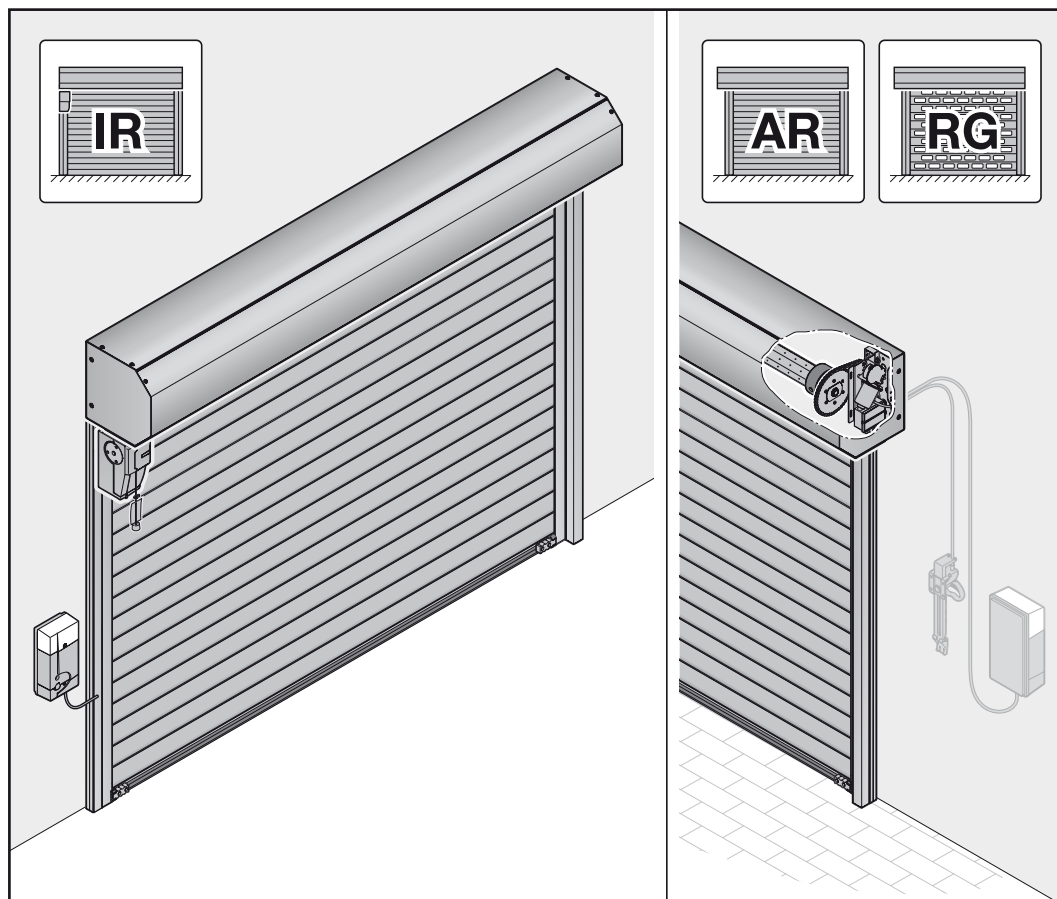




RT 700 084 RE / Stand: 12.2015

DE**Anleitung für Montage, Betrieb und Wartung**

Garagen-Rolltor / Rollgitter

EN**Instructions for Fitting, Operating and Maintenance**

Roller garage door / rolling grille

FR**Instructions de montage, d'utilisation et maintenance**

Porte de garage enroulable / Grille à enroulement

ES**Instrucciones de montaje, funcionamiento y mantenimiento**

Puerta de garaje enrollable / reja enrollable

RU**Руководство по монтажу, эксплуатации и техническому обслуживанию**

Гаражные рулонные ворота / рулонная решетка

+**NL** NEDERLANDS**IT** ITALIANO**PT** PORTUGUÊS**PL** POLSKI**HU** MAGYAR**CS** ČESKY**SL** SLOVENSKO**NO** NORSK**SV** SVENSKA**FI** SUOMI**DA** DANSK**SK** SLOVENSKY**TR** TÜRKÇE**LT** LIETUVIŲ KALBA**ET** EESTI**LV** LATVIEŠU VALODA**HR** HRVATSKI**SR** SRPSKI**EL** ΕΛΛΗΝΙΚΑ**RO** ROMÂNĂ**BG** БЪЛГАРСКИ

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Make sure that these instructions remain with the door operator!

Read and follow these instructions carefully!

They provide you with important information on the safe fitting and operation, as well as proper care and maintenance, of your roller garage door / rolling grille. Keep these instructions and the warranty booklet in a safe place for later reference.

Enter the serial number (see the data label) here.

Serial no.:

1 ⚠ Safety Instructions

The manufacturer is not liable for damage resulting from non-compliance with these instructions including the safety instructions.

1.1 Qualified persons

Have a qualified person (competent person in acc. with EN 12635) fit, start-up and maintain the door following these instructions. While doing so, observe the requirements in the standards EN 12604 and EN 12635.

1.2 Symbols and signal used

Special safety information is provided at respective important points in these instructions. They are identified by the following symbols and signal words.

⚠ The general warning symbol indicates a danger that can lead to **injury or death**.

⚠ WARNING

Indicates a danger that can lead to death or serious injuries.

⚠ CAUTION

Indicates a danger that can lead to minor or moderate injuries.

ATTENTION

Indicates a danger that can lead to **damage or destruction of the product**.



Internal roller garage door
Fitting in or behind the opening



External roller garage door
Fitting in front of the opening



Rolling grille
Fitting behind or in front of the opening



Important note for avoiding damage to property

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Permissible arrangement or activity



Non-permissible arrangement or activity



See the text section (e.g. Section 2.2.1)



See illustrated section (e.g. Figure 2.1)



See separate fitting instructions for the control or for the additional electrical control elements



Risk of impact



Operator locked



Operator unlocked



Optional components



Inspect



Tighten the screws by hand



Tighten the screws firmly



Audible engagement



Dispose of component / packaging

1.3 Intended use

- The roller garage door is only intended for private use. If you would like to use the door in a commercial application, first check whether the currently valid national and international regulations permit such use.
- The rolling grille is only intended for closing passage openings in commercial and private applications. Rolling grilles which are located in a public area and only have one protective device, such as a power limit, may only be operated when the operator is in view of the door and must additionally be secured by a photocell. The rolling grille must only be operated by suitably instructed persons.
- The roller garage door / rolling grille is suitable for use outside; it opens and closes vertically.
- The roller garage door / rolling grille is intended to be used with an operator. The roller garage door / rolling grille operators are designed for operation in dry areas. Also observe the separate instructions for the control.

1.4 General safety instructions

- Always keep the door's area of travel free from obstructions. When in operation, make sure that neither persons, children in particular, nor objects are located within the door's area of travel.
- Never use the door to lift objects and / or persons.
- Do not alter or remove any components! You could otherwise risk putting important safety components out of action. Only use original parts intended for use with this particular roller garage door / rolling grille.
- Protect the door from caustic, aggressive substances, e.g. nitrous reactions from stones or mortar, acids, alkali solutions, de-icing salt, aggressive paints or sealants.
- Make sure that there is sufficient water run-off and ventilation (drying) in the lower section of the side guides.
- Operation of the door during heavy winds may be dangerous.

2 Fitting and Initial Start-Up

2.1 Safety instructions

WARNING

Danger of injury

There is a danger of injury during fitting. Observe the following instructions:



- ▶ Wear safety glasses and protective gloves.



- ▶ Check that the fixing materials supplied are suitable for the given structural conditions. Only use suitable fixing material.
- ▶ Secure the door from falling.

ATTENTION**Damage to the product**

Observe the following instructions:

- ▶ Throughout fitting, protect the door's components, especially the door curtain, from dirt and damage.
- ▶ Fasten the bracket holder to the building structure with 2 screws on each side!
- ▶ Fasten the side guides with 6 or 8 screws on each side. Otherwise the wind load indicated on the data label is not ensured.

2.2 Fitting**Internal roller garage door (IR)**

The roller garage door can be fitted from the inside behind the opening or in the opening (see Figure 1 to Figure 12).

External roller garage door (AR)

The roller garage door is fitted from the outside in front of the opening (see Figure 20 to Figure 30).

Rolling grille (RG)

The rolling grille can be fitted from the inside behind the opening or from the outside in front of the opening (see Figure 20 to Figure 30).

To ensure simple and safe fitting, carefully go through the work steps!

All dimensions in the illustrated section are in mm.

2.2.1 Removing the screw

- ▶ Remove the screw from the bearing insert to adjust the length of the octagonal shaft.

2.3 Initial Start-Up**2.3.1 Checking the door spring tension (Figure 10.5/28.5)**

- ▶ Open the door and then close it to any height. The door must remain in the respective position.

⚠ CAUTION**Door spring tension**

Improper adjustment of the door spring tension may result in injuries.

- ▶ Only have a specialist adjust the door spring tension in accordance with Figure 10.6/28.6.
- ▶ After adjusting the door spring tension, secure the spring holders with the spring securing pins.

If the door moves substantially downwards:

- ▶ Increase the spring tension.

If the door moves substantially upwards:

- ▶ Decrease the spring tension.

Perform a test run and check the door in accordance with Section 3, *Inspection and Maintenance*. When properly fitted and inspected, the roller garage door/rolling grille can be easily moved, is functionally safe and easy to operate. The rolling grille must only be operated by suitably instructed persons.

3 Inspection and Maintenance**3.1 Safety instructions**

- ▶ Have a specialist perform inspection and maintenance work on the door at least once in year in accordance with these instructions.

⚠ WARNING**Door travel**

There is a danger of injury in the door's area of travel.

- ▶ When in operation, make sure that neither persons, children in particular, nor objects are located within the door's area of travel.
- ▶ Disconnect the operator and control from the power supply.
- ▶ Functional parts, particularly safety components, may only be exchanged by a specialist.
- ▶ Quick release — Visually inspect the door springs and cables for breaks or damage before uncoupling the quick release.

3.2 Checking the condition of the door

- ▶ Visually inspect the general condition of the door, all components and safety devices for completeness, proper condition and effectiveness.
- ▶ Check that all of the fixing points are tight. Tighten the screws if necessary.

3.3 Checking the door spring tension

See Section 2, *Fitting and Initial Start-Up*.

3.4 Replacing the door springs

- ▶ Have the door springs replaced by a specialist after approx. 20,000 door cycles.

This is required at the following approximate time:

Door cycles per day	Period
Up to 5	Every 12 years
6 – 10	Every 7 years
11 – 15	Every 4 years
16 – 35	Every 2 years
Over 35	Yearly

3.5 Checking the pressure roller, return pulley and lifting cables

- ▶ Clean the pressure rollers, return pulley and bolt.
- ▶ Check the rollers for wear. Have the rollers replaced by a specialist if they are greatly worn or damaged.
- ▶ Lubricate the bolt on the return pulley with a drop of commercially available lubricating oil (see Figure 10.3/28.3).
- ▶ Check the lifting cables for breaks or damage. Have a specialist replace any damaged lifting cables.

3.6 Checking the chain tension

- ▶ Check the chain tension in accordance with Figures 5.2/12.4/23.1. If necessary, set the chain tension by adjusting the operator.

3.7 Accessories

- To ensure a high level of quality, safety, reliability, as well as a long service life, only use original parts intended for this particular roller garage door / rolling grille.
- You can optionally receive the fitting compensation set.

4 Cleaning and Care

The design of the roller garage door / rolling grille represents state-of-the-art technology. Pressure marks and abrasive wear, particularly on the top profiles, are design-related and cannot be avoided. They are not considered a reason for complaint.

- ▶ In order to avoid excessive friction, remove any soiling from the door curtain at regular intervals.

4.1 Door curtain

- ▶ Clean the door surfaces with clear water, a soft sponge and a neutral, non-abrasive cleaning agent.

4.2 Data label

- ▶ Clean the data label.
- It must always be easy to read.

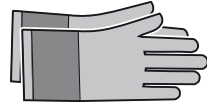
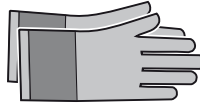
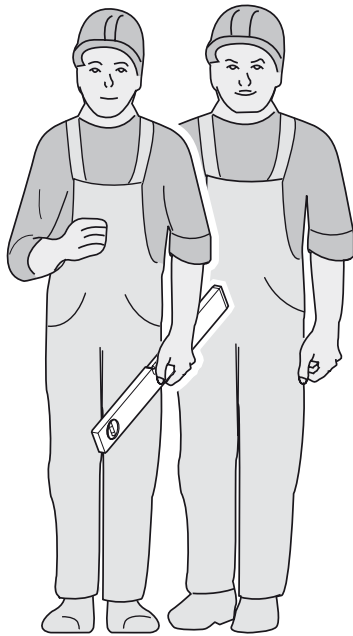
5 Assistance with malfunctions

If the door is difficult to move or exhibits other malfunctions:

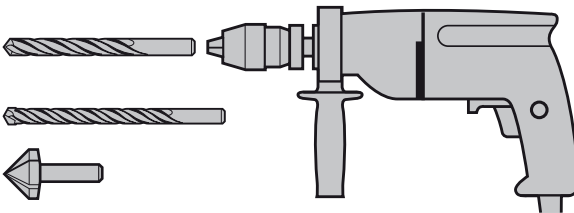
- ▶ Check all the functional parts. To do this, please follow the instructions in Section 3, *Inspection and Maintenance*.
- ▶ In the case of uncertainty, please contact a specialist for assistance.

6 Dismantling

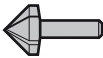
Have the door dismantled and disposed of by a specialist.



Ø 8.5; Ø 12; Ø 22;



Ø 4; Ø 6; Ø 8; Ø 20;



T 25; T30;



13



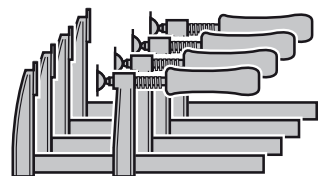
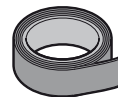
T 25; T30;

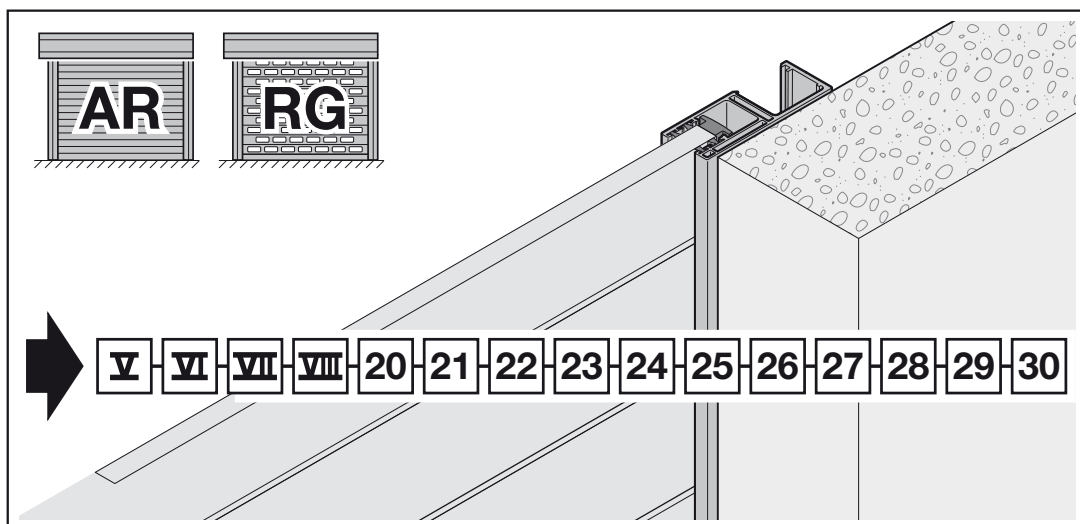
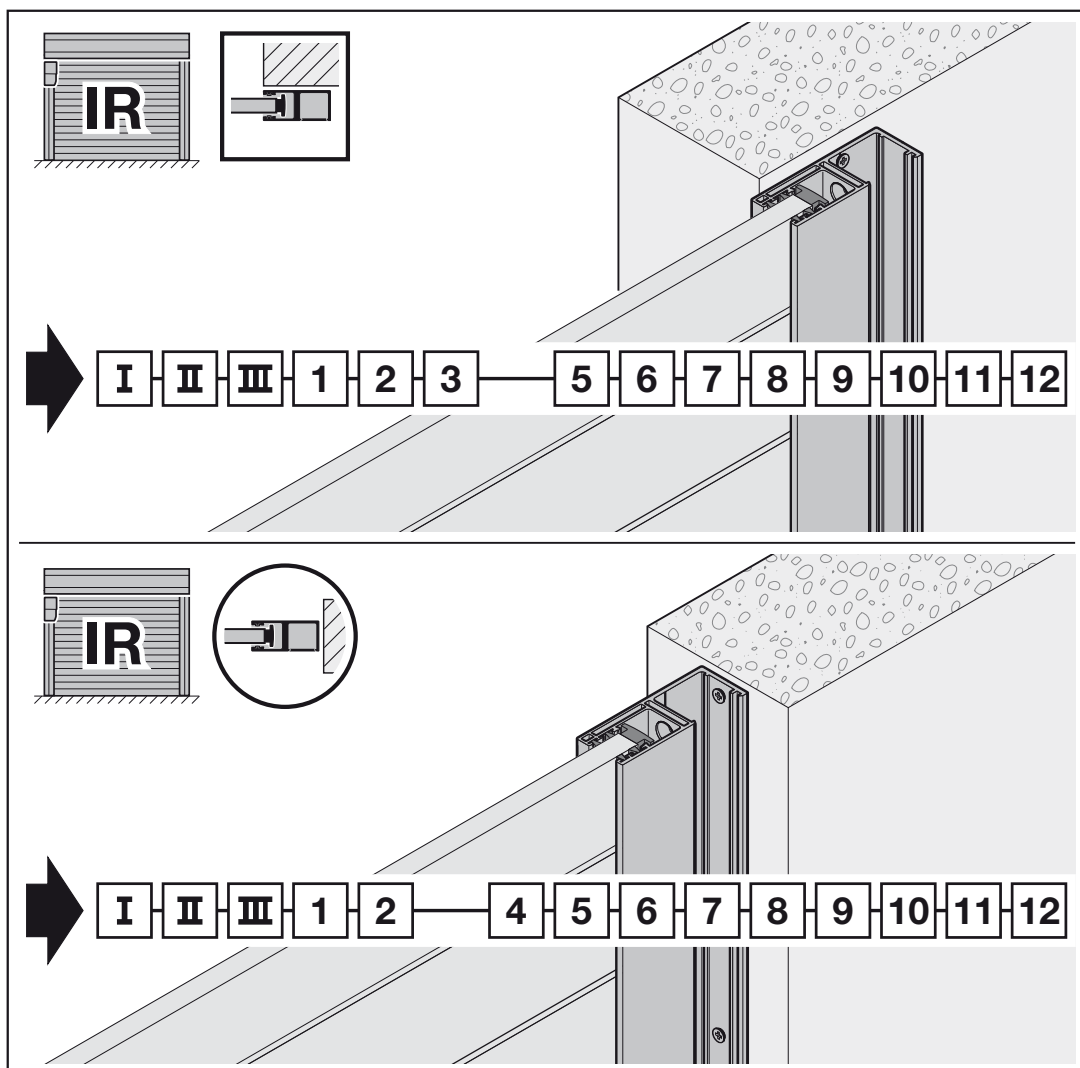


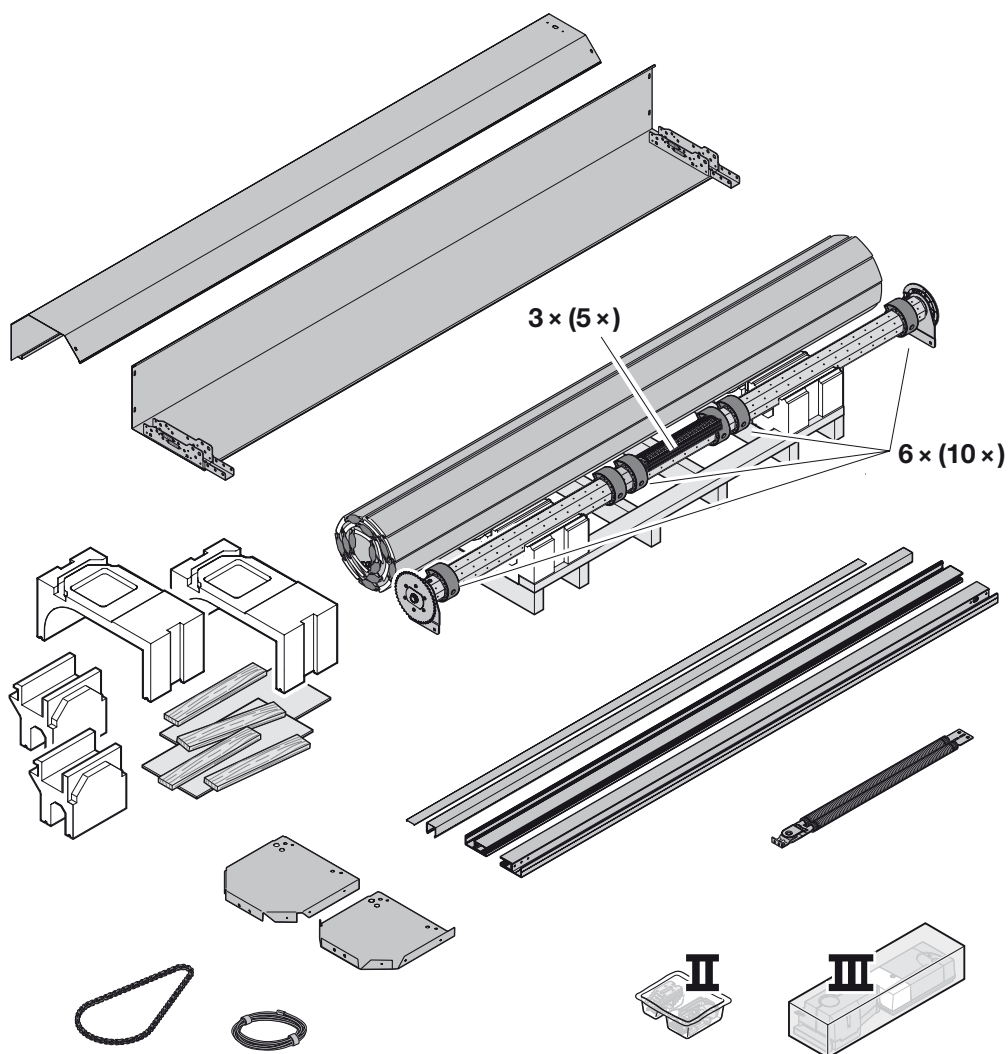
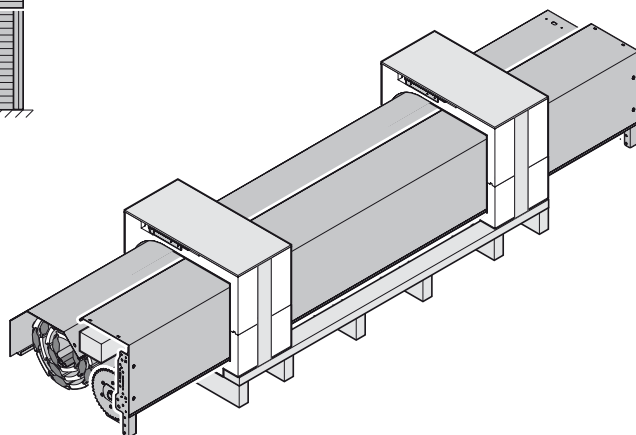
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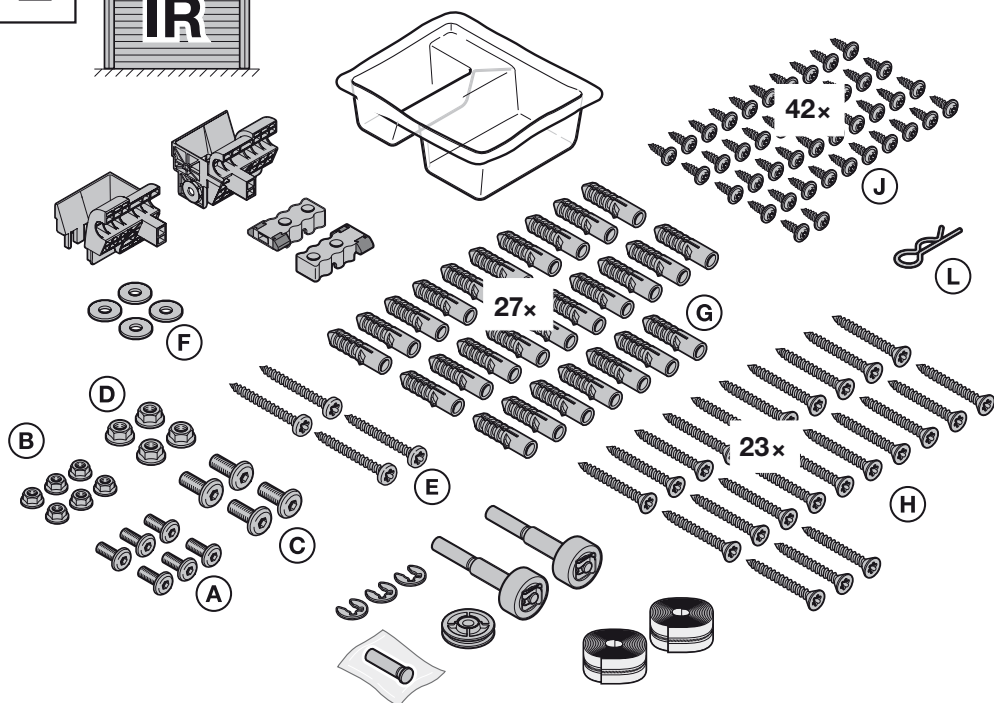
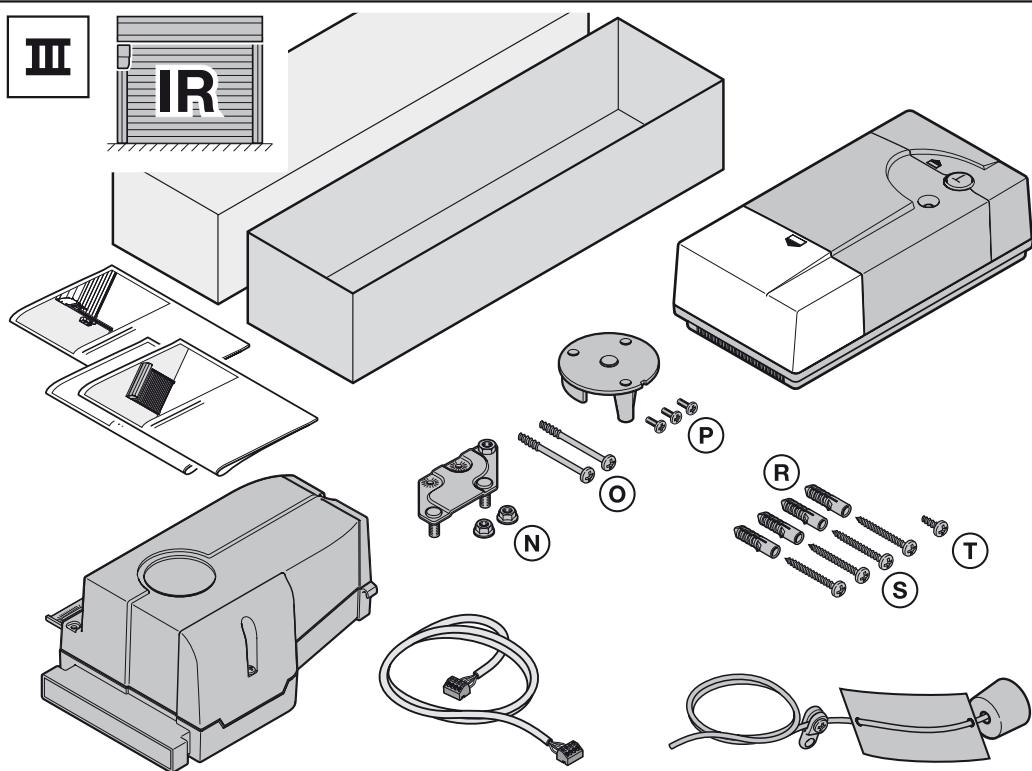


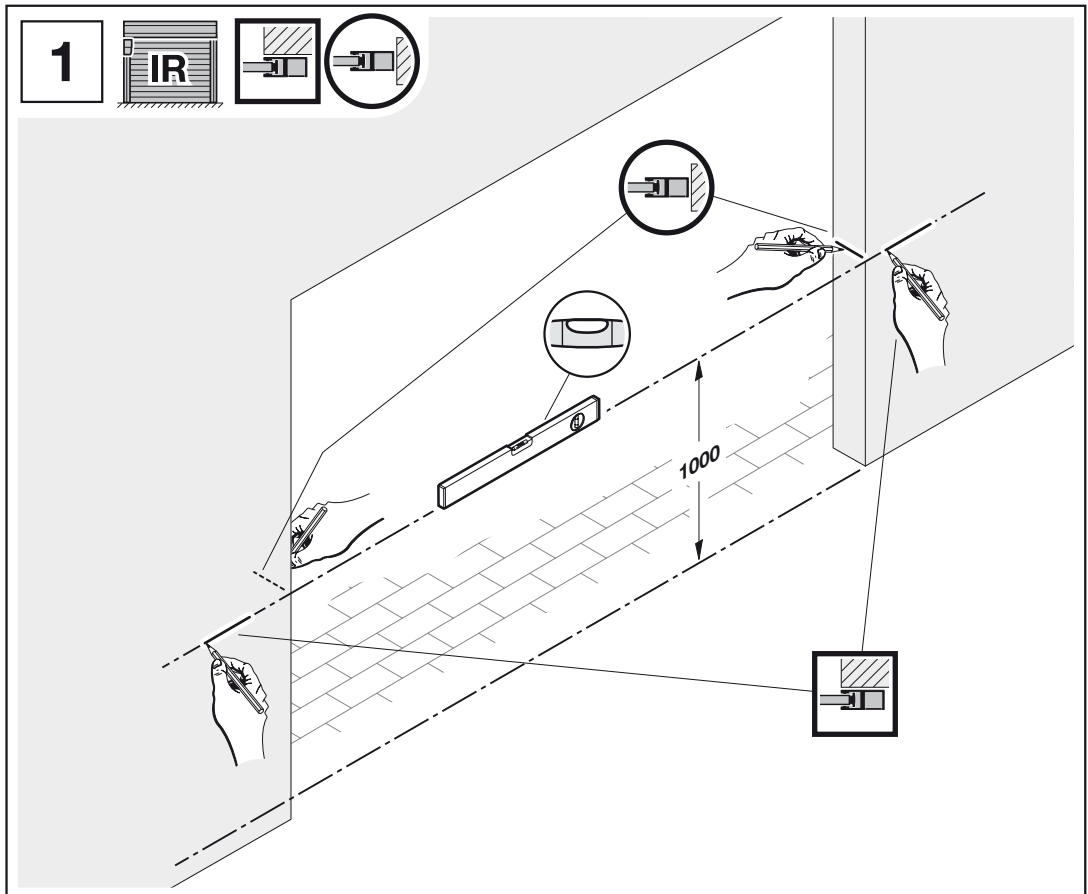
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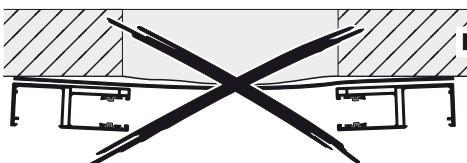
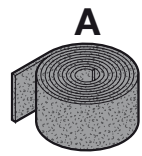
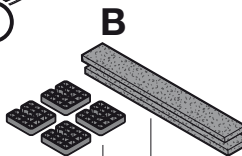


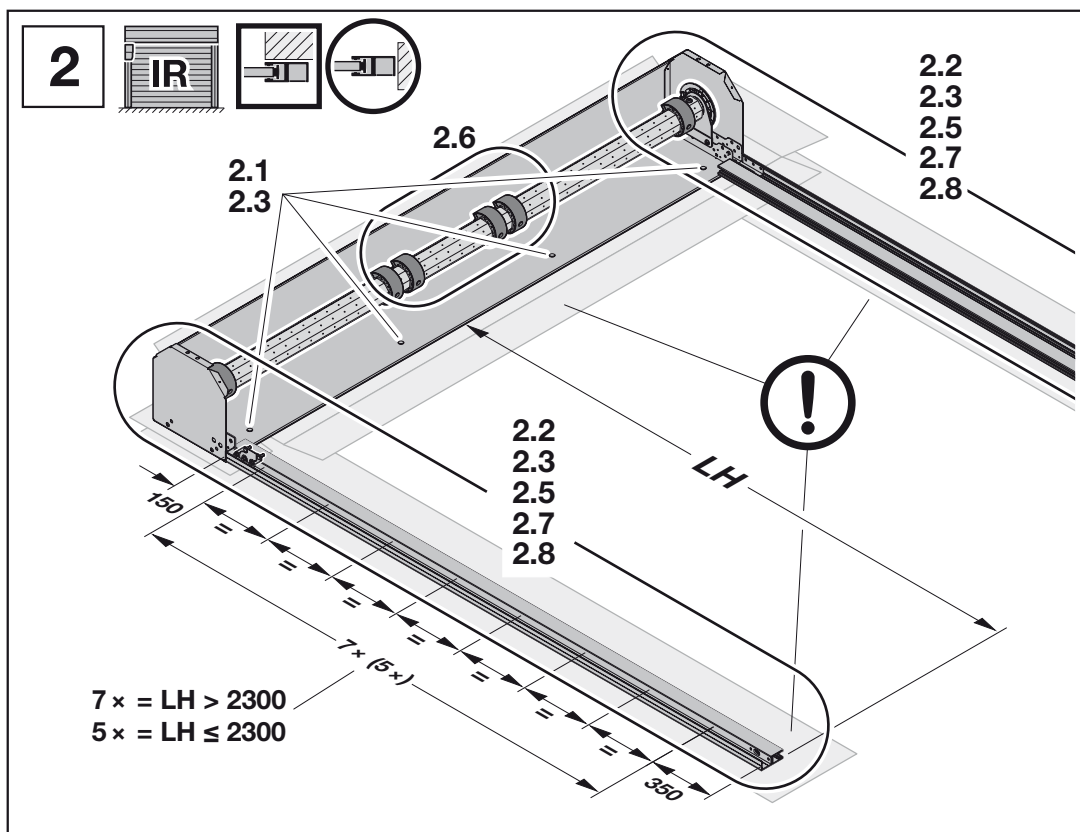
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II**III**

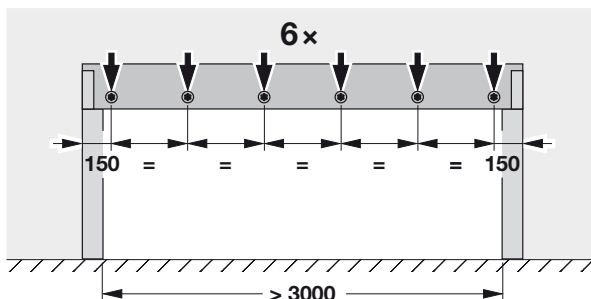
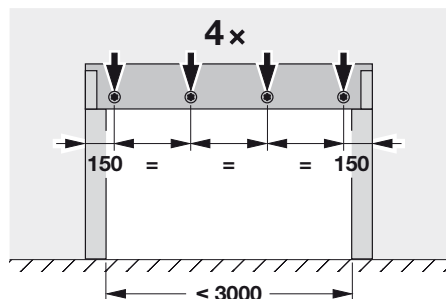
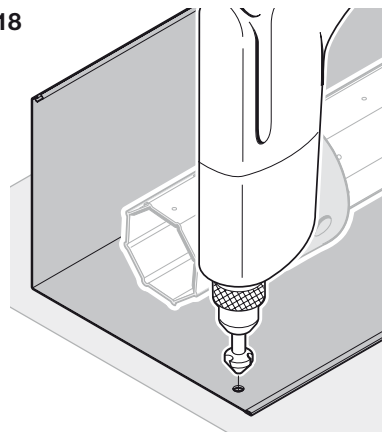
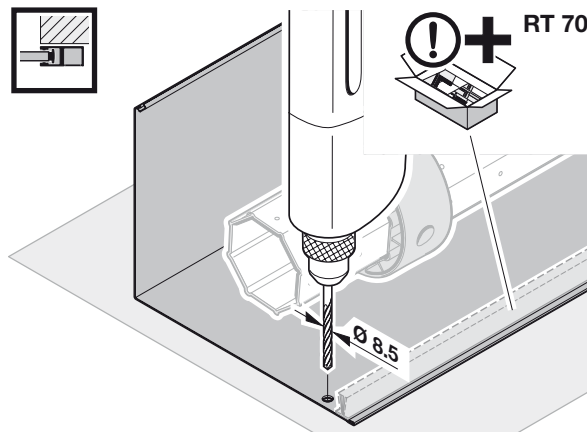
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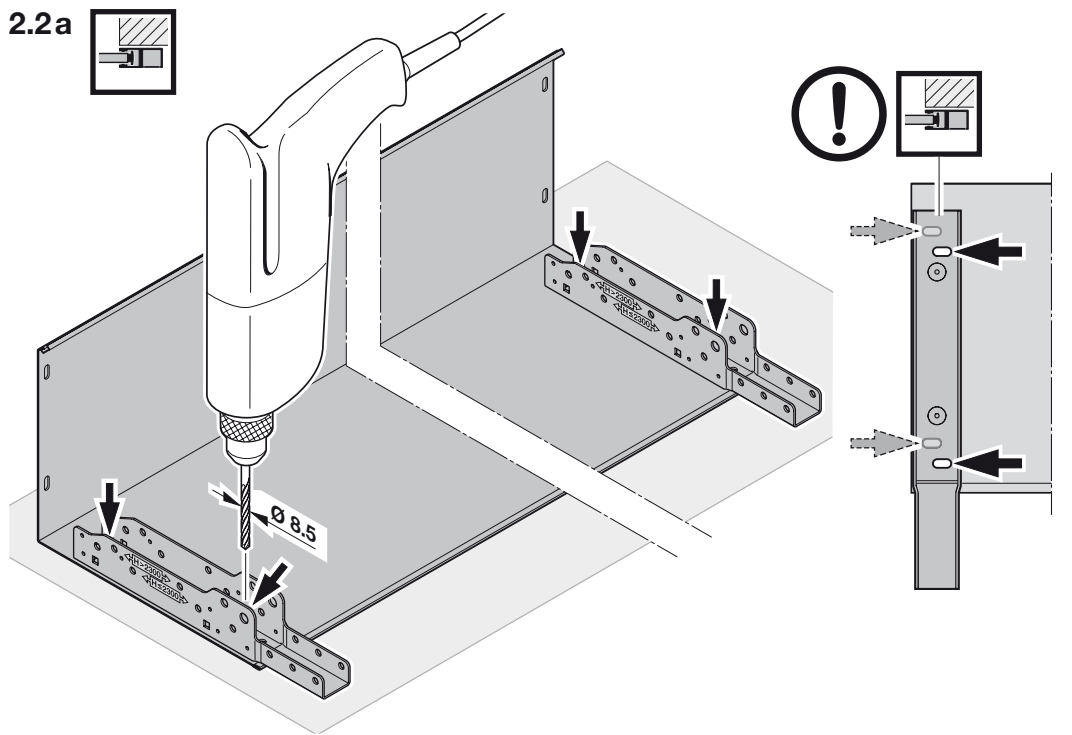




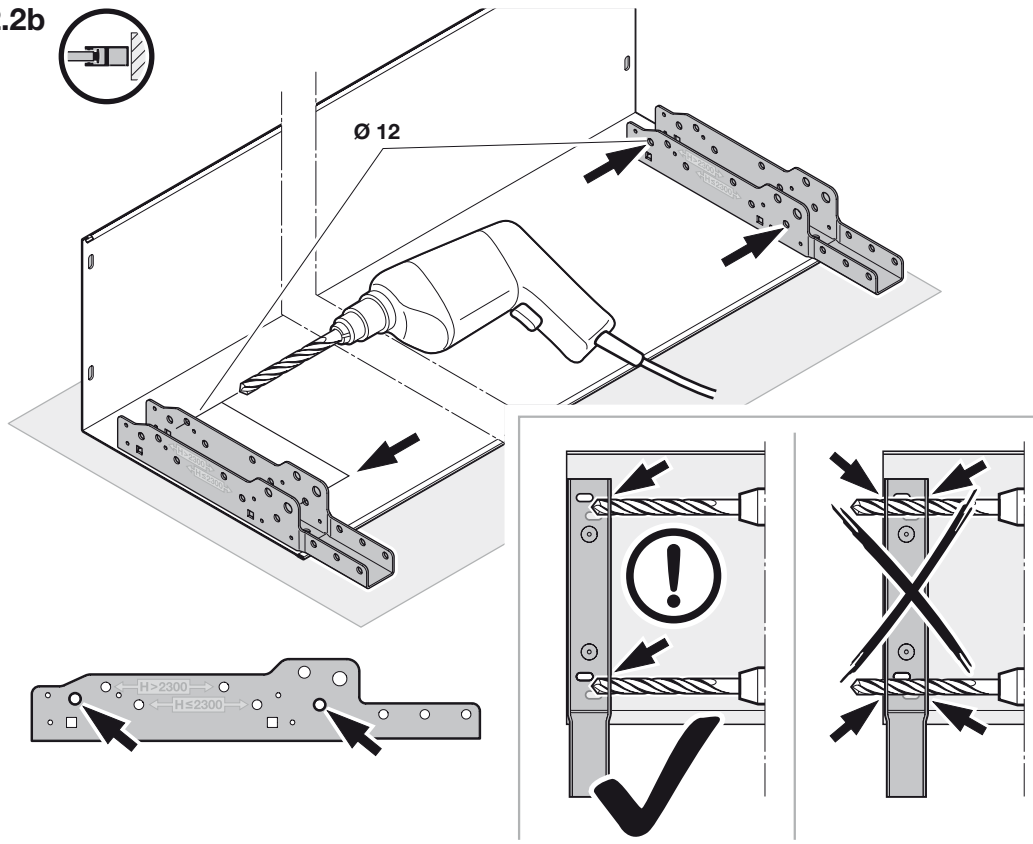
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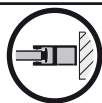
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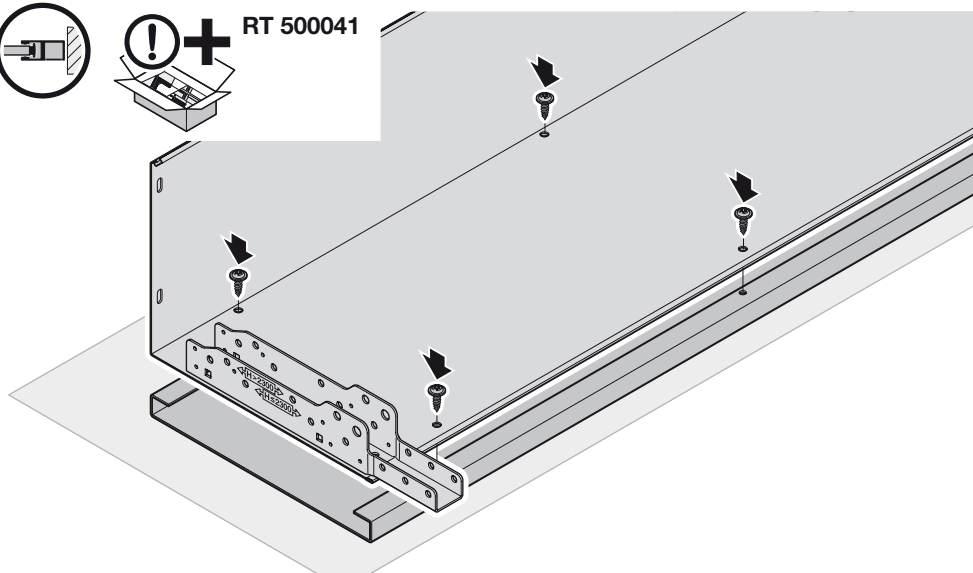
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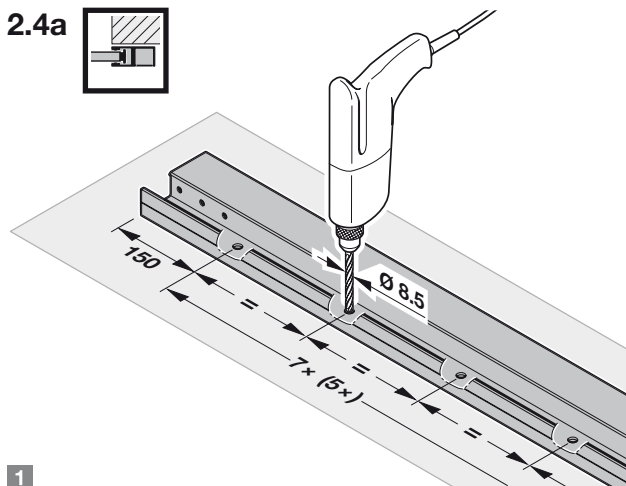
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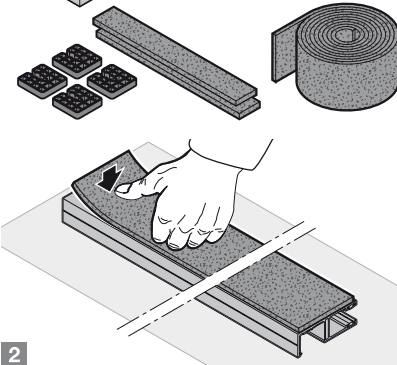


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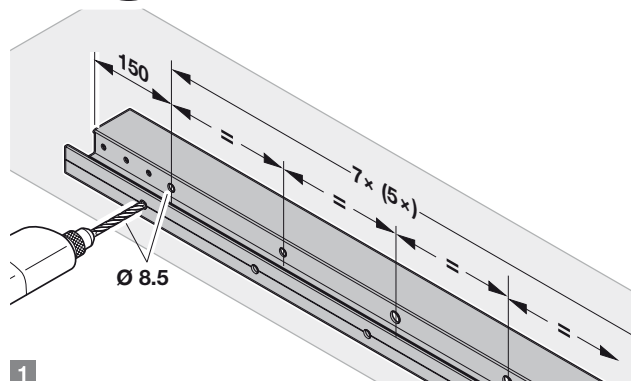
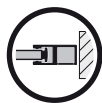
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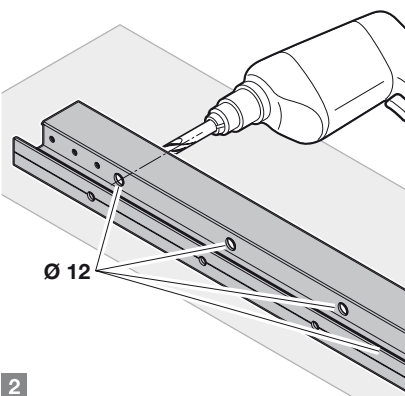


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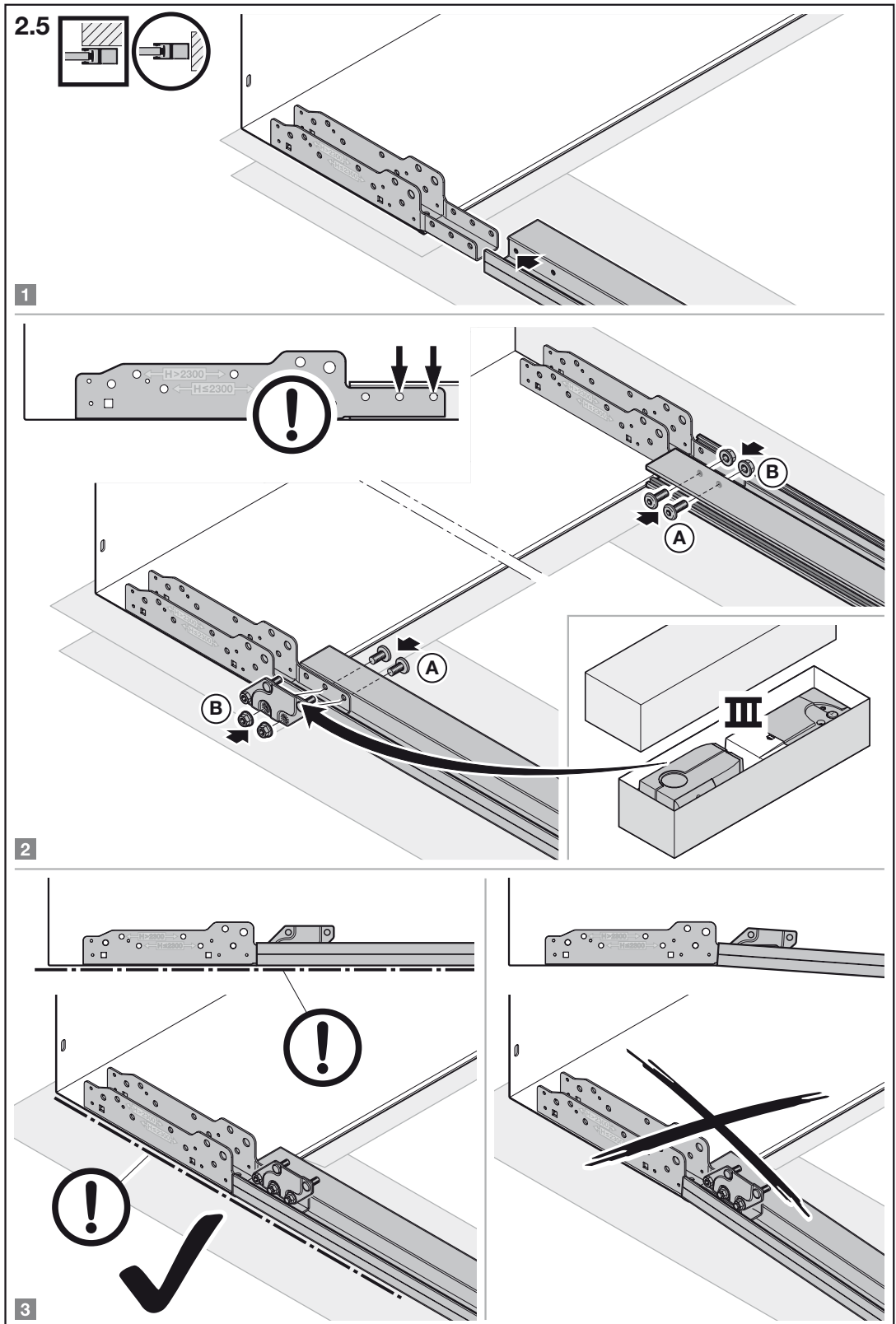
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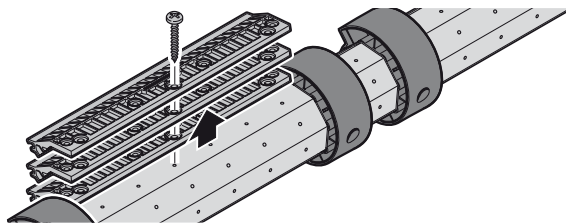
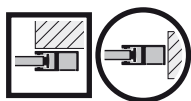
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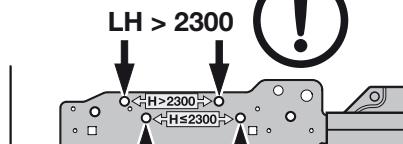
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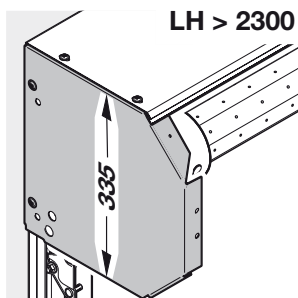
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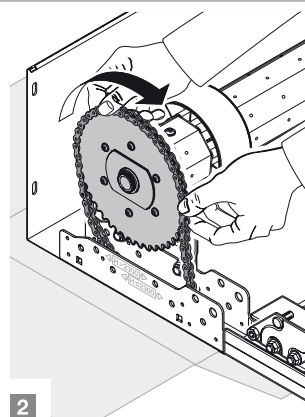
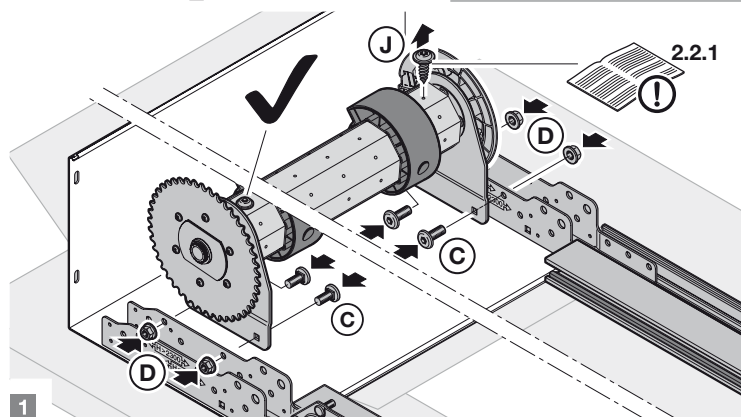
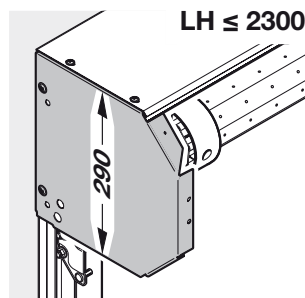
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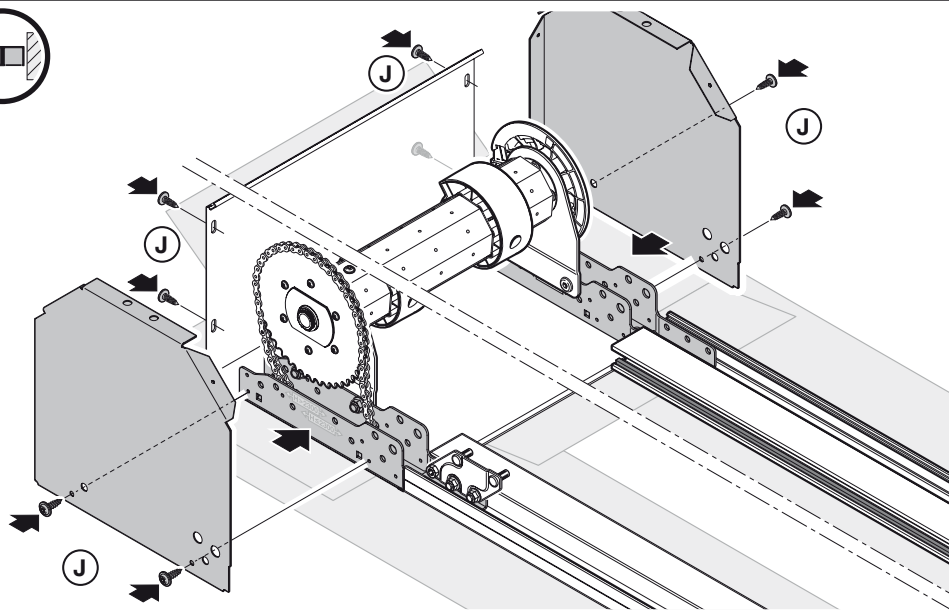
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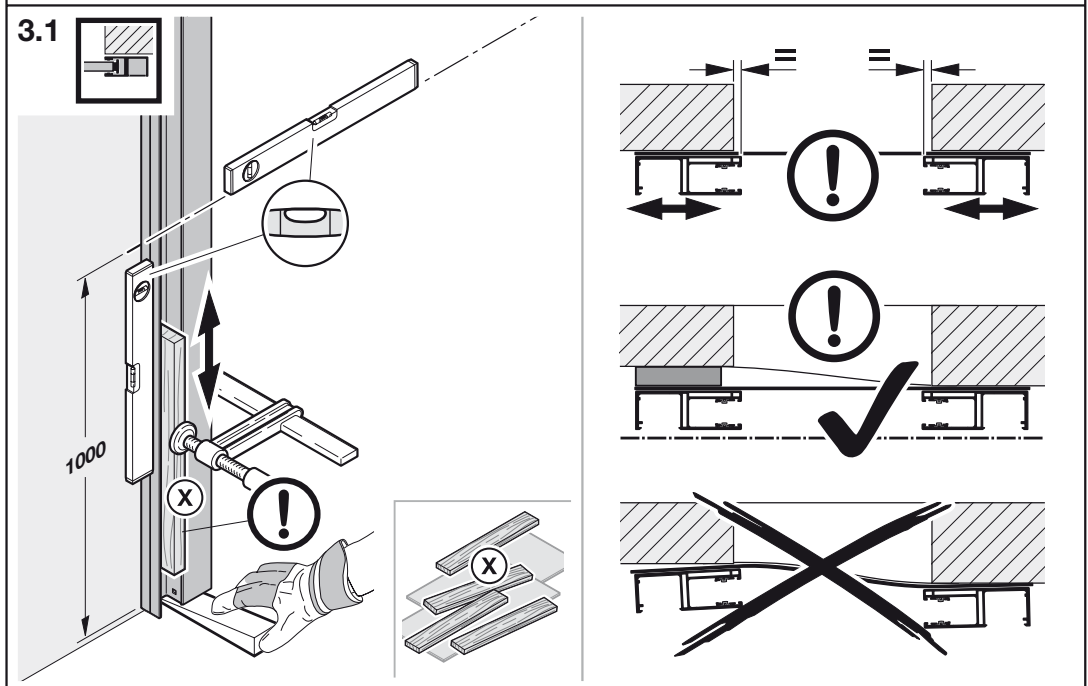
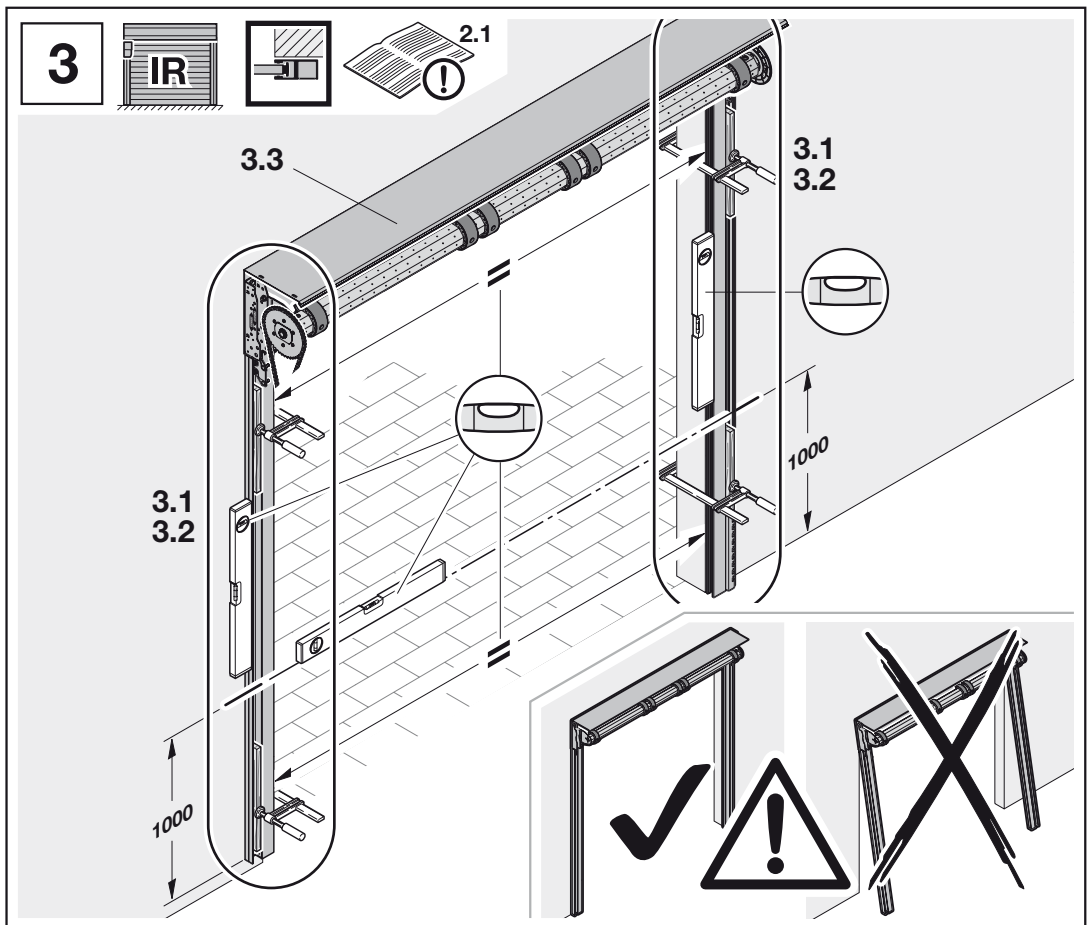


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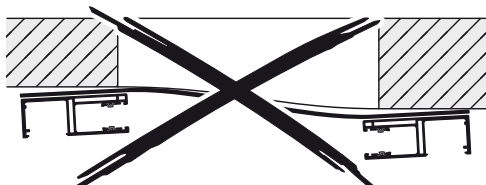
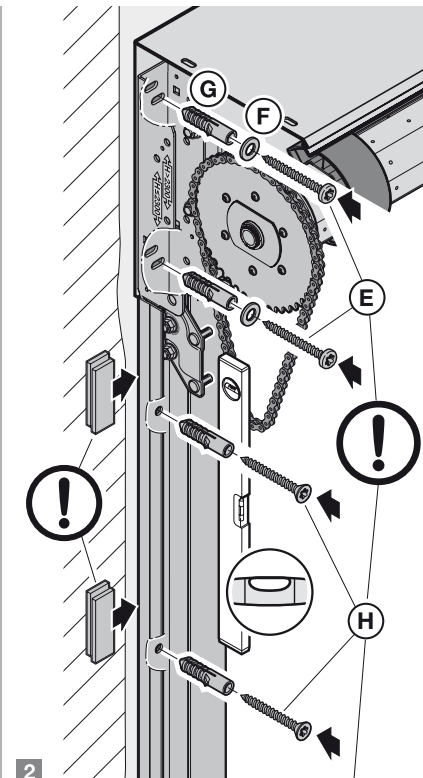
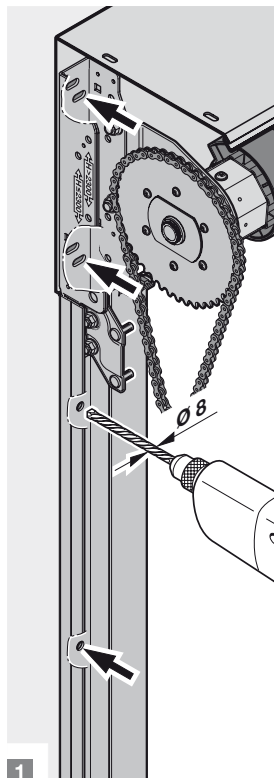
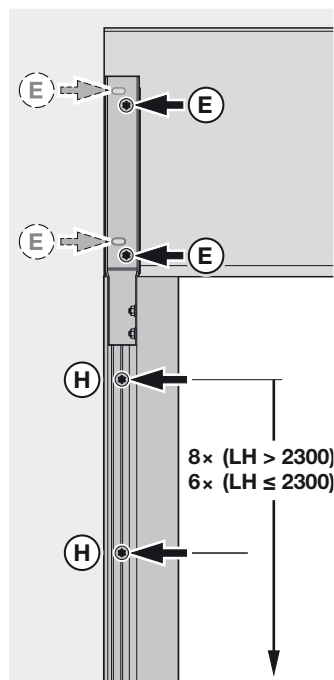




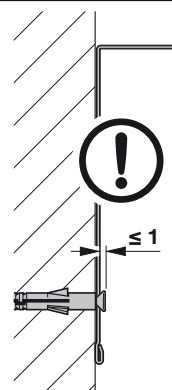
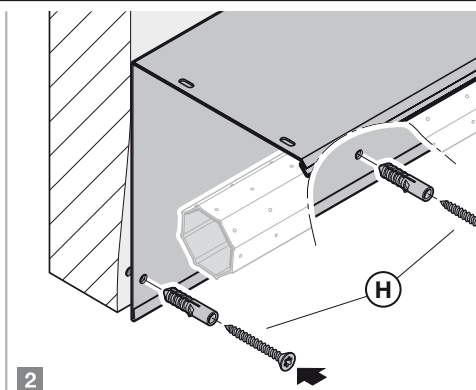
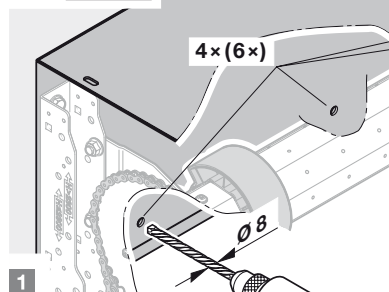
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2.1



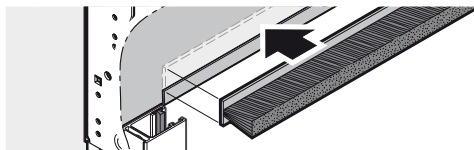
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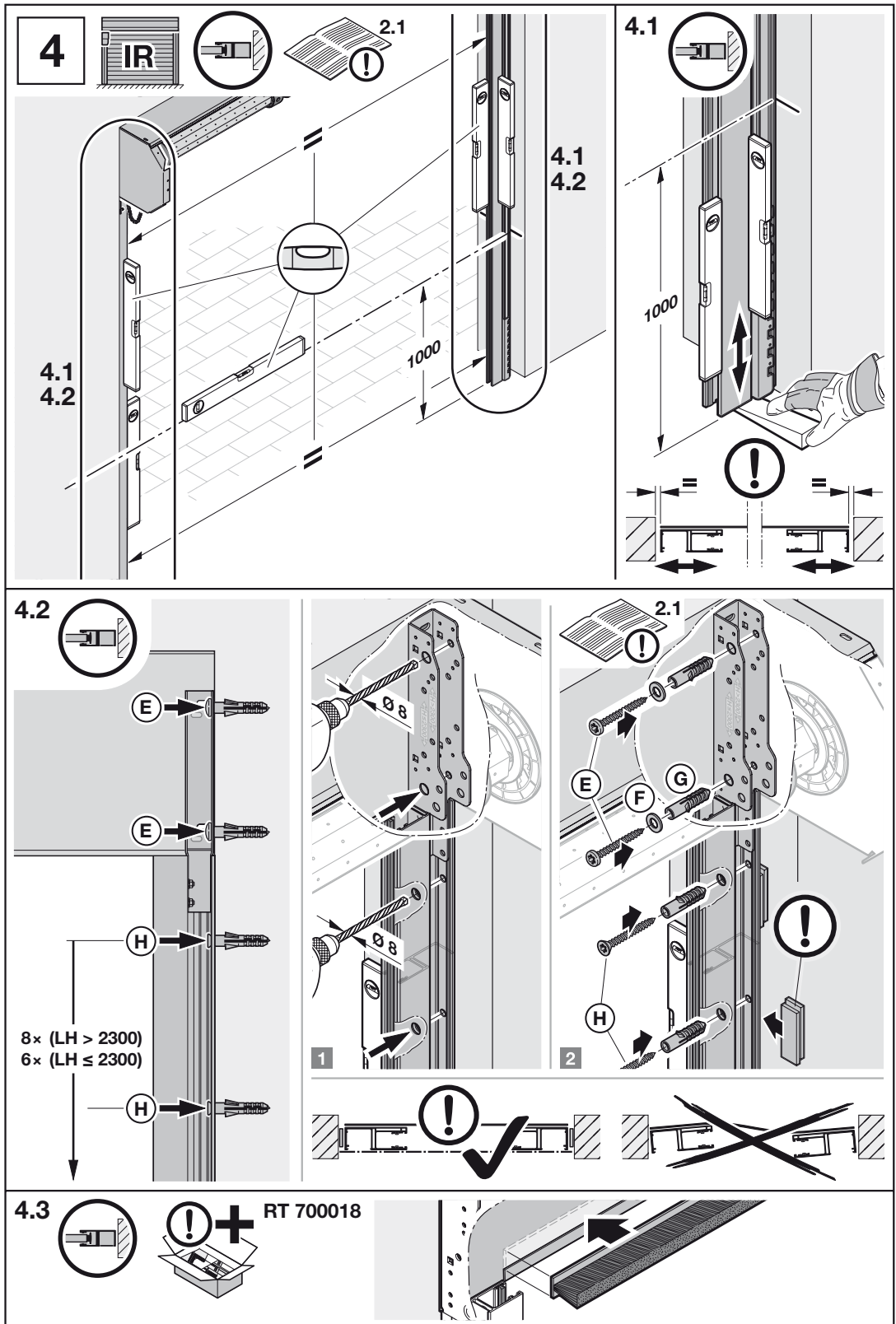


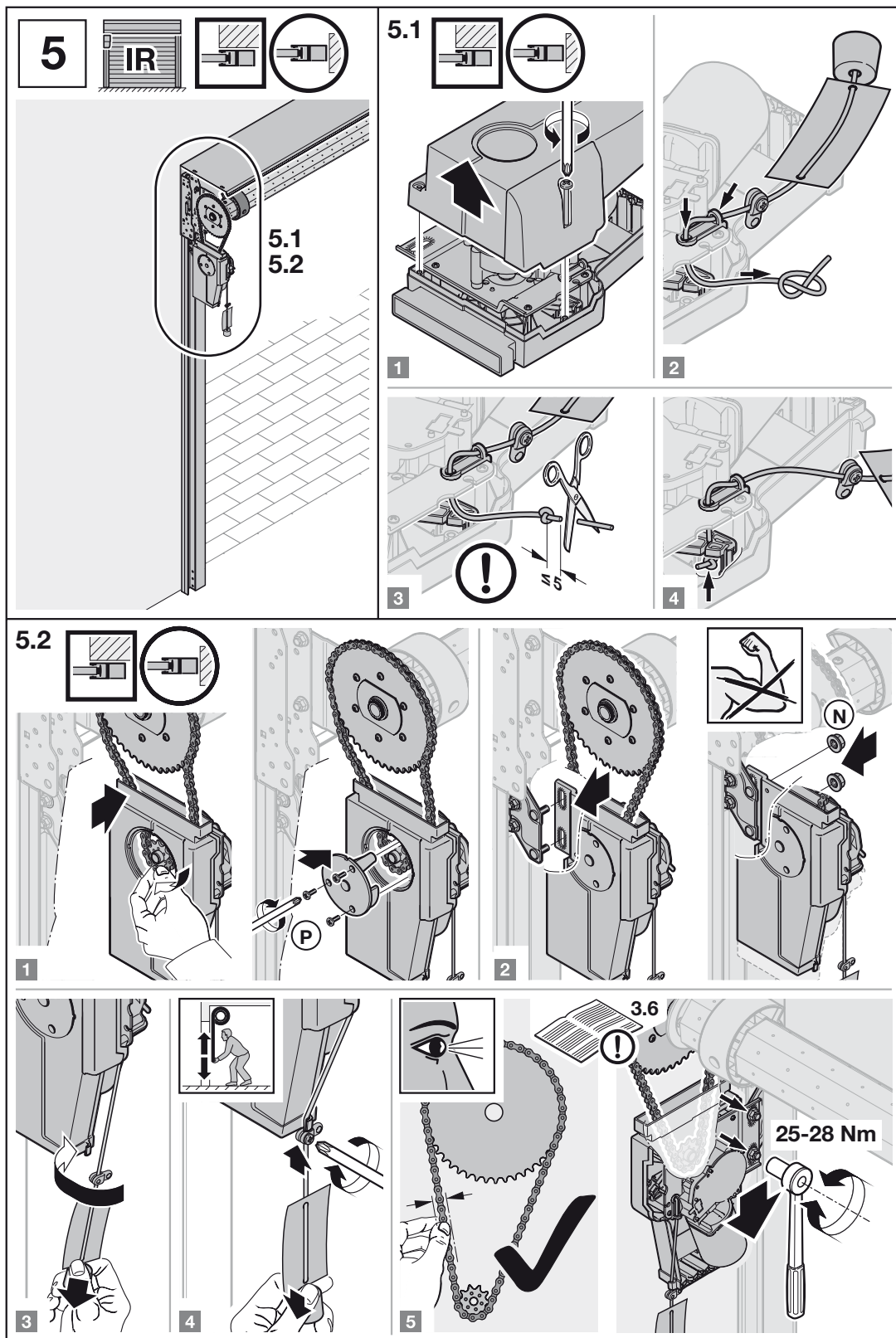
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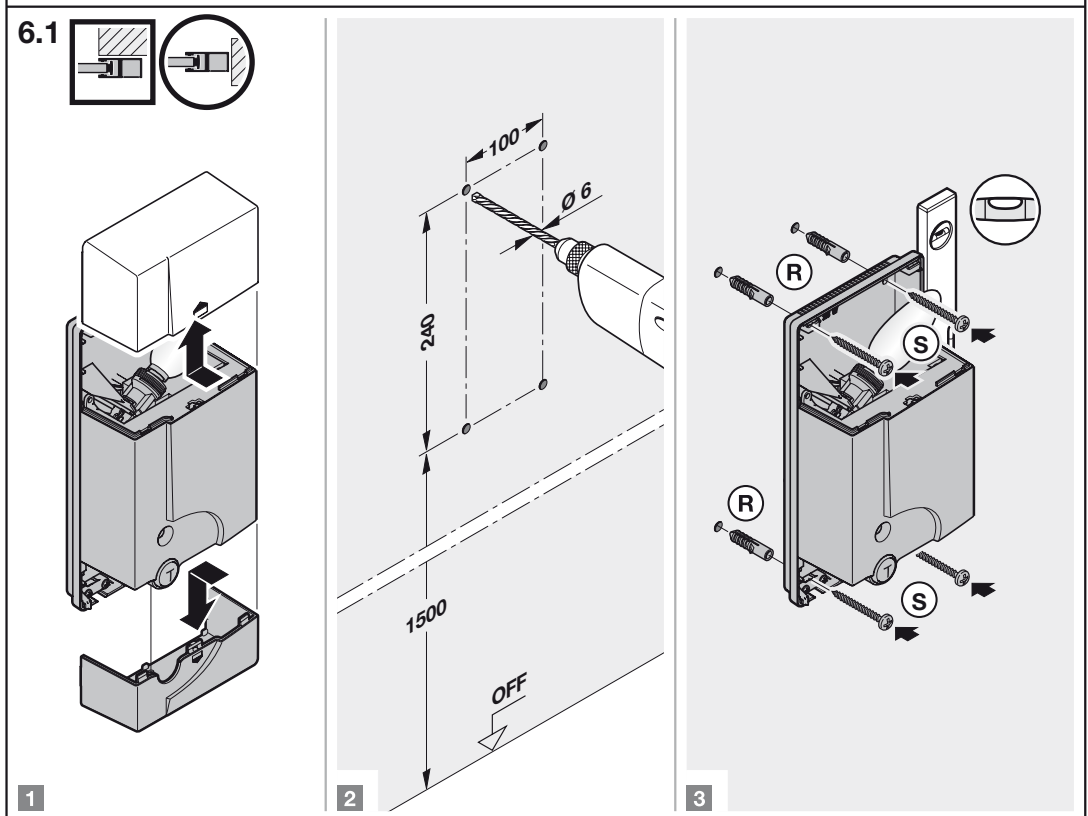
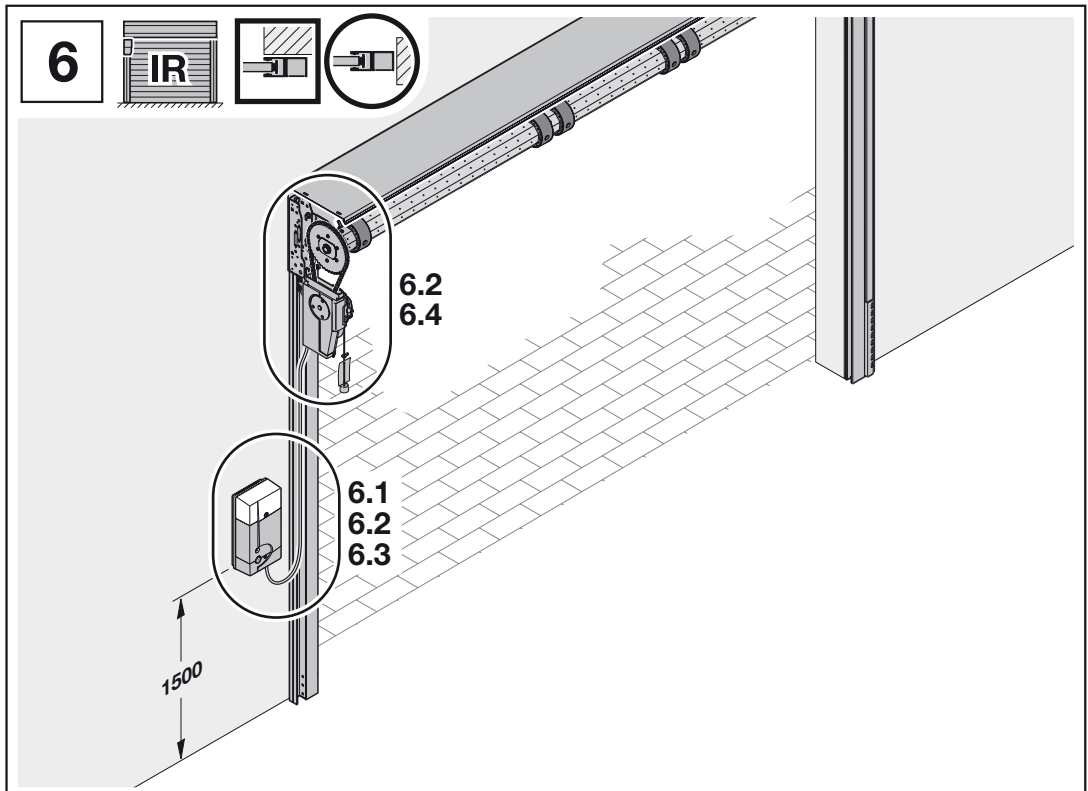


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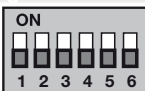
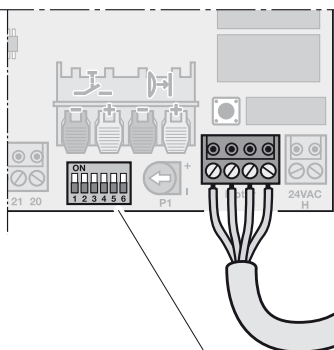
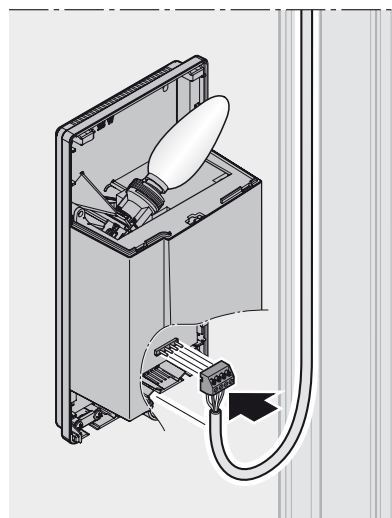
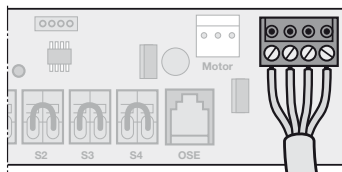
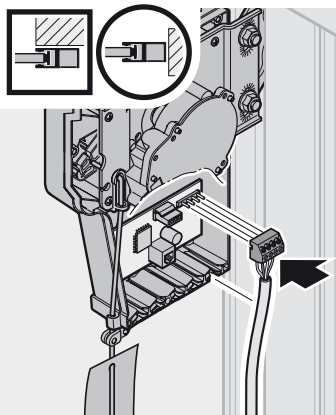




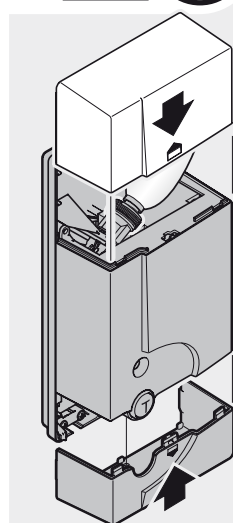
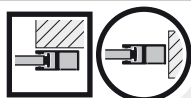




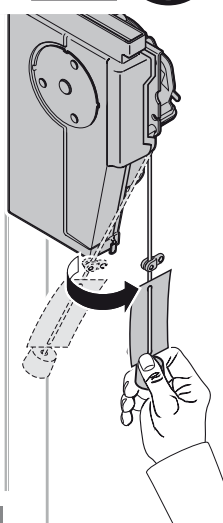
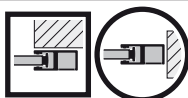
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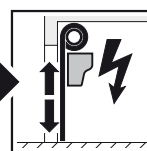
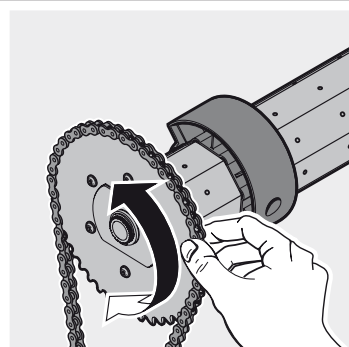
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6.4

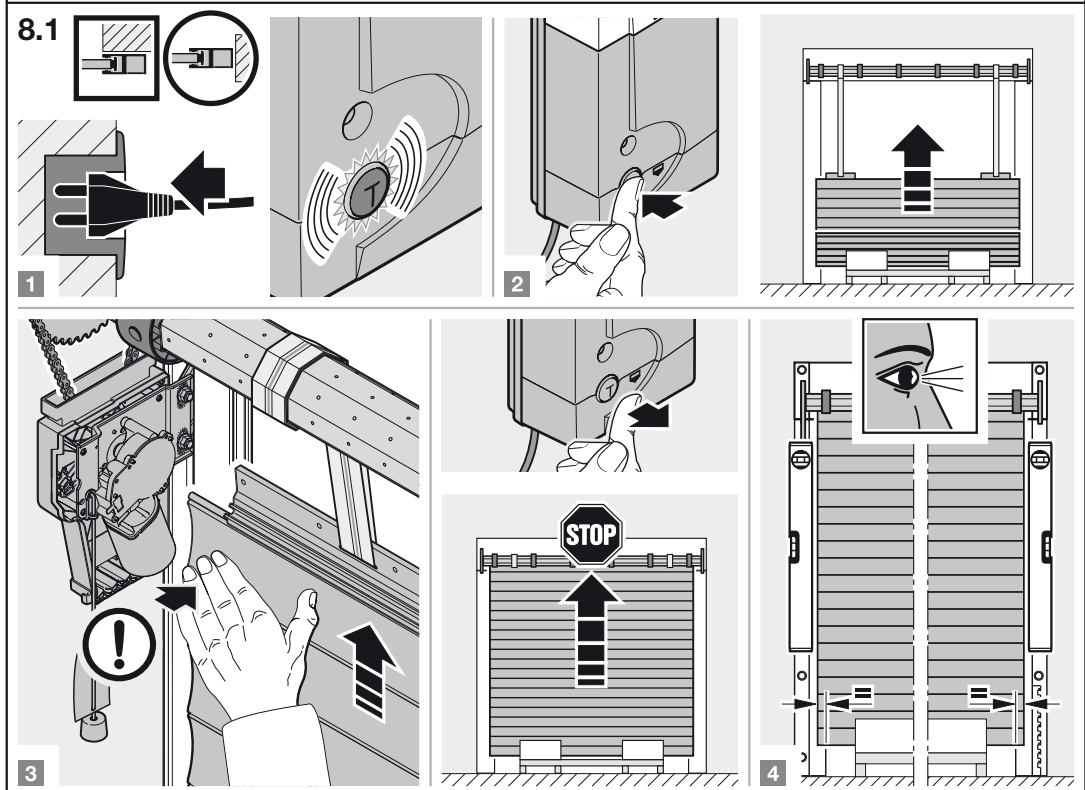
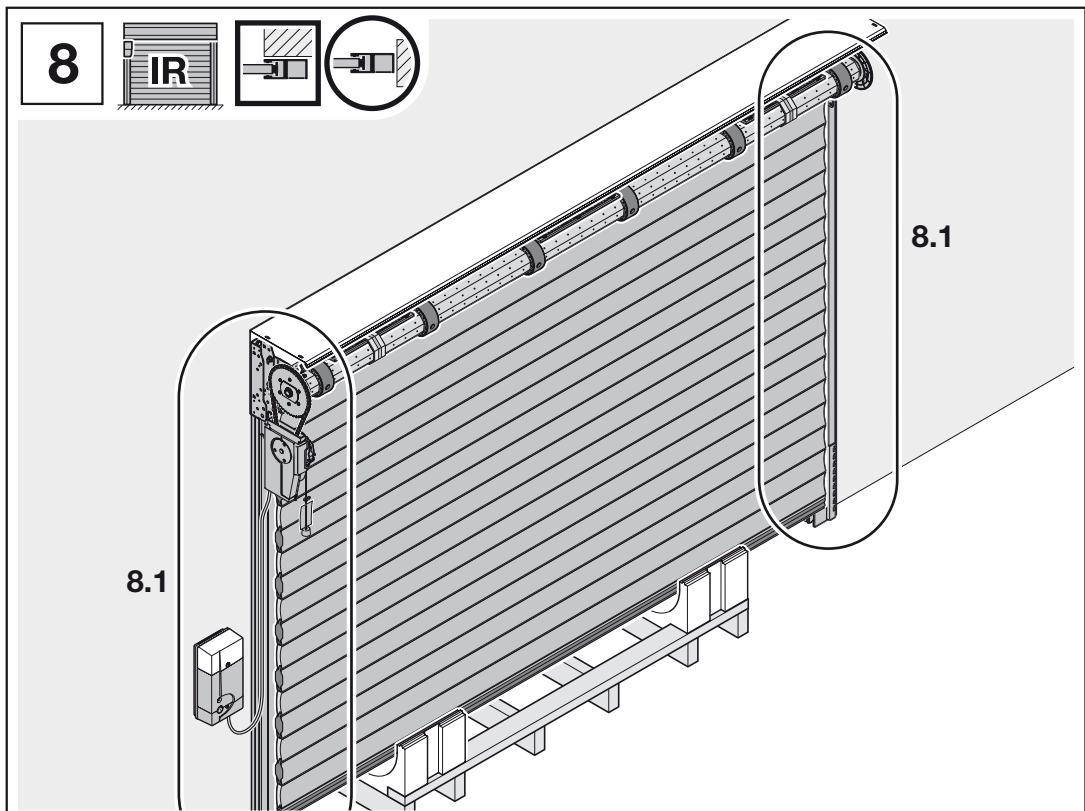


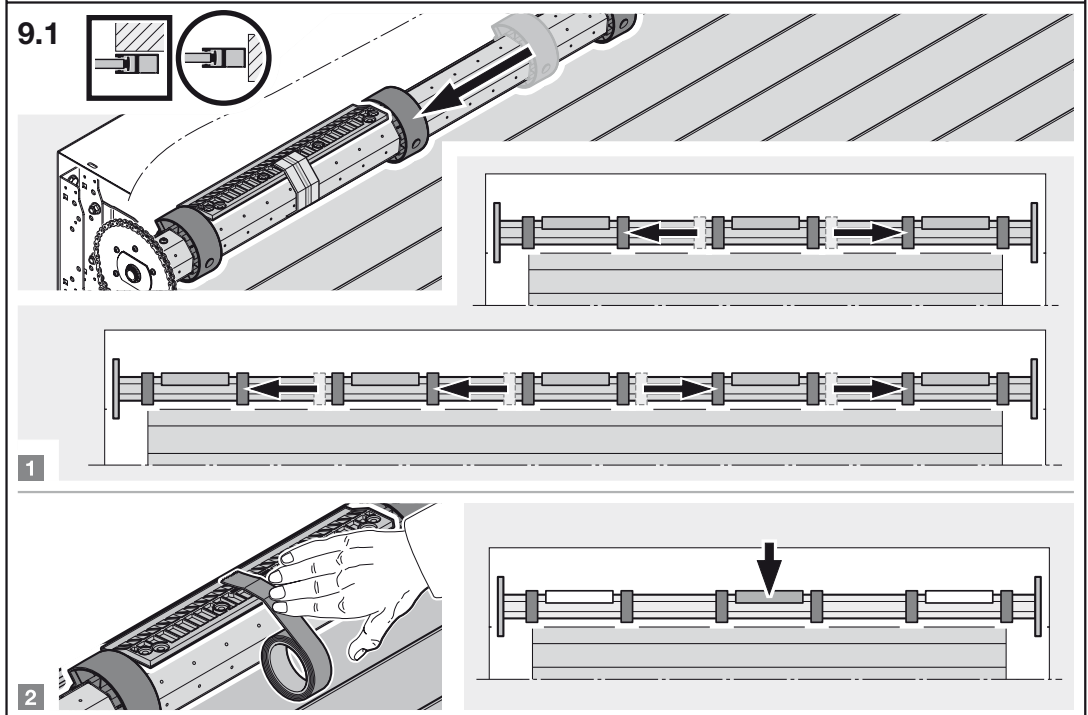
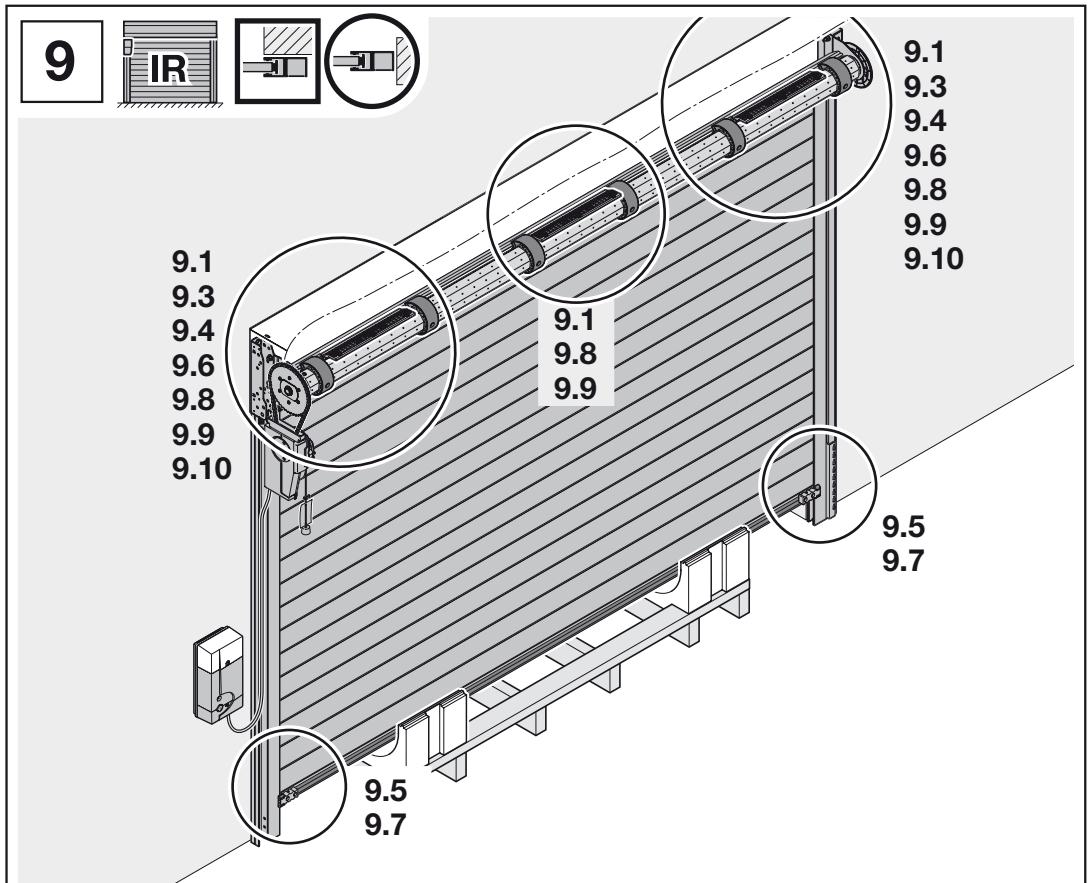
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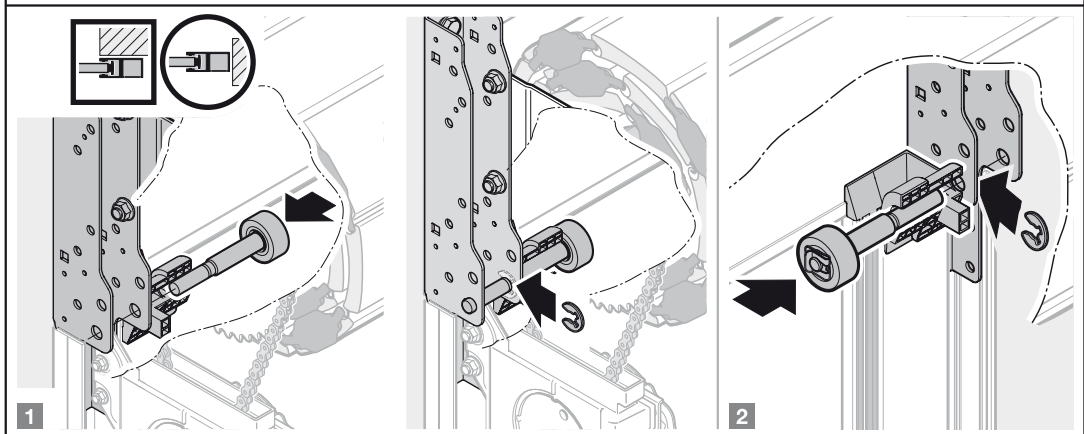
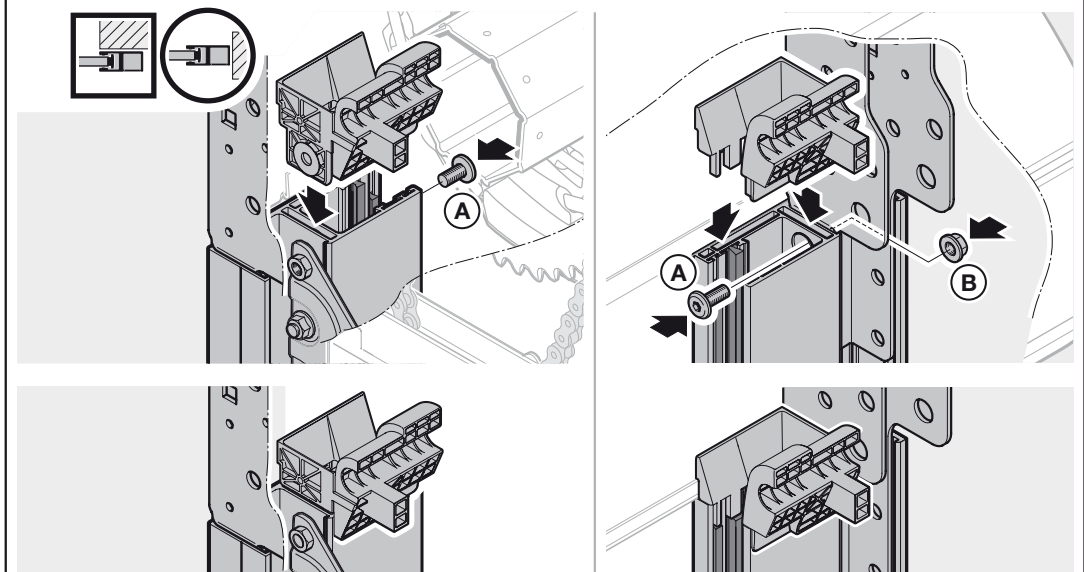
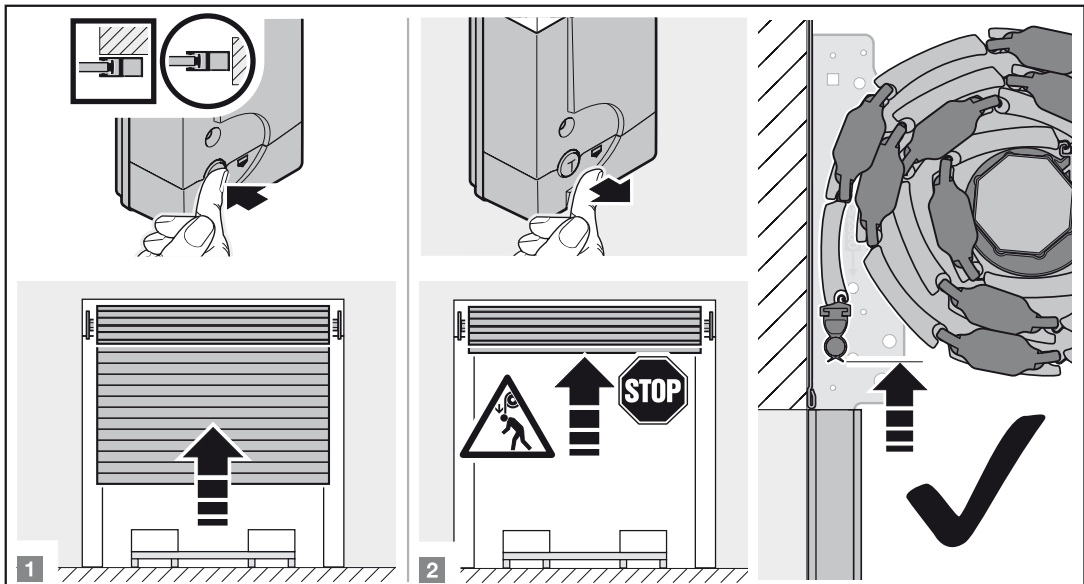


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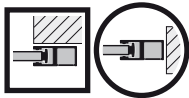




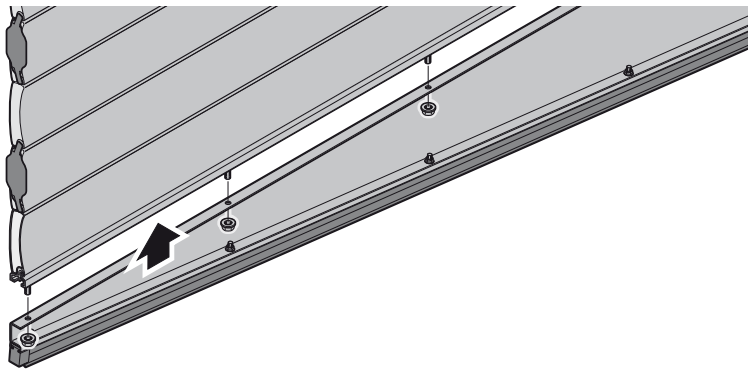




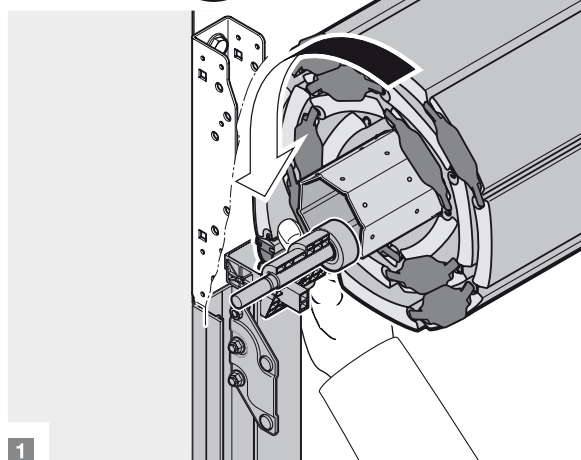
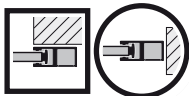
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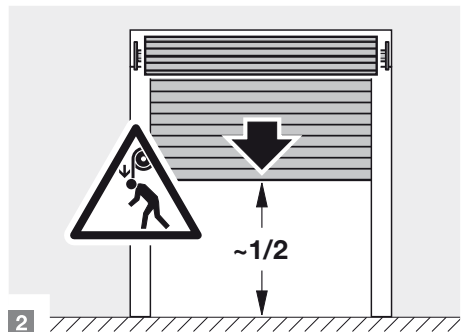
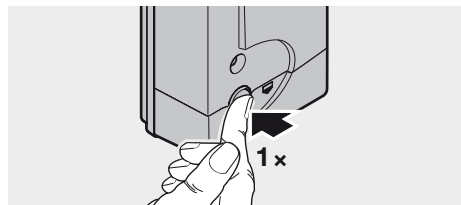
RT 700015



9.6

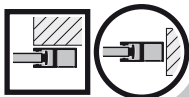


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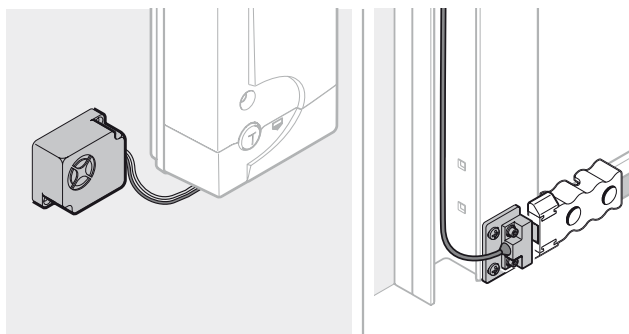
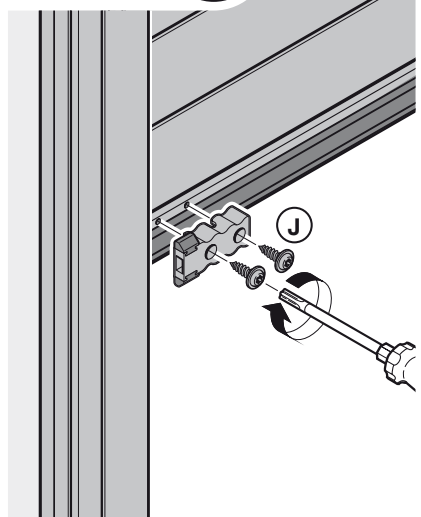


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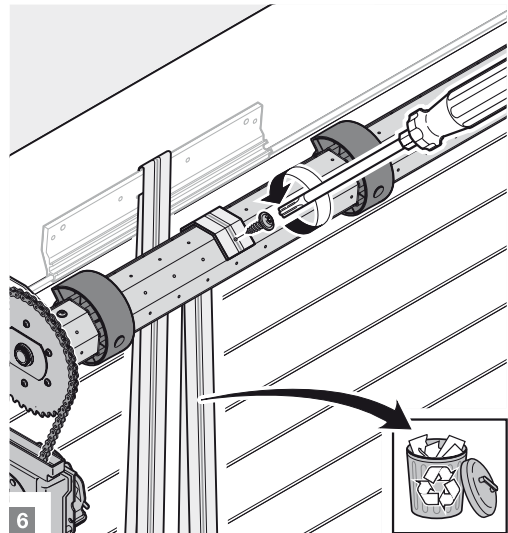
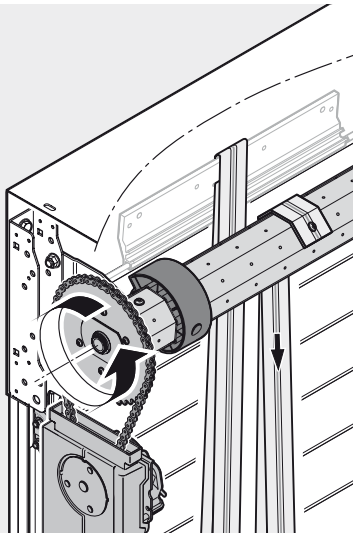
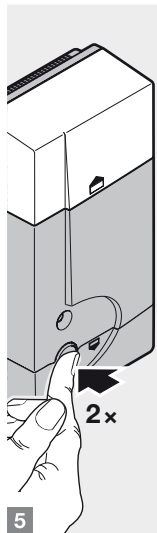
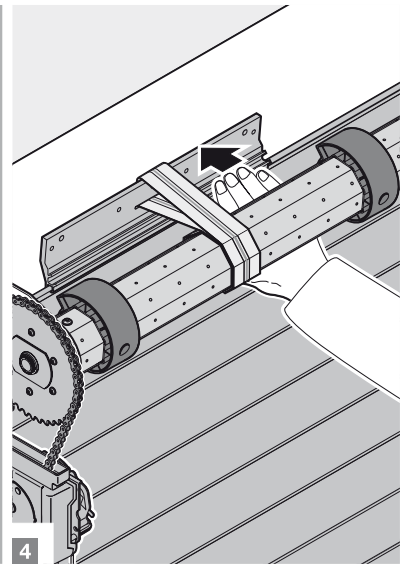
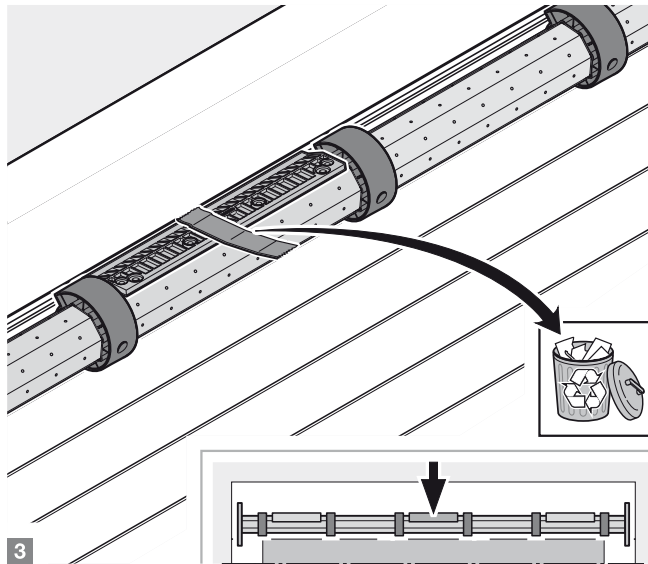
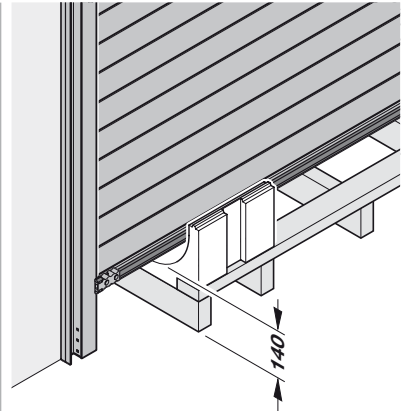
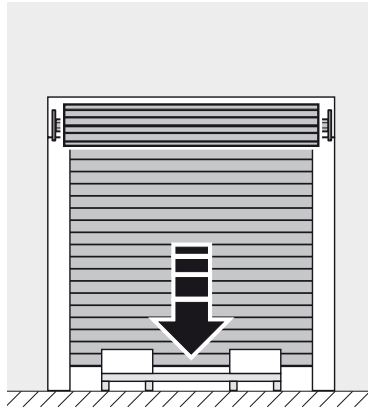
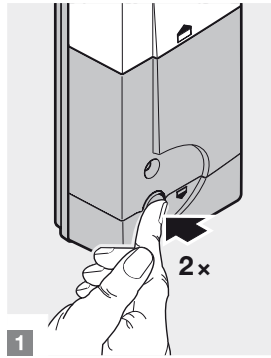
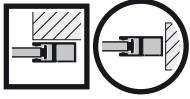
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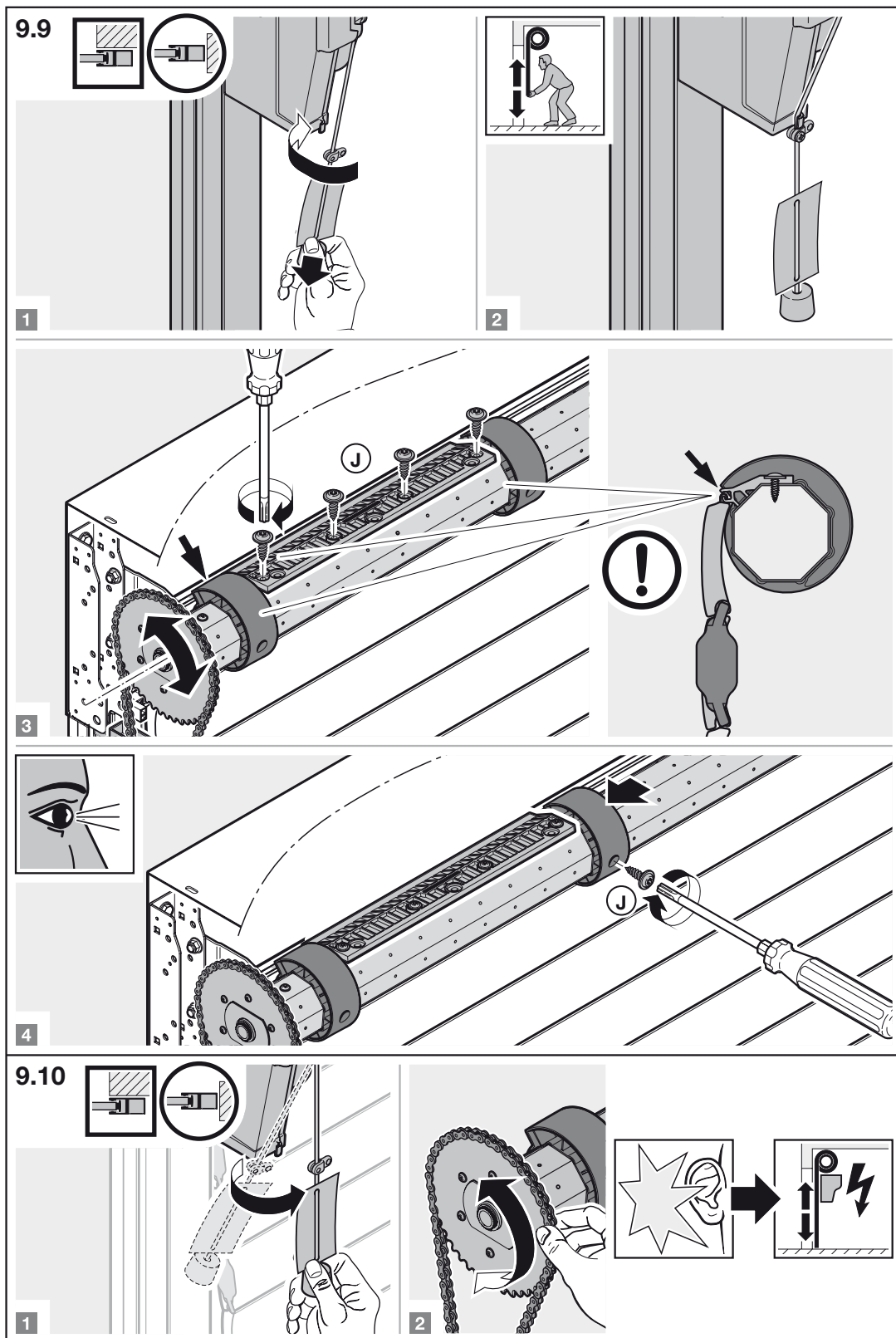


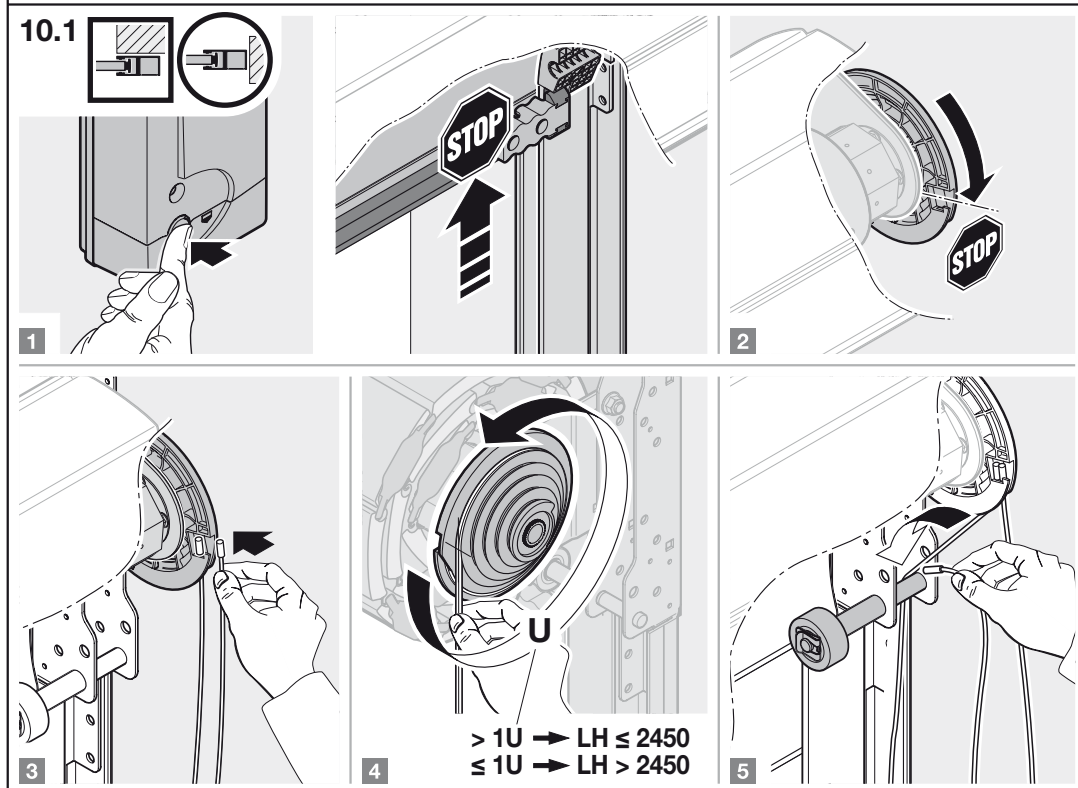
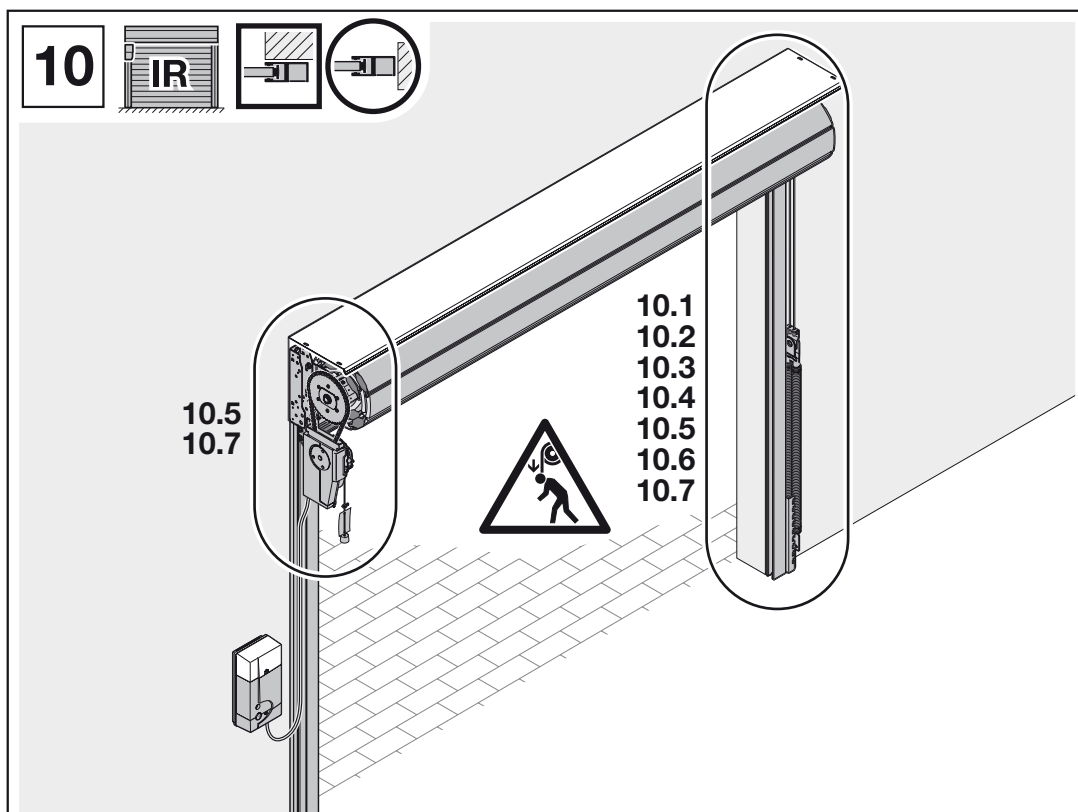
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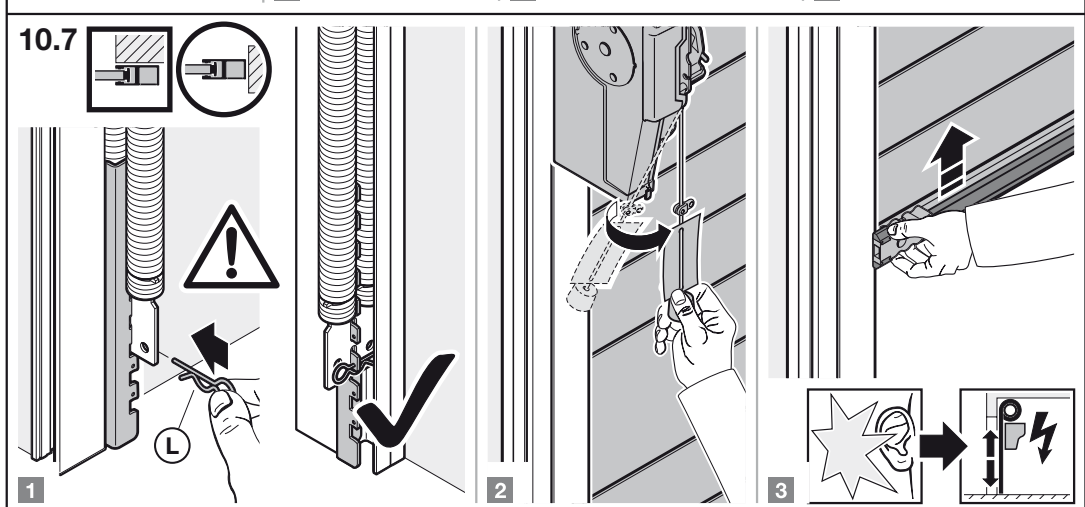
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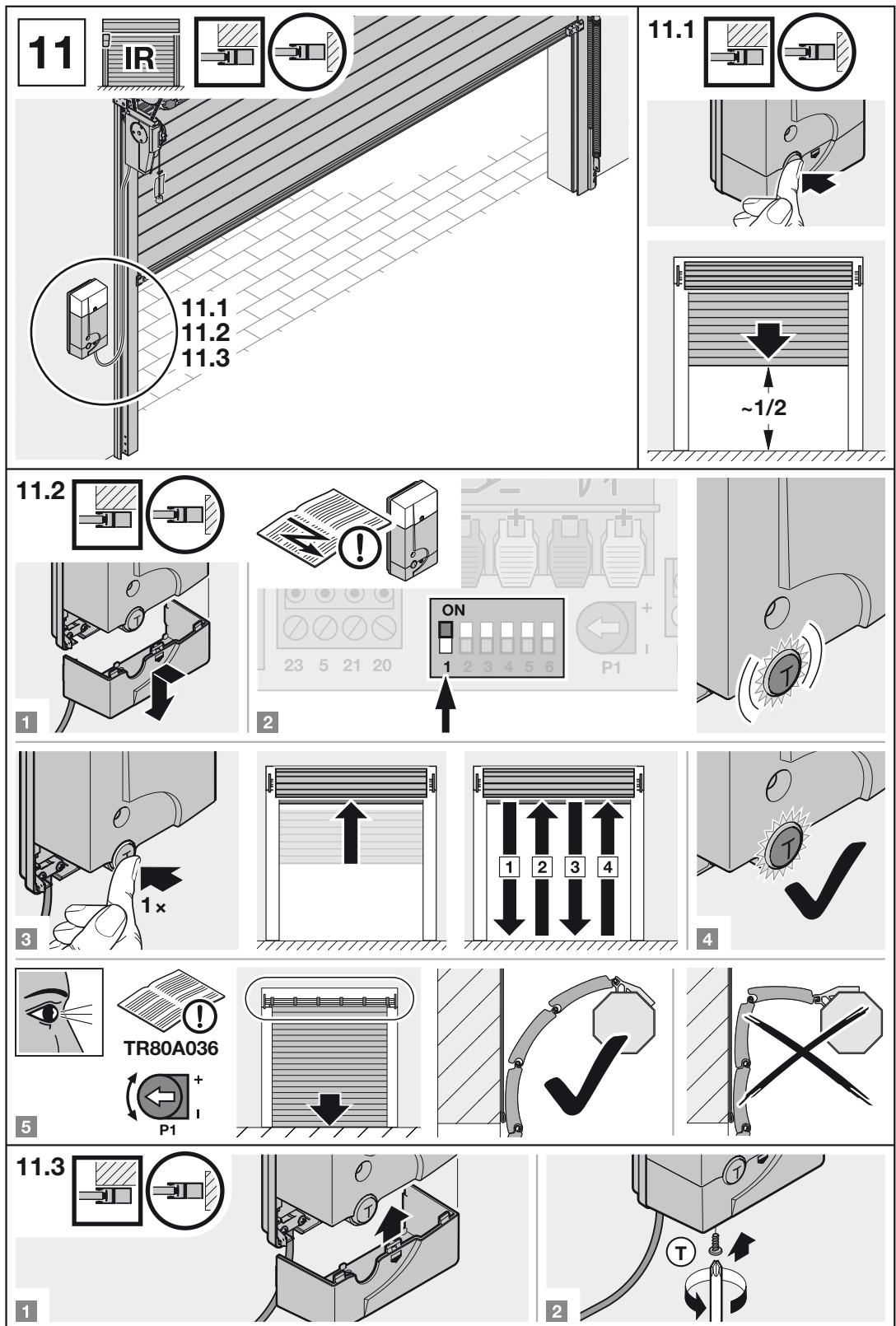


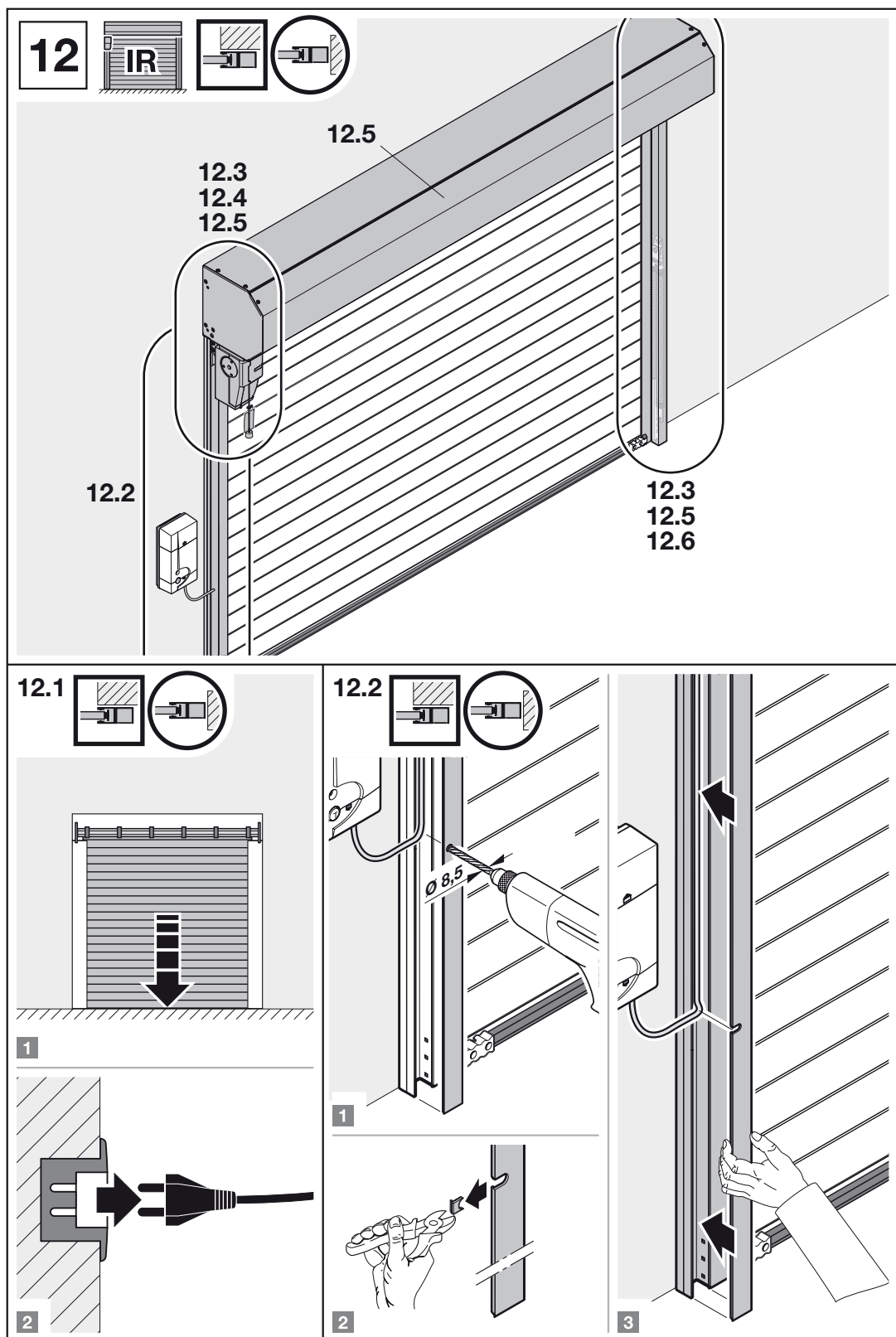




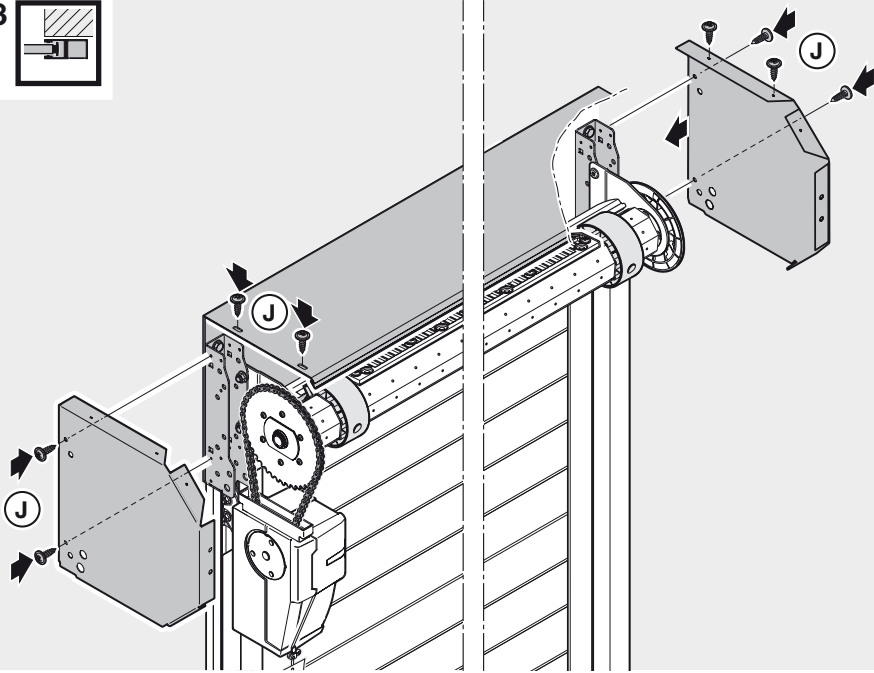




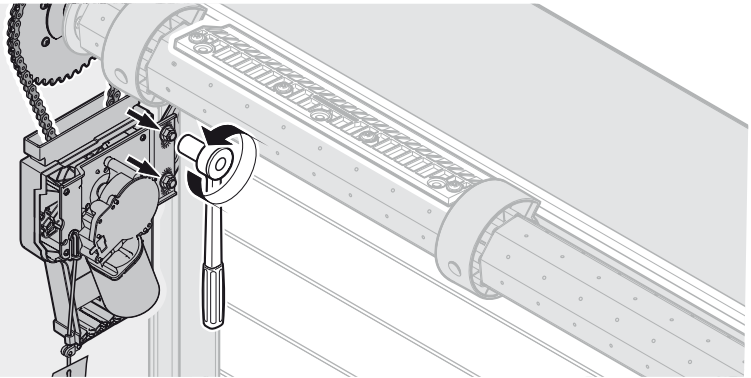




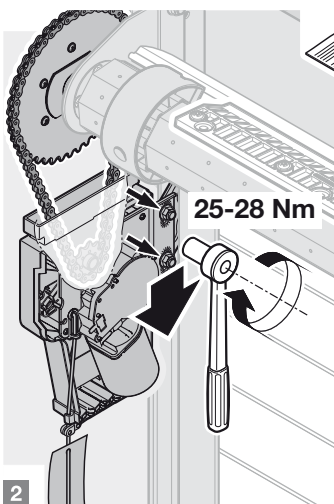
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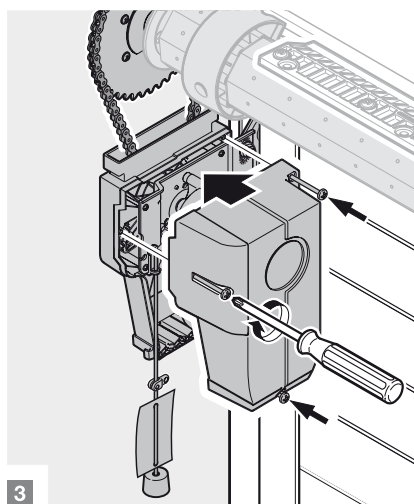
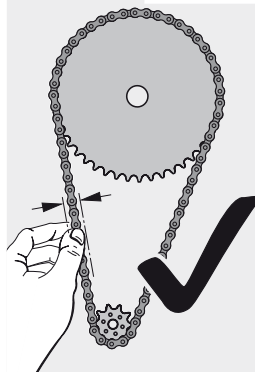
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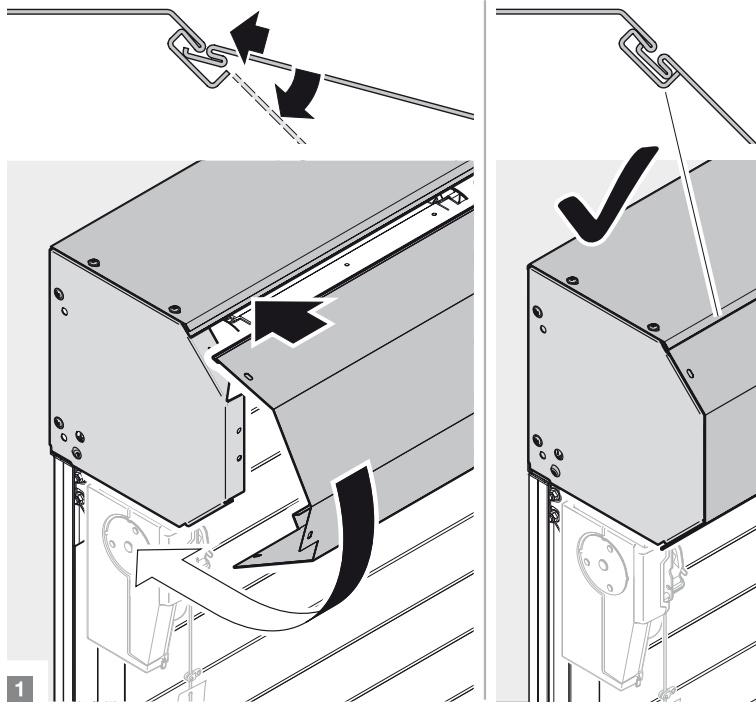
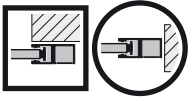


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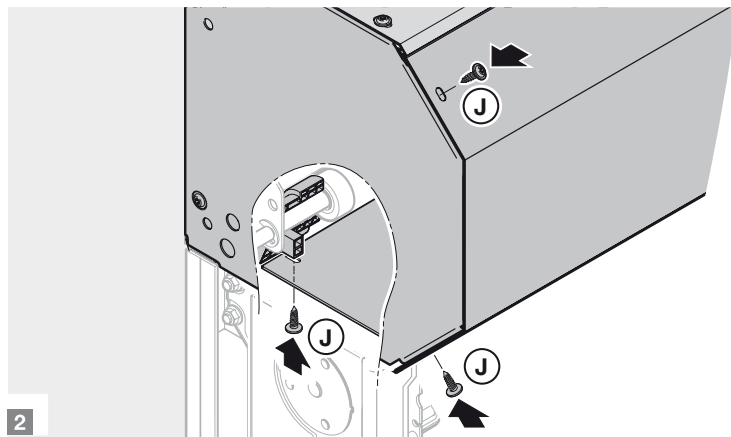
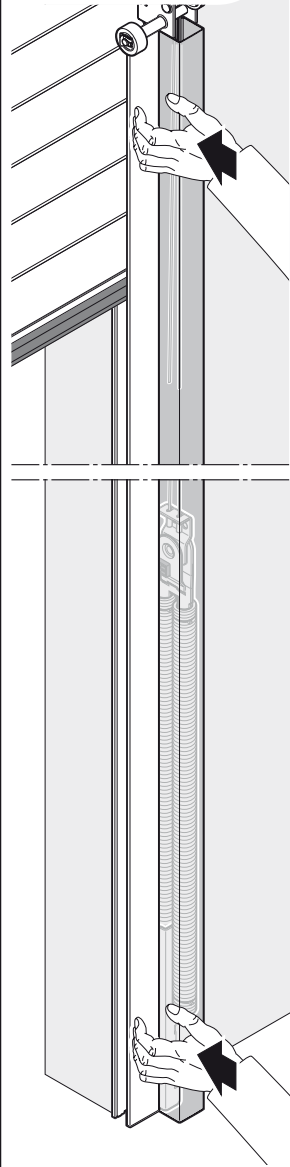
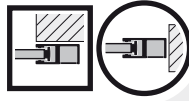


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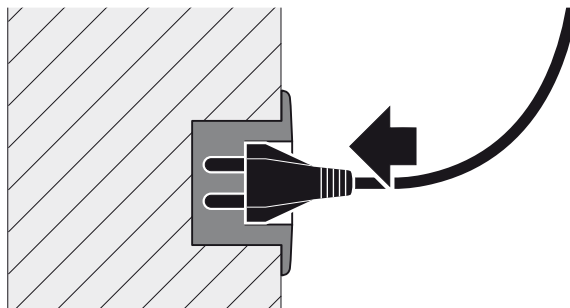
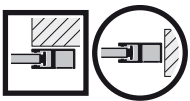
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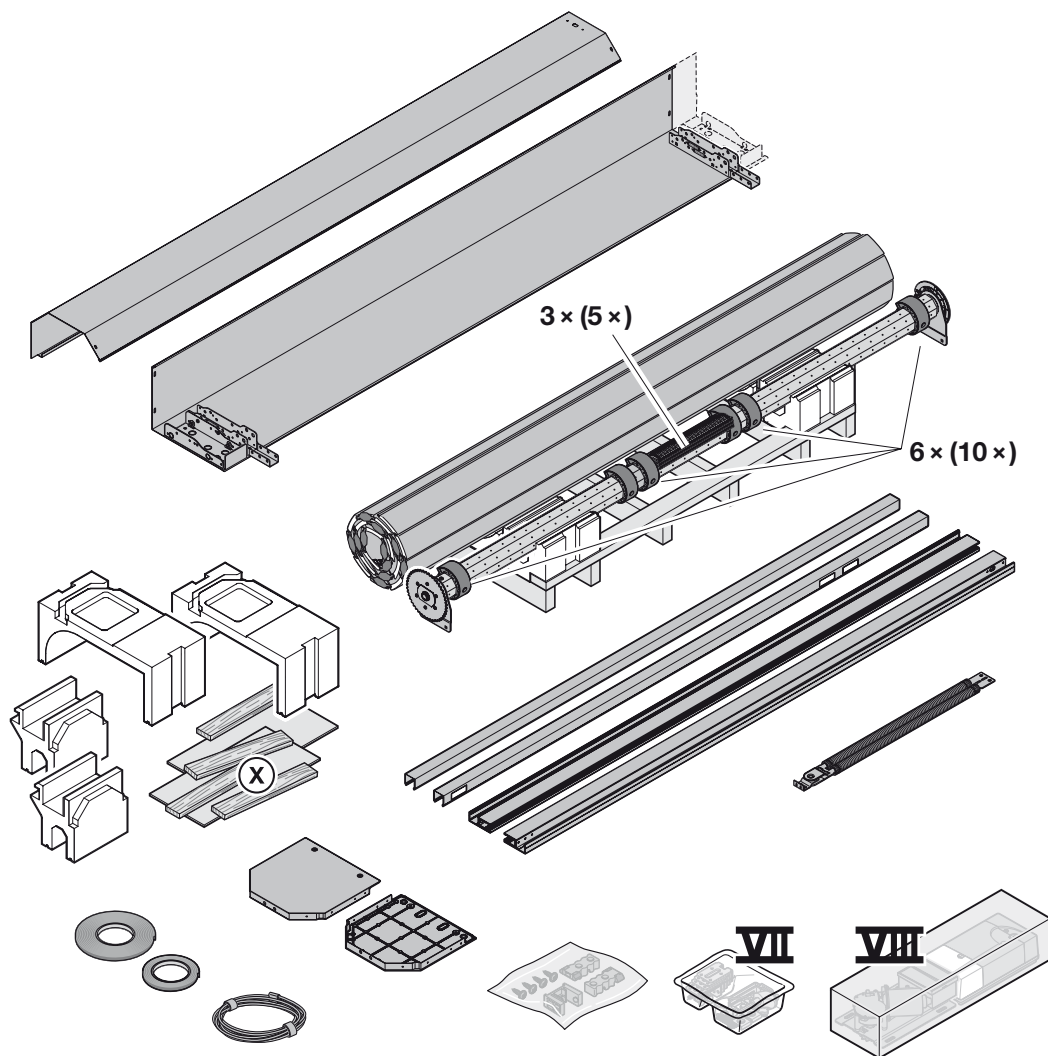
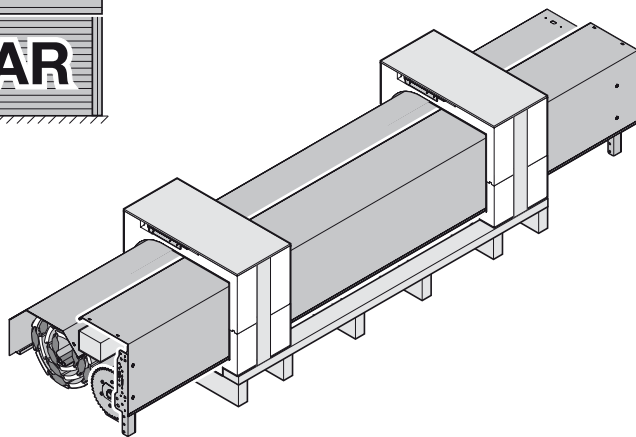


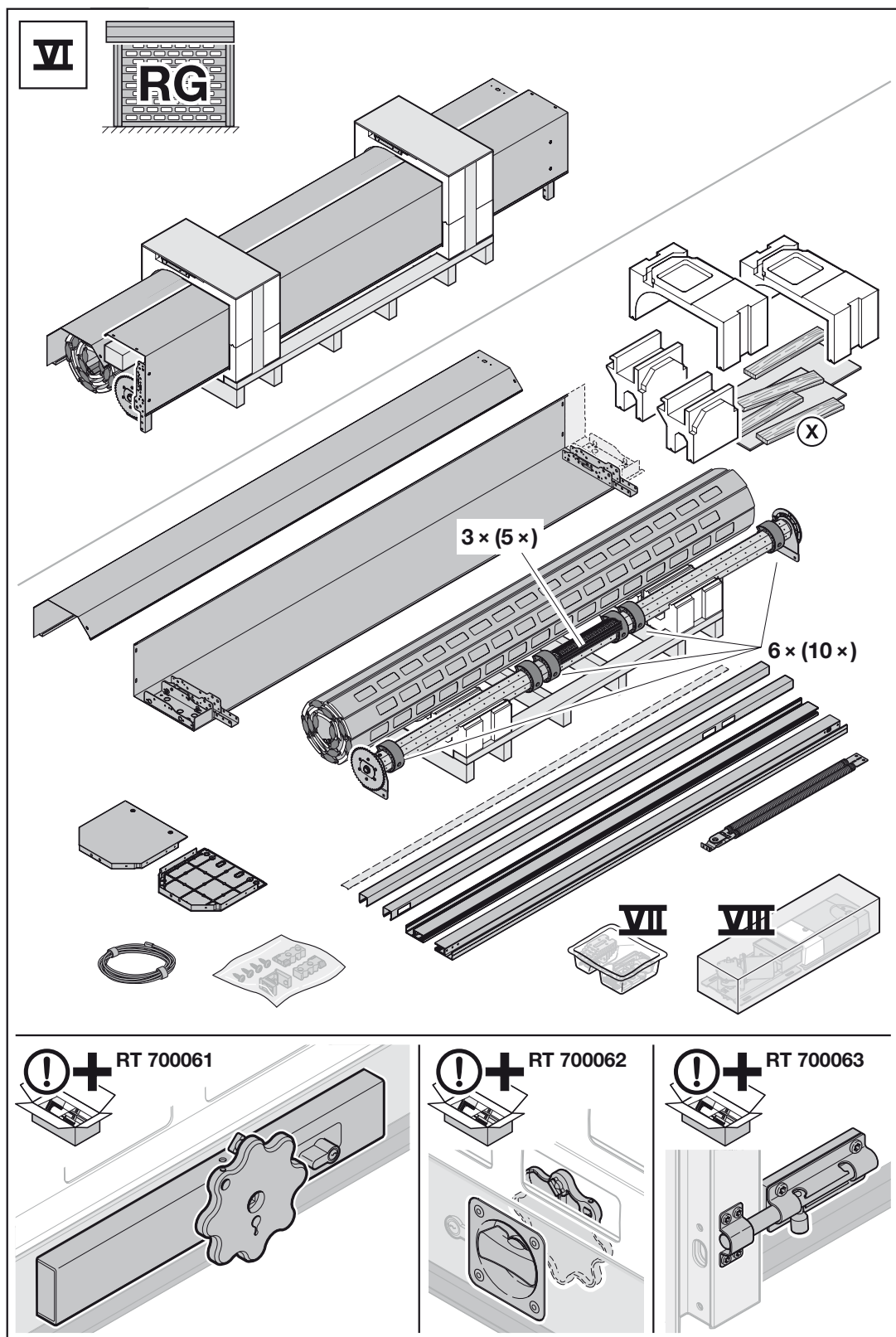
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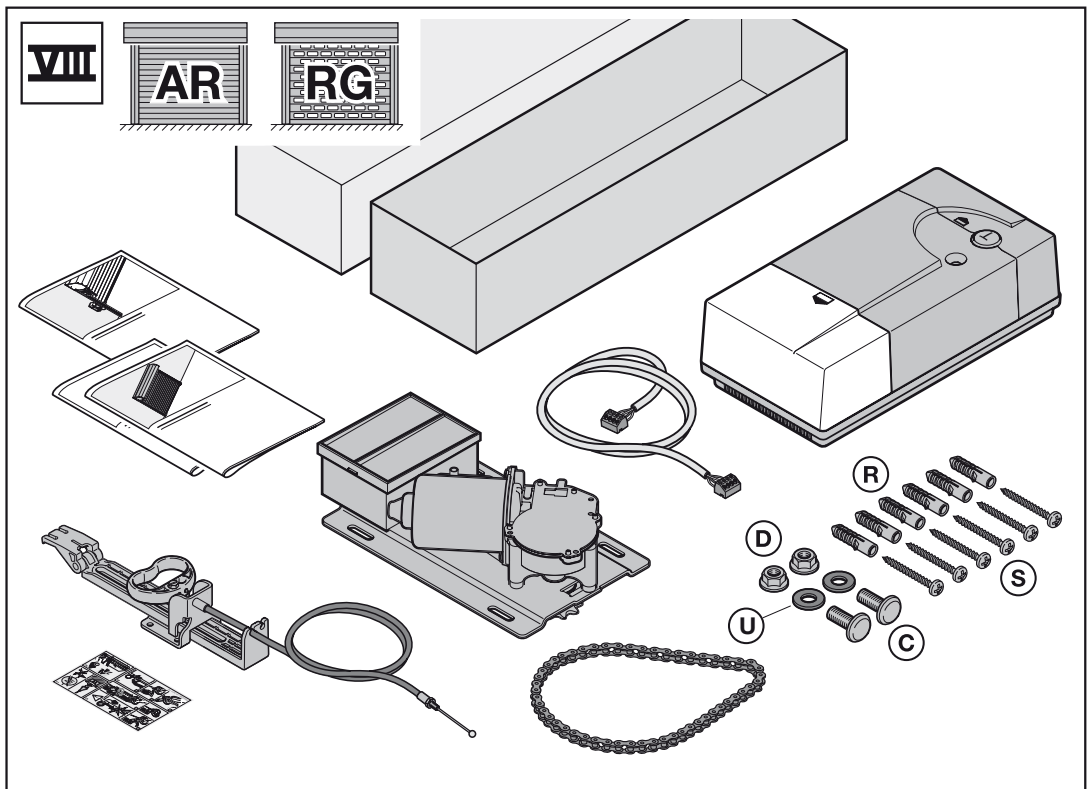
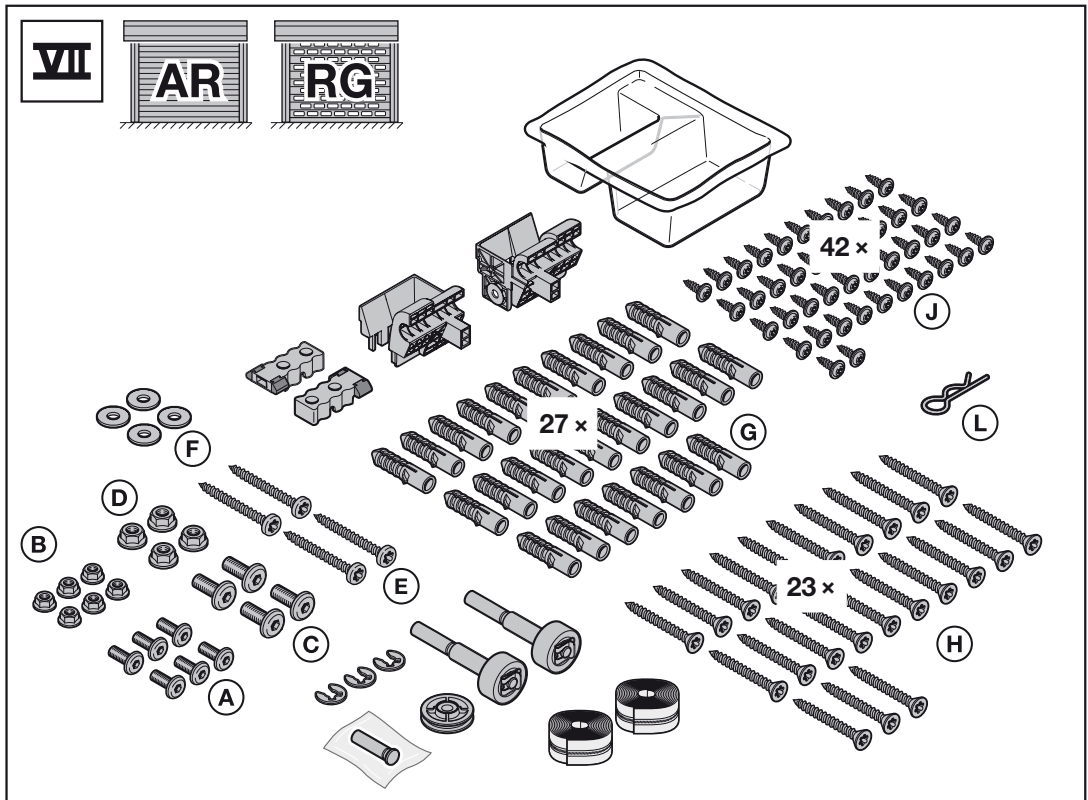


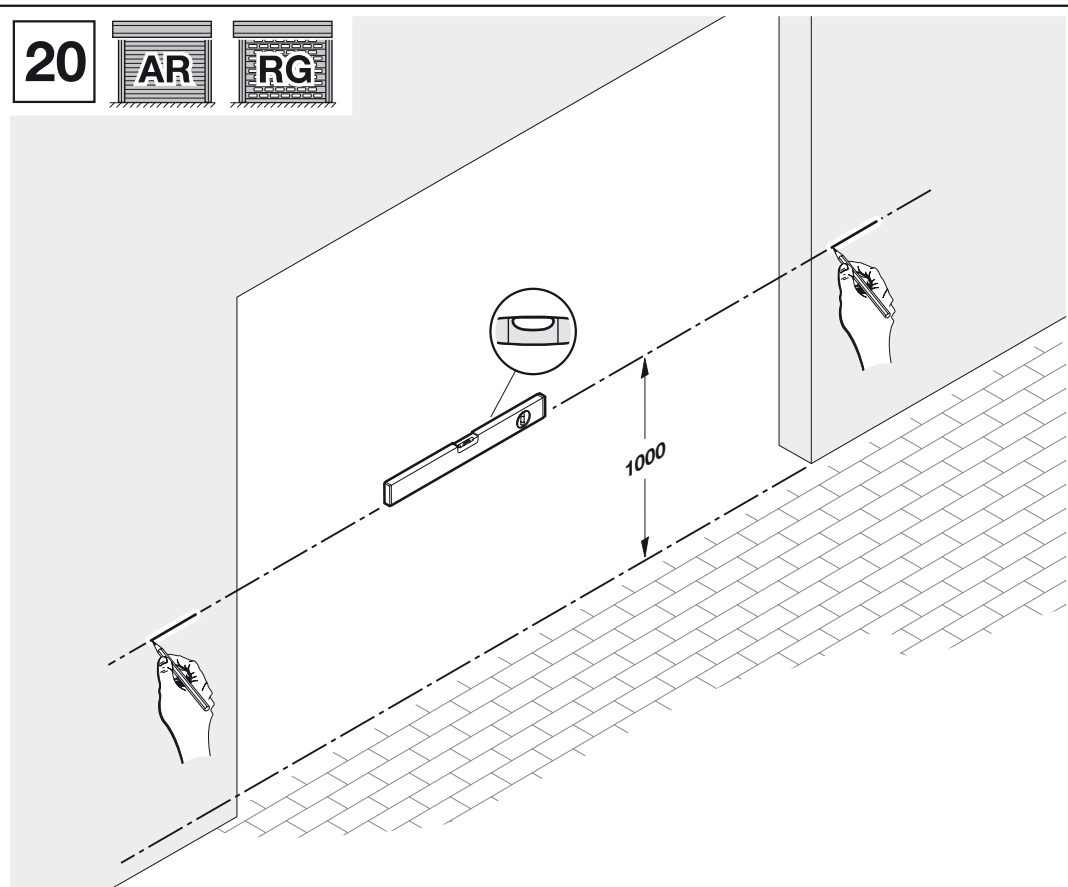
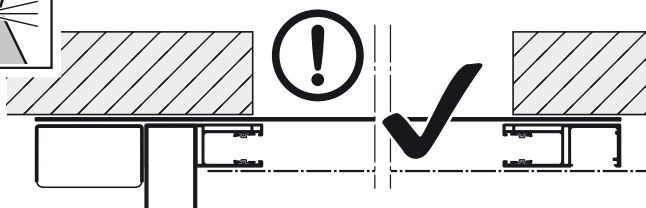
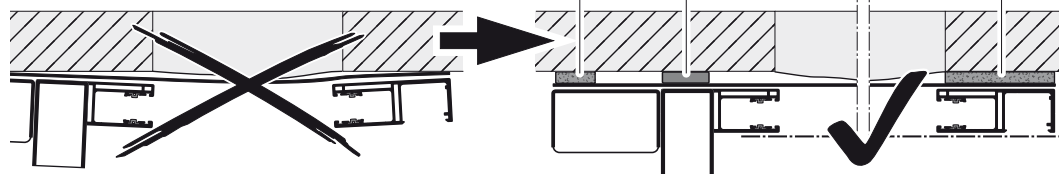
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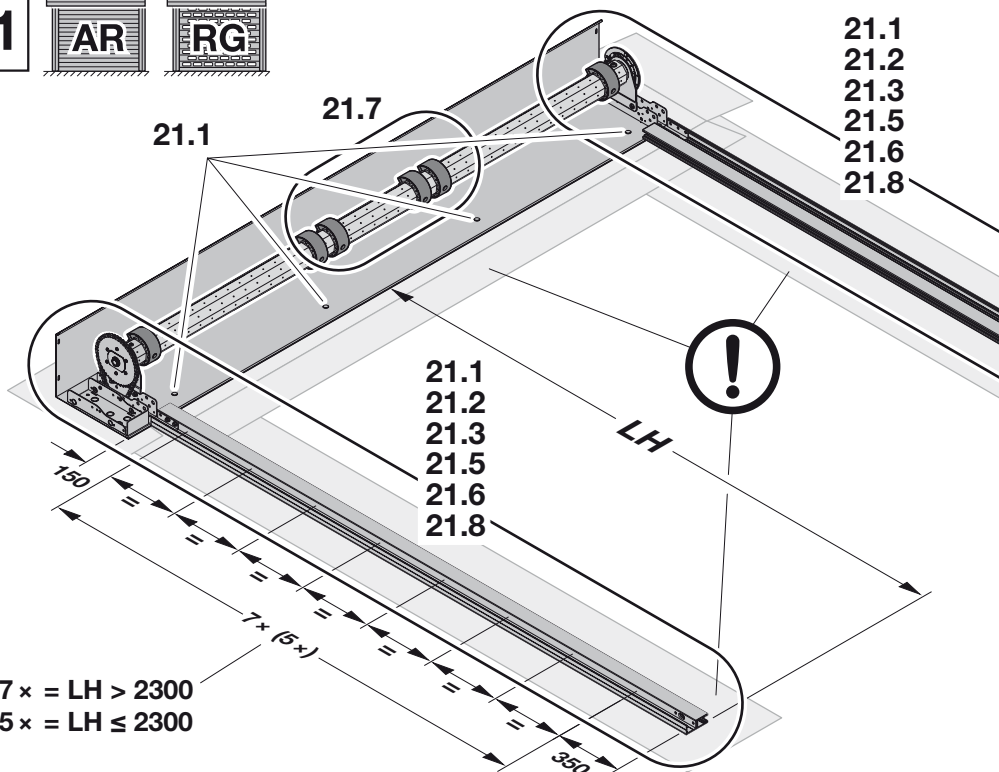
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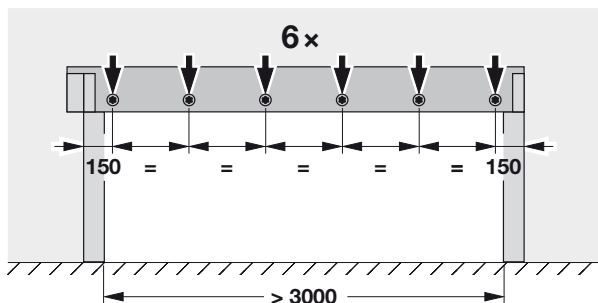
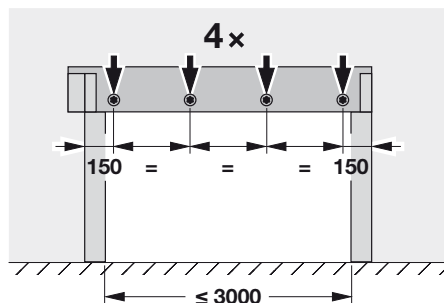
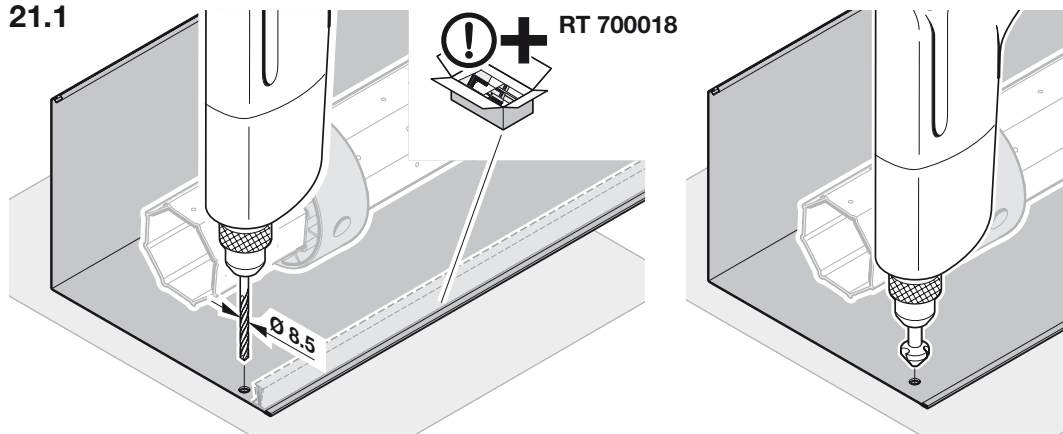


20**20.1a****20.1b****RT 700019**

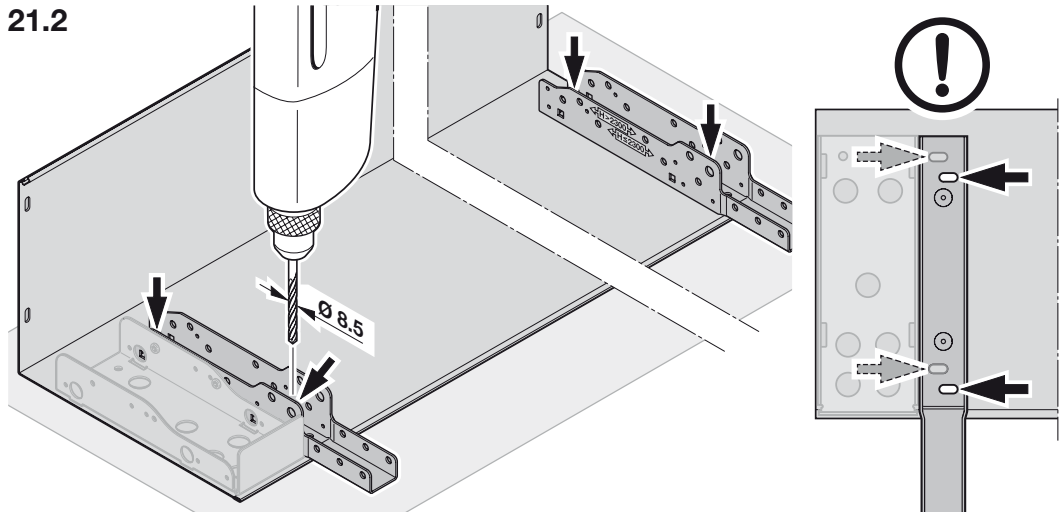
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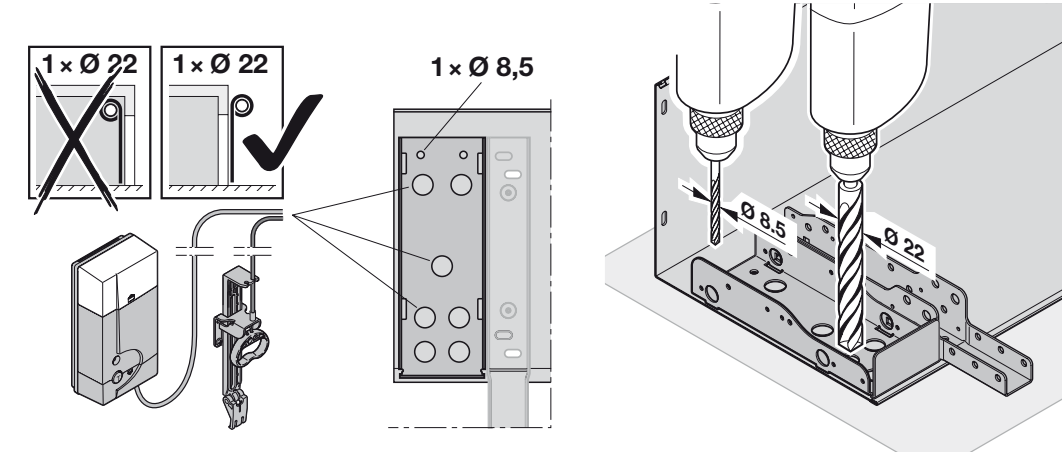
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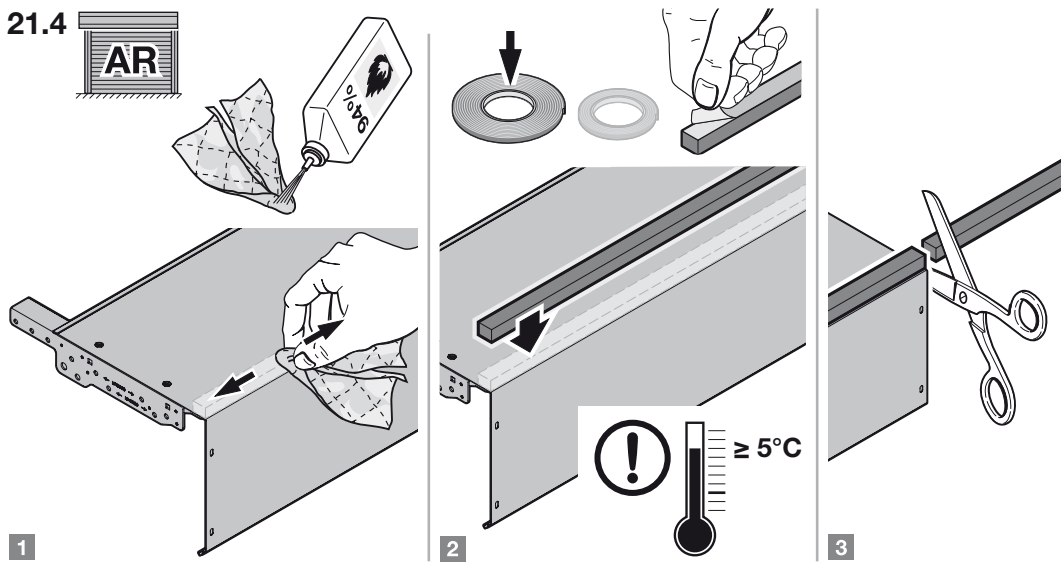
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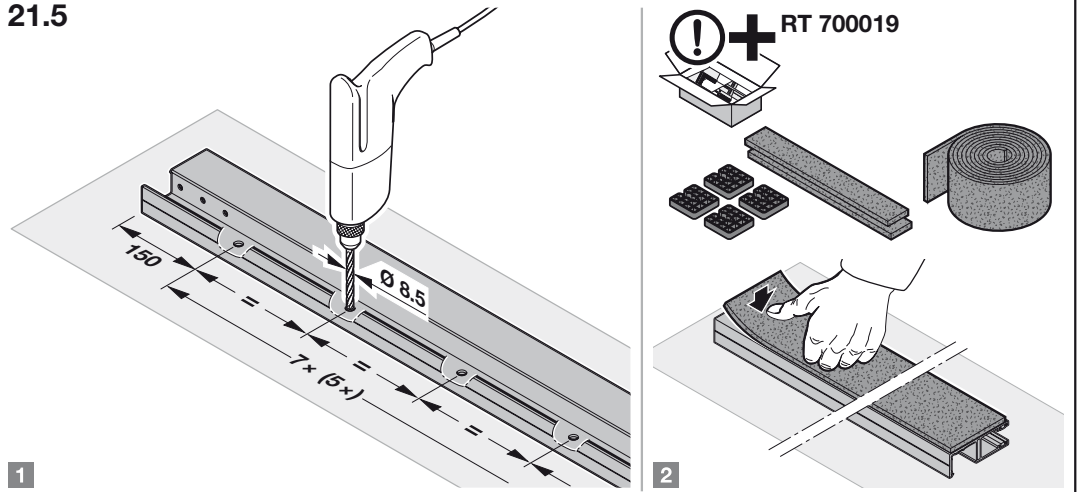
21.3



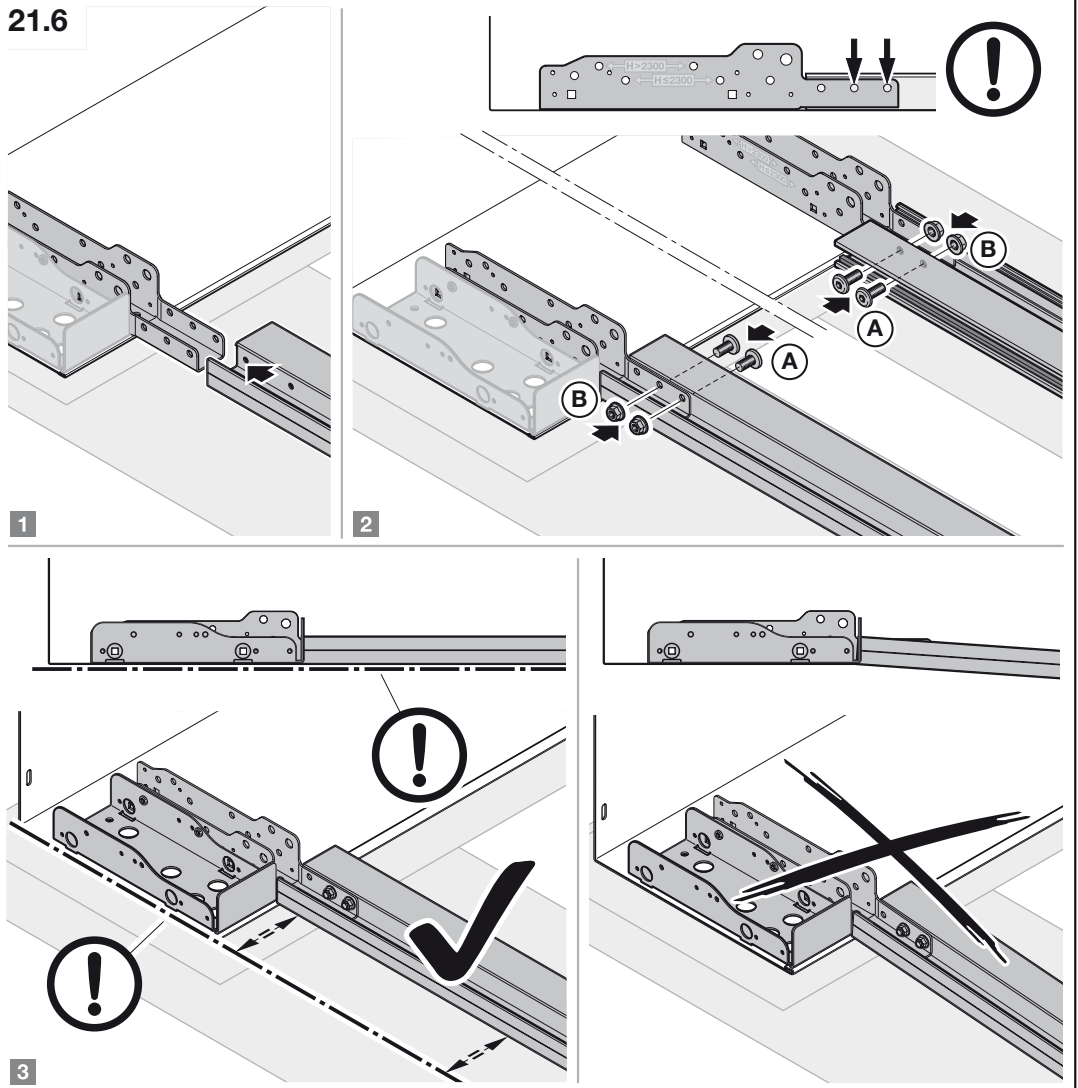
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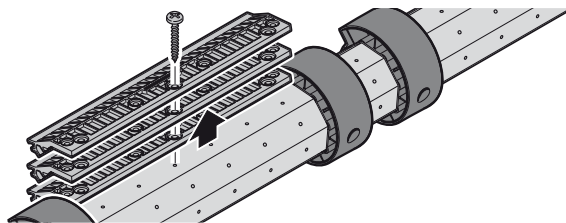
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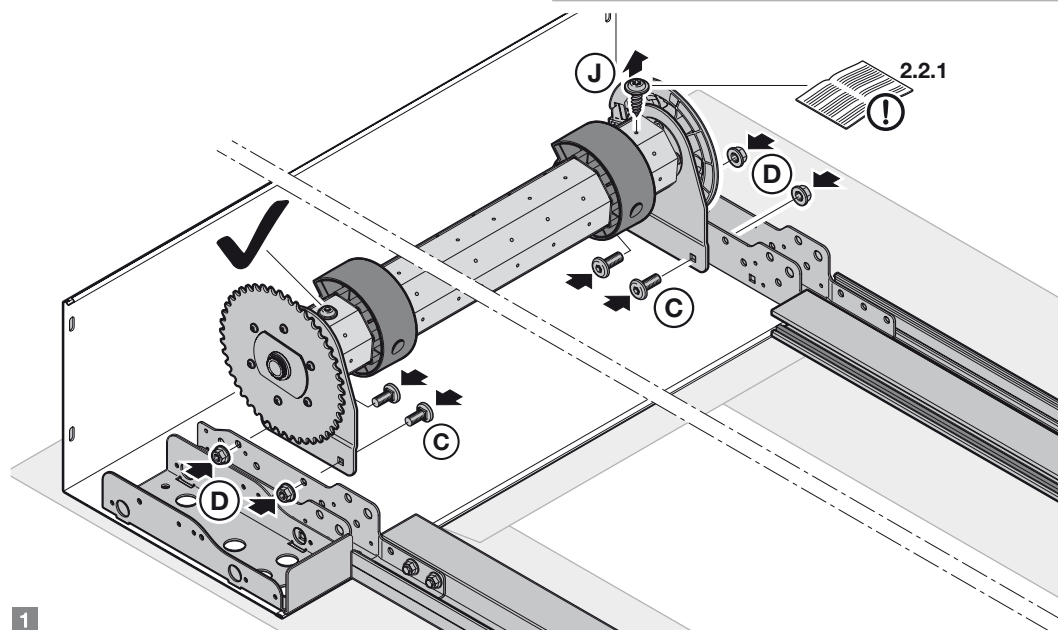
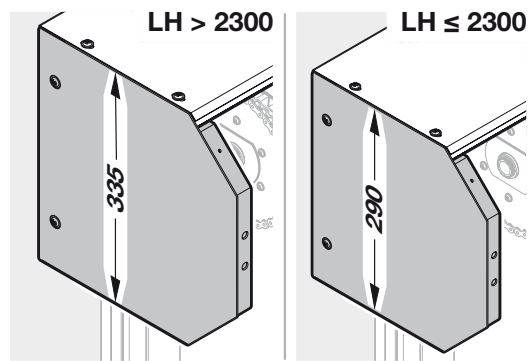
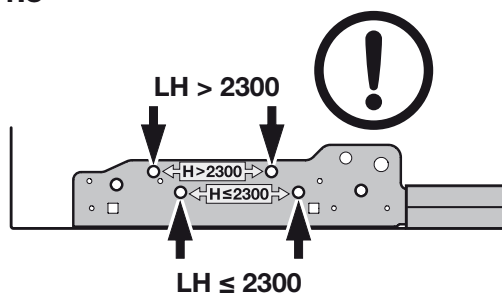
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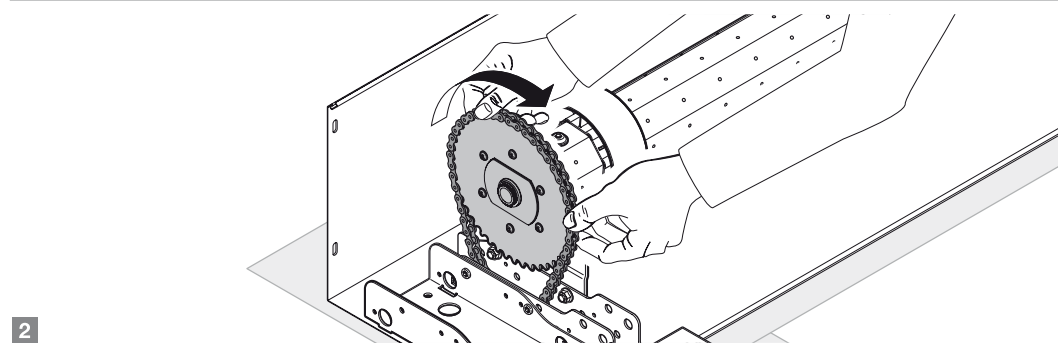
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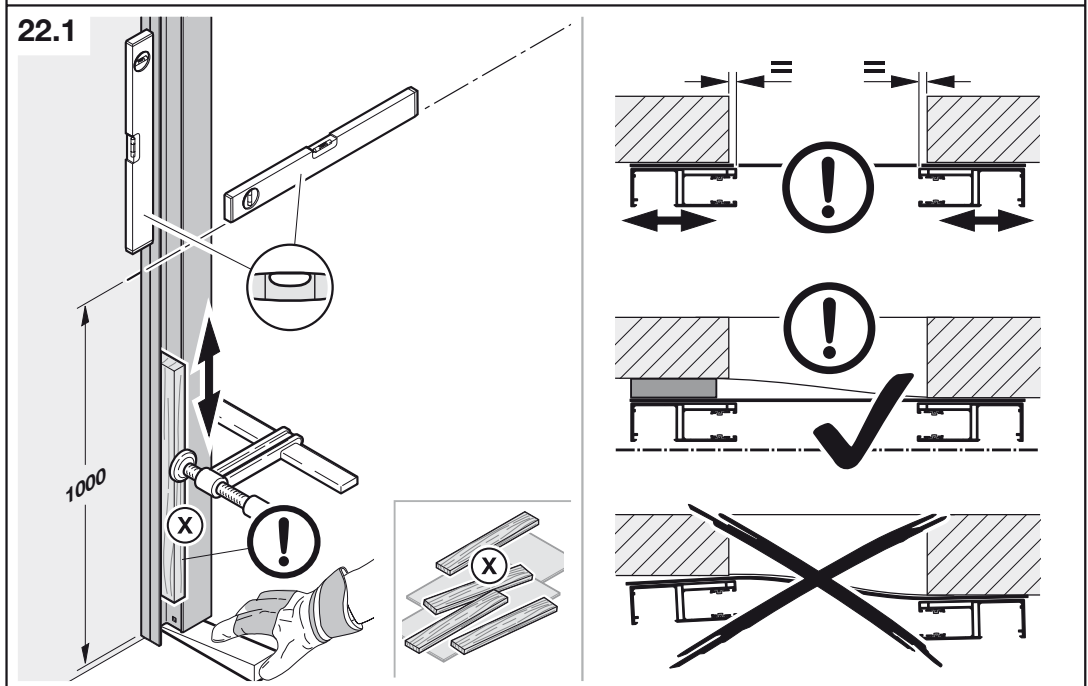
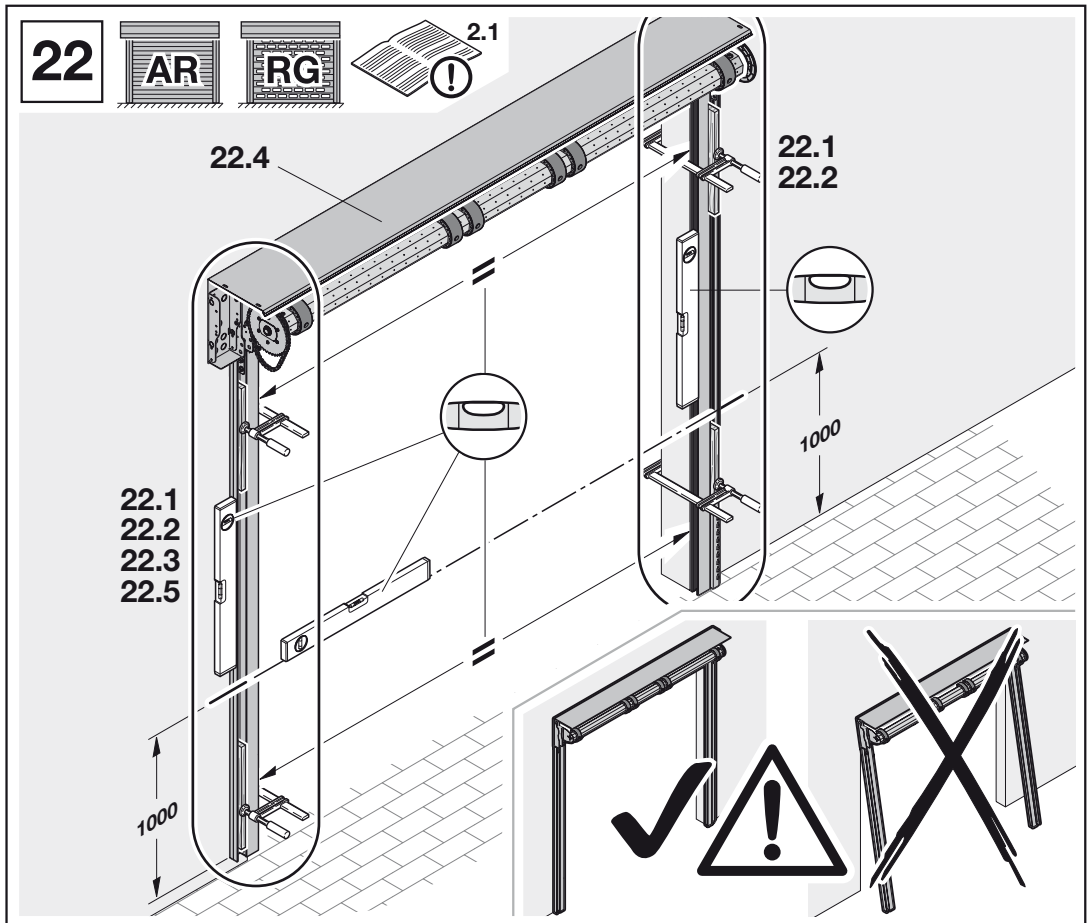
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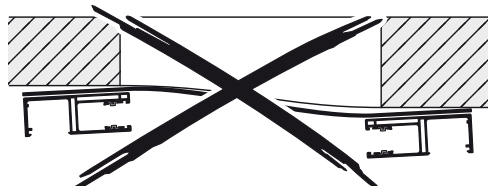
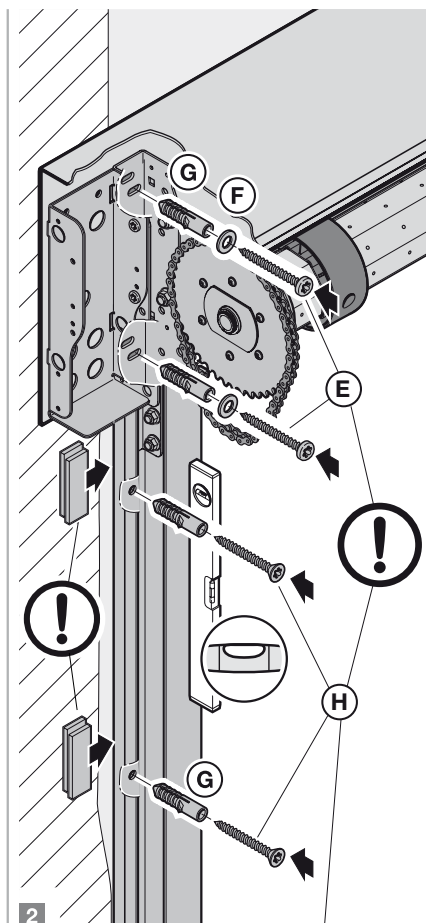
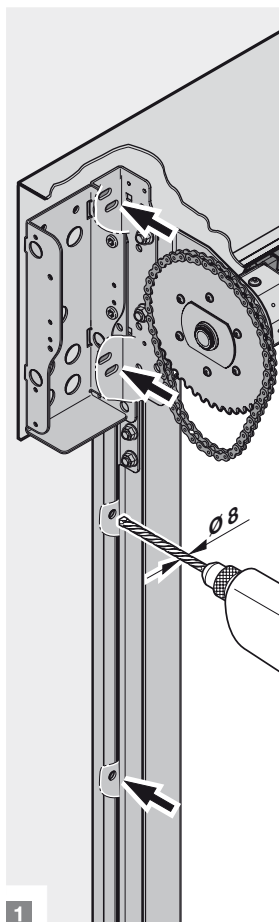
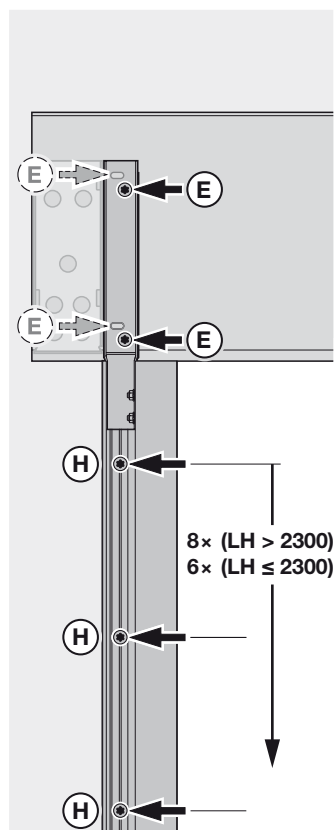


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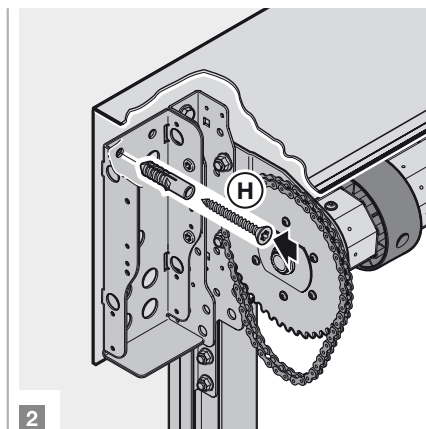
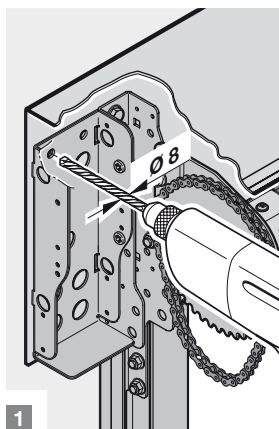
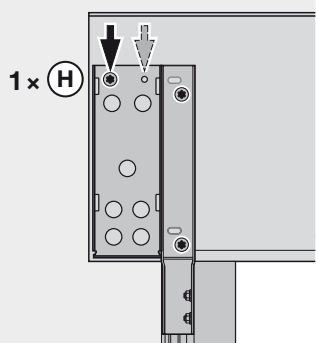


22.2

2.1



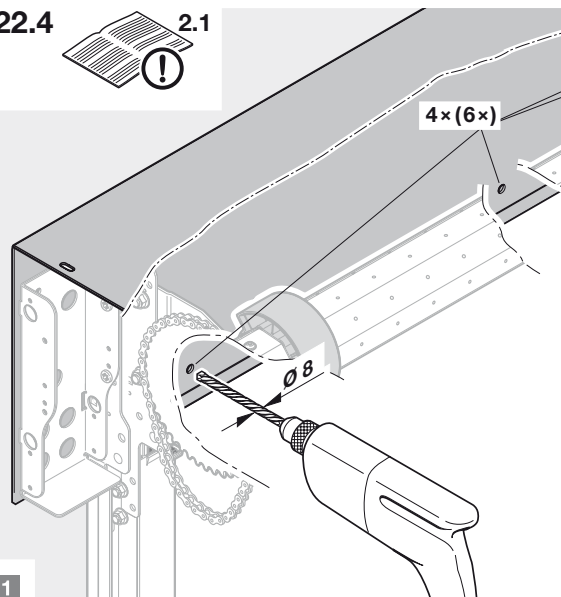
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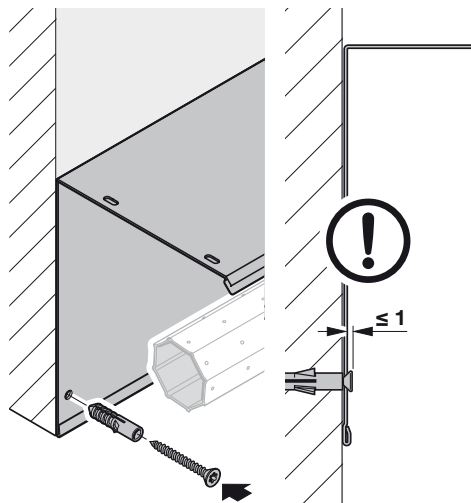
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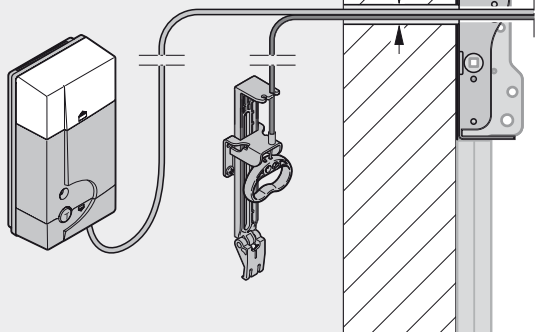
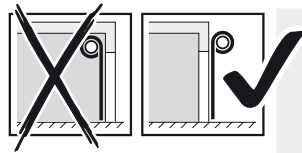
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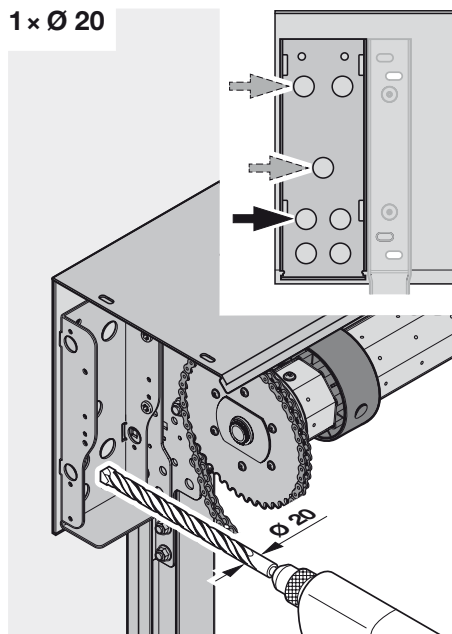
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22.5



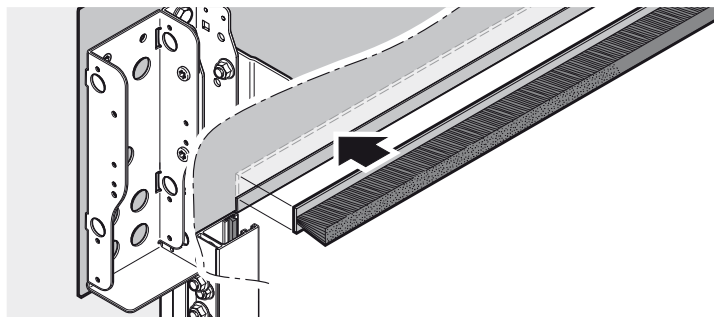
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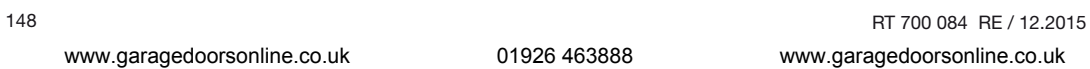


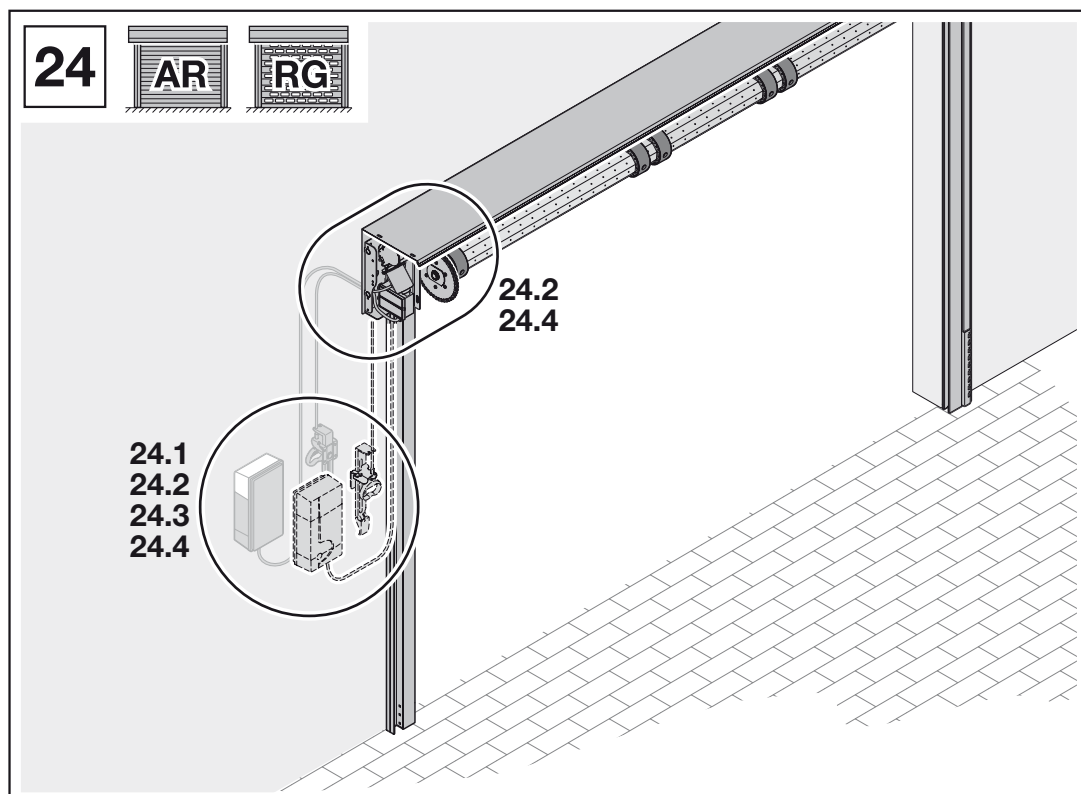
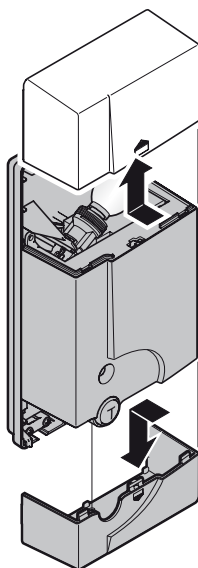
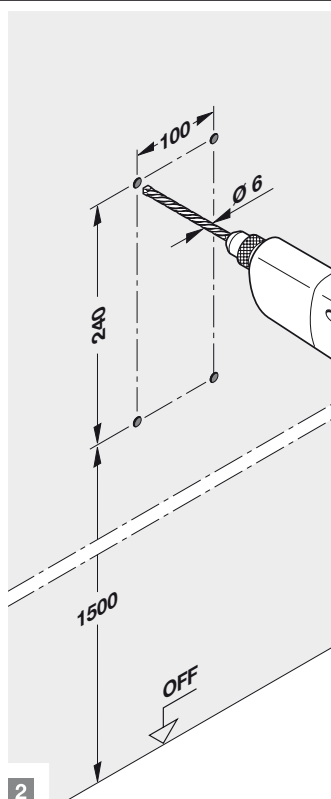
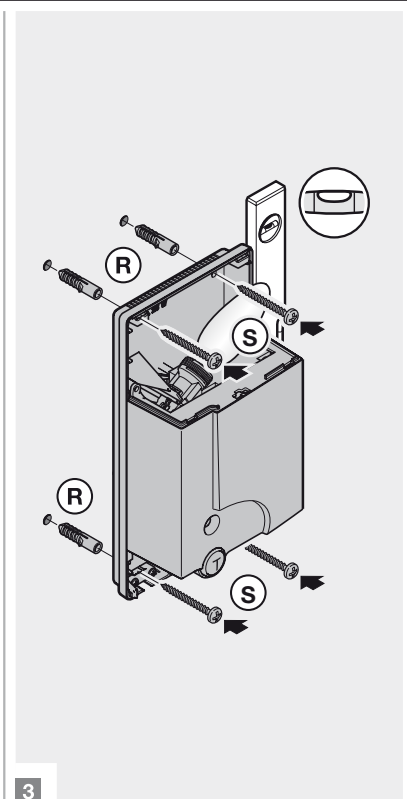
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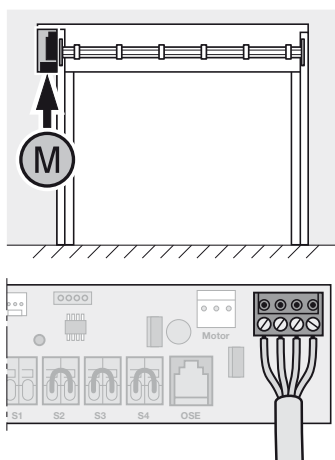
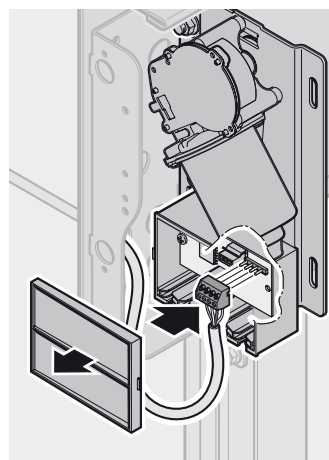
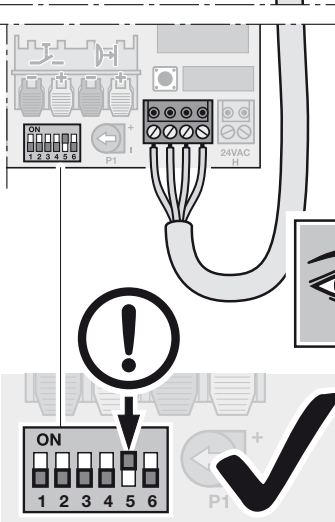
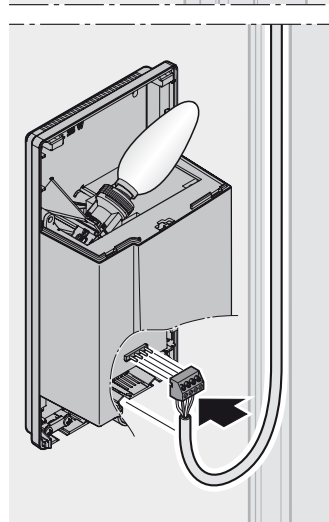
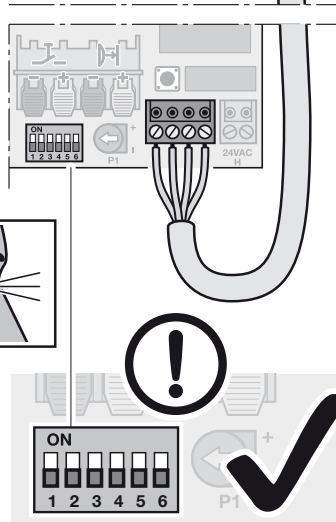
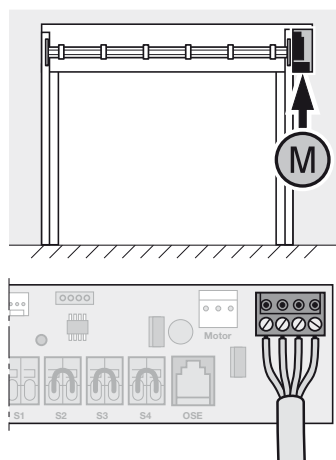
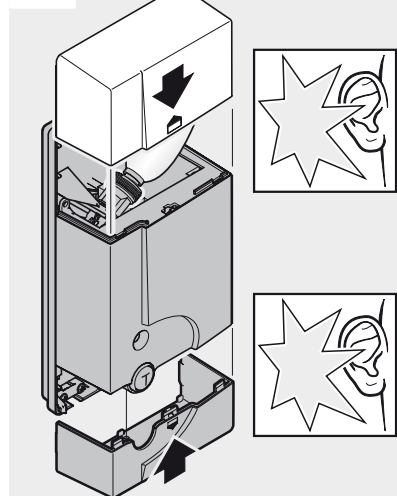
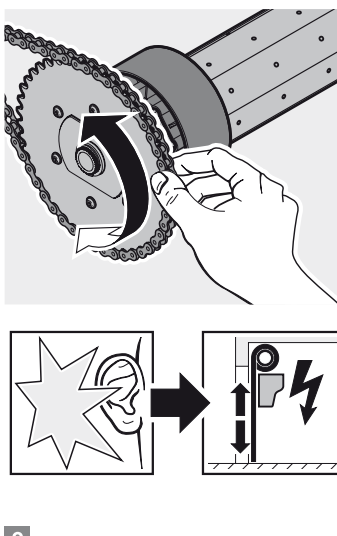
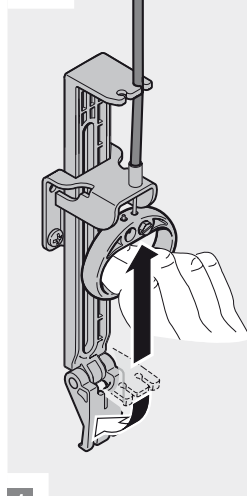


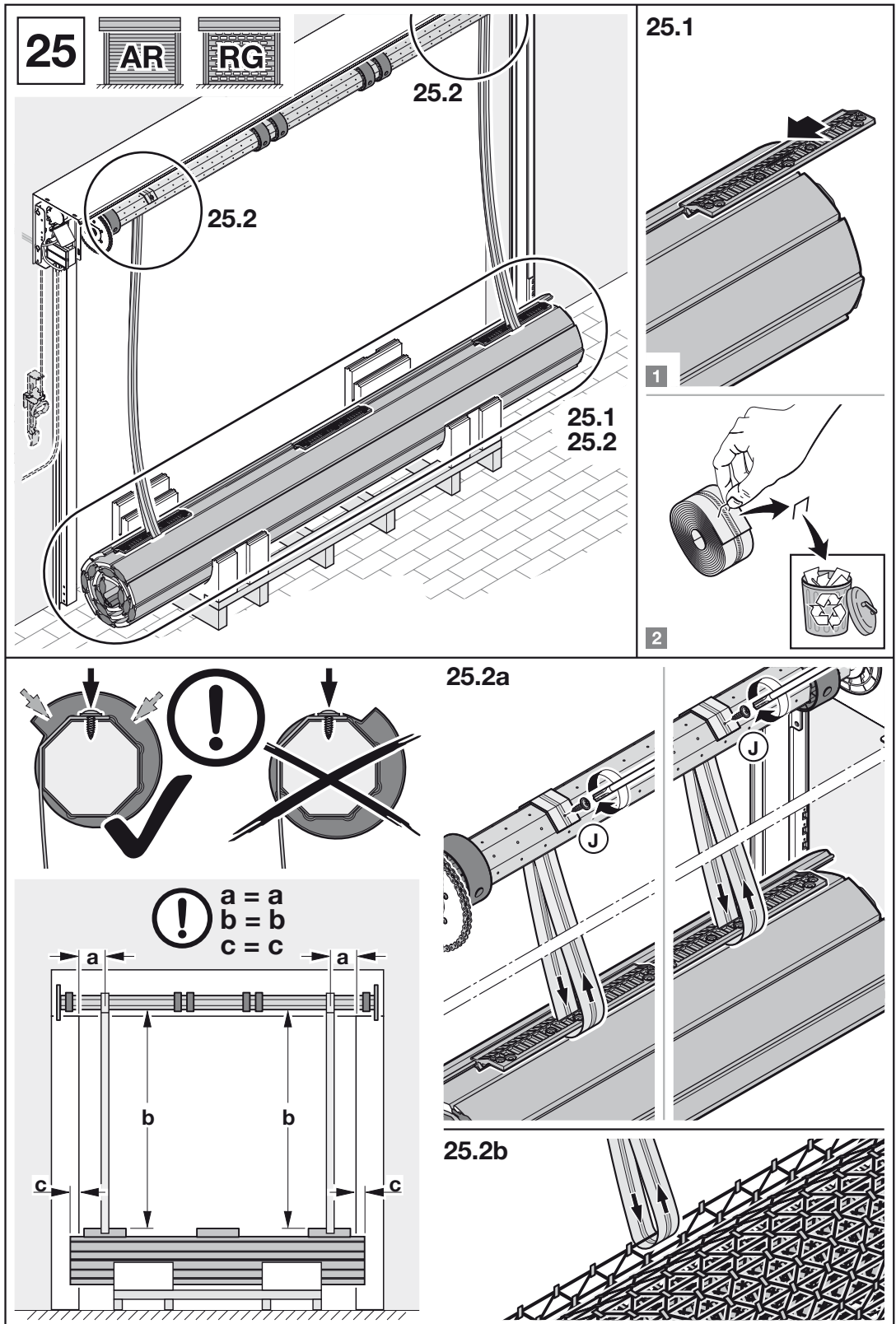
RT 700018

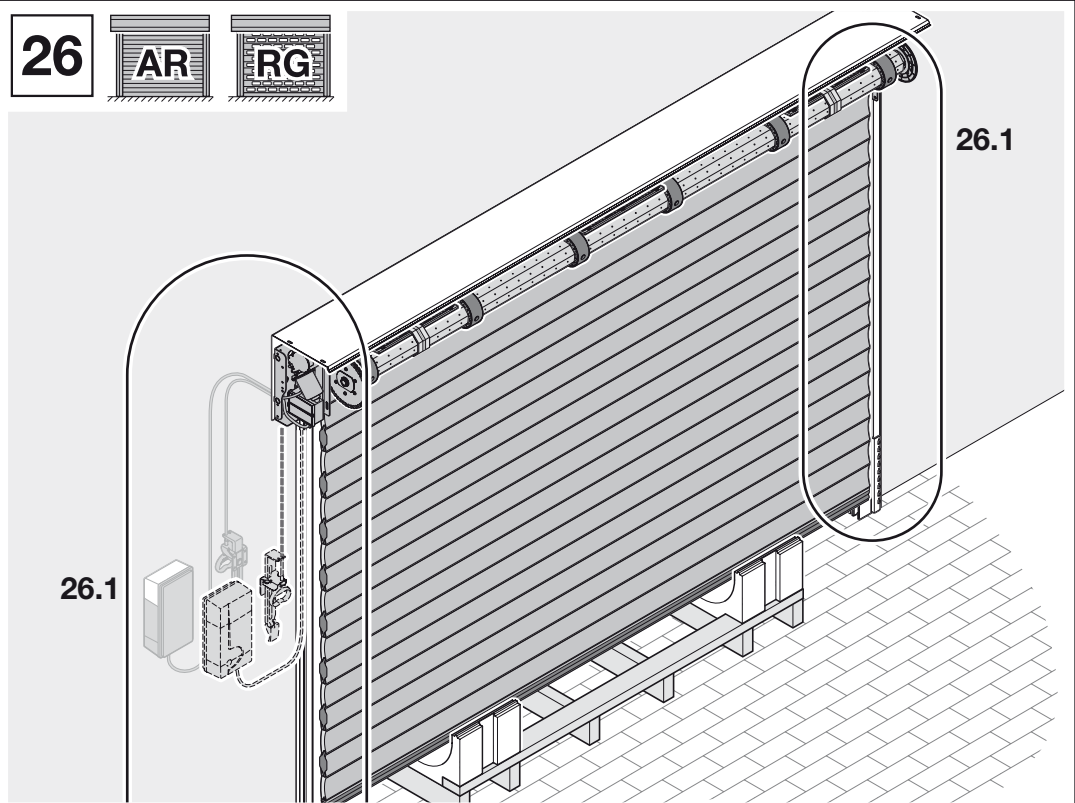
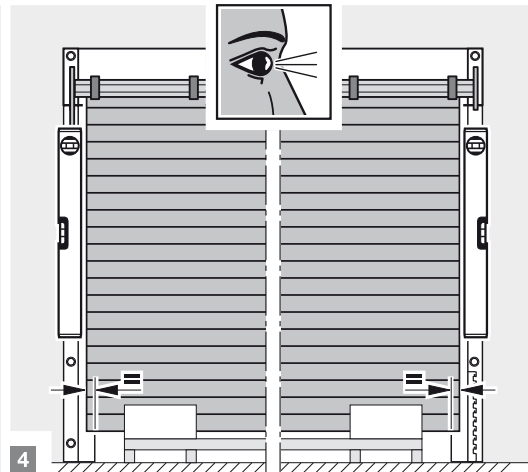
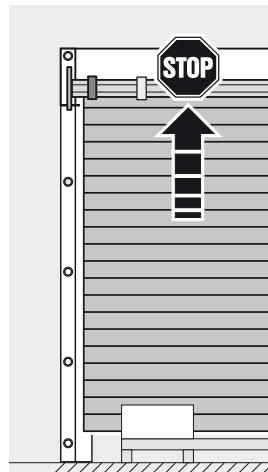
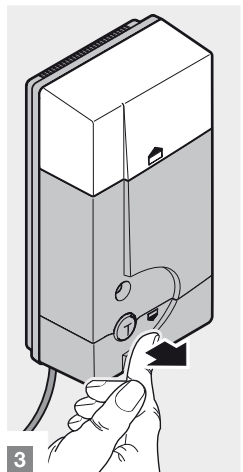
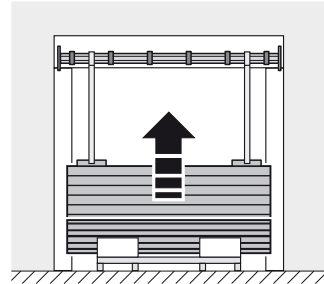
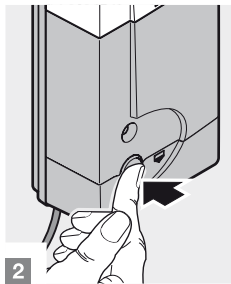
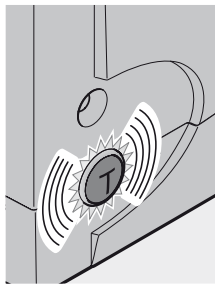
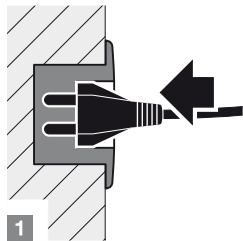




**24.1****1****2****3**

24.2a**24.2b****24.3****24.4**

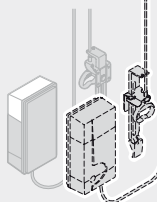


26**26.1**

27



27.1
27.2
27.3
27.4
27.5
27.7
27.10
27.11
27.12
27.13



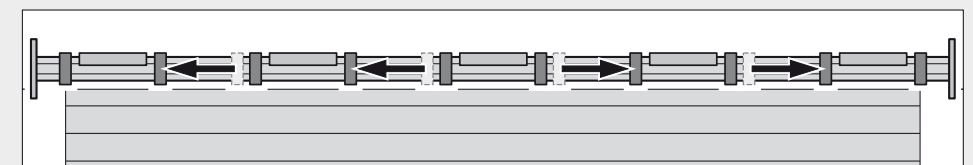
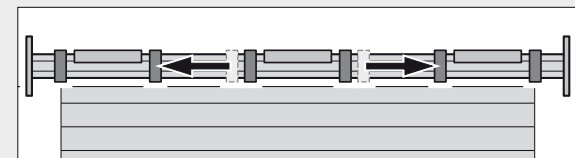
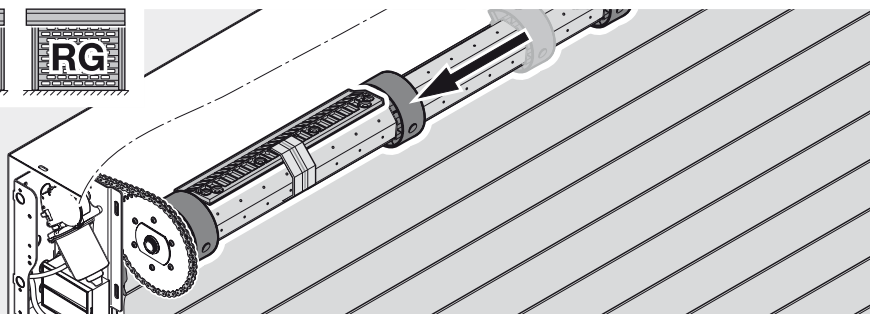
27.1
27.2
27.10
27.12

27.1
27.2
27.4
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27.12

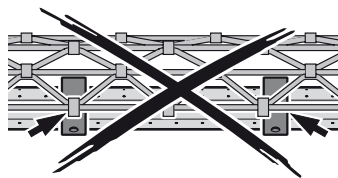
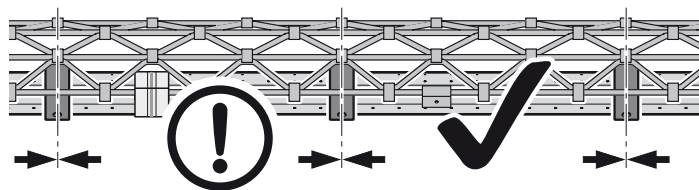
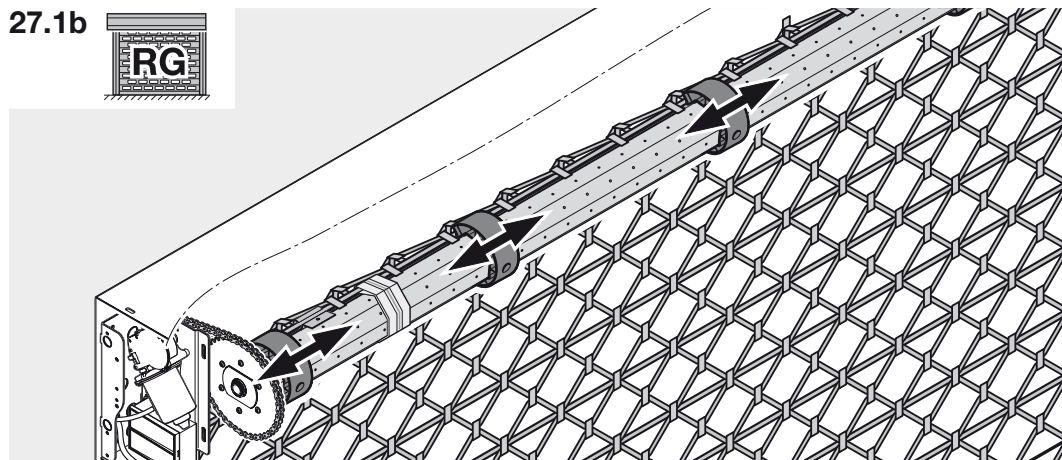
27.6
27.8
27.9

27.6
27.8
27.9

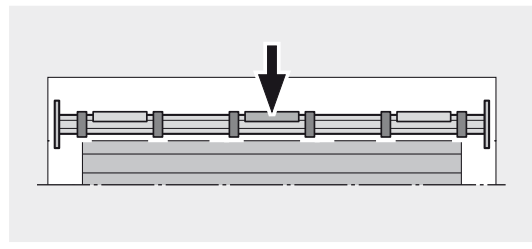
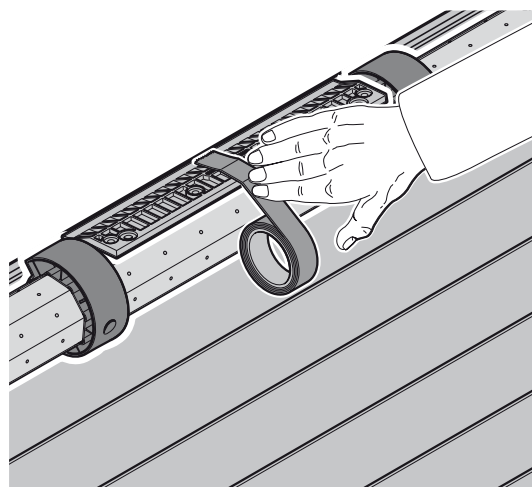
27.1a



27.1b



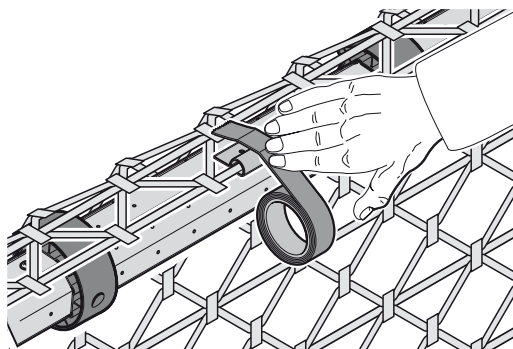
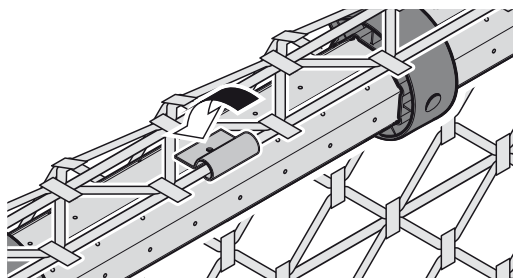
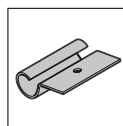
27.2a



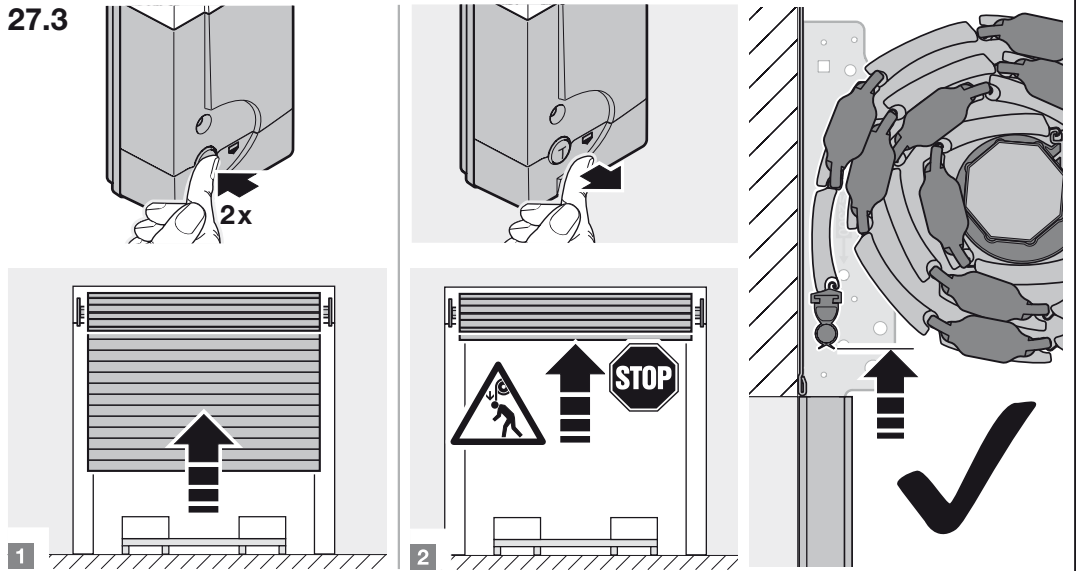
27.2b



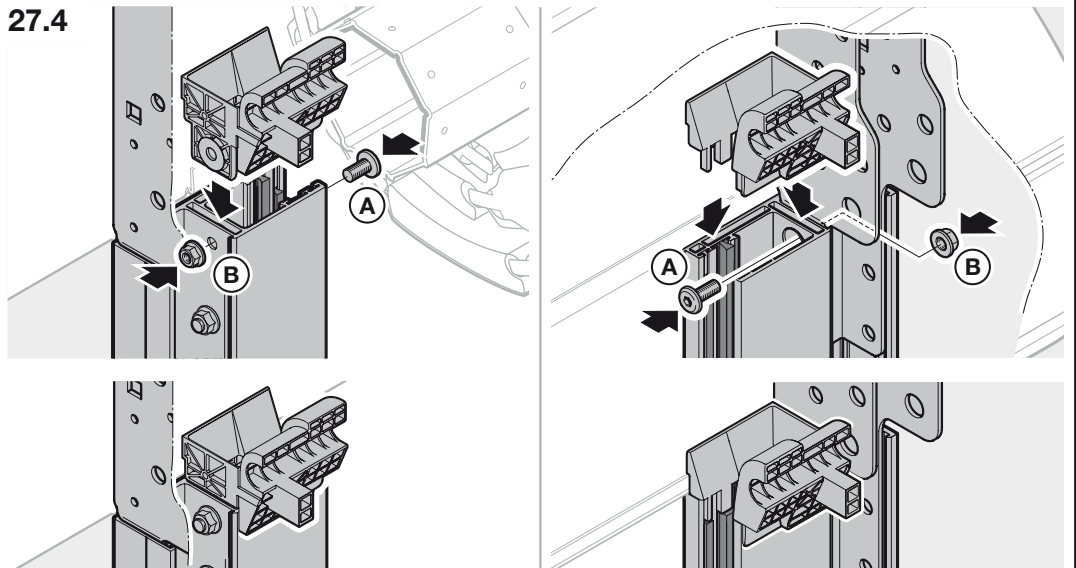
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- 3x (LB 1601 - 2400)
- 4x (LB 2401 - 3200)
- 5x (LB 3201 - 4000)



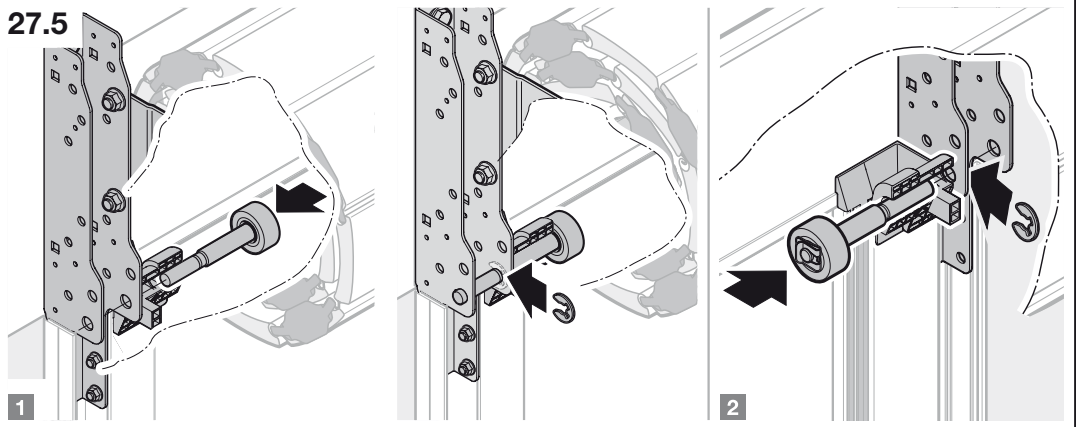
27.3



27.4



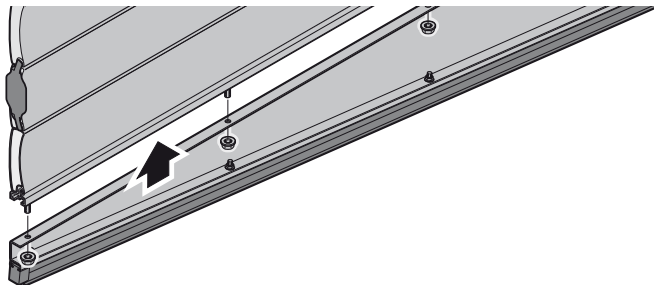
27.5



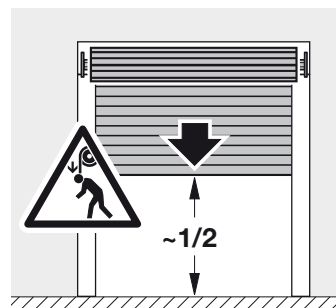
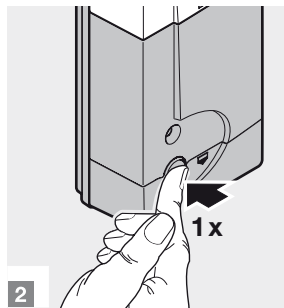
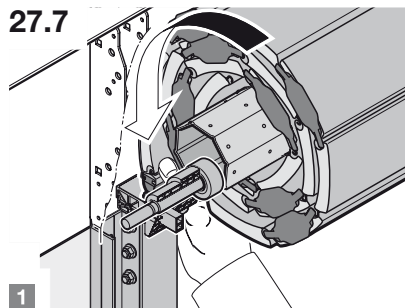
27.6



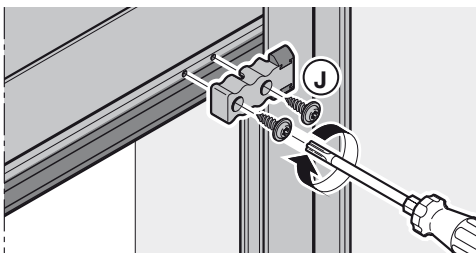
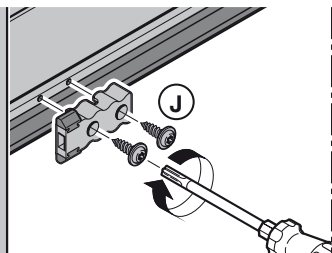
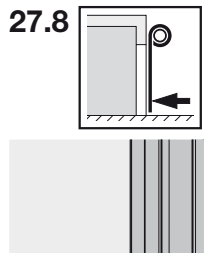
RT 700015



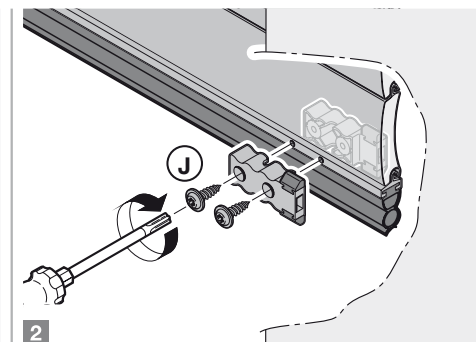
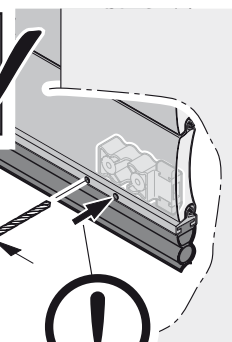
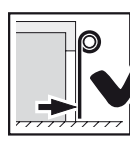
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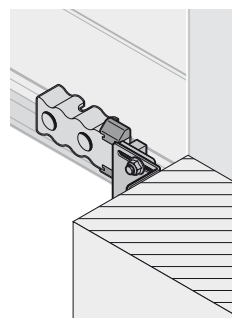
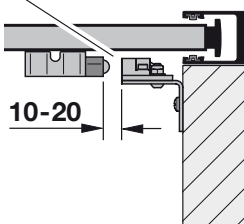
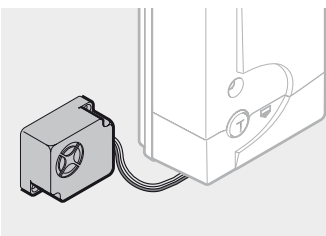


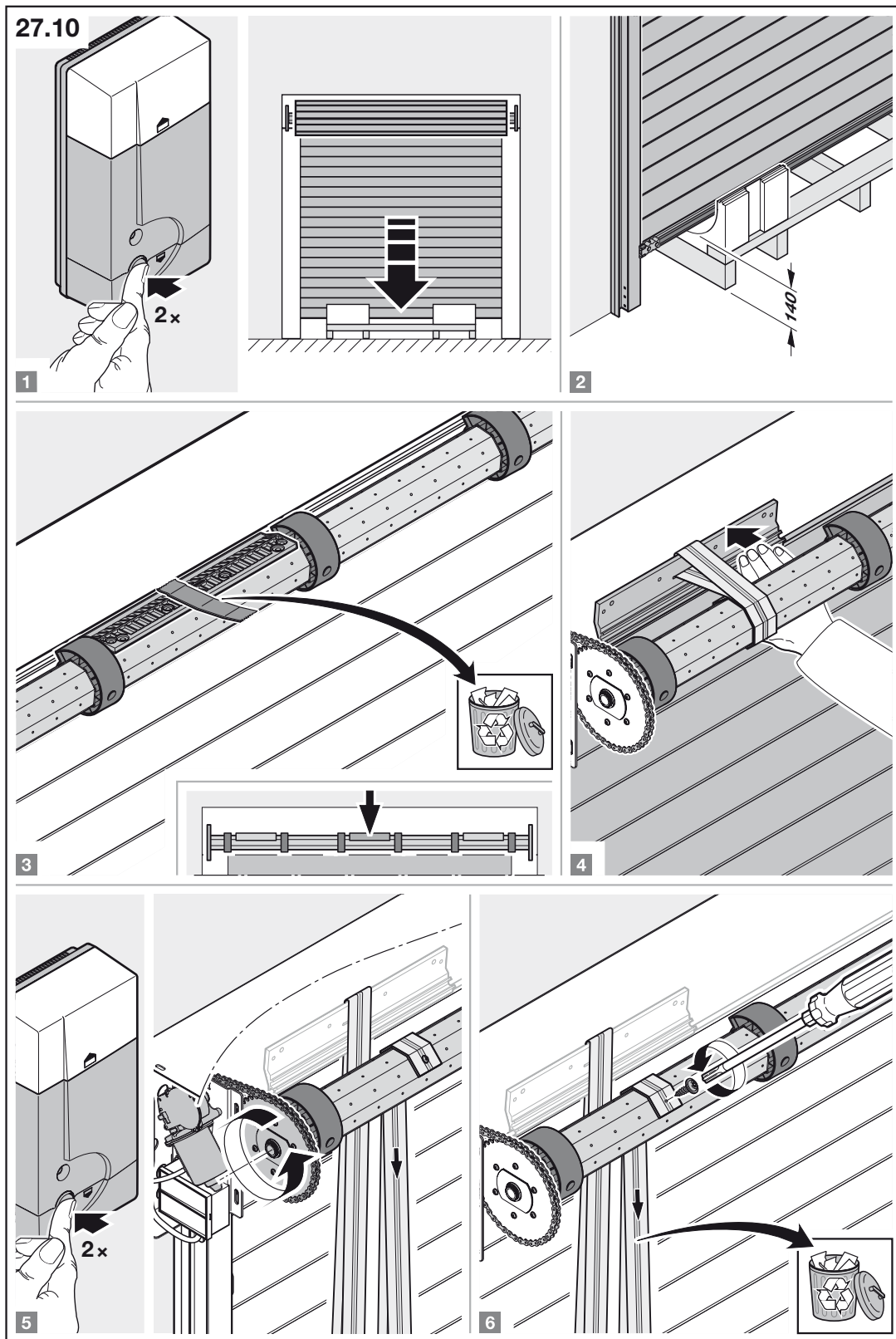
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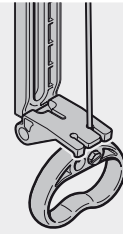
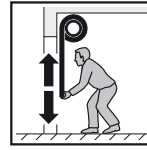
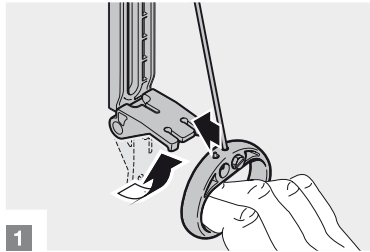
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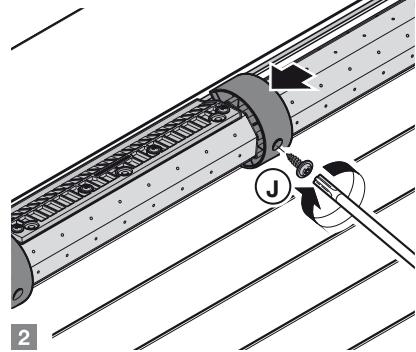
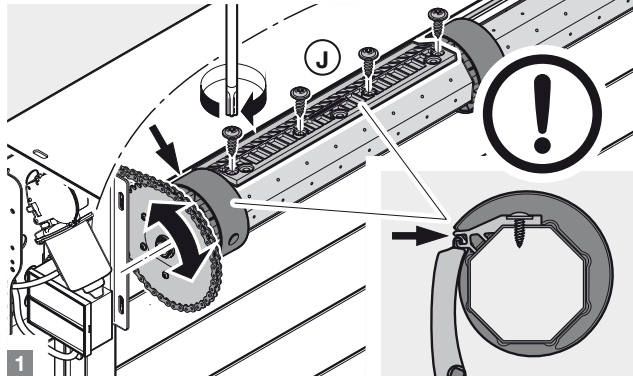
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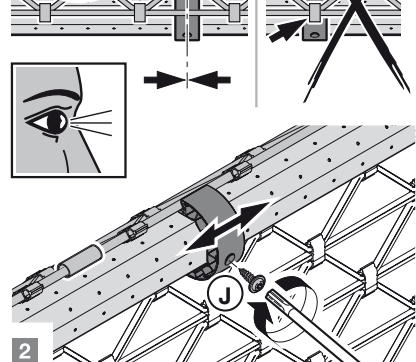
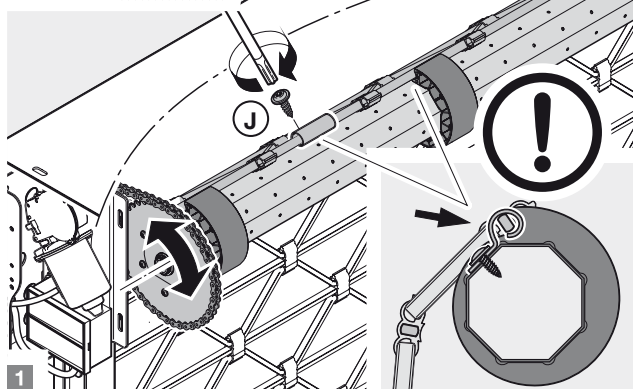
27.11



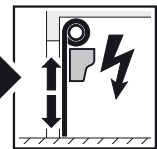
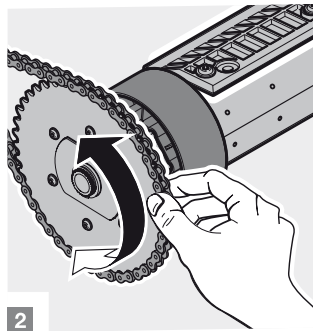
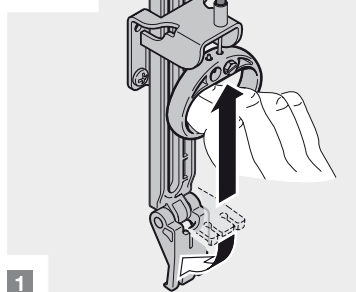
27.12a

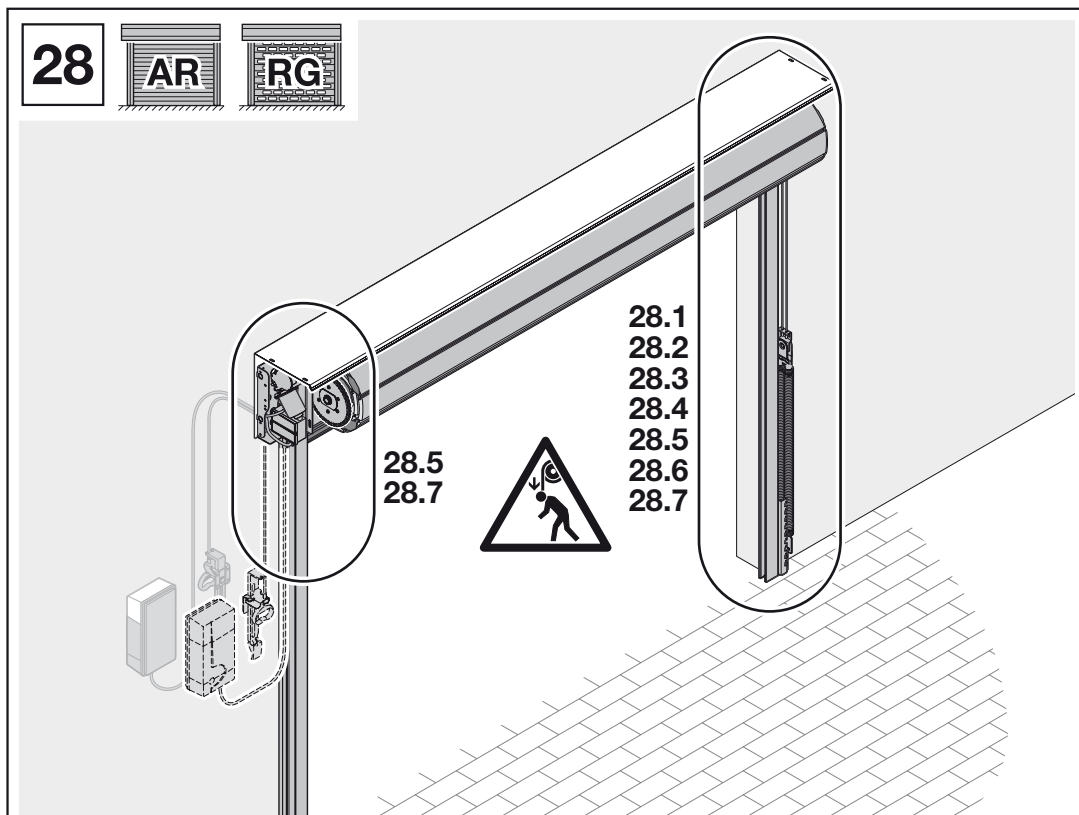
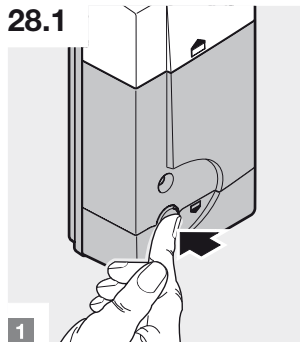
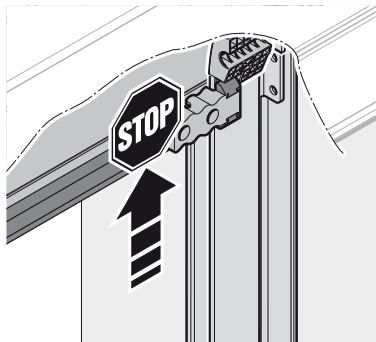
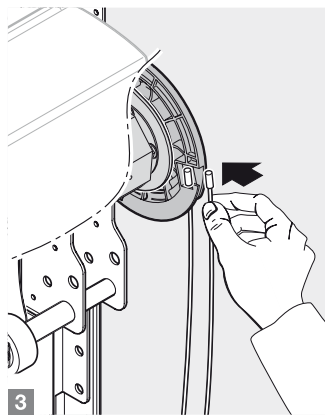
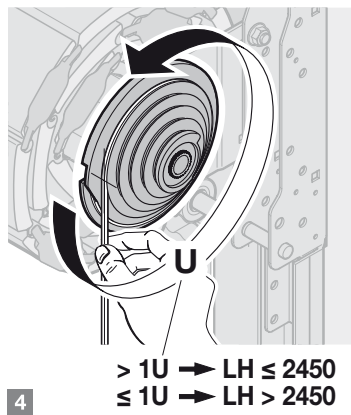


27.12b

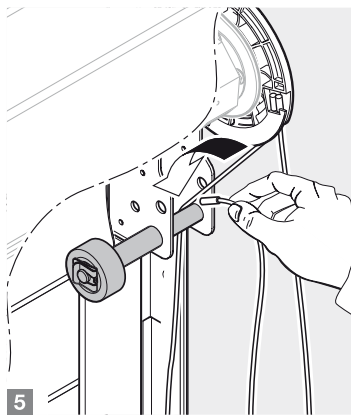


27.13

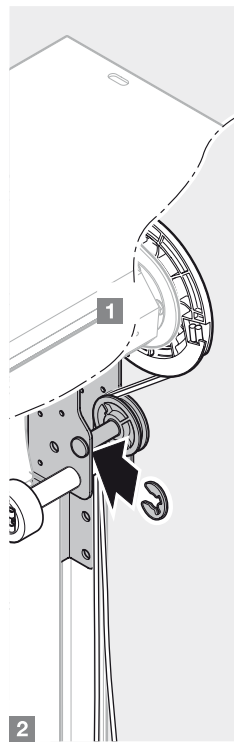
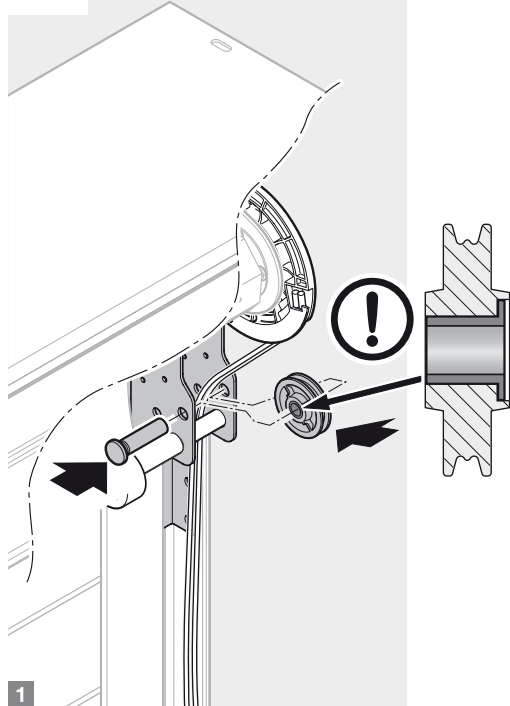


28**28.1****1****2****3****4**

$> 1U \rightarrow LH \leq 2450$
 $\leq 1U \rightarrow LH > 2450$

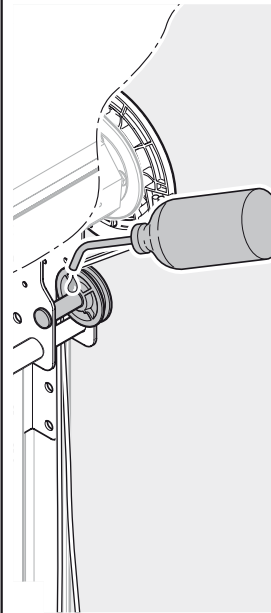
**5**

28.2

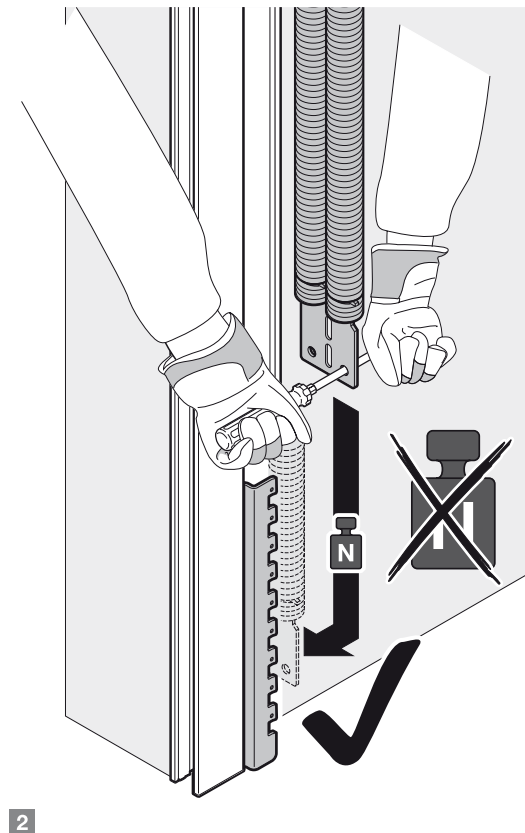
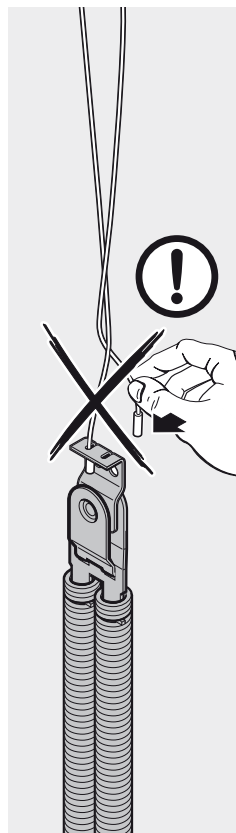
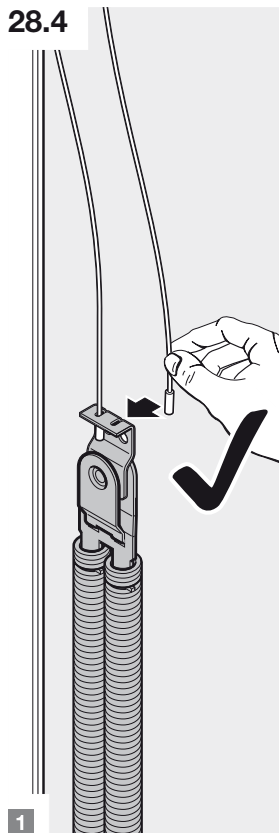


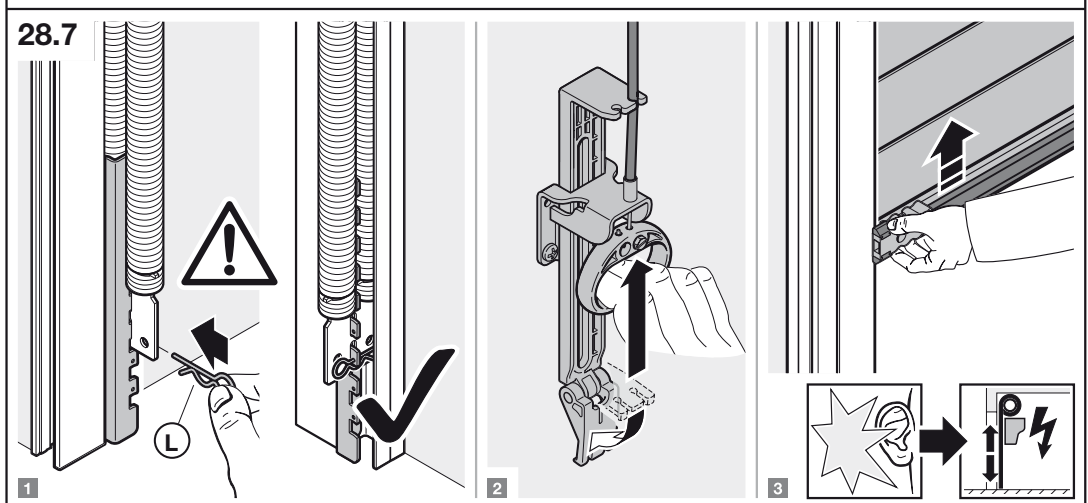
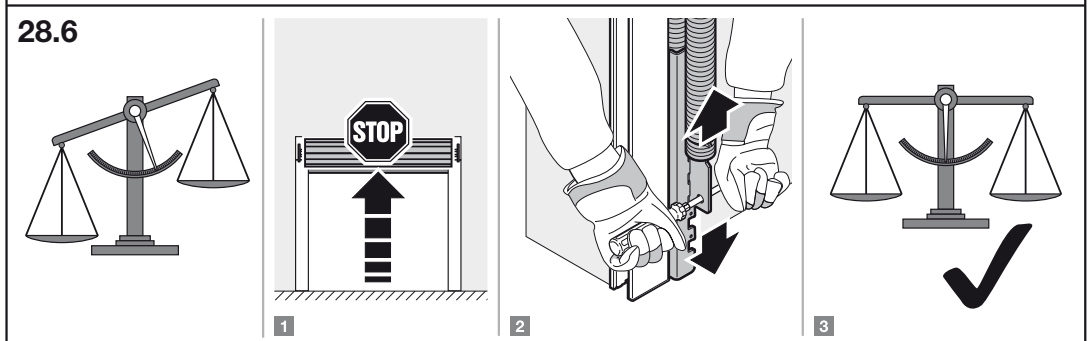
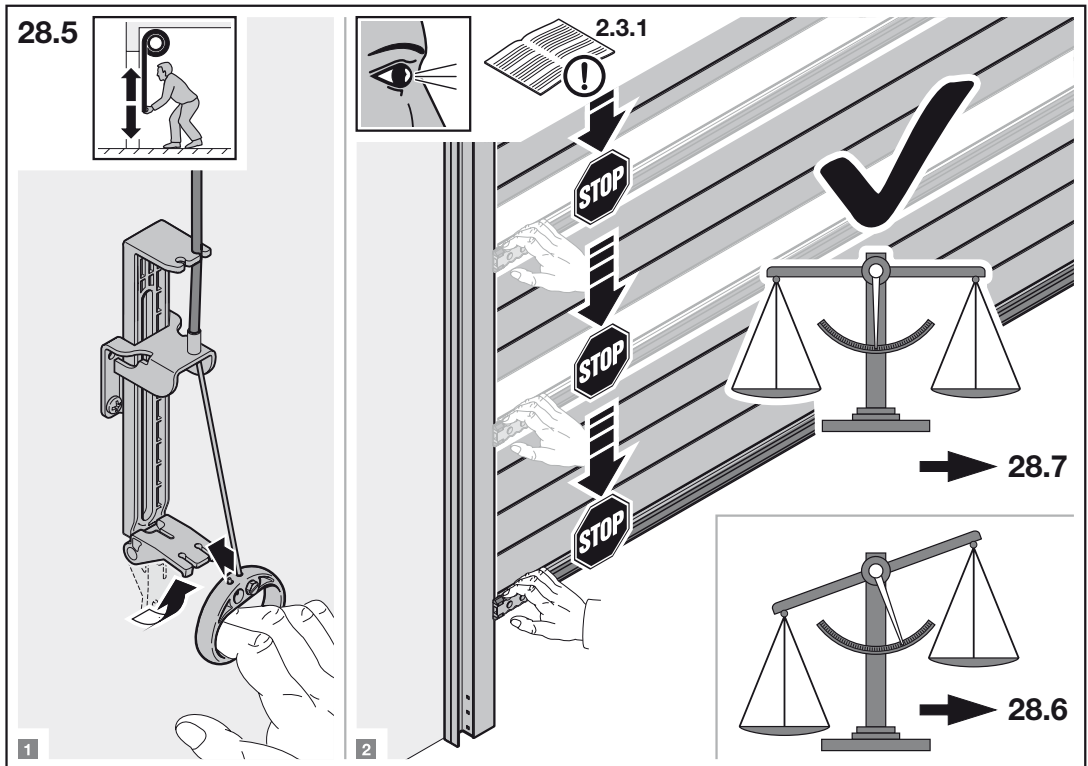
28.3

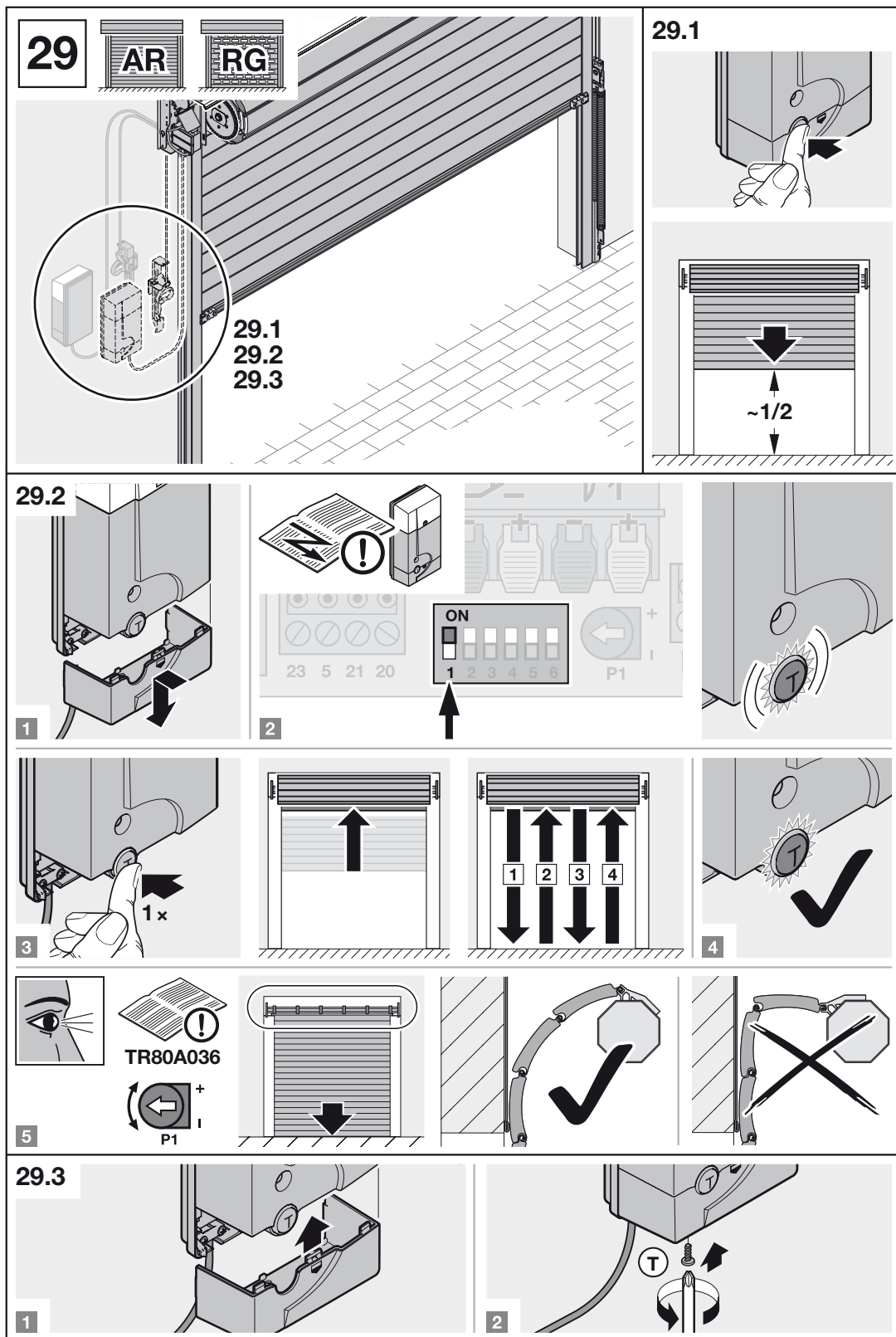
3/3.5

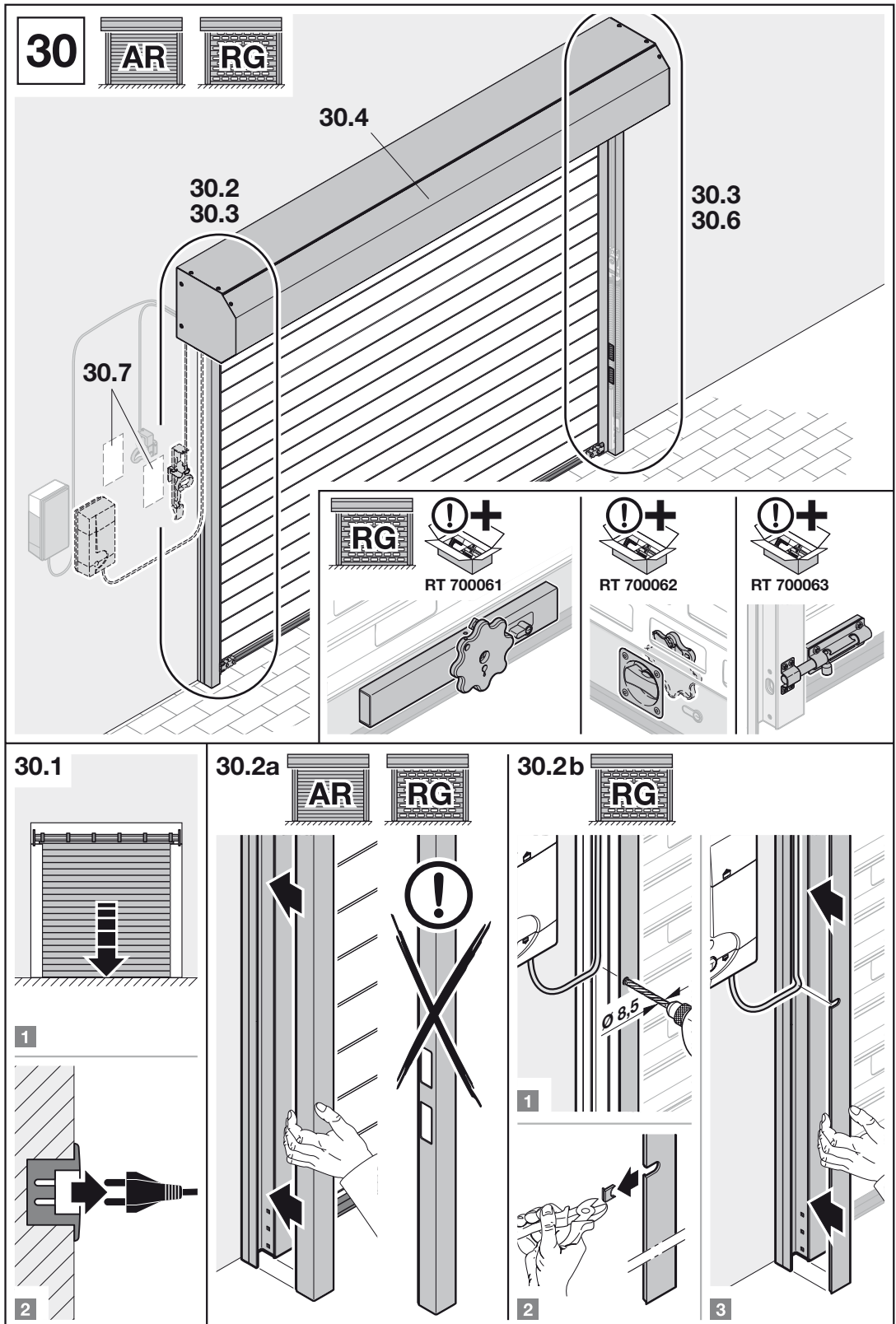


28.4

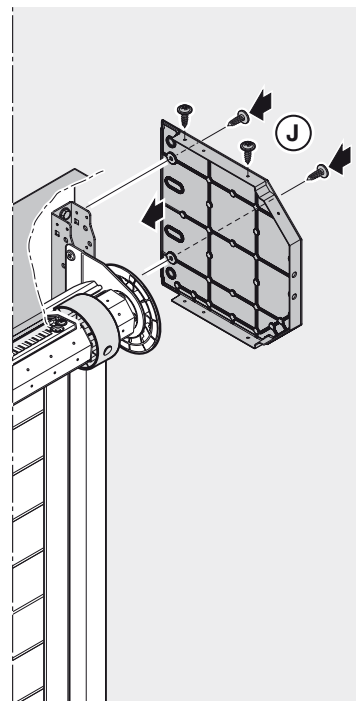
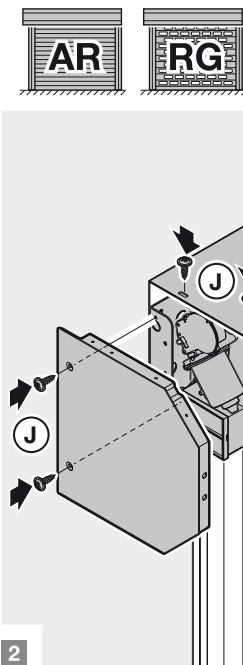
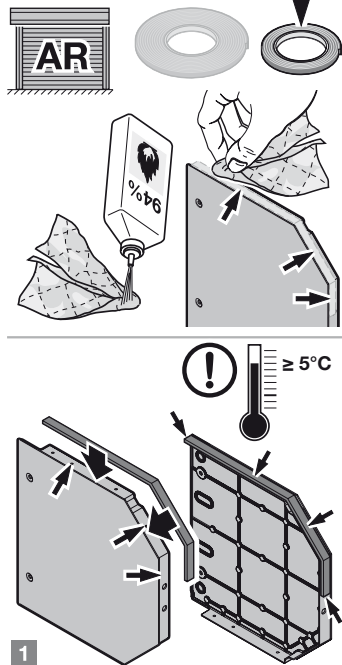




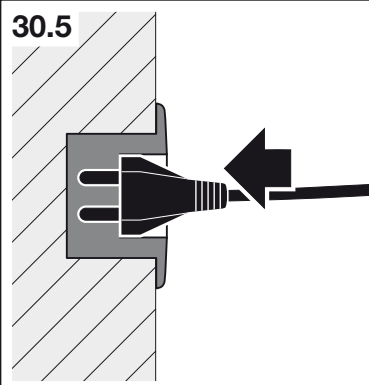
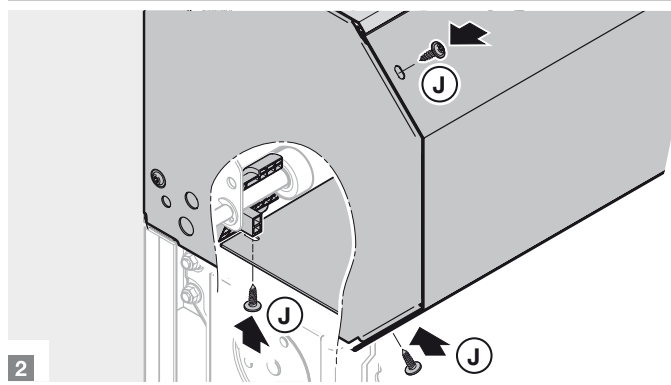
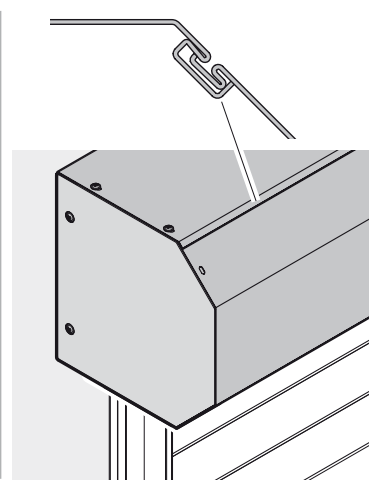
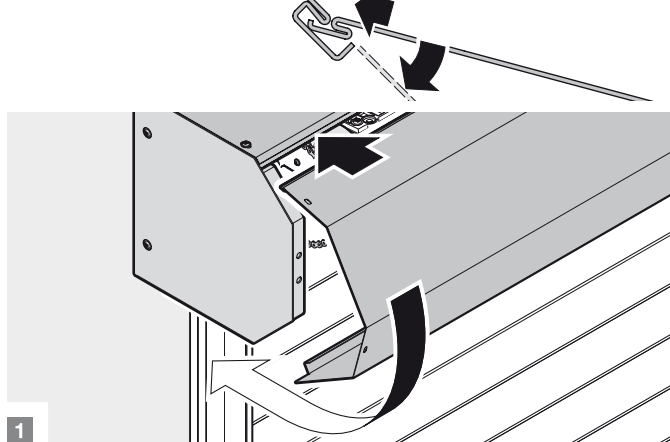




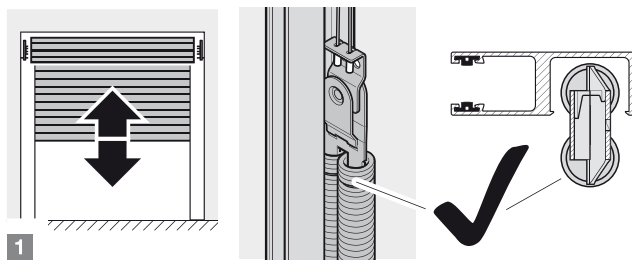
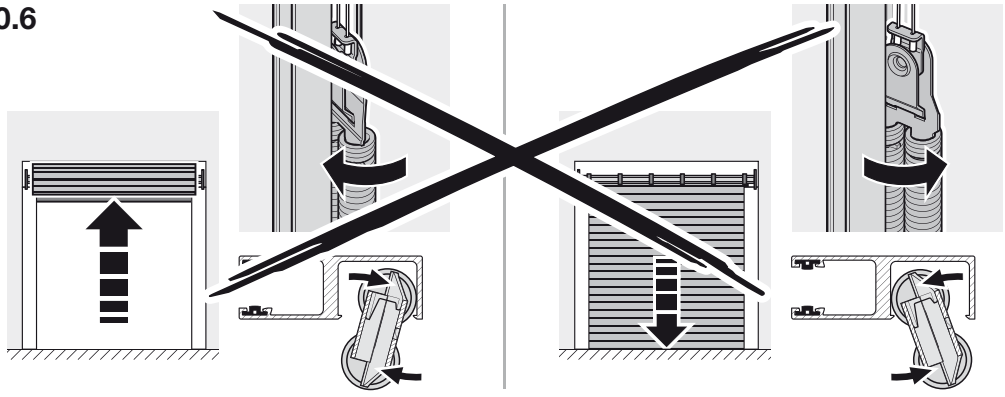
30.3



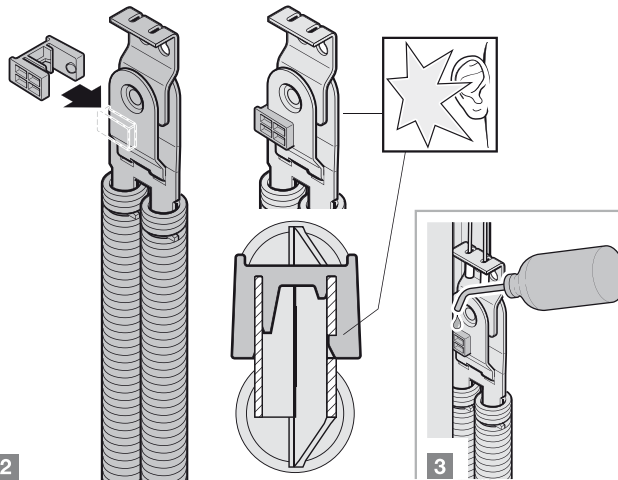
30.4



30.6

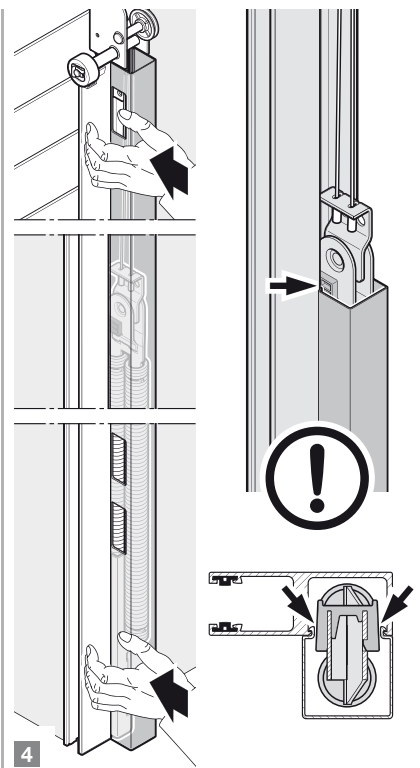


1



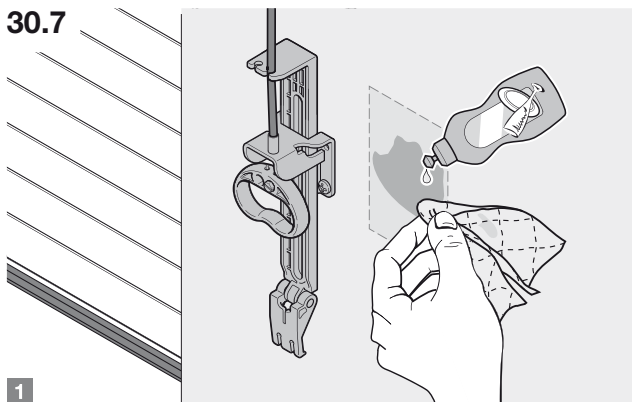
2

3

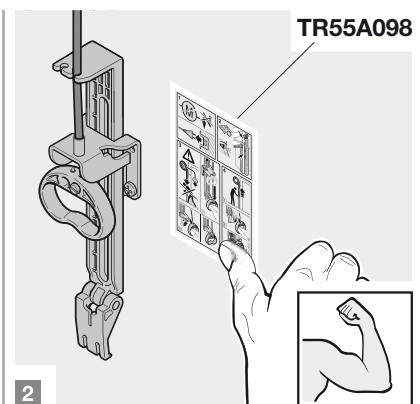


4

30.7



1



2

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