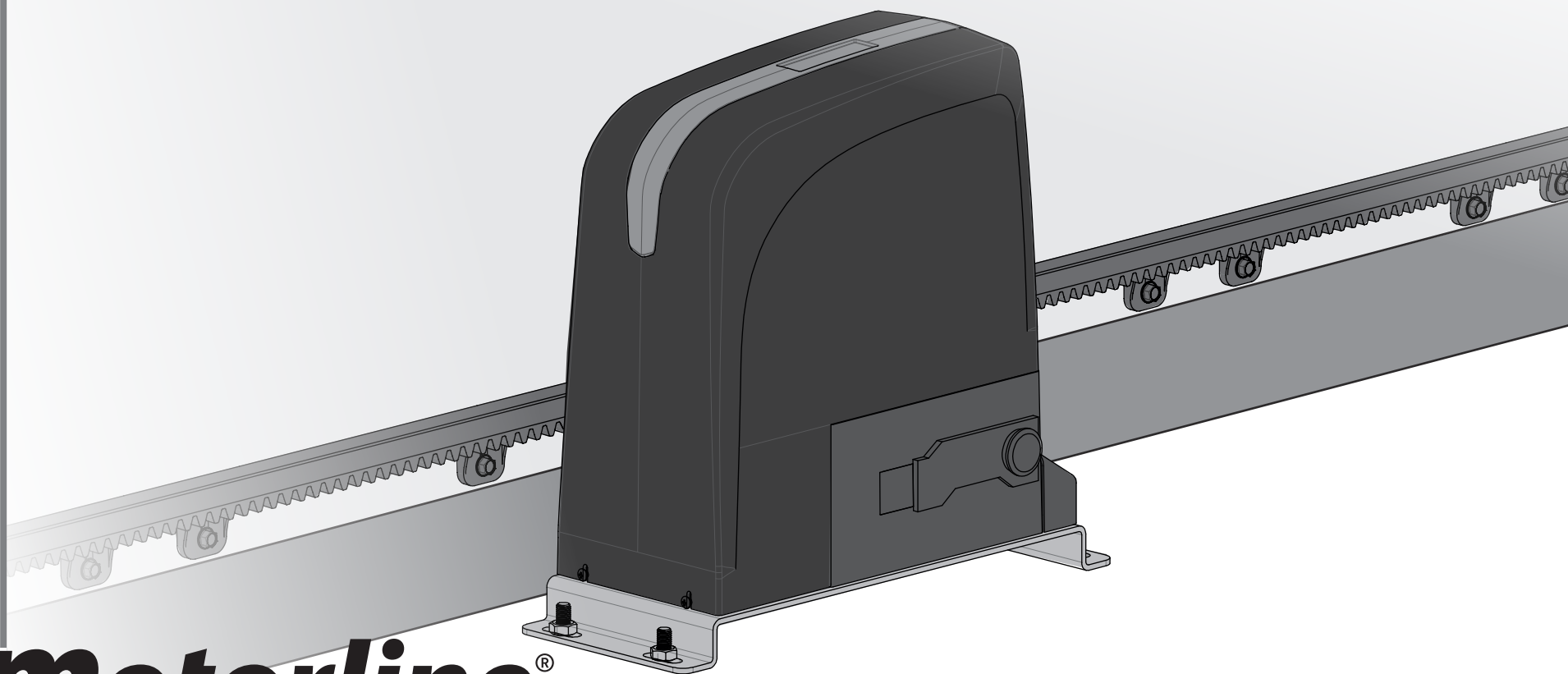




SLIDE1024

USER'S AND INSTALLER'S MANUAL








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01. SAFETY INSTRUCTIONS

ATTENTION:

	This product is certified in accordance with European Community (EC) safety standards.
	This product complies with Directive 2011/65/EU of the European Parliament and of the Council, of 8 June 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment and with Delegated Directive (EU) 2015/863 from Commission.
	(Applicable in countries with recycling systems). This marking on the product or literature indicates that the product and electronic accessories (eg. Charger, USB cable, electronic material, controls, etc.) should not be disposed of as other household waste at the end of its useful life. To avoid possible harm to the environment or human health resulting from the uncontrolled disposal of waste, separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources. Home users should contact the dealer where they purchased this product or the National Environment Agency for details on where and how they can take these items for environmentally safe recycling. Business users should contact their vendor and check the terms and conditions of the purchase agreement. This product and its electronic accessories should not be mixed with other commercial waste.
	
	This marking indicates that the product and electronic accessories (eg. charger, USB cable, electronic material, controls, etc.) are susceptible to electric shock by direct or indirect contact with electricity. Be cautious when handling the product and observe all safety procedures in this manual.

01. SAFETY INSTRUCTIONS

GENERAL WARNINGS

- This manual contains very important safety and usage information. very important. Read all instructions carefully before beginning the installation/usage procedures and keep this manual in a safe place that it can be consulted whenever necessary.
- This product is intended for use only as described in this manual. Any other enforcement or operation that is not mentioned is expressly prohibited, as it may damage the product and put people at risk causing serious injuries.
- This manual is intended firstly for specialized technicians, and does not invalidate the user's responsibility to read the "User Norms" section in order to ensure the correct functioning of the product.
- The installation and repair of this product may be done by qualified and specialized technicians, to assure every procedure are carried out in accordance with applicable rules and norms. Nonprofessional and inexperienced users are expressly prohibited of taking any action, unless explicitly requested by specialized technicians to do so.
- Installations must be frequently inspected for unbalance and the wear signals of the cables, springs, hinges, wheels, supports and other mechanical assembly parts.
- Do not use the product if it is necessary repair or adjustment is required.
- When performing maintenance, cleaning and replacement of parts, the product must be disconnected from power supply. Also including any operation that requires opening the product cover.
- The use, cleaning and maintenance of this product may be carried out by any persons aged eight years old and over and persons whose physical, sensorial or mental capacities are lower, or by persons without any knowledge of the product, provided that these are supervision and instructions given by persons with experienced in terms of usage of the product in a safe manner and who understands the risks and dangers involved.

- Children shouldn't play with the product or opening devices to avoid the motorized door or gate from being triggered involuntarily.

WARNINGS FOR TECHNICIANS

- Before beginning the installation procedures, make sure that you have all the devices and materials necessary to complete the installation of the product.
- You should note your Protection Index (IP) and operating temperature to ensure that is suitable for the installation site.
- Provide the manual of the product to the user and let them know how to handle it in an emergency.
- If the automatism is installed on a gate with a pedestrian door, a door locking mechanism must be installed while the gate is in motion.
- Do not install the product "upside down" or supported by elements do not support its weight. If necessary, add brackets at strategic points to ensure the safety of the automatism.
- Do not install the product in explosive site.
- Safety devices must protect the possible crushing, cutting, transport and danger areas of the motorized door or gate.
- Verify that the elements to be automated (gates, door, windows, blinds, etc.) are in perfect function, aligned and level. Also verify if the necessary mechanical stops are in the appropriate places.
- The central must be installed on a safe place of any fluid (rain, moisture, etc.), dust and pests.
- You must route the various electrical cables through protective tubes, to protect them against mechanical exertions, essentially on the power supply cable. Please note that all the cables must enter the central from the bottom.
- If the automatism is to be installed at a height of more than 2,5m from the ground or other level of access, the minimum safety and health requirements for the use of work equipment workers at the work of Directive 2009/104/CE of European Parliament and of the Council of 16

01. SAFETY INSTRUCTIONS

September 2009.

- Attach the permanent label for the manual release as close as possible to the release mechanism.
- Disconnect means, such as a switch or circuit breaker on the electrical panel, must be provided on the product's fixed power supply leads in accordance with the installation rules.
- If the product to be installed requires power supply of 230Vac or 110Vac, ensure that connection is to an electrical panel with ground connection.
- The product is only powered by low voltage safety with central (only at 24V motors)

WARNINGS FOR USERS

- Keep this manual in a safe place to be consulted whenever necessary.
- If the product has contact with fluids without being prepared, it must immediately disconnect from the power supply to avoid short circuits, and consult a specialized technician.
- Ensure that technician has provided you the product manual and informed you how to handle the product in an emergency.
- If the system requires any repair or modification, unlock the automatism, turn off the power and do not use it until all safety conditions have been met.
- In the event of tripping of circuits breakers or fuse failure, locate the malfunction and solve it before resetting the circuit breaker or replacing the fuse. If the malfunction is not repairable by consult this manual, contact a technician.
- Keep the operation area of the motorized gate free while the gate in motion, and do not create strength to the gate movement.
- Do not perform any operation on mechanical elements or hinges if the product is in motion.

RESPONSABILITY

- Supplier disclaims any liability if:
 - Product failure or deformation result from improper installation use or maintenance!
 - Safety norms are not followed in the installation, use and maintenance of the product.
 - Instructions in this manual are not followed.
 - Damaged is caused by unauthorized modifications
 - In these cases, the warranty is voided.

MOTORLINE ELECTROCELOS SA.

Travessa do Sobreiro, nº29
4755-474 Rio Côvo (Santa Eugénia)
Barcelos, Portugal

SYMBOLS LEGEND:



• Important safety notices



• Useful information



• Programming information



• Potentiometer information



• Connectors information



• Buttons information

02. AUTOMATISM

TECHNICAL SPECIFICATIONS

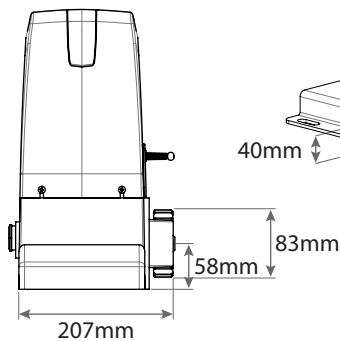
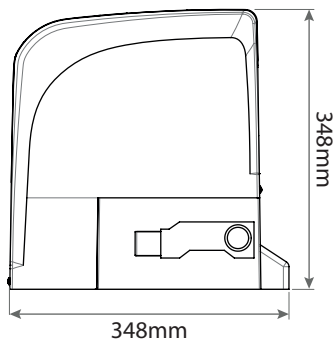


- Automated system for residential or industrial sliding gates with a maximum of 1000kgs. It consists of a reversing electro-mechanical gearmotor, powered by a 24V control board.
- The automation has a programmable electronic control board that allows the adjustment of various parameters such as working time, pause time, anti-crushing sensitivity as well as partial opening width (pedestrian access).
- The reversing system guarantees the gate will automatically lock when the motor is not operating.
- A release system enables the gate to be moved by hand in case of malfunction or emergency.
- The automated system was designed and built for controlling sliding gates. Do not use for any other purpose.

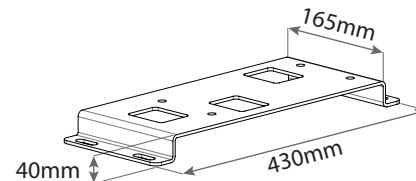
Automated system technical specifications:

• Power Supply	110/230Vac 50/60Hz
• Motor	24Vdc
• Power	180W
• Rotational speed	186mm/sec
• Noise	≤ 56dB
• Working temperature	-25°C to +65°C
• Protection class	IP44
• Maximum leaf weight	1000Kg
• Frequency of work	intensive

MOTOR DIMENSIONS



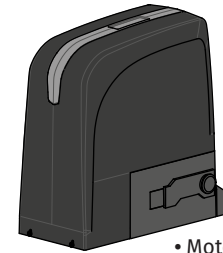
FIXING PLATE DIMENSIONS



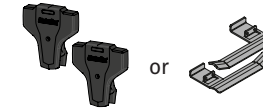
02. AUTOMATISM

KIT COMPONENTS

You should check the following items on the automation package before beginning the installation.



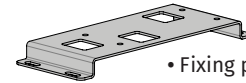
• Motor



• Magnetic limit switch or mechanical limit switches plates



• Floor fixing screws



• Fixing plate



• Motor fixing screws



• Fixing screws for the limit switch



• Remote controls



• Unlocking keys



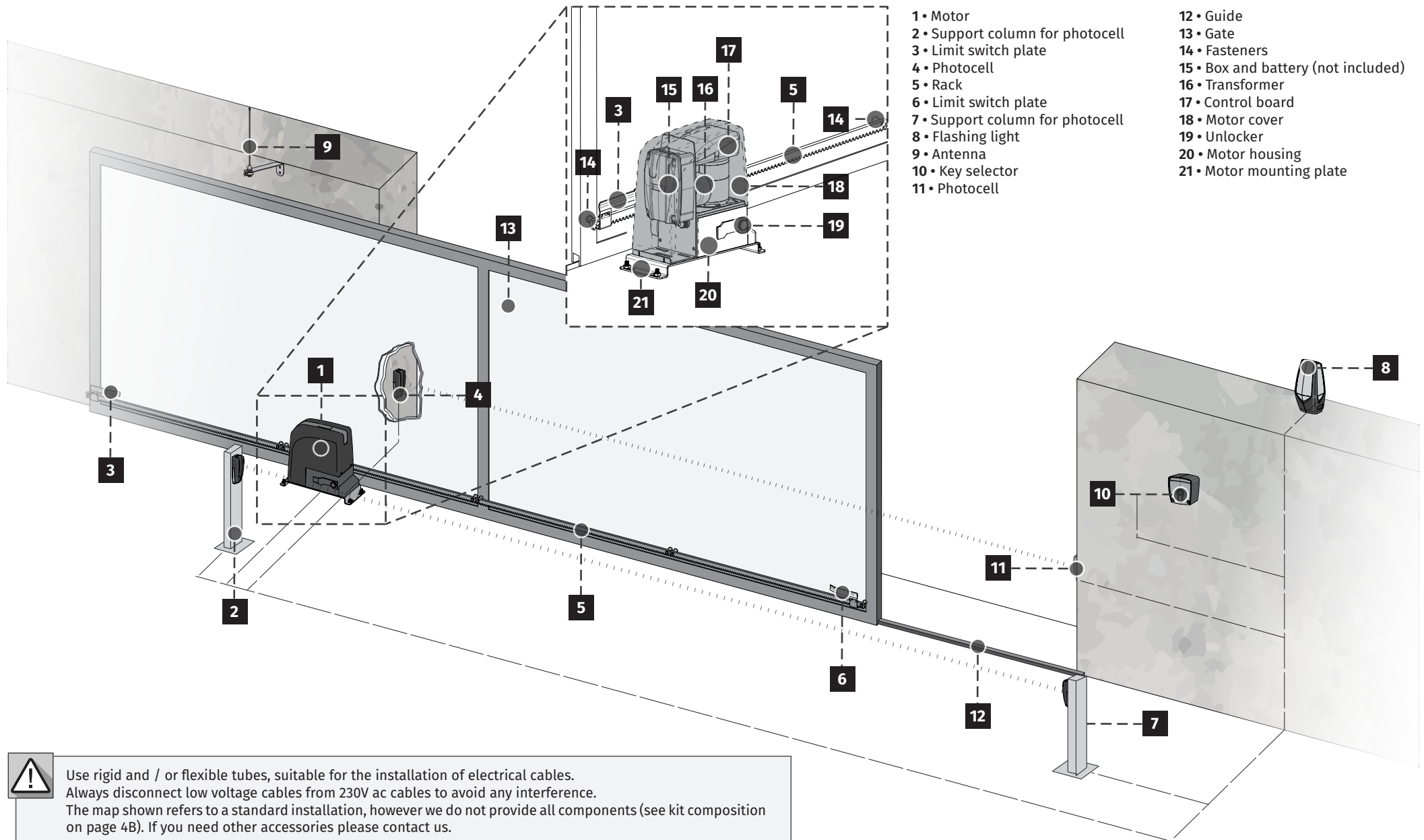
• Photocells



• User manual

03. INSTALLATION

INSTALLATION MAP

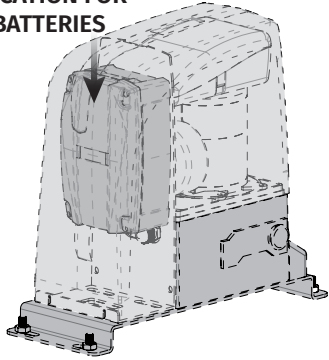


Use rigid and / or flexible tubes, suitable for the installation of electrical cables.
Always disconnect low voltage cables from 230V ac cables to avoid any interference.
The map shown refers to a standard installation, however we do not provide all components (see kit composition on page 4B). If you need other accessories please contact us.

03. INSTALLATION

CHANGE MOTOR ORIENTATION

LOCATION FOR BATTERIES



ORIGINAL MOTOR POSITION


• The motor is factory-built with the location for batteries (not included) as shown in the image on the side.



If there is an obstacle that prevents access to the batteries, you must change the orientation of the motor.

LEFT INSTALLATION


• INCORRECT INSTALLATION

This installation does not allow access to the batteries. Change the motor orientation. 

OBSTACLE

LOCATION FOR BATTERIES

• CORRECT INSTALLATION

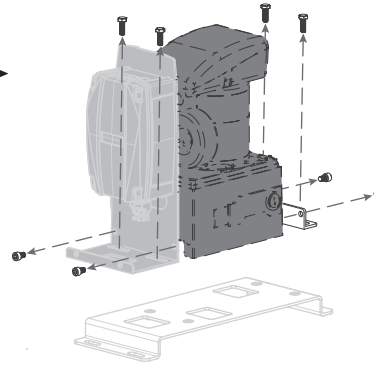
After changing the orientation of the motor, it is possible to access them without hindrance. 

OBSTACLE

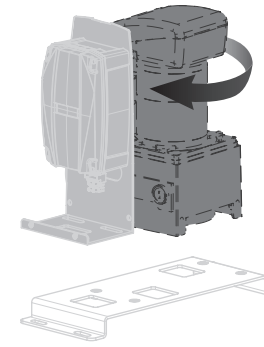
LOCATION FOR BATTERIES

CHANGE MOTOR ORIENTATION

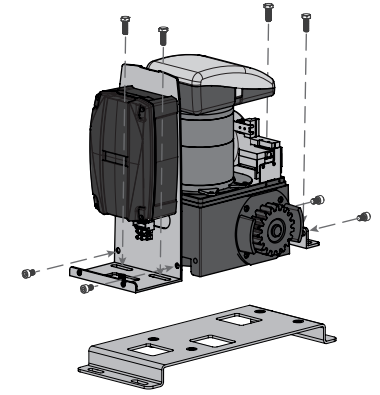
If the fixing plate is already tightened on the foundation, it is necessary to unscrew it in order to change the orientation of the motor.



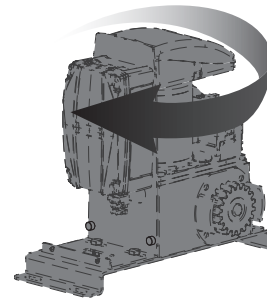
1 Remove screws.



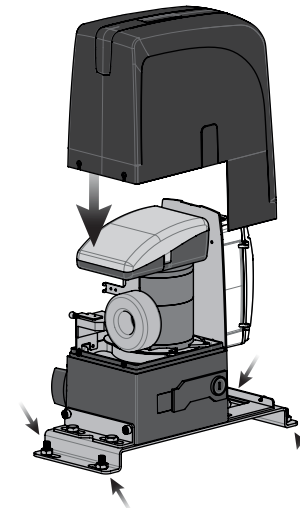
2 Rotate motor body (marked with dark gray).



3 Tighten the screws again.



4 Rotate everything (motor and plate) so as to direct the pinion to the rack.



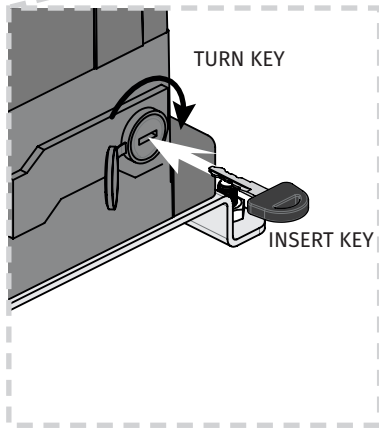
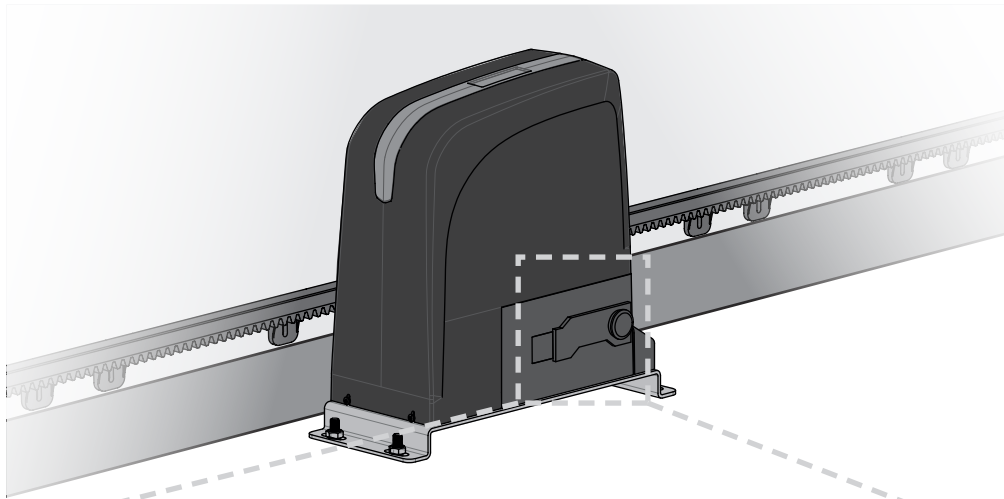
5 Tighten the 4 fixing screws to the ground and insert the cover.



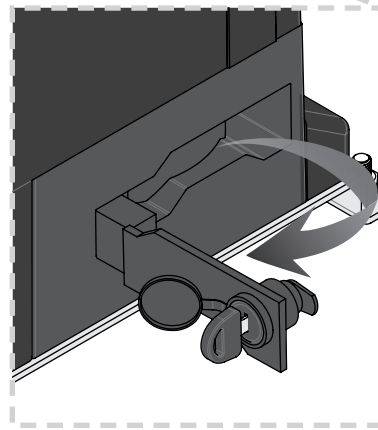
6 Final position.

03. INSTALLATION

UNLOCK AUTOMATISM



1 Insert the key and turn it 90 °.



2 Pull the unlocker out.



BLOCKED



UNLOCKED

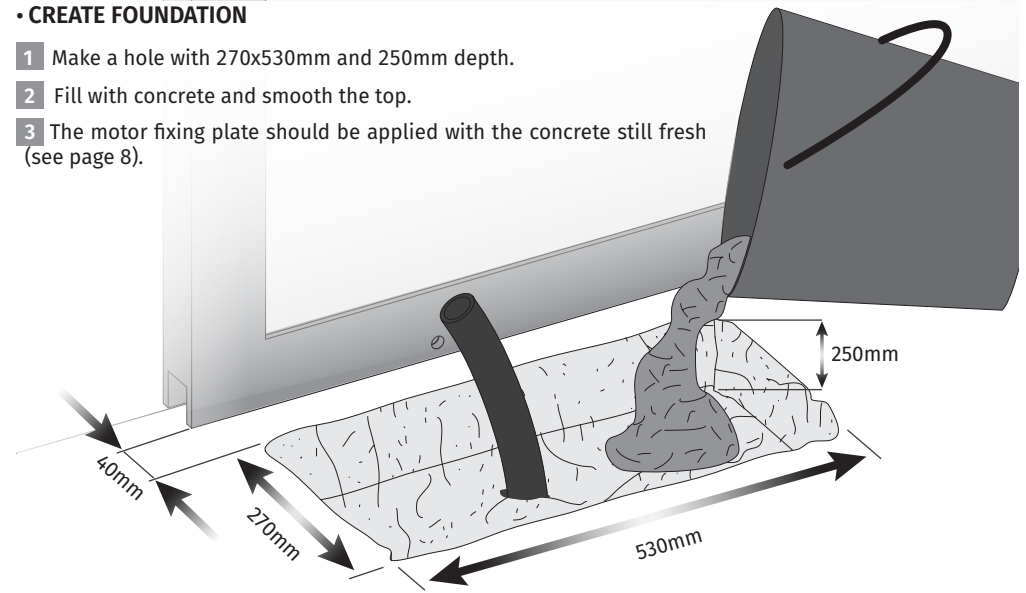
After following these steps, you can manually open/close the gate.
For the automatism to work again, you have to close the unlocker and turn the key.

03. INSTALLATION

FOUNDATION

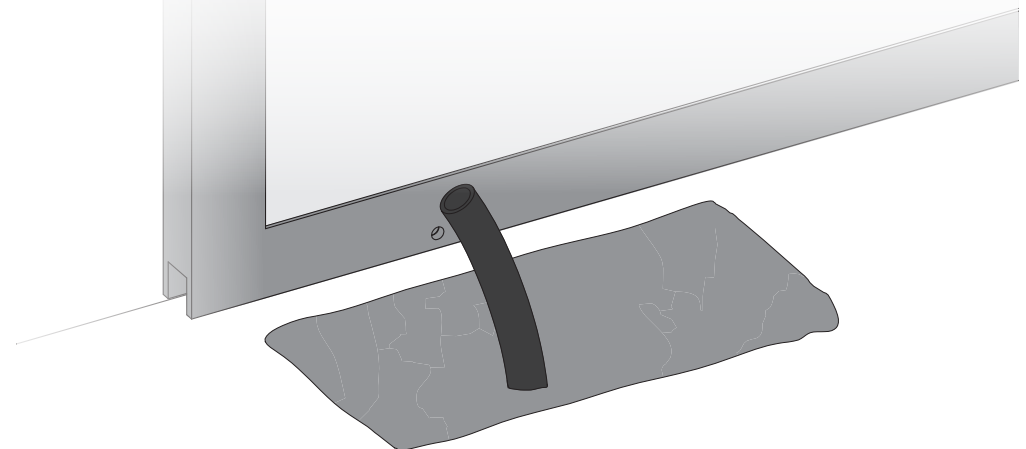
• CREATE FOUNDATION

- 1 Make a hole with 270x530mm and 250mm depth.
- 2 Fill with concrete and smooth the top.
- 3 The motor fixing plate should be applied with the concrete still fresh (see page 8).



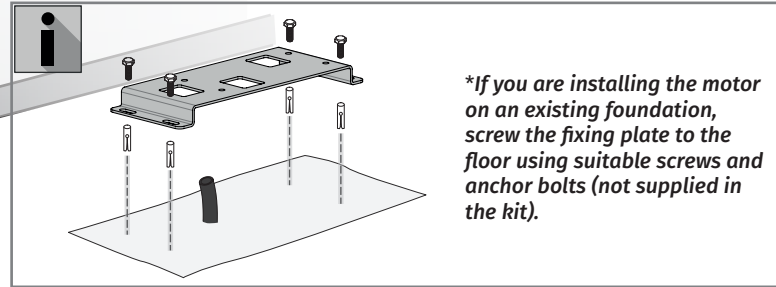
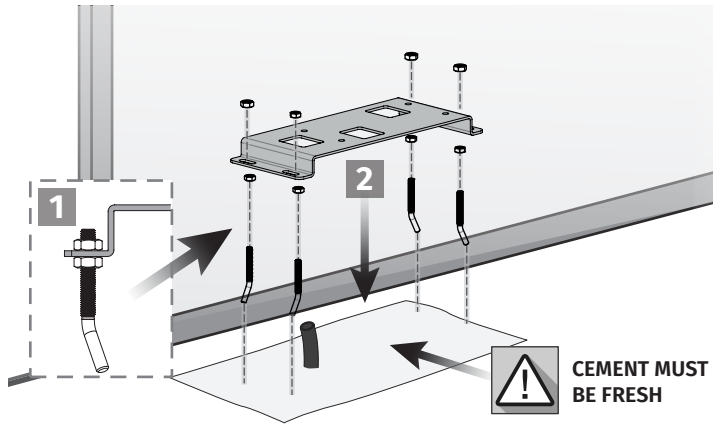
• EXISTING FOUNDATION

If you already have a foundation created, you can proceed to the installation (see page 8).

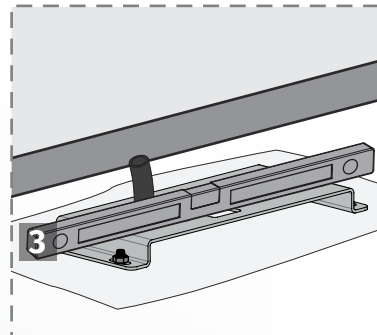
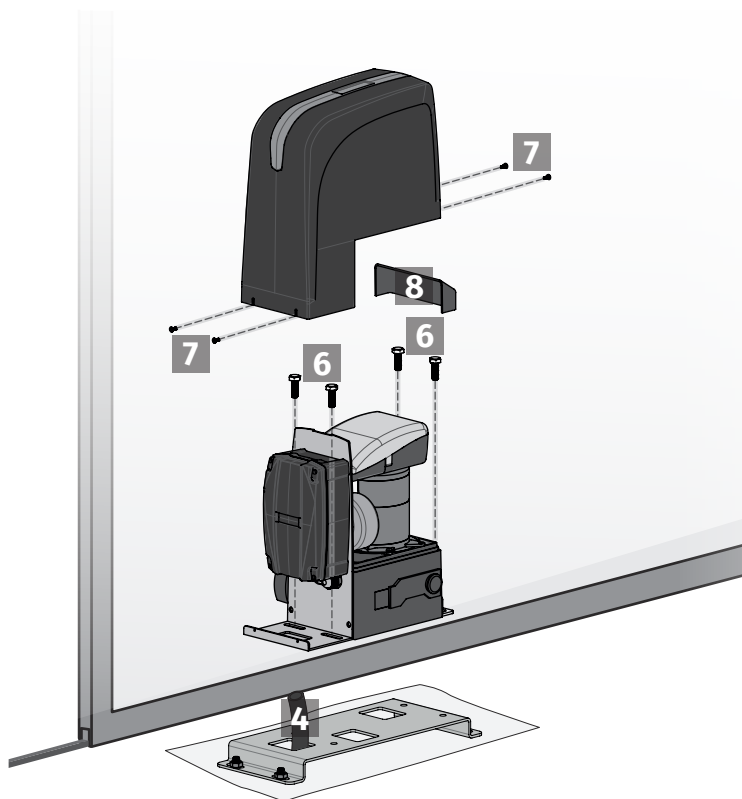


03. INSTALLATION

MOTOR INSTALLATION



**If you are installing the motor on an existing foundation, screw the fixing plate to the floor using suitable screws and anchor bolts (not supplied in the kit).*



1 Insert the screws and anchor bolts into the four holes of the fixing plate and tighten.

2 With the cement still fresh, apply the fixing plate.
**If installing the motor on an existing foundation, fasten the fixing plate to the floor using screws and anchor bolts (not supplied in the kit).*

NOTE • It is important to leave one or more tubes to pass electrical cables through the plate.

3 Using a level, make sure the plate is perfectly horizontal. The fixing plate must be placed 90° to the gate to ensure that the rack and pinion fit perfectly.

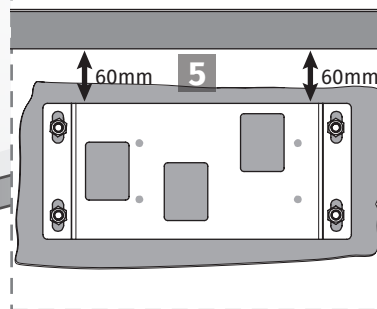
4 Route the electrical cables to connect the motor to the accessories and power. Leave cables with a length that ensures easy connection to the control board.

5 Adjust the distance between the plate and the gate.

6 Position the motor on the plate leaving it centered with it and tighten the screws.

7 Screw the cover.

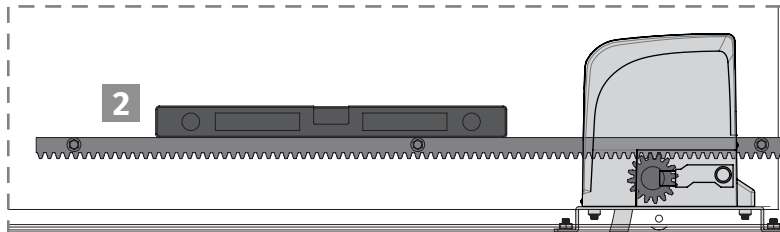
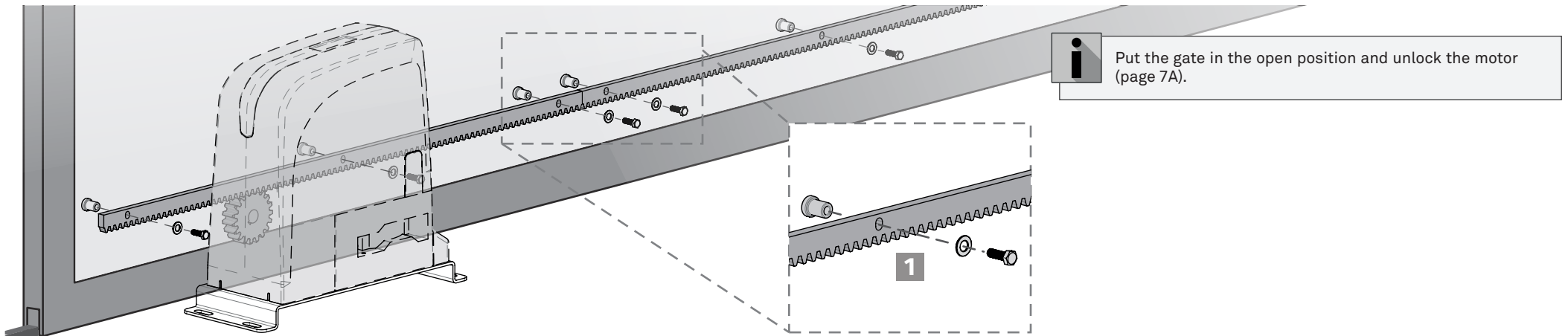
8 After attaching the cover, fit the protective cover of the two visible screws.



i Insert the key into the lock, rotate it 90° and pull to unlock the motor (see page 7B). After the motor is unlocked, you can open and close the gate manually.

03. INSTALLATION

STEEL GEAR RACK INSTALLATION

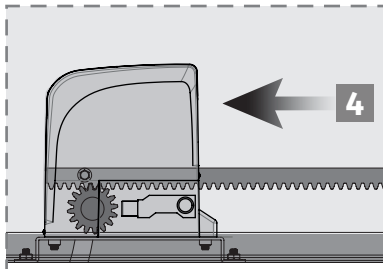
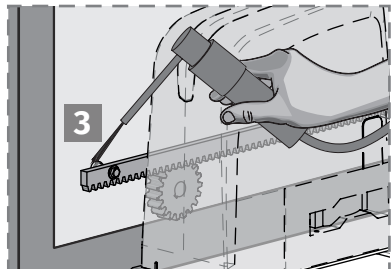


1 Place spacers in all rack holes.
You should place them in the center of the oval rack holes, so you can fine-tune it at the end of the installation if necessary.

2 Position a piece of rack on top of the pinion and level it horizontally with a level.

3 Weld the spacer on top of the pinion.

4 Close the gate slightly until the other end of the rack stands on top of the pinion and weld the other spacer to the gate.



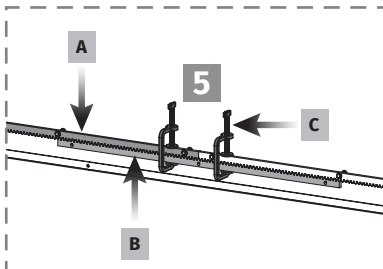
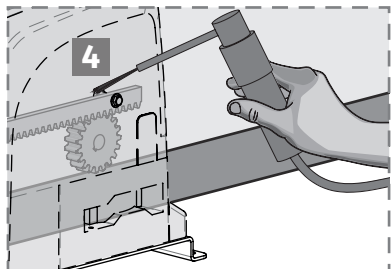
5 Close the gate slightly, letting the rack stay on the pinion and apply another piece of rack (A). To synchronize the teeth with the piece already installed, use an additional piece of rack (B) and place it under the other two union, holding them with clamps (C).

6 Open the gate until the end of the new rack piece stands on the pinion and weld the spacer.

7 Remove the auxiliary rack piece and open the gate until the pinion is over the other rack end. Weld the spacer.

8 Repeat steps from 5 to 7 for each meter of rack you need to install.

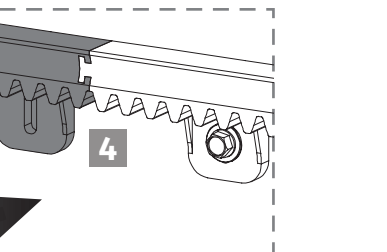
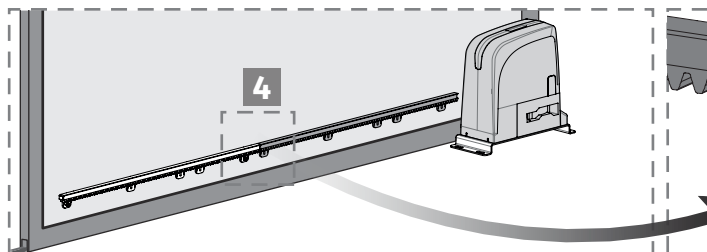
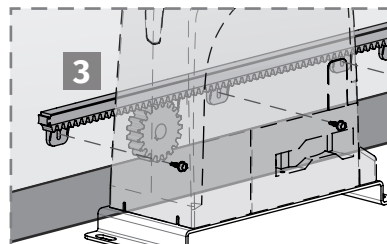
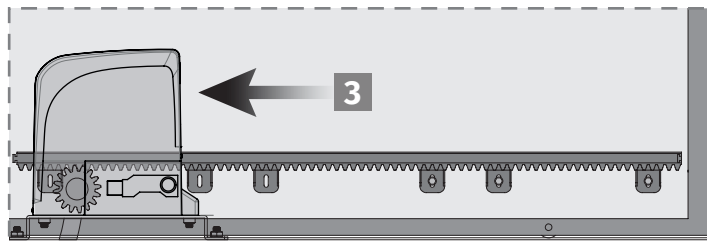
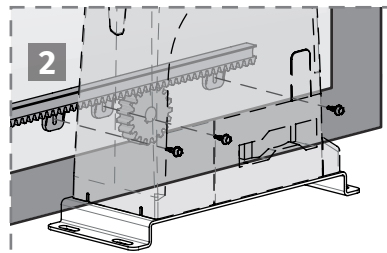
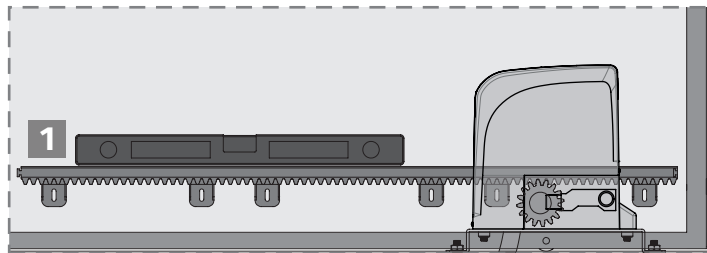
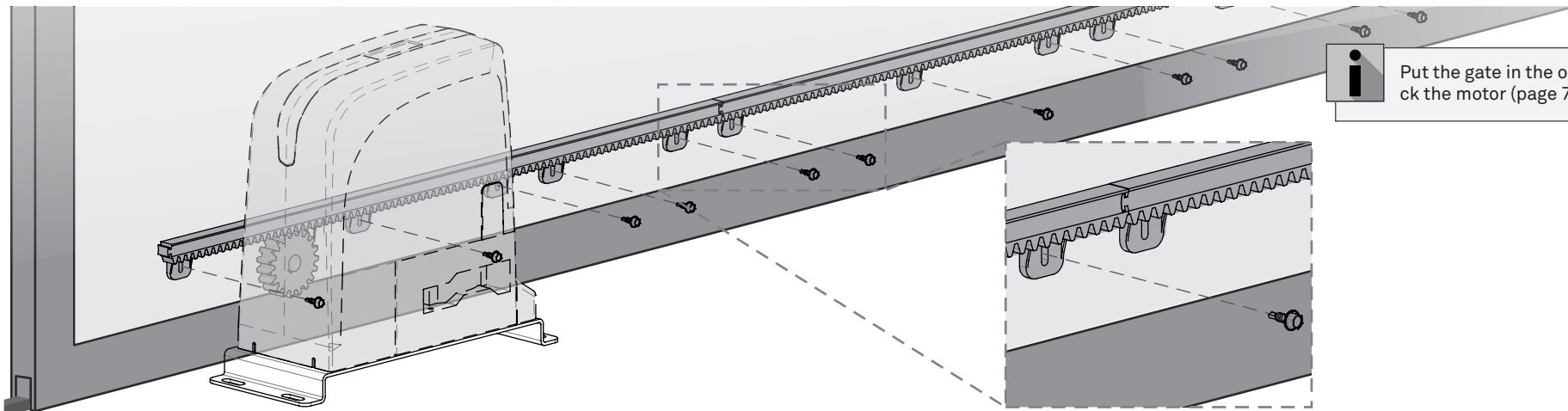
9 Test the gate movement manually with all racks installed and weld the remaining spacers. If there is any friction between the pinion and the rack, adjust the rack on the oval screws.



i During the course of the gate, all elements of the rack must engage correctly with the pinion!
Spacers can not be welded to the rack!
Do not use grease or other lubricant too thick between rack and pinion as this may damage the automation!

03. INSTALLATION

NYLON GEAR RACK INSTALLATION



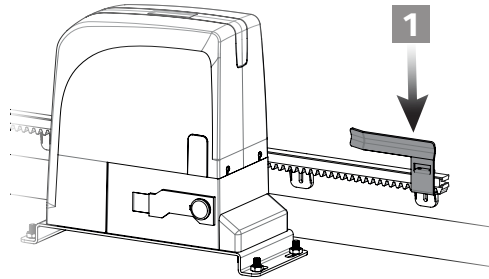
- 1 Position a rack piece on top of the pinion, level it horizontally with a level.
- 2 Begin by fixing the rack on top of the pinion to the gate.
- 3 Close the gate slightly until another end of the rack stands on top of the pinion and tightens.
- 4 Apply another piece of rack, fitting it into the already screwed rack.
- 5 Open the gate until the end of the new piece of rack stands on the pinion and screw it to the gate.
- 6 Open the gate until the pinion is over the other end of the rack. Screw it to the gate.
- 7 Repeat steps from 4 to 6 for each meter of rack you need to install.

i During the course of the gate, all elements of the rack must engage correctly with the pinion!
Do not use grease or other lubricant too thick between rack and pinion as this may damage the automation!

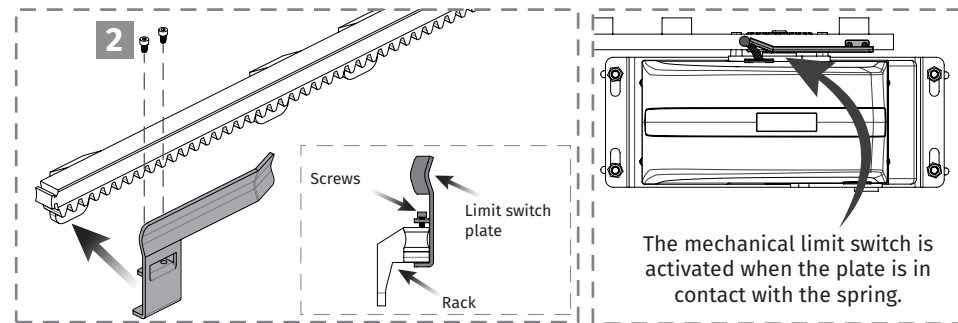
03. INSTALLATION

LIMIT SWITCH

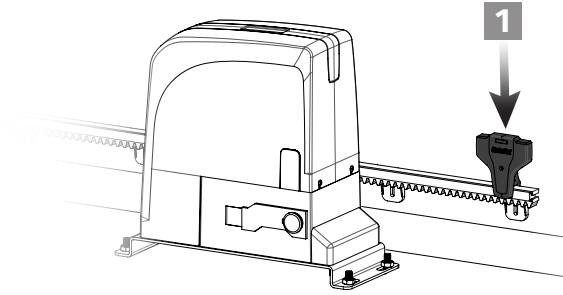
OPTION 1 MECHANICAL LIMIT SWITCH



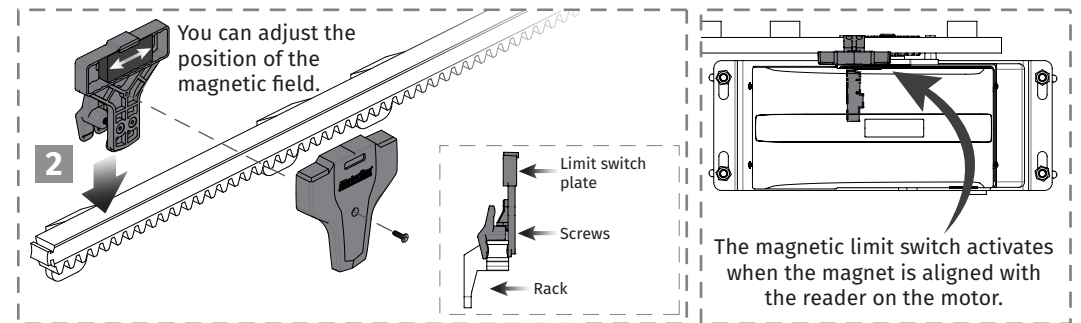
- 1 Position the opening limit switch plate on the rack so that limit switch stops the motor approximately 10 to 20 mm before the gate reaches the opening stopper.
- 2 Fix the limit switch plate / magnet to the rack with the screws provided in the kit.
- 3 Move the gate to the closed position and repeat steps 1 and 2 to fix the closing limit switch plate / magnet.



OPTION 2 MAGNETIC LIMIT SWITCH

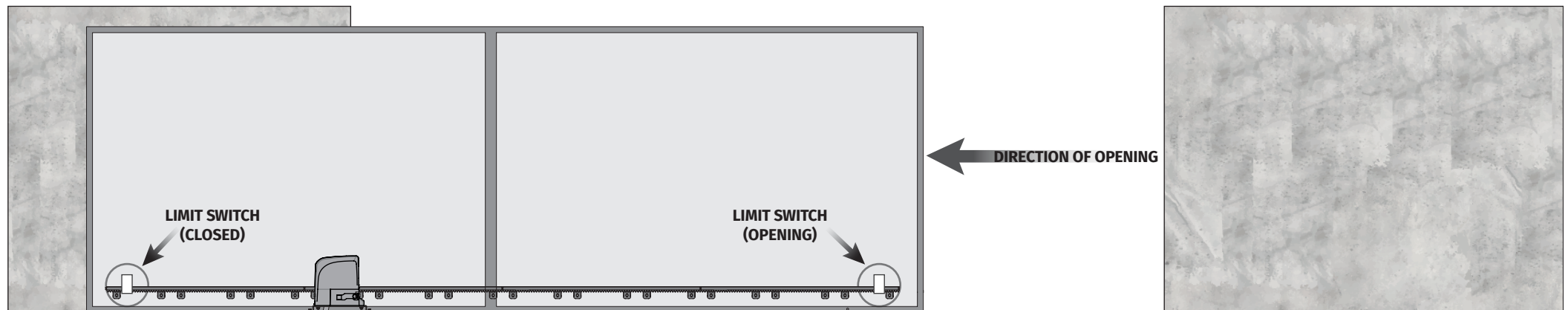


- 1 Position the open limit switch magnet on the rack so that it can trigger the motor stop about 10-20 mm before the gate reaches the opening stopper.
- 2 Fix the limit switch plate / magnet to the rack with the screws provided in the kit.
- 3 Move the gate to the closed position and repeat steps 1 and 2 to fix the closing limit switch plate / magnet.



The limit switch must be set for the gate to stop before touching the closing or opening stoppers.

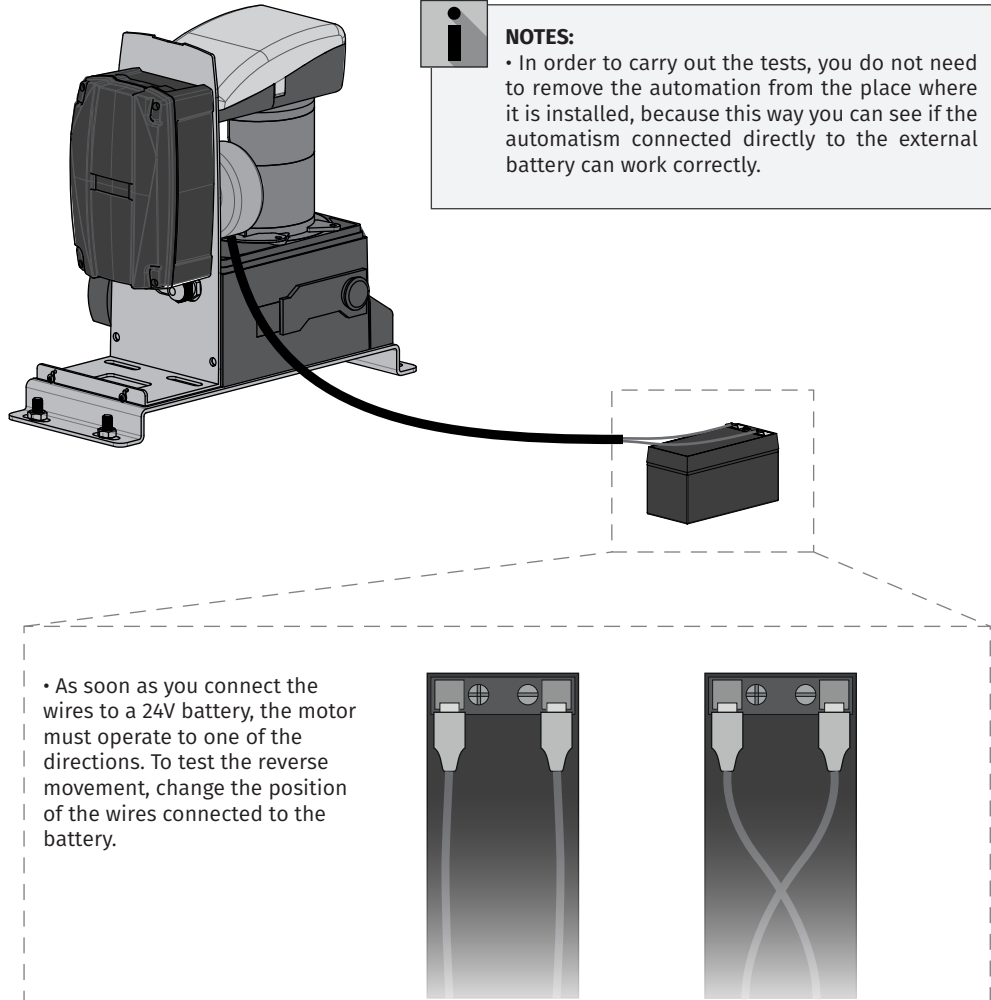
Manually test the activation of the limit switches with the gate unlocked before connecting the motor to the electric current to avoid problems due to poor configuration.



04. COMPONENT TEST

MOTOR TEST

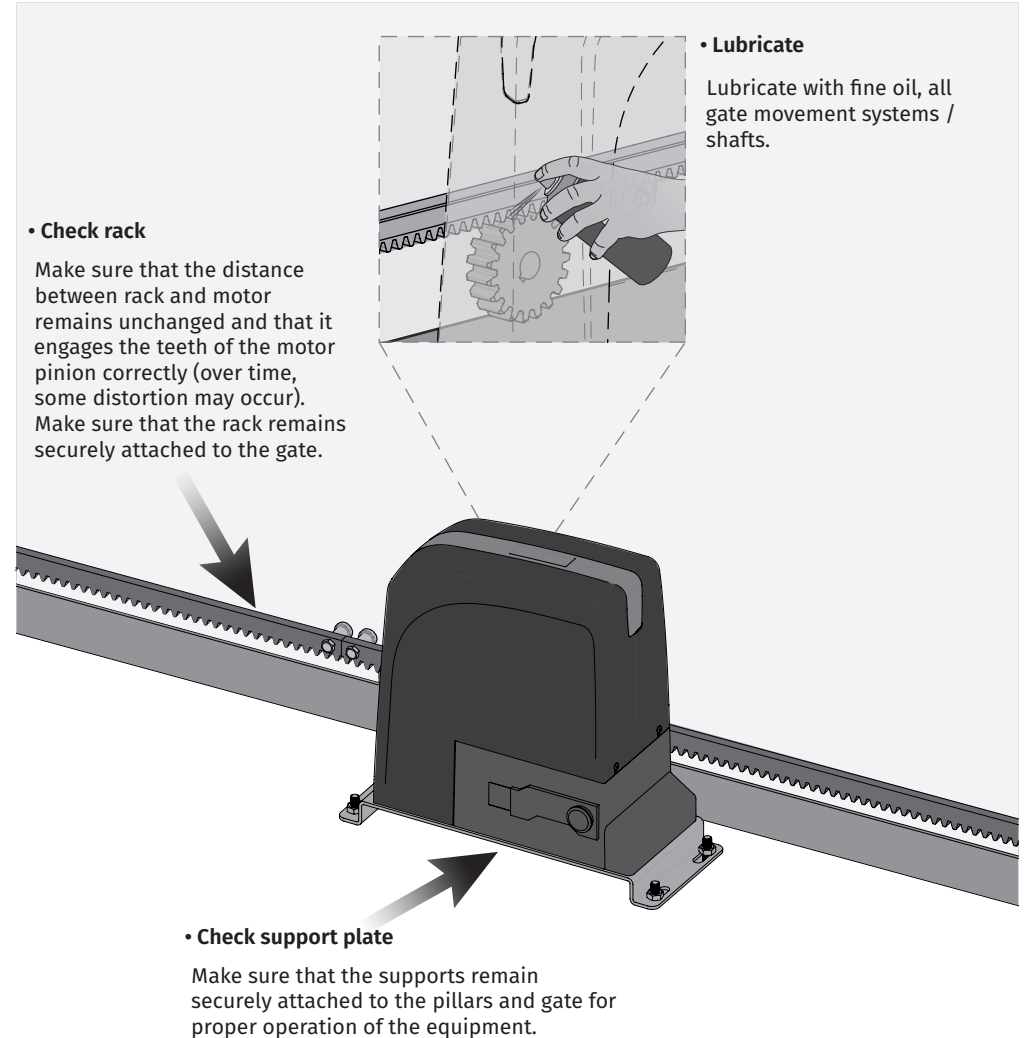
To detect which components are faulty, it is sometimes necessary to perform tests with a direct connection to an external power supply (24 Vdc). The diagram below shows how this connection should be made.



i All tests must be carried out by specialized technicians due to the serious danger related to the misuse of electrical systems!

05. MAINTENANCE

MAINTENANCE



i These maintenance measures must be carried out within 6 months to maintain the correct operation of the automation.