



Installation Instructions for Energy Chain

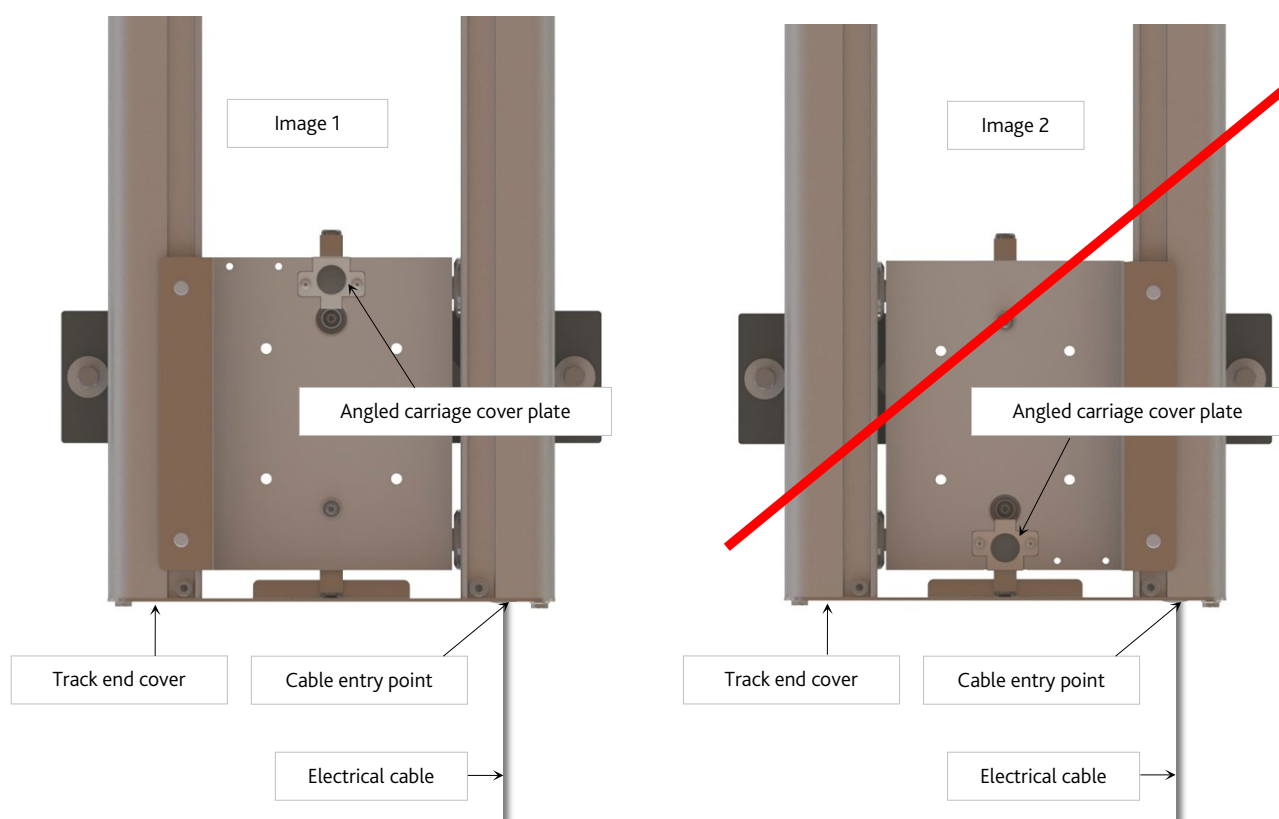
Ceiling Track System

Model 3001/TC/420/EC – for 4.2 m track

Model 3001/TC/250/EC – for 2.5 m track

Important Note

Electrical supply cables for surgical lamps can enter the track assembly at either end, via a bell mouth connector secured to one of the end covers (fitted at step 14). However, the cable must enter the track at the opposite end to the angled cover plate located on the track carriage (image 1). If site restrictions mean the cable can only enter the track with the carriage positioned as shown in image 2, the carriage (and any suspended equipment) must be removed, and the carriage turned through 180 degrees and re-installed.

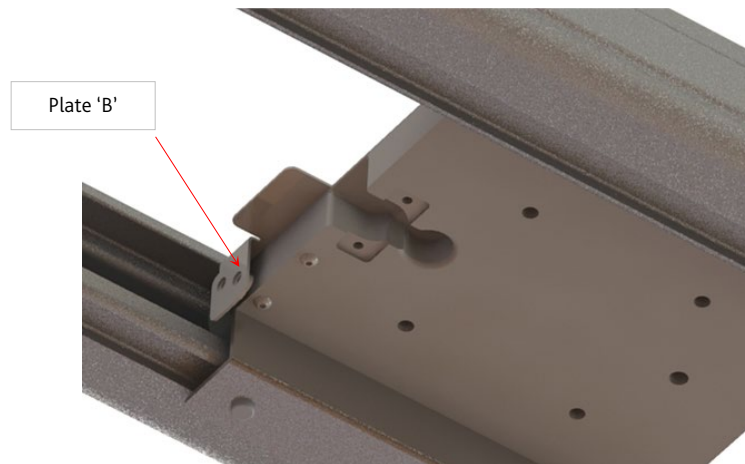


Step 1

Ensure the track and carriage is properly installed (using separately supplied instructions). Decide which end the cable will enter, and move the track carriage to this end, observing the note above.

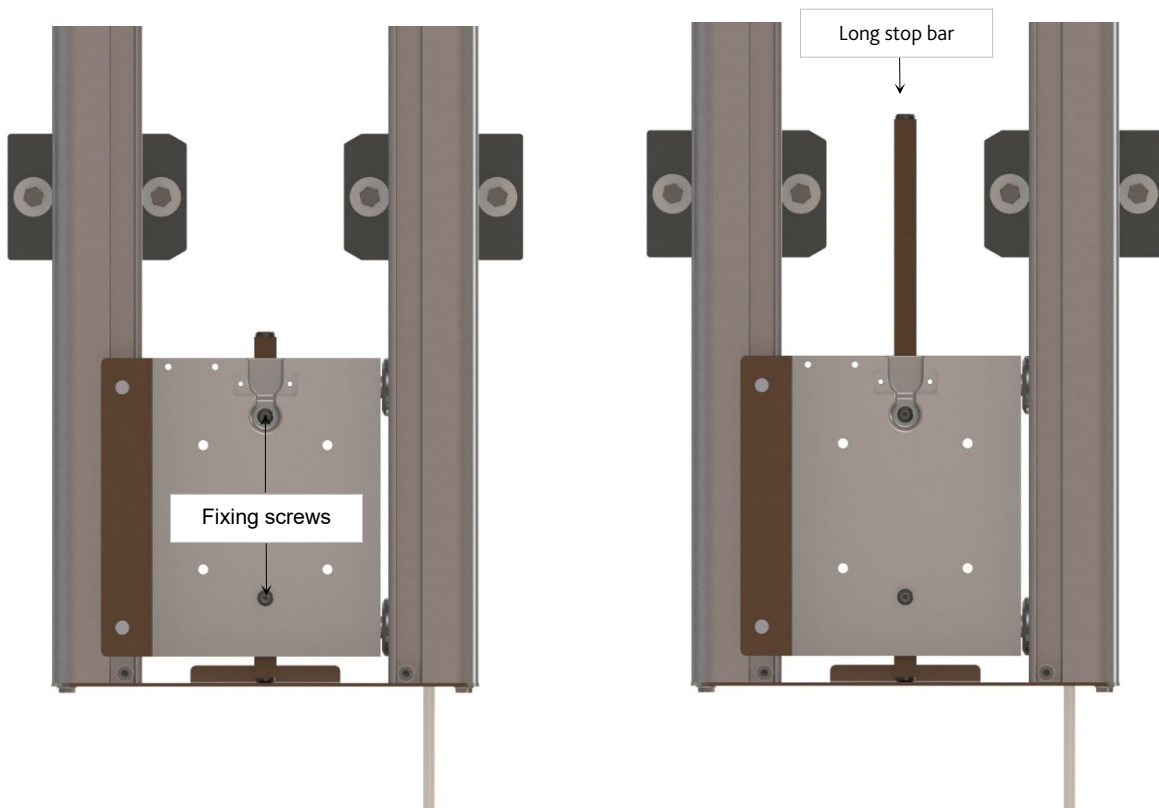
Step 2

Remove the angled carriage cover plate (and retain) to reveal the cavity within the carriage, and attach plate 'B' to the carriage using the M5 x 35 mm button head screw, plain washer and M5 Nyloc nuts (the flexible energy chain will attach to this plate at step 20).

**Step 3**

Note: The long end-stop bar described may already be fitted to the carriage if the Energy Chain system was purchased together with a Kenex track.

Remove the previously attached short end-stop bar, and replace (using the same fixings) with the long end-stop bar supplied with the cable management system.



Important note

Energy chain components:

1 x Snap open flexible energy chain

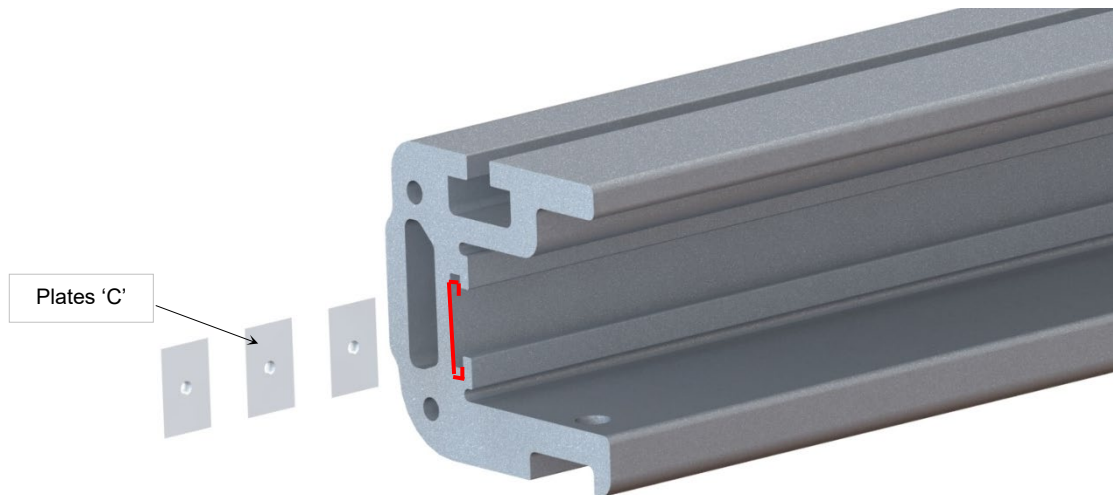
1 x Rigid tubular conduit

Step 4

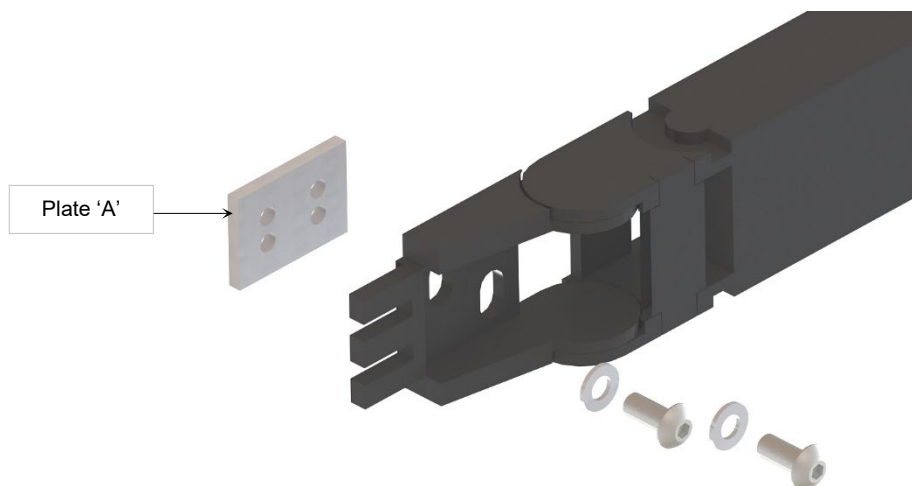
Ensure that the carriage remains positioned at the cable entry end of the track, as described in Step 1. Remove & retain the end cover at the opposite end of the track to the cable entry. Retain all fixings for use in Step 8 to 11.

Step 5

Slide three conduit attachment plates 'C' into the track inner slot (shown in red). Ensure the plates are located in the same side of the track as the cable will enter the end cover.

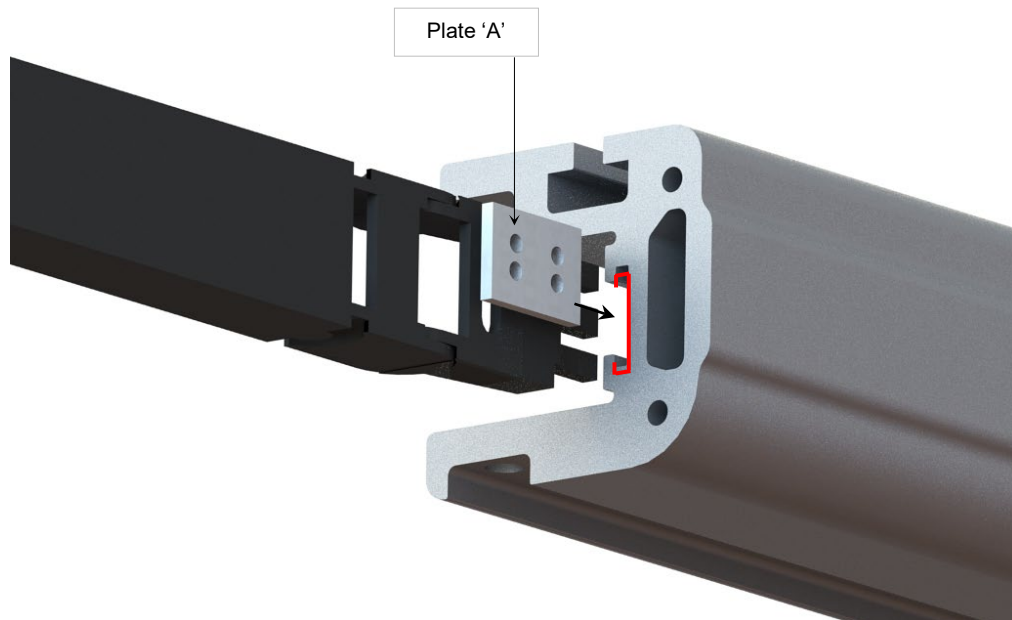
**Step 6**

Loosely attach plate 'A' to one end of the 'flexible energy chain' using M5 x 10 mm screws & washers

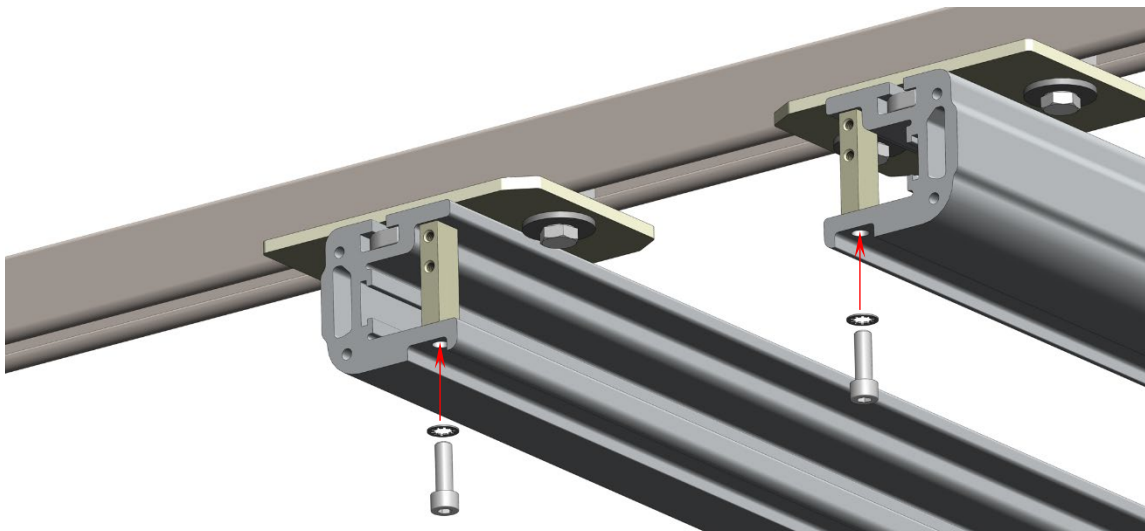


Step 7

Slide the flexible energy chain into the track (on the side the cable will enter the end cover) ensuring that the metal plate 'A' enters the slot (shown in red). Do not secure at this stage.

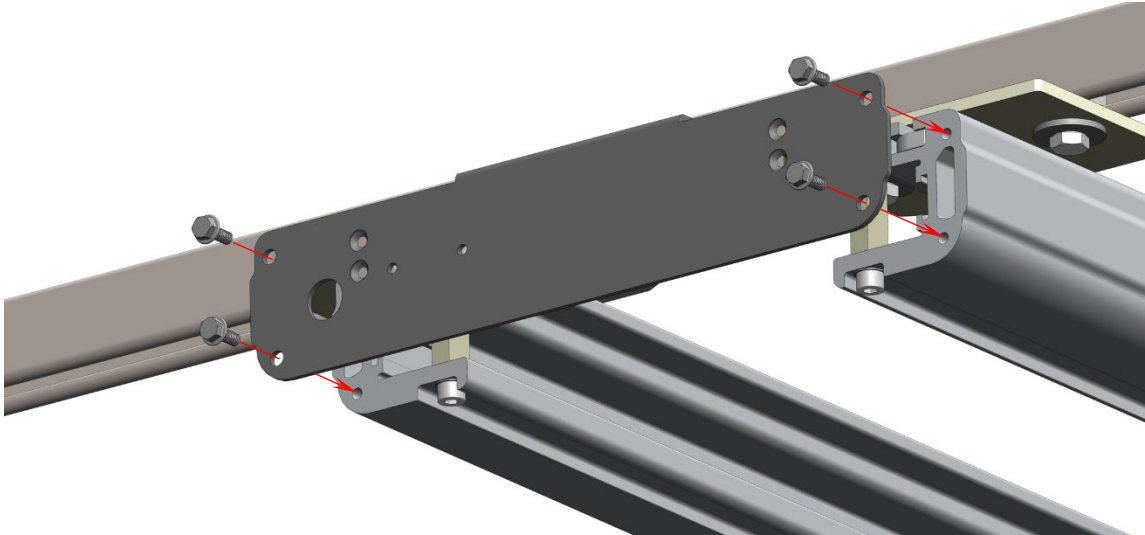
**Step 8**

Loosely re-attach the cover end support bars using the M8 x 25 mm hexagon head socket cap screws and M8 shakeproof washers. Apply Loctite 243 to the threads.

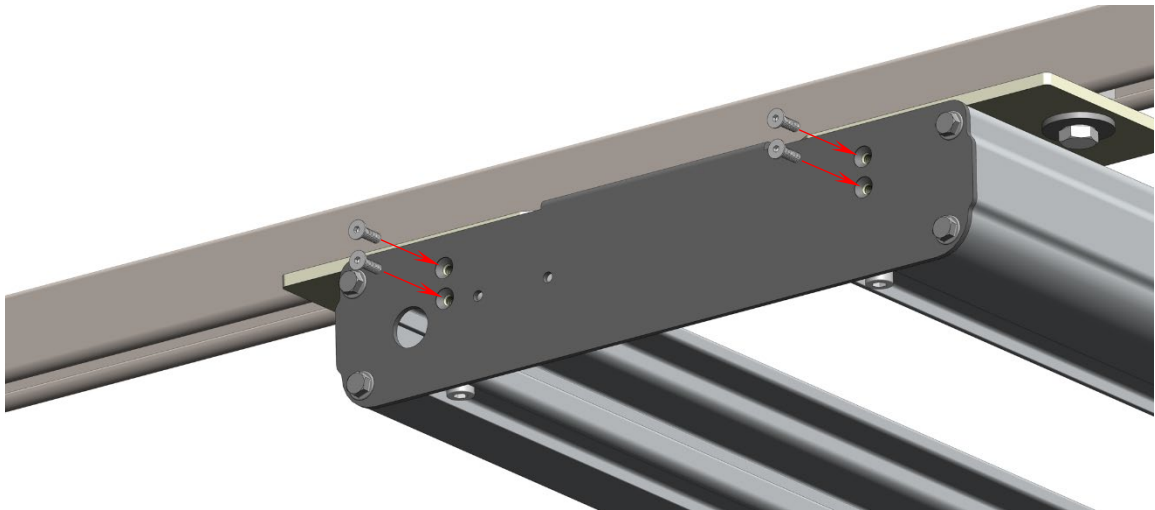


Step 9

Re-attach the end cover using four M6 x 16 mm washer hexagon screws. Tighten to 20 N/m.

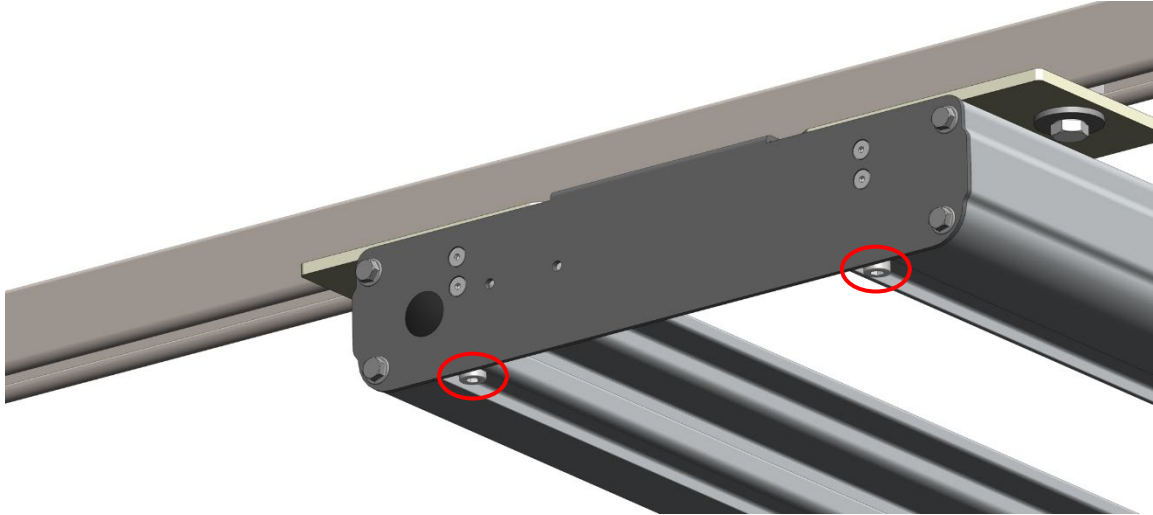
**Step 10**

Secure the end cover to the end cover support bars using four M5 x 16 mm countersunk screws. Tighten to 7 N/m.



Step 11

Tighten the two M8 x 25 mm hexagon head socket cap screws (attached at Step 8 – circled in red) to 19 N/m.

**Step 12**

Slide the flexible energy chain and carriage towards the re-installed end cover.

Step 13

Attach three plastic conduit clips to the three plates previously installed at step 5. Do not secure. Slide these clips (with plates) and tighten the M12 x 12 mm countersunk screws at the following positions:

Centre of clip one - 100 mm from the end cover with cable entry

Centre of clip two - 550 mm from the end cover with cable entry

Centre of clip three - 1000 mm from the end cover with cable entry

Step 14

Fix the supplied bell mouth cable connector to the track end cover (where the cable is to enter), with the bell mouth end facing outwards.

Step 15

Clip the 120 cm rigid tubular conduit to the three plastic clips ensuring the conduit abuts the bell mouth connector.

Step 16

Using a flat blade screwdriver, open each of the 'cable doors' along the length of the flexible energy chain.

Slide 17

Slide the flexible energy chain until it abuts the installed rigid conduit. Do not secure at this stage.

Important note

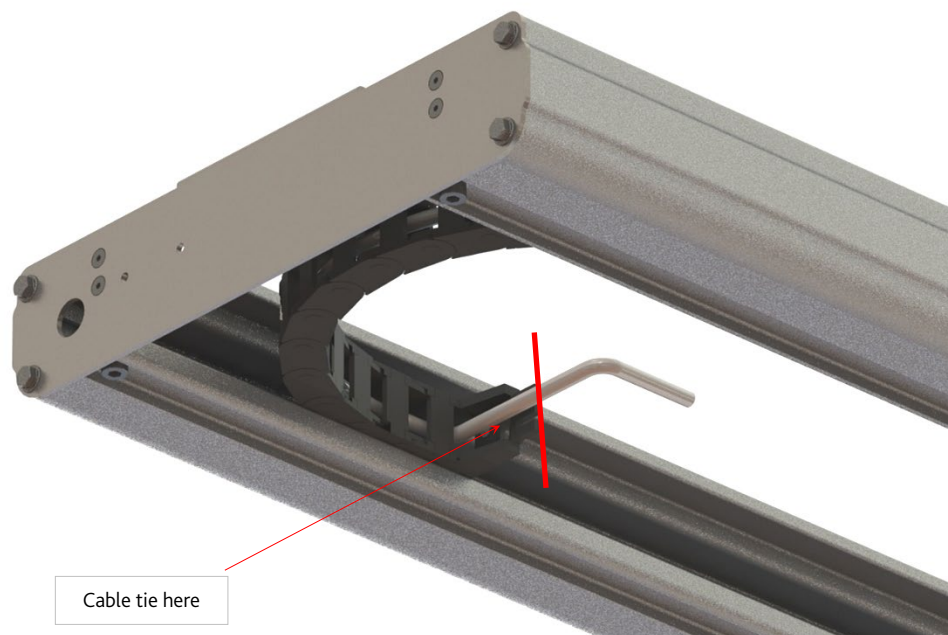
Before installing the cable, ensure it is free from twist & damage.

Step 18

Pass 493 cm of cable (for a 4.2 m track) or 323 cm of cable (for a 2.5 m track) through the end cover bell mouth connector, and into the rigid conduit. Then pass through the flexible energy chain, closing the plastic doors to secure as you move along.

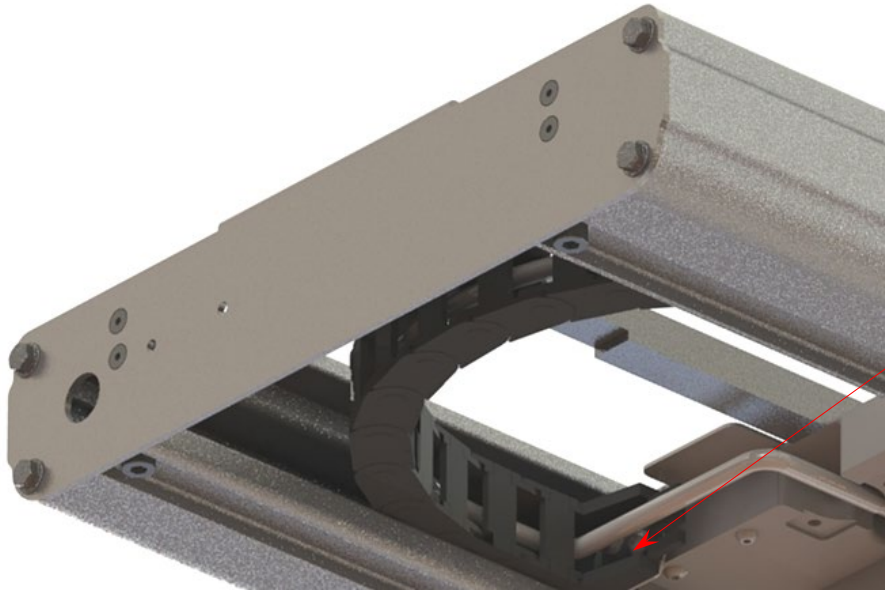
Step 19

Extend the cable 33 cm past the plastic end of flexible energy chain (33 cm past the red line), and secure using a cable tie.

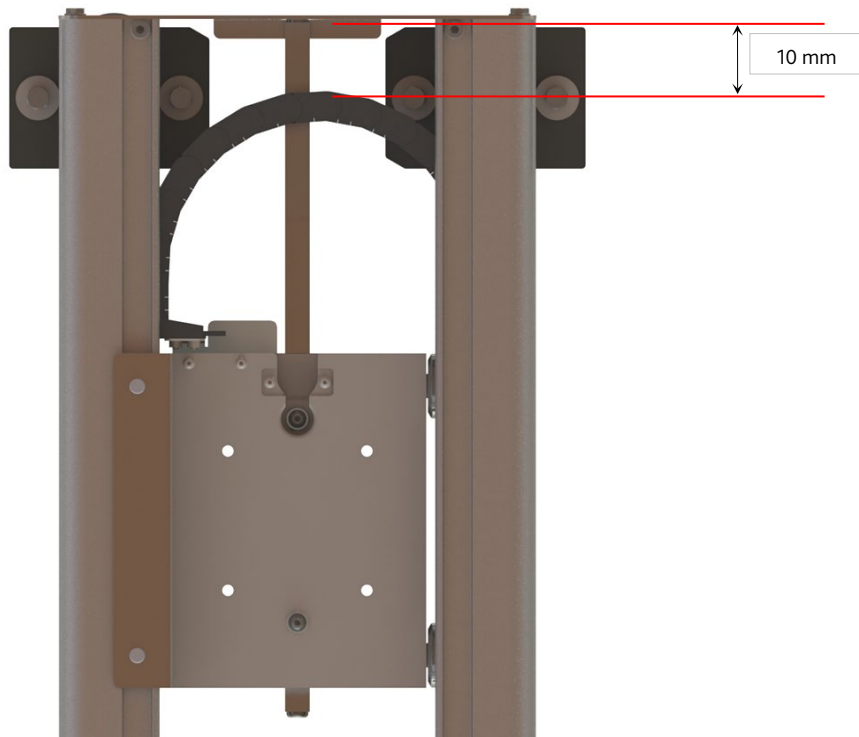


Step 20

Attach the flexible energy chain to the plate secured to the track carriage using the M5 x 12 mm button head screws and plain washers.

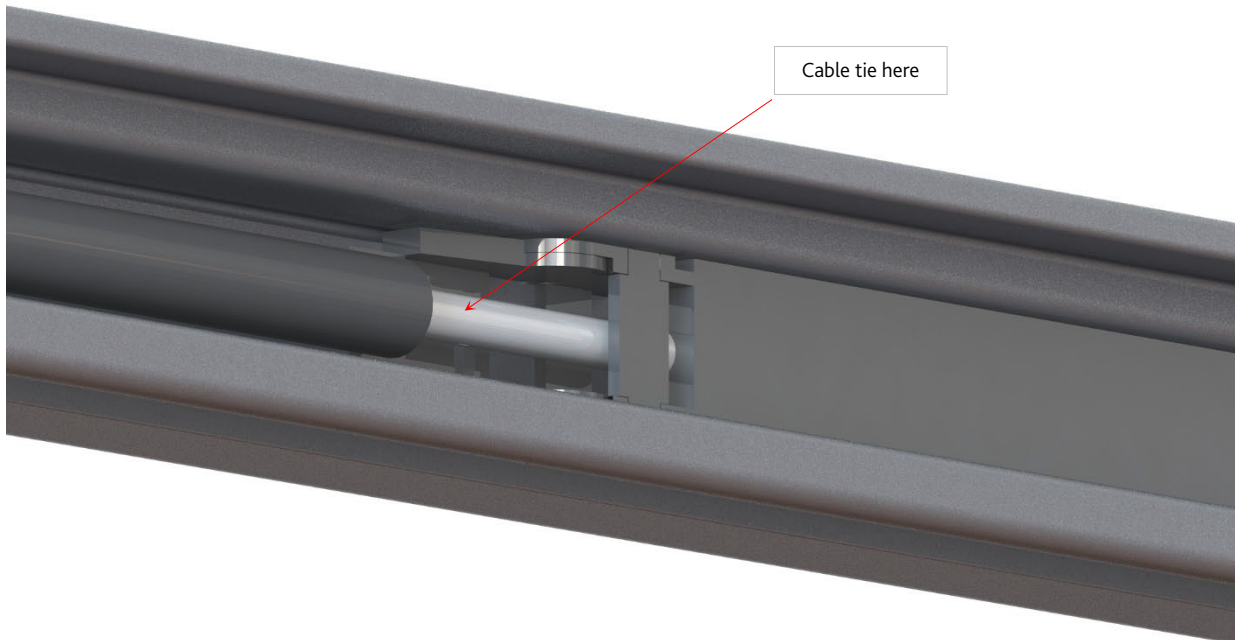
**Step 21**

Slowly slide the carriage towards the end cover at the opposite end of the track to the cable entry, checking for smooth and uninterrupted movement of the carriage and energy chain. Ensure the newly attached end-stop bar strikes the end-cover before the moving energy chain, and that no stress is placed upon the chain. Observe the 10 mm dimension shown below. To achieve this, it may be necessary to slide the flexible energy chain along the rail. Secure the flexible energy chain in place once adjusted (using the two M5 x 10 mm screws in plate 'A').

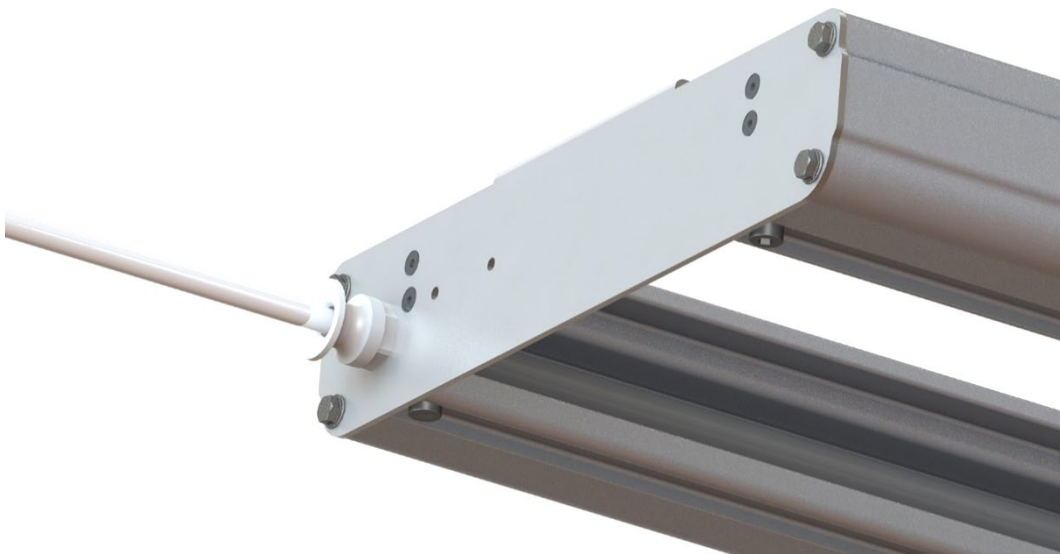


Step 22

Gently pull the installed cable through the bell mouth connector to remove the slack (be careful not to place stress on the cable). Secure the cable to the end plastic bracket of the flexible energy chain with a cable tie.

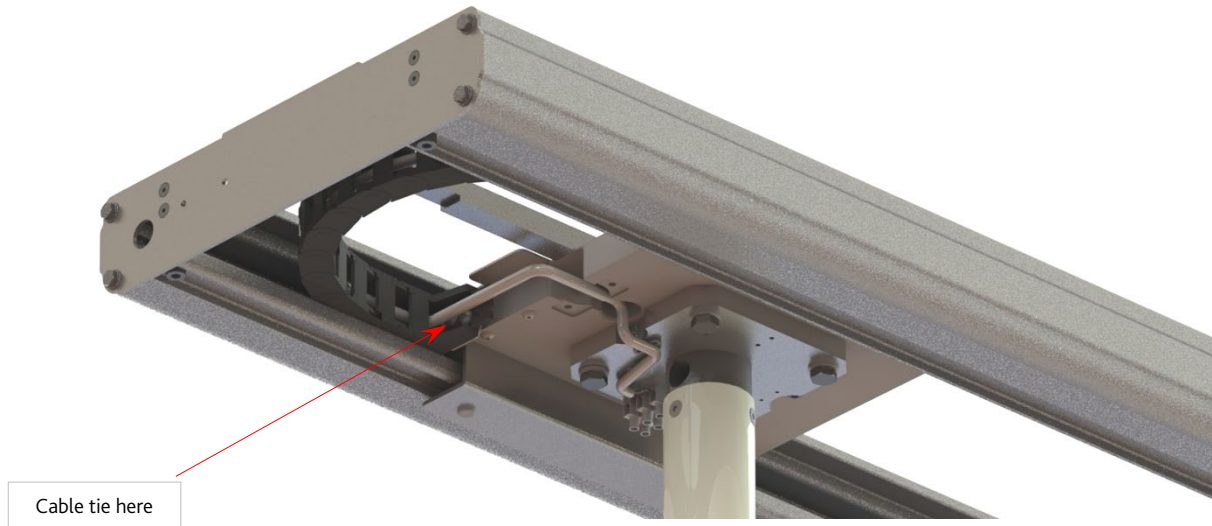
**Step 23**

Tighten the bell mouth connector to secure the cable.

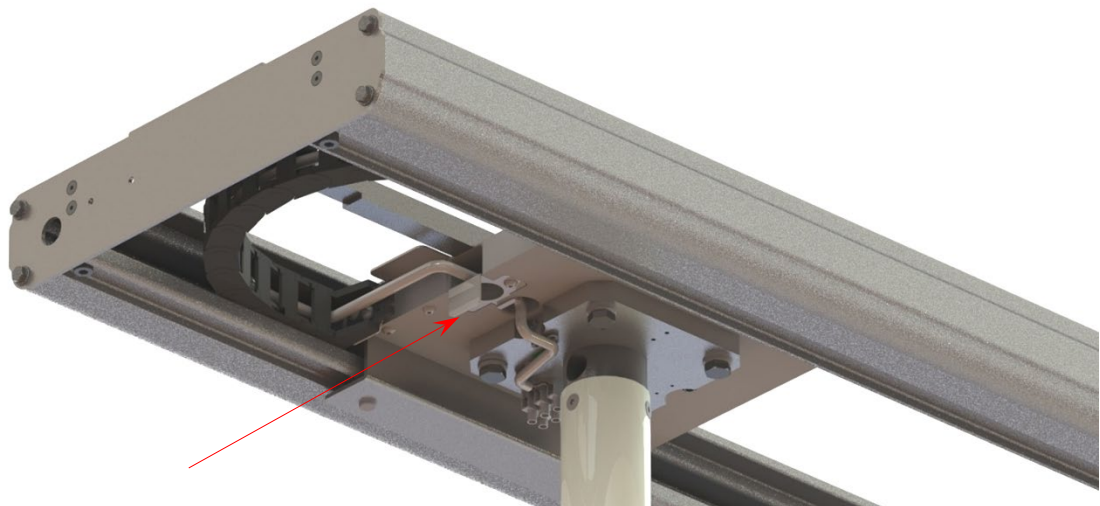


Step 24

Route the cable through the cavity in the track carriage and secure to the terminal block located beneath the plastic housing of the attached (or subsequently attached) ceiling column. Attach a cable tie at the location indicated below.

**Step 25**

Attach the angled carriage cover plate with the angled tag facing downwards (as shown). Re-attach the plastic housing of the ceiling column.

**NOTES**

