

Manual No. 7081

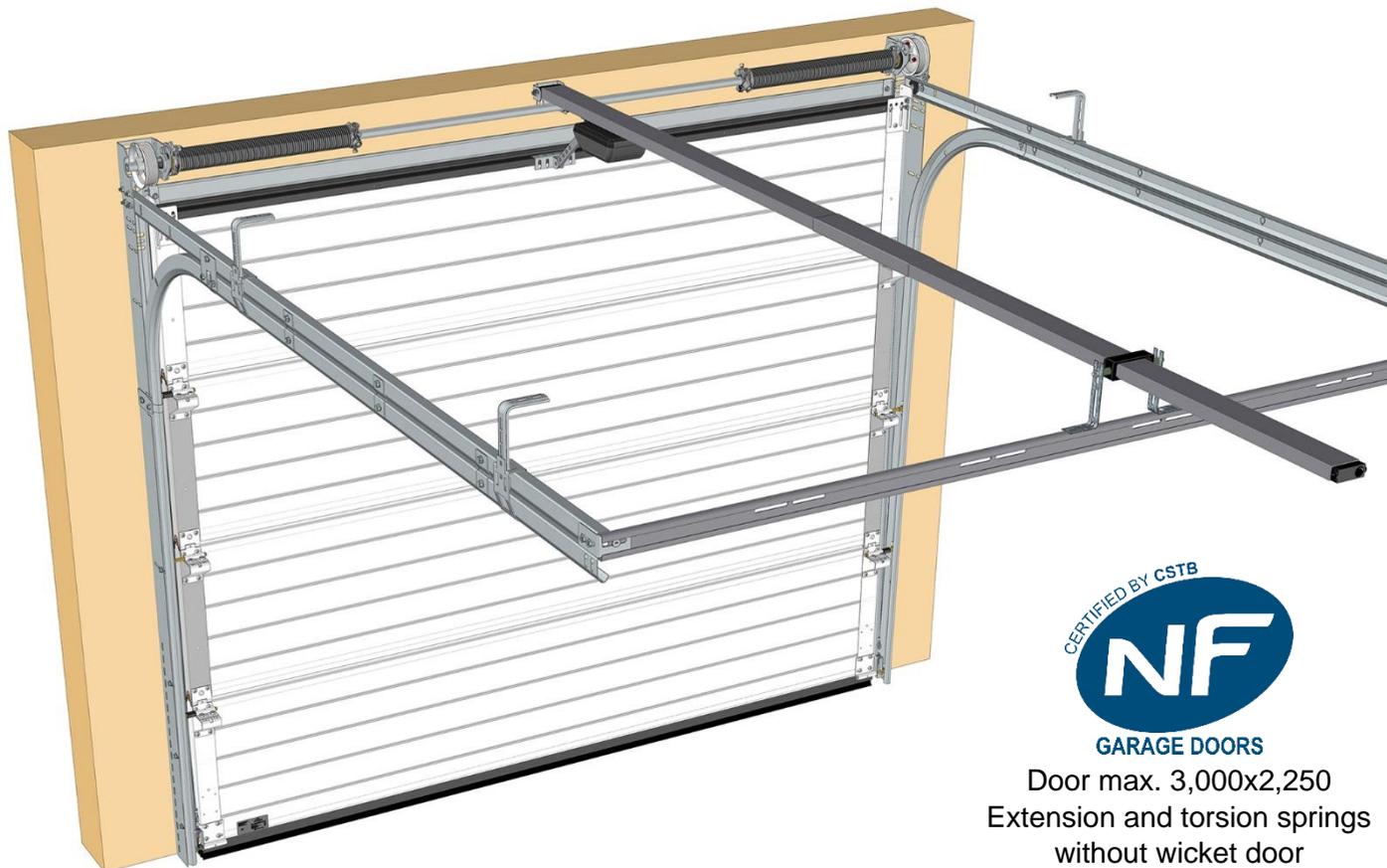
01/23

INSTALLATION

Residential garage doors Manual or Motorised



RT200
(Torsion Springs)



GARAGE DOORS

Door max. 3,000x2,250
Extension and torsion springs
without wicket door

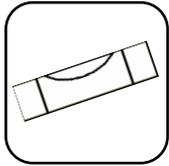
(Document reserved for installers)

Contents

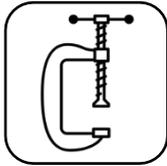
Before installation	3
Required equipment.....	3
Installation instruction.....	4
Kit contents for each door configuration/option	5
Kits for MOTORISED and MANUAL doors.....	5
Kits for MOTORISED doors.....	6
Kits for MANUAL doors.....	6
Vertical rail installation.....	7
Checking the bay	7
Assembling the vertical seals.....	7
Assembling the fascia seal	8
Assembling the fascia	8
Fixing the fascia to the floor	8
Assembling the spring assembly on the floor.....	9
Layout of the frame	10
Fixing the vertical rails	10
Horizontal rail installation	11
Assembling the curves.....	11
Fixing the horizontal rails	12
Assembling the back bar brackets.....	14
Installing the back bar	14
Installing the hangers	15
Back bar extension (option).....	15
Checking the diagonals.....	16
Installing the spring mounting bracket (“operator support” in “motorised door” version).....	17
Shutter assembly	17
Grease all roller shafts.....	17
Panel preparation	18
Installing the bottom panel	19
Installing the intermediate panel(s)	20
Installing the top panel.....	21
Cable installation	22
Positioning the cable drums	22
Routing the cables around the cable drums.....	23
Checking the tension of the cables.....	24
Spring adjustments.....	25
Spring tension.....	25
Table for number of spring tension turns.....	25
Adjusting the rollers	26
Checking the balance.....	27
Finishes	27
Leveling the shutter.....	27
Adjusting and fixing the fascia.....	28
Fixing the upper roller supports	28
Fixing the end position clips (manual door)	28
Assembling the handle	29
Assembling the latch (optional on motorised doors).....	29
Installing the lock (optional on motorised and manual doors)	30
Installing the pull cord (if manual door)	34
Weather seal (optional).....	34
Greasing the bottom of the rails	34
Fixing the « SOMMER » operator to the back bar.....	35
In case of incorrect manual functioning.....	35

Before installation

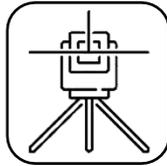
Required equipment



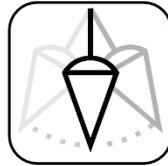
Spirit level



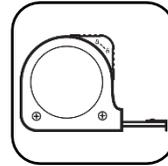
Clamp



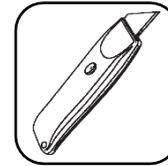
Laser level



Plumb bob



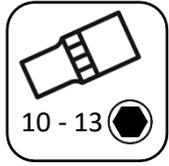
Tape measure



Utility knife



Electric screwdriver



Socket 10 - 13



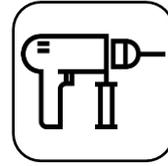
Cruciform bit



Flat wrench 10 - 13



Allen key 3



Perforator



Torx bit 30



Ladder



Phillips screwdriver



Flat screwdriver



Pencil



Grinder



Combination pliers



Cutting pliers



Locking pliers



Steel drill bit
Ø2-4.2-4.5-10-13



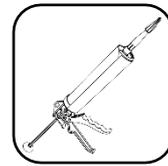
Hammer



Rivet gun



Hacksaw



Silicone sealant



Brush



Pot of grease



Grease spray

Installation instruction



CAUTION !



To ensure that this product is assembled,
used and maintained in complete safety,
it is important to follow the instructions provided in this document.

For everyone's safety, please adhere to the
precautionary measures below.

- Before beginning the assembly, read this manual carefully.
- This closure must be installed by a professional technician.
- All the parts delivered are specifically sized for this product.
Adding and/or using other parts may be detrimental to safety and may affect the product's warranty.
- Any modification or improvement of this closure must be compliant with the standard BS EN 13241:2003+A2:2016.
In this case, a "modification/transformation" file must be created by the installer as per the standard BS EN 12635:2002+A1:2008 annex C.
- Considerable force is exerted by the torsion springs ; carry out work in accordance with the safety instructions.
Use the appropriate tools to install these products. Ensure that all work is carried out on a stable floor.
- Ensure that the assembly area is adequately lit, clear, clean and clearly marked out.
- Ensure that no other people are present at the assembly site apart from the installers.
Non-authorized persons (children for example !) who are present at the site risk injury during assembly.
- All the components of this closure must be installed in compliance with the installation instructions provided in this manual.
- All the requirements of the standards BS EN 13241:2003+A2:2016 must be met and verified if necessary.

Max. tightening torque :

- Assembly screws : **10 Nm**
- Shutter mounting screws : **12 Nm**

Min. working load per attachment point :

- Compensating shaft : **300 daN**
- Rails : **40 daN**

Kit contents for each door configuration/option

Kits for MOTORIZED and MANUAL doors



Kits for MOTORISED doors

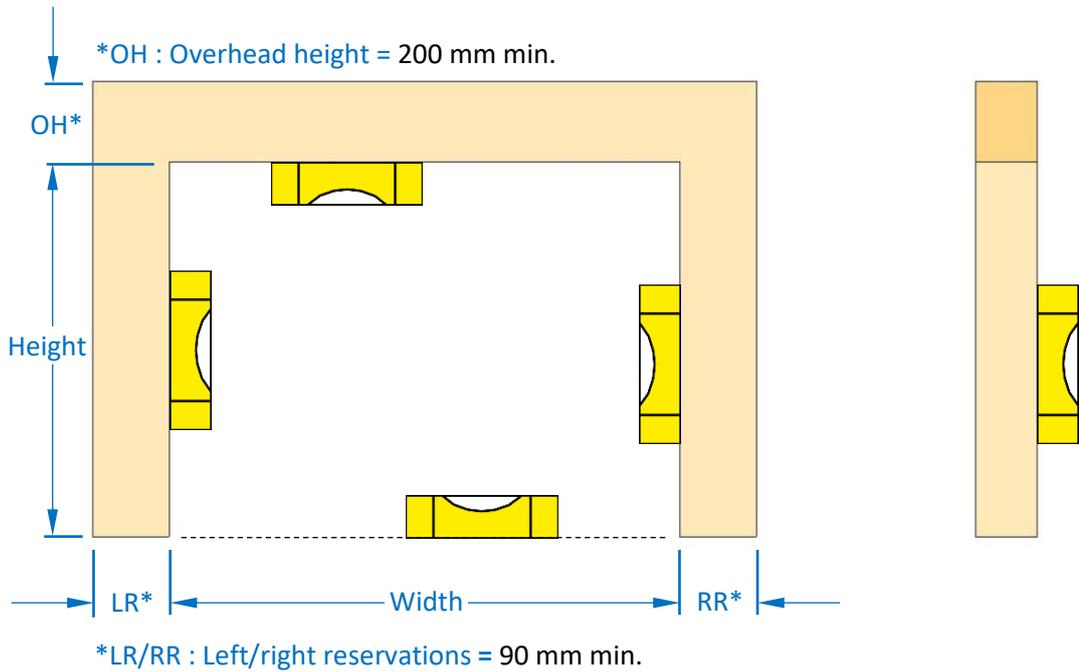
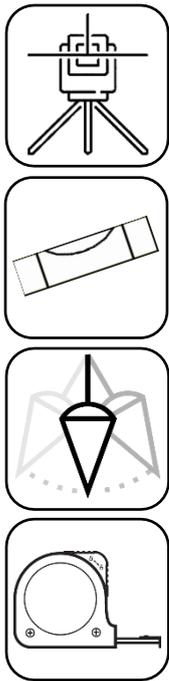


Kits for MANUAL doors

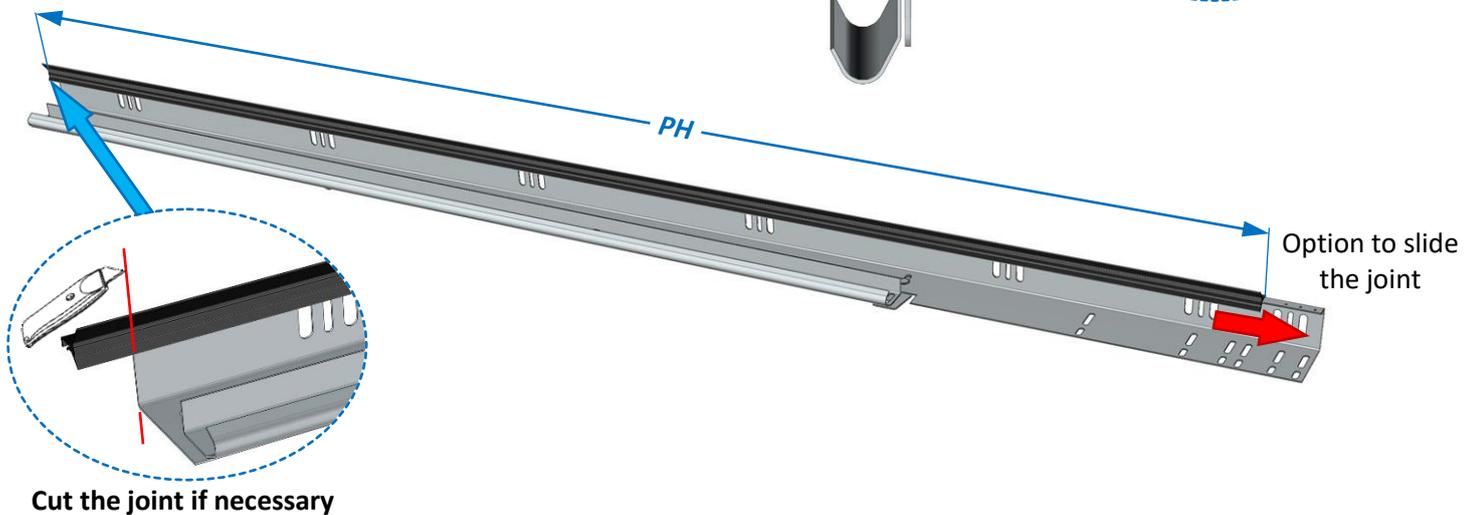
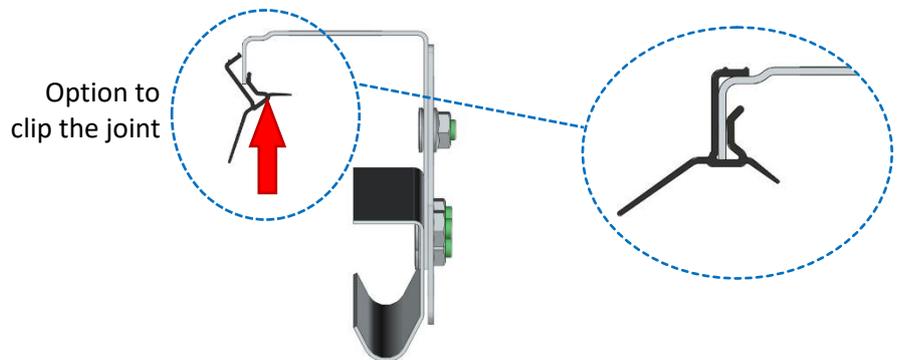


Vertical rail installation

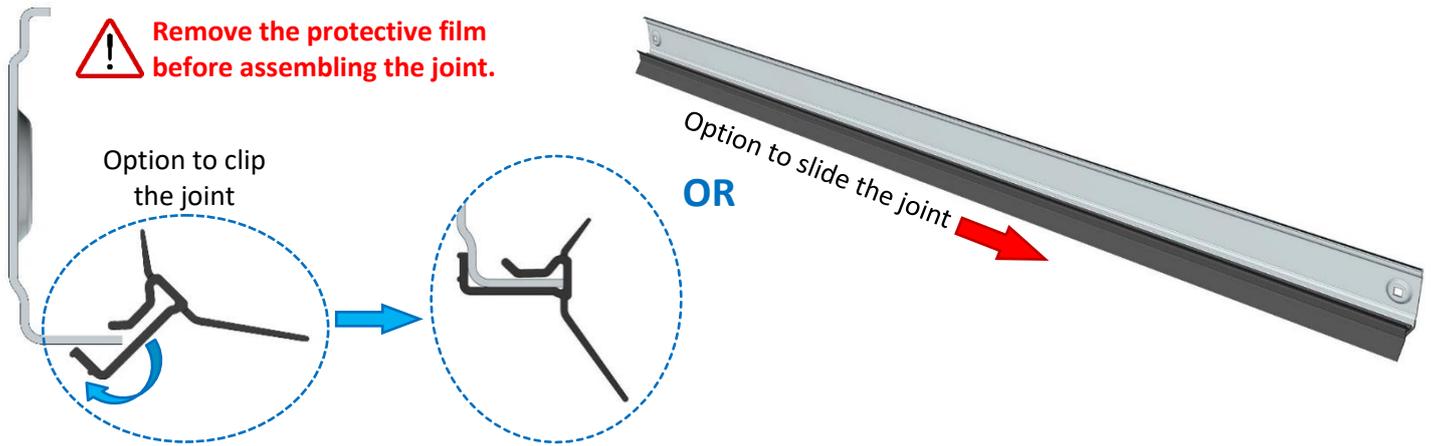
Checking the bay



Assembling the vertical seals



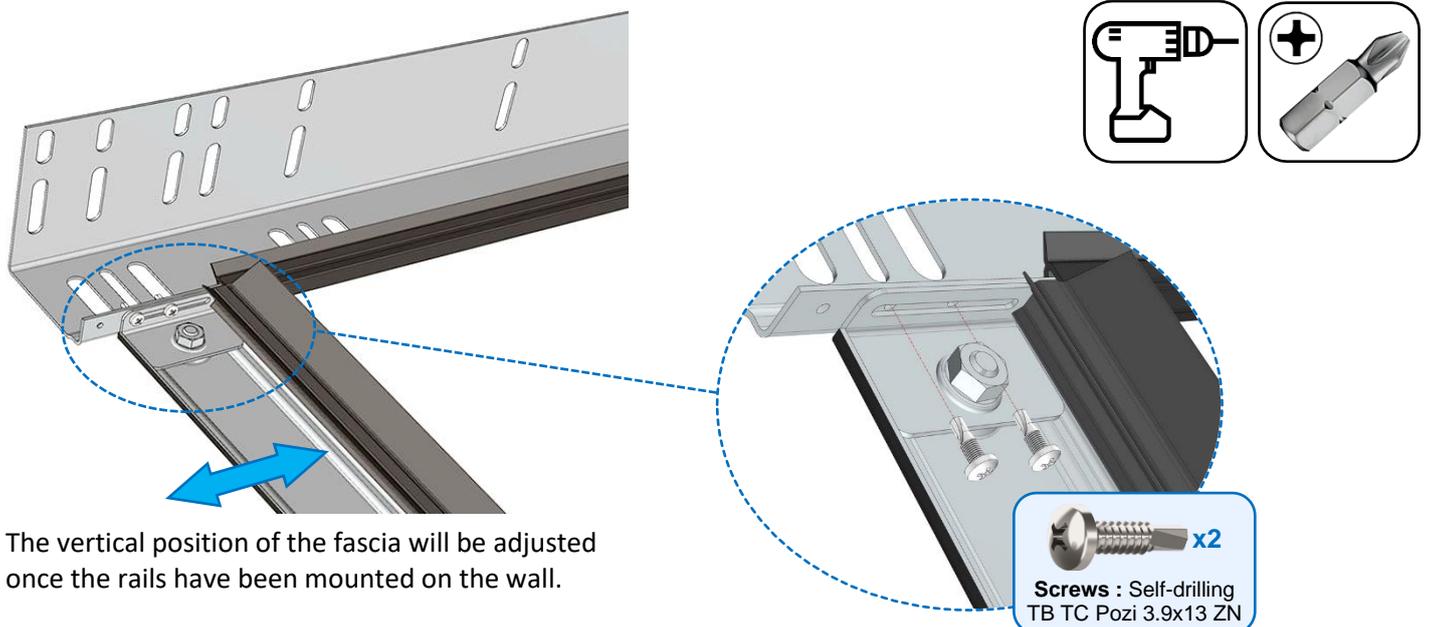
Assembling the fascia seal



Assembling the fascia



Fixing the fascia to the floor



The vertical position of the fascia will be adjusted once the rails have been mounted on the wall.

Repeat the process with the other vertical rail.

Assembling the spring assembly on the floor

1 Unscrew the 4 screws on the springs
Loosen the screw on each cable drum

10

13

2 Insert each spring into the 2 hooks on the anti-fall guard

Anti-fall guard

3

Screws : TRPCC M8x18
Nuts : H M8
(with notched base) x4

Align the sides

4

Align the end of the shaft on the bearing

5

Tighten the 2 screws on each anti-fall guard
Tightening torque 15 Nm

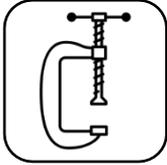
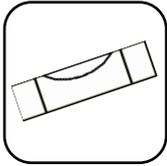
3

IMPORTANT
Grease the spacers

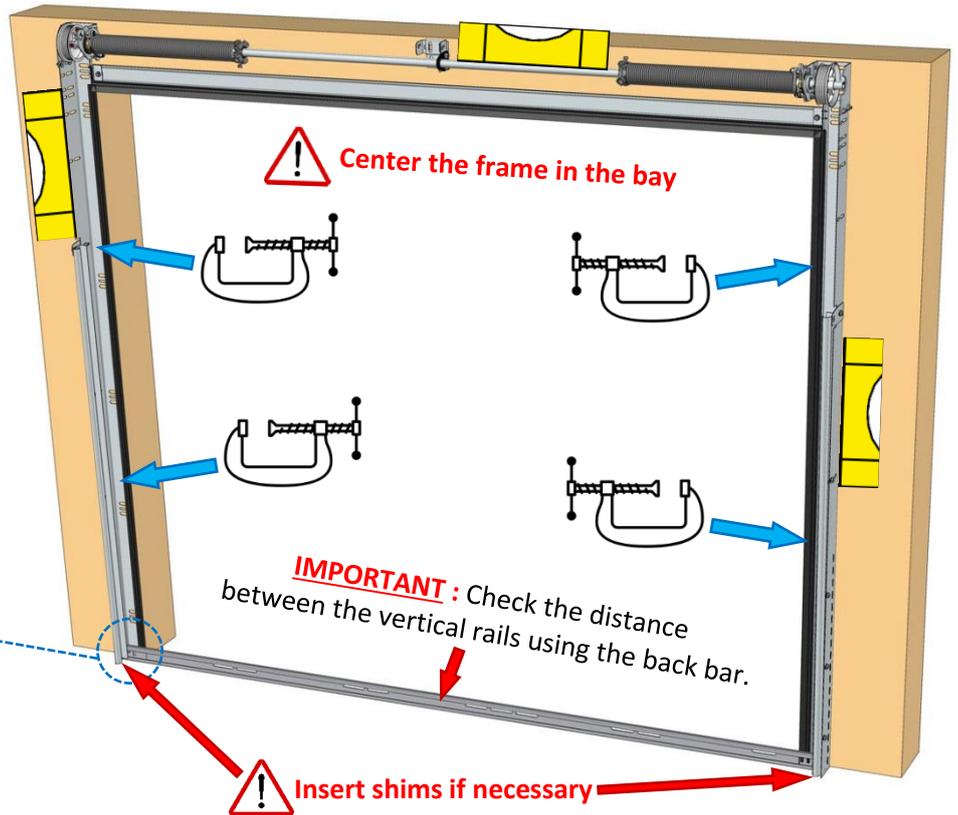
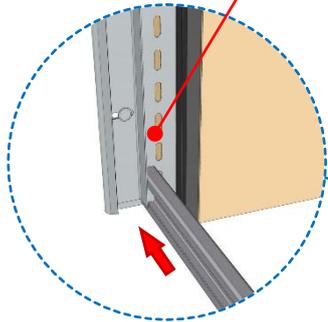
6

GRAISSE UNIVERSELLE

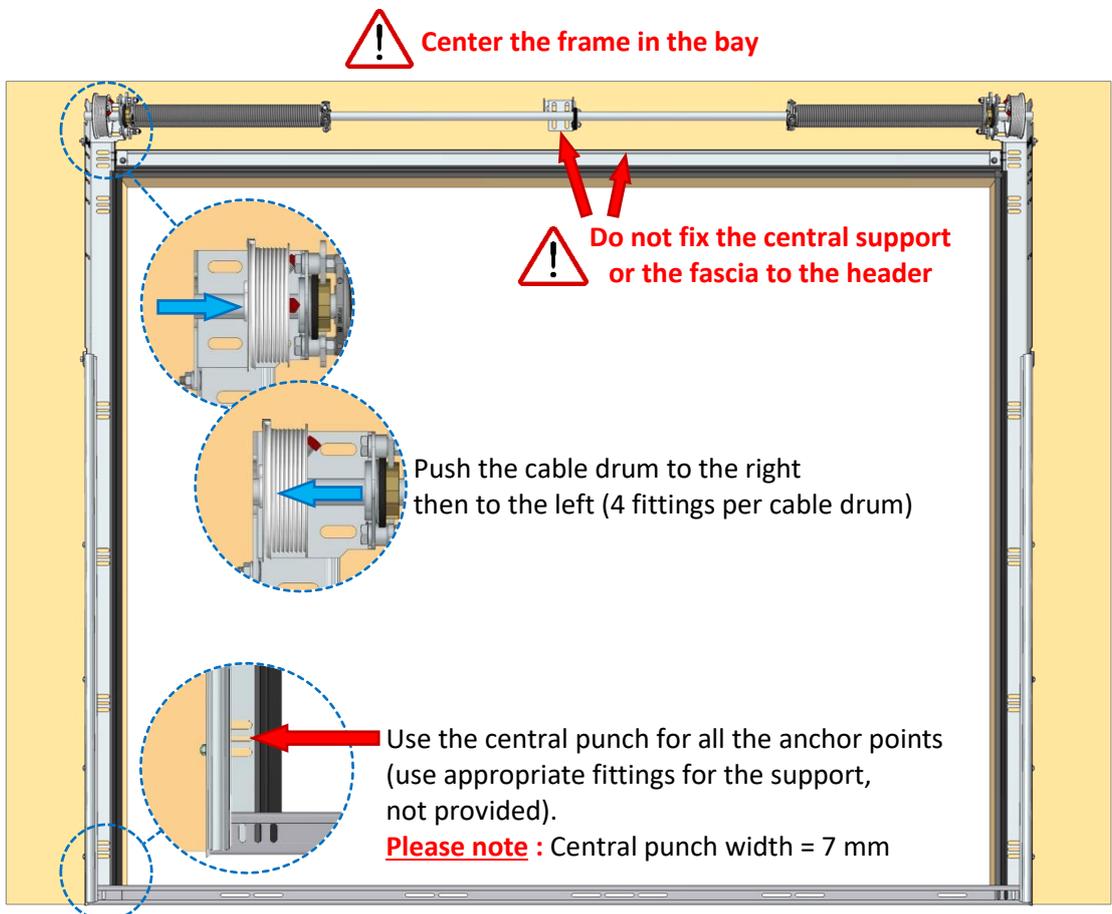
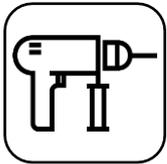
Layout of the frame



The back bar must be in contact with the backstop



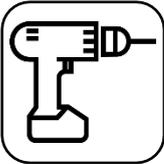
Fixing the vertical rails



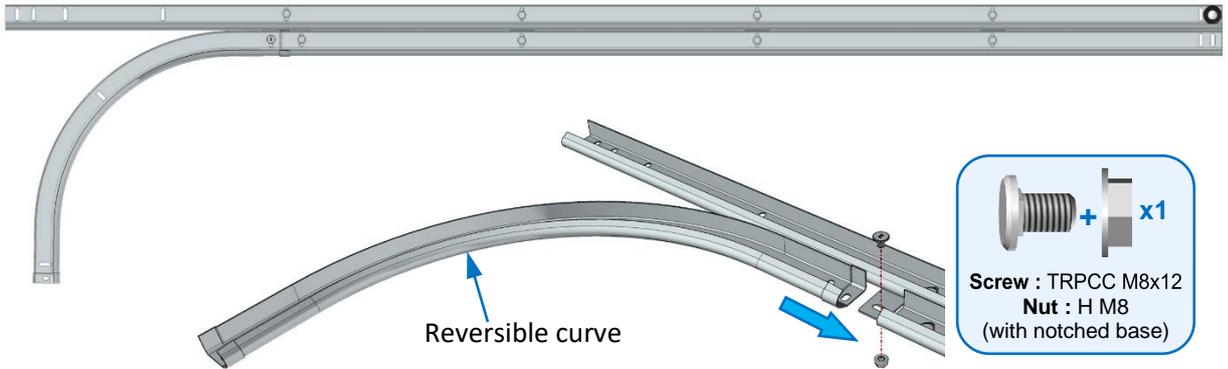
Repeat the process on the opposite side.

Horizontal rail installation

Assembling the curves

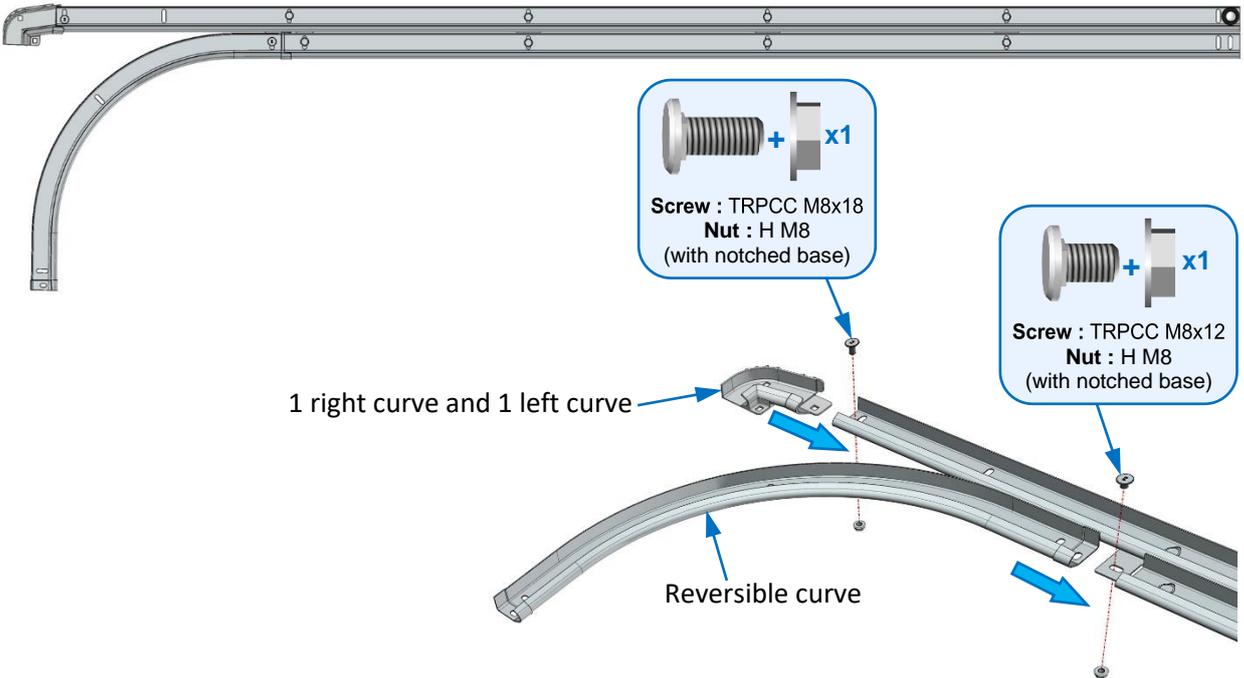


HORIZONTAL RAILS for Motorised doors



OR

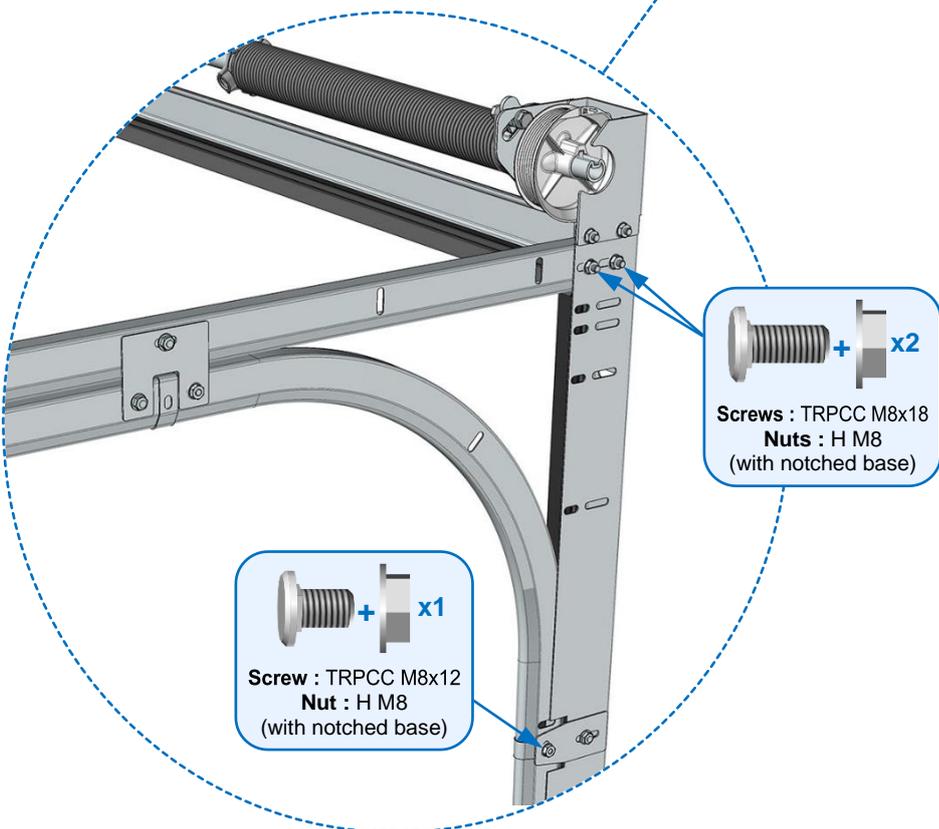
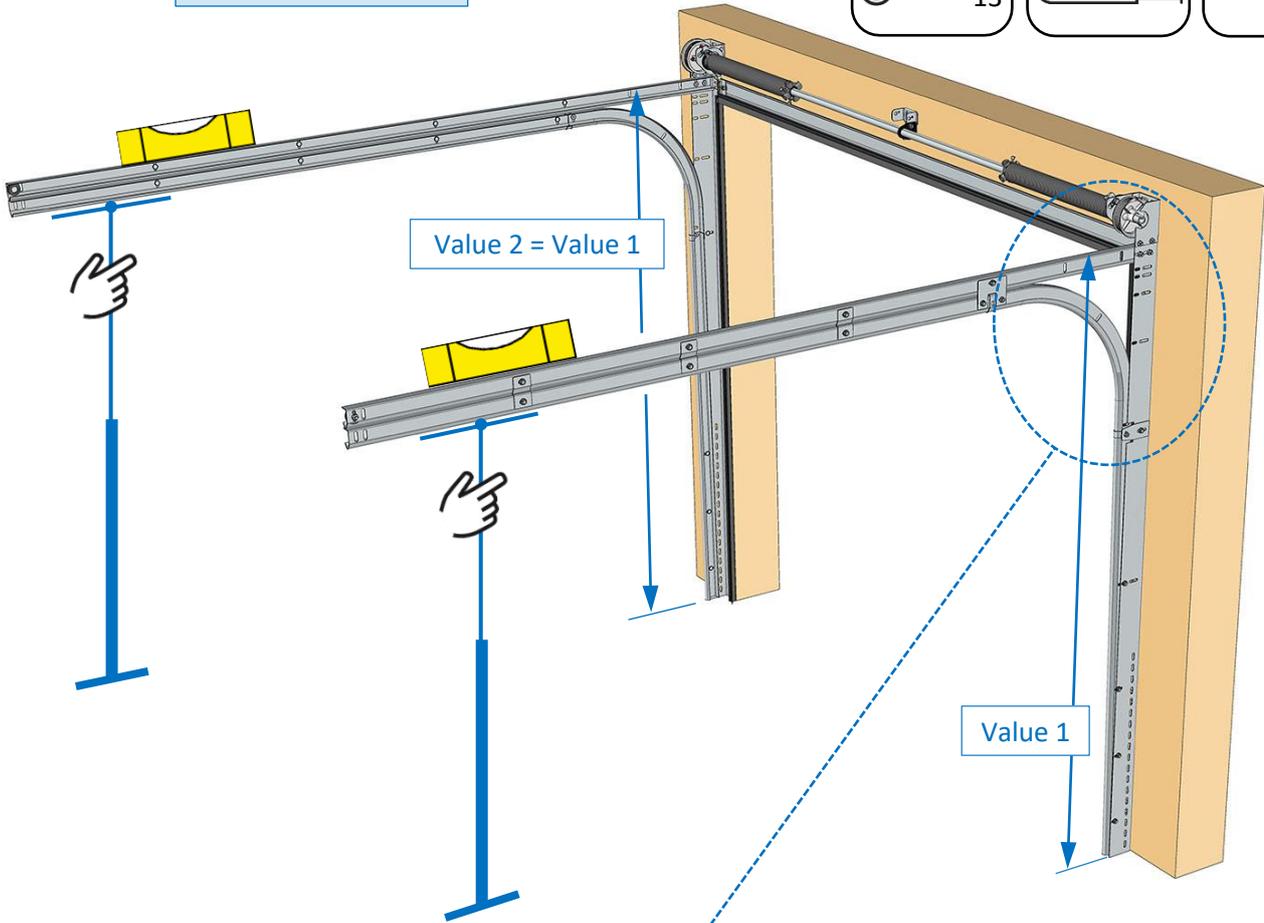
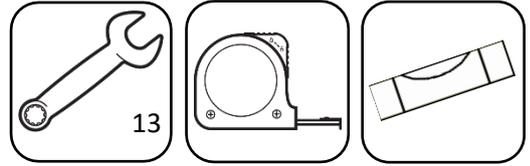
HORIZONTAL RAILS for Manual doors



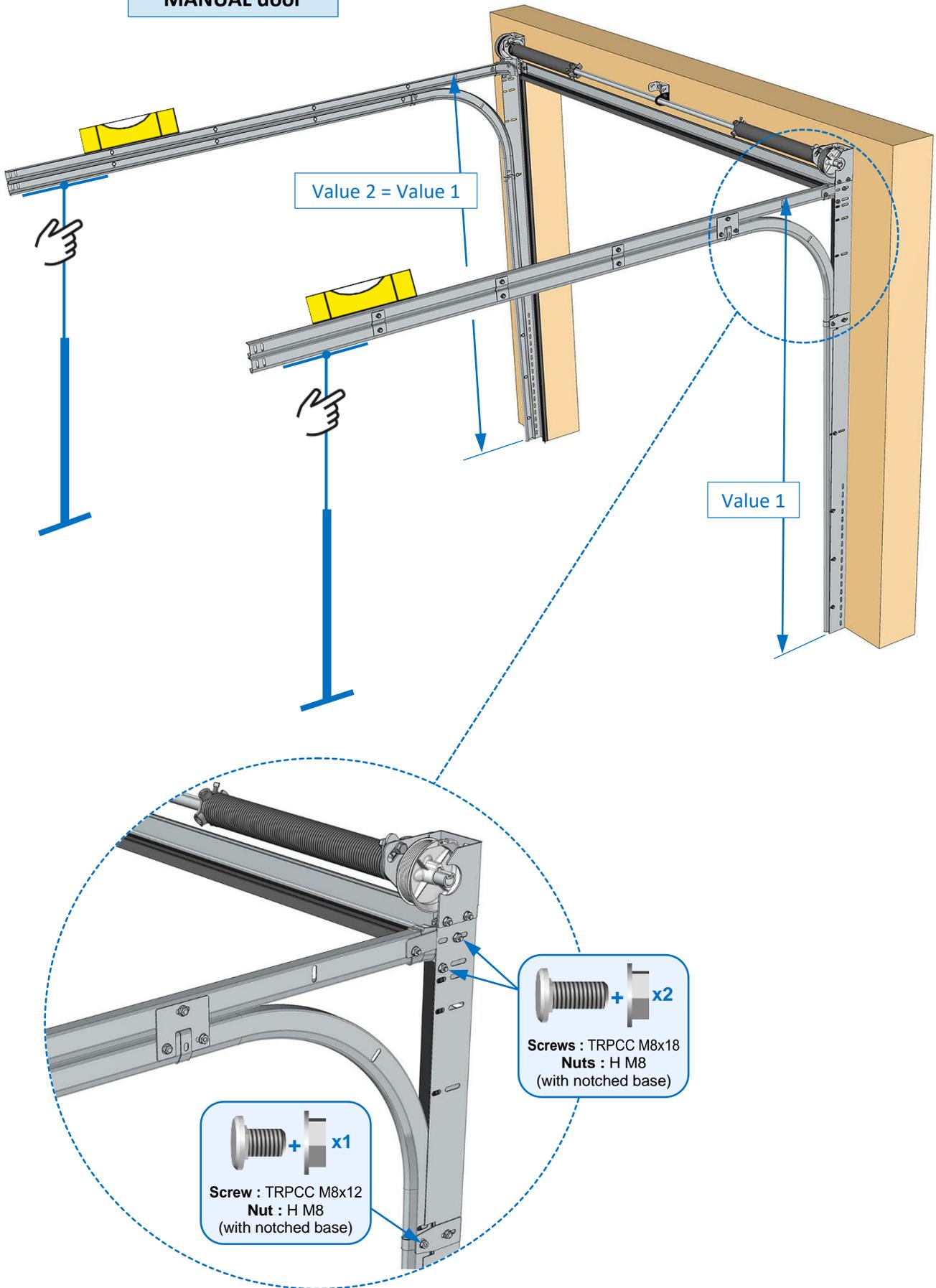
⚠ To make adjustment simpler during assembly, do not fully tighten the screws with nuts.

Fixing the horizontal rails

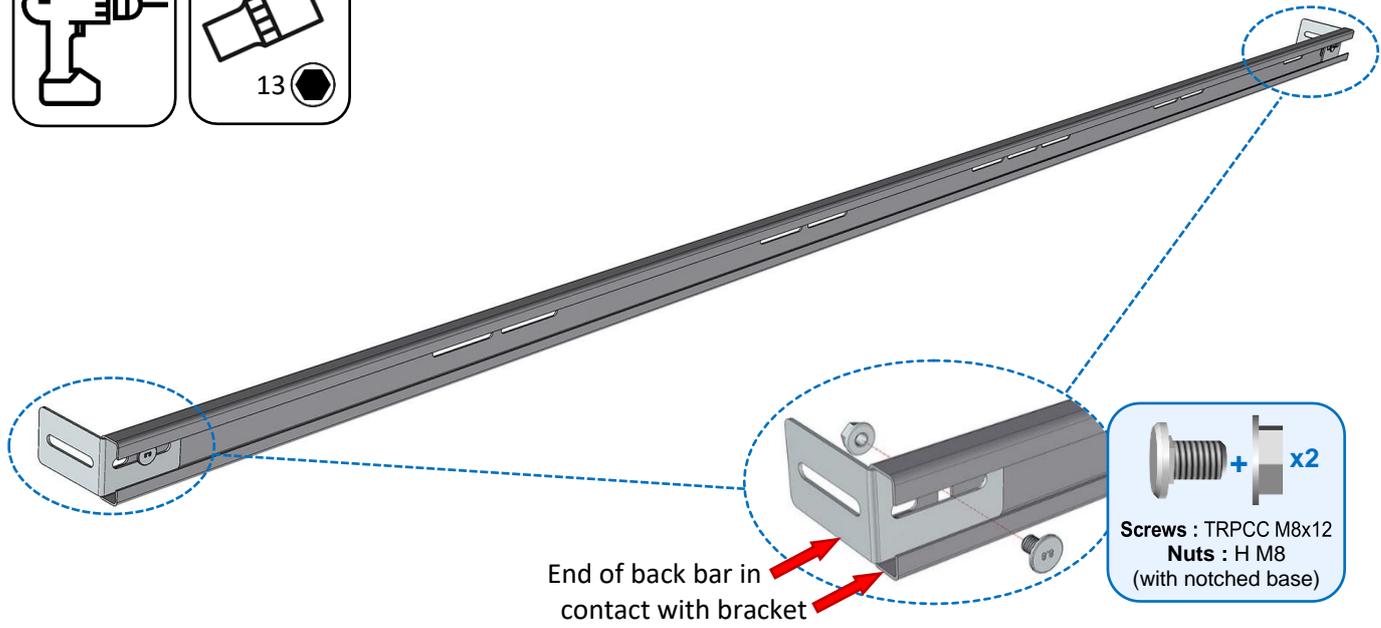
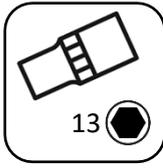
MOTORISED door



MANUAL door



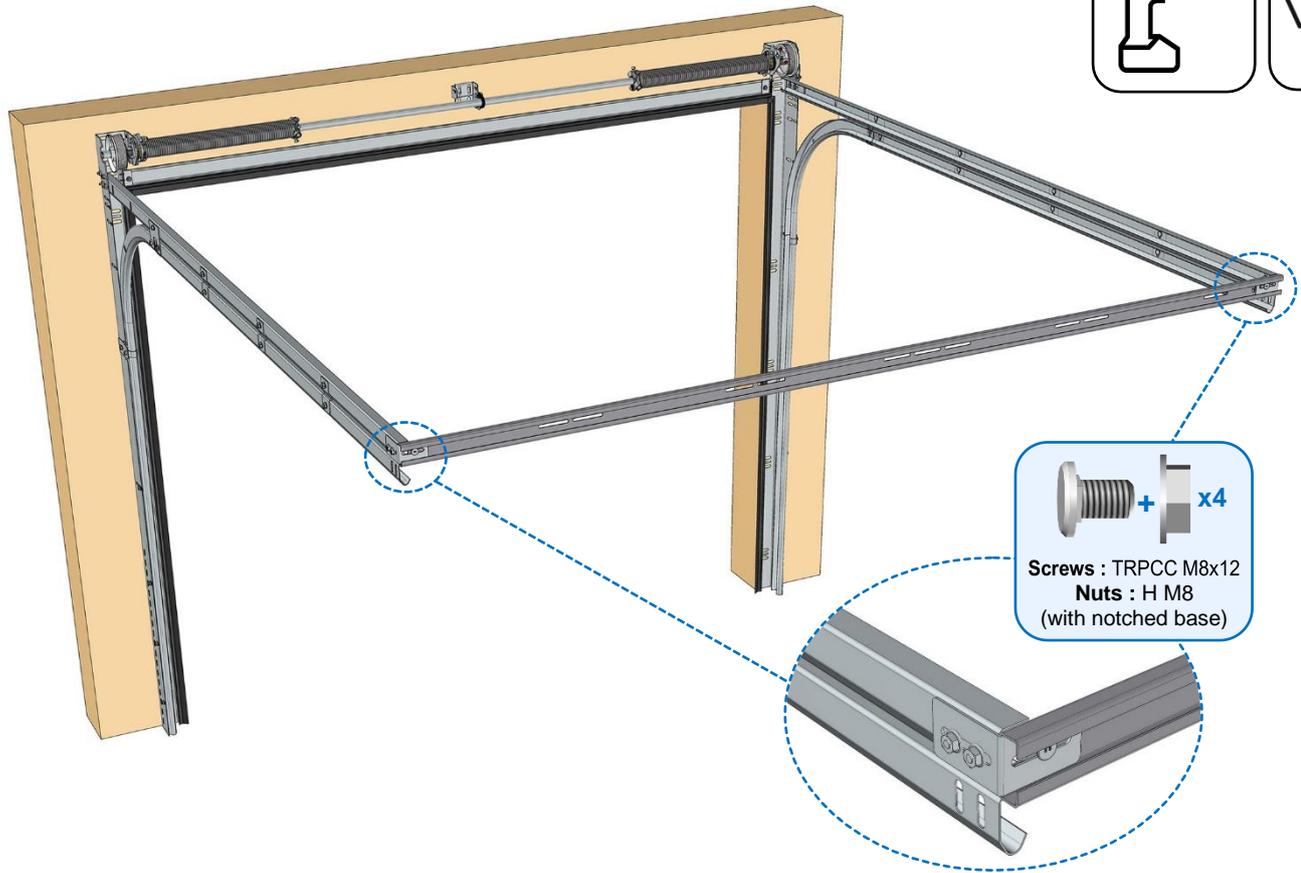
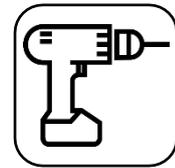
Assembling the back bar brackets



End of back bar in contact with bracket

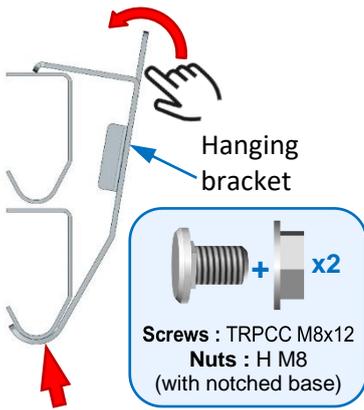
Screws : TRPCC M8x12
Nuts : H M8
(with notched base) x2

Installing the back bar

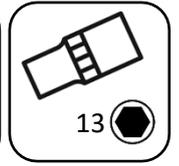
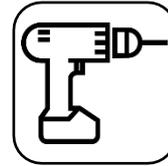


Screws : TRPCC M8x12
Nuts : H M8
(with notched base) x4

Installing the hangers



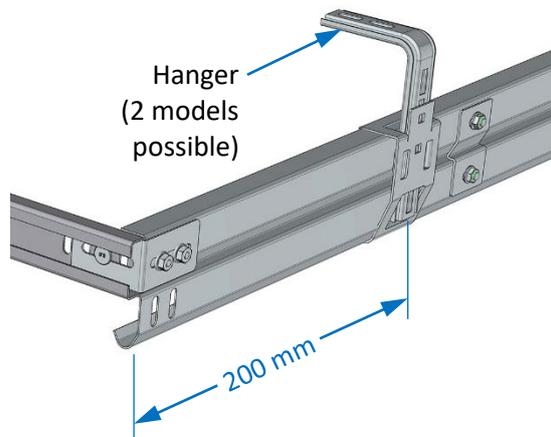
**Do not fasten the hangers to the masonry.
Do not fully tighten the screws with nuts.**



Adapt the number of hangers to the dimensions of the doors :

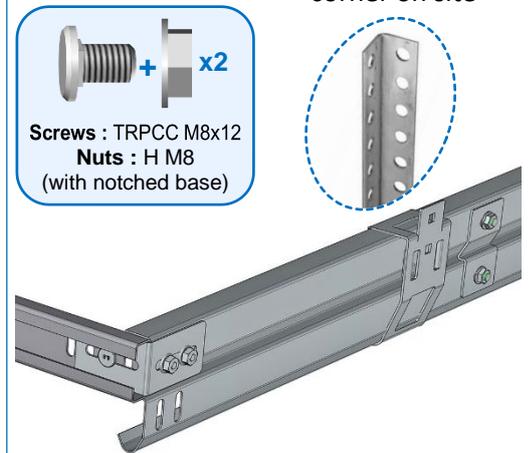
- 2 hangers, if PW ≤ 3,000 or PH ≤ 2,150 mm
- 4 hangers, if PW > 3,000 or PH > 2,150 mm

Assembly : 200 mm ≤ OH ≤ 440 mm

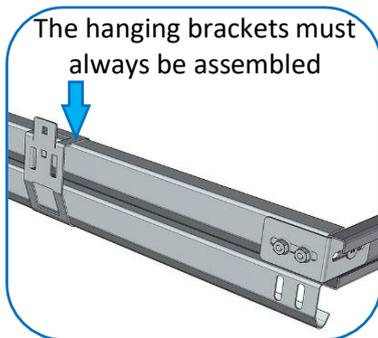


Assembly : OH > 440 mm

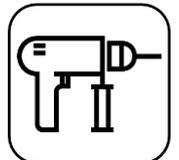
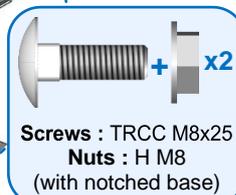
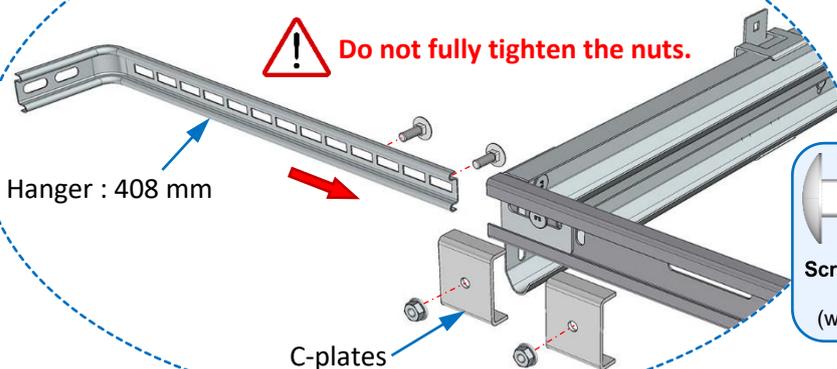
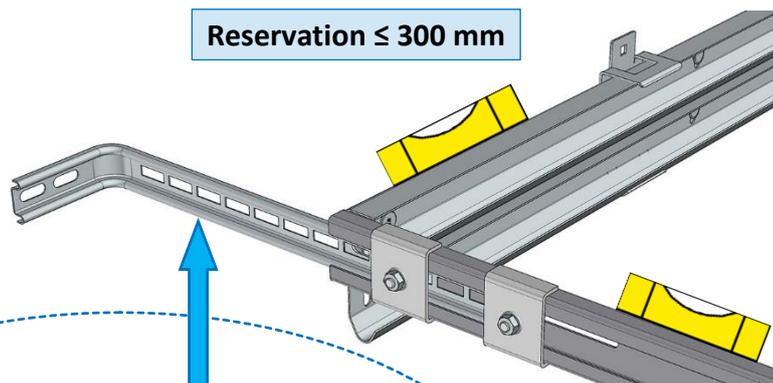
Adapt the perforated corner on site



Back bar extension (option)

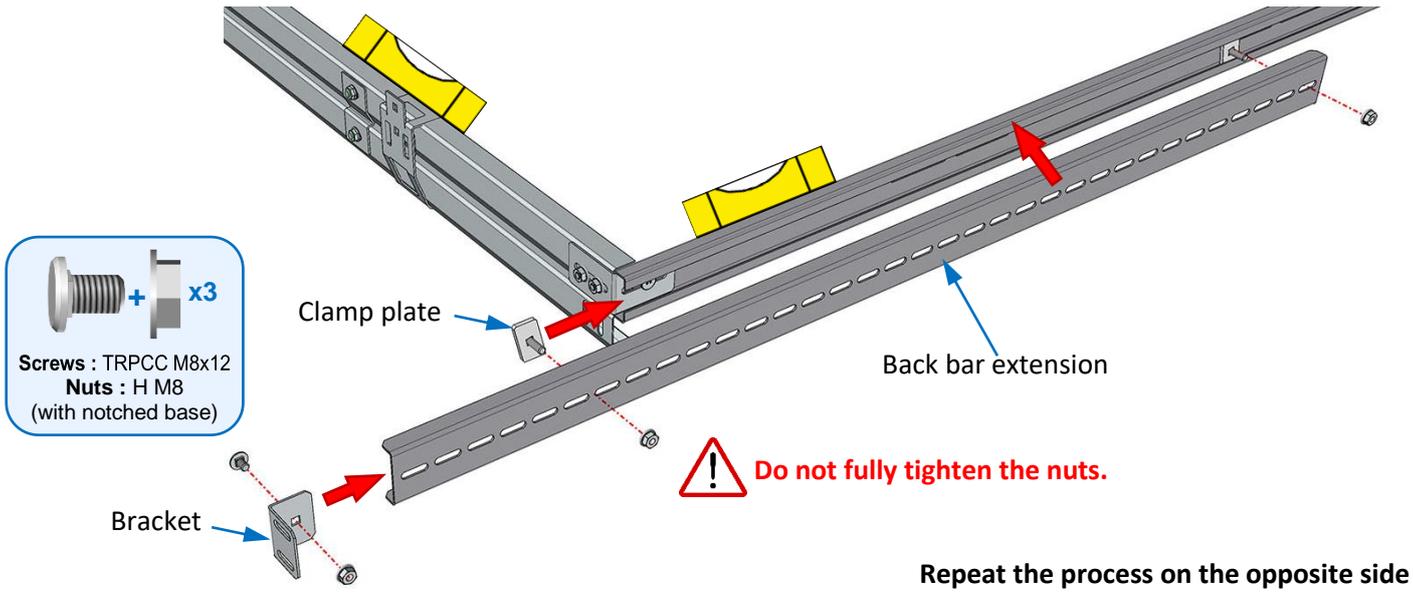


Reservation ≤ 300 mm



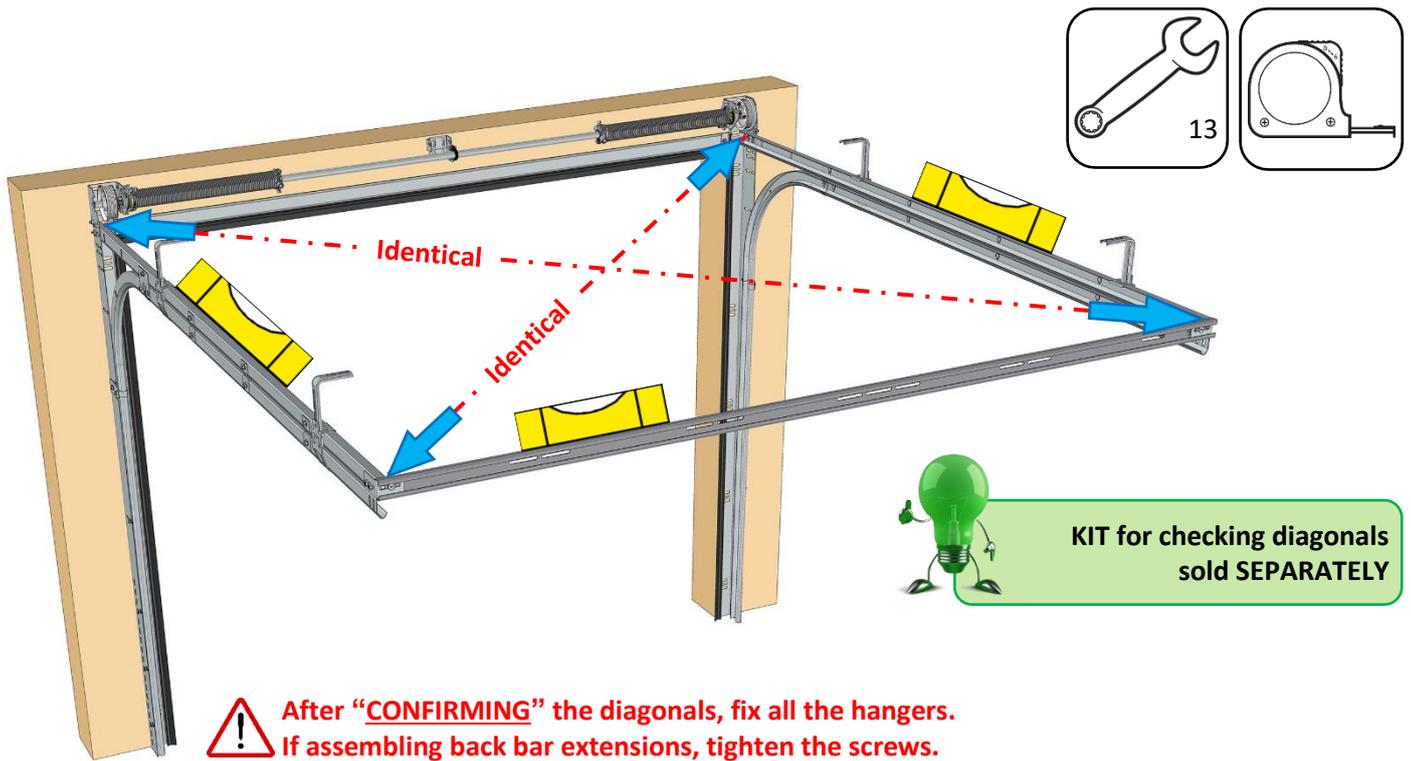
Repeat the process on the opposite side

300 mm < Reservation ≤ 1,000 mm

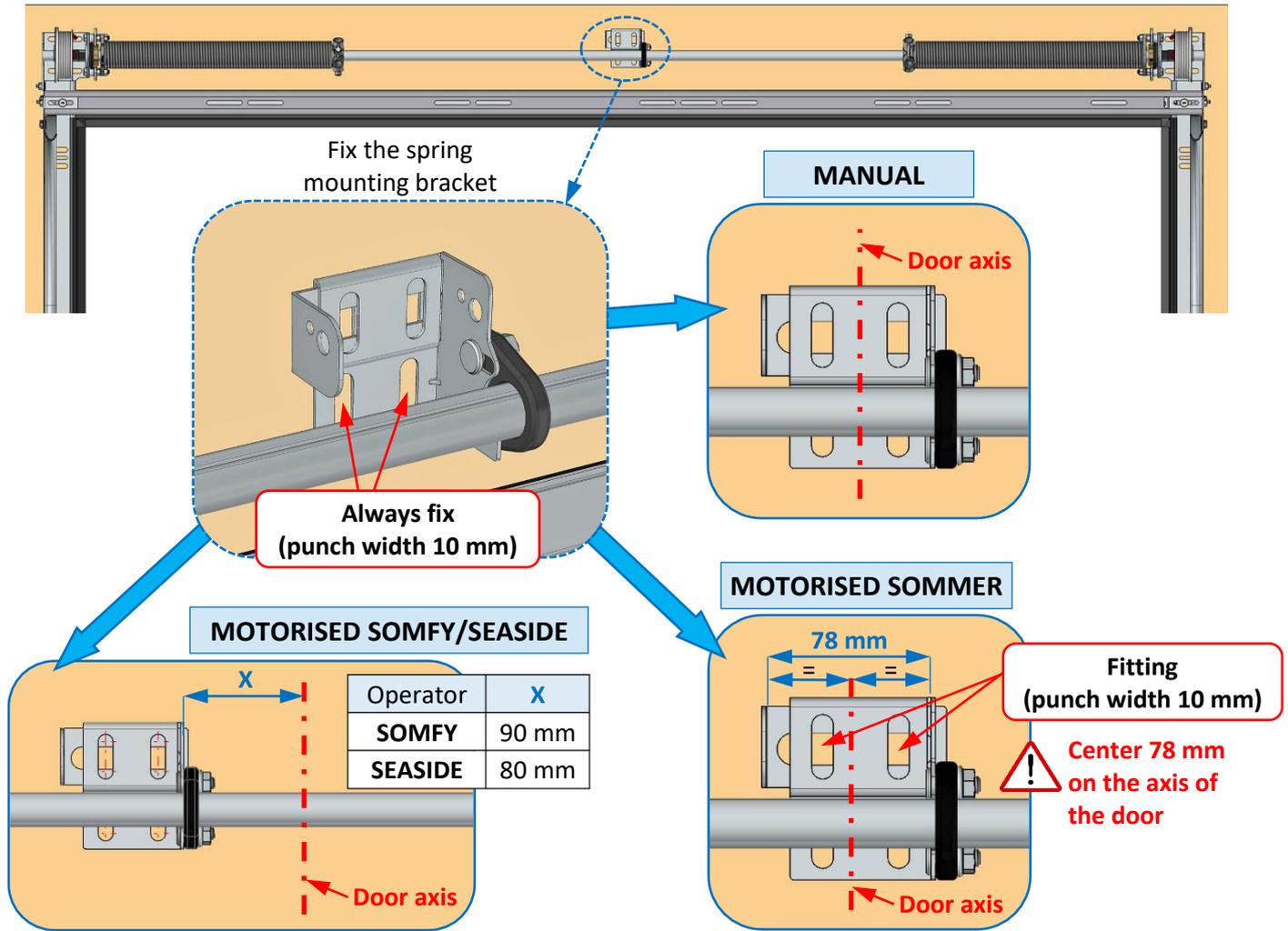


Screws : TRPCC M8x12
Nuts : H M8
(with notched base)

Checking the diagonals

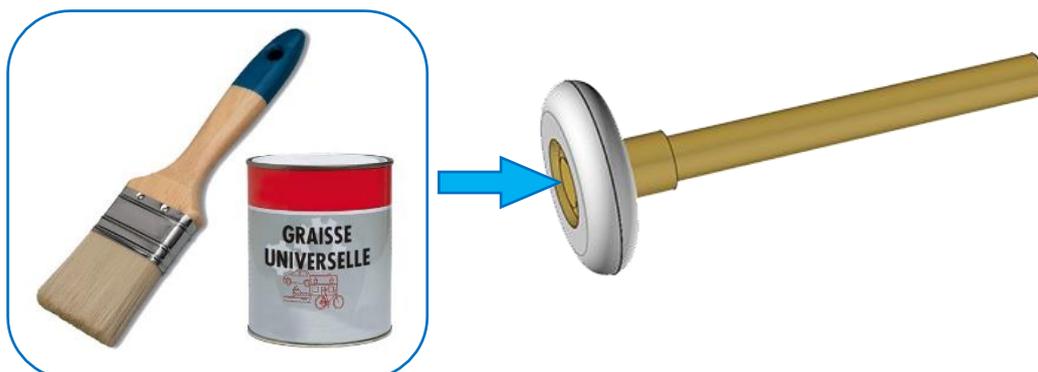


Installing the spring mounting bracket (“operator support” in “motorised door” version)



Shutter assembly

Grease all roller shafts



Panel preparation

BOTTOM PANEL

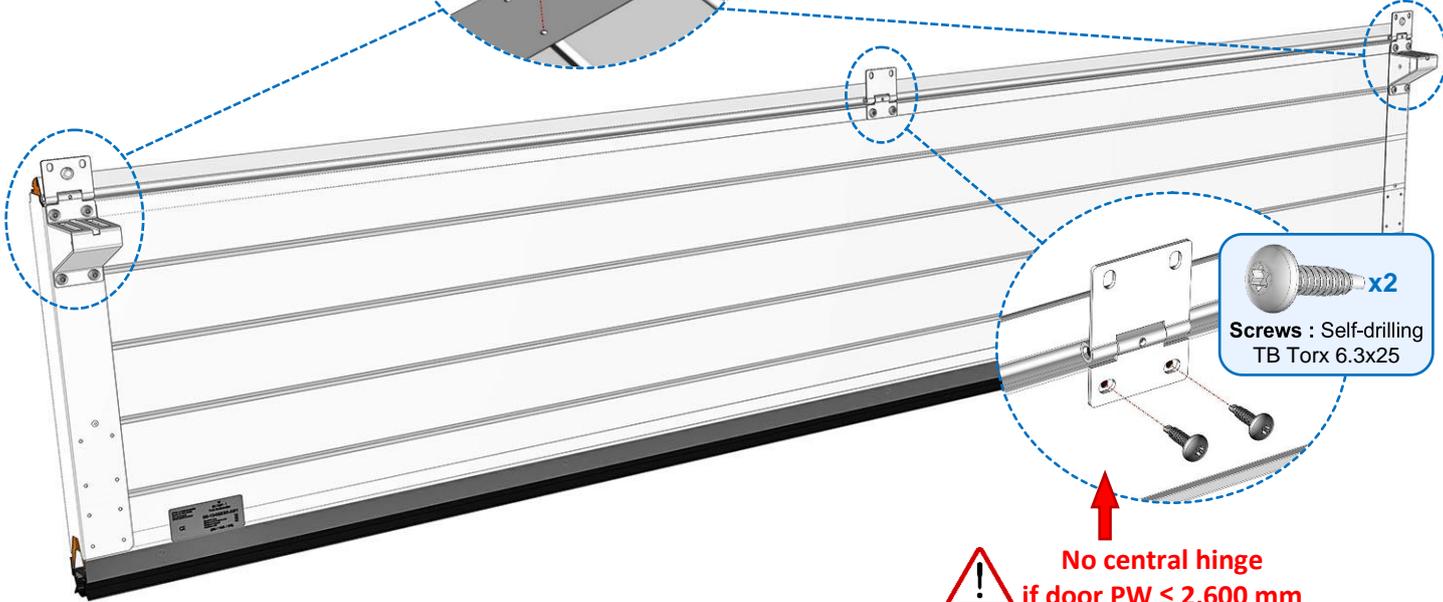
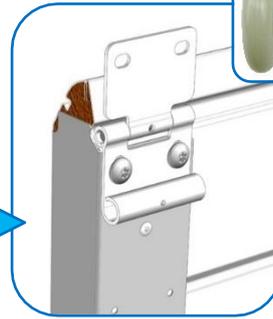


x8
Screws : Self-drilling
TB Torx 6.3x25

! OPTION tandem



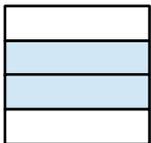
OR



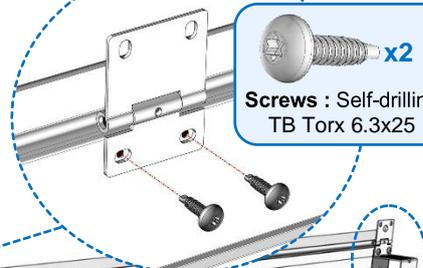
x2
Screws : Self-drilling
TB Torx 6.3x25

**! No central hinge
if door PW ≤ 2,600 mm**

INTERMEDIATE PANEL(S)

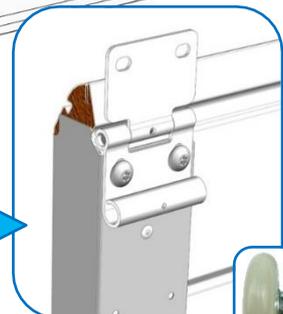


x2
Screws : Self-drilling
TB Torx 6.3x25



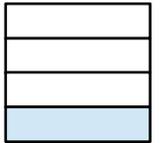
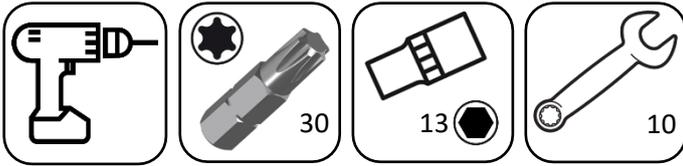
x8
Screws : Self-drilling
TB Torx 6.3x25

OR



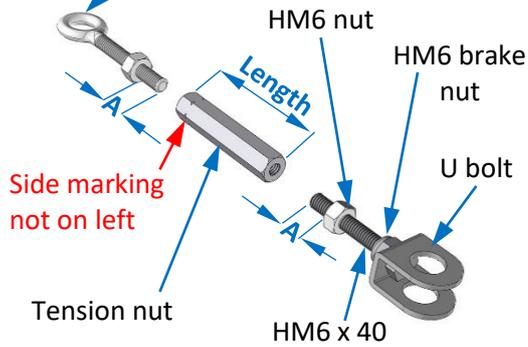
! OPTION tandem

Installing the bottom panel



Assemble the turnbuckles

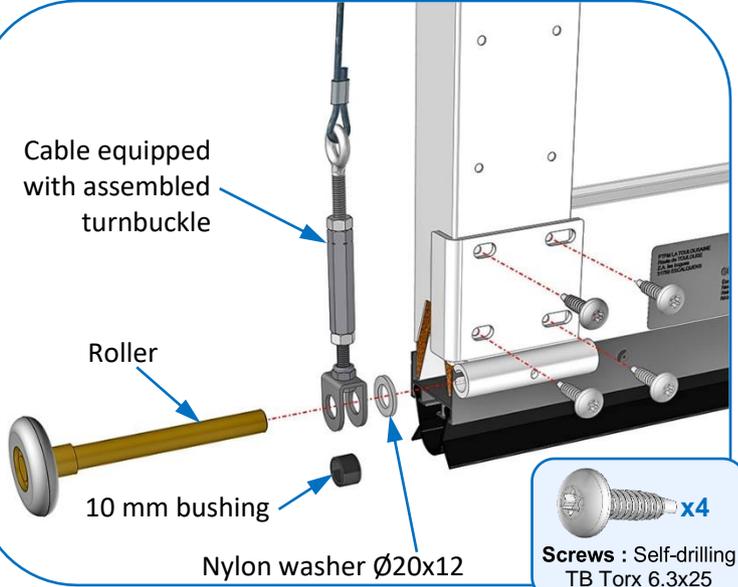
Cable equipped with turnbuckle eye and nut (not on left)



Length	A
30 mm	12 mm
50 mm	15 mm

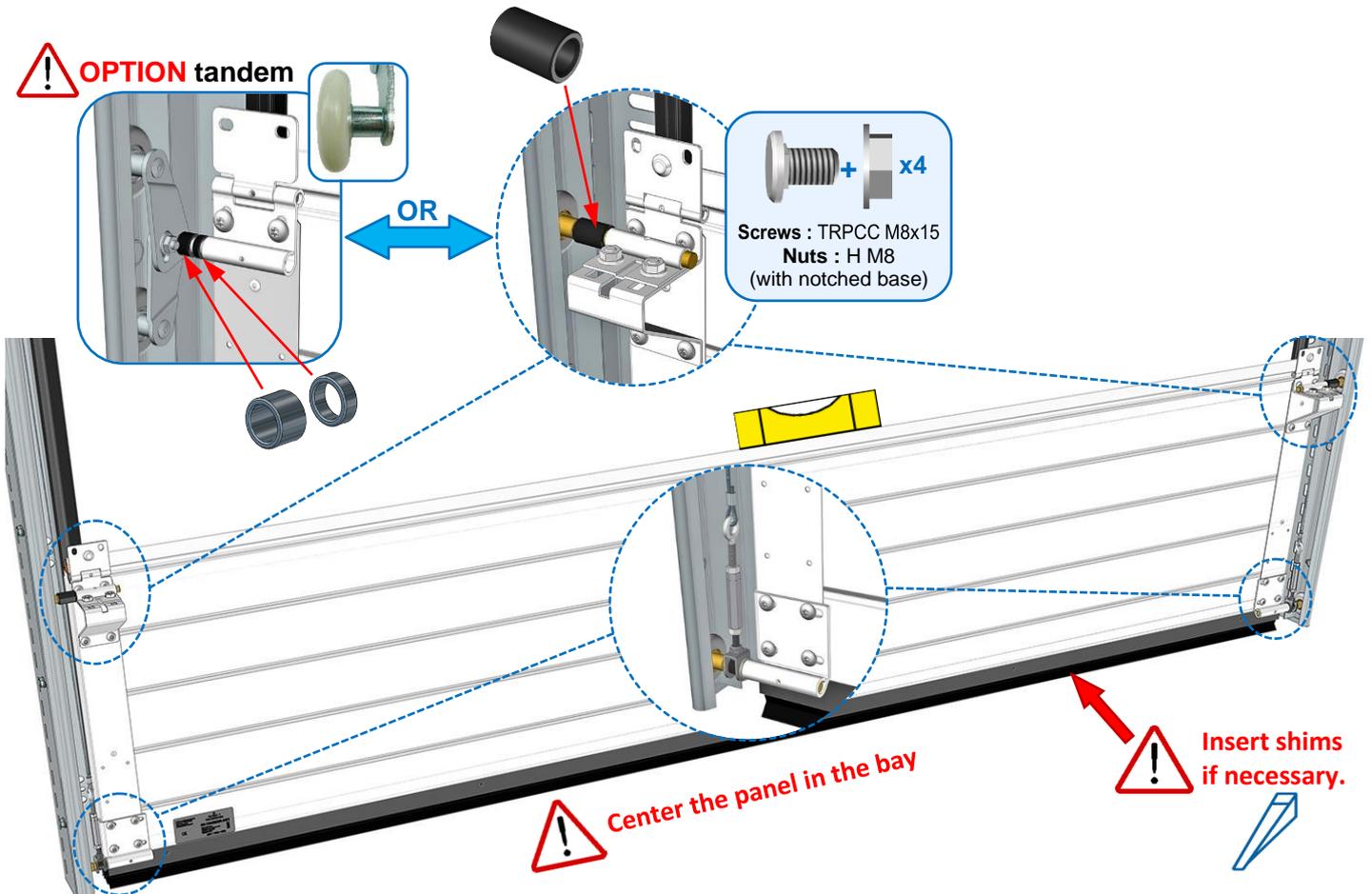
Assemble the turnbuckles

Cable equipped with assembled turnbuckle



! The turnbuckle eye must be adjusted in an identical manner for each cable.

! OPTION tandem

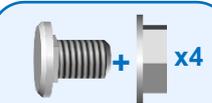


Installing the intermediate panel(s)



! OPTION tandem

OR



Screws : TRPCC M8x15
Nuts : H M8
(with notched base)

INTERMEDIATE (EXCEPT LAST INTERMEDIATE)

x6
Screws : Self-drilling
TB Torx 6.3x25

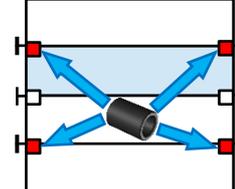
! OPTION tandem

OR

x4
Screws : TRPCC M8x15
Nuts : H M8
(with notched base)

LAST INTERMEDIATE

i Position of bushings



Installing the top panel

IMPORTANT : Remove the transport rivet from the edged column, so that the upper roller support rests on a flat surface (identical process on opposite side).

MOTORISED door

Screws : TRPCC M8x18
Nuts : H M8 (with notched base) x2

Screws : Self-drilling TB Torx 6.3x25 x2

Screws : Self-drilling TB Torx 6.3x25 x2

Assemble the adjustable rollers

Align

Right

Left

30

13

IMPORTANT : Remove the transport rivet from the edged column, so that the upper roller support rests on a flat surface (identical process on opposite side).

MANUAL door

Screws : TRPCC M8x18
Nuts : H M8 (with notched base) x2

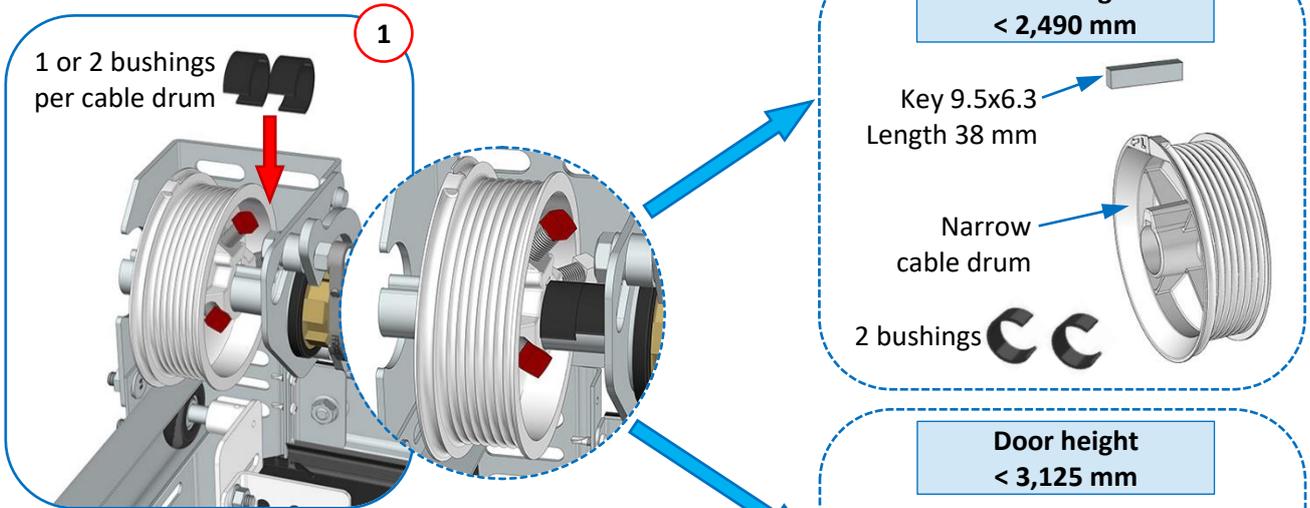
Screws : Self-drilling TB Torx 6.3x25 x2

Screws : Self-drilling TB Torx 6.3x25 x2

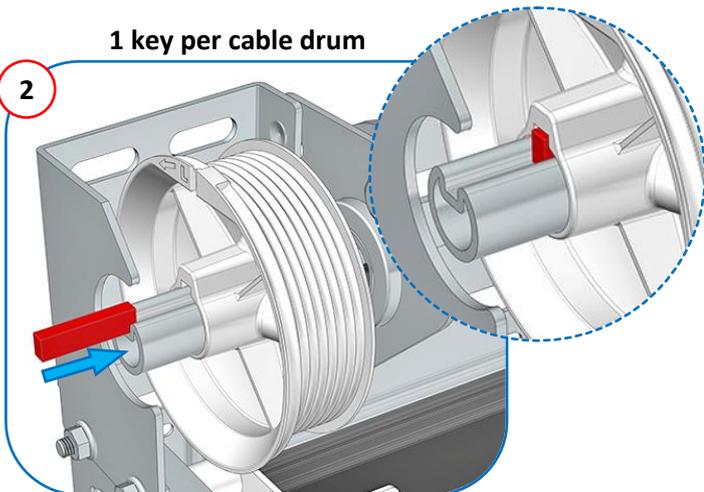
Cable installation

Positioning the cable drums

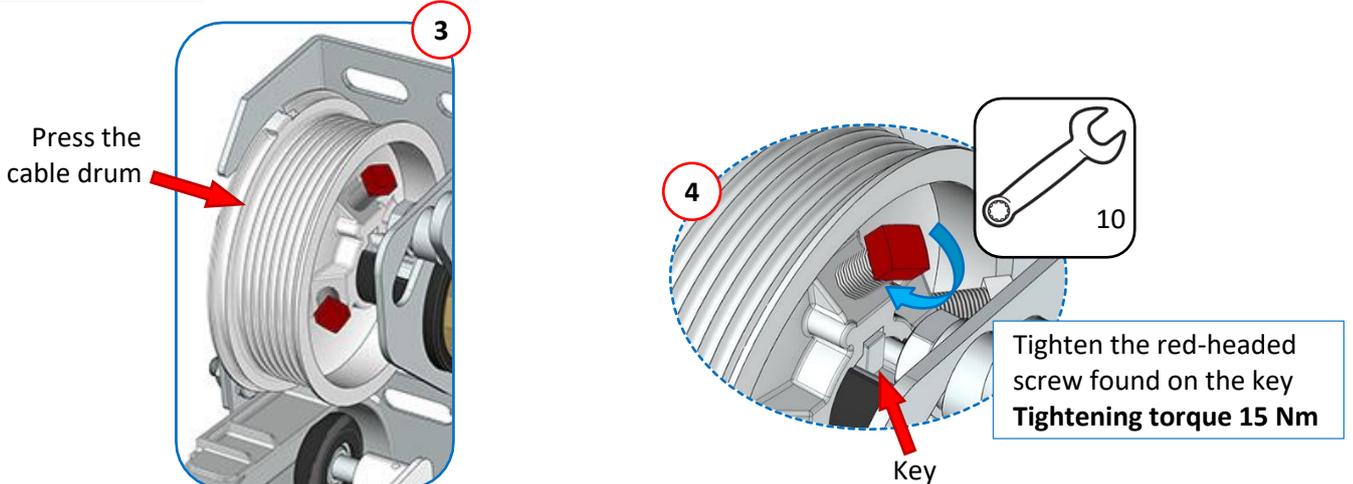
Installing the bushings for the 2 cable drums :



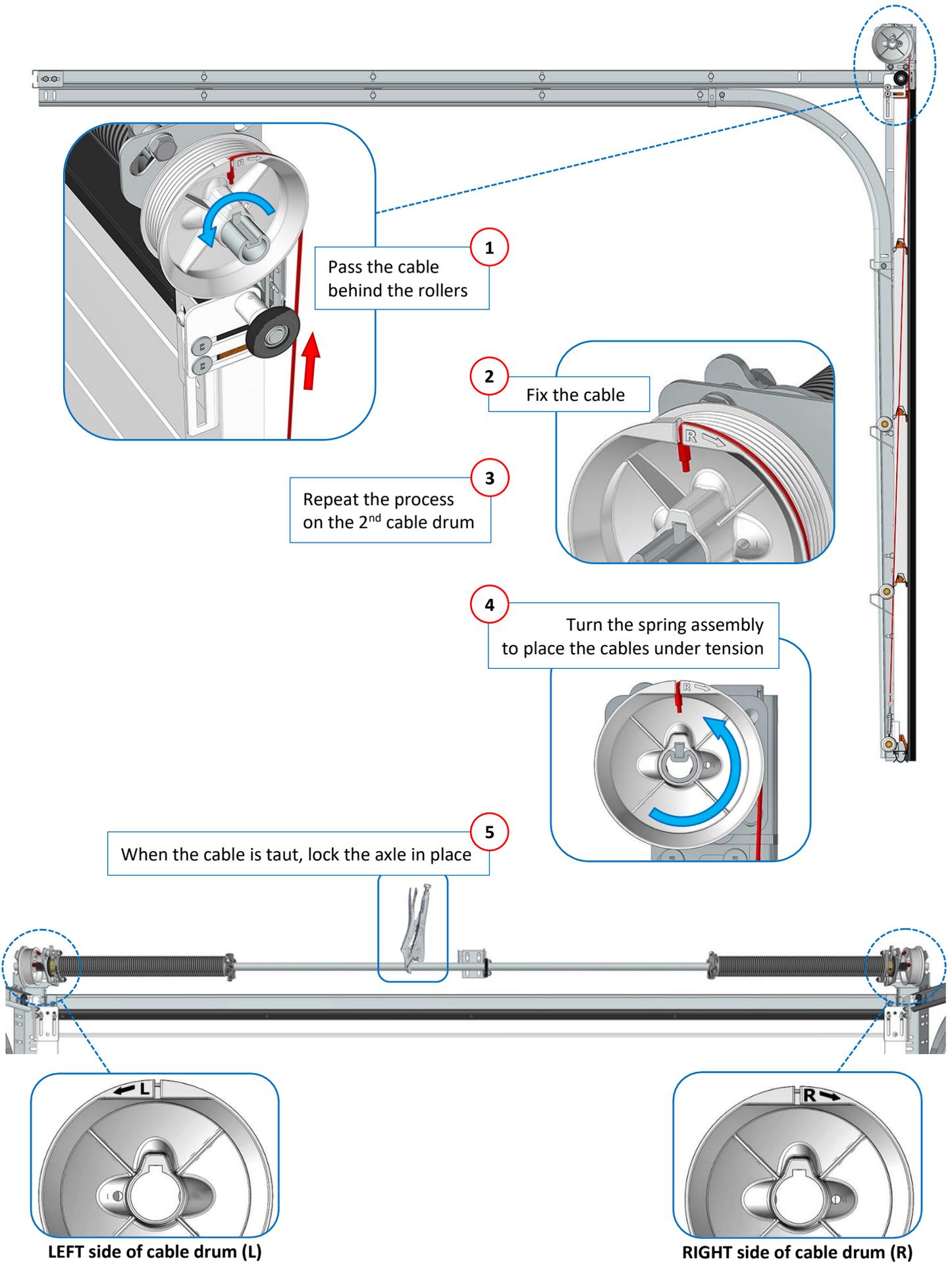
Installing the keys on the cable drums :



Block the cable drums :

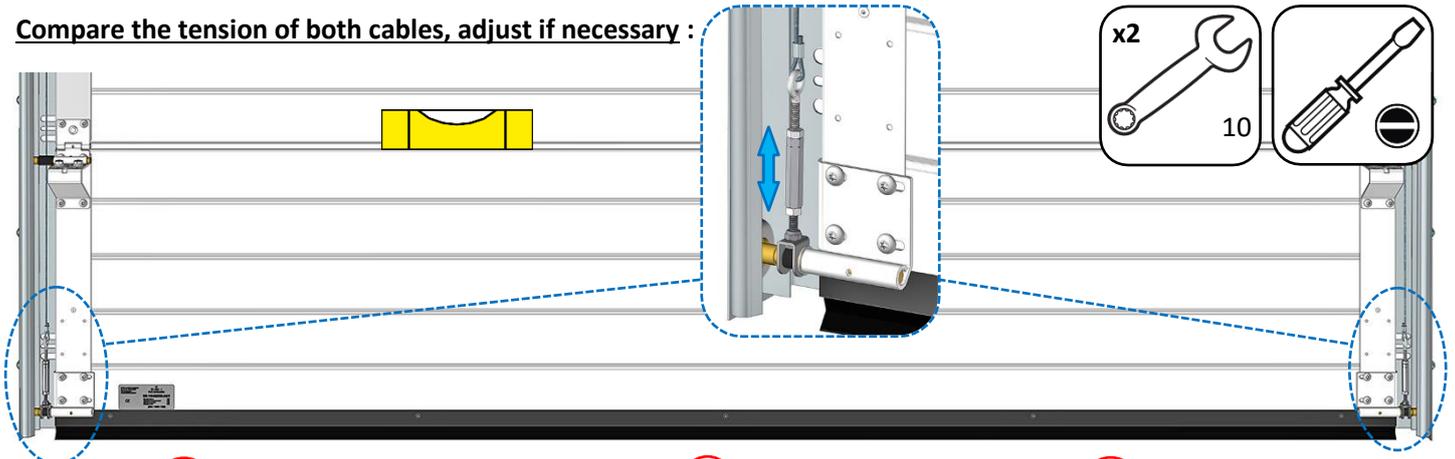


Routing the cables around the cable drums



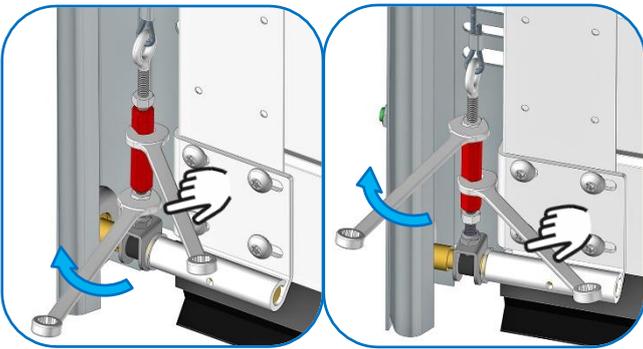
Checking the tension of the cables

Compare the tension of both cables, adjust if necessary :



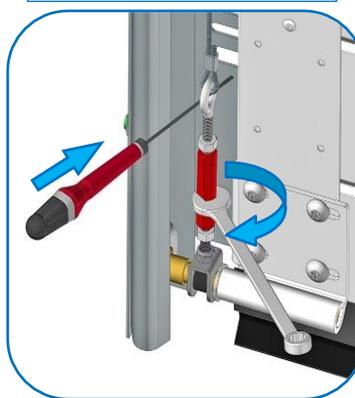
1

Loosen the nuts



2

Tension the cable



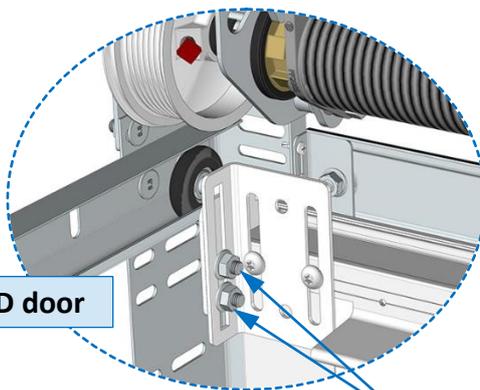
3

Tighten the nuts

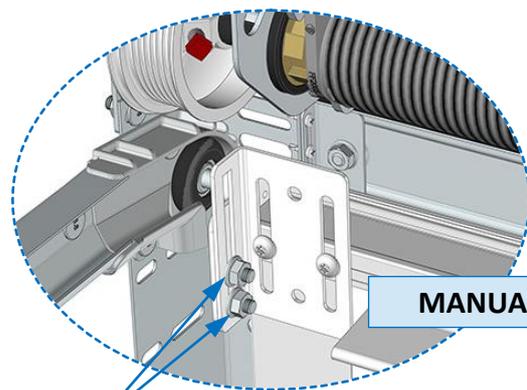


Do not over tension the cable, refer to 

Release the upper rollers :



MOTORIZED door



MANUAL door

Loosen the nuts

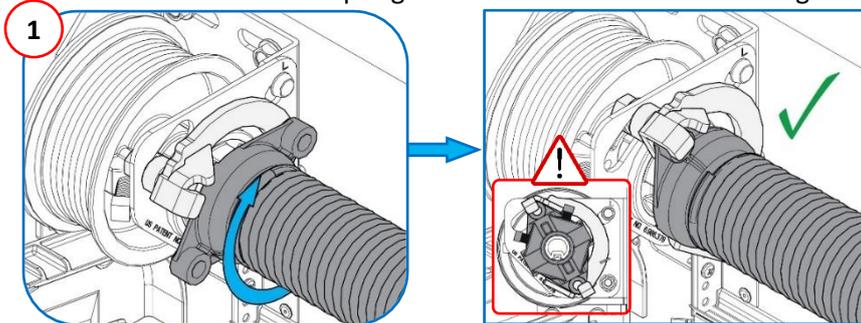
Remove the shims and lower the shutter :



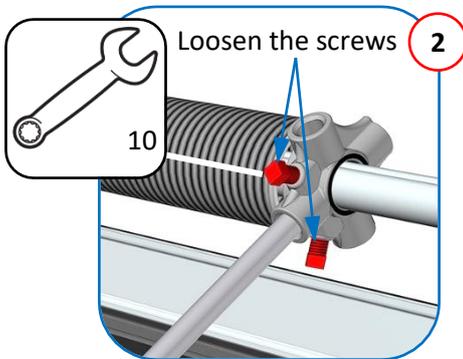
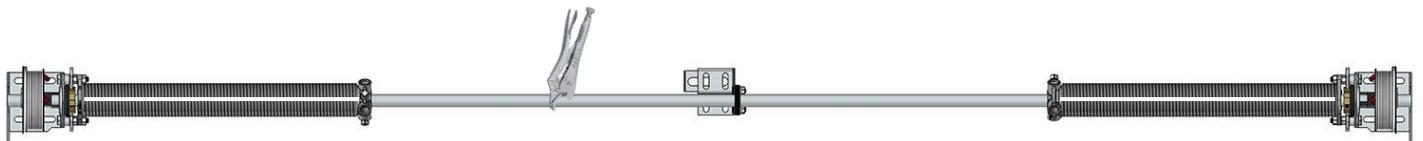
Spring adjustments

Spring tension

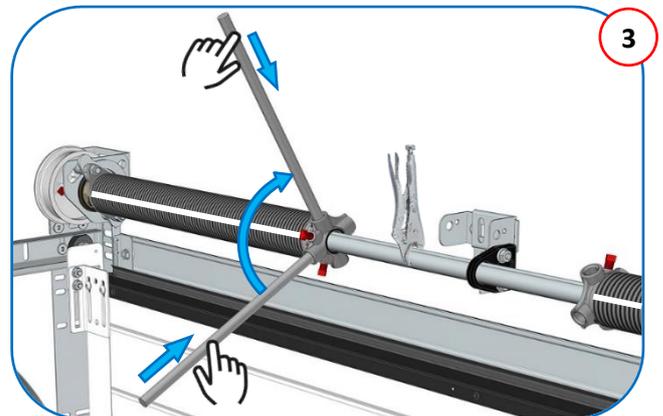
Reminder : Insert each spring into the 2 hooks on the anti-fall guard



Check both springs are positioned correctly inside the anti-fall guard supports before tensioning the springs.

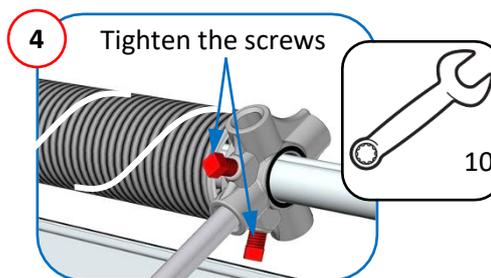


Tighten the bottom springs towards the top, according to the number of turns shown on the label stuck to the axle.



For example : Number of turns

6 5 4 3 2 1



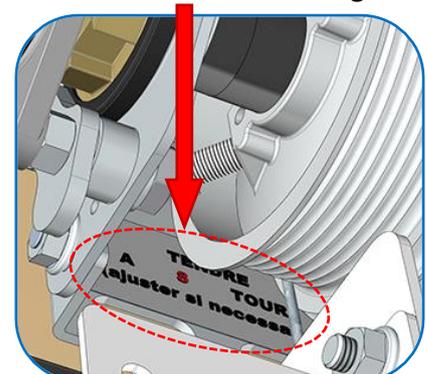
Tightening torque 20 Nm

Table for number of spring tension turns

Passage height (mm)	Number of tension turns
≤ 1,820	6
From 1,821 to 1,998	6.5
From 1,999 to 2,209	7
From 2,210 to 2,347	7.5
From 2,348 to 2,519	8
From 2,520 to 2,714	8.5
From 2,715 to 2,885	9
From 2,886 to 3,000	9.5

Adjust the settings if necessary

Number of turns shown on the right bearing



Adjusting the rollers

1 Close the shutter

2 **MOTORISED door**
Adjust the upper rollers

2 **MANUAL door**
Adjust the upper rollers

3 **Lateral hinges**
Locking screw

3 **OPTION tandem**
Locking screw

4

4

4

4

MANUAL version

MOTORISED version

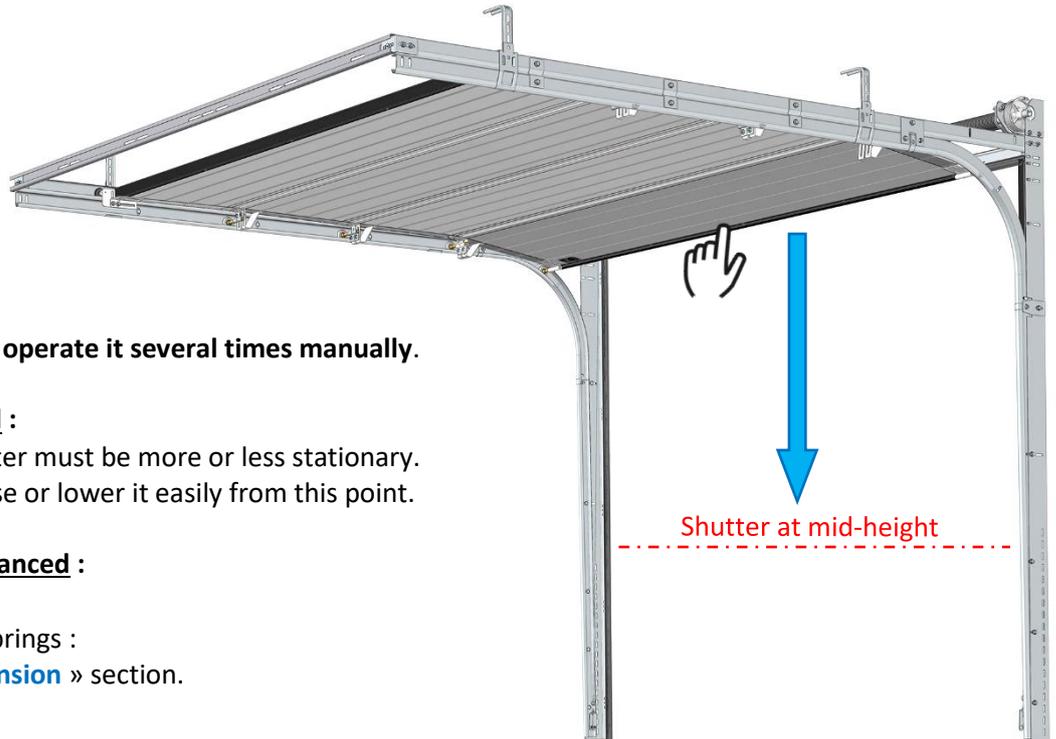
OR

! The roller rod must be able to turn freely.

! Do not flatten the vertical seals of the shutter.

Please note : If the shutter jams at the end of the closing operation, move the bottom of the rail apart slightly.

Checking the balance



Remove the **locking pliers**.
Gently close the shutter and **operate it several times manually**.

The shutter is well-balanced :

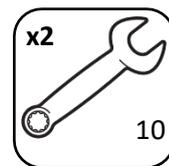
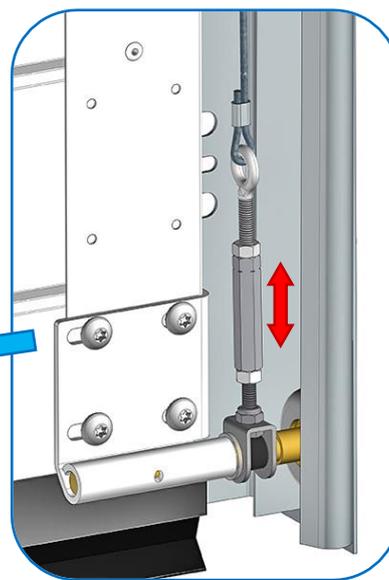
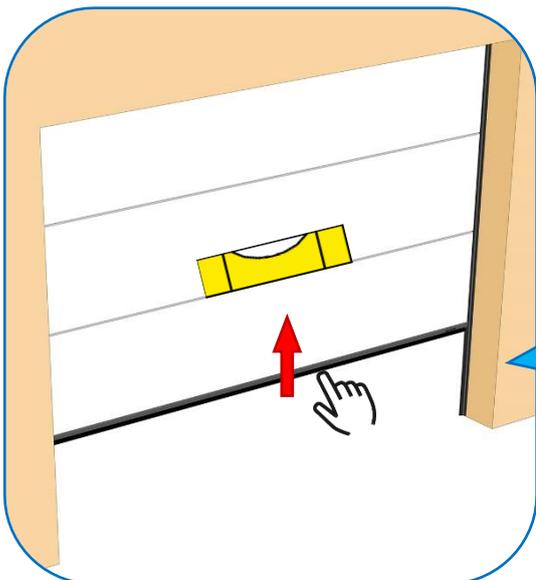
- At mid-height, the shutter must be more or less stationary.
You must be able to raise or lower it easily from this point.

If the shutter is not well-balanced :

- Lower the shutter.
- Tighten or loosen the springs :
Refer to the « **Spring tension** » section.

Finishes

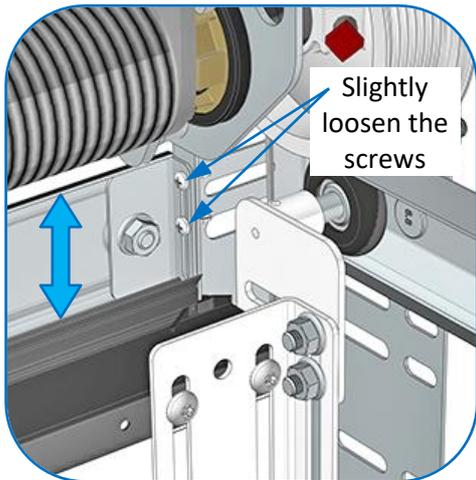
Leveling the shutter



To adjust the tensioner, refer to the « **Checking the tension of the cables** » section.

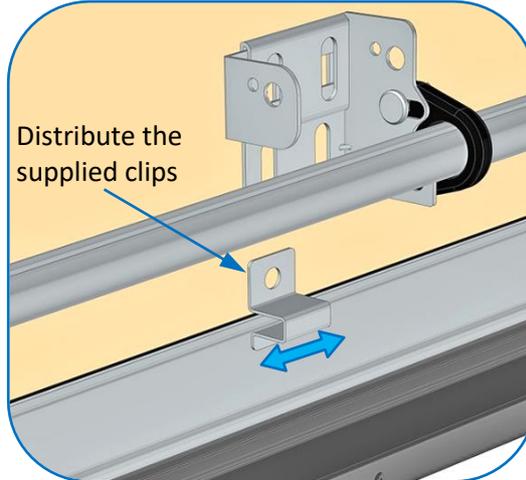
Adjusting and fixing the fascia

Adjusting the fascia

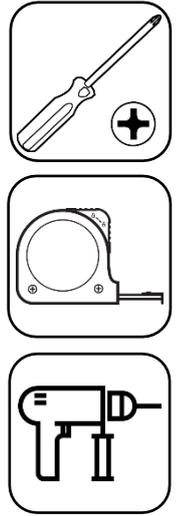


Repeat the process on the opposite side

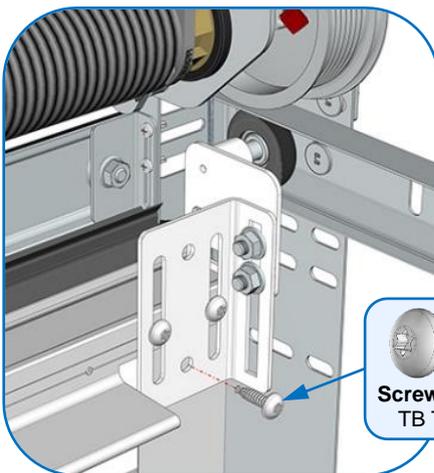
Fixing the fascia



Use appropriate fittings for the support (screws and pins not supplied)

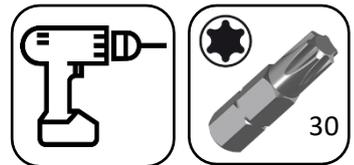


Fixing the upper roller supports



Add

Screw : Self-drilling TB Torx 6.3x25 x1

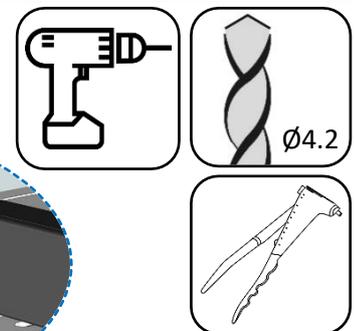


Repeat the process on the opposite side.

Fixing the end position clips (manual door)

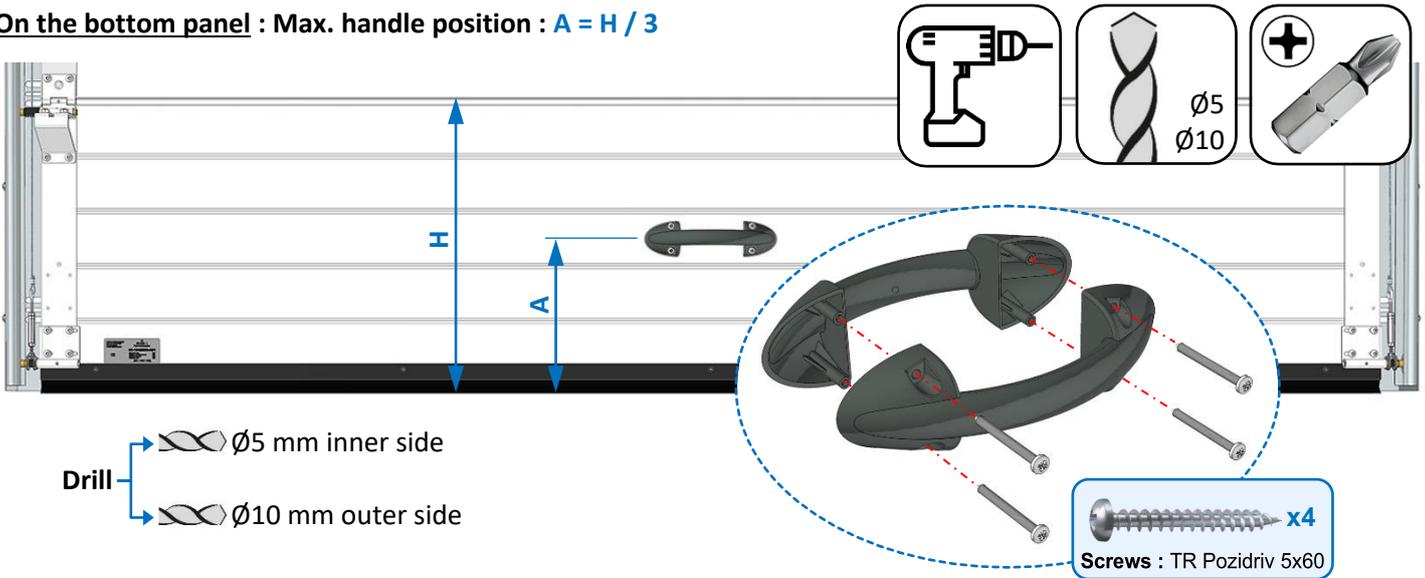


Rivets : Ø4x9 Countersink a hole of Ø4.2 x2



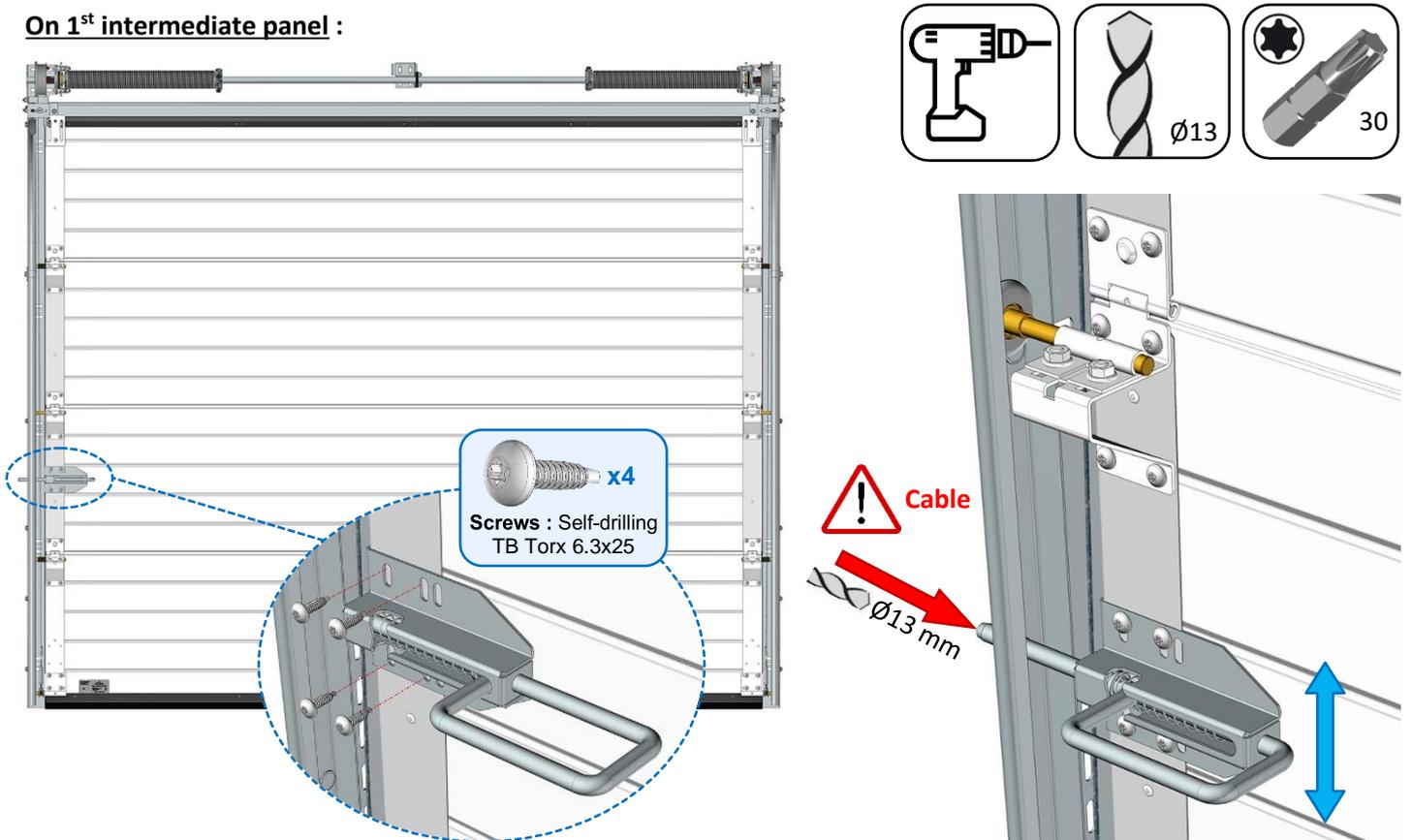
Assembling the handle

On the bottom panel : Max. handle position : $A = H / 3$



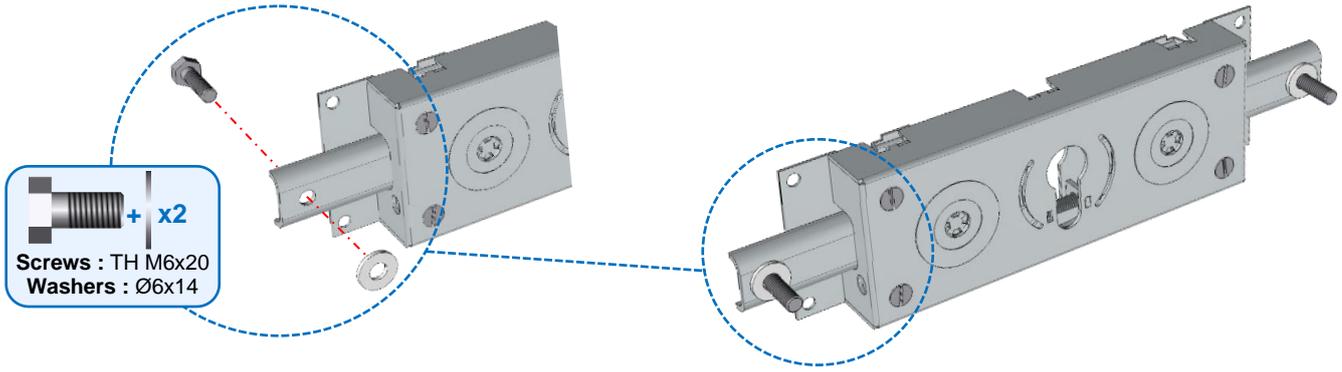
Assembling the latch (optional on motorised doors)

On 1st intermediate panel :

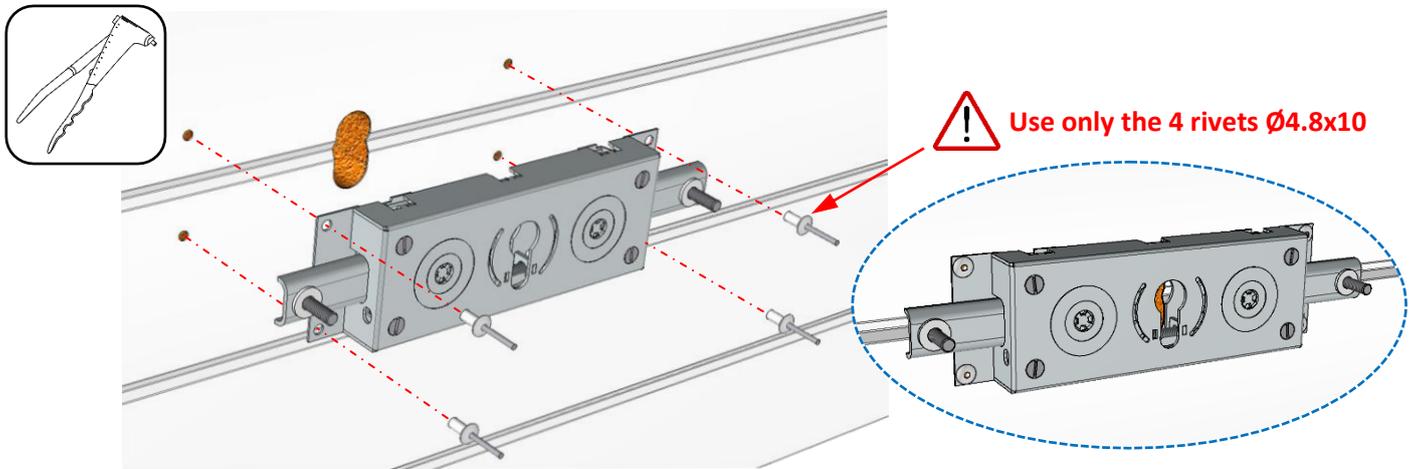


Installing the lock (optional on motorised and manual doors)

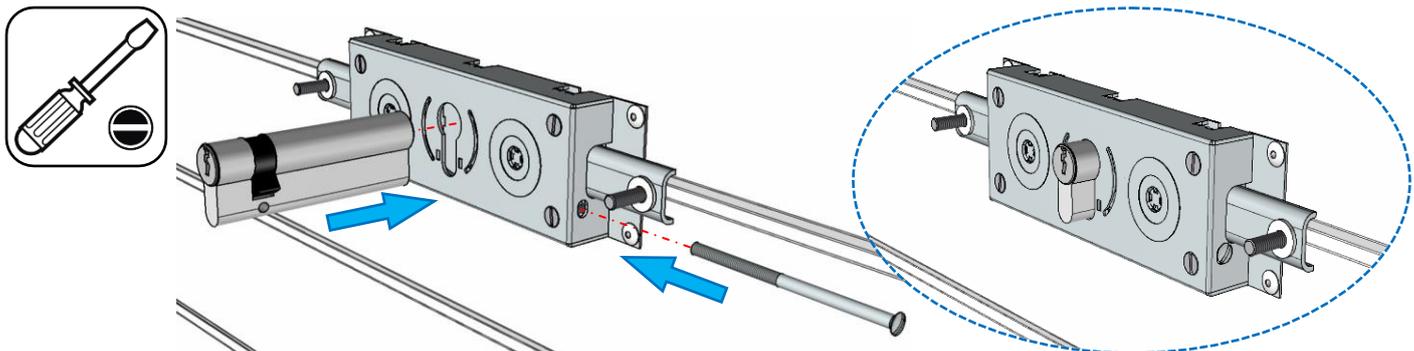
Prepare the lock :



Fixing the lock :

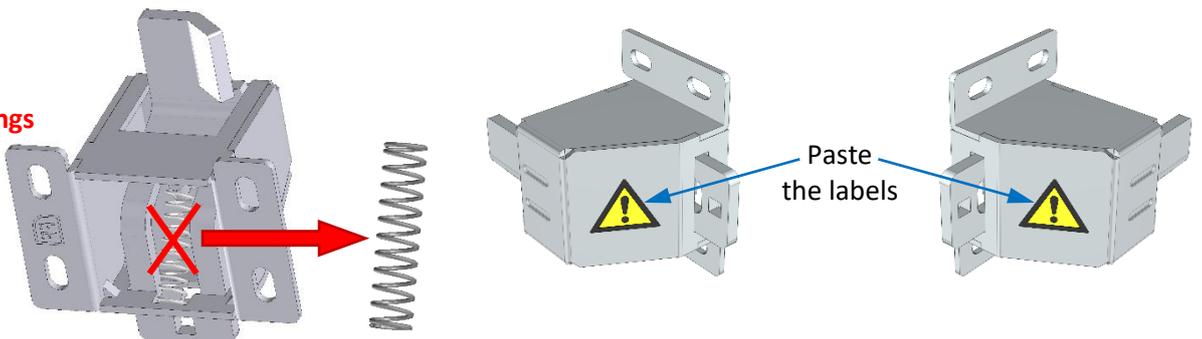


Assembling the cylinder :

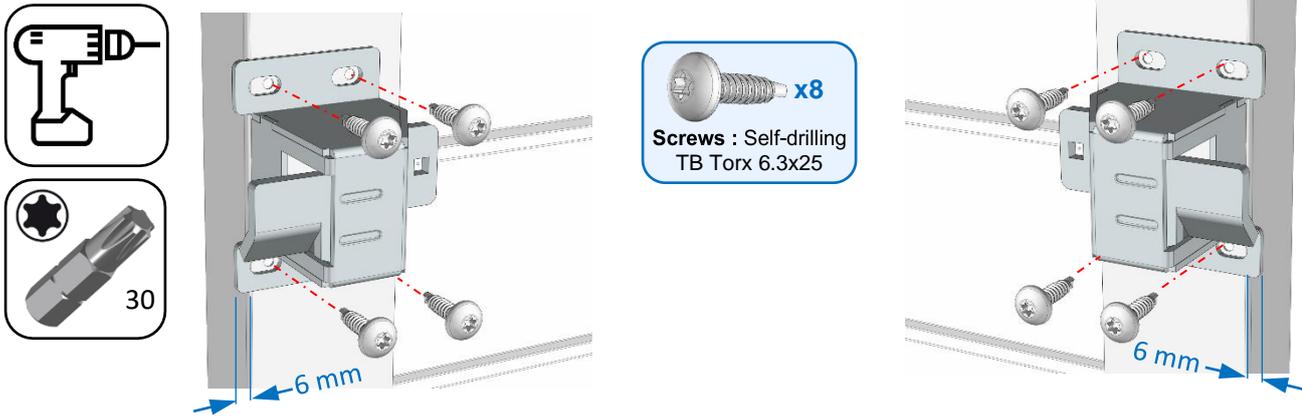


Preparing the latches (left and right) :

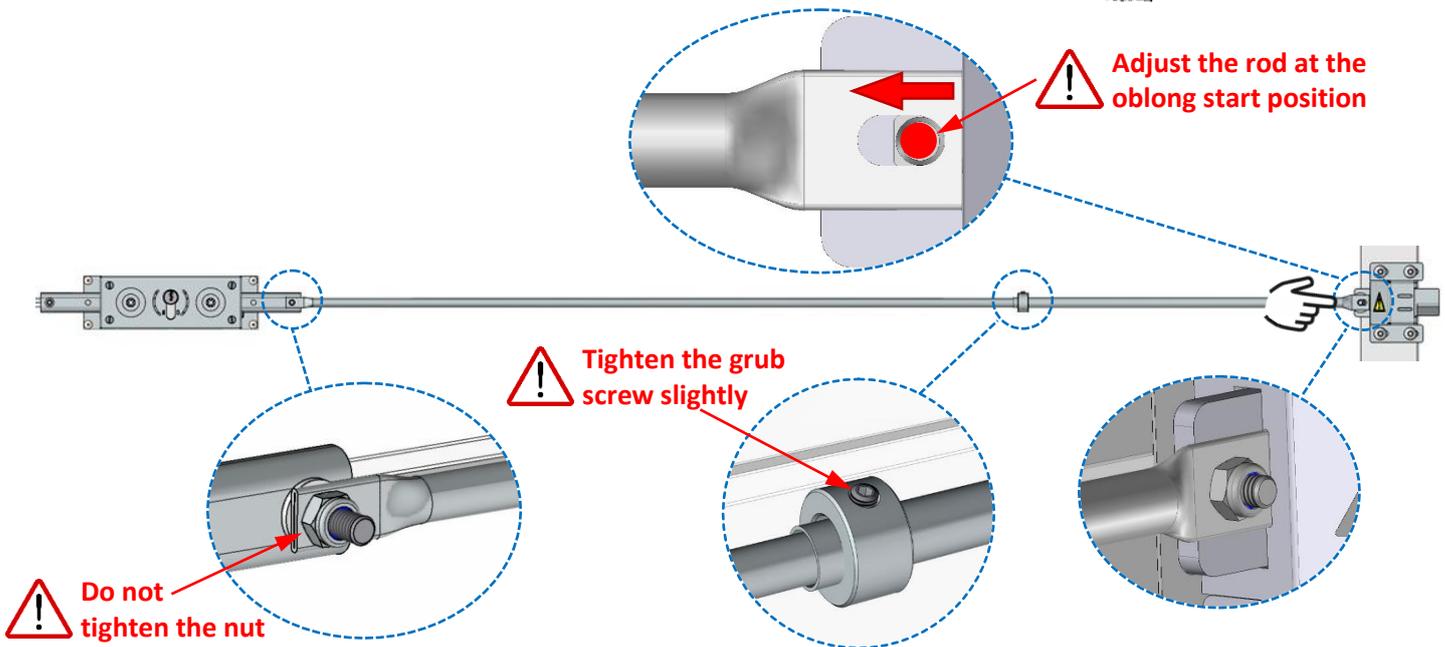
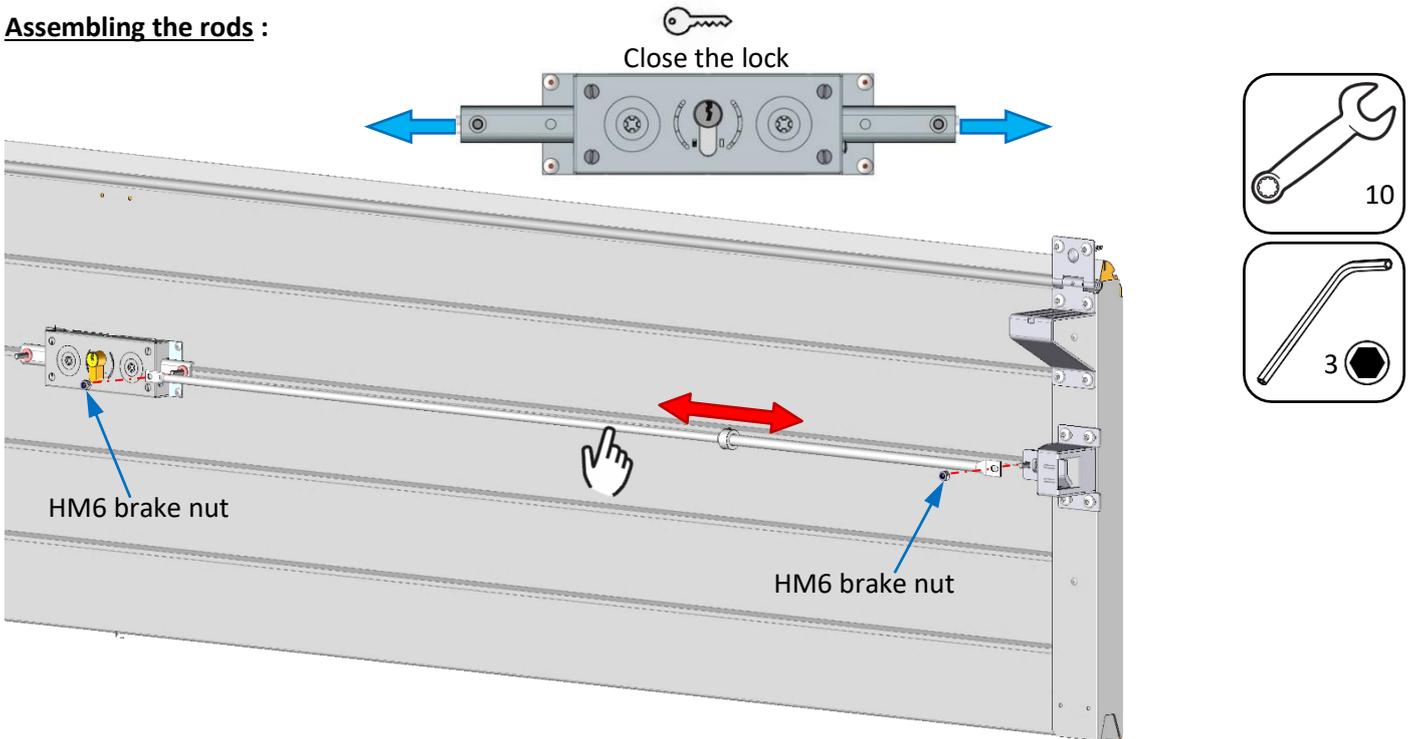
IMPORTANT
Remove the springs
from the left
and right bolts



Assembling the latches (left and right) :

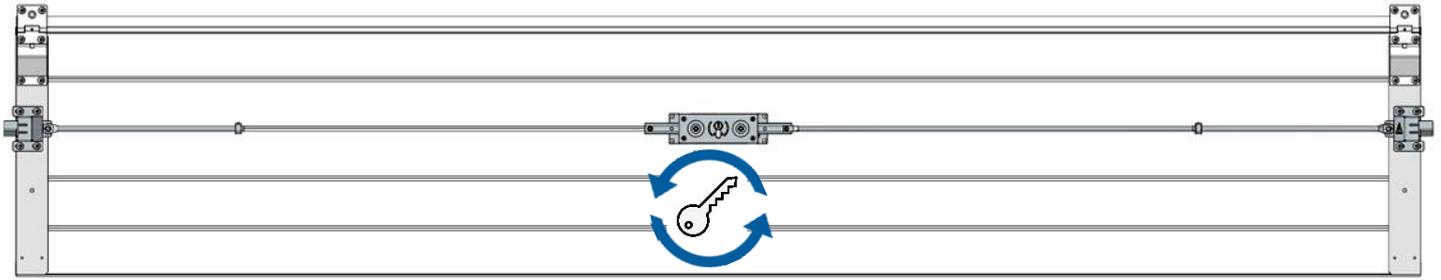


Assembling the rods :



Repeat the procedure for the second rod.

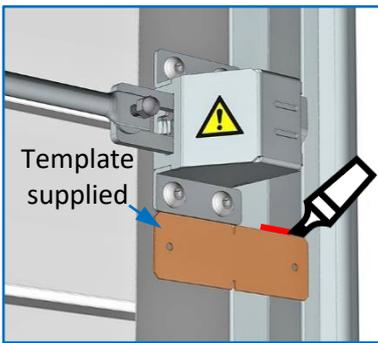
Checking the lock :



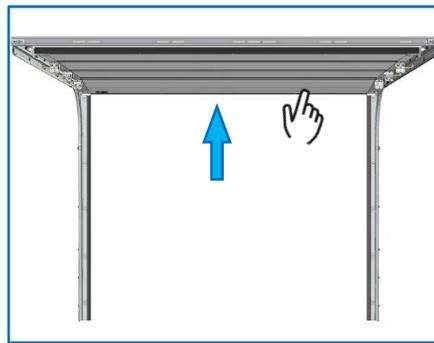
If necessary, return to the « **Assembling the rods** » section.

Positioning the strike plates :

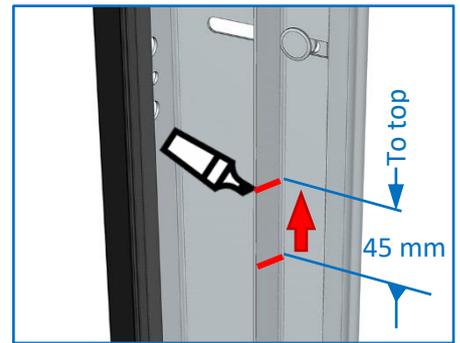
1- Mark out (on the 2 latches)



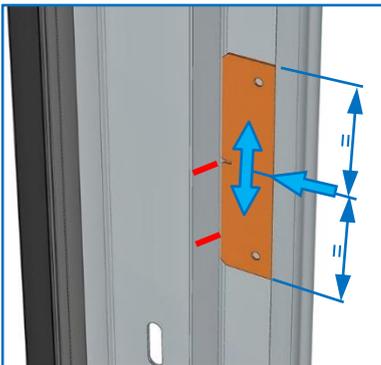
2- Open the shutter



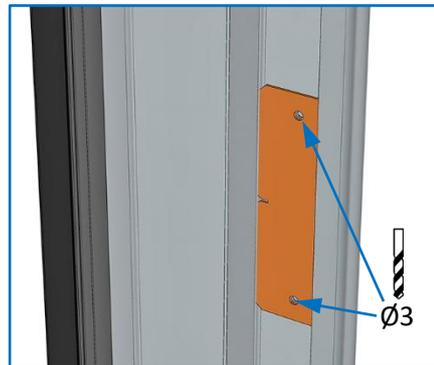
3- Offset the marking



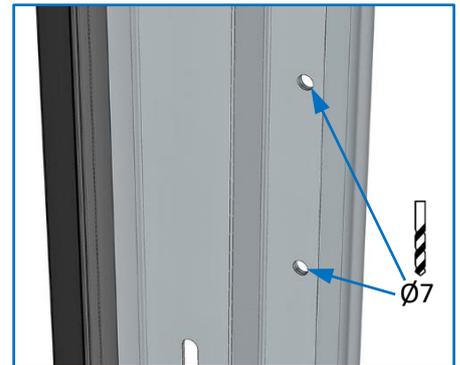
4- Position the template



5- Mark out the drill holes



6- Drill the holes



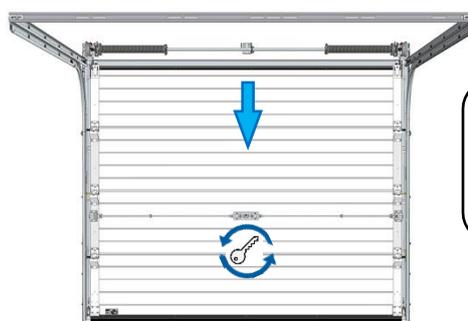
Fixing the strike plates :



Screws : TRPCC M6x16
Nuts : H M6
(with notched base)

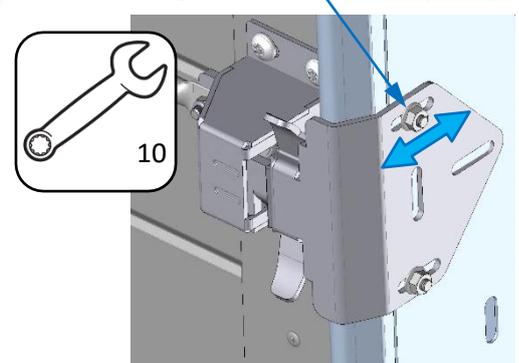
Do not fully tighten the nuts

Close the shutter



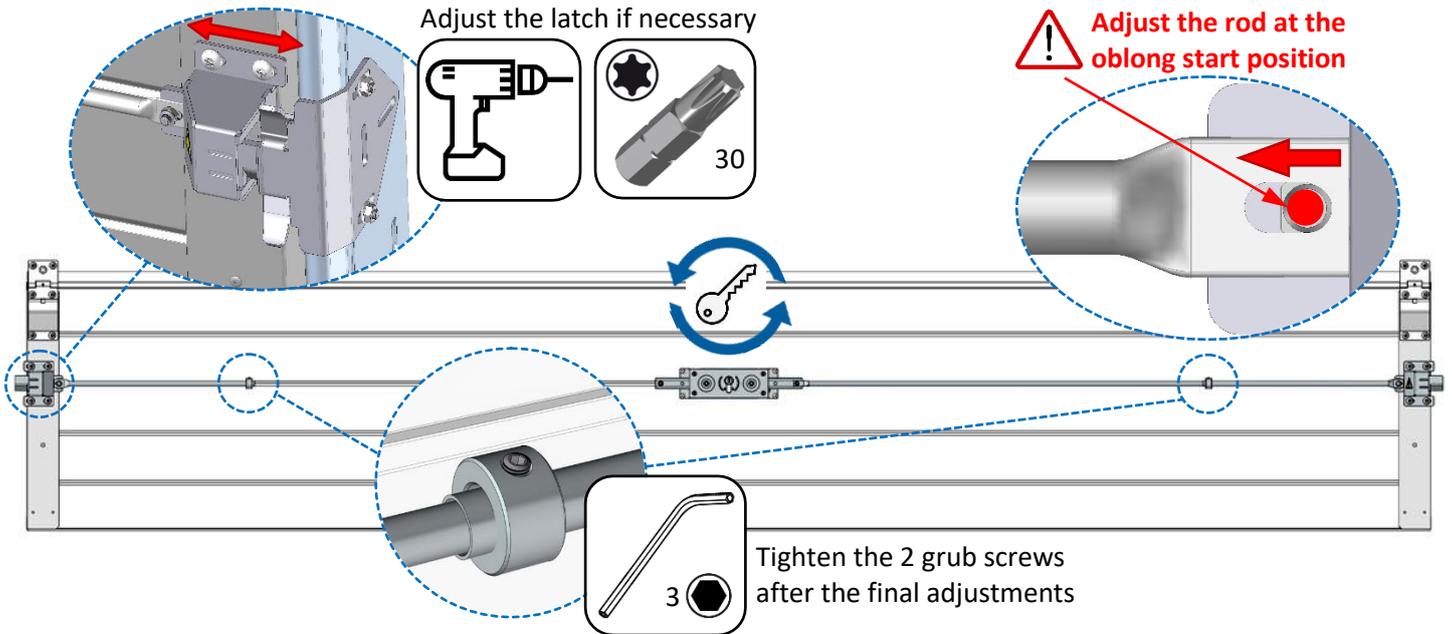
Close the lock

Adjust the strike plates
Tighten the nuts after adjusting

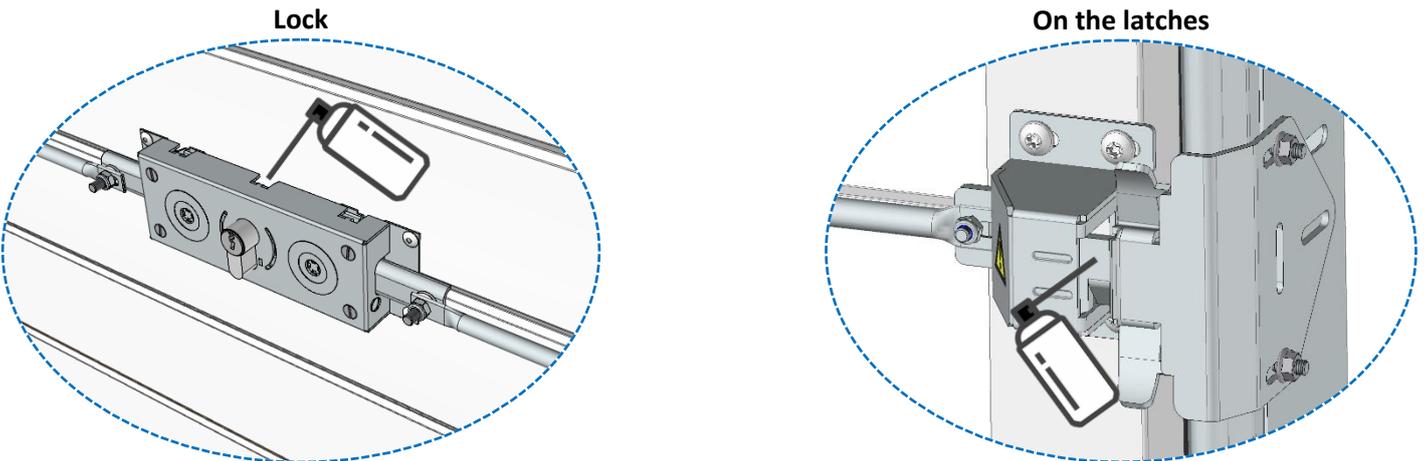


Allow some play between the strike plate and the latch

Checking the lock :



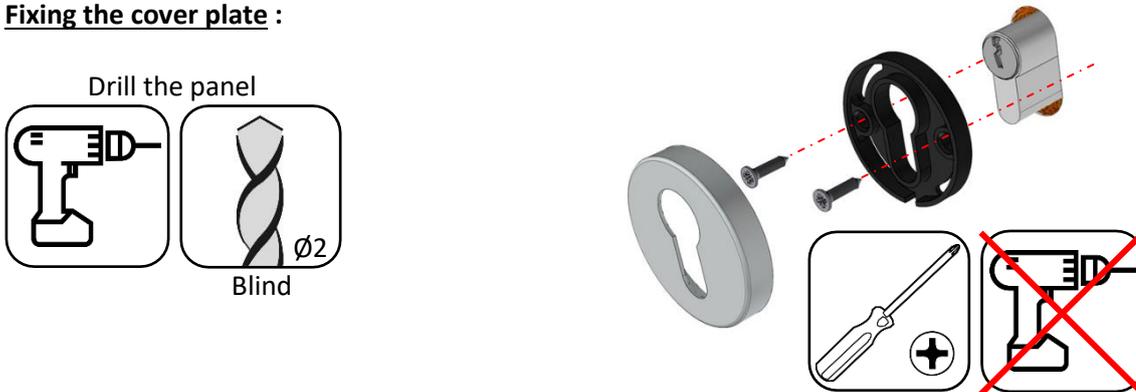
Lightly grease the lock and the 2 latches :



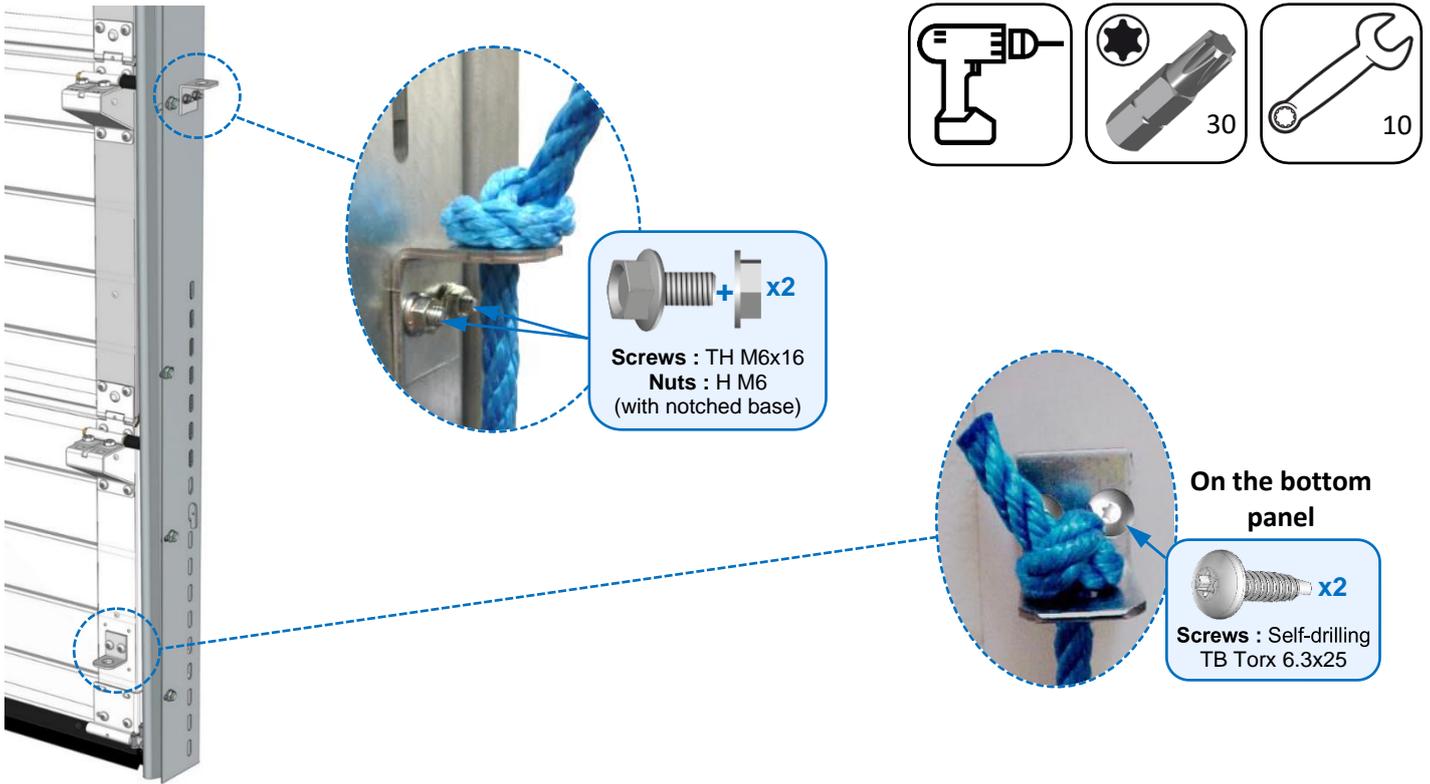
IMPORTANT :

If you feel a rough spot, check the installation of the latches, rods and strike plates.

Fixing the cover plate :



Installing the pull cord (if manual door)



Weather seal (optional)



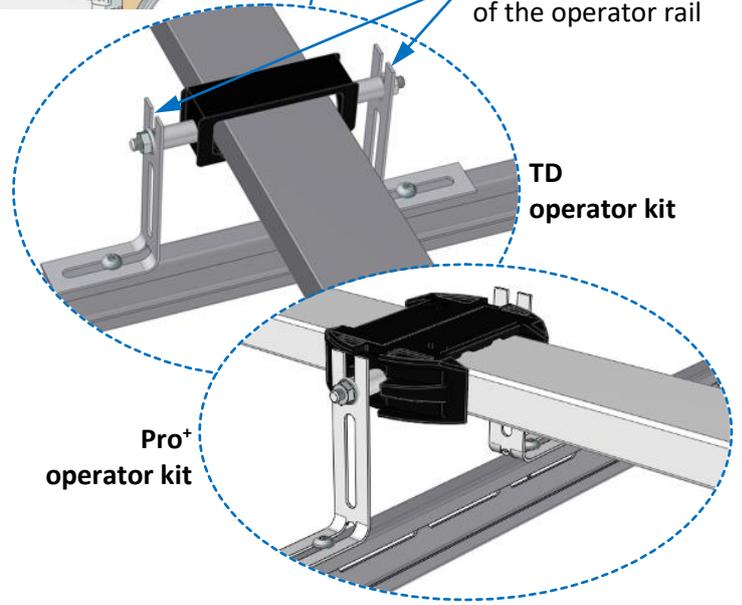
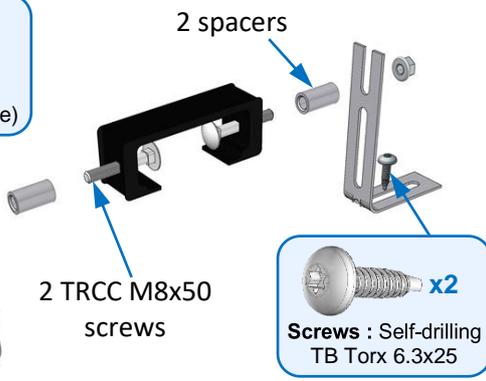
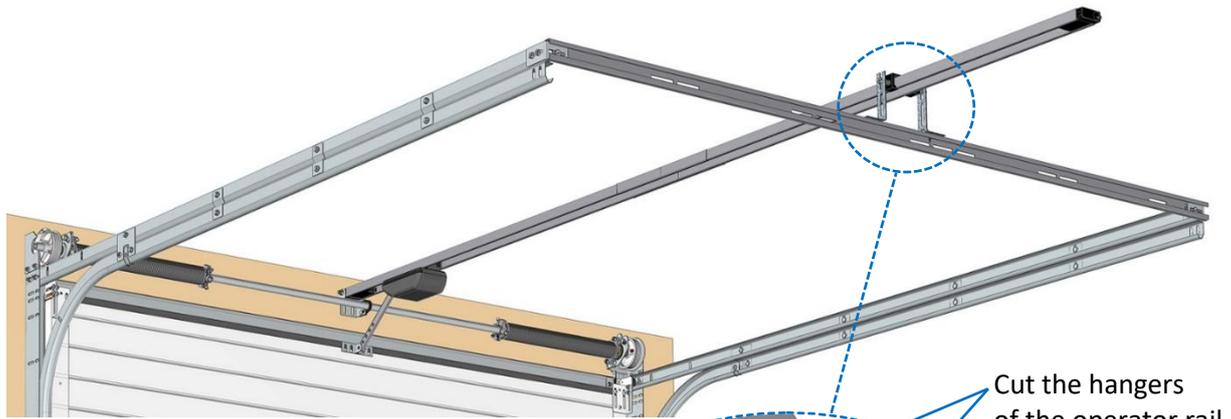
Weather seal section to be glued to the floor between the rails.

Refer to manual : Weather seal.

Greasing the bottom of the rails



Fixing the « SOMMER » operator to the back bar



⚠ This fastening kit is compatible exclusively with all « SOMMER » operators.

In case of incorrect manual functioning

- Check that the vertical rails are plumb and that there is a **56 mm** gap between the rails and the edge of the panel.
- Check that the bottoms of the vertical rails are at the same horizontal level.
- Check that the horizontal rails are aligned in relation to the vertical rails and that there is a **56 mm** gap between the rails and the edge of the panel.
- Check that the horizontal rails are perfectly aligned with each other, and that they are perpendicular to the header and level.
- With the door raised to roughly 1.00 m height, check that the shutter is perfectly level.
- Check that the lateral seals have not been compressed and that the sealing of the shutter is even.

IMPORTANT :

If the shutter is incorrectly adjusted and is flattened too tightly against the lateral seals, the door will not function correctly.

- Adjust the compensation setting by 1/4 turn on the springs. This will enable correct manual operation of the shutter.

Please note :

Difference in tolerated tension between the springs = 1/2 turn.

After being operated several hundreds of times, it may be necessary to retighten the springs slightly.



If one or more of the anti-fall guards is blocked, contact a trained installer.