

DOORHAN[®]

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OPERATOR

SECTIONAL-1200



Operation and Installation Manual

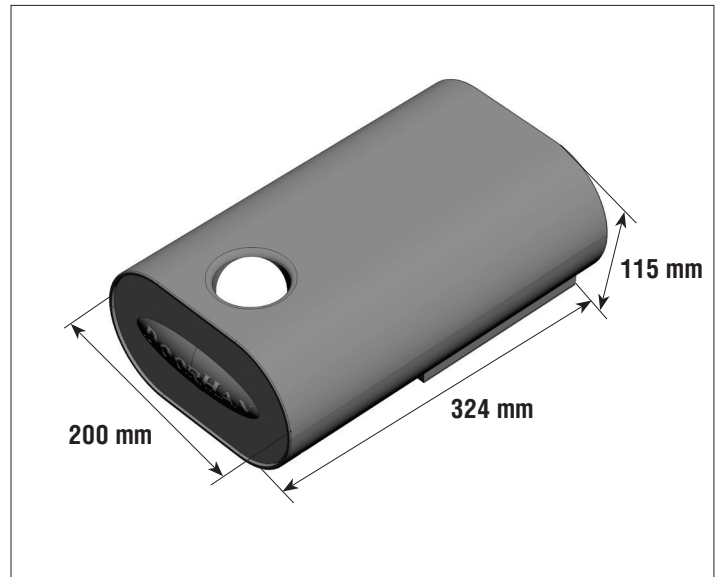
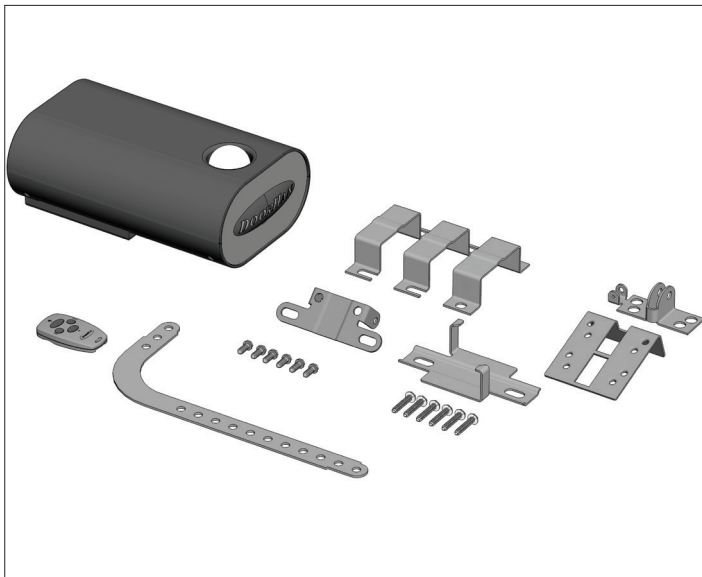
Actual version:

soft — v 1.0

PCB — v 1.0

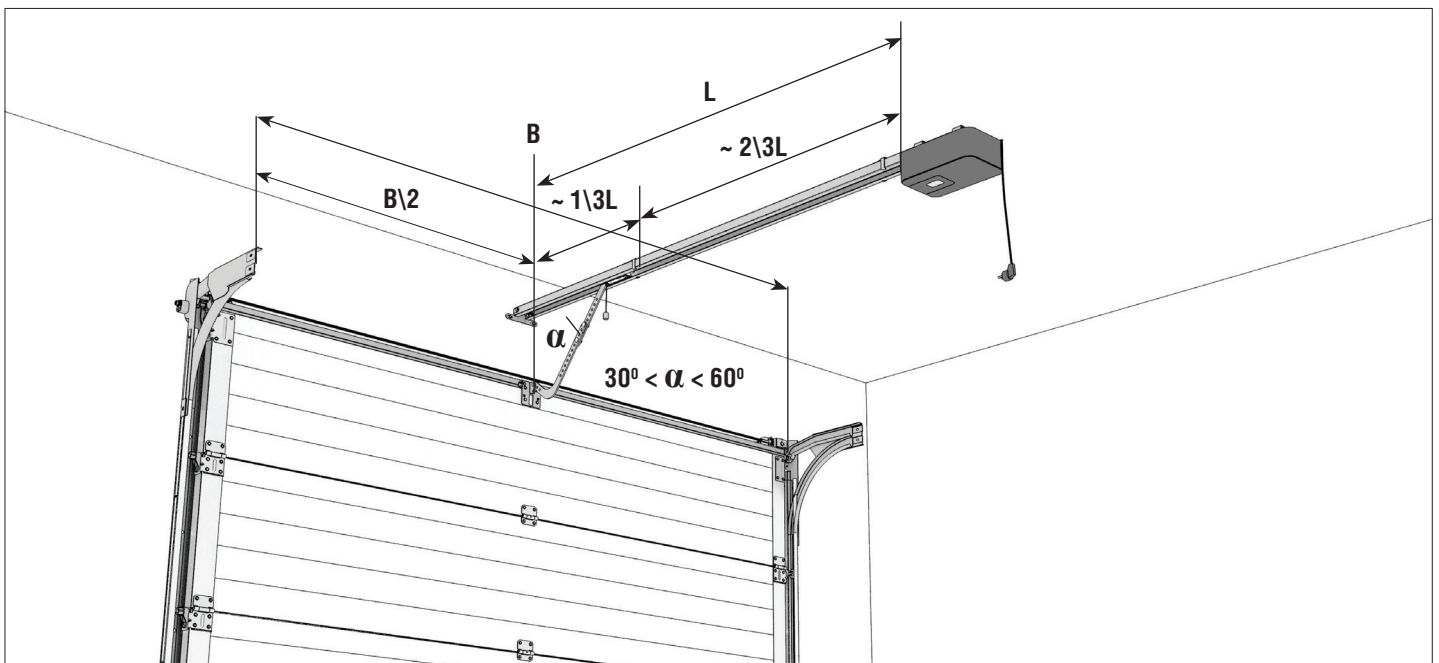
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1. GENERAL INFORMATION



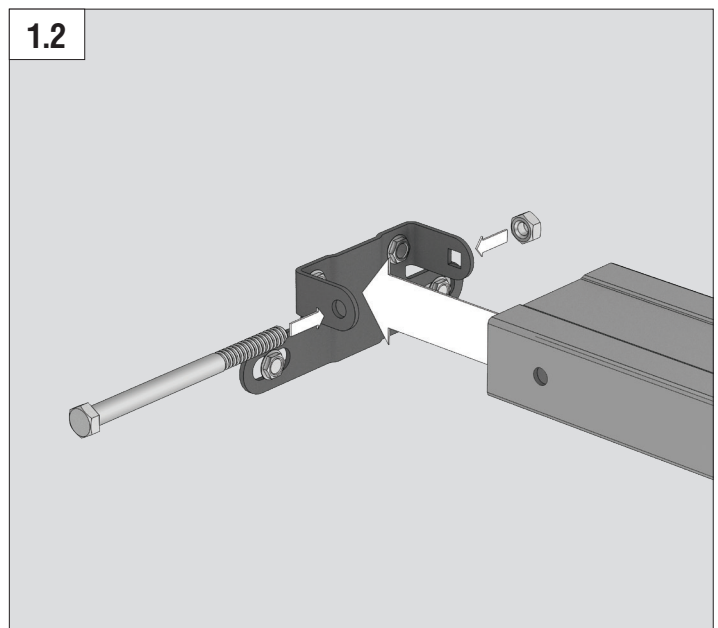
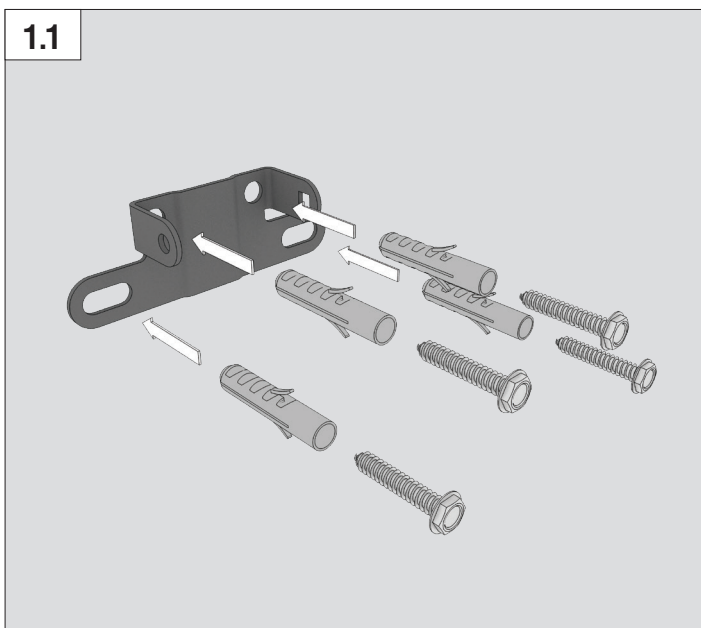
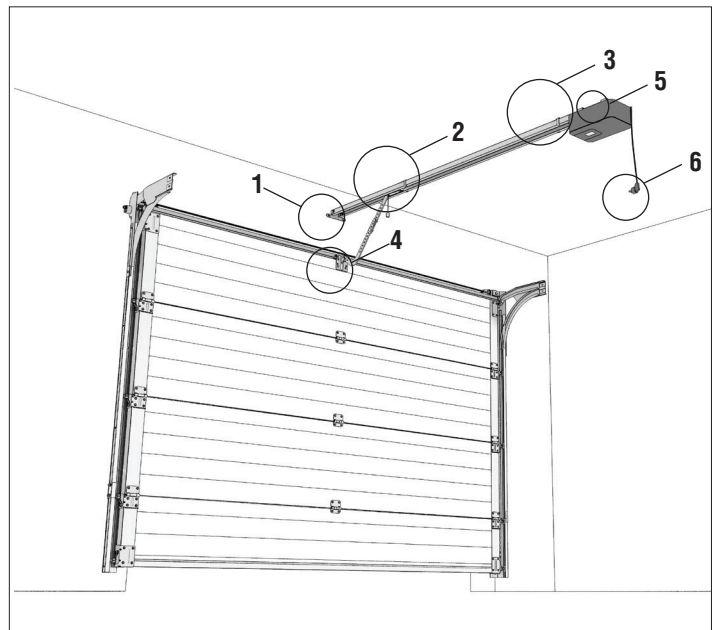
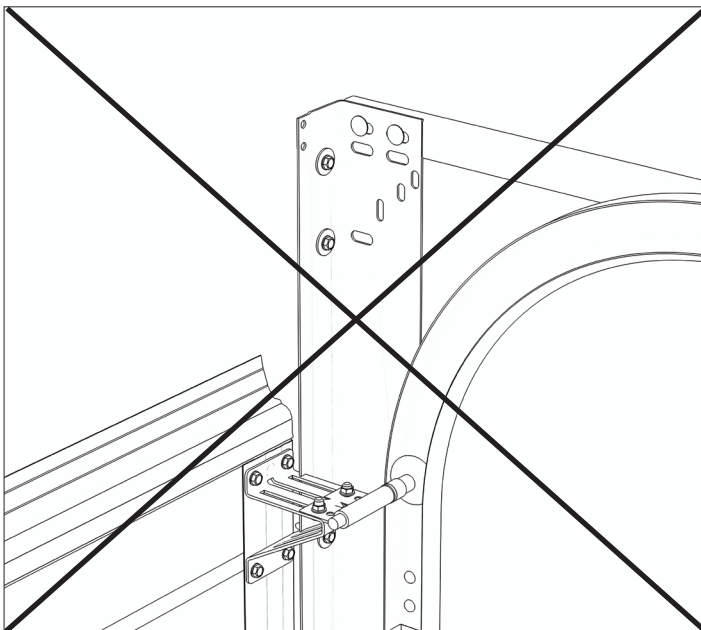
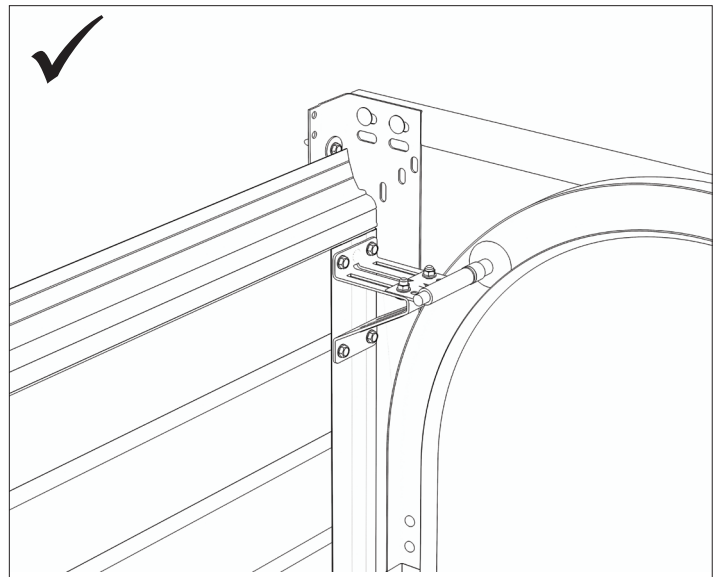
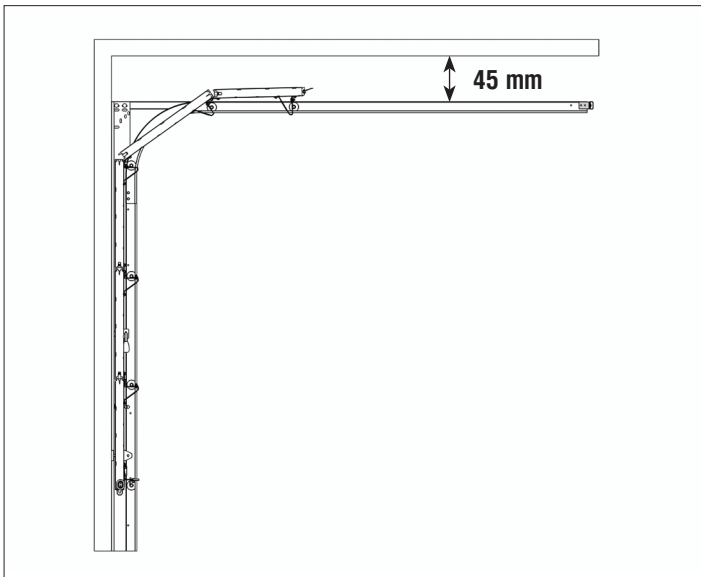
Parameter	Value	Parameter	Value
Supply voltage	207–253 V/ 50, 60 Hz	Maximum door weight	220 kg
Consumed power	300 W	Door area	up to 16 sqm
Standby mode	up to 6 W	Operating temperature	-20...+55 °C
Force	1 200 N	Fuses	power — 2,5 A
Control	stepped (pulse) mode	Radio control	433,92 MHz (maximum 60 remotes)*
Motor	24 V DC	Transmission	chain/belt
Opening speed	0,1 m/sec	Protection class	IP20

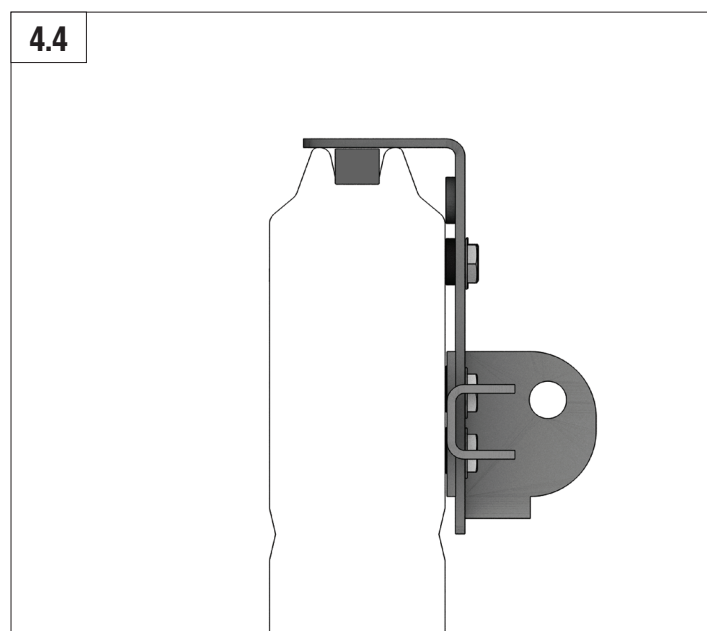
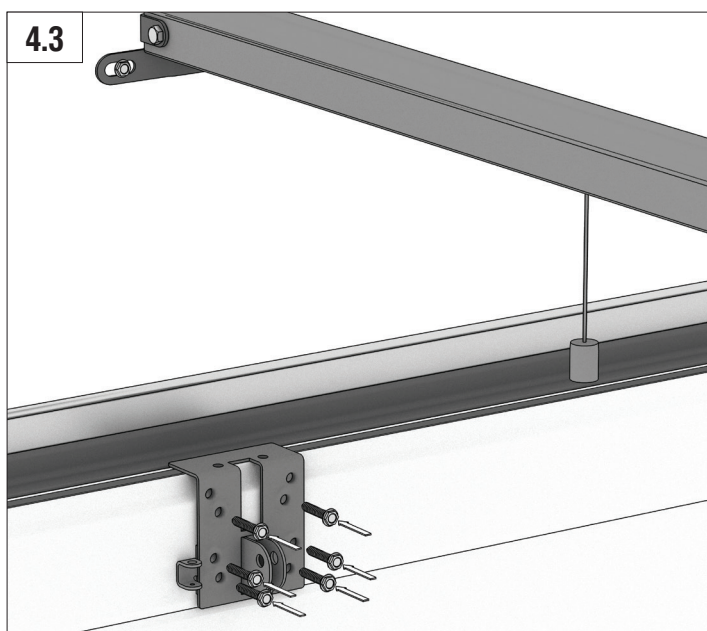
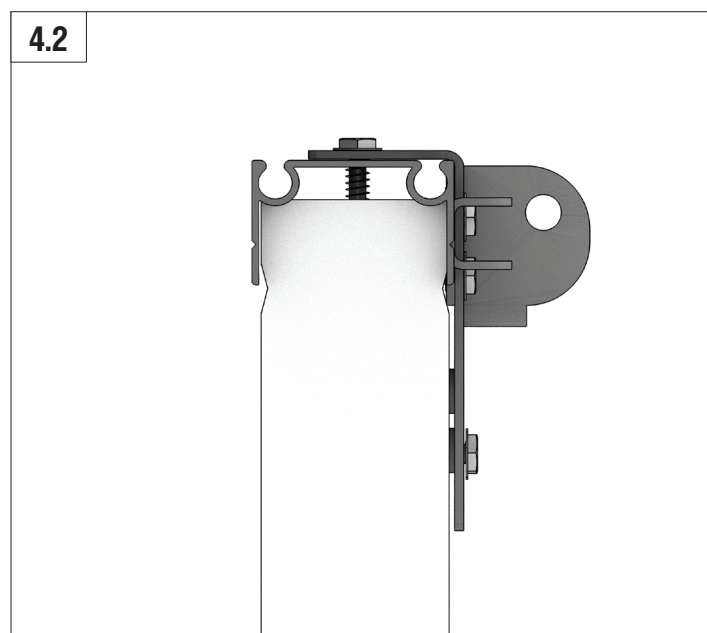
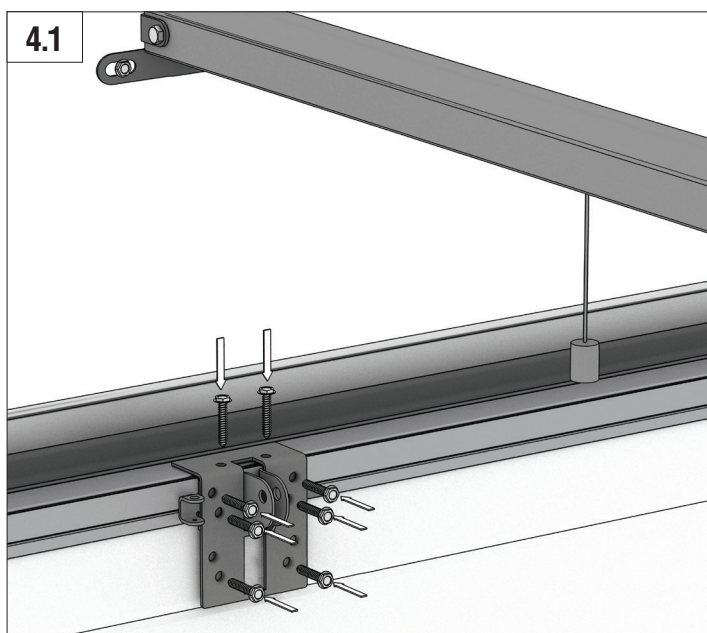
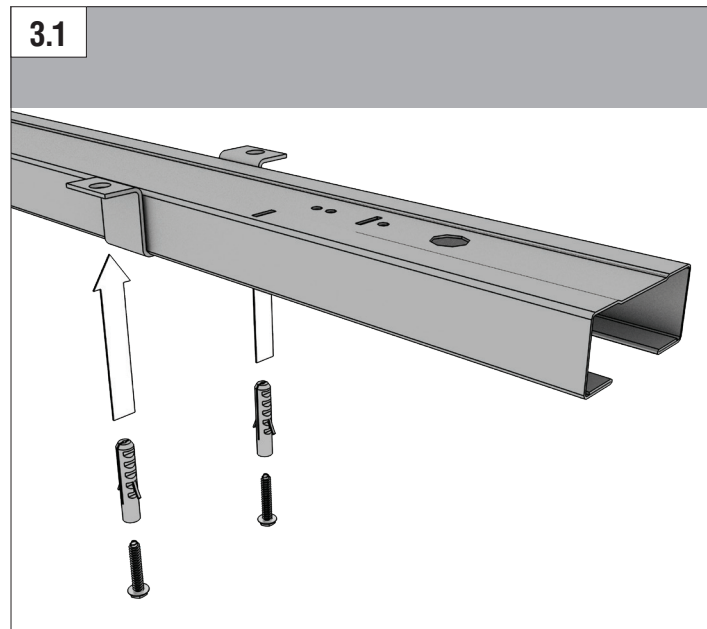
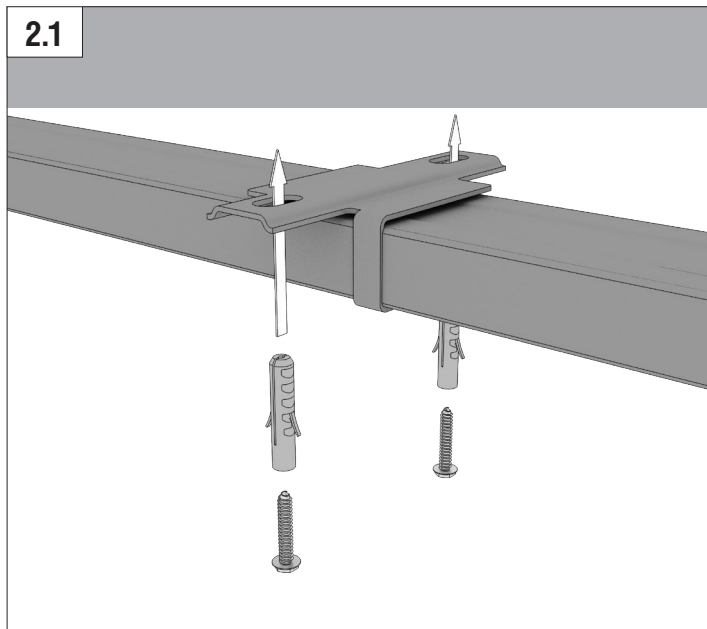
* Number of the recordable remotes can be increased if an external radio receiver is installed

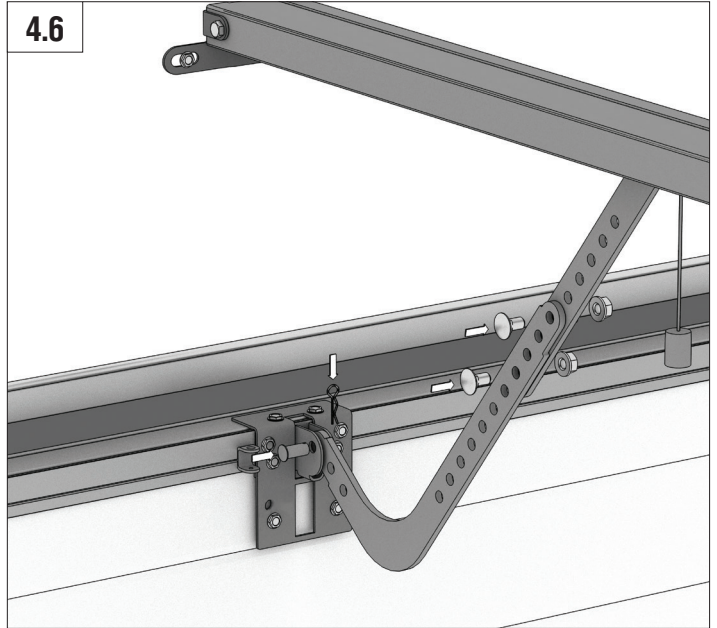
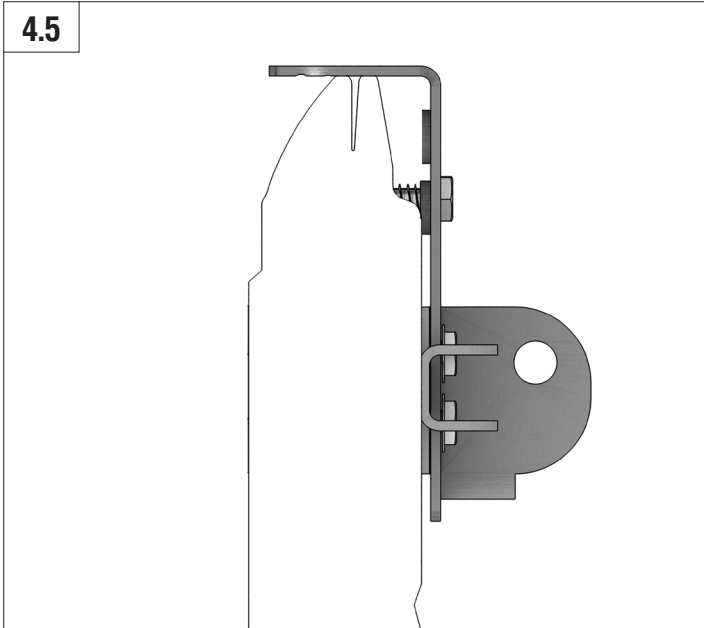


Model	Rail length, L	Working travel	Opening height
SK-3000 (chain) / PK-3000 (belt)	3 000 mm	2 800 mm	≤ 2 300 mm
SK-3300 (chain) / PK-3300 (belt)	3 300 mm	3 100 mm	≤ 2 600 mm
SK-3600 (chain) / PK-3600 (belt)	3 600 mm	3 400 mm	≤ 2 800 mm
SK-4200 (chain)	4 200 mm	4 000 mm	≤ 3 400 mm
SK-4600 (chain) / PK-4600 (belt)	4 600 mm	4 400 mm	≤ 3 800 mm

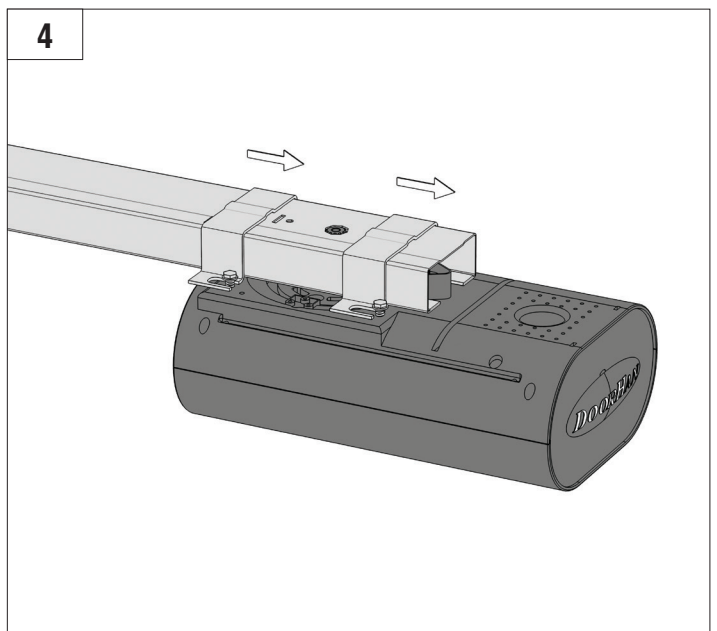
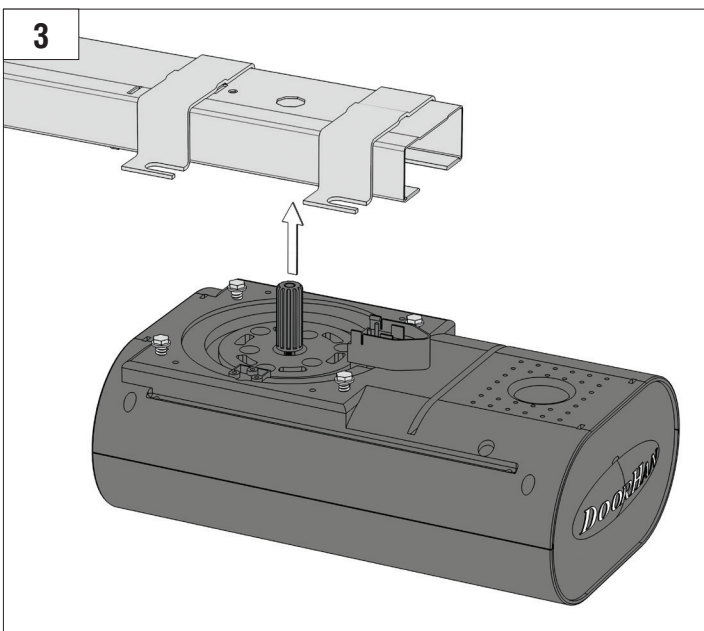
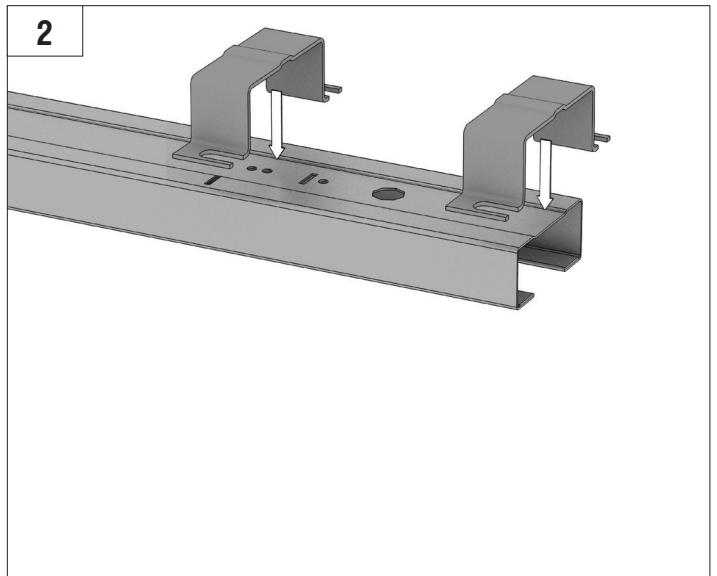
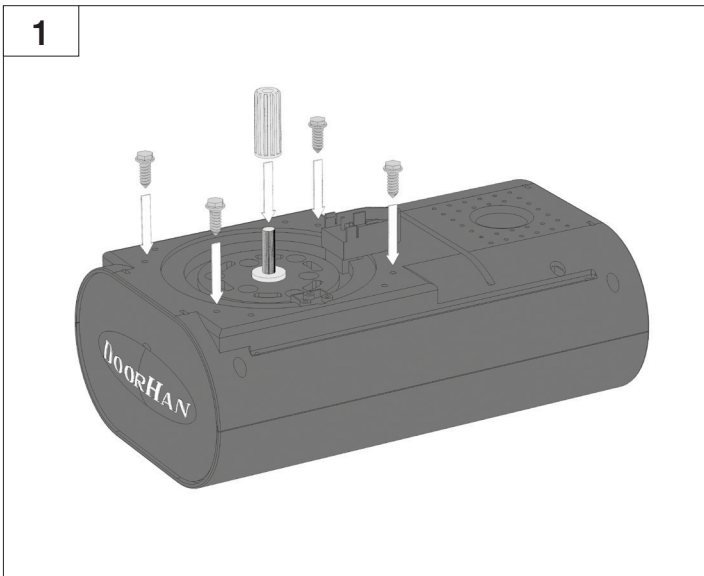
2. INSTALLATION

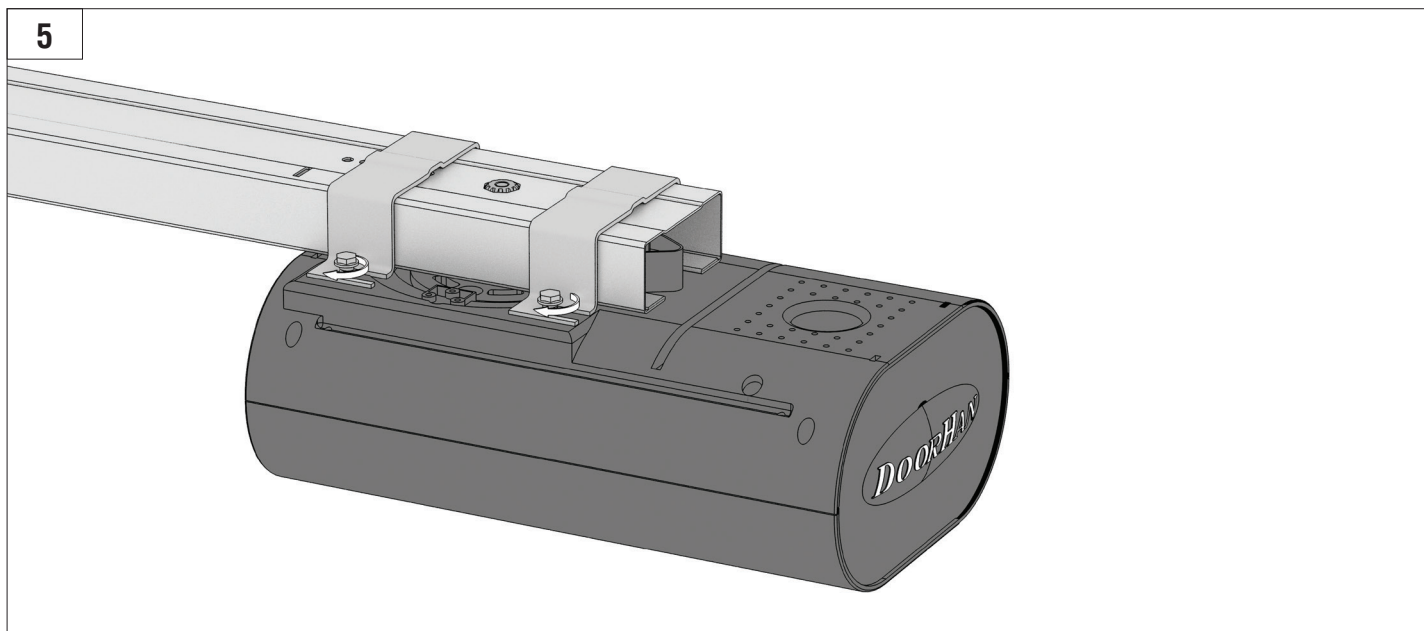




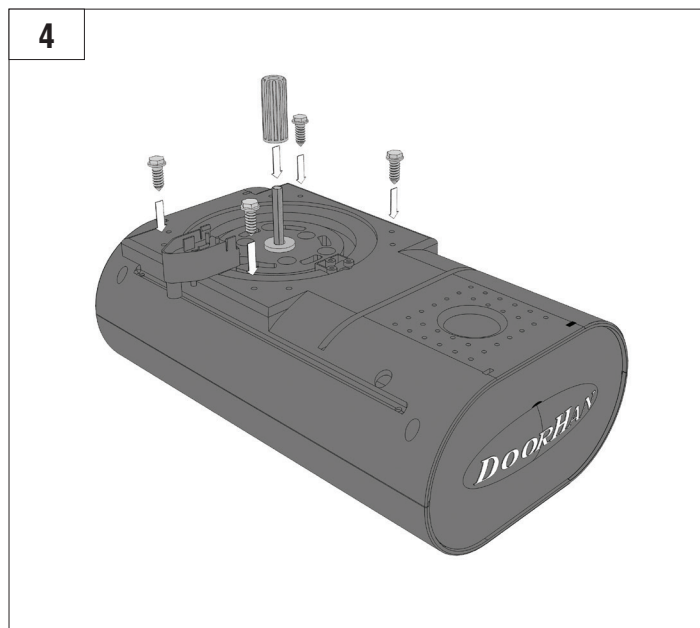
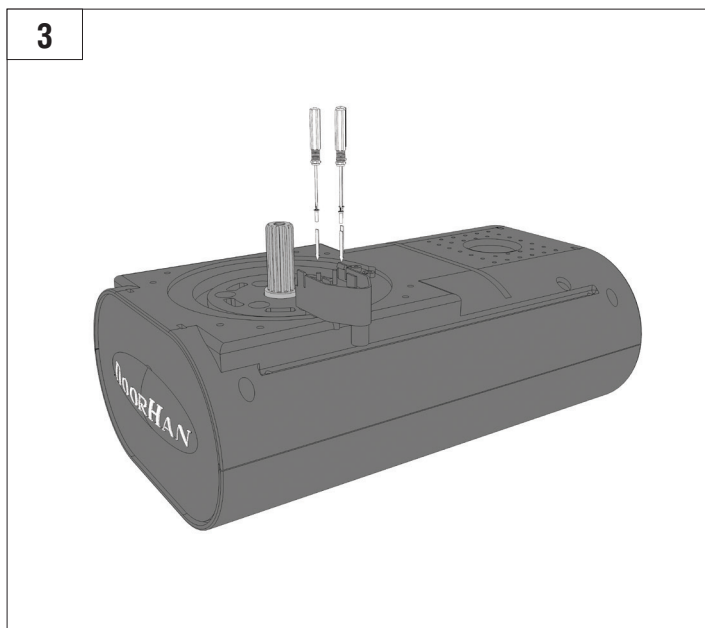
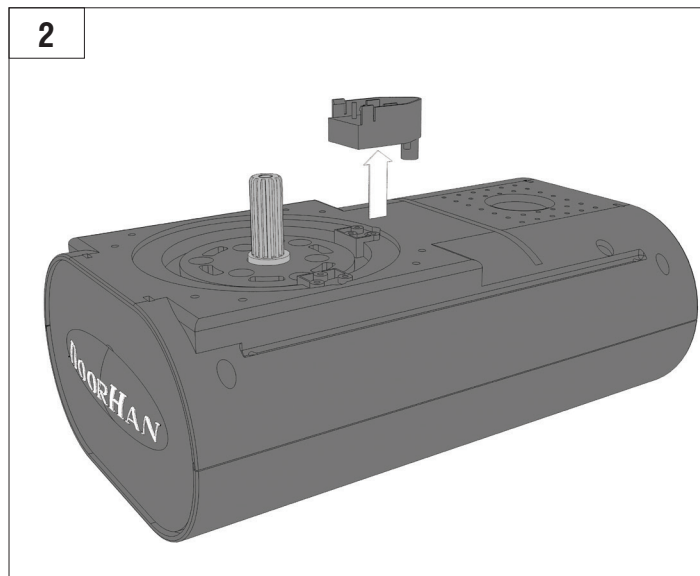
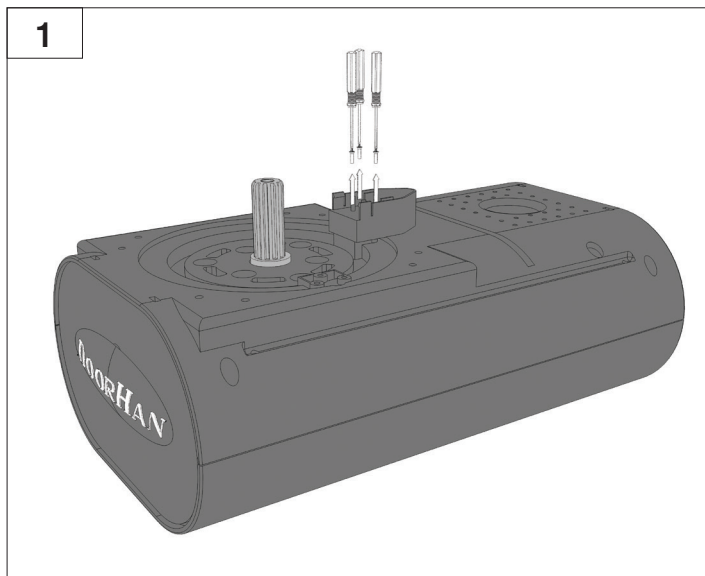


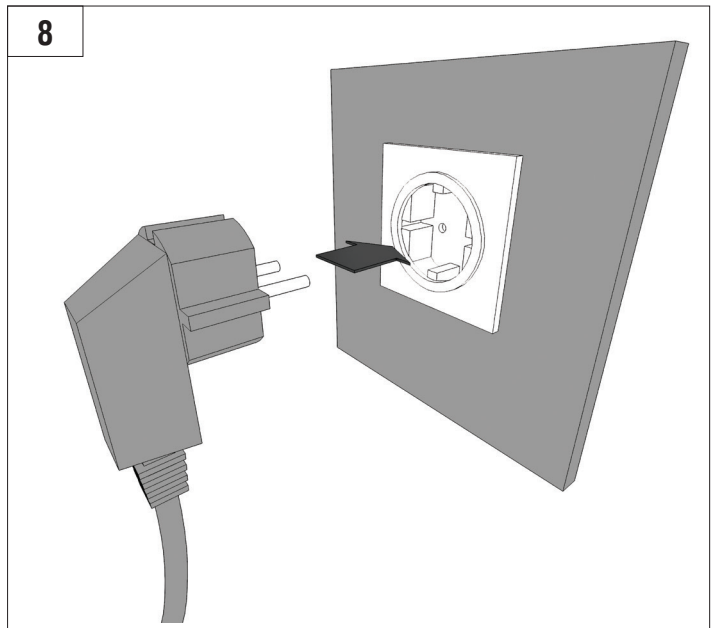
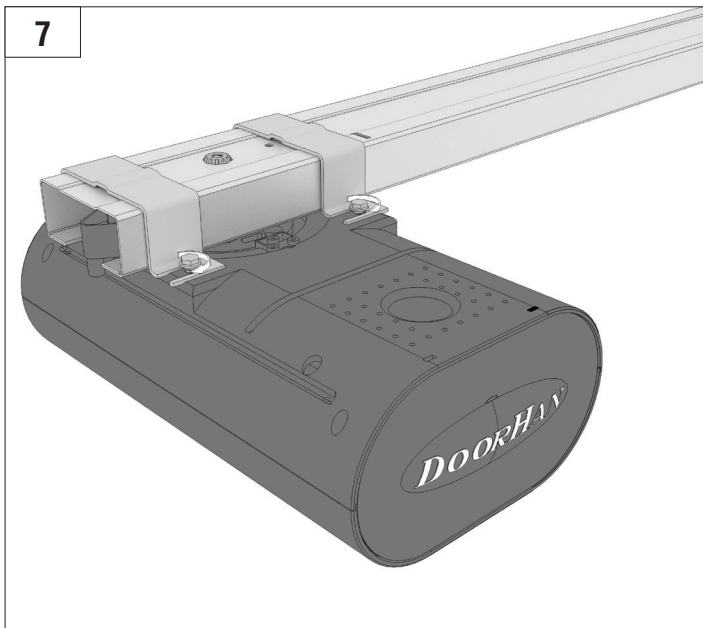
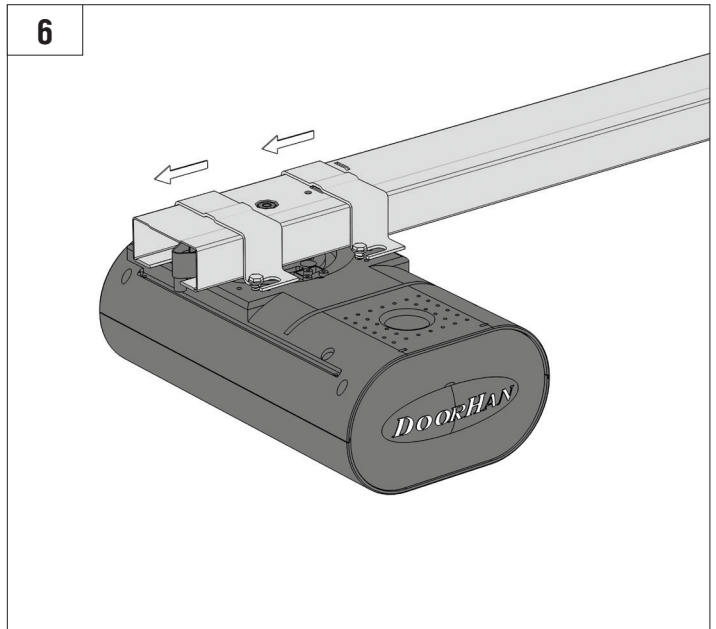
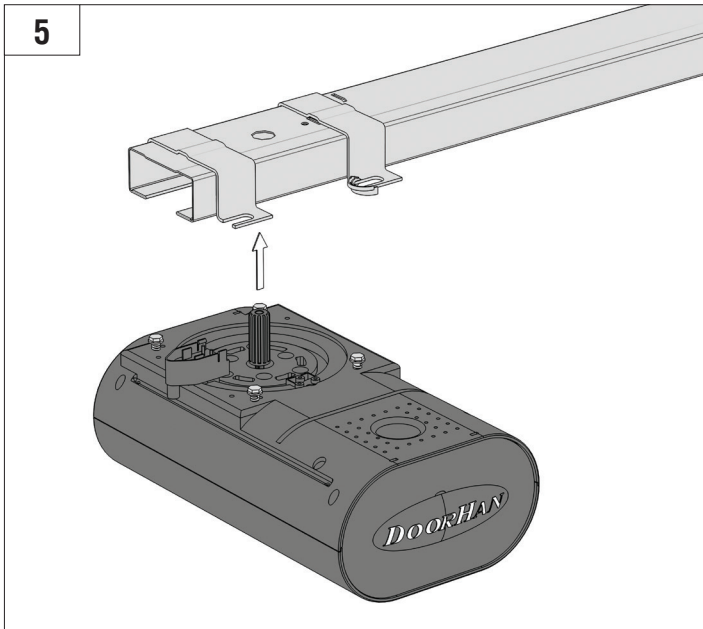
2.1. STANDARD INSTALLATION



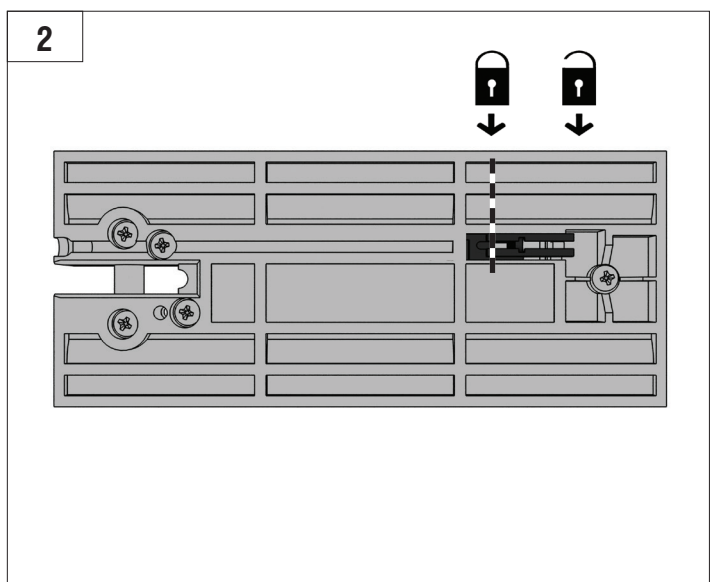


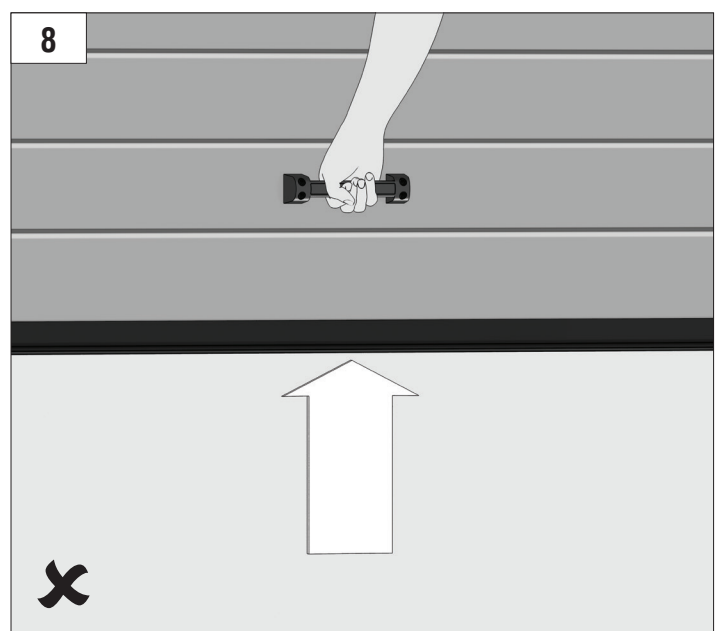
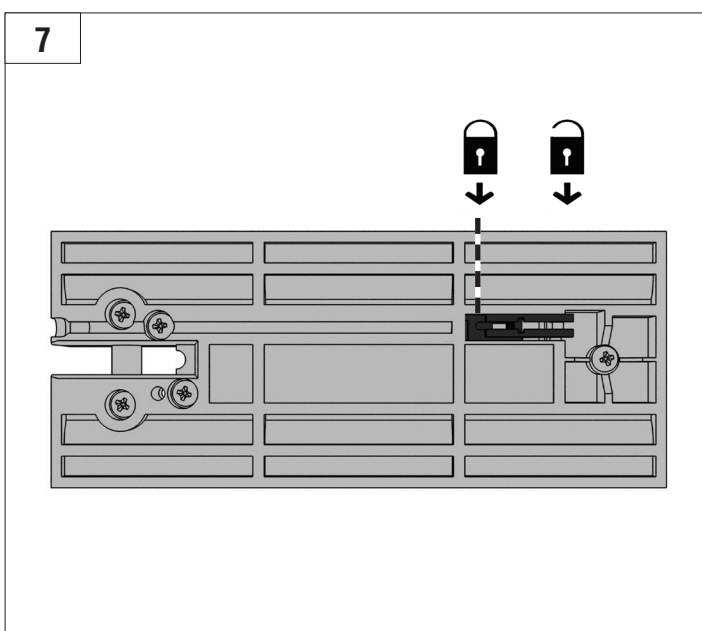
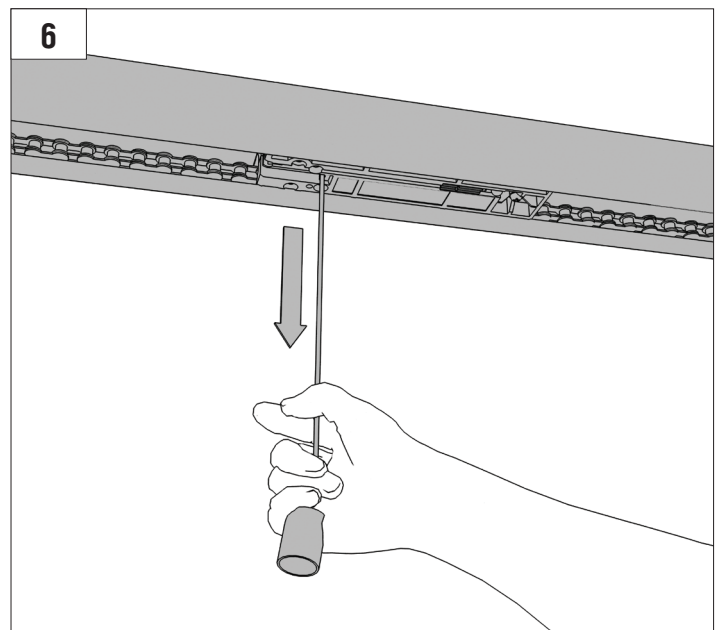
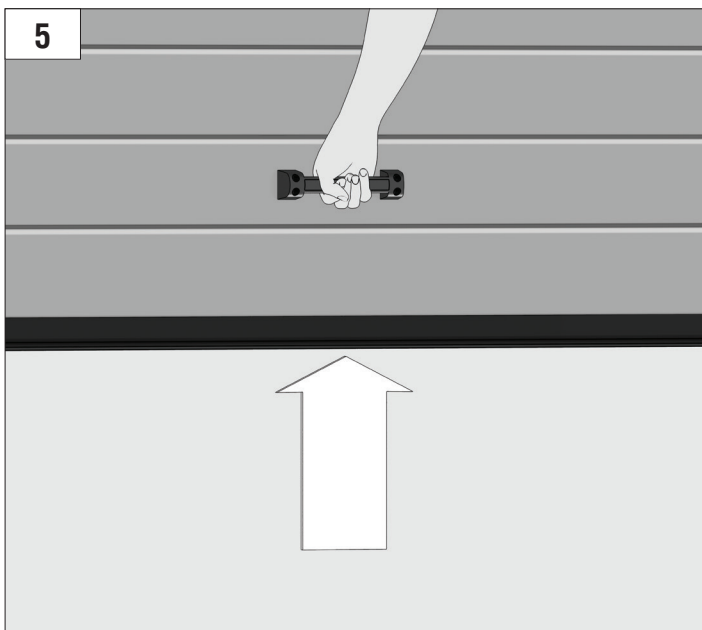
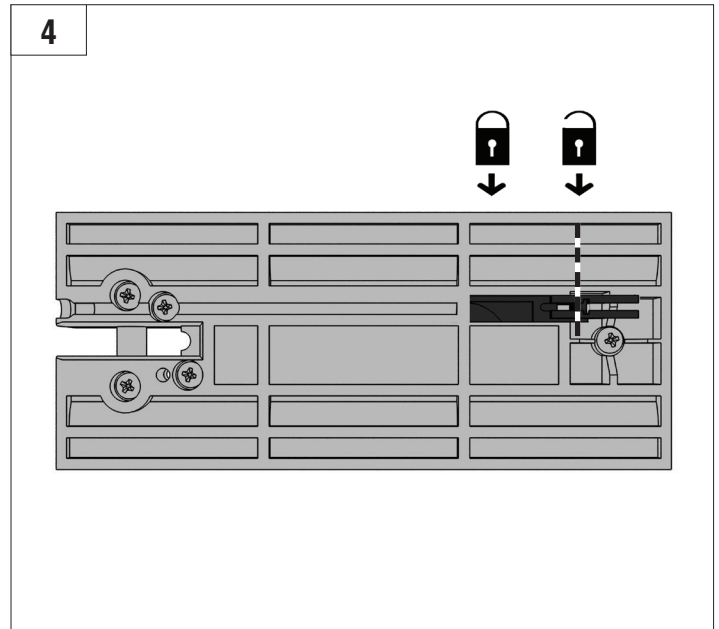
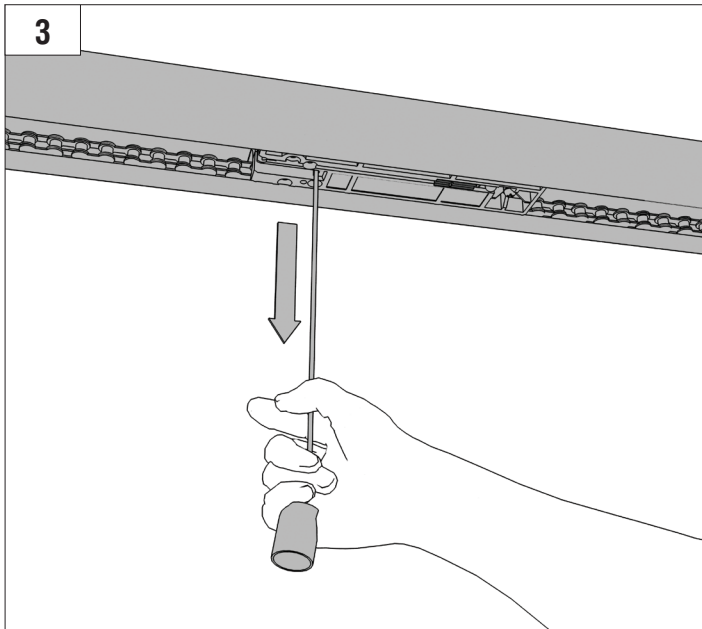
2.2. NON-STANDARD INSTALLATION



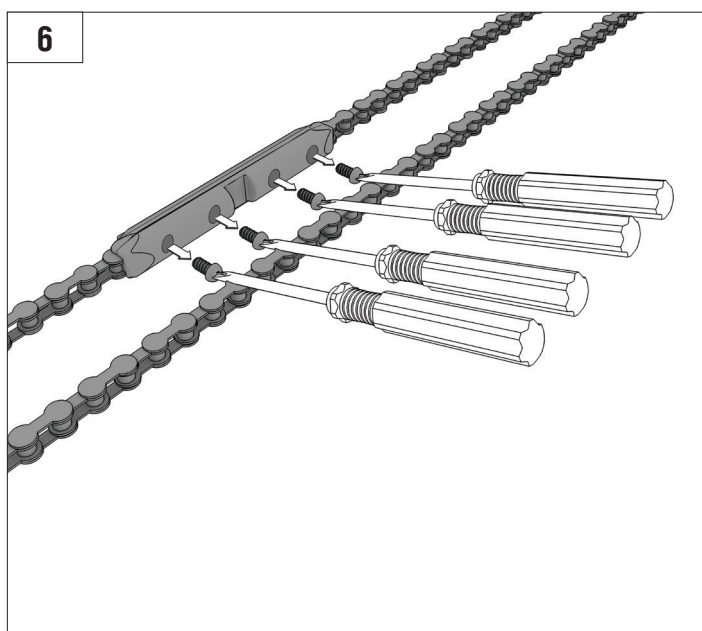
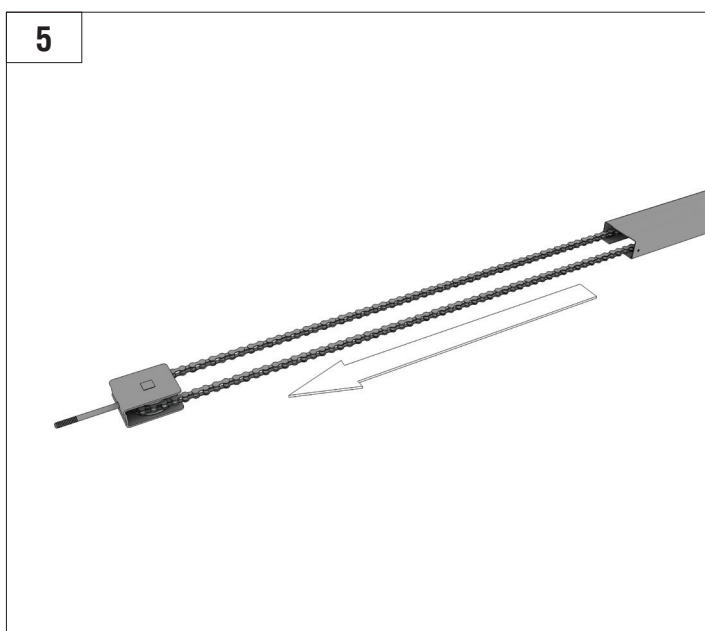
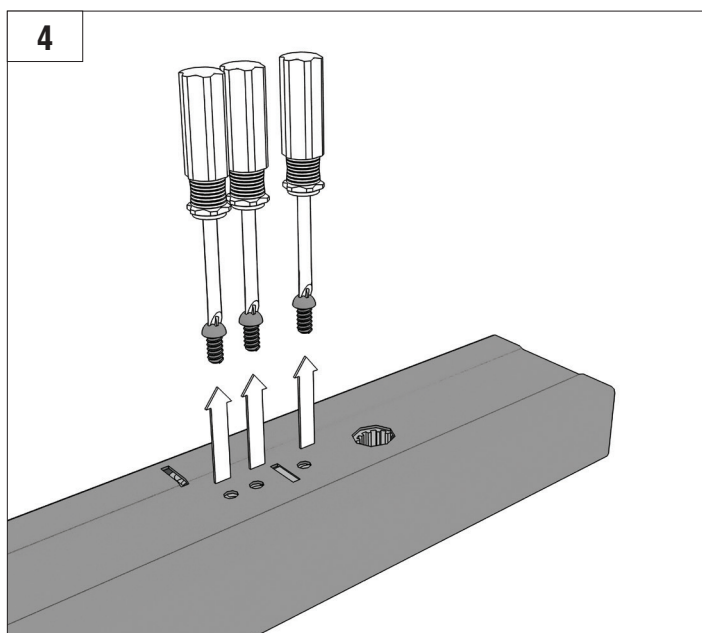
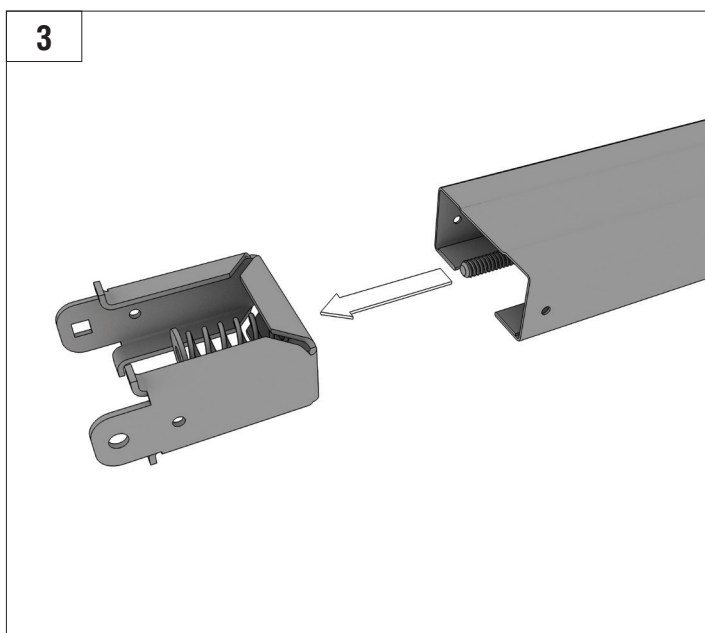
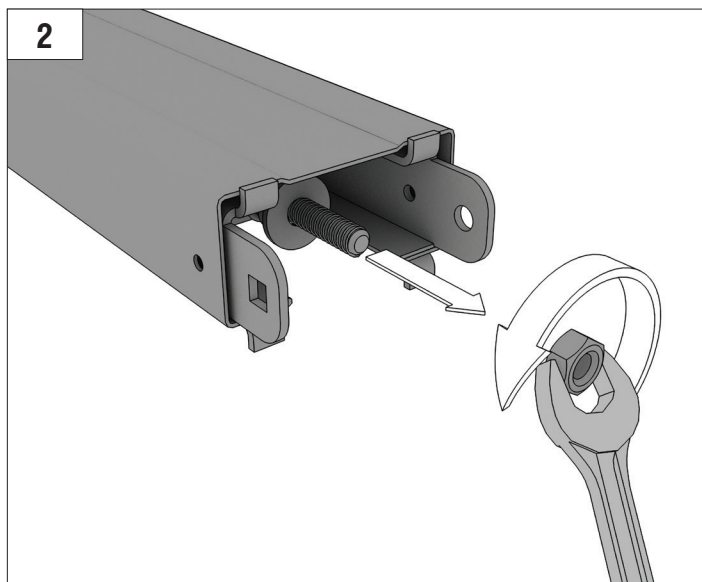
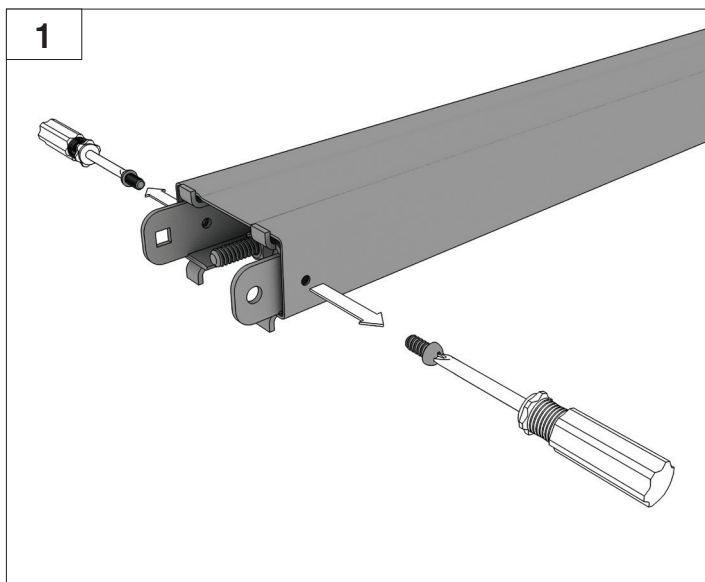


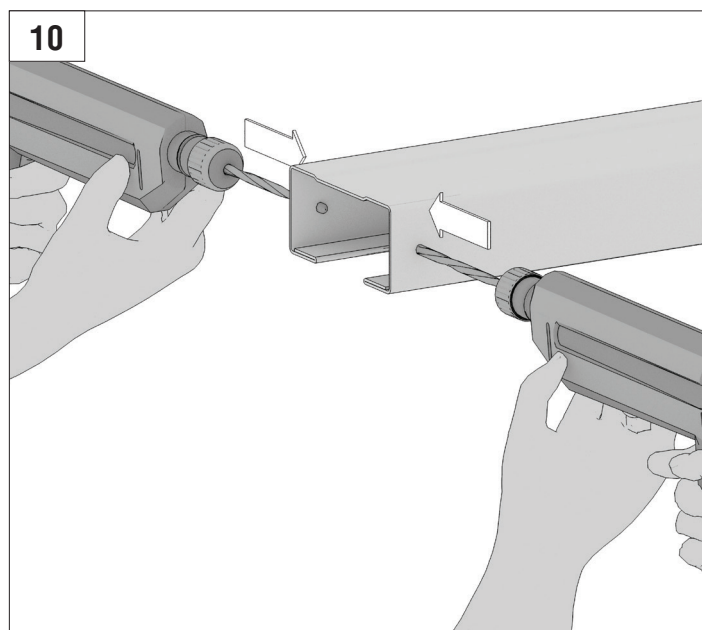
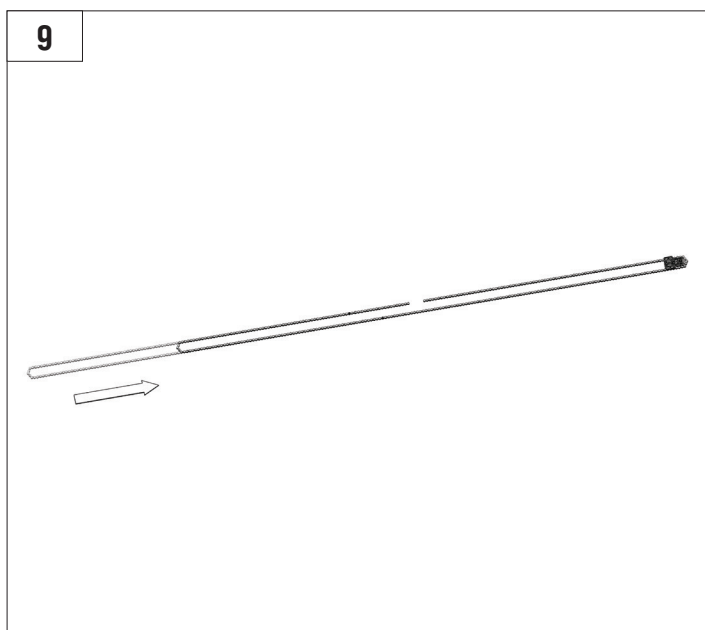
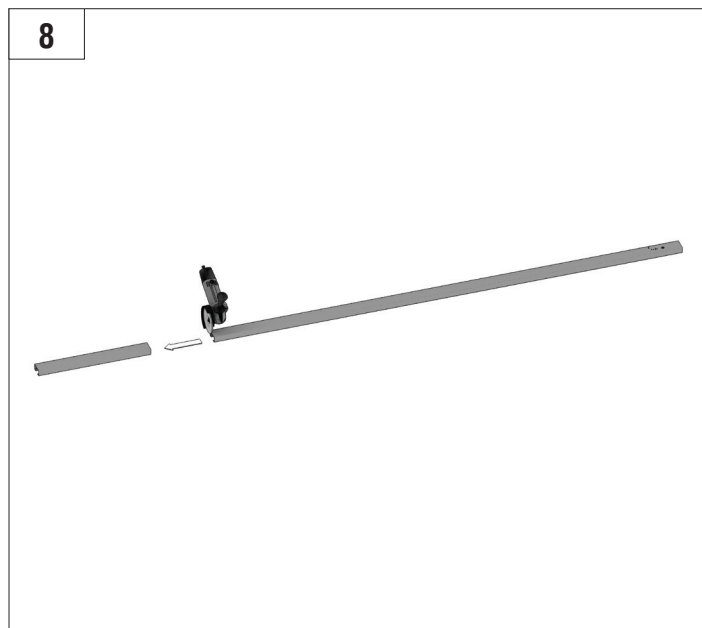
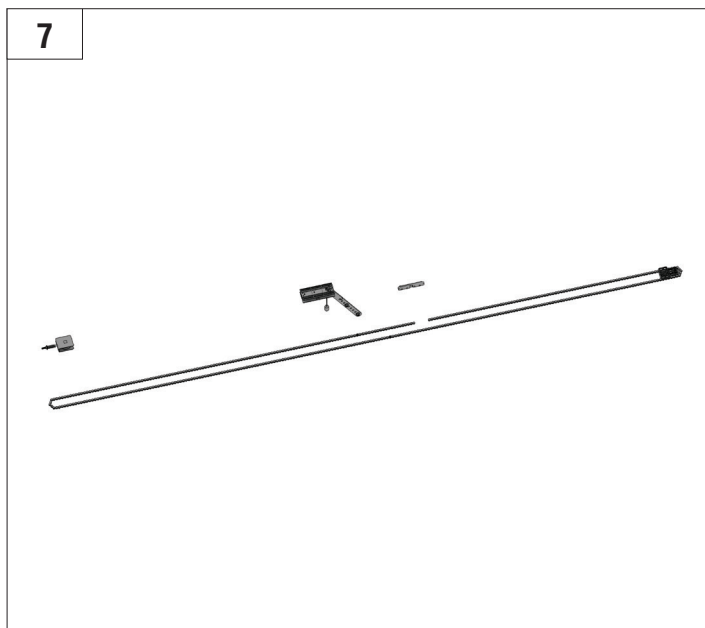
3. RELEASE OPERATION





4. RAIL CUTTING



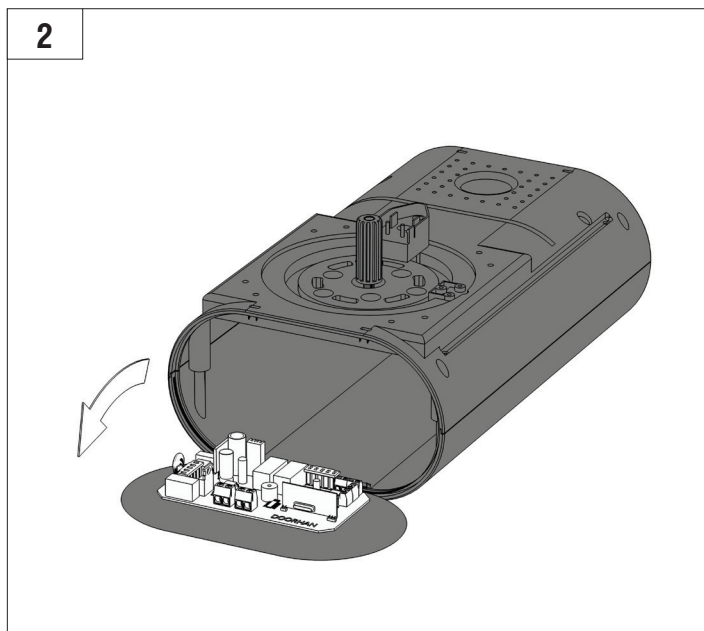
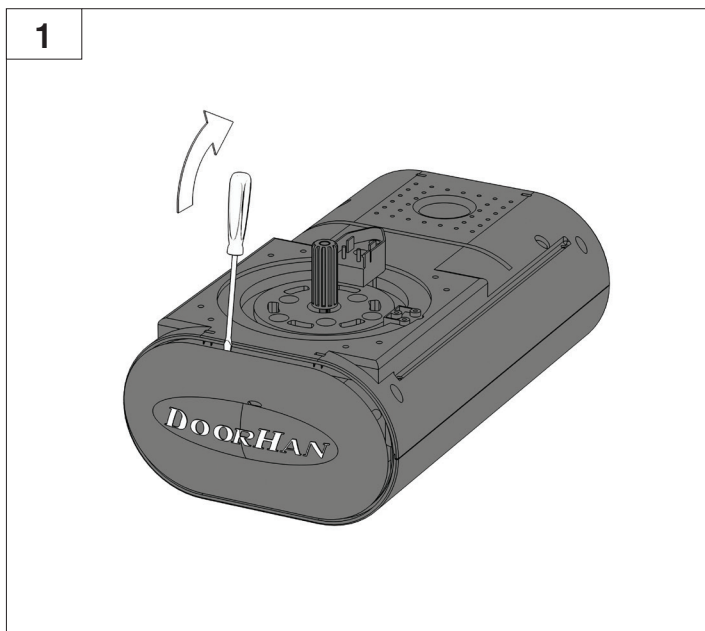


5. ELECTRICAL CONNECTIONS

5.1. CONTROL UNIT SPECIFICATIONS

Parameter	Value
Power supply	207–253 V / 50, 60 Hz
Power supply to accessories	24 V DC
Maximum current to accessories	200 mA
Operating temperature	-20...+55 °C
Radio control frequency	433,92 MHz
Operating logics	Automatic / semi-automatic
Connectors	Open button / Safety devices
Lamp turn-on-time	3 min
Fuse type	Quick cutoff fuse, 230 V, 2,5 A, SR F2,5 A

If you need to connect some accessories remove the control board from the operator housing as shown in Fig. 1, 2 p. 11.

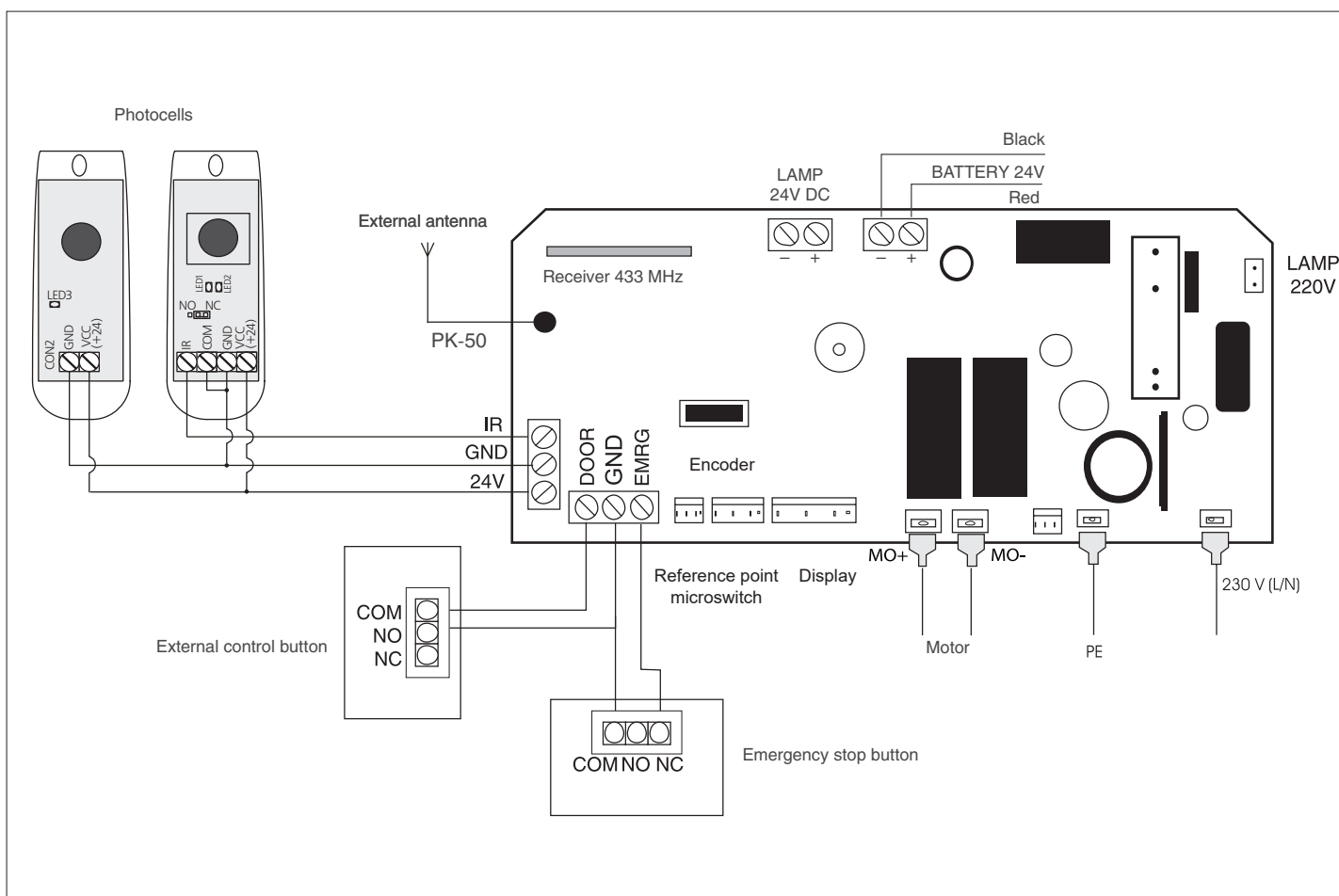


5.2. CONTROL UNIT WIRING DIAGRAM

WARNING!



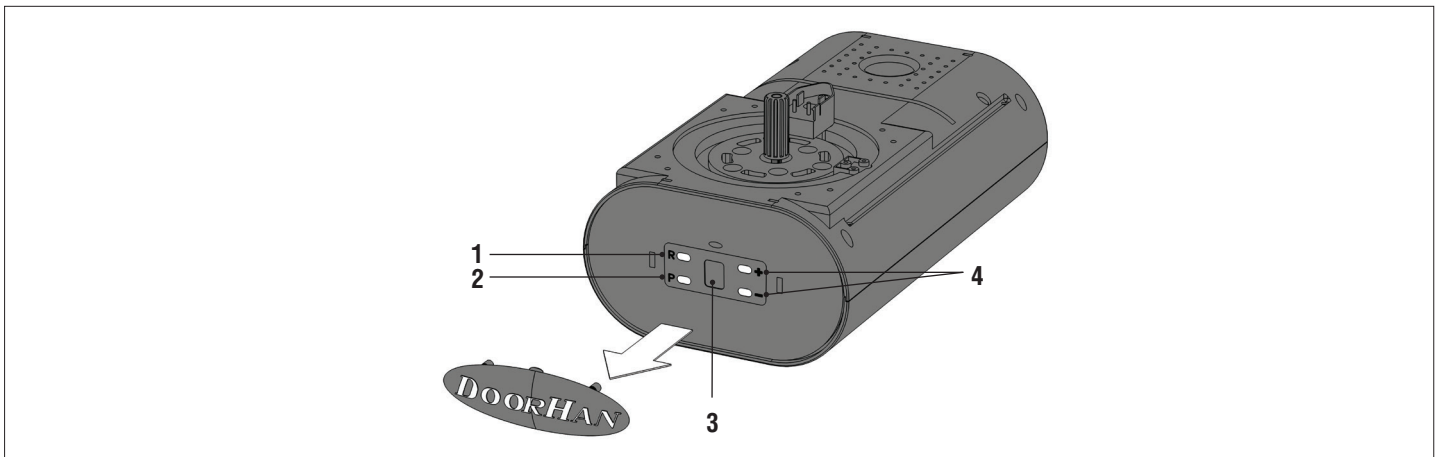
The cable wires must be protected from contact with any rough or sharp parts. Be sure to disconnect power to circuit before establishing permanent wiring connection.



6. OPERATOR PROGRAMMING

6.1. OPERATOR CONTROL BUTTONS

Remove the protective cover with DoorHan logo to get to the programming panel.



- 1. Radio code recording button — “R”
- 2. Programming button — “P”
- 3. Display
- 4. Scroll buttons — “+”, “-”

6.2. PREPARATION

Lock the trolley to operator.

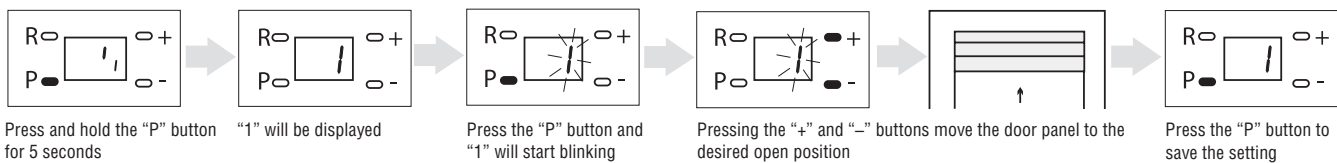
Turn on the power, the LED indicator on the operator will light up, and a beep will sound.

If the programming is incomplete, the settings will not be saved. If there is an error in any setting, you can turn off the power and start programming again.

6.3. BASIC PROGRAMMING

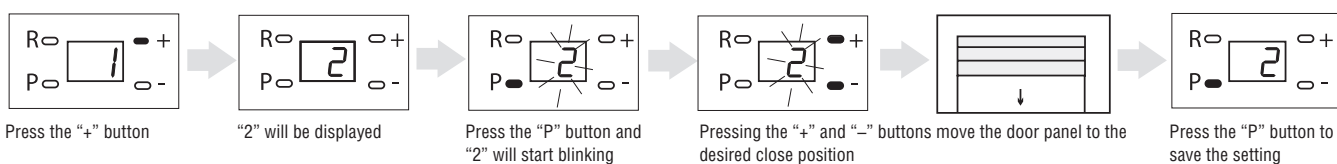
Menu	Function description	Default value
1	UP travel limit	-
2	DOWN travel limit	-
3	Automatic force adjustment	3
4	Force limit adjustment: “1” — minimum force, “6” — maximum force	3
5	Cycles counter	0
6	Warning signal: “0” — function disabled, “1” — function enabled	0
7	Automatic door closing: “0” — function disabled; “1” — 30 seconds pause; “2” — 60 seconds pause; “8” — 240 seconds pause	0
8	Service counter: “0” — function disabled, “1” — function enabled	0
9	End of programming	-

6.3.1. UP TRAVEL LIMIT



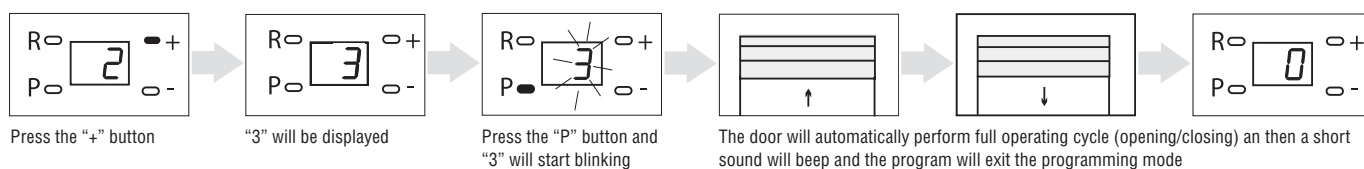
The setting is saved only when programming the UP travel limit of the door. The UP travel limit must be programmed before setting the DOWN travel limit.

6.3.2. DOWN TRAVEL LIMIT



The setting is saved only when programming the DOWN travel limit of the door.

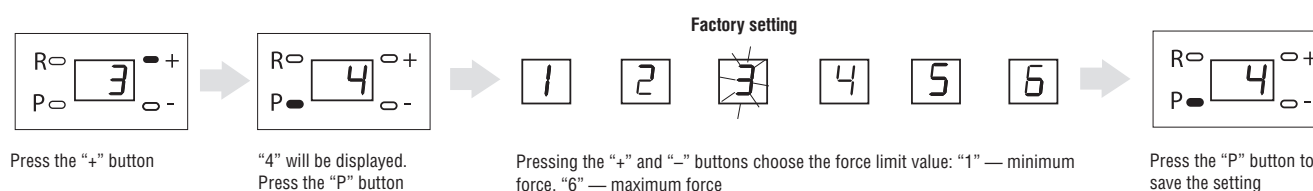
6.3.3. AUTOMATIC FORCE AJUSTMENT



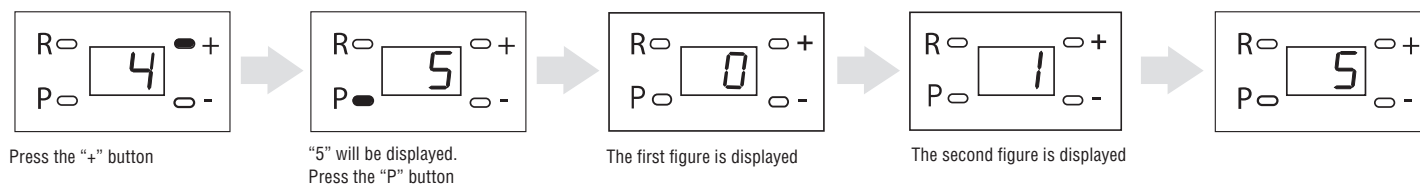
A short beep will sound after automatic force adjustment and the program will automatically exit programming mode. After performing these setups, programming can be completed. All other parameters have factory settings.

6.3.4. FORCE LIMIT ADJUSTMENT

Force limit setting is pre-programmed at the factory and its value is 3. For normal use, this setting should not need adjustments with this unit.



6.3.5. CYCLES COUNTER

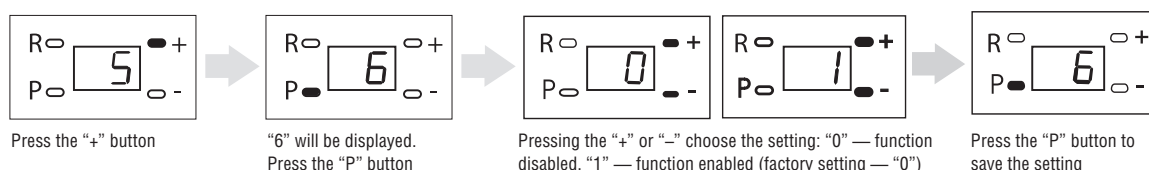


When you enter the 5th menu item, two figures are displayed sequentially. After displaying the figures, the program returns to the main menu.

First figure — tens. Second figure — units.

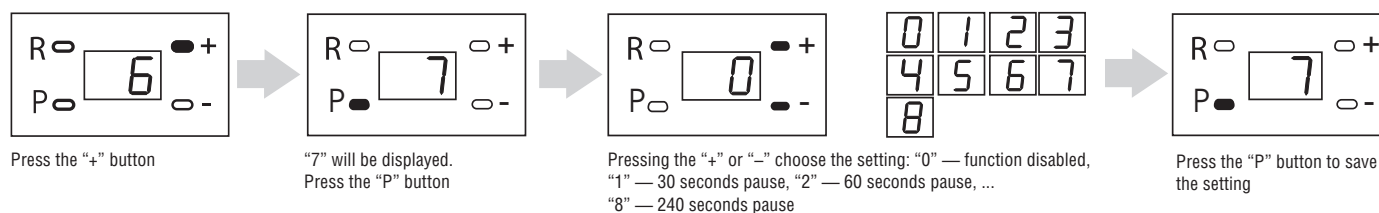
The shown value is multiplied by 1000 to get information about the number of cycles passed by the operator.

6.3.6. WARNING SIGNAL

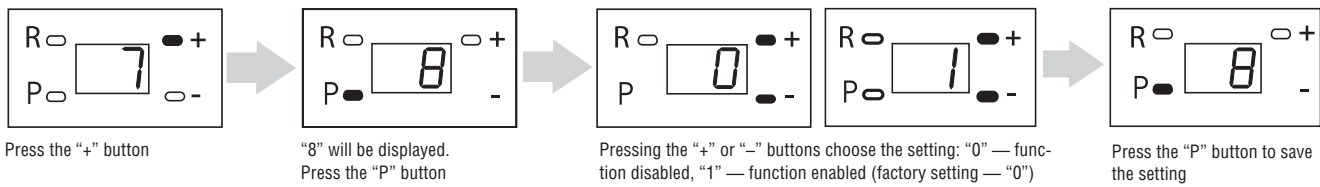


Should you forget to close the door a warning signal will sound in 10 minutes. The signal will automatically cease sound after the door is closed. Factory setting is "0" — function disabled.

6.3.7. AUTOMATIC CLOSING



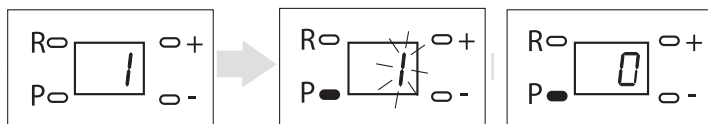
6.3.8. SERVICE COUNTER AFTER 2000 CYCLES



NOTE:

- When the function is enabled, two short beeps will sound before each opening/closing cycle after the operator have made 2000 full cycles.
- If you would like to disable the audio signal turn the power on and off.
- To reset the cycle counter manually disable and then enable the function again.
- The counter will automatically reset when 2000 cycles are reached. After that cycle counting starts again.

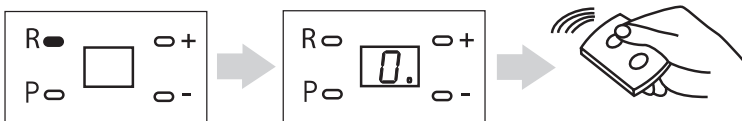
6.3.9. END OF PROGRAMMING



Pressing the “+” or “-” buttons choose “1”. Press and hold the “P” button until the display shows “0”. Programming is finished.

7. REMOTE CONTROL PROGRAMMING

7.1. RECORDING OF A DOORHAN REMOTE CONTROL



1. Press and hold the “R” button until a “dot” indication is displayed. Release the button.
2. On the remote control, press and release the button that you would like to program twice. A short beep will sound.
3. Repeat these operations to record other remotes (maximum number of remotes — 60 pcs.).
4. All remote controls are recorded sequentially in the control unit.



NOTE:

- If the receiver memory is full three long signals will sound.
- If no control commands are given the receiver will automatically time out of control panel recording mode in 10 seconds.
- After power supply of control unit is off the programmed data is stored in the memory.

7.2. REMOTE PROGRAMMING OF REMOTE CONTROLS

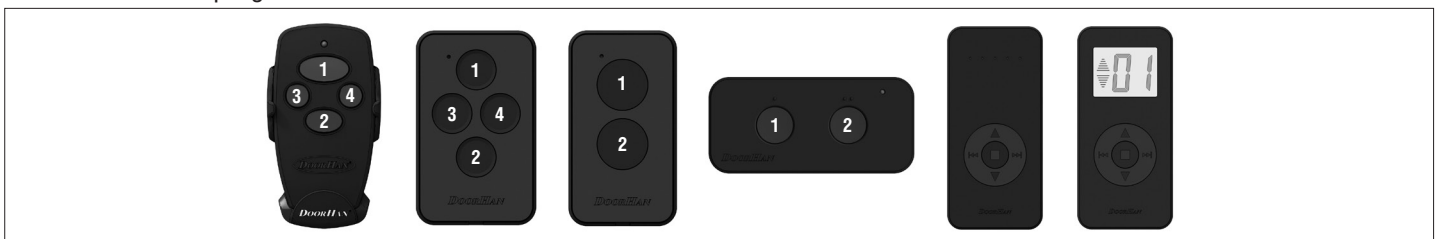
Steps 1–4 should be performed within five seconds interval being in close proximity to the operator.

1. Press and hold the “2” button of the programmed remote control.
2. Without releasing the pressed “2” button press and hold the “1” button.
3. Release the pressed buttons.
4. Press the programmed button.
5. On the remote control press and release the button that you would like to program twice. A short signal will sound.



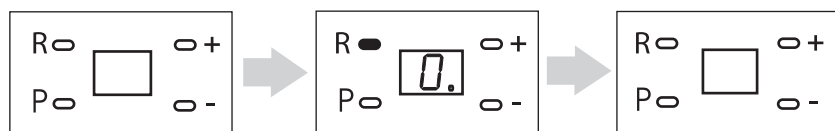
NOTE:

You can program all four buttons.



7.3. ERASE REMOTE CONTROLS

Press and hold the “R” button to erase all remote controls from the memory. After 10 seconds a long beep will sound, indicating that the remote control information is deleted from the receiver’s memory.



WARNING! If a remote control was lost, erase all radio codes and re-program the remote controls to prevent unauthorized entry.

8. MAINTENANCE

Carry out regular maintenance as described herein and in the manuals of other devices involved, in accordance with applicable regulations and legislation, in compliance with safety measures and involving qualified personnel. The operator requires scheduled maintenance once a year or every 5000 cycles.

- Disconnect the operator from the mains (if the battery backup is used disconnect it too).
- Check all the components (chain, trolley, sprocket, door parts, etc.) for signs of wear and oxidation. Replace all worn parts and assemblies.
- Make sure door stops precisely at its travel limits. Adjust if necessary.
- Clean the outer surfaces of the operator, safety devices, electromechanical and electromagnetic locks (when used) with a soft, damp cloth. Do not use water jets, high pressure cleaners, acids or alkalis for cleaning.
- Every month check if the safety and protective devices are in good working condition. Should any failures be detected ask qualified personnel for troubleshooting.
- Average product life is 10 years or 50 000 cycles.
- The service life and cycles figures are approximate. They have been statistically determined for typical operating conditions and are not guaranteed on a case-by-case basis.
- Each automatic entrance group has a number of technical characteristics (friction, balancing, environmental conditions) that can significantly affect the service life and quality of work of the whole entrance group or its component parts (including automation).

9. TROUBLESHOOTING

Symptom	Possible cause	Solution
Operator does not run	no power / blown fuse	turn the power on / replace the fuse
Operator does not work from remote control	remote control code is not recorded / dead battery in the remote	record remote control / replace the battery
Remote does not have good range	remote control battery dead	replace the battery
The chain of the guide rail moves, but the gate is stationary	the trolley is disengaged and not connected to the chain support	align the trolley with the support and engage the trolley
Sound alarm is on	sound alarm to warn about 2000 operating cycles made and maintenance to be performed	turn the power off and on
Door does not reach its travel limits or does not run at all	programming error	re-program
Door operates intermittently, “H” is displayed	electronics failure due to high humidity	call for a trained technician to clean the control board
Door stops suddenly, “F” is displayed	door hits an obstacle or mechanical components are jammed / unstable power supply	check mechanical components, remove the obstacle / check power supply
When the system is running, you can hear a creak	not enough lubricant on the guide chain due to its prolonged use	oil the chain
Chain makes noise and rubs against the guide	stretched chain	oil the chain gear and tighten the chain

DOORHAN[®]

We very much appreciate that you have chosen the product manufactured by our company and believe that you will be satisfied with its quality.

For information on purchasing, distribution and servicing contact DoorHan central office at:

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Odintsovo, Moscow region,
143002, Russia
Phone: +7 495 933-24-00
E-mail: info@doorhan.com
www.doorhan.com