


R0015078B Module A infeed arm alignment

Process for alignment of infeed arms

 Difficulty **Hard**

 Duration **8 hour(s)**

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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

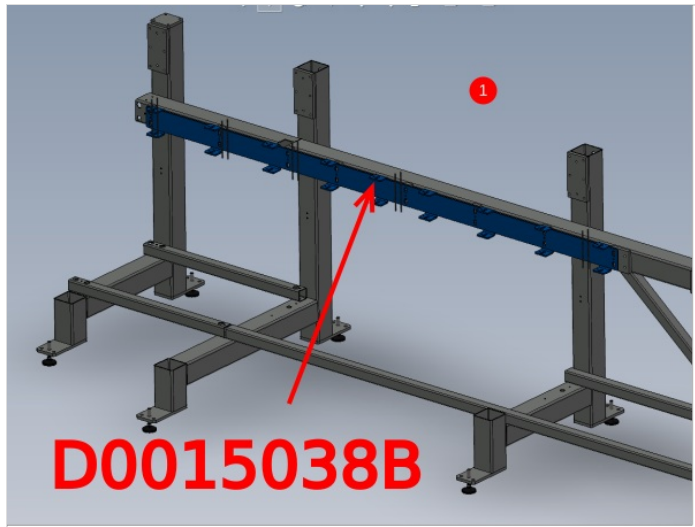
Step 1 - Unless otherwise stated

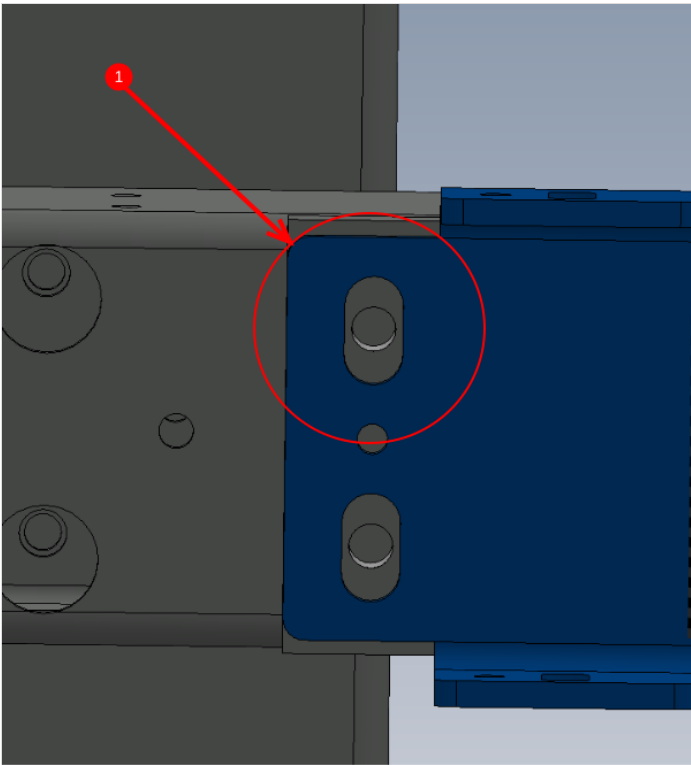
- Use loctite 243 on all fasteners
- Use Loctite 572 on all threaded pneumatic connections
- Pen mark all bolts to show finalised

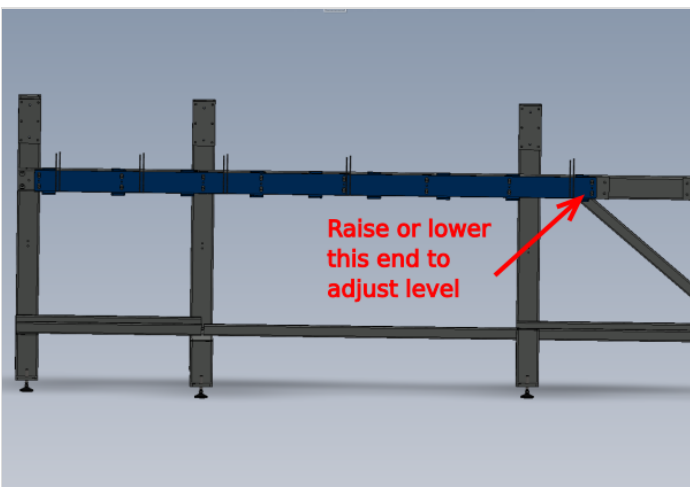


Step 2 - Mount 1st section

- 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







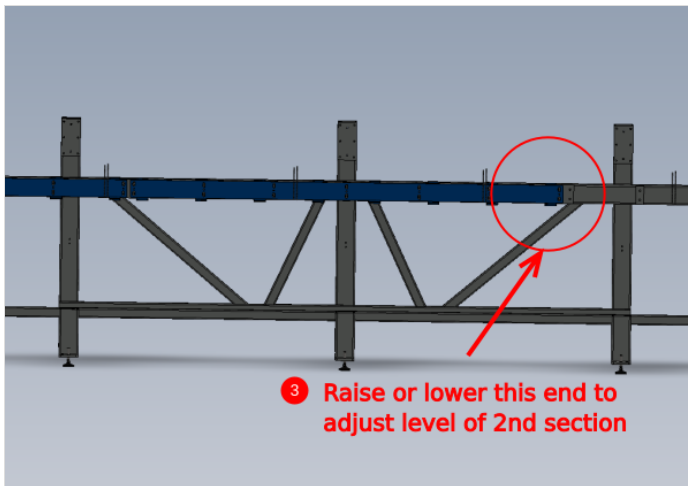
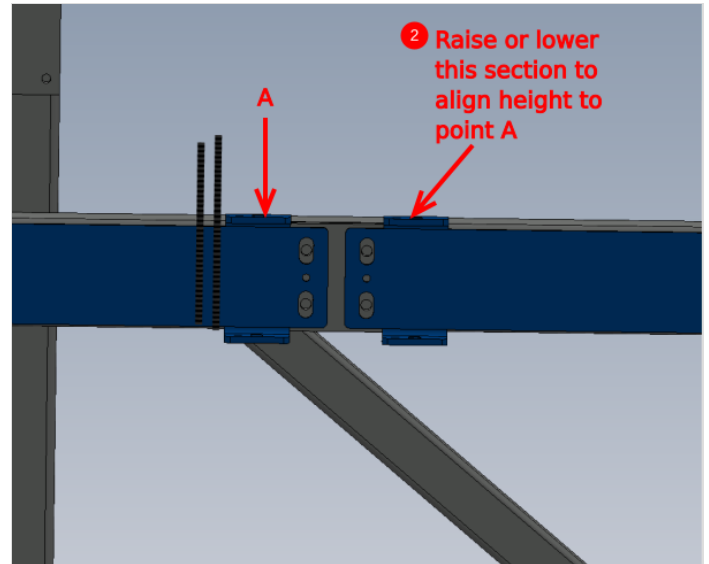
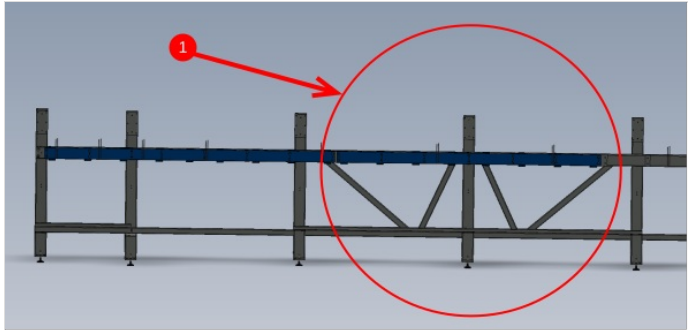
Step 3 - Mount 2nd section

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



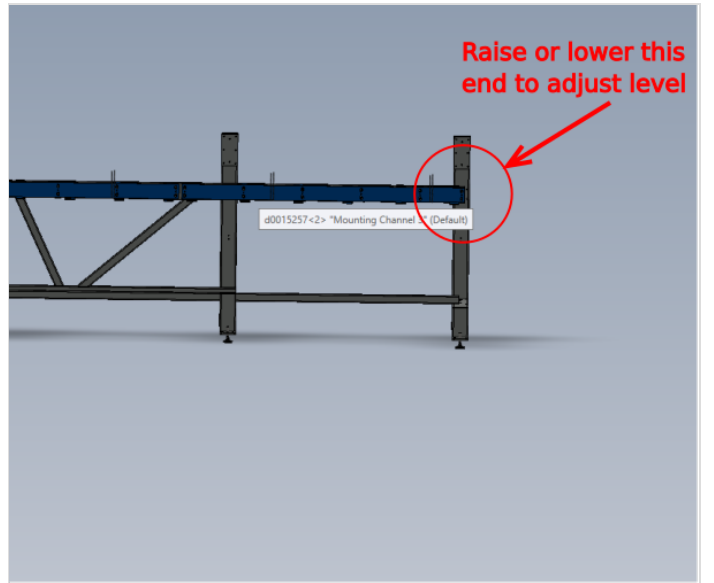
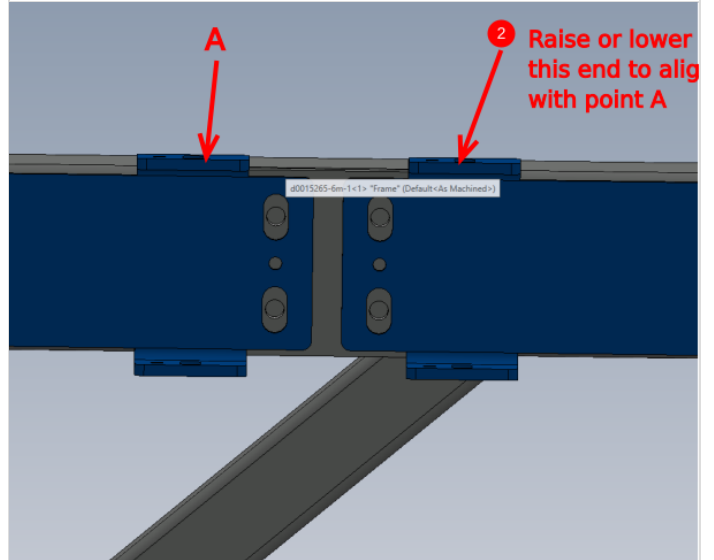
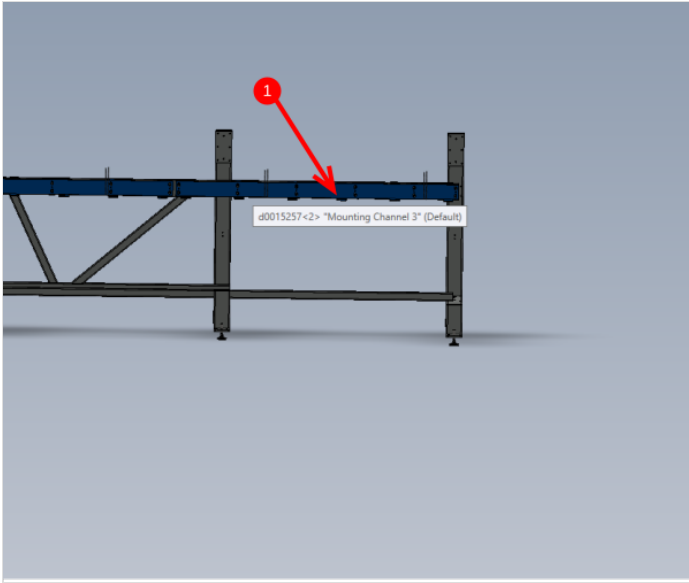
Step 4 - Mount 3rd section

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

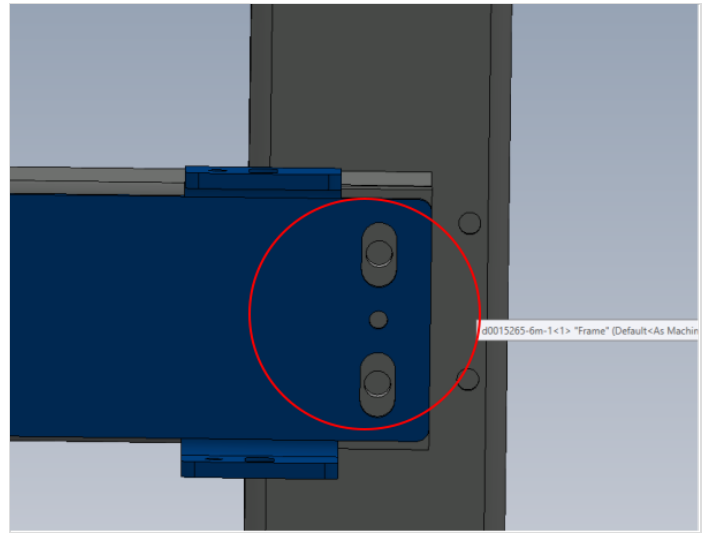


Step 5 - Quality Check

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 at this point to level section, it indicates an error on frame leveling.

Supervisor check required at this point to confirm adjustments

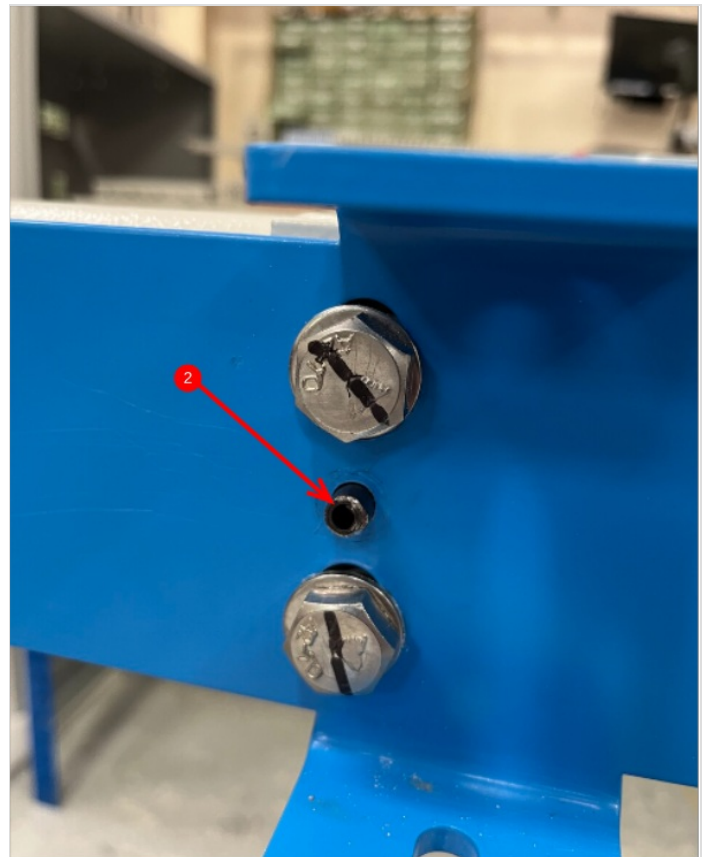
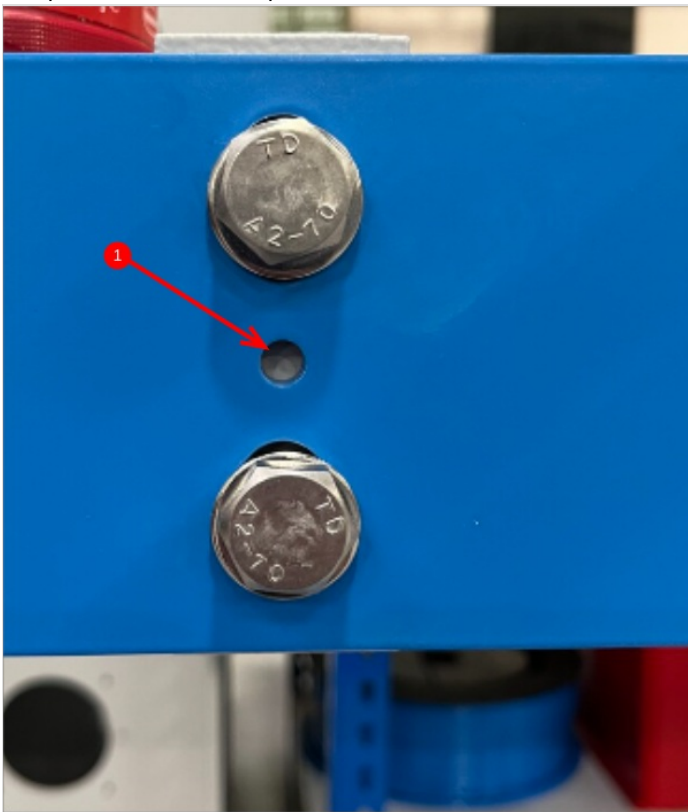


Step 6 - Dowel sections in position

1 3 off mounted sections now require drilling for dowel 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

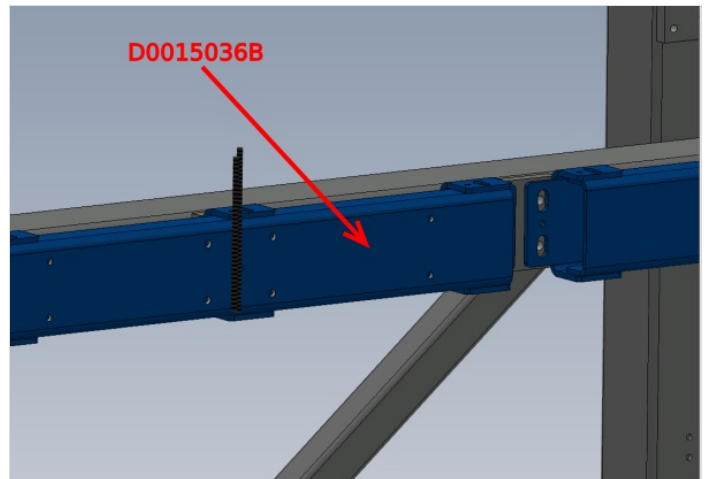
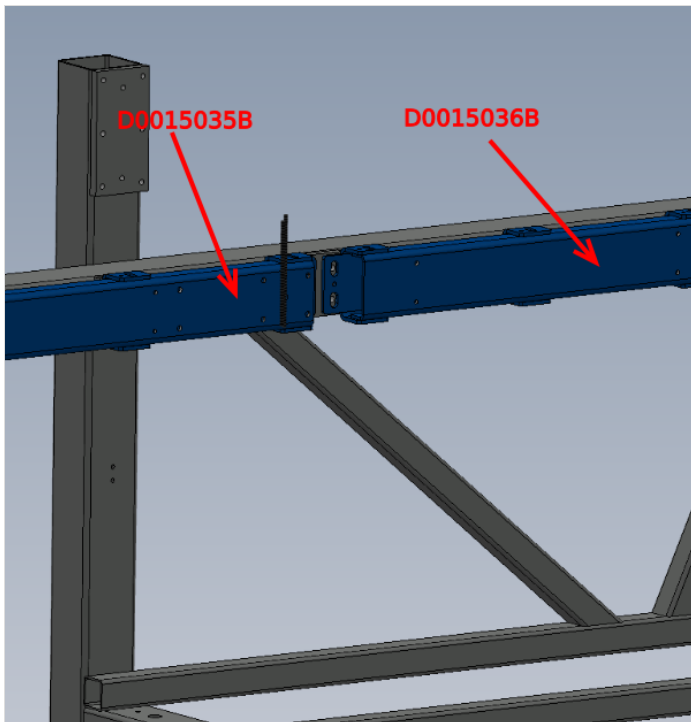
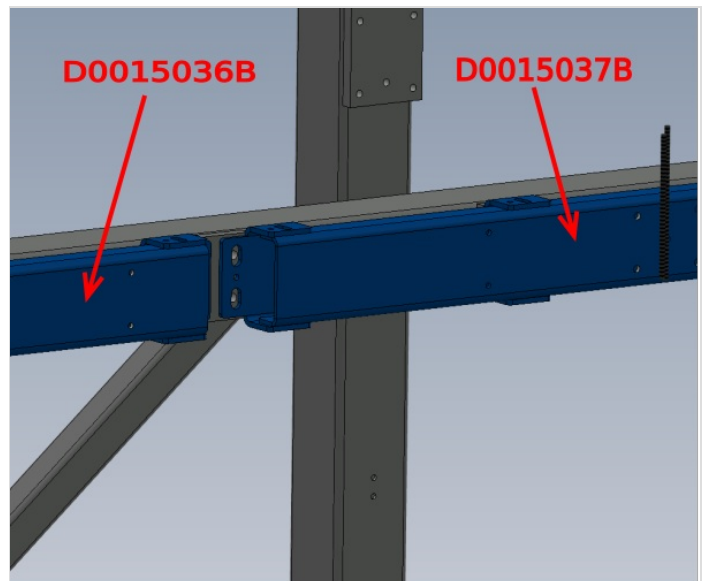
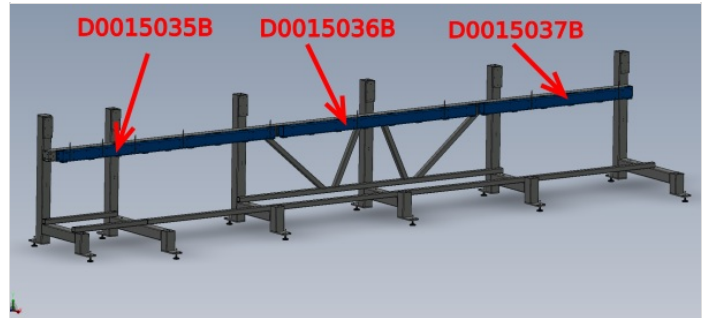
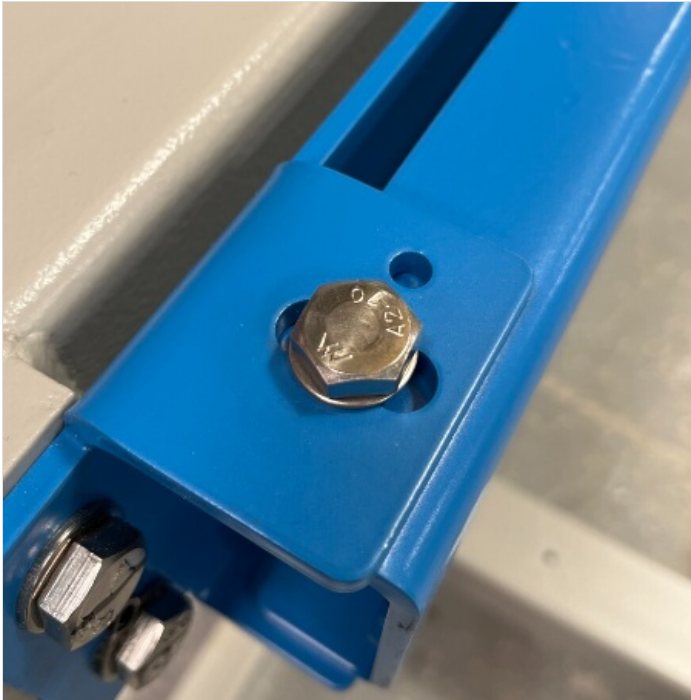
1 Mount D0015035B as shown using M10 x 20 set bolts and A form washers

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

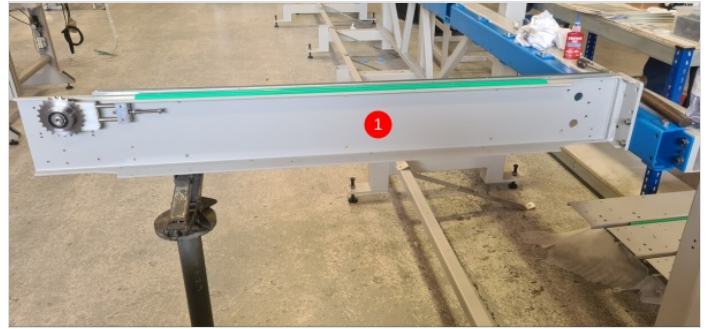
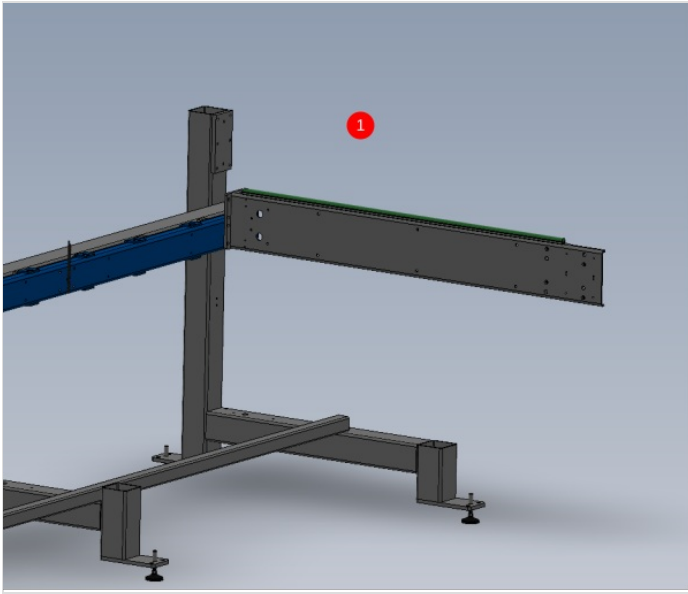


Step 10 - Mount Pre assembled load Arm 1

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



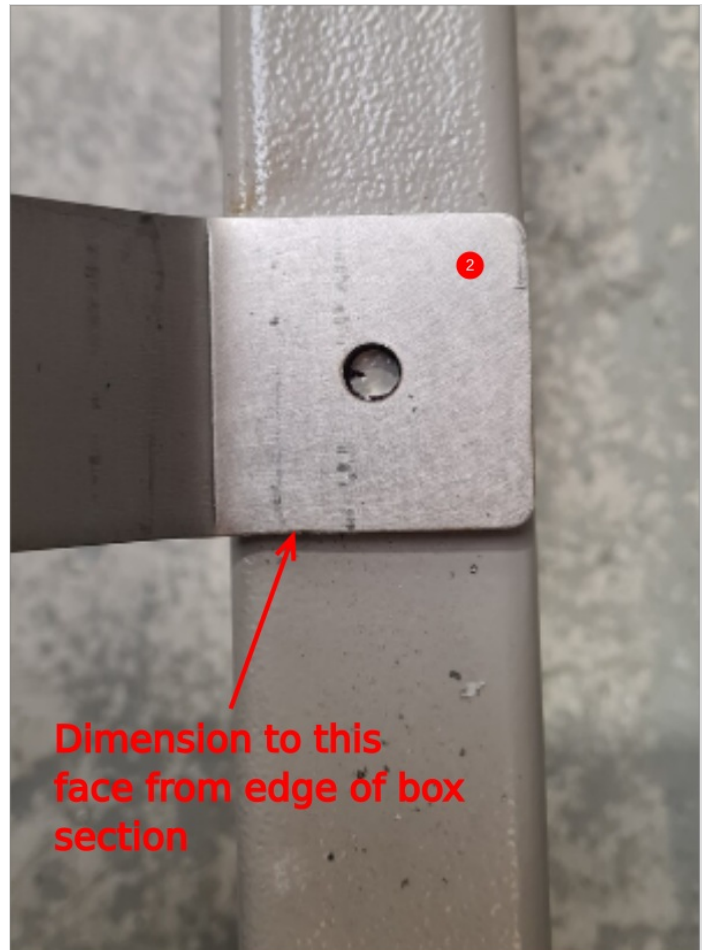
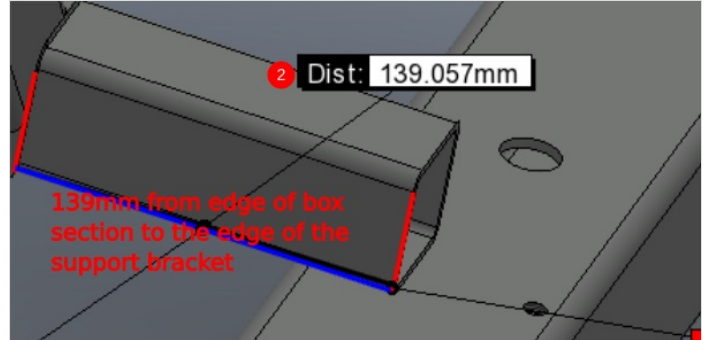
Step 11 - Fit Pre assembled support brackets

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

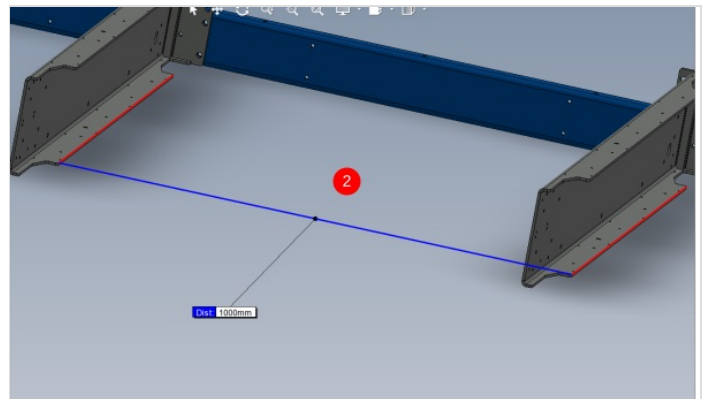




Step 12 - Install remaining arms

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

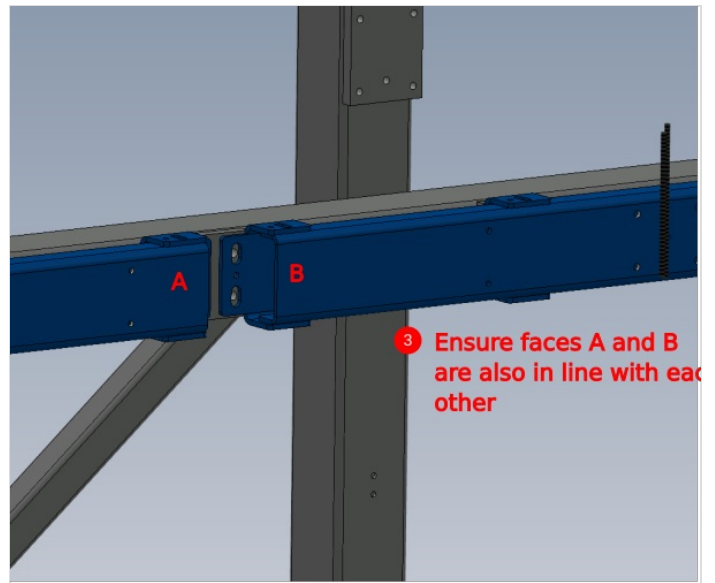
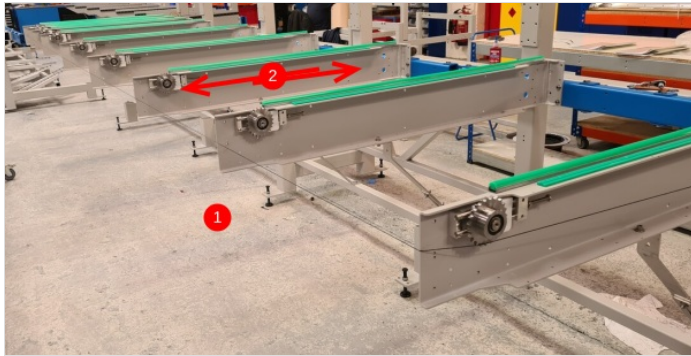
Move arms 2 to 8 in or out to achieve alignment on wire line



...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

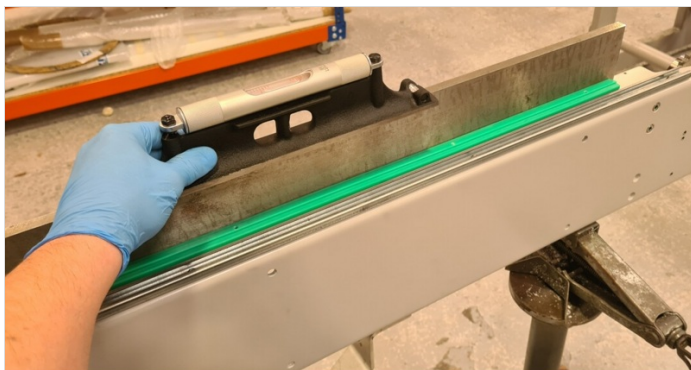
4 Apply light tension to fasteners next to arms on support channel



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

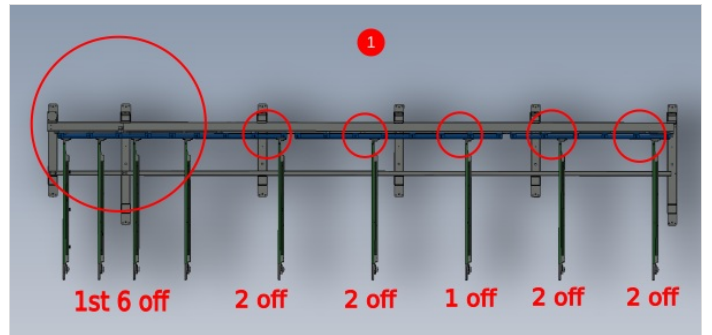
Sign off required by supervisor at this point before finalisation



Step 16 - Drill and dowel 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 dowel 2nd stage

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