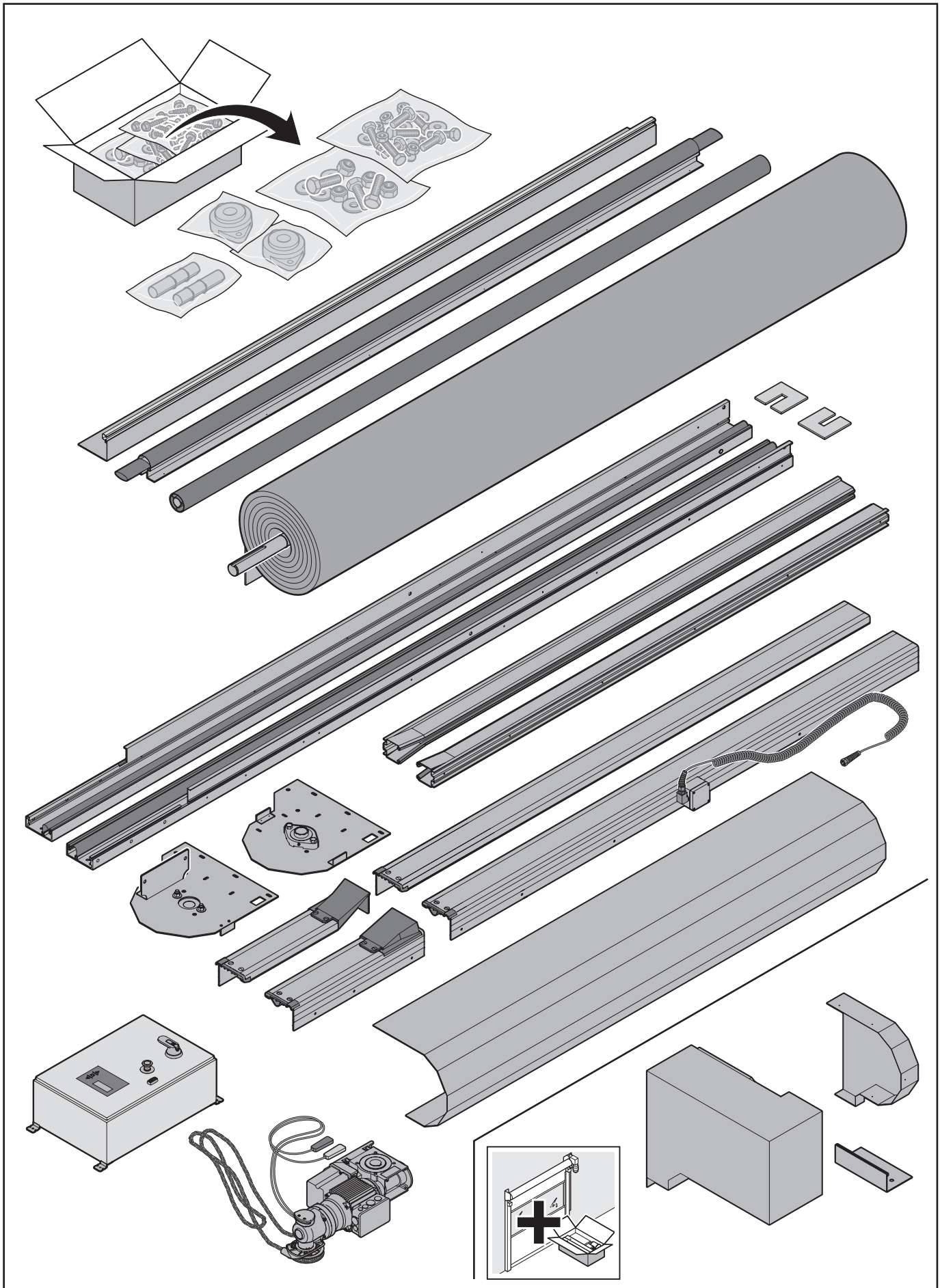


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Instructions for Installation, Operating and Maintenance


CHILLFAST Freezer Door (HDCH2)



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Dear Customer,

we are delighted that you have decided to choose a high-quality product from Hörmann.

1 About These Instructions

These instructions are divided into a text section and an illustrated section. The illustrated section can be found after the text section.

The information contained within this manual will allow you to install your Hörmann door, maximize its life and give you years of trouble free operation.

Do not install or operate this product until you read and understand the contents of this manual and the electrical schematic, wiring diagram.

These instructions are **original instructions** as outlined in the EC Directive 2006/42/EC. Read through all of the instructions carefully: they contain important information about the product. Pay attention to and follow the instructions provided, particularly the safety instructions and warnings.

Please keep these instructions in a safe place and make sure that they are available to all users at all times.





Competent operation and proper maintenance influence the performance and availability of your CHILLFAST door to a considerable degree. Operating errors and inadequate maintenance lead to avoidable failures. Only competent operation and proper maintenance will guarantee satisfactory, long-term operational safety.

If you have any questions about this manual or how to install, maintain, or use the product, contact Hörmann. Refer to the serial number when contacting Hörmann. The serial number can be found on the electric operator, control panel, and drive side mounting angle.

1.1 Further applicable documents

Depending on the ordered accessories, the delivery includes further instructions, e.g. instructions on how to control the door. Also read these instructions carefully and thoroughly. Pay attention to and follow the instructions provided herein, particularly the safety instructions and warnings.

1.2 Warnings used



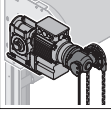
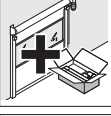
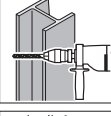

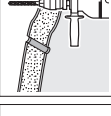
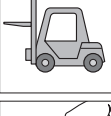



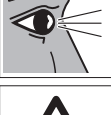

	The general warning symbol indicates a danger that can lead to injury or death . In the text, the general warning symbol will be used in connection with the caution levels described below. In the illustrated Section, an additional instruction refers back to the explanation in the text.
 DANGER	Indicates a danger that leads directly 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.











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ATTENTION

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

A Symbols

-  Important step to verify proper installation
-  Warning - dangerous electrical voltage
-  Operator side
-  Optional parts
-  Drilling through steel
-  Drilling into concrete
-  Drilling through wall panel
-  Use suitable lifting devices (e.g. forklift, crane)
-  Remove residues
-  Endplate not secure
-  Hot surface
-  Check
-  Trap risk

-  Warning - impact hazard
-  Warning - pinch hazard
-  Torque specification as per fastener manufacturer's instruction
-  Warning potential safety hazard
-  Grease
-  Correct positioning or action
-  Incorrect positioning or action
-  Remove and dispose of structural component or packaging
-  See illustrated section
-  See separate Installation Instructions for the control unit or additional electrical control elements

B Abbreviations

- F** Floor to level line
- H** Height
- W** Width
- X** Inside to inside dimension

Colour code for cables, single conductors			
The abbreviations of the colours for identifying the cables, conductors and components comply with the international colour code according to IEC 60757:			
RD	Red		

2  Safety Instructions

When used properly and for the intended purpose, CHILLFAST doors are reliable and safe to operate. Nevertheless, when used incorrectly or for purposes other

than those intended, they can pose a risk. We therefore expressly draw your attention to the safety instructions contained in the individual chapters.

2.1 Intended use

CHILLFAST doors are used to close door openings, to save energy costs, to improve the room air conditions and to accelerate the flow of materials.

Intended use also includes paying attention to these instructions and observing inspection and maintenance conditions.

Failure to follow the procedures contained within this manual may result in injury or death, damage to property or the product. Any deviations to the procedures or alterations to the product that are not authorized by Hörmann will automatically void the warranty and may cause injury or even death.

Any other or further use is regarded as non-intended use. The manufacturer / supplier is not liable for any damage resulting from this. The risk is borne solely by the user.

2.2 Qualification of personnel

Only qualified and instructed personnel may install, operate and maintain the CHILLFAST door.

Two qualified installers (Technician training is available from Hörmann)

Qualified welder (See installing the mounting angles, channels, tubes for welder qualifications.)

Qualified electrician

Before commencing work the assigned personnel must read these instructions, particularly chapter 2.

For safety reasons, specify distinct responsibilities for operation, maintenance and repairs to ensure that there are no unclear assignments.

2.3 Standards and regulations

All electrical work must meet local, provincial, state and federal codes.

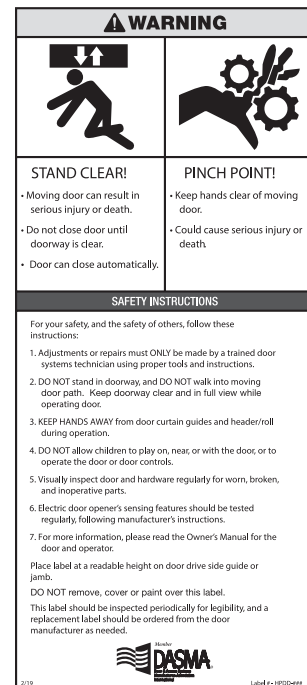
2.4 General safety instructions

- In addition, also observe the generally applicable statutory regulations and other binding regulations for accident prevention and environmental protection, country-specific regulations, and the recognised specialist technical rules for safe and competent working must be observed. Before beginning work, instruct personnel in accordance with these rules and regulations.
- Always keep these instructions available at the location where the industrial door is used.
- Without the supplier’s prior approval, do not carry out any modification, attachment or conversion work on the industrial door which might compromise safety.
- Do not make any modifications to the software on programmable control systems.
- The location and operation of fire extinguishers must be indicated by appropriate information signs. Observe the statutory fire alarm and fire-fighting regulations.
- All work on the industrial door (such as maintenance, cleaning work and inspections) may only be performed during an operational shutdown.

- Only qualified electricians may perform work on the mains supply.
- Always refer to the AS500FUE-1 Control Box - Electrical Diagrams & Operation Manual that ships with the product when making all electrical connections.
- Before undertaking any work, disconnect the system from the main power supplies and ensure that it cannot be inadvertently turned on. If available, deactivate the emergency opening lever.

2.5 Safety instructions for operation

- Before actuating the door, make sure that no persons or objects are located in the door’s area of travel.
- Do not reach into the guide or guide area while the door is in operation.
- Only actuate the industrial door if it is safe and functional. All protective devices and safety-related devices (e.g. detachable protective devices and emergency-OFF devices) must be present and functioning.
- Do not modify or put the safety devices out of operation.
- It is recommended that these 2 warning labels are placed in a visible location on or near door by the installer, to warn pedestrians about the safe use of this door.



2.6 Safety instructions for maintenance and troubleshooting

- Perform inspection and maintenance work as described in chapter 6. Comply with the maintenance intervals and note the information on the replacement of parts and sub-assemblies.
- Maintenance and troubleshooting may only be carried out by qualified personnel.
- Only use spare parts that comply with the technical requirements specified by the manufacturer. This is always guaranteed when original spare parts are used.

ENGLISH

- Only carry out welding, cutting or grinding work on the CHILLFAST door if this work has been expressly approved. There may be a risk of fire and/or explosion. Prior to welding, cutting or grinding, remove dust and combustible materials from the industrial door and its surroundings and ensure that there is adequate ventilation (to reduce risk of explosion).
- Before disassembling the operator, fix the shaft on the operator side (e.g. with a forklift).

3 Installation

3.1 Required tools, materials, and equipment

- Fasteners to attach the door to the structure. Fastener type and size will depend on the structure construction and door size.
- Welder if not using fasteners to attach the door to the structure.
- Hammer drill if attaching the door to masonry.
- Masonry and steel drill bits.
- Assorted shims.
- Tape measure or laser distance finder with minimum measuring distance of opening width plus 18".
- Laser level, transit level, water hose level, or line level and string.
- Minimum 4 foot spirit level.
- Assorted metric and standard hand tools – screw drivers, pliers, wrenches, socket set, pry bars, hammer/mallet, allen keys, etc...
- Power tools – Drill, grinder, impact gun
- 2 pieces of round bar for winding counterbalance springs – 5/8" diameter and minimum 24" long
- Two ladders that can safely reach a minimum height of the opening height plus 24".
- Forklift or crane and lifting straps

NOTE:

The capacity of the crane or forklift must be sufficient to hoist the header assembly into place.

Minimum height capacity for crane or forklift is dependent on the door model. Contact Hörmann for door specific size and weight.

The mounting surface must be free of obstructions. If the mounting surface is uneven use shims as necessary to ensure the door mounting angle/tube is installed plum and in contact to the mounting surface.

3.1.1 Labour

Two qualified installers. – Technician training is available from Hörmann. Qualified welder – See installing the mounting angles/channels/tubes for welder qualifications Qualified electrician.

NOTE:

Limit access to the work site to authorized personnel only.

3.1.2 Electrical requirements

Ensure that all electrical power sources have been locked out and tagged out according to OSHA regulations and local electrical codes. Test the equipment to ensure it can't start


moving and that the electrical power is disconnected prior to commencing work.

All electrical work must meet local, provincial/state, and federal codes.

Ensure that any local disconnects, fuses, or breakers are sized correctly for the product.

3.1.3 Personal protective equipment

- Hard hat
- Safety glasses
- Welding helmet and gloves
- Grinding face shield
- Work gloves
- Safety boots
- Fall arrest gear

 DANGER
<p>Primary power supplies</p> <p>Contact with the primary power supplies presents the danger of a deadly electric shock. For that reason, observe the following warnings under all circumstances:</p> <ul style="list-style-type: none">▶ Only qualified electricians may perform work on the primary power supplies.▶ Ensure that the on-site electrical installation complies with the applicable safety requirements.▶ Ensure that the national regulations governing the operation of electrical equipment are complied with.▶ Install the control box for the CHILLFAST door operator within sight of the door.▶ Before undertaking any electrical work, disconnect the system from the primary power supplies and ensure that it cannot be inadvertently turned on.▶ Ensure that all electrical power sources have been locked out and tagged out according to OSHA regulations and local electrical codes. Test the equipment to ensure it can't start moving and that the electrical power is disconnected prior to commencing work.▶ Ensure that any local disconnects, fuses, or breakers are sized correctly for the product.

ATTENTION
<p>External voltage</p> <p>External voltage on the connecting terminals of the control will destroy the electronics.</p> <ul style="list-style-type: none">▶ Do not apply any external voltage (e.g. primary power supplies) to the connecting terminals of the control unit.

ATTENTION
<p>Pull forces on electric cables</p> <p>Pull forces on electric cables will destroy the electronics.</p> <ul style="list-style-type: none">▶ Never pull on the connecting leads of the electrical components.

NOTE:

All mounting fasteners to be sourced and supplied by installer. Refer to fastener instructions for torque specifications.

To install the door:

1. Limit access to the work site to authorized personnel only.
2. Check the on-site conditions for the door installation (check measurements).
3. Check the quality of the structure for its strength.
4. Choose suitable fasteners.
5. The mounting surface must be free of obstructions. If the mounting surface is uneven use shims as necessary to ensure the door mounting hardware is installed plumb and in contact to the mounting surface.
6. Unpack the door and check for damage.
7. Verify the contents of the shipment with the packing slip to ensure that there are no missing parts.
8. If there is anything missing contact Hörmann immediately to allow prompt delivery of the missing parts and minimize any delays in the installation of the product.
9. Dispose of the packaging material.
10. Install the door as shown in the illustrated section.

NOTE:

When installing multiple doors at the same time, always ensure that all of the parts correspond to the correct serial number for each specific door.


Use the shop drawing to verify the opening size and assure all clearances are adequate prior to starting with the installation of the door.





Using a water hose, laser or transit level, mark a level line on each door jamb.

Measure the distance from the floor to the level line on each jamb (dimension F). If required, place a shim on the floor by the jamb where dimension F is the greatest. The shim should be the same thickness as the difference between the left and right dimension F.

The capacity of the crane or forklift must be sufficient to hoist the header assembly into place. Minimum height capacity for crane or forklift is dependent on the door model. Contact TNR Industrial Doors for door specific size and weight.

4 Putting into Service

 WARNING
<p>Faulty door A faulty door may injure persons or damage objects.</p> <ul style="list-style-type: none"> ▶ Only put the door into service if it is in perfect condition.

 WARNING	
  	<p>Door movements Door travel may injure persons or damage objects.</p> <ul style="list-style-type: none"> ▶ Make sure that no persons or objects are in the door's closing area during operation. ▶ Never use the door to lift objects or persons. ▶ Never reach into the side guides or front door hood during door operation.

4.1 Setting the End-of-travel Positions

The end-of-travel positions of the door are set by using the touch pad on the control box.

NOTE:

Follow the instructions supplied with the operator and control box.

4.1.1 CLOSE end-of-travel position

ATTENTION
<p>Exceeding the CLOSE end-of-travel position If the door travels beyond the <i>CLOSE</i> end-of-travel position, the bottom edge may be compressed. This could disrupt the function of the safety reversing edge.</p> <ul style="list-style-type: none"> ▶ Never exceed the <i>CLOSE</i> end-of-travel position.

- ▶ Set the *CLOSE* end-of-travel position so that the bottom edge makes full contact with the floor. If the floor is sloping from side to side, the *CLOSE* end-of-travel position must be determined by the higher side of the door opening.

4.1.2 OPEN end-of-travel position

ATTENTION
<p>Exceeding the OPEN end-of-travel position If the door travels beyond the <i>OPEN</i> end-of-travel position, there is a risk of the door curtain slipping out of the side guides and sustaining damage.</p> <ul style="list-style-type: none"> ▶ Never exceed the <i>OPEN</i> end-of-travel position.

- ▶ Set the *OPEN* end-of-travel position so that the lower edge of the bottom profile corresponds to the dimension for the door height.





4.2 Test run

1. After installing the door, test the functional safety according to the acceptance / commissioning report.
2. Verify in the test log book (dated and signed) that a test run has been successfully completed.
3. Hand the entire door documentation over to the owner or operator of the door.

5 Operation

NOTE:

It is the responsibility of the company that sold the door to the end user to ensure that the door is set up in such a way to provide adequate protection from accidental impacts / collisions with the door. Below are Hörmann minimum recommendations when setting up a door to be used by sensors and timers to automatically open, close, and reverse the door when an obstruction is present. (see picture 1a, b)

 WARNING	
  	<p>Door movements Door travel may injure persons or damage objects.</p> <ul style="list-style-type: none"> ▶ Make sure that no persons or objects are in the door's closing area during operation. ▶ Make sure that the door has opened completely before driving in or out! Never drive or walk through doorways unless the door has reached the OPEN end-of-travel position. ▶ Whenever driving in or out of the opening, always check that the door curtain has travelled up far enough to provide the necessary passage height. ▶ Never use the door to lift objects or persons. ▶ Do not reach into the guide or guide area while the door is in operation.

ATTENTION
<p>Emergency operation devices Too frequent use of the emergency operation devices may damage them. This will also void the warranty for the door.</p> <ul style="list-style-type: none"> ▶ Only use the emergency operation devices in the case of a power failure or during repair work.

ATTENTION
<p>Abrasive / corrosive environments, wind and heat Abrasive / corrosive environments, wind and heat may damage the door.</p> <ul style="list-style-type: none"> ▶ Protect the door from abrasive and corrosive materials: <ul style="list-style-type: none"> - Salt, stone or concrete - Cement - Plaster - Acids - Alkali - Road salt - Aggressive paints or sealants ▶ CHILLFAST door can withstand some wind pressure, not to exceed 8.5 psf (400 Pa) ▶ Avoid operating temperatures below -22°F (-30°C)

5.1 Instructed personnel

The door may only be operated by persons who have been instructed in its proper use. A person is considered to be instructed, if he/she has received instruction as to how to operate the door safely and has received permission from the owner to use the door system.


5.2 Normal wear


The design of the CHILLFAST door represents state-of-the-art technology. Pressure marks and abrasive wear are normal and cannot be avoided.





5.3 Emergency-OFF



- ▶ In emergency situations, de-energise the control box by turning the main power disconnect OFF, disconnecting the primary power supplies or, if available, actuating the red **emergency-OFF** button.

6 Inspection and Maintenance

 WARNING
<p>Unmaintained doors There is a danger of injury or damage if the door is not regularly maintained. This will also void the warranty.</p> <ul style="list-style-type: none"> ▶ Inspect and maintain the door regularly as described in these instructions or entrust this work to the door installer's service department.

 DANGER
<p>Primary power supplies Contact with the primary power supplies presents the danger of a deadly electric shock.</p> <ul style="list-style-type: none"> ▶ Before undertaking any electrical work, disconnect the system from the primary power supplies and ensure that it cannot be inadvertently turned on.

 WARNING	
  	<p>Door movements There is a danger of injury or damage if the door is actuated during inspection or maintenance work.</p> <ul style="list-style-type: none"> ▶ Before undertaking any work, disconnect the system from the primary power supplies and ensure that it cannot be inadvertently turned on. ▶ If available, deactivate the emergency opening lever / handle.

 WARNING	
	<p>Falling parts During installation and dismantling, parts may fall and injure persons or damage property.</p>
	<p>Covers and hoods (option)</p> <ul style="list-style-type: none"> ▶ Secure the covers / hoods (e.g. with a forklift) before dismantling.
	<p>Shaft</p> <ul style="list-style-type: none"> ▶ Secure the shaft (e.g. with a forklift) before dismantling the operator.

Only inspect and maintain the door yourself if you are a qualified specialist. In other words, you have the suitable training, specialist knowledge and practical experience to allow you to carry out inspection and maintenance correctly and safely.

Observe all the applicable regulations governing work safety. In general, we recommend entrusting maintenance / inspection to the door installer's service department.

The high-speed door is low-maintenance. In normal operating conditions, all the bearings, including the gears, are lubricated for life and are maintenance-free.

6.1 Maintenance intervals

In compliance with the local guidelines for power-operated windows, doors and gates testing and maintenance of the door must be carried out once a month, and into the future at the same intervals.

Depending on the size of the door and the annual number of door cycles, we recommend the following maintenance intervals:

In the case of a higher number of door cycles (> 50,000 per year):

Servicing of the functional elements every six months:

- Electric operator and brake

Servicing of the following elements every month:

- function of reversing edge
- function of reversing photoeye
- open and close limit settings
- loose fasteners
- curtain tracking

In the case of a lower number of door cycles:

Annual servicing in conjunction with the stipulated test procedures according to local regulations.

- ▶ Check the function of the photoeyes every six months.

6.2 Wearing parts

If provided, the indicated maximum assumable cycles or door cycles apply to the following wearing parts:

Wearing parts	Cycles	Period
Operator (60 % ON time)	1,000,000	2 years
Brake	250,000	2 years
Reversing edge transmitter battery	-/-	2 years

Wearing parts	Cycles	Period
Door Seals / Wear strips	-/-	2 years
Curtain	150,000	2 years
Photoeyes	-/-	2 years

7 Control Box

The control system is manufactured individually for each door ordered. The applicable wiring diagram is placed in the control box.

- ▶ Add the wiring diagram and software description to these instructions.

Each control cabinet has its own identification serial number.

- ▶ Always quote this number when calling the door installer or manufacturer for parts or technical support.

8 Malfunctions and Troubleshooting

In the case of malfunctions, contact the door installer's or manufacturer's service department.

Operator power


The operating voltage must be 230 V ± 5 % or 460 V or 600 V ± 5 %. If the voltage deviates greatly from this, there may be problems with the operator power.

9 Cleaning and Care

Use warm water together with a neutral, non-abrasive cleaning agent (household detergent, pH value 7, Isopropanol 99.9 %).

To clean the surface, use only a soft cloth or cleaning sponge. Rinse off any dirt and dust particles with clear water.



10 Extension and Conversion

 WARNING	
<p>Unsuitable components Unsuitable components could overload the door construction. This could lead to serious injury.</p> <ul style="list-style-type: none"> ▶ Only use components approved by the manufacturer. 	

Only extend or convert this door system with the manufacturer's permission.

Carrying out any structural alterations to the product without the manufacturer's permission renders the warranty and product liability null and void.

11 Dismantling and Disposal

 WARNING	
	<p>Falling parts During dismantling, parts may fall and injure persons or damage property</p>
	<p>Covers and hoods (option) ▶ Secure the covers/hood (e.g. with a forklift) before dismantling.</p>
	<p>Shaft Secure the shaft (e.g. with a forklift) before dismantling the operator.</p>

Only dismantle this door if you are qualified to do so. In other words, you have the suitable training, specialist knowledge and practical experience to allow you to dismantle the door correctly and safely.

Observe all the applicable regulations governing work safety when dismantling the door.

To dismantle and dispose of the door:

1. Open the door fully.
2. Carefully roll up the door manually (emergency manual operation).
3. Tape around the door curtain several times with strong adhesive tape (e.g. packing tape) to prevent it from unrolling from the drive barrel.
4. Drive a forklift truck with suitable pallet or supporting frame underneath the header assembly (curtain, drive barrel, shafts, end plates), so that the header assembly rests on the pallet or supporting frame.
5. Remove the fasteners securing the end plates and the operator.
6. Lift the header assembly together with the operator away from the top of the door opening and place on floor.

CAUTION

The operator may slide off the barrel drive shaft

- ▶ When lowering the header assembly down, take care to keep it level.
- 7. Dismantle the side guides or side elements and support brackets.
- 8. Disassemble the door into component parts and dispose of them properly.

12 Limited Warranty

High Performance CHILLFAST & Freezer Door

All freezer door systems manufactured by TNR Industrial Doors Inc. (hereinafter, Hörmann) are warranted from the date of shipment against defects in materials and workmanship, according to the following:

- Curtains:
- The freezer door curtain material and Curtain Loks™ are warranted for two (2) years against defects in material and workmanship.
- Undesirable aesthetics of the curtain not causing performance issues of the door are not considered a defect and are therefore not covered under this warranty.

- Operators: Operators with frequency drives are warranted for five (5) years or 1,000,000 cycles, whichever occurs first.
- Mechanical/Electrical: All other mechanical components are warranted against defects for two (2) years with unlimited cycles. All electrical components including sensors are warranted against defects for two (2) years or 300,000 cycles, whichever occurs first.
- Brake pads, bottom bar arms, bottom loops, loop seals and UHMW wear strips are wear items and are not warranted against normal wear, however, they are warranted for two (2) years against defects in materials and workmanship.
- Items that may void the warranty include but are not limited to powering doors with a generator, lubricating guides or curtain, drilling holes in the limit box or control box or other enclosure in any location other than the bottom of the enclosure, not ordering control panel or operator heaters where the control panel or operator will be installed in temperatures below 41° F (5° C), not installing buck boost transformers on Feig control panels where the primary supply voltage is measured at less than 210 V AC, not using the appropriate electrical conduit/fittings for the environment, improper installation, inadequate building framing and clearances, environmental conditions that Hörmann was not made aware of in writing prior to the door being ordered, modification to the door system without prior authorization from Hörmann.
- Documented proof of completion of the recommended maintenance in chapter 6 of this manual must be provided with warranty claims. Warranty is void without proper documentation.
- If, within the applicable warranty period stated above, any parts are found to be defective, replacement parts will be supplied free of charge, F.O.B. Hörmann's plant in Barrie, Ontario, Canada. Warranty only applies provided that recommended installation and maintenance procedures have been followed, as outlined in this manual.
- This warranty does not include replacement of parts due to damage beyond the control of Hörmann, such as damage in transit, impacts, caustic environments, or damage during storage. If the door is not installed when it arrives on site, Hörmann strongly recommends the door is protected from weather and damage. The door should be covered and secured in a dry, enclosed building until it is installed.
- Warranty claims must be made to Hörmann or to the authorized distributor where the door was purchased. Defective parts are to be returned to Hörmann in Barrie, Ontario, Canada, prepaid, for verification of the warranty claim. Any warranty coverage is only effective after the door is paid in full.
- Additionally, at the time of delivery, it is important to verify that all parts (pieces should match with the bill of lading/packing slip) have been received and that no damage has occurred during shipping. If any missing parts or damaged components are identified, note any damages and/or shortages on the bill of lading/packing slip, then sign it. In the event that this happens, please send Hörmann a signed copy immediately.

13 Determining breaker and wire size

Door Model	Poles			Minimum breaker size (amps)			Maximum motor current (amps)		
	208 V - 240 V	460 V - 480 V	575 V - 600 V	208 V - 240 V	460 V - 480 V	575 V - 600 V	208 V - 240 V	460 V - 480 V	575 V - 600 V
CHILLFAST	3	3	3	10	10	10	5.3	5.3	5.3

- 1) The above chart is for the highest current for each voltage. The current varies with door Size, model and motor voltage. The motor voltage may not be the same as the building primary voltage. For a specific door's current draw contact TNR field service at 705-792-9968.
- 2) Each door should have a dedicated circuit breaker. There should be no more than one door per breaker.
- 3) The distance from the breaker and control panel as well as the panel and operator will affect the size of the wire required. See below to properly size motor and primary wires.

To find the correct wire size you must first determine the required circular mils (cm) with the formula below.

$$CM = 19.3984 \times \text{Maximum motor current (See above chart)} \times \text{One way distance in feet from breaker to motor}$$

Allowable voltage drop (see chart below)

Allowable voltage drop based on building primary		
208 V - 240 V	460 V - 480 V	575 V - 600 V
6 V	14 V	17 V

Using the result from the above formula, look up the circular mils in the table below. If the calculated circular mils isn't the exact same as in the chart, use the next largest circular mils in the chart below. TNR Recommends a minimum 14awg wire for the building primary and motor.

Wire Gauge (AWG)	0000	000	00	0	1	2	3	4	5	6	6	8	9	10	11	12	13	14
Circular Mils (CM)	211592	167800	133072	105531	83690	66369	52633	41740	33101	26251	20818	16509	13092	10383	8234	6530	5178	4107

14 Spare parts

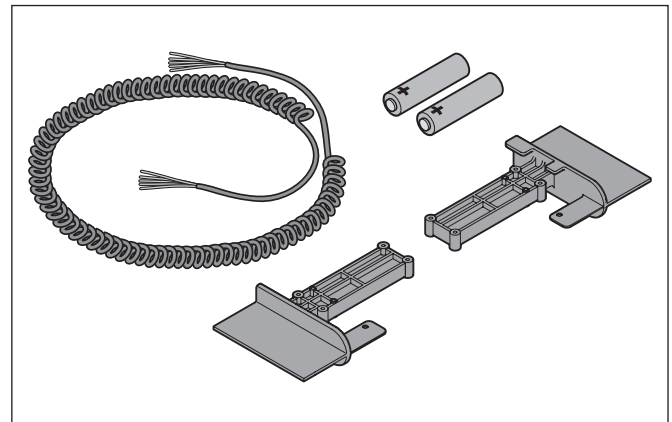
There are no parts to replace on the door system during regular maintenance checks.

CHILLFAST	
Description	QTY
Coil cord	1
Bottom bar arms	1 set
Transmitter battery	2

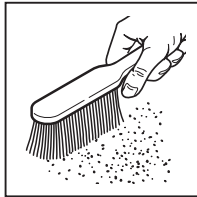
The coil cord is a standard item and it is a recommended spare part.

The bottom bar arms can be damaged if door is impacted therefore these are recommended spare parts.

Transmitter battery (3.6 V lithium battery - size AA) is a recommended spare part.



1



1a
1b
1c

1a
1b
1c

$X +1/8''$
 $X -0$

F

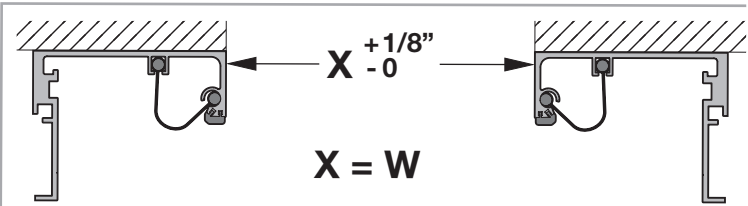
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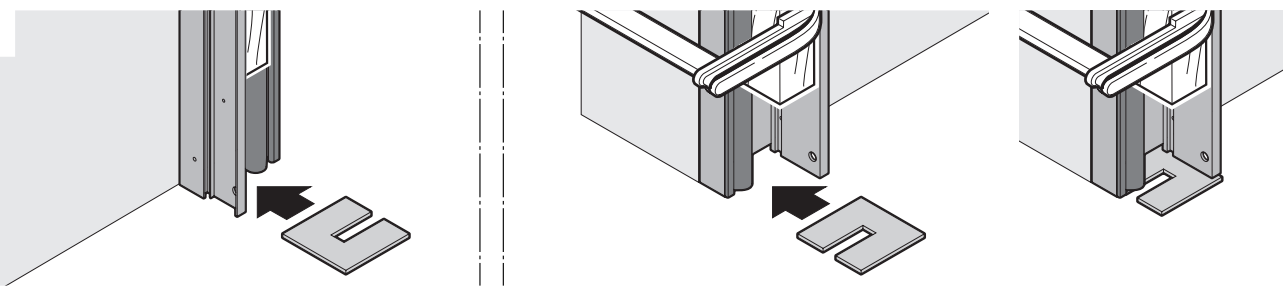
$X +1/8''$
 $X -0$

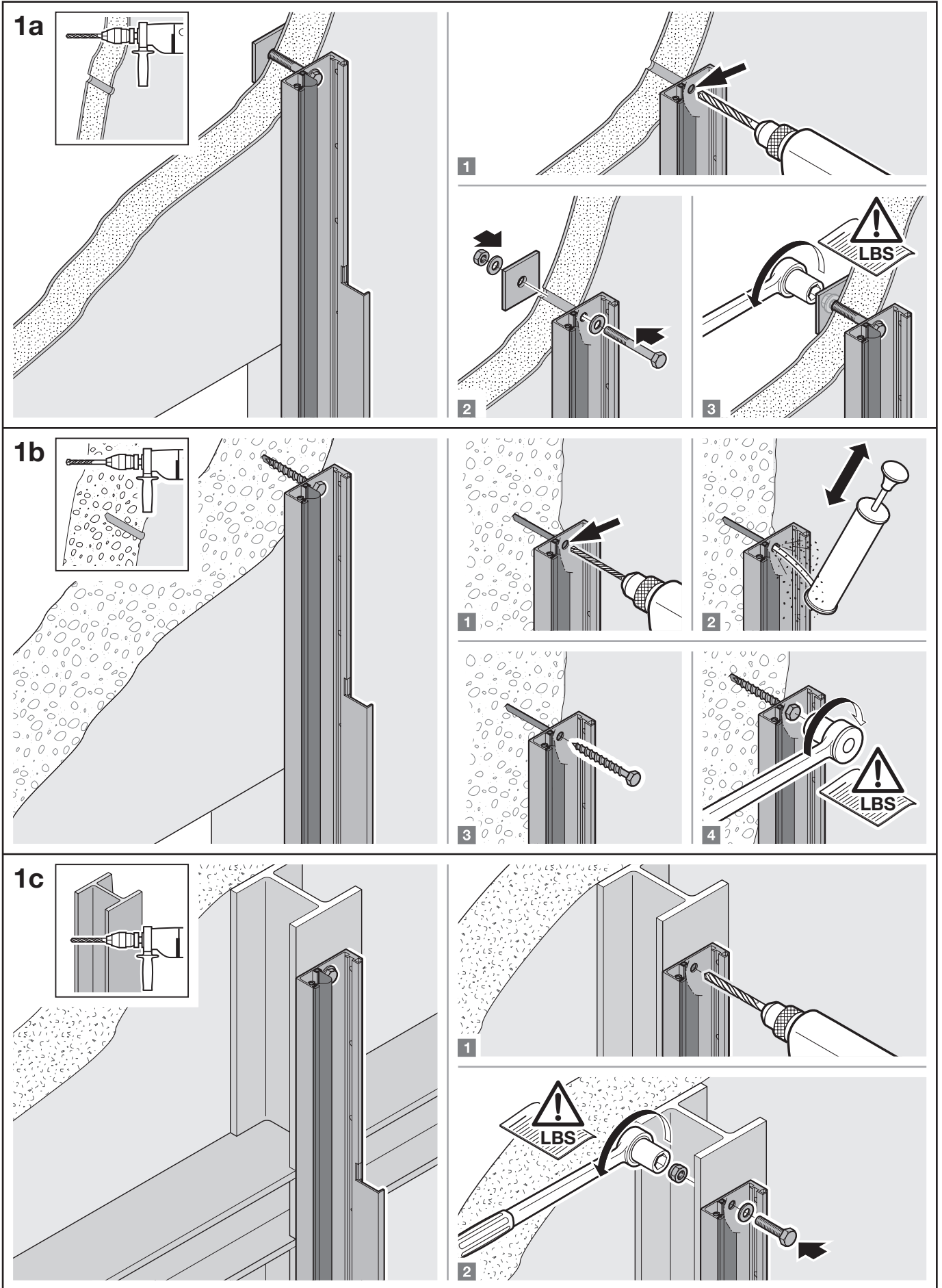
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1.1

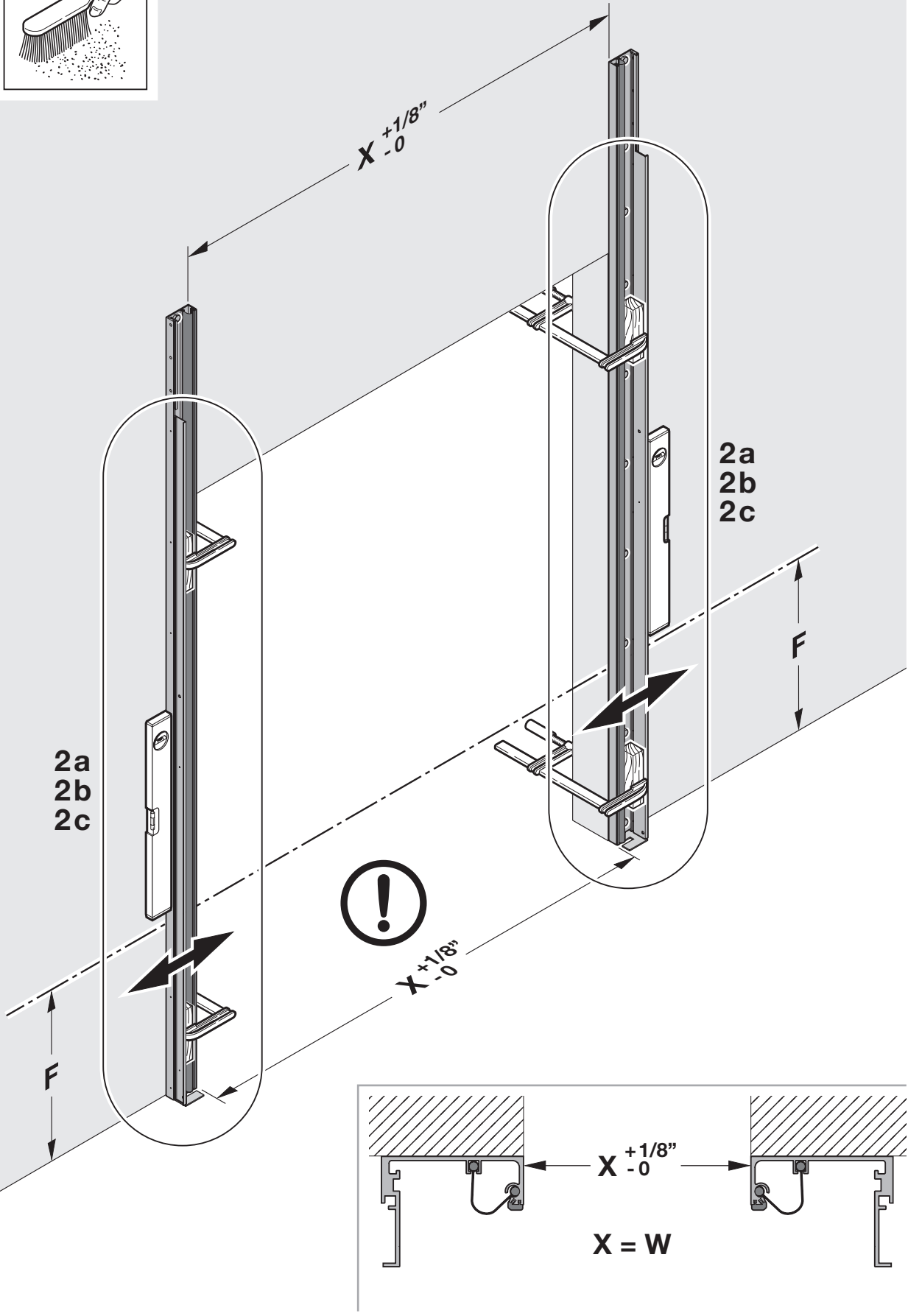


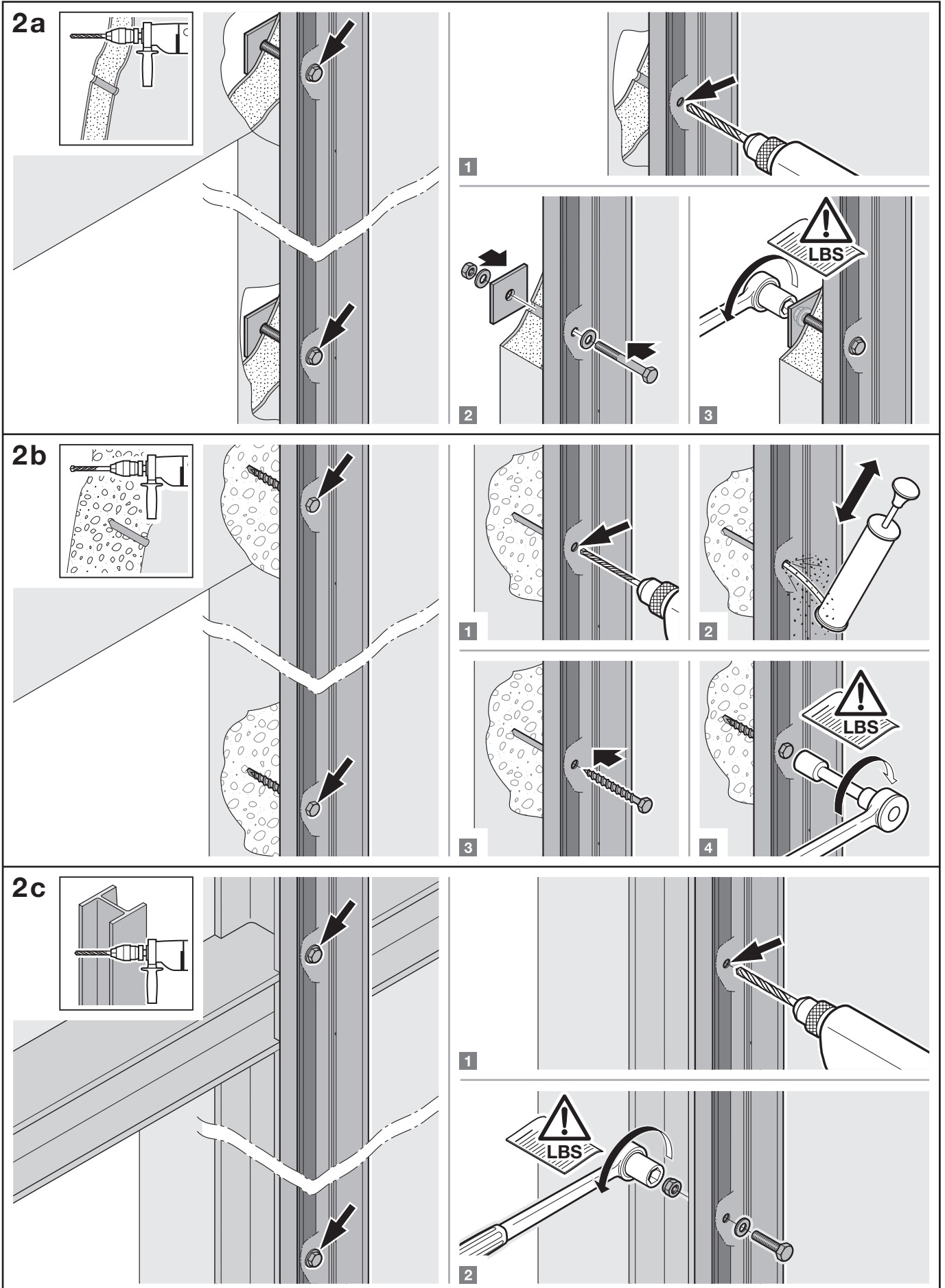
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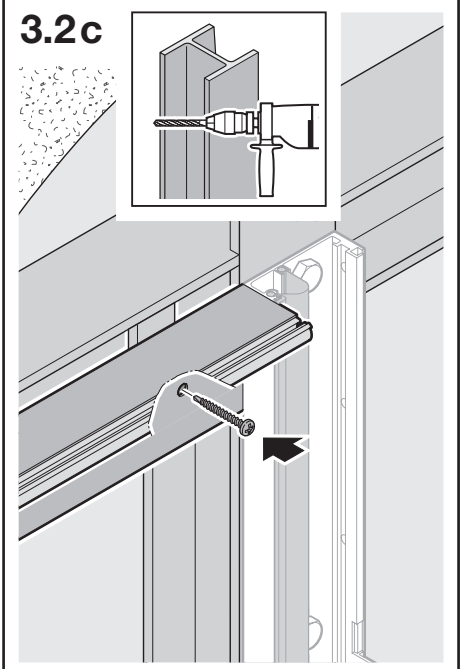
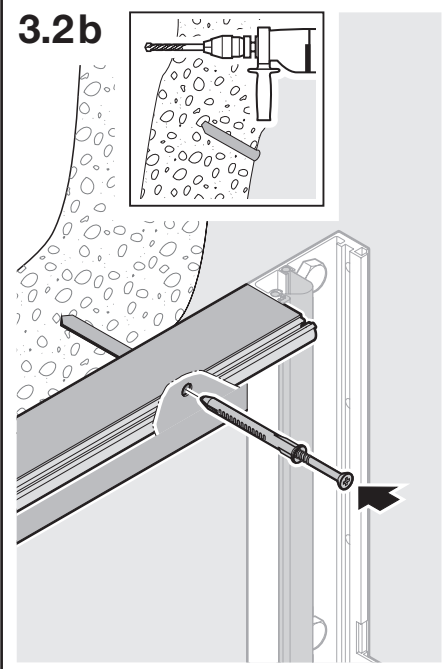
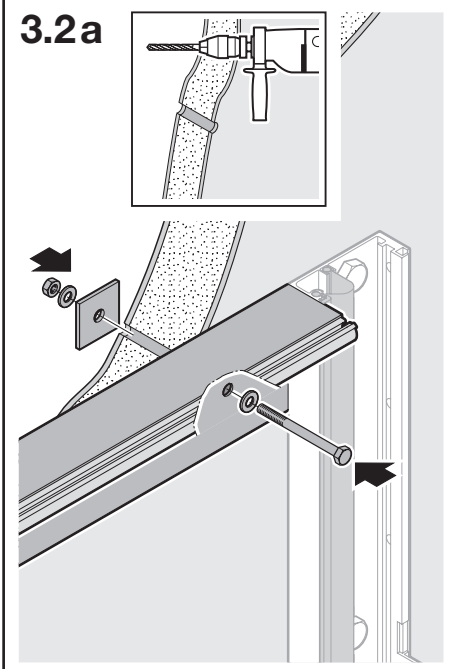
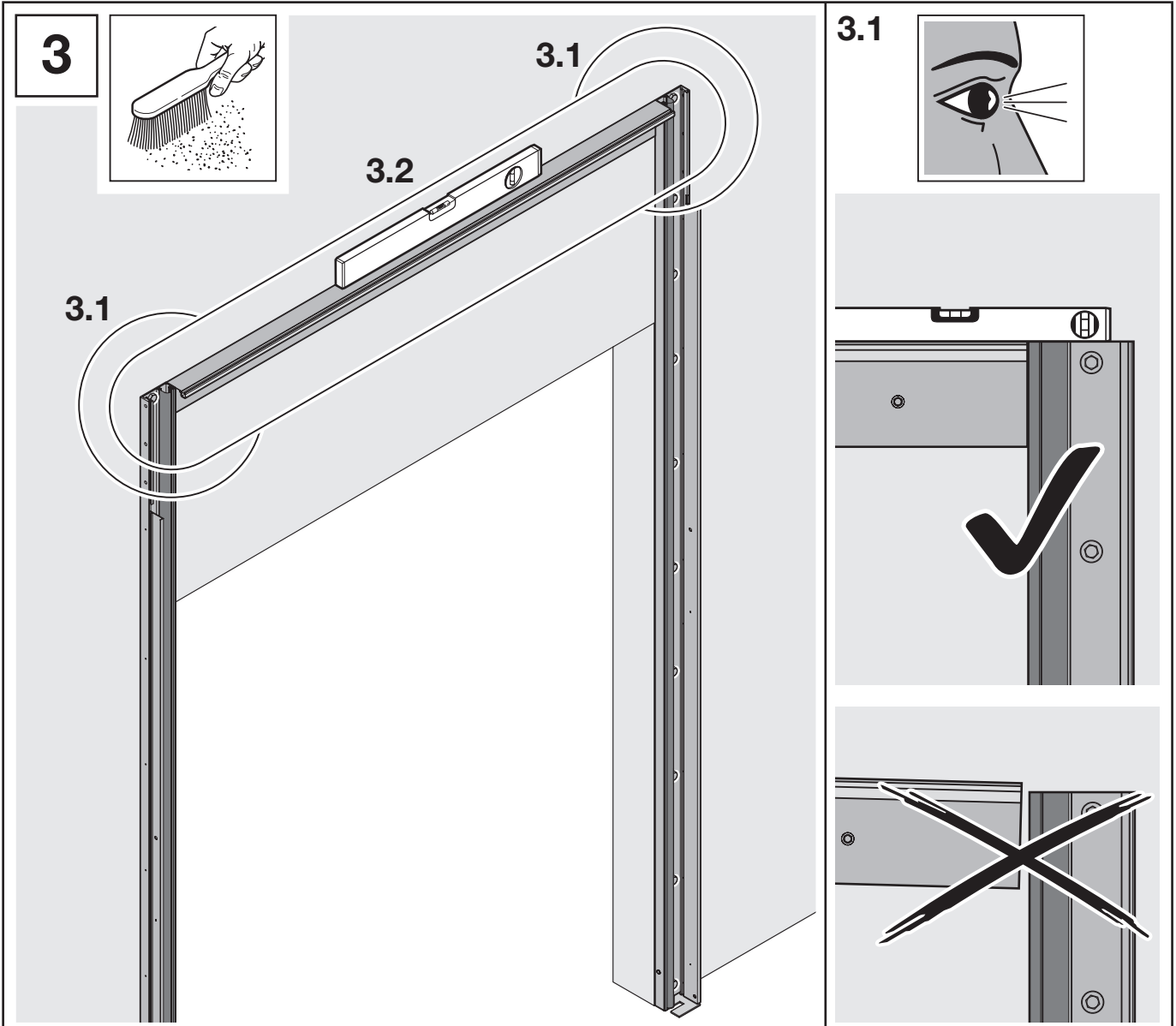


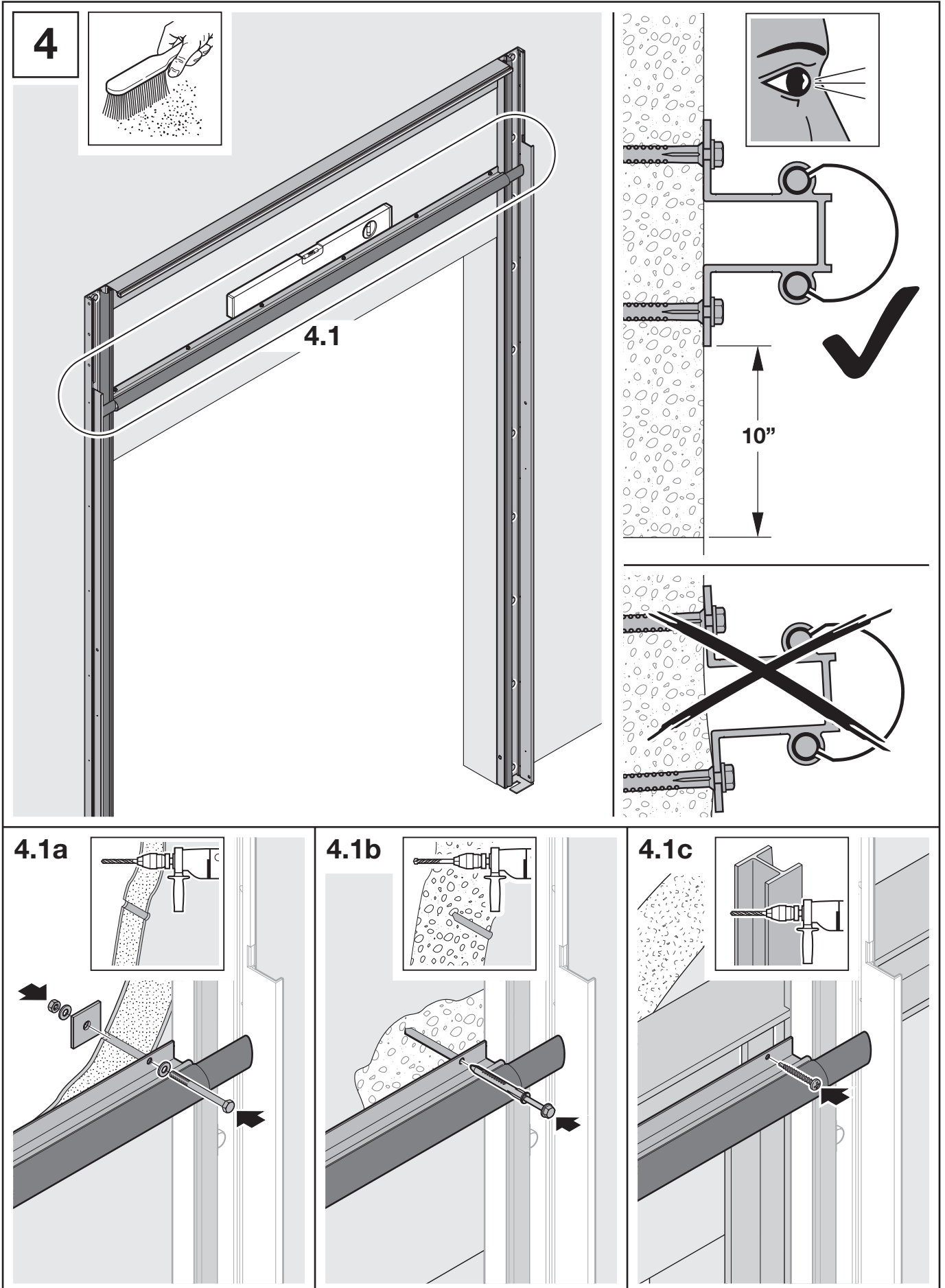


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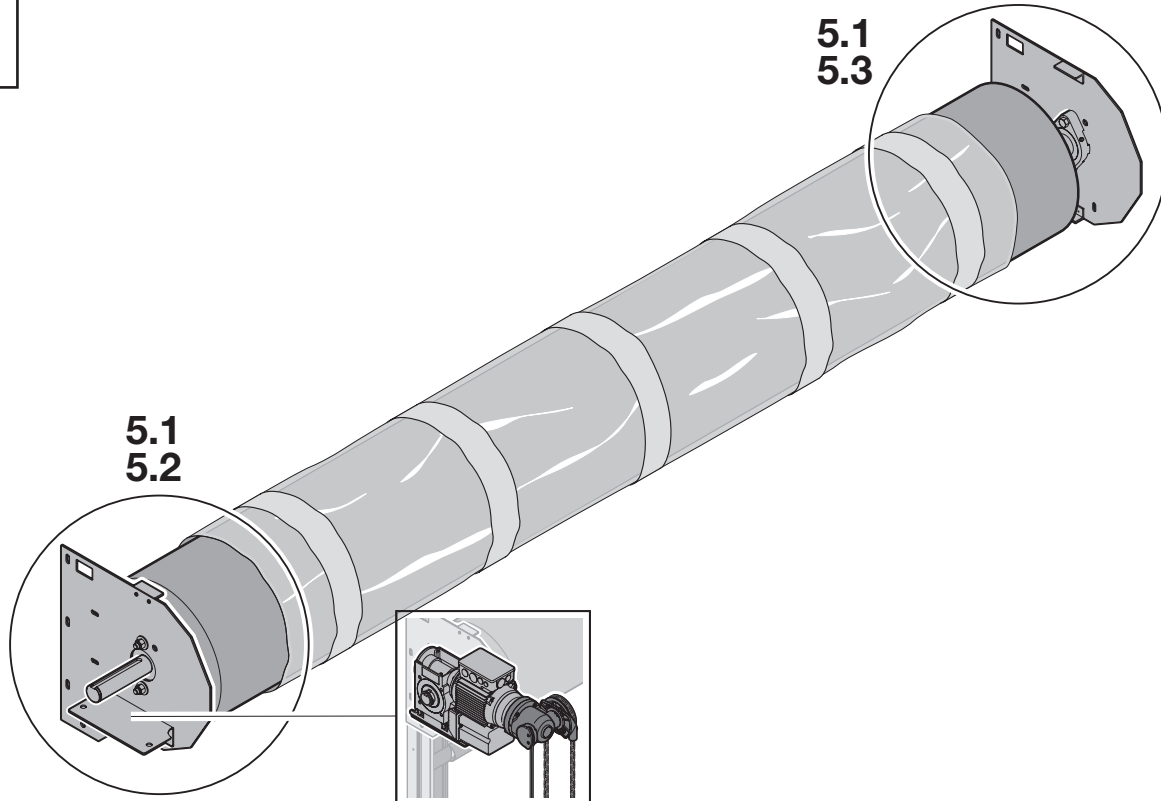




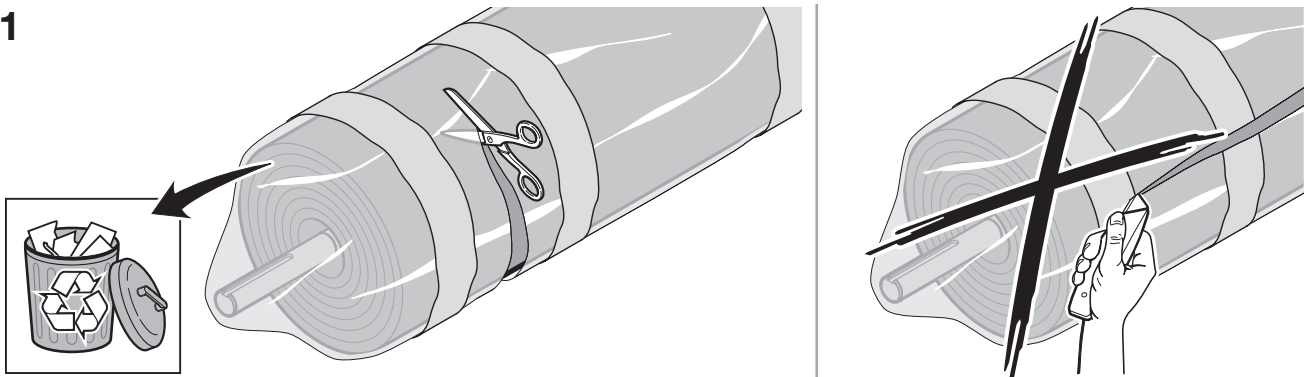




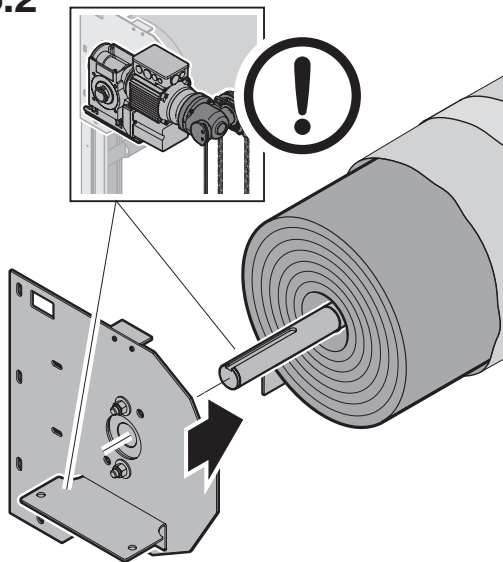
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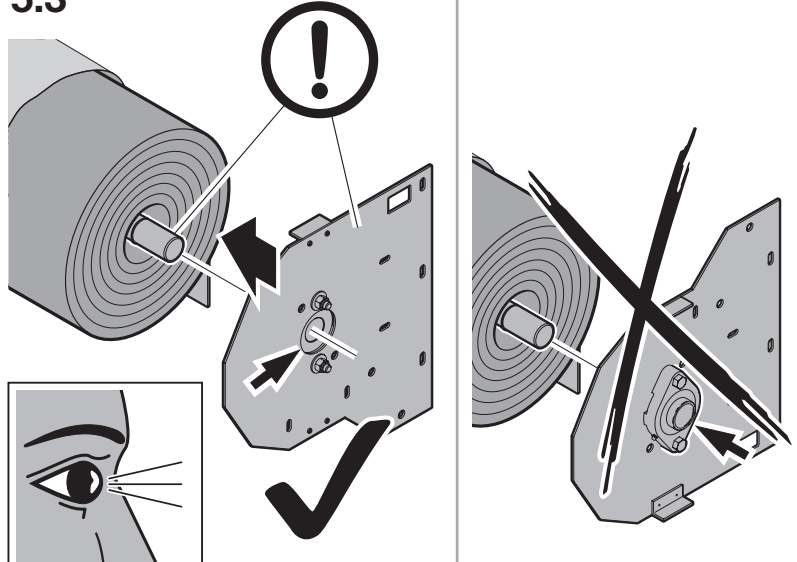
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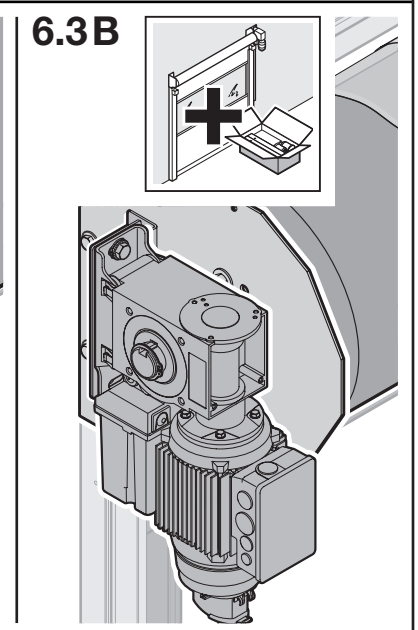
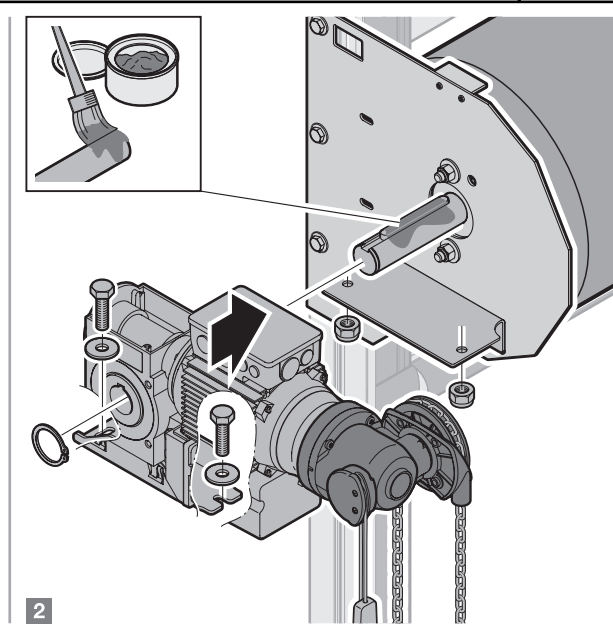
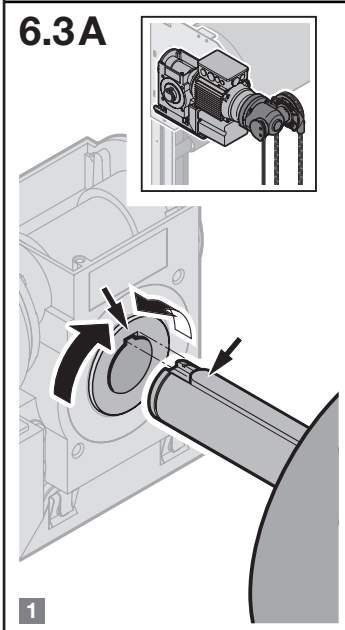
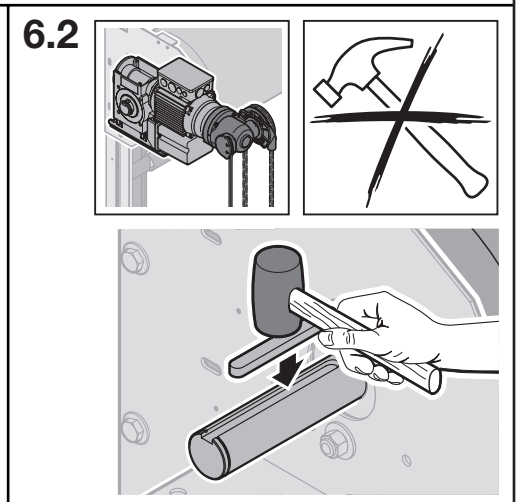
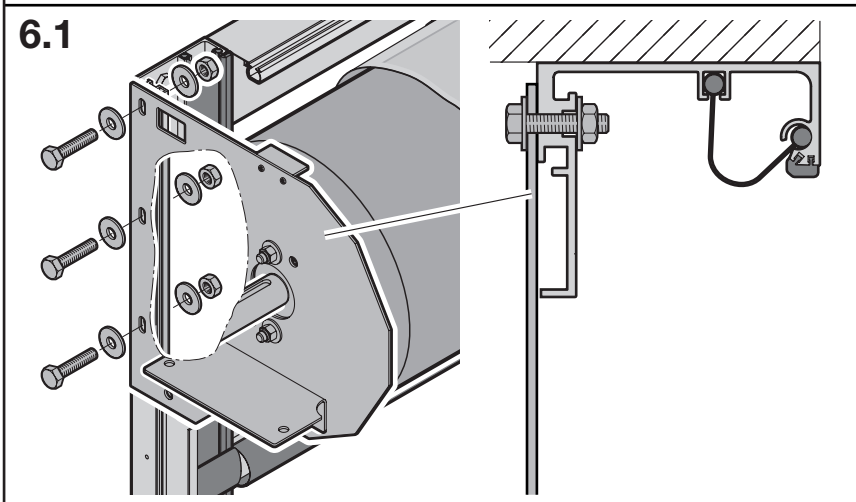
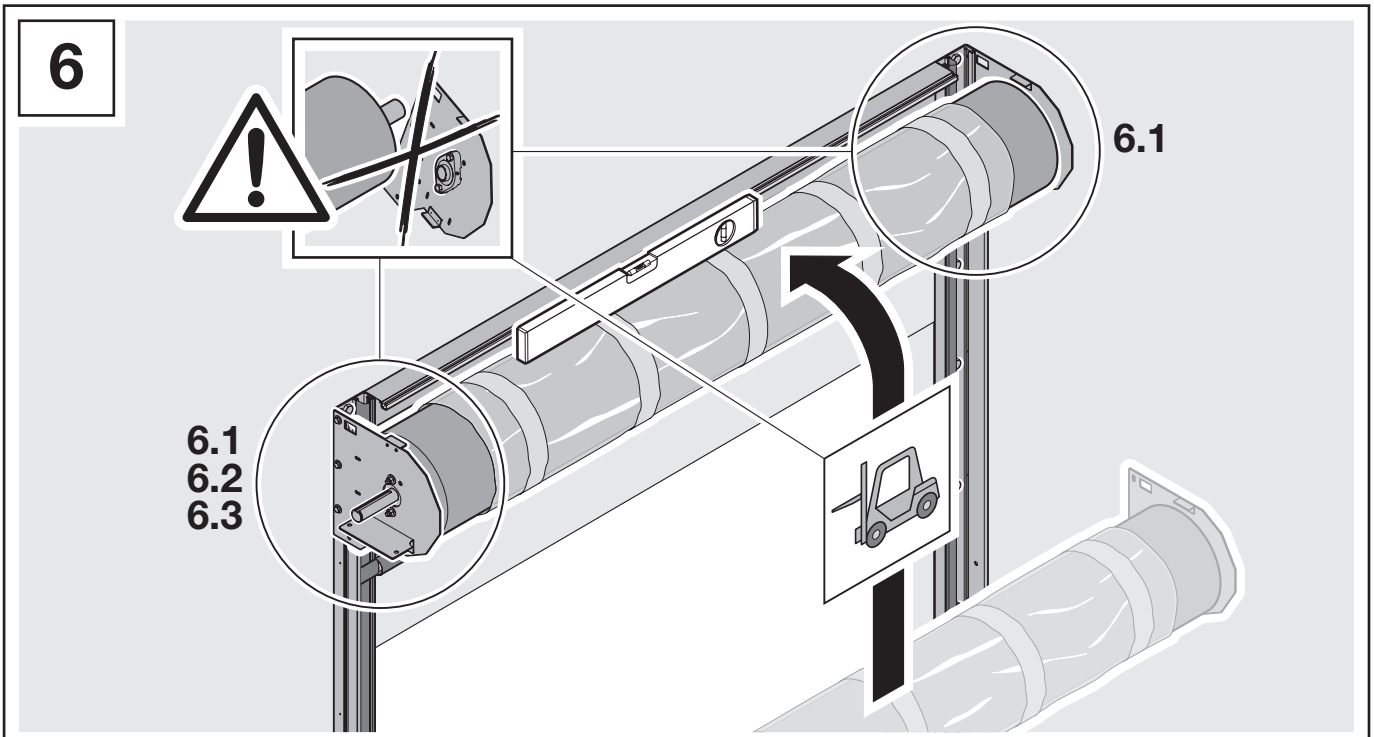


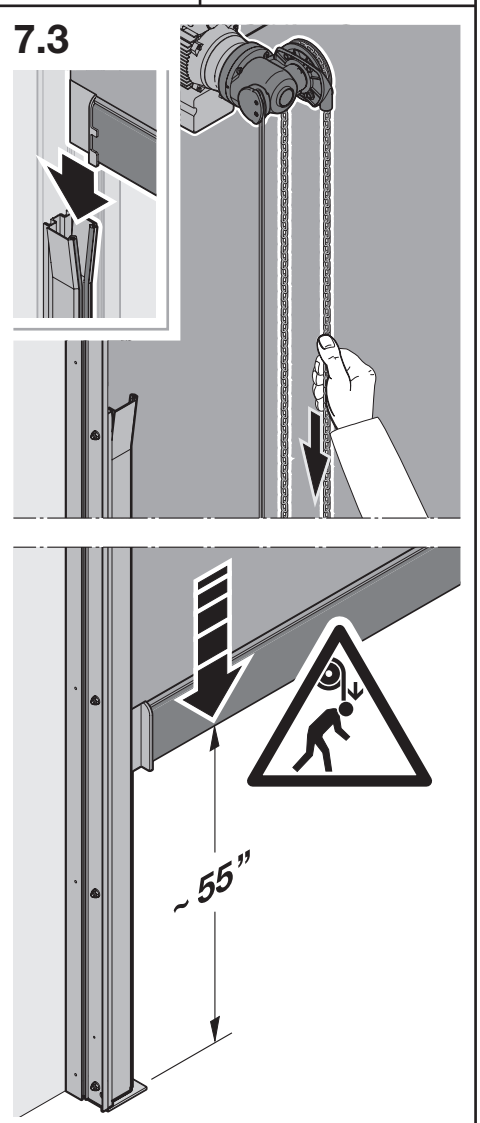
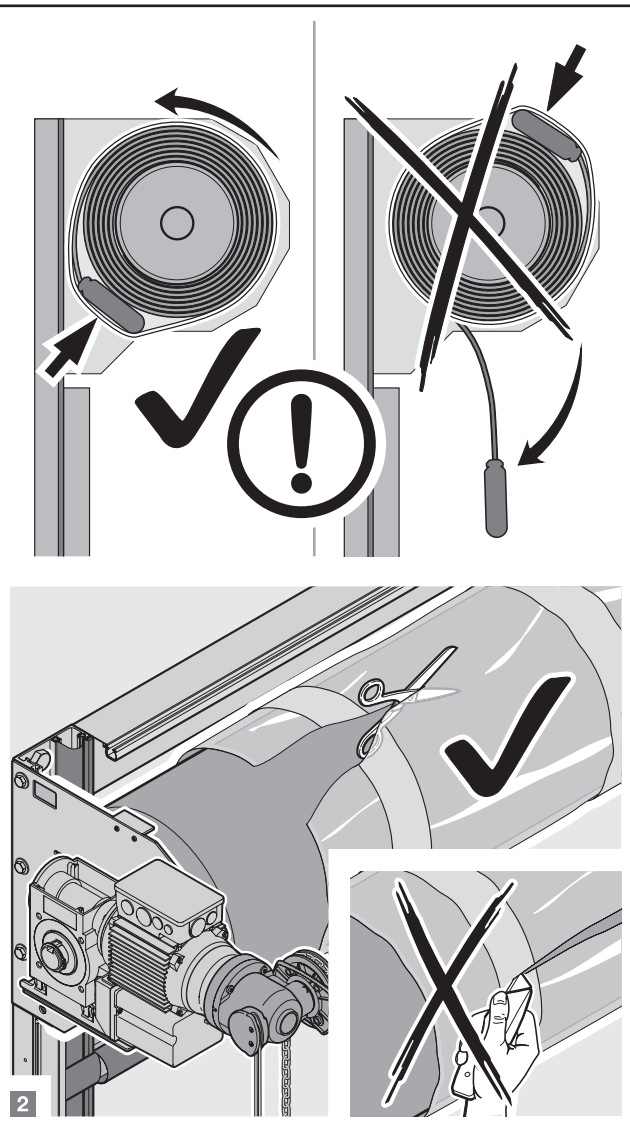
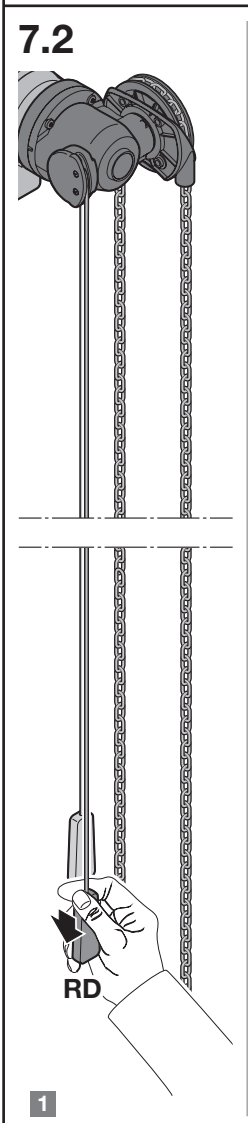
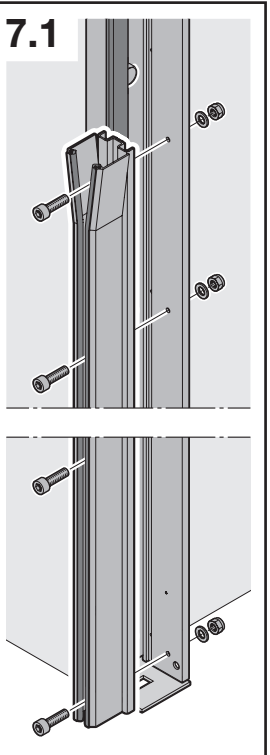
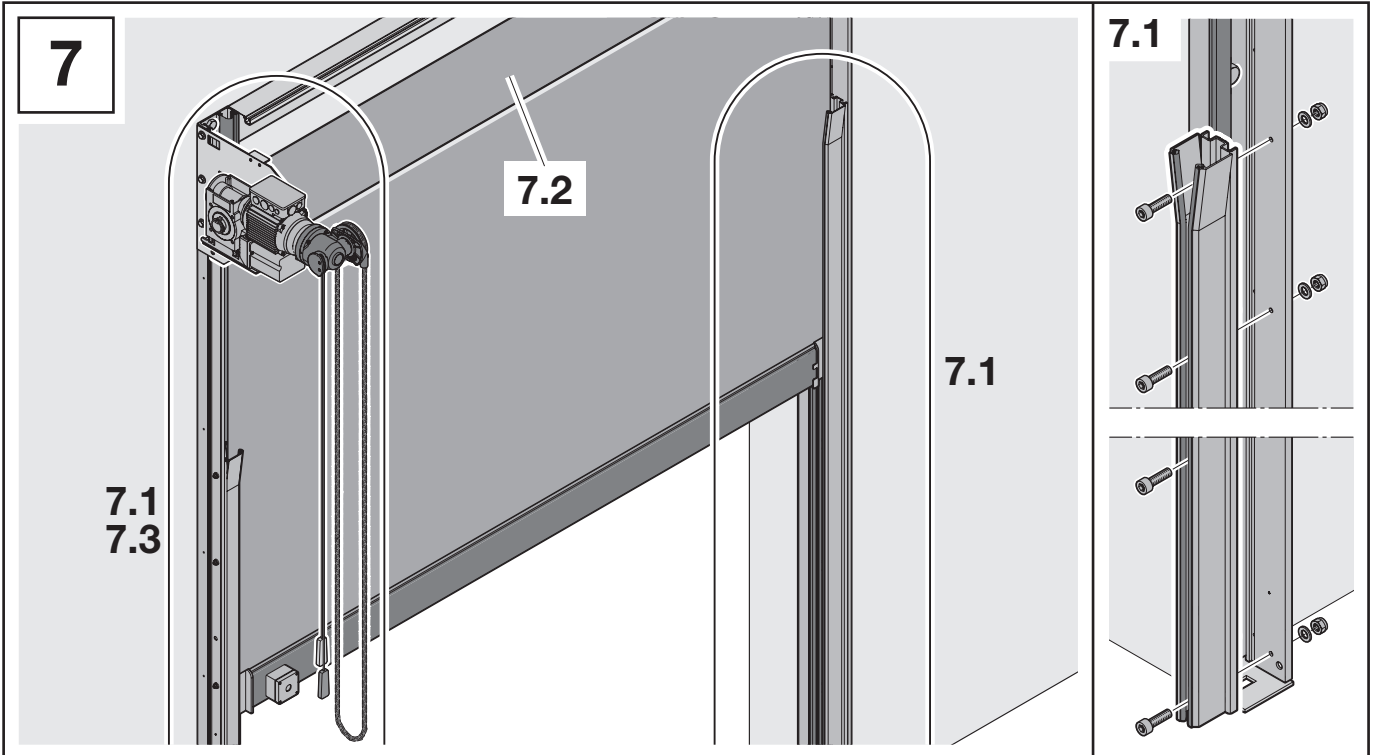
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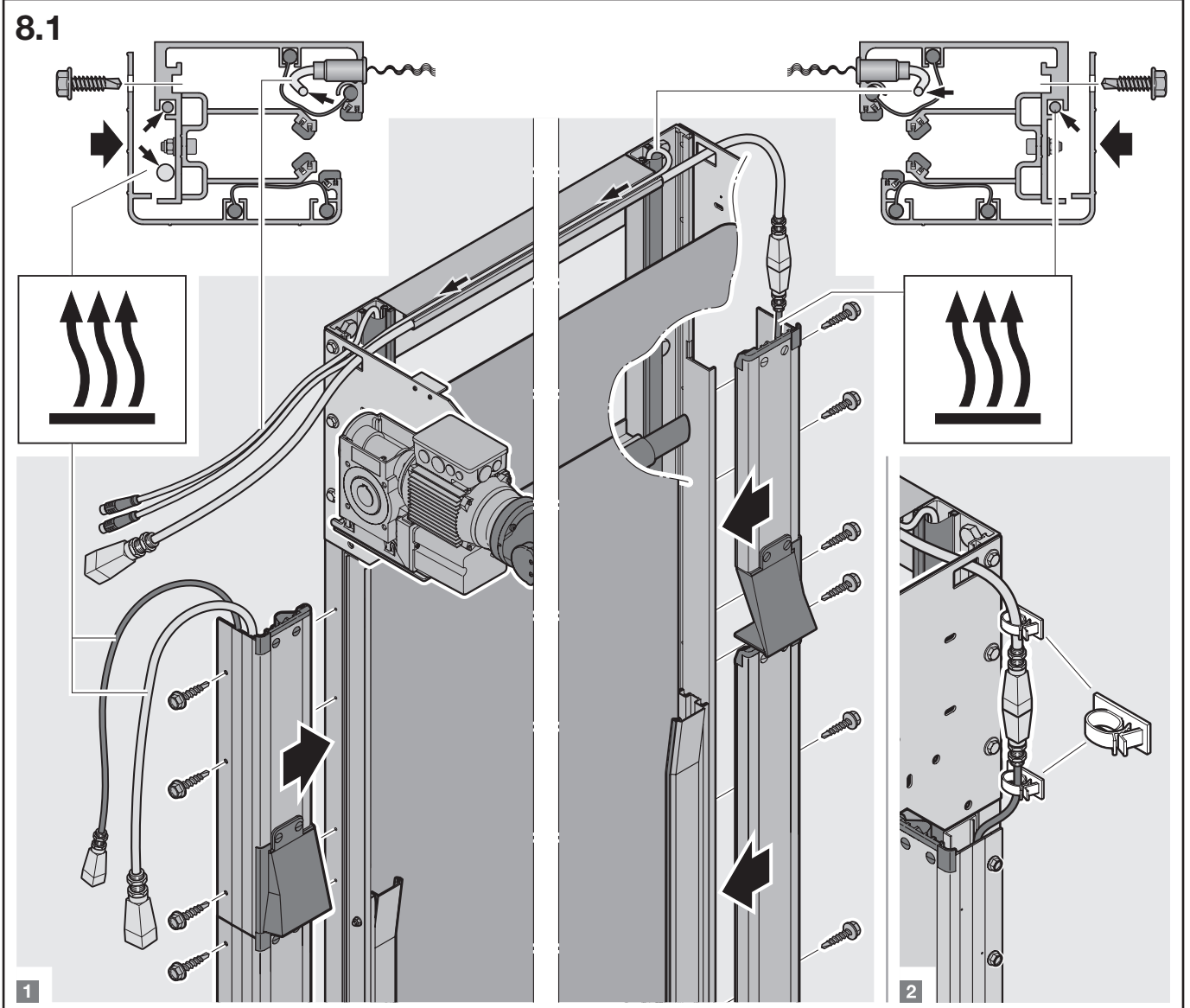
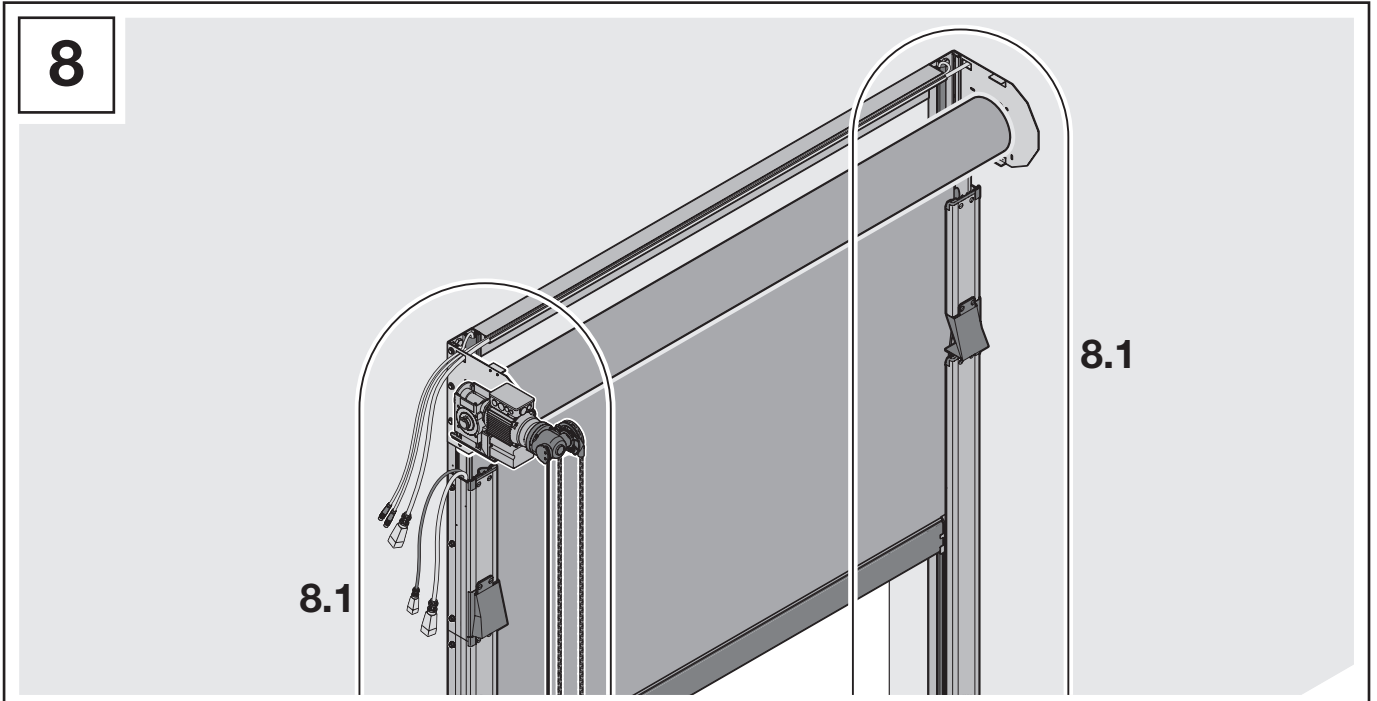


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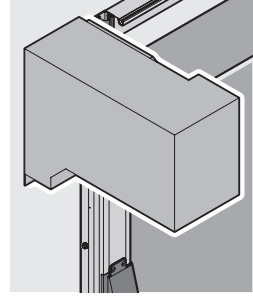
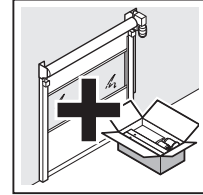
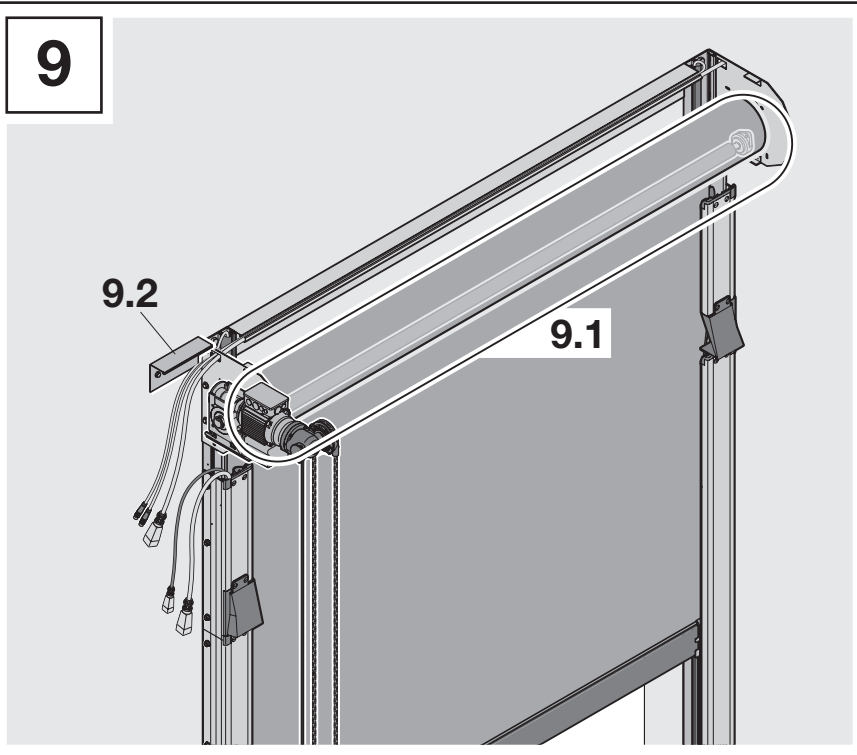




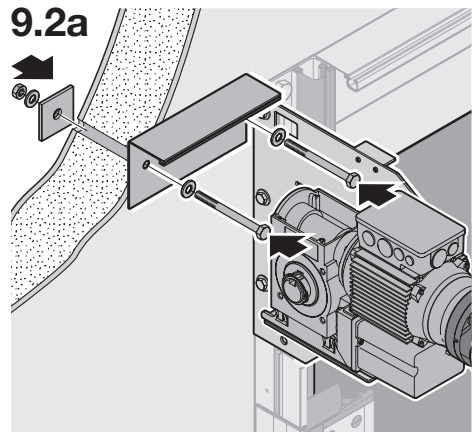
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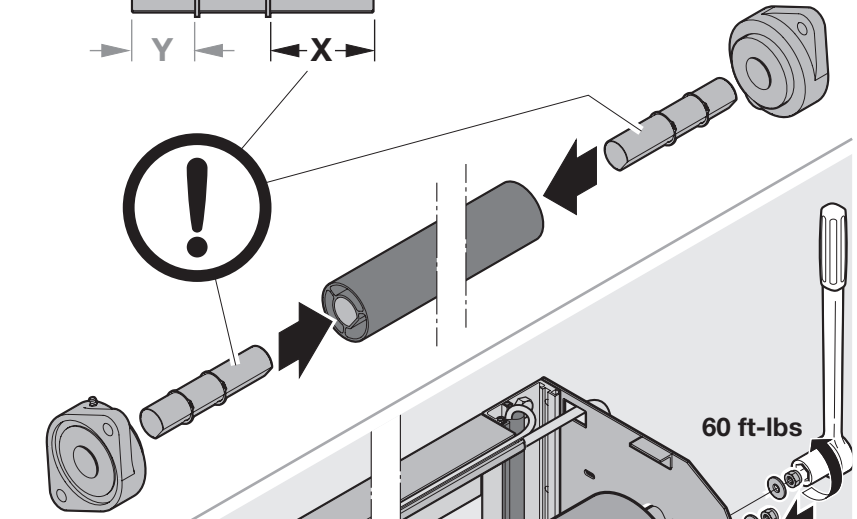
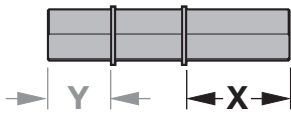
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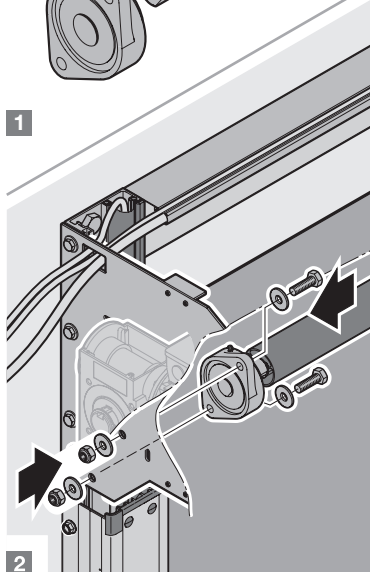
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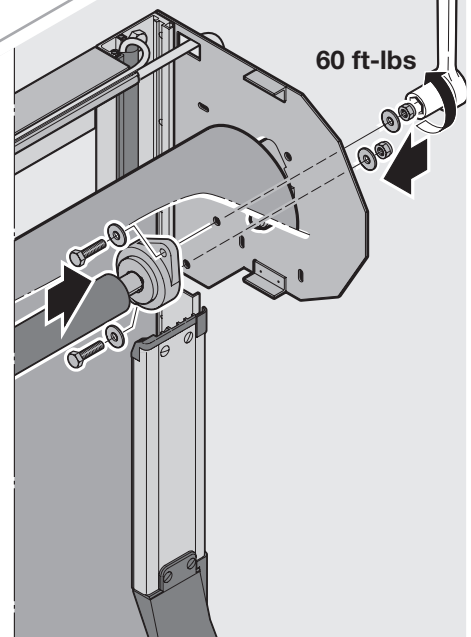
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1



2

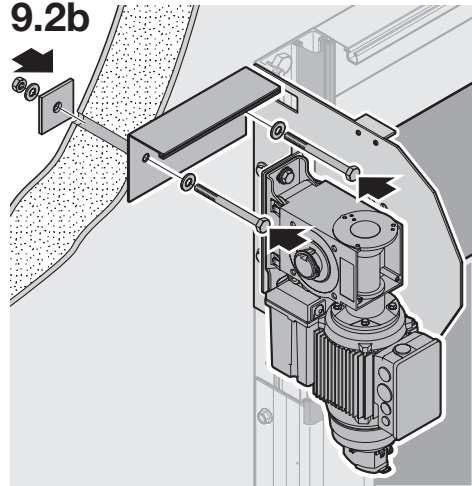


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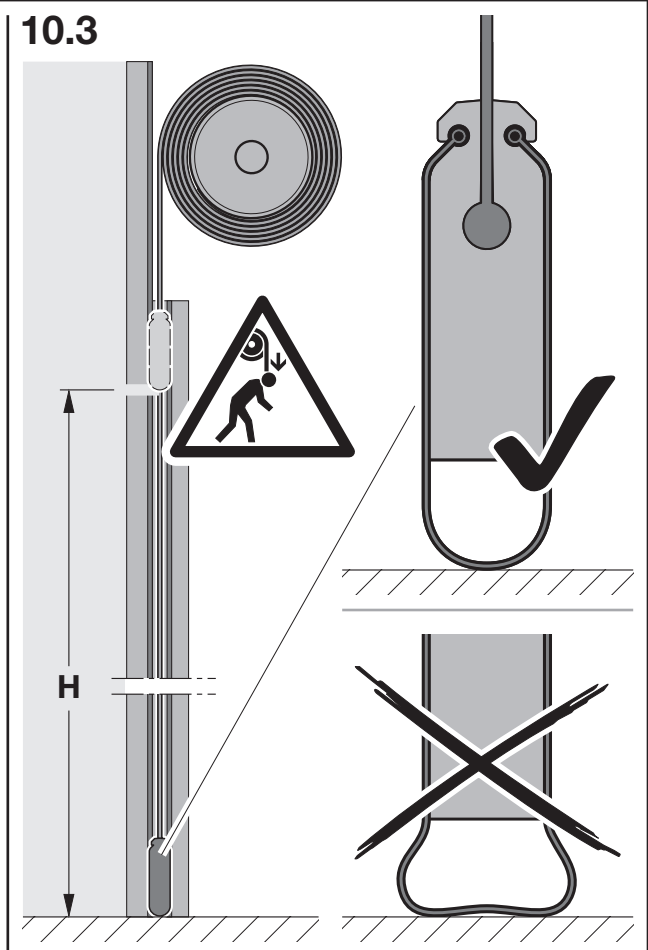
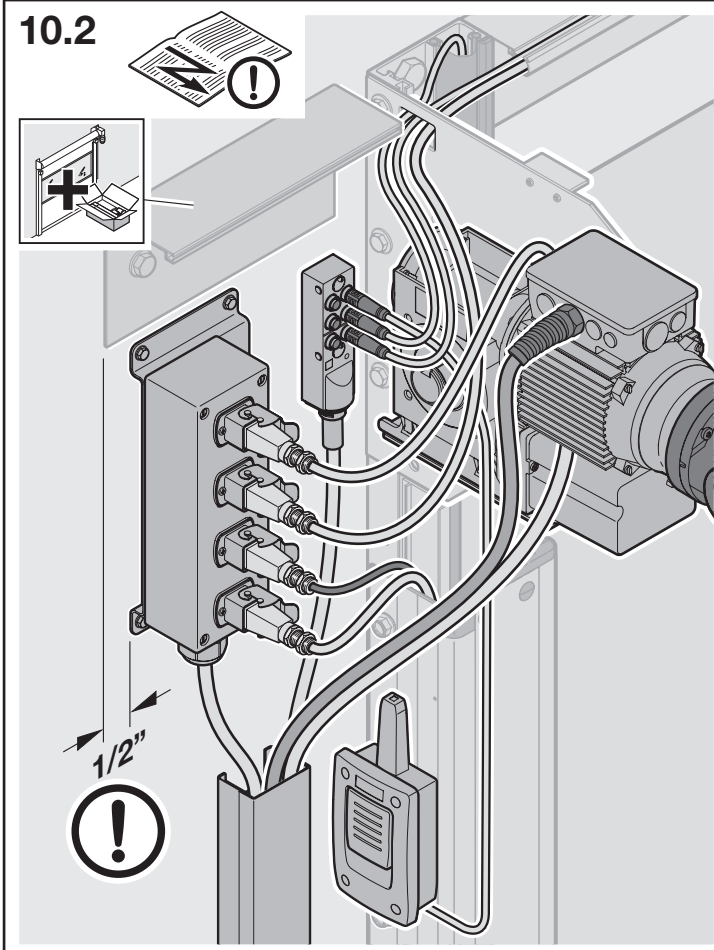
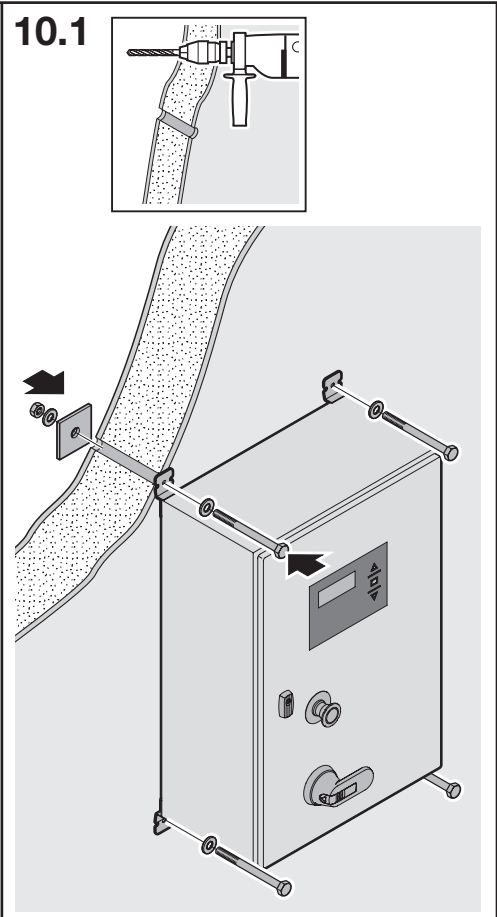
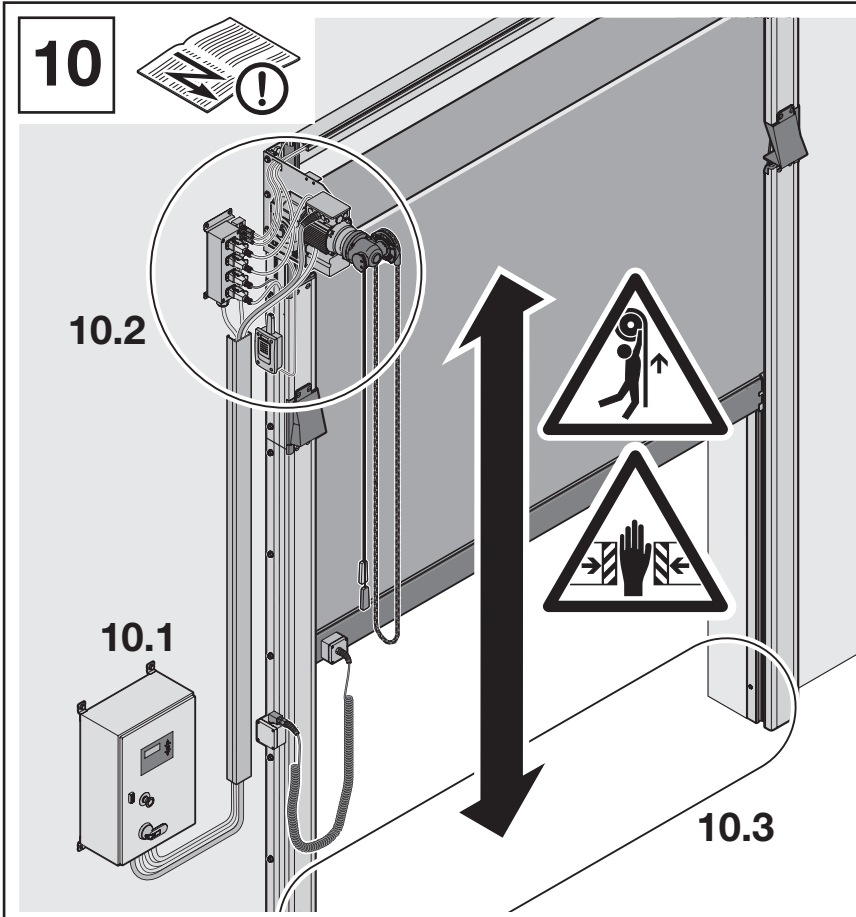
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1/2"

9.2b



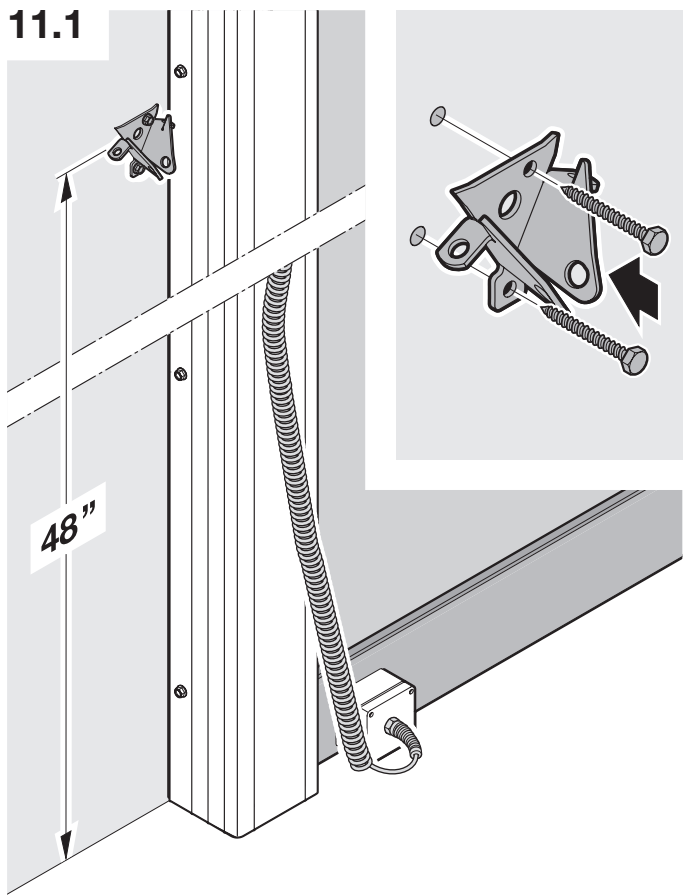
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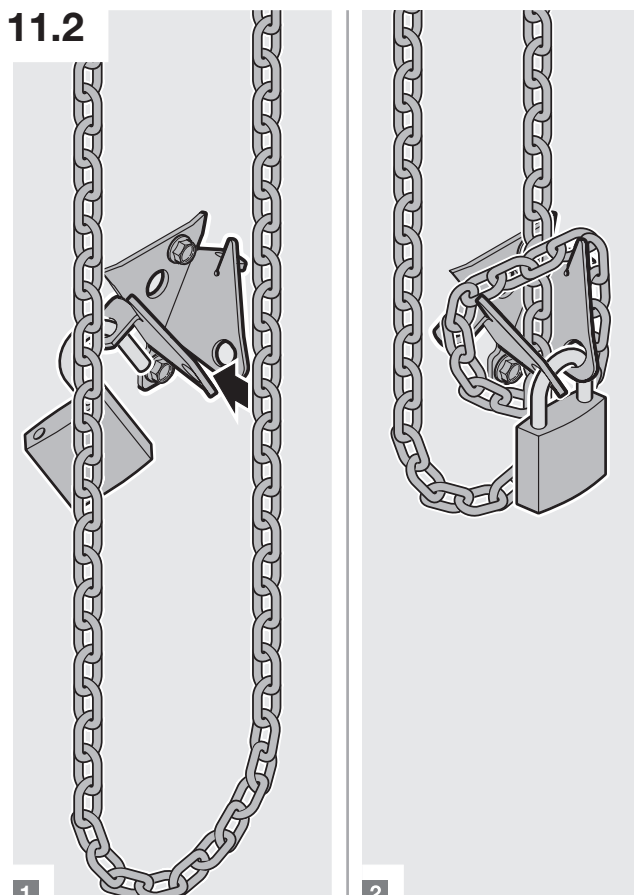
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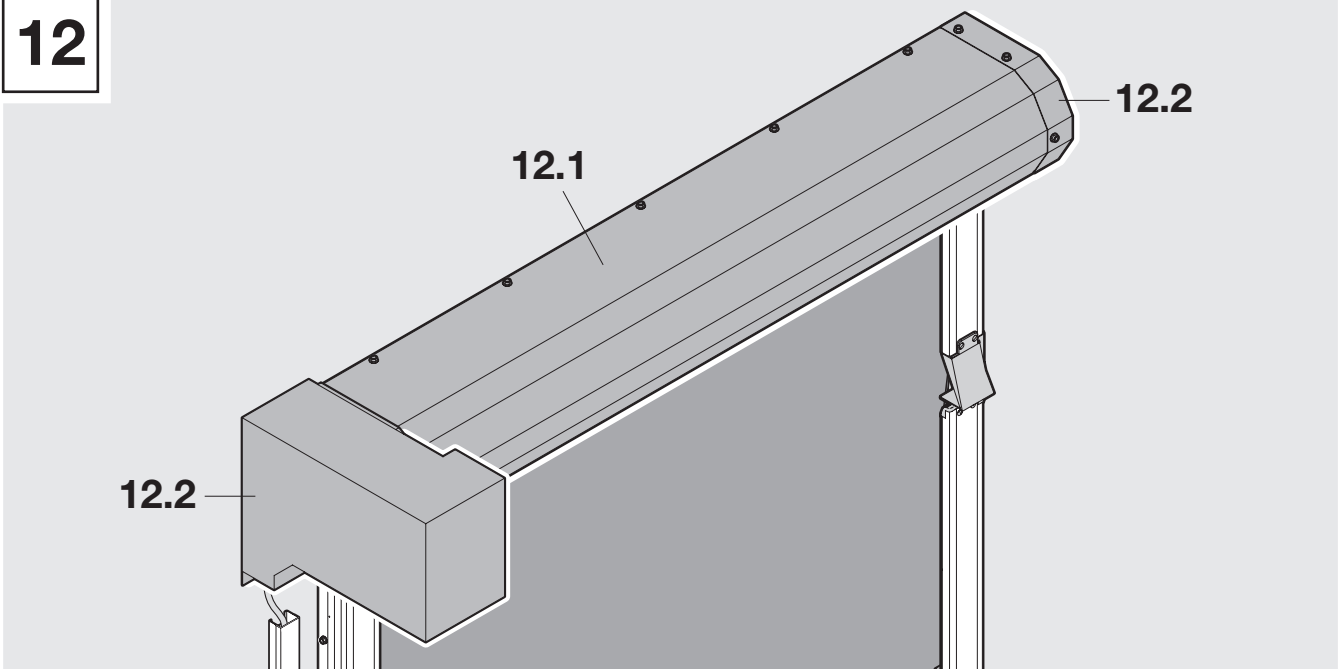
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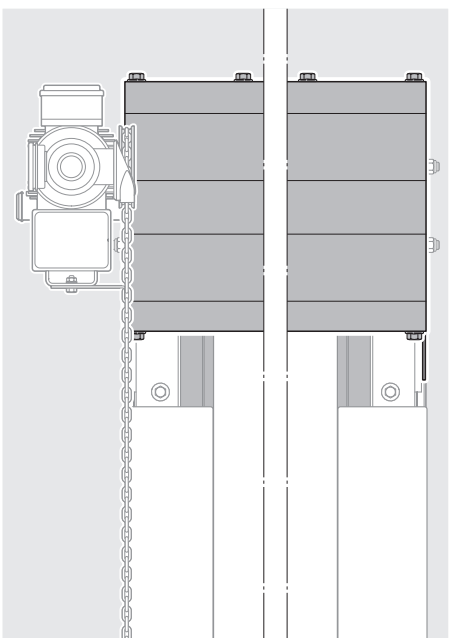
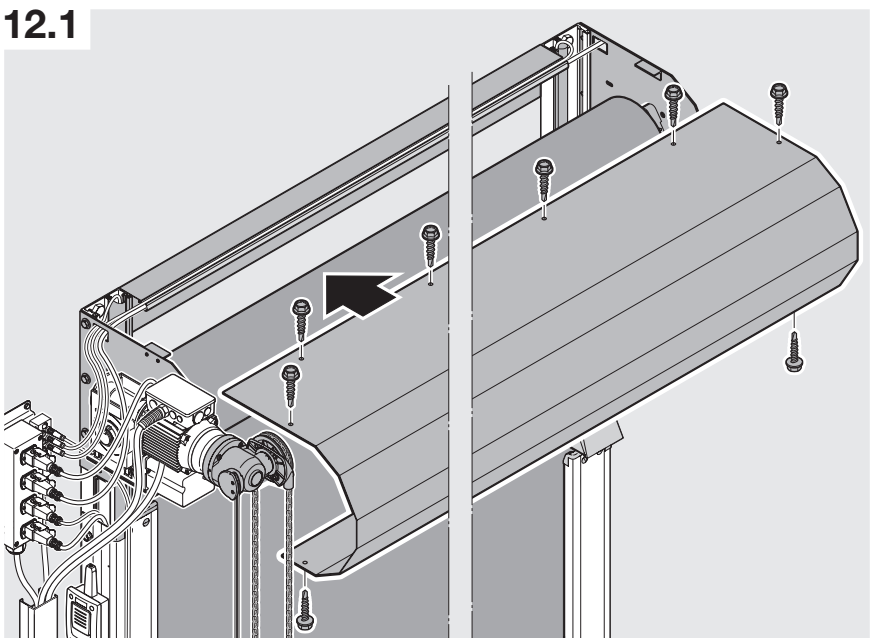
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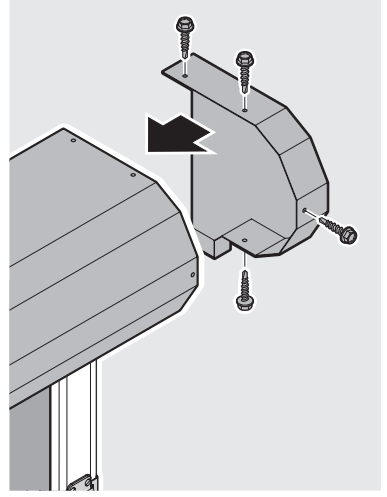
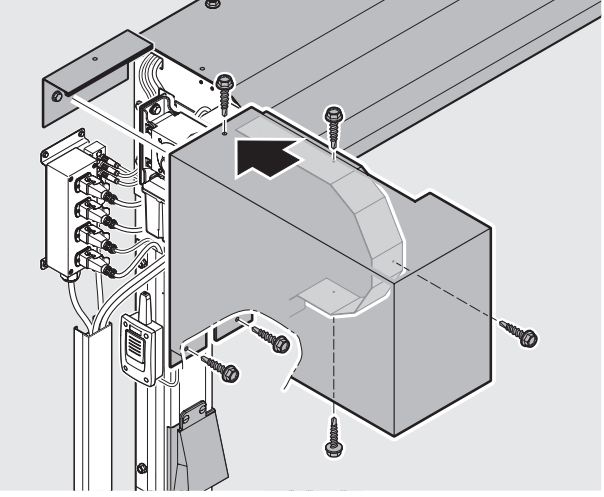
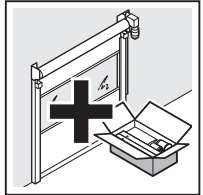
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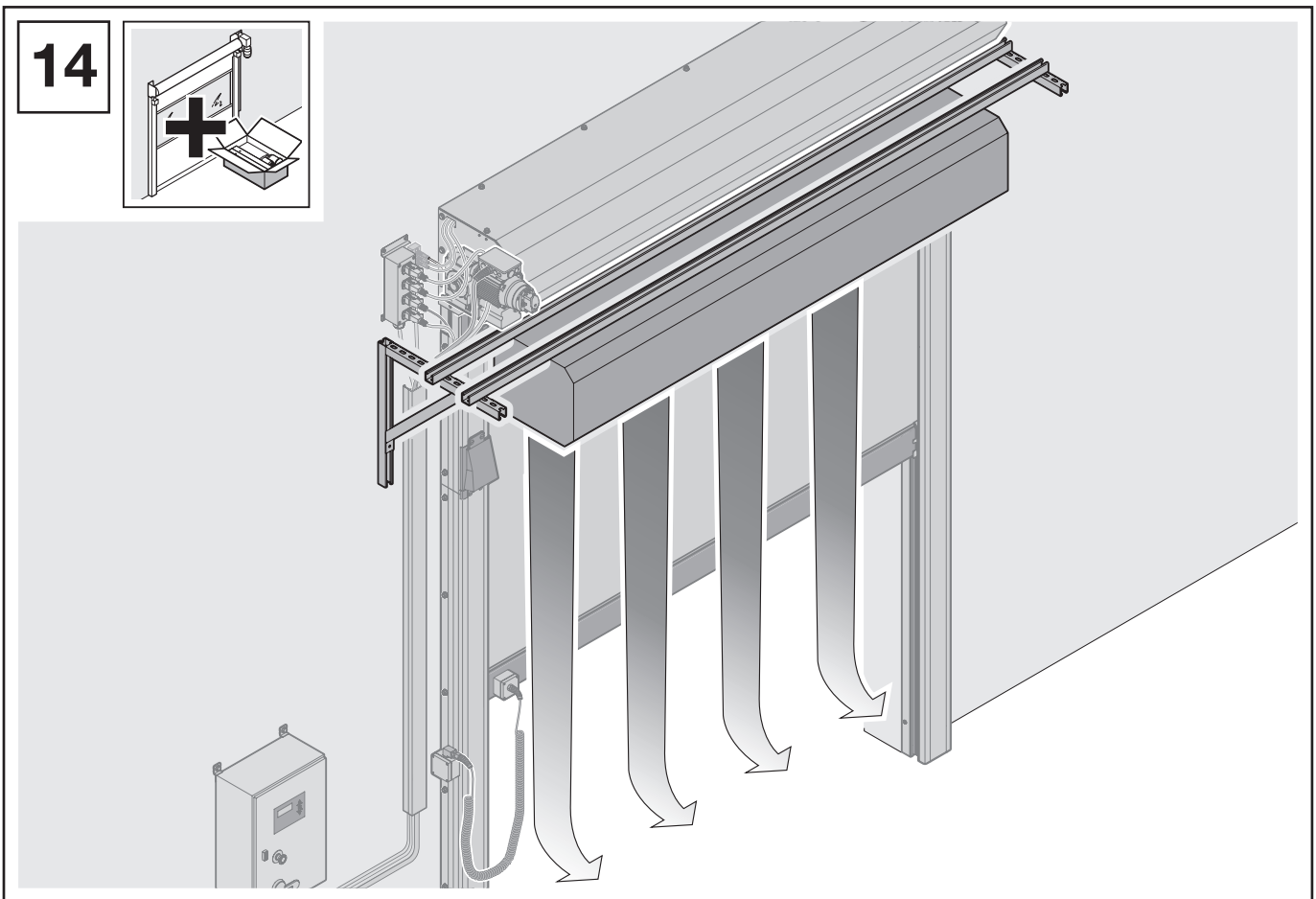
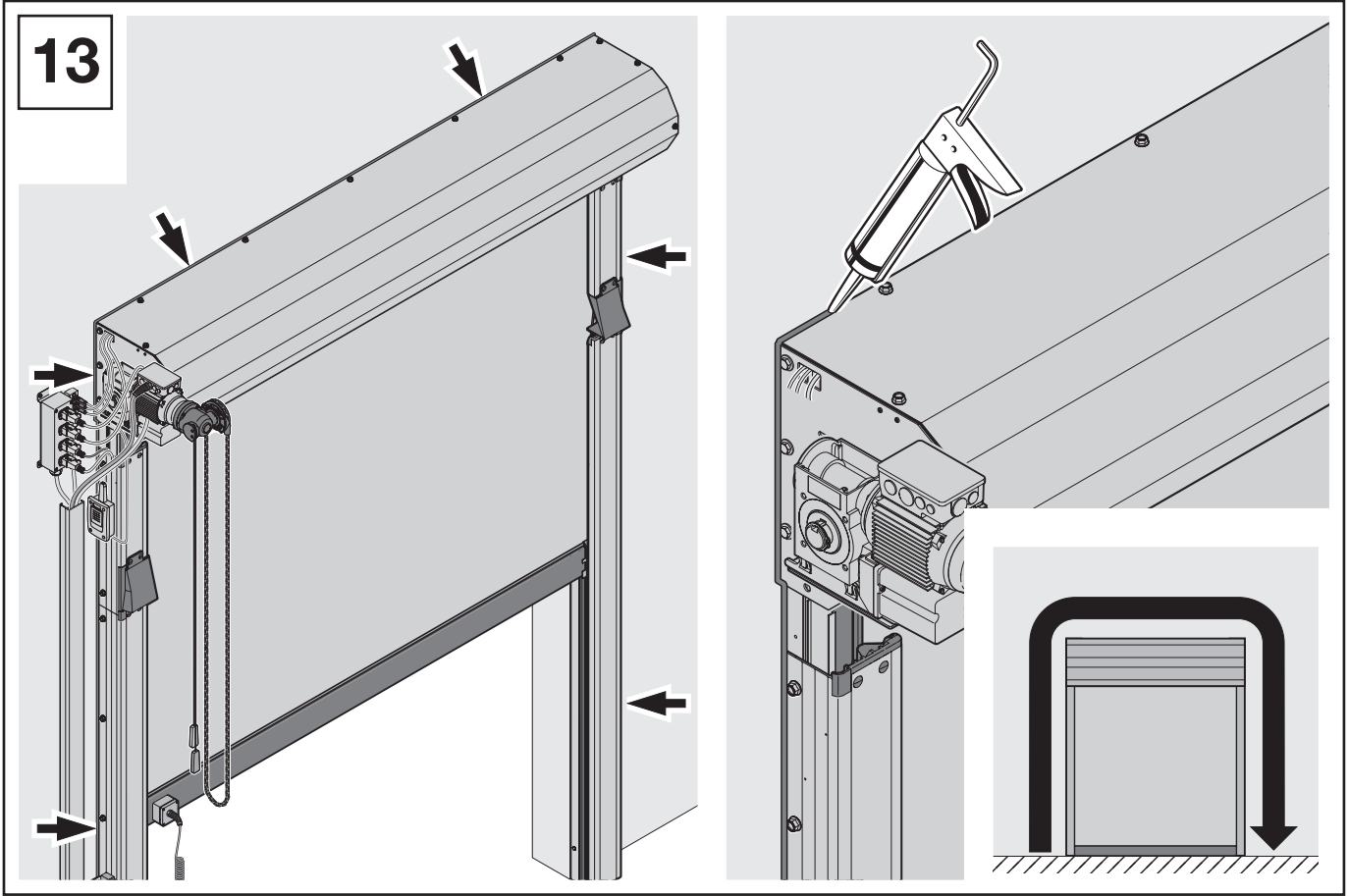


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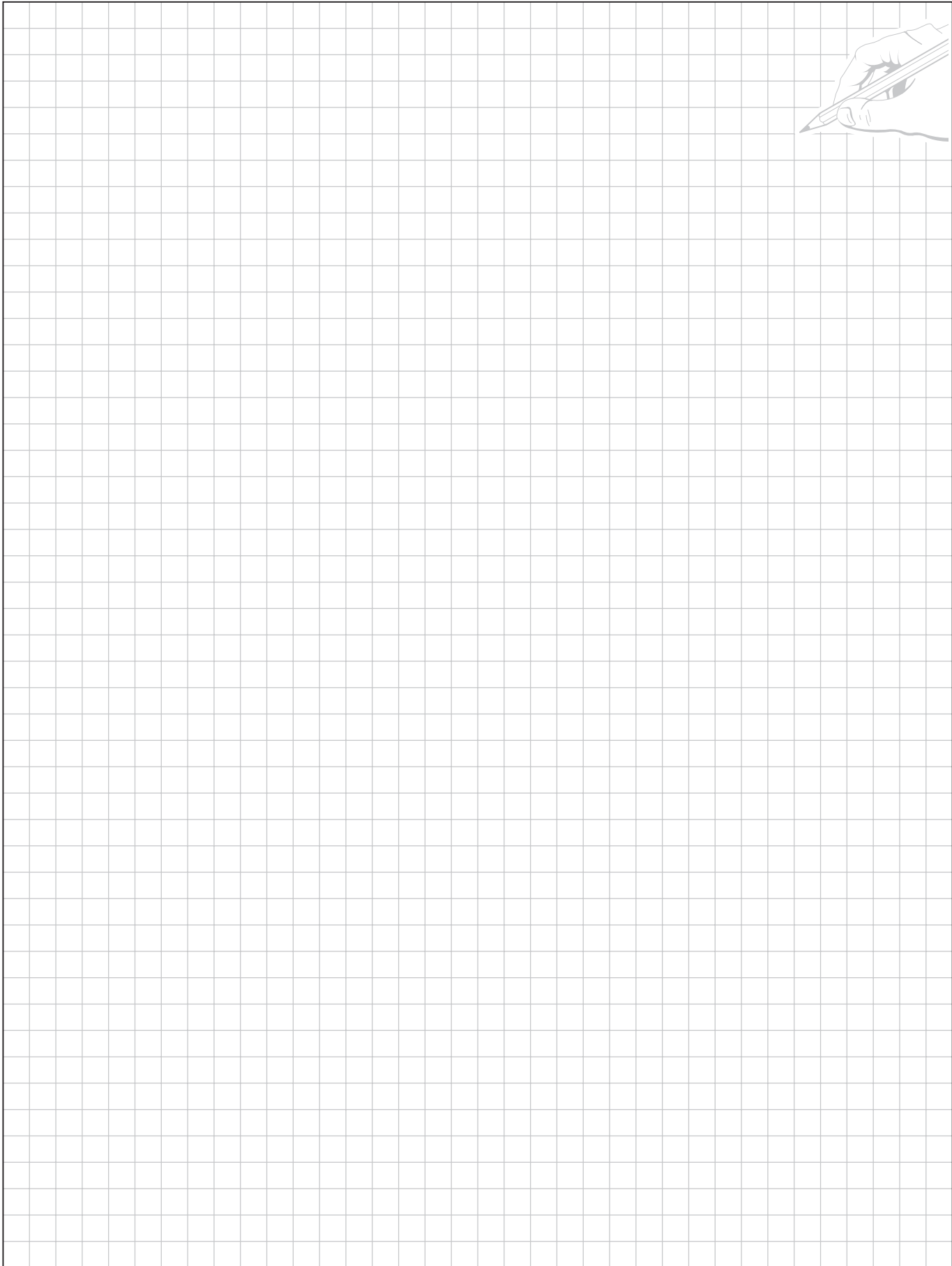


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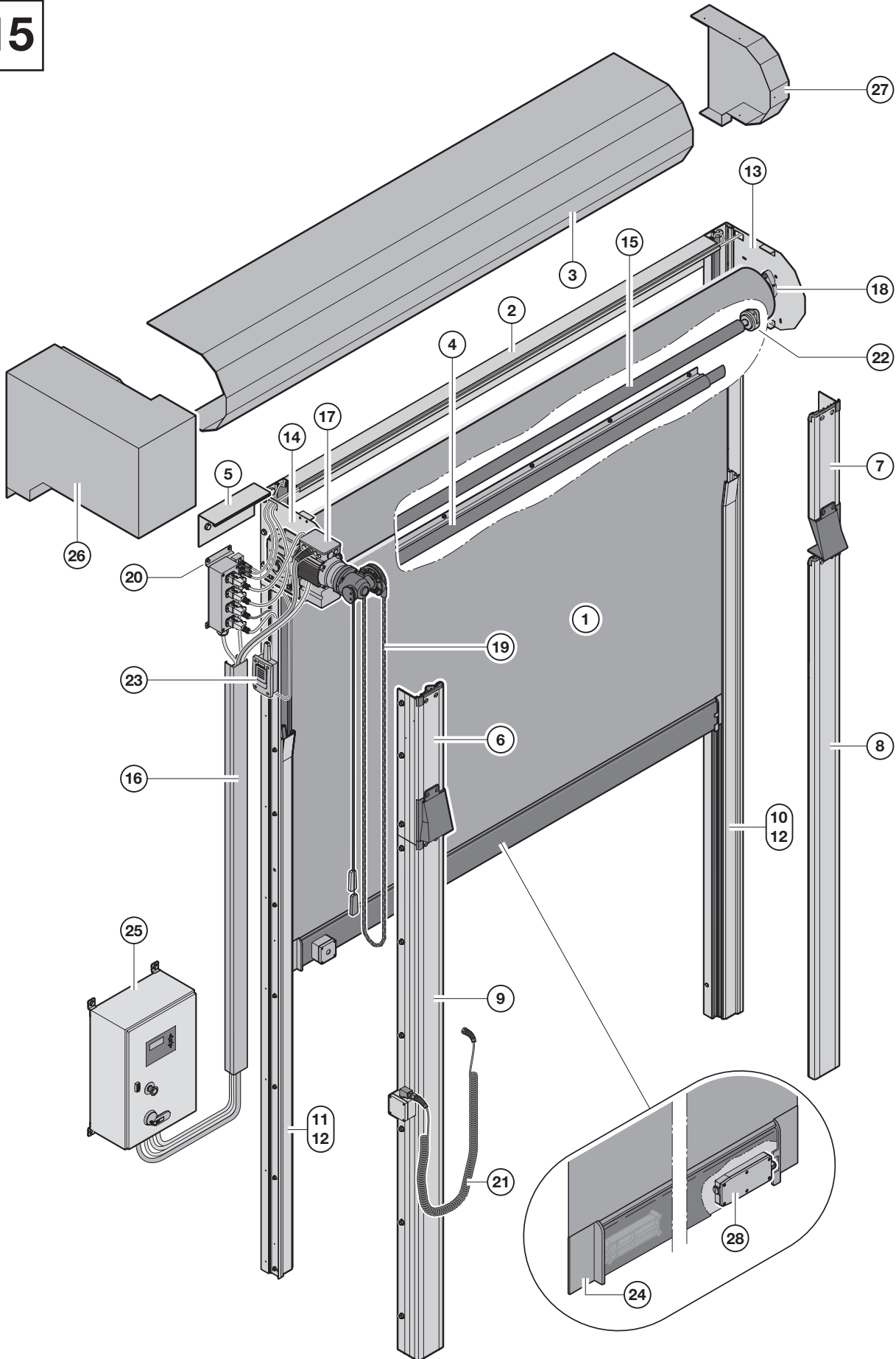




NOTES



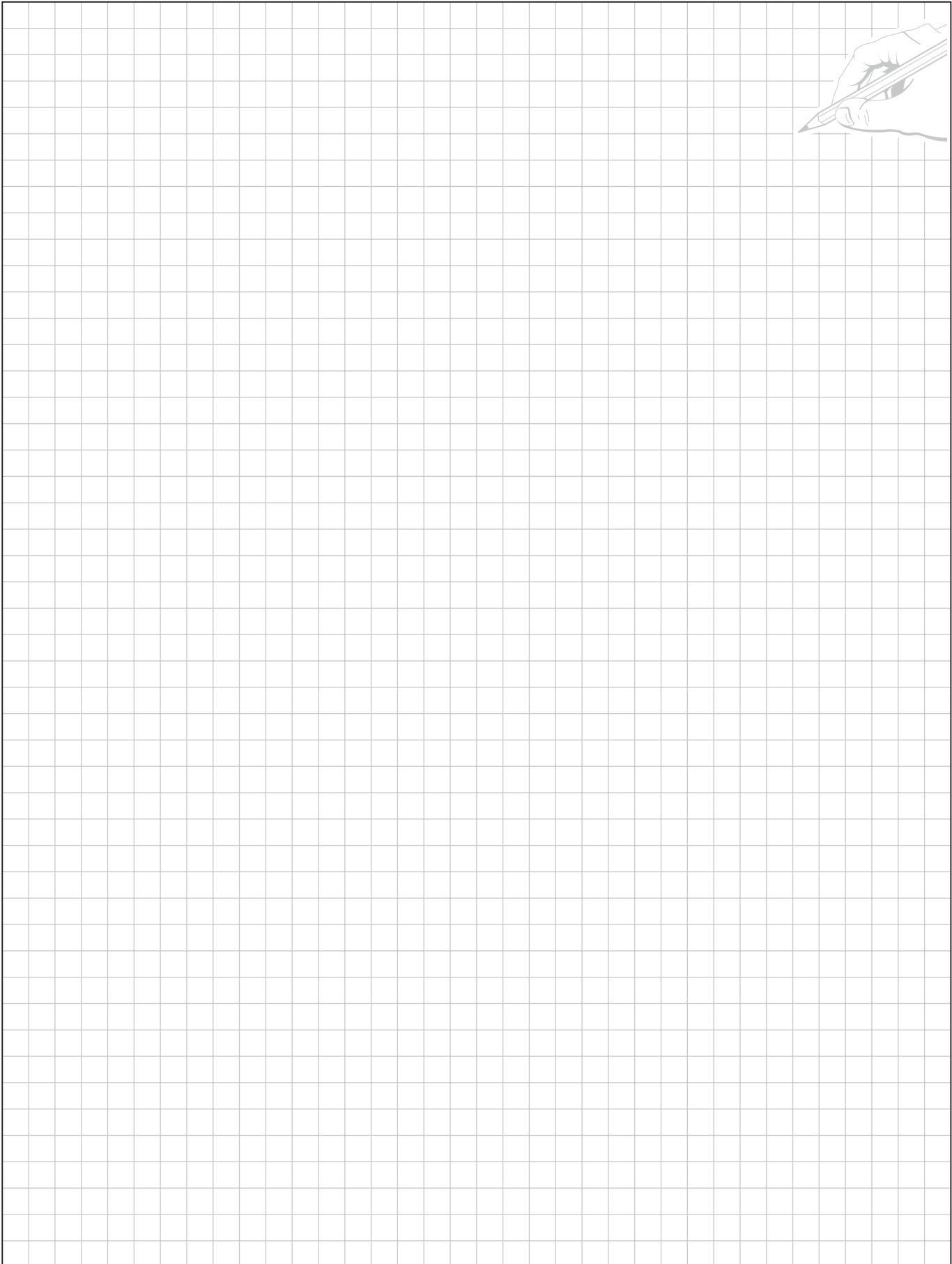
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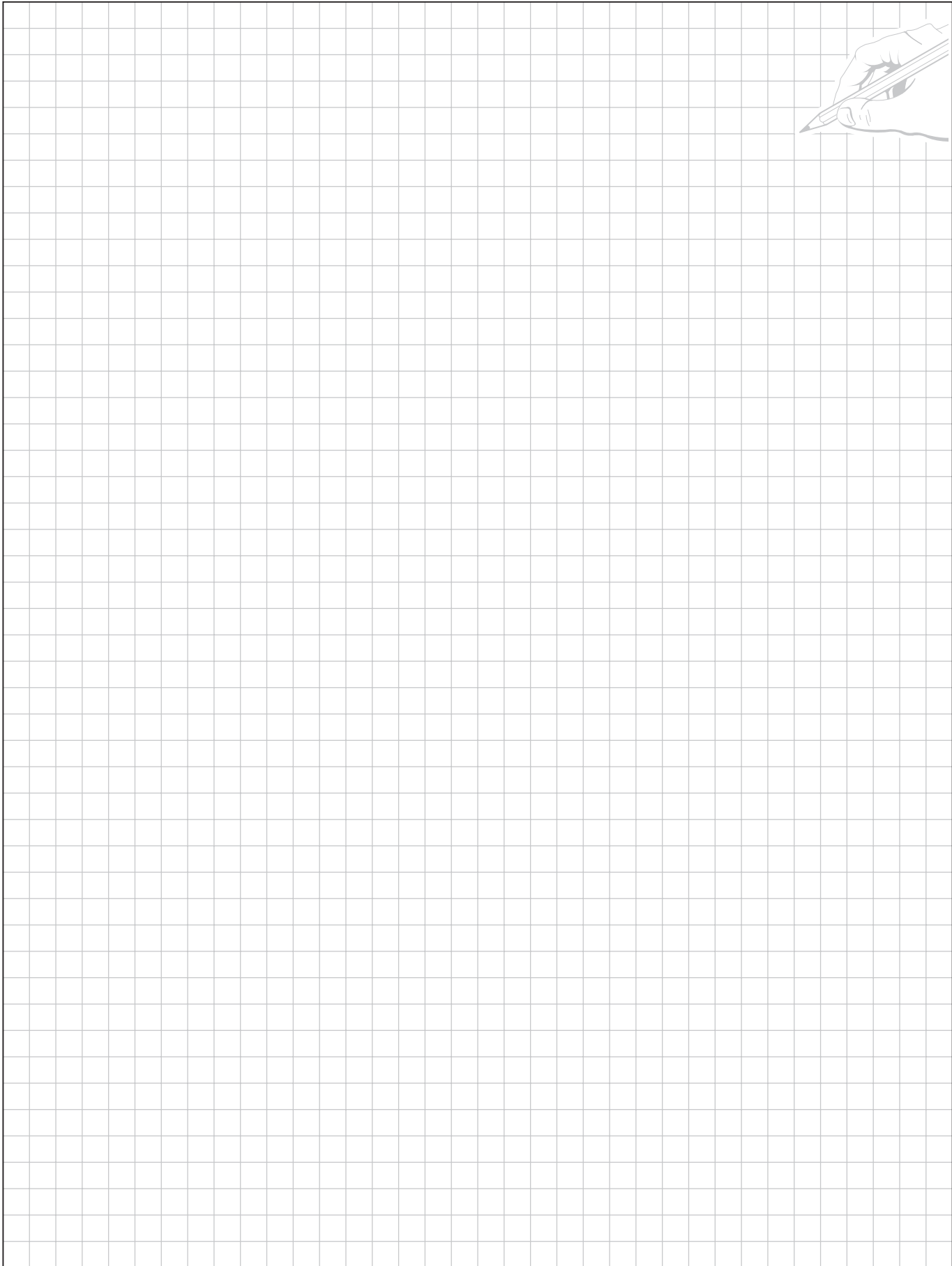
Item	Order No.	Designation
1	201-0199	HDCH2 CURTAIN ASSEMBLY Curtain and BB Assembly
2	208-0195	HOOD BRIDGE CABLE ASSEMBLY HDCH2
3	208-0187	FRONT DOOR HOOD, WHITE LACQUER for HDCH2
4	209-0137	LINTEL SEAL ASSEMBLY, ALUM. for Chillfast/ HDF3
5	101-0013	ANGLE, 3" x 5" x 0.1" ALUMINUM Lintel/Hood bracket x 30 ft (Optional)
6	205-0210	HDCH2 FRONT GUIDE TOP ASSY LH, Alum Extrusion, 6063-T6
7	205-0209	HDCH2 FRONT GUIDE TOP ASSY RH, Alum Extrusion, 6063-T6
8	205-0168	HDCH2 FRONT GUIDE ASSY BOTTOM RH, Alum Extrusion, 6063-T6
9	205-0169	HDCH2 FRONT GUIDE ASSY BOTTOM LH, Alum Extrusion, 6063-T6
10	205-0167	HDCH2 REAR GUIDE MOUNTING ASSY RH, Alum Extrusion, 6063-T6
11	205-0166	HDCH2 REAR GUIDE MOUNTING ASSY LH, Alum Extrusion, 6063-T6
12	205-0185	FABRICATED GUIDE INLAY
13	203-0294	HDCH2 RH FREE ENDPLATE ASSY 4" Aluminum Barrel
14	203-0297	HDCH2 RH DRIVE ENDPLATE ASSY 10" x 11", 4" Aluminum Barrel
15	101-0035	2 1/2" OD, 1" I.D.IDLER BARREL 6005A-T61 Ext.Alum.-24Ft, Anod
16	109-0851	CABLE DUCT 3.2M
17	203-0333	OPERATOR ASSEMBLY HDCH2
18	105-0005	1-1/4"ID 2 BOLT FLANGE BEARING UCFL 207-20
19	108-0279	Chain hoist for GFA Operators, HDCH2
20	109-0974	JUNCTION BOX PLATE High & Low Voltage PnP
21	210-0128	HDF3 GUIDE MOUNTING BOLT KIT
22	210-0136	IDLER BARREL SHAFT KIT HDCH2 DOOR MODEL
23	210-0166	RECEIVER KIT, RB3, R916K8
24	202-0169	BOTTOM BAR ARM - HDCH2 NON HANDED

25	109-0890	FEIG 5 KW XL-CONTROL PANEL N4X 208-460V,AS500 FU3-1, Heater UL
26	RH - 208-0197 LH - 208-0196	OPERATOR HOOD (white lacquer), LH door Vertical Oper. Mount (Optional)
27	RH - 208-0186 LH - 208-0185	FREE END HOOD, W LACQ for HDCH2 (Optional)
28	109-0650	TRANSMITTER, Rband RB T916

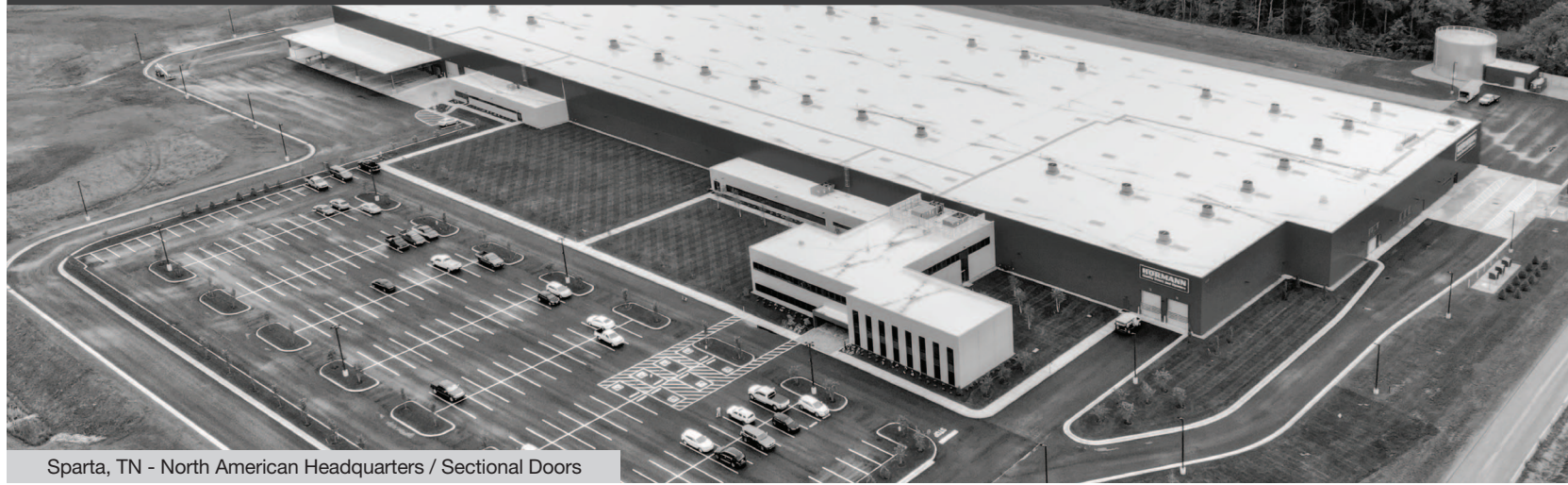
NOTES



NOTES



HÖRMANN NORTH AMERICA



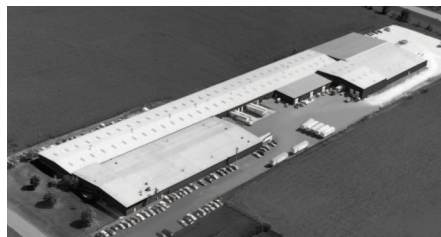
Sparta, TN - North American Headquarters / Sectional Doors

FIVE PRODUCTION PLANTS, ONE FAMILY

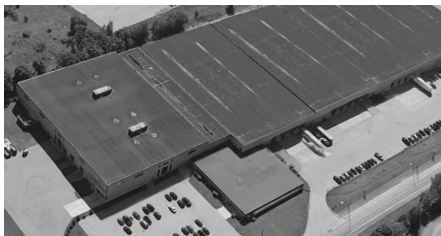
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