


BALANCE

AUTOMATION FOR COUNTERWEIGHT
GARAGE DOORS

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1. WARNINGS AND SAFETY TIPS

This manual contains important information concerning personal safety. Read carefully and store for future use. Pay particular attention to this symbol .

Connect the automation to the earth system, which must be efficient and properly carried out.

The installation of automatic doors and gates must comply with the Machine Directive 2006/42/CE, in particular EN 12453 and performed by qualified personnel only



Make sure the main power line is equipped with state of the art safety grounding system; as well be sure the whole installation is protected by a power cut switch.



Make sure the area is clear from flammable gases and/or electromagnetic interferences: it could lead to very dangerous injuries.

Switch the power and batteries OFF before any operation.

After installation, packaging and waste materials (cardboard, plastic, metal parts etc.) must be kept away from children as they could be potentially harmful.

Use only original spare parts. Any alteration to the system is prohibited.

Proteco Srl will not respond in case of using additional and/or fake spares.

Before commissioning the system, deliver the last pages of this manual to the user (section 5, END USER'S TIPS).

Proteco S.r.l. reserves the right to make changes to the product without notice.

CE COMPLIANCE DECLARATION

The Manufacturer: PROTECO S.r.l.
Address: Via Neive, 77 – 12050 Castagnito (CN) – ITALIA
 declares that
The product type: **BALANCE garage door opener**
Models: **BALANCE**

Is built to be integrated into a machine or to be assembled with other machinery to create a machine under provisions of 2006/42/EC Machinery Directive

It complies with the essential requirements of EEC Directives:
 2014/53/UE (RED) - 2011/65/CE (RoHS2)

It complies as well with EN 60335-1 - EN 60335-2-103

The manufacturer declares that the start-up of the machinery is not permitted unless the machine, in which the product is incorporated or of which is becoming a component, has been identified and declared as conformed to 2006/42/EC Machinery Directive.

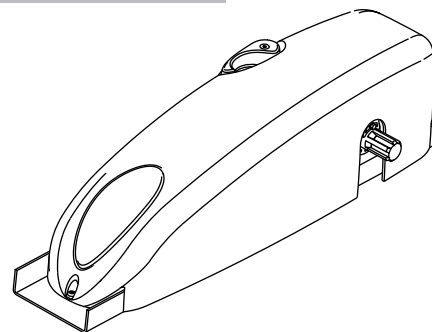
Note: These products were tested in a typical consistent configuration

Castagnito, September 1st 2023

Marco Gallo
CEO

2. CONTENT

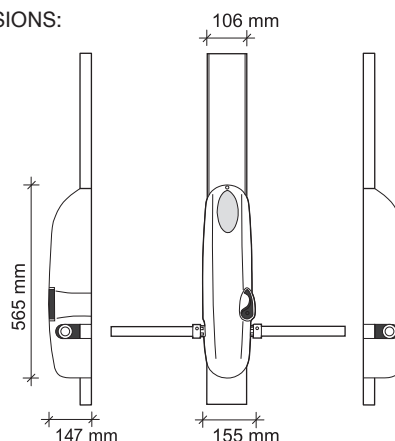
QUANTITY	DESCRIPTION
1	Complete gear motor with housing
1	Fittings bag
1	Capacitor
OPTIONAL	
1	Control unit with integrated receiver
1	External release system



3. TECHNICAL FEATURES

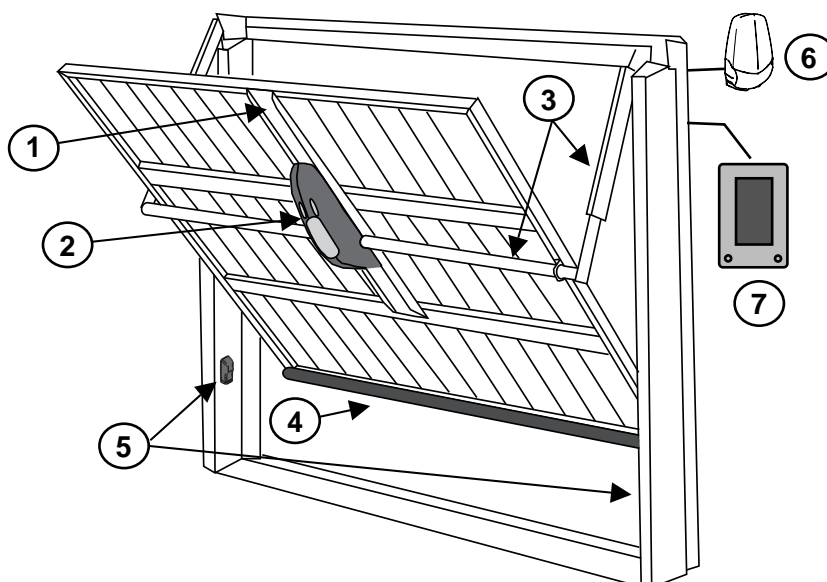
	230V
Door max. width	10 mq
Power supply	230V ac
Rated power	250W
RPM	1400
Capacitor	12,5 µF
Absorption	1,3 A
Mechanical release for manual operation	Integrated, for inner use
Working temperature	-20° C / +55° C
Weight	8 Kg
IP protection	IP 30
Limit switch	Electromechanical

DIMENSIONS:



4. INSTALLATION OVERALL VIEW

- 1 ARM FOR MOTOR CENTRAL FIXING
- 2 GEAR MOTOR
- 3 ARMS
- 4 SAFETY EDGE
- 5 PHOTOCELL
- 6 BLINKER + ANTENNA
- 7 CONTROL UNIT
(not included, optional)



- The installation and tests must be carried out only by qualified personnel in order to guarantee the correct and safe operation of the automated door.
- The manufacturer is not liable for injuries or damages due to incorrect installations.
- Before proceeding to assembly, make sure the door is working freely and counterbalanced.

Attention: Extra counterweights shall be added matching the weight of the metal fittings applied to the door and the weight of the door.

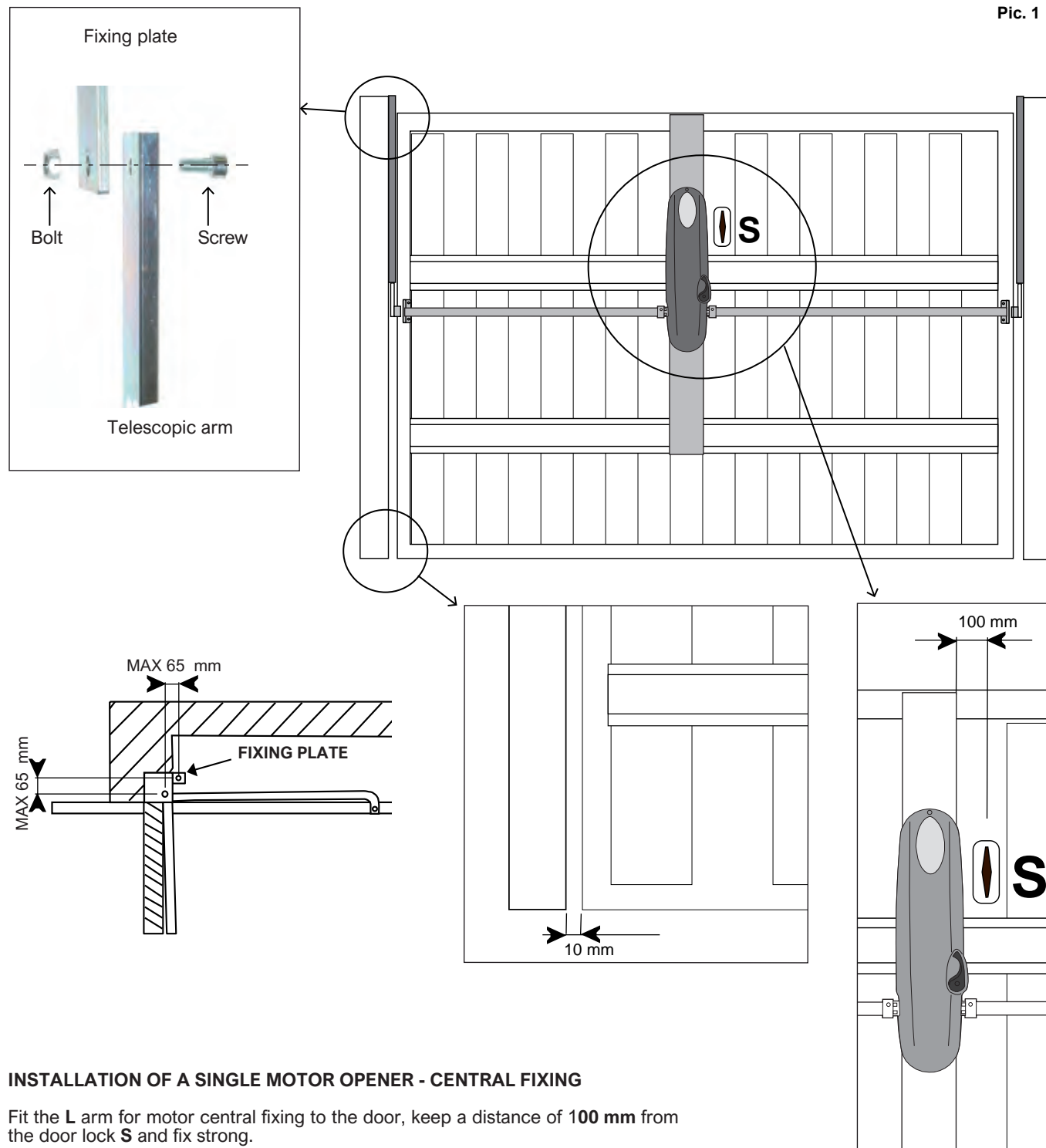
5. INSTALLATION TIPS

Fit and secure very well the fixing plate of the telescopic arm to the door frame.

Make sure the telescopic arm moves freely.

If the gap between the door and the frame is less than 10 mm use curved arms. If the gap is more than 10 mm use straight arms.

Weld the fixing plate to the door frame as shown in picture 1:



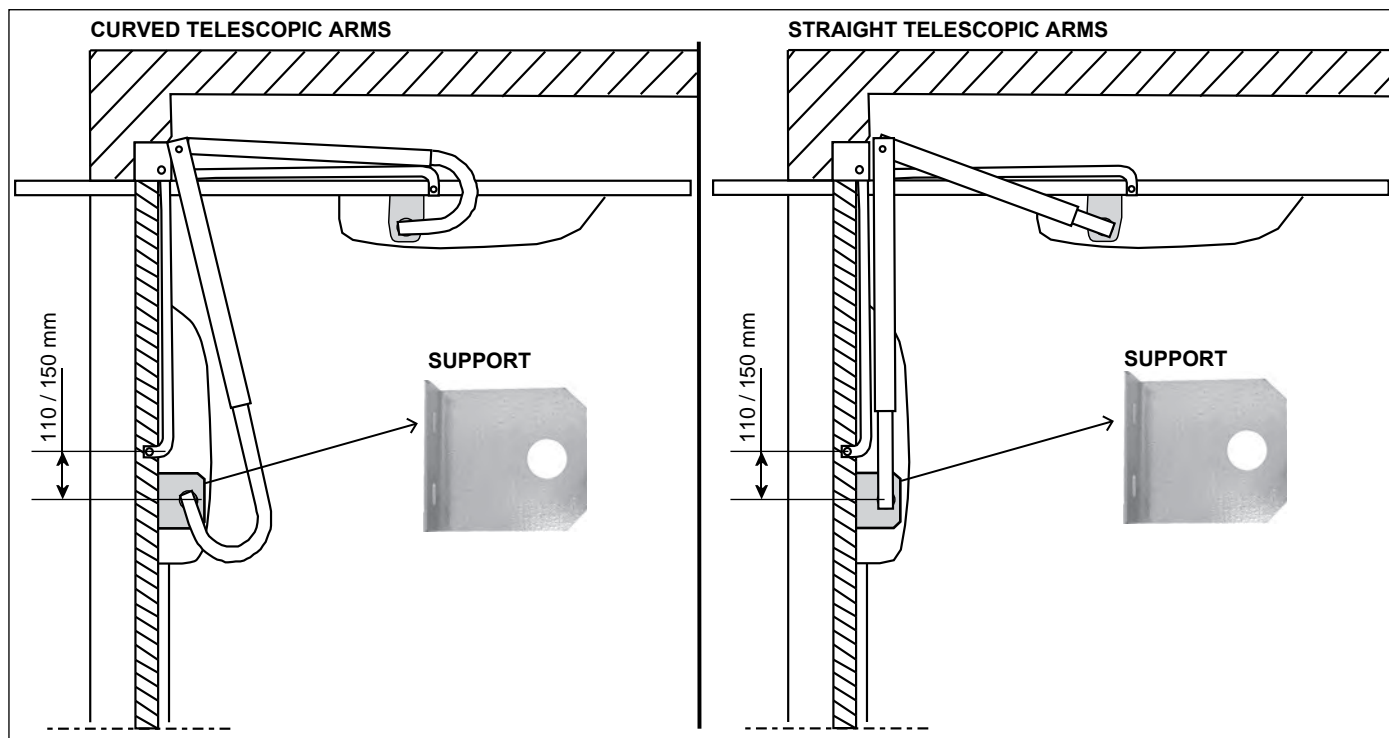
Pic. 1

INSTALLATION OF A SINGLE MOTOR OPENER - CENTRAL FIXING

Fit the **L** arm for motor central fixing to the door, keep a distance of **100 mm** from the door lock **S** and fix strong.

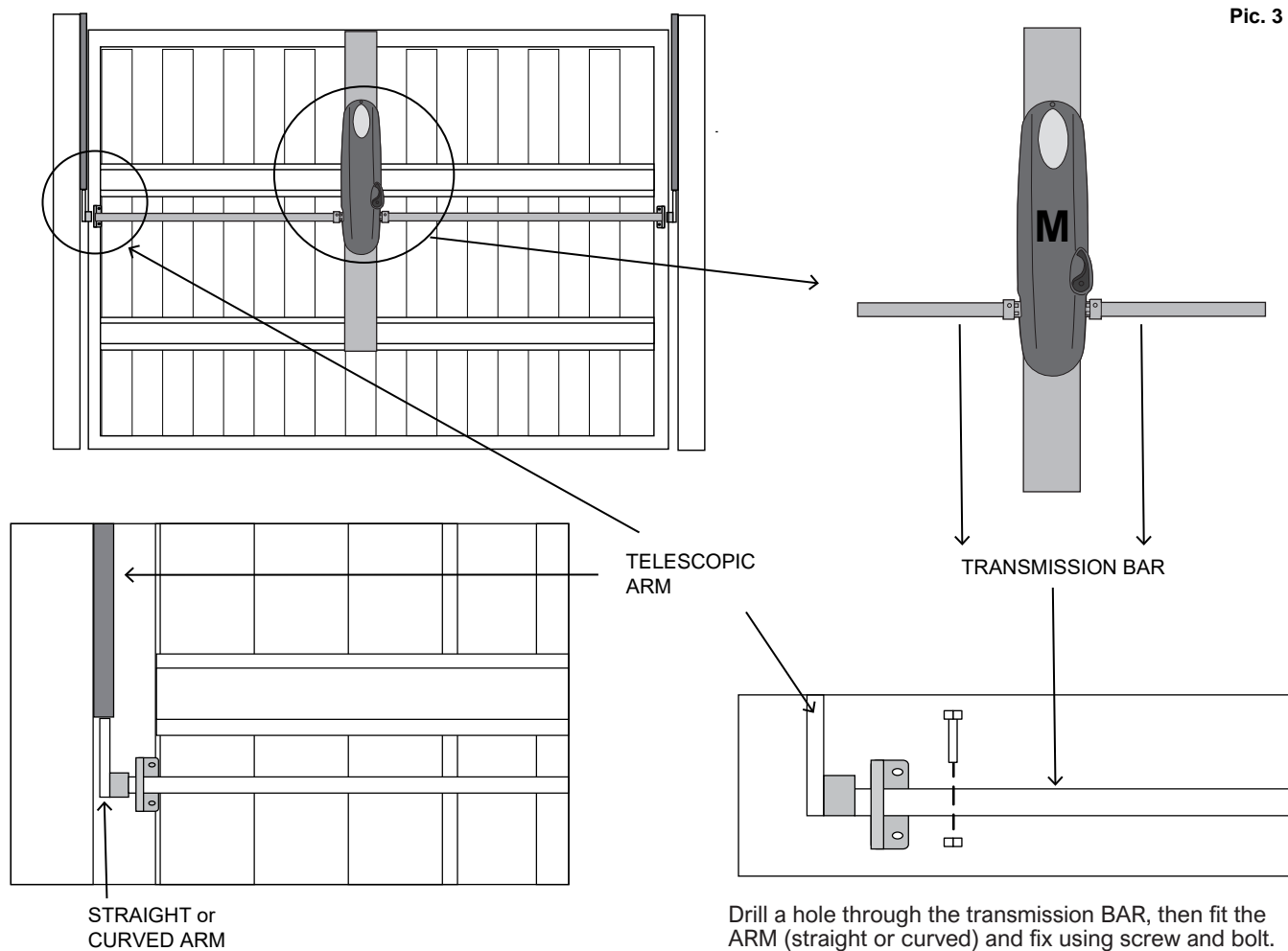
Fix strong the support to the door frame keeping a distance between **110 and 150 mm**, from the pin of the existing small arm downward.

Pic. 2



Fit the motor **M** to the arm, the transmission shaft must be perfectly in line with the transmission bar and the supports.

Pic. 3



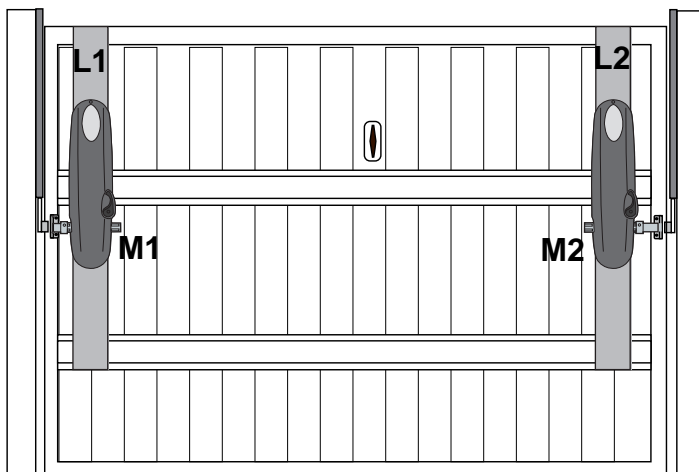
INSTALLATION OF DOUBLE MOTOR - LATERAL FIXING

ARMS - LATERAL FIXING

Fit **L1** and **L2** arms to the door as shows picture 4.

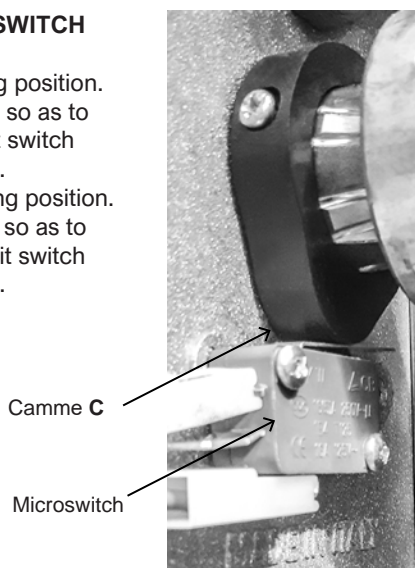
Fix **M1** and **M2** motors to the arms in line with the arm bushes, keeping a distance between 110 and 150 mm from the pin of the existing small arm downward (**Pic. 2**). Plug the arm bushes (straight or curved arms) in the motor shaft and lock.

Pic. 4



ADJUSTING THE LIMIT SWITCH

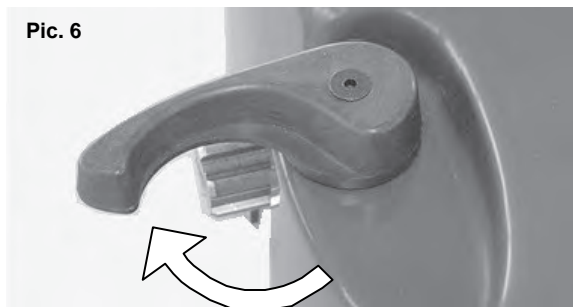
- Put the door in closing position.
- Fit the RH camme (**C**) so as to touch the closing limit switch microswitc and screw.
- Put the door in opening position.
- Fit the LH camme (**C**) so as to touch the opening limit switch microswitc and screw.



MANUAL OPERATION

In case of power cut, the gearmotor can be unlocked manually rotating the lever by approximately 90°. To lock back, return the release lever to its original position.

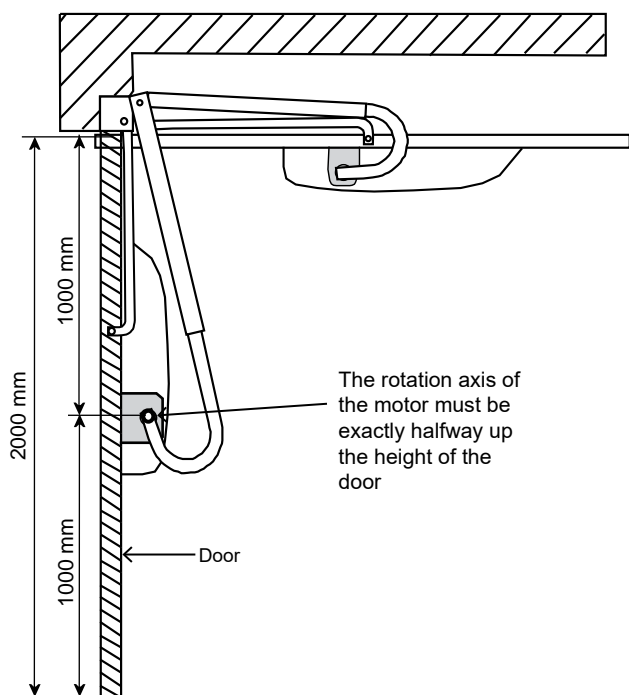
Pic. 6



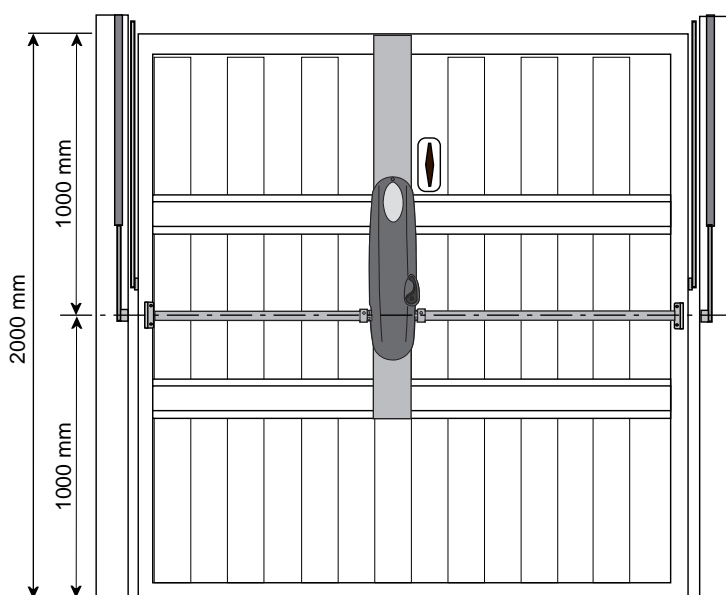
INSTALLATION FOR A NON-PROTRUDING COUNTERWEIGHT DOOR

Fit and fix strong the **L** arm to the door, positioning the shafts exactly at half the height of the door (see pic. 9 and 10)

Pic. 9



Pic. 10

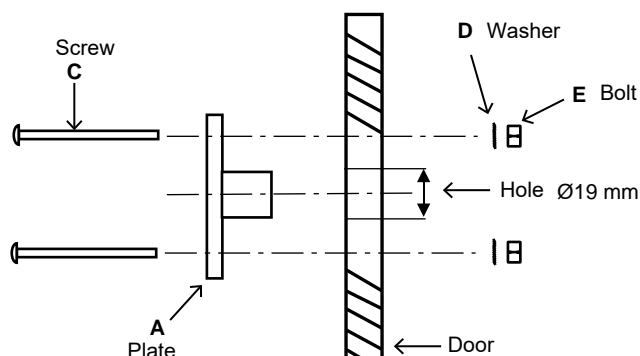


INSTALLATING THE EXTERNAL RELEASE SYSTEM

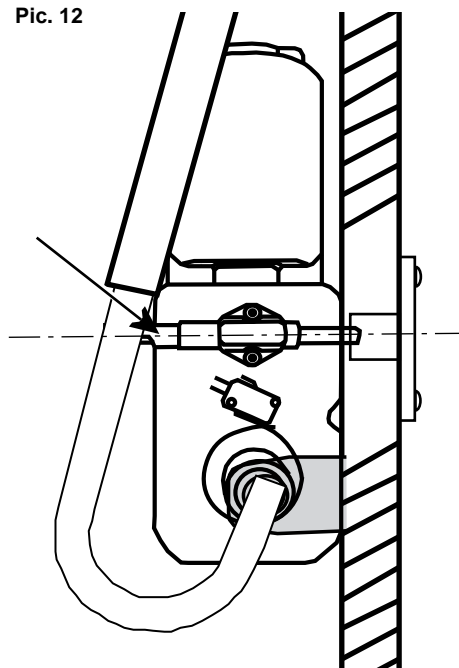
(Optional)

The external release system (OPTIONAL) allows to unlock the garage opener from outside in case of power cut.

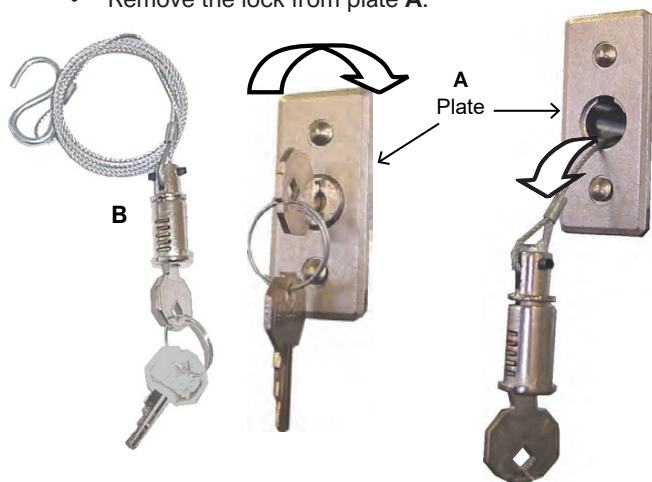
- Drill a hole on the door of $\varnothing 19$ mm in line with the release pin of the motor.
- Insert plate **A** into the hole, then drill two holes to insert fixing screws **C**.
- Secure plate **A** from the inner side of the door using bolts **E** and washers **D**.
- Plug the lock barrel **B** into the support **A**, the inox cable goes first.
- Fix the cable tail inside the door, the lock barrel has to remain pending when releasing.



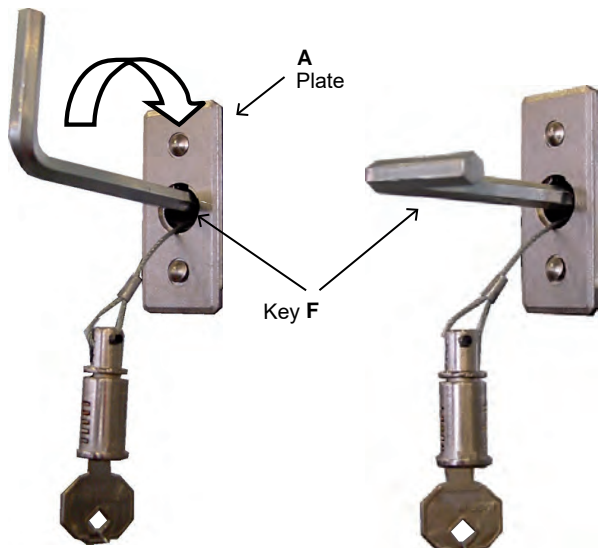
Pic. 12



- Plug the key in the lock and rotate.
- Remove the lock from plate **A**.



- Plug key **F** into plate **A** and rotate until releasing.



TESTING THE DOOR OPENER

To complete the installation procedure, refer to the manual of the control unit supplied.

Once installation has been completed, power up the automation and carry out a careful functional check of the gearmotor and all accessories, making sure in particular that the connected safety devices and manual release systems work correctly.

Fit and secure the cover.

Give this instruction manual to the end user explaining the correct operation and use of the automation.

WARNINGS



Keep children aged less than 8 away.



Children aged 8 or older, people with reduced physical or mental capabilities, or lack of experience, can only use the automation under supervision, or if they have received instructions on the safe use of the system and have understood the related dangers.



This product was designed and built exclusively for the indicated intended use.



Any different use could compromise the integrity and safety of the product and should be avoided.



Do not access, for any reason, the internal parts of the automation: they are dangerous and there are no components that can be repaired or replaced by unqualified personnel.



Start remote controls or other command devices only when the automation is visible and free of dangerous situations.



Do not allow children to play close the automation area.

6. MAINTENANCE

Carry out a functional check of the system at least every six months, paying particular attention to the safety and release devices and the moving mechanical parts.

DISPOSAL OF THE SYSTEM

Any part of the system, including devices such as remote controls, must be disposed in compliance with current legislation, as they may be harmful for the environment. Most of the materials used are similar to solid urban waste and can be handled accordingly. They can be recycled through separate collection and disposed in authorized centers. Other components (electronic boards, batteries, etc.) may instead contain polluting substances. They must therefore be removed and delivered to companies authorized for their recovery and disposal. Before proceeding, it is always advisable to check the specific regulations in force.

DISPOSAL OF PACKING

Packaging components (cardboard, plastics, etc.) are safe similar to solid urban waste and can be handled accordingly without any difficulty, simply by carrying out separate collection for recycling. Before proceeding, it is always advisable to check the specific regulations in force.



DO NOT POLLUTE THE ENVIRONMENT!

WARRANTY

PROTECO products are covered by a **3-year limited warranty** from the production date printed on the product. During this period, Proteco Srl offers a guarantee in case of malfunction due to construction, material or assembly faults. Warranty terms are applicable just if the instructions and maintenance included in this manual are fully respected and carried out.

Warranty is void when fake spares are used and doesn't respond for faults due to incorrect installation.

Installation and any maintenance works are responsibility of the person installing the system.

In no case and in no way will Proteco Srl be liable to the end user for damages, including any loss of profits, savings or other accidental or indirect damages, resulting from the use or inability to use PROTECO products.

Any return without authorization number will be rejected.

The shipment of the returned product and the related costs are the end user/buyer charge.

All defective products must be returned together with the proof of payment to:

PROTECO Srl Via Neive 77, 12050 Castagnito (CN) - Italia

Warranty is void when:

- The product has been treated / stored under abnormal conditions of use and maintenance.
- The product has been repaired, modified or altered.
- The product has been subject to misuse, neglect, electrical problems, improper package, accident, or natural events.
- The product was installed improperly.
- The product warranty label is illegible or is missing entirely.
- The malfunction is due to improper installation or to natural and/or accidental causes (eg: falls, oxidation, overvoltage).