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TRAPEX
Barrier fence



TRAPEX Barrier Fence Installation Manual



BARRIER
FENCE



SLIDING GATE
OPERATORS



SWING GATE
OPERATORS



GARAGE DOOR
OPERATORS



REMOTE
CONTROLS



INTERCOMS



KEYPADS



Company Profile



1986



1990



1995



1999



Centurion Systems
Today

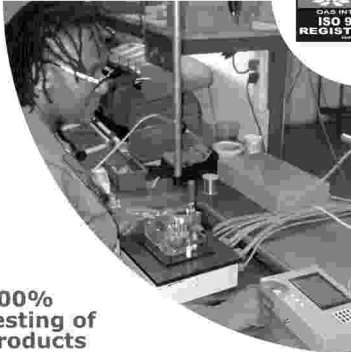
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1. Icons used in this manual



This icon indicates tips and other information that could be useful during the installation.



This icon denotes variations and other aspects that should be considered during installation.



This icon indicates warning, caution or attention! Please take special note of critical aspects that **MUST** be adhered to in order to prevent injury.



IMPORTANT Safety Instructions

ATTENTION

To ensure the safety of people, it is important that you read all the following instructions. Incorrect installation or incorrect use of the product could cause serious harm to people.



The installer, being either professional or DIY, is the last person on the site who can ensure that the operator is safely installed, and that the whole system can be operated safely.

Warnings for the installer

CAREFULLY READ AND FOLLOW ALL INSTRUCTIONS before beginning to install the product.

- All installation, repair, and service work to this product must be done by a suitably qualified person.
- Do not activate the barrier unless you can see it and can determine that the **TRAPEX** barrier fence is clear of people, pets, vehicles or any obstructions.
- Nothing must be placed and nobody must be near the **TRAPEX** barrier fence at any time. Always keep people and objects away from the area of travel.
- Children should be supervised to ensure that they do not play with or around the **TRAPEX** barrier fence
- This device is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Secure all easily accessed operator controls in order to prevent unauthorised use of the **TRAPEX** barrier fence.
- Do not in any way modify the components of the system other than to comply with specific instructions contained within this document.
- Do not install the equipment in an explosive atmosphere: the presence of flammable gas or fumes is a serious danger to safety.
- Safety devices must be fitted to the installation to guard against mechanical movement risks such as crushing, dragging and shearing.
- It is recommended that at least one warning indicator light be fitted to every system.

- Always fit a warning sign visibly to the inside and outside of the entrance and exit.
- The installer must explain and demonstrate the manual operation of the system in case of an emergency, and must hand the User Guide and Safety Instructions over to the end user.
- Explain these safety instructions to all persons authorised to use the system, and be sure that they understand the hazards associated with the system.
- Do not leave packing materials (plastic, polystyrene, etc.) within reach of children as such materials are potential sources of danger.
- Dispose of all waste products like packaging materials, worn out batteries, etc., according to local regulations.
- Always check the obstruction detection system, and safety devices for correct operation.
- **Centurion Systems** does not accept any liability caused by improper installation or use of the product, or for use other than that for which the automated system was intended.
- This product was designed and built strictly for the use indicated in this documentation. Any other use, not expressly indicated here, could compromise the service life/operation of the product and/or be a source of danger.
- Everything not expressly specified in these instructions is not permitted.



**Safety
FIRST**

3. General description

The **TRAPEX** barrier fence is a robust and effective barrier designed to prevent pedestrians from circumventing the SECTOR vehicle access control system. Its tough, all-weather aluminium construction makes it suitable for coastal and inland applications.

4. Specifications

4.1 Physical dimensions

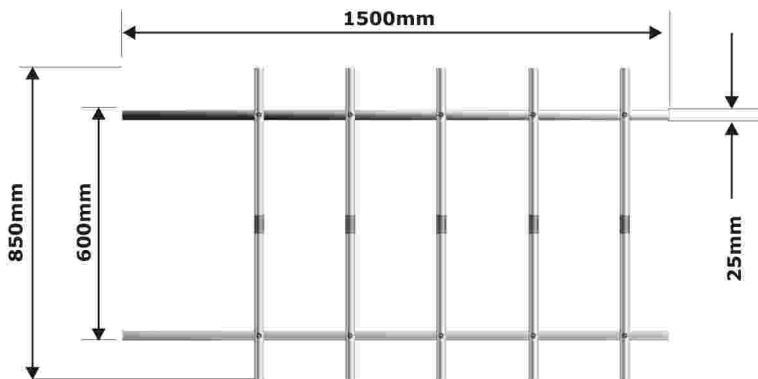


FIGURE 1. OVERALL DIMENSIONS

5. Product identification

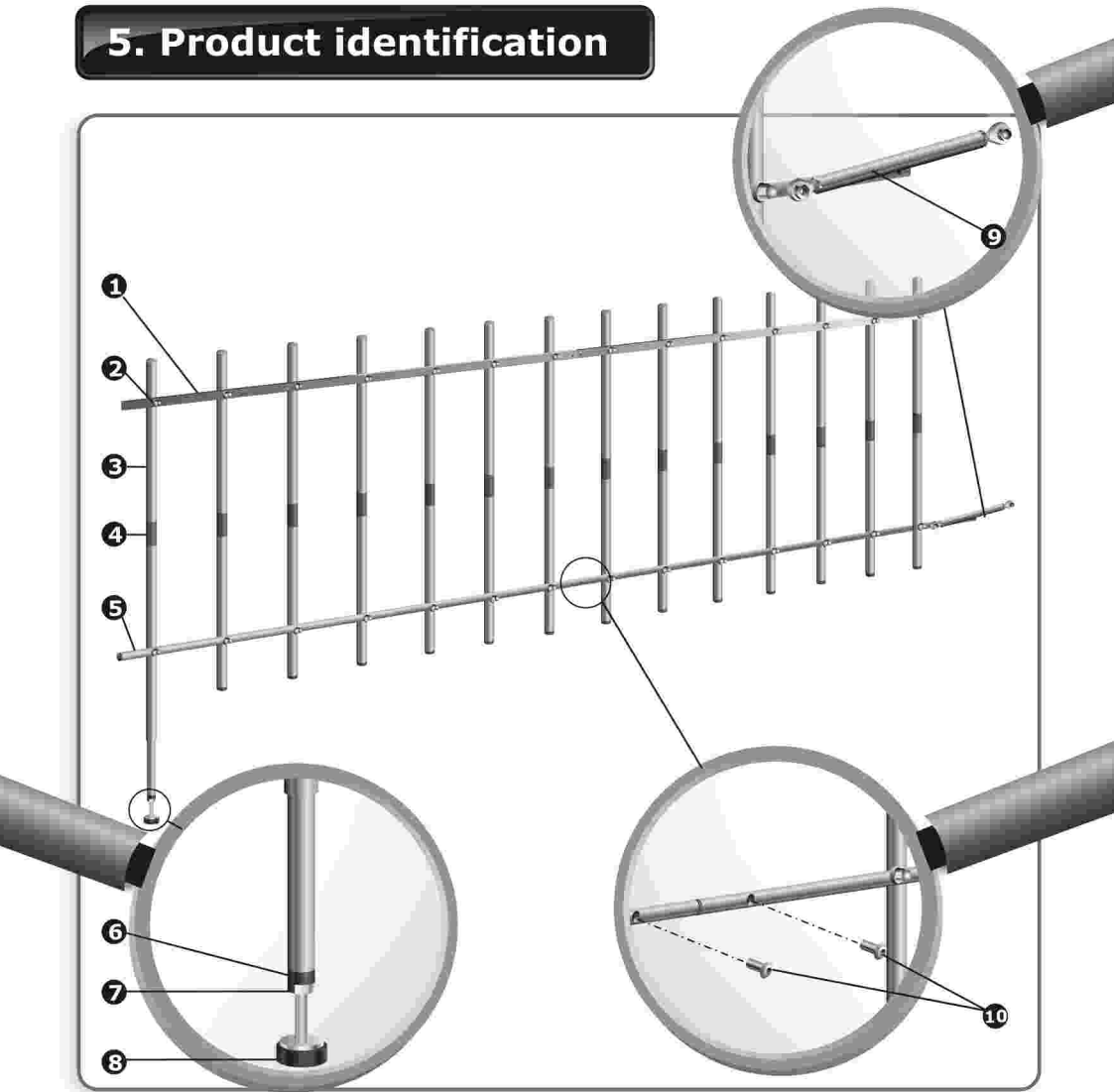


FIGURE 2. PRODUCT IDENTIFICATION

1. 1.5m Ali bar
2. Stainless steel hex dome nut M5
3. Vertical linkage
4. Reflective tape
5. 1.5m horizontal cross bar
6. Tube end fitting
7. Nut half galvanised M8 RH
8. Centinel rubber endstop and galvanised nut
9. Steering arm assembly
10. Rivets securing cross bar join

6. Introduction

This document describes the procedure to follow when installing a **TRAPEX** barrier fence onto a **SECTOR** traffic barrier. Be sure that the barrier pole is fitted correctly as described in the **SECTOR**'s installation manual.

7. Installation considerations

The **TRAPEX** barrier fence is available in 3 meters and 4.5 meters configurations.

It's very important to note that the 3 meters **TRAPEX** barrier fence must be installed with a 4.5 meters **SECTOR** counter balance spring assembly and that the 4.5 meters **TRAPEX** barrier fence is installed with a 6 meters **SECTOR** counter balance spring assembly.

The running speed of 3 meters **SECTOR** barrier must be reduced to at least the running speed of a 4.5 meters or 6 meters **SECTOR** barrier when fitting a **TRAPEX** barrier fence.

The **TRAPEX** barrier fence can be installed in four different configurations as shown in Figure 3 to Figure 6.

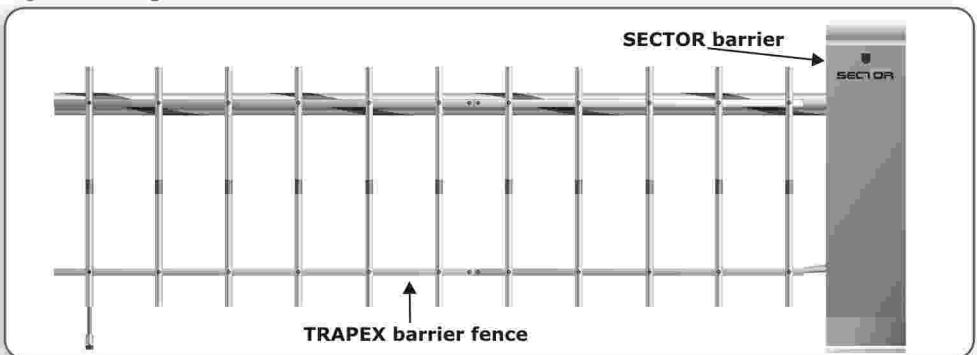


FIGURE 3. RIGHT HAND ORIENTATION SECTOR WITH TRAPEX MOUNTED ON THE FRONT

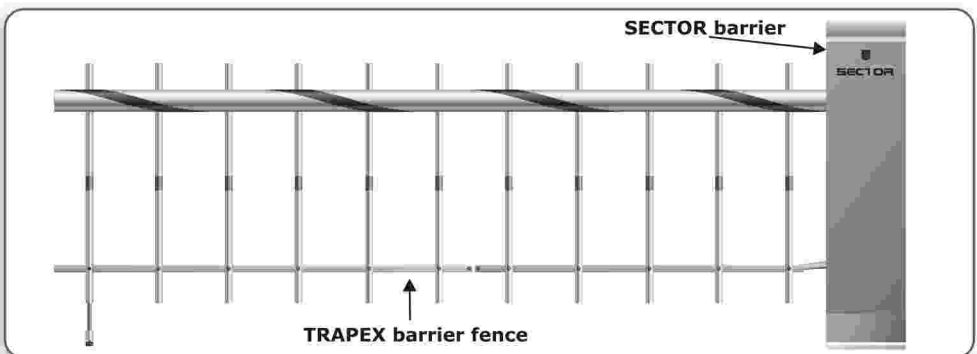


FIGURE 4. RIGHT HAND ORIENTATION SECTOR WITH TRAPEX MOUNTED ON THE REAR

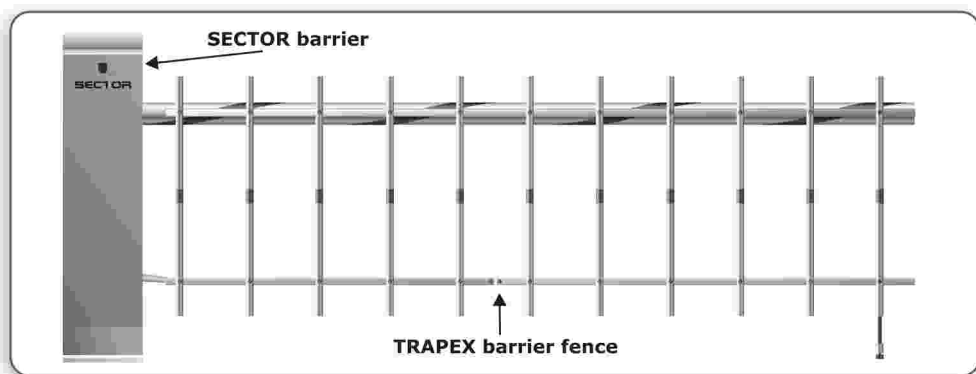


FIGURE 5. LEFT HAND ORIENTATION SECTOR WITH TRAPEX MOUNTED ON THE FRONT

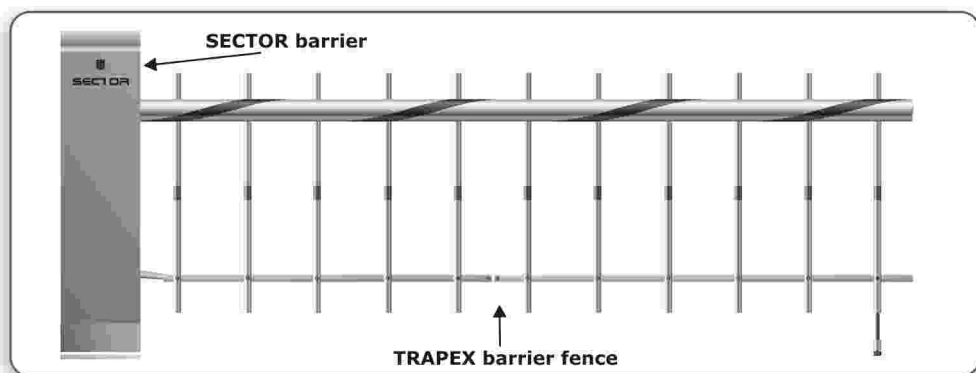


FIGURE 6. LEFT HAND ORIENTATION SECTOR WITH TRAPEX MOUNTED ON THE REAR

8. Installation

8.1. Fit the TRAPEX barrier fence modules



The **TRAPEX** barrier fence consists of modular sections of 1.5 meters lengths each. These modular sections can be mounted onto the barrier pole in series to make up the length required.

1. Attach the first modular section at the barrier pole tip (opposite side of the barrier) by marking the position of the holes.
2. Drill 5mm holes.
3. Rivet the module onto the barrier pole.

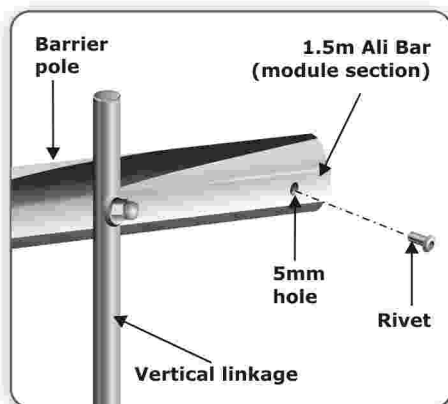


FIGURE 5. INSTALL THE FIRST MODULE

4. Then fit the additional module(s) next to the one fitted at the barrier pole tip by following a similar procedure as when fitting the first module.

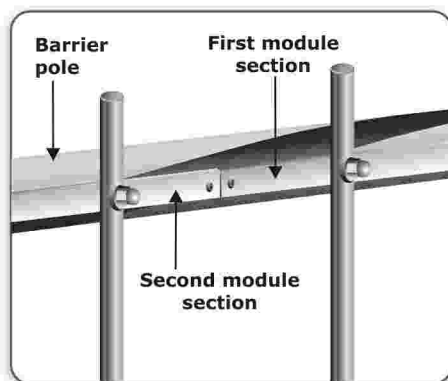


FIGURE 6. INSTALL ADDITIONAL MODULES



Moving parts can cause serious injury, amputation or death. Keep clear! The TRAPEX barrier fence may move at any time. Do not allow children to play in area or operate the system.

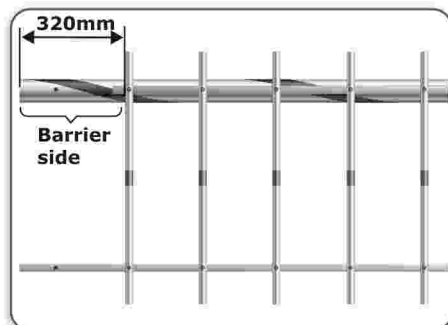


FIGURE 7. TRIM FENCE AT BARRIER END

8.2. Join the cross bar(s)

1. Join the modules at the bottom cross bars by inserting the cross bar join.
2. Drill 5mm holes and then riveting the cross bars and cross bar join together.

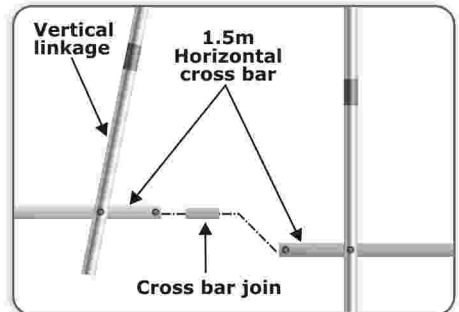


FIGURE 8. JOIN THE BOTTOM CROSS BARS

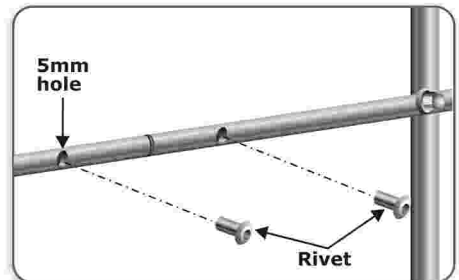


FIGURE 9. RIVET CROSS BARS INTO CROSS BAR JOIN

8.3. Fit the bottom hinge

1. Drill a 10.5mm hole in the centre of the rear SECTOR enclosure face at a height of 320mm.



If the SECTOR is fitted with a galvanised stiffener plate on the inside of the barrier, then a 50mm hole needs to be cut through this stiffener plate to coincide with the 10.5mm hole in the rear face of the SECTOR enclosure.

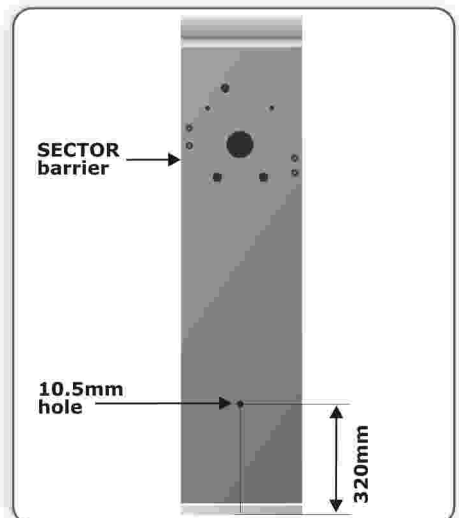


FIGURE 10. DRILL A HOLE IN SECTOR REAR

2. Fit the **TRAPEX** barrier fence Spacer and Adjustment Link to the hole drilled in the **SECTOR** barrier.
3. Replace the Threaded Bar in the first cross bar hinge point with the longer one provided in the mounting kit.
4. Also fit the Adjustment Link Spacer onto the Threaded Bar before attaching the Adjustment Link onto the cross bar.

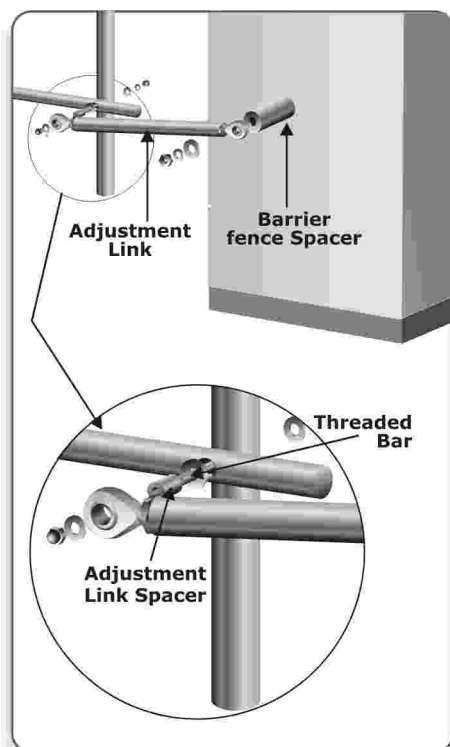


FIGURE 11. FIT THE BOTTOM HINGE

8.4. Cut the cross bar

1. Cut the cross bar shorter as shown in Figure 12.

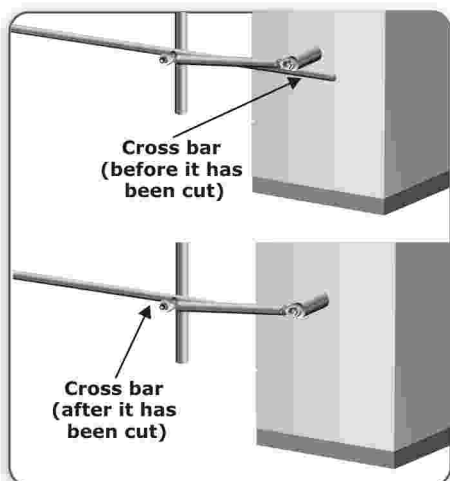


FIGURE 12. CUT THE CROSS BAR SHORTER

8.5. Adjust the pole and fence

1. Make sure that the barrier pole is level.
2. If not, loosen the lock nuts on the Adjustment Link inside the SECTOR barrier.
3. Adjust the link to level the barrier pole. When this is achieved, tighten the lock nuts.
4. Then the vertical fence bars need to be squared up with the barrier pole.
5. Loosen the lock nuts on the Adjustment Link connecting the cross bar to the SECTOR barrier
6. Adjust the link to square up the vertical **TRAPEX** barrier fence bars and the barrier pole. When this is achieved, tighten the lock nuts.

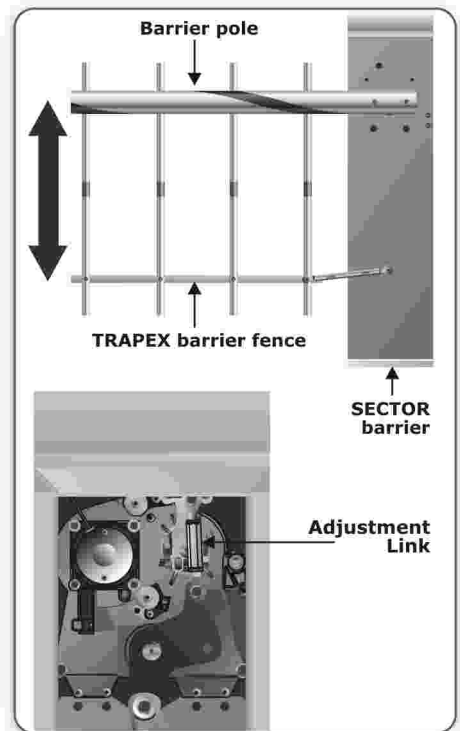


FIGURE 13. CUT THE CROSS BAR SHORTER

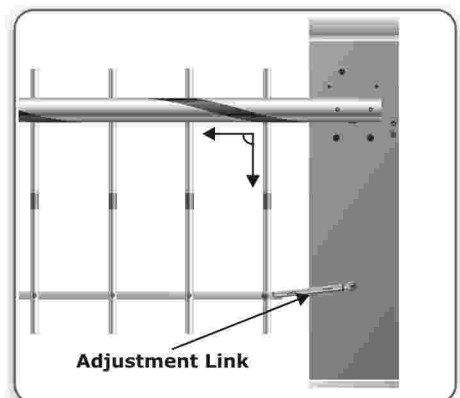


FIGURE 14. SQUARE UP THE FENCE

8.6. Fit the foot assembly

1. Slide the foot assembly into the last vertical fence bar furthest away from the SECTOR barrier.
2. Determine the correct height for the foot assembly by sliding it up and down in the vertical fence bar.
3. The foot assembly may need to be cut shorter at the tip depending on the surface contours it will be resting on.
4. When the correct height has been determined, drill a 5mm hole through the vertical fence and foot assembly tubes.
5. Rivet the foot assembly to the vertical skirt on either side.



Finer adjustment to the height of the foot assembly can be made loosening the locknut on the rubber foot.

6. Screw the rubber foot either in or out and then tightening the lock nut again.

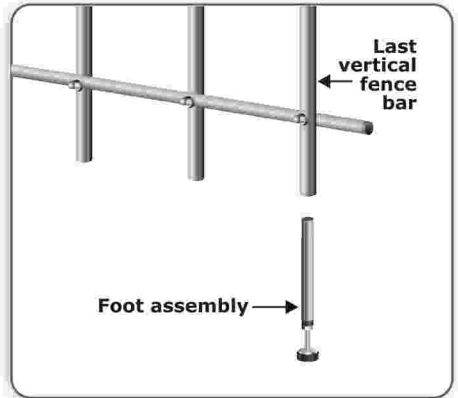


FIGURE 15. FIT THE FOOT ASSEMBLY

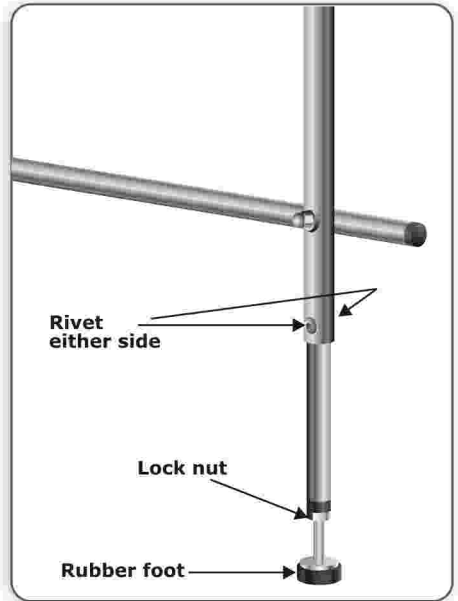


FIGURE 16. SQUARE UP THE FENCE

9. Installation handover

Once the installation has been successfully completed and tested, it is important for the installer to explain the operation and safety requirements of the system to the end user.



NEVER ASSUME THE USER KNOWS HOW TO SAFELY OPERATE THE AUTOMATED SYSTEM

Even if the end user has used one before, it does not mean he knows how to SAFELY operate it. Make sure that the end user fully understands the following safety requirements before finally handing over the site.

The following needs to be understood by the end user:

- How the obstruction detection and all other safety features work. **(Show them how by demonstration)**
- All the features and benefits of the operator,
- **All the safety considerations associated with operating the system. The end user should be able to pass this knowledge on to all other end users of the automated system and must be made aware of this responsibility.**



- **Do not activate the operator unless you can see it and can determine that its area of travel is clear of people, pets, or other obstructions**
- **NO ONE MAY CROSS THE PATH OF A MOVING AUTOMATED SYSTEM. Always keep people and objects away from the gate and its area of travel**
- **NEVER LET CHILDREN OPERATE OR PLAY WITH THE TRAPEX barrier fence, and do not allow children or pets near the TRAPEX area**
- **Be careful with moving parts and avoid close proximity to areas where fingers or hands could be pinched**
- **Secure all easily accessed barrier operator controls in order to prevent unauthorized use of the system**
- **Keep the system properly maintained, and ensure that all working areas are free of debris and other objects that could affect the operation and safety**
- **On a monthly basis, check the obstruction detection system and safety devices for correct operation**
- **All repair and service work to this product must be done by a suitably qualified person**

This product was designed and built strictly for the use indicated in this documentation. Any other use, not expressly indicated here, could compromise the good condition/operation of the product and/or be a source of danger!



CENTURION SYSTEMS (Pty) Ltd does not accept any liability caused by improper use, of the product, or for use other than that for which the automated system was designed.



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