



Vehicle Access Control  
Pedestrian Access Control  
Safety & Security Equipment

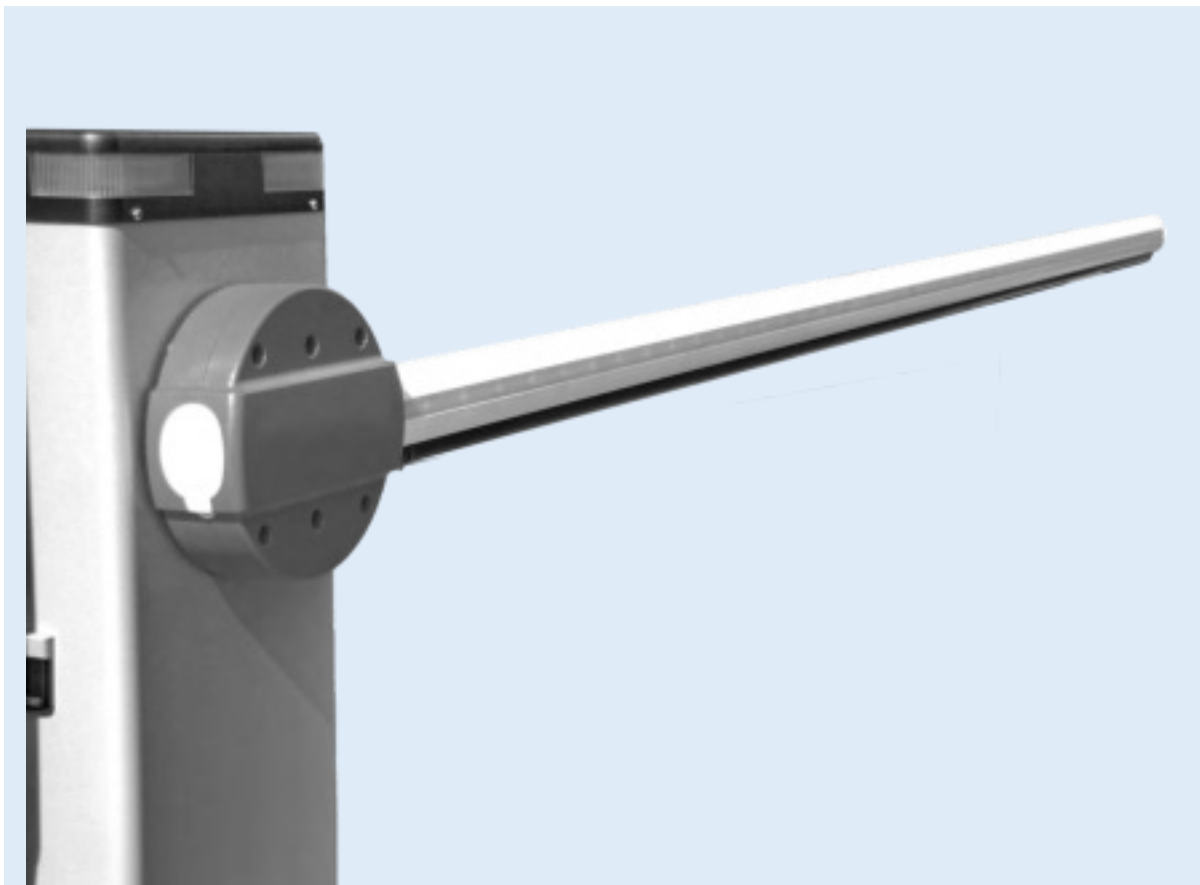
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# SENTINELAG BOOM GATE

## Mechanical Quick Set-Up Instructions (V0118)



**NOTE: The Quick Set-Up Mechanical Installation Instructions below provide basic information for setting up the AG Automatic Boom Gate.**

**FOR MOST SITUATIONS CHANGES TO FACTORY SETTINGS ARE NOT NECESSARY**

**For more detailed installation information please refer to the full set up instructions document.**

## **QUICK SET-UP MECHANICAL INSTALLATION**

The following quick set-up instructions are extracts from various sections of the complete Mechanical Installation Instructions:

- ❑ **Installing the boom gate cabinet:** *Chapter 10 –10.5 Fig 1-9*

**IMPORTANT:** Fit boom pole before fitting spring

- ❑ **Unlocking the mechanism** *Chapter 21 Fig 1-2*

Turn the key anti clockwise TWO COMPLETE TURNS so the mechanism is unlocked, you will now be able to manually move the drive mechanism.

- ❑ **Fitting the balance spring** *Chapter 11 Fig 10 -11*

- Install the balance spring using the holes as shown in **Fig 10 -11**

- Adjust the spring tension so that when placed a 45 degrees the pole will rise slowly to the open position

- ❑ **Locking the Door** *Chapter 11 Fig 10 -11*

- Insert the door onto the tabs in the bottom of the cabinet and close the door.

- The top of the door should be 4-5mm below the lip of the cabinet, if not, push down hard on the door. The door cannot be locked unless it is in this position.

When the pole and spring are fitted and adjusted the auto learn function can be started. SEE ELECTRICAL SET-UP INSTRUCTIONS

**IMPORTANT: Set Up Boom Gate Handing BEFORE fixing the boom gate to the concrete base (See Page 21 Chapter 10.4)**

**10. MECHANICAL INSTALLATION**

**10.1 Preliminary checks**

- Check that the material received is in good condition and suitable for the application.
- Check that the operating limits of the product are not exceeded.
- Check that the site chosen for installation meets the overall space requirements of the product and that there are no obstacles hindering open or close manoeuvres.
- Check the concrete base for the barrier installation. The base must be cast in accordance with proper working practices, perfectly level and clean.

**10.2 Installing base plate**

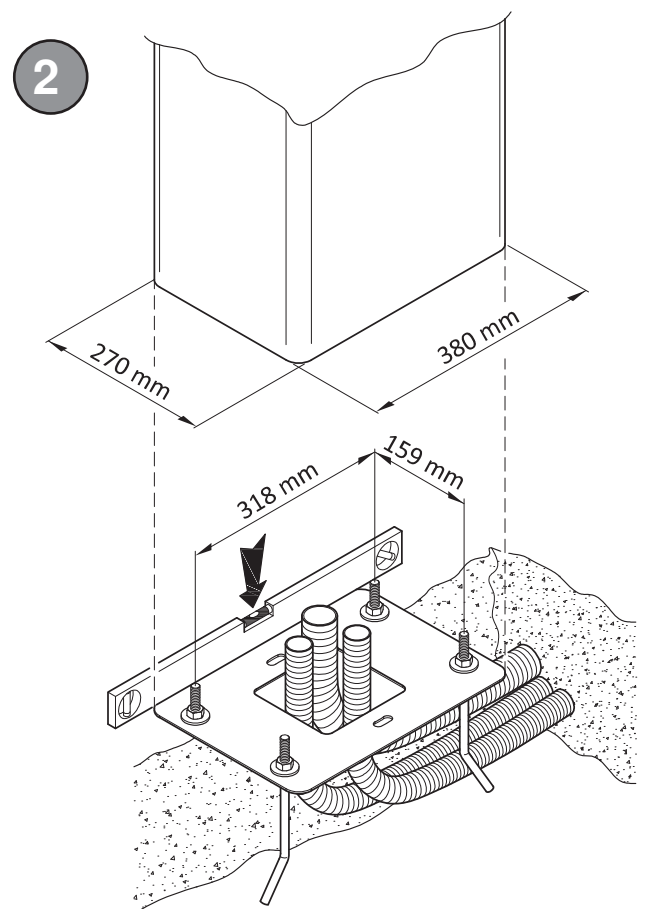
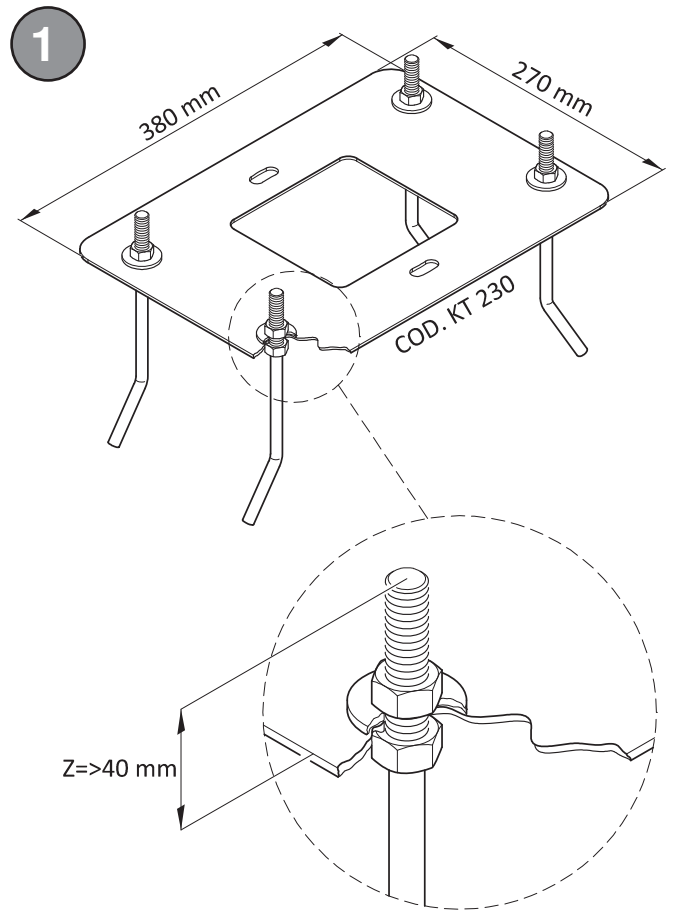
The illustrations herein are indicative only. The space necessary for fastening the automation system and the accessories may vary depending on the overall dimensions of the installation. The installer is responsible for determining the most suitable solution.

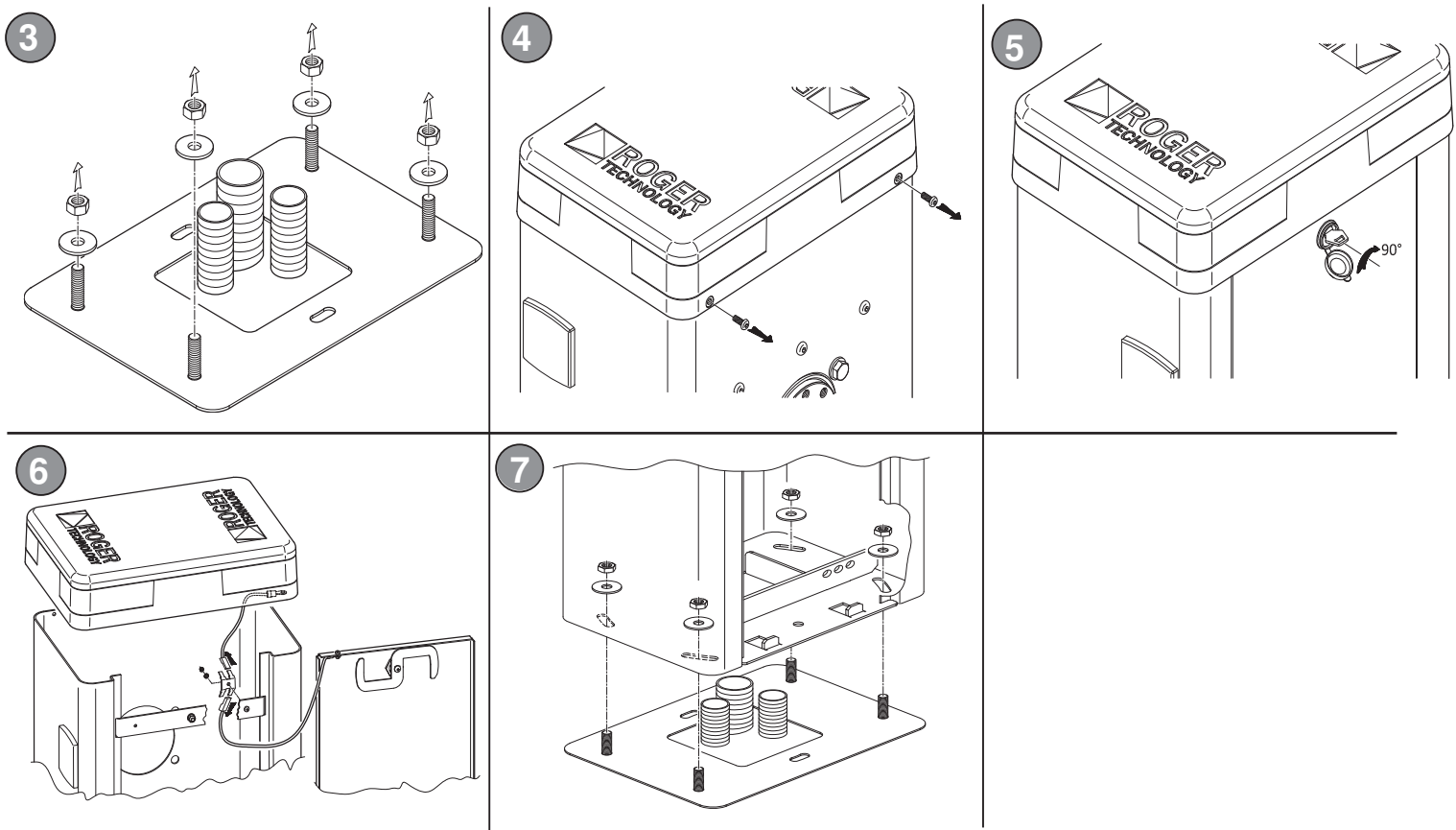
- Excavate a foundation pit measuring 1m x 1m x 0.4 m and fill with concrete reinforced with steel mesh.
- Fasten the 4 anchor ties to the plate (fig. 1). **N.B.:** the bottom nut must be tightened to the end of the thread on the screw so that the length Z is at least 40 mm.
- Sink the base plate with the anchors in the centre of the foundation pit, so that the surface is flush with the concrete and perfectly level. The corrugated cable conduits must protrude by a few centimetres from the centre of the plate.
- **Installation on existing surfaces.** Place the base plate on the surface and trace the positions of the fastener points. Drill the surface and fit 4 expansion anchor bolts (purchased separately).

**10.3 Installing the barrier**

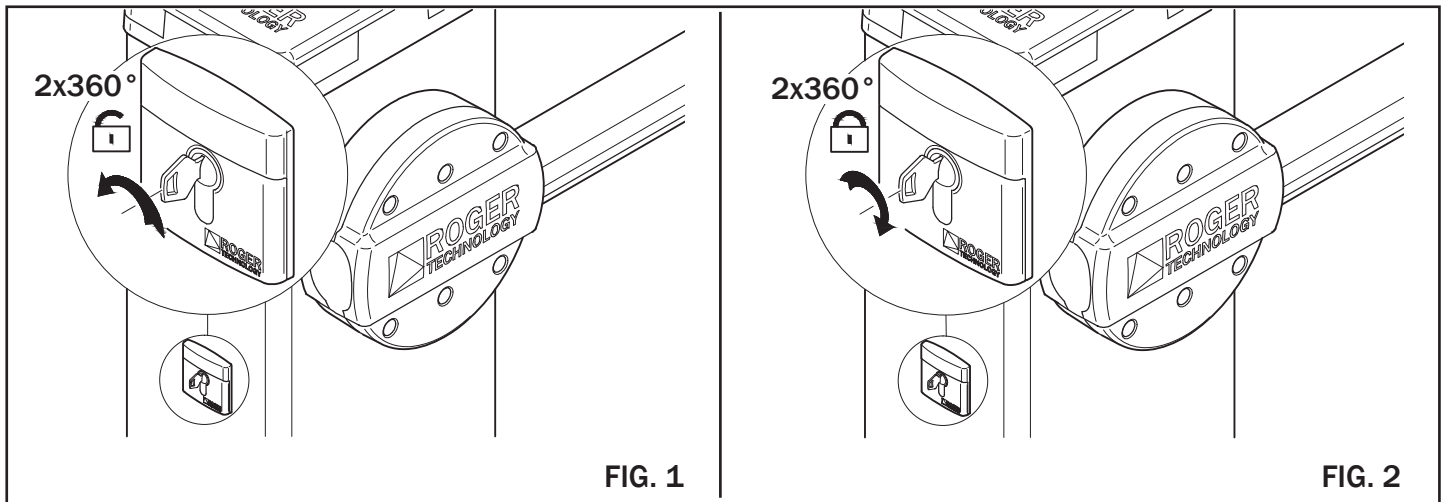
The AG Boom Gates are supplied as Standard DX handing.

- Undo and remove the washers and nuts from the anchors on the base plate (fig. 3).
- Undo and remove the two screws fastening the head (fig. 4).
- Open the inspection hatch, turning the key clockwise by 90° (fig. 5).
- Lift the head and disconnect the ground cable from the connector lugs on the cabinet (fig. 6).
- Place the head carefully on a suitable surface or in a safe place to avoid damage.
- Remove the inspection hatch.
- Place the cabinet on the plate. The anchors on the base plate must fit through the four slots.
- Fit the washers and nuts removed previously. Move the cabinet as necessary in the slots to adjust the position of the barrier correctly. Tighten the nuts securely (fig. 7).





## 21 RELEASE AND LOCK PROCEDURE



In some situations, such as in the event of a power outage or scheduled or extraordinary maintenance, it is necessary to release the automation. The operation of the release of the automation must be carried out when the boom is stopped in the closed position (horizontal). Moreover, ensure that at the time of release, no person, animal, item or vehicle is passing by or stopped within range of automation.

### RELEASE AND MANUAL OPERATION

Insert the key included into the lock and turn it anticlockwise by  $360^\circ$  making 2 complete turns, as indicated in fig. 1. Move the boom manually.

### RESTORING AUTOMATIC OPERATION

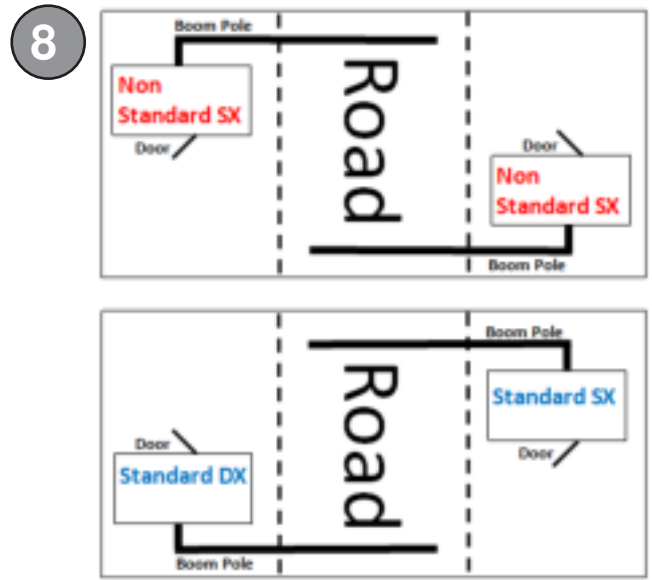
To lock the barrier again, turn the key clockwise by  $360^\circ$  making 2 complete turns, as indicated in fig. 2. Remove the key and give to the user.

## 10.4 Boom Gate Handing (fig. 8)

- AG boom gates are supplied as standard DX handing (see Fig 8)
- For non standard SX installations unlock the boom gate (see chapter 21)
- Before removing the spring, make a note of the holes that the spring is fitted to as they will be the same holes on the non standard side.
- Move the spring arm to the non standard SX position as shown in Fig 8
- Lock the boom gate.
- The key release mechanism does not need to be changed when changing the handing.
- For non standard SX handing parameter 71 needs to be changed from 01 to 00 so that the controls know the boom handing.

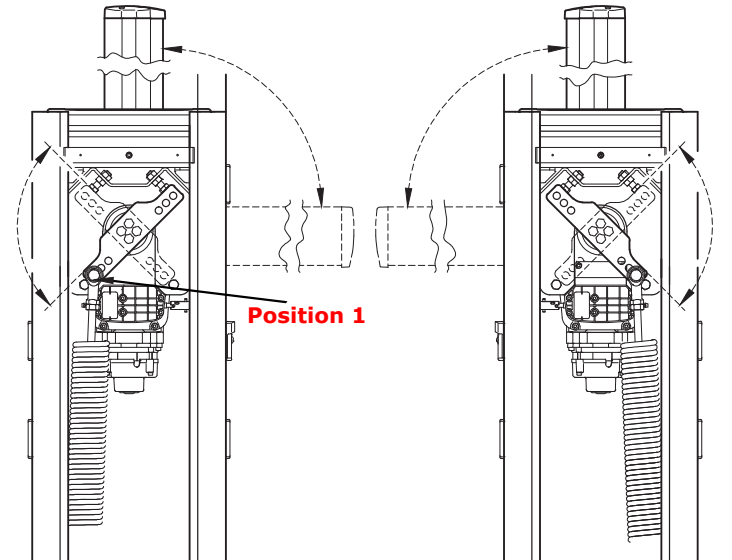
## 10.5 Installing the boom pole (fig. 9)

- Fasten the boom pole mounting base (A) to the flange (C) with the 8 x 10 M cap head screws.
- **Important** Make sure the slot for the boom pole in the mounting base (A) is in the vertical position and that the spring arm is in position (1).
- Fit the brackets (G) and partially tighten the M10 screws, insert the steel plate (E).
- Unlock the boom gate and turn the mounting base (A) to the horizontal position.
- Insert the boom pole and tighten all bolts.
- If necessary, adjust the mechanical stop so that the boom pole is level.
- Then raise the boom pole to the vertical position, lock the boom gate and fit the spring which will need adjusting (see Chapter 11).
- Fit the plastic end cap (F) and the cover (H).

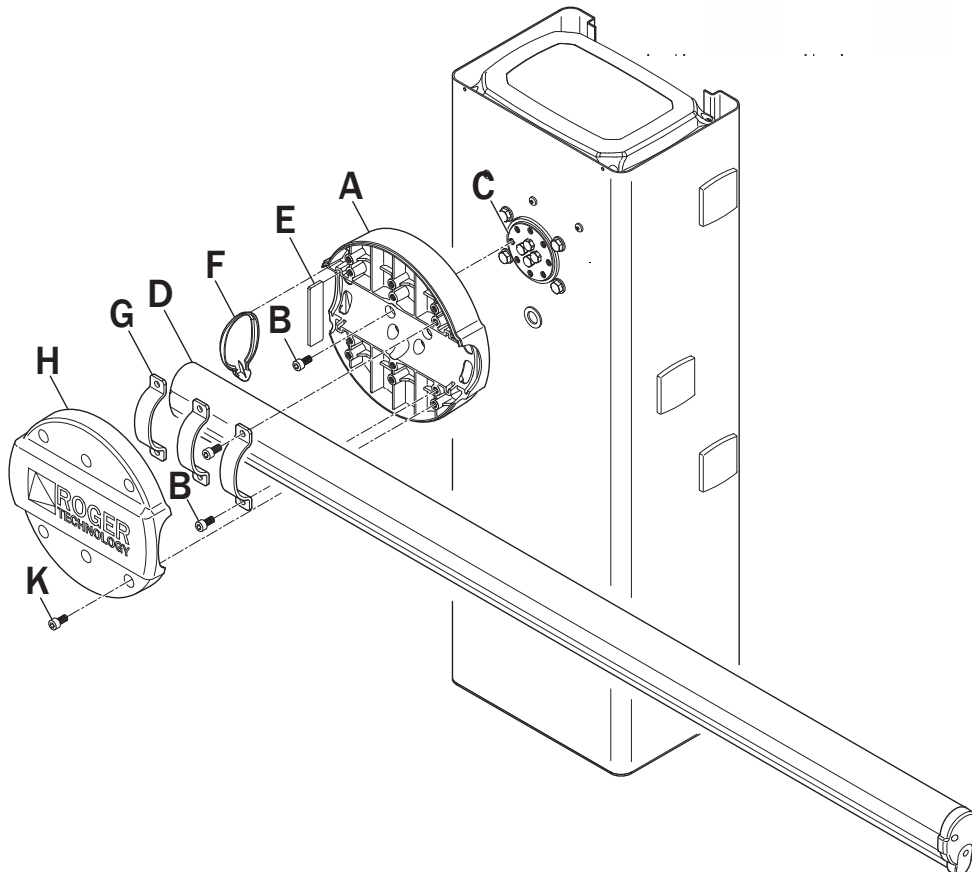


Non Standard SX

Standard DX



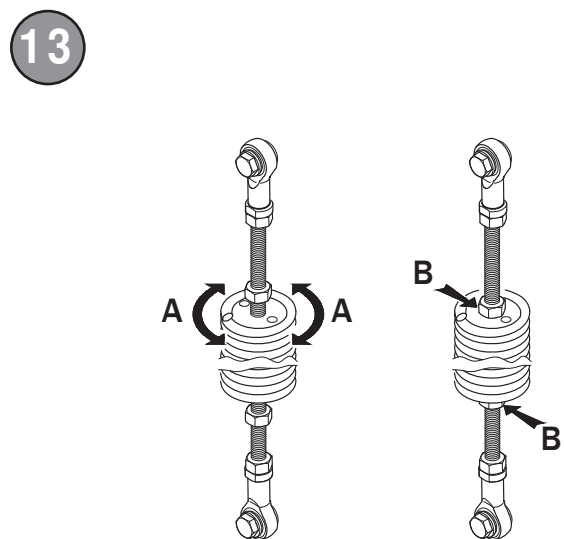
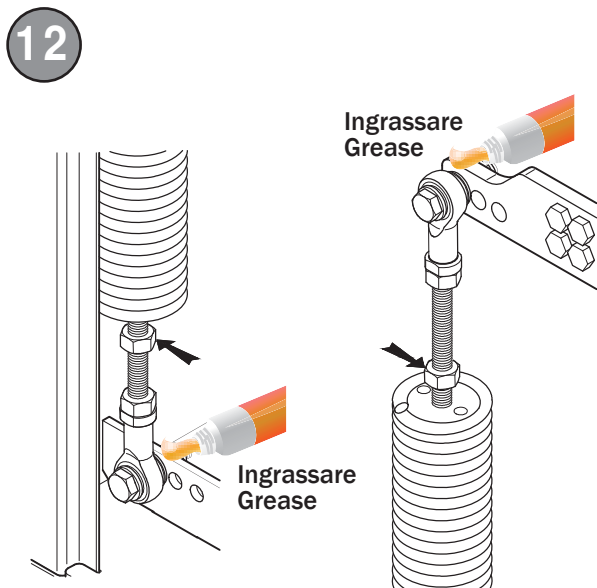
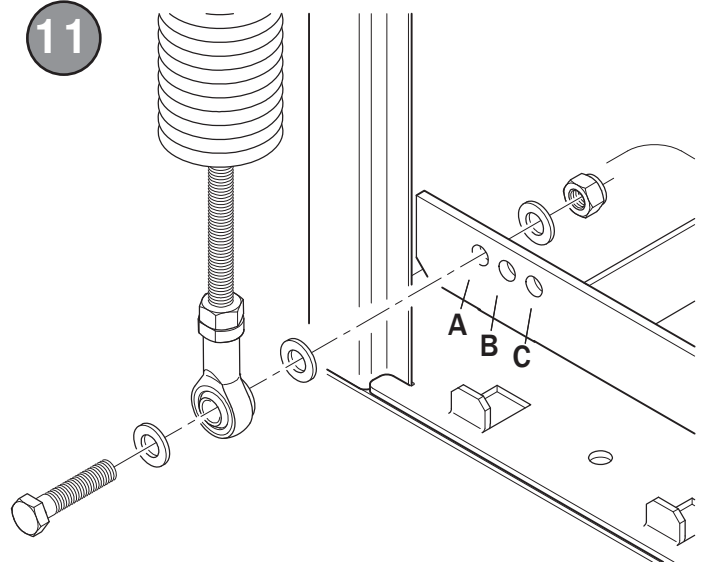
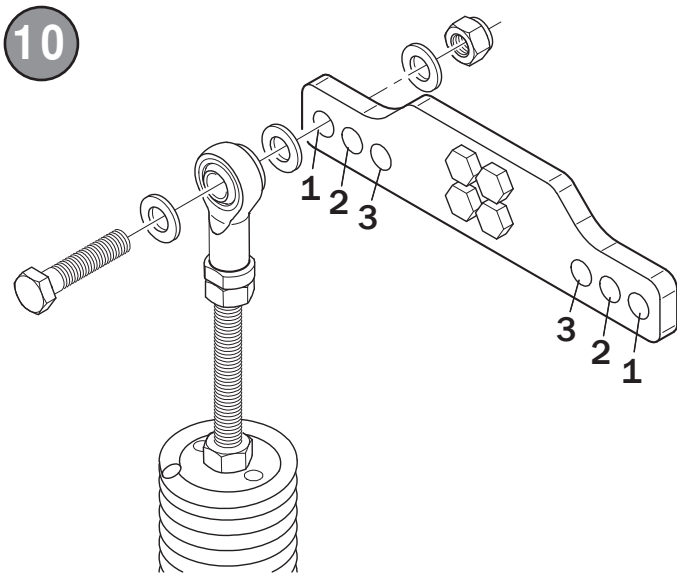
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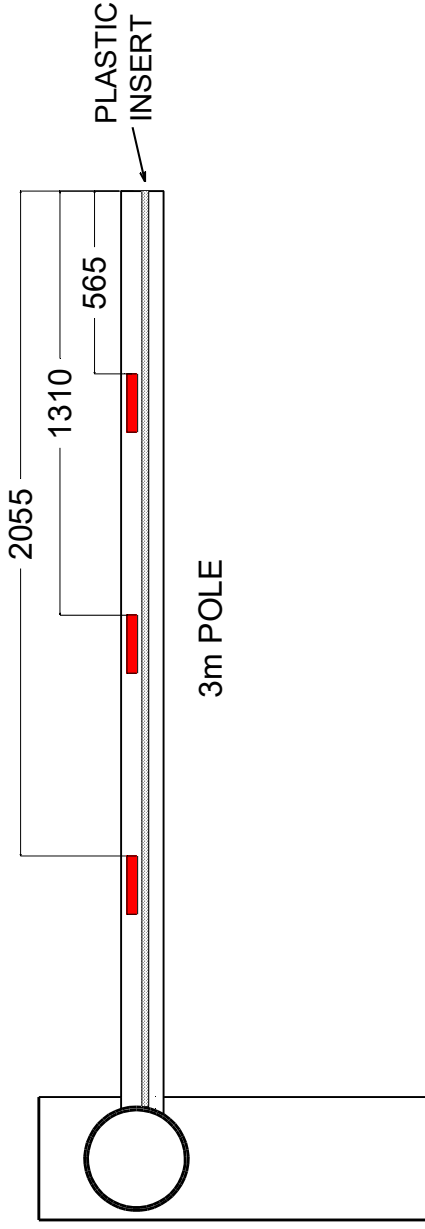


## 11 INSTALLING AND ADJUSTING THE SPRING

- Unlock the barrier (see chapter 21) and move the boom into the completely open vertical position.
- Use the screws included to fasten the spring to the linkage lever (fig. 10) on the correct side for the direction of opening.  
IMPORTANT: Using the holes furthest from the centre of the linkage lever (**A-1**) will result in a higher spring tension when the barrier is operating. Using the holes closest to the centre of the linkage lever (**C-3**) will result in a lower spring tension.
- Secure the springs to the fixed structure (fig. 11) by fastening to the steel cross boom of the barrier using the screws included.
- Lubricate the pivot points with lithium based grease (EP LITIO) (fig. 12).
- To adjust the spring tension, loosen the nuts as indicated in fig. 12, then turn the spring clockwise to reduce the tension or anticlockwise to increase tension (fig. 13)
- Lift the boom manually to an angle of 60° and adjust springs so that the pole is balanced in this position - then tighten the lock nuts.  
Springs for most applications should be connected bottom hole (A) and top hole (1).

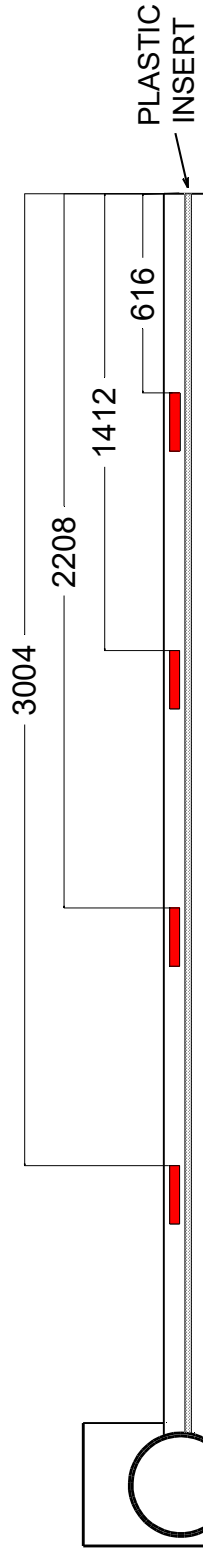
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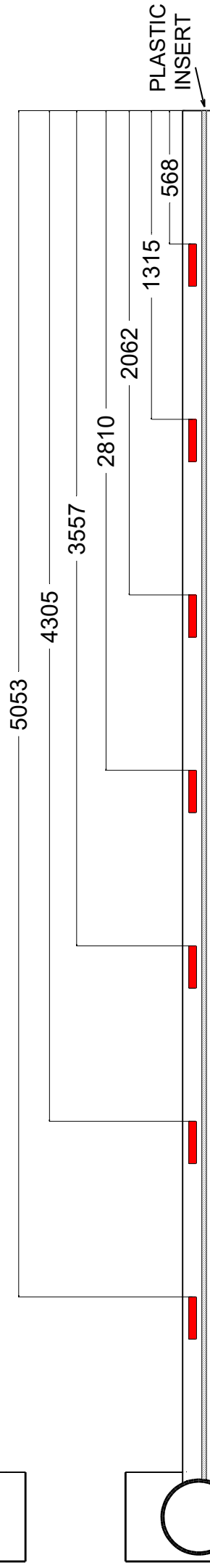


**APPLICATION INSTRUCTIONS:**

1. Apply 50 mm masking tape to the RED side of the decal to prevent the decal stretching
2. Remove backing from decal
3. Align the bottom edge of the decal with the top rib on the pole
4. From one edge press firmly and slowly move along the length of the decal to remove air pockets
5. Then remove masking tape
6. Do not attach decals to the plastic insert



4m POLE



6m POLE

## Examples of applications in parking access mode.

The **AG** controller manages the system in parking access mode.

This function is enabled with parameter **B 3**.

N.B.: the input **FT** cannot be disabled in the following operating situations. If the contact (NC) is opened during a closing manoeuvre, the barrier reopens and remains open until the contact is closed again.

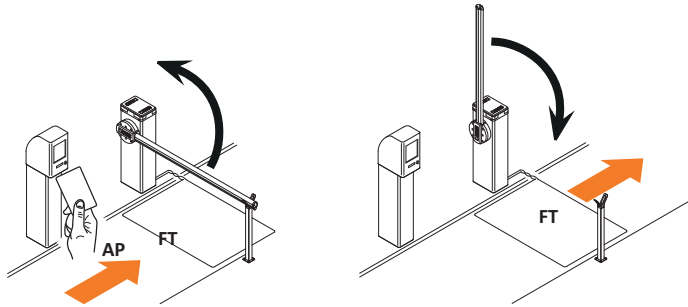
The automatic closing time is enabled if parameter **2 1** is different to **0 0**. Adjust an automatic closing time that allows the vehicle to complete the crossing.

### • Bi-directional mode with immediate closure (B3 01)

When entering and leaving the parking area, the barrier is opened with an **AP** open command (terminal block).

Once the vehicle has crossed the barrier and released contact **FT** (NC) (e.g. from magnetic loop), the barrier closes immediately. When parameter **2 1=00**, the barrier open and remains open until the vehicle has completed the passage. If the vehicle moves back, the barrier remains open.

**NOTE:** it is possible to add further 5 s delay before closing, setting **R 5 99**.



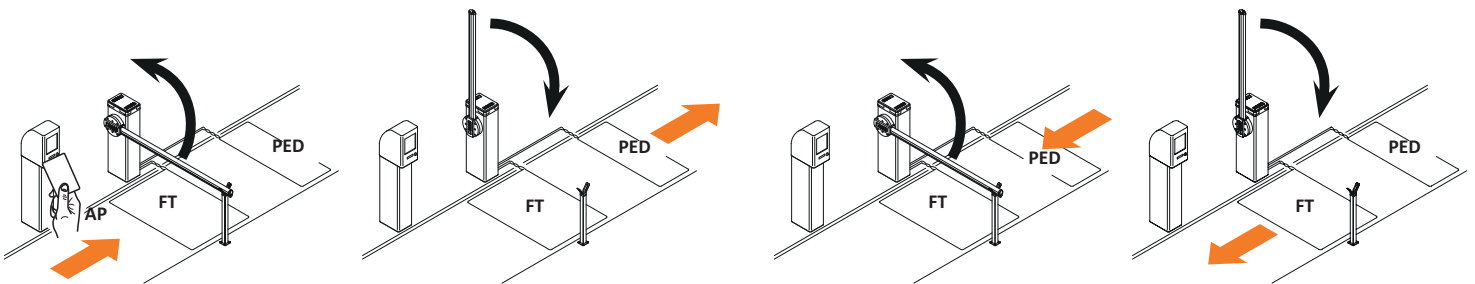
### • Directional mode 1 (B3 02)

When entering the parking area, the barrier is opened with an **AP** open command (terminal block). Once the vehicle has crossed the barrier and released contacts **FT** (NC) and **PED** (NO), the barrier closes. When leaving the parking area, the barrier is opened by a **PED** command received from the magnetic loop.

Once the vehicle has crossed the barrier and released contact **FT** (NC), the barrier closes.

When parameter **2 1=00**, the barrier open and remains open until the vehicle has completed the passage. If the vehicle moves back, the barrier remains open.

**NOTE:** it is possible to add further 5 s delay before closing, setting **R 5 99**.



### • Directional mode 2 (B3 03)

When entering, the barrier is opened with an **AP** open command (terminal block), and closes after the automatic closing time set with parameter **2 1**.

**NOTE:** in order to have the automatic closing, it is recommended to set parameter **2 1** different to **0 0**.

When leaving the parking area, the barrier is opened by a **PED** (NO) command received from the magnetic loop.

Once the vehicle has crossed the barrier and released contact **FT** (NC), the barrier closes.

**NOTE:** it is possible to add further 5 s delay before closing, setting **R 5 99**.

