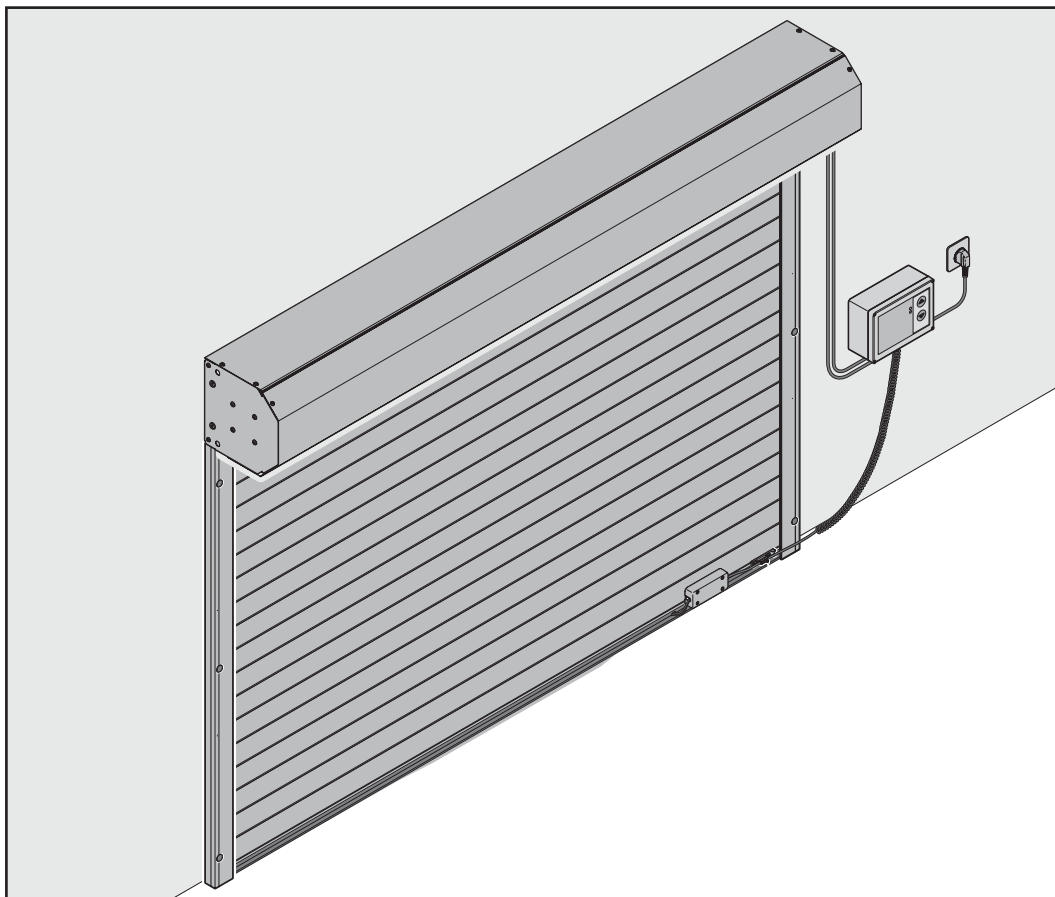




RT 700 098 RE / Standt: 01.2017

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

Garagen-Rolltor

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

Roller garage door

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

Porte de garage enroulable

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

Puerta de garaje enrollable

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

Гаражные рулонные ворота

+**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!

These instructions are **original operating instructions** as outlined in the EC Directive 2006/42/EC.

They provide you with important information on the safe fitting and operation, as well as proper care and maintenance, of your roller garage door.

Keep these instructions in a safe place for later reference!

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

Serial no.:

The following documents for safe handling and maintenance of the door system must be placed at the disposal of the end user:

- These instructions
- The enclosed log book

1 ⚠ Safety instructions

ATTENTION:

IMPORTANT SAFETY INSTRUCTIONS. FOR THE SAFETY OF PERSONS, IT IS IMPORTANT TO COMPLY WITH THE FOLLOWING INSTRUCTIONS. THESE INSTRUCTIONS MUST BE KEPT.

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**.



DANGER

Indicates a danger that immediately leads to death or serious injuries.



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**.



Important note for avoiding damage to property



Permissible arrangement or activity



Non-permissible arrangement or activity



Read instructions

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



See illustrated section (e.g. Figure 2.1)



DIL switch factory setting



Risk of impact



Optional components



Check



Dispose of component / packaging

1.3 Abbreviations used

Colour code for cables, single conductors and components			
BN	Brown	RT	Red
BU	Blue	WS	White
GN	Green	GE	Yellow
Article designations			
RSC 2		2-channel hand transmitter	
EL 31		One-way photocell	

1.4 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 roller garage door is suitable for use outside; it opens and closes vertically.

- The operator is designed for operation in dry areas.

1.5 General safety instructions

- Always keep the door's area of travel clear. When operating the door, always make sure that there are no persons, especially children, or objects 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.
- 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.

1.6 Approved safety equipment

Safety-relevant control functions or components, such as the closing edge safety device and external photocells, if available, have been designed and approved according to EN ISO 13849-1.

2 Fitting and initial start-up

ATTENTION:

IMPORTANT INSTRUCTIONS FOR SAFE INSTALLATION.

OBSERVE ALL INSTRUCTIONS, INCORRECT FITTING COULD RESULT IN SERIOUS INJURY.

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 4 screws on each side. Otherwise the wind load indicated on the data label is not ensured.

**DANGER****Electrical connection / mains voltage**

Contact with the mains voltage presents the danger of a deadly electric shock.

For that reason, observe the following warnings under all circumstances:

- ▶ Electrical connections may only be made by a qualified electrician.
 - ▶ The on-site electrical installation must conform to the applicable protective regulations (230 / 240 V AC, 50 / 60 Hz).
 - ▶ Disconnect the mains plug before any work on the operator or switch the system off at the mains in case of a permanent installation, and protect against being switched back on without authorisation according to the safety regulations.
- ▶ Check all safety and protective functions **monthly**. Errors or defects must be immediately rectified by a specialist.
 - ▶ All persons using the door system must be shown how to operate the operator properly and safely.
 - ▶ Demonstrate the safety reversal. Stop the door with both hands while the door is closing. The door system must initiate the safety reversal.

2.2 Fitting

The roller garage door can be fitted from inside behind the opening.

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

All dimensions in the illustrated section are in mm.

2.2.1 Mains voltage

If required, a permanent installation with 230 / 240 V AC, 50 / 60 Hz can be set up via an all-pole mains isolator switch with corresponding pre-fuse instead of using the mains cable.

2.2.2 Connection of additional components

The cover on the control housing must be opened to connect additional components. The terminals that are connected to the additional components only conduct a safe low voltage of max. 30 V DC. All connecting terminals can be given multiple assignments, but with a maximum of 1 × 2.5 mm². The mains plug must be pulled out before connection!

3 Setting additional functions via DIL switches**Setup operation / normal operation – DIL switch 1**

1 ON	Normal operation / impulse operation
1 OFF	Setup operation for fitting the door / press-and-hold

Reversing behaviour – DIL switch 2

2 ON	Door reverses into the <i>Open</i> end-of-travel position
2 OFF	The door reverses briefly, the obstacle is released

External lighting – DIL switch 3 / DIL switch 4

The external lighting or warning light, which is connected to option relay 4, is set with DIL switch 3 in combination with DIL switch 4.

3 OFF	4 OFF	Impulse 2 sec. after <i>Open</i> command
3 ON	4 OFF	Permanent light 2 min. after <i>Open</i> command
3 OFF	4 ON	The relay switches slowly during door travel
3 ON	4 ON	Permanent light during the hold-open phase

Door limit switch reporting / pre-warning phase – DIL switch 5 / DIL switch 6

The functions of option relay 5 are set with DIL switch 5 in combination with DIL switch 6.

5 OFF	6 OFF	Close limit switch reporting
5 ON	6 OFF	Open limit switch reporting
5 OFF	6 ON	Pre-warning phase – flashing (3 sec.) before door travel
5 ON	6 ON	Pre-warning phase – flashing (3 sec.) with automatic timer

Automatic timer – DIL switch 7

1 ON	After hold-open phase (30 sec.) automatic timed closing from the <i>Open</i> end-of-travel position. Only with additional photocell
1 OFF	Not activated, automatic timed closing not possible

Door maintenance display – DIL switch 8

1 ON	Activated, permanent flashing light of red LED after more than 2000 door cycles
1 OFF	Not activated

DIL switch 9 – Additional function of option relay 5

1 OFF	Not activated
1 ON	Permanent flashing light during door travel Only with additional LED warning light

DIL switch 10

1 OFF	No function
--------------	-------------

4 Radio

4.1 Hand transmitter RSC 2

WARNING

Danger of injury during door travel

Persons may be injured by door travel if the hand transmitter is actuated.

- ▶ Make sure that the hand transmitters are kept away from children and can only be used by people who have been instructed on how the remote-control door functions!
- ▶ If the door has only one safety device, only operate the hand transmitter if you are within sight of the door!
- ▶ Only drive or pass through remote control door systems if the door is in the *Open* end-of-travel position!
- ▶ Please note that unwanted door travel may occur if a hand transmitter button is accidentally pressed (e.g. if stored in a pocket/handbag).

CAUTION

Danger of injuries due to unintended door travel

Unintended door travel may occur while teaching in the radio system.

- ▶ Make sure that no persons or objects are in the door's area of travel when teaching in the radio system.

ATTENTION

Functional impairment caused by environmental conditions

Non-compliance with these instructions can impair function!

Protect the hand transmitter from the following conditions:

- Direct sunlight (permissible ambient temperature: -20 °C to +60 °C)
- Moisture
- Dust

NOTES:

- After programming or extending the radio system, check the functions.
- Only use original components when putting the radio system into service or extending it.
- Local conditions may affect the range of the radio system.

The hand transmitter works with a rolling code that changes with each sending procedure. It therefore must be taught in with the desired hand transmitter button on each receiver to be controlled (see section 5.2.1 or the receiver instructions).

4.1.1 Control elements

- ▶ See Figure 9.1

- 1 LED
- 2 Hand transmitter buttons
- 3 Battery

4.1.2 Inserting/changing the battery

- ▶ See Figure 9.1
- ▶ Use battery type CR2025, 3 V Li only, and pay attention to correct polarity.

4.1.3 Hand transmitter LED signals

- **The LED illuminates:**
The hand transmitter is sending a radio code.
- **The LED flashes:**
The hand transmitter still transmits, but the battery is so discharged that it needs to be replaced within a short time.
- **The LED does not react:**
The hand transmitter is not functioning.
 - Check whether the battery has been inserted correctly.
 - Replace the battery with a new one.

4.1.4 Excerpt from the declaration of conformity

Conformity of the abovementioned product with the requirements of the Radio Equipment Directive (RED) 2014/53/EU was verified by compliance with the following standards:

- EN 300 220-3
- EN 301 489-1
- EN 300 489-3

The original declaration of conformity can be requested from the manufacturer.

4.2 Integrated radio module

With an integrated radio module, 6 hand transmitter buttons can be taught in for the impulse (Open-Stop-Close-Stop) functions. If more than 6 hand transmitter buttons are taught in per function, the function is deleted from the hand transmitter button that was taught in first.

The following conditions must be met to program the radio module or delete its data:

- The pre-warning or hold-open phase is not active.

NOTES:

- A hand transmitter button must be taught in on an integrated radio module to operate the operator via radio.

4.2.1 Teaching in the hand transmitter buttons for an integrated radio module

1. Press the **LERNEN** circuit board button 1 x briefly. Availability of radio programming is immediately stopped if the **LERNEN** circuit board button is pressed again.
The **GE** LED flashes. During this time, a hand transmitter button can be programmed for the desired function.
2. Press the hand transmitter button you want to teach in until the yellow LED flashes quickly.
3. Release the hand transmitter button and press it again within 15 seconds until the LED begins flashing very rapidly.
4. Release the hand transmitter button.
The yellow LED remains lit and the hand transmitter button is taught in and ready for operation.

4.2.2 Deleting all data in an integrated radio module

1. Press and hold the **LERNEN** circuit board button.
The **GE** LED flashes slowly and signals availability for deletion.
The flashing then becomes more rapid.
All taught-in radio codes of all hand transmitters are now deleted.
2. Release the **LERNEN** circuit board button.

4.3 Normal operation

Operation via cover keypad:

1st push of a button: Door runs in the direction of the arrow

2nd push of a button: Door stops

3rd push of a button: Door runs in the direction of the arrow

Operation with the hand transmitter:

The hand transmitter works exclusively with impulse sequence control.

1st impulse: The door runs towards an end-of-travel position.

2nd impulse: The door stops.

3rd impulse: The door runs in the opposite direction.

4th impulse: The door stops.

5th impulse: The door runs in the direction of the end-of-travel position selected in the 1st impulse.

4.4 Initial start-up

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 moves smoothly, is functionally safe and easy to operate.

5 Inspection and maintenance

5.1 Safety instructions

- Have a specialist perform inspection and maintenance work on the door at least once per year in accordance with these instructions.
- Check all safety and protective functions **monthly**. Errors or defects must be immediately rectified by a specialist.

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.
- Switch off the operator at the mains. Safeguard the door system against being switched on again without authorisation according to the safety regulations.
- Functional parts, particularly safety components, may only be exchanged by a specialist.

- The roller garage door operator is maintenance-free.

5.2 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.

5.3 Check the pressure roller

- Clean the pressure rollers. Check the rollers for wear. Have the rollers replaced by a specialist if they are greatly worn or damaged.

5.4 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.
- Loading of the operator by all electrical accessories: max. 100 mA.

6 Cleaning and care

The design of the roller garage door 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.

6.1 Door curtain

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

6.2 Data label

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

7 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.

8 Dismantling and disposal

Have the door dismantled and disposed of by a specialist.

Have a specialist dismantle the control in the reverse order of these instructions and dispose of it properly. Electrical and electronic devices, as well as batteries, may not be disposed of in household rubbish, but must be returned to the appropriate recycling facilities.

9 Excerpt from the Declaration of Incorporation

(as defined in EC Machinery Directive 2006/42/EC for incorporation of partly completed machinery according to annex II, part B)

The product described on the reverse side has been developed, constructed and produced in accordance with:

- EC Machinery Directive 2006/42 EC
- EC Construction Products Directive 89/106/EEC
- EU Low-Voltage Directive 2014/35/EU
- EU Electromagnetic Compatibility Directive 2014/30/EU

Applied and consulted standards:

- EN ISO 13849-1
Safety of machinery – Safety-related parts of control systems – Part 1: General principles for design

- EN 60335-2-95/103, when applicable
Safety of electrical appliances/operators for doors
- EN 61000-6-3
Electromagnetic compatibility – Emission standard
- EN 61000-6-2
Electromagnetic compatibility – Immunity standard

Partly completed machinery as defined in the EC Directive 2006/42/EC is only intended to be incorporated into or assembled with other machinery or other partly completed machinery or equipment, thereby forming machinery to which this directive applies.

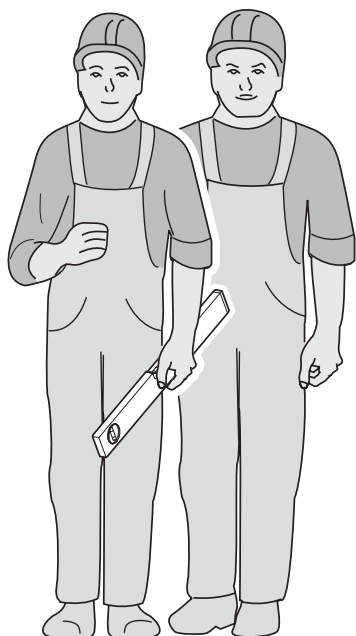
This is why this product must only be put into operation after it has been determined that the entire machine / system in which it has been installed corresponds with the guidelines of the EC directive mentioned above.

10 LED display on keypad

LED 1 green	LED 2 red	Status / malfunction / cause	Remedy
Illuminated		System ready for operation	
Flashes consistently		Hold-open phase running	
Illuminated	Flashes 2 x	Safety equipment	Check photocell, replace if necessary.
Illuminated	Flashes 4 x	Emergency stop activated (winding protection / emergency button)	Next travel command / cut-out mains
Illuminated	Flashes 6 x	Travel time limit – motor travel time exceeded	Next travel command / cut-out mains
Illuminated	Flashes 9 x	Safety devices / closing edge safety device actuated / defective	Check or replace closing edge safety device
Illuminated	Flashes consistently	Maintenance display / more than 2000 door cycles	Maintain door system / cut-out mains

11 Technical data

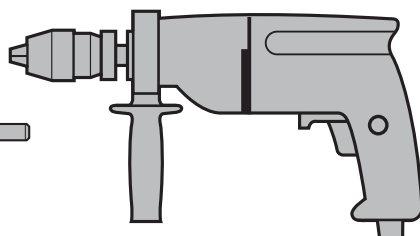
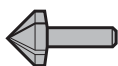
Mains voltage	230/240 V ~, 50/60 Hz
Power input	0,2 kW
Protection category	IP 44, VDE 0700
Temperature range	-20 °C to +50 °C
Nominal torque	50 Nm
Door cycles	x5 h ⁻¹



Ø 8.5; Ø 16;



Ø 6; Ø 8;



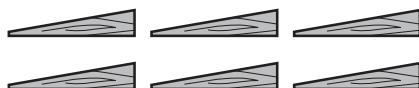
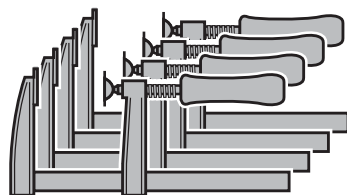
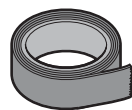
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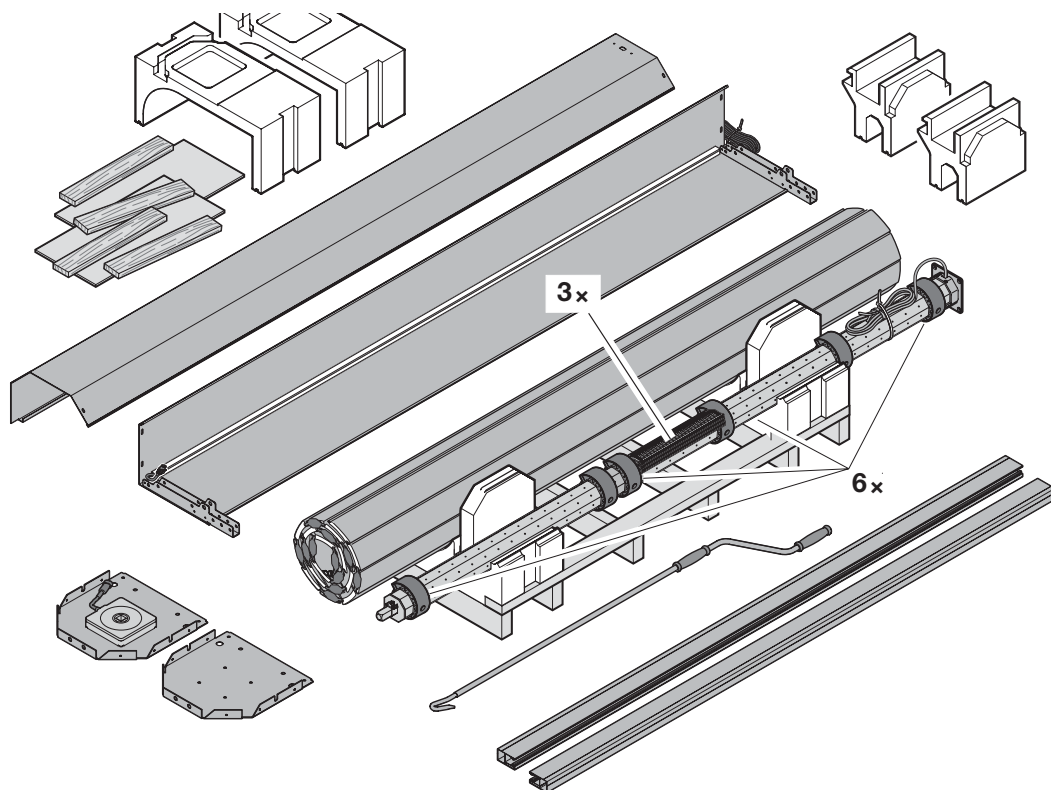
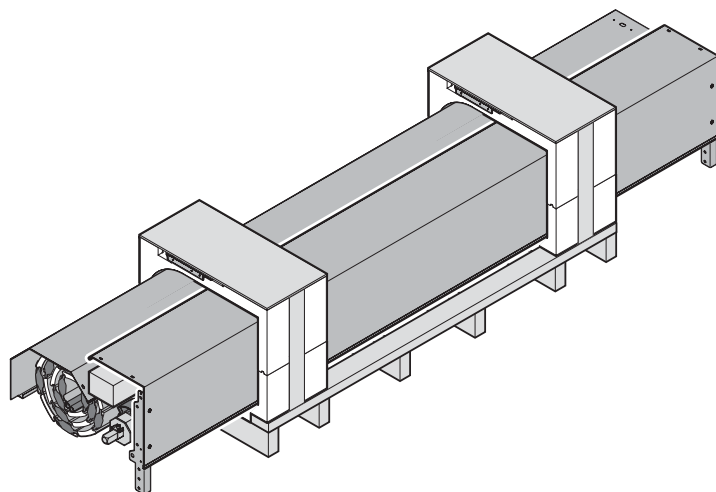
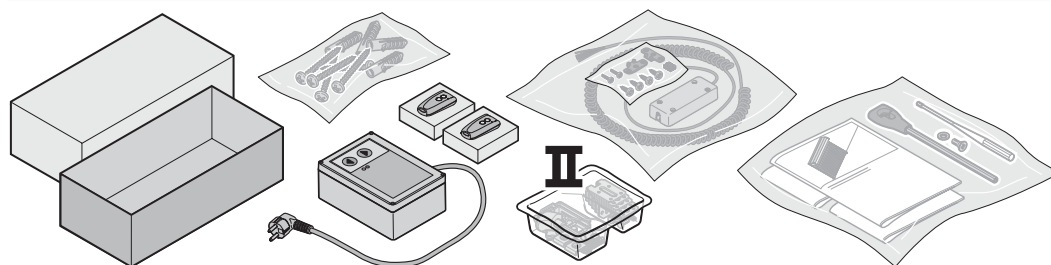


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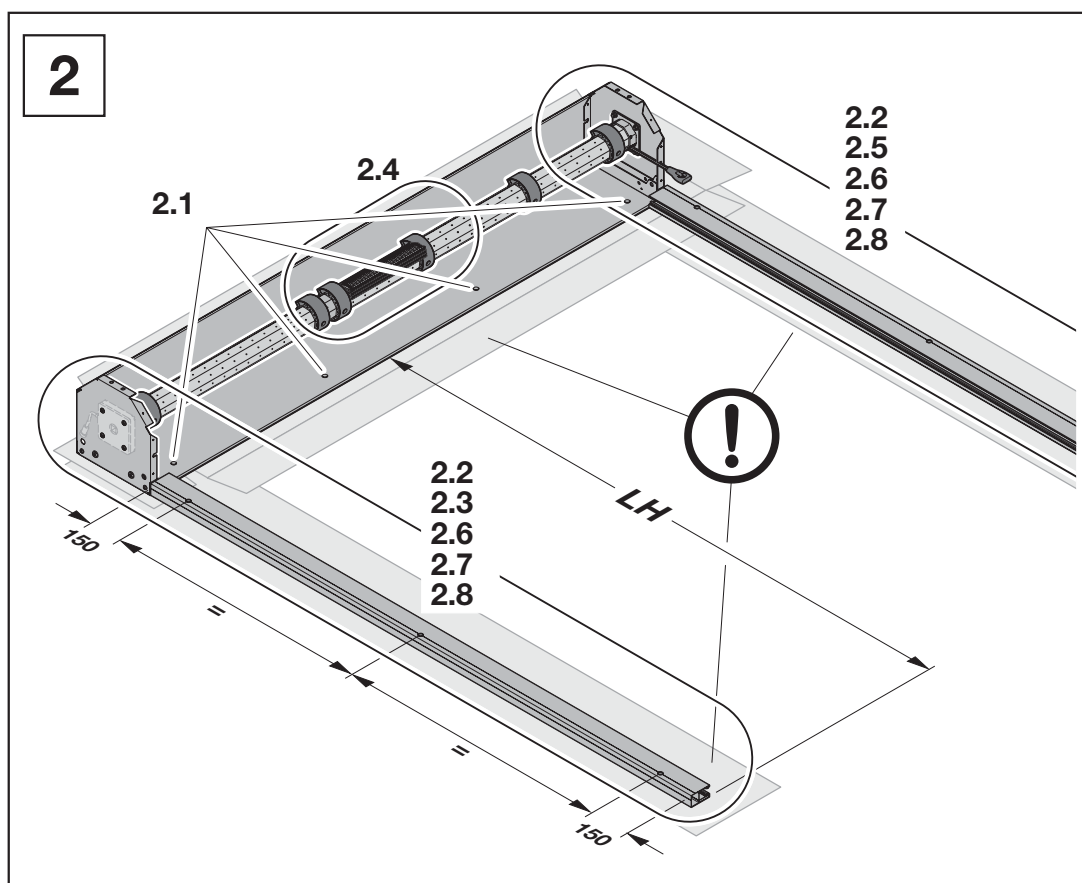
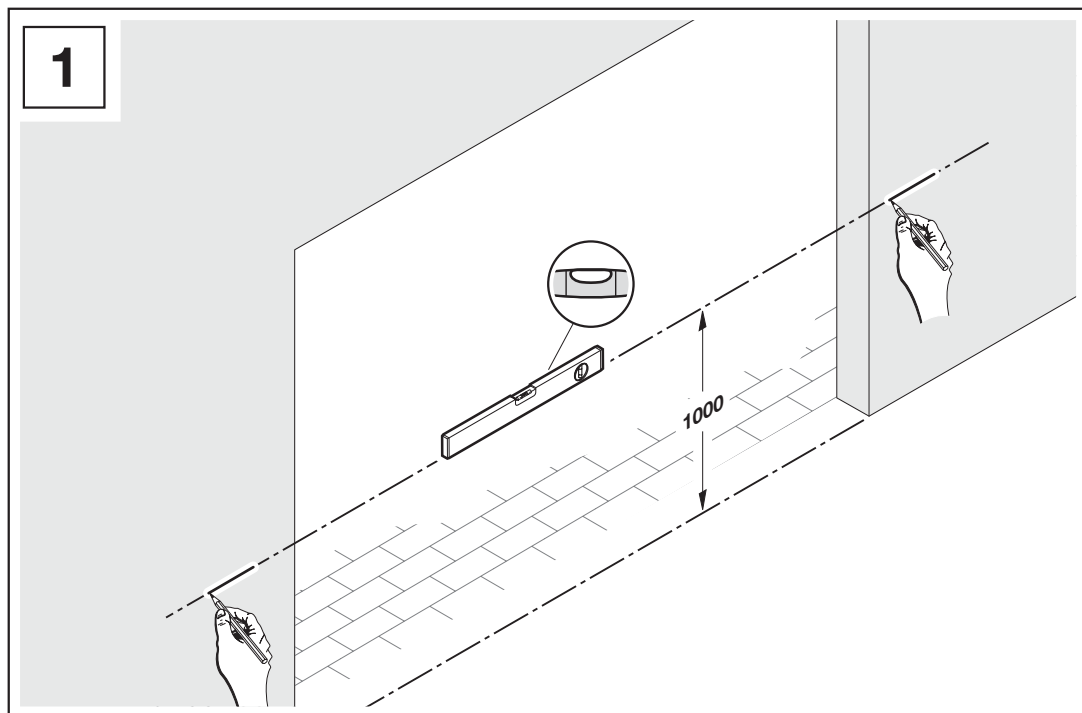


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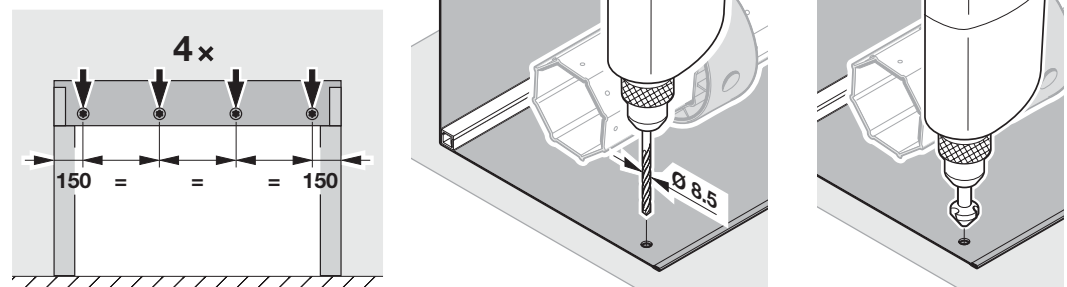
This exploded view diagram illustrates the components for assembling a storage bin. The parts are labeled as follows:

- A:** Screws for the front panel.
- B:** Screws for the side panels.
- C:** Screws for the bottom panel.
- D:** Screws for the front panel.
- E:** Screws for the bottom panel.
- F:** Washers for the bottom panel.
- G:** Screws for the bottom panel.
- H:** Screws for the bottom panel.
- J:** A large quantity (34 x) of screws for the bottom panel.
- K:** Washers for the bottom panel.
- L:** Screws for the bottom panel.

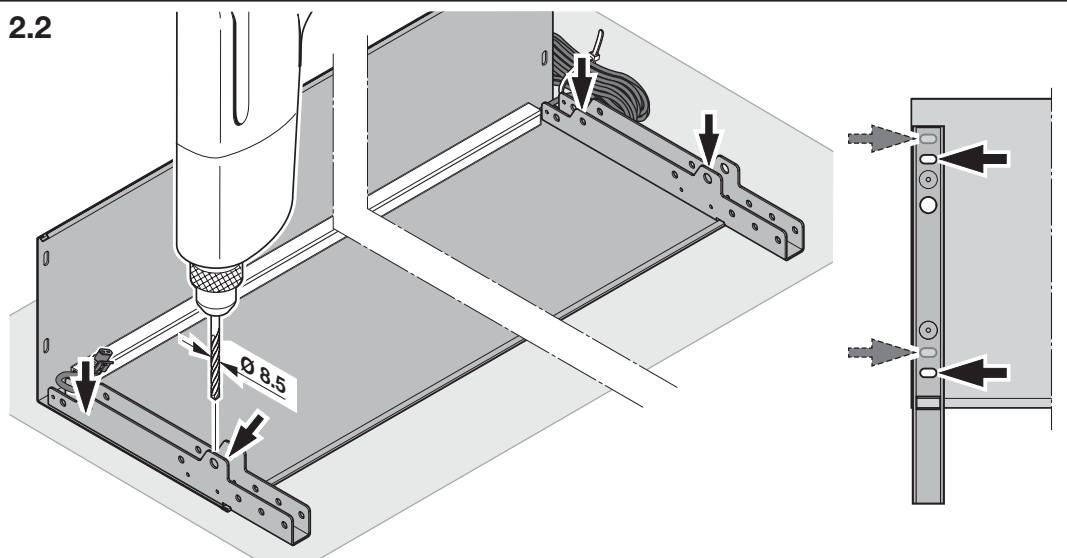
Other components shown include the storage bin, a front panel, side panels, and various fasteners like nuts, bolts, and washers.



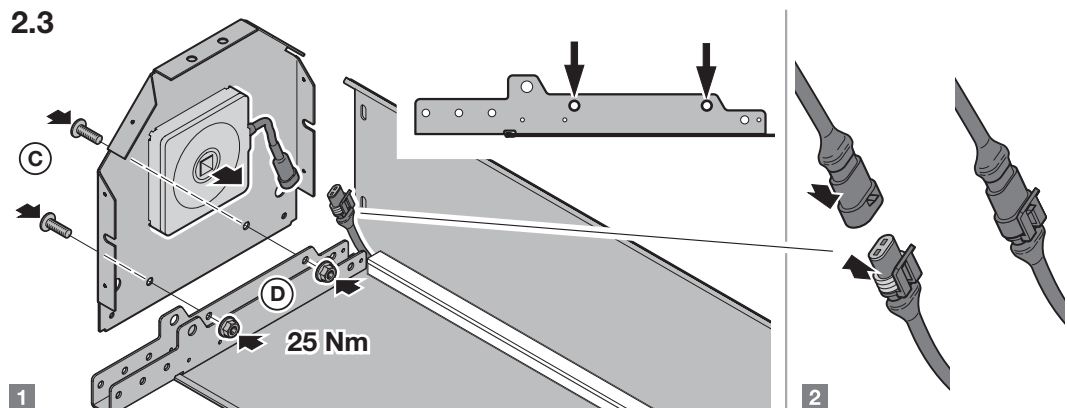
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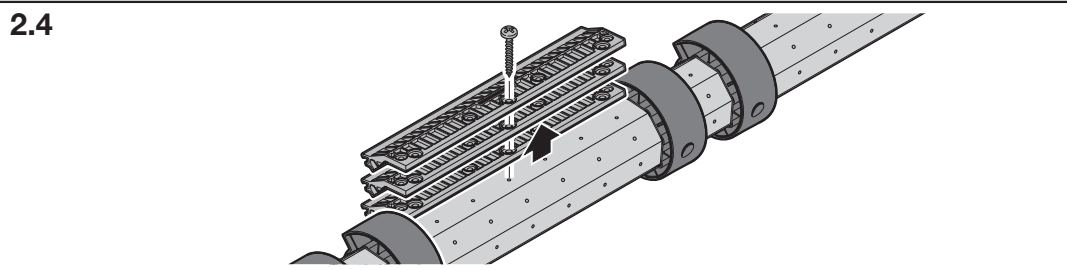
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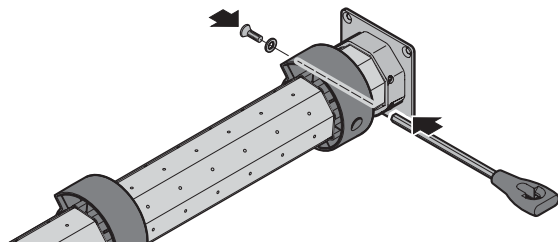
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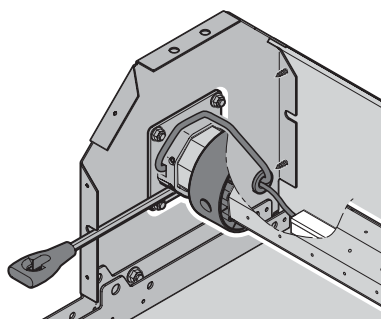
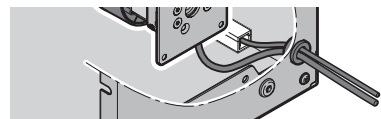
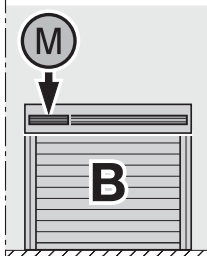
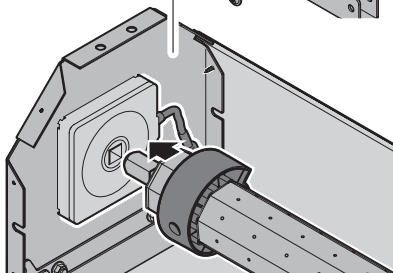
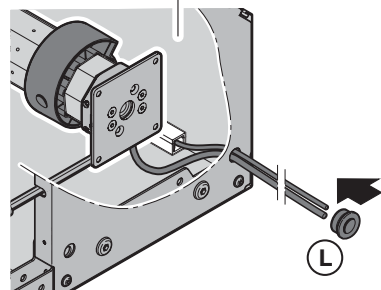
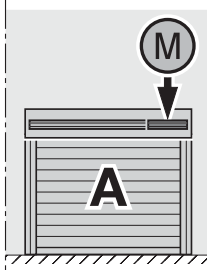
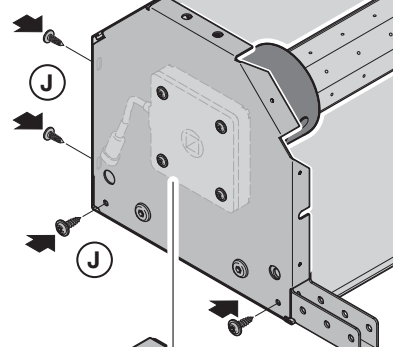
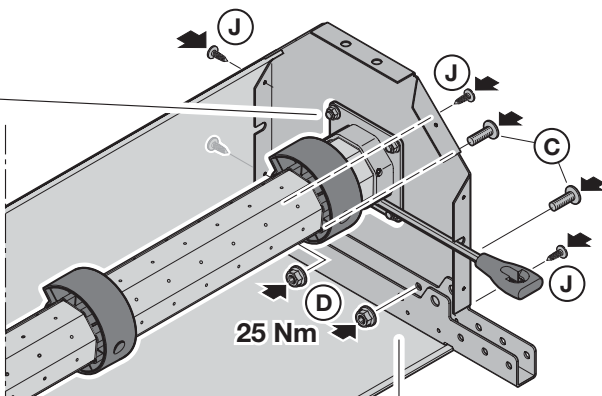
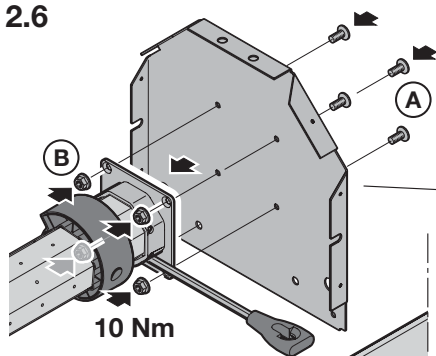
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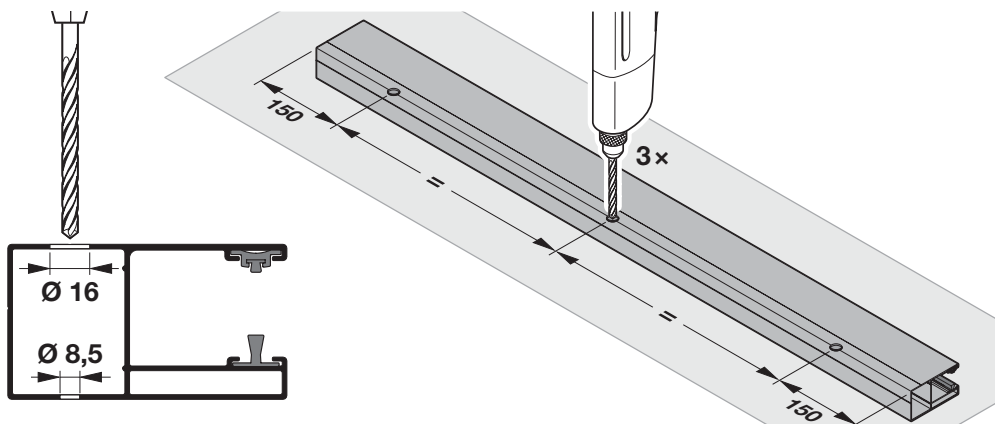
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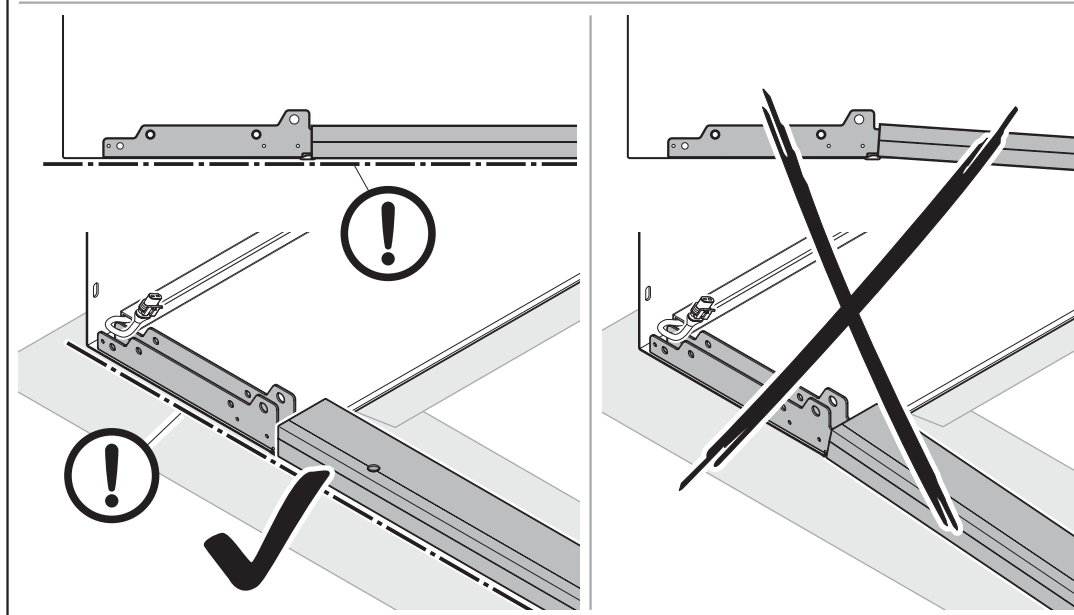
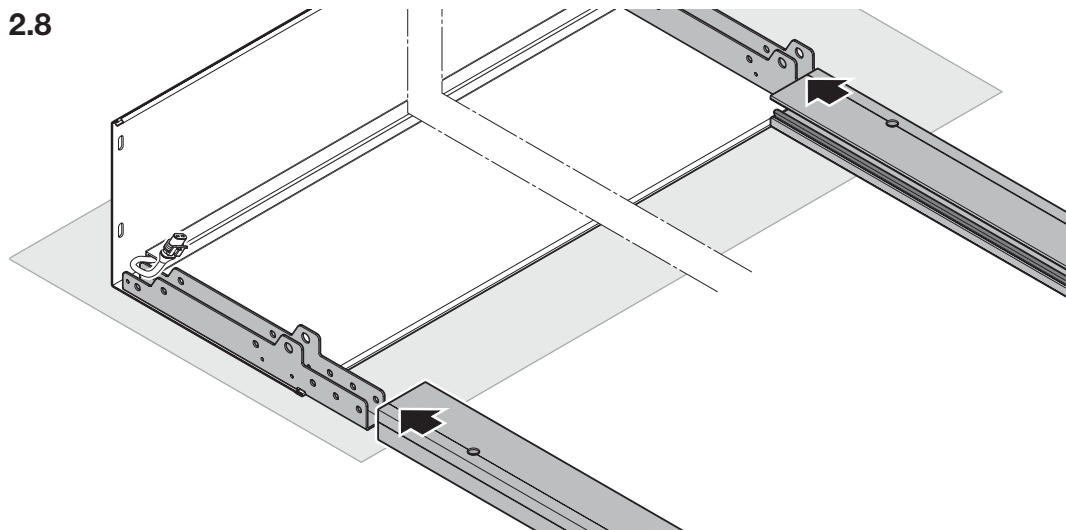
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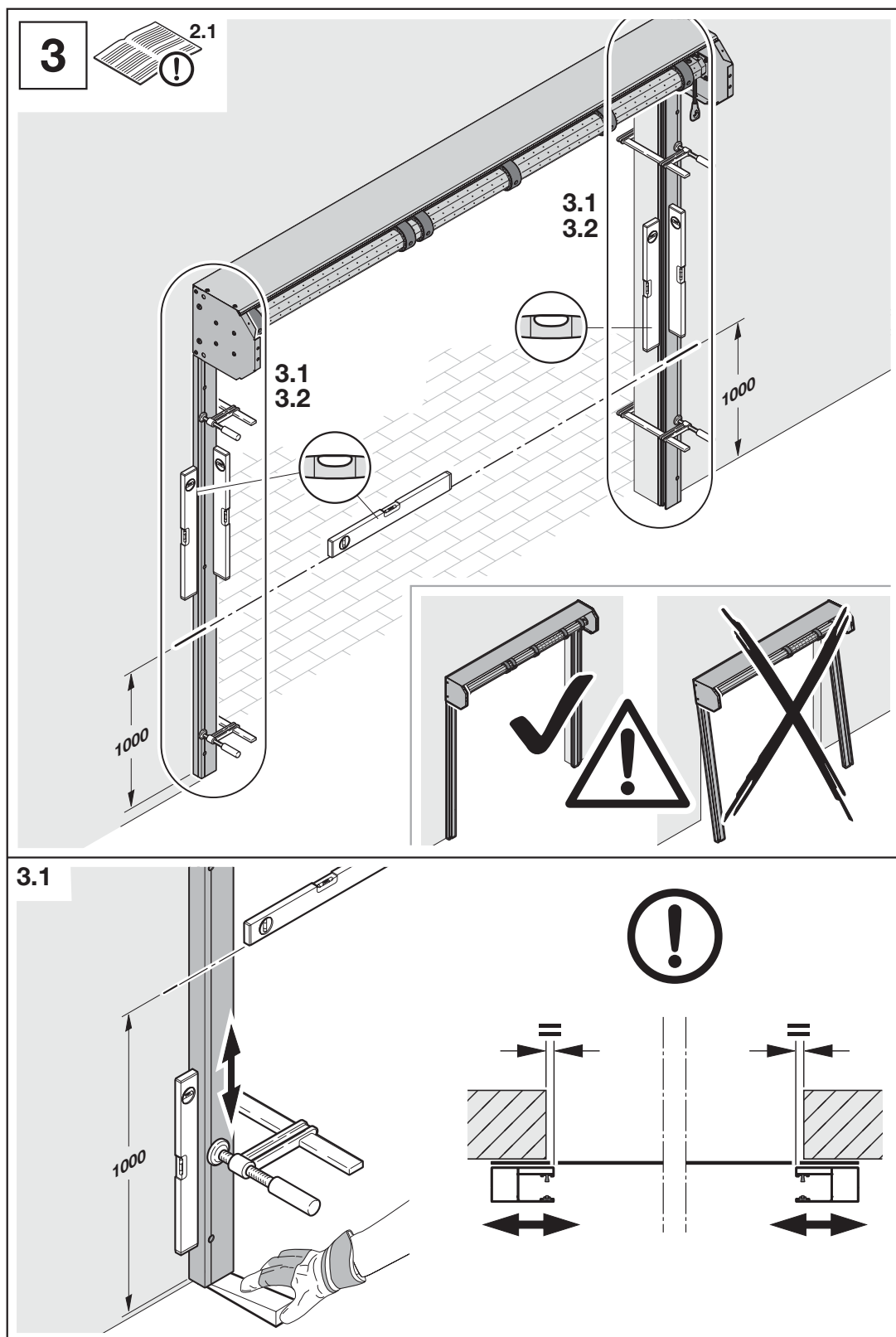


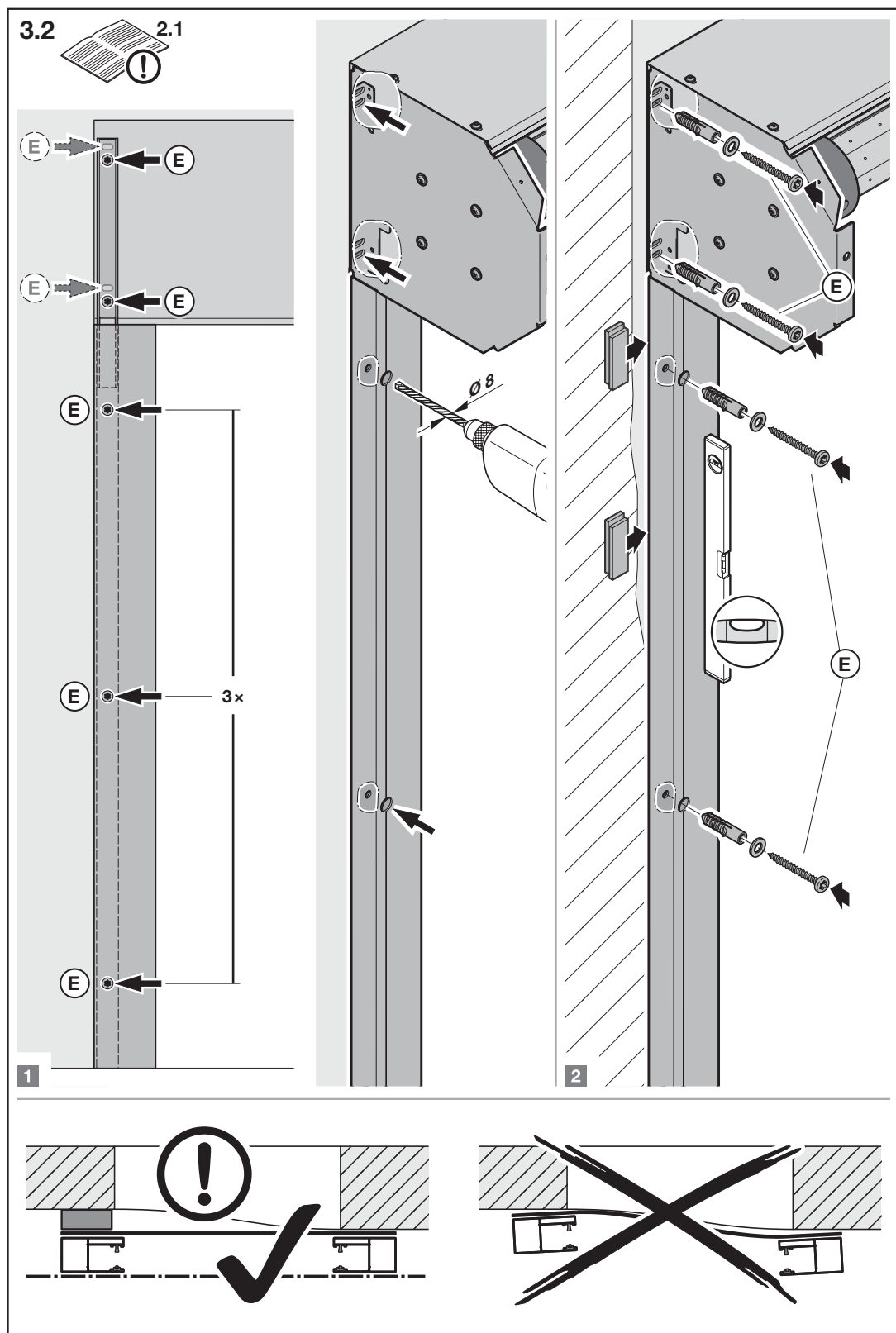
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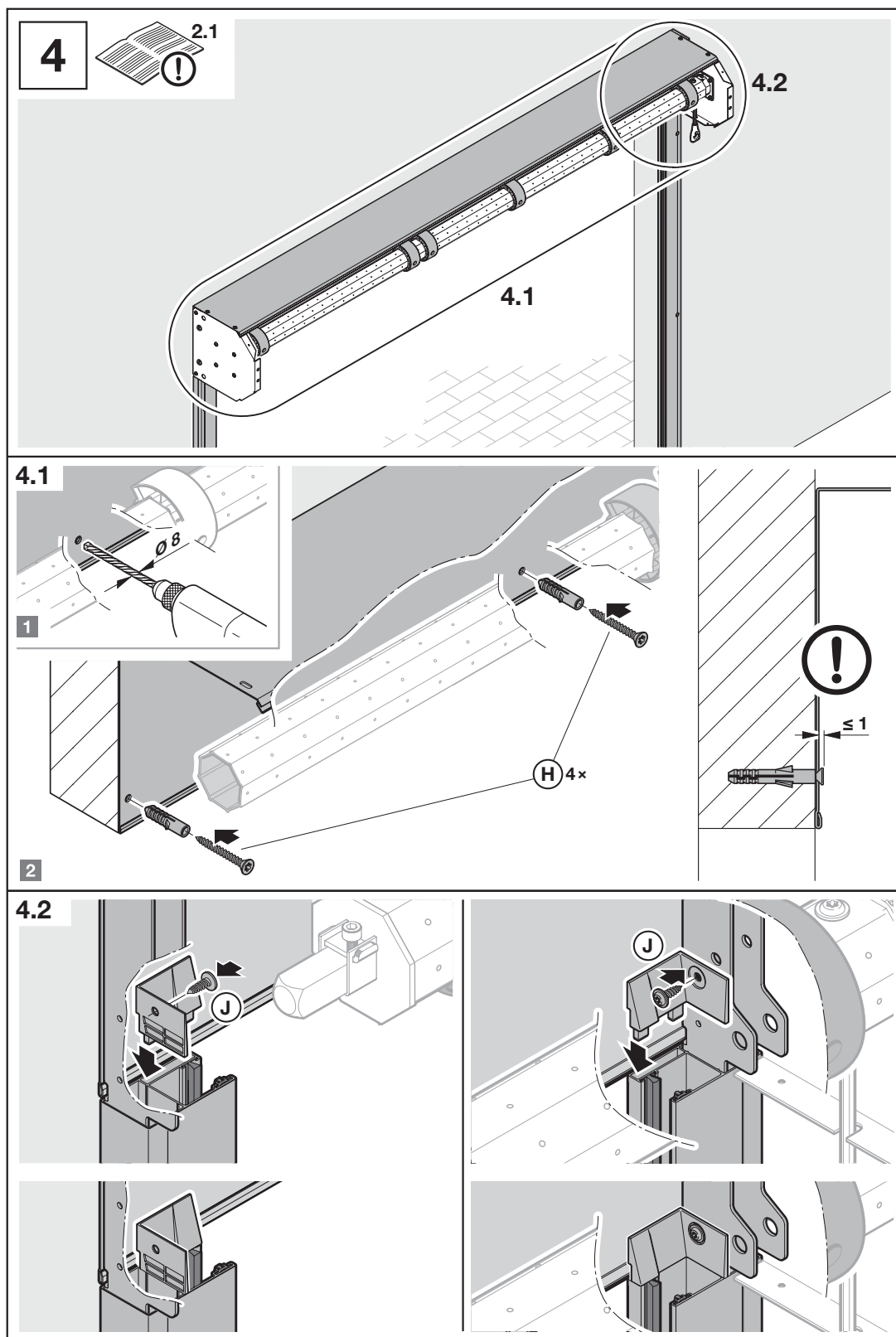


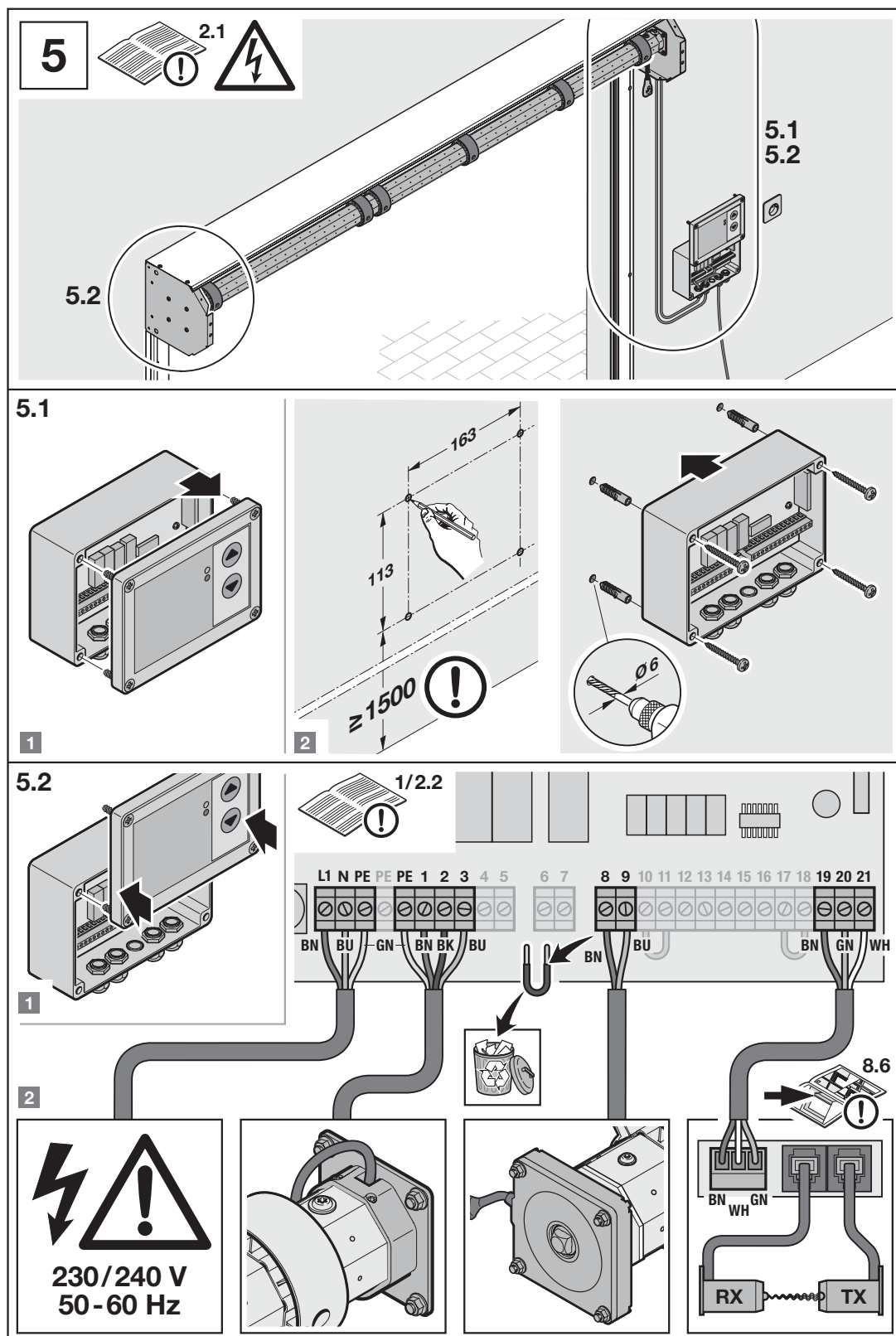
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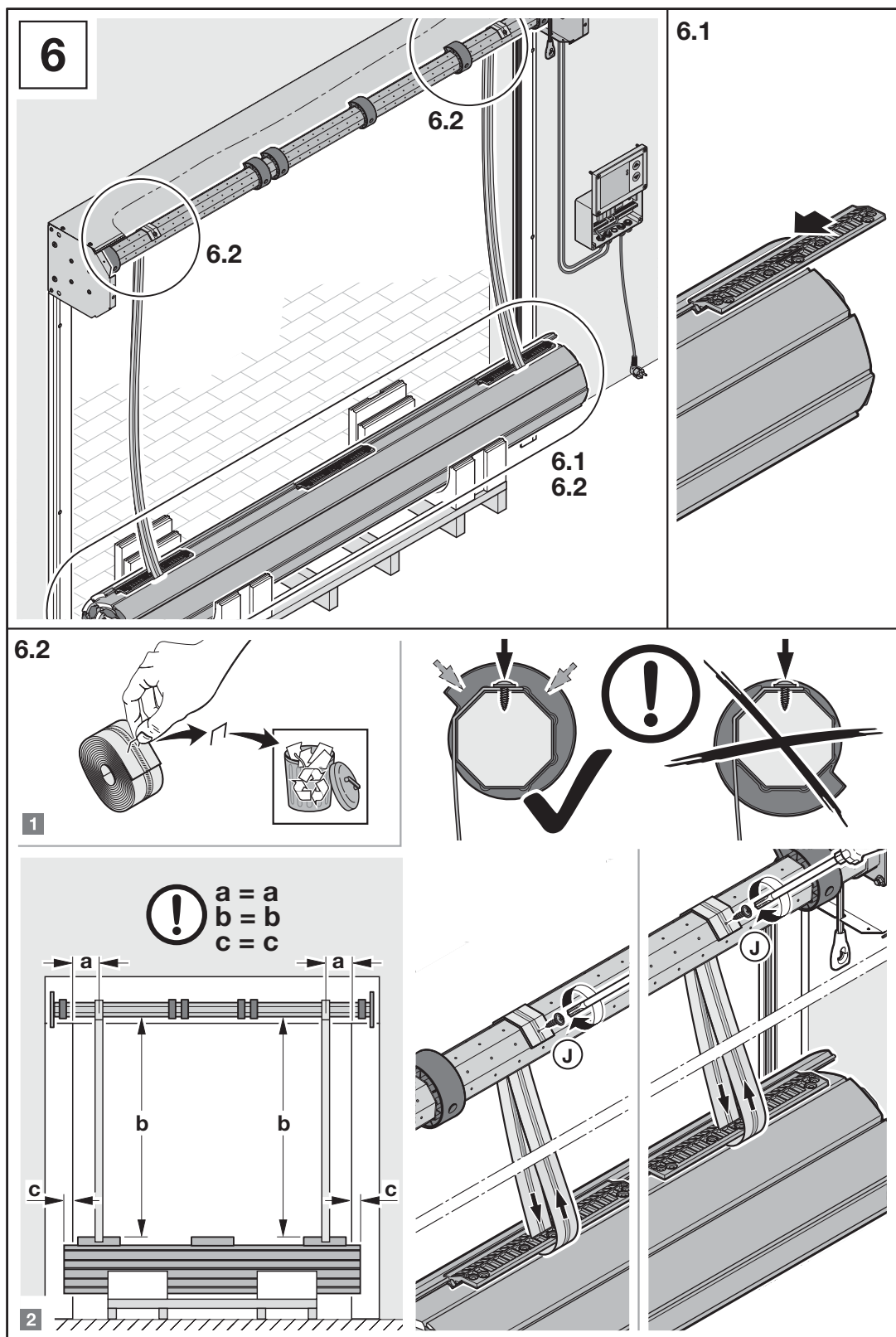










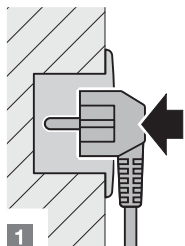




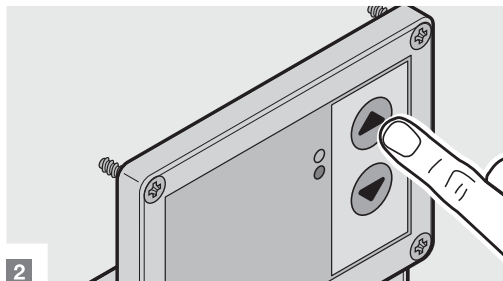
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7.1

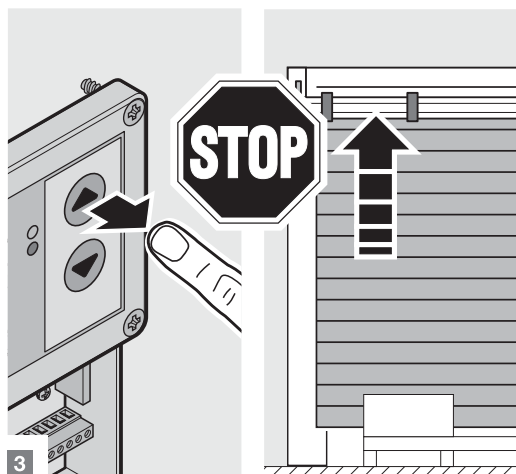
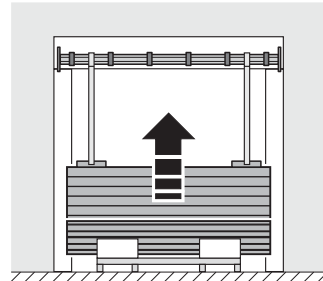
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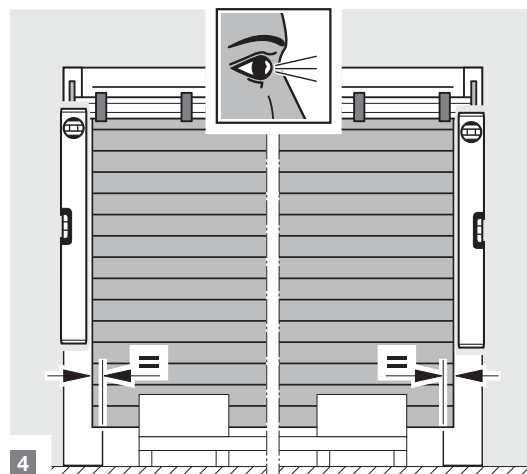
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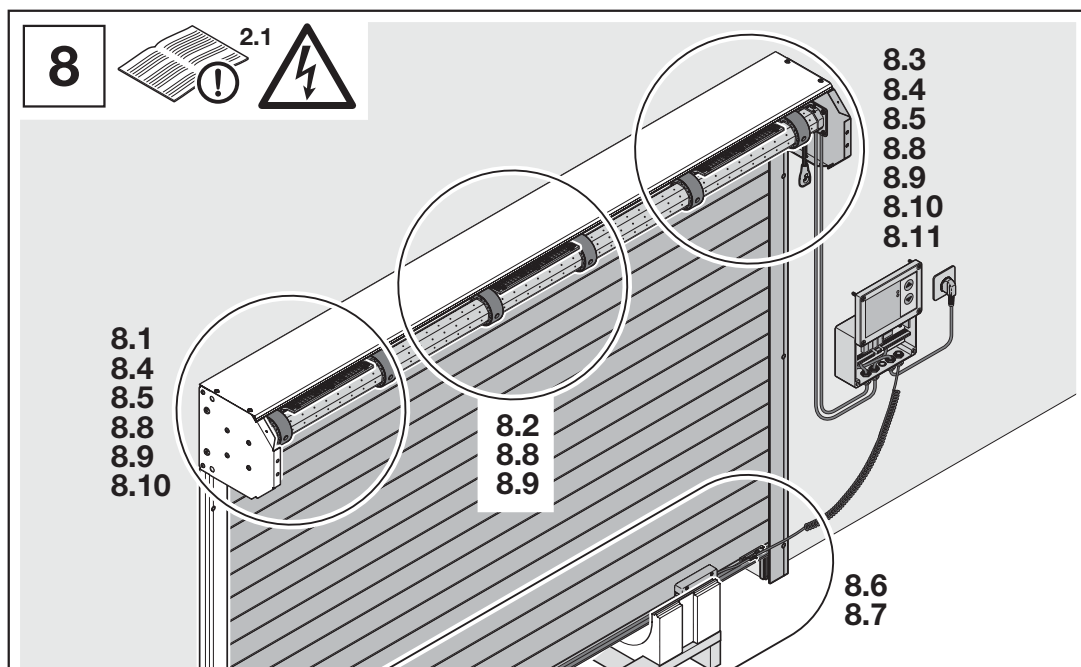
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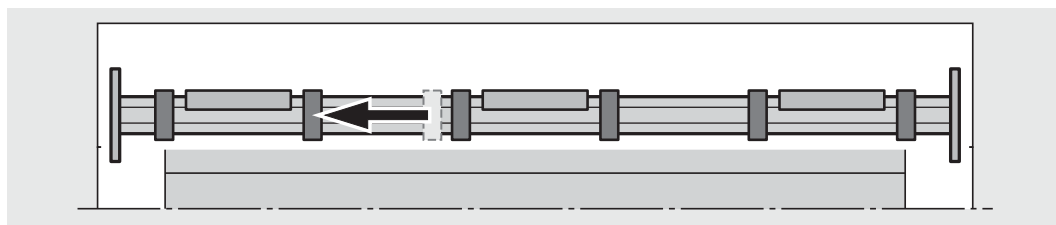
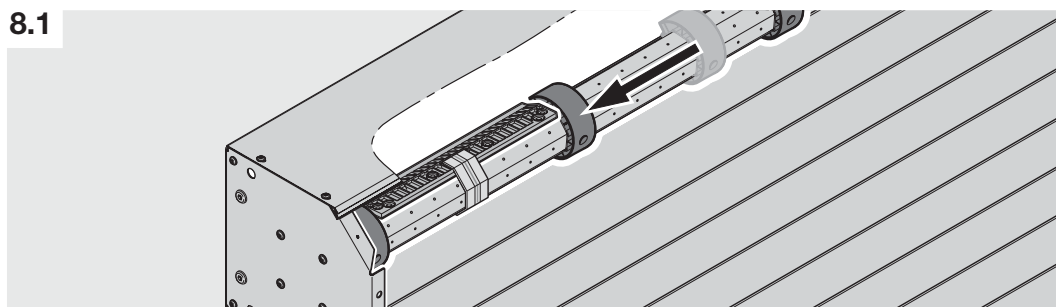
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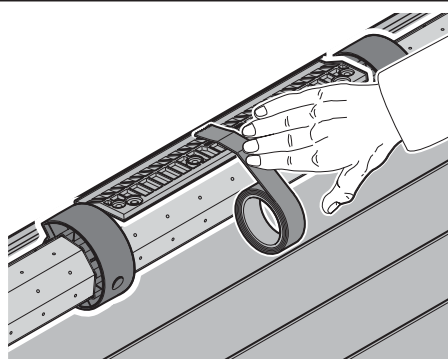
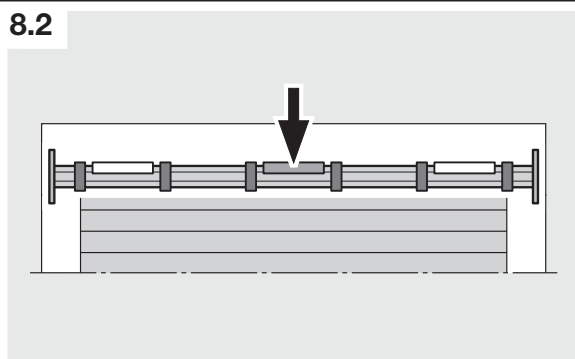
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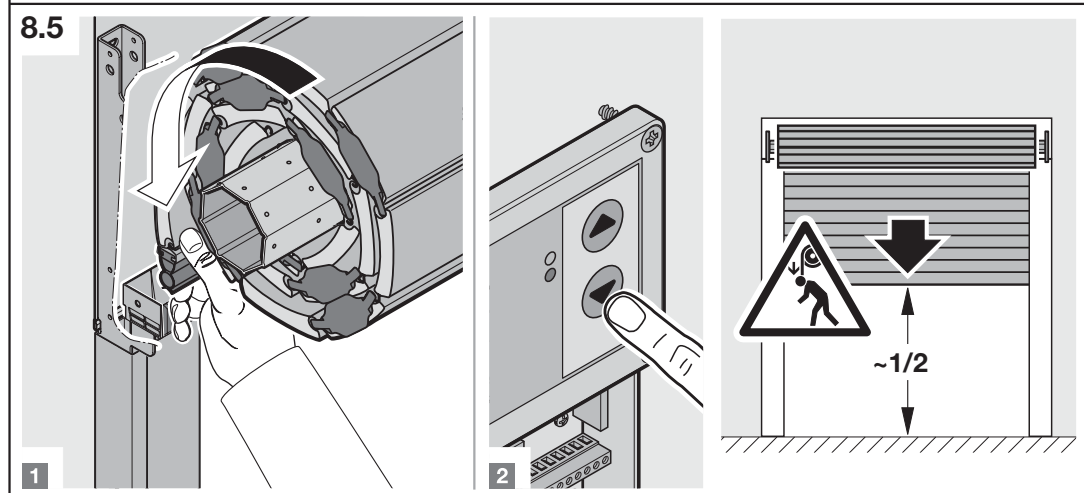
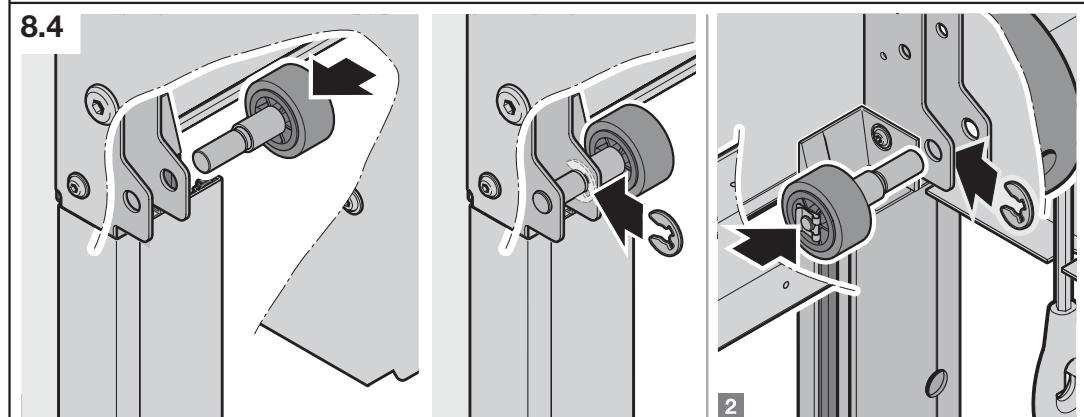
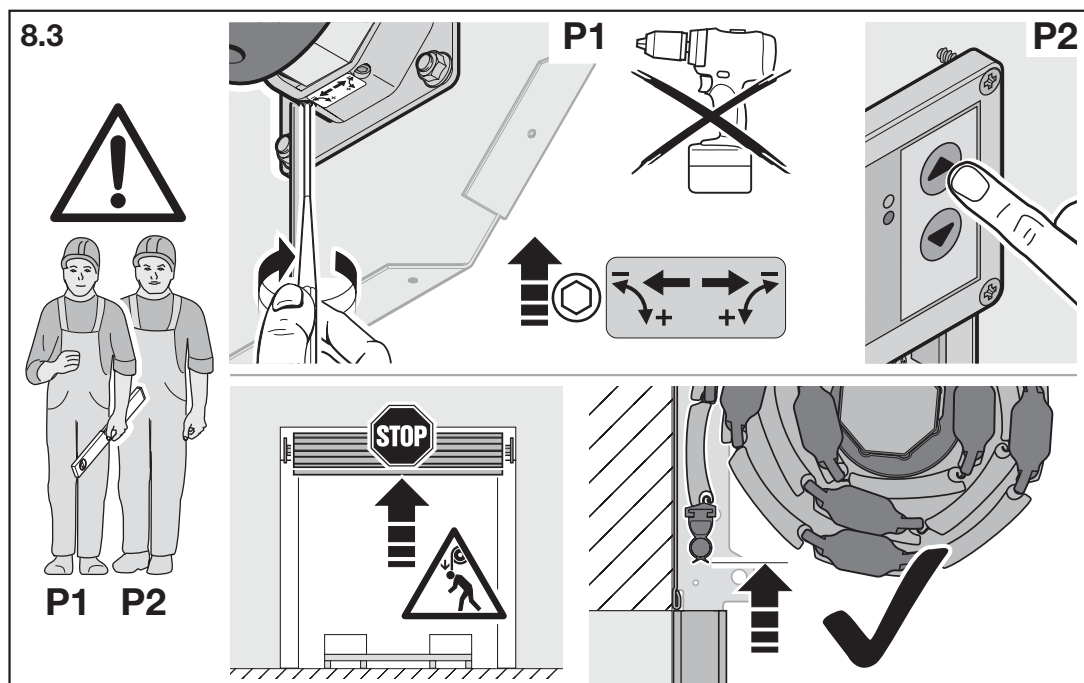


8.1

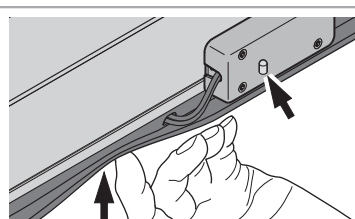
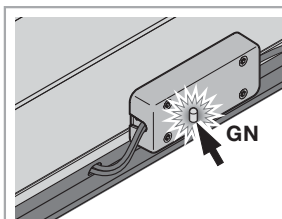
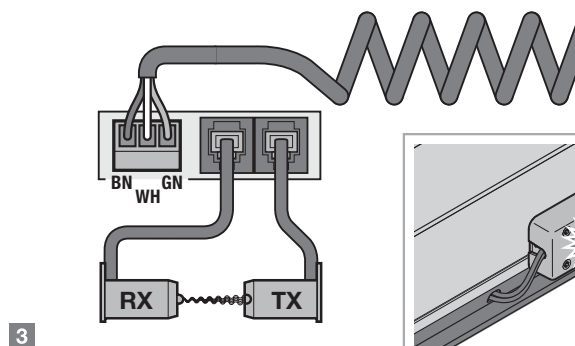
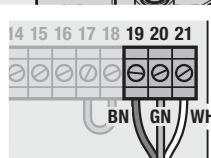
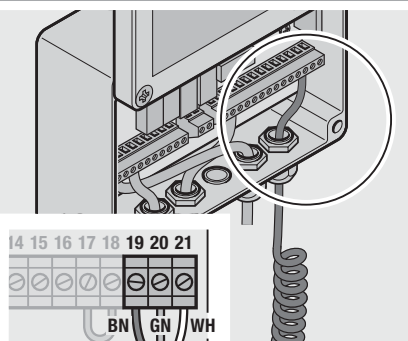
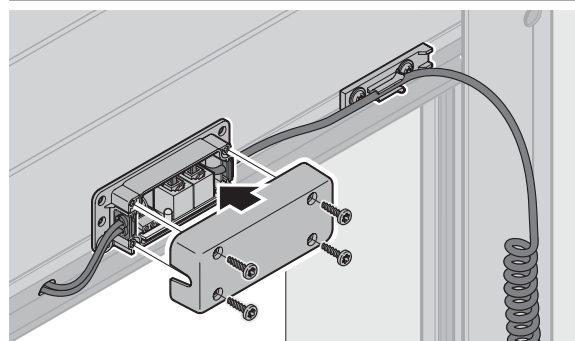
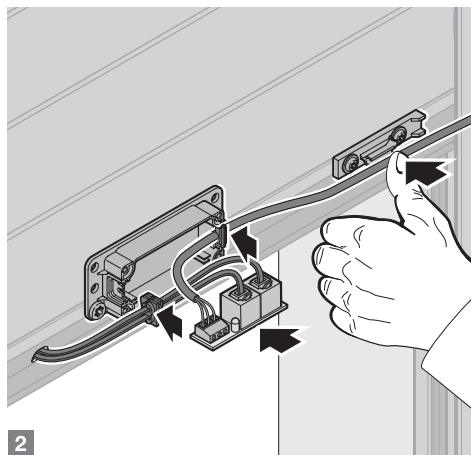
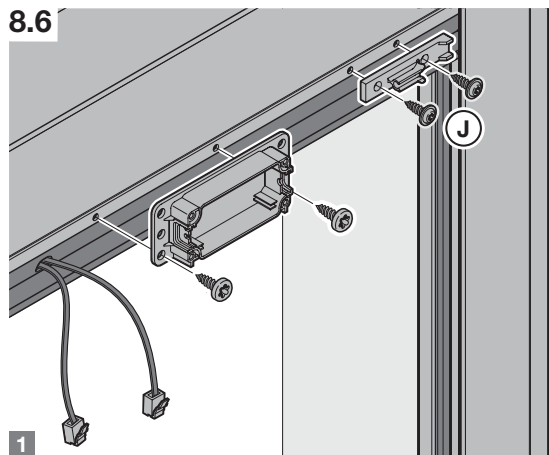


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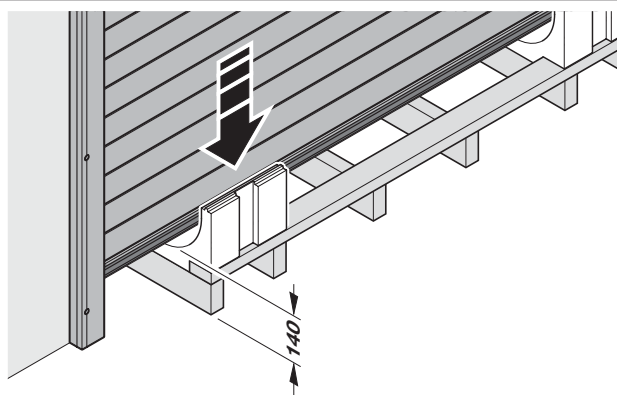
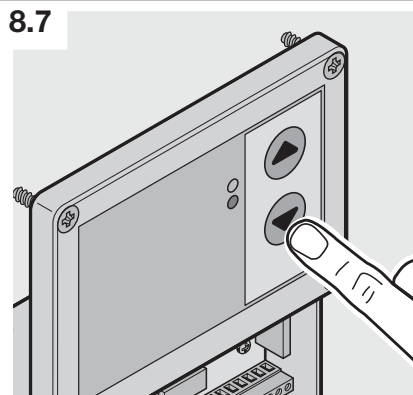




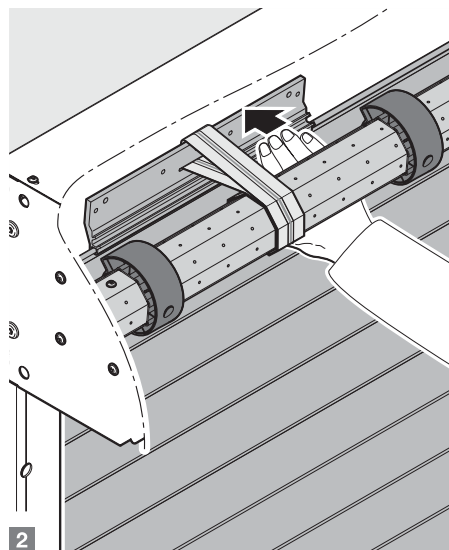
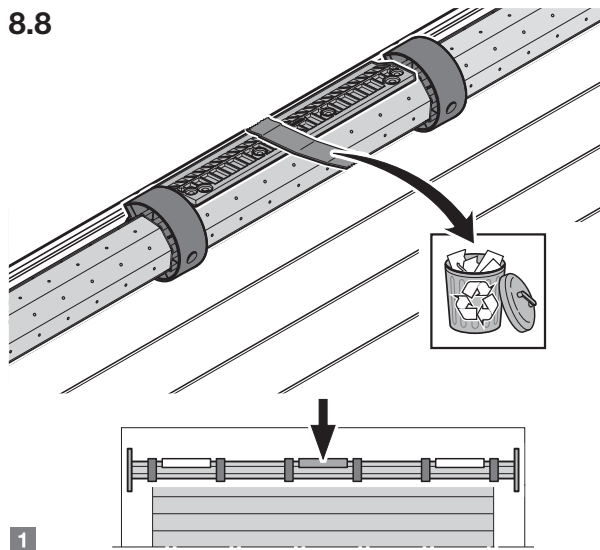
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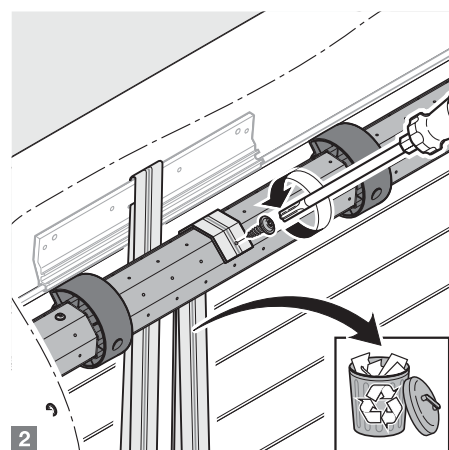
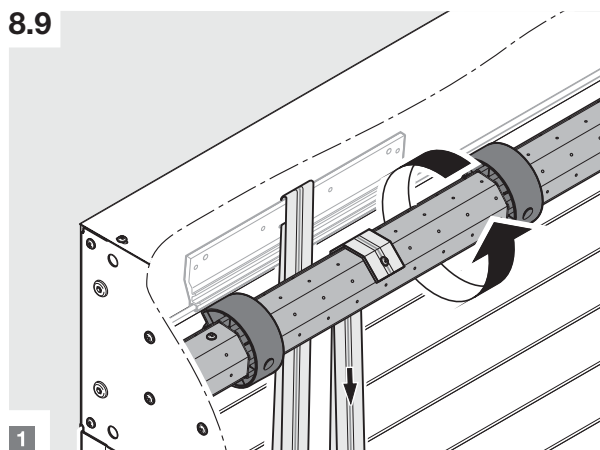
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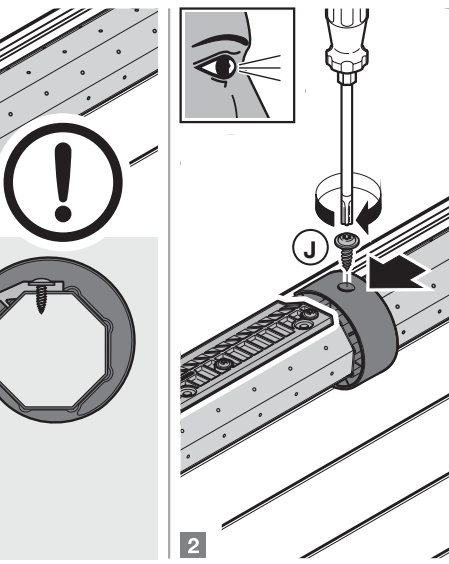
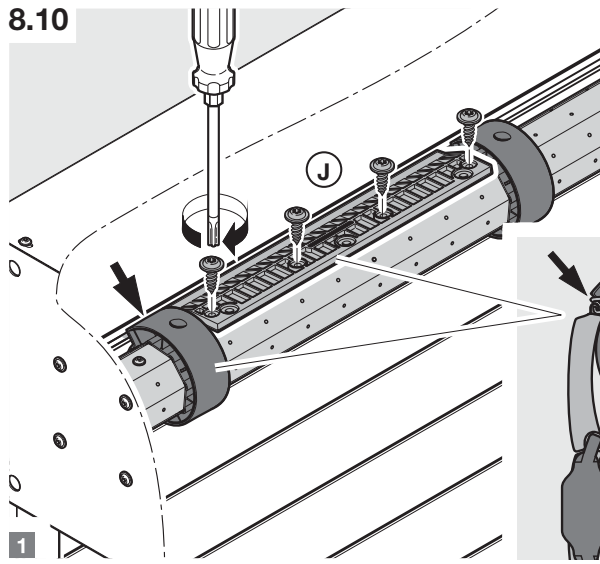
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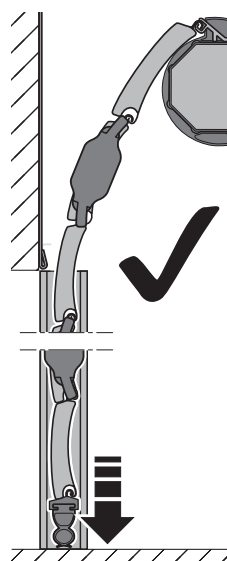
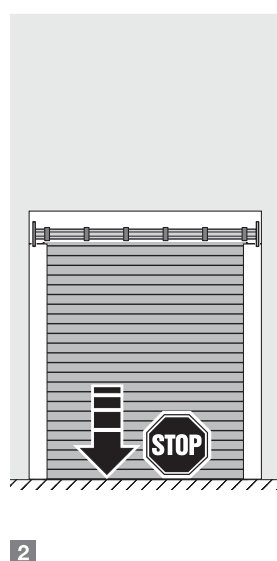
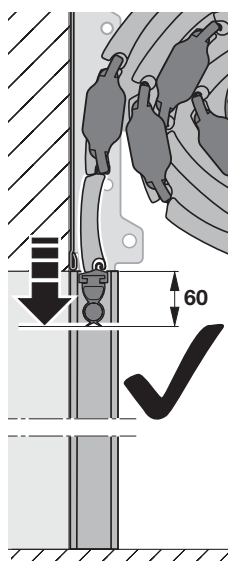
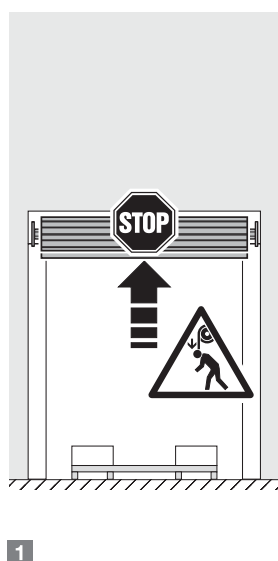
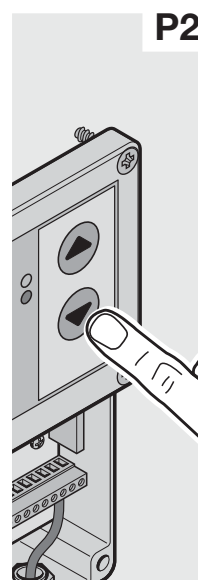
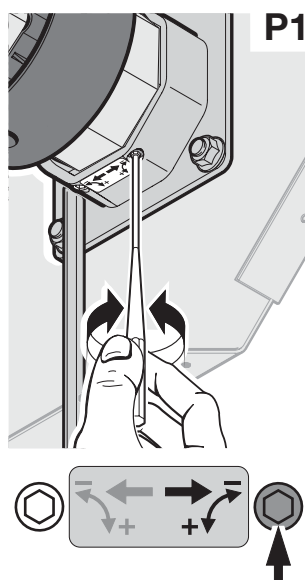
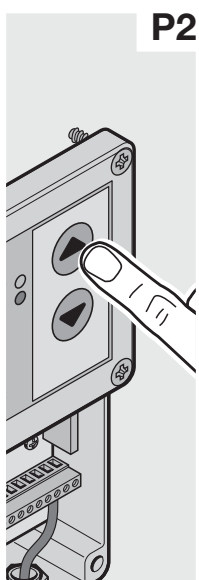
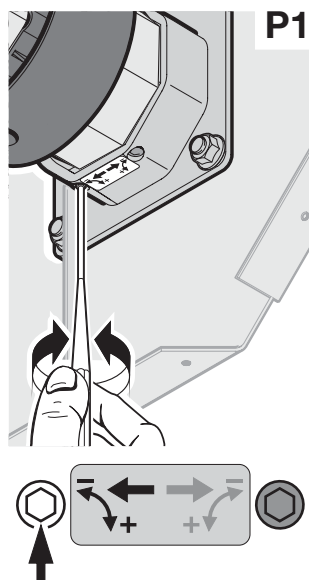
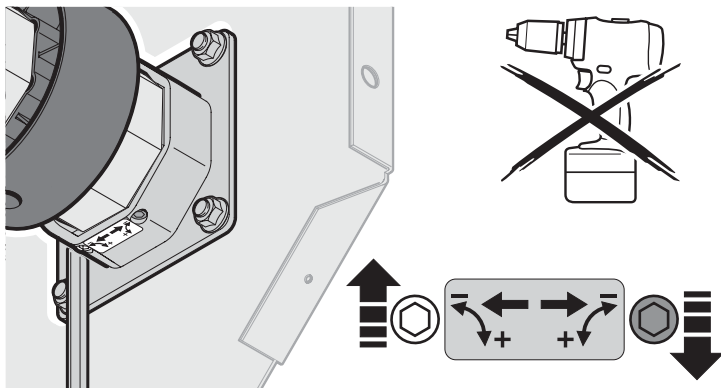
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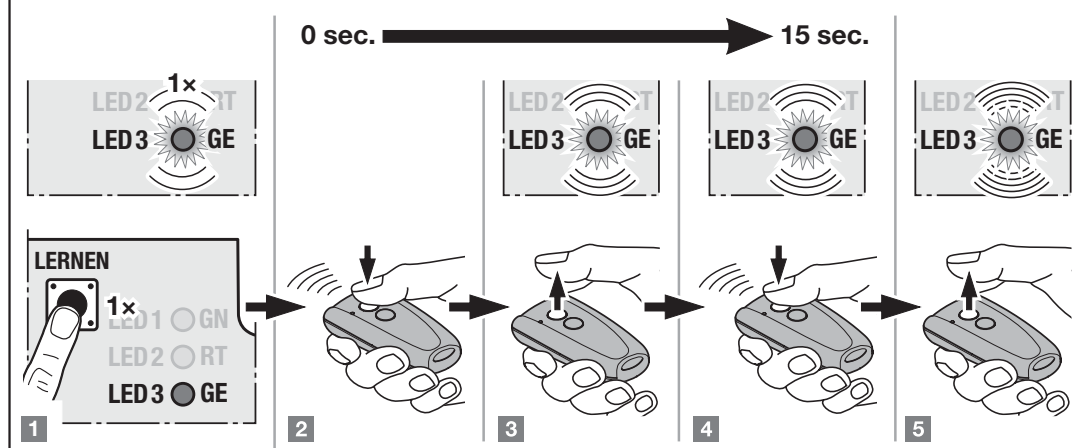
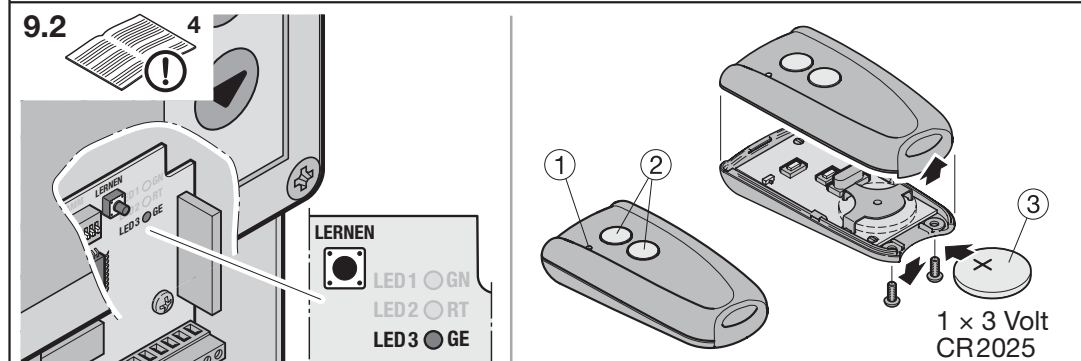
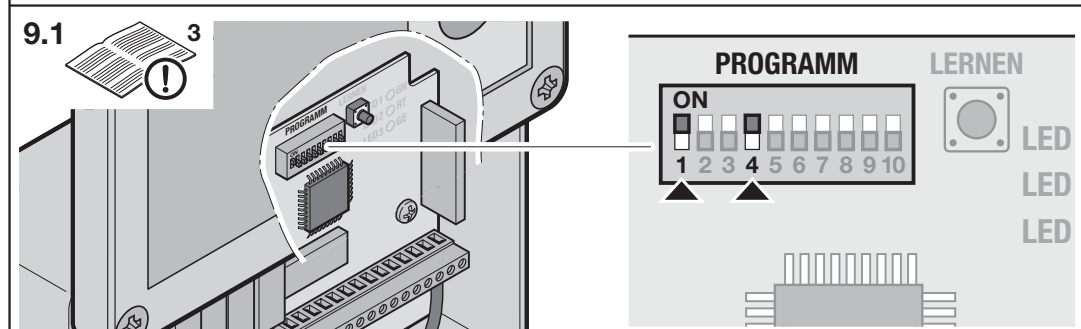
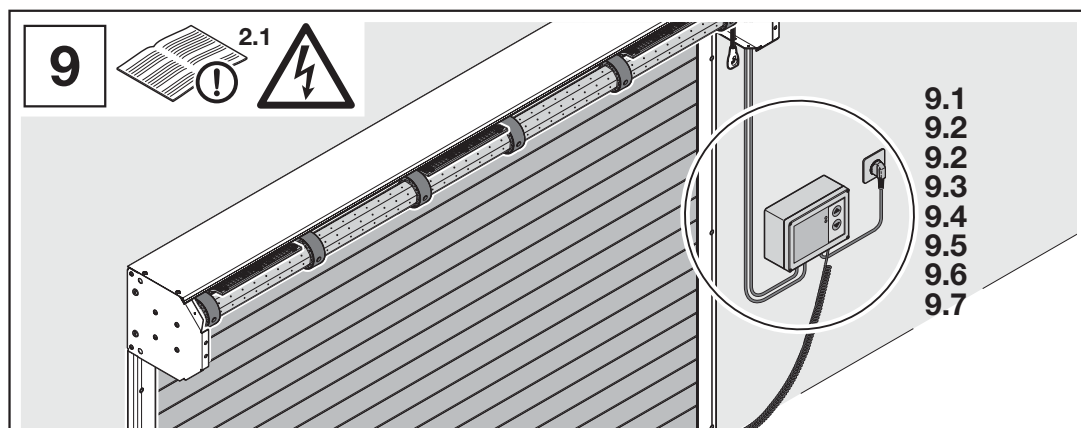


8.10

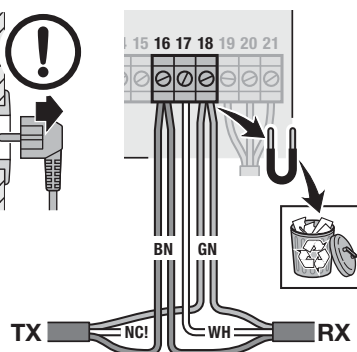
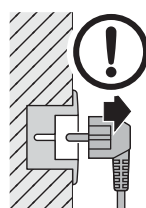
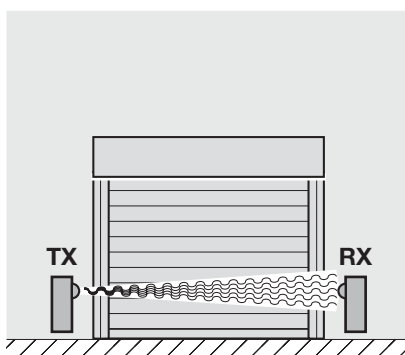
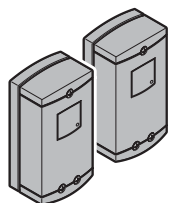


8.11

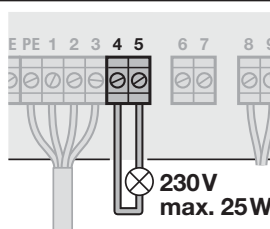
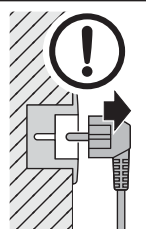
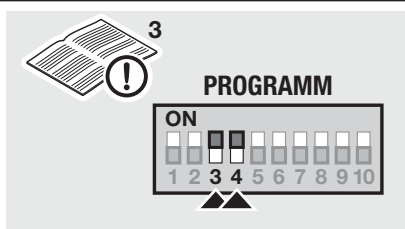




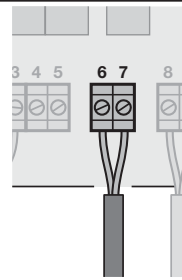
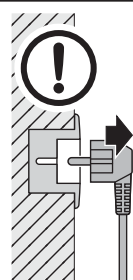
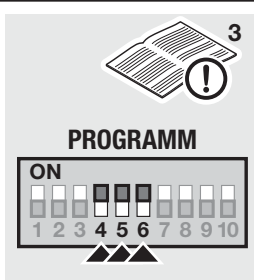
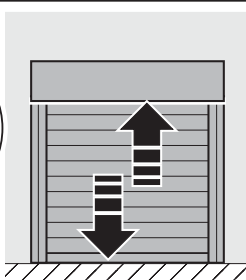
9.3



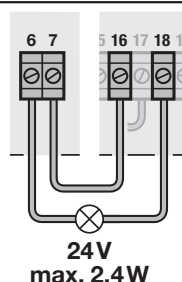
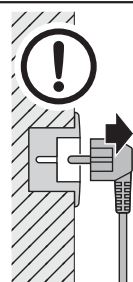
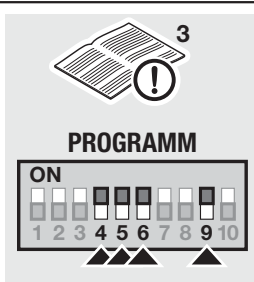
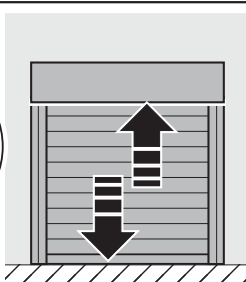
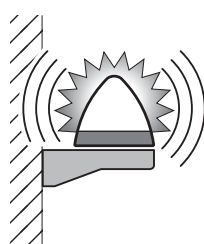
9.4



9.5



9.6



9.7

