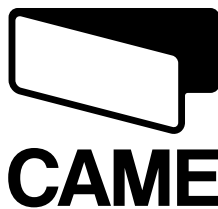


**OPERATORS  
FOR GARAGE DOORS**



**FA00045-EN**



**INSTALLATION MANUAL**

**VER10 - VER12**

**EN** | English



**WARNING!**  
**Important safety instructions for people:**  
**READ CAREFULLY!**



### **PREMISE**

- THIS PRODUCT SHOULD ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS EXPLICITLY DESIGNED. ANY OTHER USE IS DANGEROUS. CAME S.p.A. IS NOT LIABLE FOR ANY DAMAGE CAUSED BY IMPROPER, WRONGFUL AND UNREASONABLE USE
- KEEP THESE WARNINGS TOGETHER WITH THE INSTALLATION AND OPERATION MANUALS THAT COME WITH THE OPERATOR.

### **BEFORE INSTALLING**

*(CHECKING WHAT'S THERE: IF SOMETHING IS MISSING, DO NOT CONTINUE UNTIL YOU HAVE COMPLIED WITH ALL SAFETY PROVISIONS)*

- CHECK THAT THE AUTOMATED PARTS ARE IN PROPER MECHANICAL ORDER, THAT THE OPERATOR IS LEVEL AND ALIGNED, AND THAT IT OPENS AND CLOSES PROPERLY. MAKE SURE YOU HAVE SUITABLE MECHANICAL STOPS
- IF THE OPERATOR IS TO BE INSTALLED AT A HEIGHT OF LESS THAN 2.5 M FROM THE GROUND OR OTHER ACCESS LEVEL, MAKE SURE YOU HAVE ANY NECESSARY PROTECTIONS AND/OR WARNINGS IN PLACE
- BEFORE BEGINNING ANY OPERATION IT IS MANDATORY TO CAREFULLY READ ALL INSTRUCTIONS; IMPROPER INSTALLATION MAY RESULT IN SERIOUS HARM TO PEOPLE AND THINGS.
- IF ANY PEDESTRIAN OPENINGS ARE FITTED INTO THE OPERATOR, THERE MUST ALSO BE A SYSTEM TO BLOCK THEIR OPENING WHILE THEY ARE MOVING
- MAKE SURE THAT THE OPENING AUTOMATED DOOR OR GATE CANNOT ENTRAP PEOPLE AGAINST THE FIXED PARTS OF THE OPERATOR
- DO NOT FIT UPSIDE DOWN OR ONTO ELEMENTS THAT COULD BEND. IF NECESSARY, ADD SUITABLE REINFORCEMENTS TO THE ANCHORING POINTS
- DO NOT INSTALL DOOR OR GATE LEAVES ON TILTED SURFACES
- MAKE SURE ANY SPRINKLER SYSTEMS CANNOT WET THE OPERATOR FROM THE GROUND UP
- MAKE SURE THE TEMPERATURE RANGE SHOWN ON THE PRODUCT LITERATURE IS SUITABLE TO THE CLIMATE WHERE IT WILL BE INSTALLED
- FOLLOW ALL INSTRUCTIONS AS IMPROPER INSTALLATION MAY RESULT IN SERIOUS BODILY INJURY

### **INSTALLING**

- SUITABLY SECTION OFF AND DEMARCATATE THE ENTIRE INSTALLATION SITE TO PREVENT UNAUTHORIZED PERSONS FROM ENTERING THE AREA, ESPECIALLY MINORS AND CHILDREN
- BE CAREFUL WHEN HANDLING OPERATORS THAT WEIGH OVER 20 KG. IF NEED BE, USE PROPER SAFETY HOISTING EQUIPMENT
- ALL OPENING COMMANDS (THAT IS, BUTTONS, BUTTON SWITCHES, MAGNETIC READERS, AND SO ON) MUST BE INSTALLED AT LEAST 1.85 M FROM THE PERIMETER OF THE GATE'S WORKING AREA, OR WHERE THEY CANNOT BE REACHED FROM OUTSIDE THE GATE. ALSO, ANY DIRECT COMMANDS (WHETHER BUTTONS, TOUCH PANELS, AND SO ON) MUST BE INSTALLED AT LEAST 1.5 M FROM THE GROUND AND MUST NOT BE REACHABLE BY UNAUTHORIZED PERSONS
- ALL MAINTAINED ACTION COMMANDS, MUST BE FITTED IN PLACES FROM WHICH THE MOVING GATE LEAVES AND TRANSIT AND DRIVING AREAS ARE VISIBLE
- APPLY, IF MISSING, A PERMANENT SIGN SHOWING THE POSITION OF THE RELEASE DEVICE
- BEFORE DELIVERING TO THE USERS, MAKE SURE THE SYSTEM IS EN 12453 STANDARD COMPLIANT (REGARDING IMPACT FORCES), AND ALSO MAKE SURE THE SYSTEM HAS BEEN PROPERLY ADJUSTED, AND, THAT ANY SAFETY, PROTECTION AND MANUAL RELEASE DEVICES ARE WORKING PROPERLY
- APPLY WARNING SIGNS WHERE NECESSARY AND IN A VISIBLE PLACE, (SUCH AS, THE GATE'S PLATE
- ONCE INSTALLED, MAKE SURE THAT THE MOTOR EITHER PREVENTS OR BLOCKS THE OPENING MOVEMENT WHEN THE DOOR IS LOADED WITH A 20-KG MASS, FITTED TO THE CENTER OF THE DOOR'S LOWER EDGE
- ONCE INSTALLED, MAKE SURE THAT PARTS OF THE DOOR DO NOT JUT INTO PUBLIC STREETS OR SIDEWALKS.

### **SPECIAL USER-INSTRUCTIONS AND RECOMMENDATIONS**

- KEEP GARAGE-DOOR OPERATION AREAS CLEAN AND FREE OF ANY OBSTRUCTIONS. MAKE SURE THAT THE PHOTOCELLS ARE FREE OF ANY OVERGROWN VEGETATION AND THAT THE OPERATOR'S AREA OF OPERATION IS FREE OF ANY OBSTRUCTIONS
- DO NOT ALLOW CHILDREN TO PLAY WITH FIXED CONTROLS, OR TO LOITER IN THE GATE'S MANEUVERING AREA. KEEP ANY REMOTE CONTROL TRANSMITTERS OR ANY OTHER

COMMAND DEVICE AWAY FROM CHILDREN, TO PREVENT THE OPERATOR FROM BEING ACCIDENTALLY ACTIVATED.

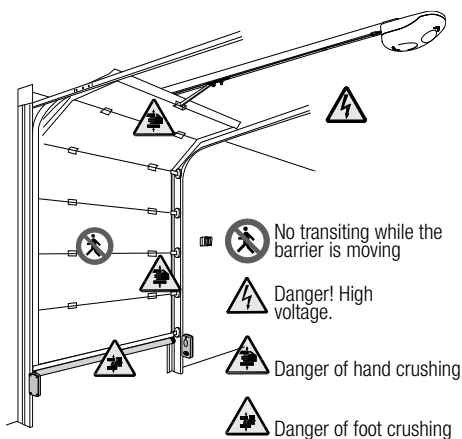
- THIS APPARATUS IS NOT FOR PEOPLE (INCLUDING CHILDREN) WITH PHYSICAL, MENTAL AND SENSORY ISSUES, OR EVEN ONES WITHOUT ANY EXPERIENCE, UNLESS THEY ARE UNDER CLOSE SUPERVISION OR ONCE THEY HAVE BEEN PROPERLY INSTRUCTED TO USE THE APPARATUS SAFELY AND TO THE POTENTIAL HAZARDS INVOLVED.
- FREQUENTLY CHECK THE SYSTEM FOR ANY MALFUNCTIONS OR SIGNS OF WEAR AND TEAR OR DAMAGE TO THE MOVING STRUCTURES, TO THE COMPONENT PARTS, ALL ANCHORING POINTS, INCLUDING CABLES AND ANY ACCESSIBLE CONNECTIONS. KEEP ANY HINGES, MOVING JOINTS AND SLIDE RAILS PROPERLY LUBRICATED
- PERFORM FUNCTIONAL CHECKS ON THE PHOTOCELLS AND SENSITIVE SAFETY EDGES, EVERY SIX MONTHS. TO CHECK WHETHER THE PHOTOCELLS ARE WORKING, WAVE AN OBJECT IN FRONT OF THEM WHILE THE GATE IS CLOSING; IF THE OPERATOR INVERTS ITS DIRECTION OF TRAVEL OR SUDDENLY STOPS, THE PHOTOCELLS ARE WORKING PROPERLY. THIS IS THE ONLY MAINTENANCE OPERATION TO DO WITH THE POWER ON. CONSTANTLY CLEAN THE PHOTOCELLS' GLASS COVERS USING A SLIGHTLY WATER-MOISTENED CLOTH; DO NOT USE SOLVENTS OR OTHER CHEMICAL PRODUCTS THAT MAY RUIN THE DEVICES
- IF REPAIRS OR MODIFICATIONS ARE REQUIRED TO THE SYSTEM, RELEASE THE OPERATOR AND DO NOT USE IT UNTIL SAFETY CONDITIONS HAVE BEEN RESTORED
- CUT OFF THE POWER-SUPPLY BEFORE RELEASING THE OPERATOR FOR MANUAL OPENINGS AND BEFORE ANY OTHER OPERATION, TO PREVENT ANY RESULTING HAZARDS. SEE INSTRUCTIONS
- IF THE POWER SUPPLY CABLE IS DAMAGED, IT MUST BE REPLACED BY THE MANUFACTURER OR AUTHORIZED TECHNICAL ASSISTANCE SERVICE, OR IN ANY CASE, BY SIMILARLY QUALIFIED PERSONS, TO PREVENT ANY RISK
- IT IS FORBIDDEN FOR USERS TO PERFORM ANY OPERATIONS THAT ARE NOT EXPRESSLY REQUIRED OF THEM AND WHICH ARE NOT LISTED IN THE MANUALS. FOR ANY REPAIRS, MODIFICATIONS / ADJUSTMENTS, AND FOR EXTRA-ORDINARY MAINTENANCE, CALL TECHNICAL ASSISTANCE
- LOG THE JOB AND CHECKS INTO THE PERIODIC MAINTENANCE LOG.

#### FURTHER RECOMMENDATIONS FOR ALL




- KEEP CLEAR OF HINGES AND MECHANICAL MOVING

PARTS

- DO NOT ENTER THE OPERATOR'S AREA OF OPERATION WHEN IT IS MOVING
- DO NOT COUNTER THE OPERATOR'S MOVEMENT AS THIS COULD RESULT IN DANGEROUS SITUATIONS
- ALWAYS PAY SPECIAL ATTENTION TO ANY DANGEROUS POINTS, WHICH HAVE TO BE LABELED WITH SPECIFIC PICTOGRAMS AND/OR BLACK AND YELLOW STRIPES
- WHILE USING A SELECTOR SWITCH OR A COMMAND IN MAINTAINED ACTIONS, KEEP CHECKING THAT THERE ARE NO PERSONS WITHIN THE OPERATING RANGE OF ANY MOVING PARTS, UNTIL THE COMMAND IS RELEASED
- THE OPERATOR MAY MOVE THE DOOR AT ANY TIME AND WITHOUT WARNING
- ALWAYS CUT OFF THE MAINS POWER SUPPLY BEFORE PERFORMING ANY MAINTENANCE OR CLEANING.
- OBSERVE THE MOVING DOORS AND KEEP PEOPLE AWAY UNTIL THE DOOR IS FULLY OPENED OR CLOSED.



## LEGEND

-  This symbol shows which parts to read carefully.
-  This symbol shows which parts describe safety issues
-  This symbol shows which parts to tell users about.

**UNLESS OTHERWISE STATED, THESE OPERATIONS APPLY TO ALL MODELS.**


**THE MEASUREMENTS, UNLESS OTHERWISE STATED, ARE IN MILLIMETERS.**

## DESCRIPTION

Operator, complete with control board with encoder, for sectional and overhead garage-doors.

### Intended use

The VER10 - VER12 are designed to power overhead garage doors in residential and apartment block settings.

 Any installation and/or use other than that specified in this manual is forbidden.

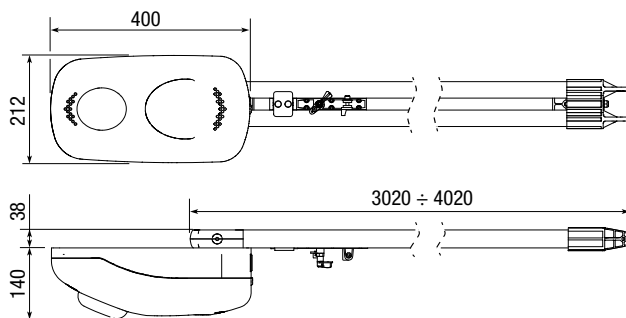
### Limits to use

Type	VER10	VER12
Door's max. surface area (m <sup>2</sup> )	18	21
Counter-weighted overhead door's max. weight (m)	2.40	2.40
Maximum height of spring-balanced overhead doors (m)	3.25	3.25
Maximum height of door (m)	3.20	3.20

### Technical data

Type	VER10	VER12
Protection rating (IP)	30	30
Power supply (V - 50/60 Hz)	230 AC	230 AC
Power supply motor (V)	24 DC	24 DC
Stand-by consumption (W)	5	7.5
Maximum power of the accessories (W)	40	40
Nominal power (W)	130	260
Maneuvering speed (m/min)	6	6
Duty cycle (%)	50	50
Traction force (N)	1,000	1,200
Operating temperature (°C)	-20 ÷ +55	-20 ÷ +55
Apparatus class	I	I
Weight (Kg)	5.7	5.8

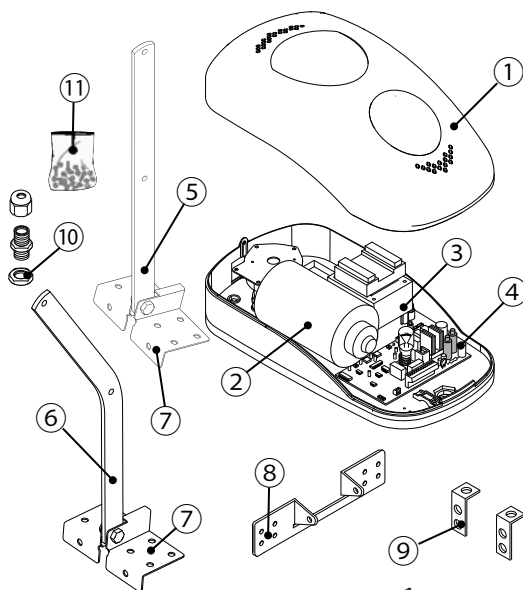
## Dimensions



## Description of parts

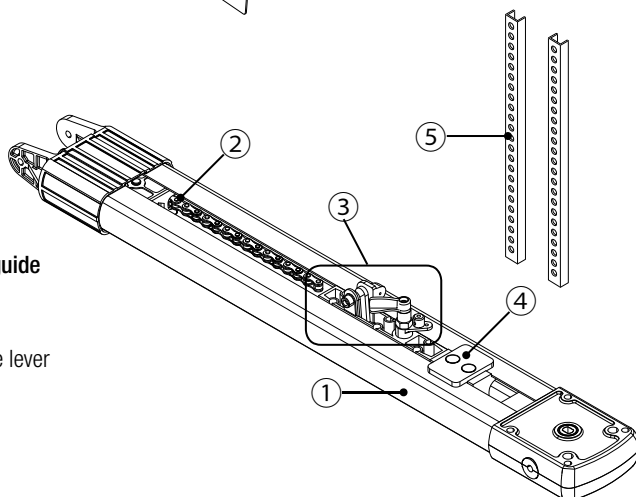
1. Cover
2. Gearmotor
3. Transformer
4. Control board
5. Transmission arm for the VER10\*
6. Transmission arm for the VER12\*
7. Door fastening brace
8. Guide fastening brace
9. Ceiling fastening brace
10. Cable gland
11. Fastening screws

☞ (\*) Only for sectional doors.



## Description of the traction guide

1. Guide
2. Chain or belt
3. Traction assembly with release lever
4. Mechanical stop
5. Support rods



## Traction guides

001V0679	Chain guide L = 3.02 m. Counter-balanced overhead doors up to 2.4 m in height - Counter-balanced overhead doors up to 2.25 m in height - Sectional doors* up to 2.20 m in height.
001V0682	Chain guide T = 3.52 m. - Counter-balanced overhead doors up to 2.75 m in height. - Sectional* doors up to 2.70 m in height.
001V0683	Chain guide L = 4.02 M OF ONE PIECE. - Spring-balanced overhead doors up to 3.25 m in height. - Sectional* doors up to 3.20 m in height.
001V0684	Chain guide L = 3.02 M IN TWO PIECES. Counter-balanced overhead doors up to 2.4 m in height - Counter-balanced overhead doors up to 2.25 m in height - Sectional doors* up to 2.20 m in height.
001V0685	Belt guide T = 3.02 m. Counter-balanced overhead doors up to 2.4 m in height - Counter-balanced overhead doors up to 2.25 m in height - Sectional* doors up to 2.20 m in height.
001V0686	Belt guide T = 3.52 m. - Counter-balanced overhead doors up to 2.75 m in height. - Sectional* doors up to 2.70 m in height.
001V0687	Chain guide L = 3.02 in two pieces. Counter-balanced overhead doors up to 2.4 m in height - Counter-balanced overhead doors up to 2.25 m in height - Sectional doors* up to 2.20 m in height.
001V0688	Belt guide T = 4.02 m. - Spring-balanced overhead doors up to 3.25 m in height - Sectional* doors up to 3.20 m in height.

☞ (\*) For sectional doors, see the paragraph on APPLICATION EXAMPLES

## Accessories

001V005	Extension for the following types of chain guides: V0679, V0682, V0683, V0684.
001V201	Transmission arm for partially retracting overhead garage-doors.
001V122	Transmission arm for sectional doors having a top-rail to spring-pole assembly distance comprised between 300 and 600 mm.
001V121	Pull-cord auto-resetting release device to fit onto the door handle.
001V670	Card for operation during power outages and for recharging the batteries. To 12 V - 1.2 Ah batteries (not supplied).

## GENERAL INSTRUCTIONS FOR INSTALLING

- △ Only skilled, qualified staff must install this product.
- △ If the door is fitted with a pedestrian door, you must also fit a safety switch at the entrance, to stop the operator from working when the pedestrian door is open.

## Preliminary checks

⚠ Before beginning, do the following:

- make sure you have set up a suitable dual pole cut off device along the power supply that is compliant with the installation rules. It should completely cut off the power supply according to category III surcharge conditions (that is, with minimum contact openings of 3 mm);
- setup suitable tubes and conduits for the electric cables to pass through, making sure they are protected from any mechanical damage;
- ⚡ make sure that any connections inside the container (ones that ensure continuity to the protection circuit) are fitted with additional insulation with respect to those of other electrical parts inside;
- make sure that the door is properly balanced; when stopped at any in-between point, it should hold its position.

## Cable types and minimum thicknesses

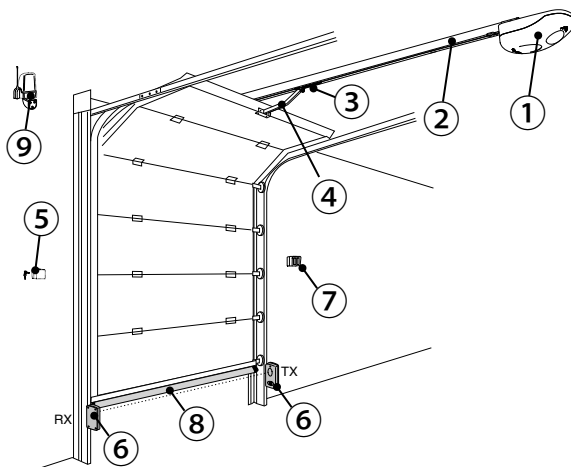
Connection	Cable type	Cable length 1 < 15 m	Cable length 15 < 30 m
Control panel power supply 230 V AC	H05VV-F	3G x 1.5 mm <sup>2</sup>	3G x 2.5 mm <sup>2</sup>
Flashing light	FROR CEI 20-22 CEI EN 50267-2-1	2 x 0.5 mm <sup>2</sup>	
Photocell transmitters		2 x 0.5 mm <sup>2</sup>	
Photocell receivers		4 x 0.5 mm <sup>2</sup>	
Command and safety device		2 x 0.5 mm <sup>2</sup>	
Antenna	RG58	max 10 m	

📖 If cable lengths differ from those specified in the table, establish the cable sections depending on the actual power draw of the connected devices and according to the provisions of regulation CEI EN 60204-1.

For multiple, sequential loads along the same line, the dimensions on the table need to be recalculated according to the actual power draw and distances. For connecting products that are not contemplated in this manual, see the literature accompanying said products.

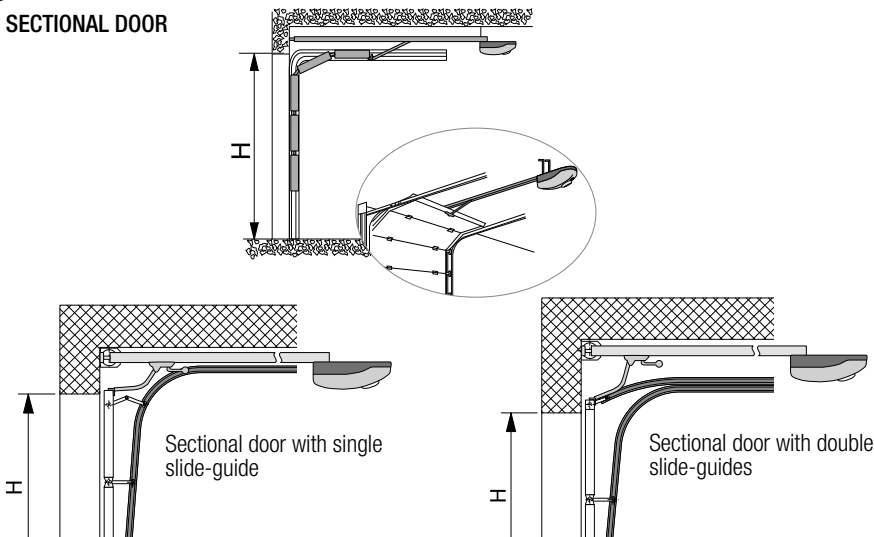
## Standard installation

1. Operator
2. Traction guide
3. Release device
4. Transmission arm
5. Key-switch selector
6. Photocells
7. Control device
8. Sensitive safety-edge
9. Flashing light

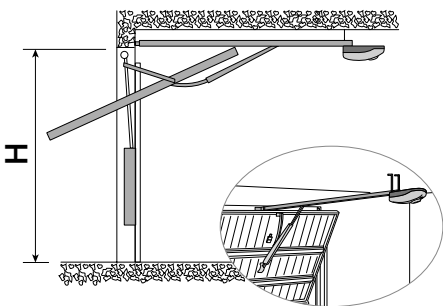


## Applicative examples

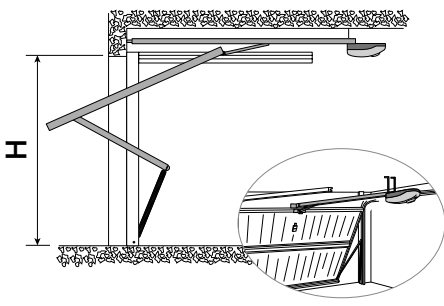
### SECTIONAL DOOR



### COUNTERBALANCED OVERHEAD DOOR, PARTIALLY RETRACTING AND PROTRUDING



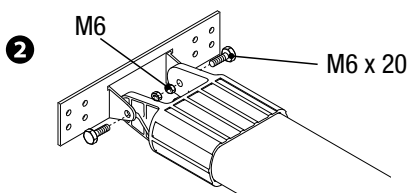
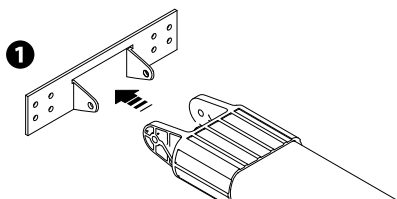
### SPRING-BALANCED OVERHEAD DOOR, FULLY RETRACTING AND PROTRUDING



## INSTALLATION

△ The following illustrations are just examples, in that the space available for fitting the operator and accessories varies depending on the overall dimensions. It is up to the installer to find the most suitable solution.

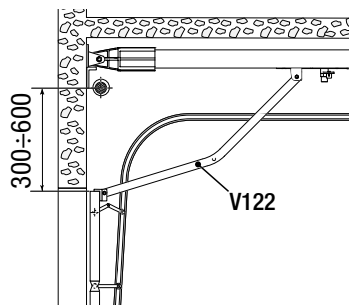
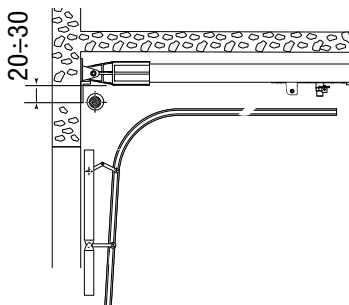
### Assembling the traction guide



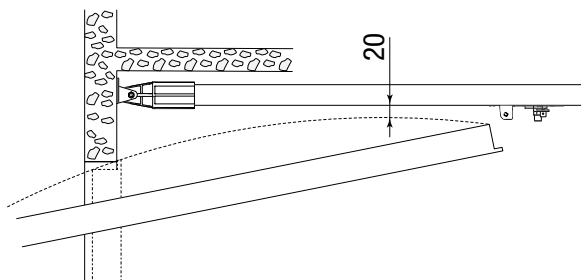


## Positioning the traction guide

Sectional doors: above the spring-pole brace assembly. If the distance between the spring-pole and the upper part of the door is between 300 and 600 mm, use the V122 transmission arm.



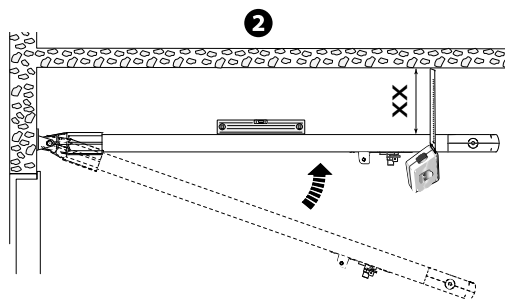
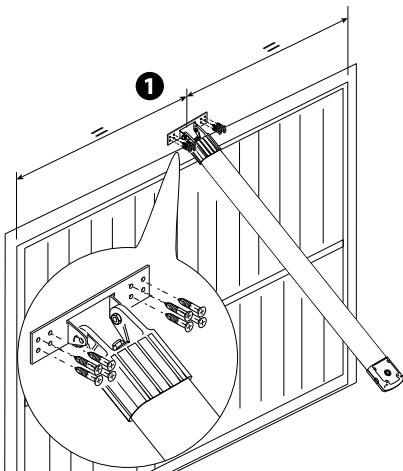
For protruding overhead garage-doors, keep the guide at 20 mm from the highest opening point.



For partially-retracting protruding overhead garage doors, use the V201 transmission arms.

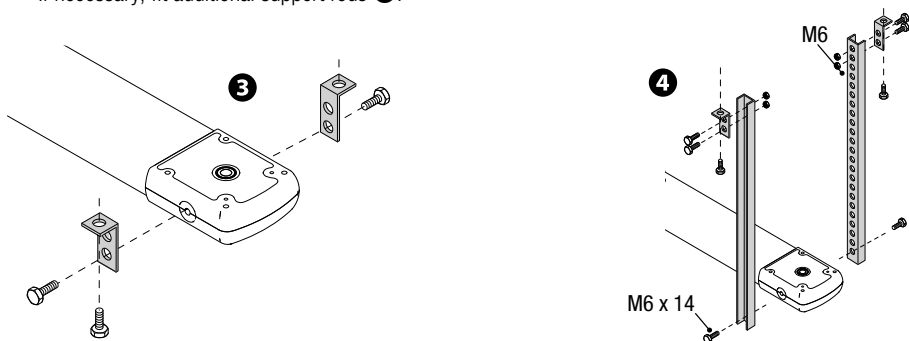
## Fastening the traction guide

The traction guide should be fastened at the center of the door opening, using suitable screws. ❶. Raise the guide and position it horizontally to measure the distance from the ceiling, and then fasten it. ❷.

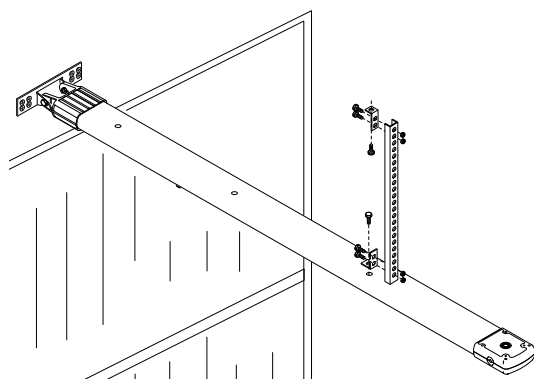


Fit the braces to the guide and to the ceiling **3**.

△ If necessary, fit additional support rods **4**.

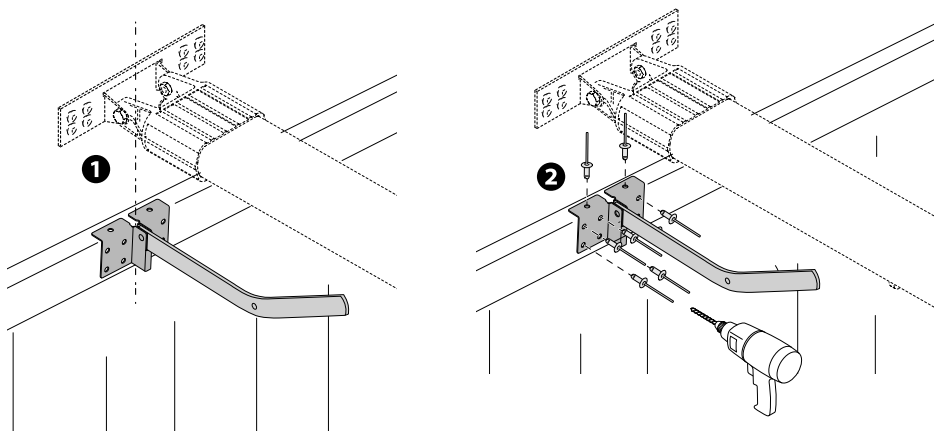


Drill the ceiling where the braces will go and fit them to the ceiling using suitable dowels and screws.



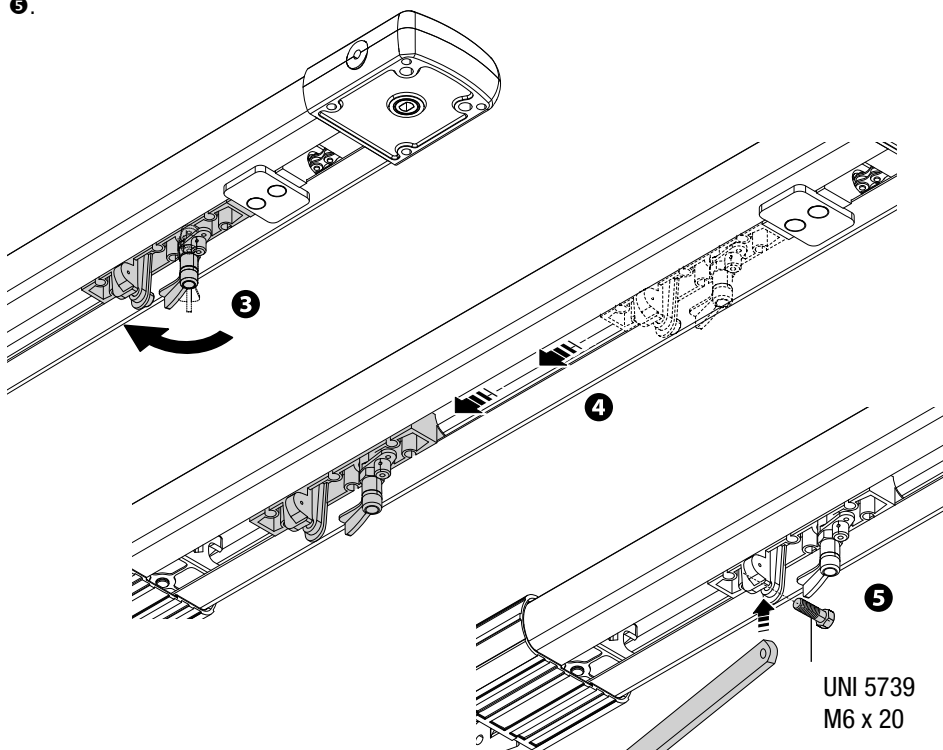
### **Fitting the transmission arm to the door**

Position the transmission arm brace to the door's top rail, perpendicularly to the traction guide **1** and fasten it using the supplied screws or other suitable screws **2**.



Turn the release lever clock-wise ③.

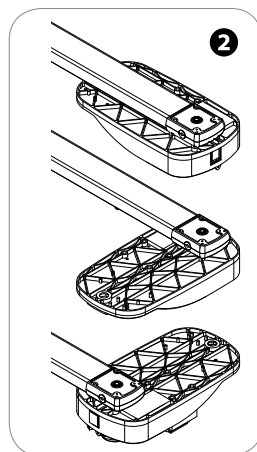
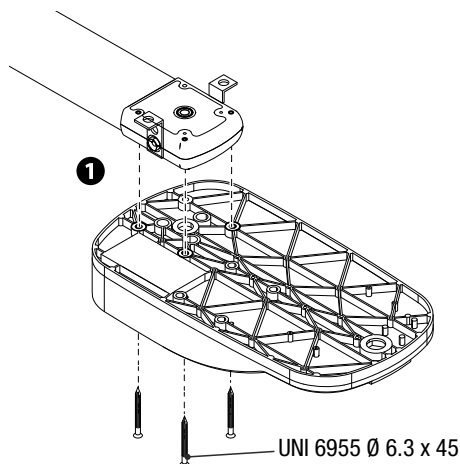
Move the traction assembly towards the door ④ and fasten the transmission arm using the supplied bolt ⑤.



### Fitting the operator to the guide

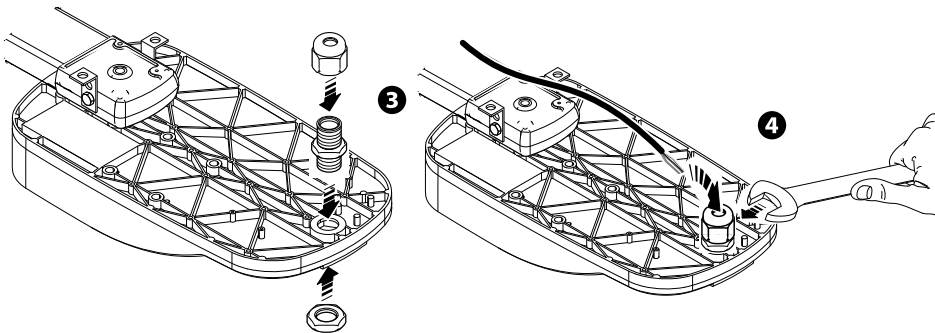
Fasten the operator to the traction guide using the supplied screws ①.

The operator can also be fitted laterally ②.



Fit the cable gland into the corresponding hole ❸ and fit the electrical cables ❹.

📖 The number of cables depends on the type of system and accessories fitted.



ELECTRICAL CONNECTIONS

FUSE TABLE

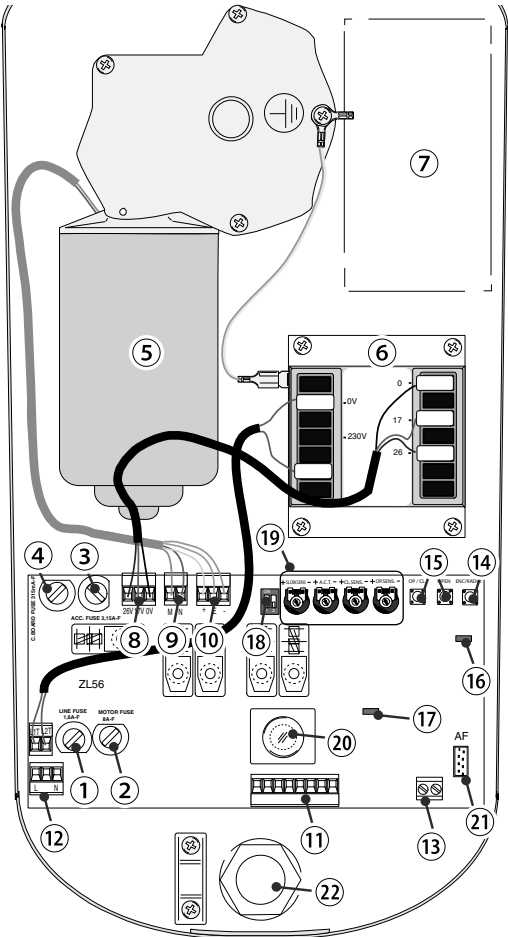
Motor (A)	8
Accessories (A)	3.15
Control device (mA)	315
Line fuses (A)	1.6

LIGHTS

LED courtesy lights 24 V E14S (W)	1
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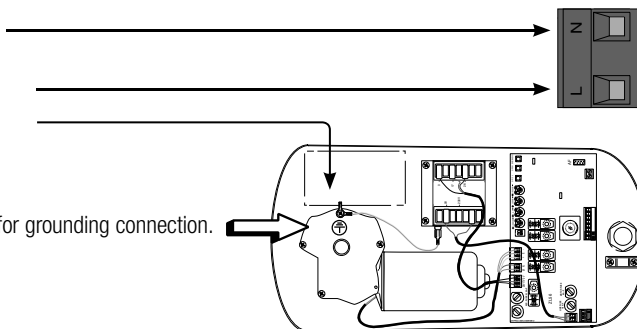
Components

- 1. Line fuse
- 2. Motor fuse
- 3. Accessories fuse
- 4. Control
- 5. panel/ Gearmotor board fuse
- 6. Transformer
- 7. Battery housing
- 8. Transformer connection terminals
- 9. Gearmotor connection terminals
- 10. Encoder connection terminals
- 11. Accessories connection terminals and control devices
- 12. Power supply terminal board
- 13. Antenna connection terminals
- 14. Memorization button
- 15. Limit-switch adjustment buttons
- 16. Programming LED
- 17. POWER-ON alerting LED
- 18. DIP-switch
- 19. Trimmer
- 20. Courtesy light
- 21. AF card connector
- 22. Hole for cables



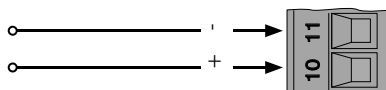
## Power supply

230 V AC  
50/60 Hz



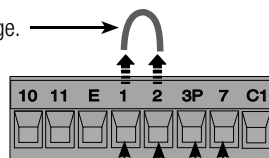
Terminals for powering up accessories:

- 24 V AC - grid powered (230 V);
  - 24 V DC when the emergency batteries are operating;
- Overall allowed power: 40 W

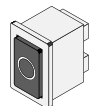


## Command and control devices

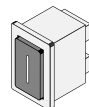
If a device is connected, remove the bridge.



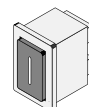
Stop button (NC contact). Enables the door to stop and excludes the automatic closing. To resume movement, use the control device.



PARTIAL OPENING feature from command device (NO contact).

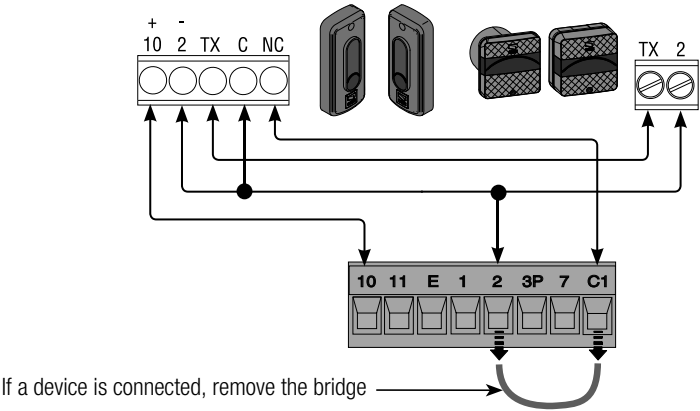


OPEN-STOP-CLOSE-STOP sequential function from control device (NO contact).



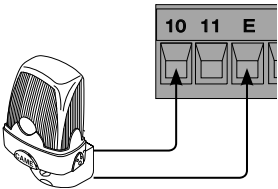
Safety devices

Reopening while closing function (NC contact). When the door is opening, opening the contact causes the door to invert its movement until it is completely open.



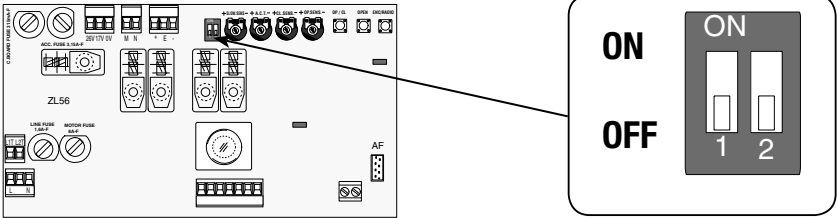
Signaling devices

Flashing light connecting (contact rated for: 24 V AC - 25 W max). It flashes during the door's opening and closing phases.



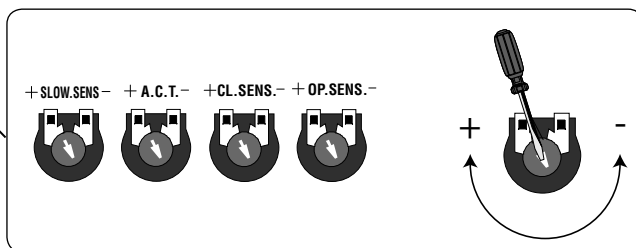
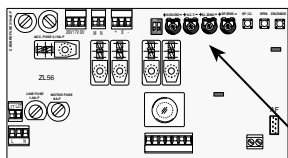
PROGRAMMING

Selecting DIP switches



DIP-SWITCH	Description of functions
1 ON	It activates the opening and closing limit-switch setting procedure and the delayed-opening setting procedure. (1 OFF - deactivated)
2 ON	Activate the procedure for partial opening and closing slow-down programming. (2 OFF - deactivated)

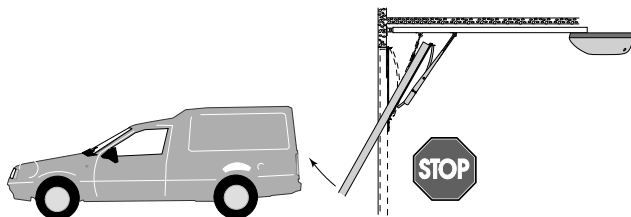
## Adjusting the trimmers



Trimmer	Description of functions
<b>SLOW.SENS</b>	<p><b>Sensitivity during slow-downs</b></p> <p>Adjusts the amperometric sensitivity that controls the force exerted by the motor during slow-downs; if the exerted force is greater than the setting, the system inverts the direction of travel.</p>
<b>A.C.T.</b>	<p><b>Automatic Closing Time</b></p> <p>Sets the open door's waiting time. Once this time elapses, a closing maneuver is automatically performed.</p> <p>The time can be set between 0 and 120 seconds.</p> <p> Sets the time to a minimum, and excludes AUTOMATIC CLOSING.</p>
<b>CL.SENS.</b>	<p><b>Sensitivity during closing</b></p> <p>Adjusts the amperometric sensitivity that controls the force exerted by the motor during closing; if the exerted force is greater than the setting, the system inverts the direction of travel.</p>
<b>OP.SENS.</b>	<p><b>Sensitivity during opening</b></p> <p>Adjusts the amperometric sensitivity that controls the force exerted by the motor during opening; if the exerted force is greater than the setting, the system inverts the direction of travel.</p>

## Encoder operation

Obstruction detection when OPENING  
The door recloses.

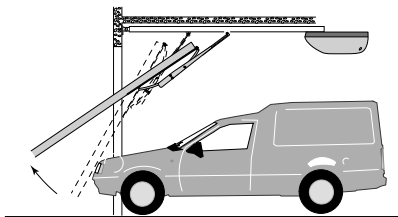
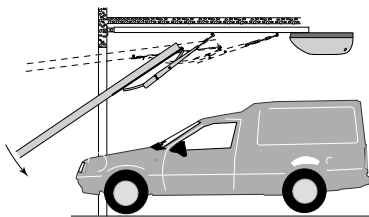


Obstruction detection when CLOSING

The door inverts its travel direction and reopens.

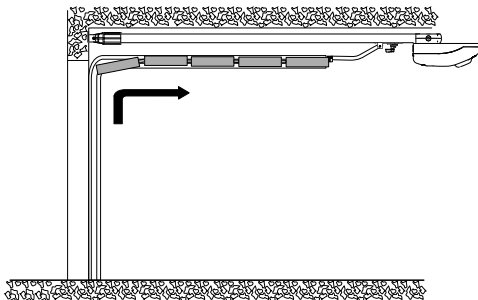
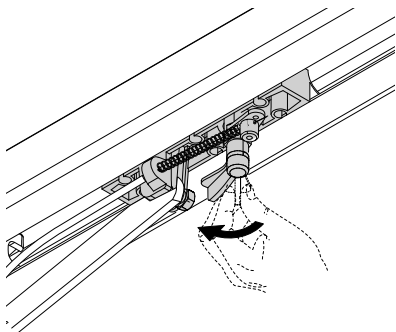
After three consecutive inversions, the door stays open and excludes the automatic opening.

To reclose the door, press a control button or use the transmitter.



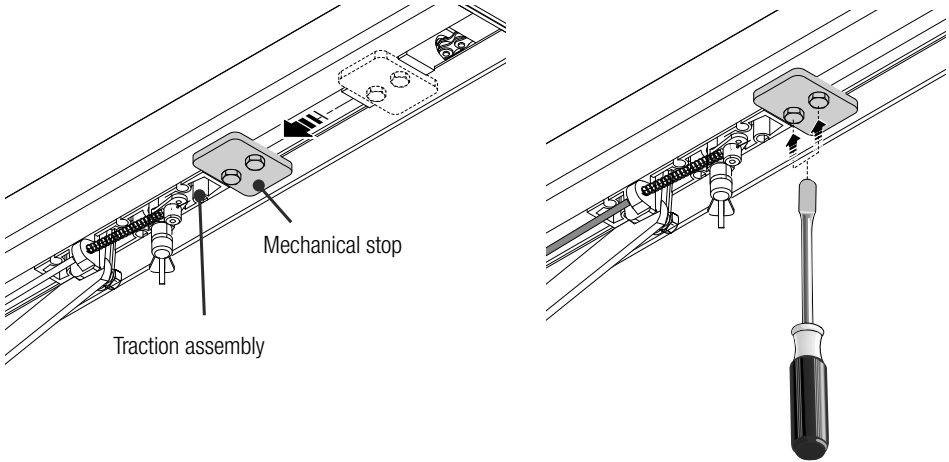
## Fastening the opening mechanical stop

Release the operator and completely open the door.

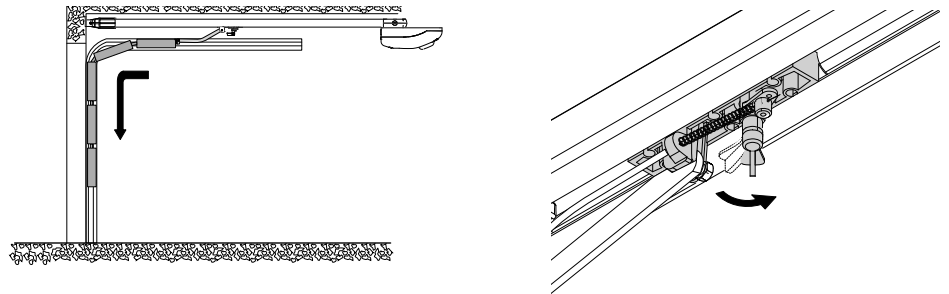




Position the mechanical stop against the traction assembly and fasten it.

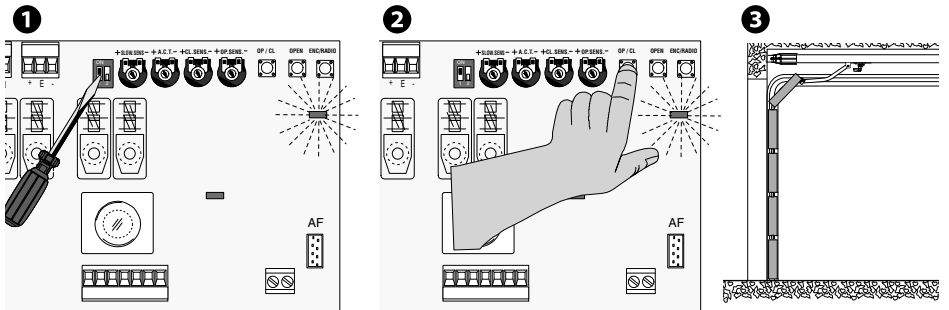


Manually close the door until it latches shut.

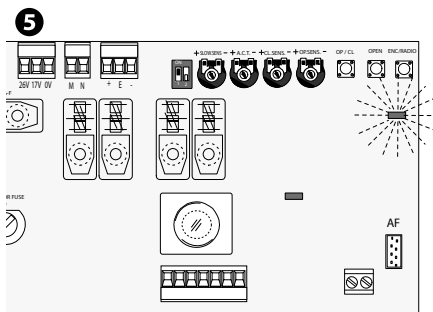
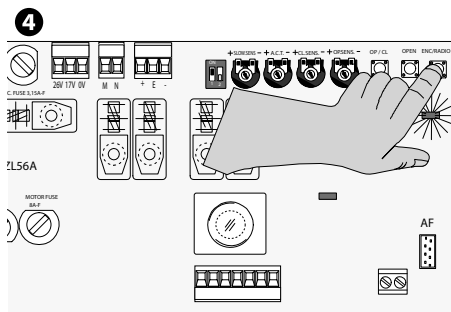


### Establishing the closing and opening limit switch points

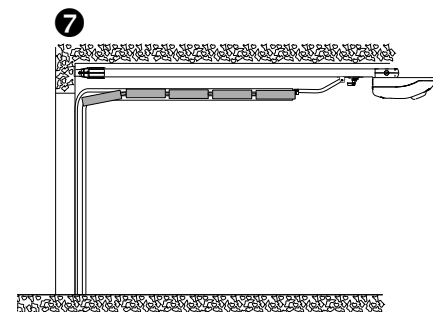
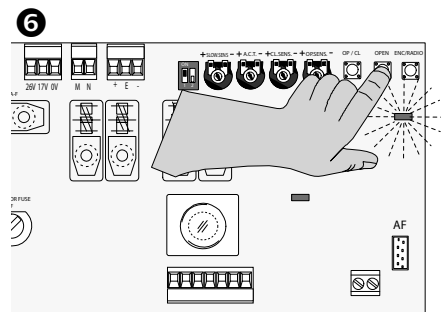
Set DIP-switch 1 to ON, the programming LED will flash ❶.  
Press the OP/CL button until the door reaches the closing strike plate ❷❸.



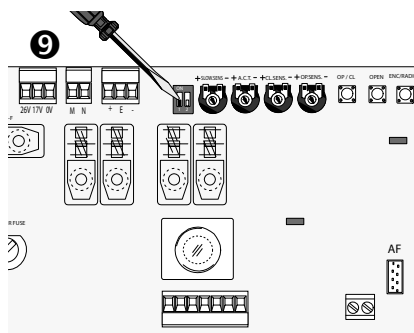
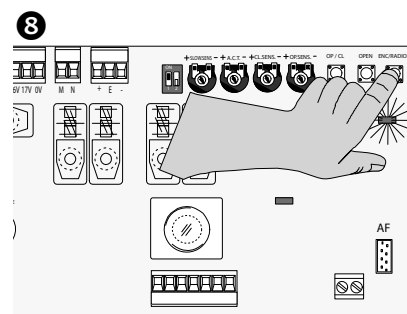
Press the ENC/RADIO button **4** to memorize the closing point.



Press the OPEN button until the door reaches its completely-open point **6** **7**.



Press the ENC/RADIO button to memorize the opening point **8**.  
Reset DIP-switch 1 to OFF **9**.

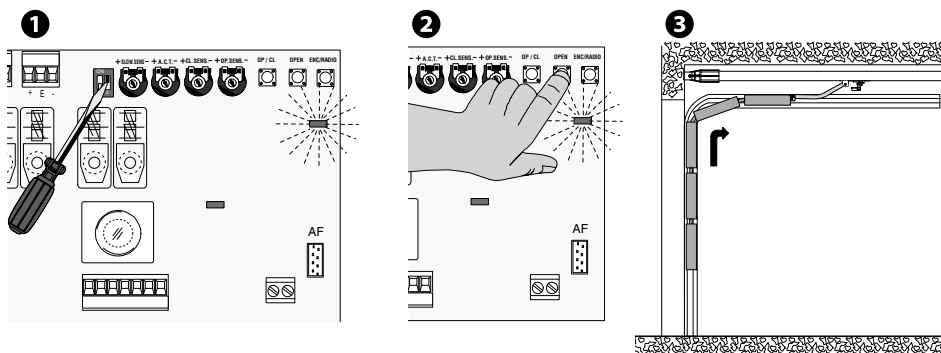


Use the OP/CL button to command an opening and a closing to check that the programming was properly done.

## Programming the partial opening

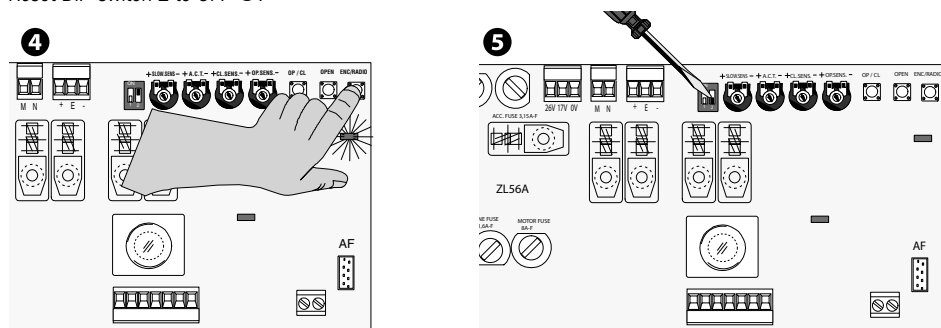
When the door is fully closed, set DIP-switch 2 to ON, the LED will flash **1**.

Press the OPEN button until the door reaches the wanted opening position **2 3**.



Press ENC/RADIO to memorize the partial opening **4**.

Reset DIP-switch 2 to OFF **5**.



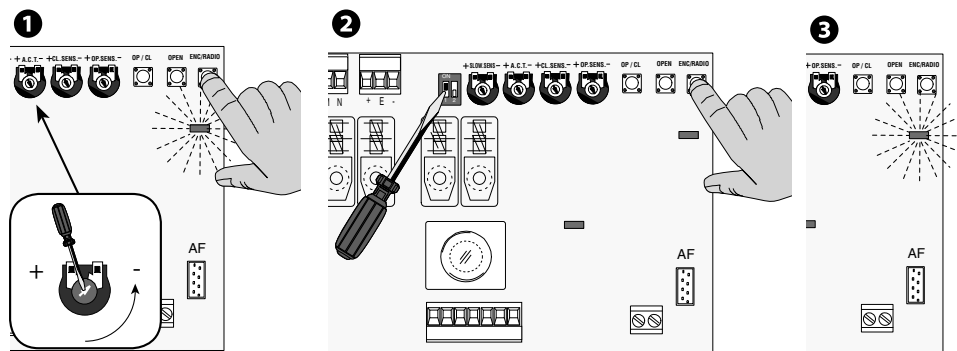
## Programming the slow start with door open (max. 50% of the door travel)

Before programming, deactivate the automatic closing by setting the trimmer to **A.C.T.** a minimum.

When the door is fully open, press the ENC/RADIO button, the LED will flash rapidly **1**.

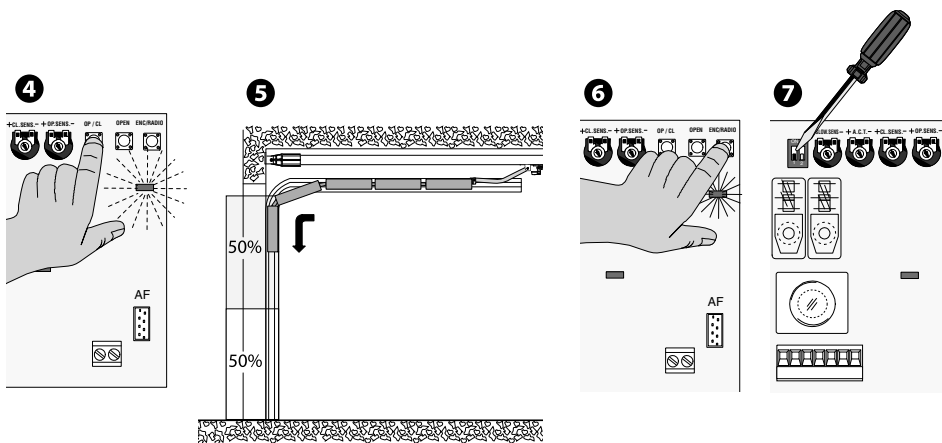
Set DIP-switch 1 to ON, the LED turns off **2**.

Release the ENC/RADIO button, the LED flashes slowly **3**.



Press the OP/CL button until the door reaches the desired end slow-down point **4** **5** - Press the ENC/RADIO button until the LED stays on to signal that memorization is now complete **6**.

Reset DIP-switch 1 to OFF **7**.

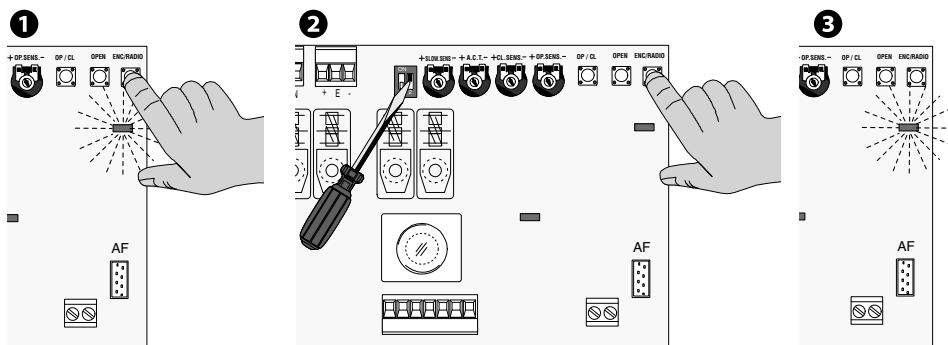


### Programming the closing slow-down (min. 600 mm from the final closing strike or max. 50% of the door travel)

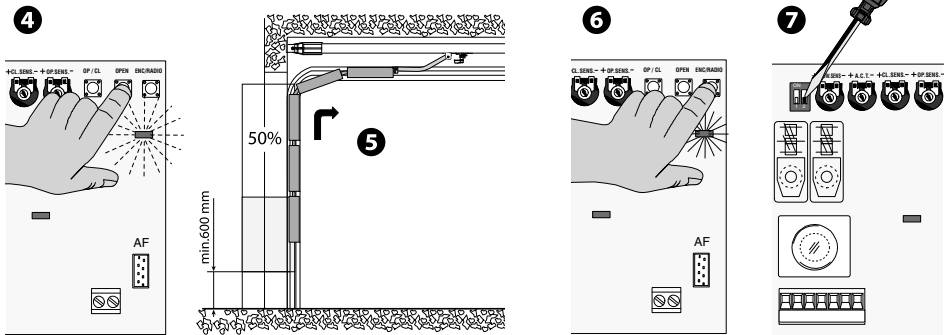
When the door is fully closed, press the ENC/RADIO button, the LED will flash rapidly **1**.

Set DIP-switch 2 to ON, the LED turns off **2**.

Release the ENC/RADIO button, the LED flashes slowly **3**.

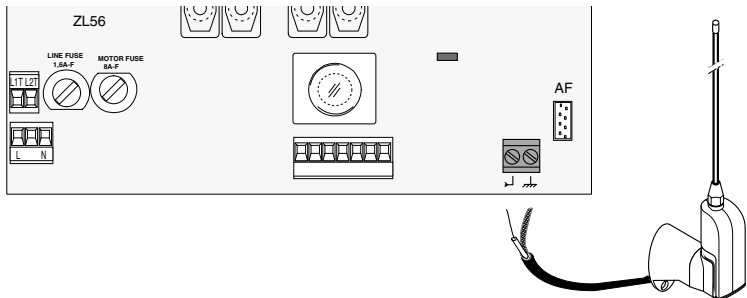


Press the OPEN button until the door reaches the desired closing slow-down start point **4** **5**.  
 PPress the ENC/RADIO button until the LED stays on to signal that memorization is now complete **6**.  
 Reset DIP-switch 2 to OFF **7**.

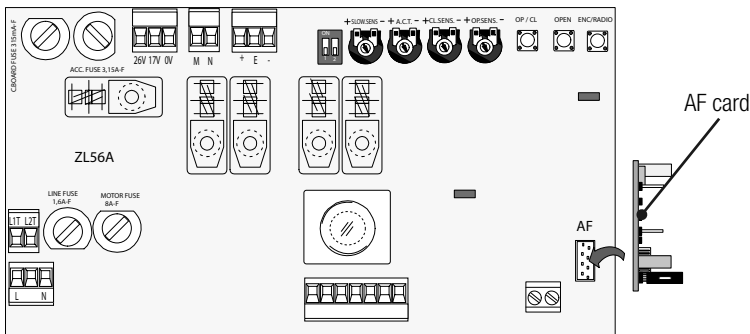


## ACTIVATING THE RADIO CONTROL

Before fitting the AF card, you **MUST CUT OFF THE MAIN POWER SUPPLY** and, remove any emergency batteries. Connect the RG58 antenna-cable to the corresponding terminals.



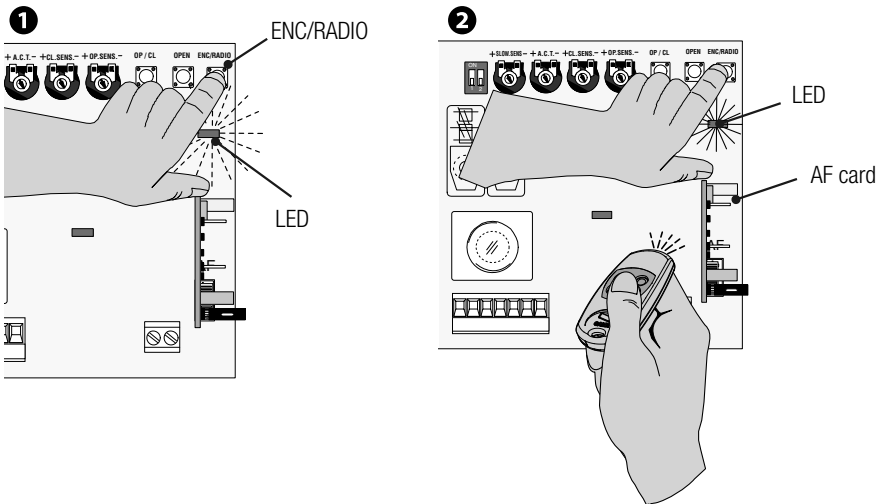
Fit the AF card into the connector on the control board.



You can memorize up to 25 transmitters.

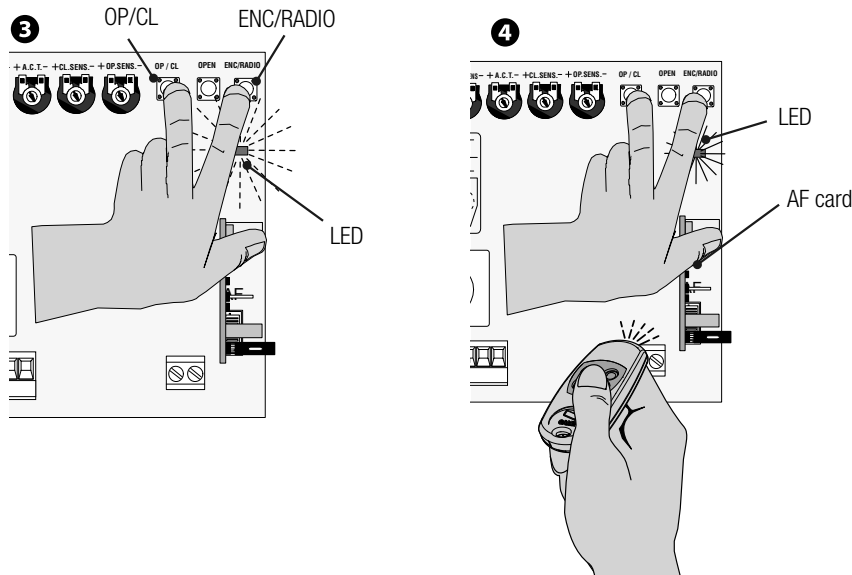
### Activating for the (2-7) sequential command

Press the ENC/RADIO button on the control board. The warning LED flashes **1**.  
Press the button on the transmitter you wish to memorize. The LED stays on to indicate that memorization has been successful **2**.



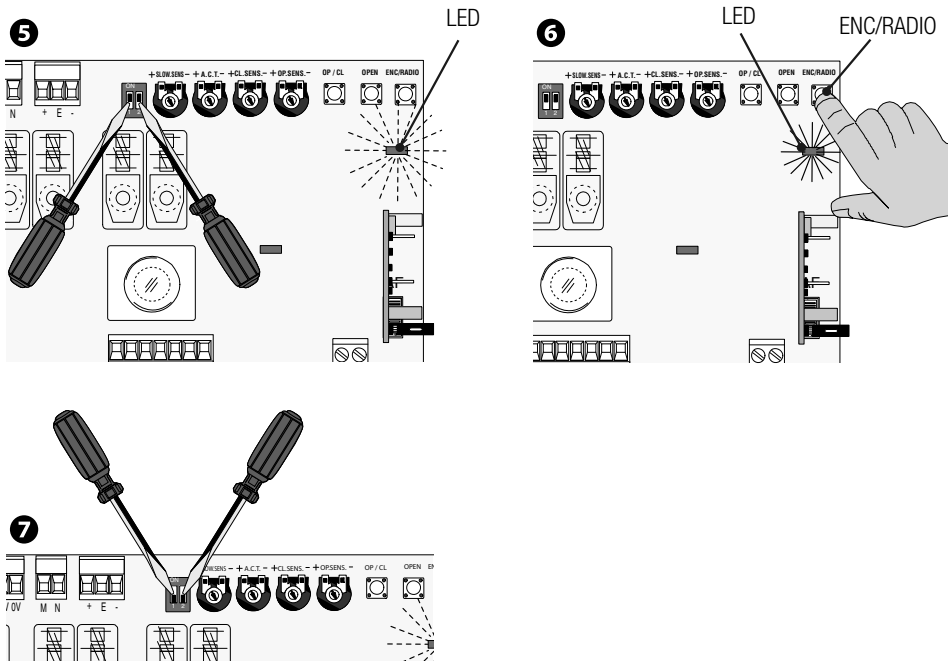
### Activating for the (2-3P) partial opening command

Keep the ENC/RADIO button pressed and then press the OP/CL button.  
The LED will flash **3**.  
Press the button on the transmitter you wish to memorize.  
The LED stays on to indicate that memorization has been successful **4**.



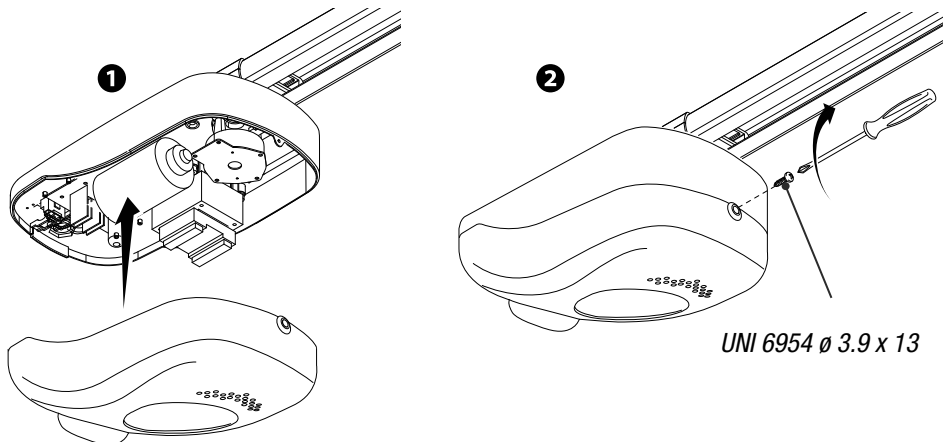
## Deleting all of the memorized transmitters

Set DIP-switch 1 and DIP-switch 2 to ON, the warning LED will start flashing ⑤. Press the ENC/RADIO button for 5 seconds, the LED starts flashing quickly and stays on to signal that deletion is complete ⑥. Reset the DIP-switches to OFF ⑦.



## FINAL OPERATIONS

Do the final operation only once the connections are complete and the system is started up.



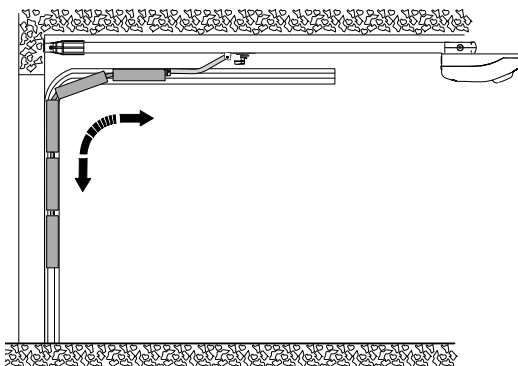
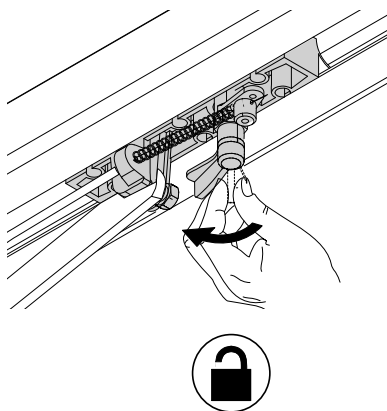
## RELEASING THE OPERATOR

⚠ This procedure must be done with the mains power cut off.

⚠ Manually releasing the operator can cause the door to move unexpectedly, if the door has any mechanical issues or is unbalanced.

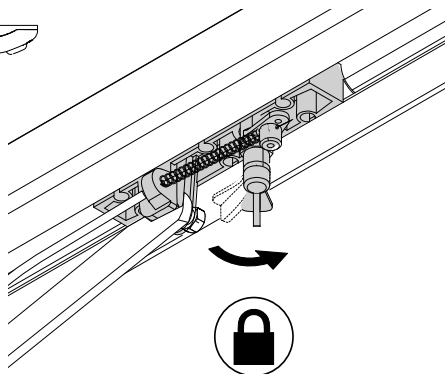
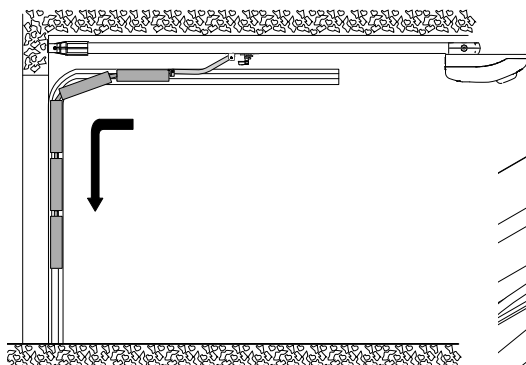
### RELEASING

Turn the release lever clock-wise.



### LOCKING

Manually close the door until it latches shut.





## TROUBLESHOOTING

ISSUES	CHECKS AND FIXES
<ul style="list-style-type: none"> <li>• The operator neither opens nor closes</li> </ul>	<ul style="list-style-type: none"> <li>• Check the power supply and line fuses</li> <li>• The (1-2) NC safety contact is open</li> </ul>
<ul style="list-style-type: none"> <li>• The operator opens but does not close</li> </ul>	<ul style="list-style-type: none"> <li>• The N.C. safety contact (2-C1) is open</li> <li>• Check the proper direction of the door travel</li> <li>• Check the balancing of the overhead garage-door</li> </ul>
<ul style="list-style-type: none"> <li>• The operator closes but does not open</li> </ul>	<ul style="list-style-type: none"> <li>• Check the balancing of the overhead garage-door</li> </ul>
<ul style="list-style-type: none"> <li>• The operator does not perform the automatic closing</li> </ul>	<ul style="list-style-type: none"> <li>• Check that the A.C.T. trimmer is not set to minimum</li> <li>• Check the proper direction of the door travel</li> </ul>
<ul style="list-style-type: none"> <li>• The transmitter does not work</li> </ul>	<ul style="list-style-type: none"> <li>• Check the bridging on the AF card, cut off/power up again</li> <li>• Memorize the transmitter again</li> </ul>
<ul style="list-style-type: none"> <li>• The operator pushes too hard</li> </ul>	<ul style="list-style-type: none"> <li>• Adjust the sensitivity</li> </ul>
<ul style="list-style-type: none"> <li>• The operator pushes too weakly or inverts the direction of travel</li> </ul>	<ul style="list-style-type: none"> <li>• Adjust the sensitivity</li> <li>• Eliminate all mechanical friction</li> <li>• Check the door balancing</li> <li>• Check the tautness of the belt/chain</li> </ul>
<ul style="list-style-type: none"> <li>• Only one transmitter works</li> </ul>	<ul style="list-style-type: none"> <li>• Enter (or duplicate) the same code in all the transmitters</li> </ul>
<ul style="list-style-type: none"> <li>• The photocell is not working</li> </ul>	<ul style="list-style-type: none"> <li>• The N.C. safety contact (2-C1) is open</li> <li>• Check proper functioning of the photocell</li> </ul>
<ul style="list-style-type: none"> <li>• The PROGRAMMING LED flashes rapidly</li> </ul>	<ul style="list-style-type: none"> <li>• The N.C. safety contact (2-C1) is open</li> <li>• The Encoder doesn't work: cut off the power to the control board, then power it up again</li> <li>• Wrong Encoder connection: check connections</li> </ul>
<ul style="list-style-type: none"> <li>• The PROGRAMMING LED stays lit</li> </ul>	<ul style="list-style-type: none"> <li>• NC control button instead of NO (2-7)</li> </ul>
<ul style="list-style-type: none"> <li>• The POWER-ON alerting LED is off</li> </ul>	<ul style="list-style-type: none"> <li>• Check the power supply and line fuses</li> <li>• The (1-2) NC safety contact is open</li> </ul>
<ul style="list-style-type: none"> <li>• The operator does not work with the emergency batteries</li> </ul>	<ul style="list-style-type: none"> <li>• Deactivate the obstruction detection function by using the DIP-switches</li> <li>• Check the batteries</li> <li>• Respect the polarities of the photocells and accessories</li> </ul>
<ul style="list-style-type: none"> <li>• The operator inverts the travel direction at the limit switch</li> </ul>	<ul style="list-style-type: none"> <li>• Check the proper direction of the door travel</li> <li>• Eliminate all mechanical friction</li> <li>• Check the door balancing</li> </ul>
<ul style="list-style-type: none"> <li>• The operator starts too slowly</li> </ul>	<ul style="list-style-type: none"> <li>• Eliminate all mechanical friction</li> <li>• Check the door balancing</li> <li>• Check the tautness of the belt/chain</li> </ul>

## MAINTENANCE

### Periodic maintenance

☞ Before doing any maintenance, cut off the mains power supply, to prevent any hazardous situations resulting from the door's unexpected movement.

#### ***Periodic maintenance log kept by users (every six months)***

Date	Notes	Signature

### Extraordinary maintenance

⚠ The following table is for logging any extraordinary maintenance jobs, repairs and improvements performed by specialized contractors.

N.B.: Any extraordinary maintenance jobs must be done only by specialized technicians.

#### ***Extraordinary maintenance logs***

Fitter's stamp	Name of operator
	Job performed on (date)
	Technician's signature
	Requester's signature
Job performed _____ _____ _____	

Fitter's stamp	Name of operator
	Job performed on (date)
	Technician's signature
	Requester's signature
Job performed _____ _____ _____	

Fitter's stamp	Name of operator
	Job performed on (date)
	Technician's signature
	Requester's signature
Job performed _____	
_____	
_____	

Fitter's stamp	Name of operator
	Job performed on (date)
	Technician's signature
	Requester's signature
Job performed _____	
_____	
_____	

## DISMANTLING AND DISPOSAL

☞ CAME S.p.A. applies a certified Environmental Management System at its premises, which is compliant with the UNI EN ISO 14001 standard to ensure the environment is safeguarded. Please continue safeguarding the environment. At CAME we consider it one of the fundamentals of our operating and market strategies. Simply follow these brief disposal guidelines:

### ♻️ DISPOSING OF THE PACKAGING

The packaging materials (cardboard, plastic, and so on) should be disposed of as solid household waste, and simply separated from other waste for recycling. Always make sure you comply with local laws before dismantling and disposing of the product.

**DO NOT DISPOSE OF IN NATURE!**

### ♻️ DISMANTLING AND DISPOSAL

Our products are made of various materials. Most of these (aluminum, plastic, iron, electrical cables) is classified as solid household waste. They can be recycled by separating them before dumping at authorized city plants. Whereas other components (control boards, batteries, transmitters, and so on) may contain hazardous pollutants. These must therefore be disposed of by authorized, certified professional services. Before disposing, it is always advisable to check with the specific laws that apply in your area.

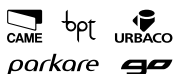
**DO NOT DISPOSE OF IN NATURE!**

## PERTINENT REGULATIONS

This product complies with the law.

English - Manual **FA00045-EN v. 2** - 09/2016 - © Came S.p.A.  
The contents of this manual may change, at any time, and without notice.



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safety&comfort



**Came S.p.A.**



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