



R0015078B Module A infeed arm alignment

Process for alignment of infeed arms

 Difficulty **Hard**

 Duration **10 hour(s)**

Contents

Introduction

Step 1 - Unless otherwise stated

Step 2 - Mount 1st section

Step 3 - Mount 2nd section

Step 4 - Mount 3rd section

Step 5 - Quality Check

Step 6 - Pin sections in position

Step 7 - Finalize fasteners

Step 8 - Prepare Support Channels

Step 9 - Mount Section

Step 10 - Mount Pre assembled load Arm 1

Step 11 - Fit Pre assembled support brackets

Step 12 - Install remaining arms

Step 13 - Arm alignment

Step 14 - Check levels

Step 15 - Quality check

Step 16 - Drill and Pin 1st stage

Step 17 - Finalize fasteners

Step 18 - Drill and Pin 2nd stage

Comments

Introduction

Tools Required

Standard spanner set

Standard Hex key set

Pedestal stand

Adjustable jack

1 meter straight edge

300mm engineers level

Lever bar

Standard tap set

Standard hss drill set

Hammer

Tape measure

Wire line

Clamps

Parts Required

D0015038B x 1
D0015039B x 1
D0015257 x 1
D0015035B x 1
D0015036B x 1
D0015037B x 1

Step 1 - Unless otherwise stated

Use loctite 243 on all fasteners

Use Loctite 572 on all threaded pneumatic connections

Pen mark all bolts to show finalised



Step 2 - Mount 1st section

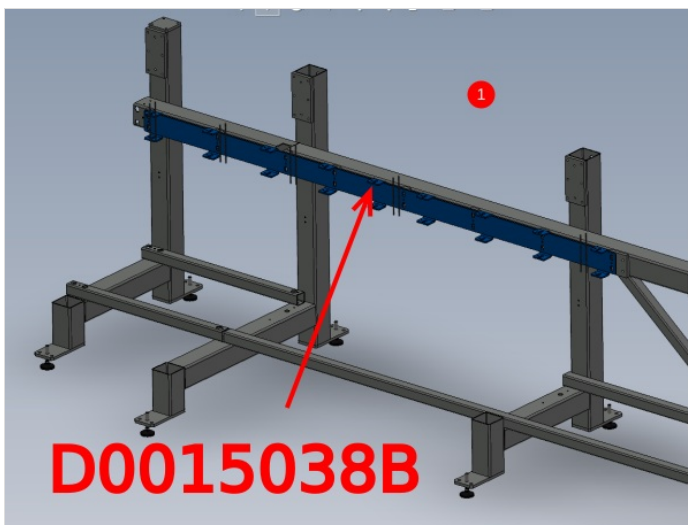
1 Mount D0015038B in position shown .

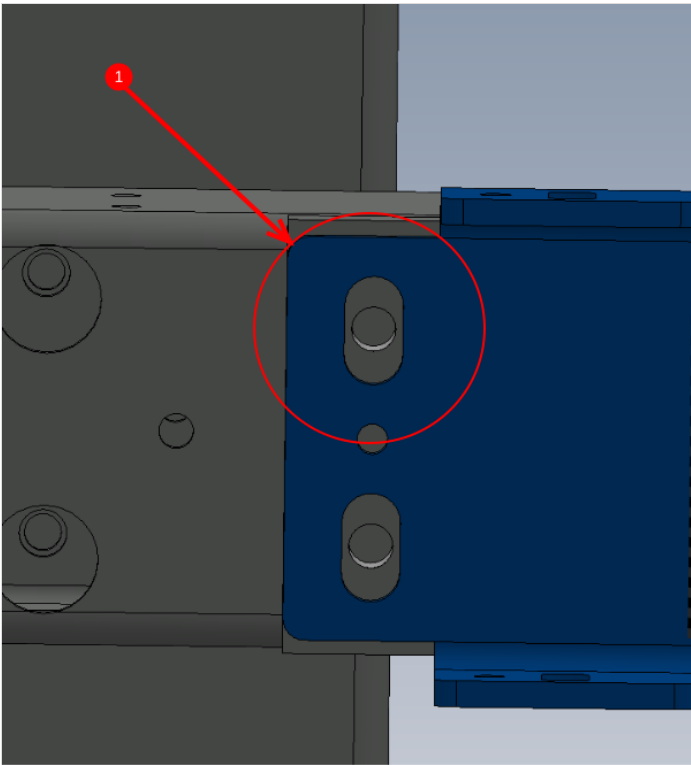
Use M12 x 25 set bolts and M12 A form washers. Do not add loctite 243 at this stage. Ensure Section is mounted mid slot as shown

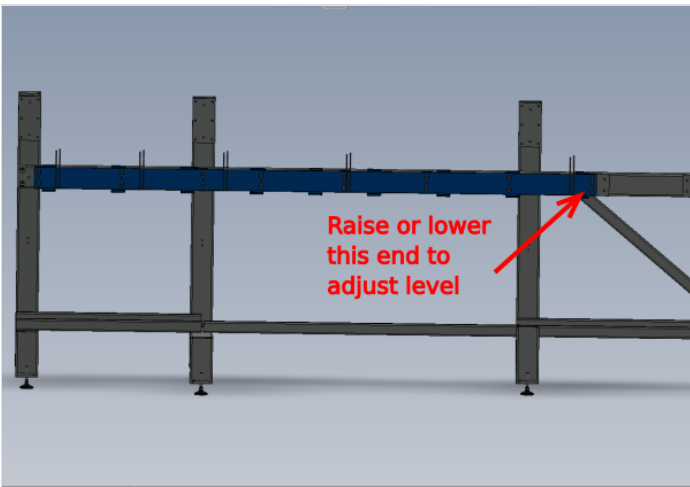
2 Use a 2 meter straight edge and position on top of mounted section as shown

Use 300mm engineers level and adjust indicated point to bring section level

3 Tension fasteners to hold support section position







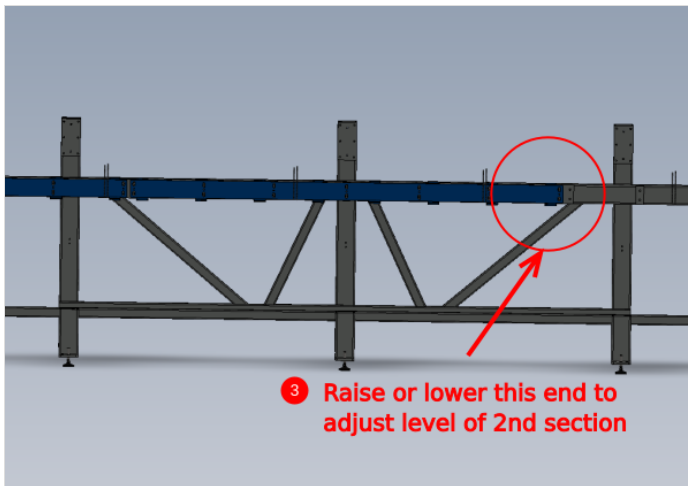
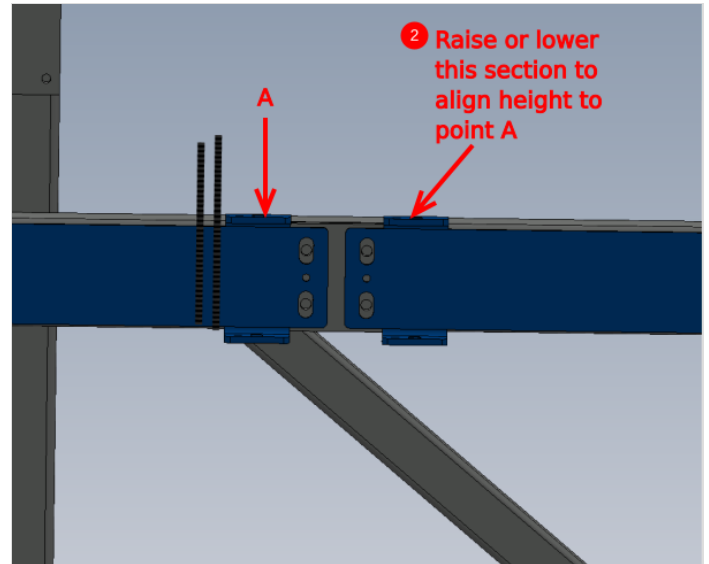
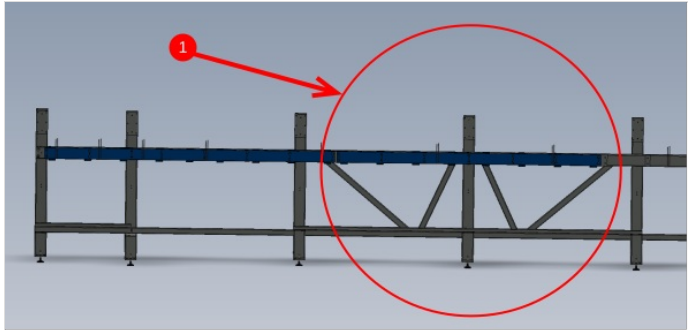
Step 3 - Mount 2nd section

1 Mount D0015039B at position shown using same fixings as previous step

2 By extending 2 meter straight edge slightly from previous fitted section, set height at point shown to be flush with 1st section

3 Move straight edge to sit only on 2nd section and move indicated point to adjust level

4 Tension fasteners to hold support section position



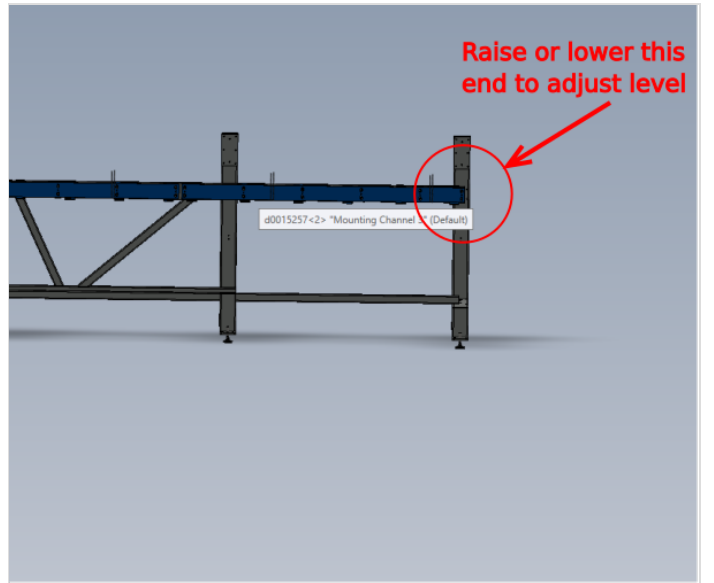
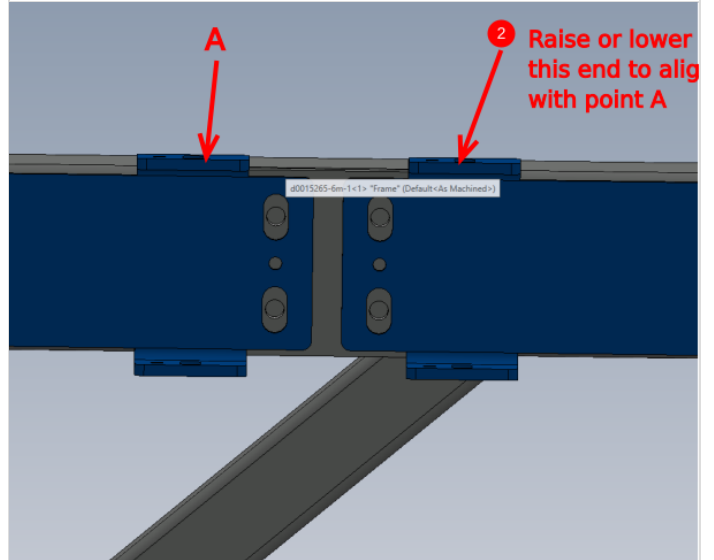
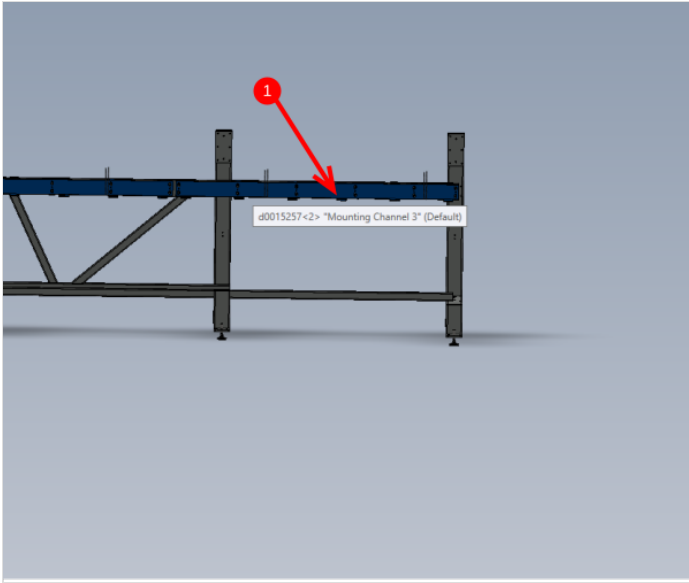
Step 4 - Mount 3rd section

1 Mount D0015257 at position shown using same fixings as previous

2 By extending 2 meter straight edge slightly from previous fitted section, set height at point shown to be flush with 1st section

3 Move straight edge to sit only on 2nd section and move indicated point to adjust level

4 Tension fasteners to hold support section position

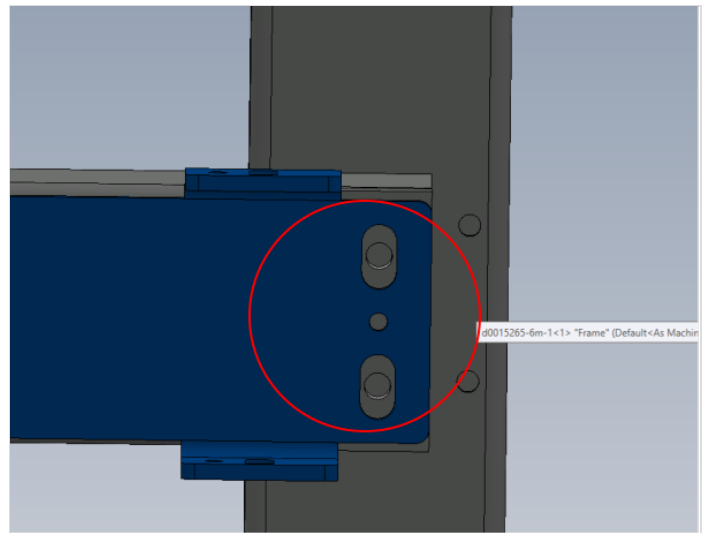


Step 5 - Quality Check

If the frame has been leveled accurately, the last section mounted should still be approximately mid slot when leveled

If there is not enough adjustment **available in the slot** at this point to level section, it indicates an error on frame leveling.

Supervisor check required at this point to confirm adjustments

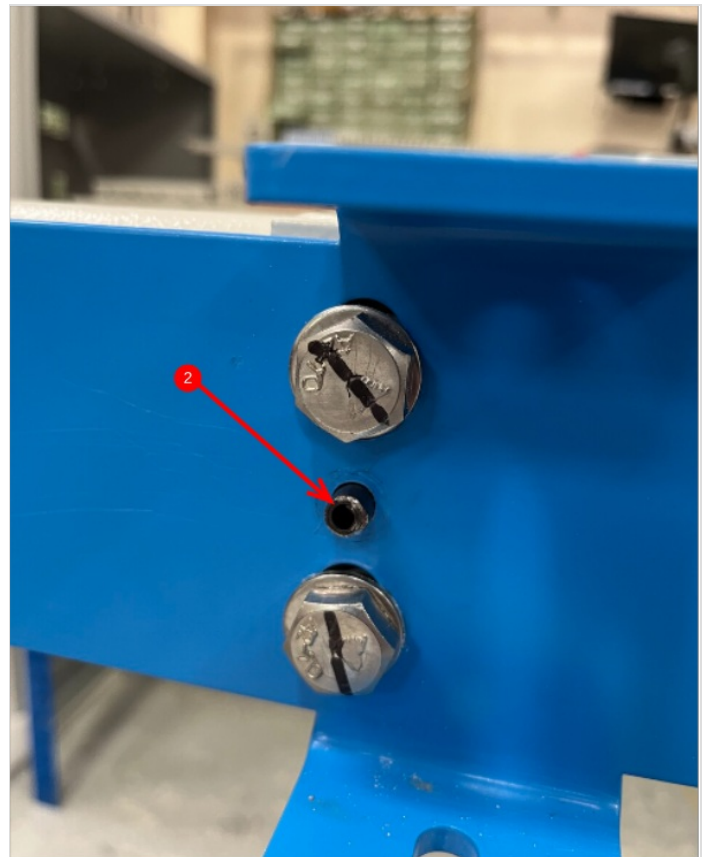
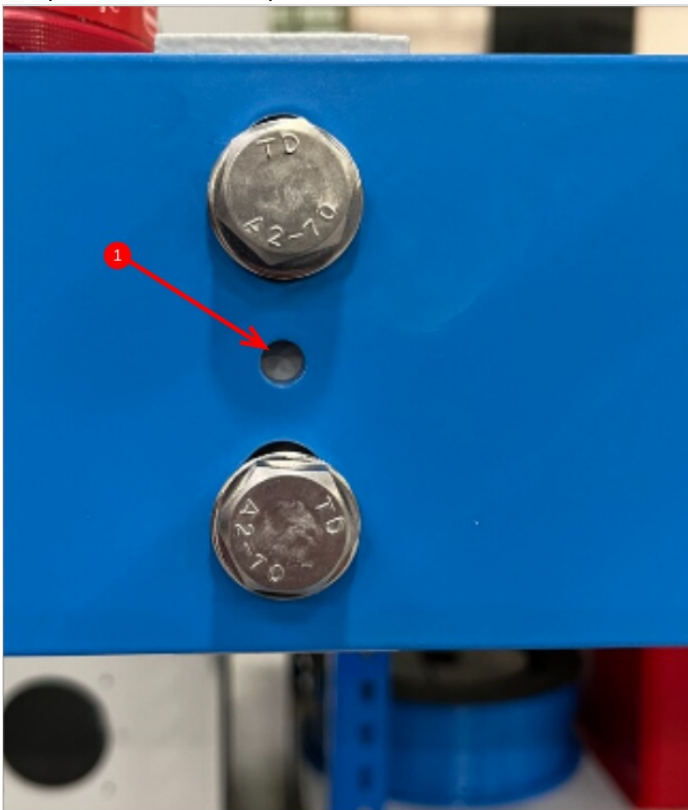


Step 6 - Pin sections in position

1 3 off mounted sections now require drilling for spirol pins

2 Drill hole 7mm , then increase to 8mm and then fit 8mm x 24mm spirol pin

3 Repeat this on all dowel positions on all 3 mounted sections



Step 7 - Finalize fasteners

- 1 Remove M12 x 25 set bolt
- 2 Add Loctite 243 to thread
- 3 Refit and add final tension
- 4 Mark bolt as complete
- 5 Repeat for all M12 fasteners



Step 8 - Prepare Support Channels

Prepare D0015035B, D0015036B and D0015037B ready for fitting.

All tapped holes require cleaning to remove any debris from coating process



Step 9 - Mount Section

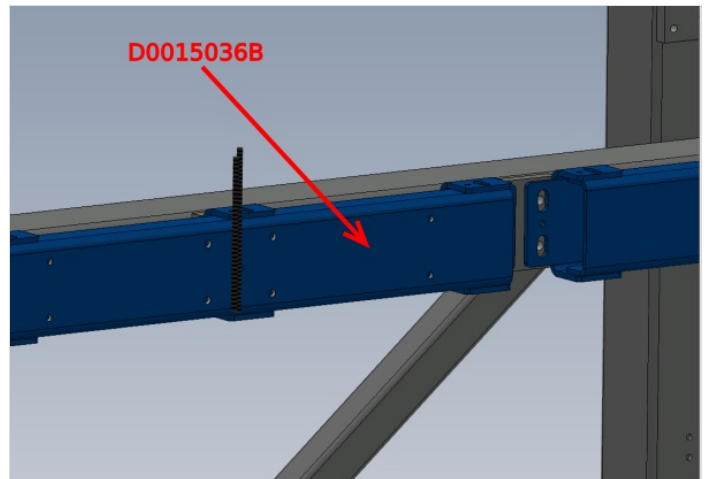
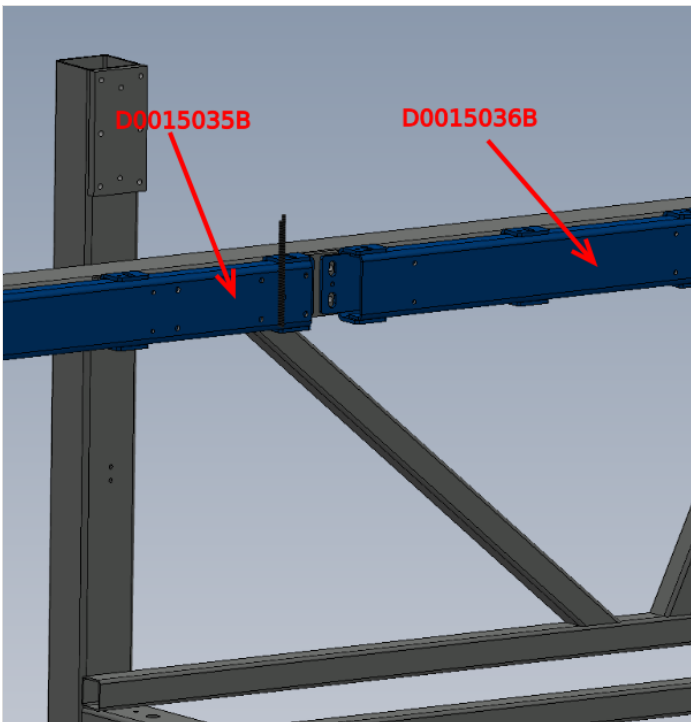
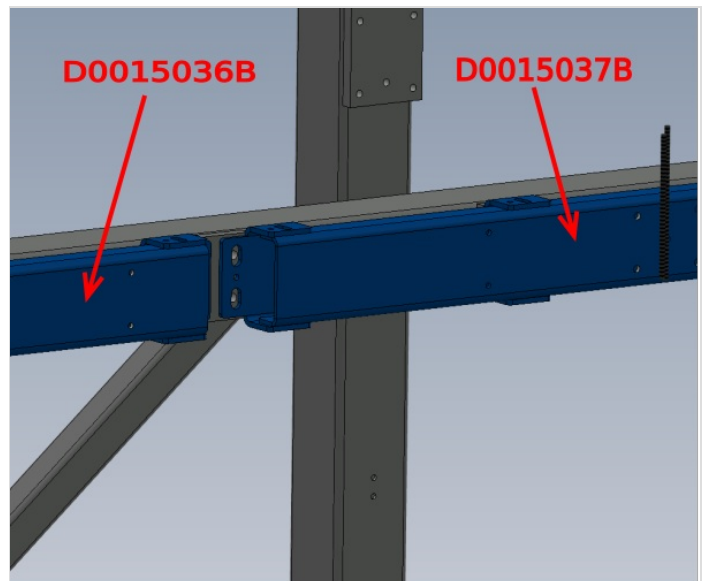
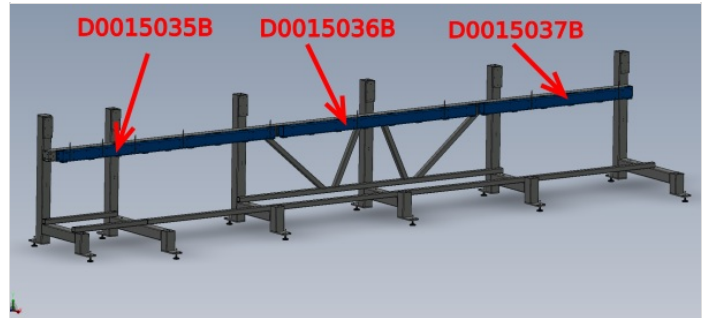
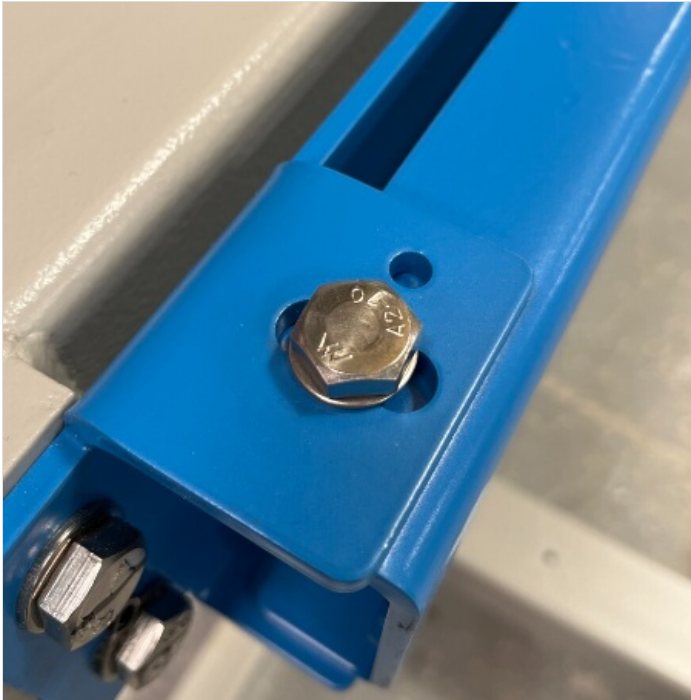
1 Mount D0015035B as shown using M10 x 20 set bolts and A form washers

2 Mount D0015036B as shown M10 x 20 set bolts and A form washers

3 Mount D0015037B as shown M10 x 20 set bolts and A form washers

4 Ensure when mounted, Middle slot position is obtained

5 Do not use Loctite 243 at this point




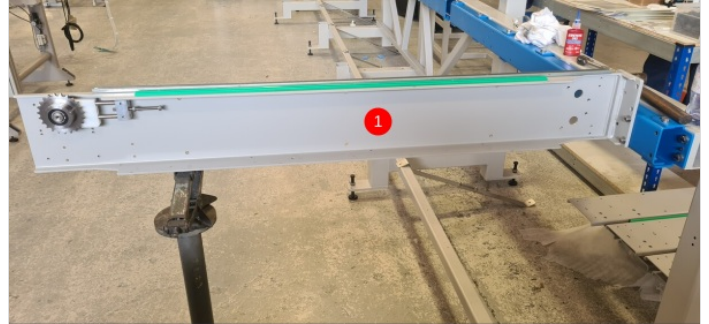
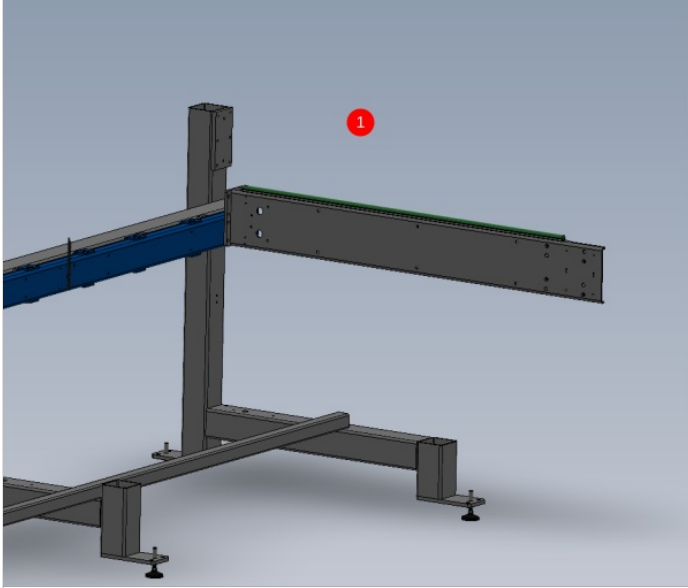
Step 10 - Mount Pre assembled load Arm 1

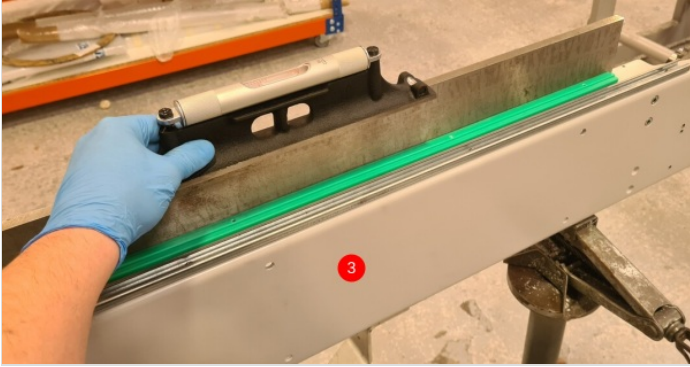
1 Mount 1st Arm as shown , using pedestal stand and jack to support arm Fix with M10 x 30 socket caps and A form washers.

2 Use engineers level to adjust arm level at the indicated point

3 Use 1 meter straight edge and engineers level and adjust to level using jack

 ...only use the indicated face to level from. Due to manufacturing tolerances, any other faces will give a discrepancy to the top face which is the datum

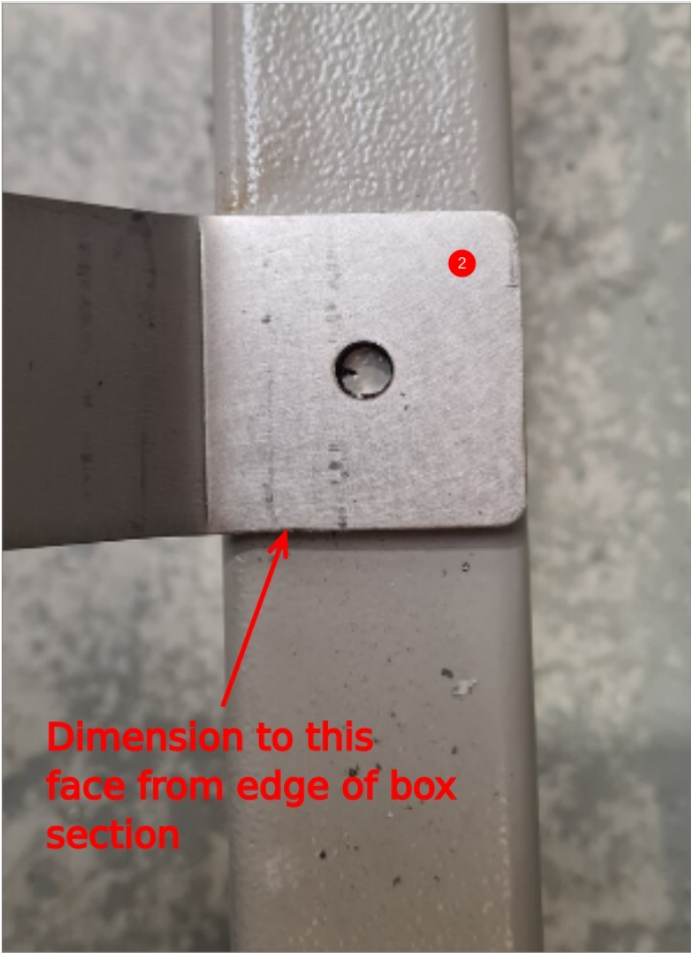




Step 11 - Fit Pre assembled support brackets

- 1 Mount support arm to loader arm using M8 x 30 socket cap , heavy M8 washers and M8 nyloc nut
- 2 Position Bottom of support bracket to dimension shown, and mark hole onto box section
- 3 Drill and tap hole to M6 and secure bracket with M6 x 20 socket cap and heavy M6 washer
- 4 Tighten 2 off M8 socket caps and nylocs on support bracket and remove jack and pedestal



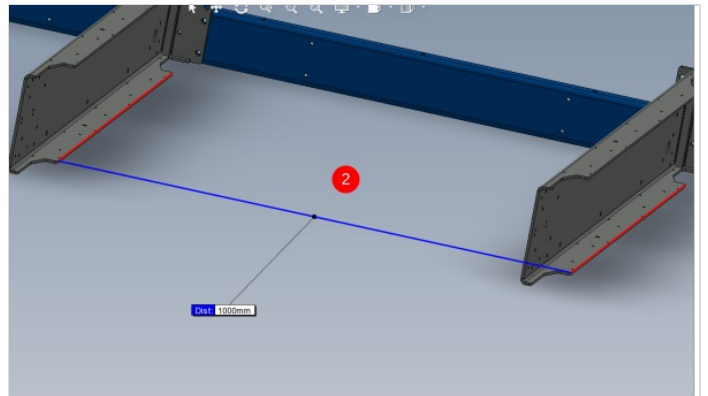




Step 12 - Install remaining arms

1 Mount remaining 8 arms using to the same procedure .

2 To determine bottom bracket drilling position, measure between each arm when fitting to calculate the pitch, and set bottom support bracket to position to replicate the top . Picture shows points to measure



Step 13 - Arm alignment

1 Set a wire line along front face of all arms

Use dokit **ALIGNMENT USING WIRE LINE** to ensure correct use

2 Leave arms 1 and 9 as datum positions. Do not adjust these

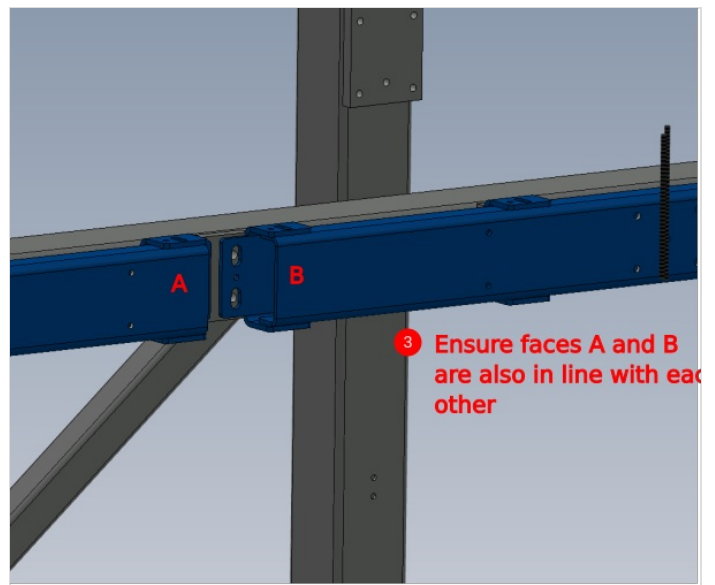
Move arms 2 to 8 in or out to achieve alignment on wire line



...Use a G clamp or lever bar to give controlled movement when adjusting arm position

3 Ensure mounting channel joining points are also aligned to each other

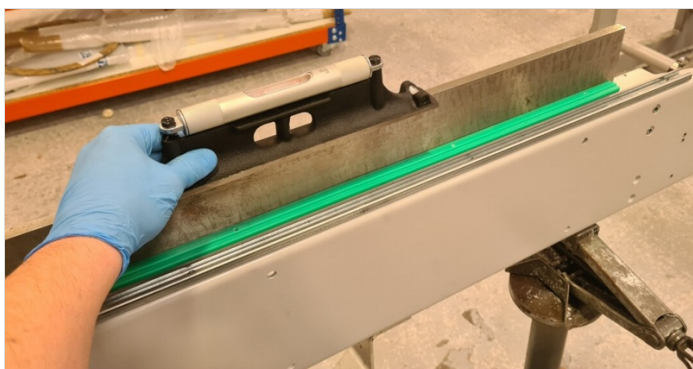
4 Apply light tension to fasteners next to arms on support channel



Step 14 - Check levels

1 Check levels as shown and adjust if required as this may have moved slightly when adjusting arm position

2 If any level adjustments are done, recheck wire line for straightness



Step 15 - Quality check

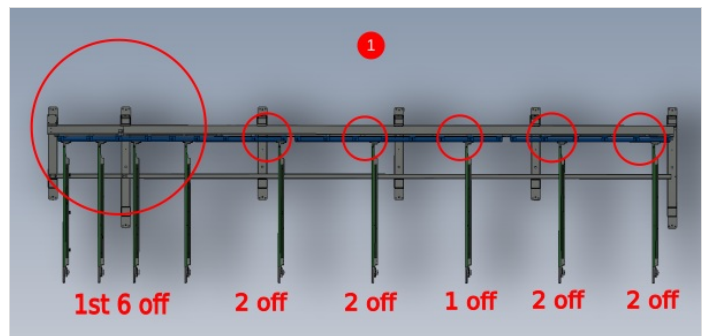
Sign off required by supervisor at this point before finalisation



Step 16 - Drill and Pin 1st stage

1 Drill first stage dowels above and below at points indicated to stop movement when finalising fasteners. Drill 7mm, Then increase to 8mm and then add 8mm x 24mm spirol pin . Repeat these steps at all indicated dowel points.

⚠ ...Do not drill all dowel holes first then add all spirol pins at the end. Movement may occur and settings will be lost.
Drill hole , add spirol pin and repeat



Step 17 - Finalize fasteners

Remove M10 x 20 set bolts one at a time, add Loctite 243, refit, add final tension and mark . Repeat this for all M10 fasteners along aligned channels.



Step 18 - Drill and Pin 2nd stage

Remaining dowel points can now be drilled as above, and final spiral pins added