


R0015310 Install V Notch Subframe

Installation criteria for V notch sub frame

 Difficulty **Hard**

 Duration **6 hour(s)**

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Comments

Introduction

Tools Required

Standard hex key set
Standard Spanner set
Parallel setting blocks
600mm rule
1 meter straight edge
2 meter straight edge
12" engineers level
12" engineers square

Parts Required

D0015151 Shaft End Washer x 8
D0015155 Vertical Spacer Bar x 4
D0015150 shaft 40mm zx v notch x 4
D0015169B cylinder rod bracket x 2
R0015035 Bench Assemble V Notch Components

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

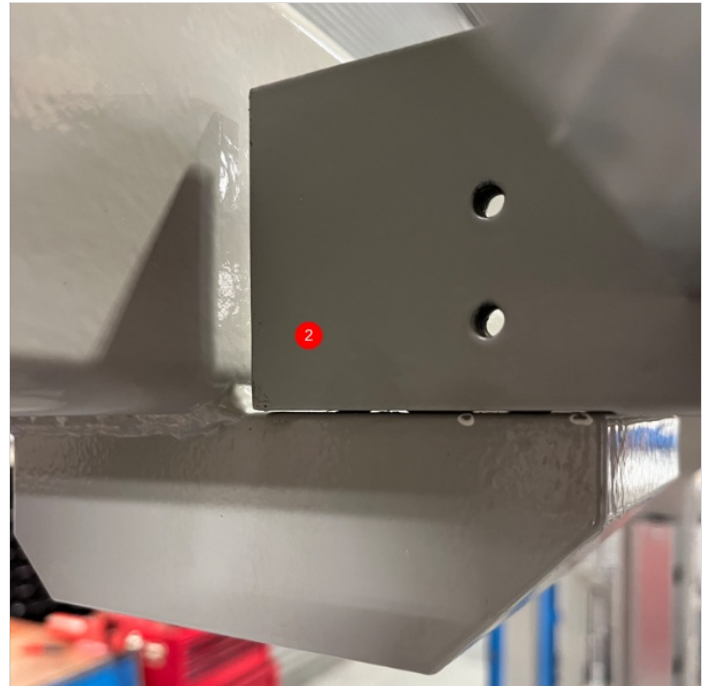
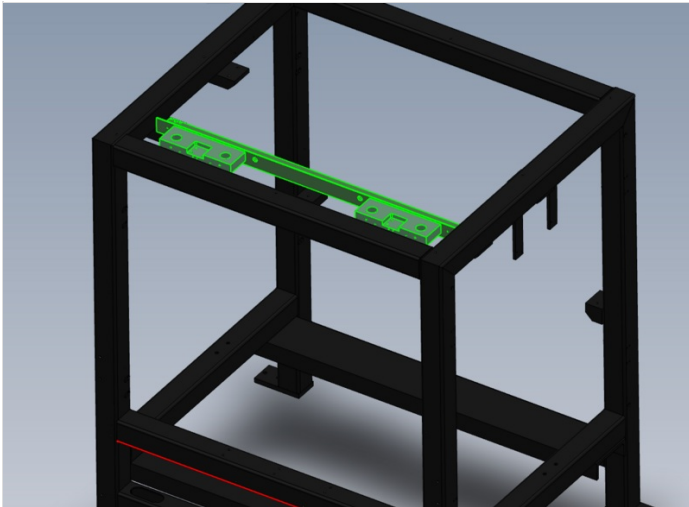


Step 2 - Install top Mount

Position top mount as shown

1 Use 4 off M12 x 25 socket caps and A form washers to lightly fix in position

2 Adjust 8 off M10 grub screws to lift mount approximately 1mm from face of mounting block

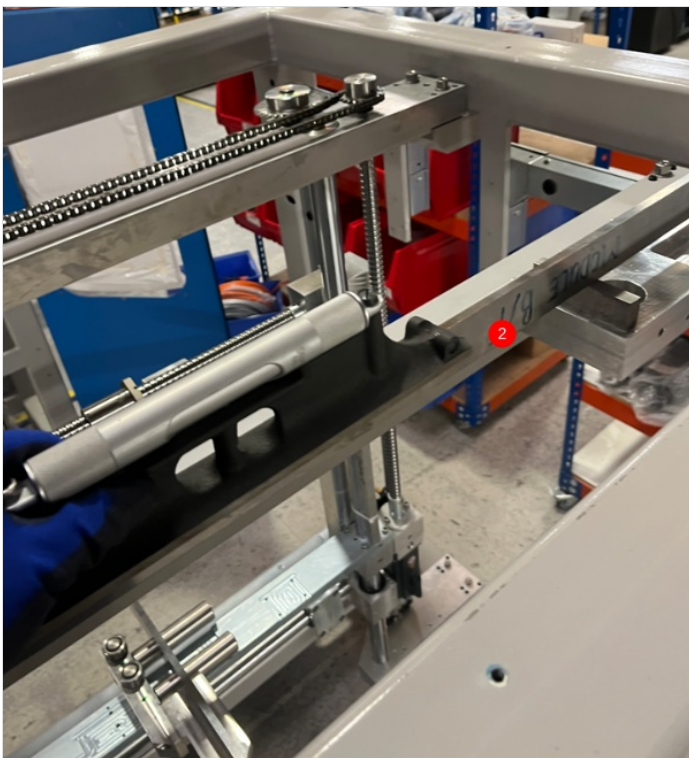


Step 3 - Level top mount

1 Level X axis on both ends as shown using parallels and engineers level , Use M10 grub screws to adjust

2 Level Y axis as shown , using 1 meter straight edge and parallels. Use M10 grub screws to adjust

3 Ensure M12 socket caps are tight and recheck levels once set



Step 4 - Fit shafts

1 Fit 4 off D0015150 shaft 40mm x v notch as shown , shafts must be staggered as shown

2 Captivate in position with M8 x 12 flat grub screws in top mount blocks



Step 5 - Caution


When fitting bearing assemblies, great care should be taken to preserve bearing seals.

Ensure seals are not damaged by folding or kinking during installation



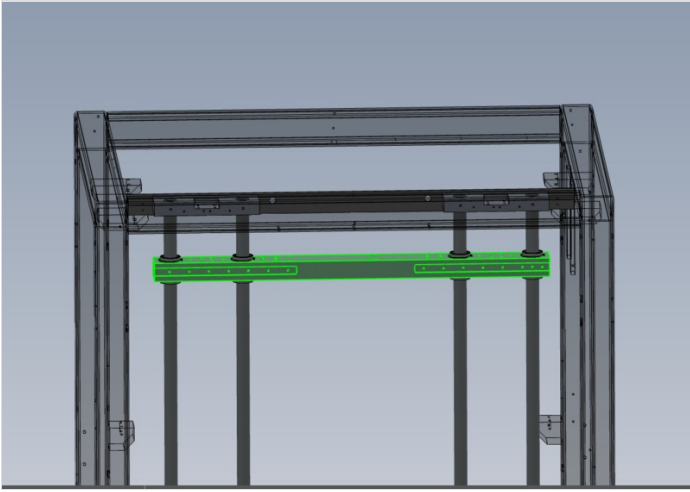
Step 6 - Add top bearing block

Fit top bearing block as shown.

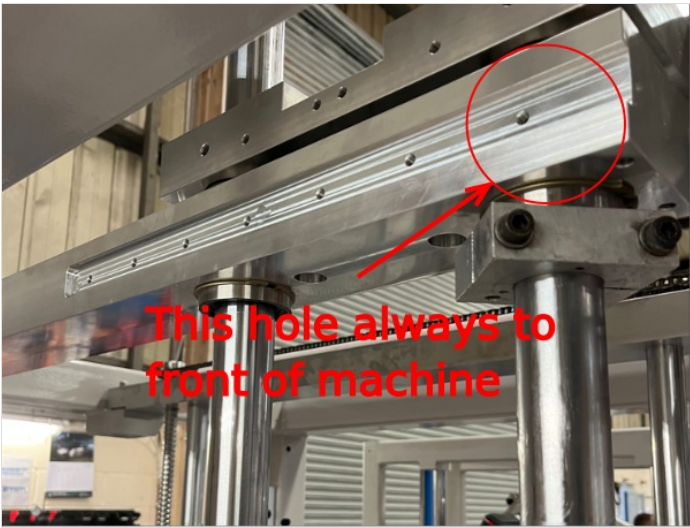
 ...Ensure correct orientation!!

See photos for orientation

Fit shaft clamp to 1 off shaft to hold bearing block in position



These holes always at the rear of machine



This hole always to front of machine



Counterbored holes to face down



Shaft clamp

Step 7 - Fit rear lower bearing block

Fit lower bearing block as shown to rear of frame

Take care to orientate correct way

Identify by cut out indicated

Secure with Shaft clamp as shown



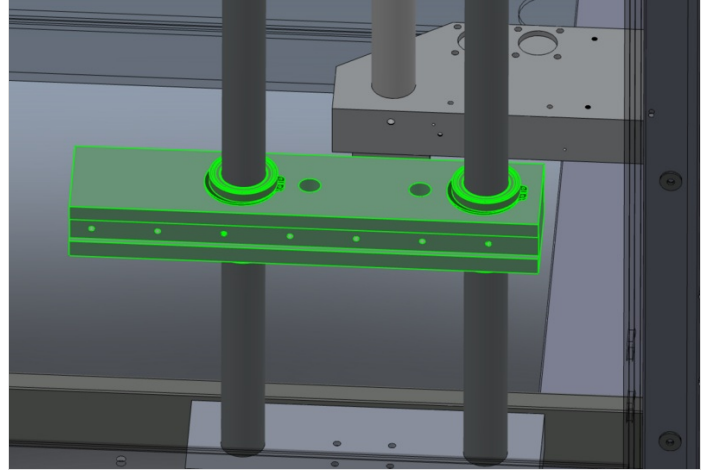
Step 8 - Fit front lower bearing block

Fit front lower bearing block as shown

Ensure correct orientation

Use counter bores holes as reference, these should be facing up

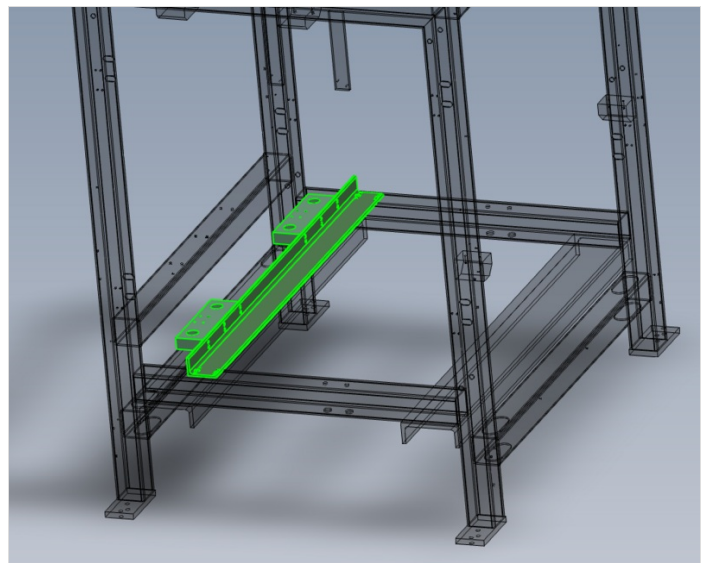
Secure with shaft clamp



Step 9 - Position Bottom support

Lay in position bottom support as shown

Do not fix at this point

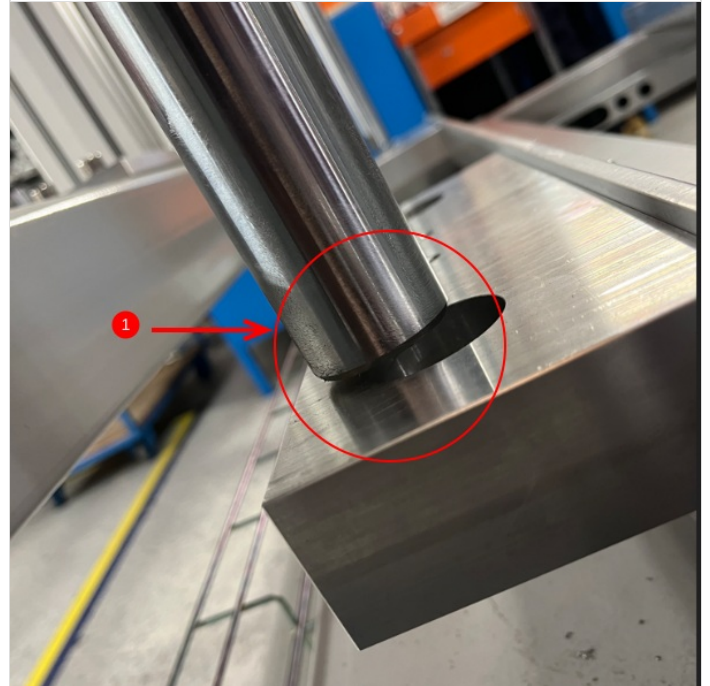
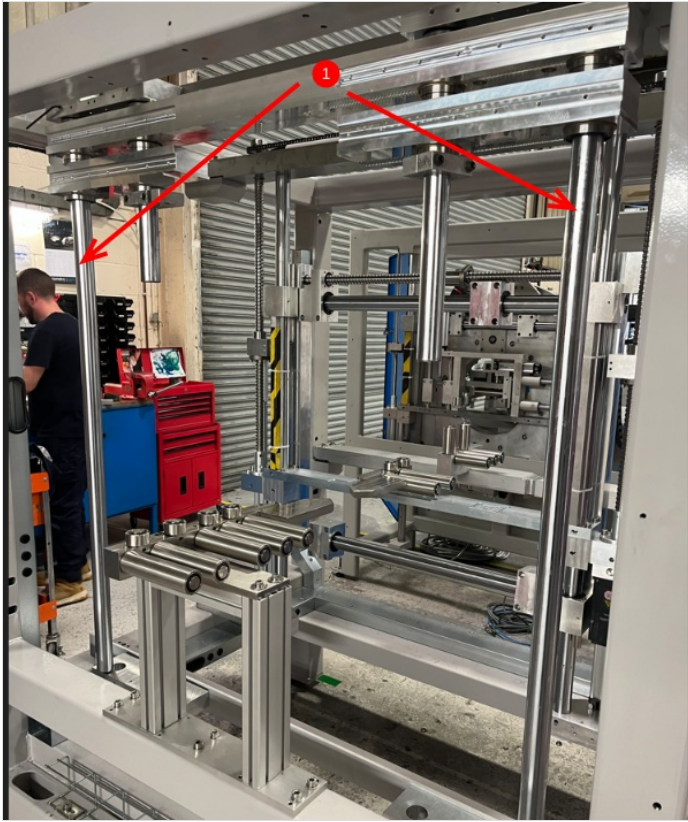


Step 10 - Drop outer shafts

1 Individually drop 2 outer shafts

Release locking M8 grub screw to allow movement

2 Position shafts just above bottom support as shown



Step 11 - Add top washers

1 Fit 2 off D0015151 Shaft End Washer to outer shafts. Use M16 x 2.0 x 30 set bolt to secure

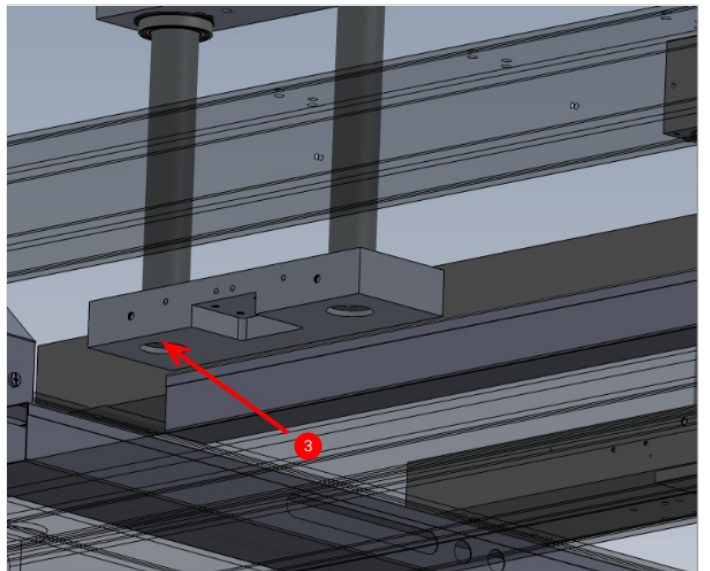
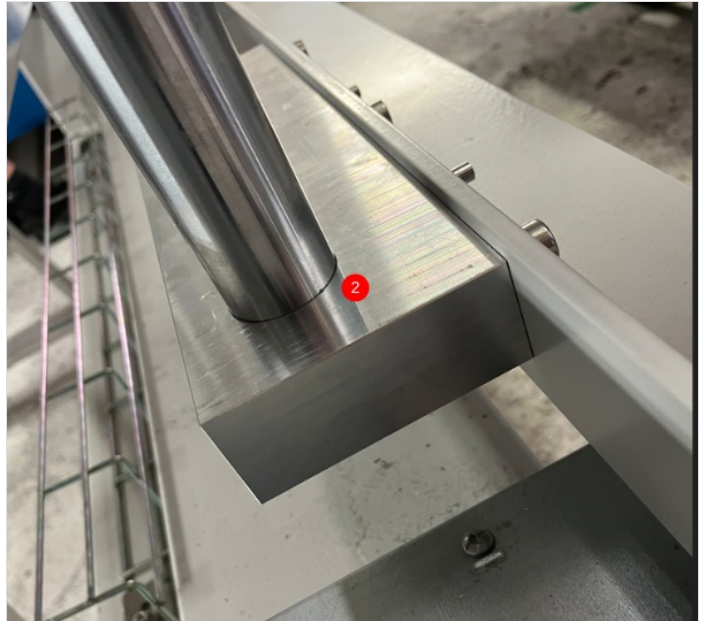
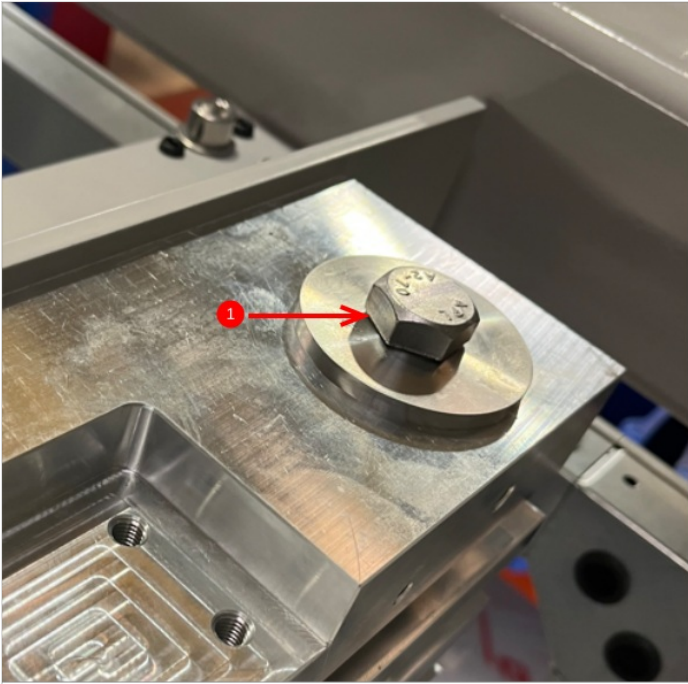
2 Drop outer shafts individually to start penetrating the bores of the lower support blocks (by approx 5mm)

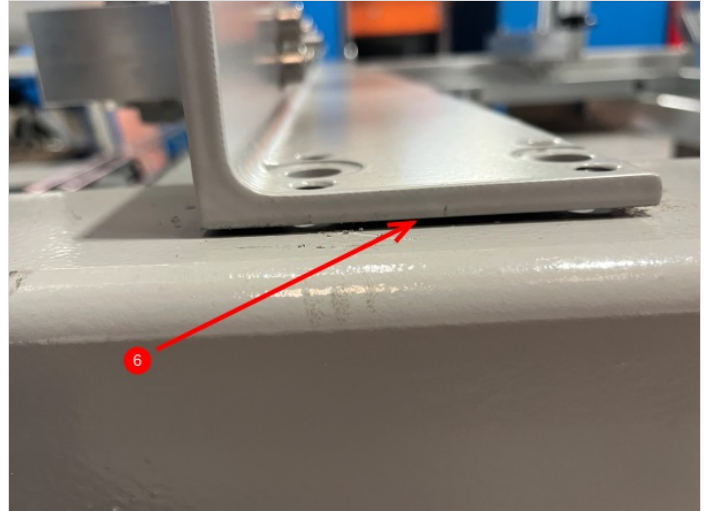
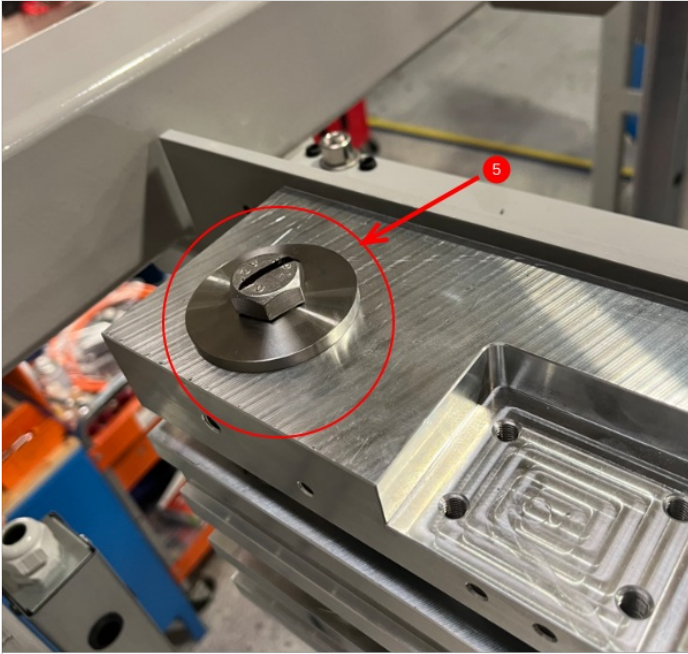
3 Fit 2 off D0015151 Shaft End Washer with M16 x 2.0 x 50 set bolts to shaft bottom

4 Use set bolts to evenly pull lower blocks onto outer shafts

5 Adjust shafts down from top fixing so washers now sit flush to mounting block

6 Swap bottom outer shaft fixing M16 x 2.0 x 50 For M16 x 2.0 x 30 set bolt and position block as shown (slight gap between support angle and main frame)

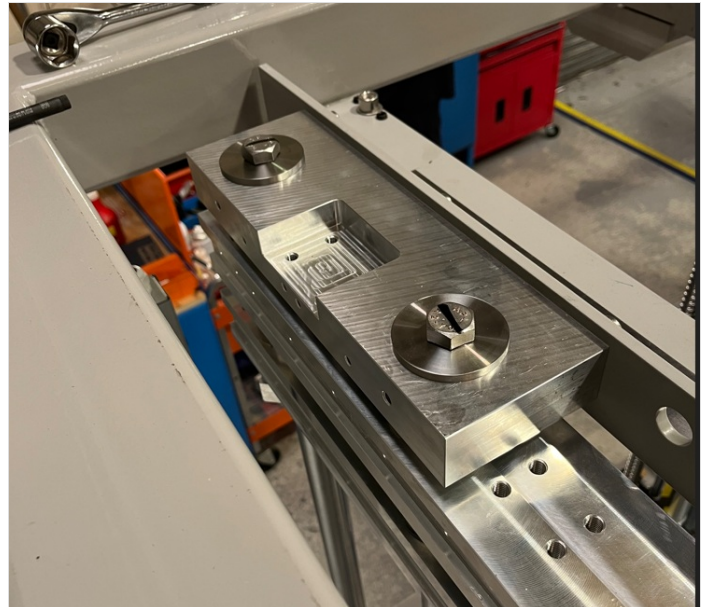


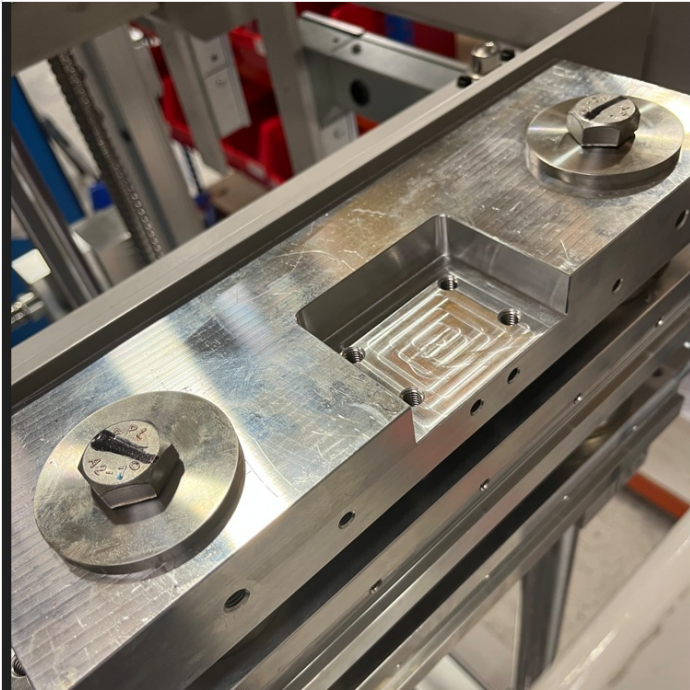


Step 12 - Drop inner shafts

Individually swap shaft clamps to outer shafts (use clamp to hold bearing block when removing shaft clamp)

Repeat step 11 to position inner shafts





Step 13 - Position bearing assemblies

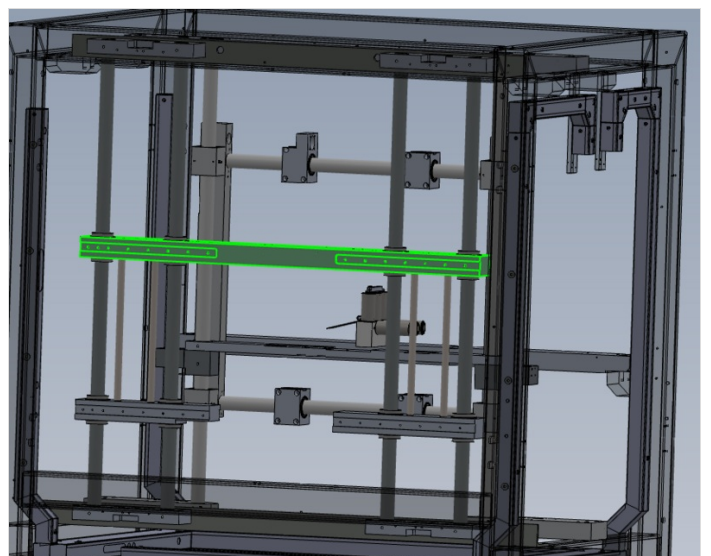
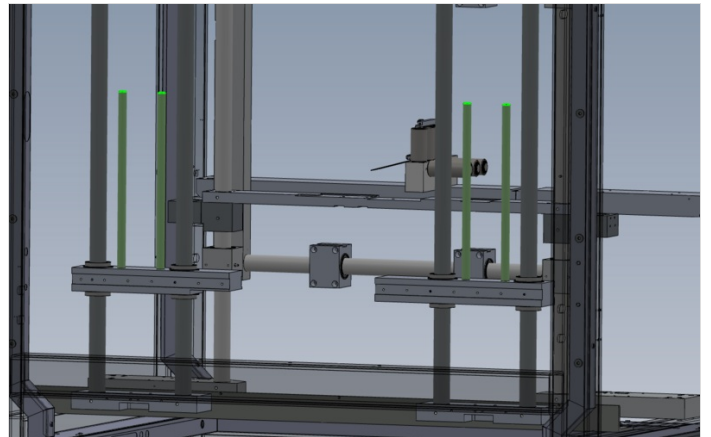
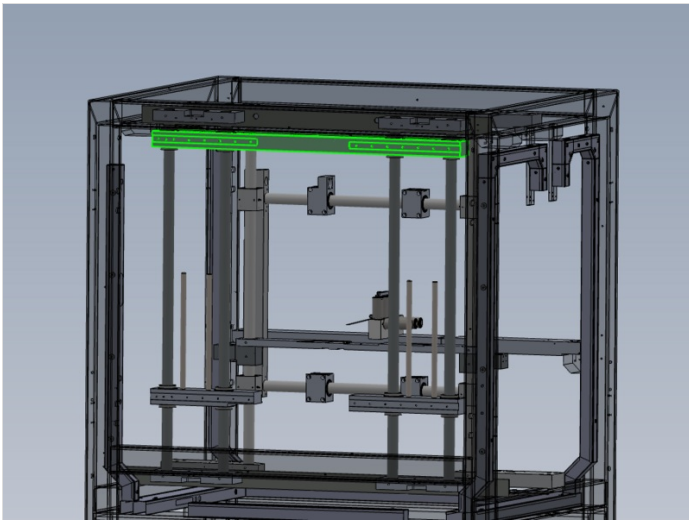
Reposition bearing assemblies as shown

- 1 Drop lower rear bearing block by releasing shaft clamp and dropping to shown position
- 2 Add clamp to hold top bearing block to upper mount
- 3 Drop front lower bearing block to same height as rear lower and secure with shaft tie
- 4 Drop upper bearing block to position shown



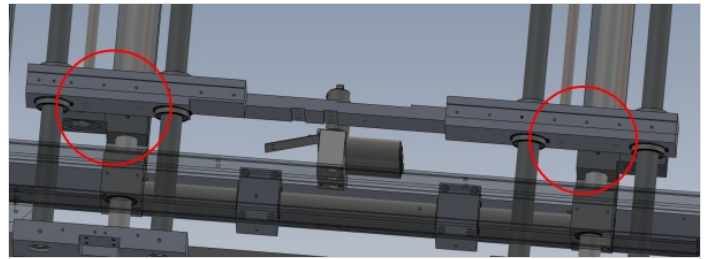
Step 14 - Fit vertical spacers

- 1 Lift upper bearing assembly
- 2 Position 4 off D0015155 Vertical Spacer Bar as shown
- 3 Drop upper bearing assembly onto fitted spacers



Step 15 - Add lower fixings

Use 4 off M8 x 50 socket caps with M8 A form washers to fix spacer shafts at positions shown



Step 16 - Add upper fixings

1 Position 2 off D0015169B cylinder rod bracket as shown

2 Fix each block with 4 off M8 x 60 socket caps and 1 off M8 x 100 socket cap

3 Ensure indicated face is set flush

4 Fit 2 off M8 x 50 socket caps with M8 A Form washers to secure spacer shafts not attached via D0015169B

