



PRAKT/GAR.AS with chain

The automation for sectional and bascule front doors

Instructions for use and installation



This manual has been redacted from the manufacturer and is an integral part of the product. In these pages are contained all the information necessary for:

- A method of installation which allows to work in safety.
- The correct installation of the automation.
- The knowledge of the mechanical part of the automation.
- The correct use in condition of safety.
- The correct maintenance.

In order to avoid wrong motions with the risk of accidents, it is necessary to read this manual with attention, following step by step the furnished information.



1. General warnings

This manual is redacted by Allmatic without any implicit or explicit guarantee and it is exclusively addressed to qualified personnel who knows the constructive rules and the devices of protection against the accidents for the gates, the doors and the motorized doors.

ALLMATIC does not accept any responsibility for possible damages caused by the inobservance during the installation of the safety regulations and of the laws actually in vigour.

By the continuous searching of quality and innovation, Allmatic reserves itself to introduce innovations or modifications to the automation and/or to this manual without giving any notice.

1.1 General warnings for the safety

- The assembly and the installation of the automation must be executed **ONLY** by qualified personnel. Installations made not in a professional way can produce serious damages.
- Disconnect the power supply of the system before any sort of intervention or maintenance on the system, excluding the procedures of programming and test.
- Any sort of regulation, also of possible limit switches, must be executed exclusively by qualified personnel.
- The electrical connections or any other electrical intervention, which is necessary for a correct installation, must be executed exclusively from qualified personnel. It is necessary that the power supply cable of the system is always accessible in order to always guarantee a rapid and easy disconnection of the power supply.
- Before the automation is put on use, it is necessary to declare that the system is in conformity with the safety norm 98/37 and that a valid certificate of conformity is issued.
- Improper installations or maintenances, or any other modification or adding of elements which are not provided with this instruction, are not allowed and they invalidate the guarantee of the product.
- Before installing the automatism, check that the door can be activated by hand, for this purpose unblock the slide and move manually the door in opening and in closure with the necessary precautions, bringing it at the point of the anchorage of the steel to the door self. The force necessary to execute this action must exceed the Kg.15,00.
- Make also sure that the automation can be fixed in a solid and lasting way and that the installation does not modify the important characteristics of the surrounding environment.
- The technical data are listed on the table 1 and must be observed anyway.
- For the maintaining program, make reference exclusively to the chapter "maintenance" of this instruction.

1.2 Destination of use

This automation is designed to be utilized with bascule or sectional door in the sector of the domestic automation. The environment of utilization must be dry and controlled.

1.3 Warnings for the use

- Utilize the automation only when it is possible to observe all the area interested to the moving and when there are no people or things in this zone.
- During the movement it is not allowed the stop of people and things. Do not allow kids to stay near the automation. Keep the transmitters or any other removable accessory in a place protect and sure.
- All the fixed accessories (buttons, switches and others) must be installed in an accessible and visible place. Maintain a slight distance of almost 1,8 m from parts in movement and in any case in a way that the children can not have access.
- All the devices (door, automation) and the accessories must be regularly controlled. See chapter 4 (maintenance) for further information.
- Do not utilize the automation in condition of failure or in any case when it is necessary the intervention of qualified personnel.
- For environments which are not provided of a second way of access, it is necessary to prepare an unblocking system of the door. This device of unblock must be frequently checked and tested.
- Do not strain with weights or other things the unblocking system. Do not hang on or pull with the weight of the body.
- Check that the emergency unlocking does not have contact or interfere with the chain or with others elements in moving and that it is always easily getting. Pay attention that by using the unblock, uncontrolled movements of the door or situations of danger be caused.
- Instruct all the people that utilize the automation to a safe and conform use of it.

1.4 Use of the emergency unblock

WARNING: Do not utilize the emergency unlocking during the movement of the door. Position the handle of the string of the unlocking to a minimum height of 1,8 m from the ground. To activate the unlocking, take by the hand the handle connected to the string (of the unlocking) and draw it down until the slide of drawing free itself from the chain.

2. Technical data

	PRAKT/GAR.AS 60	PRAKT/GAR.AS 120
POWER SUPPLY OF THE SYSTEM	230 Vac	
POWER SUPPLY MOTOR AND ELECTRONIC	24Vcc	
NOMINAL ABSORPTION	0,5A	
BASCULE OVERFLOWING DOOR MAXIMUM HEIGHT	3000mm	
SECTIONAL DOOR MAXIMUM HEIGHT	2700mm	
MAXIMUM PUSH OF THE MOTOR (for 750 ms)	400N	
MAXIMUM WIDTH OF SECTIONAL DOOR	3000mm	4500mm
OPERATOR WEIGHT	6kg	8Kg
OPERATOR DIMENSIONS	340 x 170 x 150 mm	
LENGTH OF GUIDE	1500 mm x 2	
EMERGENCY UNLOCKING	INTERNAL-EXTERNAL	
TRANSMISSION	BY CHAIN	
LIMIT SWITCHES	WITH ENCODER/YES	
AUTOMATIC RECLOSING	SELECTABLE	
SOFT STOP - SOFT START	PRESENT	
DISPOSITIVE OF CONTROL	REMARK OF AN OBJECT DURING THE MOTION	
EMERGENCY STOP	PRESENT-ARREST OF MOVING	
COURTESY LIGHT	24Vcc MAX 20W	
PROTECTION DEGREE	IP 40	
SERVICE	RESIDENTIAL 5 cycles/h	

Table 1: Technical data

WARNING:

- Each intervention or beginning put on starting must be executed exclusively by qualified personnel.
- The automation must be regularly tested and checked in all its parts.
- The automation does not be utilized if any sort of intervention of maintenance or reparation must be executed. A problem of the automation or a bad balancing can provoke damage to people and/or things.

3. Assembly of the automation.

This chapter contains important information for a sure and correct installation. Follow scrupulously all the instructions because a non correct assembly can provoke serious damage to people and/or things.

WARNING: Before starting the assembly of the automation **remove all the mechanical unlocks.**

3.1 Composition automatism

The composition of the automatism is described in figure 1.

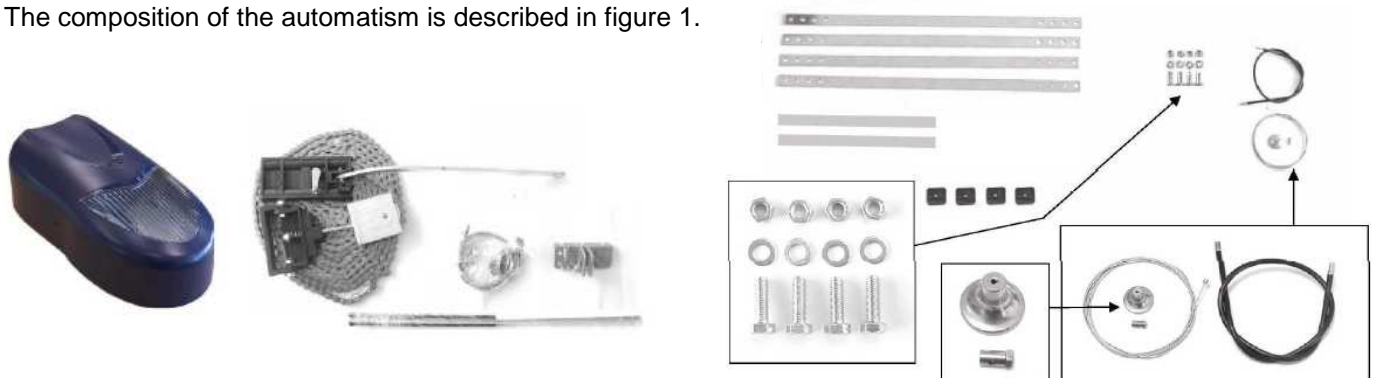


Figure 1– Composition automatism

3.2 Necessary instruments

The instruments necessary for a correct installation of the automation are described in figure 2.

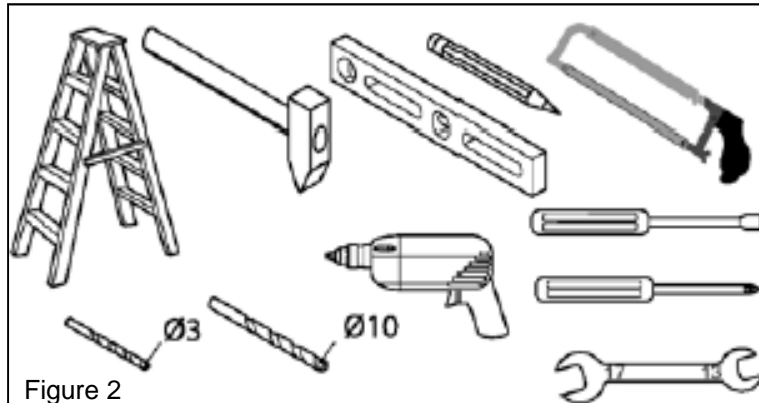


Figure 2

3.3 Requirements for the installation

The system here described is adapt to the automation of bascule doors with spring (figure 3), with counterpoise (figure 4) and for balanced sectionals (figure 5) with the characteristics reported on chapter 2 (technical data). An adapter arc (figure 6) is at disposal, like accessory, for bascule doors.

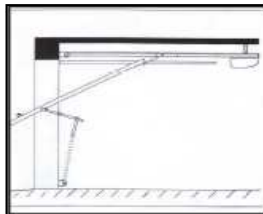


figure 3

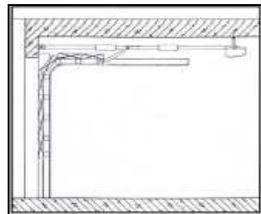


figure 4

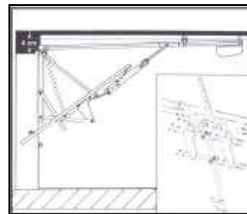


figure 5



figure 6

3.4 Assembly

3.4.1 Assembly guide

Warning: if the door to automatize is a bascule with counterpoise (fig.5) with the application of the arc (fig.6), replace previously the "L" staff (fig.7) mounted on the sliding block with the one STRAIGHT supplied with the arc.

Link the various parts of the guide by using the suitable provided steels (parts A and B). Moreover insert the 4 plastic blocks (C,D) with the bolt turned to the external slide. Make the parts slide until the position of block, in a way that A and B be engaged on both guides.

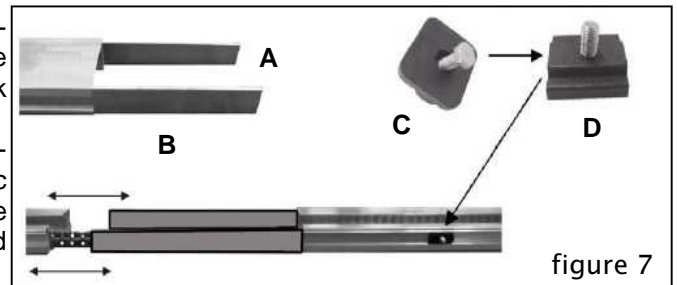


figure 7

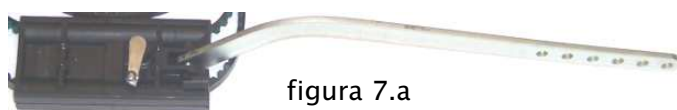


figura 7.a

Unlock the undercarriage by using the unlocking steel having care to position the pawl (blinded to the chain) on the left part of the drive (fig.8).

Insert the sliding block and the clamp with the counter wheel (pay attention that the SQUARE part of the hub of the counter wheel can be seen through the drive).

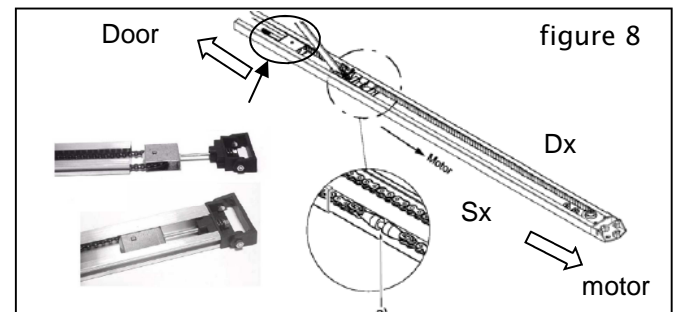


figure 8

Get close the drive obtained in this way to the base of the motor and insert it inside the suitable crack (point F) having care to make the chain slide around the pinion.

Push the drive until the complete insertion in the base of the motor (fig.9).

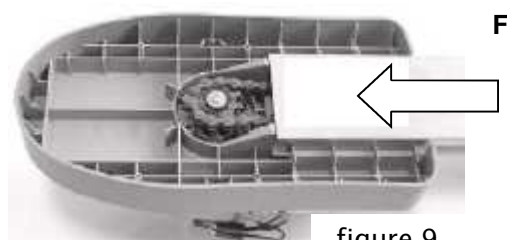
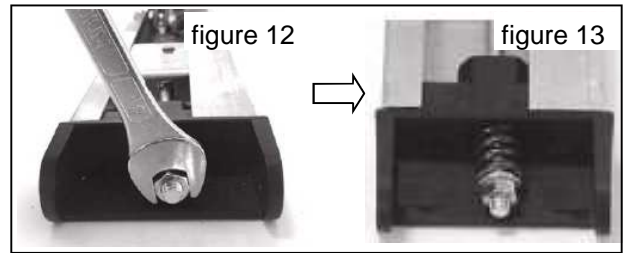
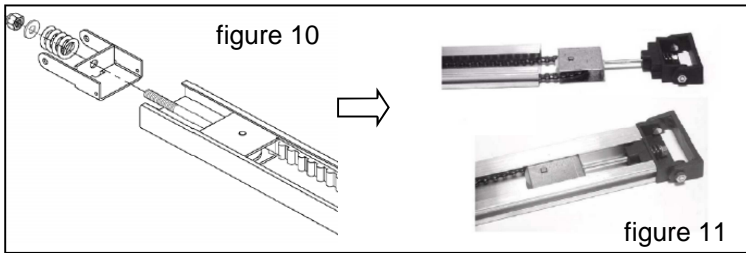
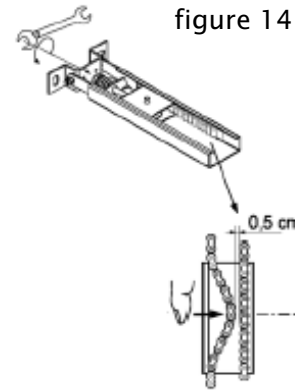


figure 9

At this point bring the tensioning clamp to the opposite extremity of the guide (as regards to the motor) in a way that the bolt goes through the hole present on the clamp (fig.10).
 Make the bolt slide through the hole in a way that you can insert the supplied spring and washer.
 Then fix them with the nut (see fig. 11).

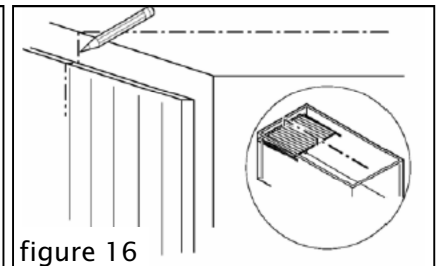
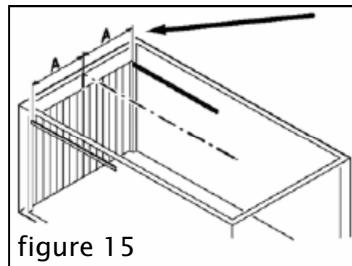


Adjust the tension of the chain operating on the nut of the fixing clamp to the architrave (fig.14) until, pressing inwards from a side of the chain, he gets to a distance of 0,5 cm. from the other side of the chain self.

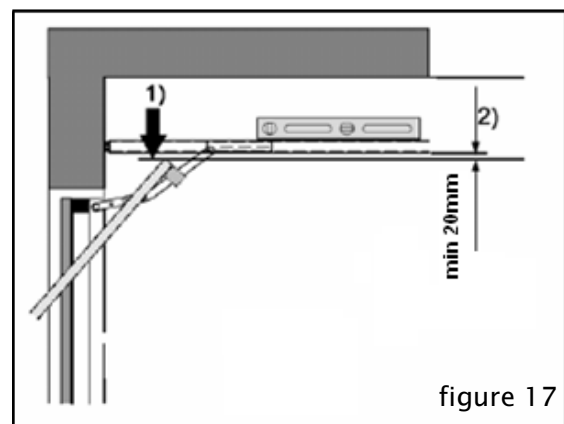


3.4.2 Fixing of the guide

Measure the width of the door and sign the middle on the wall where it will be installed the fixing clamp (of the drive, fig.15 and 16).
 Plan a minimal distance of the drive from the sky of almost cm.3.

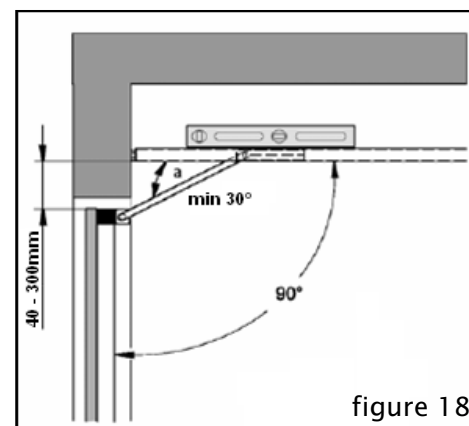


The guide must be installed at a such height as between the higher point which the door can reach during the movement and the board of the guide, there is a distance just like at almost 2 cm.(point 1 and 2 of the fig.17).



The angle a of the figure 18 can not be inferior to 30°, otherwise the correct transmission of the drawing force is guarantee. Furthermore it is indispensable that during the whole movement of the door, both in opening and closing, the tracting arm does not interfere with other moving parts of the system.

The distance between the lower board of the guide and the upper board of the garage door should be included between 5 and 7 cm. when the door finds itself completely closed (fig.18).



Bring again the centre line of the door on the architrave, in a way that the fixing clamp of the drive is exactly at the middle point of the door and above the maximum position which the door can reach during the movement.

Use a pen to mark the position of the holes of the clamp on the architrave. Make a hole with a point of diameter 10 mm. on the marked positions.

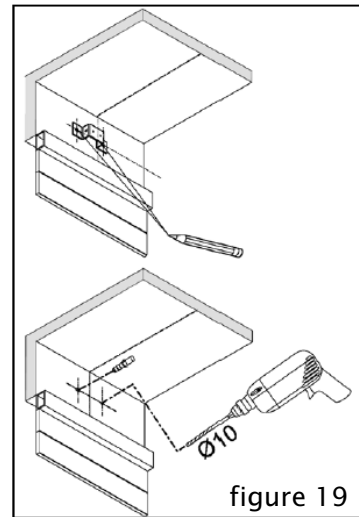


figure 19

According to the type of the installation, fix the clamp (fig.20) to the architrave by using suitable screws and plugs (not supplied: diameter S10 are suggested).

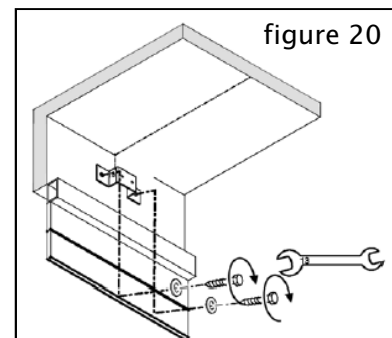


figure 20

Fix the guide to the clamp on the architrave with the supplied bolt and screw (fig.21).

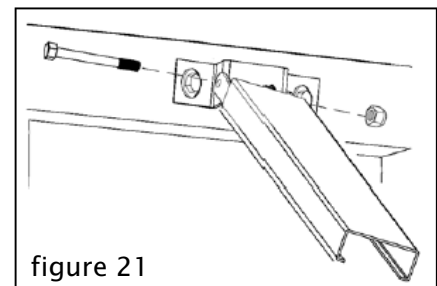


figure 21

Modify the supplied fixing clamps in a way to install the drive to the level. The maximum distance gettable between the ceiling and the drive, with the supplied clamps, is of 45 cm. In order to obtain larger distances, it is necessary to request some more clamps in addition. The excess part of the clamp must be cut.

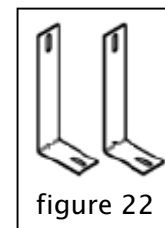


figure 22

Arrange that the motor group with the drive is suspended in a way that the points of suspension correspond to the dimensions indicated on fig.23. Warning: utilize plugs sufficiently strong to suspend the automation (S8 diameter are suggested).

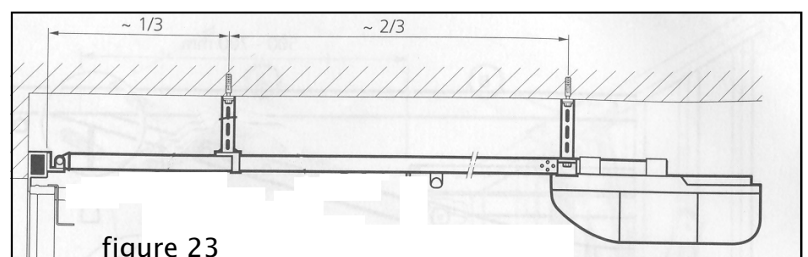


figure 23

Mark the points (A and B) in which the fixing clamps (from the part of the motor) will be fixed to the ceiling. By fixing the clamps, make sure that the guide is lined up with the fixing clamp on the architrave and that is on level.

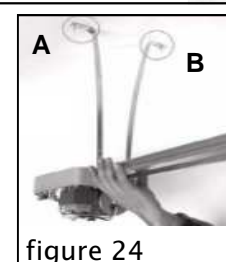
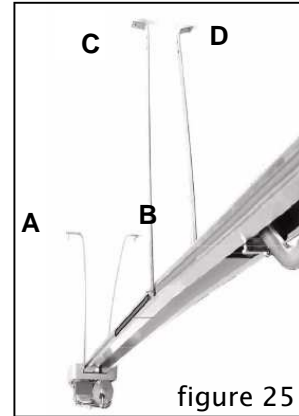


figure 24

Mark the points (C and D) in which the fixing clamps (on the part of the architrave) will be fixed to the ceiling.

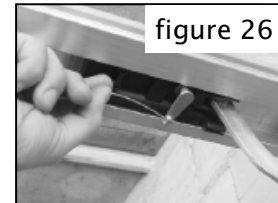
By fixing the clamps at the ceiling, make sure that the guide is linked up with the clamp on the architrave and that it is on level.



3.4.3 Installation device of unlock

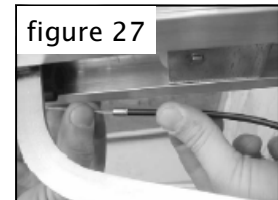
If the door is without a second entry, it is necessary to provide to the installation of the emergency unlock system.

In this way the door can be also moved without the intervention of the automation. Make the wire of steel pass (from the part of the head without stop) through the eye present on the unblocking lever (fig.26).

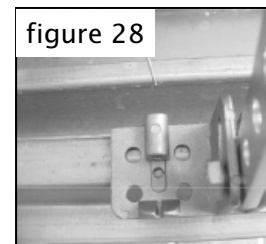


Insert the wire inside the sheath (fig.27) and make it slide through her completely.

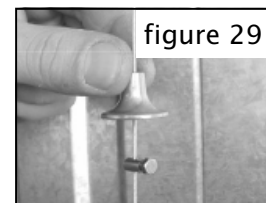
It is advisable lubricate the wire in the way to make easy the sliding inside the sheath.



Insert the head of the free cable inside to the stop provided on the clamp fixed to the door (fig.28)



Insert the supplied knob and stop it by using the clamp (fig.29).



3.4.4 Mounting of the courtesy light

1. Cut off the power supply to the system.
2. Insert a lamp BAS9s, max 20W.
3. Fix to join the lamp by rotating it in clockwise sense.
4. Drive the screw of the carter of the gear motor.

The courtesy light remains turned on 1,30 minutes from the last order given

3.4.5 Installation adapter for bascule doors

If the door which is being installing is a bascule with counterpoises, it is necessary to utilize the apposite accessories provided by request (fig.30).



figure 30

In case of bascule door with counterpoise, it is necessary to provide that the guide is mounted inclined. Particularly between the point in which the drive is fixed to the motor (point a) and the point in which it is fixed to the clamp on the architrave (point b), they must be 4 cm. (fig.31).

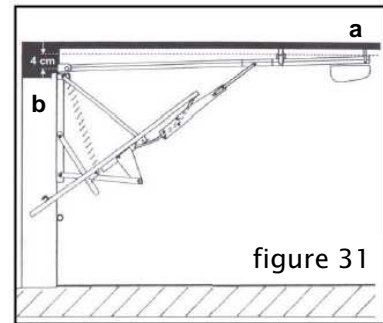


figure 31

Fix the bracket A of the adaptor bow on the superior board of the door. The centre of the bracket must correspond with the centre of the drive.

Fix the point B of the curved branch to the door by using a clamp or something similar according to the structure of the door. Check that the points A and B be stable and do not involve deformations or breakings to the door.



figure 32

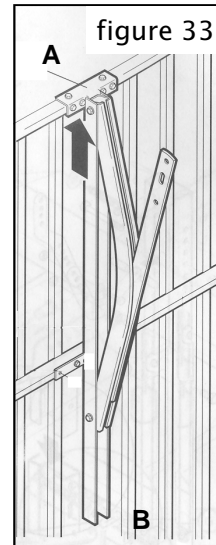


figure 33

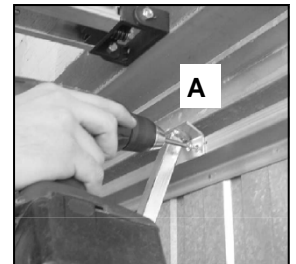


figure 34

Fix the point B of the adaptor bow on the door, having care that the bow is plumb.

Connect the clamp fixed to the carriage for bascule to the adaptor bow on the point C, in a way that the distance of the points D-E is included between 50 and 70 mm.

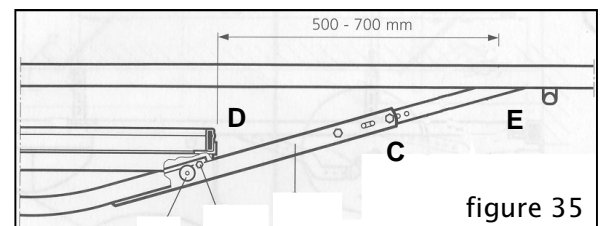


figure 35

4. Put in function and maintenance



Warning: the following notes are exclusively addressed to qualified personnel.

4.1 Put in function of the automation

For the put in function of the automation it is necessary to execute the programming of the electronic panel inserted on the board of the motor.

This sort of programming must be executed only by qualified personnel after having finished and checked the installation of the mechanical part of the automation on each of his point.

Particularly the following points must be always checked:

- The correct balancing of the door. By positioning the door open at 60-70 cm. from the ground, it must neither open nor close by itself.
- The sliding of all the movable parts. The door must execute a fluid movement.
- The correct functioning of the unlocking device in each position of the door.
- The lubrication, if necessary, of the mechanical parts of the door.

Before executing the wirings necessary to the functioning of the automation, read the following warnings:

- Some points of the system are subjected to dangerous tensions. For this reason, the installation, the opening and the programming of the panel must be executed only by qualified personnel. All the operations that the final user can execute do not require the opening of the box.
- Provide the use of a means which assures the omni polar disconnection from the power supply of the system. It can be either an omni polar switch (directly connected to the terminals of the power supply) with a minimal distance of the contacts of 3 mm. on each pole, or an issue integrated in the power supply net.
- For the connection to the power supply, use flexible cables with CENELEC H05W designation and anyway with minimal section of the single conductor not inferior to 0,75 mm².
- It is advisable to check the absorptions of all the devices connected to the outputs of the control unit, like for example luminous spies, photocells, safety devices, etc., in a way to re-enter in the limits indicated on the table of the technical data. The correct functioning of the product in case of inobservance of these limitations is not guarantee.
- The constructor declines all responsibilities in case of inobservance of these cautions.

4.2 Maintenance of the automation

It is advisable to make periodically check the automation by specialized technical personnel.

To assure a correct functioning of the automation, it is necessary to observe the following points:

- Check regularly the balancing of the door. The door must be easily manoeuvrable by hand in an easy way, for this purpose unlock the slide and with the due cautions move manually in opening and in closing bringing it on the anchorage point of the steel to the door self. The force necessary to do this action must not exceed the 15 Kg.
- The door and particularly the cables, the springs and the fixing components must be regularly checked to ensure that they do not show signs of wear, of damage or of unbalancing .
- The anti-squashing control must be periodically checked. If it is necessary, correct the regulation of the reversing function and check again the functioning. Make reference to the instructions of the CT ACTION (code: 6-1622345) / GAR.AS (code: 6-1622375) for sectional door.

The substitution of the bulb must be executed exclusively by qualified personnel. For the substitution proceed as follows:

- 1.Cut off the power supply to the system.
- 2.Unscrew the screws which fix the cover in his seat.
- 3.Remove the cover
- 4.Push and rotate the bulb in clockwise sense until you can remove her.
- 5.Replace the bulb with one of the same characteristics.

GUARANTEE - In compliance with legislation, the manufacturer's guarantee is valid from the date stamped on the product and is restricted to the repair or free replacement of the parts accepted by the manufacturer as being defective due to poor quality materials or manufacturing defects. The guarantee does not cover damage or defects caused by external agents, faulty maintenance, overloading, natural wear and tear, choice of incorrect product, assembly errors, or any other cause not imputable to the manufacturer. Products that have been misused will not be guaranteed or repaired.

Printed specifications are only indicative. The manufacturer does not accept any responsibility for range reductions or malfunctions caused by environmental interference. The manufacturer's responsibility for damage caused to persons resulting from accidents of any nature caused by our defective products, are only those responsibilities that come under Italian law.