

FMC-SB

COLUMN WITH ADJUSTABLE MIRRORS

OVERVIEW

This technical sheet describes how to assemble the **FMC-SB** series of mirrors with the **FMC-CB/FMC-CBL** base and how to ensure correct positioning and alignment.

For further information about light curtain operation, please see the relative handbook.

ASSEMBLY WITH FMC-CB/FMC-CBL BASE PLATE (FIGURE 1)

- Fix the FMC-CB/FMC-CBL column base to the floor, (see base mounting instructions).
- Loosen the three Allen screws and remove the washers.
- Mount the column on the base, centring the rotating flange fitting of the FMC-SB column with the guideways on the upper plate of the FMC-CB/FMC-CBL column base.
- Tighten the Allen screws and washers to secure the column.

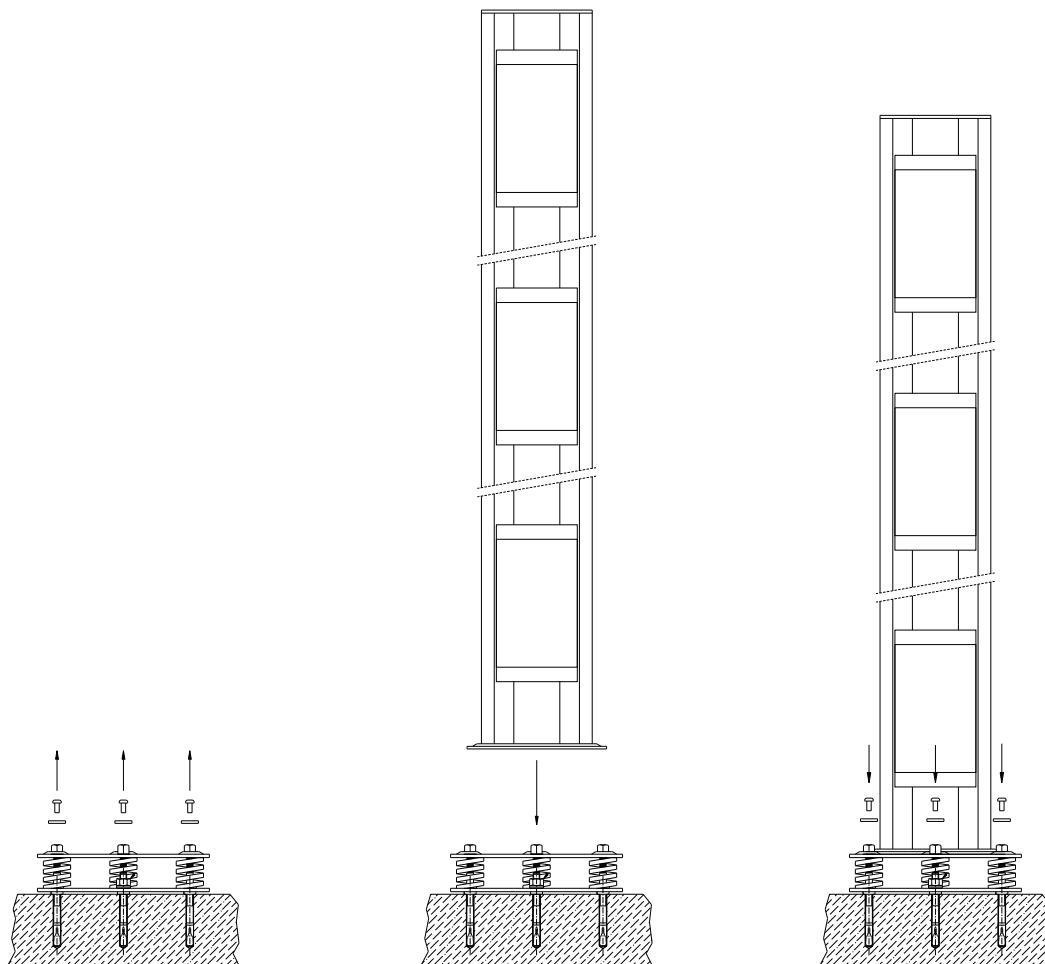


Figure 1

VERTICALITY (FIGURE 2)

After mounting the columns on the bases and fixing them to the floor, check the verticality of the FMC-SB columns.

Proceed as follows:

- The column must be perfectly perpendicular with the floor; check this by placing a spirit level (A) on the top end of the column.
- Make the necessary adjustments using the three hex nuts (B) used to assemble the base plate (**MAXIMUM ADJUSTMENT: 10 mm**).
- If the 10 mm maximum adjustment is not sufficient, level off the floor or insert the appropriate shims.

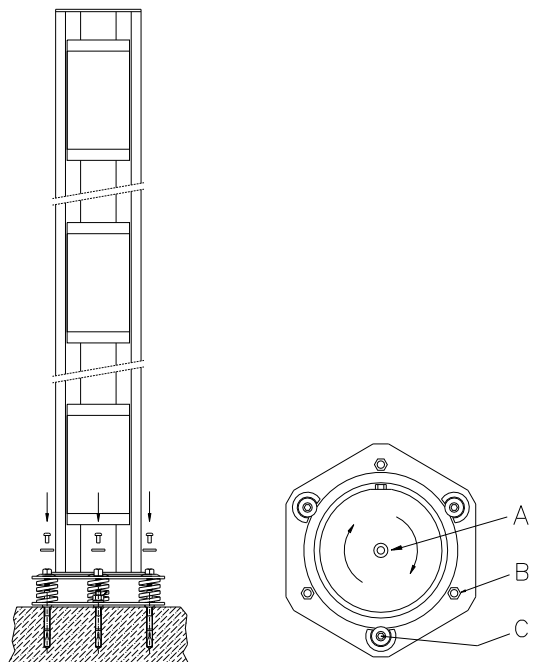


Figure 2

ALIGNMENT (FIGURE 2)

You will need the laser alignment device to perform this operation:

- LAD2 for ADMIRAL/VISION light curtains
- LAD3 for JANUS light curtains
- LAD4 for EOS light curtains.

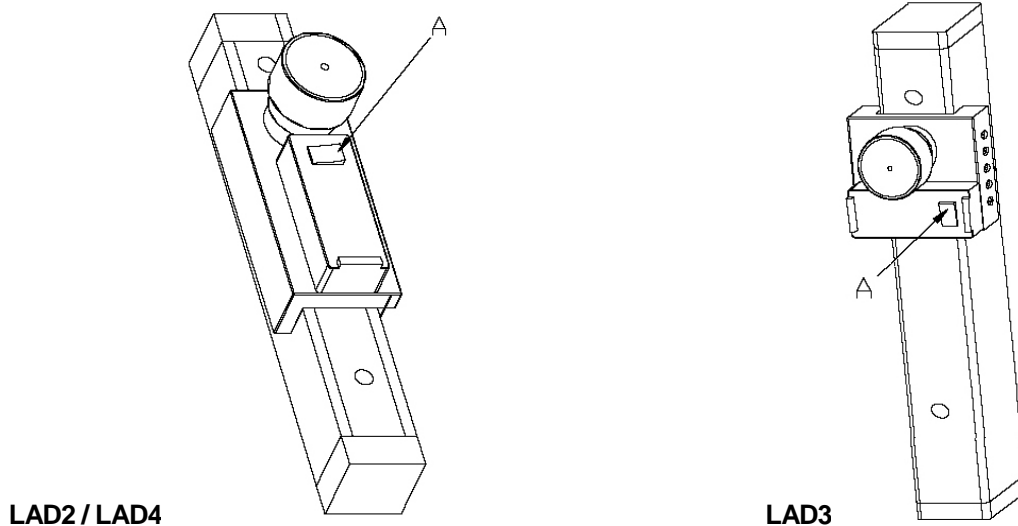
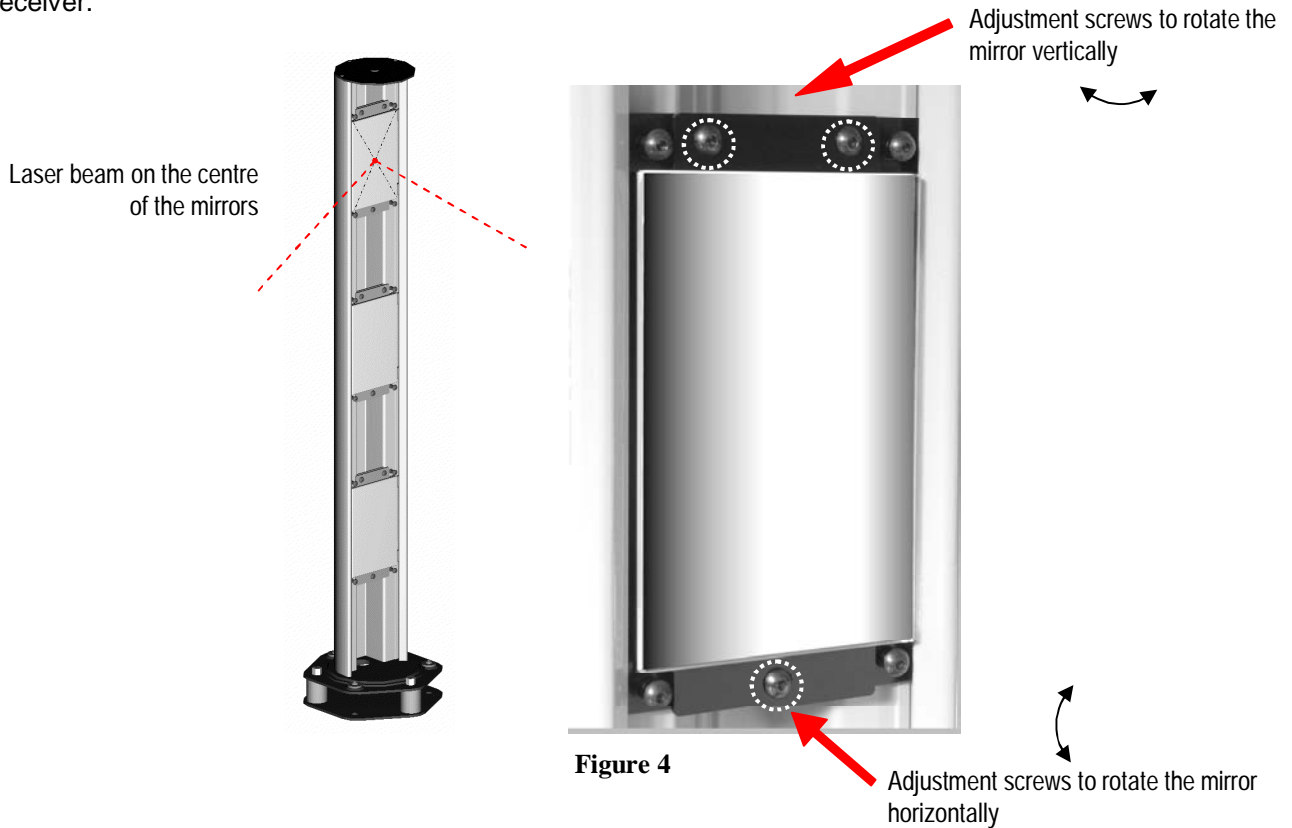


Figure 3

ALIGNING THE TOP MIRROR

Proceed as follows:

1. Fix the laser alignment device to the emitter (next to the photo-emitter, which is visible against the light near the beam present indicator LED) (Figure 3).
2. Loosen the three Allen screws (C - Figure 2) that hold the rotating flange fitting in place.
3. Direct the emitter towards the first FMC-SB column.
4. Switch on the laser (switch A - Figure 3) and the safety light curtain.
5. Turn the column housing the emitter and check that the laser beam falls exactly on the centre of the mirror (Figure 4).
6. Turn the mirror column to align the receiver column with the laser beam and tighten the three Allen screws (C - Figure 2).
7. Align the mirror using the three fine adjustment screws (Figure 4) to deflect the laser beam onto the photo-receiver.



ALIGNING THE BOTTOM/MIDDLE MIRROR

Proceed as follows:

1. Fix the laser alignment device to the emitter (next to the photo-emitter, which is visible against the light near the beam present indicator LED) (Figure 3).
2. Switch on the laser (switch A) and the safety light curtain.
3. Align the central mirror (if present) using the three fine adjustment screws (Figure 4) to deflect the laser beam onto the photo-receiver.
4. Align the bottom mirror using the three fine adjustment screws (Figure 4) to deflect the laser beam onto the photo-receiver.
5. Verify TX --> RX alignment and check that the **GREEN LED** on the light barrier receiver stays on.

IMPORTANT: IF THERE ARE TWO FMC-SB COLUMNS, REPEAT THE PROCEDURES DESCRIBED IN THE LAST TWO POINTS FOR THE SECOND COLUMN.