

R0015291 Install Transfer Beams To Module C and E

Correct settings and installation procedure for transfer beam assemblies

 Difficulty **Hard**

 Duration **6 hour(s)**

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Comments

Introduction

Tools Required

Standard hex key set

Module pitching jigs

Tape measure 7.5 meter

Engineers level

1 meter spirit level

Parts required

Pre assembled transfer beams

Step 1 - Unless otherwise stated

Use Loctite 243 on all fasteners

Use Loctite 572 on all threaded pneumatic connection

Pen mark all fasteners to show finalised



Step 2 - Install Frame pitching jigs

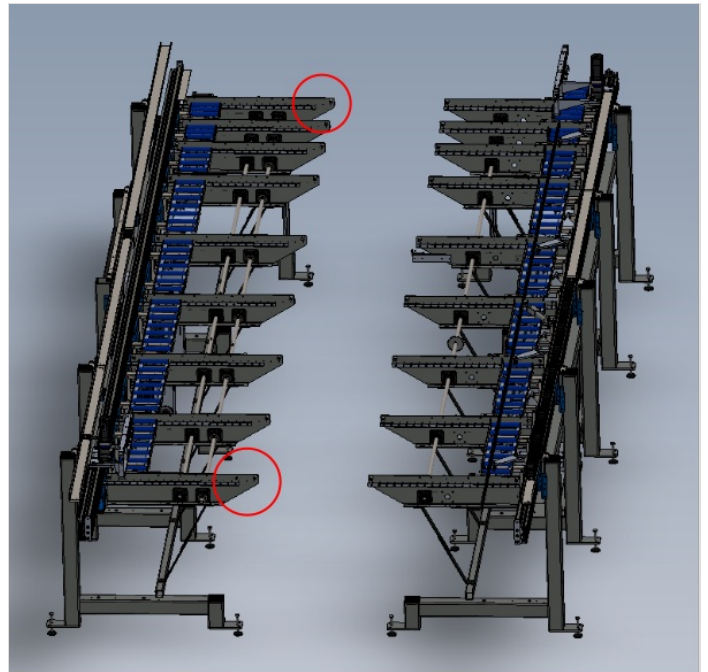
Module E will require accurately positioning to align with Module C

Only frame E must be moved



Step 3 - Attach Jigs

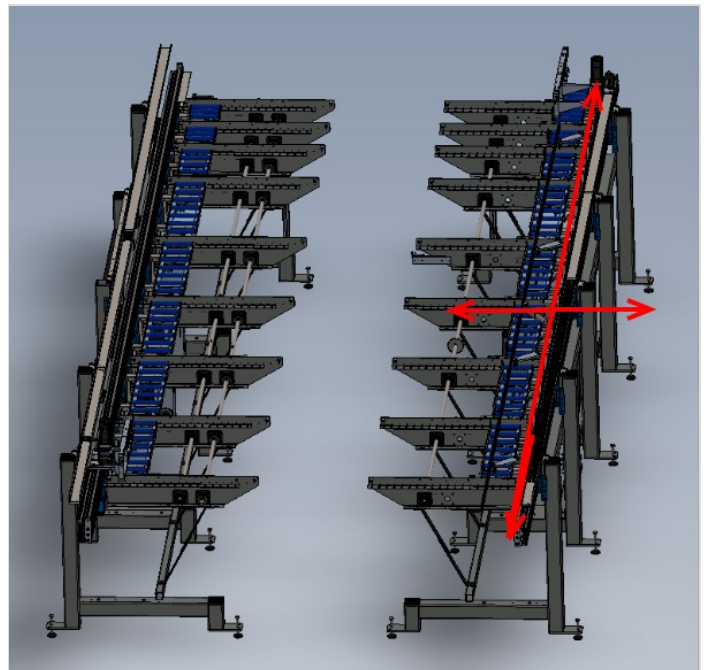
Attach jigs to Module C at indicated points



Step 4 - Move Module E

Move module E in the directions shown to align to jigs

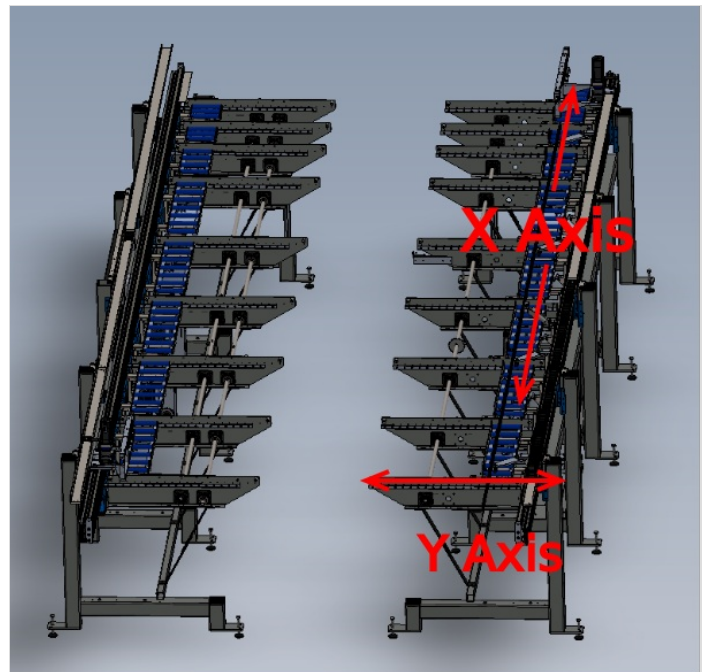
Fasten jigs to module E once aligned



Step 5 - Level module E

Module E will require re levelling now it has been moved

Level from carriage plate for X axis and support arms for Y axis



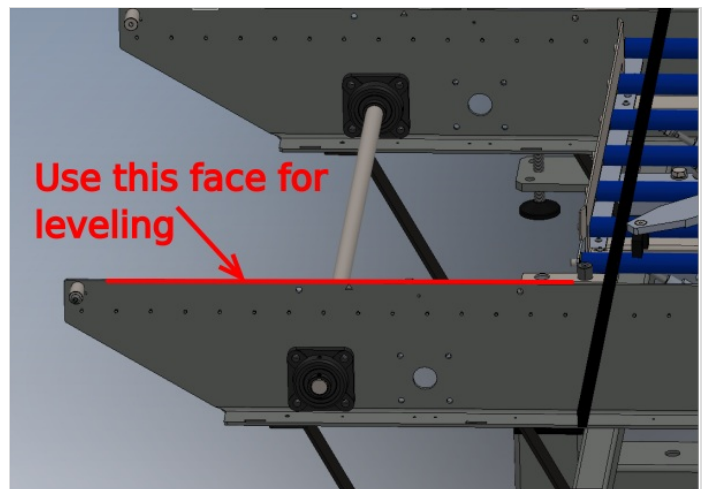
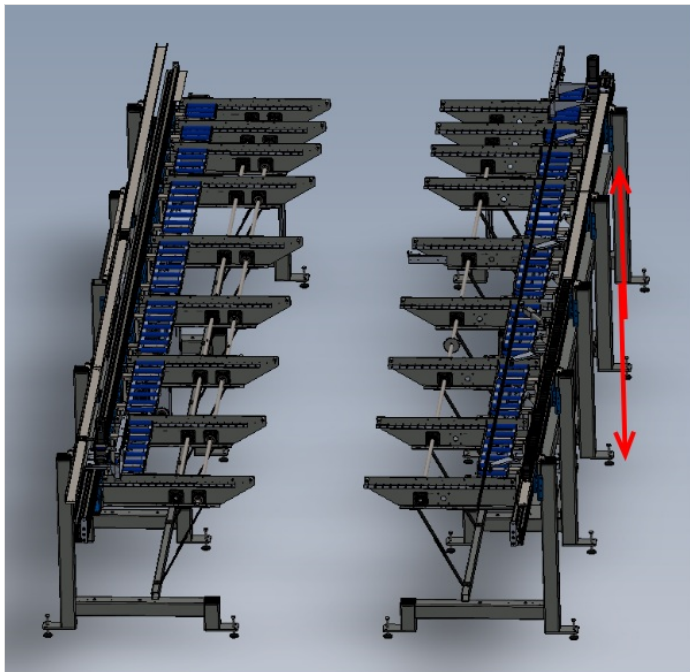
Step 6 - Adjust height of module E

Using loading arms as datum , lift or lower Module E on adjusting bolts to bring module level with module C

Only use the face indicated for levelling between models. This is the face that is used in set up of the arms so continuity occurs for installation



...Ensure all adjusting feet are turned in equal amounts so level is not affected when adjusting height



Step 7 - Remove setting jigs

Remove setting Jigs from modules



Step 8 - Fit Transfer beam 1 and 9

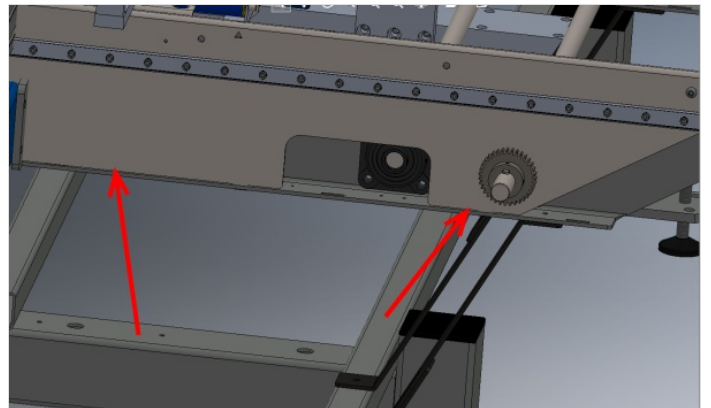
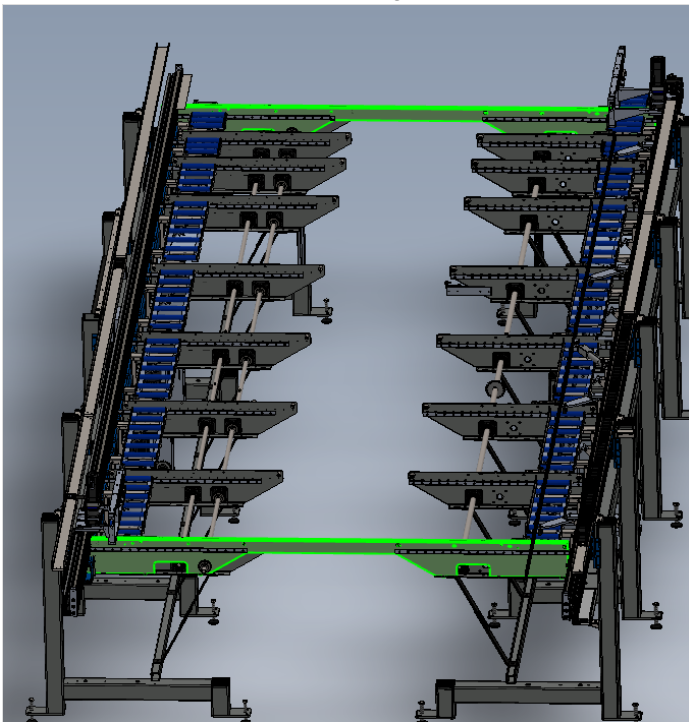
Fit transfer beam 1 (with pneumatic rail) and transfer beam 9 (no pneumatic rail) to modules

~~Fasten with button heads~~

Fasten with M8 x 20 set bolts

Do not use adhesive on these bolts as need to be removed for decommission

Check that transfer beams sit flat along indicated faces



Step 9 - Information

It is important that the squareness and parallel are checked after the levelling of the 2 frames in relation to each other.

If there is a large variance in height between the 2 modules, a discrepancy will be created when measuring for correct positioning

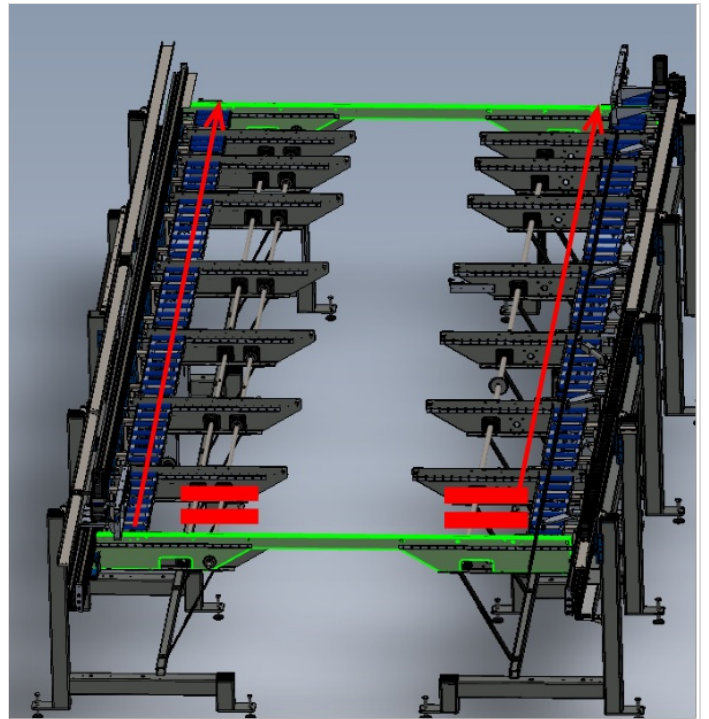
The amount of frame movement required after levelling has been performed will be minimal , and have negligible effect on levels set



Step 10 - Check Parallel

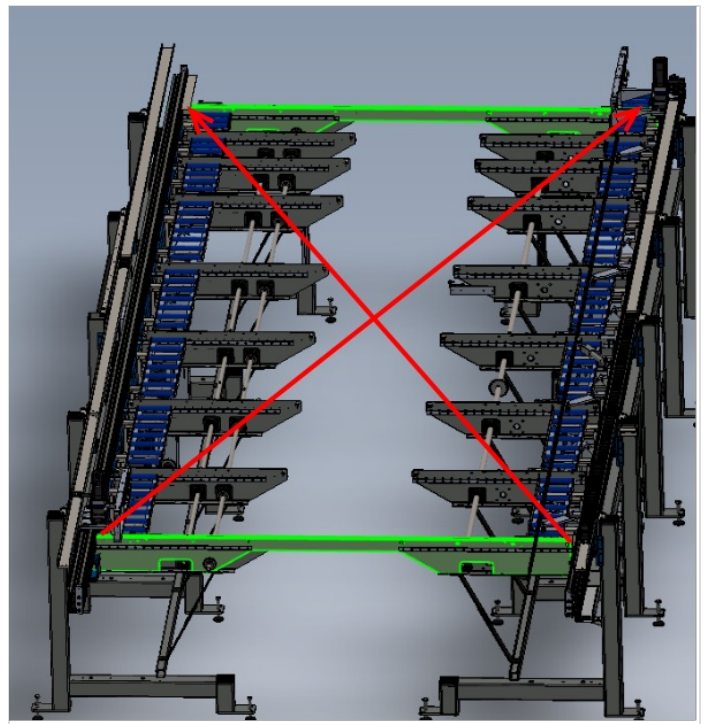
Check that beams are Parallel by measuring with a tape measure

Report any discrepancy to supervisor



Step 11 - Check Squareness

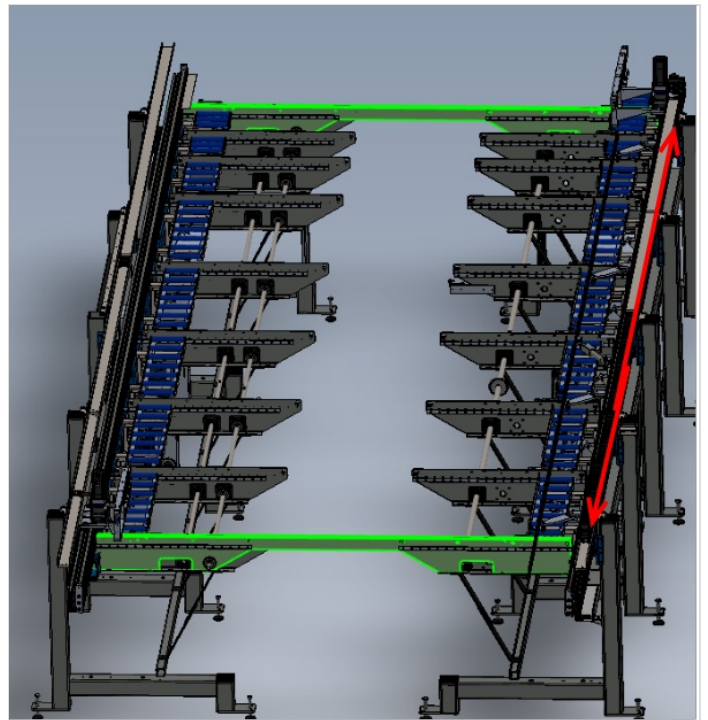
Check squareness by taking corner measurements where indicated



Step 12 - Adjust squareness

Adjust Squareness by moving Module E in the direction shown

Frame will need to move half the distance of the discrepancy measured on corner measurements



Step 13 - Check adjustment

Once adjustment is complete, check measurements and levels of all areas adjusted

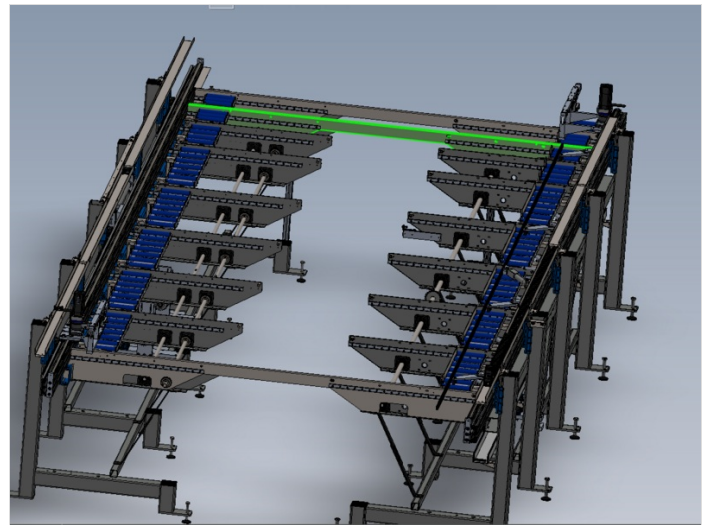


Step 14 - Install Transfer beam 2

Install transfer beam 2 and secure

Fasten with M8 x 20 set bolts

Do not use adhesive on these bolts as need to be removed for decommission

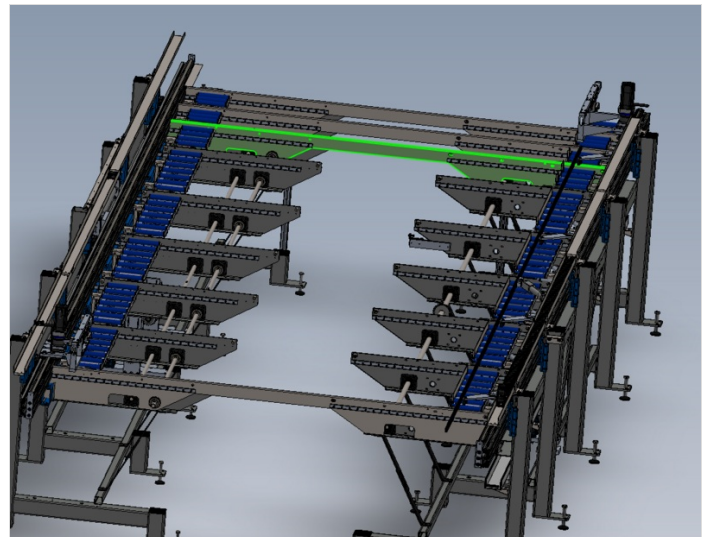


Step 15 - Install Transfer beam 3

Install transfer beam 3 and secure

Fasten with M8 x 20 set bolts

Do not use adhesive on these bolts as need to be removed for decommission

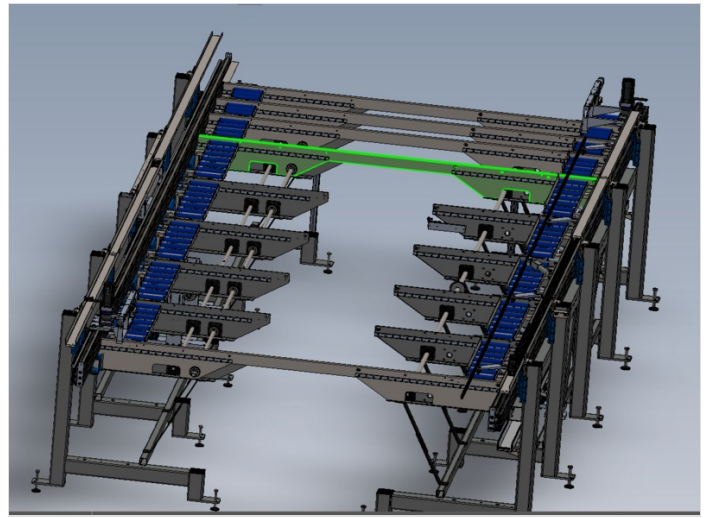


Step 16 - Install Transfer beam 4

Install transfer beam 4 and secure

Fasten with M8 x 20 set bolts

Do not use adhesive on these bolts as need to be removed for decommission

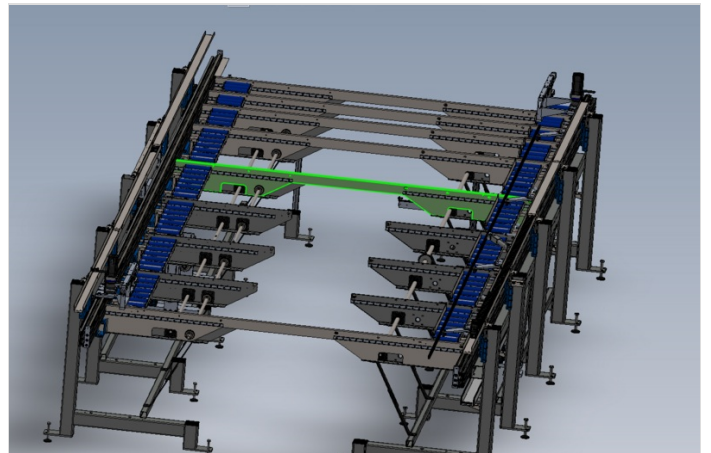


Step 17 - Install Transfer beam 5

Install transfer beam 5 and secure

Fasten with M8 x 20 set bolts

Do not use adhesive on these bolts as need to be removed for decommission

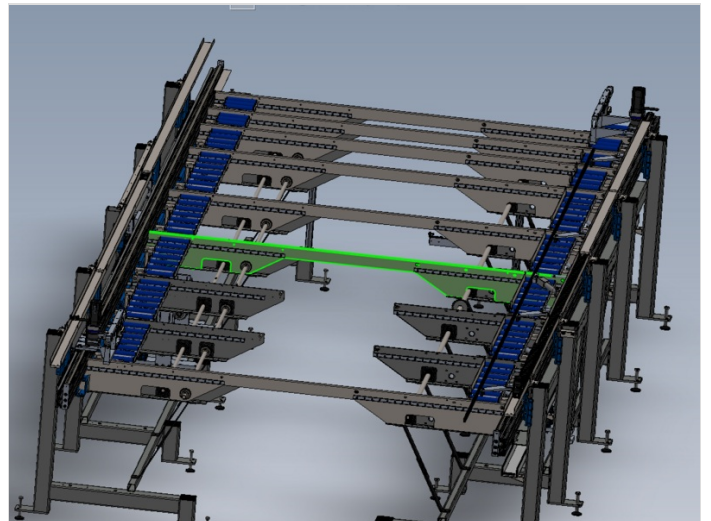


Step 18 - Install Transfer beam 6

Install transfer beam 6 and secure

Fasten with M8 x 20 set bolts

Do not use adhesive on these bolts as need to be removed for decommission

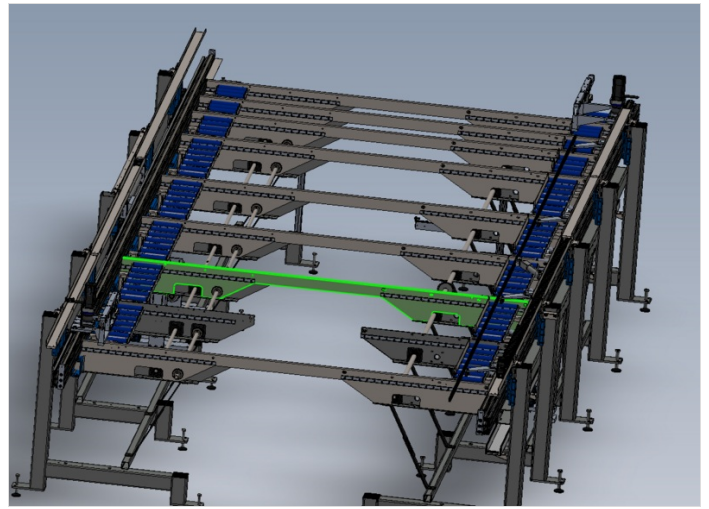


Step 19 - Install Transfer beam 7

Install transfer beam 7 and secure

Fasten with M8 x 20 set bolts

Do not use adhesive on these bolts as need to be removed for decommission

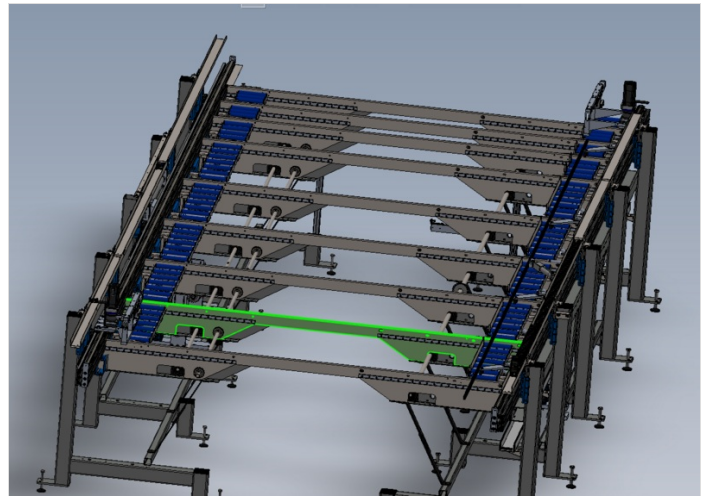


Step 20 - Install Transfer beam 8

Install transfer beam 8 and secure

Fasten with M8 x 20 set bolts

Do not use adhesive on these bolts as need to be removed for decommission



Step 21 - Check Flatness

Once all transfer beams are installed, check flatness with a 2 meter straight edge

Span across arms with 2 meter straight edge and check that no arms are sitting higher or lower than other transfer arms

Sign off required by supervisor

