

EN

Instructions for Fitting, Operating and Maintenance
Garage Door Operator

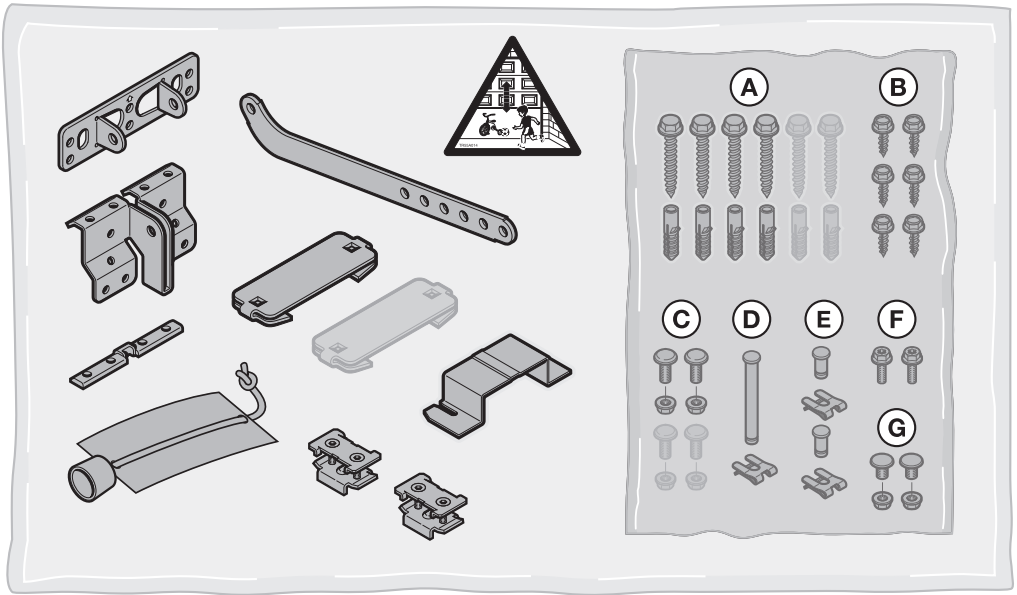
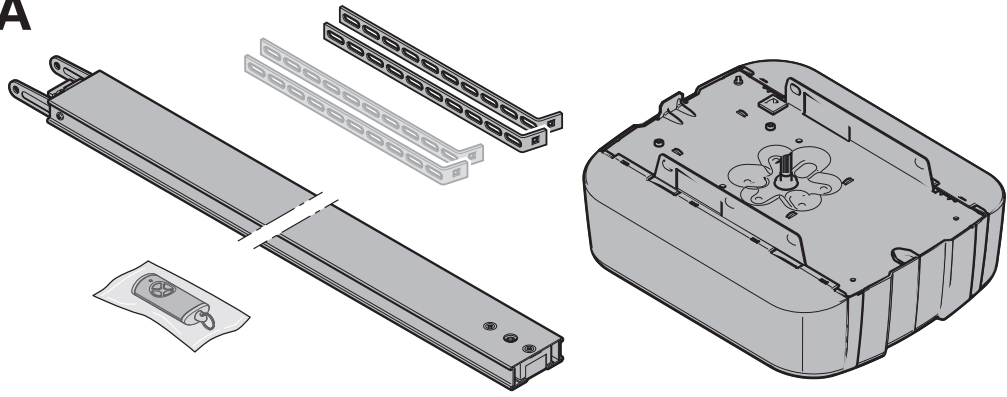
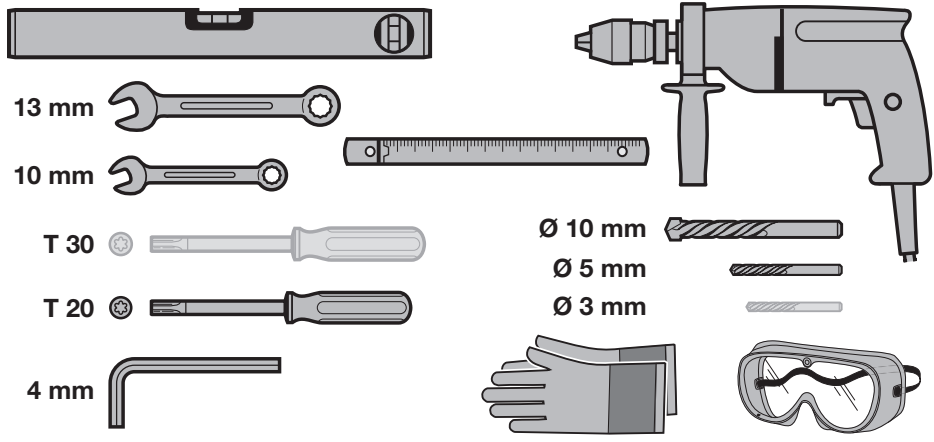
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These instructions are **original operating instructions** as outlined in EC Directive 2006/42/EC and are divided into a text and illustrated section. They contain important information on the product, and especially safety instructions and warnings.

Read through the instructions carefully and keep them in a safe place.

1 Further applicable documents

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

- These instructions
- Log book
- The garage door instructions
- You will find additional descriptions at:



www.hoermann-docs.com/363295

1.1 Warning labels used

⚠ DANGER
Indicates a danger that immediately leads to death or serious injuries .
⚠ WARNING
Indicates a danger that can lead to death or serious injuries .

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App StoreSM is a brand of Apple Inc.
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ATTENTION

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

1.2 Definitions used

Hold-open phase

Waiting time for the automatic timer before the door closes from the OPEN end-of-travel position or partial opening.

Automatic timer

After the set hold-open phase and pre-warning time lapse, the door automatically closes from the OPEN end-of-travel position / partial opening position.

Power limit

Forces that are caused by the door hitting an obstacle are limited to permissible values (EN 12453).

Impulse sequence control

The taught-in impulse radio code or a button triggers impulse sequence control. With each actuation, the door is started against the previous direction of travel, or the door run is stopped.

Learning runs

The operator learns travel paths and forces that are required to move the door.

Ventilation

During ventilation, the upper section is folded down or the door is lifted slightly to allow air to circulate.

Single plate mode

Normal operation is a door run with taught-in travel paths and forces.

reference run

Door run towards the OPEN end-of-travel position at a lower speed in order to set the home position.

Safety reversal / reversing

Door run in the opposite direction when the protective device or power limit is activated.

Reversal limit

The reversal limit is shortly before the CLOSE end-of-travel position. Safety reversal / reversing does not take place within the reversal limit.

Slow travel

The area in which the door moves extremely slowly to softly approach the end-of-travel position.

Status

The current position of the door.

Partial opening

Individually adjustable second opening height.

Timeout

A defined time period within which an action is expected, e.g. menu selection or function activation. If this time period has elapsed without an action, the operator automatically switches back.

Door system

Door with the operator.

Doors under thermal load

Doors fitted to the south side, for example, and thus subjected to more sunlight. These doors could expand and may require more clearance below the ceiling.

travel

The distance the door covers from the OPEN end-of-travel position to the CLOSE end-of-travel position.

Pre-warning time

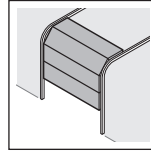
The time between the travel command (impulse) and the start of a door run.

Factory reset

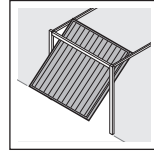
Resetting of the taught-in values to the delivery condition / factory setting.

1.3 Symbols used

In the illustrated section, fitting to a sectional door is labelled with **a**, to an up-and-over garage door with **b**. Deviations for fitting with an up-and-over door are also shown.



a = Sectional door



b = Up-and-over door

Icons



Important advice to prevent injury to persons and damage to property



Permissible arrangement or activity



Non-permissible arrangement or activity



High exertion of force



Low exertion of force



Check



power failure



Power restoration



Factory setting



Use protective gloves



Check for ease of movement



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7-segment display



Display is illuminated



Display flashes slowly



Display flashes quickly



Dot flashes

1.4 Abbreviations used

Colour code for cables, single conductors and components			
The colour abbreviations for cable and strand identification and for components conform to the international colour code in accordance with IEC 60757:			
WH	White	BK	Black
BN	Brown	BU	Blue
GN	Green	RD	Red
YE	Yellow	RD/BU	Red/blue

All specified dimensions in the illustrated section are in [mm].

1.5 Article designation used

HSE 4 BiSecur	4-button hand transmitter
ESE BiSecur	Bi-directional receiver
IT 1b-1	Internal push button with illuminated impulse button
IT 3b-1 / PB 3 / IT 3b-1M	Internal push button with illuminated impulse button, additional buttons for light on/off and lock/unlock operator
EL 101 / EL 301	One-way photocell
HOR 1-HCP	Option relay
UAP 1-HCP	Universal adapter print
SLK	LED warning light, yellow
SKS	Activating kit for closing edge safety device
STK	Wicket door contact
VL	Activating kit for leading photocell
HNA 18-4	Emergency battery
HKSI-1 / HKSA	Climate sensors (internal sensor / external sensor)



2 Safety instructions

ATTENTION:

For undated references to standards, directives etc., the latest version of the publication applies, including any amendments.

2.1 Intended use

The operator is intended for the impulse operation of spring-balanced / counterbalanced garage doors. Depending on the operator type, the operator can be used in the private or commercial sector.

Note the manufacturer specifications regarding the door and operator. EN 13241 specifies the application for installation, fitting and use.

Only operate the operator in dry rooms.

2.2 Non-intended use

The operator must not be used for doors without a safety catch.

Door systems that are located in a public area may only be operated under supervision. If this cannot be guaranteed, an additional photocell is required.

2.3 Qualification of specialists

Only specialists in accordance with EN 12635 may fit, service, repair, or disassemble the operator.

Pay attention to possible dangers in accordance with EN 12604 and EN 12453.

On-site changes may void the CE compliance.

2.4 Safety instructions for fitting, maintenance, repair and dismantling

DANGER

Compensating springs are under high tension

- ▶ See warning in section 3.1

WARNING

Danger of injury due to unexpected door run

- ▶ See warning in section 12

Only specialists in accordance with EN 12635 may fit, service, repair, or disassemble the door system and the operator.

- ▶ In the event of a failure of the operator, immediately commission a specialist with inspection / repair.

2.5 Safety instructions for fitting

The specialist carrying out the fitting work must follow the prevailing national workplace safety regulations, those governing the operation of electrical equipment and the national guidelines. Hazards in accordance with EN 13241-1 will be prevented by construction and fitting according to our specifications.

After fitting is complete, the specialist must declare conformity in accordance with EN 13241-1 based on the area of application.

WARNING

Unsuitable fixing material

- ▶ See warning in section 3.3

Danger to life from the pull rope

- ▶ See warning in section 3.3

Danger of injury due to unwanted door travel

- ▶ See warning in section 3.3

2.6 Safety instructions for installation



DANGER

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

- ▶ Before performing work on the system, disconnect the mains plug **and** the plug of the emergency battery (if applicable). Safeguard the door system against being switched on again without authorisation.
- ▶ Electrical connections may only be made by a qualified electrician.
- ▶ If the mains connection cable is damaged, commission a qualified electrician.
- ▶ On-site electrical installations must conform to the applicable safety regulations (230 / 240 V AC, 50 / 60 Hz).

ATTENTION




External voltage at the connecting terminals

External voltage (230 / 240 V AC) on the connecting terminals of the control will destroy the electronics.


Connection cables and supply lines laid together can result in malfunctions.

- ▶ Lay the operator's connection cables (24 V DC) separate from the supply lines (230 / 240 V AC).

2.7 Safety instructions for initial start-up and operation

 WARNING
<p>Danger of injury due to incorrectly selected door type</p> <ul style="list-style-type: none"> ▶ See warning in section 4.1 <p>Danger of injury for children</p> <ul style="list-style-type: none"> ▶ See warning in section 4.1 <p>Danger of injury due to door run</p> <ul style="list-style-type: none"> ▶ See warning in section 11 <p>Danger of crushing in the boom</p> <ul style="list-style-type: none"> ▶ See warning in section 11 <p>Danger of injury from the cord knob</p> <ul style="list-style-type: none"> ▶ See warning in section 11 <p>Danger of injury resulting from uncontrolled door travel in the CLOSE direction if one of the counterbalance springs breaks and the slide carriage is released.</p> <ul style="list-style-type: none"> ▶ See warning in section 11 <p>Danger of injury due to a fast-closing door</p> <ul style="list-style-type: none"> ▶ See warning in section 11.1.1


2.8 Safety instructions for using the hand transmitter

 WARNING
<p>Risk of injury during intended or unintended door travel</p> <ul style="list-style-type: none"> ▶ See warning in section 9 <p>Risk of explosion due to incorrect battery type</p> <ul style="list-style-type: none"> ▶ See warning in section 9.2 <p>Danger to life due to swallowing battery</p> <ul style="list-style-type: none"> ▶ See warning in section 9.2

2.9 Protective devices


meets EN ISO 13849-1, cat. 2, PL “c” and was constructed and tested accordingly:

- Internal power limit
- Protective devices

 WARNING
<p>Danger of injuries due to faulty protective devices</p> <ul style="list-style-type: none"> ▶ See warning in section 8.2

3 Assembly

3.1 Testing the door system

 DANGER
<p>Compensating springs are under high tension</p> <p>Serious injuries may occur while adjusting or loosening the compensating springs!</p> <ul style="list-style-type: none"> ▶ Never try to replace, adjust, repair or reposition the compensating springs for the counterbalance of the door or the spring mountings yourself. If required, only have a specialist conduct the work! ▶ Check the entire door system (door bearings, joints, cables, springs and fastenings) for wear and possible damage, rust, corrosion or cracks.

<p>A malfunction in the door system or an incorrectly aligned door can cause serious injuries!</p> <ul style="list-style-type: none"> ▶ Do not use the door system if repair or adjustment work must be conducted!

The garage door operator is not designed for the operation of sluggish doors.

The door must be in a flawless mechanical condition, as well as correctly balanced, so that it can be easily operated by hand (EN 12604).

- ▶ **Observe the manufacturer's instructions.**

3.2 Clearance required


- ▶ Figure 1.1a / 1.2b

The clearance between the highest point of door travel and the ceiling (even when opening the door) must be **at least 35 mm**, for doors under thermal load **at least 75 mm**.

In connection with Hörmann doors, the dimensions given in the respective figures (1.6a, 1.8b) must be adhered to.

NOTE

For doors under thermal load, the dimensions with * must be chosen. Fitting to ceiling is not possible for doors under thermal load (Figure 1.6a -4).

-  For ThermoFrame, note the respective technical manual for the door.


If the clearance is smaller, the boom can also be mounted behind the open door if enough space is available. In this case, an extended fitting bracket (ordered separately) must be used.


The operator can be arranged up to max. 500 mm off-centre. Sectional doors with a high-lift track application (track application H) present an exception. They require a special fitting kit.

Fit the socket required for electrical connection approx. 500 mm from the operator head.

- ▶ Check the dimensions.

3.3 Fitting the garage door operator

 WARNING
<p>Unsuitable fixing material</p> <p>may result in the operator becoming loose.</p> <ul style="list-style-type: none"> ▶ The fitter must check whether the supplied plugs and bolts are suitable for the intended fitting site. Because the supplied fixing materials are suitable for concrete (≥ B15), but are not officially approved, you may need to use other fixing material. (See Figures 1.6a / 1.8b / 2.4).

 WARNING
<p>Danger to life from the pull rope</p> <ul style="list-style-type: none"> ▶ Remove the rope during fitting (see Figure 1.3a).

WARNING

Danger of injury due to unwanted door travel

Incorrect handling of the operator and the control units may trigger unwanted door travel and result in persons or objects being trapped.



- ▶ Fix control units at a height of at least 1.5 m out of the reach of children.
- ▶ Fit permanently installed control units within sight of the door, but away from moving parts.

ATTENTION

Drilling chippings and dust

can lead to malfunctions.

- ▶ Cover the operator.

Sectional door (Figure 1a – 1.6a)

- ▶ With an off-centre reinforcement profile, fit the link bracket on the nearest reinforcement profile to the left or right (Figure 1a).
- ▶ Completely disassemble the mechanical door locking (Figure 1.2a + 1.3a).
- ▶ With central door locking, fit the lintel joint and link bracket max. 500 mm off-centre (Figure 1.5a).

NOTE:

In a deviation from Figure 1.5a, use the 5 × 35 wood screws from the door accessory bag (hole Ø 3 mm) for timber doors.

Up-and-over door (Figure 1b – 1.8b)

- ▶ Render the mechanical door lockings inoperable (Figure 1.3b, 1.4b, 1.5b). For door models not covered here, block the lock latch on site.
- ▶ With ornamental iron door handles, attach the lintel joint and the link bracket off-centre (Figure 1.6b, 1.7b).

NOTE:

With N80 doors with timber infill, use the bottom holes on the lintel joint for fitting (Figure 1.7b).

3.4 Fitting the boom

- ▶ Figure 2 – 3.1b
- ▶ Press the green button and move the slide carriage approx. 200 mm towards the centre of the rail. This is no longer possible once the end stops and operator have been fitted. (Figure 2.1)
- ▶ For divided rails, a second suspension is recommended (available under accessories). (Figure 2.4)
- ▶ Take the installation direction of the link bracket into account depending on the door hardware and door type. (Figure 3a – 3.1b)

NOTE

Only use the booms recommended by us for the garage door operators, depending on the respective application (see product information)!

3.5 Determining the end-of-travel positions

1. Pull on the cord of the mechanical release. (Figure 4)
2. Fit the OPEN end stop between the slide carriage and operator. (Figure 5.1)
3. Fit the CLOSE end stop between the slide carriage and door. (Figure 5.2)

4. Push the green button on the slide carriage. (Figure 6)
5. Move the door until the slide carriage snaps into the belt lock.

3.6 Fitting the operator head

- ▶ Fit the operator head and the lamp housing (Figure 7). The connecting compartment cover must face the garage.

3.7 Emergency release

- ▶ Figures 8 – 9b

The cord knob for mechanical release may not be installed at a height greater than 1.8 m from the garage floor. The cord may need to be extended on site, depending on the height of the garage door.

- ▶ When extending the cord, please make sure that the cord cannot become caught on a roof rack system or any other protrusions of the vehicle or door.

For garages without a second emergency mechanical release is required. An emergency release prevents the possibility of being locked out during a power failure. Order the emergency release separately.

- ▶ Check the emergency release monthly for proper function.

4 Initial start-up

- ▶ Before initial start-up, read and follow the safety instructions in sections 4.1, 8.2, 11 and 11.1.1.

During learning runs, the operator is adjusted to the door. The travel distance, the required force for OPEN and CLOSE door travel and the connected protective devices are taught in automatically and saved in a power failure-proof manner. The data is only valid for this door.

NOTES

- The hand transmitter must be ready for operation.
- The slide carriage must be engaged.
- Observe the hand transmitter instructions.
- While the travel is being taught in, the operator moves in slow travel.

Operator light:

If the operator is not taught in, the operator light remains illuminated for **120** seconds after electrical supply.

4.1 Teaching in the operator

WARNING

Danger of injury due to incorrectly selected door type

Door system malfunctions may cause **injuries**.

- ▶ Only choose the menu of the door system you have.

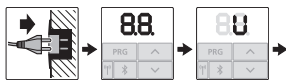
WARNING

Danger of injury for children

Door system malfunctions during initial start-up may cause **injuries**.

- ▶ Make sure that no children are located in the vicinity of the door system during initial start-up.

To teach in the operator:



1. Plug in the mains plug.
On the display
 - **88** illuminates for 1 second,
 - **8U** is then illuminated continuously.
2. Press the **▲** or **▼** button and select the available door type.



Sectional door



Up-and-over garage door: door swinging outward



Side sliding sectional door



Non-protruding up-and-over door: door tilting inward



Garage horizontal door



Canopy non-protruding up-and-over door: door tilting inward



Sectional door with folding roller bracket



Hinged garage door



Industrial sectional door

3. Press the **PRG** button.
 - **L** is illuminated.



4. Press the **▲** button.
 - The door will open and briefly stop in the OPEN end-of-travel position.
L flashes.
 - The door automatically completes 3 cycles (OPEN and CLOSE door runs).
L flashes in the CLOSE direction.
L flashes in the OPEN direction.
The travel and required forces are taught in.

- The operator light flashes during the learning runs.
- The door stops in the OPEN end-of-travel position.
The operator light is continuously illuminated.

To abort a learning run:

- ▶ Press one of the buttons **▲**, **▼**, **PRG** or an external control element with impulse function.
On the display a **U** is illuminated and the operator has not been taught in.

Display of taught-in forces



After the learning runs, a number displays the maximum determined force.
This value indicates the following:

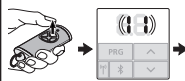
Door width < 5000 mm	Door width ≥ 5000 mm, track application L, industrial sectional door	
0-2	0-4	Optimal force ratios.
3-9	5-9	Poor force ratios. Check or readjust the door system.

The operator automatically switches to the menu for teaching in the hand transmitters.

Each hand transmitter button is assigned to a radio code.

11 flashes on the display.

To teach in a radio code (impulse):



5. Press and hold the hand transmitter button from which you want to transmit the radio code.

Hand transmitter:

- The LED is illuminated blue for 2 seconds and then goes out.
- After 5 seconds, the LED alternates flashing in red and blue. The radio code is transmitted.

Operator:

If the receiver detects a valid radio code, **11 flashes rapidly on the display.**

- Release the hand transmitter button.
The hand transmitter has been taught in and is ready for operation.
11 flashes on the display.
 Further hand transmitters can be taught in within 25 seconds. (Radio timeout)

To teach in further radio codes (impulse):

- ▶ Repeat steps 5 + 6.

To cancel radio code teach-in:

- ▶ Press the **PRG** button.

To teach in further functions on the hand transmitter:

- ▶ Press the **▲** button and select:

Menu 12	Lighting
Menu 13	Partial opening
Menu 14	Choosing OPEN direction
Menu 15	Choosing CLOSE direction
Menu 16	Ventilation

- Press the **PRG** button and switch to programming mode.
Correspondingly, **12, 13, 14, 15** or **16** flashes.
- Perform steps 5 + 6 as for the impulse radio code.

To teach in no further hand transmitters



- ▶ Press the **PRG** button.
The operator switches to programming mode.
or
- ▶ No input for 25 seconds (radio timeout).

11, 12, 13, 14, 15 or **16** is illuminated depending on which radio code was last taught in.

To complete initial start-up:



- Press the **▲** / **▼** buttons to select the menu **00**.
- Press the **PRG** button.
The operator switches to operation mode.
or
- ▶ No input for 60 seconds (timeout).

The taught-in protective devices are active and activated in the menus.

The operator is ready for operation.

Radio timeout:

If the timeout (25 seconds) is exceeded while teaching in the radio code, the operator automatically switches to programming mode. To teach in a hand transmitter, the corresponding menu must be selected manually.

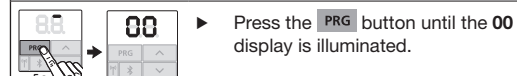
- ▶ Section 7

5 Programming additional menus

NOTES

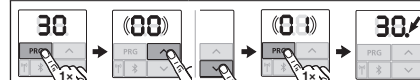
- Menu **00** is the first visible menu in programming mode
- Menu **00** is also used to exit the programming mode.
- Menus **01–09** are only accessible during initial start-up.
- After initial start-up, only the available menus **10–38** are visible.
- A decimal point next to the menu number indicates an active menu.

To switch to programming mode:



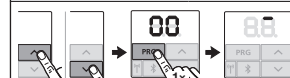
- ▶ Press the **PRG** button until the **00** display is illuminated.

To activate a menu with selectable parameters:



- Press the **PRG** button 1 x.
The active parameter flashes.
- Select the desired parameter with the **▲** / **▼** buttons.
- Press the **PRG** button 1 x.
The parameter is immediately active.
The menu number and the decimal point are illuminated.

To exit programming mode



- Press the **▲** / **▼** buttons to select the menu **00**.
- Press the **PRG** button.
or
- ▶ No input for 60 seconds (timeout).
All inputs are saved. The operator switches to operation mode.

5.1 Menu 10: Learning runs

- ▶ Please observe the notes from section 4.

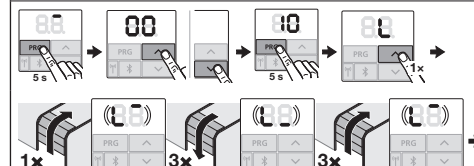
Learning runs are necessary:

- After service or maintenance work
- If protective devices, e.g. photocells, wicket door contacts or safety contact strips are retrofitted
- In case of changes to the door


Note on learning runs in the delivery condition:

During initial start-up (section 4), all learning runs are performed automatically.


To start learning runs:




- Press the **PRG** button until the **00** display is illuminated.
- Press the **▲** / **▼** buttons to select the menu **10**.
- Press the **PRG** button for 5 seconds.
– **L** is illuminated.

4. Press the  button .
- The door will open and briefly stop in the OPEN end-of-travel position.
L⁻ flashes.
 - The door automatically completes 3 cycles (OPEN and CLOSE door runs).
L₋ flashes in the CLOSE direction.
L⁻ flashes in the OPEN direction.
- The travel and required forces are taught in.
The operator light flashes during the learning runs.
- The door stops in the OPEN end-of-travel position.
The operator light remains illuminated and goes out after approx. 120 seconds.

Display of taught-in forces

 5 s

 → After the learning runs, a number displays the maximum determined force.
This value indicates the following:

Door width < 5000 mm	Door width ≥ 5000 mm, track application L, industrial sectional door	
0-2	0-4	Optimal force ratios.
3-9	5-9	Poor force ratios. Check or readjust the door system.

6 Connecting accessories

- ▶ Note the safety instructions in section 2.6
- ▶ Figure 11 – 21

NOTES

- Loading of the operator by all accessories: **max. 350 mA**. See the figures for component power consumption.
- Series[®]3 accessories must be connected via the **HCP adapter HAP 1**.
- The BUS socket enables the connection of accessories with special functions.
- The indicated standby value does not take into account optional accessories. Accessories can increase standby power consumption.
- The stop or static current circuit input is **not** a monitored connection according to EN ISO 13849 PLc.

6.1 Connecting terminals

All connecting terminals can have multiple assignments:

- Minimum size: 1 × 0.5 mm²
- Maximum size: 1 × 2.5 mm²

6.2 Button with impulse function












































- ▶ Figure 12

Terminal assignment:

23	Signal channel 2	Partial opening
5	+24 V DC	
21	Signal channel 1	Impulse
20	0 V	

7 Menu and programming overview

The listed factory settings  apply to **sectional doors**.













Menu	Campaign	
00	Open / exit programming mode	
Select door type		
Default settings such as speed, soft stop, reversing behaviour of the protective devices, reversal limit etc. are pre-set.		
01		
 →  → 	 1x	 1x
02		
 →  → 	 2x	 1x
03		
 →  → 	 3x	 1x
04		
 →  → 	 4x	 1x
05		
 →  → 	 5x	 1x
06		
 →  → 	 6x	 1x
07		
 →  → 	 7x	 1x

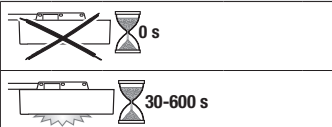
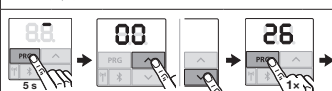




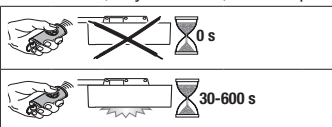
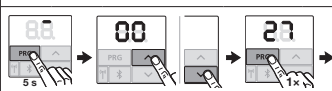




Menu	Campaign	
08		
09		SPU Track application N, track application L, track application Z
Learning runs		
After service / maintenance or changes to the door system.		
10		
Teach-in hand transmitter		Section 9
11		Impulse
12		Light

Menu	Campaign	
13		Partial opening
14		Choosing OPEN direction
15		Choosing CLOSE direction
16		Ventilation
17	Smart Home control centres: all functions are provided for corresponding apps	

Menu	Campaign											
Deleting all radio codes												
19												
	<table border="1"> <tr> <td rowspan="5">Parameter</td> <td>00</td> <td>Back without deleting</td> </tr> <tr> <td>01</td> <td>Radio (all transmitters)</td> </tr> <tr> <td>02</td> <td>Bluetooth® (all keys)</td> </tr> <tr> <td>03</td> <td>-</td> </tr> <tr> <td>04</td> <td>All transmitters, all keys and external reset setting of the Bluetooth antenna</td> </tr> </table>	Parameter	00	Back without deleting	01	Radio (all transmitters)	02	Bluetooth® (all keys)	03	-	04	All transmitters, all keys and external reset setting of the Bluetooth antenna
	Parameter		00	Back without deleting								
01			Radio (all transmitters)									
02			Bluetooth® (all keys)									
03			-									
04		All transmitters, all keys and external reset setting of the Bluetooth antenna										
Reversal limit – CLOSE												
Menu is only visible if												
<ul style="list-style-type: none"> • a leading photocell VL is connected to SE 2. • Parameter 02 is set in menu 43. 												
20												
Wicket door contact												
28												
	<table border="1"> <tr> <td rowspan="2">Parameter</td> <td>00</td> <td>Deactivated Wicket door contact without self-testing</td> </tr> <tr> <td>01</td> <td>Wicket door contact with testing</td> </tr> </table>	Parameter	00	Deactivated Wicket door contact without self-testing	01	Wicket door contact with testing						
	Parameter		00	Deactivated Wicket door contact without self-testing								
01		Wicket door contact with testing										

Menu	Campaign									
Belt relief, CLOSE direction										
22										
	<table border="1"> <tr> <td rowspan="4">Parameter</td> <td>00</td> <td>Without</td> </tr> <tr> <td>01</td> <td>Short</td> </tr> <tr> <td>02</td> <td>Means</td> </tr> <tr> <td>03</td> <td>Long</td> </tr> </table>	Parameter	00	Without	01	Short	02	Means	03	Long
	Parameter		00	Without						
01			Short							
02			Means							
03		Long								
Changing the position										
The parameter 02 is only visible if at least one additional safety device (photocell / leading photocell) is connected in addition to the standard power limit in CLOSE direction.										
23										
	<table border="1"> <tr> <td rowspan="3">Parameter</td> <td>00</td> <td>Back without changing</td> </tr> <tr> <td>01</td> <td>Change partial opening position</td> </tr> <tr> <td>02</td> <td>Change the ventilation position</td> </tr> </table>	Parameter	00	Back without changing	01	Change partial opening position	02	Change the ventilation position		
	Parameter		00	Back without changing						
01			Change partial opening position							
02		Change the ventilation position								

Menu	Campaign							
Locking position								
The menu is only visible if the ETV1-HCP door locking has been detected via a BUS scan.								
24								
								
	Parameter	<table border="1"> <tr> <td>00</td> <td>Additional locking in ventilation position deactivated</td> <td></td> </tr> <tr> <td>01</td> <td>Additional locking in ventilation position activated</td> <td></td> </tr> </table>	00	Additional locking in ventilation position deactivated		01	Additional locking in ventilation position activated	
	00	Additional locking in ventilation position deactivated						
01	Additional locking in ventilation position activated							
								
Operator light								
25								
								
	Parameter	<table border="1"> <tr> <td>00</td> <td>Operator light is switched on</td> <td></td> </tr> <tr> <td>01</td> <td>Operator light is switched off</td> <td></td> </tr> </table>	00	Operator light is switched on		01	Operator light is switched off	
	00	Operator light is switched on						
01	Operator light is switched off							
								

Menu	Campaign																						
Illumination / illumination period (internal relay)																							
26																							
																							
	Parameter	<table border="1"> <tr> <td>00</td> <td>Deactivated</td> <td></td> </tr> <tr> <td>01</td> <td>30 seconds</td> <td></td> </tr> <tr> <td>02</td> <td>60 seconds</td> <td></td> </tr> <tr> <td>03</td> <td>120 seconds</td> <td></td> </tr> <tr> <td>04</td> <td>180 seconds</td> <td></td> </tr> <tr> <td>05</td> <td>300 seconds</td> <td></td> </tr> <tr> <td>06</td> <td>600 seconds</td> <td></td> </tr> </table>	00	Deactivated		01	30 seconds		02	60 seconds		03	120 seconds		04	180 seconds		05	300 seconds		06	600 seconds	
	00	Deactivated																					
	01	30 seconds																					
	02	60 seconds																					
03	120 seconds																						
04	180 seconds																						
05	300 seconds																						
06	600 seconds																						
																							
Illumination / illumination period (external relay) e.g. hand transmitter, key switches, internal push button etc.																							
27																							
																							
	Parameter	<table border="1"> <tr> <td>00</td> <td>Deactivated</td> <td></td> </tr> <tr> <td>01</td> <td>As with menu 26</td> <td></td> </tr> <tr> <td>02</td> <td>60 seconds</td> <td></td> </tr> <tr> <td>03</td> <td>180 seconds</td> <td></td> </tr> <tr> <td>04</td> <td>300 seconds</td> <td></td> </tr> <tr> <td>05</td> <td>600 seconds</td> <td></td> </tr> </table>	00	Deactivated		01	As with menu 26		02	60 seconds		03	180 seconds		04	300 seconds		05	600 seconds				
	00	Deactivated																					
	01	As with menu 26																					
	02	60 seconds																					
03	180 seconds																						
04	300 seconds																						
05	600 seconds																						
																							

Menu	Campaign																														
Permanent ON – external illumination																															
28																															
	Parameter	<table border="1"> <tr> <td>00</td> <td>Deactivated</td> </tr> <tr> <td>01</td> <td>Activated</td> </tr> </table>	00	Deactivated	01	Activated																									
00	Deactivated																														
01	Activated																														
Additional functions with relay circuit board Figure 19 + 20																															
HOR 1-HCP or UAP 1-HCP (3rd Relay)																															
30																															
	Parameter	<table border="1"> <tr> <td>00</td> <td>Deactivated</td> <td>Menu 25 is automatically deactivated.</td> </tr> <tr> <td>01</td> <td>External illumination function</td> <td> No maintenance display (In)</td> </tr> <tr> <td>02</td> <td colspan="2">OPEN end-of-travel position reporting</td> </tr> <tr> <td>03</td> <td colspan="2">CLOSED end-of-travel position reporting</td> </tr> <tr> <td>04</td> <td colspan="2">Partial opening end-of-travel position reporting</td> </tr> <tr> <td>05</td> <td colspan="2">Momentary signal at the time of OPEN or partial opening command</td> </tr> <tr> <td>06</td> <td colspan="2">Error message on the display (malfunction)</td> </tr> <tr> <td>07</td> <td>Start warning / advance warning / warning during run / UAP 1-HCP (3rd relay) de-energises in each end-of-travel position</td> <td rowspan="2">Advance warning only if activated in menu 32.</td> </tr> <tr> <td>08</td> <td>Start warning / advance warning / warning during run / UAP 1-HCP (3rd relay) de-energises in each end-of-travel position</td> </tr> <tr> <td></td> <td>Flashing</td> <td></td> </tr> </table>	00	Deactivated	Menu 25 is automatically deactivated.	01	External illumination function	No maintenance display (In)	02	OPEN end-of-travel position reporting		03	CLOSED end-of-travel position reporting		04	Partial opening end-of-travel position reporting		05	Momentary signal at the time of OPEN or partial opening command		06	Error message on the display (malfunction)		07	Start warning / advance warning / warning during run / UAP 1-HCP (3rd relay) de-energises in each end-of-travel position	Advance warning only if activated in menu 32.	08	Start warning / advance warning / warning during run / UAP 1-HCP (3rd relay) de-energises in each end-of-travel position		Flashing	
	00	Deactivated	Menu 25 is automatically deactivated.																												
	01	External illumination function	No maintenance display (In)																												
	02	OPEN end-of-travel position reporting																													
	03	CLOSED end-of-travel position reporting																													
	04	Partial opening end-of-travel position reporting																													
	05	Momentary signal at the time of OPEN or partial opening command																													
	06	Error message on the display (malfunction)																													
07	Start warning / advance warning / warning during run / UAP 1-HCP (3rd relay) de-energises in each end-of-travel position	Advance warning only if activated in menu 32.																													
08	Start warning / advance warning / warning during run / UAP 1-HCP (3rd relay) de-energises in each end-of-travel position																														
	Flashing																														

Menu	Campaign																																		
	09	Relay energises during travel and de-energises in each end-of-travel position																																	
	10	Maintenance interval signal (display In flashes 3 x in each end-of-travel position)																																	
	11	As with menu 26	Menu 25 is automatically deactivated. No maintenance display (In)																																
	12	Door locking ETV1-HCP locked message																																	
Pre-warning time																																			
32																																			
	Parameter	<table border="1"> <tr> <td>00</td> <td>Deactivated</td> <td></td> </tr> <tr> <td>01</td> <td>Advance warning 1 s</td> <td></td> </tr> <tr> <td>02</td> <td>Advance warning 2 s</td> <td></td> </tr> <tr> <td>03</td> <td>Advance warning 3 s</td> <td></td> </tr> <tr> <td>04</td> <td>Advance warning 4 s</td> <td></td> </tr> <tr> <td>05</td> <td>Advance warning 5 s</td> <td></td> </tr> <tr> <td>06</td> <td>Advance warning 10 s</td> <td></td> </tr> <tr> <td>07</td> <td>Advance warning 15 s</td> <td></td> </tr> <tr> <td>08</td> <td>Advance warning 20 s</td> <td></td> </tr> <tr> <td>09</td> <td>Advance warning 30 s</td> <td></td> </tr> <tr> <td>10</td> <td>Advance warning 60 s</td> <td></td> </tr> </table>	00	Deactivated		01	Advance warning 1 s		02	Advance warning 2 s		03	Advance warning 3 s		04	Advance warning 4 s		05	Advance warning 5 s		06	Advance warning 10 s		07	Advance warning 15 s		08	Advance warning 20 s		09	Advance warning 30 s		10	Advance warning 60 s	
	00	Deactivated																																	
	01	Advance warning 1 s																																	
	02	Advance warning 2 s																																	
	03	Advance warning 3 s																																	
	04	Advance warning 4 s																																	
05	Advance warning 5 s																																		
06	Advance warning 10 s																																		
07	Advance warning 15 s																																		
08	Advance warning 20 s																																		
09	Advance warning 30 s																																		
10	Advance warning 60 s																																		

Menu	Campaign		
Advance warning direction			
33			
Parameter	00	Advance warning in the CLOSE direction	
	01	Advance warning in the OPEN and CLOSE direction	
Automatic timer – hold-open phase			
Photocell required			
34			
	Parameter	00	Deactivated
		01	Hold-open phase 5 s
		02	Hold-open phase 10 s
		03	Hold-open phase 15 s
		04	Hold-open phase 30 s
		05	Hold-open phase 60 s
		06	Hold-open phase 90 s
07		Hold-open phase 120 s	
08		Hold-open phase 180 s	
09		Hold-open phase 240 s	
10	Hold-open phase 300 s		
Menu 32, parameter 03 is automatically activated.			

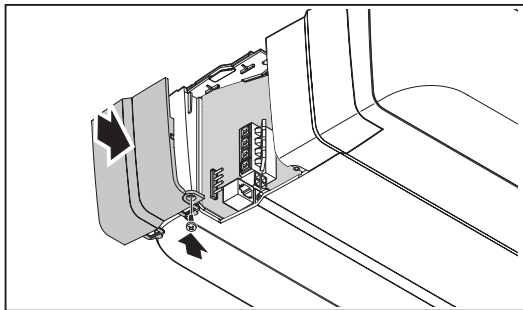
Menu	Campaign		
Automatic timer – partial opening			
Photocell required			
35			
	Parameter	00	Deactivated
		01	As with menu 34
		02	Hold-open phase 5 min
		03	Hold-open phase 15 min
		04	Hold-open phase 30 min
		05	Hold-open phase 45 min
		06	Hold-open phase 60 min
07		Hold-open phase 90 min	
08		Hold-open phase 120 min	
09		Hold-open phase 180 min	
10	Hold-open phase 240 min		
Control buttons			
36			
	Parameter	00	Deactivated
	01	Activated	

Menu	Campaign	
Reset		
	37	
Parameter	00	Back without reset
	01	Reset / BUS scan HCP-BUS
	02	Reset / parameters from menu 22 – 36
	03	Factory reset U
	03	U

8 Final work

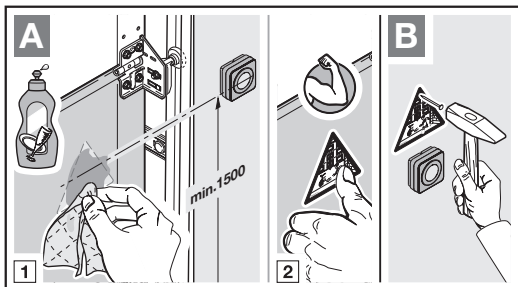
Upon completion of all required steps for initial start-up:

- ▶ Close the cover.



8.1 Fixing the warning sign

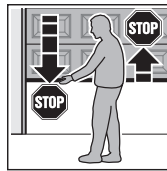
- ▶ Fix the crushing warning sign in a prominent, cleaned and degreased place.



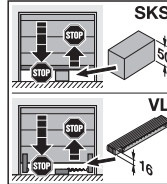
8.2 Function check

⚠ WARNING
<p>There is a danger of injuries due to a faulty protective device.</p> <ul style="list-style-type: none"> ▶ After the learning runs, a specialist must check the function(s) of the protective device(s). <p>Only then is the system ready for operation.</p>

To check the safety reversal:



1. Stop the door with both hands while it is **closing**. The door system must stop and initiate the safety reversal.



2. Stop the door with both hands while it is **opening**. The door system must switch off and take the load off.
3. Position a test object with a height of approx. 50 mm (SKS) or 16 mm (VL) in the centre of the opening and close the door. The door system must stop and initiate the safety reversal as soon as it reaches the obstacle.

- ▶ In the event of a failure of the safety reversal, a specialist must be commissioned immediately for the inspection or repair work.

9 Hand transmitter HSE 4 BiSecur

⚠ WARNING

Risk of injury during intended or unintended door travel

- ▶ 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 protective device, only operate the hand transmitter if you have visual contact with the door!
- ▶ Drive or walk through the door openings only when the door is in the OPEN end-of-travel position!
- ▶ Never stand in the door's area of travel.
- ▶ Note that accidentally pressing a button on the hand transmitter can result in a door run.
- ▶ Make sure that no people or objects are in the door's area of travel when teaching in the radio system.

If you start up, enhance or change the radio system:

- Only possible if the operator is at rest.
- Perform a function check.
- Only use original parts.
- Local conditions may affect the range of the radio system.

If there is no separate garage entrance, perform all programming changes and extensions of radio systems while standing in the garage.

9.1 Product description


- ▶ Figure 22


- | | |
|---------------------------|----------------------------|
| 1 LED, bi-colour | 2 Hand transmitter buttons |
| 3 Battery insulation foil | 4 Battery |

After removing the battery insulation foil, the hand transmitter is ready for operation.

9.2 Changing the battery

► Figure 22.1

 WARNING
<p>Risk of explosion due to incorrect battery type</p> <ul style="list-style-type: none"> ► Use <i>only</i> this battery type: 1 × 3 V battery, type: CR2032, lithium ► Remove the battery from the hand transmitter if it is out of use for a long period of time.

 WARNING
<p>Danger to life due to swallowing battery</p> <p>If the battery is swallowed, serious internal burns can occur within 2 hours and result in death.</p> <p>Keep batteries out of the reach of children!</p>

Proper disposal: See section 13

9.3 Hand transmitter operation

Each hand transmitter button is assigned to a radio code.

- Press the button of the hand transmitter whose radio code you want to transmit.
 - The LED is illuminated blue for 2 seconds.
 - The radio code is transmitted.

9.3.1 Teach-in behaviour of inherited radio codes

If the radio code of the hand transmitter button is inherited beforehand from another hand transmitter and is being used for the first time, press and hold the hand transmitter button until the LED flashes alternately in red and blue and the desired function is performed.

9.4 Inheriting / transmitting a radio code

1. Press and hold the hand transmitter button from which you want to inherit / transmit the radio code.
 - The LED is illuminated blue for 2 seconds and then goes out.
 - After 5 seconds, the LED alternates flashing in red and blue.
 - The hand transmitter button sends the radio code.
2. If the radio code is taught in and recognised, release the hand transmitter button.
 - The LED goes out.

NOTE

You have 15 seconds to inherit / transmit the radio code. If inheriting / transmitting the code was not successful within this period of time, repeat the process.

9.5 Hand transmitter reset

Each hand transmitter button is assigned to a new radio code by means of the following steps.

1. Open the hand transmitter housing.
2. Remove the battery for 10 seconds.
3. Press and hold a circuit board button.
4. Insert the battery.
 - The LED slowly flashes in blue for 4 seconds.
 - The LED flashes quickly in blue for 2 seconds.
 - The LED is illuminated blue for a prolonged period of time.
5. Release the circuit board button.
All radio codes are newly assigned.
6. Close the hand transmitter housing.

NOTE

If the circuit board button is released prematurely, no new radio code is assigned.

9.6 LED display

Blue (BU)

Status	Function
Illuminated 2 s	A radio code is being transmitted
Flashes slowly	Hand transmitter is in the learn mode
Flashes quickly after slow flashing	A valid radio code was detected during the teach-in procedure
Flashes slowly 4 s, Flashes quickly 2 s, Illuminated long	Device reset is being performed and completed

Red (RD)

Status	Function
Flashes 2 ×; following this, the radio code continues to be transmitted	The battery should be replaced soon
Flashes 2 ×; following this, the radio code is no longer transmitted	The battery must be replaced immediately

Blue (BU) and Red (RD)

Status	Function
Flashing alternately	Hand transmitter is in inherit / transmit mode

9.7 Cleaning the hand transmitter

ATTENTION
<p>Damaging the hand transmitter by faulty cleaning</p> <p>► Only clean the hand transmitter with a clean, soft cloth.</p>

NOTE

Regular use of disinfectants can cause damage to the hand transmitter.

9.8 Disposing of electrical and electronic devices



Electrical and electronic devices may not be disposed of in household rubbish, but must be returned to the appropriate recycling facilities.

9.9 Disposing of batteries



Do not put batteries in the household waste! Each consumer is legally required to leave batteries with a collection point in their community, their district, or with a trader, so that they can be disposed of in an environmentally-friendly way.

9.10 Technical data

Hand transmitter HSE 4 BiSecur	
Model	HSE4-868-BS
Frequency	868 MHz
Transmitting power (EIRP)	max. 10 mW
Power supply	1 × 3 V battery, type: CR2032, lithium
Perm. ambient temperature	0 °C to +50 °C
Max. humidity	93%, non-condensing
Protection category	IP 20
Dimensions (W × H × D)	28 × 70 × 14 mm

9.11 EU declaration of conformity for the hand transmitter

The manufacturer of this operator herewith declares that the provided hand transmitter complies with EU Directive Radio Equipment 2014/53/EU.

The complete declaration of conformity can be found in the enclosed log book or requested from the manufacturer.

10 Bluetooth®

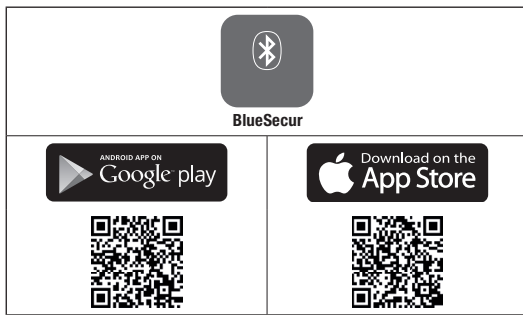
The garage door operator is equipped with a Bluetooth receiver. The operator can be operated via Bluetooth® using the corresponding BlueSecur application (app) on a smartphone.

After Bluetooth® is configured, operation with one smartphone is free of charge. All other users are subject to a fee.

10.1 BlueSecur application (app)

The BlueSecur app is available free of charge in the App StoreSM or from GoogleTM Play.

► Install the BlueSecur app on your smartphone.



10.1.1 System requirements

Operating system		Software version
Android	Smartphone	See the app info in Google TM Play
iOS	Smartphone	See the app info in the App Store SM

10.1.2 App authorisations

In order to use the full functionality of the app, you must allow the following authorizations:

Camera		To scan the QR code.
Bluetooth®		For the communication between app and receiver.
Location	Android	For the Bluetooth function.
Contacts		To distribute (virtual) keys to their contacts.

10.1.3 User

Admin	The first user who connects with the receiver via the QR code is automatically the admin.
	Allocates access rights (keys) for users.
	Can delete access rights (keys) for users.
User	Receive access rights (keys) from the admin.

10.1.4 App functions

In the app, you can select the functions (impulse, lighting, partial opening position, choosing OPEN and CLOSE direction and ventilation position).

Trigger a command

Using the app, the user / admin can trigger a command within the range of the Bluetooth receiver.

Status

Using the app, the user / admin can check the status within the range of the Bluetooth receiver.

Diagnostic data

Operator diagnostic data, such as error messages, operating hours, maintenance displays and door cycles, can be read with the app.

10.1.5 Delete device

If the garage door operator is deleted in the app using the dustbin icon, the operator can no longer be operated using the smartphone. However, the smartphone is still saved in the operator.

To remove the smartphone from the operator, select menu **19** – parameter **02** and delete all Bluetooth devices (see section).

10.1.6 Keys

Purchasing sets of keys

In order to distribute keys, the admin must purchase sets of keys using the in-app purchase function. Payment is made according to the App StoreSM or GoogleTM Play policies.

One-time keys are free of charge.

Distributing keys

The admin can

- Distribute keys to users via all installed messaging services, e.g. e-mail, Facebook Messenger, iMessage, WhatsApp etc.
- **Distribute a maximum of 250** paid keys to users.
- **Distribute a maximum of 15** free one-time keys simultaneously.

NOTE

The BlueSecur app must be installed on the smartphone to use the key. If users have not installed the app upon receiving a key, they will be directed to download it from the App StoreSM or GoogleTM Play.

Key type	Validity
Admin key	Always valid
User key	Always valid or just for a defined time period
One-time key	Valid only once and within a maximum of 1 month

The admin has 2 options for defining the time of validity for one-time keys:

1. The one-time key is valid immediately and can be used just once, within 1 month.
2. The one-time key is valid from a defined date and can be used just once, within 1 month.

Safety when distributing keys

When the admin distributes a key to a user, for security reasons, the user must authenticate themselves using a PIN generated by the server. The user must enter this PIN before the key can be provided to them.

Admin key

Admin keys cannot be deleted. To delete an admin key, select menu **19** – parameter **02** and delete the device from the Bluetooth receiver (see section).

10.1.7 Backup

To avoid losing data, you can create a backup on the Hörmann server. Saved data can be accessed there at any time.

To create a backup, you must first register.

All of the following data existing up to this point will be saved:

- Devices (garage door operators)
- Purchased sets of keys
- Distributed keys



A backup is necessary for restoring data:

- If the admin changes the smartphone
- Before a device reset
- If the smartphone is defective or lost

A backup is strongly recommended to secure the data.

10.2 Enable / disable Bluetooth®

When Bluetooth® is disabled:

1. Briefly press the  button on the operator control panel. Bluetooth® is enabled and in receiver mode. The Bluetooth® symbol flashes.
2. A connection can be established. The Bluetooth receiver remains in receiver mode for 5 minutes and then switches back to operation mode. The Bluetooth® symbol is illuminated.
3. Briefly press the  button on the operator control panel. Bluetooth® is disabled. The Bluetooth® symbol is off.
4. To enable it again, repeat step 1.

10.3 Set up Bluetooth®

The first user that connects with the Bluetooth receiver using the supplied QR code is the admin. This procedure can only be performed once!

1. Bluetooth® must be enabled.
2. Start the app in range of the Bluetooth receiver.
3. Select the **Teach in** field (iOS) or the + symbol (Android). The camera opens.
4. Scan the QR code.
The first user is connected with the Bluetooth receiver as the admin.
5. Assign a name to the device.

The Bluetooth receiver is in operation mode.

Store the QR code in a safe place. You will need the QR code to set up a Bluetooth receiver again.

10.4 Operation

A connection to the Bluetooth receiver is always established exclusively through communication with the app, e.g. for triggering a command, adjusting settings in the app or user management.

Only one smartphone can be connected to the Bluetooth receiver at a time. A connection takes approx. 1 second. Only after this can the next smartphone connect to the receiver.

10.4.1 Range

Range and performance are highly dependent on the smartphone. For communication with the receiver, the user must be in range to perform the following actions:

- Trigger a command
- Set up, manage and delete devices
- Delete user permissions

10.4.2 Synchronise

The date and time is synchronised in the receiver with each communication of the admin's smartphone with the receiver.

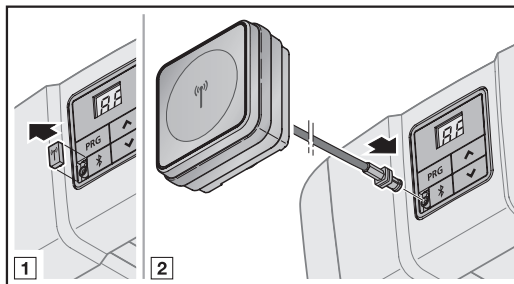
10.4.3 power failure

Taught-in keys, user data and settings are saved in a power failure-proof manner.

10.4.4 Smartphone loss

In the event that the smartphone is lost, unauthorised parties could gain access to the garage door. In this case, select menu **19** – parameter **02** and delete the device from the Bluetooth receiver (see section).

10.5 External Bluetooth antenna*



An external antenna is recommended in the event of a limited range.

Configure an external antenna in the app settings. The factory setting is the internal antenna.

10.6 EU declaration of conformity for Bluetooth receivers

The manufacturer of this operator herewith declares that the integrated Bluetooth receiver complies with EU Directive Radio Equipment 2014/53/EU.

The complete declaration of conformity can be found in the enclosed log book or requested from the manufacturer.

10.7 Open source license

The following open source software is included with this product:

mbed TLS 2.16.1 (<https://tls.mbed.org>)
Copyright 2006 – 2018, ARM Limited, all rights reserved

This software is licensed under Apache license version 2.0 (the “license”); you may only use this file in accordance with the license.



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You will find information on specific language-relevant rights and restrictions in the license, whose complete text you will find in the corresponding “BlueSecur” app.


* – Accessory, not included as standard equipment!

11 Operation

	 WARNING
	<p>Danger of injury due to door run If persons or objects are in the area of the door during door travel, this can lead to injuries or damage.</p> <ul style="list-style-type: none"> ▶ Objects and persons, especially children, must not be in the door system's area of travel or opening area. ▶ Only operate the operator in door systems with a single protective device if you are within sight of the door's area of travel. ▶ Monitor the door travel until the end-of-travel position is reached. ▶ Go through the door openings of remote-controlled door systems only when the garage door is in the OPEN end-of-travel position. ▶ Never stay standing under the open door.

 WARNING
<p>Danger of crushing in the boom Do not reach into the boom with your fingers during door travel, as this can cause crushing.</p> <ul style="list-style-type: none"> ▶ Do not reach into the boom during a door run.

 WARNING
<p>Overload of the cord knob Can cause injuries and damage the operator.</p> <ul style="list-style-type: none"> ▶ Do not hang on the cord knob with your body weight

 WARNING
<p>Danger of injury resulting from an uncontrolled door run in the CLOSE direction if one of the counterbalance springs breaks and the slide carriage is released. If a retrofit kit is not installed, uncontrolled door travel in the CLOSE direction may occur if the slide carriage is released while a counterbalance spring is broken, the door is improperly balanced or the door is not completely closed.</p> <ul style="list-style-type: none"> ▶ The specialist must install a retrofit kit on the slide carriage if the following applies: <ul style="list-style-type: none"> - The standard DIN EN 13241-1 applies - The operator is retrofitted to a Hörmann sectional door without spring safety device (BR30) by a specialist. <p>This retrofit kit includes a bolt that secures the slide carriage against uncontrolled unlocking as well as a new cord knob tag with images showing how the set and the slide carriage should be handled for the two operation modes of the boom.</p> <p>NOTE The use of an emergency release or an emergency release lock is not possible in conjunction with the retrofit set.</p>

ATTENTION
<p>Damage due to the cord of the mechanical release If the cord of the mechanical release becomes caught on a roof rack system or any other protrusions of the vehicle or door, this can lead to damage.</p> <ul style="list-style-type: none"> ▶ Make sure that the cable cannot become caught.

11.1 Instructing users

The operator may be used by

- Children over 8 years of age
- Persons with limited physical, sensory or mental capabilities
- Persons with a lack of experience or knowledge.

The condition for use of the operator is that the above-mentioned children / persons

- Are supervised
- Instructed on safe use
- Understand the resulting dangers.


Children must not play with the operator.

- ▶ Show all users of the door system the proper and safe use of the operator.
- ▶ Demonstrate and test the mechanical release and safety reversal.

11.1.1 Cord knob mechanical release

Fix the cord knob for mechanical release at a maximum height of 1.8 m from the garage floor. The cord may need to be extended on site, depending on the height of the garage door.

- ▶ Please make sure that the cord cannot become caught on a roof rack system or any other protrusions of the vehicle or door.

 WARNING
<p>Danger of injury due to a fast-closing door If the cord knob is actuated while the door is closing, the door may close quickly due to weak, broken springs or faulty counterbalance.</p> <ul style="list-style-type: none"> ▶ Only pull the cord knob when the door is closed.





- ▶ Pull the cord knob when the door is closed. The door is now unlocked and should be easy to open and close by hand.

11.1.2 Mechanical release by emergency release lock:

For garages without a second an emergency mechanical release is required. An emergency release prevents the possibility of being locked out during a power failure.

- ▶ When the door is closed, actuate the emergency release lock. The door is now unlocked and should be easy to open and close by hand.

11.2 Functions of control buttons

1. Press the  button.
The door opens.
 2. Press the  button again.
The door stops.
-
1. Press the  button.
The door closes.
 2. Press the  button again.
The door stops.

11.3 Functions of various radio codes

Each hand transmitter button is assigned to a radio code. To operate the operator with the hand transmitter, the radio code for the respective hand transmitter button must be taught in to the channel of the desired function on the integrated radio receiver.

► Section 7

NOTES

- If the radio code of the hand transmitter button is inherited from another hand transmitter, press and hold the hand transmitter button until the LED flashes alternately in red and blue and the desired function is performed.
- If the operator recognises an inherited radio code that has not yet been taught in at the integrated radio receiver, the operator automatically changes to learning mode for 10 seconds.

11, 12, 13, 14, 15 or 16 flashes on the display.

11.3.1 Channel 1 / impulse

In normal operation, the garage door operator works with the impulse sequence control.

Pressing the corresponding hand transmitter button, the button or an external button triggers the impulse. 

1. Impulse: The door runs towards an end-of-travel position.
2. Impulse: The door stops.
3. Impulse: The door runs in the opposite direction.
4. Impulse: The door stops.
5. Impulse: The door runs in the direction of the end-of-travel position selected in the 1st impulse

etc.

11.3.2 Channel 2 / lighting

Pressing the corresponding hand transmitter button for light switches the operator light on and off prematurely.

11.3.3 Channel 3 / partial opening

If the door is **not in the partial opening position**, the hand transmitter button with the radio code for partial opening triggers a door run to this position.

If the door is in the **partial opening position**, the hand transmitter button triggers the following:

- A door run in the CLOSE end-of-travel position with the radio code for partial opening.
- A door run in the OPEN end-of-travel position with the radio code for impulse.

11.3.4 Channel 4 / choosing OPEN direction

The hand transmitter button with the radio code for OPEN position triggers the impulse sequence (Open – Stop – Open – Stop) for a door run to the OPEN end-of-travel position.

11.3.5 Channel 5 / choosing CLOSE direction

The hand transmitter button with the radio code for CLOSE position triggers the impulse sequence (Close – Stop – Close – Stop) for a door run to the CLOSE end-of-travel position.

11.3.6 Channel 6 / ventilation

If the door is **not in the ventilation position**, the hand transmitter button with the radio code for ventilation triggers a door run to this position.

If the door is **in the ventilation position**, the hand transmitter button triggers the following:

- A door run in the CLOSE end-of-travel position with the radio code for ventilation.
- A door run in the OPEN end-of-travel position with the radio code for impulse.

11.3.7 Channel 7 / all functions

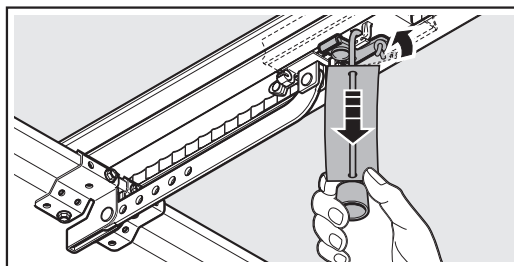
Intended for teaching in Hörmann Smart Home control centres (e.g. Hörmann homee Brain).

11.4 Garage door operator behaviour after 3 fast OPEN door runs in a row

The motor of the garage door operator is equipped with thermal overload protection. If the operator performs 3 fast runs in the OPEN direction within 2 minutes, the overload protection reduces the travel speed in the OPEN direction. Runs in the OPEN and CLOSE direction are then performed at the same speed. After an idle time of another 2 minutes, the next run in the OPEN direction is then once again fast.

11.5 Behaviour during a power failure (without an emergency battery)

During a power failure, open and close the door system by hand. Disengage the operator first.

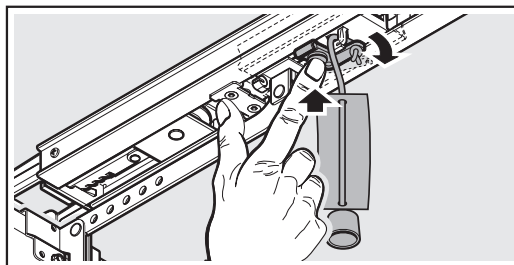


- Pull on the cord of the mechanical release. The slide carriage is disengaged for manual operation.

11.6 Behaviour after the power returns (without emergency battery)

After the power returns,  flashes until all the taught-in radio codes are loaded.

After the power returns, you have to re-engage the operator for automatic operation.



- Push the green button on the slide carriage. The slide carriage is re-engaged for automatic operation.

11.7 Behaviour during a power failure (with an emergency battery)

- Figure 21

To move the door in the event of a power failure, an optional emergency battery can be used. The system is switched to battery operation automatically. During battery operation, fewer LEDs are illuminated on the operator light.

⚠ WARNING

Danger of injury due to unexpected door run
 An unexpected door run may occur when the emergency battery is still connected despite the mains plug being pulled out.

- ▶ Disconnect the mains plug **and** the plug of the emergency battery whenever performing work on the door system. Safeguard the door system against being switched on again without authorisation.

11.8 reference run

Display



A reference run is required:

- If the power limit is activated 3x in a row during a run in the CLOSE direction.
- In case of a power failure during a door run.

A reference run is performed:

- Only in the OPEN direction.
- The operator light and display flash.
- At a reduced speed.
- With a minor increase in force of the most recently taught-in forces.



The impulse triggers the reference run. The operator moves to the OPEN end-of-travel position.

12 Inspection and maintenance

The manufacturer recommends that the door system is checked and maintained **annually** by a specialist.

No rest period is required between operating cycles.

- ▶ Observe the maximum number of operating cycles per hour indicated on the data label.

⚠ WARNING

Danger of injury due to unexpected door run
 Unexpected door travel may occur during inspection and maintenance work if the door system is inadvertently actuated by other persons.

- ▶ Disconnect the mains plug **and** the plug of the emergency battery whenever performing work on the door system. Safeguard the door system against being switched on again without authorisation.

Inspection and repairs may only be carried out by a qualified person. Contact your specialist dealer.

A visual inspection may be carried out by the operator.

- ▶ Check all safety and protective functions **monthly**.
- ▶ Check all protective devices without self-testing **every six months**.
- ▶ You must eliminate any errors or defects **immediately**.

Do not allow children to clean or maintain this operator without supervision.

12.1 Tension of the toothed belt

The toothed belt of the boom is tensioned optimally at the factory.

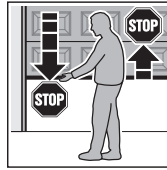
During the start-up and slow-down phase, the toothed belt may briefly hang out of the boom profile with larger doors.

However, this does not constitute a technical malfunction and

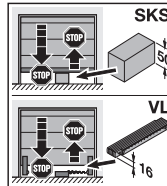
does not negatively affect the function and service life of the operator.

12.2 Checking safety reversal / reversing

To check safety reversal / reversing:



1. Stop the door with both hands while it is **closing**. The door system must stop and initiate the safety reversal.
2. Stop the door with both hands while it is **opening**. The door system must switch off and take the load off.
3. Position a test object with a height of approx. 50 mm (SKS) or 16 mm (VL) in the centre of the opening and close the door. The door system must stop and initiate the safety reversal as soon as it reaches the obstacle.



- ▶ In the event of a failure of the safety reversal, a specialist must be commissioned immediately for the inspection and repair work.

13 Dismantling and disposal

NOTE

When dismantling the system, observe the applicable regulations governing workplace safety.

Have a specialist dismantle the garage door operator in the reverse order of these instructions and dispose of it properly.

13.1 Disposing of the packaging



Dispose of the packaging sorted by materials:

- Cardboard and paper in the paper recycling
- Plastic film in the mixed recycling

13.2 Electrical and electronic devices



Electrical and electronic devices may not be disposed of in household rubbish, but must be returned to the appropriate recycling facilities.

14 Warranty conditions

Thank you for the trust you have placed in us with your purchase of a Hörmann product.

Hörmann products are developed and produced in specialised factories to a high quality standard. If there is a reason for complaint with regard to our product, Hörmann grants (see para. 1) the following warranty from:

1. Warranty provider

The warrantor is exclusively the Hörmann international sales company responsible for the respective country in which the product (see para. 2) was purchased by the customer. You can find the respective Hörmann international sales company responsible for your country under: www.hoermann.com/en/hoermann-in-your-country/ (Englisch).

2. Warranty period and warranty item

The customer receives a parts warranty on the operator technology, the motor and the motor control unit of the door operator SupraMatic H 4 (hereinafter referred to as "Product") for 5 years from the date of purchase, the maximum period of use being 20 cycles per hour / 150 cycles per day (OPEN / CLOSE). The warranty on radio equipment, accessories and special systems lasts 2 years.

For replacement deliveries, the remaining warranty period for the original product applies, but at least a warranty period of six months.

The warranty period begins on the date of purchase. Please keep the original receipt to prove the date of purchase.

3. Warranty scope

For the duration of the warranty we shall eliminate any product defects that are proven to be attributable to a material or manufacturing fault. A claim under this warranty exists only for damage to the subject matter of the contract itself; any concomitant and / or consequential damage is not covered by the warranty.

The warranty does not apply to defects which are due to

- improper fitting or electrical connection;
- improper initial start-up or use;
- failure to arrange for care, cleaning and maintenance;
- negligent or intentional damage / destruction or vandalism;
- unsuitable fitting location or defective water run-off in the fitting area of the product;
- external influences such as fire, excessive ambient humidity or aggressive environmental substances (e.g. salts, alkalis, acids, fertilisers or other chemical substances), abnormal environmental effects (e.g. hail), ambient air containing salt water and / or sand
- improper transport;
- primer coating and other surface protection;
- colour or surface changes;
- incorrect protective coatings or coatings not applied in good time
- repairs not conducted by professionals;
- use of non-original spare parts;
- changes, conversions and / or extensions without our prior written consent;
- normal wear and tear;
- removal or defacing of the data label.

4. Performance under the warranty

We pledge to replace a defective product with a non-defective product, to carry out repairs, or to grant a price reduction at our discretion, whereby we do not cover the costs for installation and removal as well as shipping costs. Replaced parts become our property or, at our discretion, are to be disposed of by the customer at the customer's expense.

Our performance under the warranty (repair, replacement of the product or price reduction) does not extend the warranty period or cause the warranty to restart.

5. Geographic and personal scope of the warranty

A claim under this warranty is only valid for the country in which the Hörmann product was purchased. The product must have been purchased through our authorised distribution channels. In addition, the product must be under the ownership of the original purchaser and must not have been dismantled or reassembled.

6. Making a warranty claim

To make a claim under this warranty, please contact the dealer from which you purchased the product.

A claim under the warranty can only be made upon presentation of the original receipt of purchase. In order to be able to check and process your warranty claim as quickly as possible, we require the following information:

- your contact details for queries and, in the event of a justified warranty claim, for processing the claim;
- information about the dealer from which you have purchased the product;
- the product designation;
- a photo of the product's data label;
- a detailed description of the defect.

If additional information is required for processing, it must be submitted to us upon request.

We are entitled to involve third parties to check and process the warranty claim.

7. Reference to the consumer's statutory rights in case of defects

We expressly point out that you have statutory rights in case of a defect upon delivery of the product (supplementary performance, withdrawal or reduction of the purchase price as well as compensation for damages). The exercising of these statutory rights is free of charge and is not limited by this warranty which goes beyond the rights.

15 EC / EU declaration of conformity / manufacturer's declaration

(as defined in EC / EU Machinery Directive 2006/42/EC according to Annex II, Part 1 A for a complete machine or Part 1 B for incorporation of an incomplete machine)

For the end user to fit this garage door operator, only a combination with specifically approved door types is permitted. These door types can be found in the complete EC / EU declaration of conformity in the provided log book.

However, if this garage door operator is not combined with an approved door type, the fitter will be considered a manufacturer of the complete machine.

In this case, fitting may only be done by a fitting company, as only they have knowledge of the relevant safety regulations, valid directives and standards, as well as the required testing and measuring devices.

The appropriate manufacturer's declaration can also be found in the provided log book.

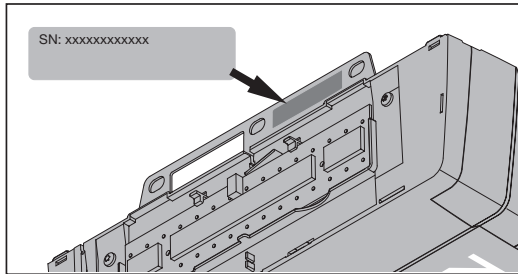
16 Technical data

Mains voltage	230 / 240 V, 50 / 60 Hz
Standby	0.6 W
Time to standby (ready state)	1 min
Frequency	<ul style="list-style-type: none"> • Radio system: 868 MHz • Bluetooth: 2.4 GHz
Permissible ambient temperature	-20°C to +60°C
Max. humidity	93%, non-condensing
Protection category	Only for dry rooms
Automatic safety cut-out	Is automatically taught in for both directions separately
End-of-travel position cut-out / power limit	<ul style="list-style-type: none"> • Self-learning • Wear-free • Automatic safety cut-out, readjusting at every door run.
Travel time limit	90 s, side sliding sectional door 180 s
Rated load	See data label
Pull and push force	See data label
Motor	Direct current motor with Hall sensor
Switching power supply	24 V DC / 37 V DC
Connection	<ul style="list-style-type: none"> • Screw terminal for external devices • Screwless connection technology for external 2-wire buttons and photocells

Special functions	<ul style="list-style-type: none"> • Photocell or safety edge can be connected • Option relay, adapter print and additional HCP bus participants can be connected
Quick release	Manual operation from inside with cable
Universal fittings	For up-and-over garage doors and sectional doors
Door travel speed	<ul style="list-style-type: none"> • Max. 14 cm/s¹⁾ for travel in the CLOSE direction • Max. 25 cm/s¹⁾ for travel in the OPEN direction
Operator airborne sound emission	≤ 70 dB (A)
Side guide	<ul style="list-style-type: none"> • Extremely flat with 30 mm • With integrated anti-lift kit • With toothed belt

1) Depending on operator type, door type, door size and door leaf weight

16.1 Data label position



17 Displaying errors, warnings and operating modes

17.1 Control buttons



	Teaching in the operator
	Impulse button in normal operation
	Change functions and parameters
	Cancel learning runs prematurely
	Acknowledge errors
PRG	Save functions and parameters
	Cancel learning runs prematurely
	Enable / disable Bluetooth®

17.2 Operator light messages









Status	Function
Flashes slowly	Learning run or reference run is being performed
Flashes once	Factory reset successful
Flashes 3 × once	During the pre-warning time
	Maintenance interval has been reached
Illuminated for 120 seconds	The operator has not been taught in (delivery condition)
	Single plate mode

17.3 Operating condition display

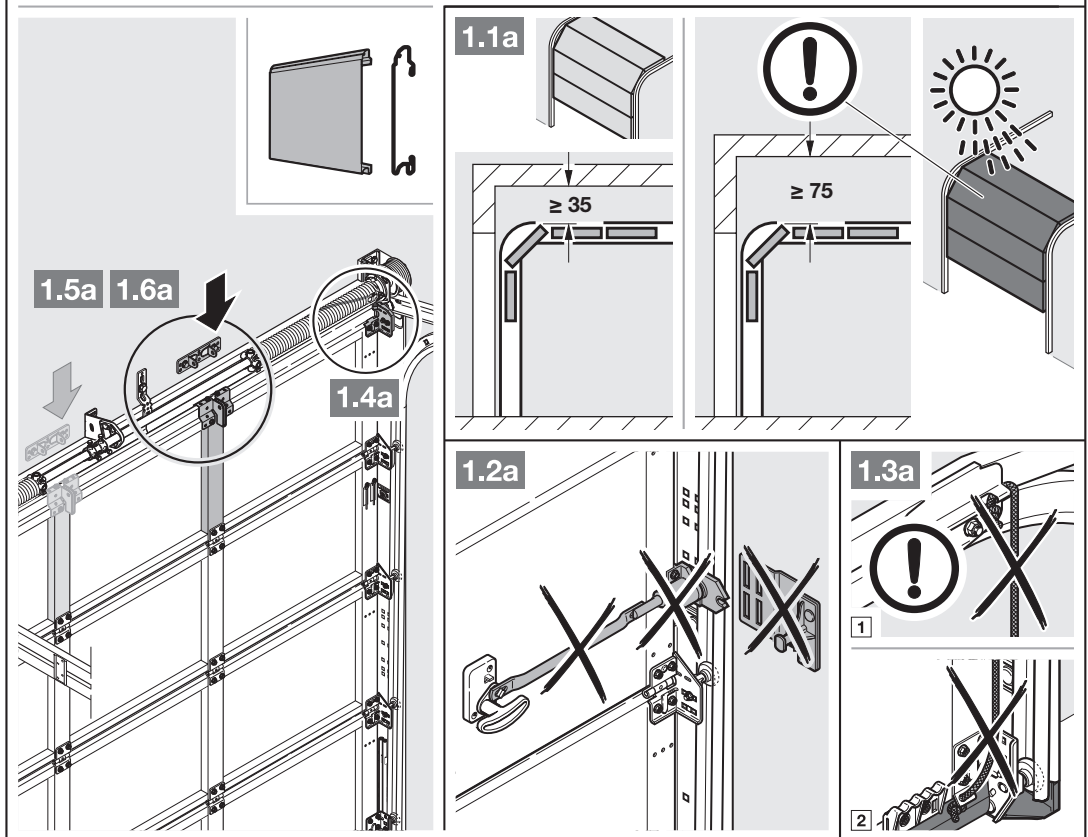
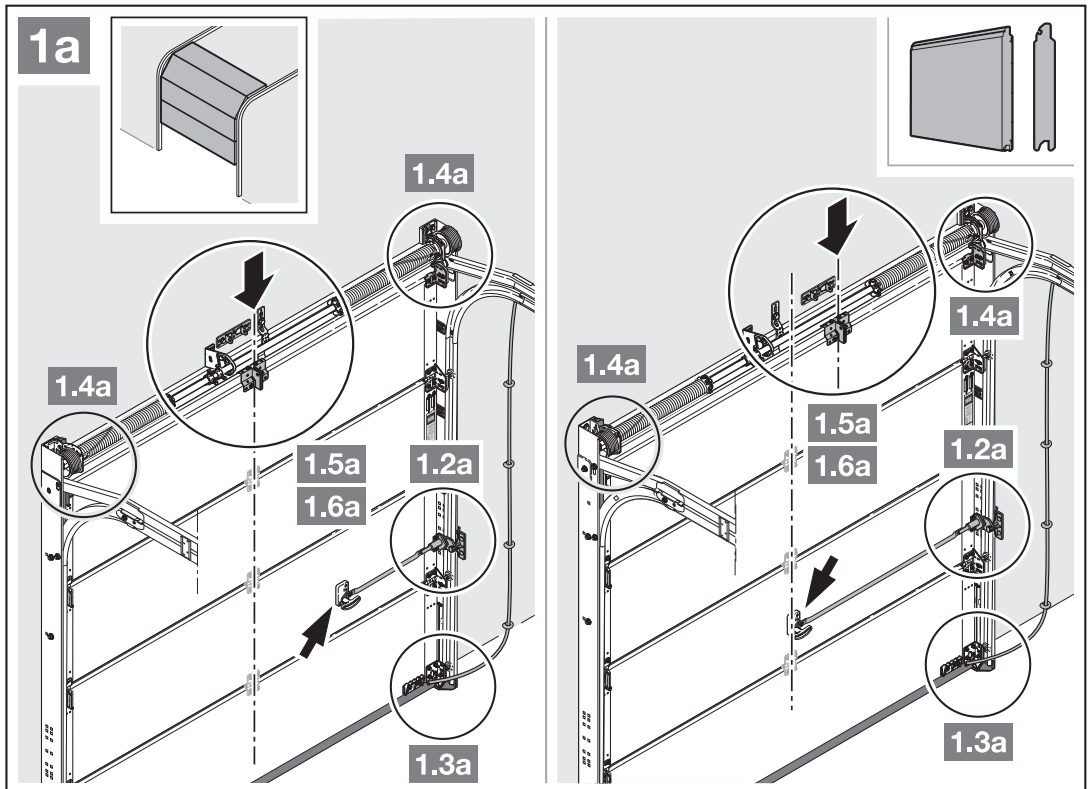
8.0	The operator has not been taught in
8.8	Learning runs are necessary
((8.8))	The operator performs the required learning run in the OPEN direction
((8.8))	The operator performs the required learning run in the CLOSE direction
8.8.	The operator is in the OPEN end-of-travel position
8.8	The operator is in the CLOSE end-of-travel position
((8.))	<ol style="list-style-type: none"> 1. The operator moves in the OPEN direction 2. The automatic timer is active
((8.))	The operator moves in the CLOSE direction
((((8.)))	<ol style="list-style-type: none"> 1. The operator is in the OPEN end-of-travel position 2. The pre-warning phase is active
((((8.)))	<ol style="list-style-type: none"> 1. The operator is in the CLOSE end-of-travel position 2. The pre-warning phase is active
8.8.	The operator is in an intermediate position
((8.-))	<ol style="list-style-type: none"> 1. The operator is in an intermediate position 2. The pre-warning phase is active
8.H	The operator is in the partial opening position
((H))	The operator moves to the partial opening position
((H))	<ol style="list-style-type: none"> 1. The operator is in the partial opening position 2. The automatic timer is active
((((H)))	<ol style="list-style-type: none"> 1. The operator is in the partial opening position 2. The pre-warning phase is active
H2	The operator is in the ventilation position
((H2))	The operator moves to the ventilation position
((((H2)))	<ol style="list-style-type: none"> 1. The operator is in the ventilation position 2. The pre-warning phase is active
8.8 (*)	Impulse input from a radio code (flashes 1 ×)
8.8 (*)	Standby (flashes continuously)
8.8 (*)	Sends the door position feedback to the hand transmitter (flashes 1 ×)
((8.))	A reference run is being performed
8.8.	Illuminated for 2 seconds
	<ol style="list-style-type: none"> 1. On power restoration after a power failure. 2. After a factory reset

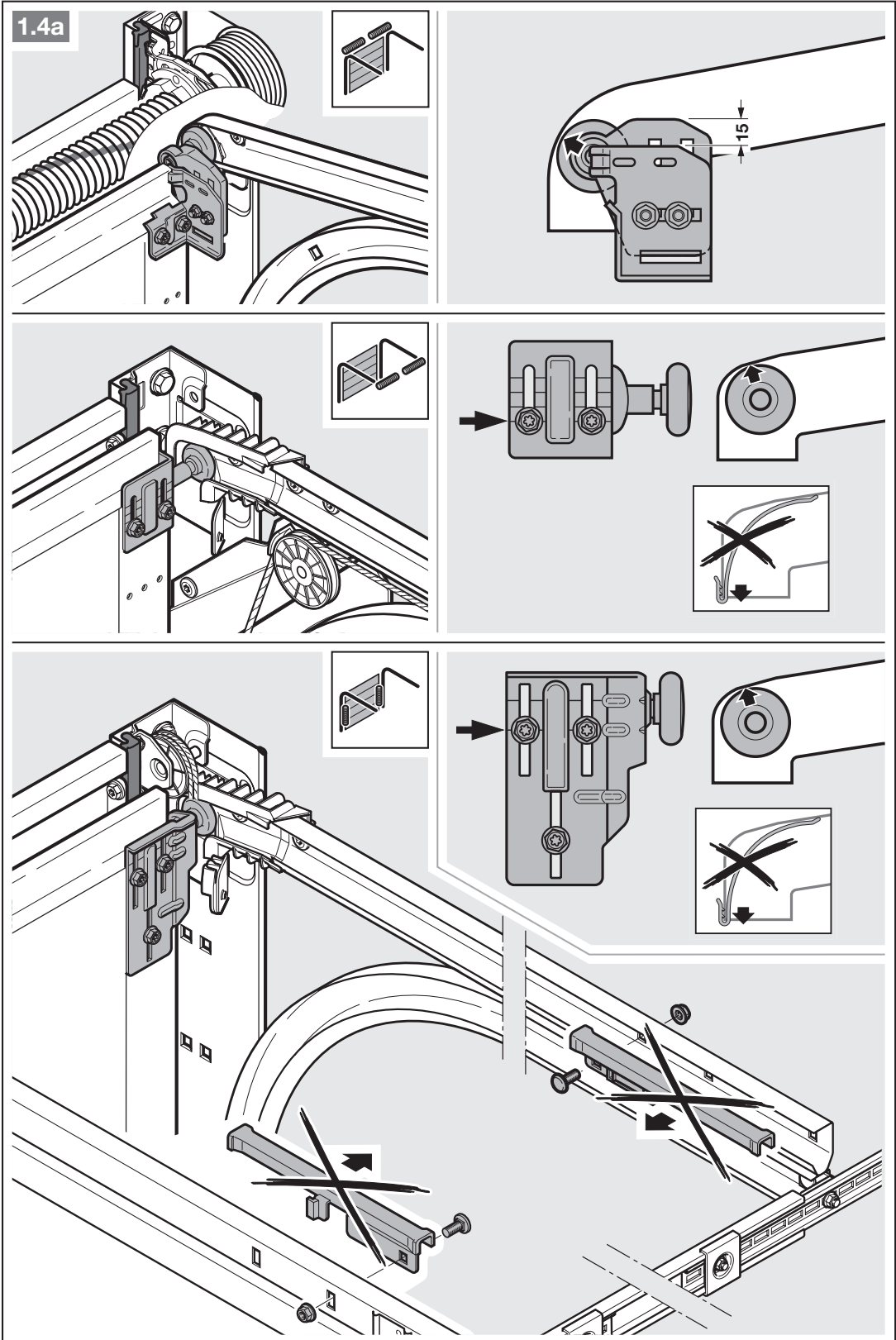
	All taught-in radio codes are being loaded.
	Performing BUS scan

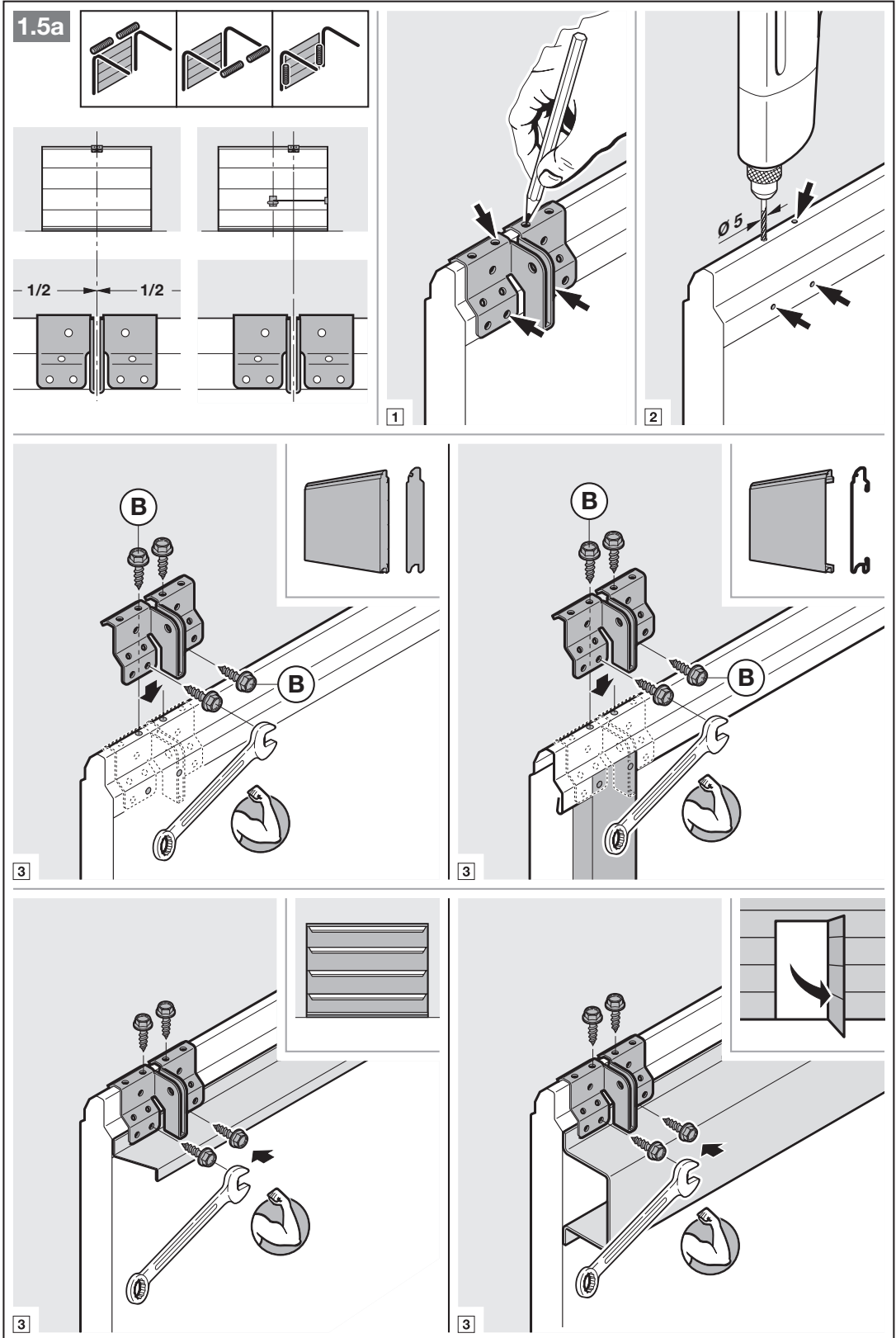
17.4 Display of errors and warnings

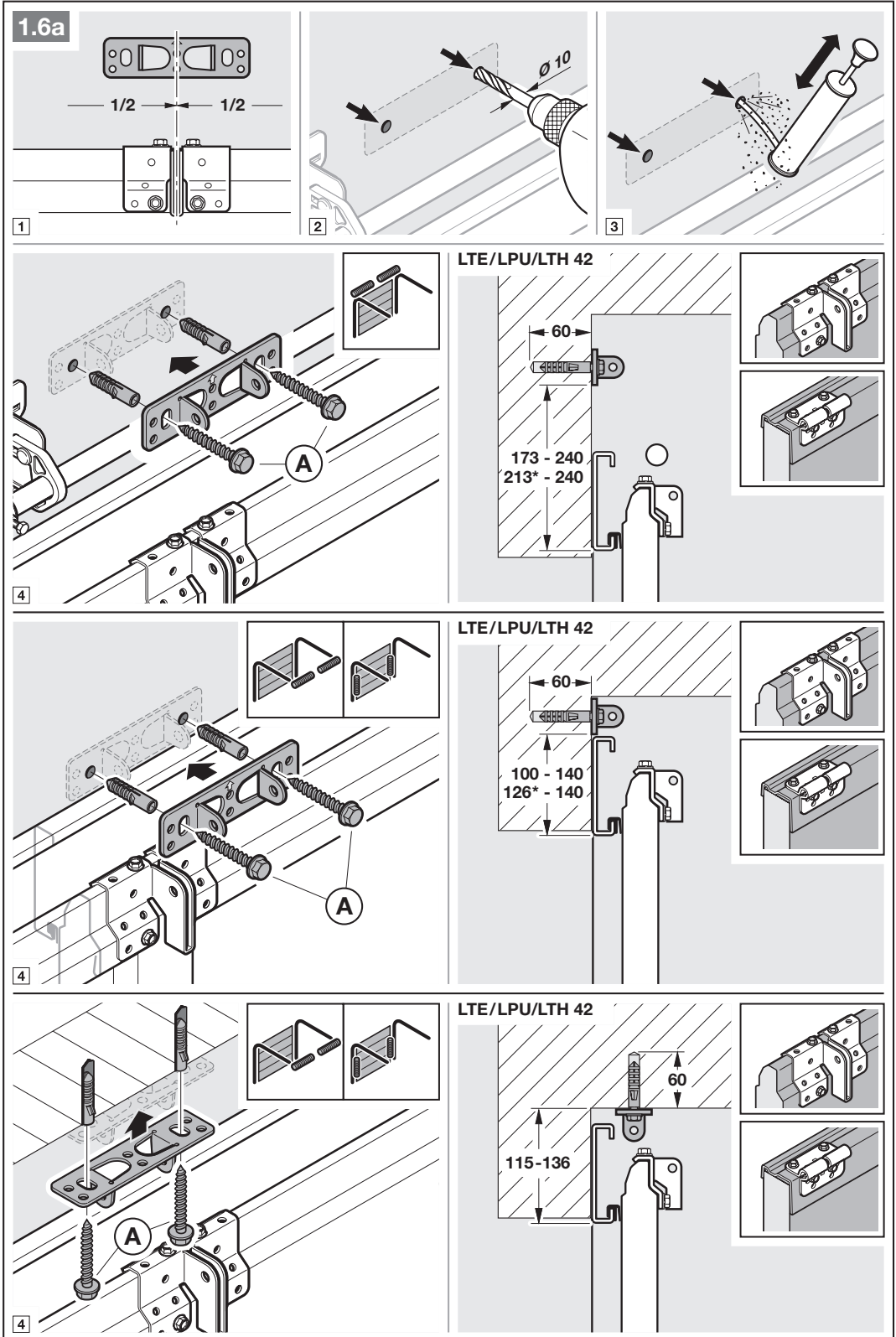
Display	Error / warning	Possible cause	Remedy
	Setting the reversal limit is not possible	When setting the SKS/VL reversal limit, an obstacle is in the way	Remove the obstacle
		The position of the reversal limit is > 200 mm before the CLOSE end-of-travel position	Pressing the  or  button acknowledges the error. Select a position < 200 mm before the CLOSE end-of-travel position
		The test body was not recognised when setting the SKS/VL reversal limit.	Repeat the setting of the reversal limit.
	Setting the partial opening position is not possible	The partial opening position is too close to the end-of-travel positions (\leq 120 mm slide travel)	The partial opening position must be > 120 mm
	Setting the ventilation position is not possible	The ventilation position is outside of the permitted range	The ventilation position must be 35 – 300 mm slide travel before the CLOSED end-of-travel position
	Door teach-in not possible	The taught-in travel path is too short	Increase the distance between the end stops
	Protective device on SE1	No protective device connected	Connect a protective device. Deactivate the protective device in the menu by performing a reset (menu 37).
		The protective device signal is interrupted before travel	Set / configure the protective device Check the connecting leads and, if necessary, replace them
		The protective device is defective	Replace the protective device
	Power limit in the CLOSE direction	The door is too sluggish or does not move smoothly	Correct the door travel
		Obstacle in door area	Remove the obstacle and teach in the operator again, if necessary
	Static current circuit interrupted	The wicket door is open	Close the wicket door
		The magnet has been fitted the wrong way	Fit the magnet correctly (see the instructions for the wicket door contact)
		The self-testing result is not OK	Exchange the wicket door contact
		Static current circuit interrupted on the accessory connected to the BUS socket.	Check the accessory on the BUS socket
	Power limit in the OPEN direction	The door is too sluggish or does not move smoothly	Correct the door travel
		Obstacle in door area	Remove the obstacle and teach in the operator again, if necessary
		Spring break	Check the springs. If necessary, have a specialist replace the springs.
		Spring tension decreasing	Check the spring tension. If necessary, have a specialist adjust the spring tension.
	System error	Internal error	Perform a factory reset and teach in the operator again; if necessary, replace it
	Travel time limit	The belt is torn	Exchange the belt
The operator is defective		Exchange the operator	

Display	Error / warning	Possible cause	Remedy
8.8 ^(*)	Communication error	Communication with control element or additional print is faulty	Check the connecting leads and, if necessary, replace them
			Check the control element or additional print and, if necessary, replace them
			Perform a BUS scan (see section 7, menu 37)
8.8 ^(*)	Control elements / operation	Error during input	Check and change the input
		Input of invalid value	Check and change the input value
	Travel command is not possible	The operator was locked for the control elements and a travel command was issued	Release the operator for the control elements Check the IT3b connection
8.9 ^(*)	Specifically for taught-in protective devices	Self-testing protective device is interrupted	Check the protective device and replace it if necessary
		Closing edge safety device / leading photocell actuated	Remove the obstacle
		Closing edge safety device / leading photocell is defective or not connected	Check the closing edge safety device / leading photocell, exchange or connect as needed
8.0 ^(*)	Voltage error (over / undervoltage)	In battery operation: signalling In the event of power supply undervoltage: internal error without signalling	Charge battery, check voltage source
8.8 ^(*)	Spring	Spring tension decreasing	Check the spring tension. If necessary, have a specialist adjust the spring tension.
		Spring break	Check the springs. If necessary, have a specialist replace the springs.
8.8	No reference point	The CLOSE direction power limit was activated 3 × in a row	Move the door to the OPEN end-of-travel position
		Power failure during a door run	
8.0	The operator has not been taught in	No error The operator has not been taught in yet	Teach in the operator (see section 4)
8.n	Maintenance interval signal (display In flashes 3 × in each end-of-travel position)	No error The maintenance interval set by the fitter has been exceeded.	Have the door system inspected and maintained by a specialist in accordance with manufacturer specifications.

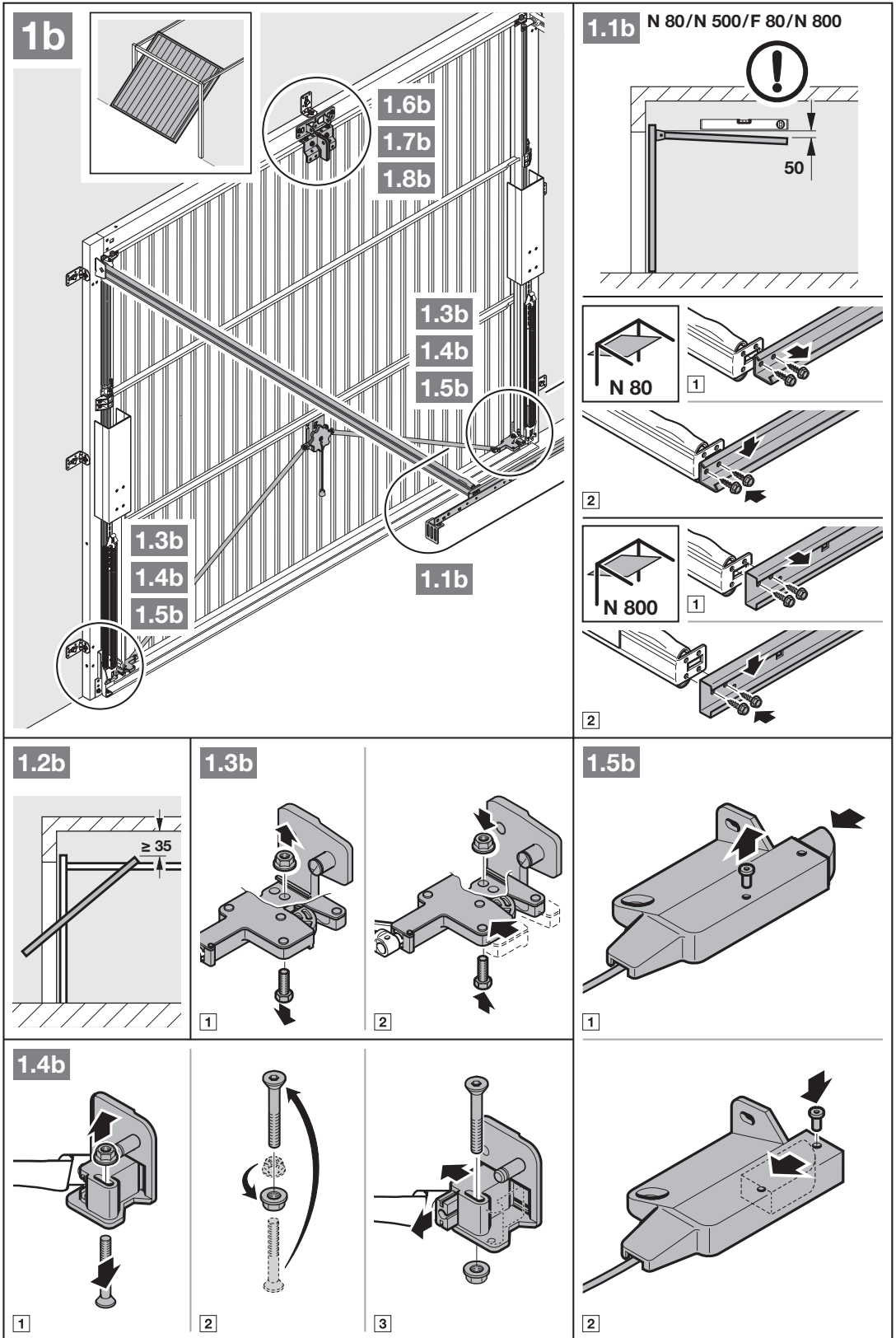








* - see notice in chapter 3.2



1b

1.1b N 80/N 500/F 80/N 800



50

1.3b
1.4b
1.5b

1.1b

N 80

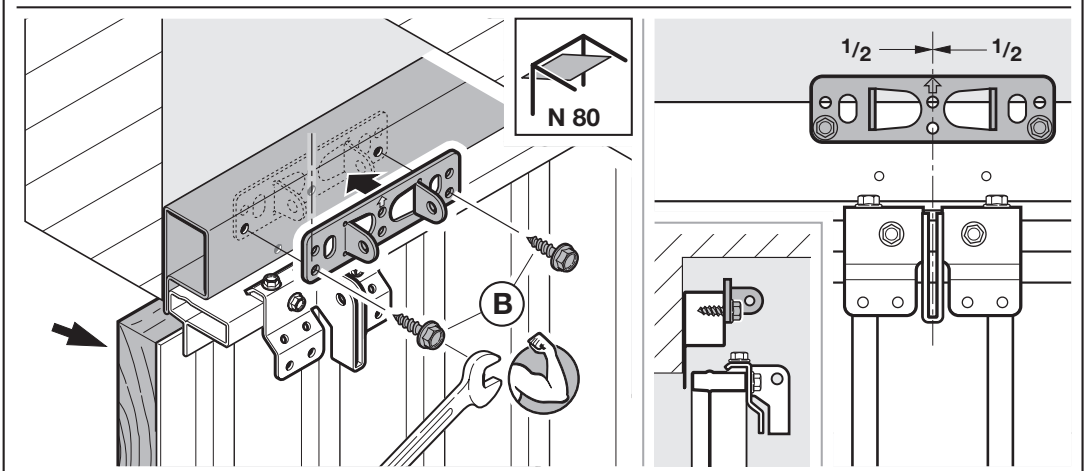
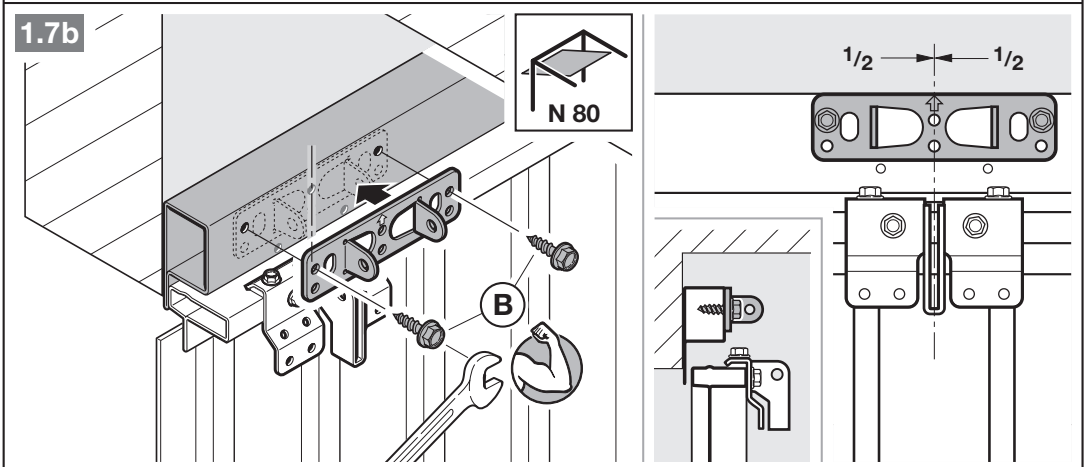
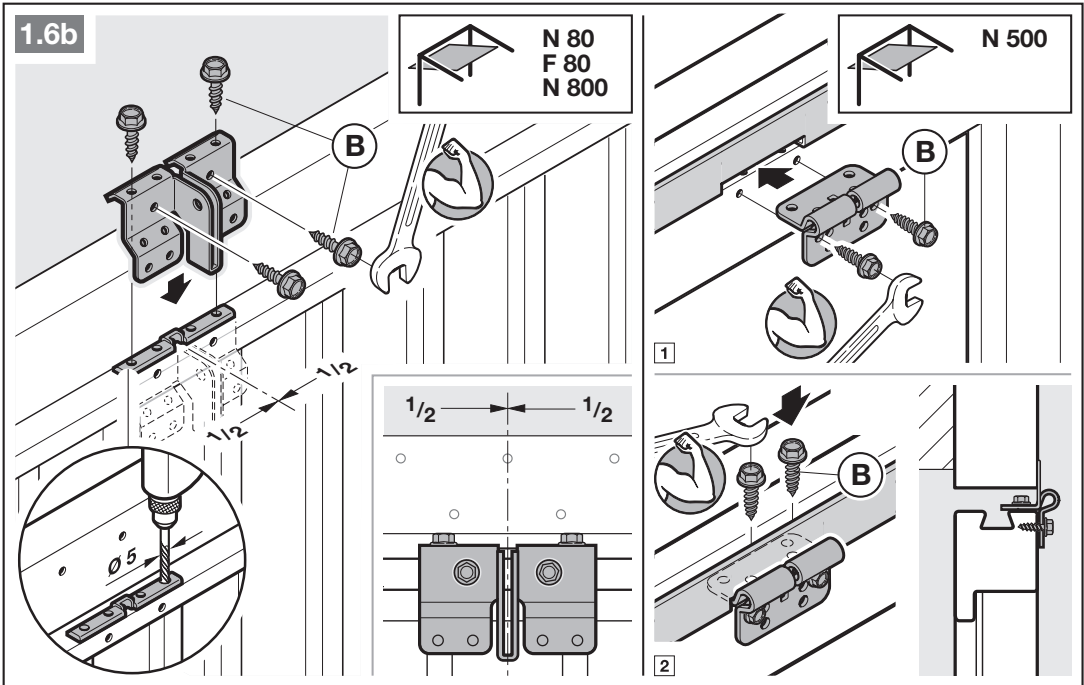
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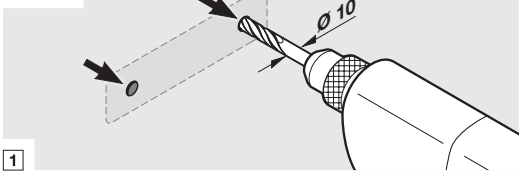
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1.5b

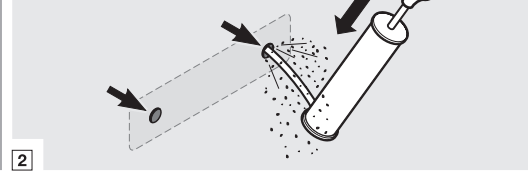
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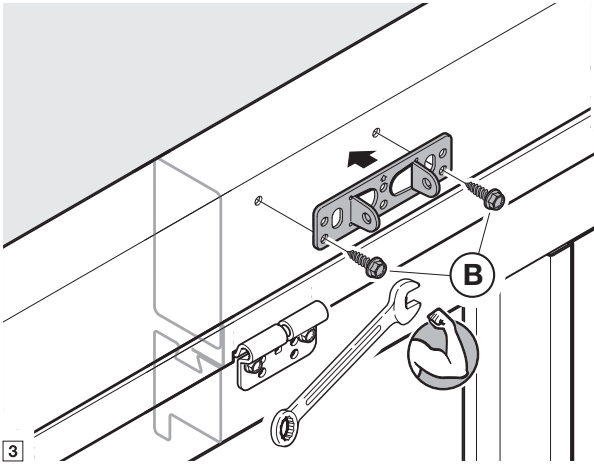
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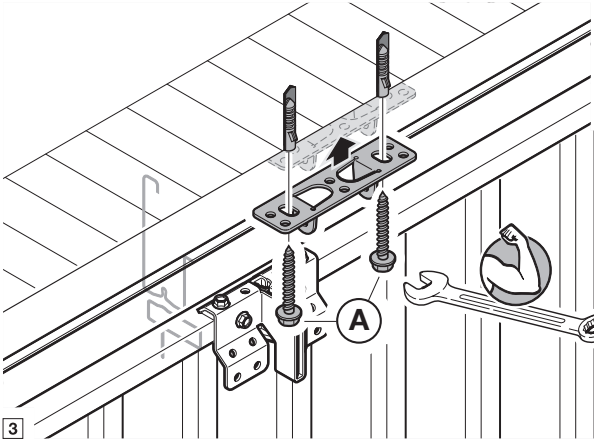
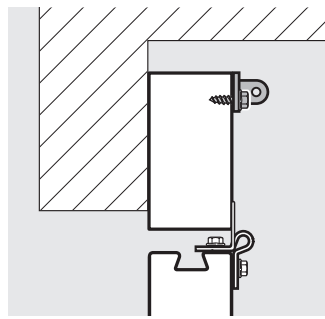
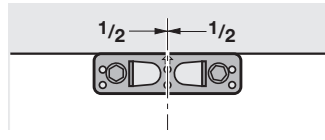
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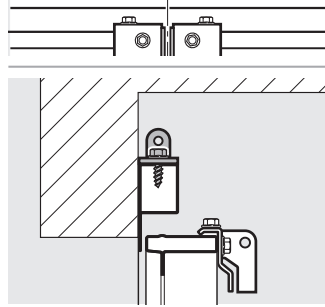
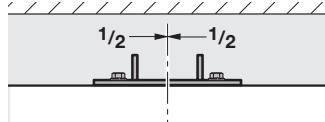
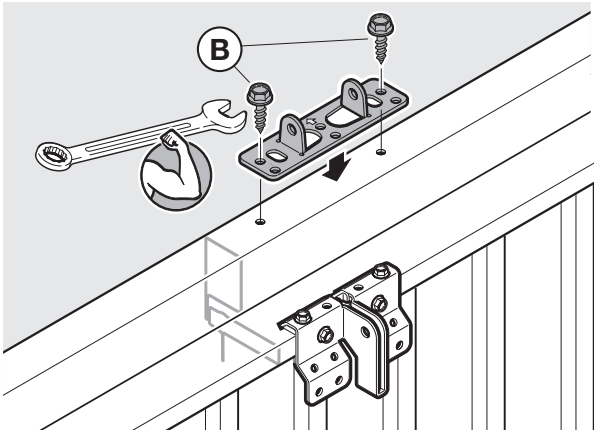
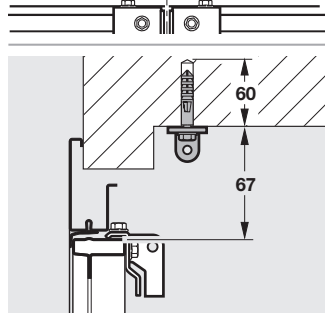
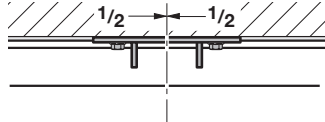
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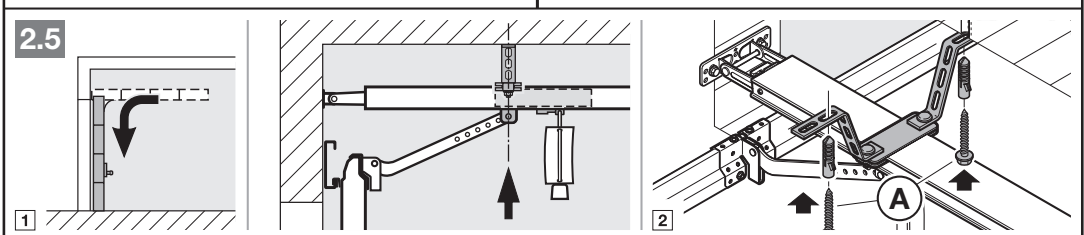
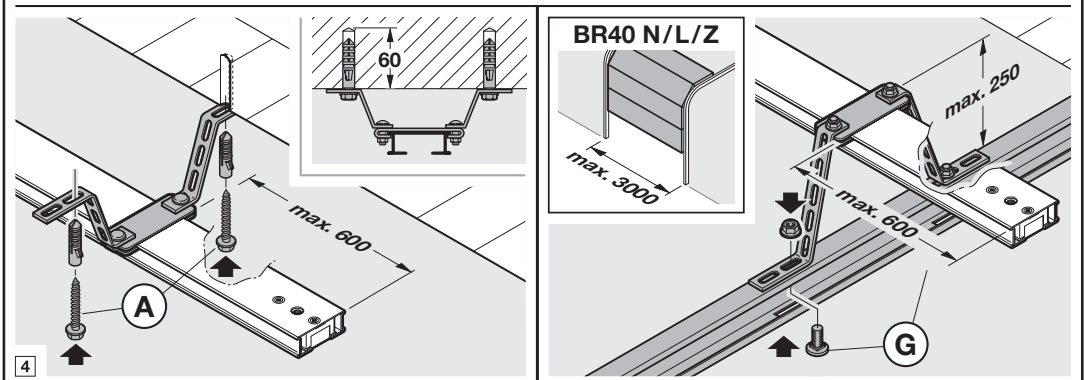
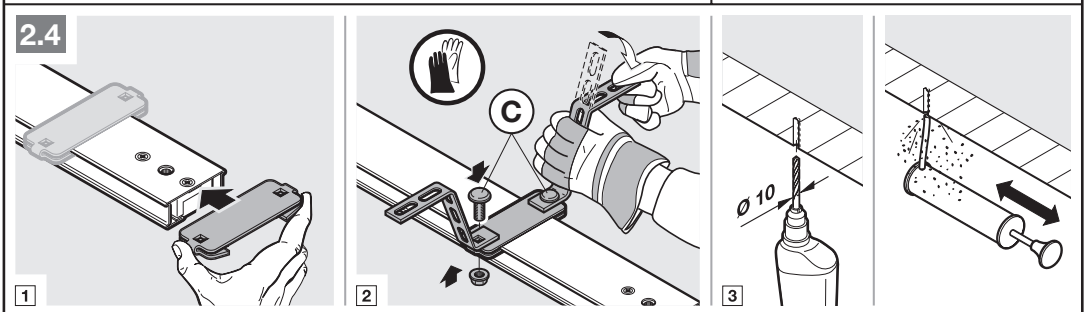
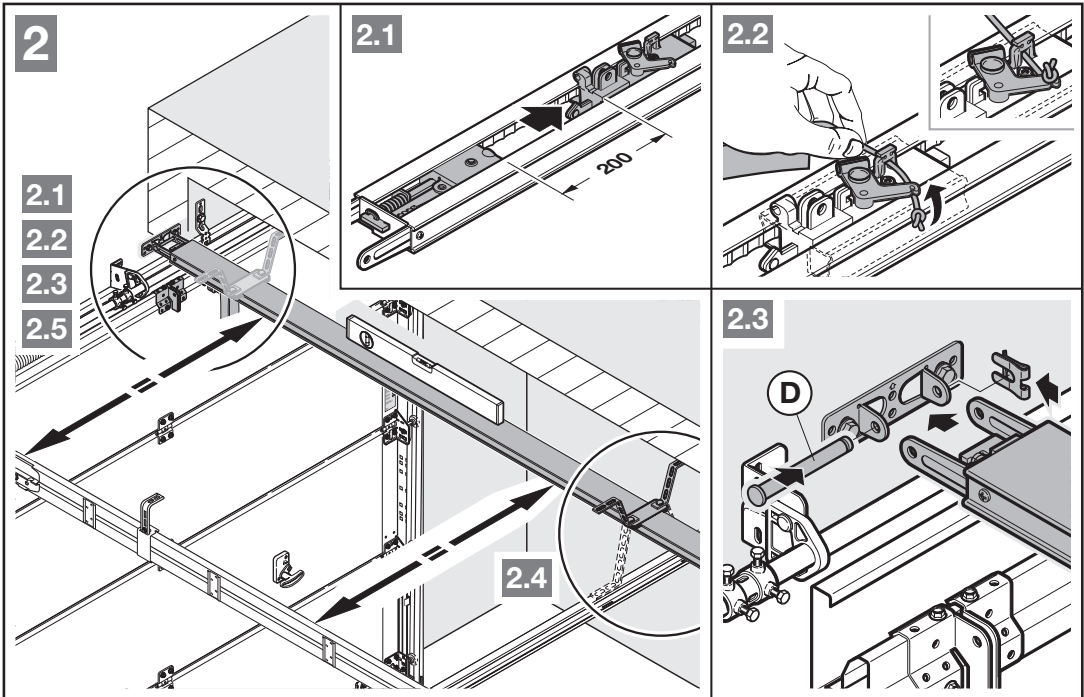


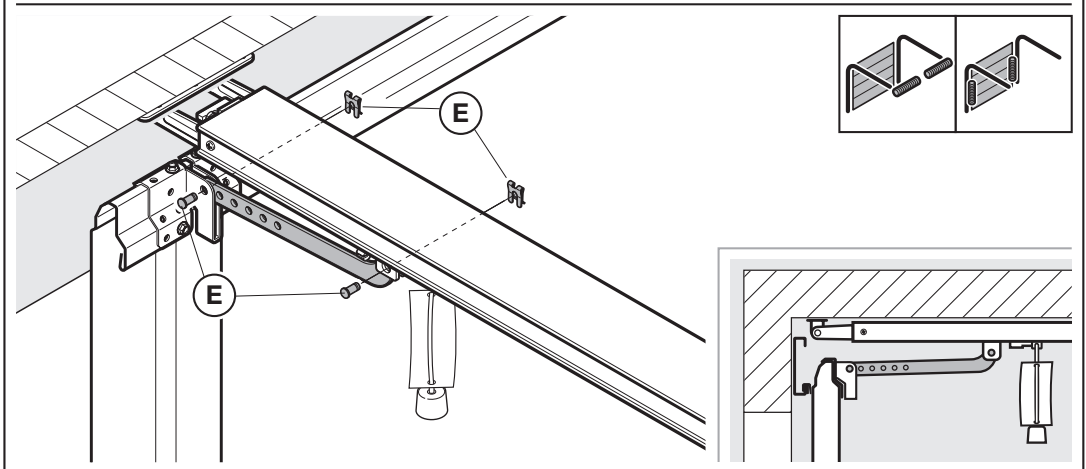
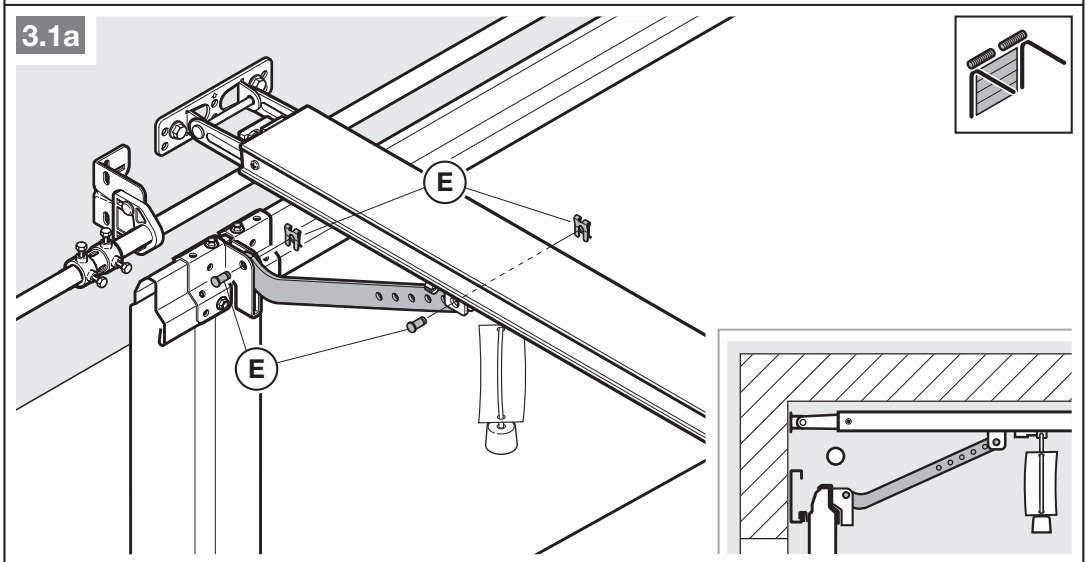
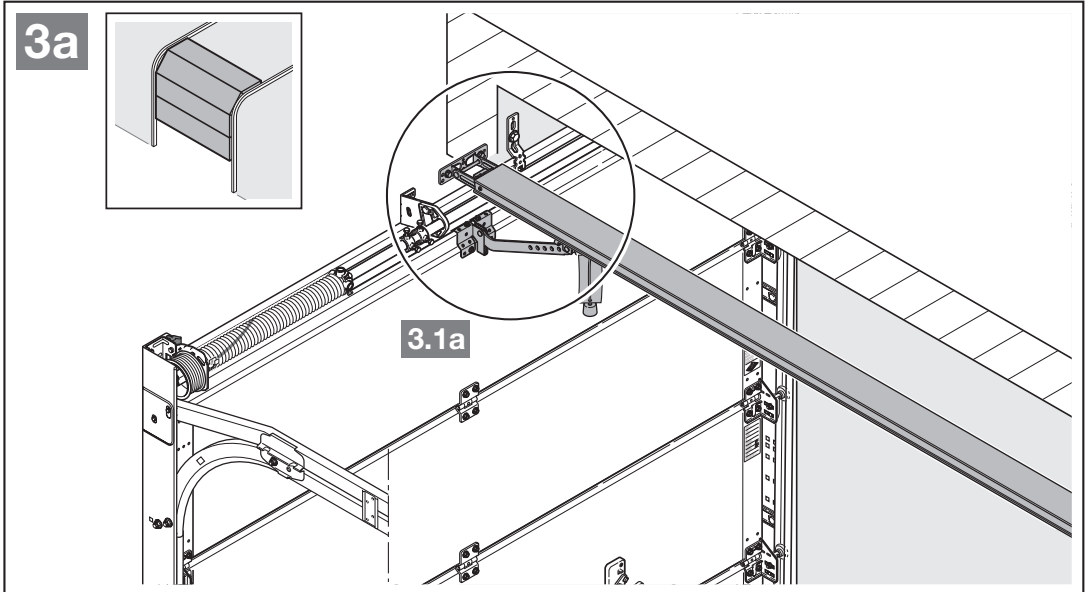
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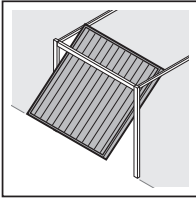
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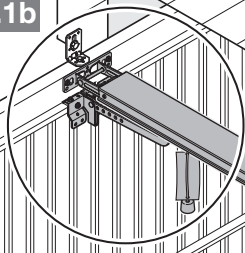




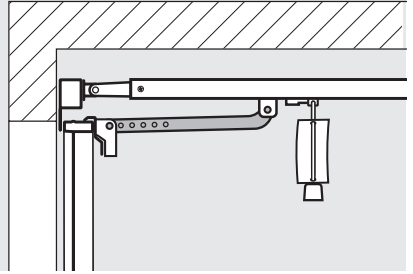
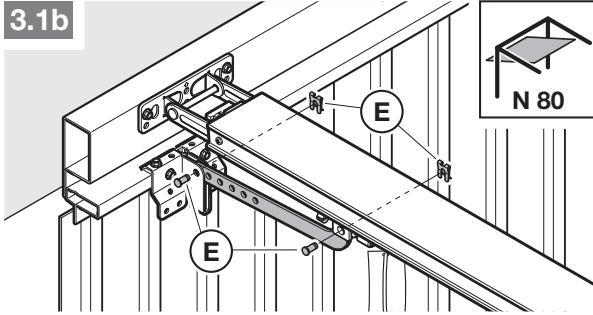
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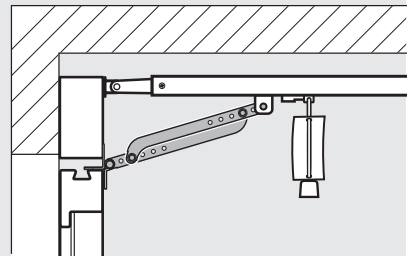
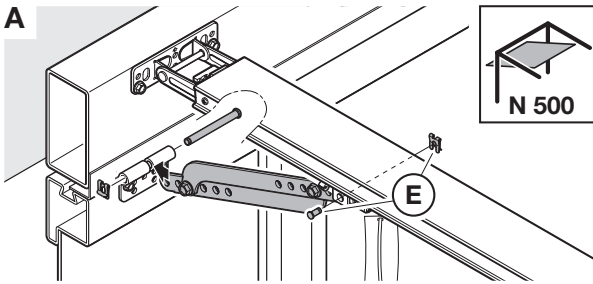
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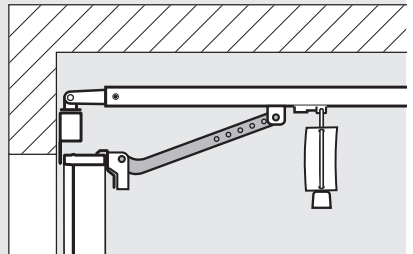
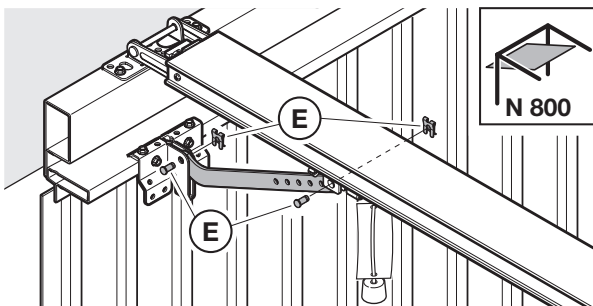
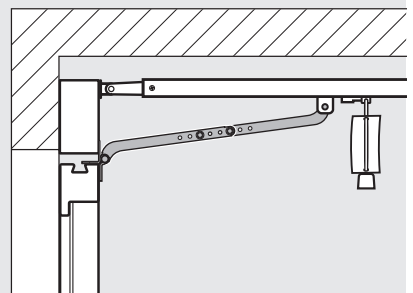
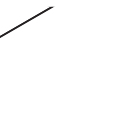
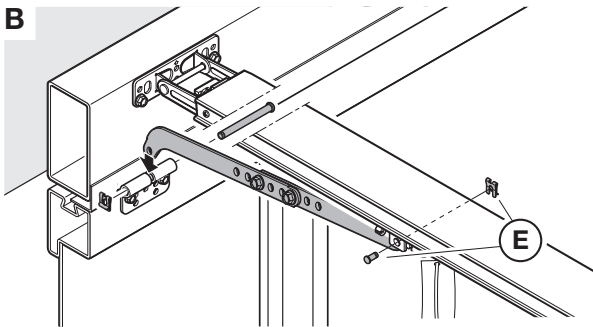
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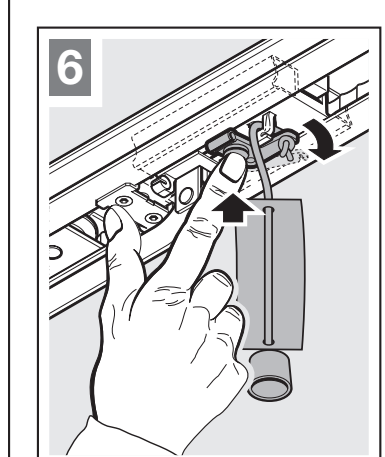
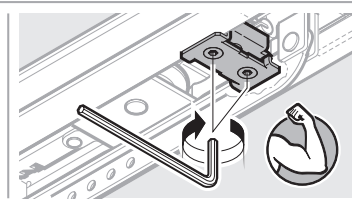
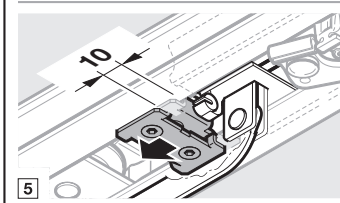
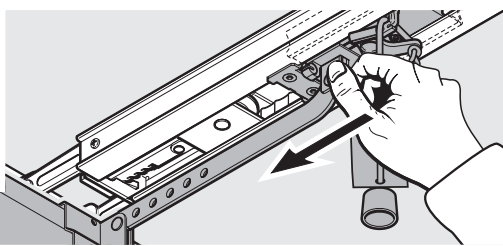
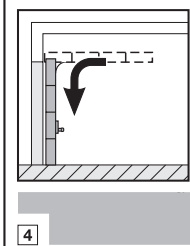
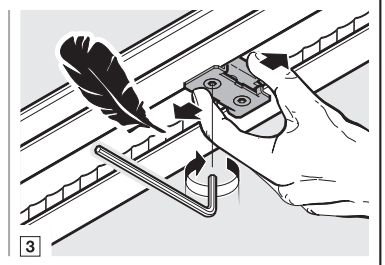
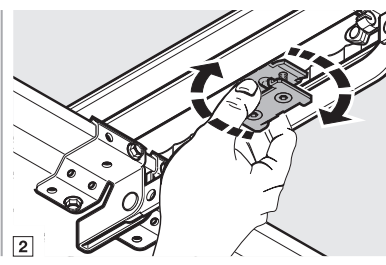
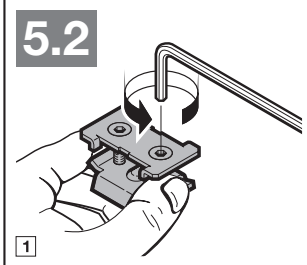
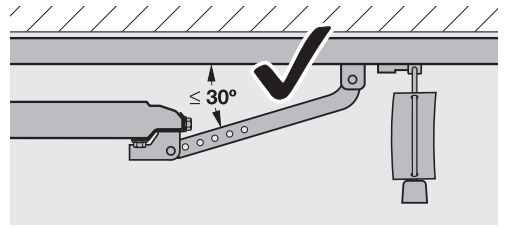
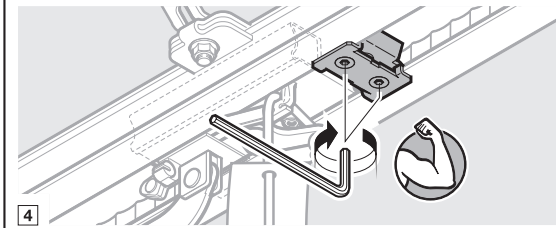
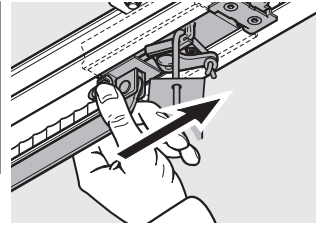
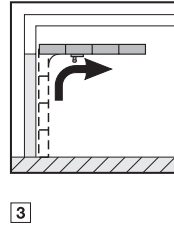
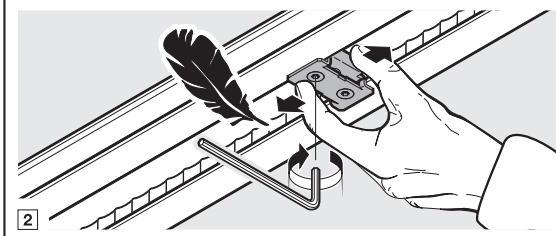
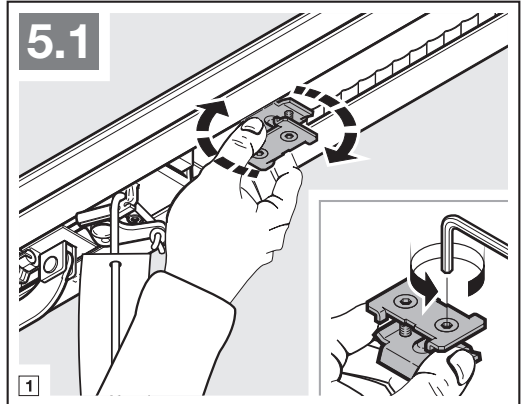
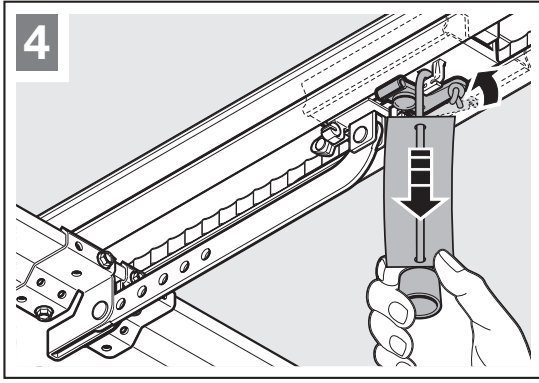


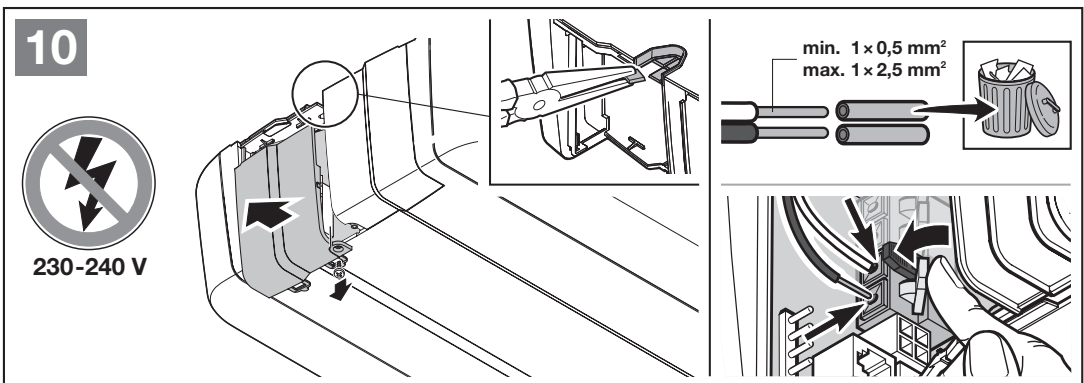
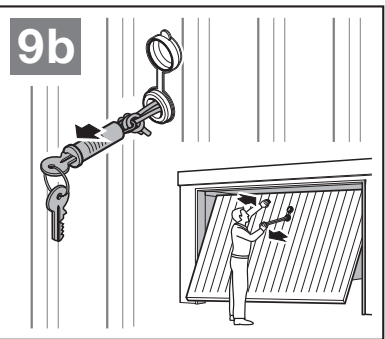
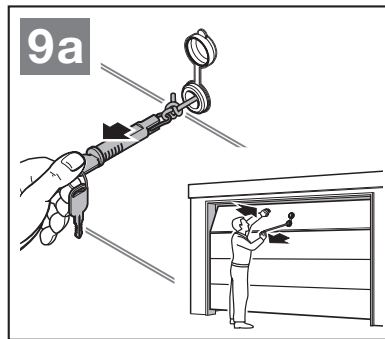
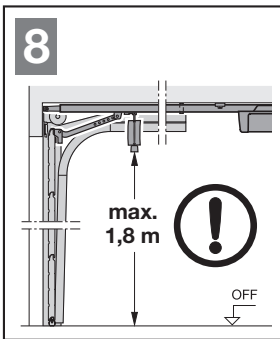
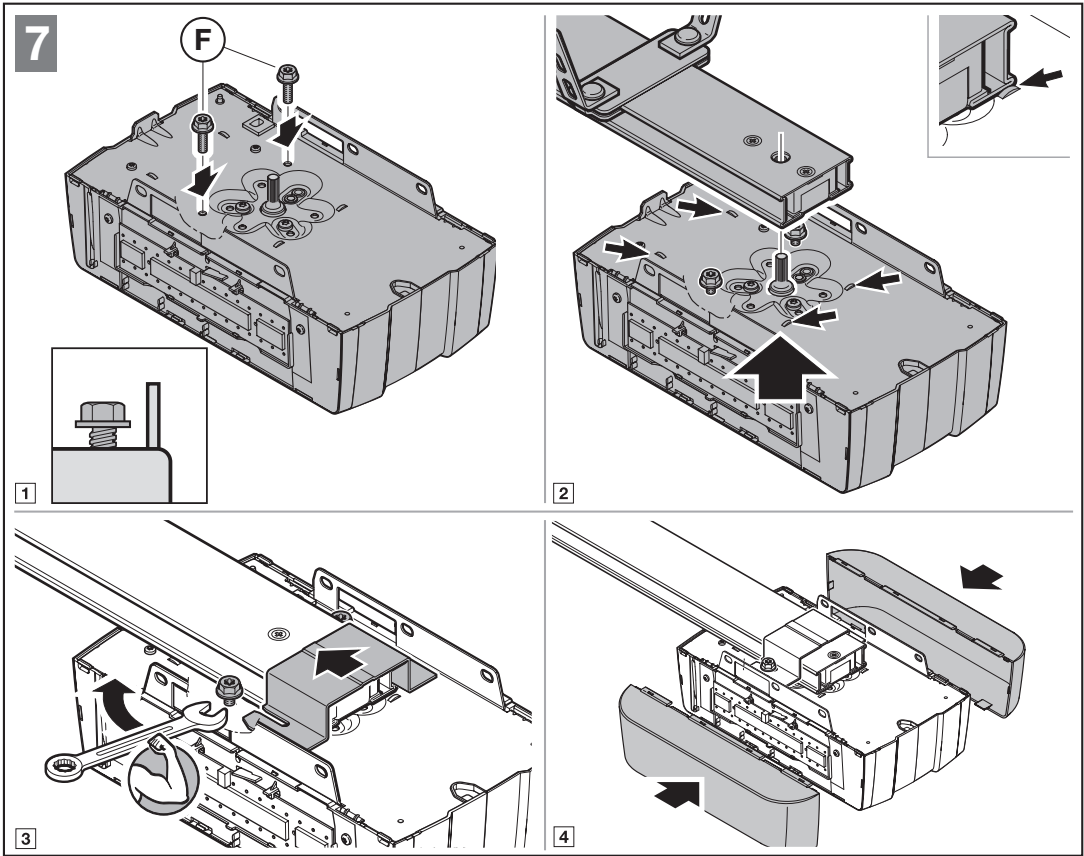
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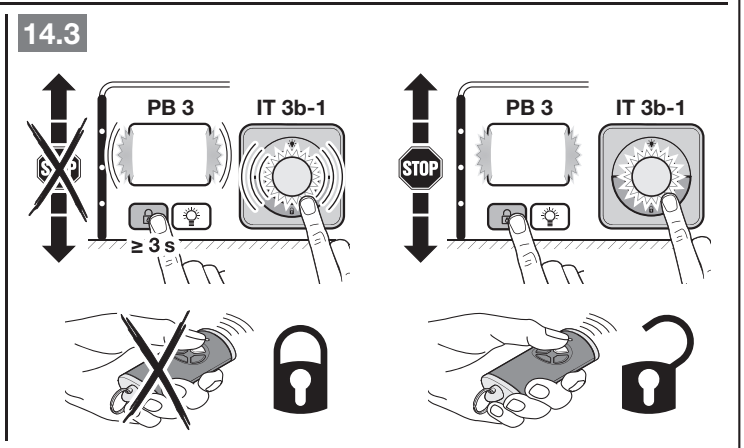
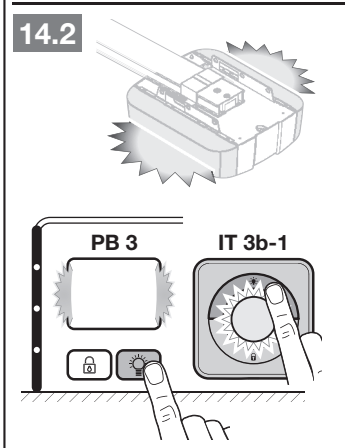
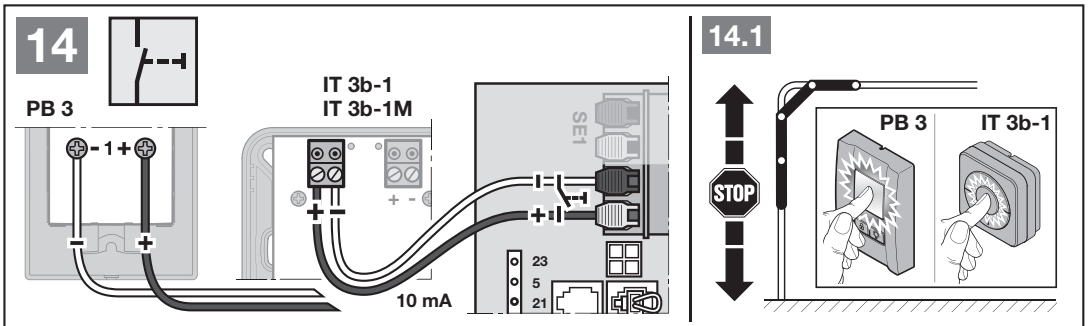
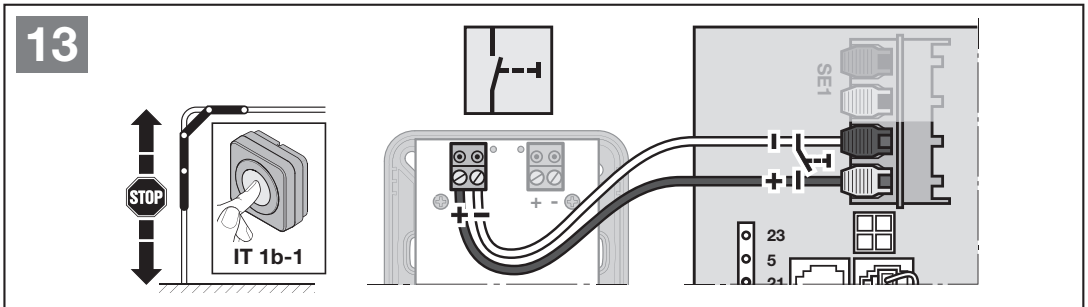
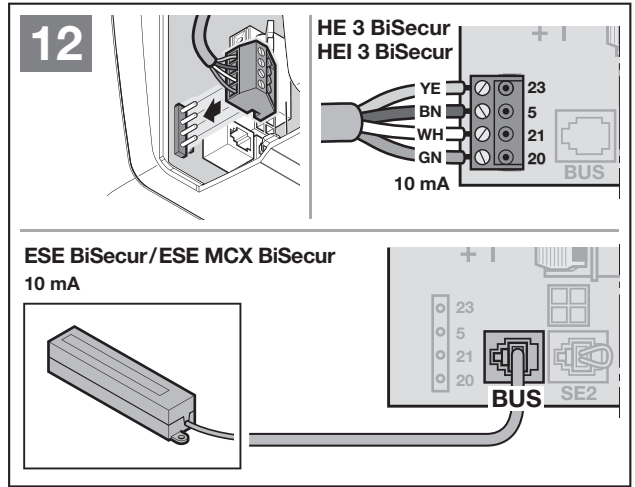
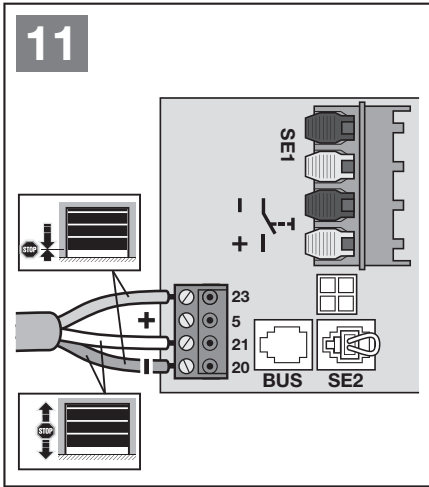


B









15 EL 101 35 mA
EL 301 40 mA

TX RX

0V 0V

TX RX

EL 201 XX mA

TX TX

RX RX

16

STK 5 mA

BUS SE2

17

SKS 30 mA

VL 65 mA

BUS SE2

18

HOR 1-HCP 45 mA

BUS SE2

.6 .5 .8 U

19

UAP 1-HCP 45 mA

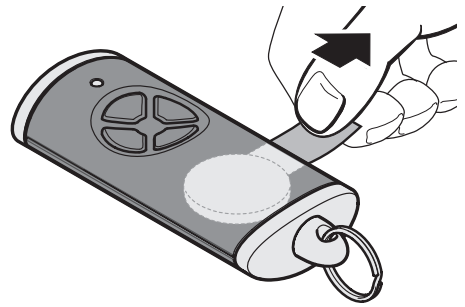
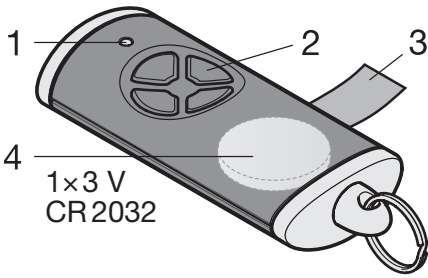
BUS SE2

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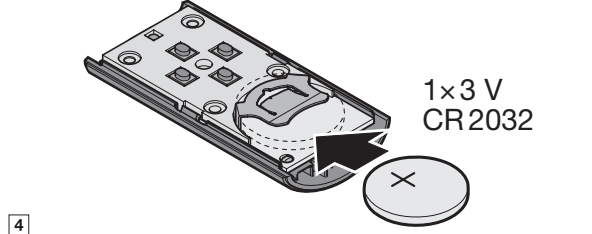
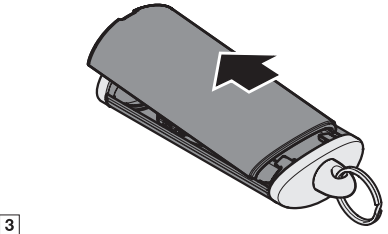
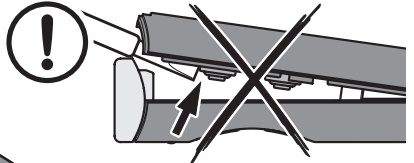
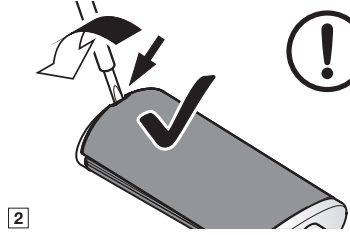
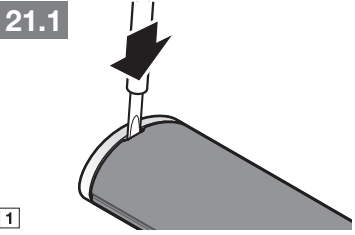
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BUS SE2

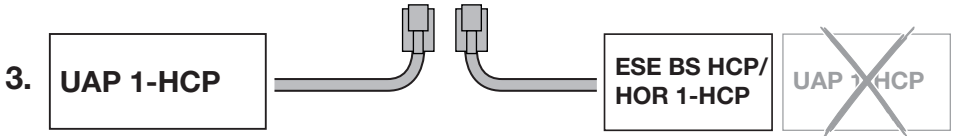
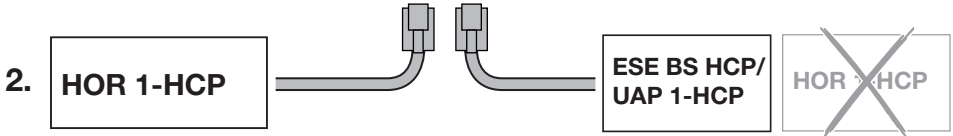
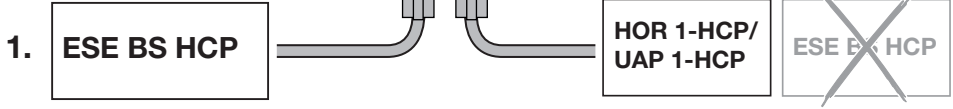
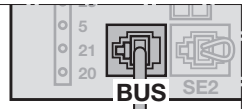
21



21.1



22



SupraMatic H 4

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