


# R0015298 Bench Assemble V notch Clamps

Assembly instructions for Clamp components

 Difficulty **Medium**

 Duration **2 hour(s)**

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Comments

## Introduction

### Tools Required

Standard Hex key set

Standard Spanner set

External circlip pliers

### Parts Required

B0000415 Ball Bearing 20 I/D 32 O/D 7 Long + shields (INA) x 8

B0001176 Washer : bearing shim x 9

D0001313 Datum Roller (Radial Bearing) x 2

D0010060 Roller Shaft Ø20 x 37.5 x 3

D0010061 Datum Roller Ø40 x 20 x 3

D0010065 Shaft 16mm: 115mm Autoflow Infeed Roller x 2

D0010066 Infeed Roller Connector x 1

D0010545 Infeed Roller Mount x 2

D0010546 Infeed Roller Attachment x 1

D0015211 Outfeed Clamp Upright x 2

D0015212 Top Clamp Mounting Plate x 1

D0015213 Side Clamp Mounting Block x 1

D0015221 Outfeed Roller Bed Mounting Plate x 1

D0015241 Outfeed Side Clamp Mounting Block x 1

- D0015242 Outfeed Front Fence x 1
- D0015243 Outfeed Top Clamp Plate x 1
- D0015244 Outfeed Top Clamp Mounting Plate x 1
- D0015245 Outfeed Top Clamp Leg x 2
- D0015246 Centre Side Clamp Roller Block x 1
- M00001004 Endcap 40 x 40 black x 2
- M0001006 Threaded insert M14-M8 30 long x 4
- M0001017 Endcap 80x40 Black x 2
- P0000010 6mm elbow x 4
- P0001045 Guide cylinder 25 x 150 x 2
- P0001132 Cylinder 32x 175 guided x 2
- P0001198 Fitting: Speed controller 1/8" x 6mm Elbow x 4

## Step 1 - Unless otherwise stated

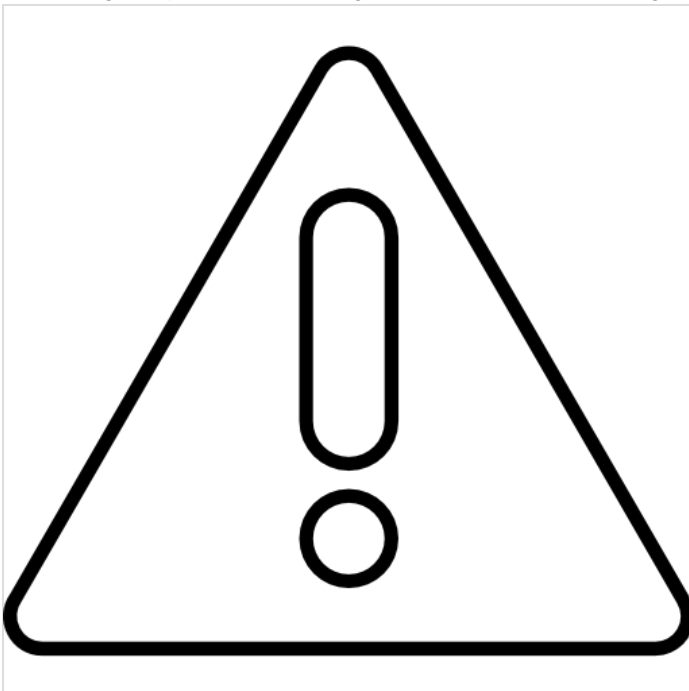
- Use loctite 243 on all fasteners
- Use loctite 572 on all threaded pneumatic connection
- Pen mark all fasteners to show finalised



## Step 2 - Check length of D0015245

Ecr raised 02/08/23 to adjust length of D0015245 Outfeed Top Clamp Leg x 2

Check length of part is 365mm long, if not rework to correct length



- REMOVE ALL BURRS AND SHARP EDGES -      - DO NOT SCALE -      - IF IN DOUBT, ASK -

No.	Qty.	Description	Length
1	1	1.11.040080.64LP 6E	385

385

2x Hole Top M14 x 35 Deep

80 ref


140 ref

1	30/02/17	MG	4 of 44 topped holes changed to 2 of 44 topped holes
2	10/02/17	MG	Design
3	08/02/17	MG	Dimensional Change

**Stuga** MACHINERY LTD  
 1.11.040080.64LP 3mm  
 Natural 0.94 kg

**Outfeed Top Clamp Leg**  
 1:2  
 1 of 1  
 D0015245 2

## Step 3 - Assemble V notch top clamp mount assembly assembly

 ...~Take care with orientation of base and top legs. See picture for clarification

1 Fit 4 off threaded inserts to D0015245 Outfeed Top Clamp Leg x 2 Secure with Loctite 270 stud lock

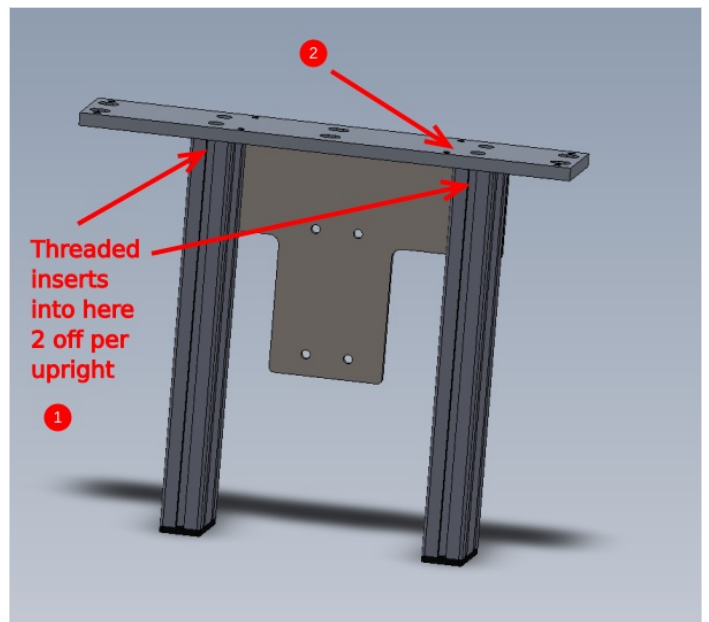
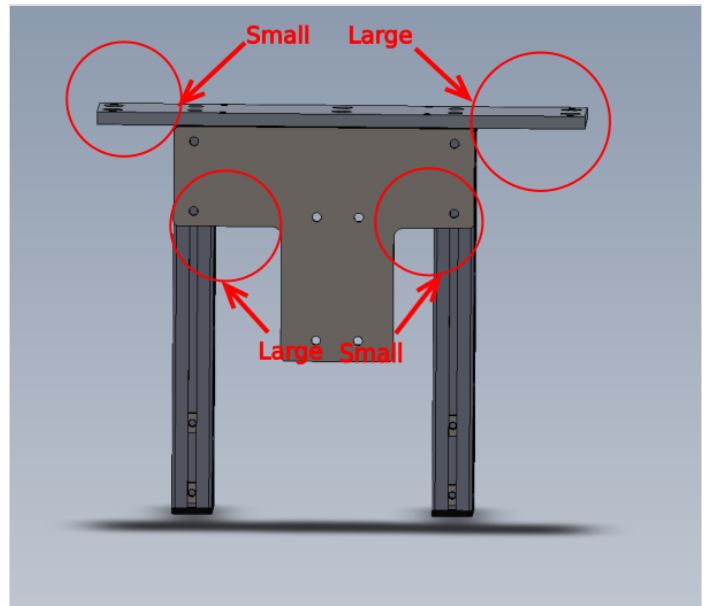
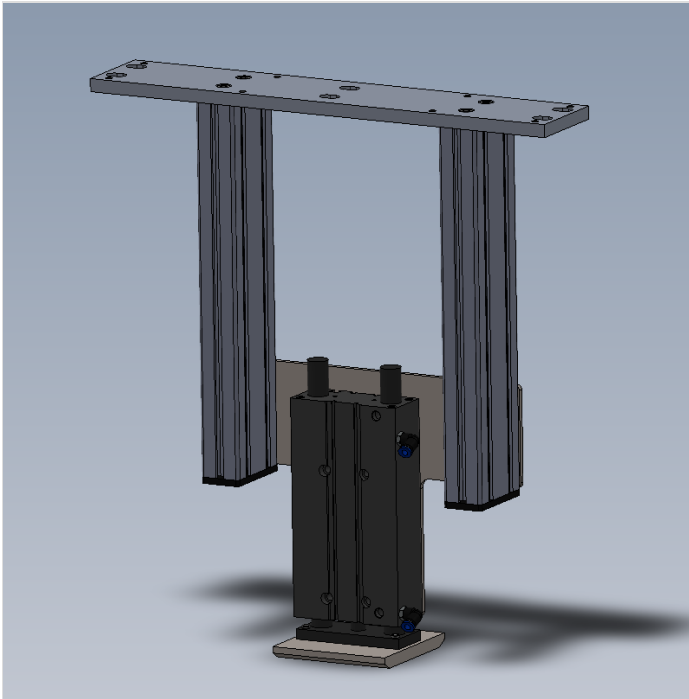
2 Attach D0015221 Outfeed Roller Bed Mounting Plate x 1 using Appropriate 4 off M8 socket caps ( This bolt length can vary due to tapped hole depth in part D0015245) only apply light pressure

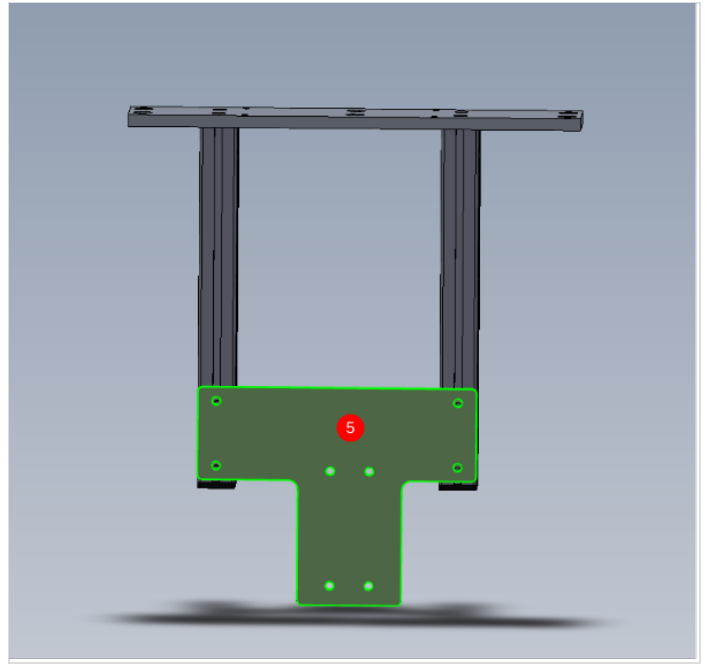
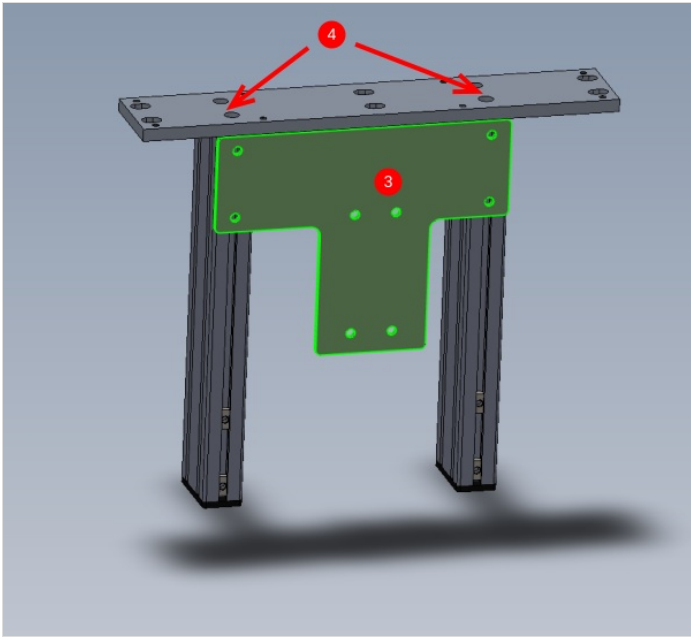
3 Attach D0015244 Outfeed Top Clamp Mounting Plate in the position shown. Use M8 x 16 socket caps , Heavy M8 washers and D nuts to fix. Only apply light tension , this part will set the correct pitch of the 2 top clamp legs

4 Apply final tension to top clamp legs ( 4 off M8 )

5 Slide D0015244 to position shown and apply light pressure to fixings

6 Insert endcaps M0001017 Endcap 80x40 Black x 2



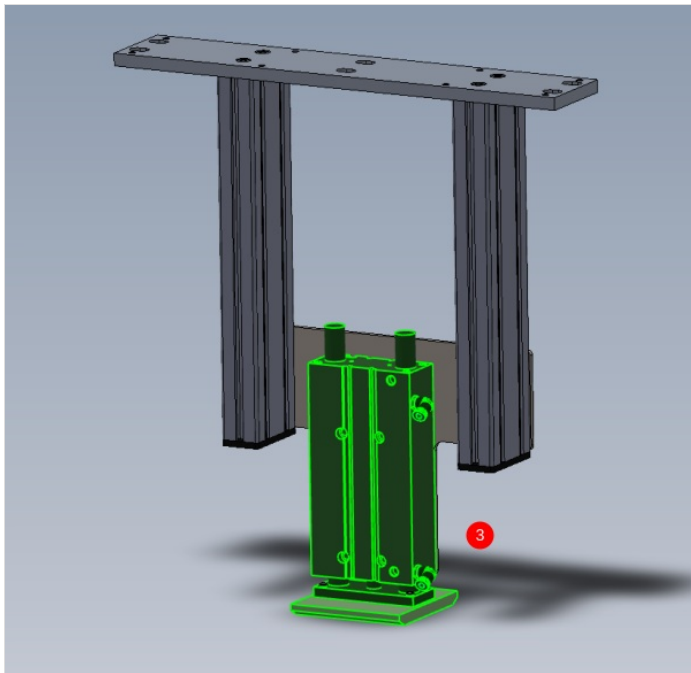
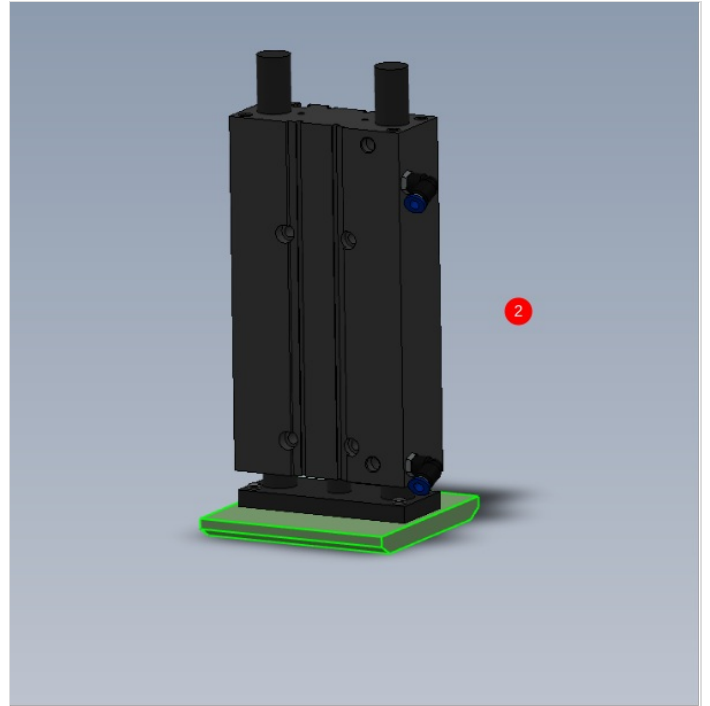
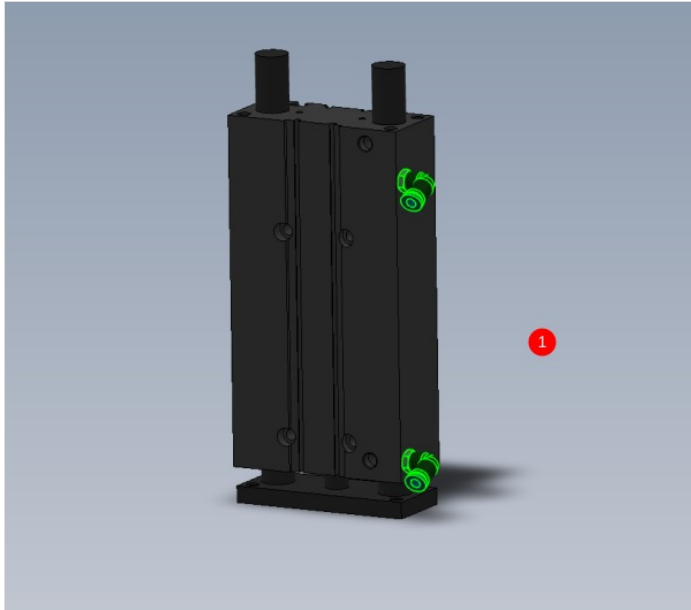


## Step 4 - Assemble and fit v notch top clamp cylinder

1 Attach 2 off P0000010 Fitting: 6mm Elbow to P0001132 Cylinder 32x 175 guided. Ensure indicated air ports are used

2 Attach D0015243 Outfeed Top Clamp Plate using 4 off M8 x 16 socket caps

3 Attach the frame using 4 off M8 x 25 socket caps and Heavy M8 washers



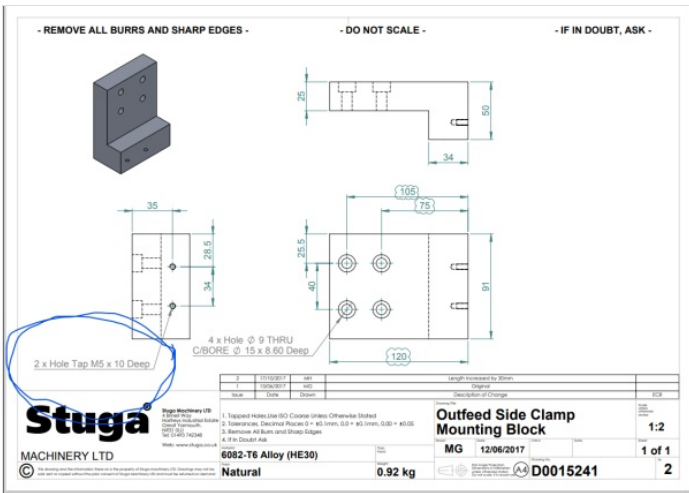
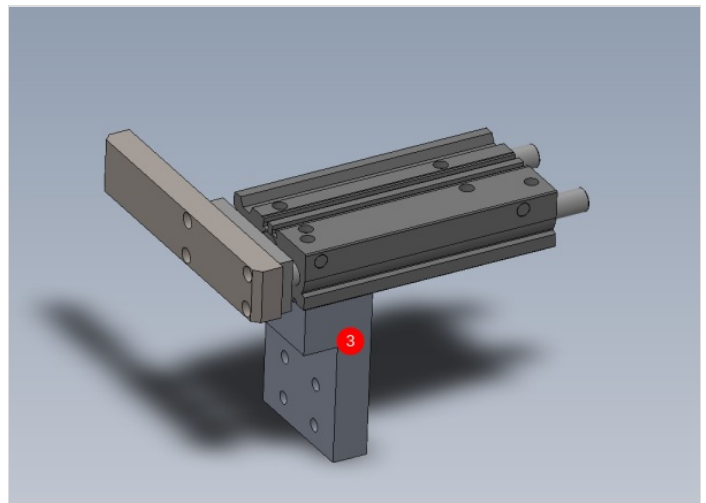
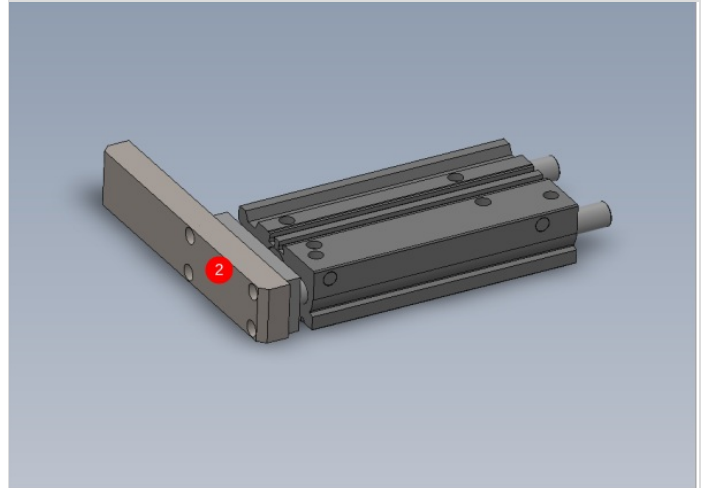
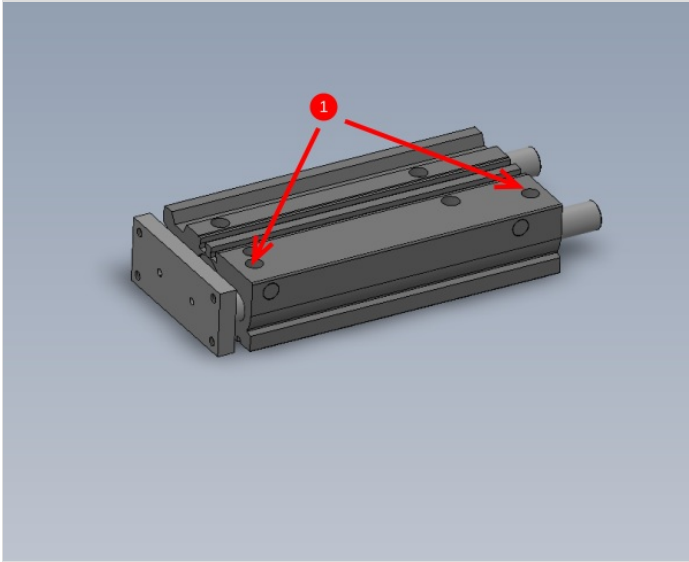
# Step 5 - Assemble V notch side clamp

1 Fit 2 off P0001198 Fitting: Speed controller 1/8" x 6mm Elbow to P0001045 Guide cylinder 25 x 150 using indicated ports

2 Attach Side clamp bar as shown using 4 off M6 x 25 socket caps

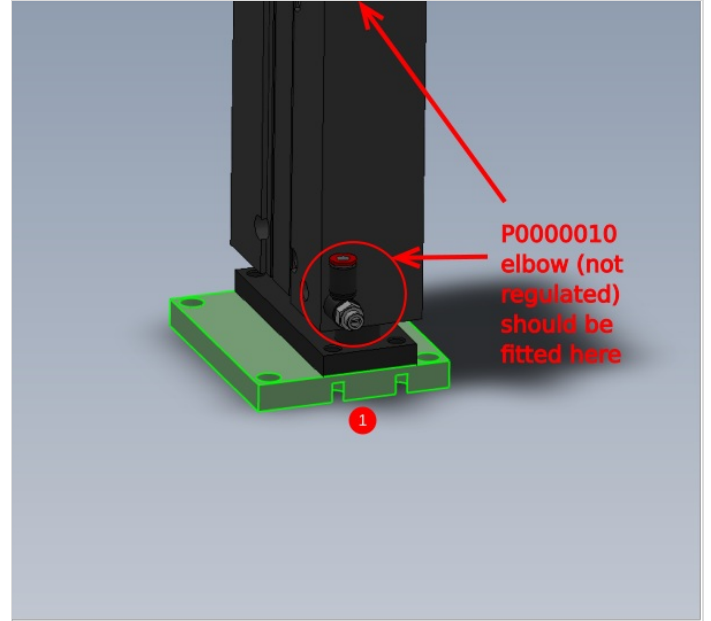
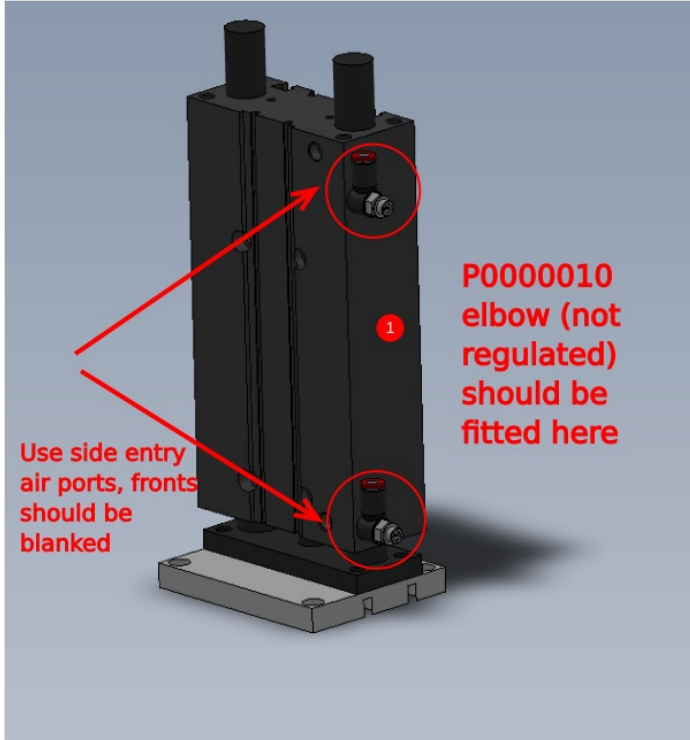
3 Attach cylinder to D0015241 Outfeed Side Clamp Mounting Block using 2 off M5 x 50 socket caps

**⚠** ...Check for Rework . Ecr raised to increase depth of M5 tapped holes indicated. Should be 20mm deep. Rework if not to sufficient depth for listed fixings



## Step 6 - Assemble outfeed clamp top cylinder

1 Attach 2 off P0000010 1/8" x 6mm Elbow to cylinder P0001132 Cylinder 32x 175 guided. Fit D0010546 Infeed Roller Attachment orientated as shown . Use 4 off M8 x 20 socket caps to fix



## Step 7 - Assemble top clamp roller

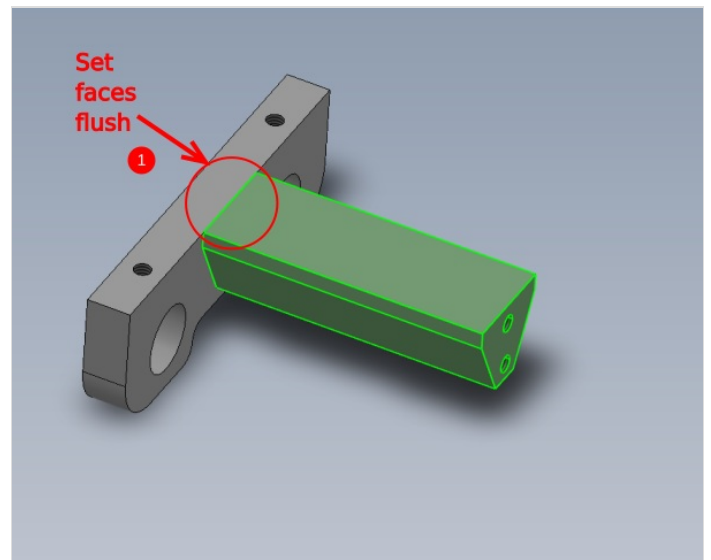
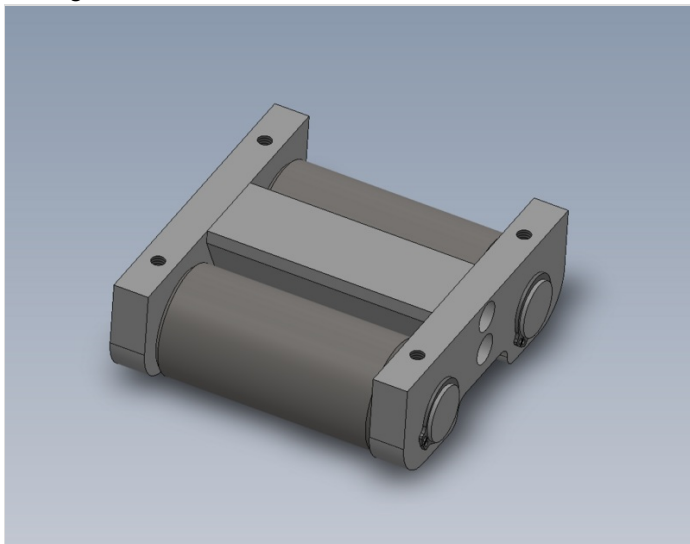
1 Attach D0010545 Infeed Roller Mount to D0010066 Infeed Roller Connector using 2 off M6 x 16 socket caps . Ensure indicated faces are set flush

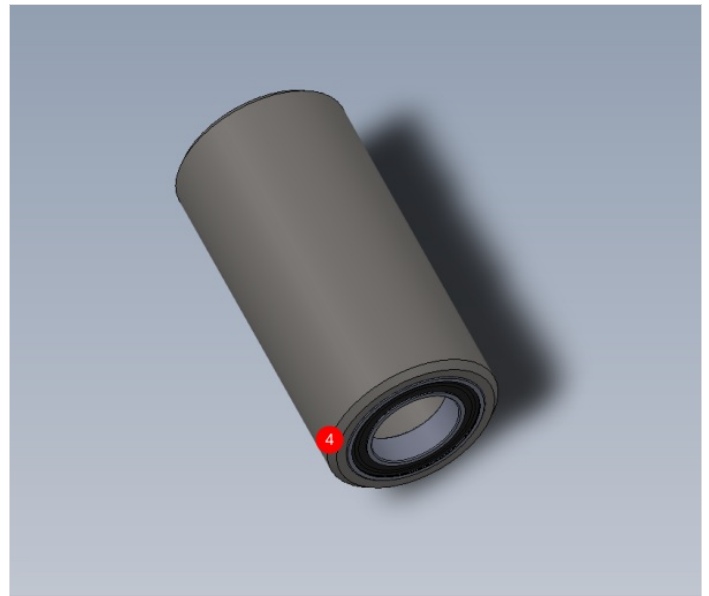
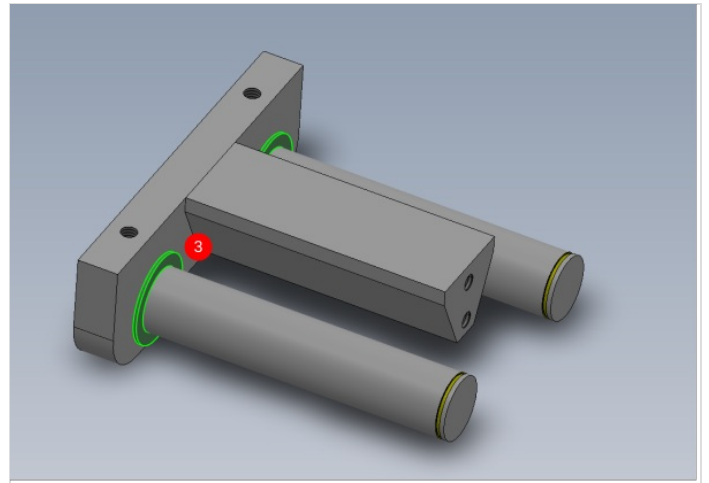
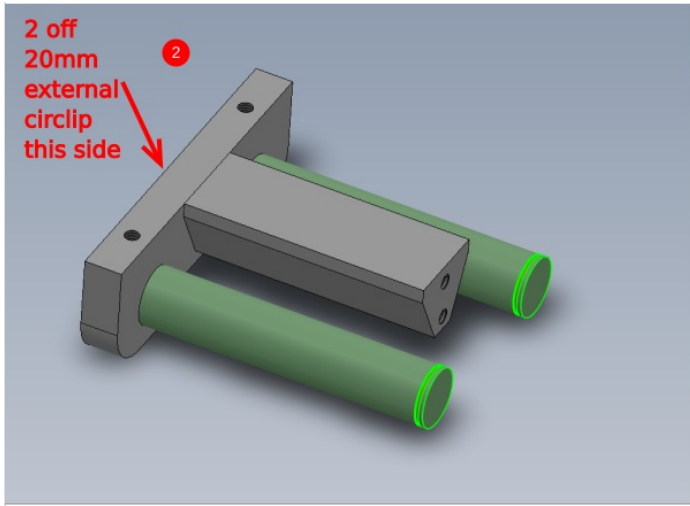
2 Insert 2 off D0010065 Shaft 16mm: 115mm Autoflow Infeed Roller and fit 2 off 20mm external circlip

3 Add 4 off B0001176 Washer : bearing shim (2 per shaft ) as shown

4 Fit 4 off B0000415 Ball Bearing 20 I/D 32 O/D 7 Long + shields (INA) into 2 off D0001313 Datum Roller (Radial Bearing) . Ensure bearing fit is correct . If tight, inspect part and drawing, if loose check drawing and if in tolerance use solvent to degrease and bearing fit 570 to secure into bore

5 Fit rollers to shafts as shown . Correct fit must be achieved onto shafts . Use bearing fit and solvent to degrease if fit is loose and inner bearing rotates on shaft





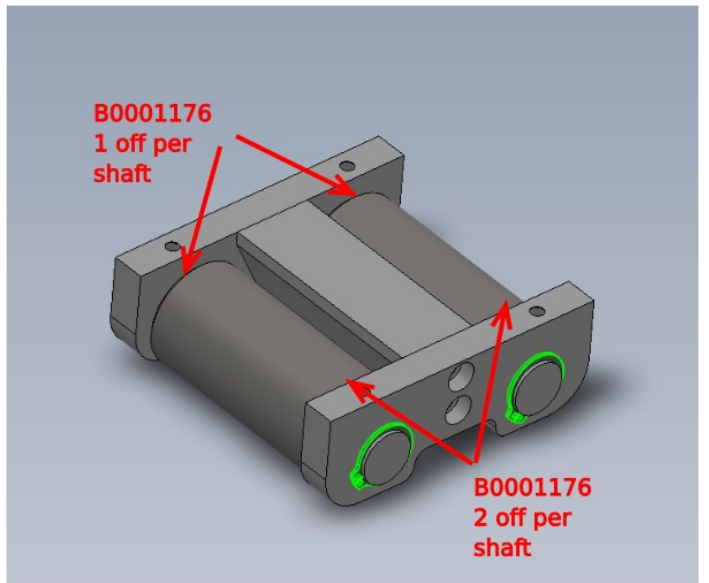
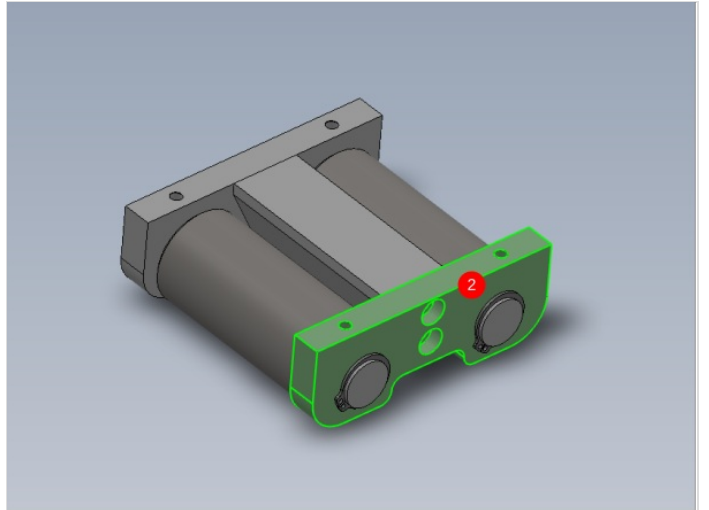
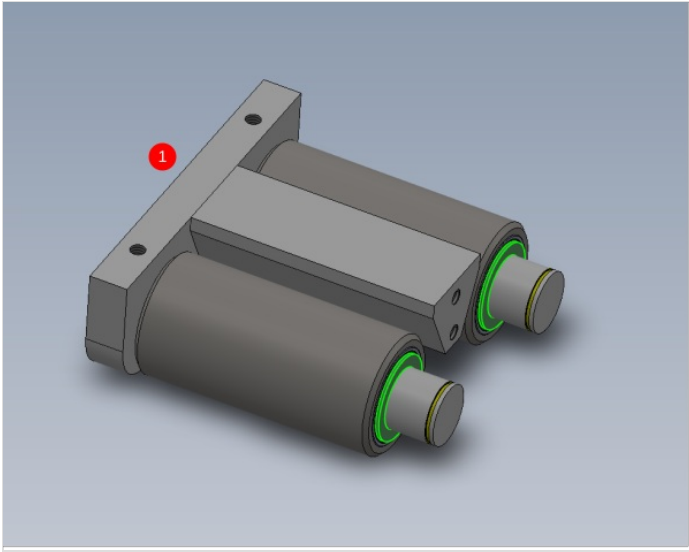
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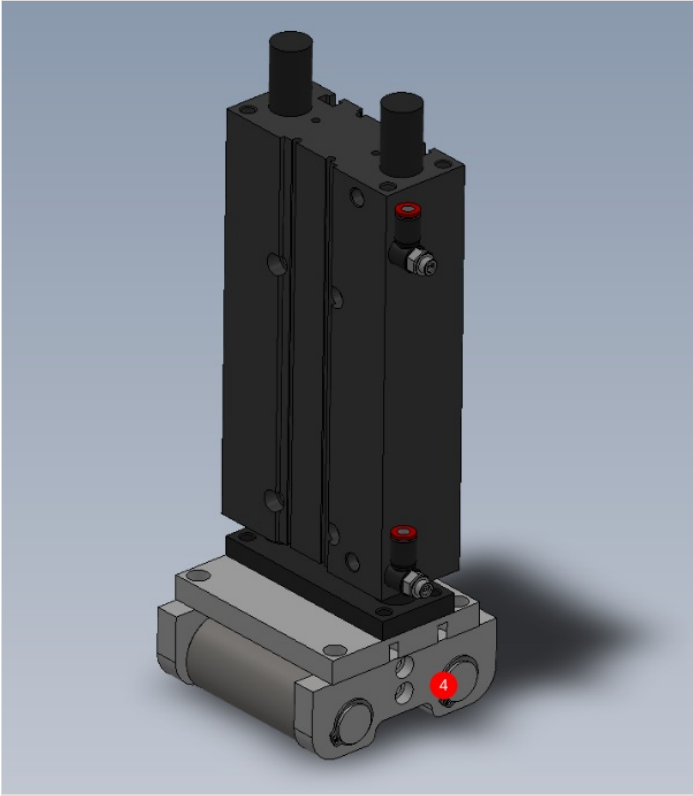
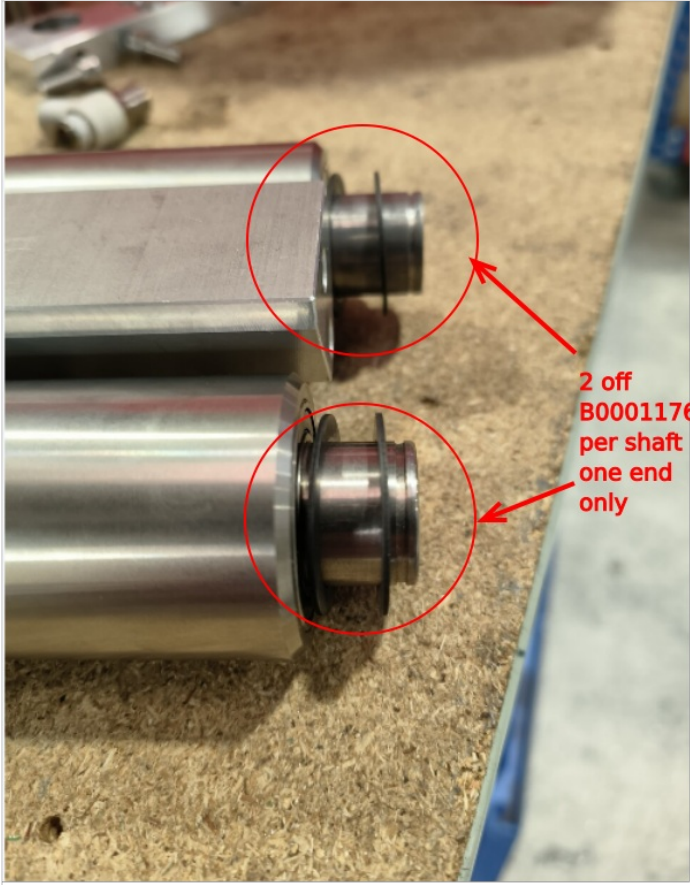
## Step 8 - Assemble top clamp roller

(Combined with step above as to much detail for one step . Limit to photos)

- 1 Add 1 off B0001176 Washer : bearing shim to each shaft as shown
- 2 Fit D0010545 Infeed Roller Mount and secure with 2 off M6 x 16 socket caps. Ensure faces as previous stated are set flush
- 3 Fit 2 off 20mm external circlips
- 4 Attach to cylinder as shown using 4 off M6 x 16 socket caps



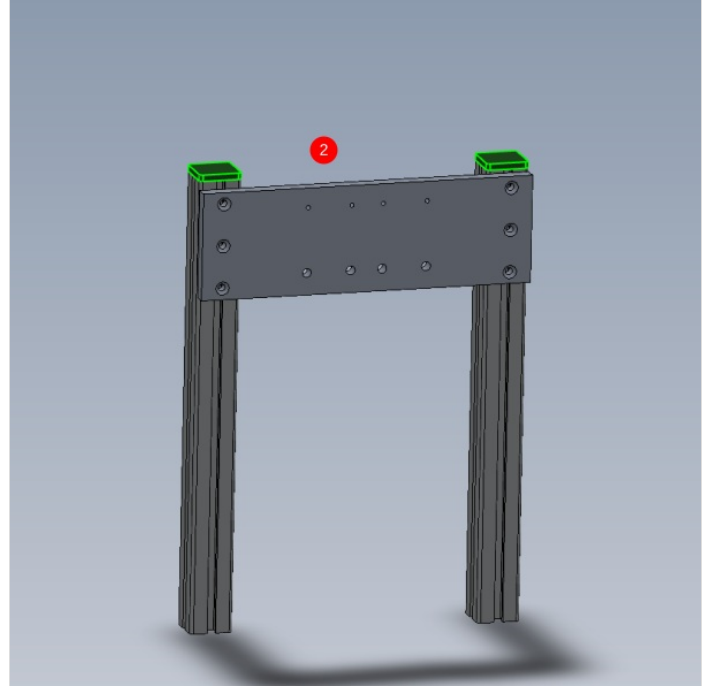
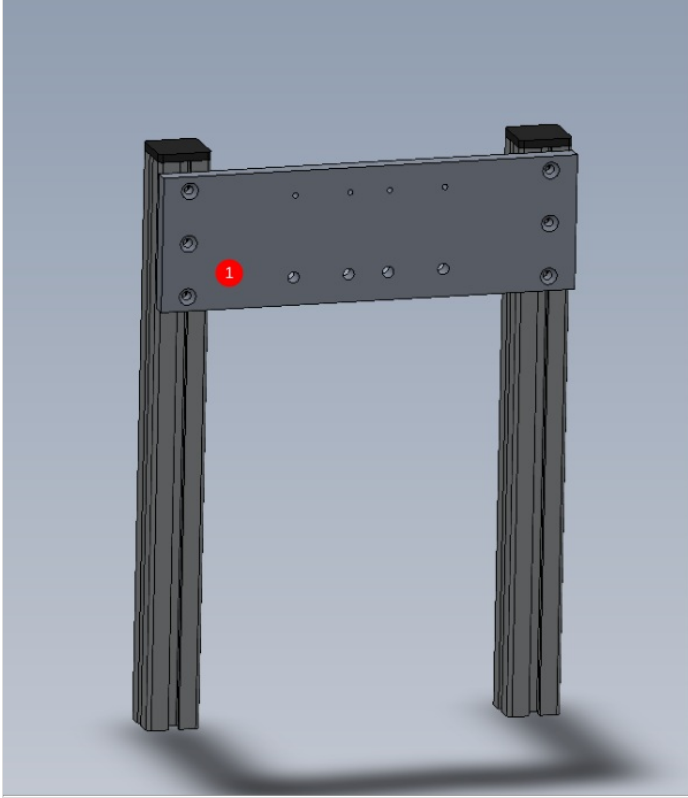




## Step 9 - Assemble frame

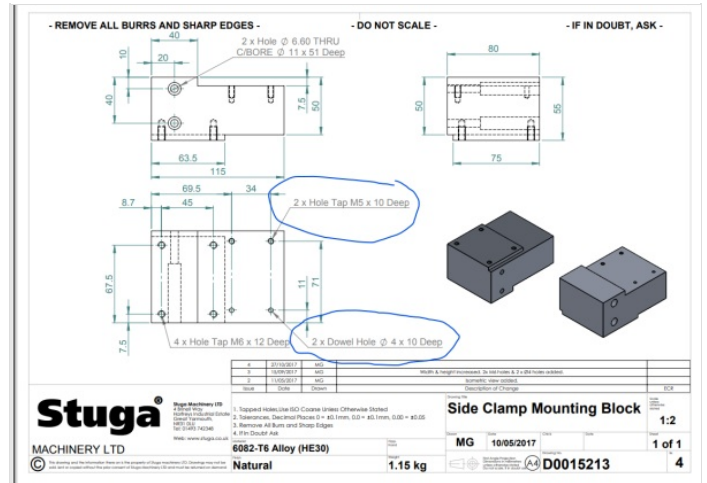
1 Assemble 2 off D0015211 Outfeed Clamp Upright onto D0015212 Top Clamp Mounting Plate using 6 off M6 D nuts and 6 off M6 x 20 Socket counter sunks. Do not finalise bolts or add adhesive

2 Fit 2 off M00001004 Endcap 40 x 40 black



## Step 10 - Assemble outfeed side clamp

Check fixing holes in D0015213 . Ecr raised 02/08/23 to amend hole depth of 4mm and m5 holes . If holes indicated are not 20mm deep, rework and log rework time



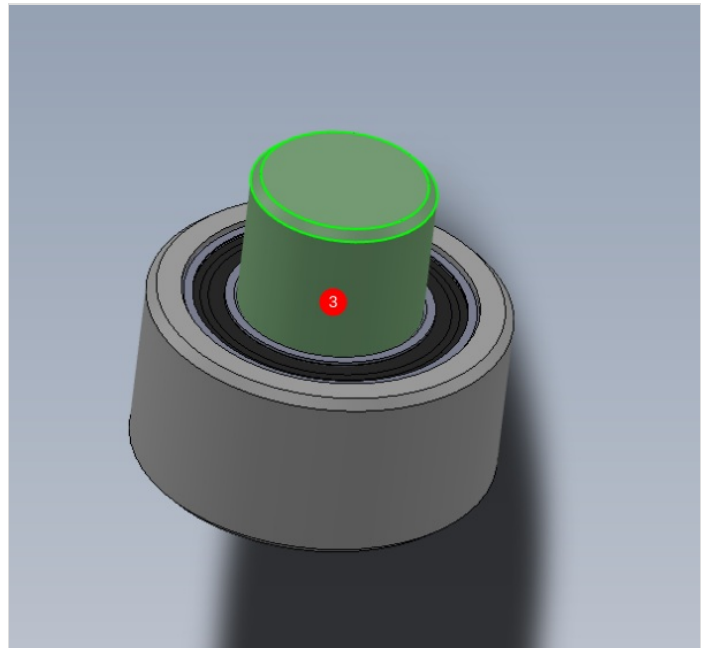
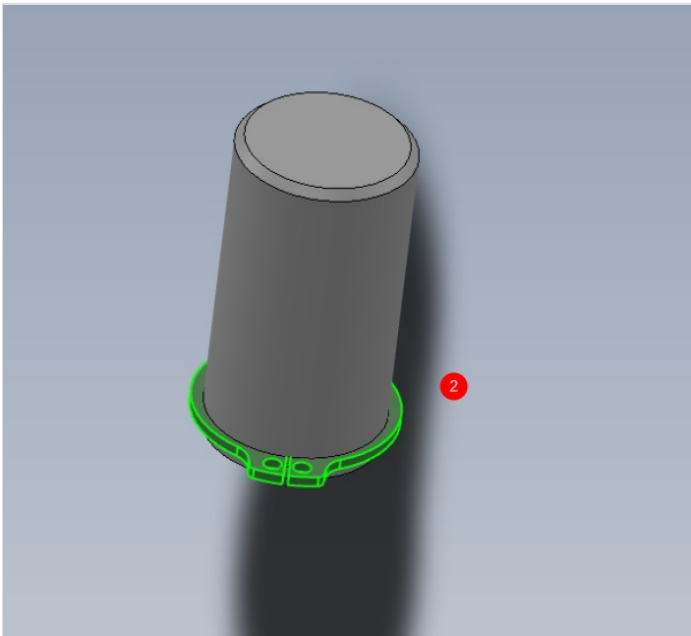
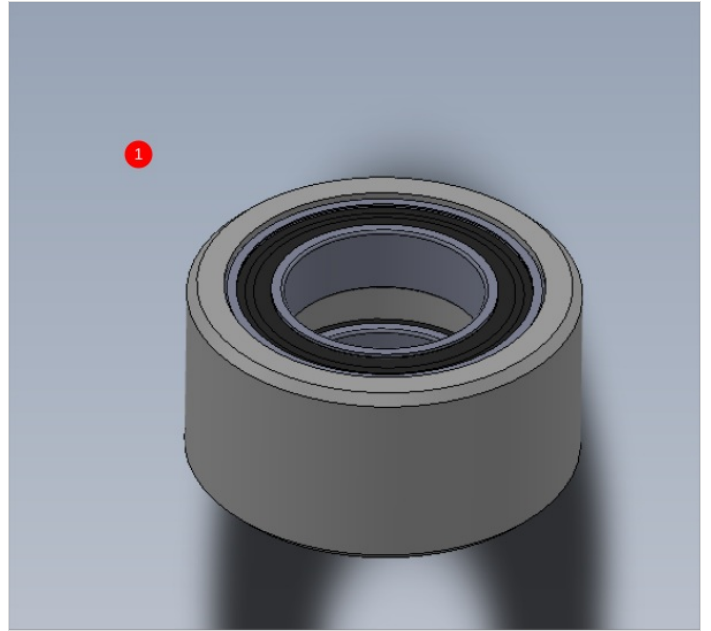
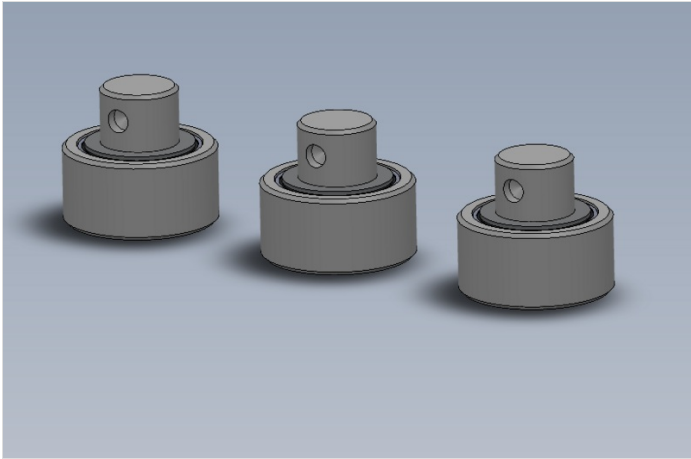
## Step 11 - Assemble rollers

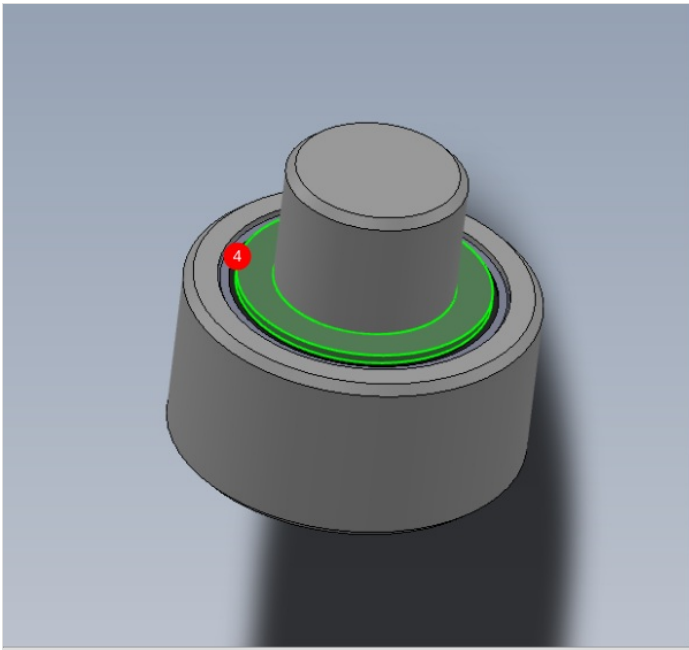
1 Fit 6 off B0000415 Ball Bearing 20 I/D 32 O/D 7 Long + shields (INA) into 3 Off D0010061 Datum Roller Ø40 x 20 . Ensure correct fit is observed and remedied accordingly using previous stated steps

2 Fit 3 off 20mm external circlips to 3 off D0010060 Roller Shaft Ø20 x 37.5

3 Fit shaft to roller assembly , ensuring correct fit between shaft and bearing is achieved

4 Fit 1 off B0001176 Washer : bearing shim to each roller as shown





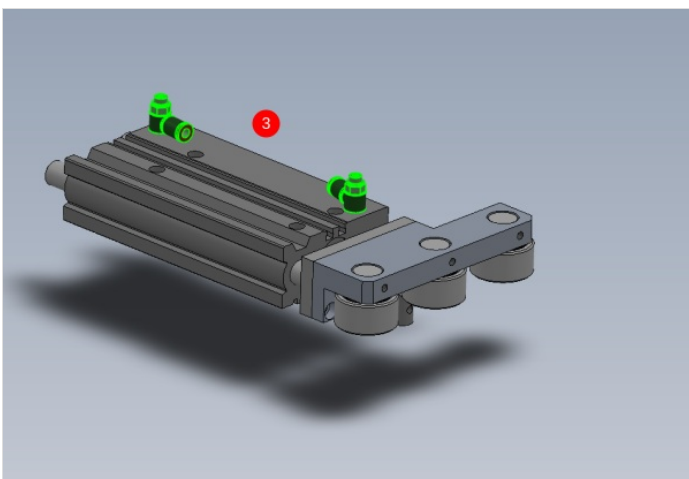
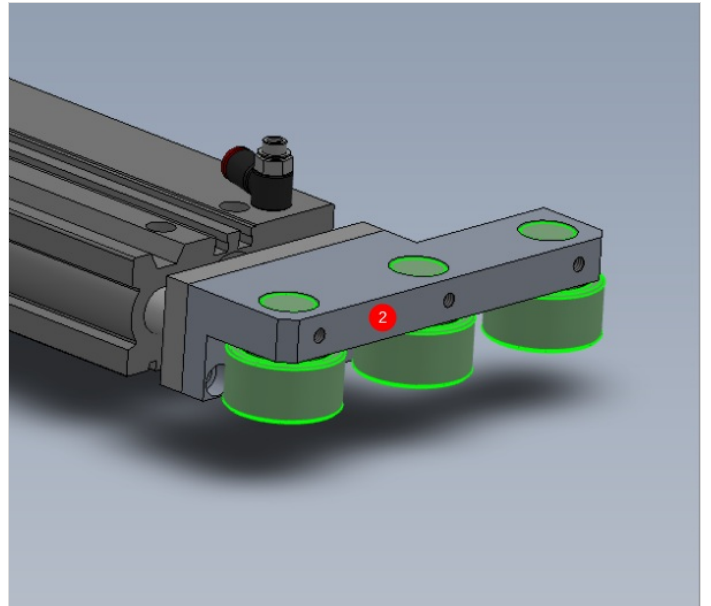
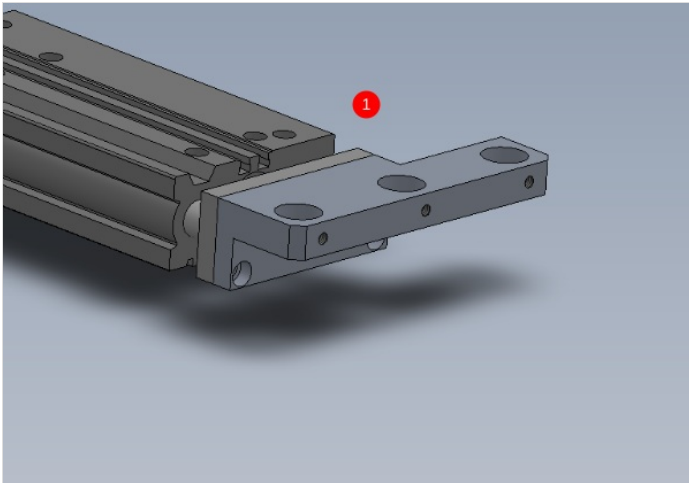
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## Step 12 - Attach to cylinder

1 Attach D0015246 Centre Side Clamp Roller Block to cylinder P0001045 Guide cylinder 25 x 150 as shown using 2 off M6 x 16 socket caps

2 Attach rollers to mount and secure with 3 off M6 x 10 kcp grub screws

3 Fit 2 off P0001198 Fitting: Speed controller 1/8" x 6mm Elbow to cylinder as shown



## Step 13 - Attach cylinder to mount

1 Fit 2 off 4mm x 20 roll/spiral pins to indicated holes

2 Attach D0015213 Side Clamp Mounting Block using added 4mm pins to align

3 Use 2 off M5 x 50 socket caps to final fix cylinder to mounting block

