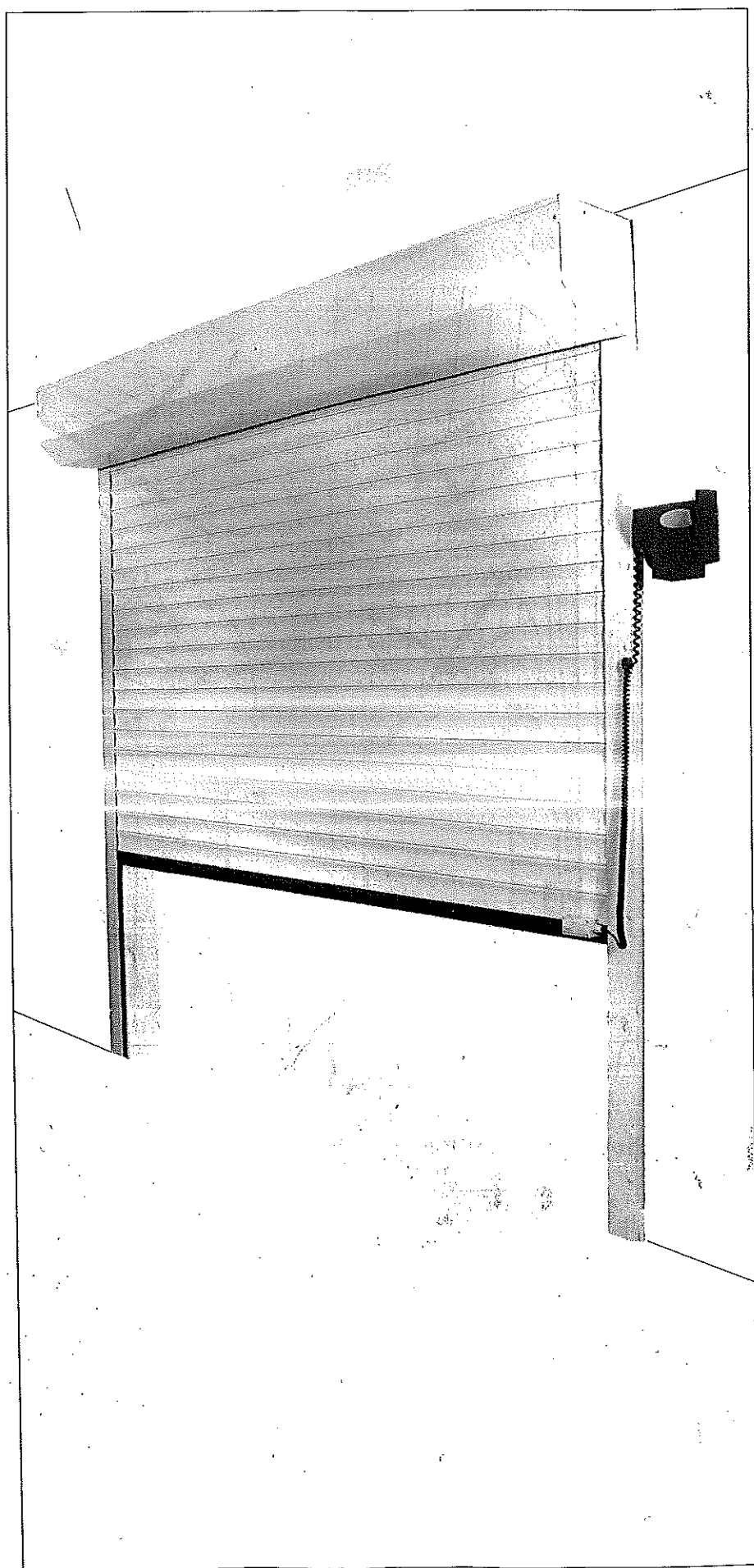
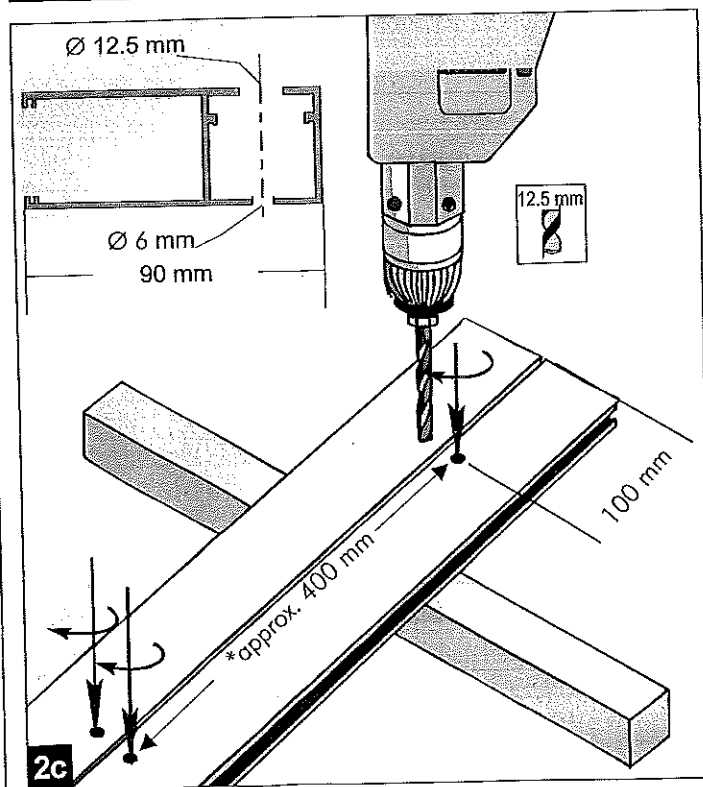
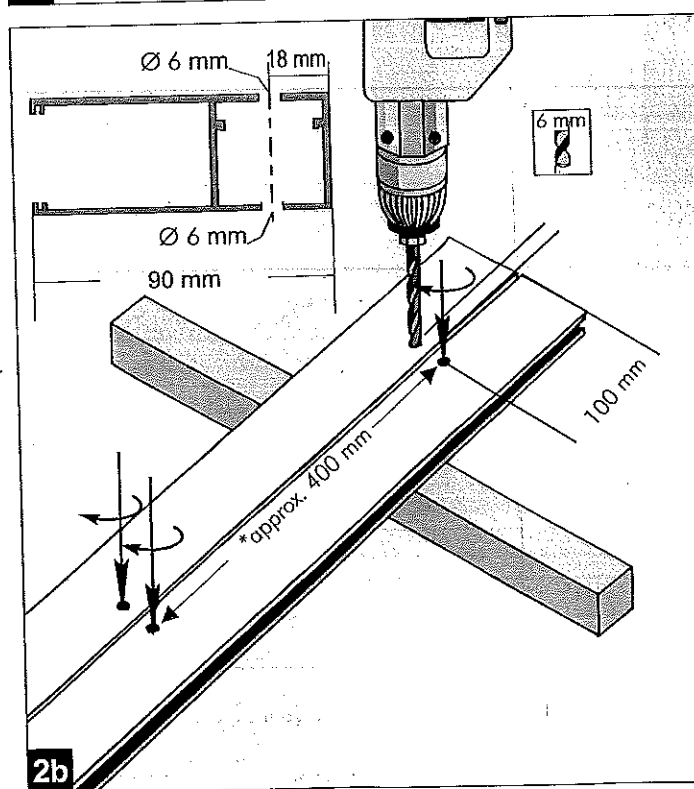
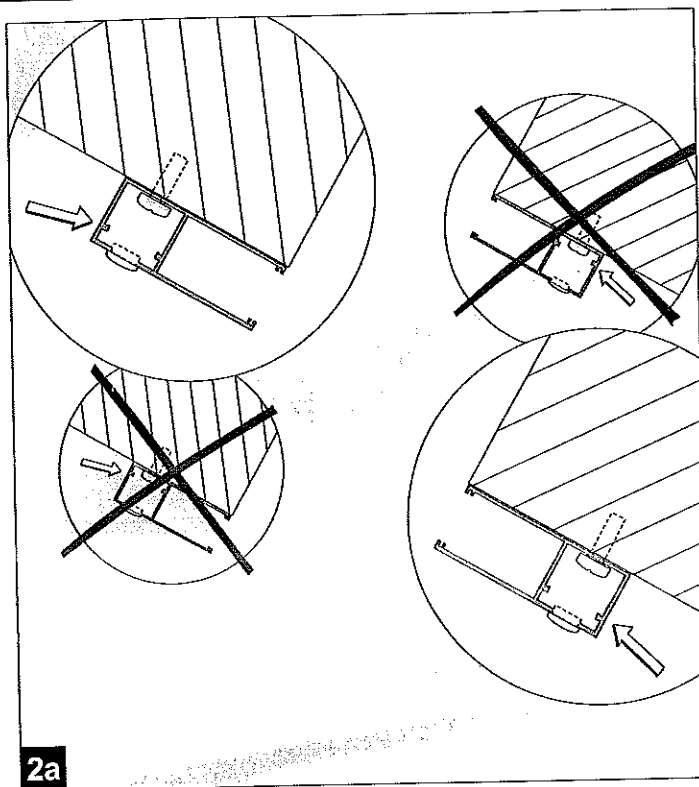
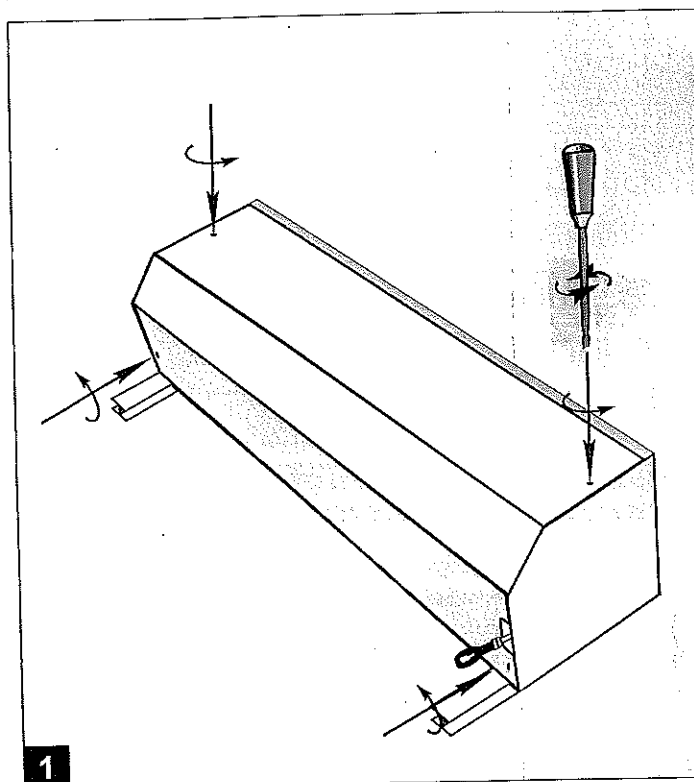
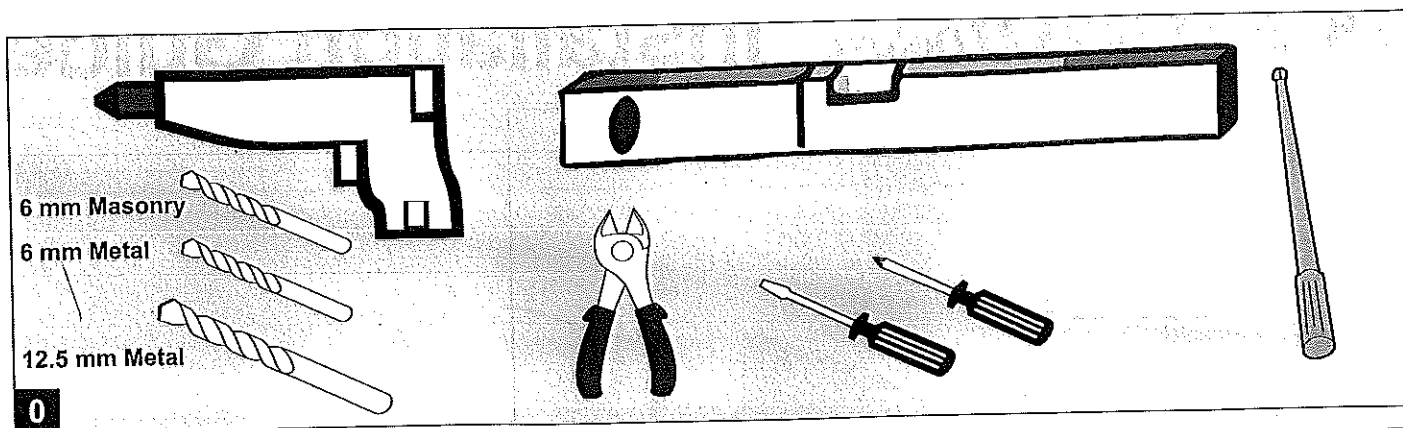
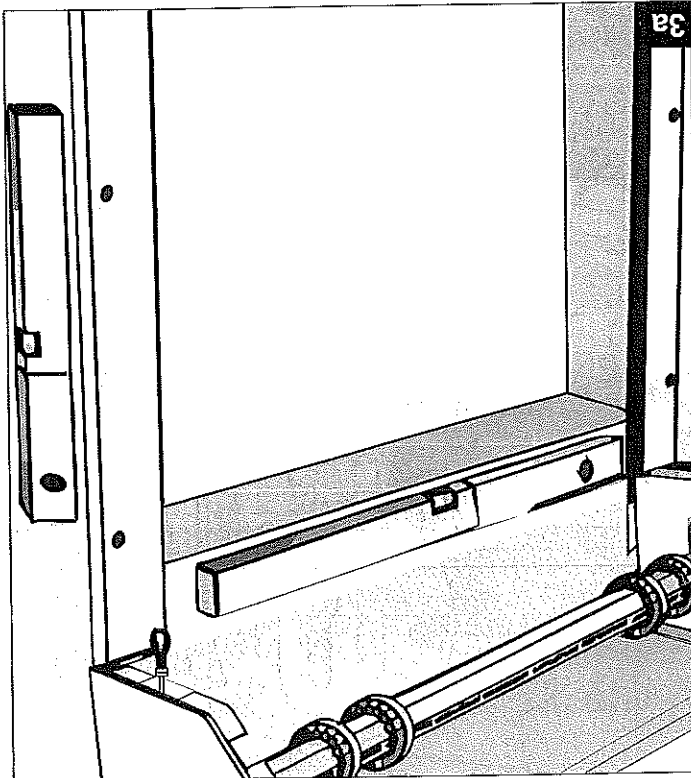
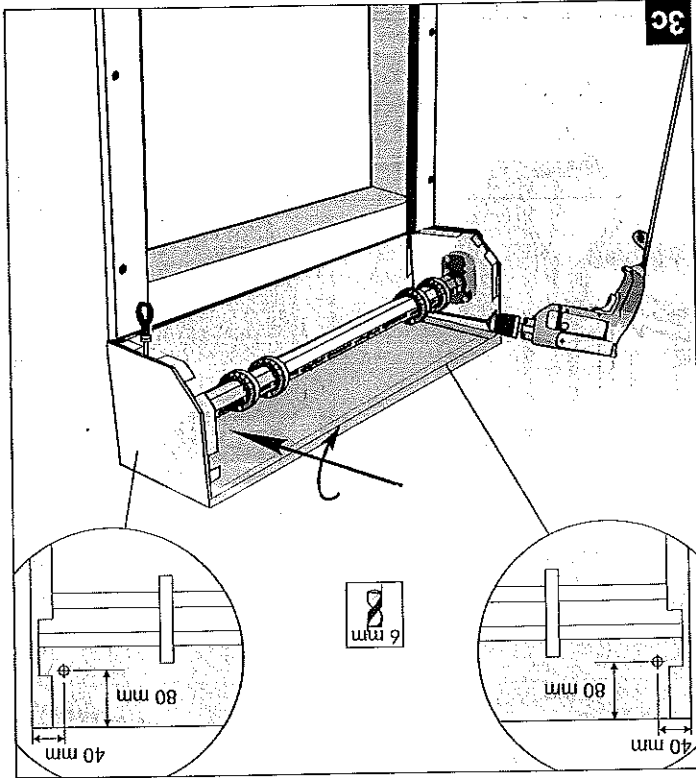
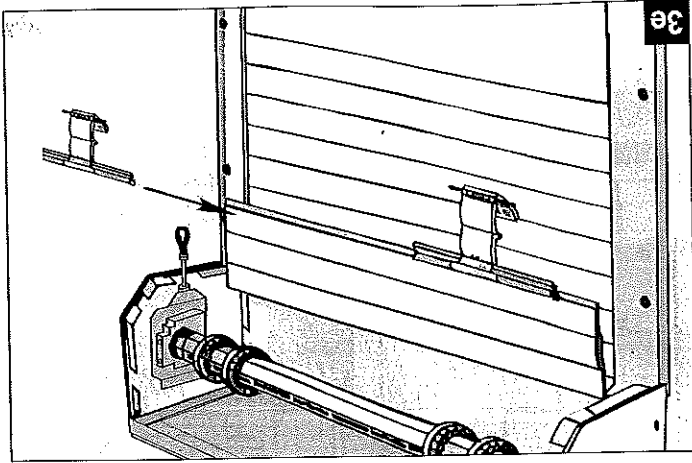
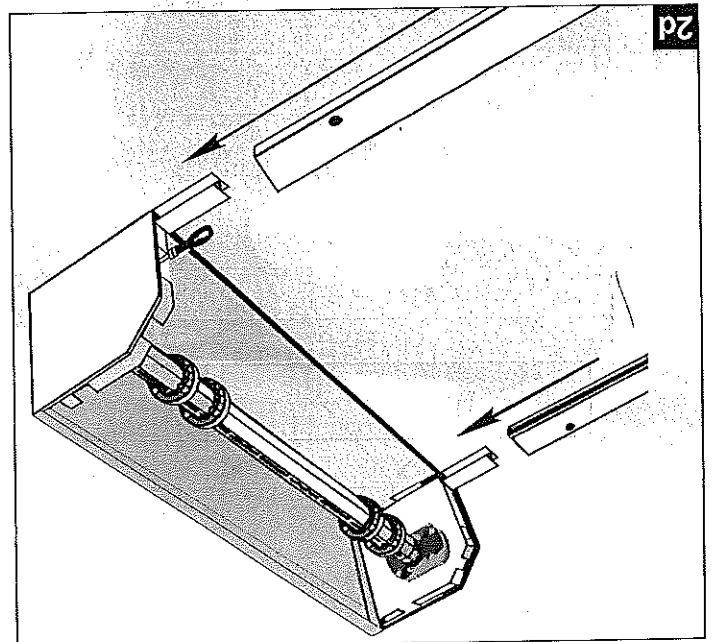
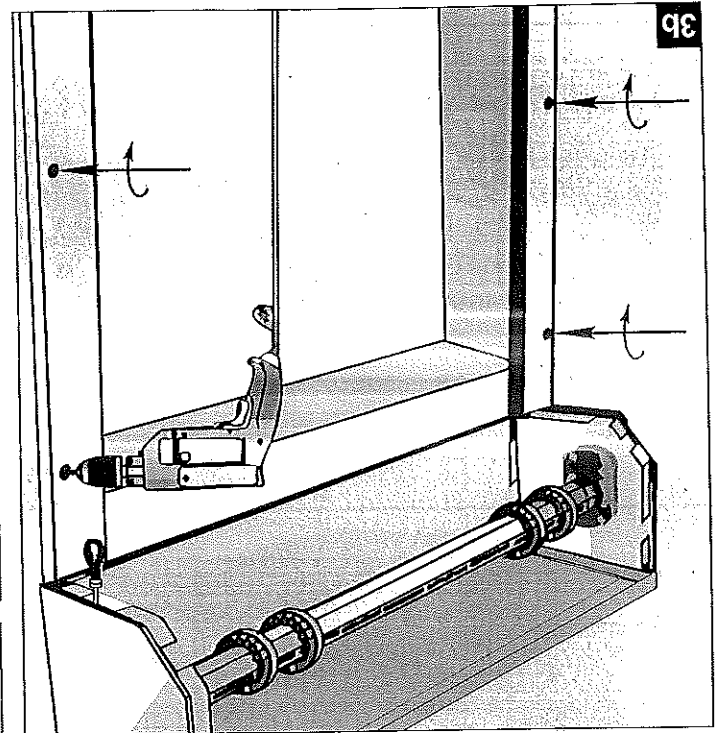
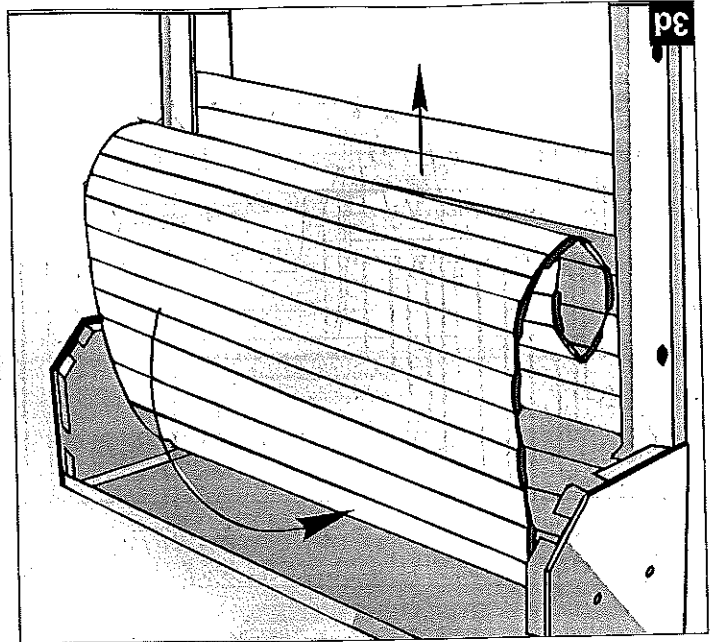


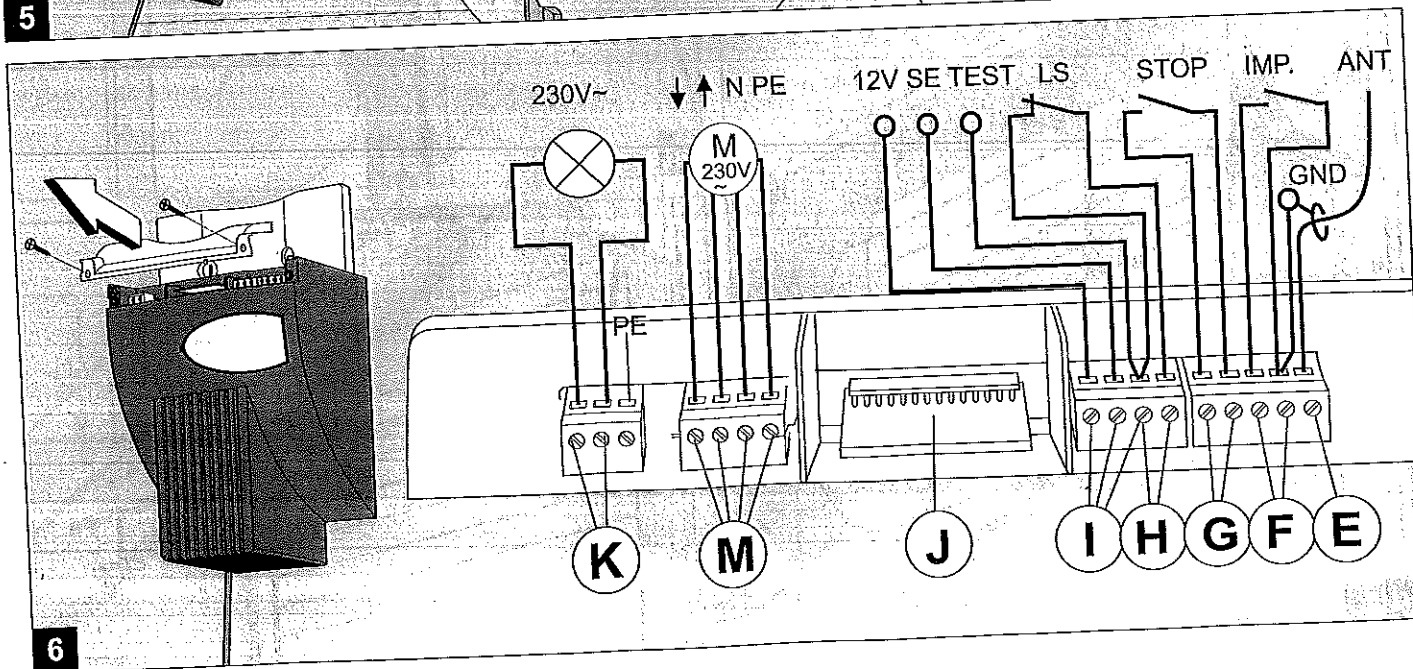
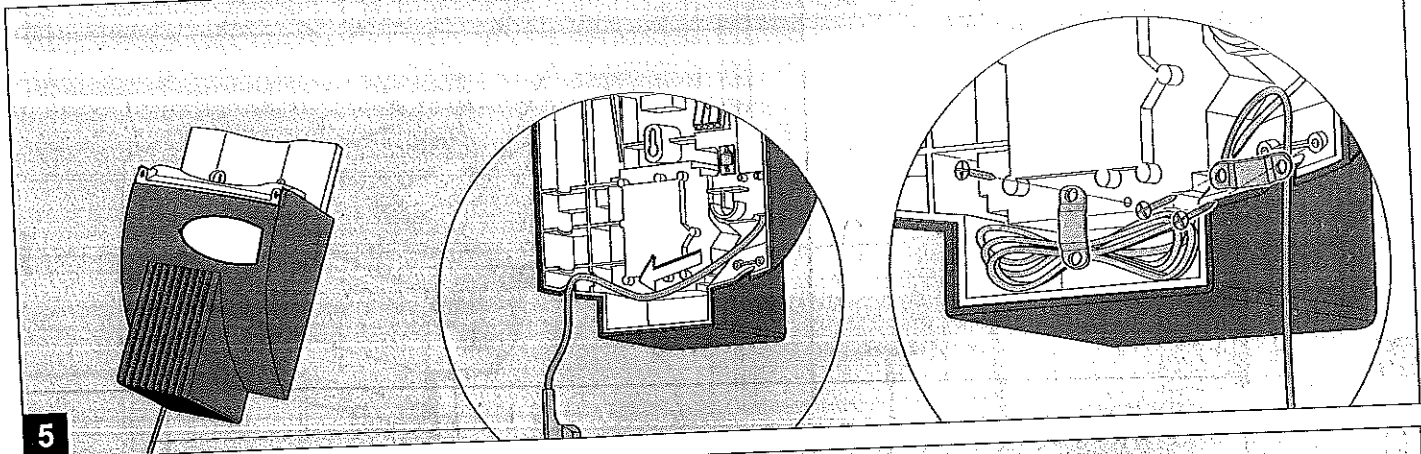
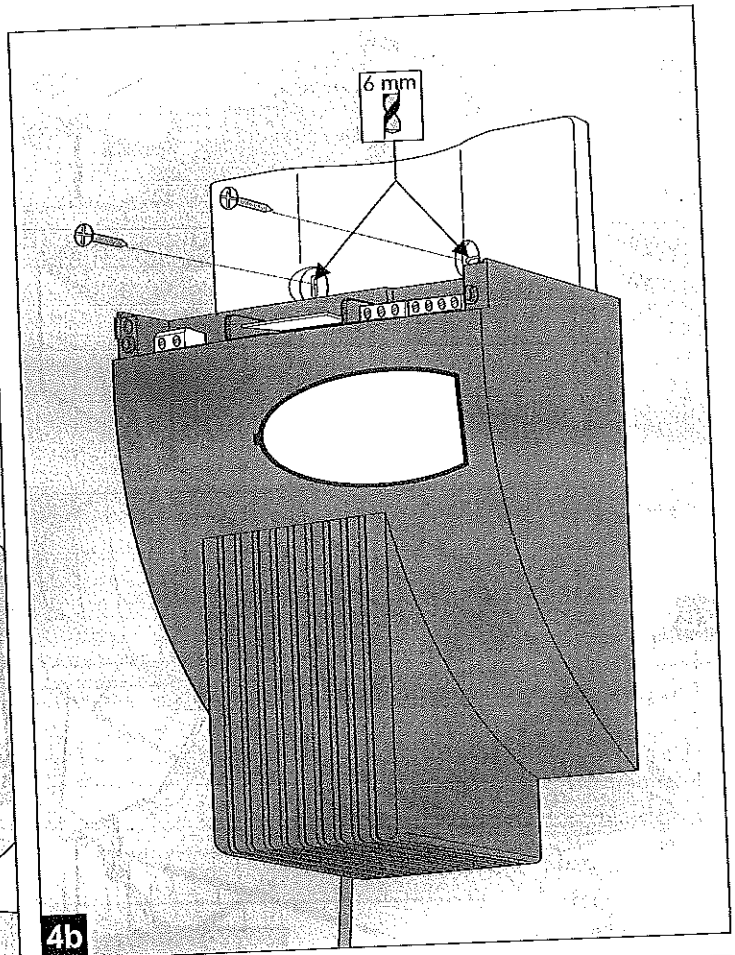
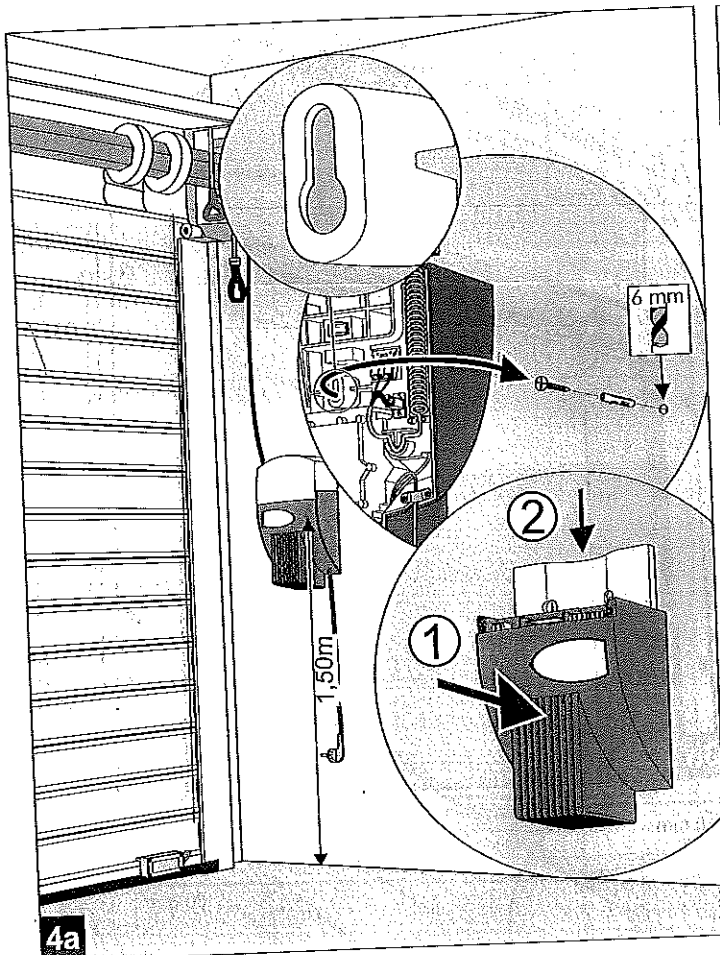
NovoRol_{Deluxe} Installation Guide

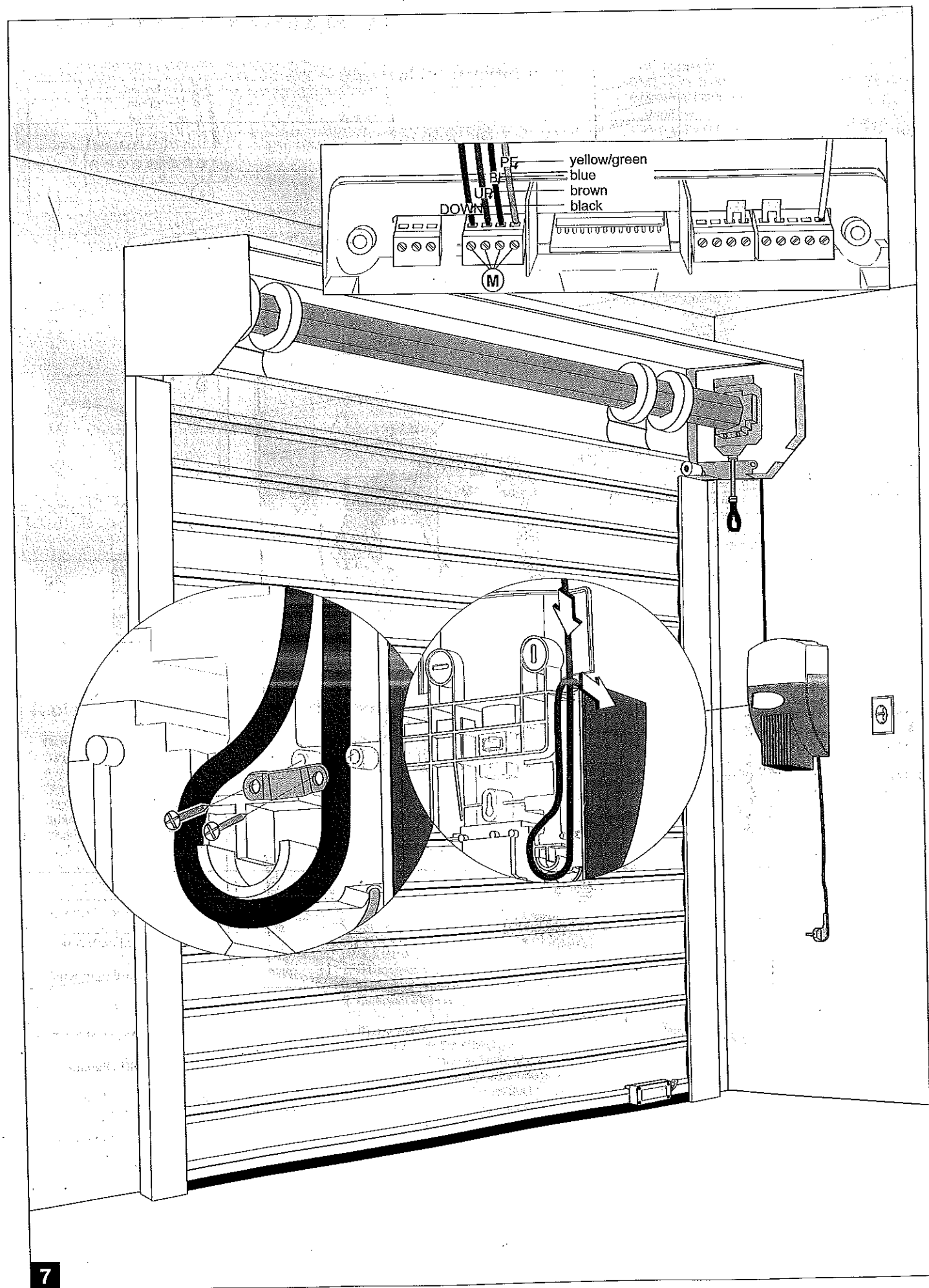
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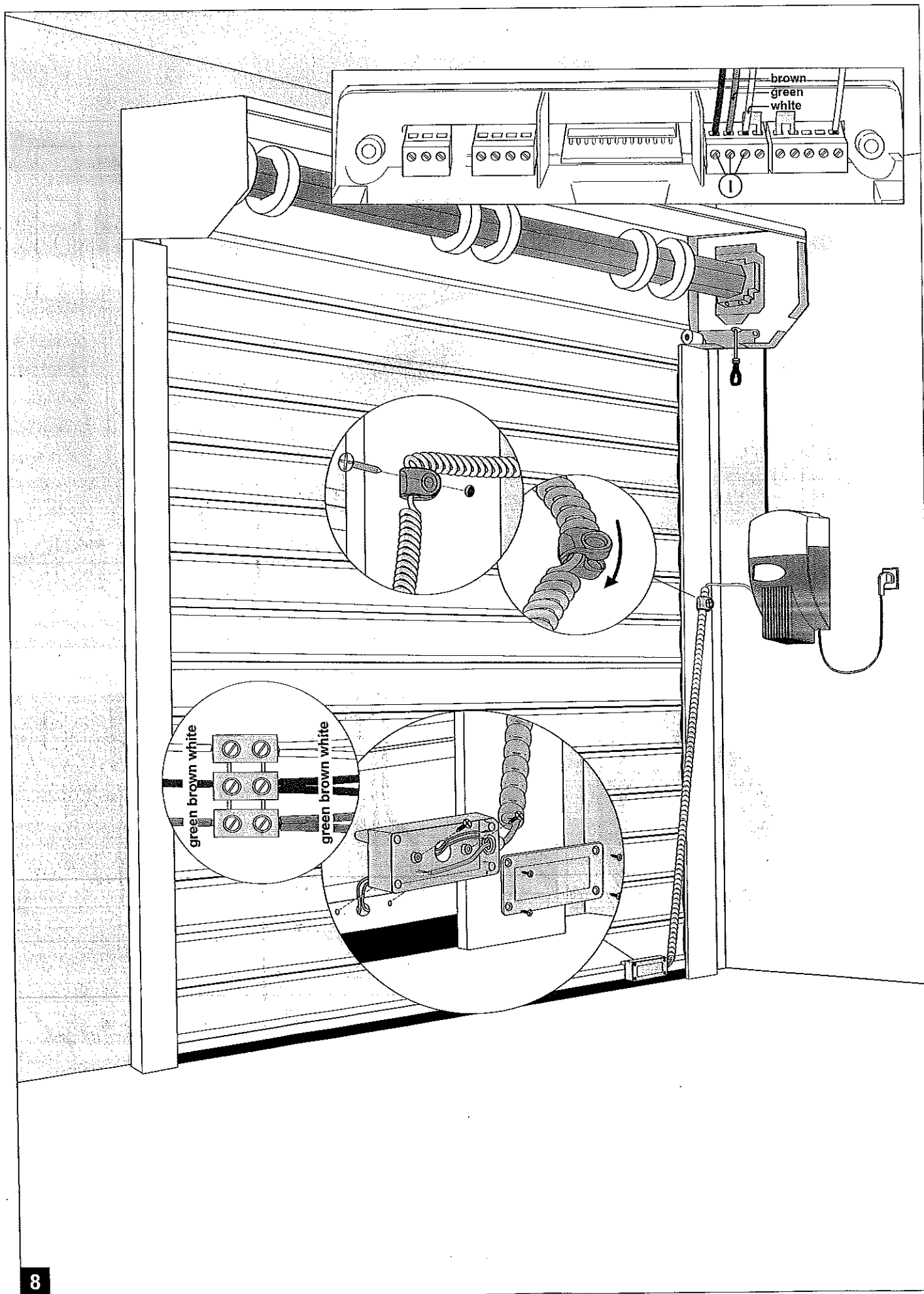


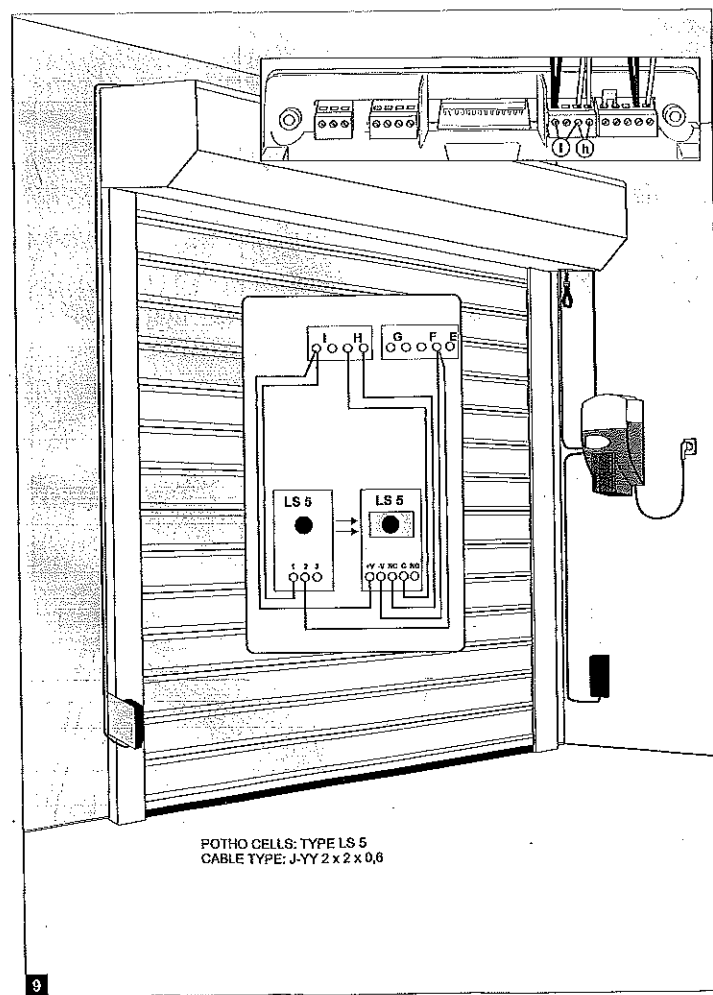
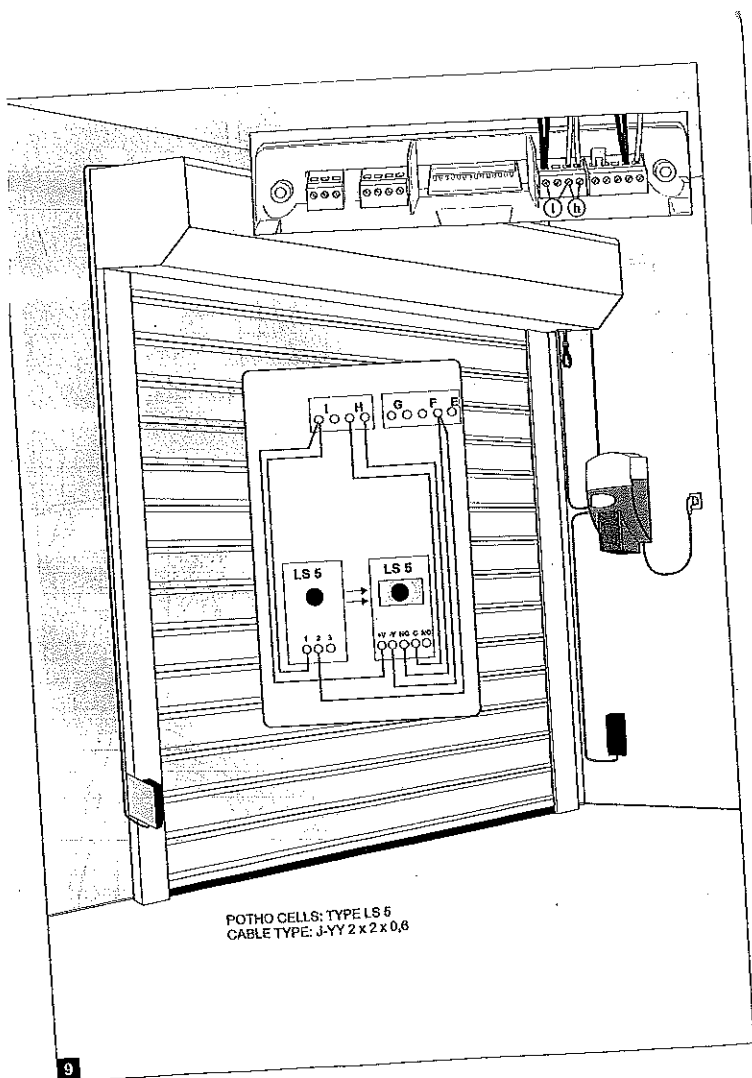
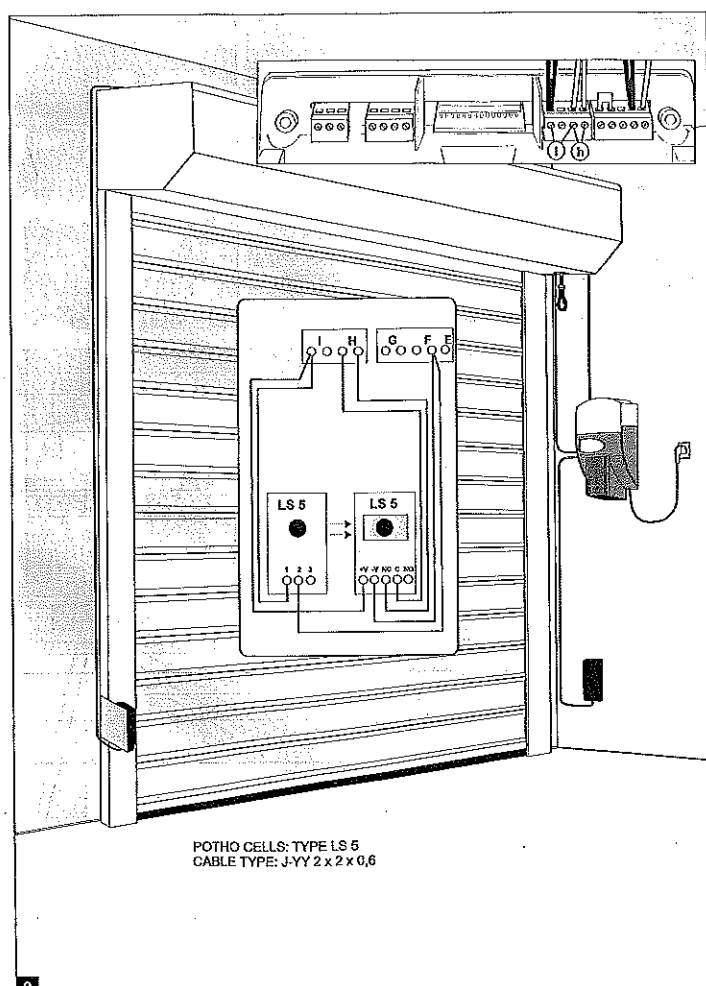
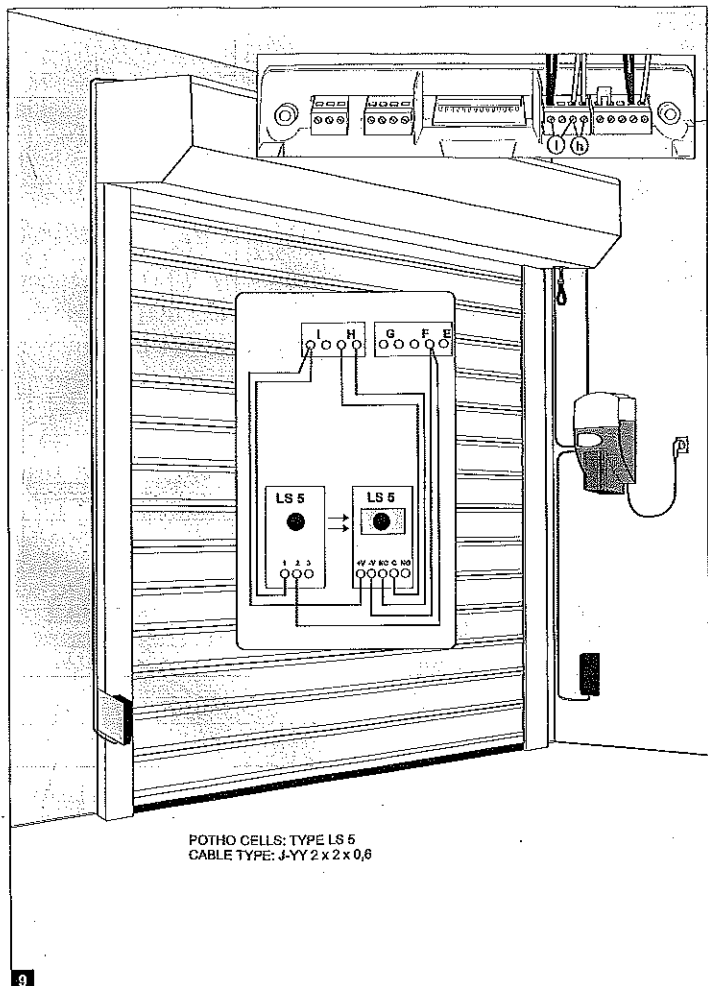


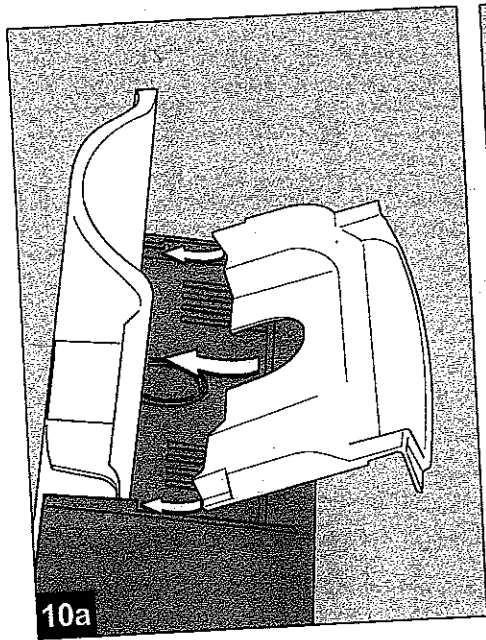




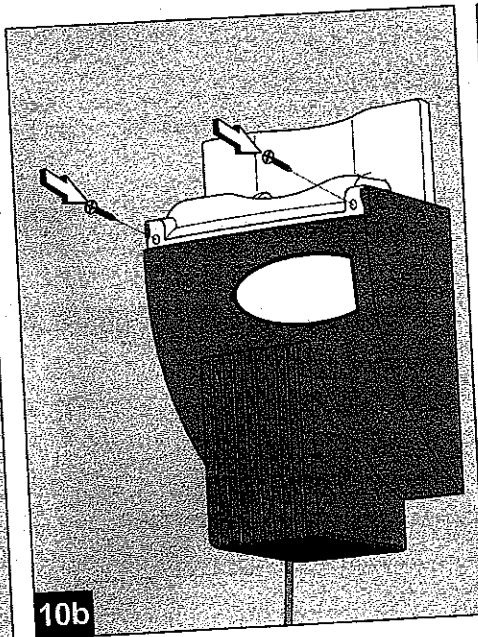




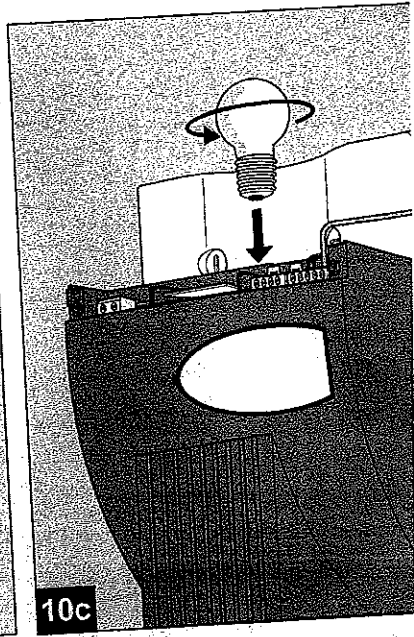




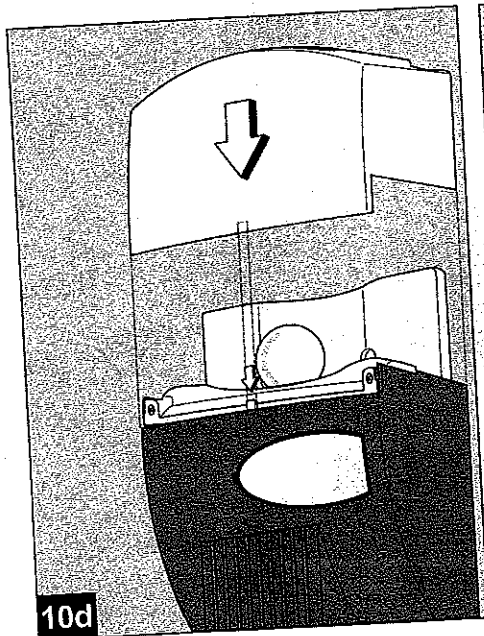
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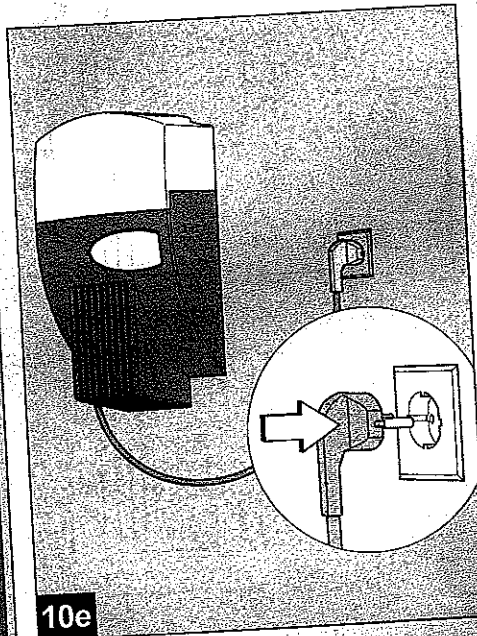
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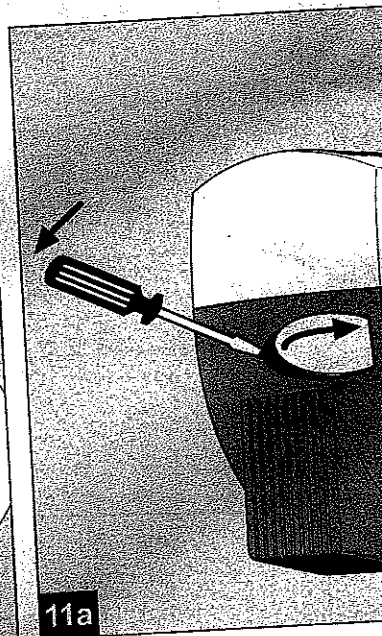
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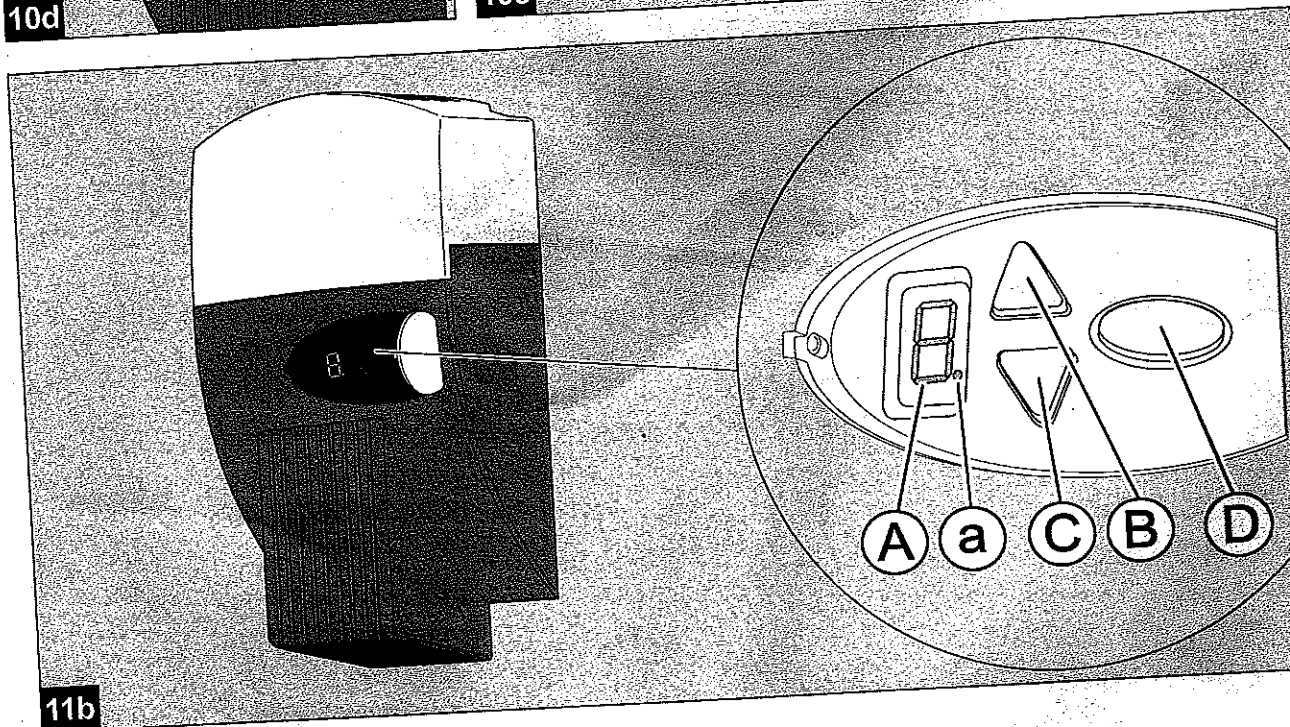
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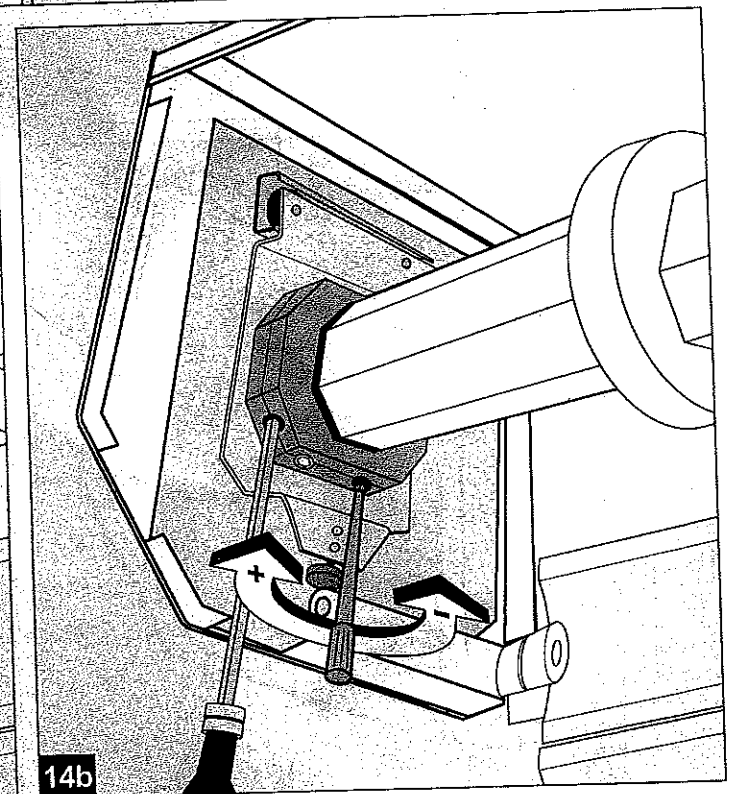
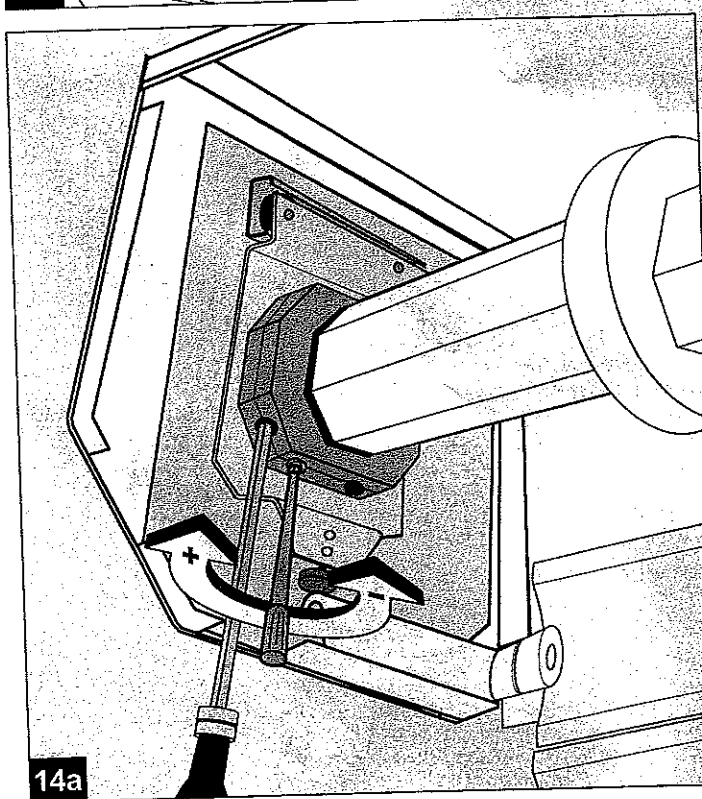
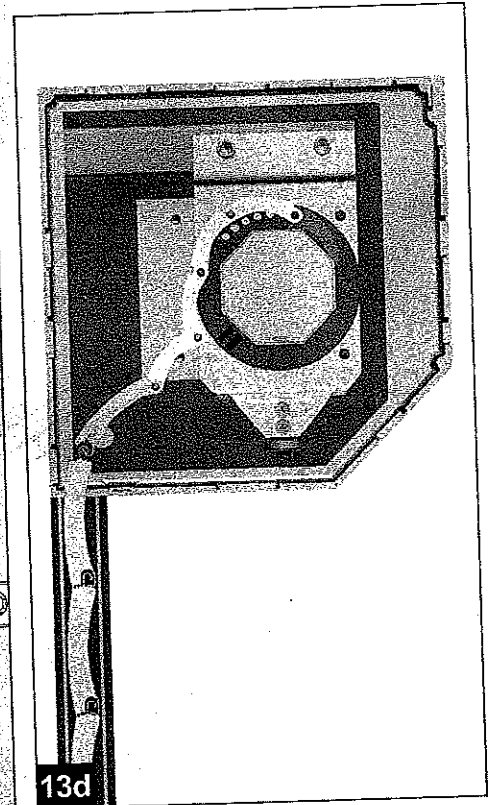
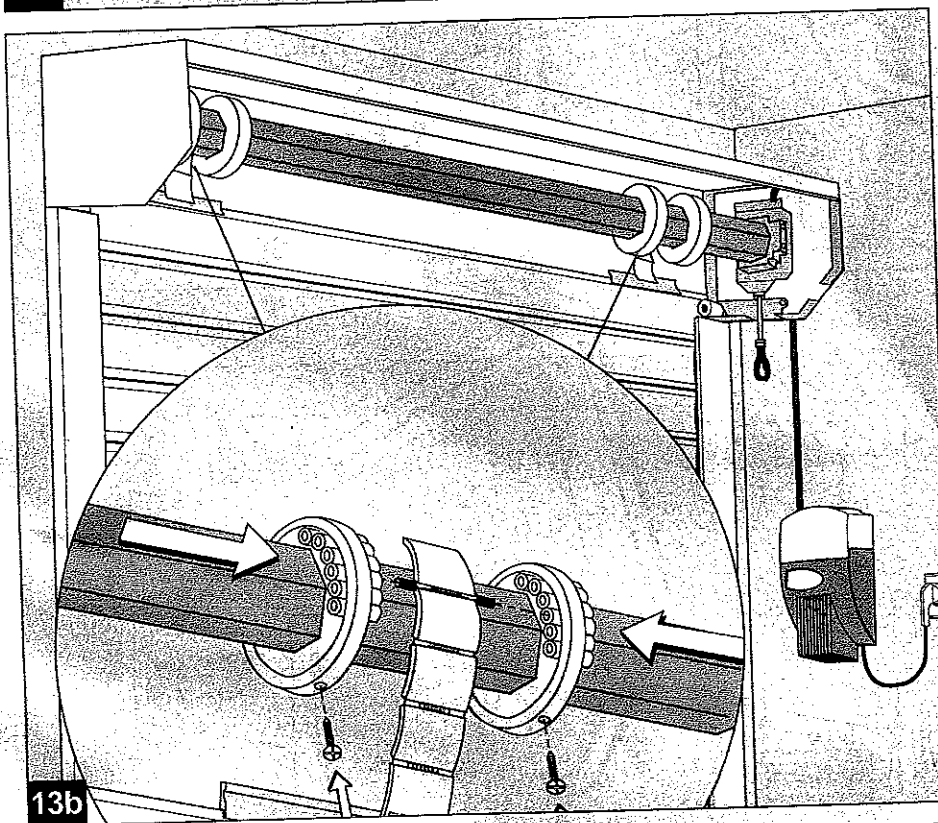
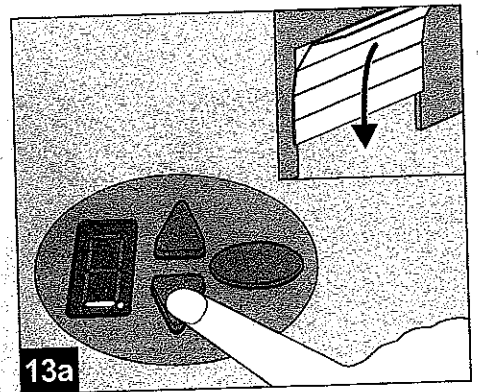
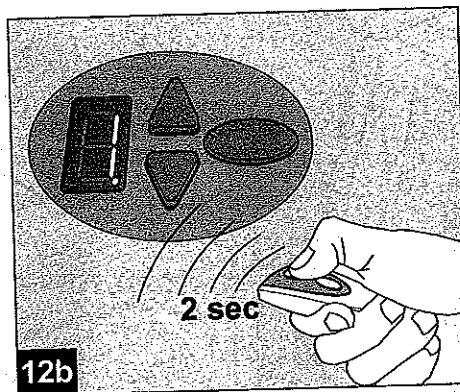
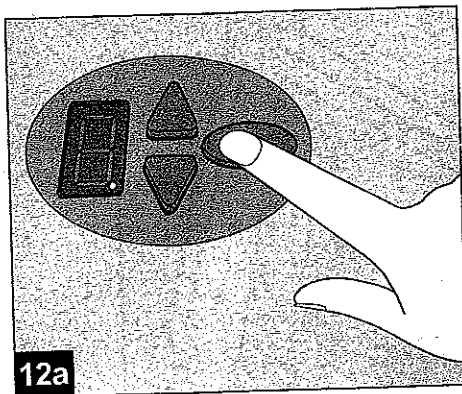
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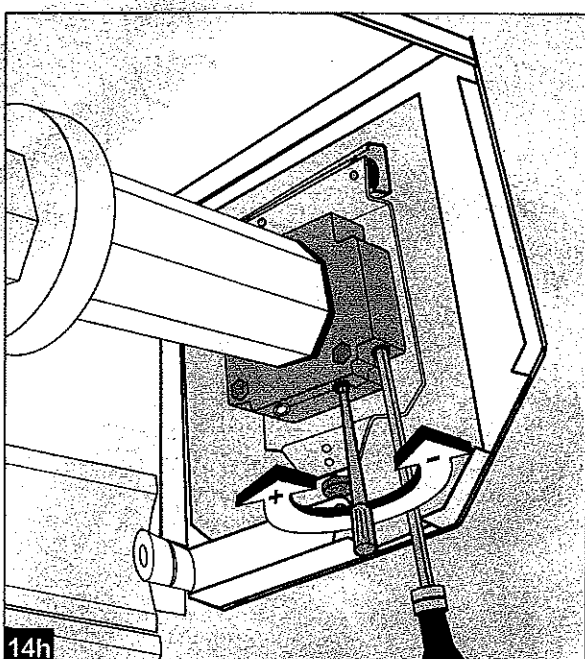
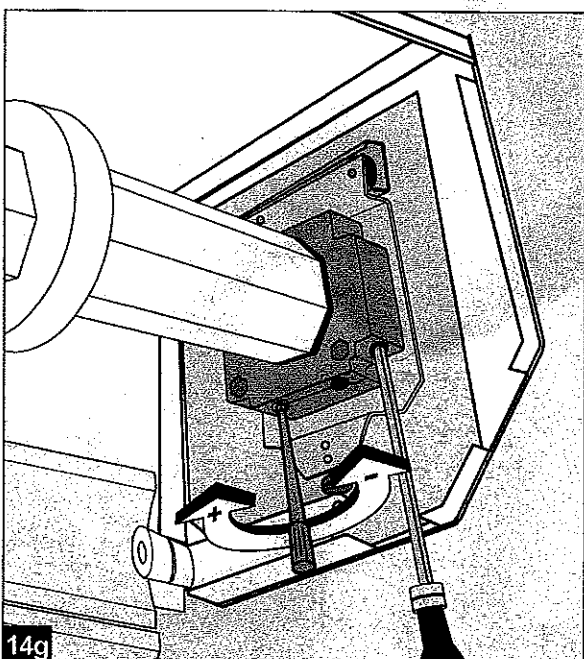
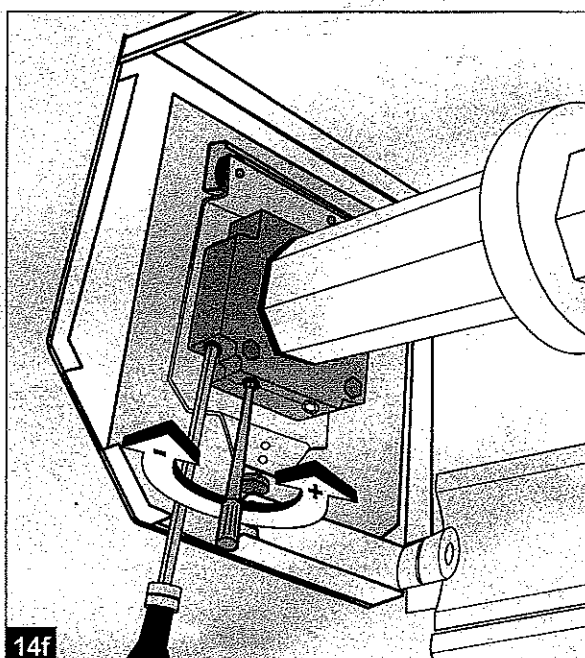
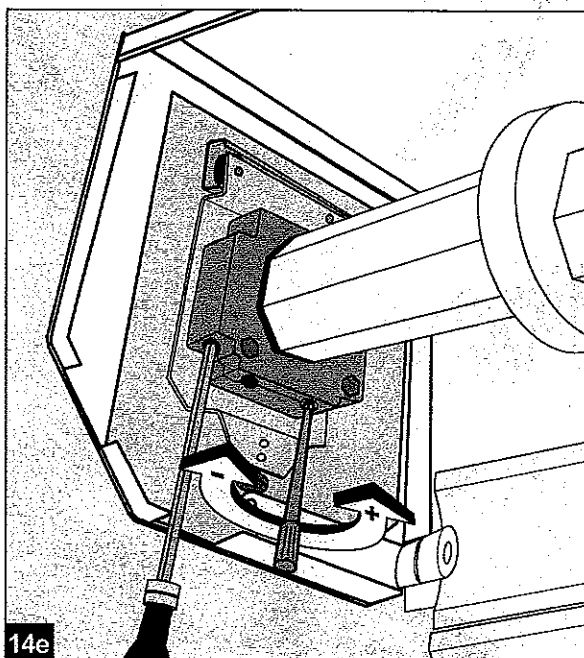
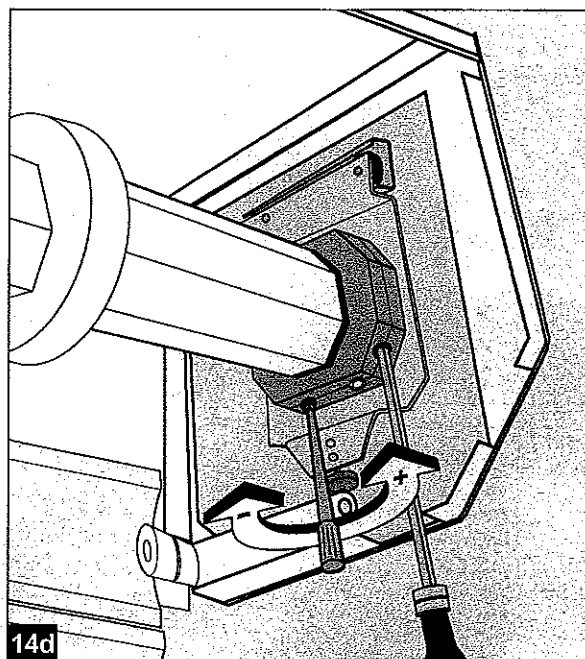
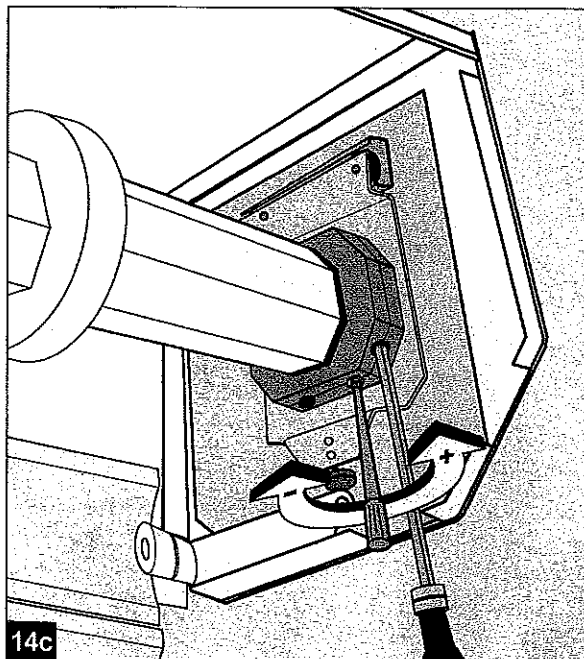


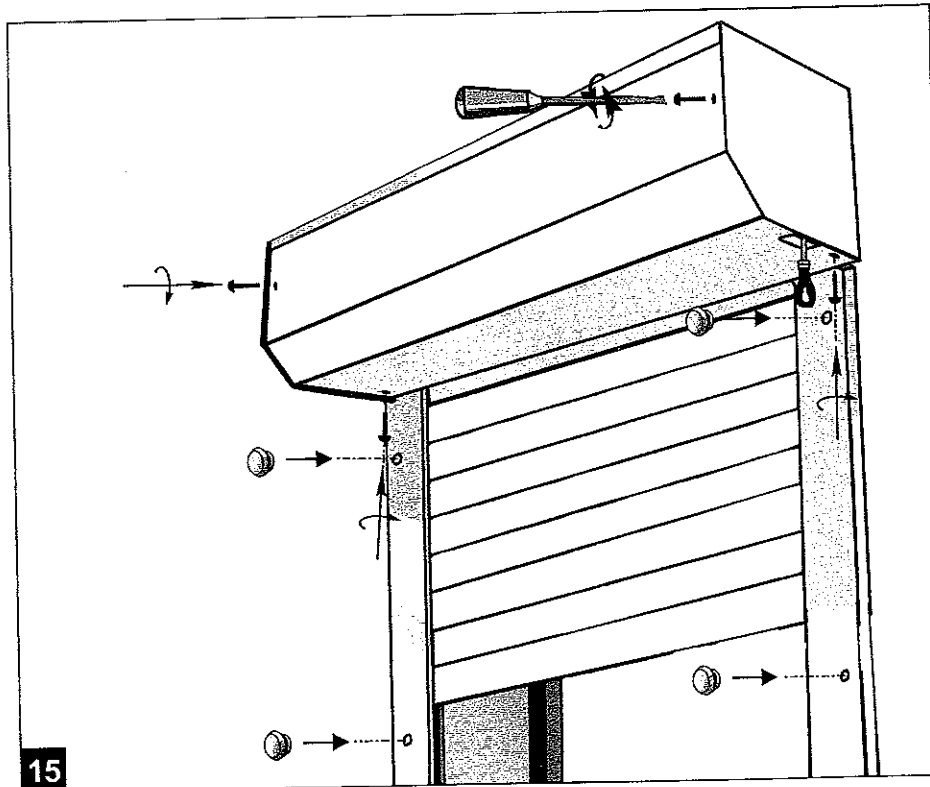
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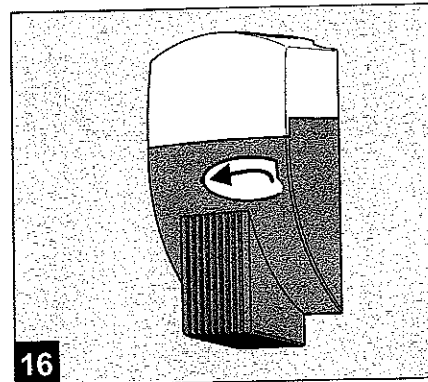
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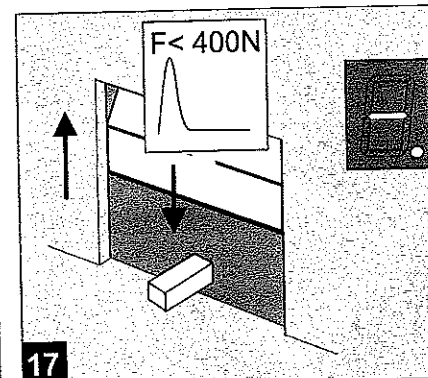




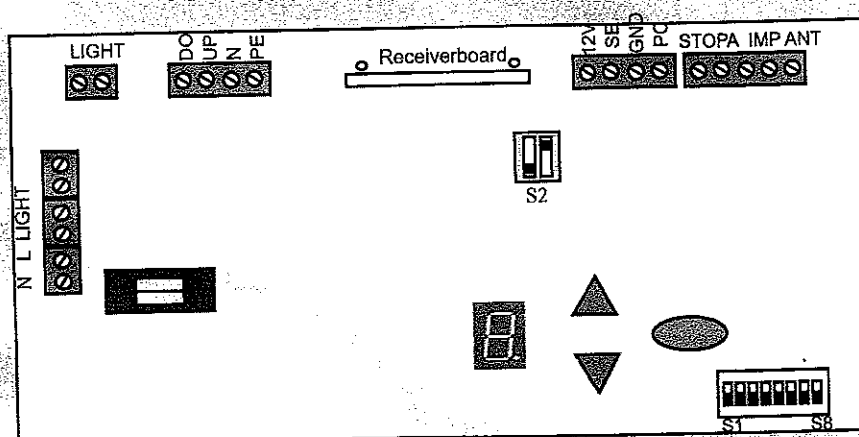
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16

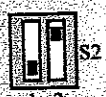


17



18 Special settings

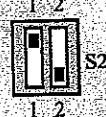
The setting can be altered via Dip switches.



S2

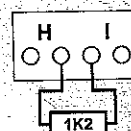
Safety Edge

Input I is configured for a Optical Safety Edge.
(factory setting)



S2

Input I is configured for a
Electric Safety Edge with 1K2 resistor.



S3

Automatic Closing Mode

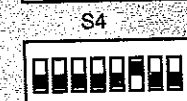
Press Button to open the door. After the desired hold open time
set switch S3 on. In this mode photo cells are required.



S4

Early warning phase

The early warning phase is set, the light starts 4 seconds before
the operator starts up.



S6

Protection against drawing in

An external photocell safety device to detect a person who is in
danger to be drawn in.

If the photocell is interrupted whilst the door is closing or
opening the door stops immediately.



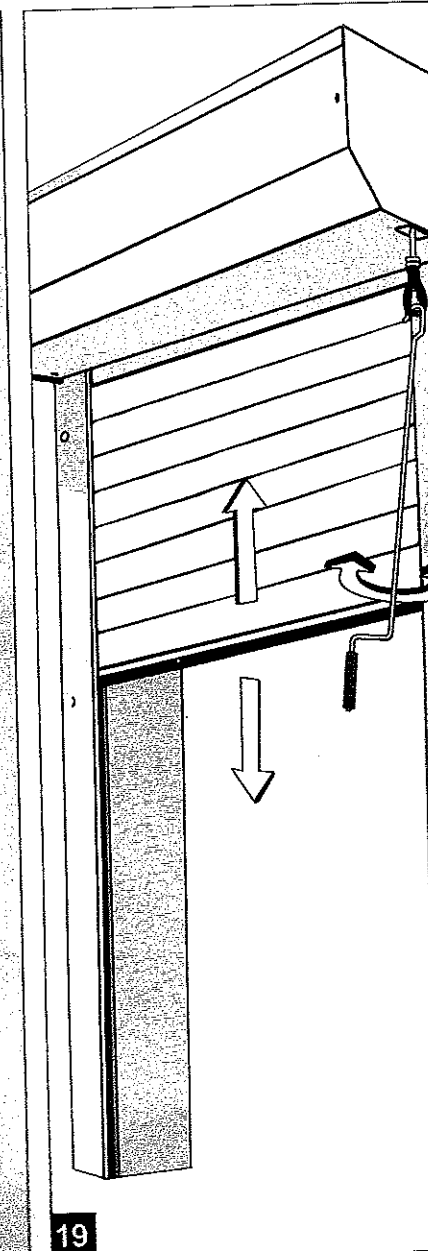
S7

Safety edge

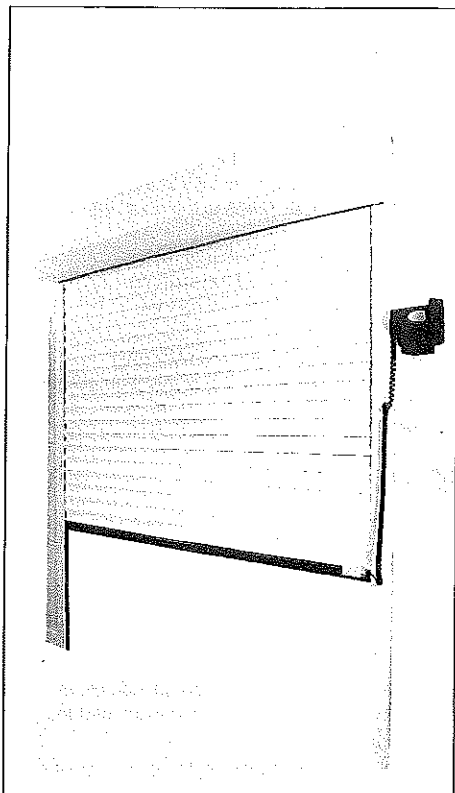
If the closing door encounters an obstruction, the operator stops
and causes the door reopen to its top end-of-travel position.

The opening door encounters an obstruction, the operator stops
immediately.

18



19



• General Information

• Safety

Before commencing any work on the product, carefully read through the Operating Instructions from start to finish, in particular the section entitled "Safety" and the related safety advice. It is important for you to have fully understood what you have read. This product could prove hazardous if not used properly as directed or in accordance with the regulations. Any damage occurring as a result of non-compliance with these instructions shall exempt the manufacturer from all liability.

• Explanation of symbols



WARNING: IMMINENT DANGER

This symbol indicates that instructions are being given which, if not observed, could lead to serious injury.



WARNING! Risk for electric shock

Installation only be performed by certified electricians.



This symbol indicates that instructions are being given which, if not observed, could lead to malfunctions and / or failure of the operator.



Reference to text and figure

• Occupational safety

By following the safety advice and instructions provided in this Operating Manual, injury to persons and damage to property whilst carrying out work with and on the product can be avoided. Failure to observe the safety advice and instructions provided in this Operating Manual as well as the accident prevention regulations and general safety regulations applicable to the range of use shall exempt the manufacturer or its authorized representative from all liability and render any damage claims null and void.

• Hazards that can result from this product

The product has undergone a risk assessment. The design and execution of the product based on this corresponds to state-of-the-art technology. When used properly in accordance with the regulations, the product is reliable and safe to operate. Nevertheless, a residual risk always remains.

The product runs at a high voltage. Before commencing any work on electrical systems, please observe the following:

1. Disconnect from the power supply
2. Safeguard against a power restart
3. Establish that electricity supply is cut off

• Spare parts

Only use the manufacturer's genuine spare parts. Wrong or faulty spare parts can cause damage, malfunctions or even a total failure of the product.

• Changes and modifications to the product

To prevent hazards and ensure optimum performance, the product may not be subjected to any changes, modifications or conversions that have not been expressly approved by the manufacturer.

• Dismantling

Dismantling takes place in reverse sequence to the Installation Instructions.

• Disposal

Observe the corresponding country-specific regulations.

• Data plates

The data plate for the control is located on the side of the control box. Observe the specified power rating.

The data plate for the door is placed on the curtain.

• Packaging

Always dispose of the packaging materials in an environmentally-sound manner and in accordance with the local regulations on disposal.

• Terms of warranty

The purchaser is granted a warranty covering the safe and reliable operation of the Novoferm garage door for a period of 10 years from the date of purchase. This warranty is conditional on the regular inspection and maintenance of the product in accordance with the installation manual supplied with the door. During the guarantee period the manufacturer undertakes to repair, without charge, any product which has suffered a proven failure of its safe and reliable operation provided that the springs, wire cables, tracks, guide rollers and hinges have been inspected regularly (at least once a year) and maintained correctly, including replacement of wear items when required. NovoRol garage door systems are guaranteed against any form of manufacturing defects for a period of 2 years from the date of purchase. The finish of white powder coated doors is guaranteed for a period of 2 years.

In the case of textured woodgrain finished doors, the exterior finish is guaranteed to provide an effective weatherproof membrane which will resist perforation of the NovoRol door from the weather side due to corrosion for 10 years. Furthermore, colour change or fade to the exterior surface will be limited and uniform for the full 10 year period.

NovoRol electric operators are guaranteed against any form of manufacturing defect for a period of 5 years for mechanical elements, motors and transformers. The motor control unit is guaranteed for 3 years. Remote control accessories and parts are guaranteed for a period of 2 years.

Manufacturer:

Novoferm Europe Limited
Brooke Park, Epsom Avenue, Handforth Dean,
Wilmslow, Cheshire, SK9 3PW
Tel: 0161 486 0066 (Garage Door Division)

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 - Terms of warranty
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- Operating Instructions
- Maintenance and Checks
- Trouble-shooting Guide
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- Declaration of Conformity
 - Technical data
- Inspection Log Book

• Installation Instructions



Repairs and adjustments should only be performed by an authorized Novoferm dealer.

Incorrect installation can put the safety of persons at risk or cause damage to property! Improper installation shall exempt the manufacturer from all liability.

Preparing for installation

1. To connect to the mains, a power point must be installed on site - the included mains lead is approx. 1 m long.
2. Check the supplied screws and wall plugs to ensure that these are suitable for the structural conditions on site.
3. Choose the installation side of the tubular motor in accordance with the structural conditions on site.
4. For garages without a second entrance, an emergency opening device is required (accessory).

0 Required tools

- Drilling machine with 6 mm masonry, 6 mm and 12.5 mm metal drill
- Sturdy side cutter
- Slotted screwdriver, 3 mm wide
- Philips screwdriver, size 2 x 100 mm
- Spirit level
- Adjustment stick

1 Remove the cover

2 Preparing the guides

1. Identify front and back sides of the guides refer to the diagram 2a and lay guides on the back.
2. According to the distances in the drawing shown. Pilot drill guides with 6mm drill bit. All the way through.
3. Drill the face of track with 12.5 mm drill bit
WARNING! Do not drill all the way through.
4. Slide guides onto the end plates as shown.

3 Mounting the door

Mark out and position the guides, plumb sides and top.

Fix guides to the wall with appropriate fixings. Fix back box to the wall, using additional fixings across the full width of the box to reduce deflection.

Ensure all bolt heads screws etc, housed inside the Novoshield canopy do not encroach into the roller shutter coiling area.

Important!

DO NOT ATTEMPT TO INSTALL THE SHUTTER CURTAIN AT THIS STAGE!

4 Fastening the control unit

Mount the control unit onto the side wall.

1. At side from the door and 1.50m from the floor, mark the spot for the first plug hole,
2. drill the hole, insert the plug but do not screw the screw in fully.
3. Place the control unit with key hole onto the screw head.
4. Align the unit and mark the remaining fixing holes, drill holes, plug and fasten with screws 4.2 x 32.

5 Mains connecting lead

At the back of the control unit there is a chamber in which, if required, the excess mains lead can be stowed.

1. Wind up the excess cable and place in the chamber.
2. Fasten the cable clips with self-tapping screws.

6 Connecting plan / aligning the aerial Instructions:



Do not connect any current-carrying cables, only connect volt-free push buttons or volt-free relay outputs.

E. Connection for aerial

Route the aerial on the housing exit upwards. When using an external aerial, the shielding must be assigned to the adjacent terminal (F, on right).

F. Connection for external impulse generator (accessories, e.g. key switch or digital coderG. Input STOP A

Connection for safety devices (accessories, e.g. Emergency Button). An interruption at this input end causes the door to stop during the opening or closing phase or prevents the operator from starting up in either direction.

H. Input STOP B

Connection for safety devices (accessories, e.g. one-way photocell). An interruption at this input end causes the operator to automatically change direction during the closing phase only.

I. Optical Safety Edge OSE

- Voltage supply 12 Vdc (e.g. for one-way photocell), connection can take a max. load of 60 mA (do not exceed!)
- Signal Input OSE
- GND

J. Plug-in base for radio receiver

K Connection for an external light with protective insulation or signal lamp, max 500W).

M Motor connector

- Down
- Up
- Common
- PE

1. Loosen both screws on the terminal cover and pull the cover to the front to remove.
2. Connect corresponding cables according to the connection diagram.
3. Put the terminal cover back on again by feeding the back end of the cover under the guides of the control unit and
4. then screw back in place.

7 Connecting the motor cable

Lay the motor cable within the formed recess at the back of the control unit and secure, using the cable clips and screws provided.



Connect the wires according to the drawing.
brown – upward travel,
black – downward travel
blue – neutral
yellow/green – PE

The brown and black wires will have to be reversed for a left hand motor.

8 Wiring the optical safety edge

1. Disconnect control panel from mains supply before wiring the safety edge
2. Connect the sensor cables together with the coiled cable:
3. Hold up the coiled cable in a vertical position in height of the control unit.
4. Hold the clamp against the guide, mark the spot, drill, screw to the guide using screw 4.2 x 25.
5. Connect the coiled cable as in the drawing on terminal I.
6. Now re-connect the mains power supply to the control panel.

9 Installing photo cells (Option)



Where door systems are used by the public or are impulse-operated out of sight of the door, a photocell must be installed, or if the operation mode of the control unit is "automatic closing".

Install photo cell Novoferm LS5 in a height of 20-30cm. Observe a distance to the door regarding the coiled cable.

Remove the bridge on terminal (h) and route the cable and wire according to the drawing.

10 Lamp

1. Screw in light bulb (max. 40W/230V).
2. From above, slot lamp cover into side guides until it engages.
3. Plug into mains.

11 Control elements

The control elements for programming the door operator are located behind the white cover. The cover can be opened with a screwdriver. Once the operator has been programmed, the cover is reclosed and serves as an interior push-button (figure 16).

A. The numerical display serves to indicate the menu stage, the respectively set value and the error/fault diagnosis.

a. The incremental display, lights up to indicate readiness for operation.

B. Button Δ serves as a START button.

C. Button ∇ serves as a "DOWN" button.

D. Button \bigcirc serves as "Programming Transmitter"

After power on the controller is checking itself. Successively middle line, bottom line and dot shine on the display.

12 Menu stage 1: programming the starting function for the hand transmitter

- Briefly press button \bigcirc .
- A "1" flashes all 2,5 seconds
- keep the button of the hand transmitter, with which you would like to start the operator later, pressed for approx. 1 second.
- As soon as the code has been read in, this is acknowledged by "1" is still displayed as long as the transmitter button is pressed.

Further hand transmitters (up to a max. of 60 button codes) can be programmed.

13 Safety Brake & Curtain Connection

Ensure the safety brake is fully disengaged by pressing the upward control button on the control box to make one full rotation of the barrel.

1. Now press and hold the downward travel button and rotate the barrel until it stops.
2. Now connect the curtain to the tube using the anti lift hinges provided.

14 Limit Settings

- ! Do not use the manual override prior to setting the limit switches.
- Only use the limit setting tool provided.
- Do not use power tools to adjust the limit position.
- Do not hose the motor with water.

If the motor stops working, wait for 20 mins to allow the motor to cool before further operations.

The tubular geared motor has integral electro-mechanical limit switches that cut off the power at a position corresponding to the Fully Open & Closed position of the door.

Both the upper and lower limit settings for the curtain travel are pre-set in the factory to suit the opening height of each individual door, however fine tuning will be required, using the following procedure.

Whilst toggling between the upward/downward control buttons on the control box, make adjustments to the limit travel settings as follows:

50Nm MOTOR SETTINGS (Octagonal Head)

LEFT HAND MOTOR

14a. Adjust **WHITE** limit **CLOCKWISE** to increase the travel of bottom limit.

14b. Adjust **RED** limit **CLOCKWISE** to increase the travel of top limit.

RIGHT HAND MOTOR

14c. Adjust **WHITE** limit **ANTI CLOCKWISE** to increase the travel of the top limit

14d. Adjust **RED** limit **ANTI CLOCKWISE** to increase the travel of the bottom limit.

100Nm MOTOR SETTINGS (Square Head)

LEFT HAND MOTOR

14e. Adjust **WHITE** limit **ANTI CLOCKWISE** to increase the travel of bottom limit.

14f. Adjust **RED** limit **ANTI CLOCKWISE** to increase the travel of top limit.

RIGHT HAND MOTOR

14g. Adjust **WHITE** limit **CLOCKWISE** to increase the travel of the top limit.

14h. Adjust **RED** limit **CLOCKWISE** to increase the travel of the bottom limit.

NOTE!

WHEN SETTING THE LIMIT TRAVEL, DO NOT OVER ADJUST THE DOWNWARD LIMIT SCREW AS THIS COULD CAUSE SERIOUS DAMAGE TO THE ANTI LIFT HINGES. WHEN ADJUSTING THE UPWARD TRAVEL LIMIT REMEMBER THAT THE SAFETY EDGE RELAY BOX MOUNTED ON THE BOTTOM RAIL SHOULD PROJECT BELOW THE NOVOSHIELD CANOPY.

15 Re-fit the Novoshield

• Operating Instructions

Information regarding the operating instructions

These operating instructions describe how to use the product properly and safely. The safety advice and instructions as well as the local health and safety regulations and general safety regulations for the range of use must be observed.



All persons using the door system must be shown how to operate it properly and safely.

1. In the interest of your safety and others, this door must be operated by users familiar with its operation.
2. When operating the door do not place fingers near or in guides or another moving part at any time.
3. The person operating the door must have it in sight at any times during this operation particularly if it is automatic operation.
4. Do not permit children to play with the garage door or electrical controls.
5. Do not attach any objects to, or make any modifications to the door as this may cause damage and/or physical injury.
6. Operate the door only when adjusted and free from obstruction.
7. Should the door become difficult to operate or completely inoperable, call an authorized Novoform dealer. Repairs and adjustments should only be undertaken by qualified person.
8. Every 6 months check a tighten and loose fixings.
9. Periodically clean your door with warm water, allow dry naturally. Do not use abrasive or caustic based cleaners. Bird droppings are caustic please remove upon detection.
10. Your new garage door needs an annual service by an authorized Novoform dealer to maintain the CE mark and warranty.

16 Internal impulse generators

The cover on the control unit is used as an impulse generator for opening and closing from inside the garage. Briefly press the cover and the operator starts up

Functional sequence

The garage door operator can be actuated by push-button on the control unit (figure 16) or by other impulse generators, such as hand transmitters, key switches etc. It is only necessary to generate a short, sharp impulse.

- Initial impulse:
Operator starts up and causes the door to travel to the set OPEN or CLOSE end-of-travel positions.
- Impulse generated whilst the door is in motion:
Door stops
- A new impulse:
Door continues to move but in the opposite direction.

Optical safety edge

If the closing door encounters an obstruction, the operator stops and causes the reverses direction for approx. 2 second in order to clear the obstruction. The door can be closed again by generating a new impulse.

Photocell defective

If the photocell is interrupted whilst the door is closing, the door stops and reopens to its top end-of-travel position.

An interruption whilst the door is opening has no effect.

Lighting

The lighting switches on automatically whenever a start impulse is generated and switches off again after the set time phase (factory setting approx. 90 seconds).

Changing the light bulb

Pull out the mains plug and open the lamp shade using a Phillips screwdriver size 2 x 100. Replace the light shade (230 V, 40 W, cap E27) and screw the lamp cover back on again.

Signal light

If a signal light for signalling the opening and closing phases is installed, this flashes together with the lamp in the operator as soon as a start impulse is generated. The operator starts with a time delay in accordance with the set early warning phase (see Special Settings).

Hand transmitters

- Programming further hand transmitters: (figures 12a and 12b).
- Changing the battery: slide back the battery compartment cover on the hand transmitter. Take out the battery.
- Insert a new battery. Be sure to pole correctly! Slide the cover back on.

Empty batteries must be disposed of separately (toxic waste)!

19 Hand crank

In case of a power failure use the hand crank to open and close the door manually (figure 19).



Do not overwind, this can cause damage to auto locks.

• Maintenance / Checks



For your own safety we recommend that the door system be checked by a specialist after initial installation and then regularly at intervals of 1 year minimum.

17 Checking the force limit facility

- Place an obstruction (e. g. operator's cardboard box) underneath the door's closing edge.
- Starting from the OPEN end-of-travel position, actuate the door to close.
- The door travels towards the obstruction, stops and travels back for approx. 2 seconds in order to clear the obstruction.

The door system must be checked before initial operation and at least once a year thereafter. In the process, the force limiting device (figure 17) must be tested!



CAUTION! If the closing force is set too high, this can result in injury to persons and damage to property.

The opening force can be re-adjusted in menu stage 5, the closing force in menu stage 6.

• Troubleshooting Guide



Important note: when working on the operator, always pull out the mains plug beforehand !!!

Malfunction	Possible causes	Remedy
Door does not open/close full.	Door mechanics have altered. Door does not open/close fully. Travel limit is incorrectly set.	Have the door checked. Readjust travel limit 13 and 14 .
After closing, the door opens again slightly.	Door blocks shortly before reaching the closed position. Travel limit is incorrectly set.	Remove the obstruction. Readjust closed travel limit 14 .
Door does not respond on impulse from the hand transmitter - but does respond to push-buttons or other impulse generators.	Battery in the hand transmitter is flat. Aerial not fitted. No hand transmitter programmed.	Replace battery in the hand transmitter. Plug in / align aerial.. Programme the hand transmittor 12
Door does not respond to impulse from hand transmitter nor to other impulse generators.	See diagnostic display.	See diagnostic display.
Insufficient range of hand transmitter.	Battery in the hand transmitter is flat. Aerial not fitted. On-site screening of the receiving signal.	Replace battery in the hand transmitter. Plug in / align aerial. Connect external aerial (accessories).
Door only works in dead man mode when closing only.	Safety edge dip switch may be incorrectly set.	Set dip switch 1 +2 as per instruction manual.
Door does not stop after hitting an obstacle.	Loose wiring from safety edge / photo cells to control panel Damaged safety edge / photo cells..	Check wiring from safety edge / photo calls to control panel as per instruction manual. Renew safety edge / photo cells
The door is going up and down noisily and moving from side to side	Drum and motor have come apart.	Check that the motor is pushed firmly into the drum and is held in with the fixing screw.
I have been using the door constantly but it has suddenly stopped working.	Motor has over heated.	Let the motor rest for 15 minutes [cool down period].
There is a noise coming from the ends of the drum when the door is operated	There is grit in the sliding brackets.	Clean and oil the sliding brackets.

• Diagnostic Display

During operation the display provides diagnostic information on any possible faults and/or malfunctions

Display	State	Diagnosis / Remedy
	Operator is not ready for operating	Control main power. Check internal Fuse 3.15A
	Operator is ready for operating	
	Operator is receiving a valid transmitter code	A transmitter is activated.
	Operator drives in up direction.	Operator has got a start impulse.
	Operator drives in up direction	A transmitter is still activated.
	Operator drives in close direction	Operator has got a start impulse.
	Operator drives in close direction	A transmitter is still activated.
	Door does not close. All 2.5 seconds one flash. All 2.5 seconds two flashes.	Safety edge is activated. Photocell is activated.
	Door will not open or close. Dot flashes once in 2.5 seconds.	Emergency Stop is activated. Check input G. Close this input
	Door will not open or close. Line and dot flashes consecutive.	Safety test has been triggered. Briefly pull out mains plug.