# **MOUNTING INSTRUCTIONS**



**VER.03-2017EN** 





In this handbook we are mentioning the instructions for the correct installation of our track system. This handbook is dedicated to be used by experienced and qualified technicians and it's not advisable for handymen or for using by unschooled personal.

In this handbook we are mentioning the instructions for the correct installation of our track system. The supplier answers for the installation of the whole door. This handbook is dedicated to be used by experienced and qualified technicians and it's not advisable for handymen or for using by unschooled personal.

#### The standard track system set is composed by following parts:

- A set of rails (vertical and horizontal)
- B necessary standard parts/ basic material for montage
- C fittings (hinges, wheels, etc.) from selected material
- D set of wires
- E torsion bar
- F torsion spring

Notice: Parts (bolts, etc.) required for mounting the tracks to the wall or for its hanging to the side wall or ceiling are not included.

#### **Optional equipment**

G connecting/hanging profiles of horizontal rail set

H upper sealing for montage to lintel

We are sure that you will successfully install the track system.

When you will have some questions or you will need to clear up any problem please don't hesitate to contact Kružík Ltd.

#### ATTENTION!

- ! This handbook describes just the installation of the track system parts and it's necessary to complete it with instructions for the montage of any optional parts.
- ! Carefully read this handbook before beginning the installation.
- ! Some of the parts might be sharp or might have burrs.
- We recommend using protective gloves.
- ! All supplied parts are engineered for using with up-and-over doors.
- ! Through the tension the springs can put out heavy forces. Work carefully. Use proper equipment. Respect that you stay in a stationary position.

 By the installation ensure enough light. Remove obstructions and dirtiness. Ensure that there is no one to assist except the mounters on the installation place.
Other persons (children) can be in the way through the installation and they could threaten themselves.

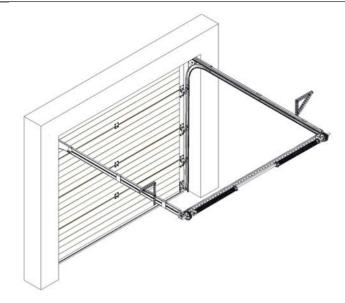
#### Equipment necessary for correct and fast installation

Electro-tools	tools
Drilling machine	o-keys 10, 13, 14, 15, 17mm
Impact drilling machine	gola set 10, 13, 17
Aku-drilling machine	set of imbus keys
grinder	nut 10, 13mm + prolonged bits adapter combination pliers, gas pliers
	hammer
	air level
	yardstick
	pencil
	2× bar for springs tensing
	rope
	2 blocks, appr.20 and 40mm high clips

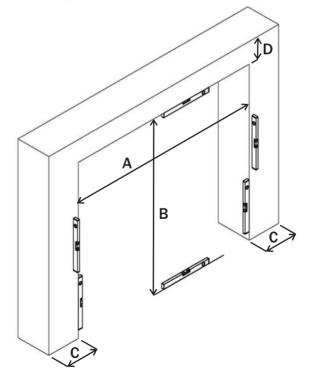
#### The construction conditions on the site are for sectional private and industrial doors installation and their further flawless operation essential!

- surface flatness
- for the sectional door installation the surface has to be even (side room, headroom, floor). Side room and headroom have to run in one line. Maximal allowed flatness variations are +/-2mm.
- masonry base for installation has to be solid and dry. In the mounting area is no electric wiring within the walls allowed.
- each larger unevenness of the mounting base, can have a negative influence on the proper door operation. Use plugs with 12mm diameter to fix the sectional doors in the masonry wall.





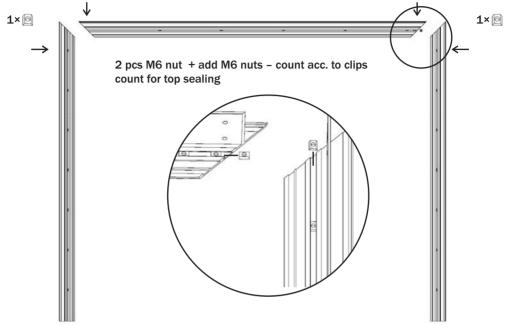
Prior to the installation check the mounting area.



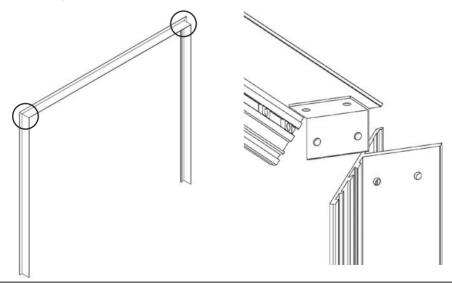


Setup before connecting the T-profiles

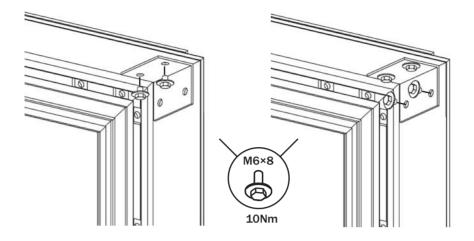
Insert a M6 nut into each vertical profile. Insert appropriate count of M6 nuts (acc. to clips count) + 2 nuts more into the horizontal profile.



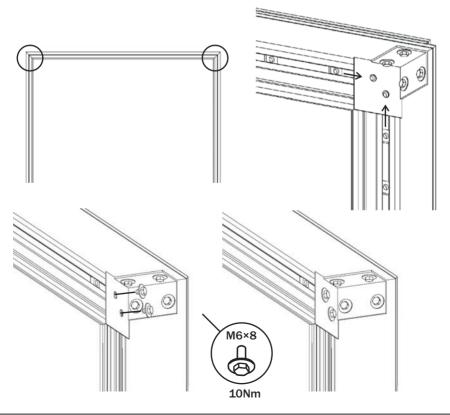
Set up the T-profiles in such way that they utmost align. From the inner side insert the L-profile and screw it together with M6×8mm bolts.







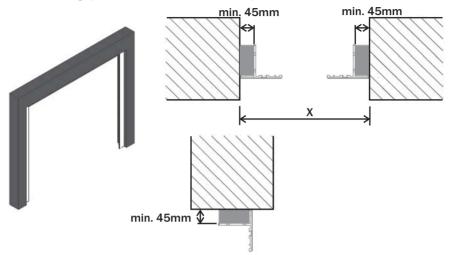
Insert the corner joints into the corners, slide the nuts under the holes and screw it together with M6×8mm bolts.





Mounting into the building opening on the existing frame

For the mounting into the building opening on the existing frame it is necessary a minimum frame width of 45mm. In case of narrower frame measure the size X and subtract it from the value 90mm; the gap between the frame and the T-profle has to be underlaid.



Mounting into the building opening on the outside opening









Mounting into the building opening

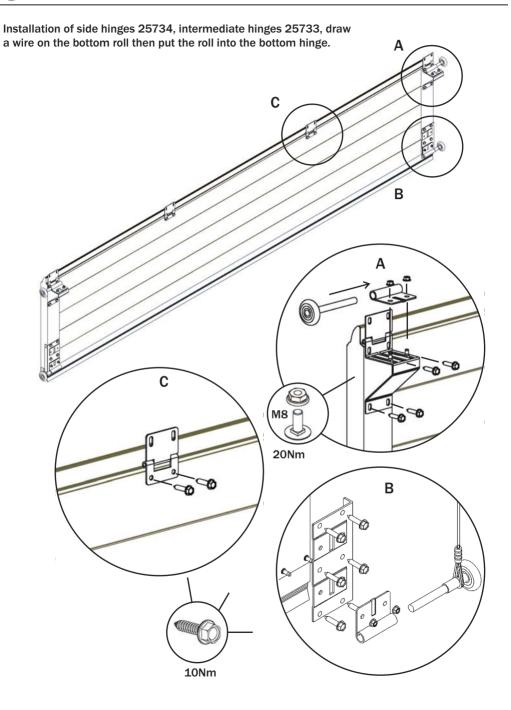




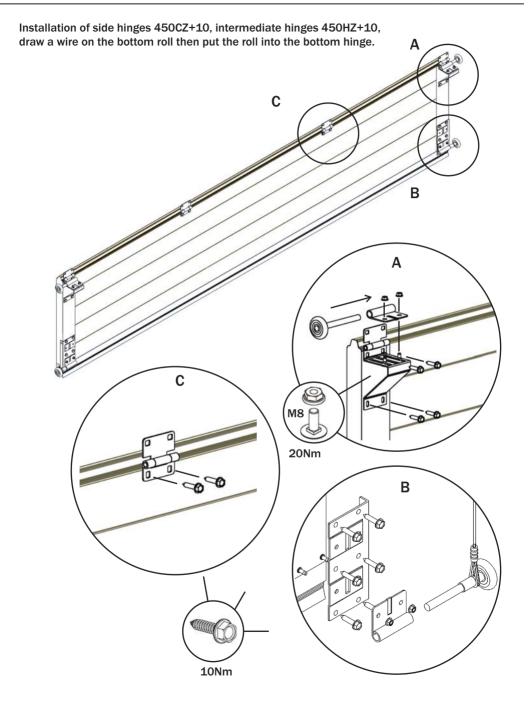




KRUŽÍK

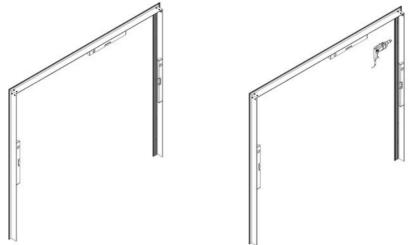




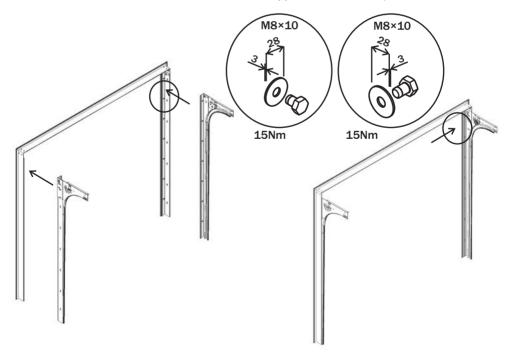


7

Insert the assembled frame from the outside into the opening, align it with the air level, mark and dril holes into the walling. Insert back the frame, re-align it and if necessary underlay it with supports and screw it on.

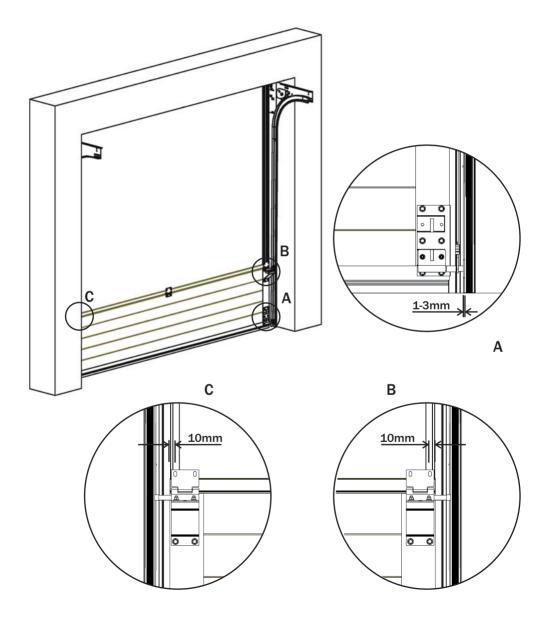


We continue further as for standard door installing. Bolt up on the vertical parts of the mounted frame the vertical rails with a **M8×10mm** bolt with applied washer **ø8mm/28×3mm**.

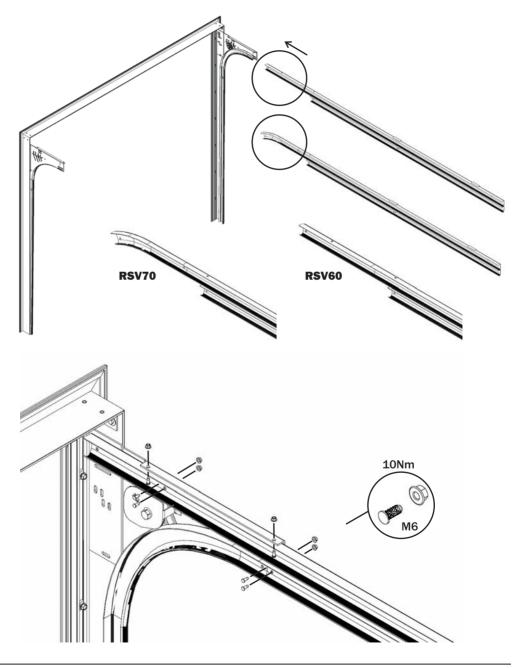




The section is to be inserted into the opening so that it laps over 10mm on each side. Put the rolls into the side and bottom hinges. The section in the opening is to be balanced by an air level. In case the floor is not even it is important to ensure that one of the sides will be chocked. The bottom section rolls have to be put into the vertical rails. The room between the bottom roll and the vertical rail has to be at least 1mm and max. 3mm.

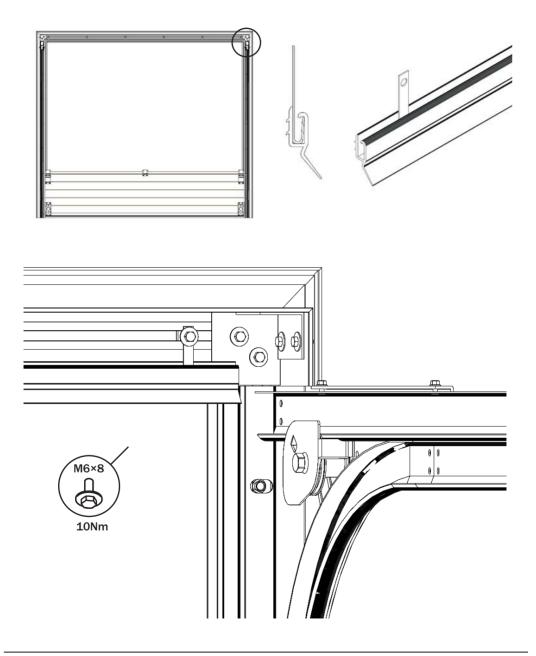


Put the horizontal rail into the vertical rail and fasten it with flathead bolts M6.



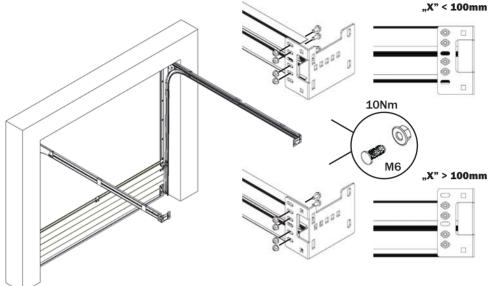


Cut the top sealing to necessary length and fasten them using clips and M6 bolts into the M6 nuts in the T-profile.

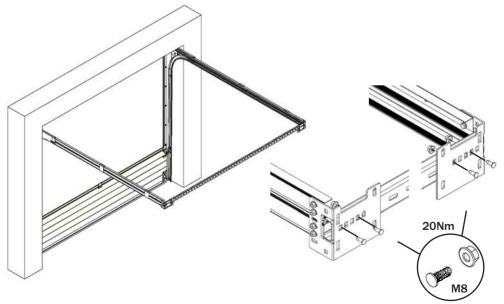


KRUŽÍK

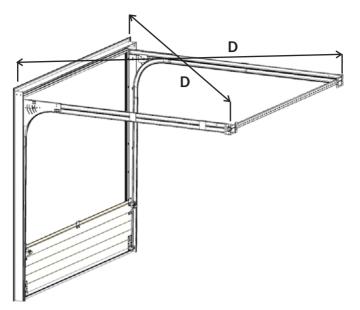
Fasten the supporting consoles of the C-profile to the end of the horizontal rail by M6 bolts . The location of the supporting console of C-profile depends on the space "X", which is disposable for mounting.



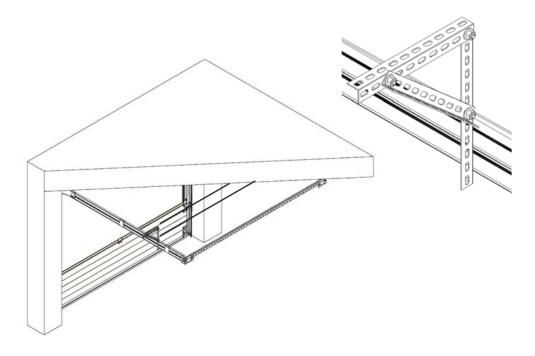
Connect the horizontal rails by using the C-profile. C-profil screw by M8 bolts. The C-profile mustn't overlap the horizontal rails.

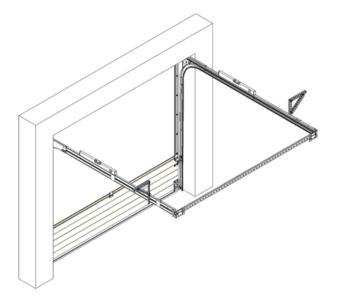






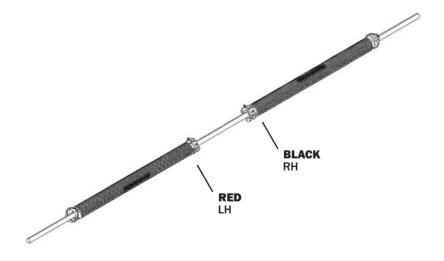
With a perforated mounting profile fix the horizontal rails to the ceiling. Then check the diagonals, in case of necessity adjust the horizontal rails so that the diagonals are equal.



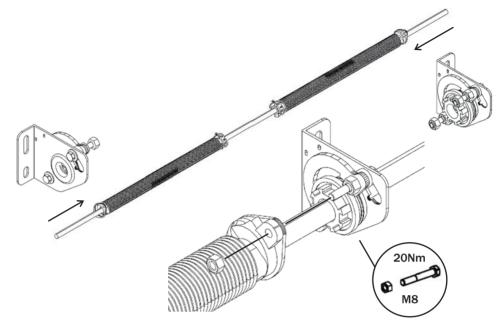


KRUŽÍK

We slip the torsion springs over the torsion bar, LH on the left and RH on the right side in case of 2 springs.



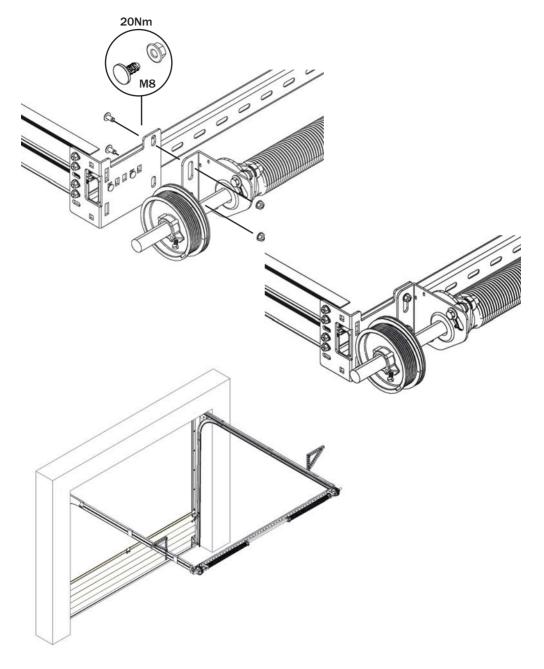
The spring break device will be fixed to the spring.



Slip the winding drums over the torsion bar.

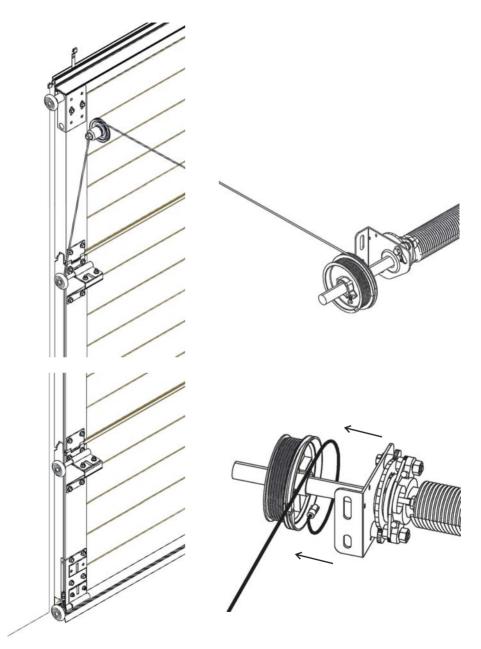


At the end of horizontal rails fasten the torsion springs system.

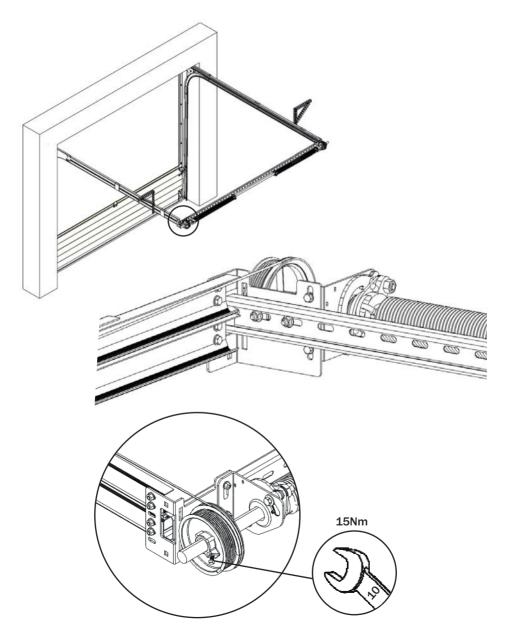




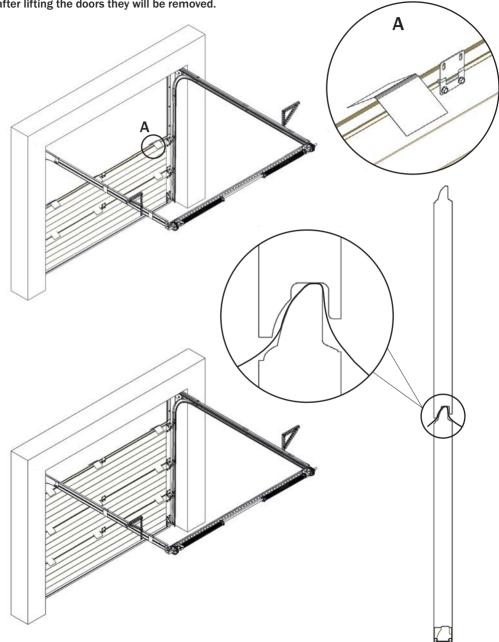
## Wires installation



Turn the drum until the lifting cable is tight. Align the winding drum with the bar, so that the lifting cable can freely reel up. Then secure the winding drum on the bar by bolts (torsion moment 10Nm). When the door is absolutely equilibrated, both cables are tightened equally.

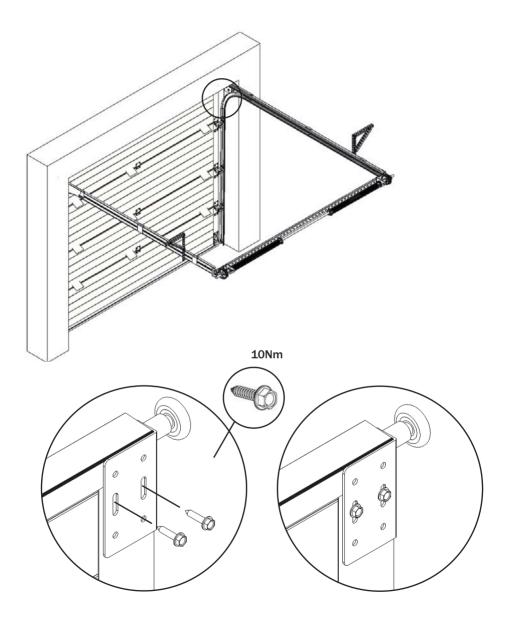






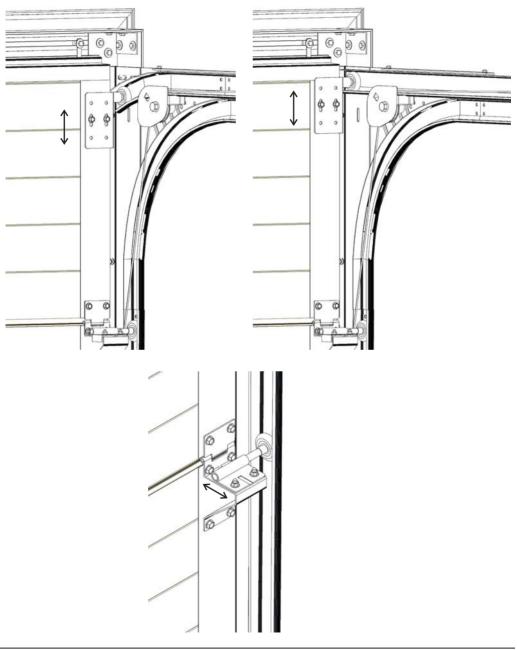
Distance washers should come in between the sections to each hinge, after lifting the doors they will be removed.

The sections 2,3 .... and top section come into the opening successively. Fix the upper hinge on the top section, so that the section sufficiently seals.

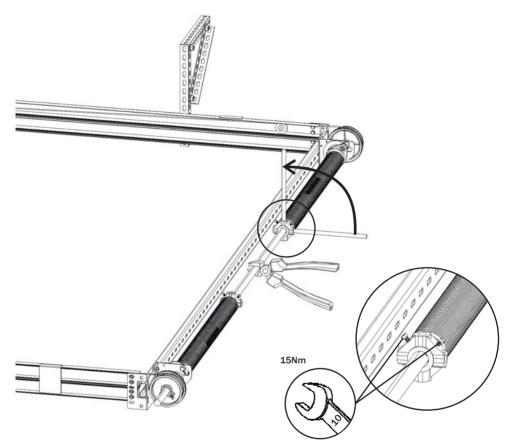




The side hinge will be adjusted, so that between the section and the side sealing there is a free motion of 1mm. Tightening the top section can be made by adjusting the upper hinge upwards or downwards.



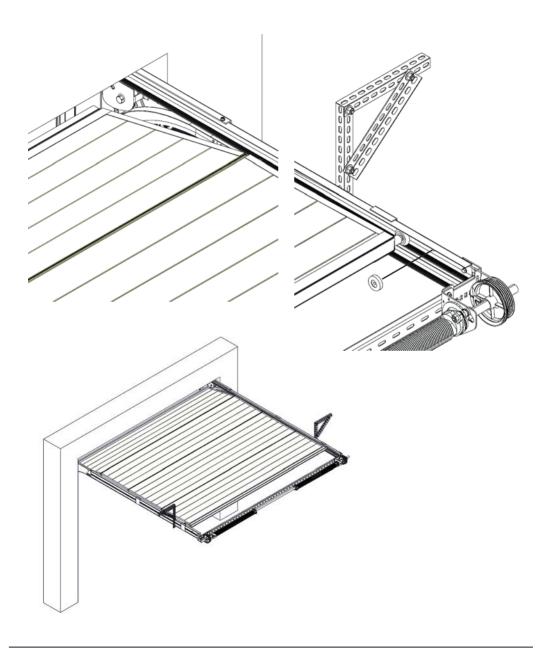
Secure the torsion bar against spinning, tighten the first spring with a tension rod with the required number of turns, then secure by bolts. Repeat the procedure for the second spring.



After springs setup test the doors functionality. It has to run up and down easily.



After opening the doors the rubber backstop will be mounted into the horizontal rails.





## Instructions for demounting

## The sectional door has to be closed before demounting!!!

## Don't do demounting works until you don't cushion the torsion springs!!!

## 1) Torsion bars cushioning

First put the tension rod into the spring head and than disengage release the ensured screw on the torsion spring. Cushion the torsion spring and turn the spring head in its power wise until the spring power stops acting. For spring cushioning of garage doors we need two tension rods with a diameter 11,5mm and for industrial doors with a diameter 16mm.

## 2) Panel demounting

After the spring cushioning begin to demount the top, middle and side hinges. Begin to demount always from the top panel. After demounting the hinges on the panel remove it immediately. Repeat this procedure for all panels. Unscrew the winding wire by the lower panel hinge and also remove this section.

## 3) Demounting of torsion springs, drums and torsion bars

Disengage the ensured screws on the drums and the ratchet-wheel of spring break protection. Than unscrew the torsion springs from the spring break protections. In case of two shafts demount the coupler. When using an industrial door opener, it has to be demounted from the torsion shaft before removing the shaft. Move the shaft to one side to pull it out of the spring break device. Than take it down from the console.

## 4) Demounting the console and the spring break device

After demounting the torsion shaft demount the spring break devices and the consoles from the lintel.

## 5) Demounting the horizontal tracks

Unscrew the perforated mounting profiles from the ceiling and also the screws connecting the horizontal and the vertical tracks.

## 6) Demounting the vertical tracks

Unscrew the vertical tracks from the door opening.



Кготеříž, Veleslavínova 2357, [tel.] 573 336 233, [fax.] 573 343 582 Praha 10 Hostivař, Herbenova 38, [tel.] 267 710 901 [fax.] 267 710 696 г. Мукачево 89622, 000, "Кружик Украина", с. Ивановцы, ул. Мира, 3, [тел] +38-050-523-59-69

www.kruzik.cz | www.kruzik.com | www.kruzik.com.ua | www.kruzik.eu

08032017