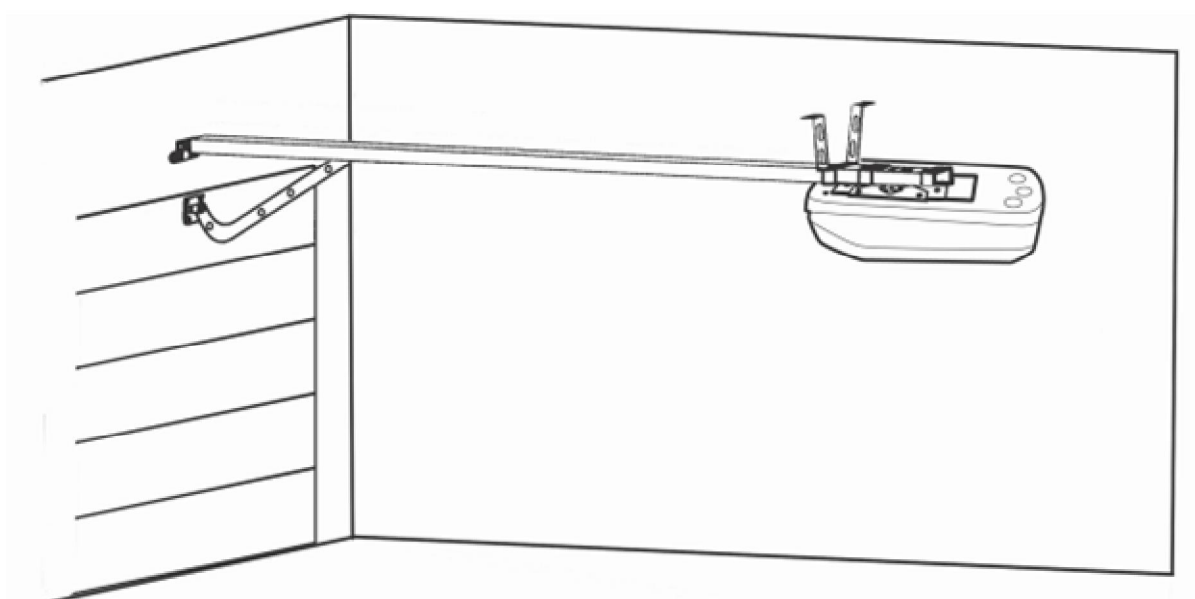


140100



Technical data:

Operating Voltage:200-240V,50HZ

Rated power: 120W

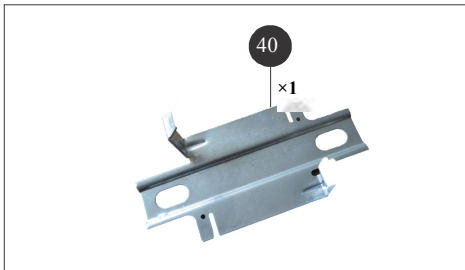
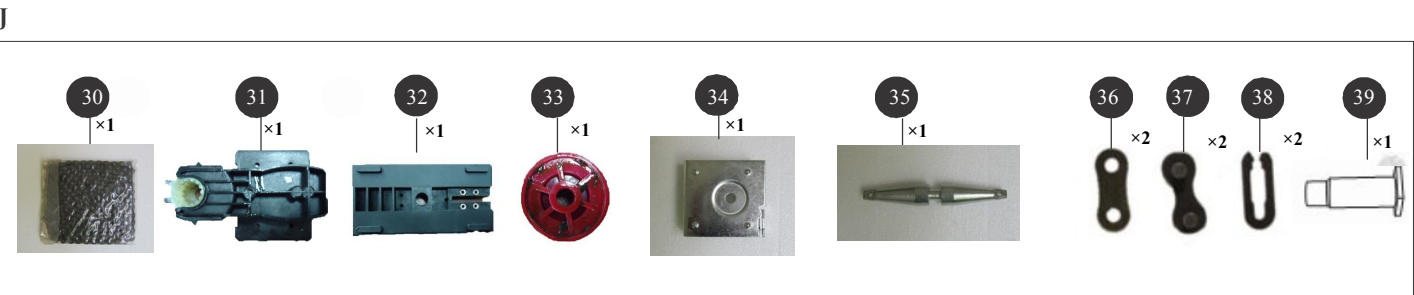
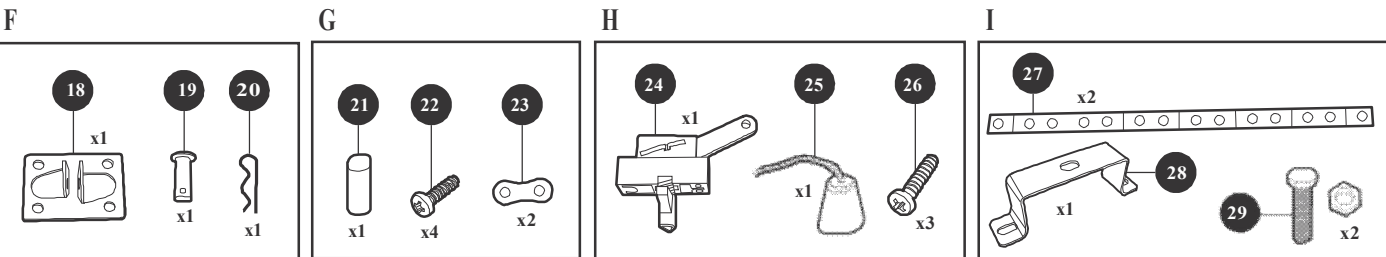
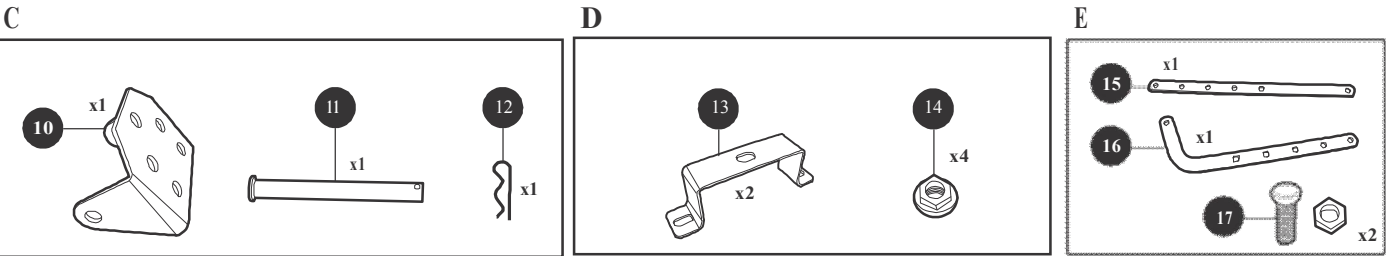
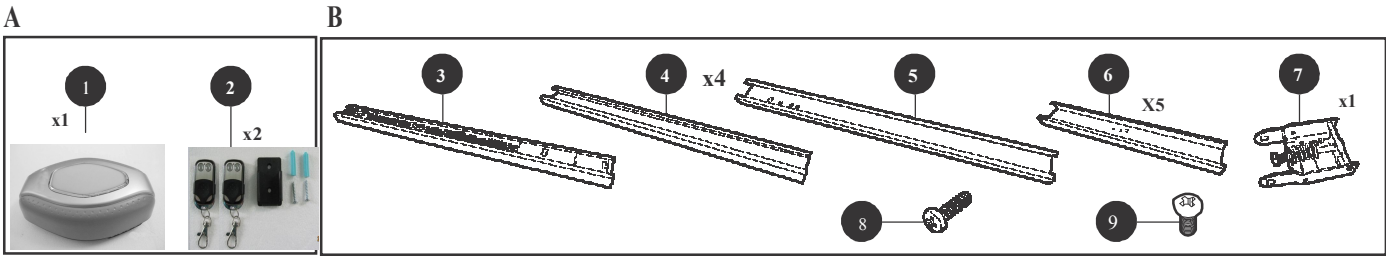
Maximum Driving Force: 800N

Work Temperature: -30°C/65°C

Frequency of remote control:433.92MHZ

Remote control distance:25M-35M

1 • Part List

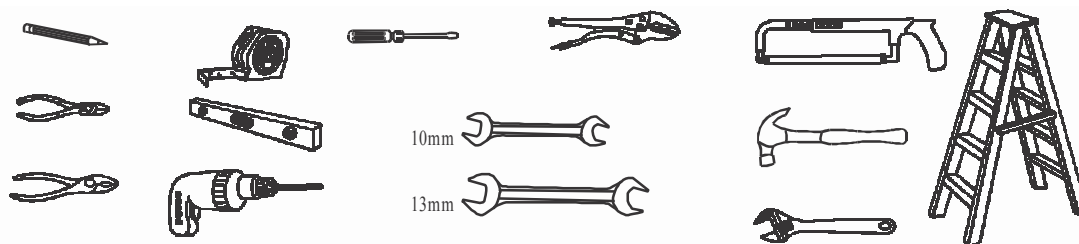


Item	Element	No.	Item	Element	No.
A	Motor		F	Arm/Door Connector	
1	Motor	1	18	Door support	1
2	Remote	2	19	Pin to fit the door support	1
			20	R key-to fit pin	1
B	Rail		G	Arm/Pull cart	
3	Front section of the rail(with two holes on side)	1	21	Pin to fit the arm to pull cart	1
4	Central part of the rail	4	22	Screw to fit the arm to pull part	4
5	Rear portion of the rail	1	23	Metal piece for fitting the arm to pull cart	2
6	Rail Connection(short)	5			
7	Head of the rail	1			
8	Screw for fitting the chain	2	H	Clutch arm	
9	Screw for fitting the head of the rail	2	24	Clutch arm	1
			25	String	1
C	Rail/Wall connector		26	Screw fix clutch arm	3
10	Wall support	1			
11	Long pin to fit the rail to the wall support	1	I	Ceiling Connect	
12	R key to fit long pin	1	27	Mounting support straps	2
			28	U bracket -Fixing Rail with ceiling	1
D	Motor/Rail connector		29	Screw and nut fix ceiling	2
13	U bracket –To fit Rail to motor	2	J	Attach with the chain in the rail	
14	Screw to fit U bracket	4	30	Chain	1
			31	Chain wheel trailers	1
E	Arm		32	Pull cart	1
15	Curved Door link- Part of the arm	1	33	Plastic sprocket	1
16	Bent portion of the arm	1	34	sprocket fixture	1
17	Screw and nut for connecting Curved door link	2	35	Chain link	1
			36	Metal piece for fitting chain link1	2
			37	Metal piece for fitting chain link2	2
			38	Clips	2
			39	Metal nut for fixing the sprocket fixture and plastic sprocket	1
			K	Fixing the rail	
			40	Rail fixation	1

2 • Necessary tools

The tools required for installation must be in good condition and adapt to the applicable safety.

2-1 • Necessary tools (not supplied in the kit)



3 • Analysis of risks

(Perform the installation according to the regulations. To make all possible risks, resulting from movement of the gate as small as possible)

3-1 • Regulations

The installation of an automatic garage door, or a motor, on an existing garage for private use, should be in accordance with the guideline 89/106/CEE relating to construction products.

The reference standard for this agreement is to the standard EN 13241-1, which relies on a reference of several standards including EN 12445 and EN 12453 by the methods and components to mention the motorized gate, to be secured that the risks to people can be reduced or eliminated.

The installer must make the user familiar with the operation of the automatic gate. The standard EN 12453 specifies that the minimum protection of the edge of the gate depends on the type of use and the type of operation used for the gate. This automated system for a garage door is a system with impulse control, this means: by a single press of one of the controls (remote control, keyswitch) the port can be activated.

This automatic garage door system is equipped with a force limiter corresponding to the Annex A to EN 12453 in connection with the use of a port that conforms to the specifications given in this chapter.

Specifications of the EN 12453 standard so make the following two usage types and minimum:

- Activate by using the gate pulse as shown

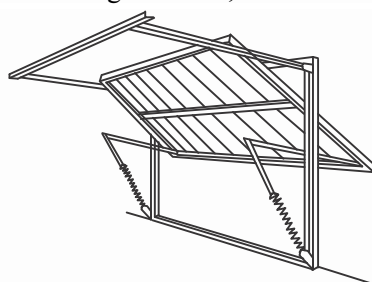
Minimum level of protection: only the force limiter

- Activate on impulse while the port is not visible

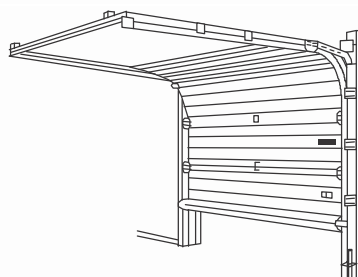
Minimum level of protection: force limiter and a pair of photoelectric cells to close the gate to maintain safety.

3-2 • Specifications of the motorized gate

- The automatic garage door system is suitable for the following port types:
 - **Over door(The Retractable Door)**: maximum height 2.20 m, maximum weight 60 kg.



- **Sectional door**: maximum height 2,10m, maximum weight 60 kg.



The maximum weight applies for a gate opens and closes free and has no significant friction. The port must be operated manually with a force of less than 15 kg (150N). Otherwise, the weight must be reduced to the appropriate number.

Security checks of the gate:

- The motorized gate is only intended for private use.
- The port must not be installed in an explosive atmosphere or in a corrosive environment (the presence of gas, flammable fumes, vapors or dust).
- The port must not be equipped with a locking mechanism (strike, lock, latch,).
- Without the engine, the port is in good mechanical condition, well balanced, and without friction or resistance to open or close. We recommend to grease the slide material elements and the rails.
- Check if the connection points of the different elements are in shock-free zones and that the flat surface is strong enough.
- Check if the structure of the gate has no protruding elements.
- The point where the automated system on the port is attached, has to be a solid part of the gate. For ports made of light materials (PVC, etc.), the attachment point should be strengthened.
- Tilt Gates protruding out of the wall, should not cover public roads.
- The garage port may not have a door.
- The pressure during the closing be measured may not be more powerful than 150 N (15kg). If the pressure during closing exceed 15 kilograms, then the automated system can only be installed on ports whose weight exceeds 30kg. The engine cannot be tuned, used to compensate for a malfunctioning door. Using overly regulated power prevents the safety system of the port from working.

3-3 • Safety Instructions

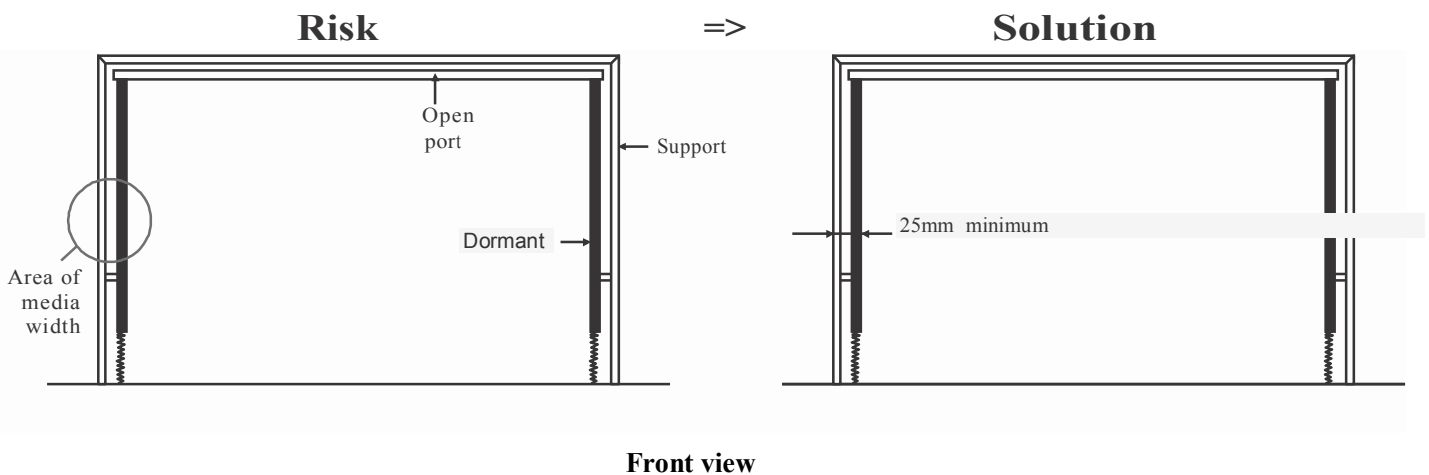
The motion of a garage port can be dangerous for people, goods and vehicles that are too close. These hazardous conditions cannot always be avoided by design.

The possible risks depend on the condition of the gate, the way it is used and where it is installed.

After ensuring the motorized gate corresponds to the requirements listed in this section and before you start the installation, you must analyze all hazardous conditions to exclude them or to identify them if they cannot be excluded:

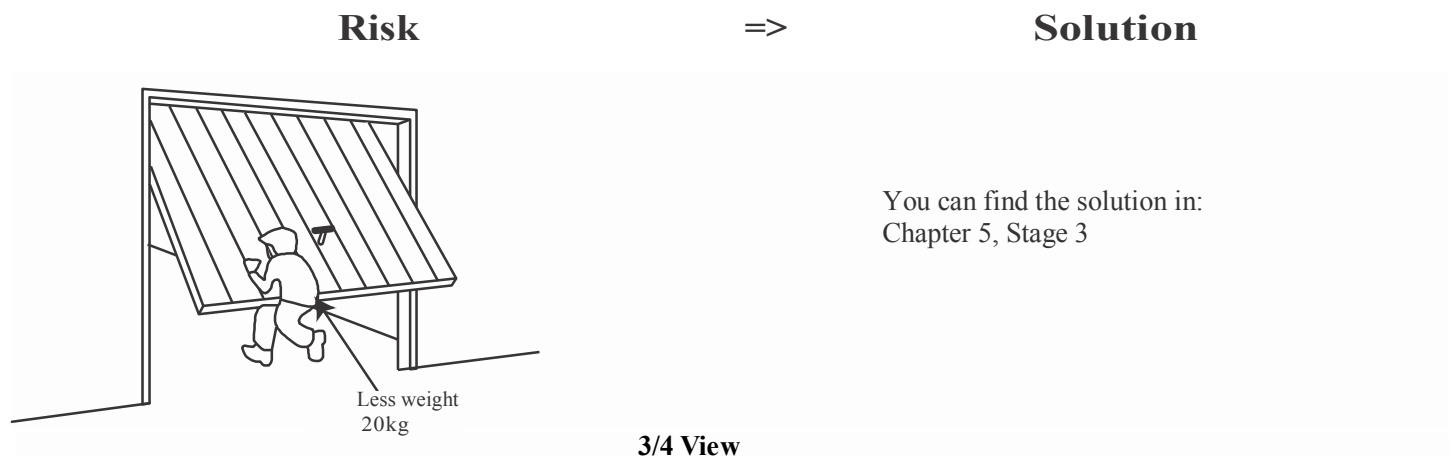
Between the levers of an over door and the frame

There is a risk that someone can be crushed between the levers of an over door and the style. To avoid this comply with a minimum distance of 25mm around the levers.



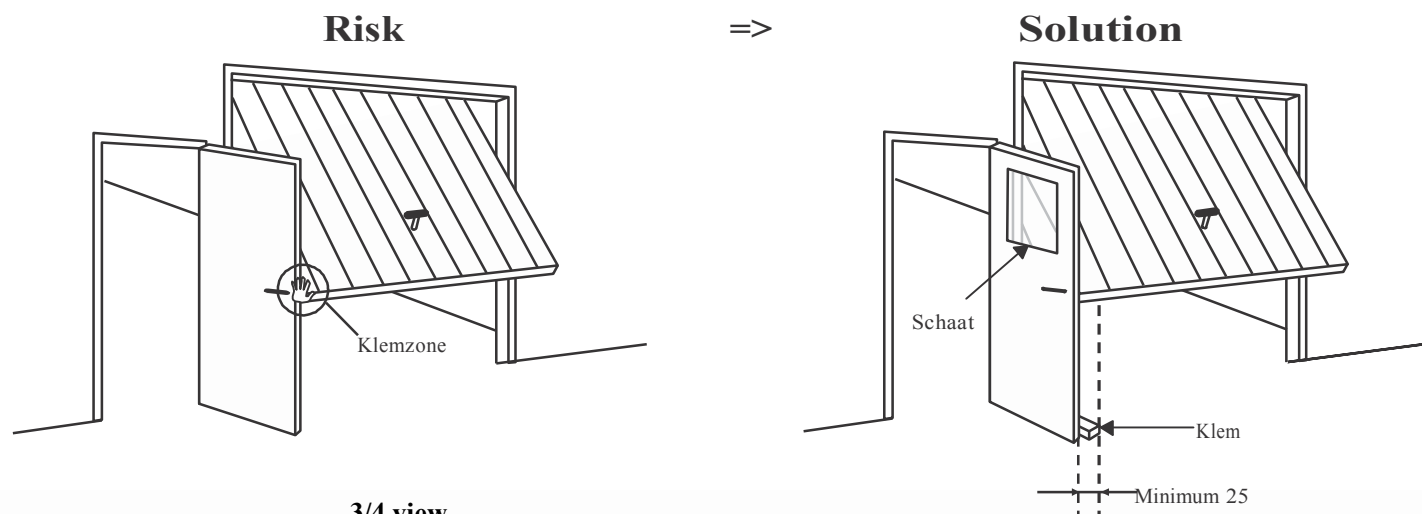
Risk to be lifted through an over door.

There is the danger that a person is lifted by the port. To avoid this; adjust the power of the engine so that the motorized gate cannot lift a weight of 20 kilograms.



Risk to get stuck or crushed between the over door and a normal door

The risk exists that someone gets squeezed and crushed between an over door and a normal door. To avoid this; make a hole or window in the normal door, or make a door stop on the floor that causes a distance between the door and over door never smaller than 25mm.

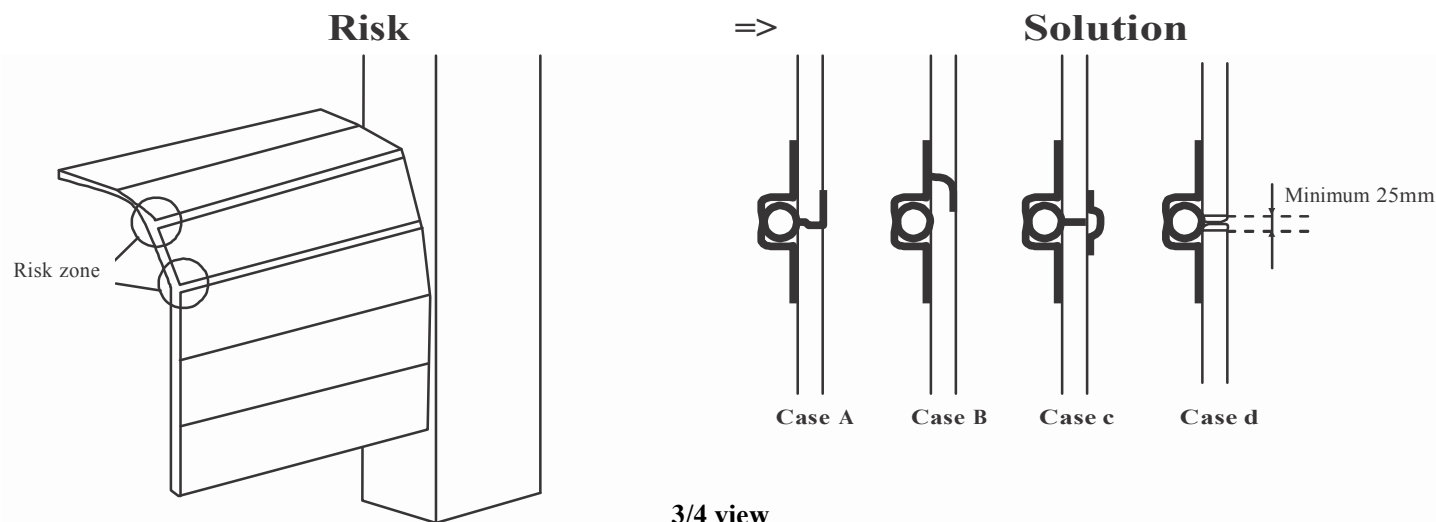


3/4 view

Risk of becoming wedged between the elements of a sectional door

The risk exists that someone get wedged between the elements of a sectional door. To avoid this it is possible to:

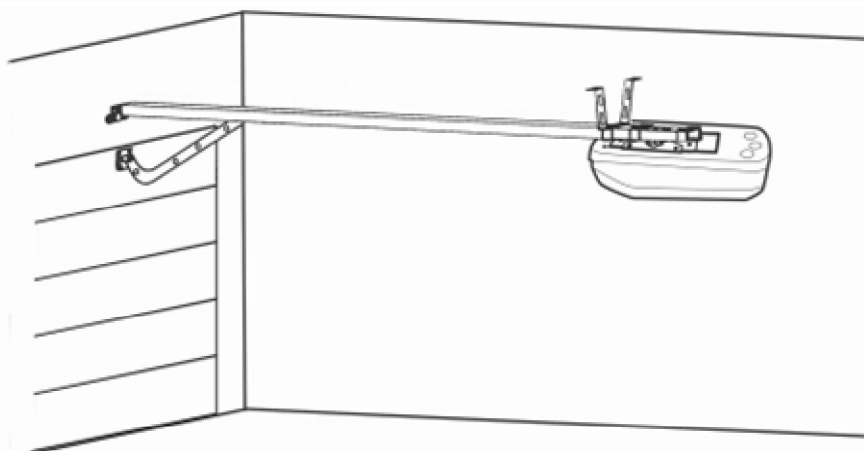
- assemble a flexible guide which follows the movement of elements (case A)
- Assemble elements which are so designed that no variable gaps can occur (case B)
- Fill the space up with rubber or other flexible material (case C)
- Always use a safety distance of at least 25mm to, this distance is measured in closed position (case D)



3/4 view

4 • Fixation of the elements

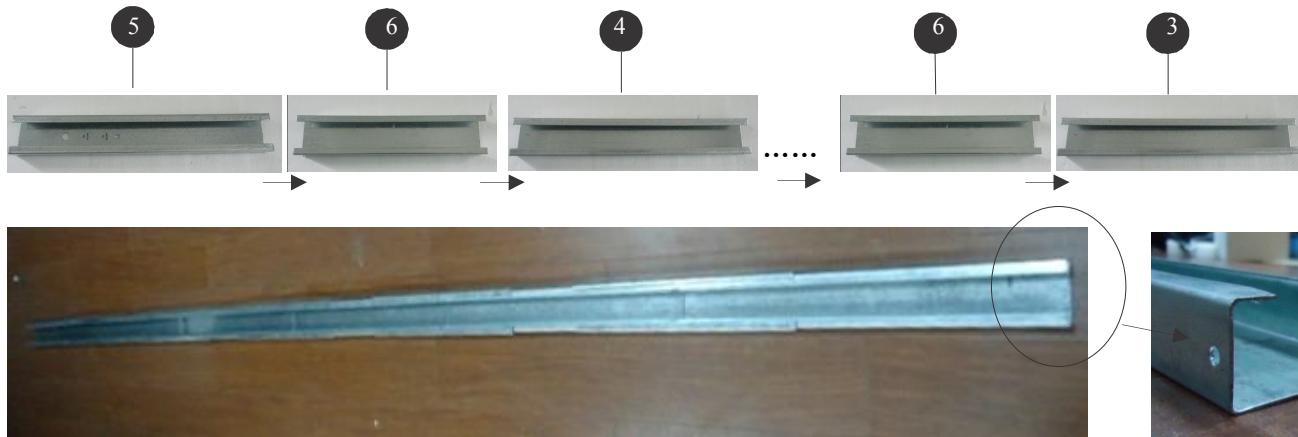
Overview Drawing (in garage)



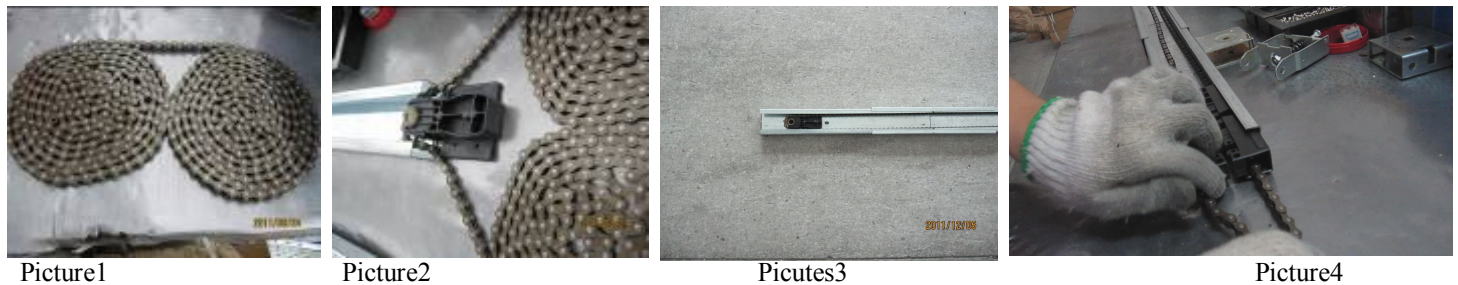
Check whether there is sufficient space available and if there are no obstructions (pipes, ducts, etc.) at the place where the motor must be installed.

4-1 • Assembly of the rail and the engine

• How to assemble the elements of the rail. There are total 11 parts of the rail, you can connect one central part (4) to one connection part (6), then repeat for four times. Please note that the last rail (5) is of some holes which will connect to the motor, and the first rail (3) has two holes in the side.



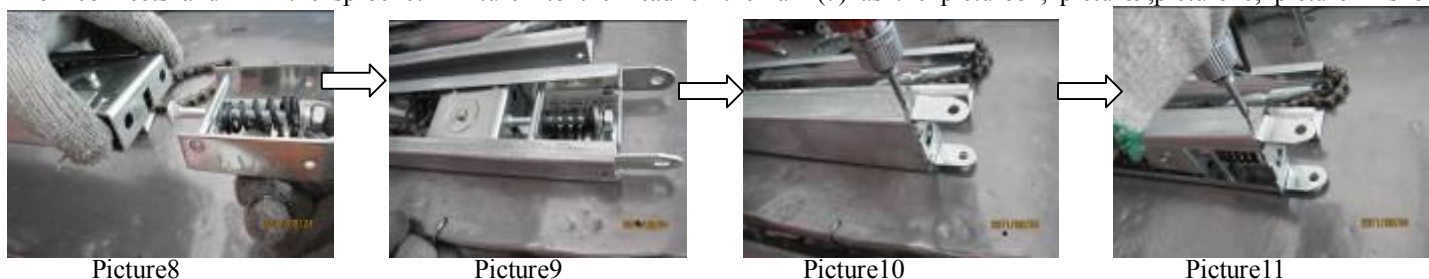
Then open the packing of the chain (30), make the chain like the below picture1 shows. Then connects the chain to the Chain wheel trailers (31), as the picture2 shows. Then move the chain wheel trailers with chain to the last rail, the chain wheel trailers will connect to the motor, as the picture3 shows. Then get the pull cart (32) connect to the chain and get into the rail, as the picture4 shows.



Then put one end of the chain into the sprocket fixture (34) hole, if no do so, later you will find that you can not get the chain through the sprocket fixture (34). Now you can connect the chain link (35) with the chain, use metal piece and clips (36), (37), (38), as picture 5 shows. Then put Plastic sprocket into the sprocket fixture as picture6 shows. Meanwhile do not forget to put metal nut (39) into the holes for both sprocket fixture and plastic sprocket as the pictures7 shows.



Then connects and fix the sprocket fixture to the head of the rail (7) as the picture8, picture9, picture10, picture11 shows.

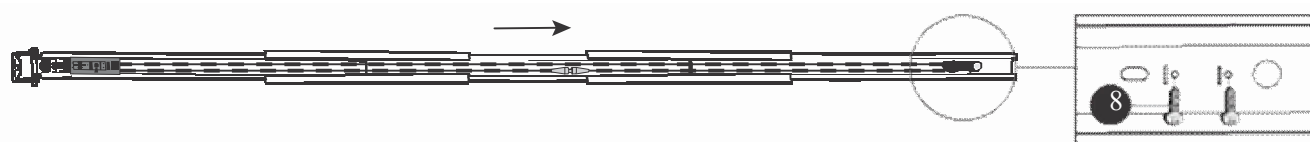


Now the product like the below picture12 shows



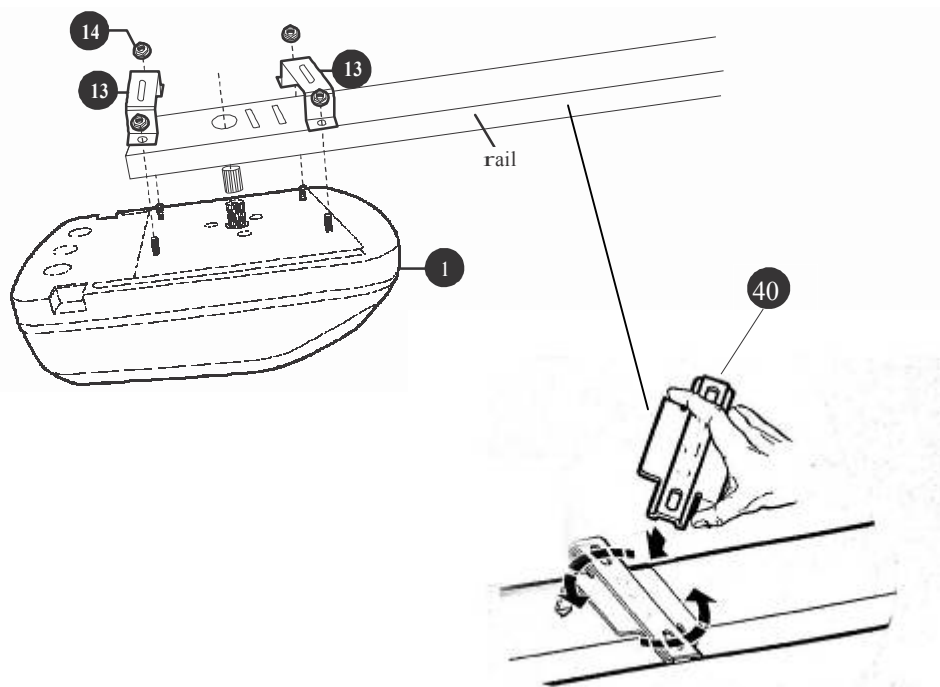
Picture12

Then you can fix Chain wheel trailers (31) to the last rail using the screws (8) as the below picture13 shows



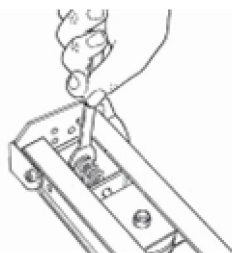
Picture13

- How to attach the rail to the engine.



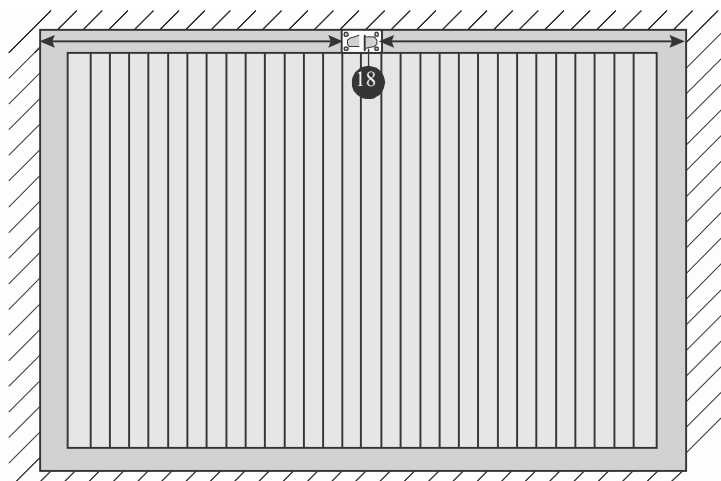
Fit this anywhere along the rail and the clutch so the push arm can pass through it freely, so you can later select the best place to fix it to the ceiling. The above right pictures shows how to fix the rail to the ceiling, using Rail fixation (40).

- How to tighten the chain.

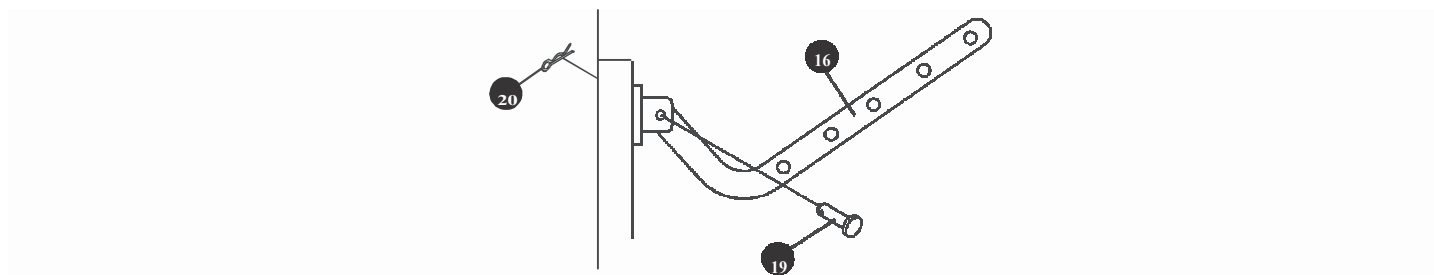


4-2 • How to attach the assembled engine

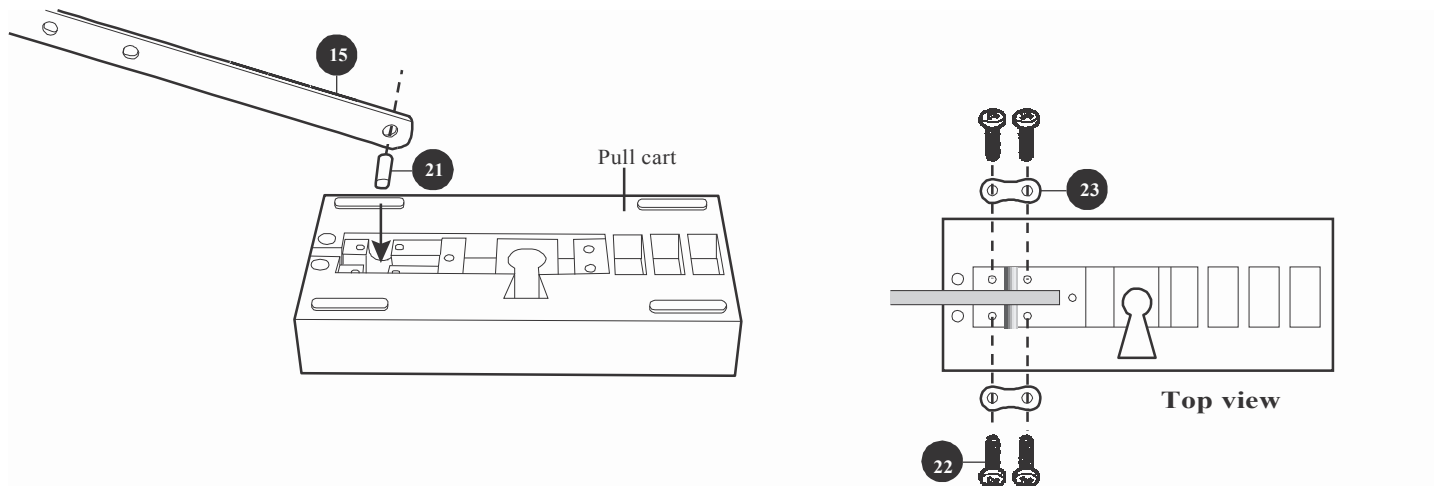
- Draw the 4 holes in the middle and on top of the door for the door support (see part list 18). Attach the door support with screws. Use screws that are adjust to the materials of the door, and check that they are able to bear the entire effort required for opening and closing the door.



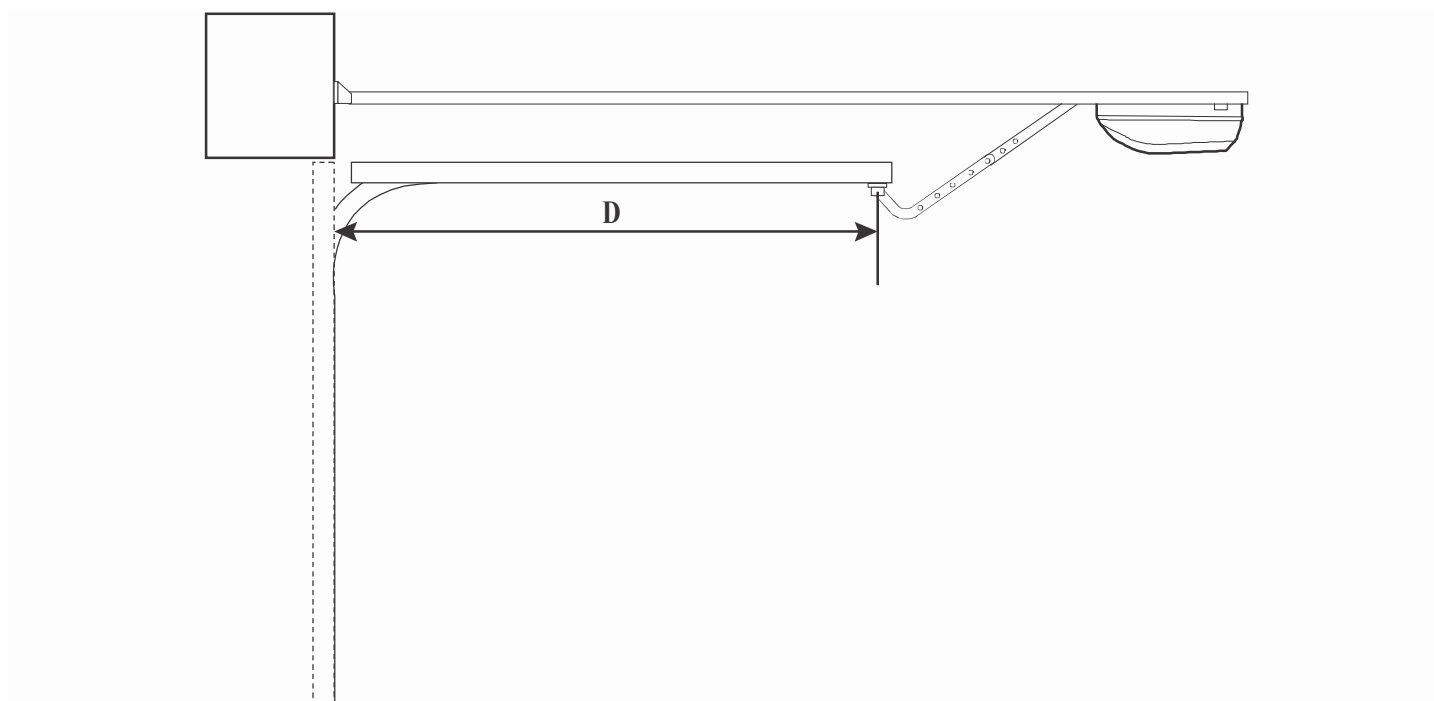
- Fit the bent portion of the arm (16) to the door support (18).



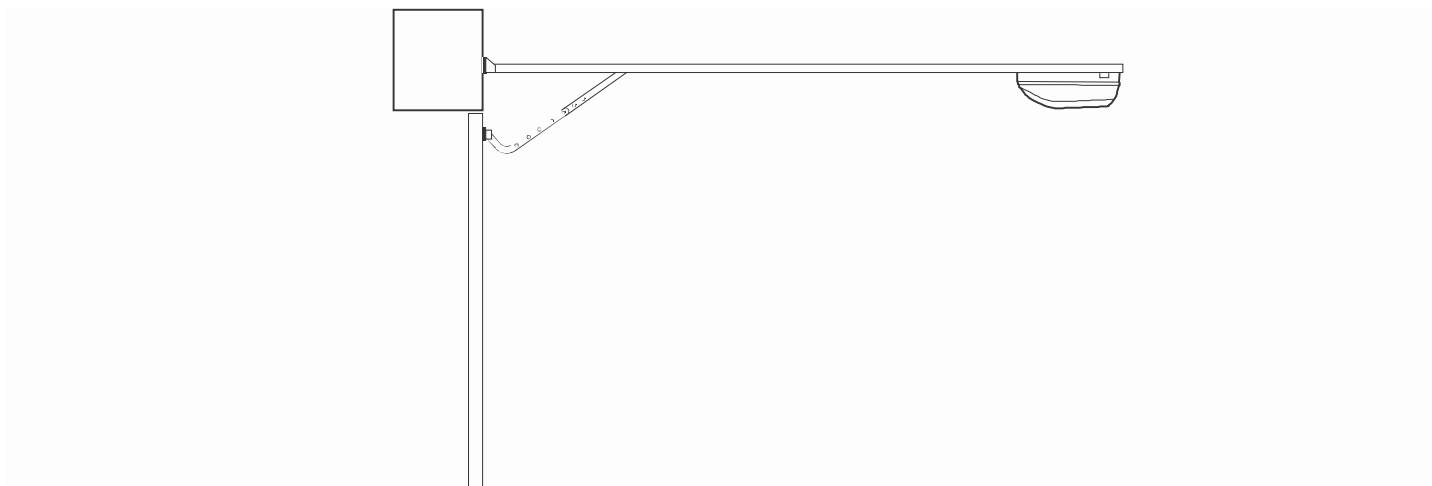
- Attach the straight part of the arm (15) to the pull cart.



- Open the door completely and measure the distance D, the distance between the door in closed position and the door in open position.



- Attach the assembled engine as follows:



- The two parties of the arm (use nr. 16 only if necessary) together determine the size of the rail (the best compared to the ceiling) this to determine A maximum.



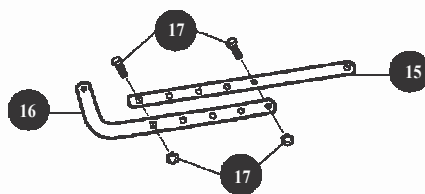
A :

$$a \text{ maxi (in cm) } = 222 - d$$

(222 : total run of the pull cart in the rail / d : measured distance totally opened door)

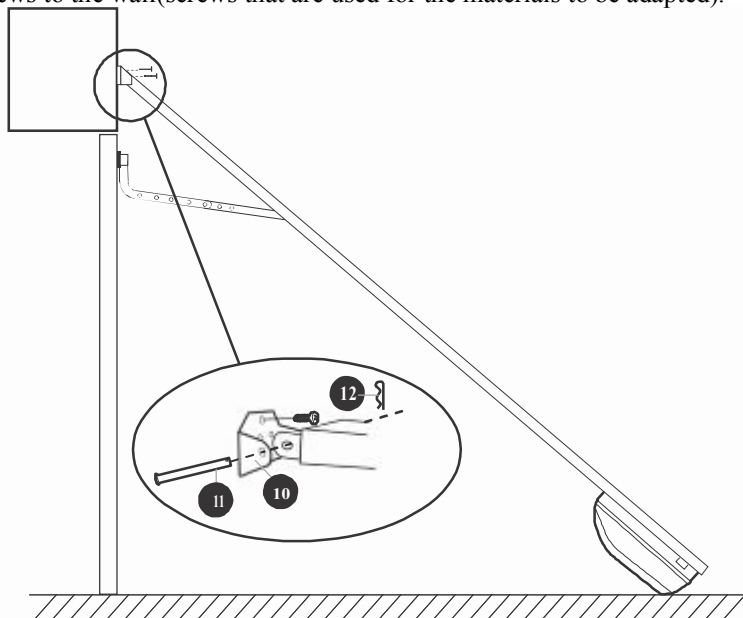
$$a \text{ mini (in cm) } = 2$$

- If A exceeds calculated A maxi then the door will not fully open.
- If the ceiling on which the rail is attached is too high and the connection of the parts of the arm is too short, don't try to extend further. Because, if the engine is too high relative to the door, the door support (18) on top of the door will be overburdened, this can cause damage of the door.

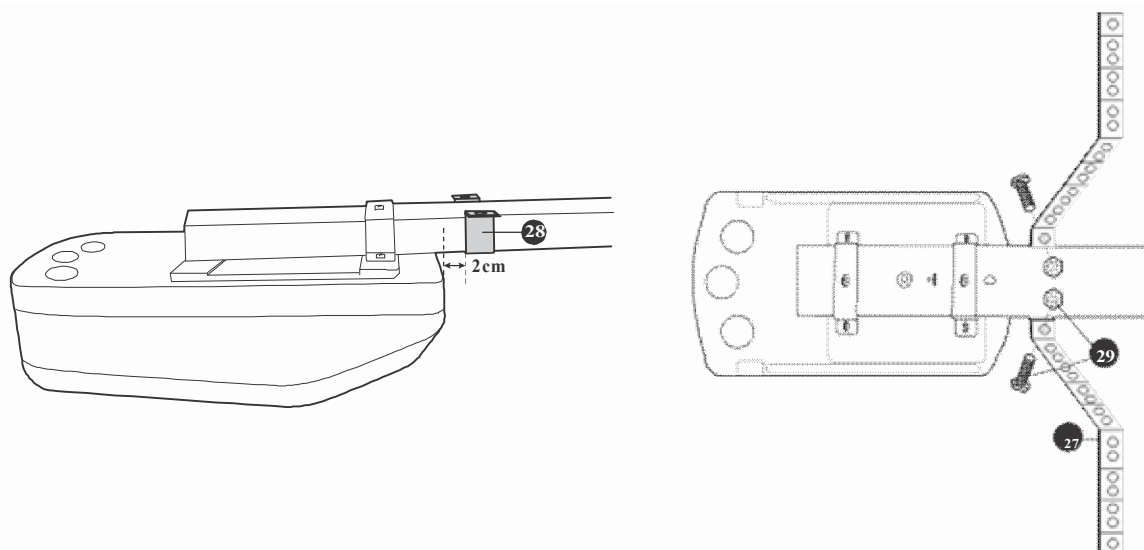


4-3 • Attach the assembled engine to the ceiling and the door

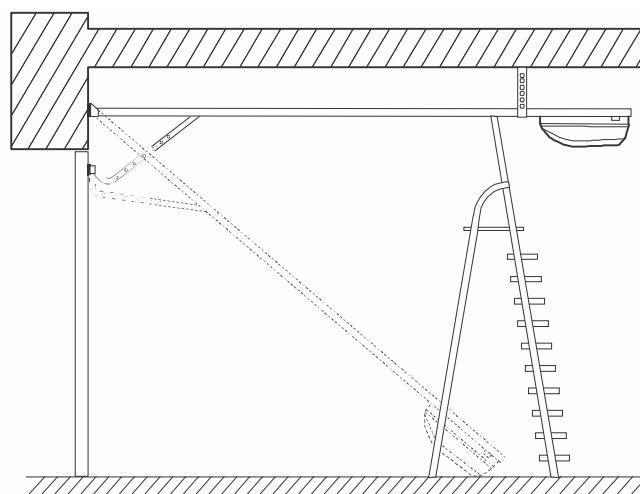
- Be sure that A is always smaller than A maximum and greater than 2 cm. Be also sure that you attach the engine in the center of the door and in line with the door support nr (18). Attach the wall support (nr10) with screws to the wall(screws that are used for the materials to be adapted).



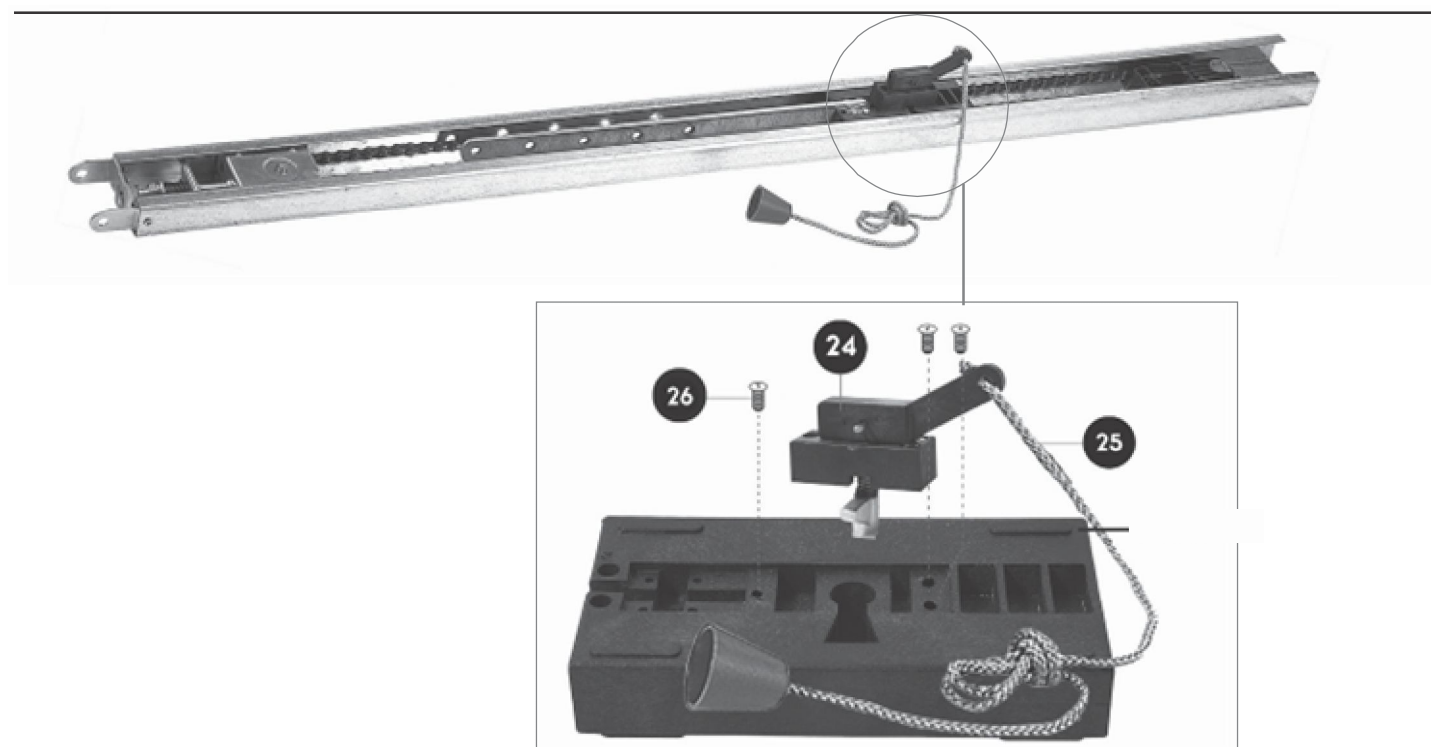
- Fold the mounting support straps (27) around the rail (3,4,5) and attach it according to the pictures and fully horizontal.



- Attach it to the ceiling with screws and anchors (screws that are used for the materials to be adapted), check if they are able to support the weight of the whole construction and the effort and force required for the opening and closing of the door.



4-4 • Attach the release system on the pull cart



5 • Controlling and operating

Attention! To avoid dangerous situations, no one should be standing under the automated system when the power is adjusted.

Preparation

Release clutch arm(24), manually open and close the door several times. If the door does not move smoothly, please check installation or torsion system.

Don't install the automated system unless the door runs smoothly for manual operation.

Testing and tuning of the automated system is done in five steps.

Step 1: Controlling the opening position

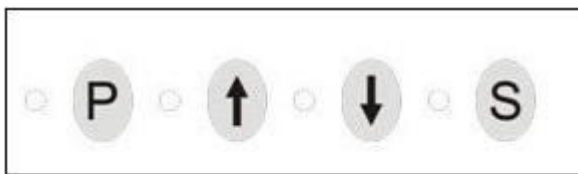
Step 2: Adjusting the closing position

step 3: Controlling the opening force

Step 4: Controlling the closing force

Step 5: Programming the remote control

5-1 • Controlling the opening position



1. Connect the automatic system to the electrical network 230Vac/50Hz.
2. Press button **P** about 3 seconds until the light flash slowly. Let it go.
3. Press button **↑** and the garage door starts to open.
4. Release the button once the door completely open. If the door is open too far, press button **↓** to change.
5. Press button **P** to select the position to memorize
6. The **↑** light flashes rapidly, then the **↓** light flashes slowly. Then it's time to arrange the closing (see below)

5-2 • Adjusting the closing position.

1. Press button **↓** and the garage door starts to close.
2. Release the button once the door completely close. Press button **↓** to change the position. Press button **P** to memorize.
3. The automated system open and close the door automatically to check the position. If the door is not completely open or close, it is necessary to start again.

5-3 • Controlling the force(usually it is not needed)

Adjust the force so that the automatic door system works the best way. If the force too low, the process of opening the door will interrupt during cycle. If it is too strong, the security system does not work.

1. Press button **P** about 6 seconds until both **↑** light and **↓** light are on.
2. If necessary push the buttons **↑** and **↓** to adjust the level of force for opening the door. There are four possible levels: the lowest when the **↑** light flashes once, the highest when the light flashes 4 times (after pressing "**↑**" or "**↓**").
3. Push button **P** to memorize the force for opening the garage door. At this point you can adjust the closing level, press the P Button to exit the control mode.

5-4 • How to use the remote controller

You can fix the controller holder onto the wall near the garage door using the screw sets with the remote controller.

There are two remote controller with the product, one is taken by person, the other is fix onto the wall near the garage door.

1.Programming the Remotes Control

1)Code

Press **S** button 2 seconds, press operation button of the remotes 2 times till indicator flash.

①It is successfully programmed if the opener work.

②If a Remote Control lost, it must be decoded and new Remote coded as above, so that the lost one can not operate the door any more.

2)Decode

Press **S** button for 6 seconds till indicator glows.

3)When the door closing completely, first press unlock button, then press operation button to open the door. When not closing completely, just press operation button for opening and closing.

6 • How to use

Important Note:

- The automated system should never be used before the installation and all arrangements are fully implemented. The safety instructions in the front of this manual must be read.
- Please ensure that the route of the port is free before you activate the closing cycle.
- In case of a serious defect the automated system may not be activated, please contact our help desk or a specialist.

6-1 • Open / Close

- The system can be operated with a programmed remote control or any other control element that was installed.
- The movement of the garage door can be stopped at any time: to do so you must press the programmed remote control or to activate a control element. A new command will control the port to move. This will be a reverse motion against the previous motion.

1. Press the programmed remote control or activate a control unit.
2. The gate is in motion.
3. Release the button on the remote control or the controlling element.

6-2 • Lighting

This automatic system for garage doors is equipped with a lighting element.

The lights will turn on when the garage door is put in motion and turns off 2 minutes after the gate has completely stopped.

6-3 • Detection of an obstacle

When the gate is closing, and has any contact with an obstacle, the automated system is as follows:

- The gate stops.
- The door will be opened once again into the up position.

1. Remove the obstacle.
2. Press the button on the remote control or activate a control element to close the gate again.

6-4 • Action of the photocells(not supplied in the kit)

The photocells are active at the beginning and during the closing.

- At the beginning of each clip:

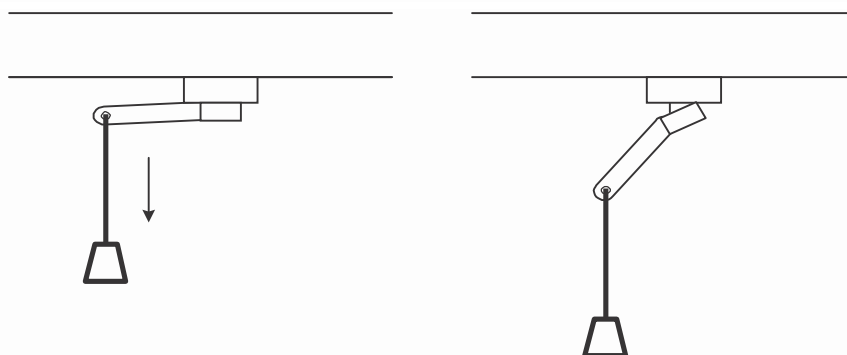
1. Push the button on the remote control or a control element to continue the closing of the door again.
2. If there is something in the beam of the photocells, the door will not close. As long as the beam is blocked, it is impossible to move the door.
3. Once the bundle is unblocked again, you can push the button on the remote control or a control element to continue the closing of the door.

- During the closure:

If the beam of the photocells is blocked, the door reopens completely.

6-5 •Manual movement

To close the garage port, in case of a power failure or a defect in the automatic system, you can manually move the door by pulling the rope on the pull cart. Now the pull cart is released and manual movement is possible:



Note: Once the automated system is disengaged, the door can come in motion because of her own weight. Therefore it is important to pay attention or to block the port, preventing any risk of injury.

7 • Maintenance

7-1 • How to solve defects

Symptom	Possible cause	Solution
The automatic system begins to work, but stops immediately.	The garage door is locked.	Unlock the gate and try again.
	The mechanism was not properly installed	Rule assembly according to the instructions in this manual.
	The power is not properly regulated.	Adjust the power according the instructions in this manual.
The automated system will not work, and moreover it is not light.	The operation times are not set correctly.	Adjust the time according to the instructions in this manual.
	<input checked="" type="checkbox"/> The springs are worn or too tight. The automatic system cannot move the gate.	Replace old and worn feathers.
	The automatic system is not connected to the electricity.	Connect to an socket with 230.
	The socket is not powered.	Check the board with fuses.
The automatic system opens and /or closes the gate not completely.	The port is blocked by an obstacle.	Remove the obstacle.
	The opening and closing times are not properly regulated.	Adjust the time according to the instructions in this manual.
	The engine power is not properly regulated.	Adjust the power according to the instructions of this manual.
The remote does not work.	The battery is empty.	Replace the battery according to the instructions of this manual.
	The remote is not installed yet.	Programming the remote control according to the instructions of this manual.
	All codes are erased from the automated system.	The remote control should be re-programmed according to the instructions
The automated system works, but the door does not open.	The motor is disconnected.	Put the disconnection lever of the trolley back into the horizontal position.
	The chain is not properly tightened.	Adjust the tension according to the instructions in this manual.

7-2 • Maintenance

For proper functioning and security of the system, the maintenance should be performed by the installer or a suitable qualified person. The number of maintenance and cleanings should be proportional to the frequency of use of the motorized gate.

For use around 10 cycles per day, the following maintenance for your reference:

- Every 12 months for mechanical parts: tighten the screws, lubricate, control of the conductors
- Every six months for electronic components: motor operation, photocells, controls.

Important:

In case of an obstacle, the security system should be monitored regular. The movement of the garage door must reverse when the door comes into contact with an obstacle 50 mm high was placed on the floor. If the system is not properly working, it can lead to serious injury. Repeat the test once a month and repair the system as necessary.