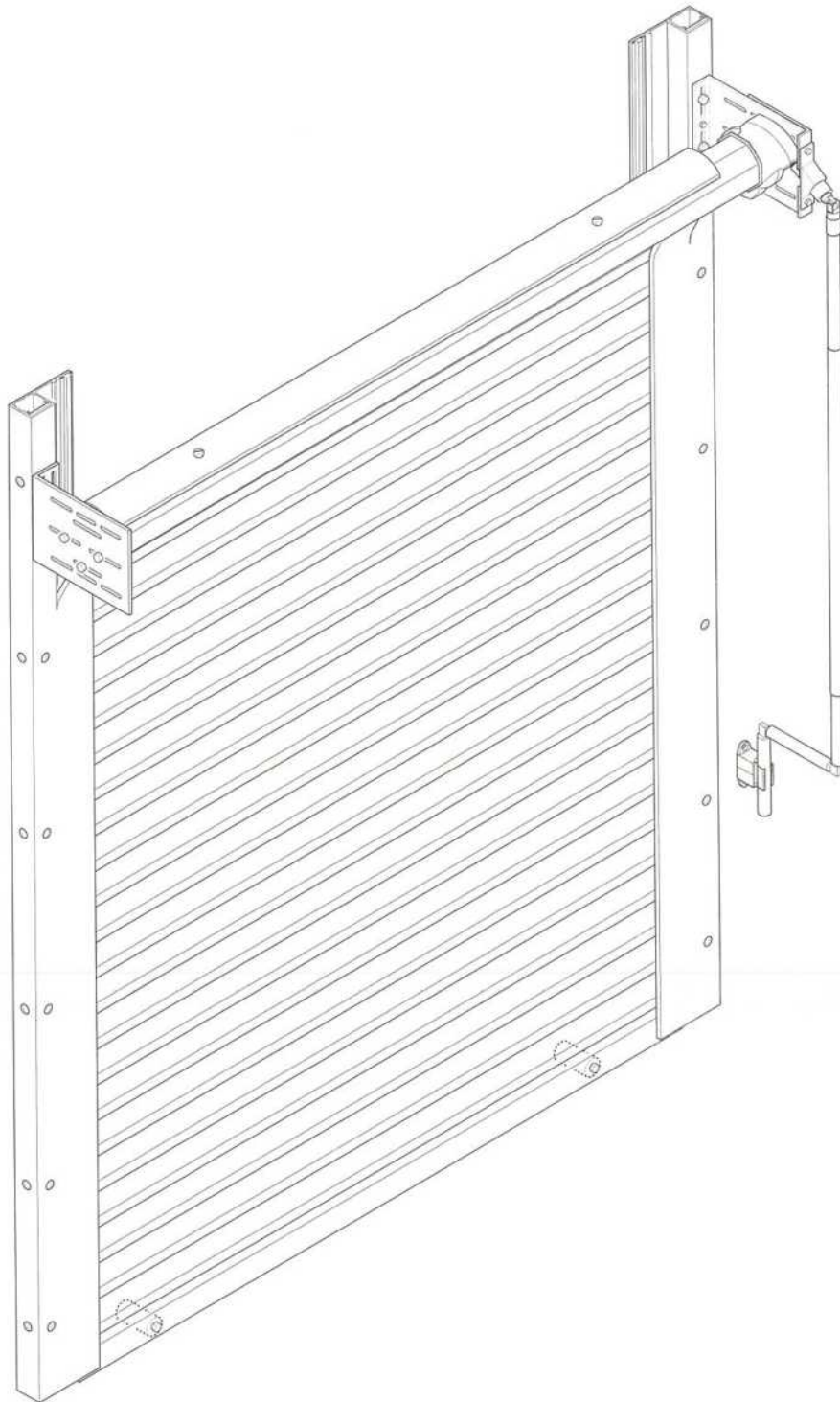
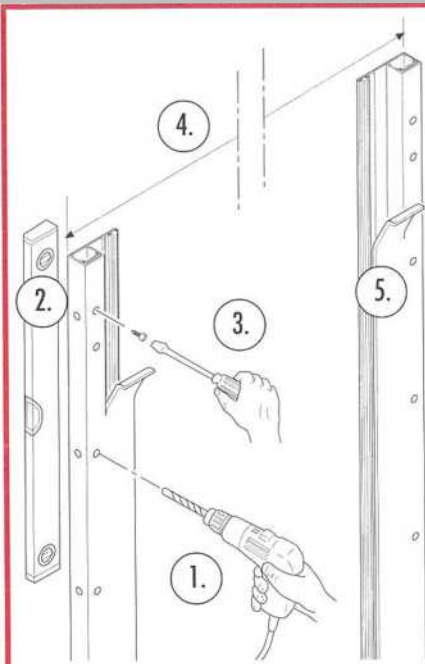


Crank-operated Rullari installation instructions



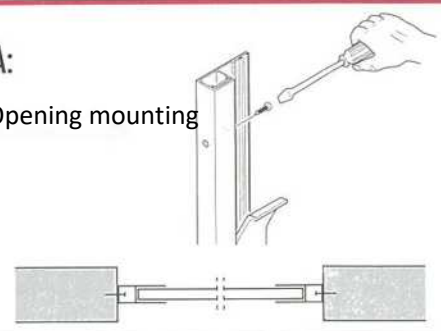
STAGE 1: Mounting guide rails



1. Drill holes where necessary into the guide rails. Note the installation method A = in the opening, B = on the wall surface
2. Make sure that the guide rail is straight
3. Fix the guide rail in place.
4. Check the distance between the guide rails according to the dimensions given in the order, taking the installation method (A or B) into account.
5. Attach the second guide rail, making sure that the guide rails are straight and parallel.

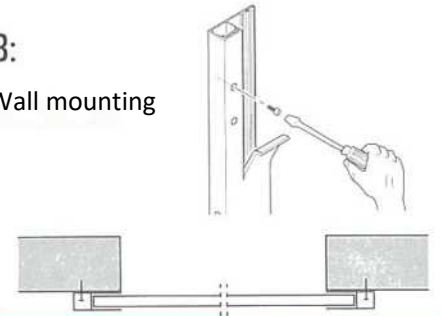
A:

Opening mounting



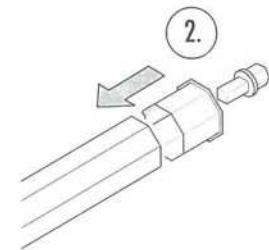
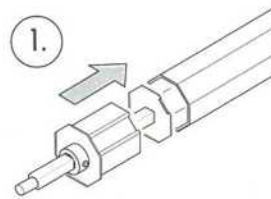
B:

Wall mounting



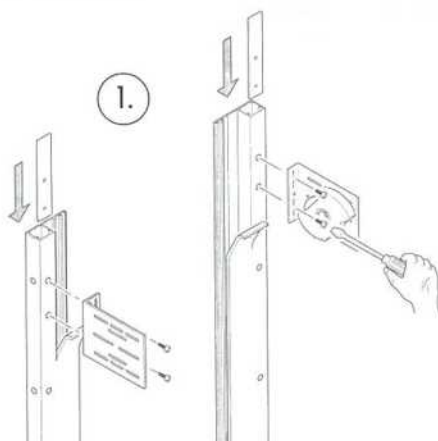
STAGE 2: Assembling the axle

1. Install the left-hand stopper at the end of the axle.
2. Install the right-hand stopper at the end of the axle.

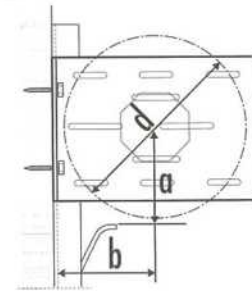
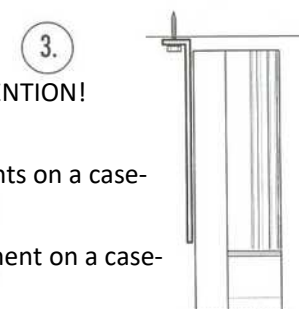
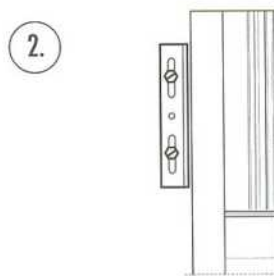


STAGE 3: Installation of mounting brackets

ATTENTION! If the mounting brackets are already on the rails, go to step 4. For casing installation, go to step 5B.



1. Attach the mounting brackets to the guide rails. ATTENTION! Battens!
2. Fixing the mounting bracket to the wall. Measurements on a case-by-case basis.
3. Fixing the mounting bracket to the ceiling. Measurement on a case-by-case basis.

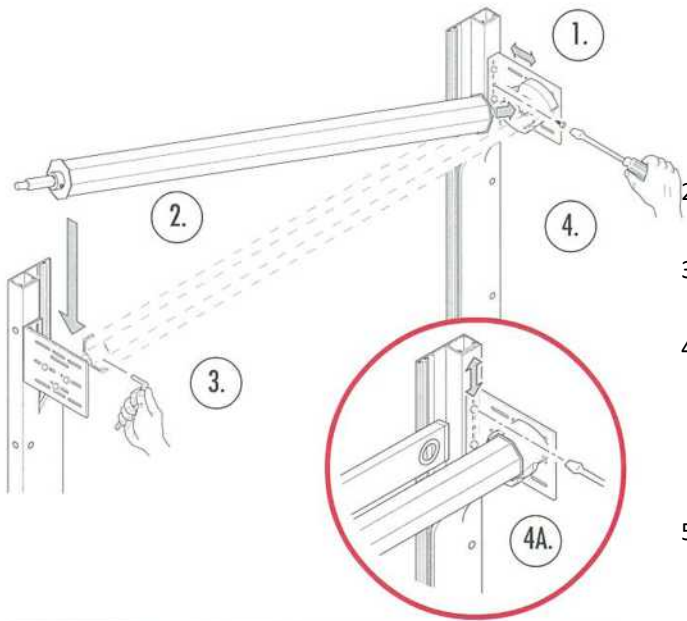


a= _____

b= _____

d= _____

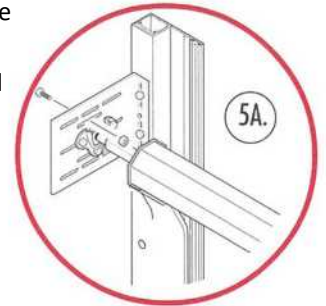
STAGE 4: Install the axle and adjust



1. Adjust the distance between the bearing and the motor bracket and the guide rails so that the shutter has room to wind around the axle. The diameter of the roller d is shown in step 3. At this stage, decide on the position of the crank pivot joint and adjust the position of the gear in line with the pivot pin (8x8 mm). When in use, the angle between the pivot and the crank should be as slight as possible, so that the joint is light and does not put any strain on the crank's joint.

Attachment of the pivot joint is shown in step 5. Note the effect of this adjustment also on fixture of the joint in stage 5a

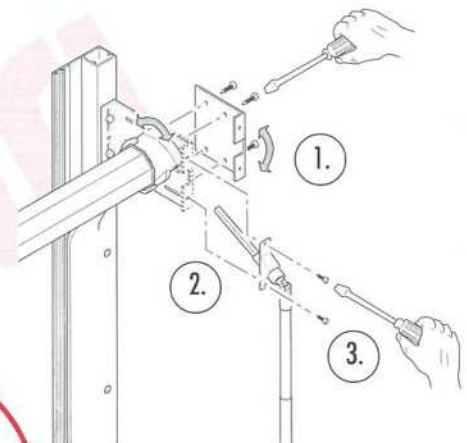
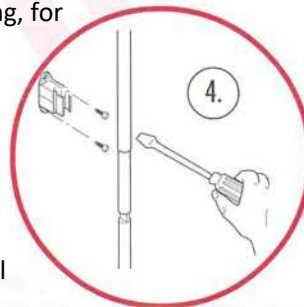
2. Lift the axle into position in front of the end which will house the gearing.
3. Using an Allen wrench, adjust the length of the axle to the appropriate length using the adjusting screw.
4. Make sure that the axle is straight and make any necessary adjustments to the mounting brackets (see Figure 4A). Lock the mounting brackets with a drill screw.
5. Lock the opposing ball bearing with a screw as shown in Figure 5A.



STAGE 5A: Crank assembly on mounting bracket

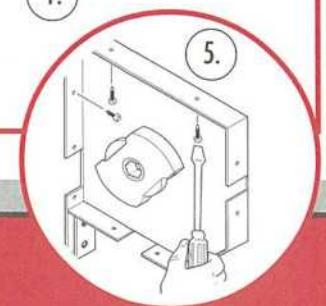
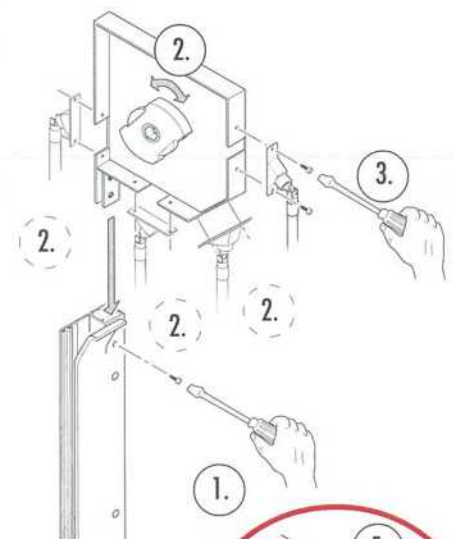
1. Attach the crank's mounting plate to the mounting bracket. The pivot's mounting plate may also be attached at a 45° angle to the mounting bracket.
2. Fit the pivot pin (8x8mm) into the hole provided in the gearing in accordance with the adjustment carried out in step 4. Trim the pivot pin (8x8mm) to a suitable length.
3. Attach the pivot to the pivot mounting plate.
4. Attach the crank holder to either the stem of the crank or the handle to suit.

ATTENTION ! If the customer provides their own casing, for example gyproc or laminate boards, the pivot of the crank should be fixed to the surface of the casing without using its mounting plate.



STAGE 5B: Crank assembly on casing

1. Attach the end piece of the casing to the guide rail with a drill screw.
 2. Fit the pivot pin (8x8mm) into the hole provided in the gearing. If necessary, adjust as described in step 4. Trim the pivot pin (8x8mm) to a suitable length. Please note the different fixing options and their ease of use (= slightest possible angle between the pivot and the crank when using the crank)! Mount the axle in position according to stage 4.)
 3. Attach the crank to the end piece of the casing. ATTENTION! The pivot will be removed from the casing in step 7.
 4. Attach the crank holder to either the stem of the crank or the handle to suit.
- NOTE! You can reinforce the end of the casing by fixing it to the wall/ceiling in a few places (see figure 5).



STAGE 6: Installing the shutter and checking its operation

1. The gearing has a built-in stopper which works as the lower limit. Turn the axle with the crank in the shutter's lowering direction until it reaches the lower limit and leave it there.
2. Lift the Rullari shutter over the axle to the guide rails and attach the roller to the axle to secure the shutter either directly from the top edge (see Figure 2A) or with a retaining spring (see Figure 2B), depending on the model.
3. Attach the plastic upper limit stopper.
4. Ensure that the Rullari shutter can function unhindered. Note clearance max 5 mm (see Figures 2A and B).

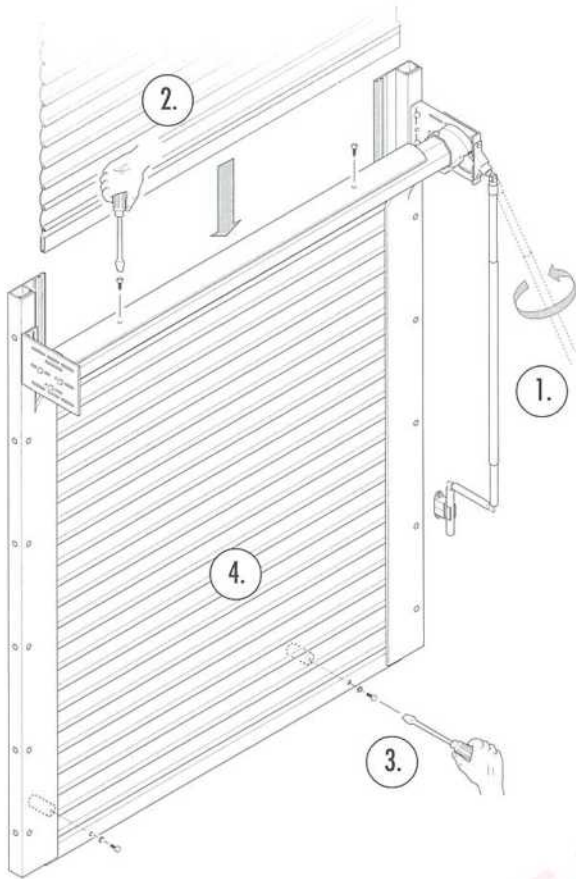


Figure 2A: Models CD 600 and CD 800

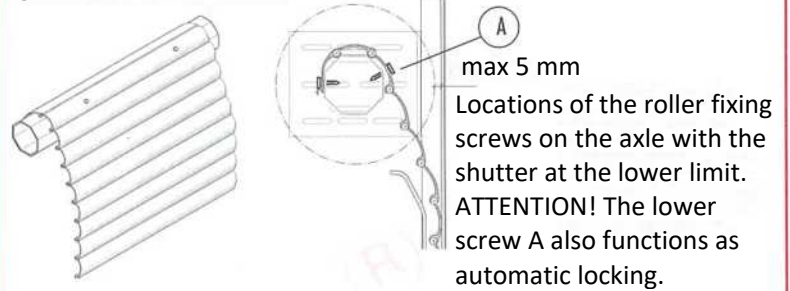
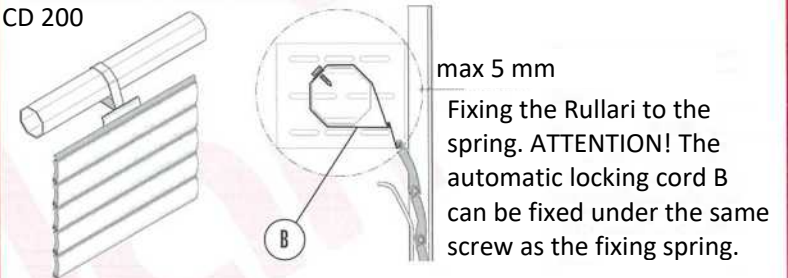
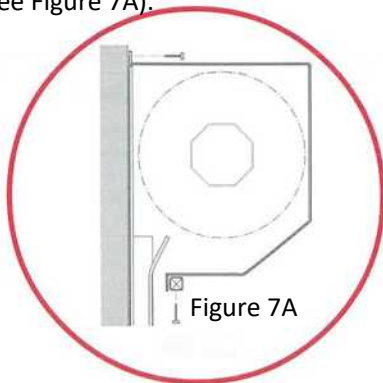


Figure 2B: Models CD 50, CD 150 and CD 200



1. After installing the shutter, remove the pivot from the end piece of the casing, make a hole in the casing's protective cover for the pivot pin and attach casing's protective cover and the pivot with screws.

In the case of wide roller blinds, the casing can be supported at its upper edge by one or more screws to the wall. The bottom edge of the casing can also be supported by a tube attached to the ends of the casing (see Figure 7A).



STAGE 7: Option with prefabricated casing

