
Carriying capacity-min.max (kg)	1500-3150	1500-3150
Max. tripping speed	2.5 m/s	2.5 m/s
Slide –way surface quality	Cold-drawn/Machined	Cold-drawn/Machined

CAUTION! Use rail according to ISO VG 150

CAUTION! Lubricating oil for rail according to DIN 51524 kinematic viscosity (cSt) 135-165 (Mobil Gear 629, Shell omala 100 Esso spartan EP 100 BP Energol GR-XP100)

CAUTION! Montage the safety gear according to the label values.

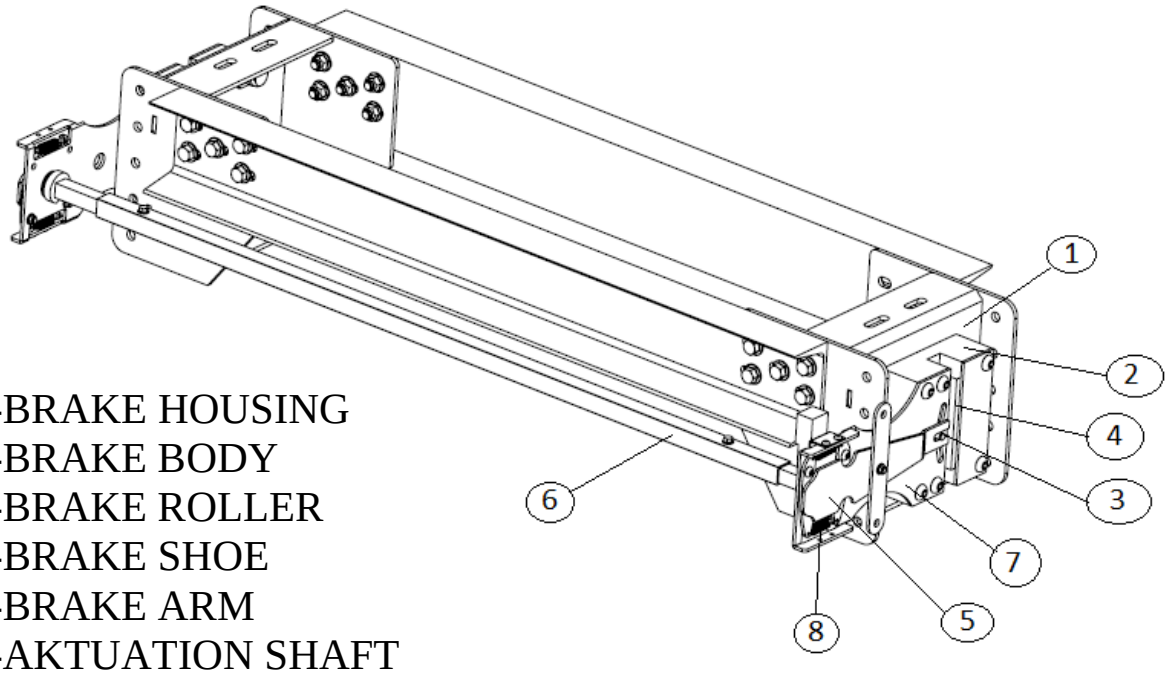
- This manual is prepared to help installation of safety gear correctly. Therefore, this explains just only safety gear.
- The safety gear must be installed, adjusted and maintenanced by only experienced person. The safety gear can not be installed by inexperienced person.
- The safety gear is one of the most important parts in elevator mechanics. During installation period, this point must not be forgotten and must always be considered.
- Before installation, all safety rules must be obeyed and comfortable working conditions should be set up.
- While heavy parts are lifted and installed suitable equipment should be used.
- The safety gear consists of two brake blocks. Serial numbers of these brake blocks must be same.
- The brake blocks without seal must not be installed. Absolutely, these blocks must be sent back to manufacturer firm and sealed again.
- Before installation, the cabin guide rails must be cleaned. Due to protective lubricant coating, the brake blocks may not work correctly.
- The brake block jaws and the guide rail must be parallel. This condition must be checked.
- The required distances between the brake block and the rail must be adjusted correctly by using a suitable pattern.
- Check label information on brake block. (P+Q weight, braking acceleration, serial number)
- The over speed regulator which actuates safety gear must also be assembled according to the installation manual. The installation of the over speed regulator must be made correctly and the diameter of steel rope connected to the safety gear must be 6 mm at least. Before elevator runs, the over speed regulator below tension roller and other contacts must be assembled. Safety tension

connection must be made according to EN 81 standard. The steel rope carrying through over the assembled regulator must be connected to safety gear. The rope must be stretched sufficiently and it must actuate the safety gear easily. If weight on the safety gear is not enough, safety gear may not work correctly. To check whether tension is enough, below steps can be followed practically; system is worked by holding the tension roller. If the safety gear works easily it means that tension force reached to enough value. At same time, if the pulley rotates without contact, it means that force is not enough.

- In elevators with high tripping distance much thicker regulator ropes than others should be used. The ropes must be selected according to EN 81 standard.

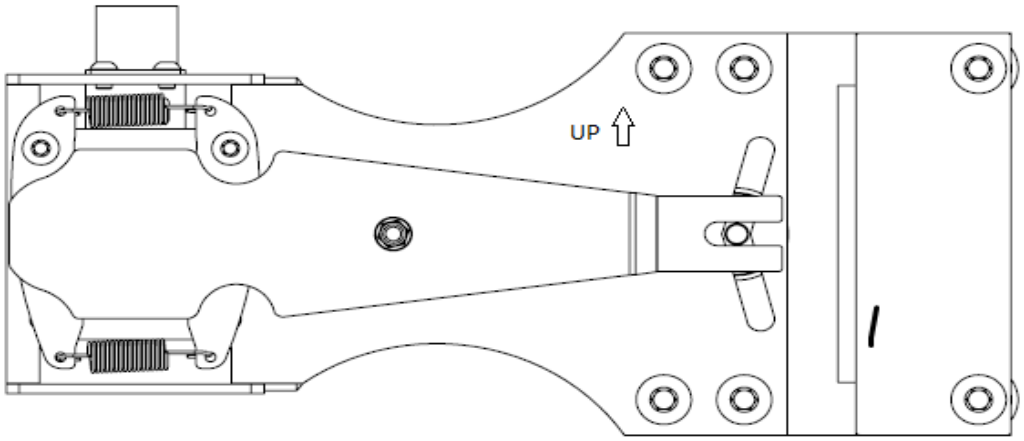
- The over speed regulator operating speed must be suitable for selected safety gear.

2.SKY 4000-A3 Progressive Safety Gear Parts

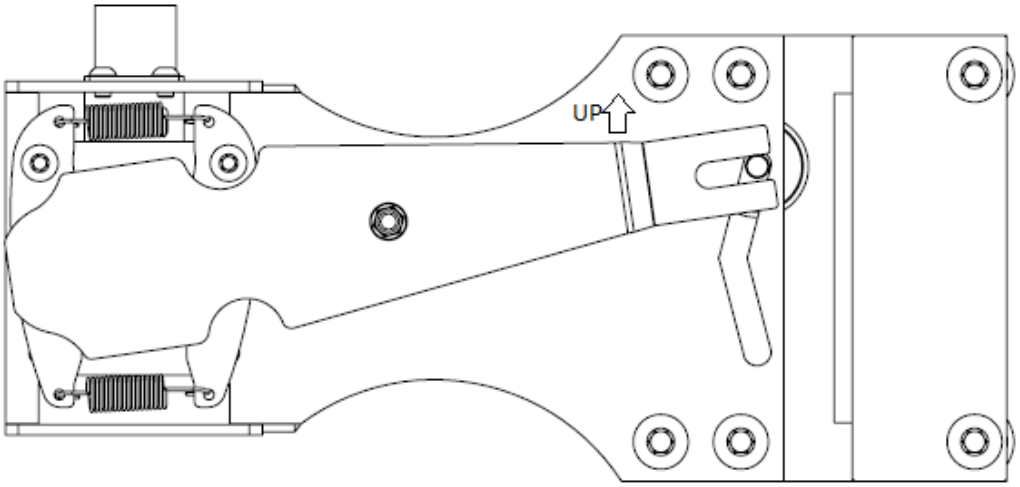


1-BRAKE HOUSING
2-BRAKE BODY
3-BRAKE ROLLER
4-BRAKE SHOE
5-BRAKE ARM
6-AKTUATION SHAFT
7-ROLLER BEARING HOUSING
8- SPRING.

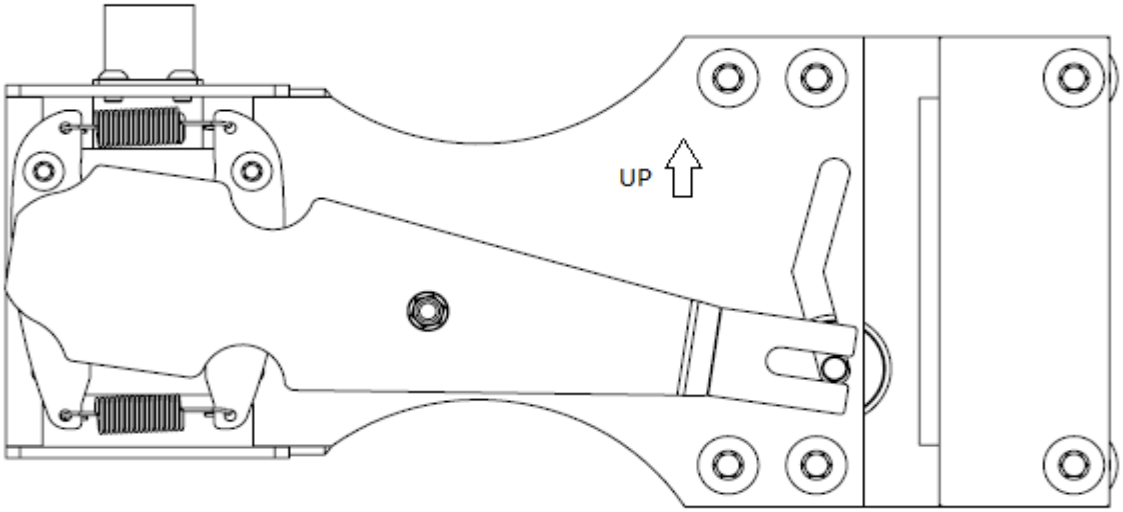
STANDBY



DOWNWARDS BRAKING



UPWARDS BRAKING



2. Product Label

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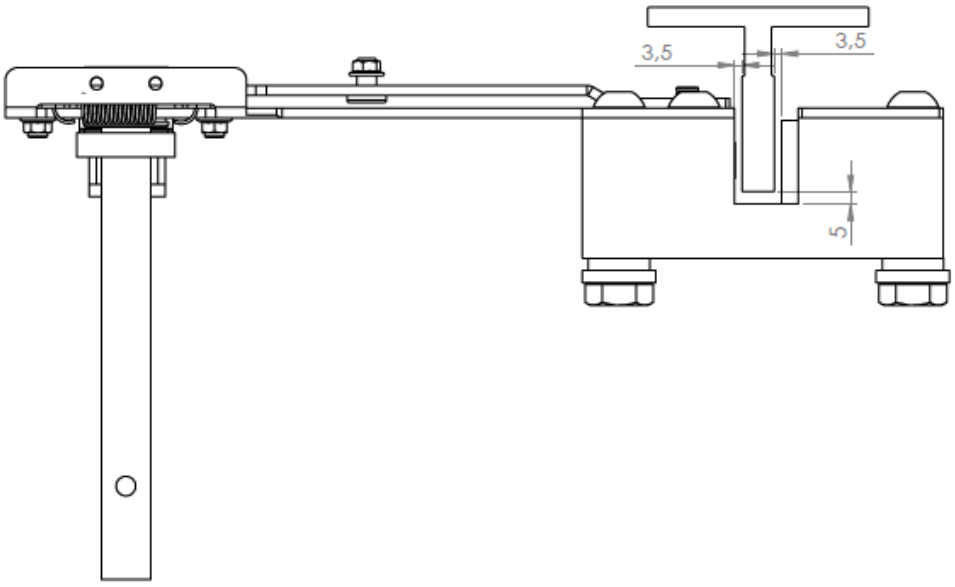
Model	: SKY 4000-A3	Date	:2016
Vmax.act:	2.16 m/s	P+Q	:4125 kg.
Rail	: Coul Drawn	Serial No	:0001
	Machined	Rail Thickness	: 16 mm.

CAUTION!

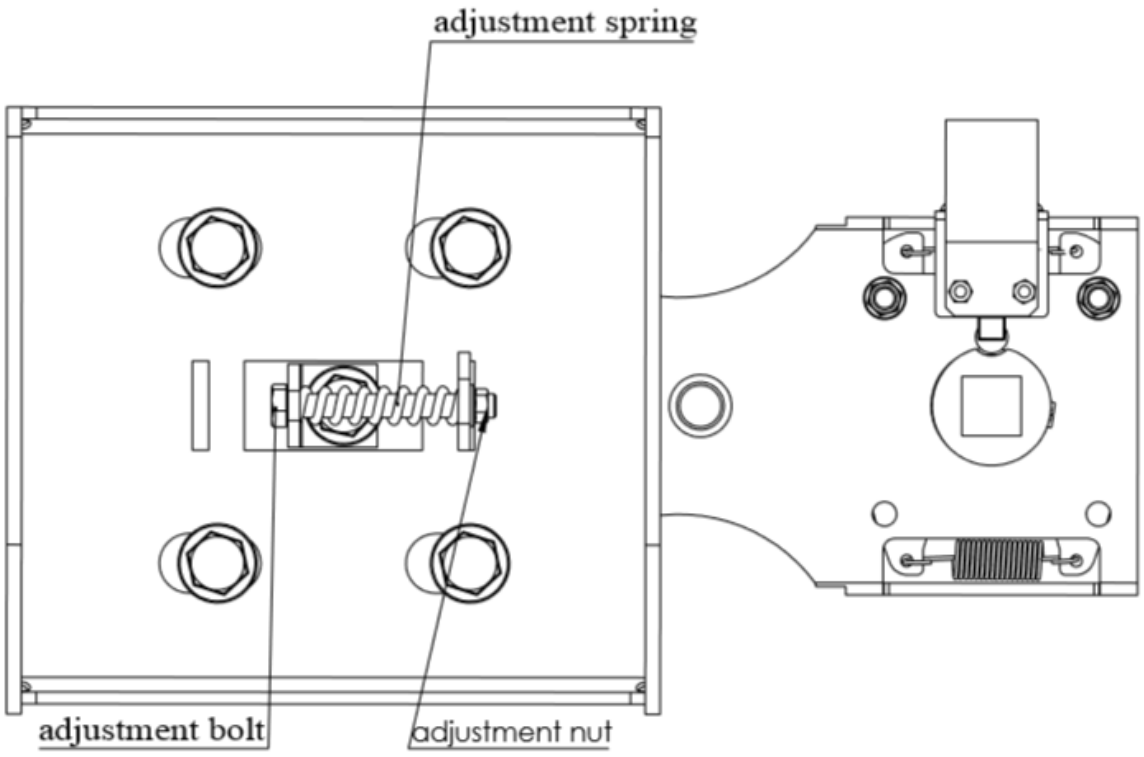
The product label is placed flank side of the brake block. Before installation, all information on product label must be checked carefully. The product label must not be damaged during installation period. If there are missing and erased information on label, don't install brake blocks and send them back to manufacturer firm.

3. Installation and Adjustments



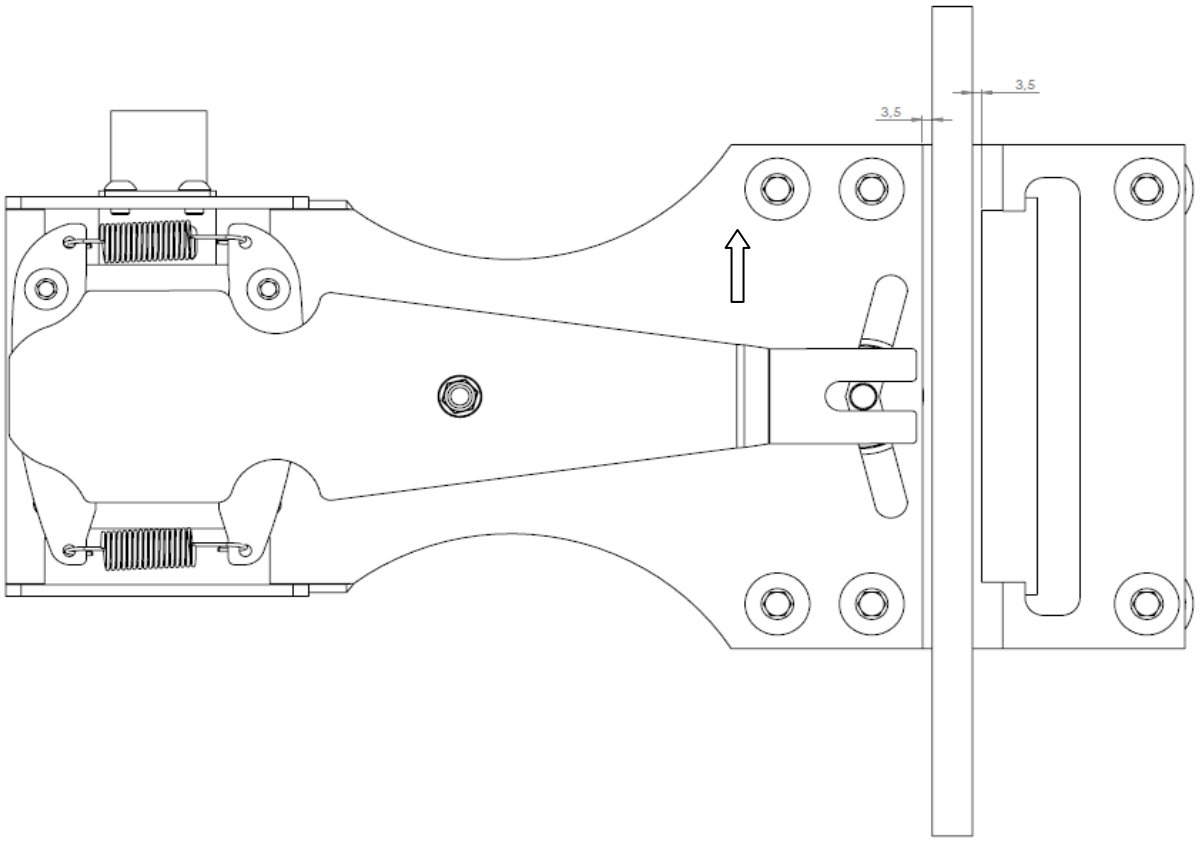
CAUTION!

Required distances between brake block and rail should be adjusted correctly. In this product sufficient operating spaces is provided. This can be also used for 62 mm rail height easily.



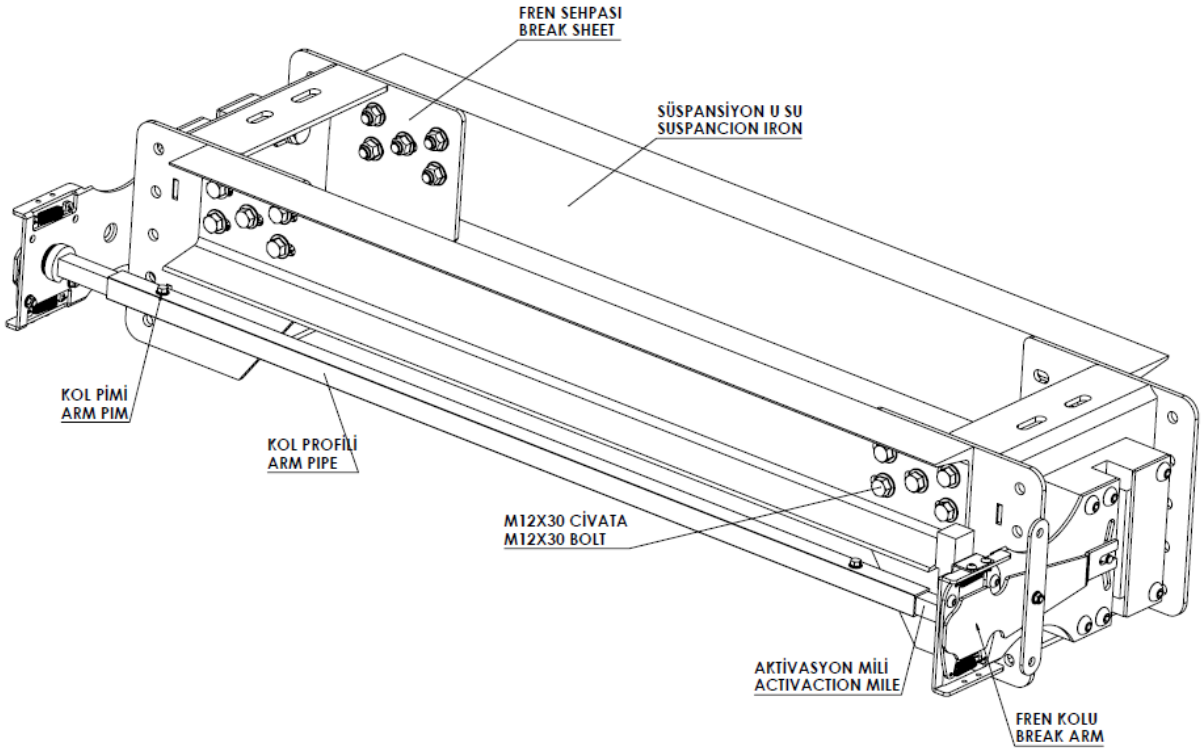
The brake block is adjusted with the adjustment bolt according to above dimensions. When system is actuated by pulling brake arm, easy working in system should be observed. Besides, both of blocks should be worked synchronously. This adjustment is very important to provide well force share during braking period. This adjustment is provided by tightening nut against adjustment bolt and by tightening contra nut adjustment is fastened.

When brake block is assembled, the arrow on cover of brake block must definitely show upwards.



Distance between rail and roller must be 3 mm. Besides, distance between rail and both of brake shoes must be 3 mm, too. While these distances are being adjusted, the adjustments of brake shoes must not change.

6.İnstallation instruction :



1- Before the installation, OK sign on the brakes will be fixed up.
2- The pipe whose outer diameter is 30 mm and inner diameter is 20 mm should be cut according to the right size and and fixed in the activation mile.
3- M12*30 bolts and U irons are fixed together on the metal sheet.
4- After the bolts are squeezed, the pin bores are formed. The bolts are fixed in the bores and thebolt pins are squeezed.
5- The brake pads should be checked whether if it moves well or not. If not, the brake pad should be changed.
.**6**- After the space between the bolts and the rails is arranged, the bolts are fixed.
7- The brake arm should be checked upside down if it works well or not.
8- The switch button should be checked if it swithches off or not.
9- The switch electric current should be handled by a specialist.

CAUTION!

For the rail lubrication use of special lubrication equipments is preferred. Thus, the rail surfaces can be lubricated sufficiently.

7.Maintenance

The safety gear must be checked during periodical elevator maintenances. It must be checked whether the system works correctly. For the safety gear special maintenance is not necessary. But, if corrosion occurs depending on climate conditions and humidity the safety gear must be cleaned, lubricated and upgraded to perfect working conditions.

CAUSE OF UNBRAKING SITUATION

IMPORTANT : You should assemble to safety gears after read to user guide and provide to dimensions of draws. Correct working of the safety gears is possible after providing to conditions in user guide .

1-Check to horizontally moving after providing all adjustment of safety gears , see to being untightening.

2-If the safety gears use with non- standart guide rails , braking may not occur.

3-You do not allow enter of strange particuls (sand ,mortar…..etc) in safety gears. This partculs may cause of locking the system and safety gears may not brake.

4-If the safety gears assemble on the lubricated guide rails, you only lubricate to guide rails by recommended oils, otherwise braking distance increase.

5-You must provide to assemble of safety gears which arrow on the cover should show up direction, arrows will always shows to up direction. Otherwise safety gears may not brake

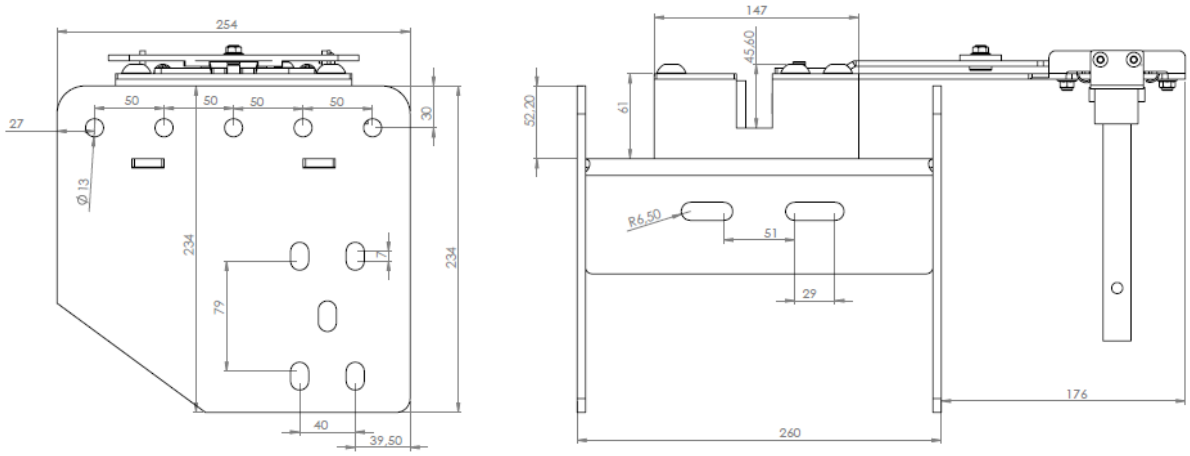
6- You should to provide corresponding assemble of over – speed regulater according to user guide. The rops as 300N tensions after only correct assemble of over – speed regulater.

7-If the safety gears is not parallel to the guide rails it may not brake because of non – pressure condition between Moving Jaw and Guide Rail.

8-If the safety gears does not brake same time with other ones because incorrect assemble of safety gears, corresponding brake distance may not occur.

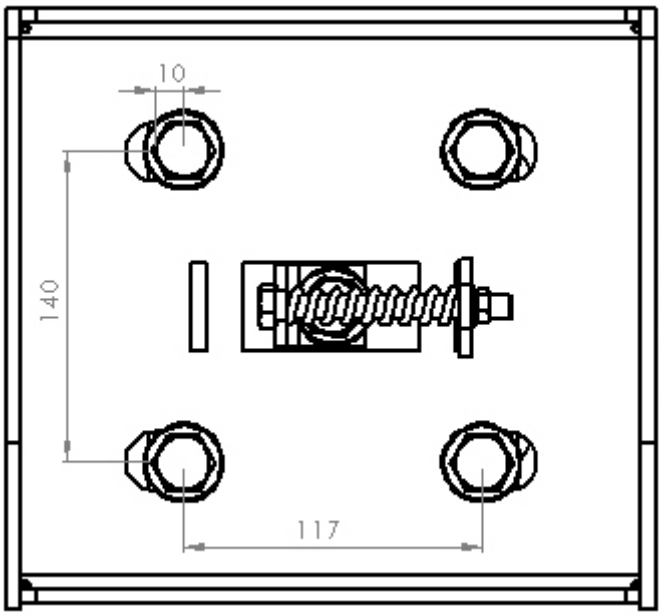
8.Drawings and Miscellaneous Measurements

Brake block top view dimensions

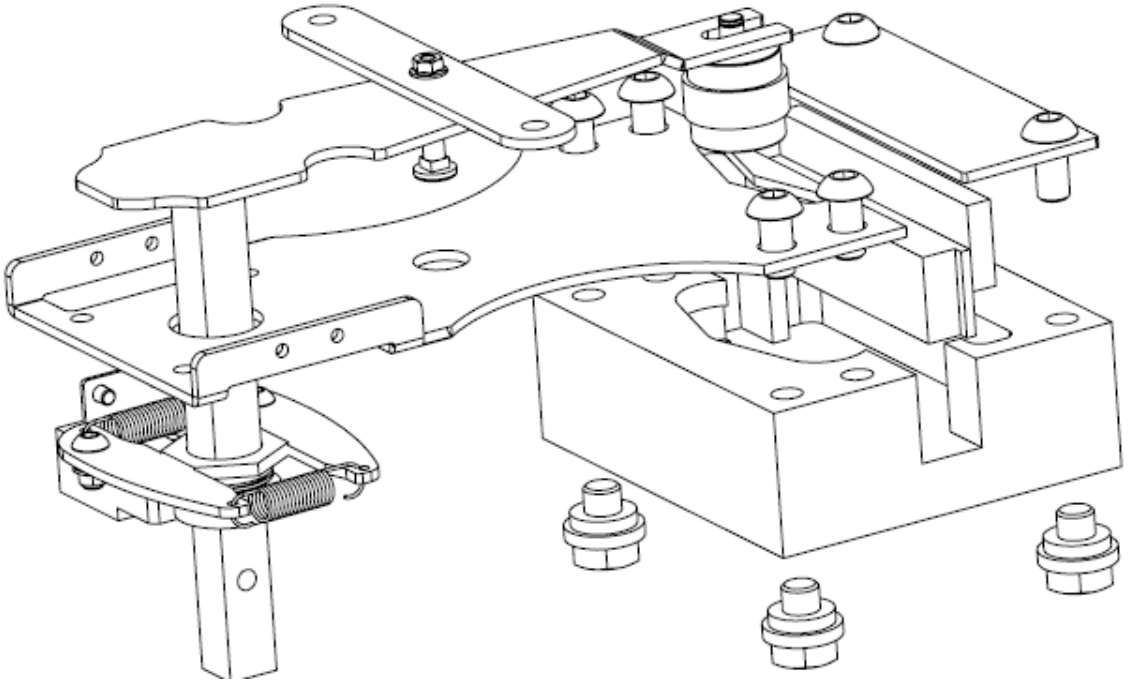


Back view of brake block:

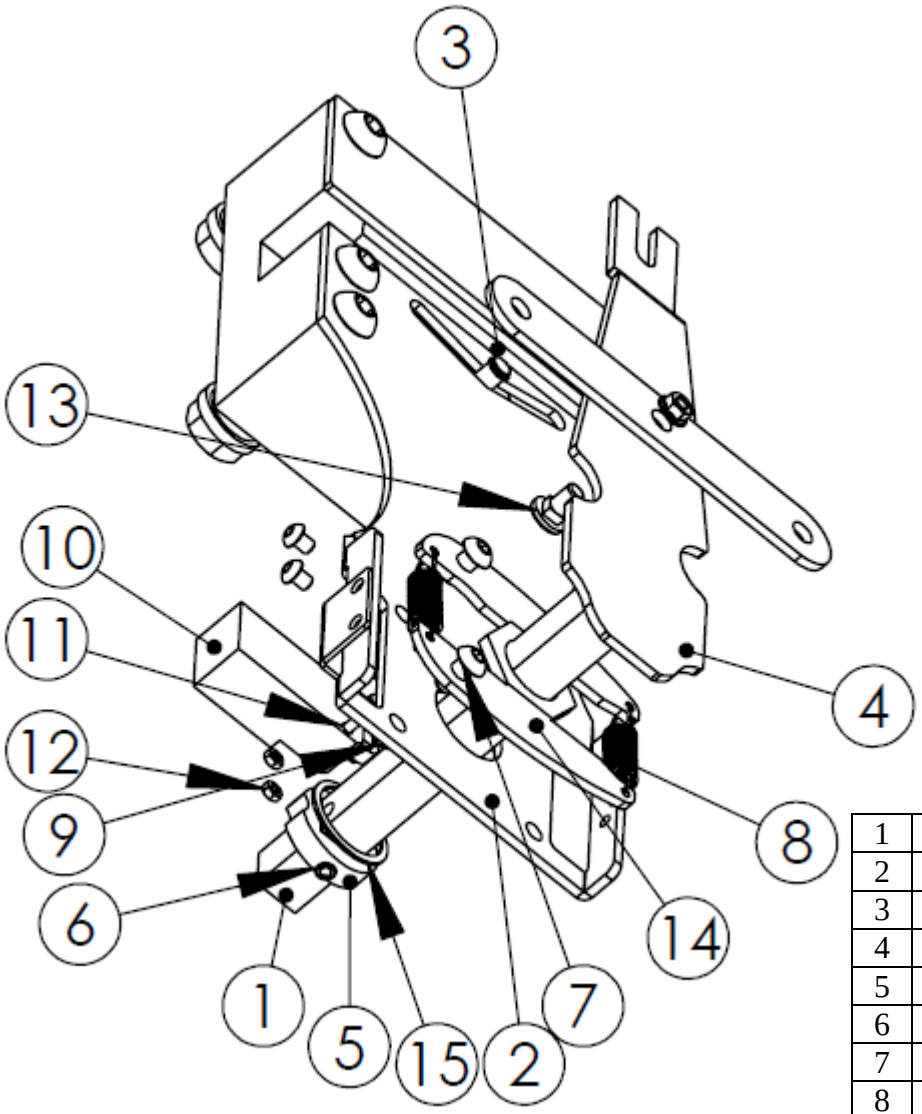
Dimensions of assembly holes



8. SKY4000-A3 Eko Safety Gear Demontage Pictures



10.Actuation Mechanism



1	Actuated Shaft
2	Roller Shaft
3	Roller Shaft
4	Actuating Arm
5	Bush
6	M8 Set Screw
7	M8X80 Bolt
8	Spring
9	M8 Nut
10	Security Swic
11	M4X50 Bolt
12	M4X50 Nut
13	M8X30 Bolt
14	Spring push plate
15	Ring

SKY4000-A3 progressive safety gear is designed for elevators. Therefore for different aims it is not used. In case of separation of brake block warranty will not be valid and manufacturer firm will not responsible.

ÖZBEŞLER MACHINE.....2019

AT UYGUNLUK BEYANI
EC – DECLERATİON OF CONFORMİTY

İmalatçı firma (manifacturer) :ÖZBEŞLER MAKİNA
Samanlı mahallesi 2. serin sok. no:138 YILDIRIM/BURSA

Aşağıda tanımı, modeli ve seri numarası verilen ürün/ürünlerin belirtilen standartlara ve direktiflere uygun olduğunu beyan ederiz.

We declare that the product/porducts with descripton, type and serial nr. is/are mentoined below in confirmation with the standarsts and directives which are mentioned.

(Product Description)	:Bİ-DİRECTİONAL PROGRESSİVE SAFFETY GEAR
Modeli	:SKY 4000-A3
Standartlar (Standardads)	:EN 81-20/50
Direktifler (EC Directives)	:2014/33/EU
Sertifika No	:
Onaylanmış Kuruluş (Notified Body)	:1015
	Tricoupi Kifisia 14554 BRNO/CZECH REPUBLİC
Tarih (Date)	...../……../……..

Seri No (Serial Nr.) :……

İMZA / KAŞE (Signature / Stamp)