

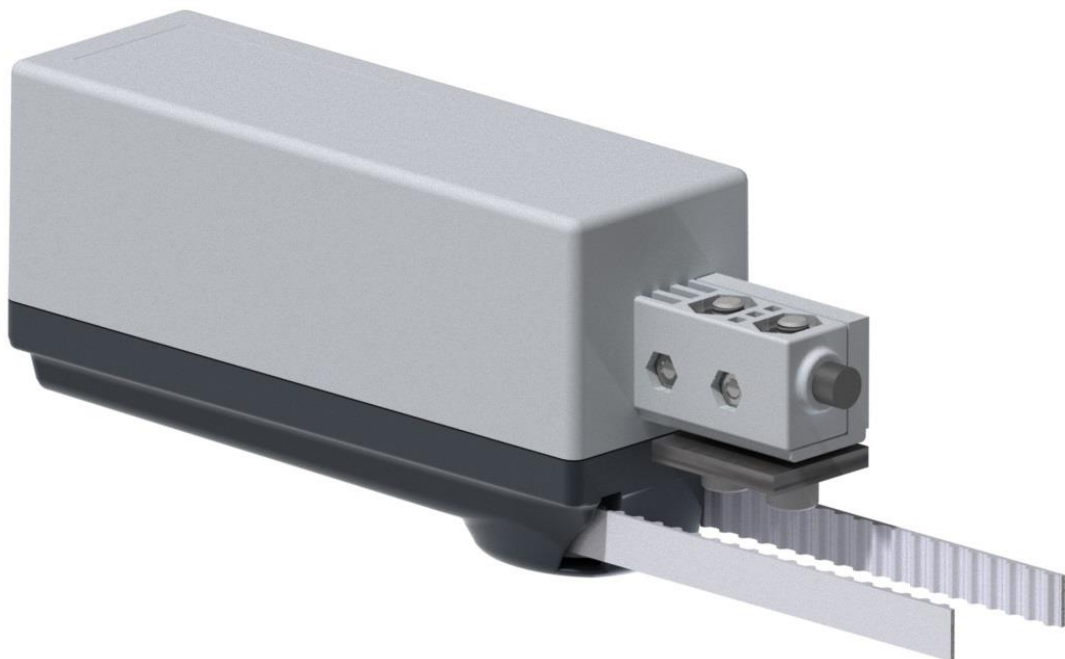


MANTION SMT
Solutions MecaTroniques

INSTALLATION INSTRUCTIONS

SLIDING SHUTTER MOTOR

SYCOMM



VERSION 1-12 EN

2, rue des Métiers
21110 – Genlis
Tel.: (33) 03 80 37 85 71
<http://www.mantion-smt.fr>



GUARANTEE CERTIFICATE – CAUTION NOTICE

Important safety instructions. For user safety reasons, follow these instructions. Please Keep It.

The SLIDING SHUTTER MOTOR is exclusively designed for opening and closing sliding shutters. It must not be used for any purpose other than that specified in these instructions. The manufacturer or supplier shall not be liable for any damage resulting from improper use thereof. The user alone shall be solely liable and assume any risks arising from improper use of the product.

This unit can be used by 8 years old children and people with physical, sensory or mental capabilities reduce or devoid of experience or knowledge, if they are properly monitored or if all using and safety instructions are given to them and if all the risks of using this unit were apprehended.

This shutter motor must be installed by persons fully aware of the hazards involved in electric current, drilling, who have the requisite qualifications to work on domestic installations in accordance with good practice.

If the power supply cable is damage, it must be change by the manufacturer or people having knowledge to do it.

All the instructions must be followed because faulty installation can cause injury.

The assembly steps must be followed, as must the operating instructions, and safety rules must always be heeded.

Before installing the sliding shutter motor, check that both the driven part and the entire product are in good physical condition and that the structure has the necessary load-bearing capacity for the sliding shutter motor in its entirety.

The product must be installed by qualified people or with MANTION SMT agreement.

The electrical installation must be done according to prevailing national standards and in accordance with all legal obligations and/or prevailing obligations to that effect.

(Electrical compatibility: voltage and frequency as marked on the product and that of the power network where it will be used.) Do not connect the device without first checking that the control circuit is dead.

Check the installation frequently to detect any imbalances or signs of wear or damage. Do not use the device if it needs repairing or adjusting.

Disconnect the power supply when cleaning it or carrying out other maintenance or servicing tasks.

Never modify or mount any additional parts to the device that may compromise safety without MANTION SMT's written permission.

Be very careful about fingers pinching when using the device.

The user bears full responsibility for all risks associated with improper use, and any resulting damages.

The product must be stored indoors in a dry place at temperature between 0°C and +45°C.

When mounting, the installer must heed accident prevention instructions and always conform to the current national standards.

Do not immerse the device in water or splash it.

Do not dispose of it in fire or bring it into contact with flame or any heat source.

Do not use household products or chemicals to clean it. Only use a moist sponge and soap.

Do not dispose of the packaging in the environment; treat waste according to the national standards.

Keep products, devices and documentation out of reach of children.

Do not let children play with the fixed control devices. Keep remote controls out of reach of children.

When using a switch without a lock, make sure everyone else is kept at a distance.

Radio control:

Wireless remote control use is only authorized if any disturbance in the transmitter or receiver poses no danger to people or animals, or if such hazards are removed by other arrangements.

The wireless control user is not protected against interference generated by other telecommunications installations and remote-controlled devices. If there is a high level of interference, contact the organization in charge of measuring wireless interference (radiolocation).

Do not use the radio transmitter in radio transmissions sensitive places (airports, hospitals) or only after taking all the necessary precautions.

The SLIDING SHUTTER MOTOR remote control may pose risks and for this reason please heed the following points when using it:

1. Make sure no object or person is within range of the sliding shutters.
2. Only operate them when direct visual inspection is possible.

The wireless control is not a toy; do not let children play with it. Keep it out of reach children and animals.

TERMS OF THE GUARANTEE

MANTION SMT products come with a 5 (five) years guarantee from the date of delivery.

The guarantee is limited, as decided by MANTION SMT, either to replacement or to repair of products MANTION SMT recognizes as faulty, with the proviso that:

1. Subject to MANTION SMT's written permission to return the products, the said products are returned to MANTION SMT forthwith with the details of the fault and a copy of the installer or dealer's bill stating the date of installation.
2. The products have been stored, installed, maintained and used in accordance with MANTION SMT's instructions and specifications.

The guarantee is strictly limited to the provisions of this clause, and any other guarantee or liability, including loss of profits or damage directly or indirectly resulting from the sale or use of the products, is excluded.

MANTION SMT shall on no account be liable for drilling and embedding conditions.

MANTION SMT shall in any event only be liable for the SLIDING SHUTTER MOTOR product. The guarantee does not apply in case of overvoltage or short-circuiting resulting for instance from connection errors, weather conditions such as lightning etc. The guarantee does not cover normal wear.

TECHNICAL DATA

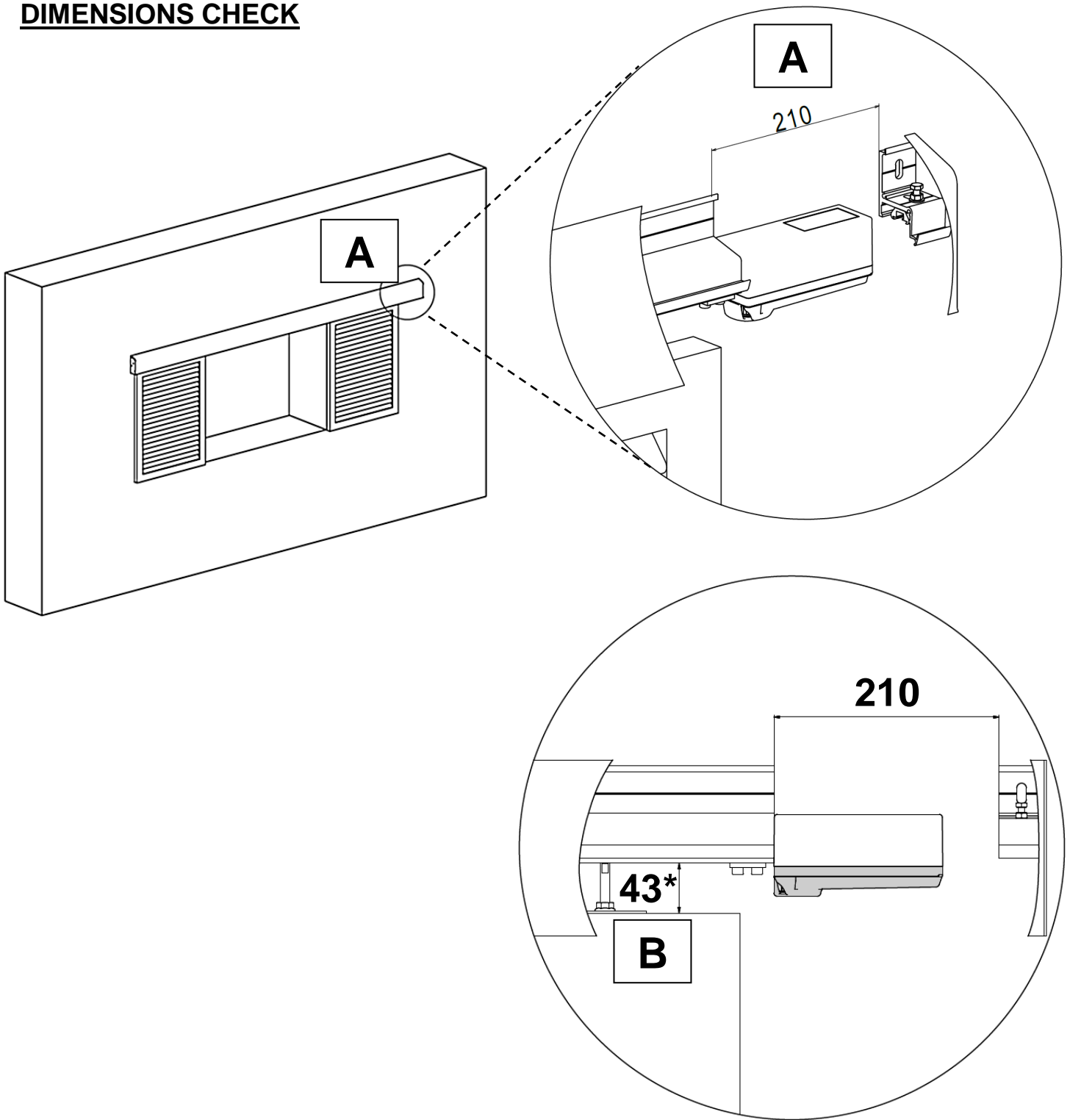
Sliding Shutter Motor is designed for opening and closing sliding shutter. It is designed for domestic or home use.

This product is only designed to be used under pelmet.

Supply voltage	110-230 V AC - 50/60 Hz
Maximum power rating	25 W
Outer dimensions (lxLxh)	150x50x73 mm
Maximum motor torque	1,5Nm
Protection rating	IP55
Ending position	Smart (Obstacle Stop)
Motor technology	Brushless
Linear speed	~ 60mm/s
Operating temperature	-20 à +60°C
Radio frequency	433.92 MHz
Standby consumption	<0.02 A
Colors	Bicolor (RAL 7016 & 7035)
Shutter max. weight	80 kg
Max. weight	200kg up to 4 shutters (4x50kg)
Type of shutter	Wood, aluminum, PVC
Shutter width	30 cm to 3 m
Max. sliding stroke (1 shutter)	3m
Min. sliding stroke (1 shutter)	30cm
Durability	18,000 cycles guarantee
Status indicators	Led, Buzzer
Power wire length	3m

NB: All the data in the table are for reference only. They depend on the specific conditions and do not constitute a commitment of MANTION SMT.

DIMENSIONS CHECK



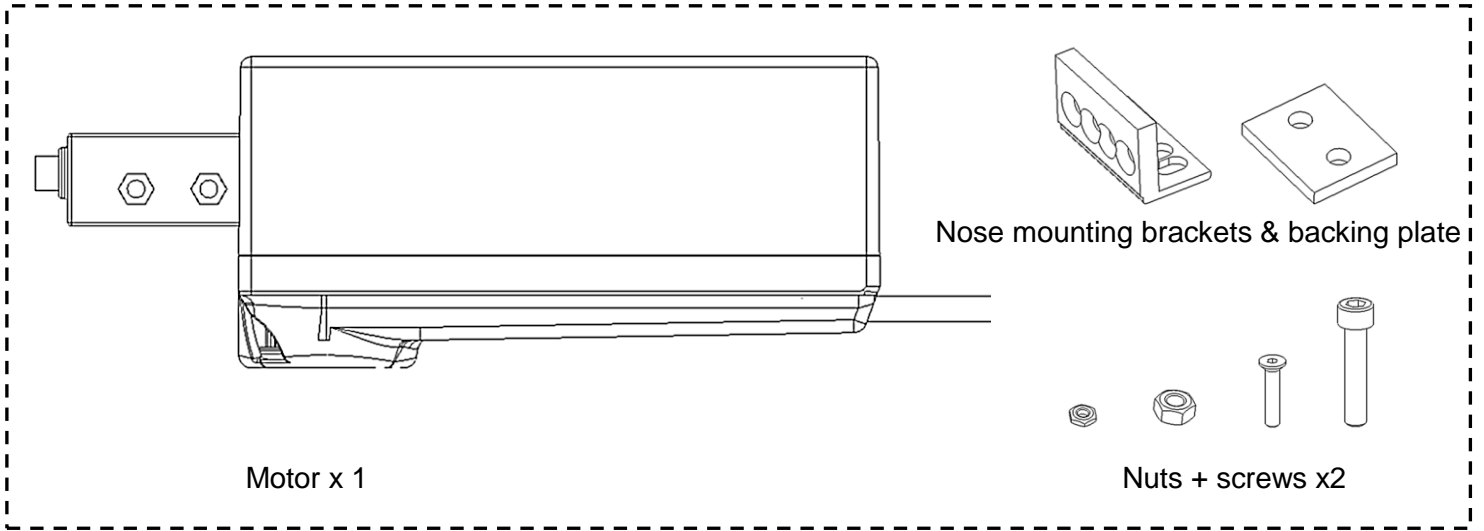
Dimension A: 210 mm minimum motor clearance

Dimension B: 43 mm minimum track/shutter distance and 50 mm maximum

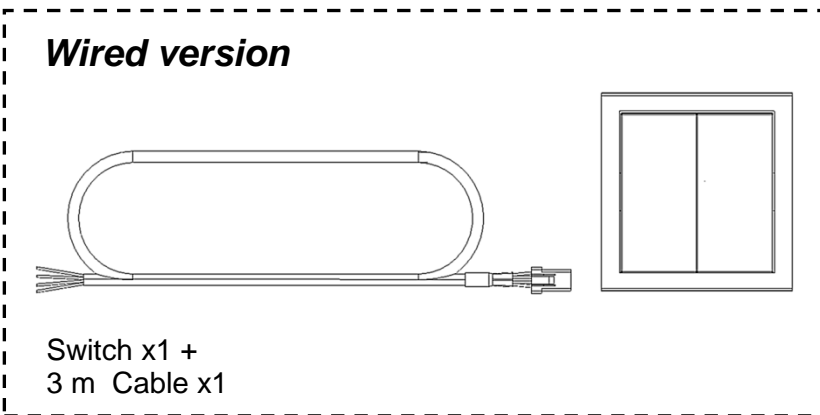
Necessary installation tools:

- A:** No. 3 hex wrench
- B:** No. 2.5 hex wrench
- C:** No. 5 hex wrench

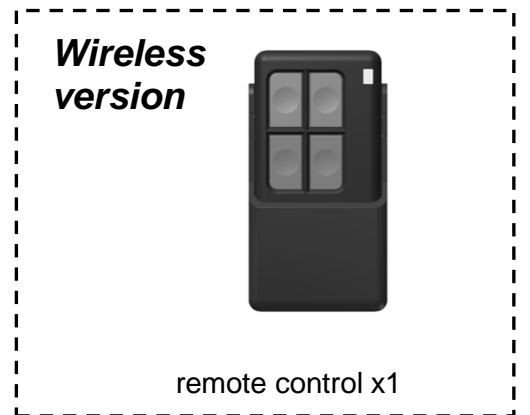
KIT CONTENTS



+



OU

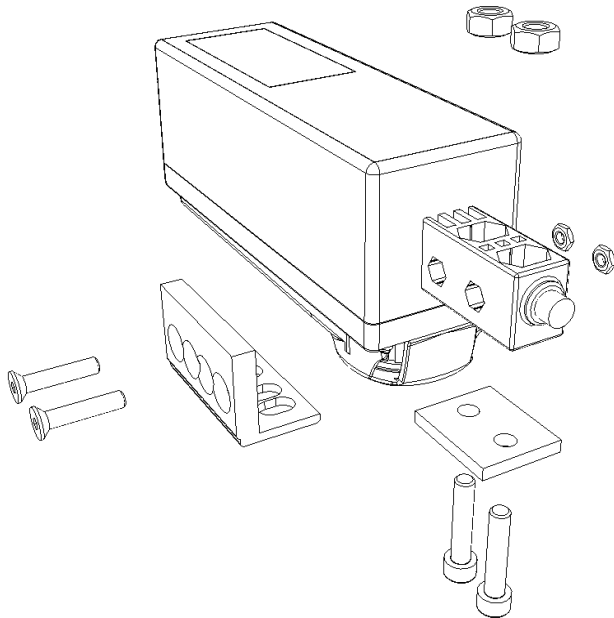


Nose mounting brackets assembly

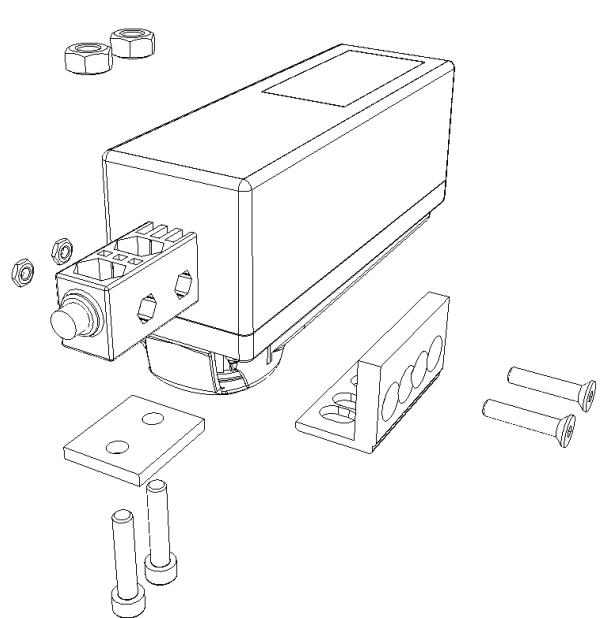
Depending on the motor location relative to the track, adjust the position of the bracket:

For the installation/removal, use hex wrench **B** & **C**.

Left-hand side mounting

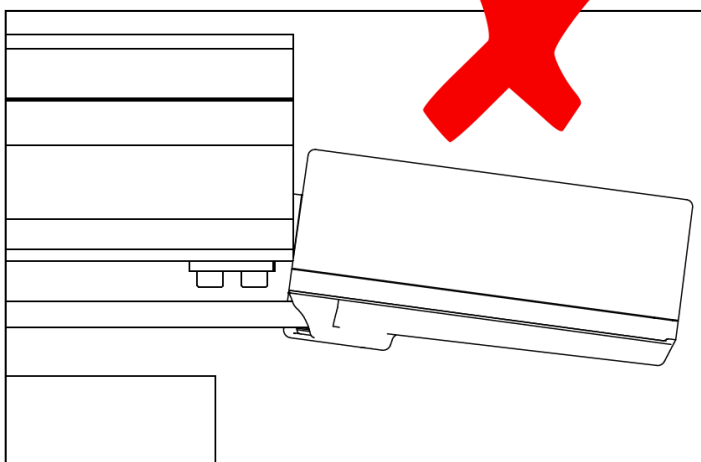


Right-hand side mounting

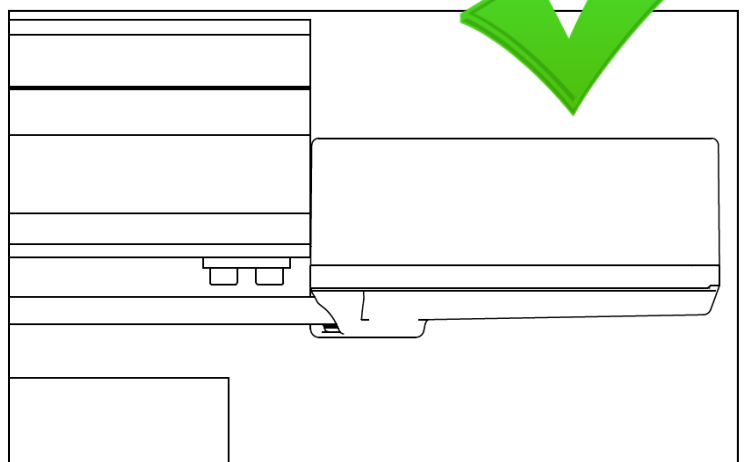


Seen from the home outside

Control the belt tension



Too high belt tension



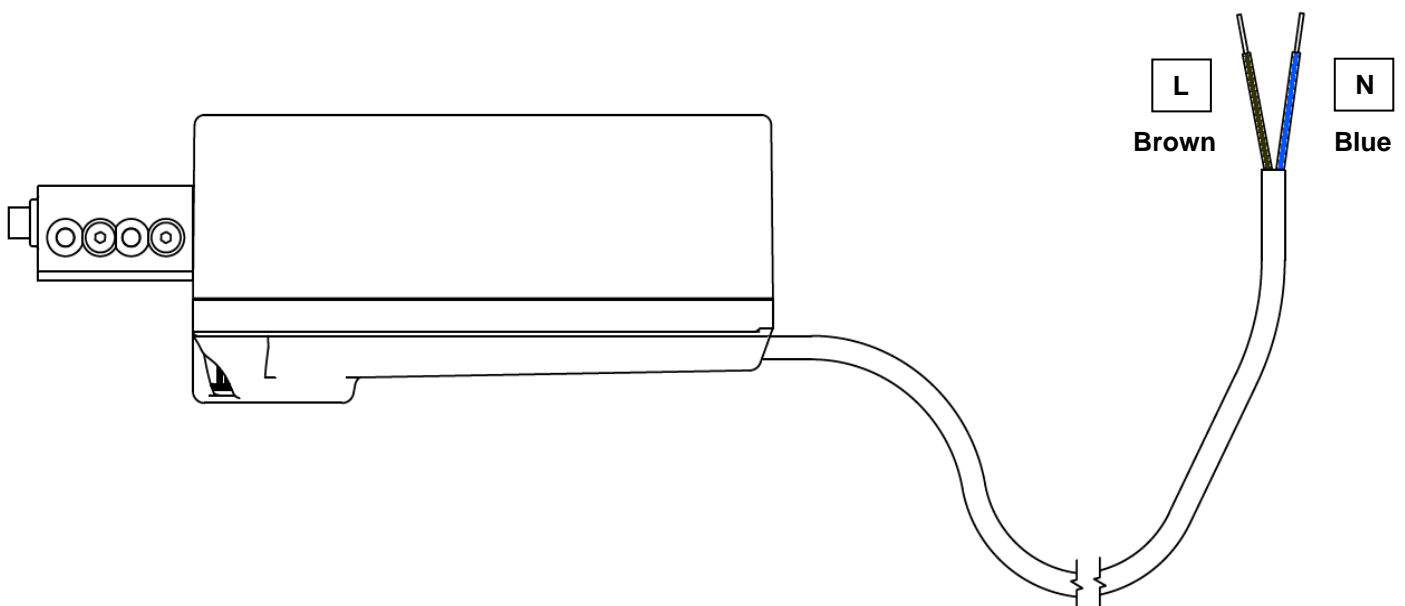
Belt tension OK

ELECTRICAL CONNECTION



Security Warning :

- The electrical installation must be carried out in accordance with the national standards in force, as well as any obligations foreseen by the law and/or by all obligations in force, laid down for this purpose.
- Power connection must be executed **Power OFF**: Do not connect the Power before completing all assembly operations!



Electrical connection

The installation must be equipped (L, N) with a two-pole external circuit-breaker (or selector switch) on the primary side, in order to isolate the product if necessary.

Recommended external protection: Thermal magnetic circuit-breaker 4A, curve C or equivalent

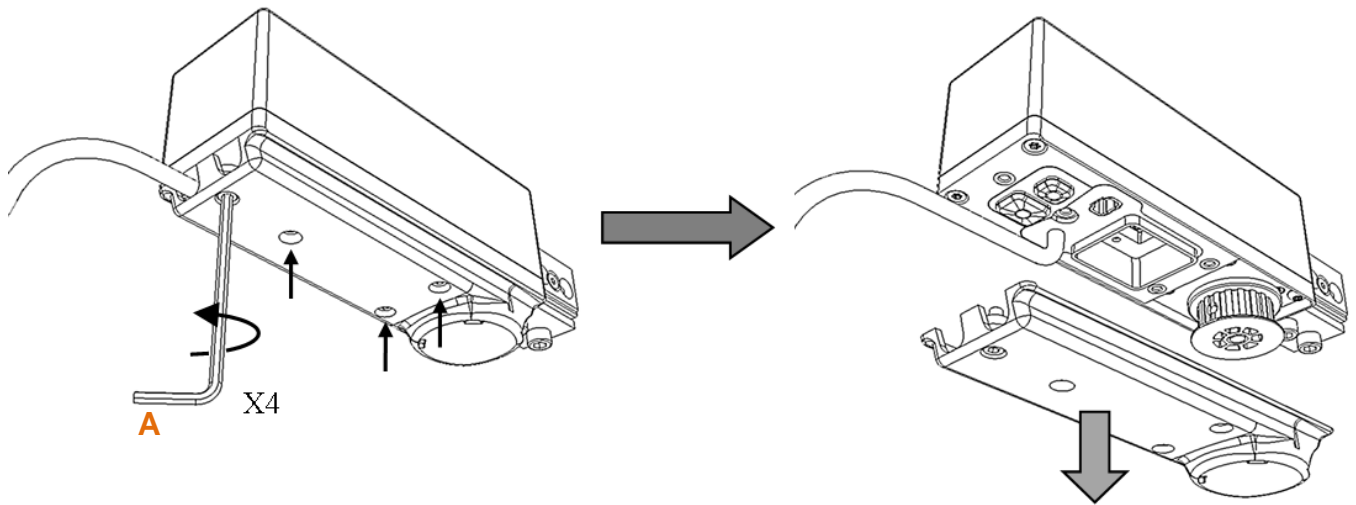
The product's power wire must be connected to the home power supply grid.

Bornes	Conducteur	Couleur
L	Phase	Brown
N	Neutral	Blue

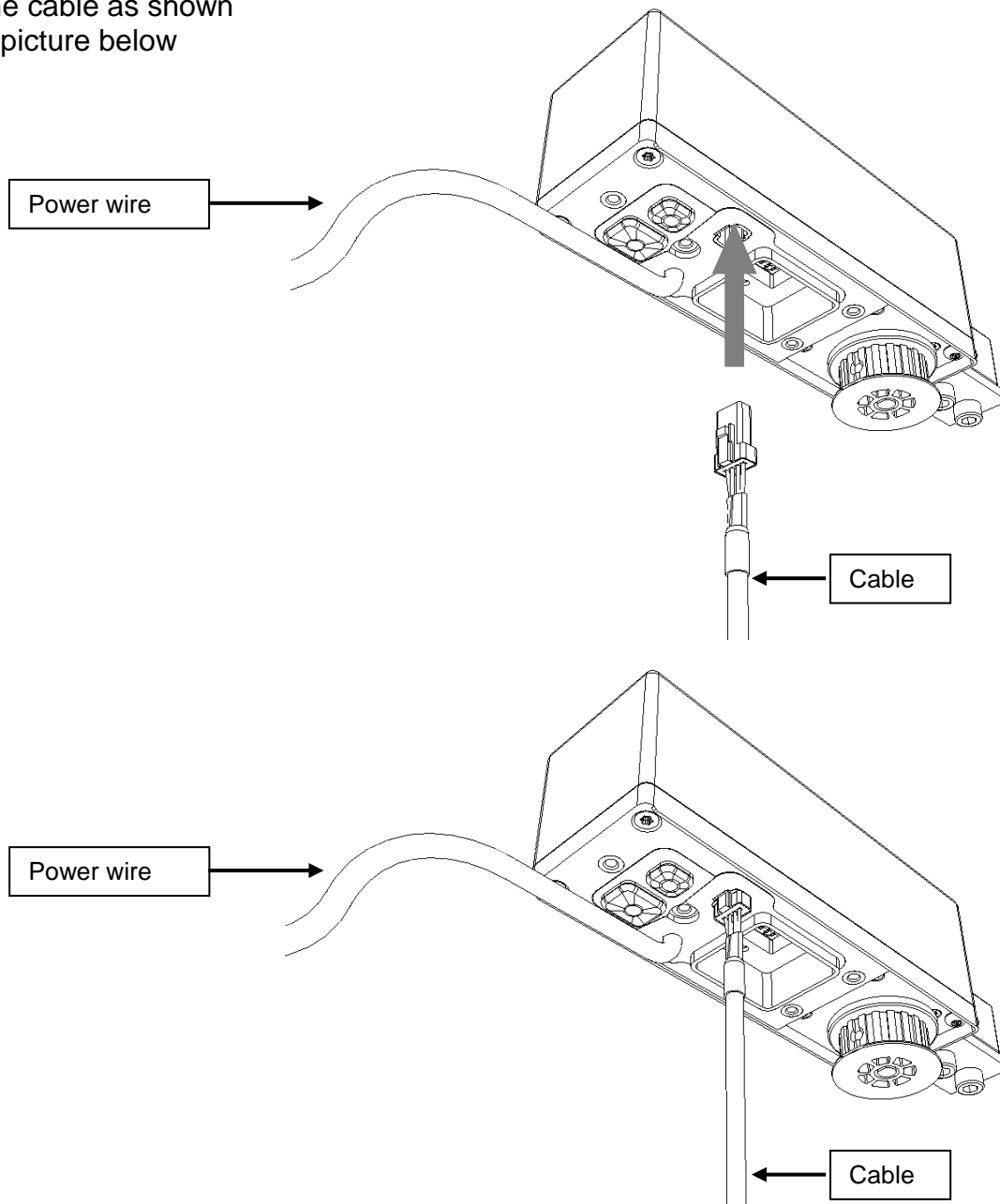
Wired push switch connection (Only for Wired version)

Do not use other push switches than the one included in the kit

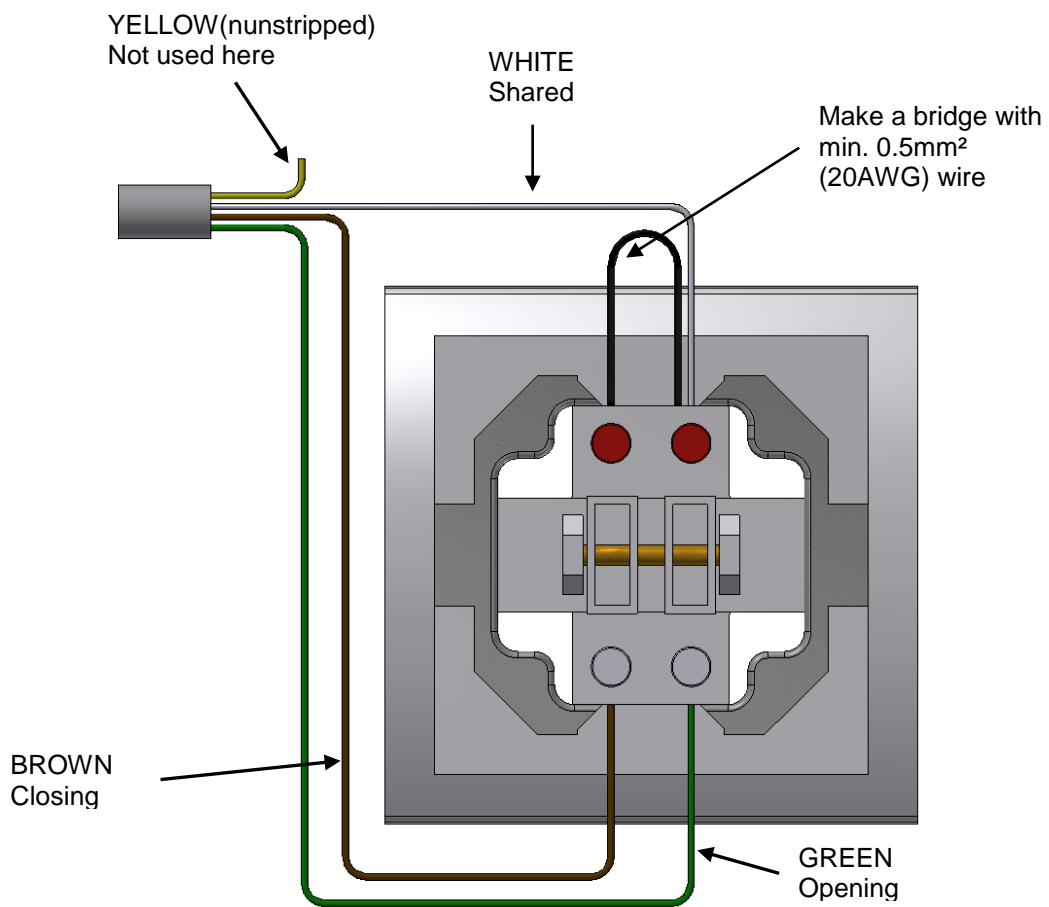
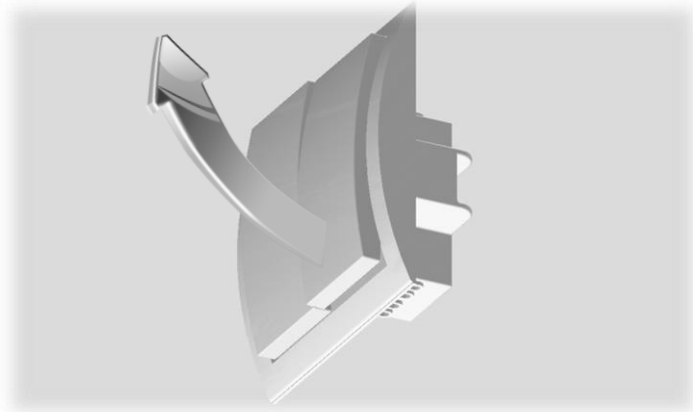
Unscrew the four pulley-case screws with the **A** wrench then, remove the pulley-case



Plug the cable as shown on the picture below



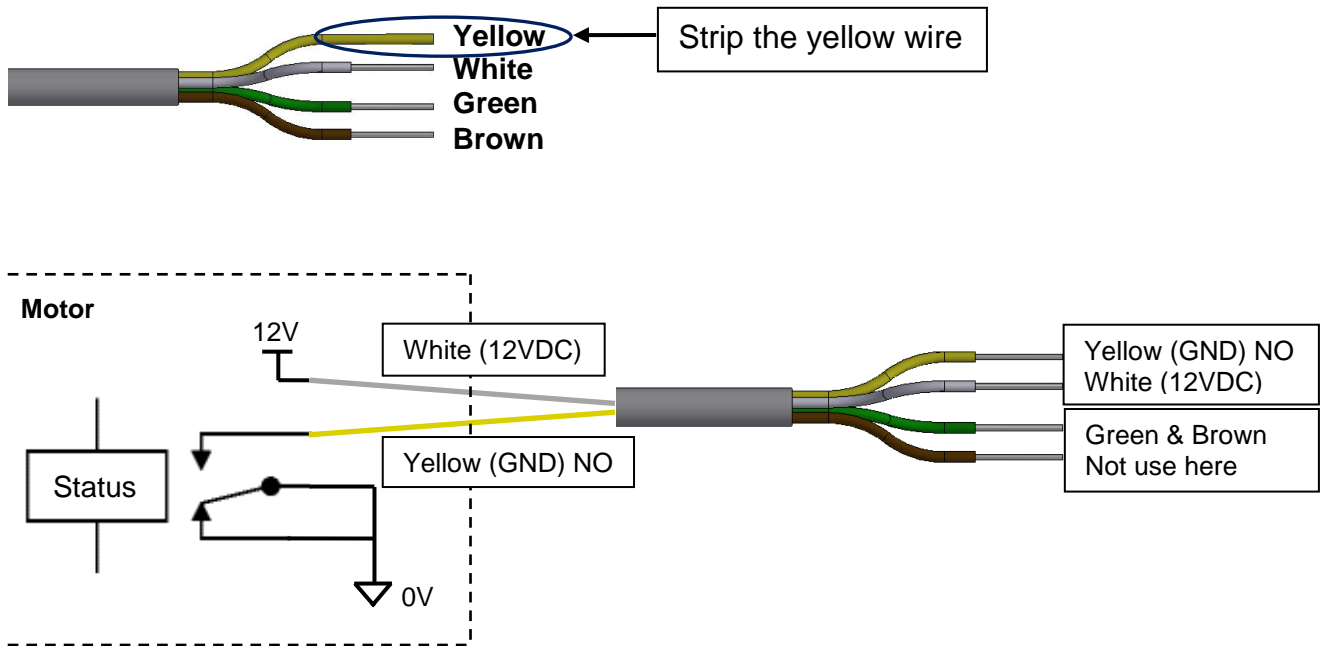
To access the push button to connect wire of the switch, remove the two front buttons => shoot down the button:



Press one of the terminals tabs and at the same time insert the wire into the cavity located below the button. Releasing the button, the wire is then locking in the cavity. Check by slightly pulling on it. Repeat the operation for each wire.

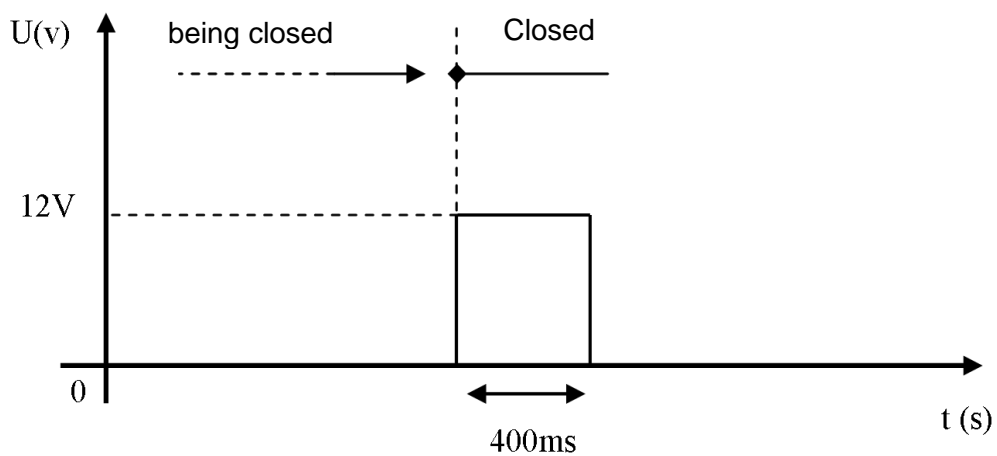
Wiring diagram for « Status » output (to interface with a wired home automation system only).

Strip the yellow wire of the Cable used in the previous section



Yellow wire	GND Normally open
White wire	Shared (+12VDC)

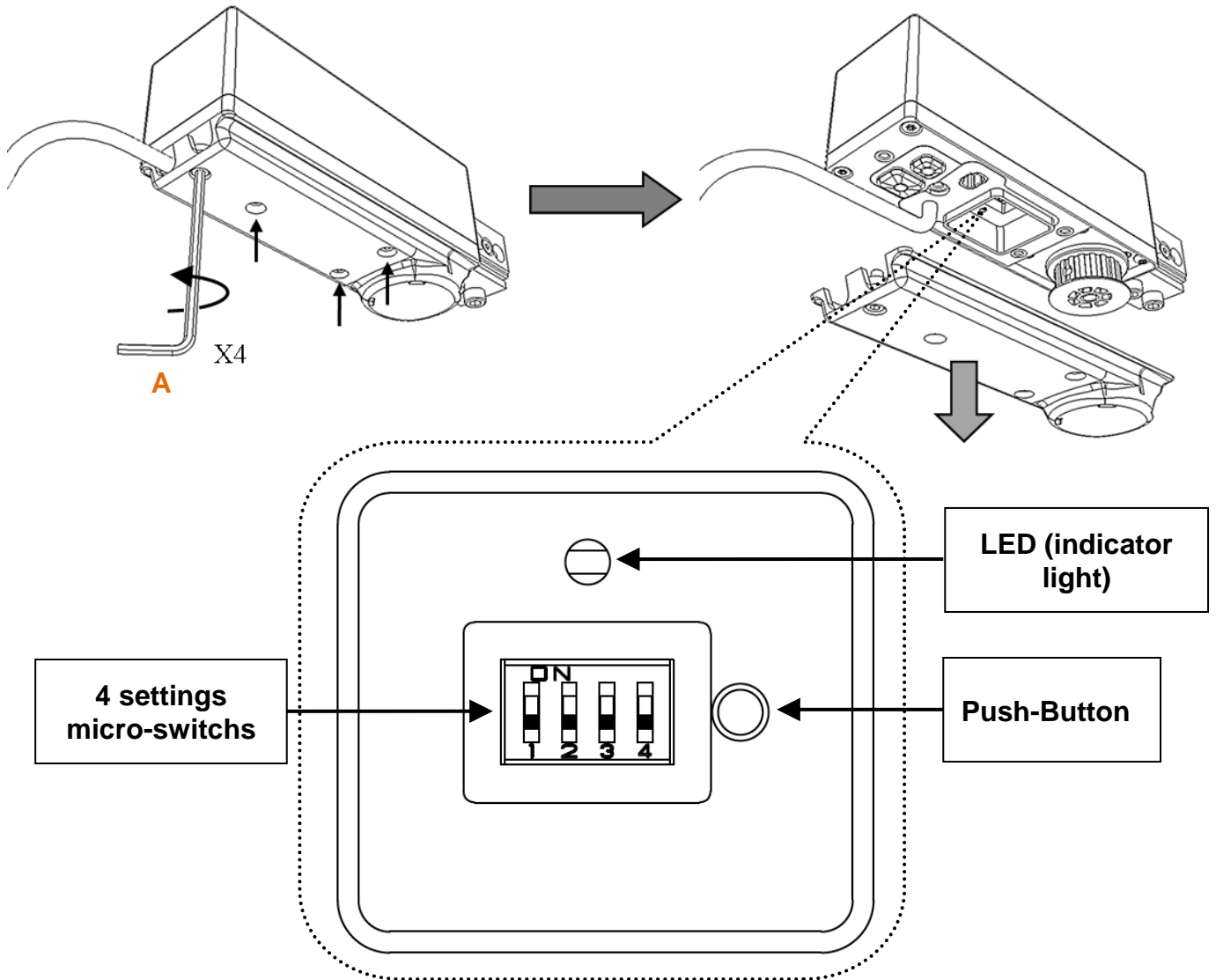
As the chart below illustrates, when the shutter ended its closure, Status output is connected to ground during 400ms. So, the voltage between yellow wire and white wire is 12V during 400ms.



Voltage between yellow wire and white wire at the end of the closing cycle.

START UP

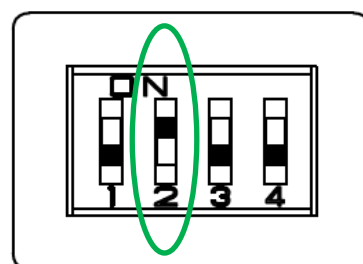
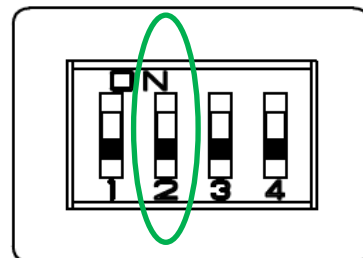
To get access to the settings, unscrew the four pulley-case screws with the **A** wrench then, remove the pulley-case



A. Shutter(s) range of weights selection

Depending on the total shutter(s) weight , choose the correct Switch 2 position:

Switch 2 OFF	total shutter(s) weight < 120kg
Switch 2 ON	total shutter(s) weight \geq 120kg

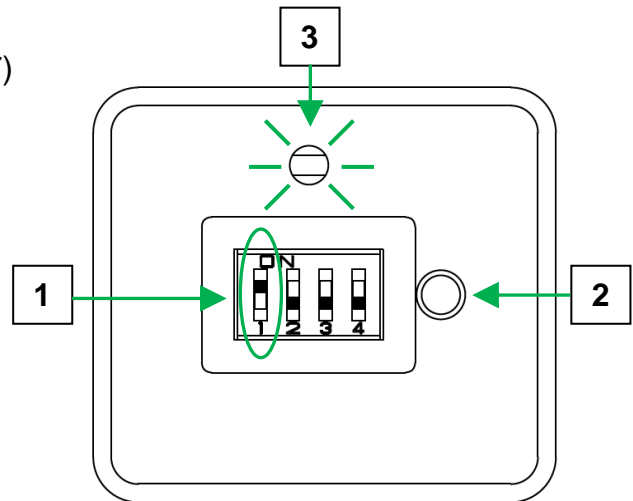


B. Self-Learning mode

Place the belt with enough tension (refer to page 7)

Check that nothing blocks the movement of the shutter(s)

- 1- Set the Switch 1 to ON
- 2- Press the Push-button
- 3- The buzzer beeps once, the green LED flashes over the duration of the learning mode

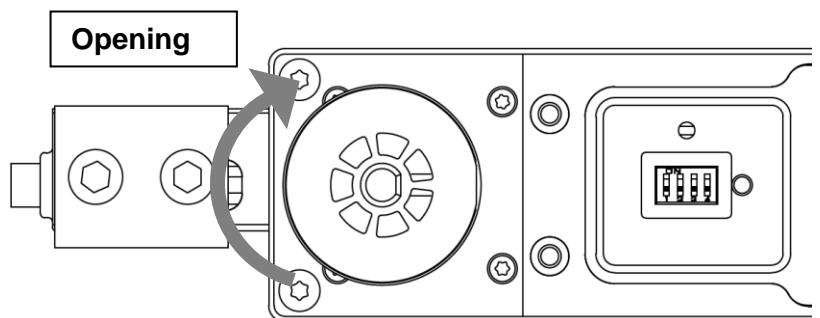
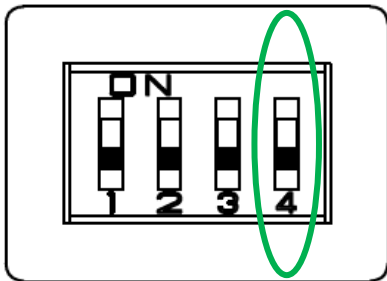


The shutters move in opening stop, then move in closing stop. It store the moving distance. Its movements are in slow speed.

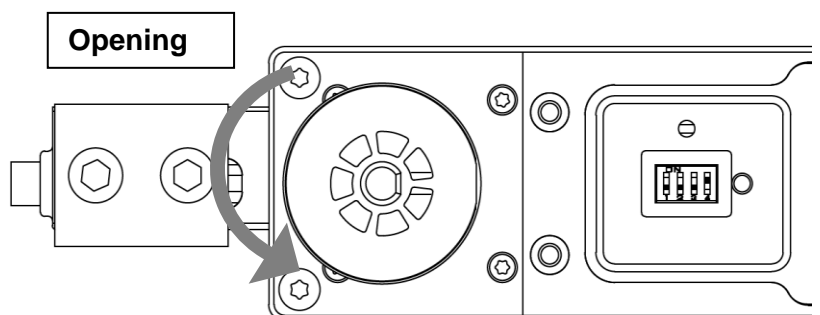
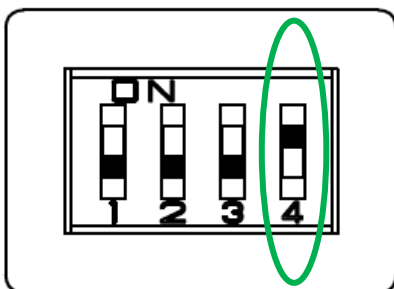
To stop the learning process, push again the Push-button. (The shutter stroke will not be recorded the product will not be operational until it is done)

Warning: at the end of learning mode, shutter(s) must be closed. If not, set the Switch 4 ON in order to reverse the motor direction.

Initial motor rotation direction



Reverse motor rotation direction



Then, go again to **Self-Learning mode (Step B)**.

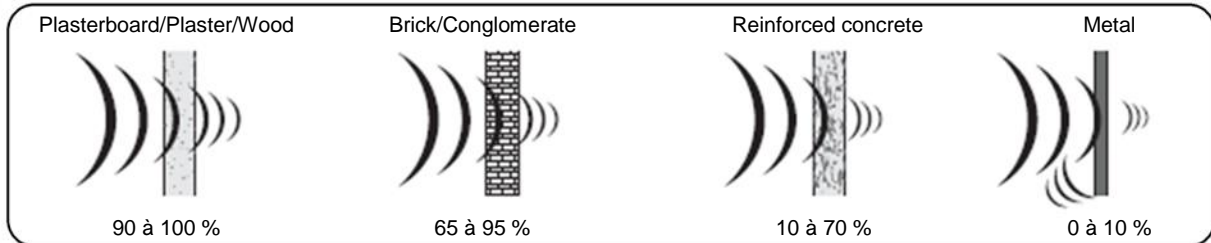
C. Wireless setup instructions (Only for Wireless version)

1 – Radio specifications:

Frequency: 433.92 MHz

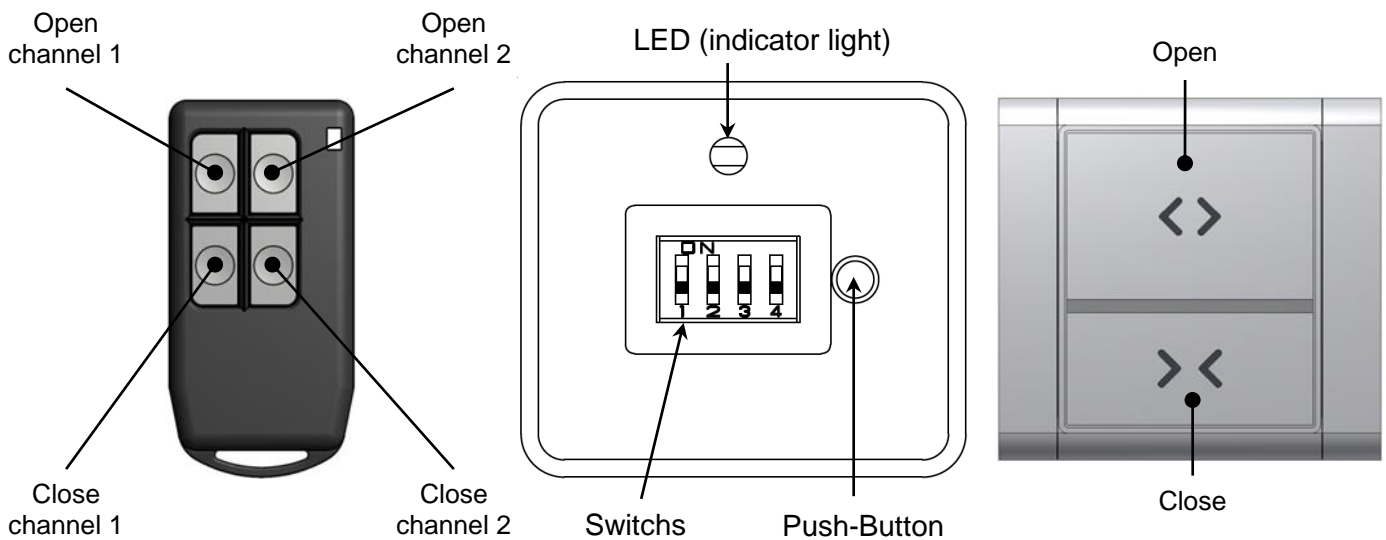
Transmitters range: approx: 70 metres line-of-sight *

* Propagation of radio waves varies according to the medium they traverse. The range of the radio waves will vary according to the type of construction:



Reception is poor, use the radio repeater ref. C0004760.

2 – Setup



Wireless switch Pairing:

1. **Set the Switch 1 to OFF then, press the Push-Button once.**
The LED lights up, buzzer beeps once (the motor is in "radio peering" mode)
2. While the LED is ON (not flashing): **press the "open" and "close" buttons simultaneously** on the switch.
The LED flashes quickly then turns off, the buzzer beeps twice: the device is now paired.

Remote control Pairing:

1. **Set the Switch 1 to OFF then, press the Push-button once.**
The LED lights up, buzzer beeps once (the motor is in "radio peering" mode)
2. While the LED is ON (not flashing): **press the "open" and "close" buttons simultaneously** on the desired Remote control channel.
The LED flashes quickly then turns off, the buzzer beeps twice: the device is now paired.

Note: it is possible to peer several SYCOMM on a same switch, or several transmitters on the same SYCOMM. For that, repeat the operations below.

Wireless switch Unpairing:

1. **Set the Switch 1 to OFF then, press the Push-Button once.**
The LED lights up, buzzer beeps once (the motor is in "radio peering" mode)
2. **Make a short press on the Push-Button**
The LED & the buzzer flashes slowly, (the motor is in "radio suppression" mode)
3. While the LED & the buzzer is flashing, **press the "open" and "close" buttons simultaneously on the switch.**
The LED flashes quickly then turns off, the buzzer beeps twice: the device is now unpaired.

Remote control Unpairing:

1. **Set the Switch 1 to OFF then, press the Push- Button once.**
The LED lights up, buzzer beeps once (the motor is in "radio peering" mode)
2. **Make a short press on the Push- Button**
The LED & the buzzer flashes slowly, (the motor is in "radio suppression" mode)
3. While the LED & the buzzer is flashing, **press the "open" and "close" buttons simultaneously** on the desired Remote control channel.
The LED flashes quickly then turns off, the buzzer beeps twice: the device is now unpaired.

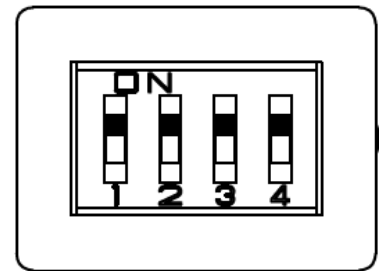
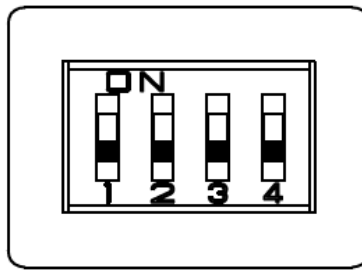
Unpairing all transmitters:

1. **Set the Switch 1 to OFF then, press the Push- Button once.**
The LED lights up, buzzer beeps once (the motor is in "radio peering" mode)
2. **Make a long (>5s) press on the Push- Button**
The LED & the buzzer flashes quickly
All devices are now unpaired.

Additional information

In Radio pairing mode, if no command occurs during more than 20 seconds, the Motor returns to its normal operating mode (If you want to go again in radio pairing mode, you must push again once on the Push-button).

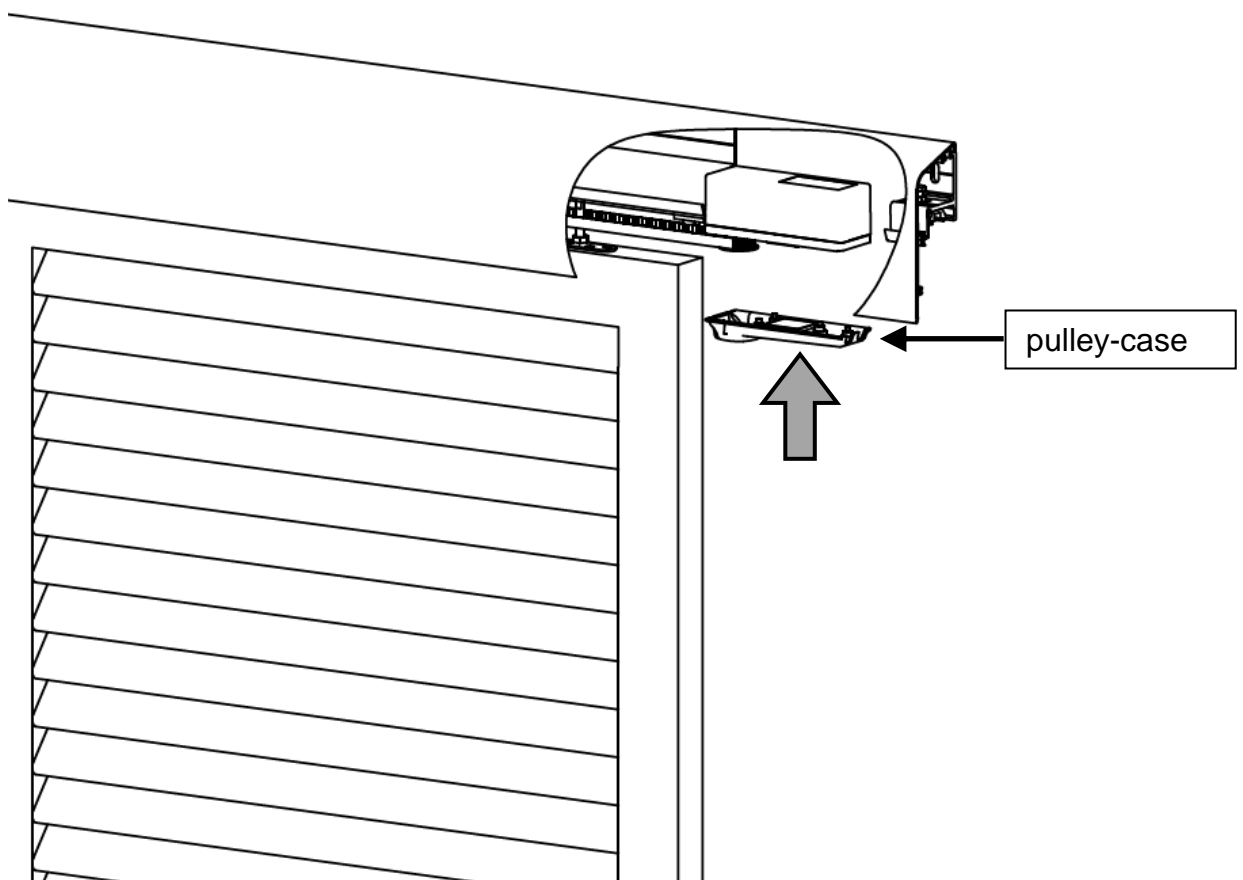
D. Summary of configurable settings



Switch #	OFF State	ON State
Switch 1	Radio Pairing (+BP)	Self-Learning mode (+BP)
Switch 2	shutters < 120kg	shutters ≥ 120kg
Switch 3	-	-
Switch 4	Opening clockwise	Opening counter-clockwise

E. Final assembly

When the motor functions check is OK, reassemble the pulley-case, Screw the four captive screws with the **A** wrench.



It is imperative to mount the pulley-case to ensure the product tightness

F. Product operation

Opening	Press open button
Closing	Press close button
Stop in intermediate position	Repeat last command (Press open button during opening) (Press close button during closing)

The sliding shutter is fitted with obstacle detection. In case of obstacle, the motor self-reverse the direction and try 2 times to pass the obstacle before stay in position if the obstacle still present.

G. Troubleshooting

Problem	likely cause	Solutions
Buzzer beep at each opening/closing order	The Self-Learning is not done	Refer to Self-Learning mode (p13)
	battery end of life (if battery option)	Control and change of the battery
Opening order start closing/ Closing order start Opening	Reverse order	Toggle switch 4 and make a Self-Learning
Opening / Closing order do nothing on motor	The control is defective	For Wired option : check the connection between the wire ref. C0012640 and the switch ref. C0001050. For Wireless option :, check batteries (the Led on the remote should illuminate when pressing any key)
The shutters does not close/open completely	There is an obstacle or the self-learning was badly done	Remove the obstacle and/or make a Self-Learning again
Drive is noisy (clicking noise)	The belt is too slack	Check belt tension. It could be not too slack and not too much tensioned

Buzzer:

- 1 beep: -Push on configuration key
-Opening/Closing order if Self-Learning has not been done
- 2 beep: Radio Pairing/Unpairing acknowledge
- 3 beep: Obstacle detection

Remote Configuration

This feature allows for either a learning stops, or the pairing of a new radio transmitter from the order without having access to the engine.

Product Radio

Concept of "master transmitter".

The first transmitter associated with the product (during installation or after a factory reset configuration) becomes the "master transmitter".

This transmitter has all the features of another conventional transmitter plus a special function remote configuration.

Pairing of a new radio transmitter

- Press and hold both buttons simultaneously to the "master transmitter" to hear a series of "beep" continuously.
- Make a short press on the button **opening** of the master transmitter (1 confirmation beep): Switching to radio pairing.
- Press both buttons on the remote to add (2 beeps)

The new remote control is paired.

Learning stops

- Press and hold both buttons simultaneously to the "master transmitter" to hear a series of "beep" continuously.
- Make a short press the button **closure** of the master transmitter (1 confirmation beep): Switching to learning stops.

The shutters open and close. The new stops are learned.

Wired product

Learning stops

Simultaneously press the two buttons of the wired switch for more than 5 seconds until you hear a series of "beep" continuously.

Learning then launches automatically the shutters open and close.

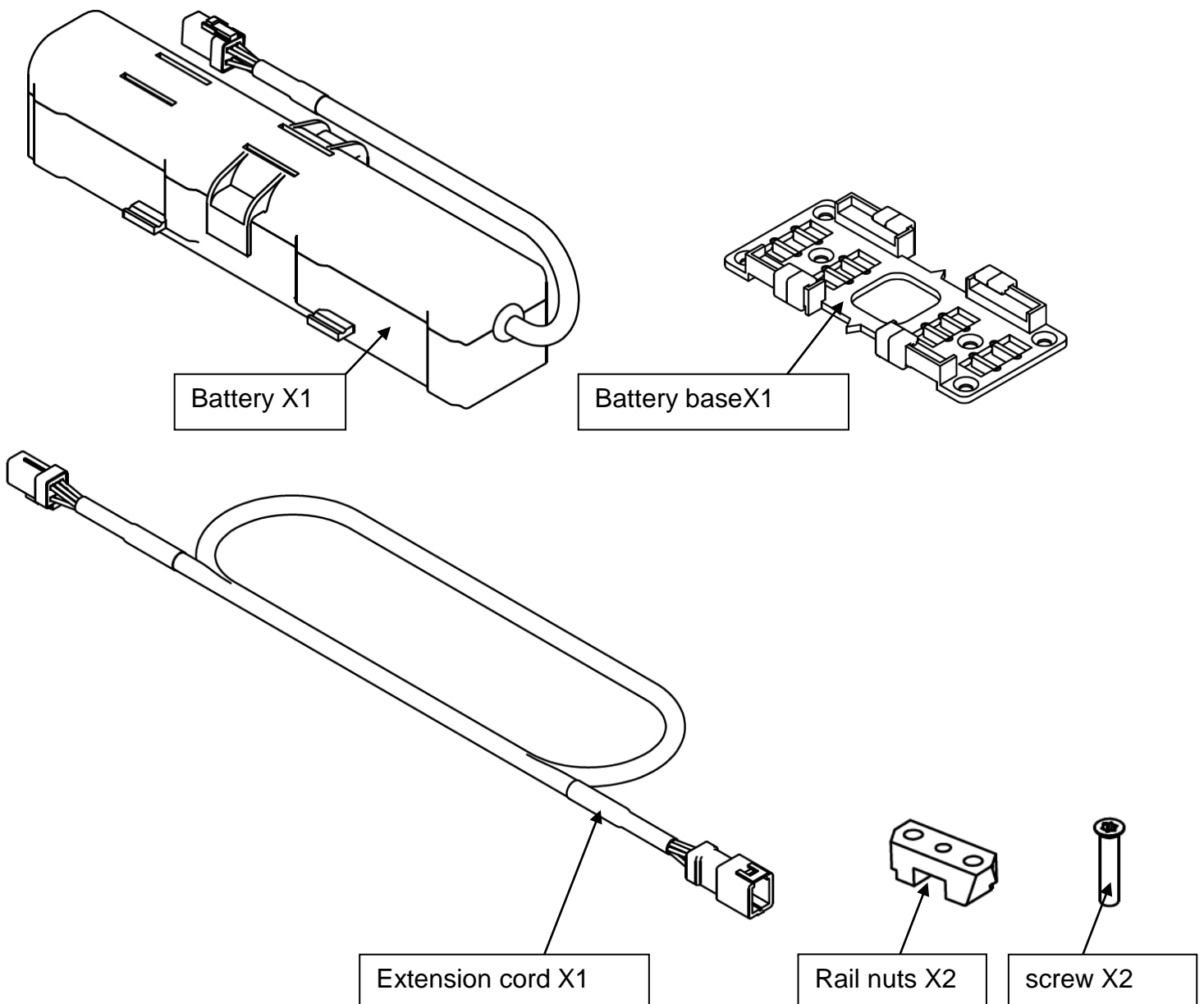
The new stops are learned.

BATTERY OPTION

Technical data

Battery option	
Voltage	12V-6V
Power	3000 mAh
Type	LiFePO4
Cord length	2.1 m
Possible number of extension	3

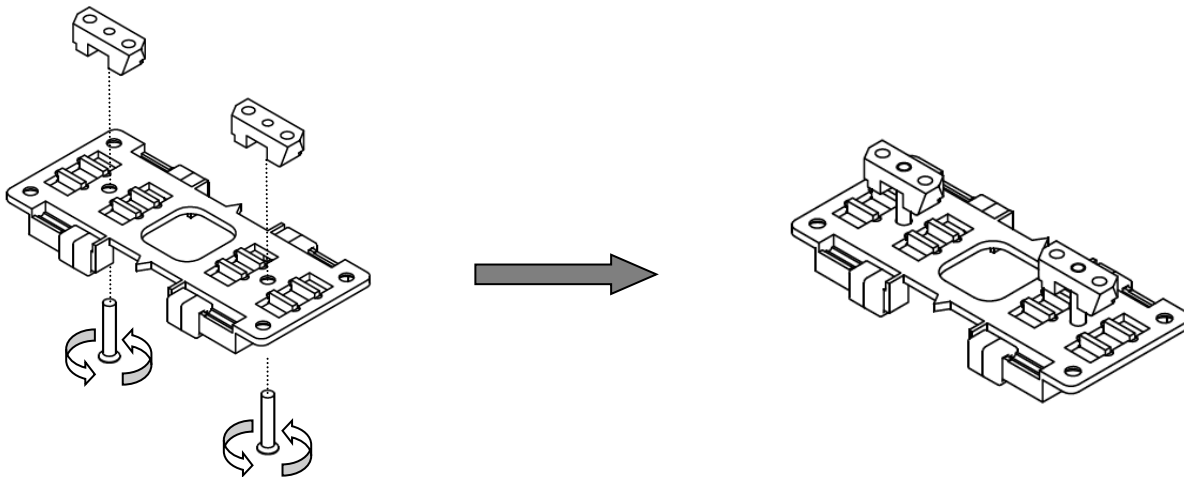
Kit contents



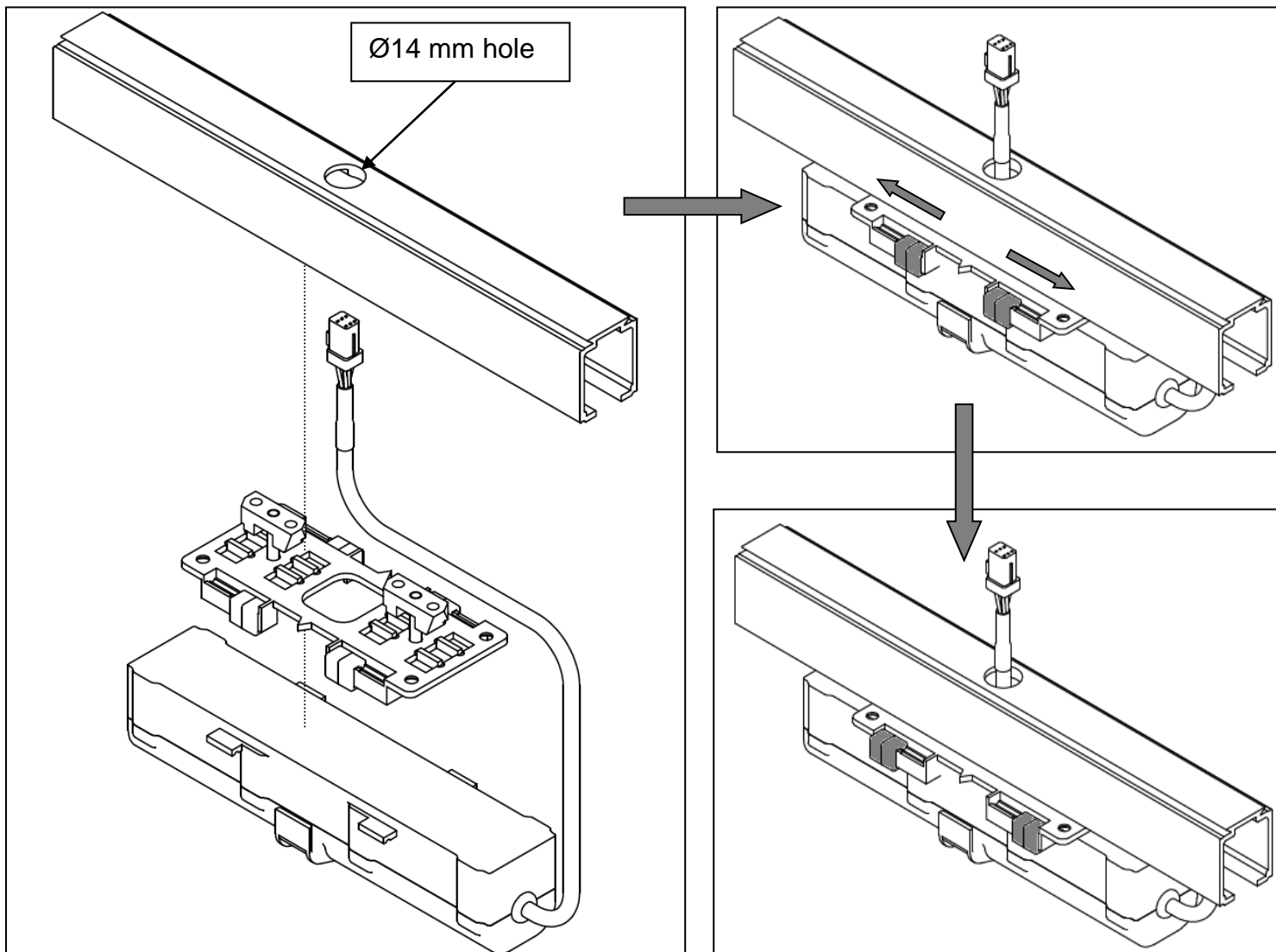
Necessary installation tools:

- A:** No. 3 hex wrench
- B:** No 15 torx wrench
- C:** drill
- D:** 1 drill \varnothing 14 mm

Installation of the battery under the rail:



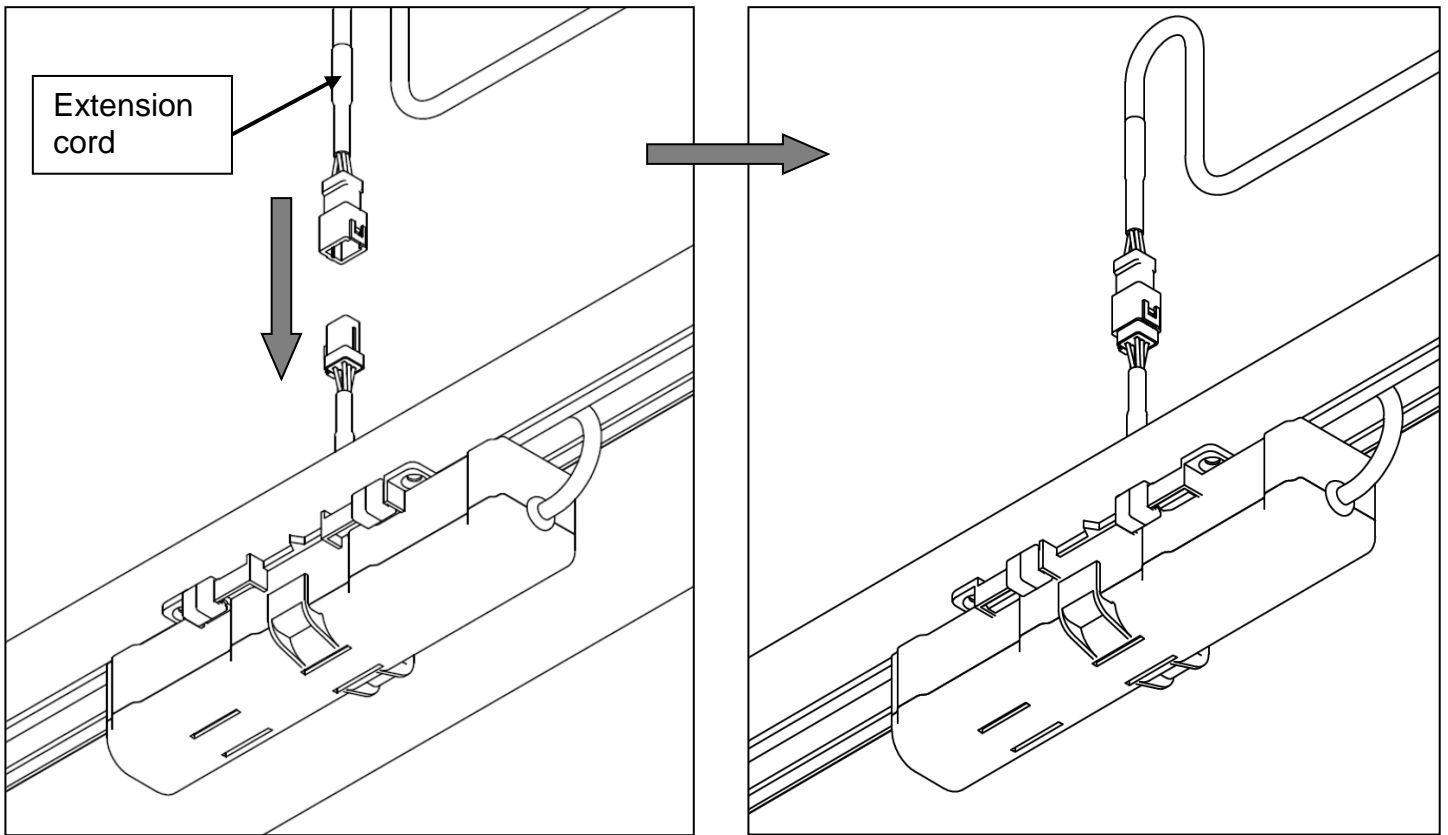
With the wrench **B**, Pre-tighten the nuts rail in the battery base loosely.



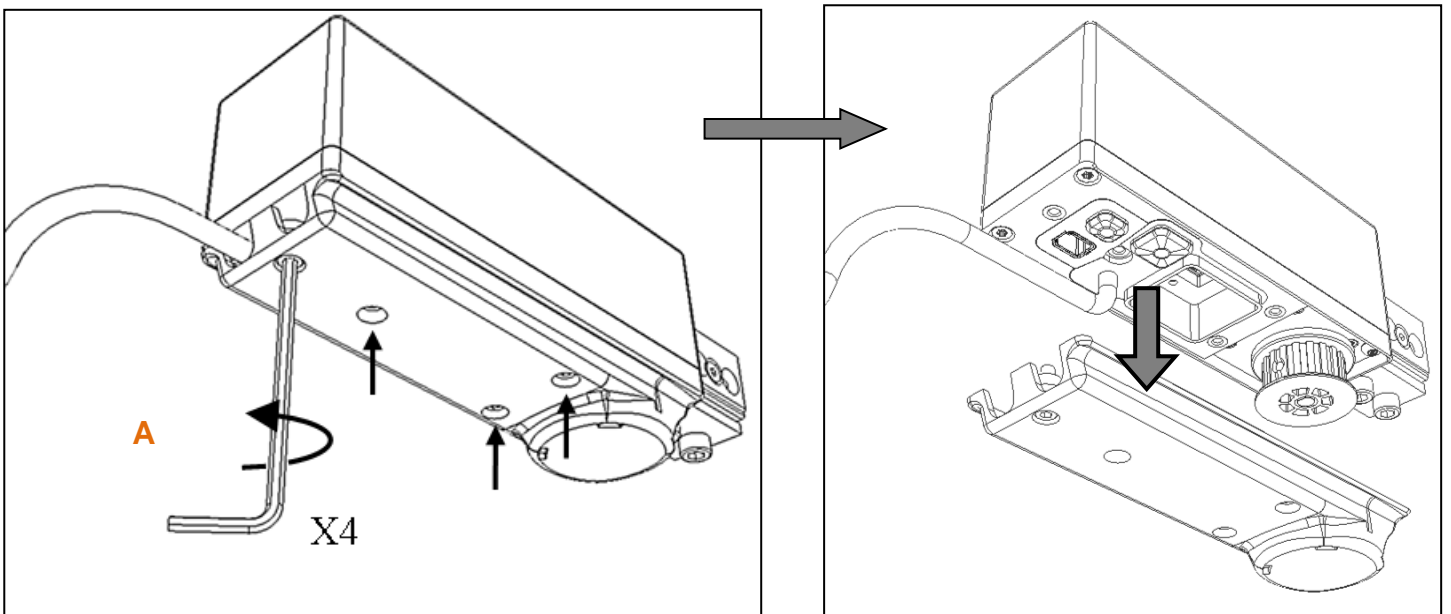
Battery pack connection

Do not use batteries other than those supplied in the kit

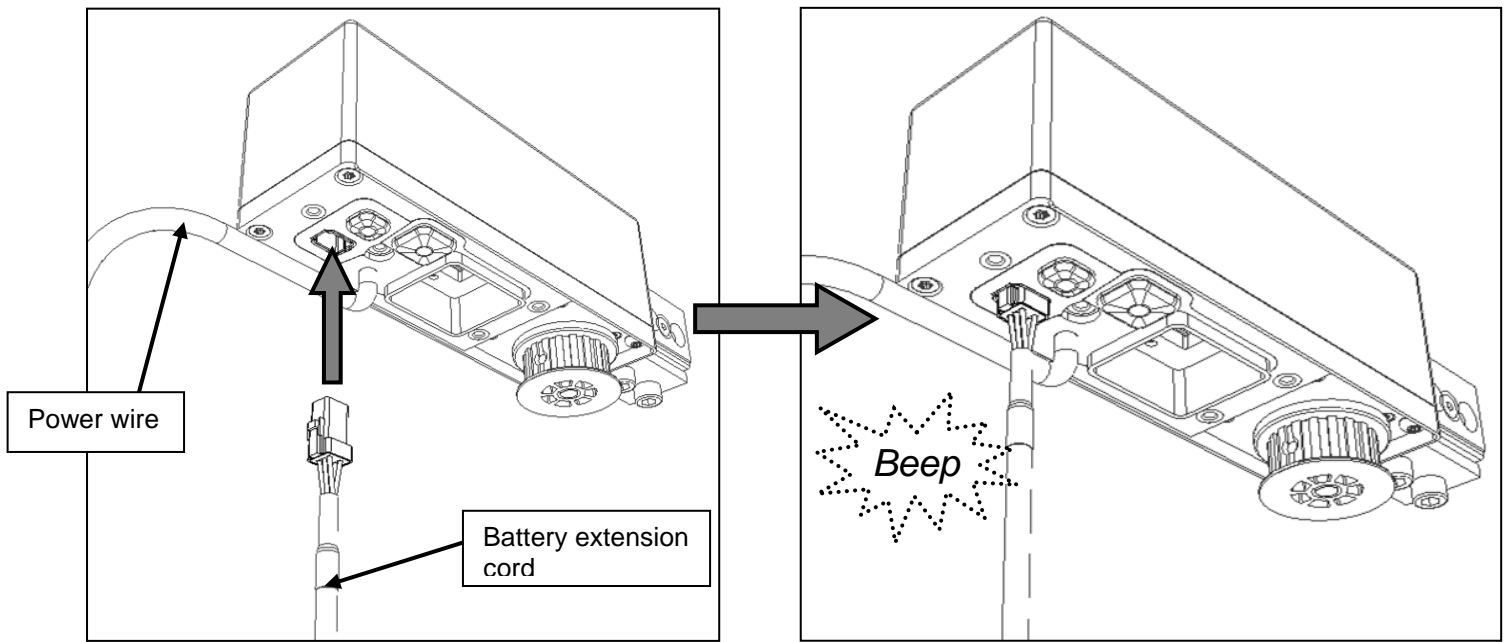
Connect the extension cord to the battery



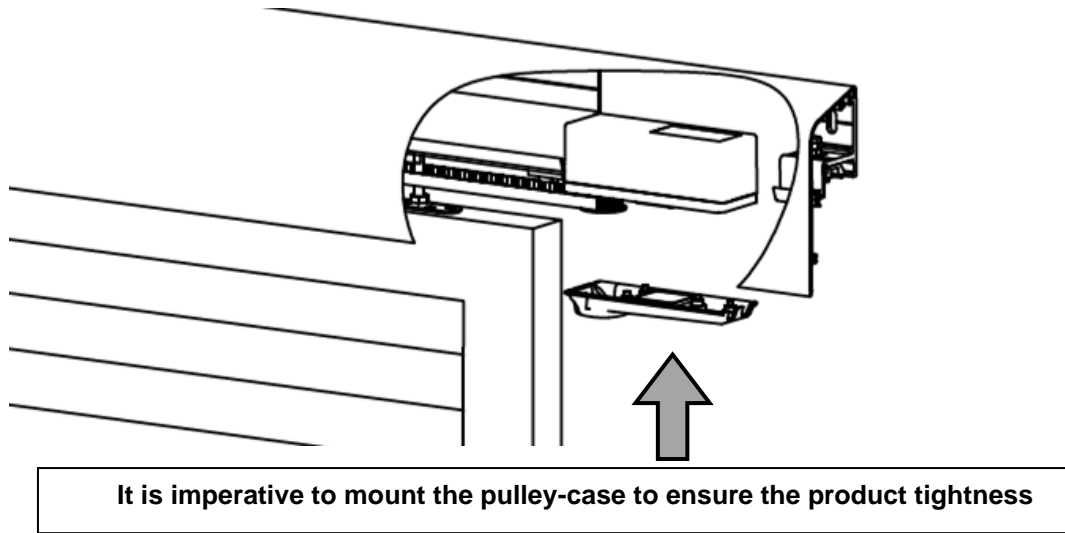
Unscrew the 4 screws of the pulley cover using the key **A** and remove the pulley Hood



Connect the extension cord. The motorization “Beep”, the battery is active



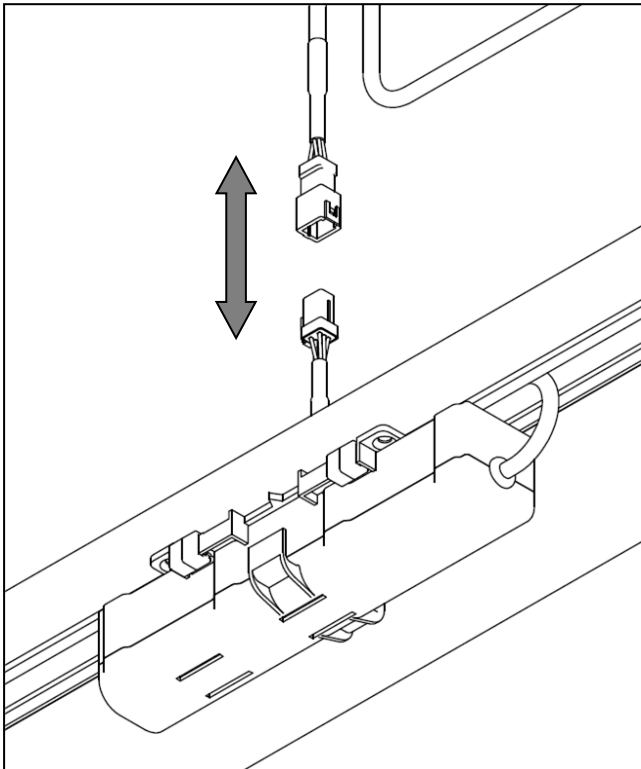
Reassemble the pulley hood making sure to tighten the four captive screws with wrench **A**.



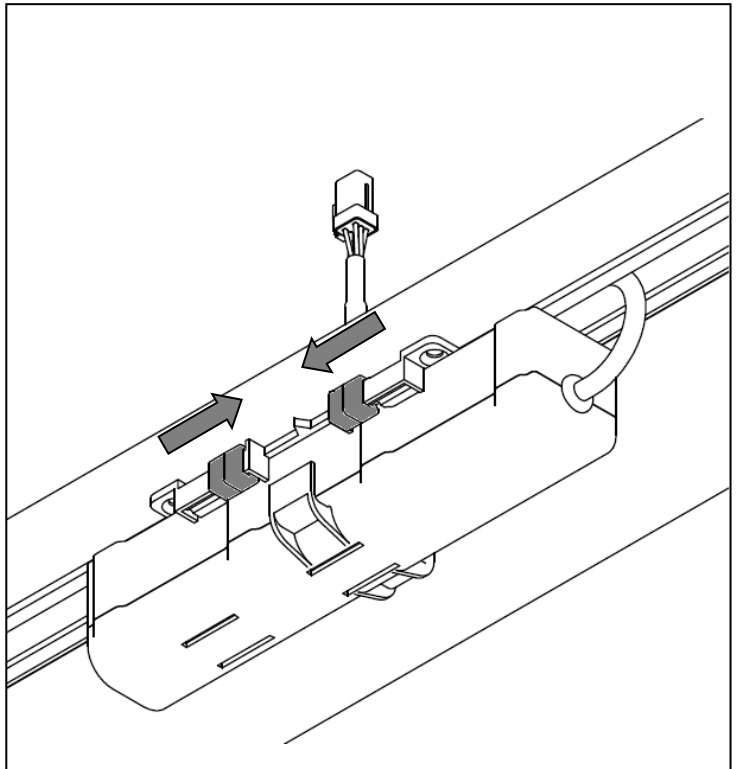
Changing the battery pack

1- Old battery disassembly

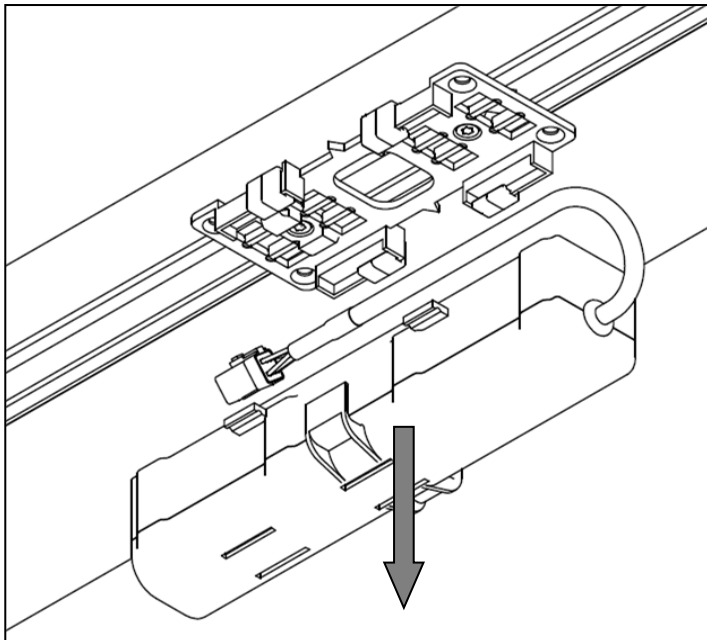
Unplug the extension cord.



Slide 4 pins inwards



Remove the battery



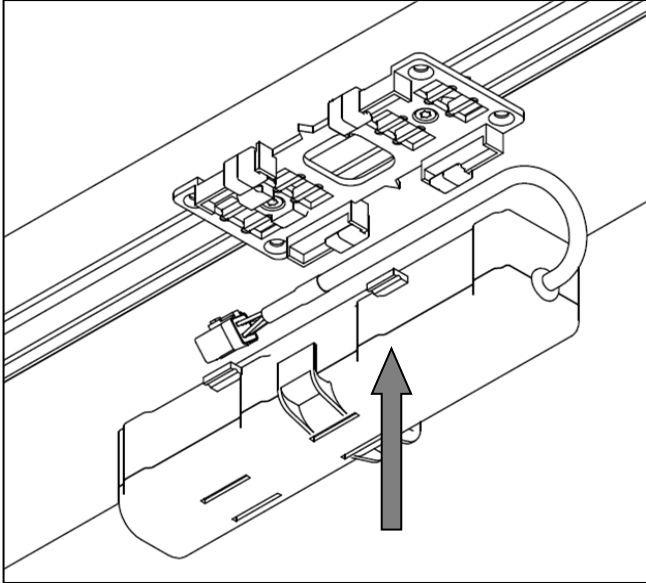
2- Resetting the motorisation

Before installing the new battery, you must reset the engine:

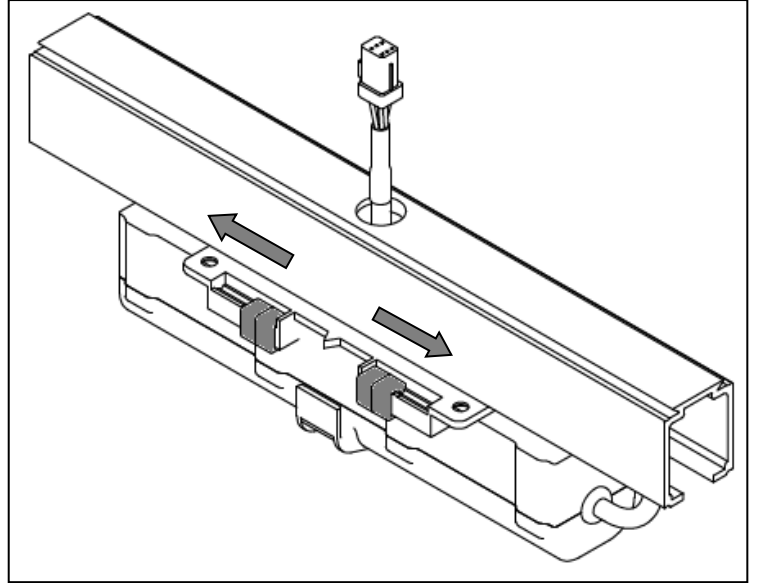
Using the remote control or the switch, do an opening or closing command. Motorisation "beep" three times and "beep" one time, the system is reset and the cycle counter is reset. You can mount the battery.

3- Mounting the new battery

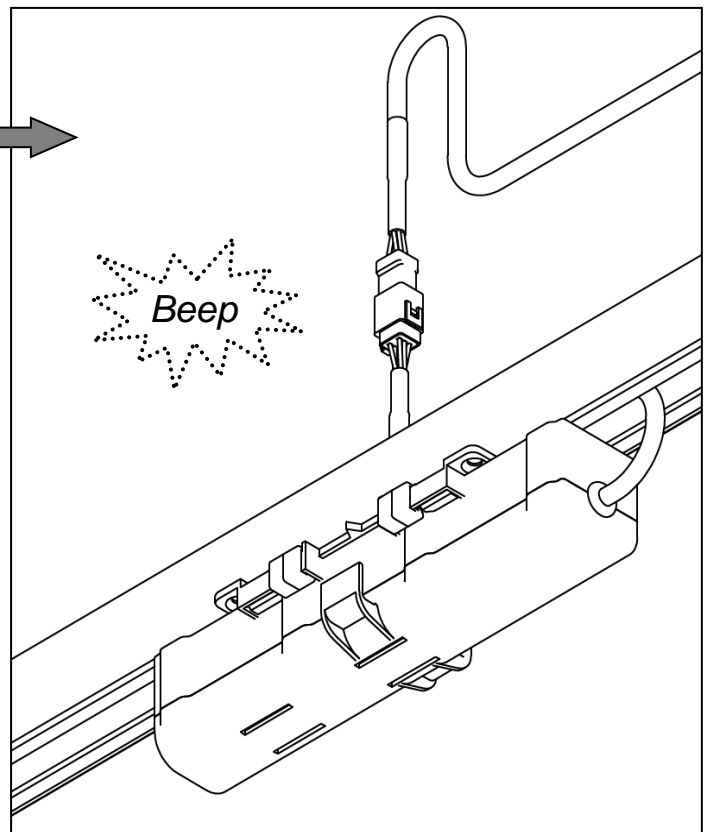
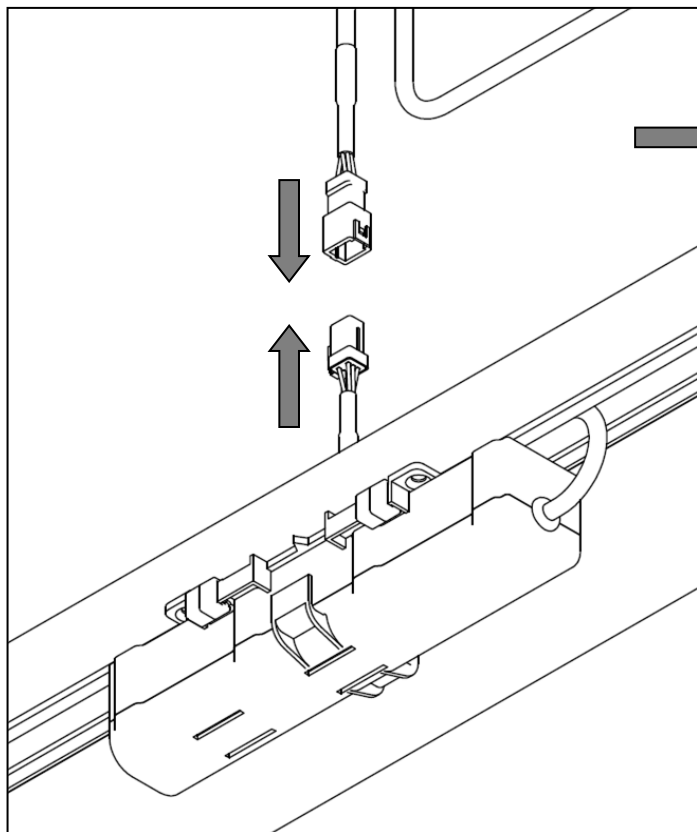
Fit the battery into place.



Slide 4 pins outwards.



Plug the extension cord. La The motorization "Beep", the battery is active.

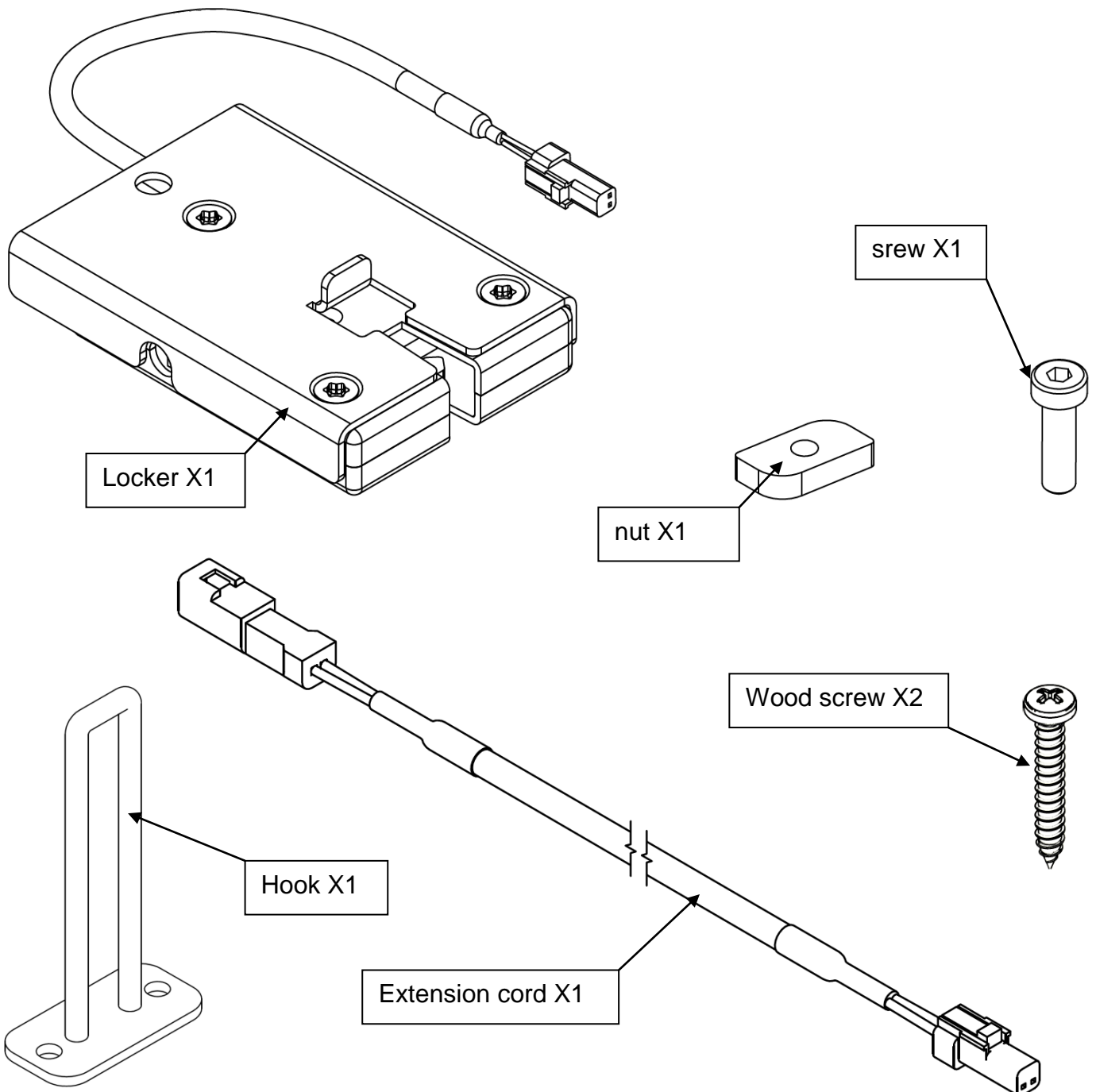


LOCKER OPTION

Technical data

Locker option	
Voltage / current	12VDC
Power consumption	800mA
Holding force	150 kg
Cord length	2.5 m
Possible number of extension	3

Kit contents

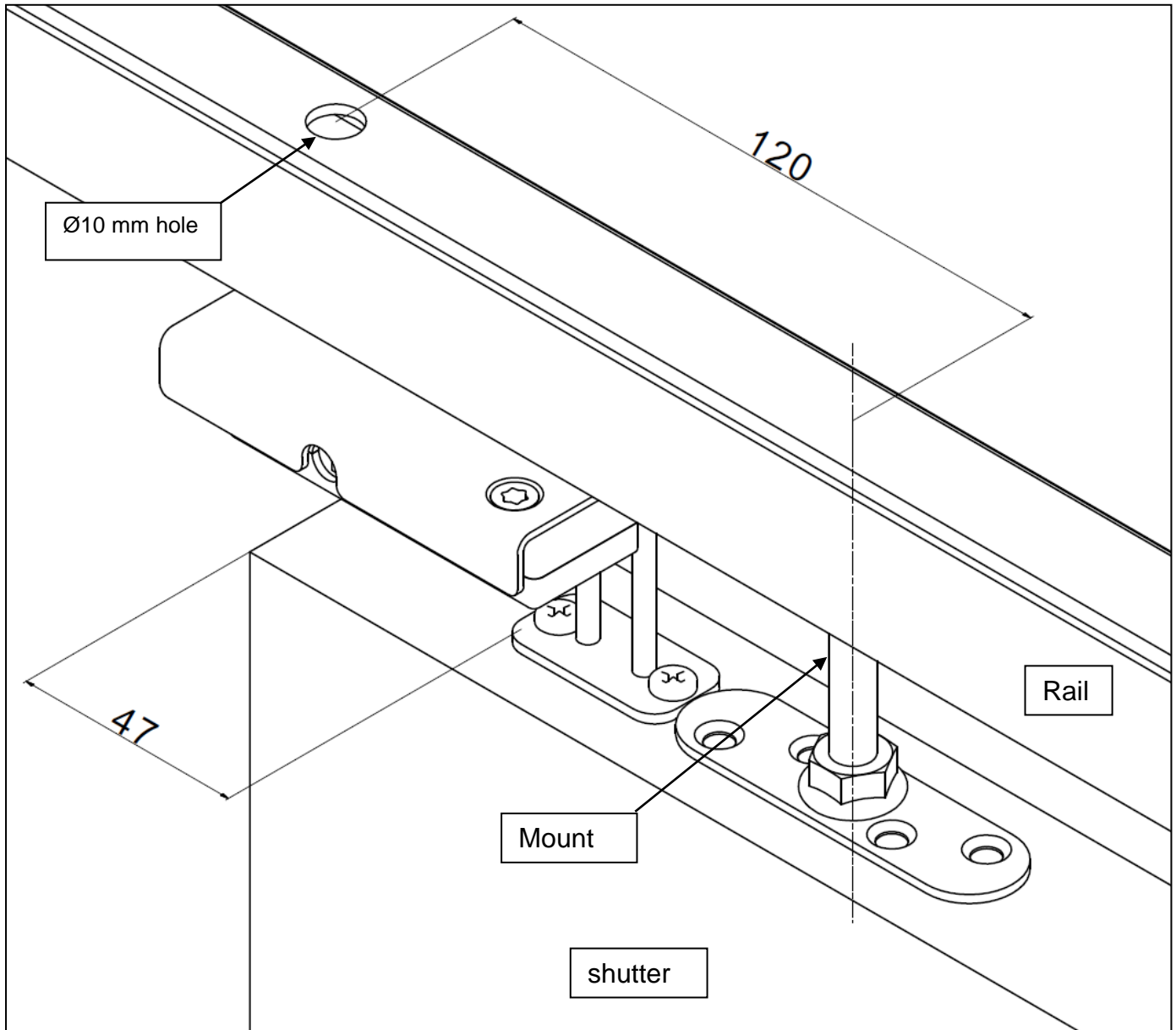


Necessary intallation tools :

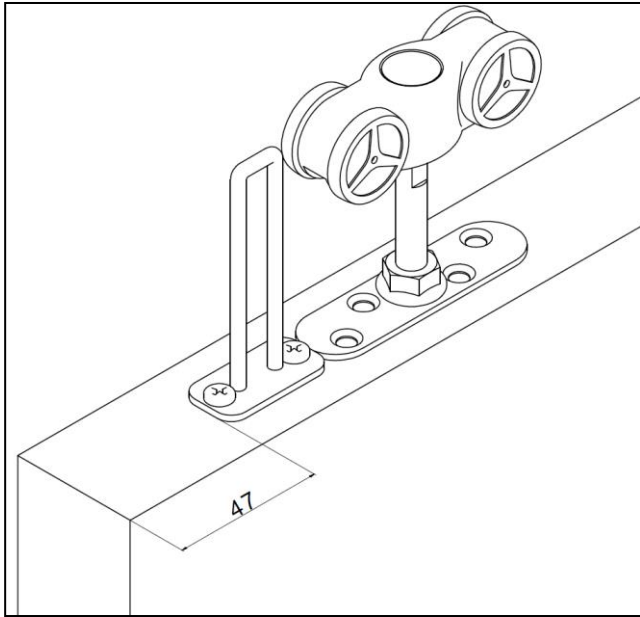
- A : No. 3 hex wrench
- B : No. 4 hex wrench
- C : drill
- D : 1 drill \varnothing 10 mm

Installation of the locker under the rail:

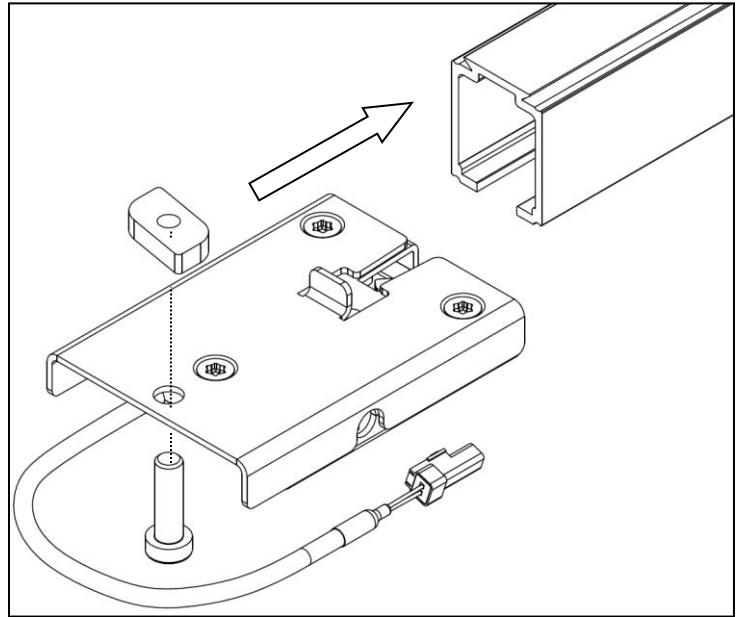
Close the shutter. Drill a \varnothing 10 mm hole in the rail 120 mm from the axis of the mount.



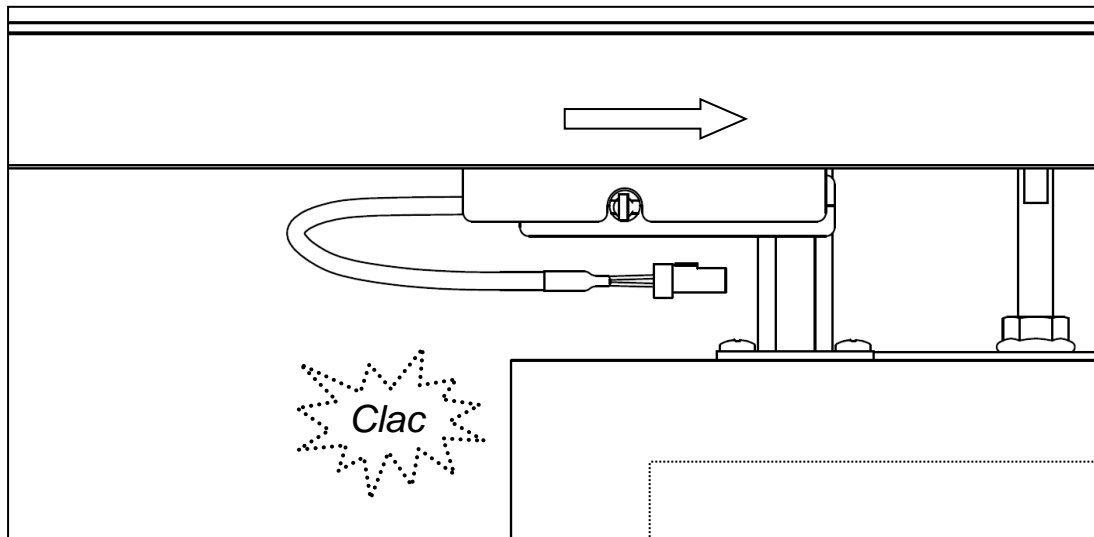
Fit the locking hook to 47 mm from the edge of the flap and centered on the mount



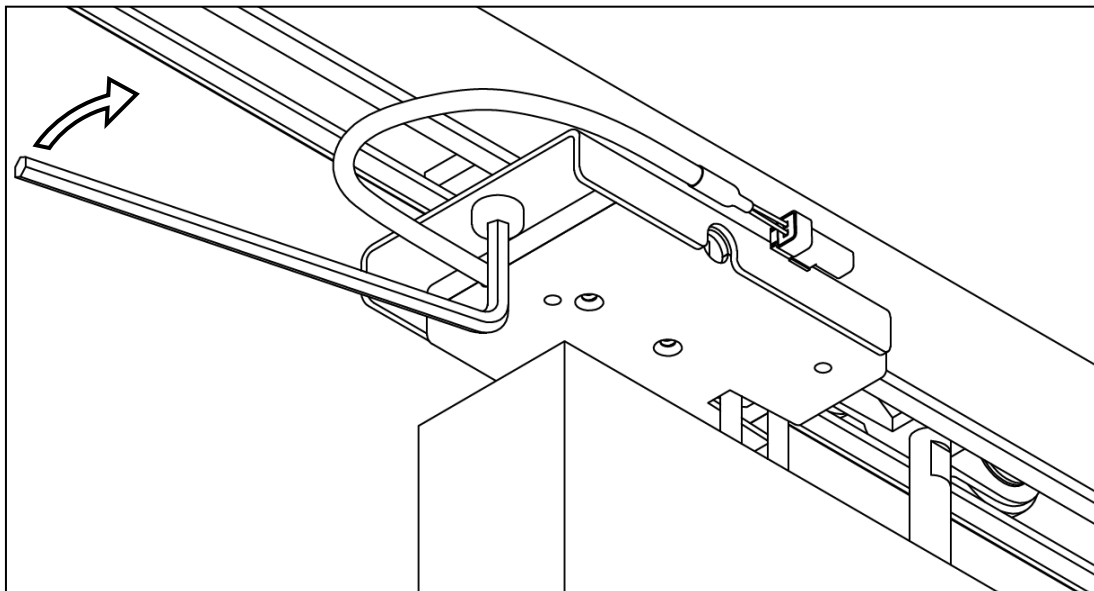
Insert the nut into the rail. Pay attention to the mounting direction of the nut



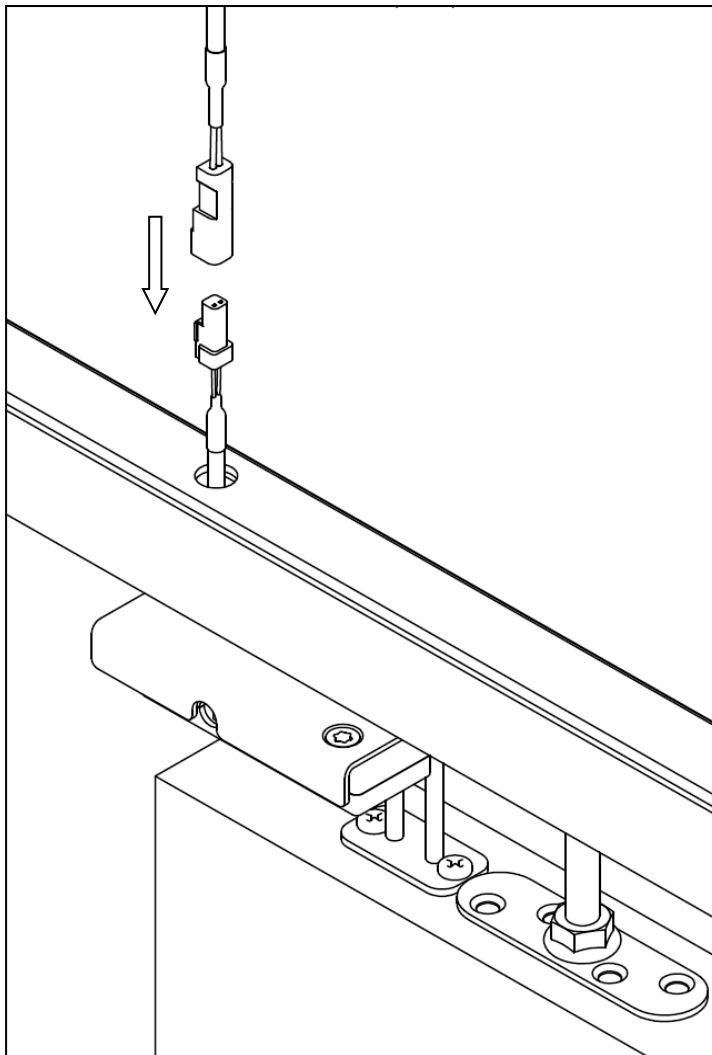
Put the shutter in the closed position. Slide the locker into the rail until it locks.



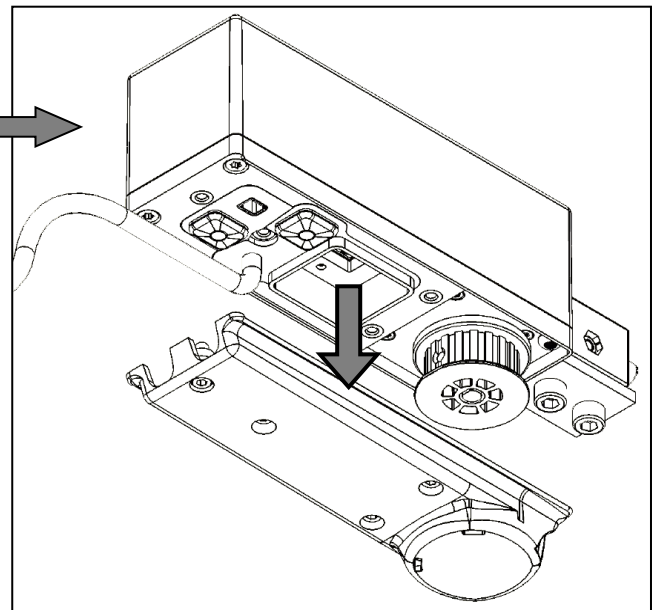
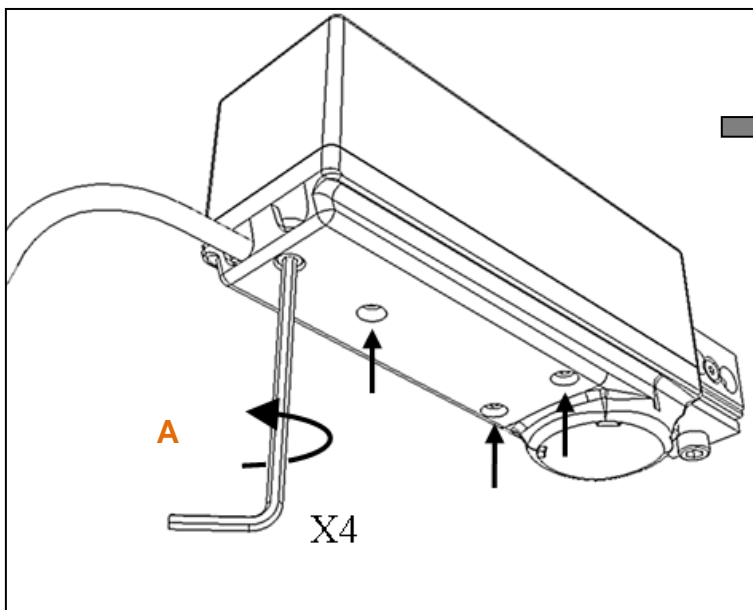
Using the key **B**, tighten the nut on the rail.



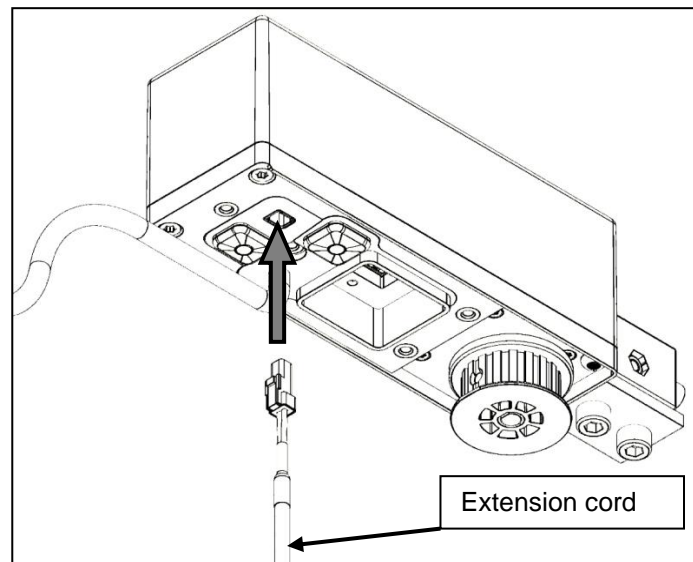
Connect the extension cord




Unscrew the four pulley-case screws with the **A** wrench then, remove the pulley-case

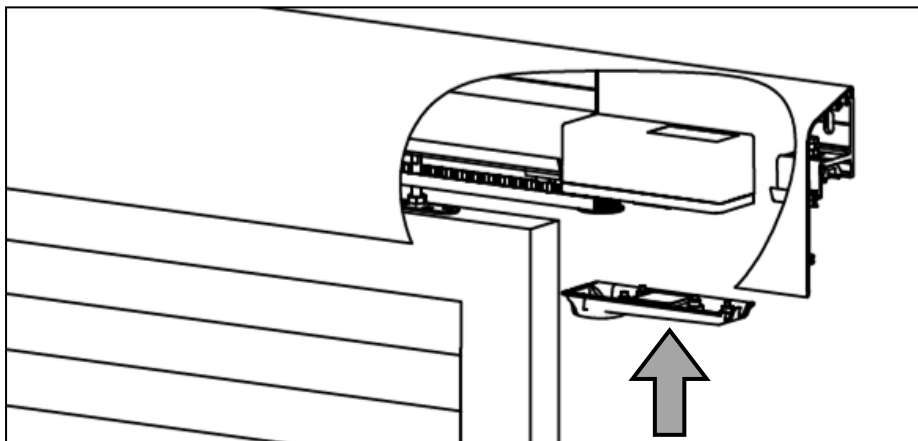


Connect the extension cord to the motor.



 Start the self learning mode.

Screw the four captive screws with the **A** wrench.



It is imperative to mount the pulley-case to ensure the product tightness

