

R0015030B Bench assemble loader wheel

Instructions to assemble loader wheel

 Difficulty **Medium**

 Duration **3 hour(s)**

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Comments

Introduction

Tools Required

Standard hex keys

Standard spanner set

Cutting blade

Rule

External circlip pliers

Switch setting box

Ball pien hammer

Parts Required

D0015438 x 1

D0010431 x1

B0000426 x 1

B0000173 x 7

D0010238 x 1

B0000046 x 2

D0015741 x 1

D0015439 x 1

M0001077 x 1
D0010509 x 1
D0015436 x 1
D0010611 x 1
P0001044 x 1
P0001098 x 1
P000001174 x 1
P0000200 x 1
P0001198 x 1
P0001047 x 1
P0001041 x 1
P0001042 x 1
B0000240 x 1
B0001100 x 2
D0015435 x 1
B0000053 x 1.2
B0000054 x 2
D0015434 x 1
B0000189 x 1
B0000142 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

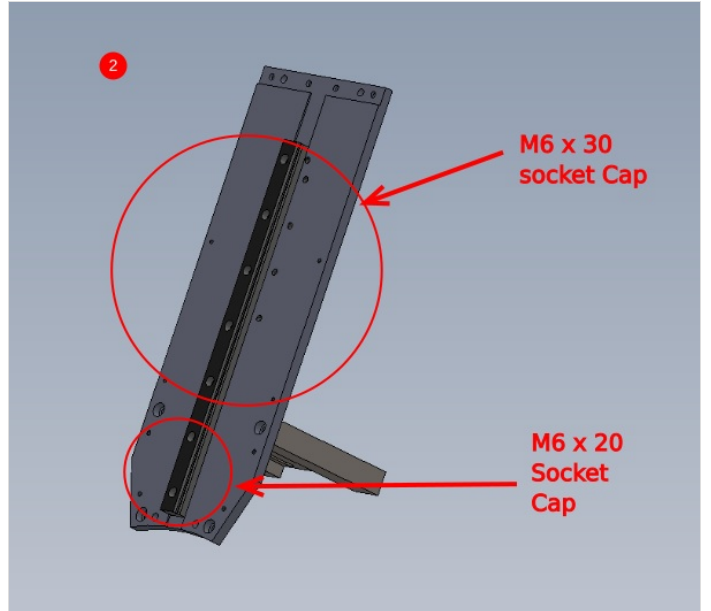
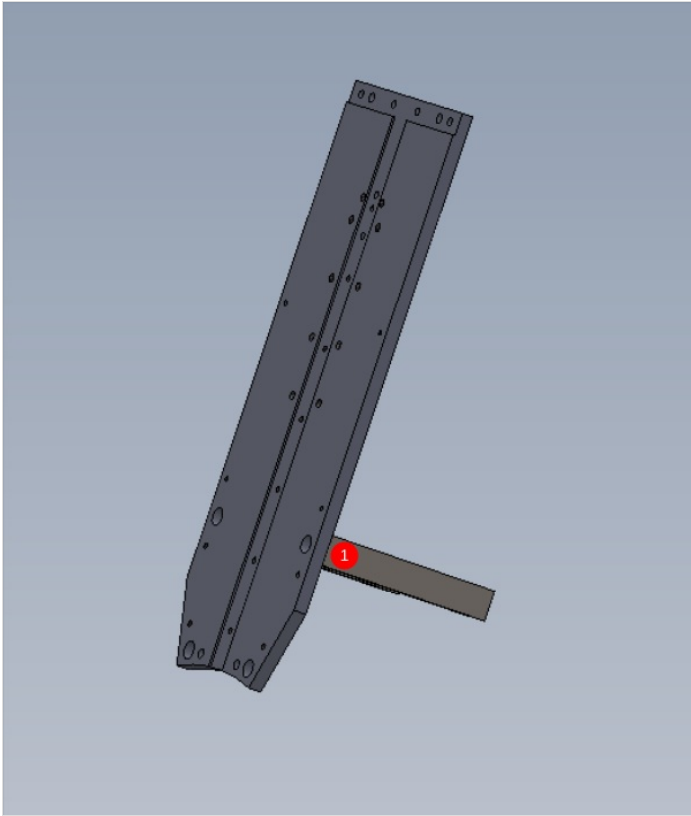


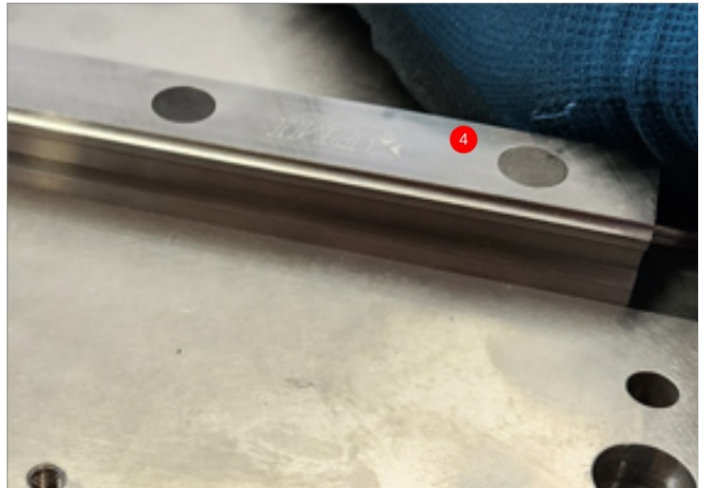
Step 2 - assemble main base

1 Attach D0015438 to D0010431 Using M8 x 20 socket caps

2 Attach linear rail B0000426 using 2 off m6 x 20 socket caps and 5 off M6 x 30 socket caps. Make sure linear rail is pushed hard against one register side of machined slot.

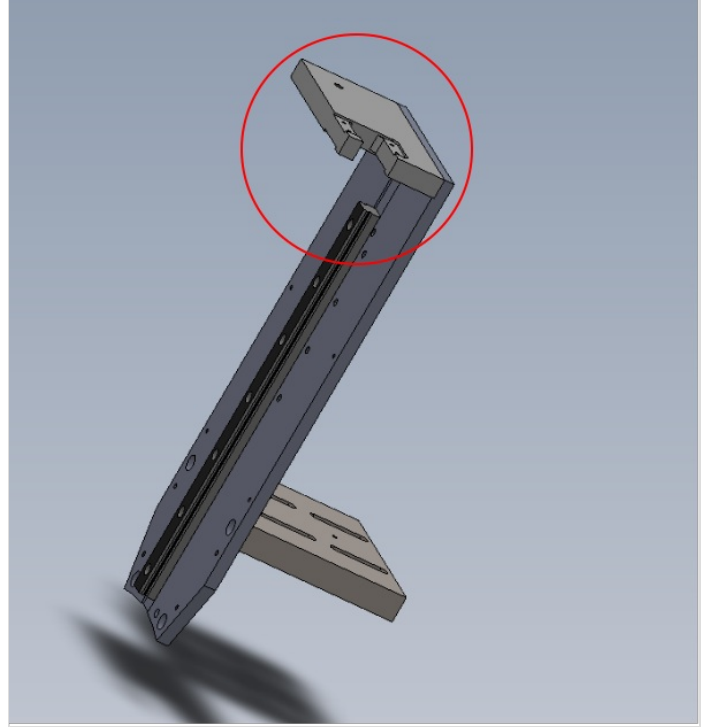
3 Attach D0015741 support web using 5 off M6 nyloc nuts and M6 A form washers and 2 off M6 x 16 socket caps with A form washers
Insert rail caps 7 off B0000173 ensuring they sit flush to rail face





Step 3 - Attach cylinder mount

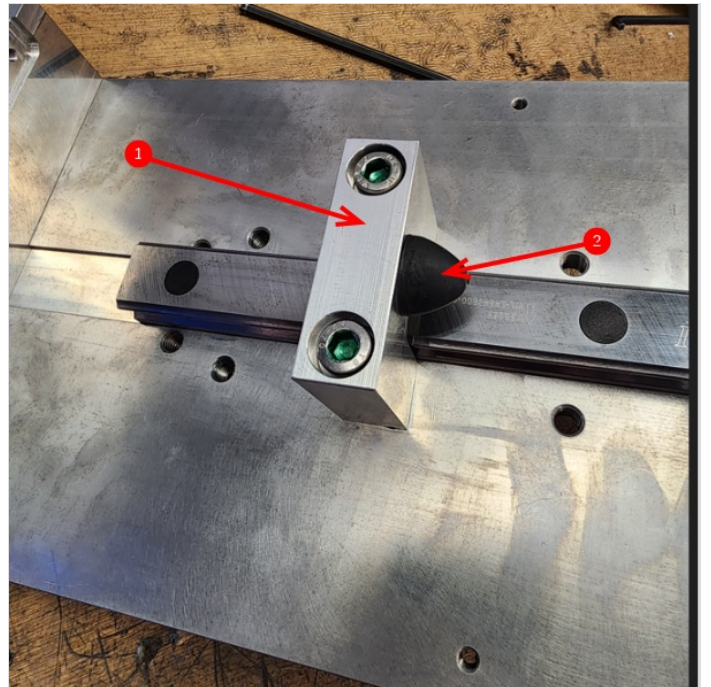
Attach cylinder mount block D0010238 to assembly with 4 off M6 x 20 socket caps



Step 4 - Attach stop block and damper

1 Attach damper block D0015439 to main plate in position shown using 2 off M8 x 50 socket caps

2 Attach M0001077 damper to block

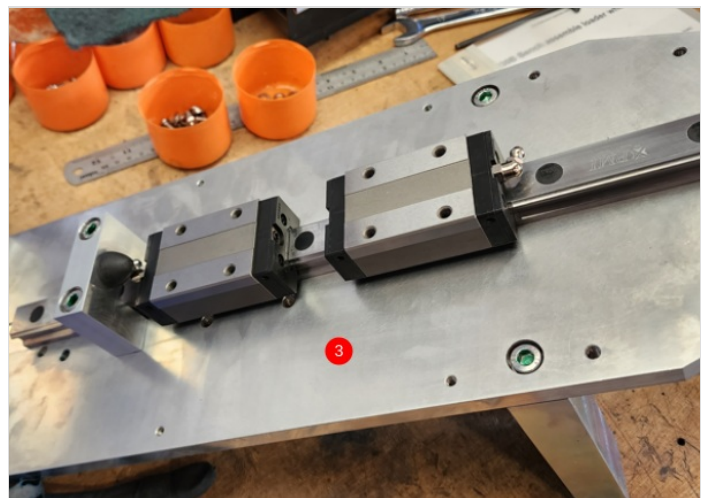
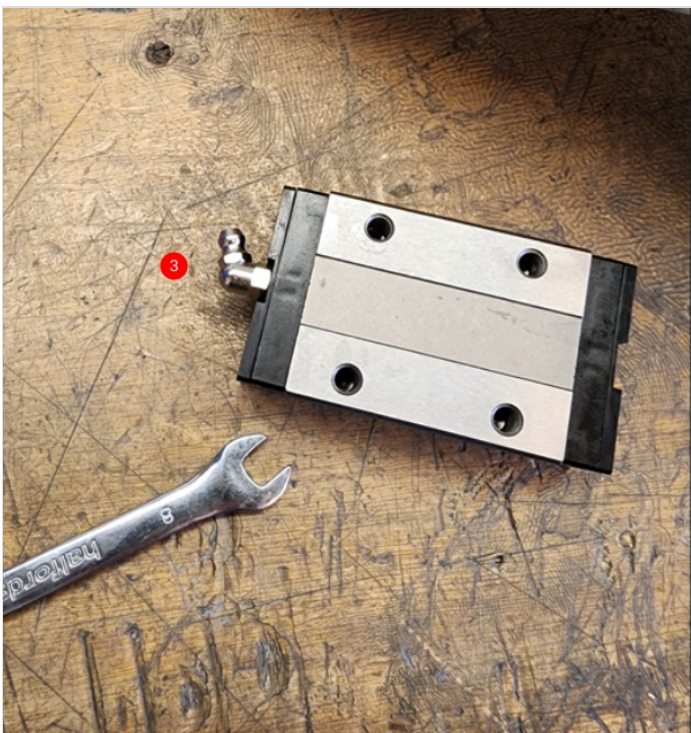
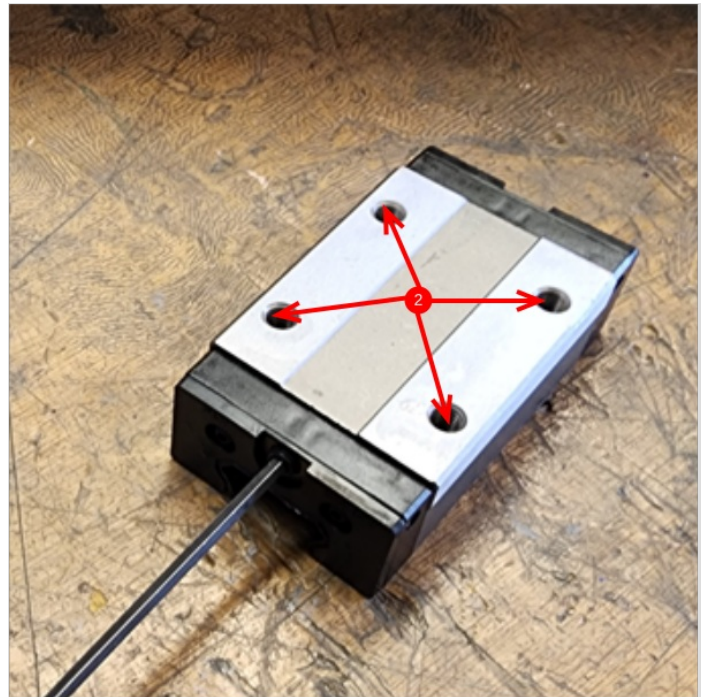
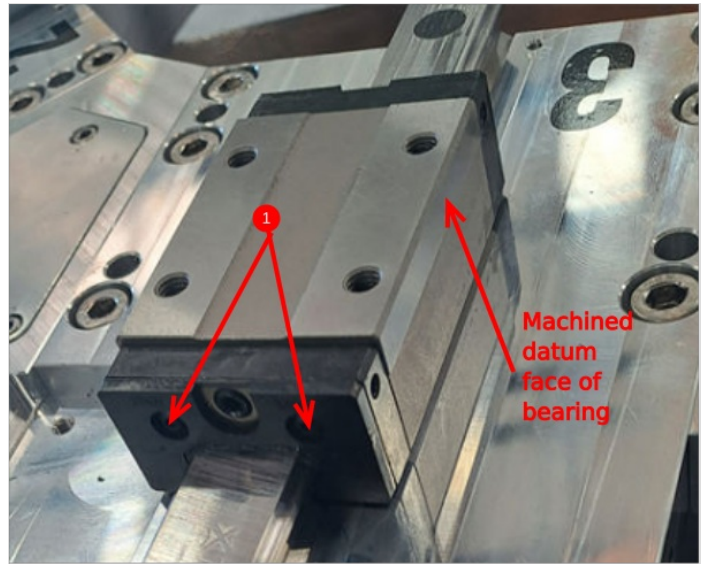


Step 5 - Fit linear bearings and set

1 Slide B0000046 bearings onto linear rail and ensure datum face of both bearings is facing the same way as the datum arrow on the linear rail. Release m3 button heads (4 off per bearing) the allow seals to centralise to the rail. Retension m3 buttons and then remove bearings from rail.

2 Use Fe 10 solvent cleaner to degrease M6 holes in bearings for correct adhesive function, and then clean with compressed air .

3 fit grease nipples in the orientation shown and then refit bearings to linear rail

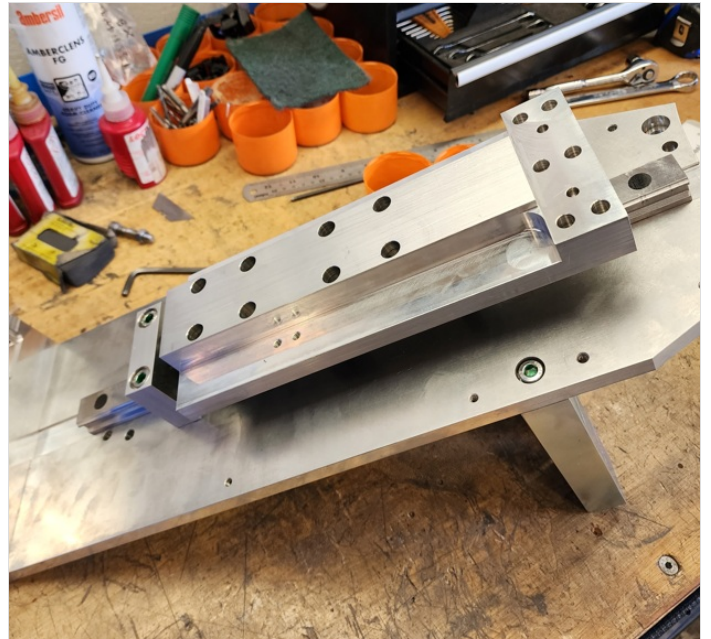


Step 6 - Grease bearings

Use grease gun to grease 2 off B0000046 bearings

Step 7 - Fit slide plate

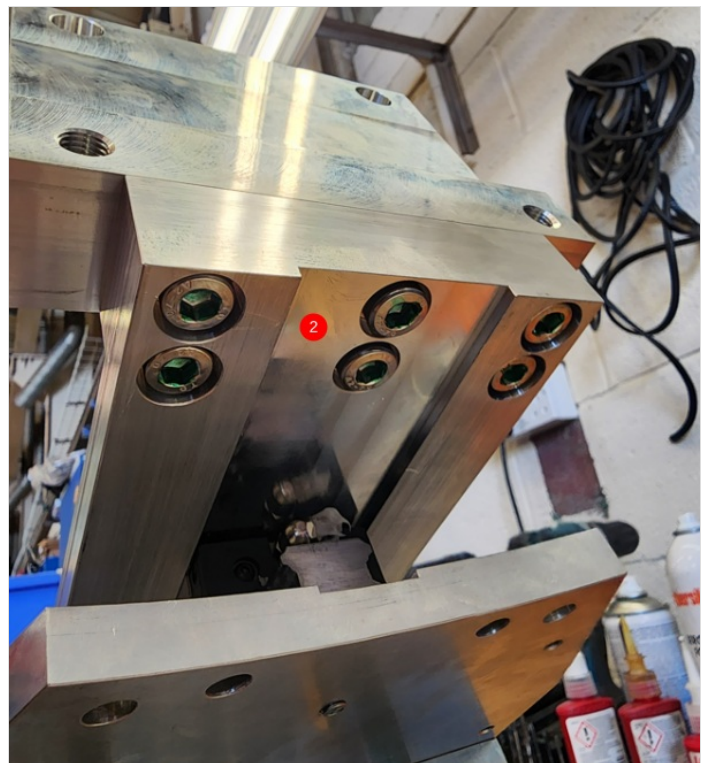
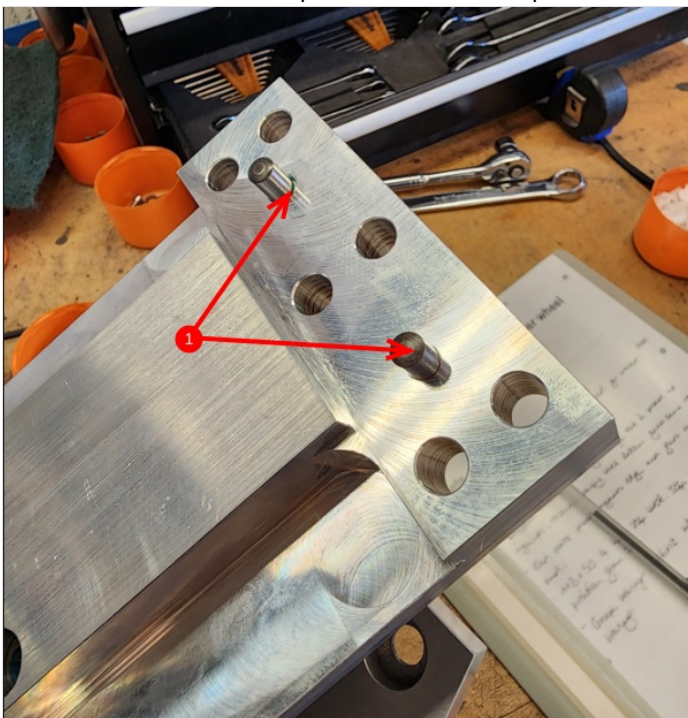
Use 8 off M6 x 12 socket caps to mount D0010509 slide block to bearings, ensuring datum face of bearing pushes up against register on slide block



Step 8 - Fit motor plate

1 Insert 2 off 6mm x 20mm dowels into motor plate

2 Use 6 off M8 x 30 socket cap and fix D0015436 in position



Step 9 - Mount cylinder

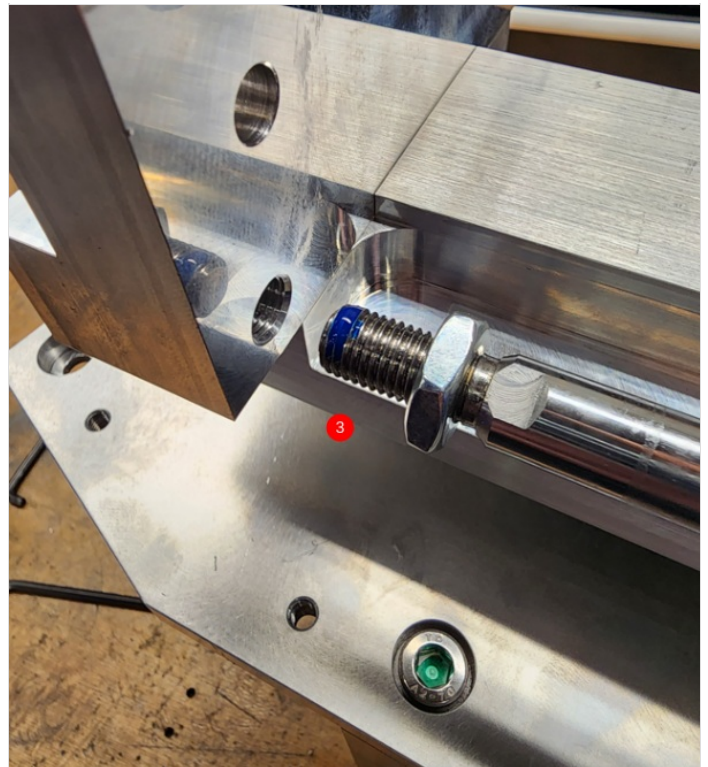
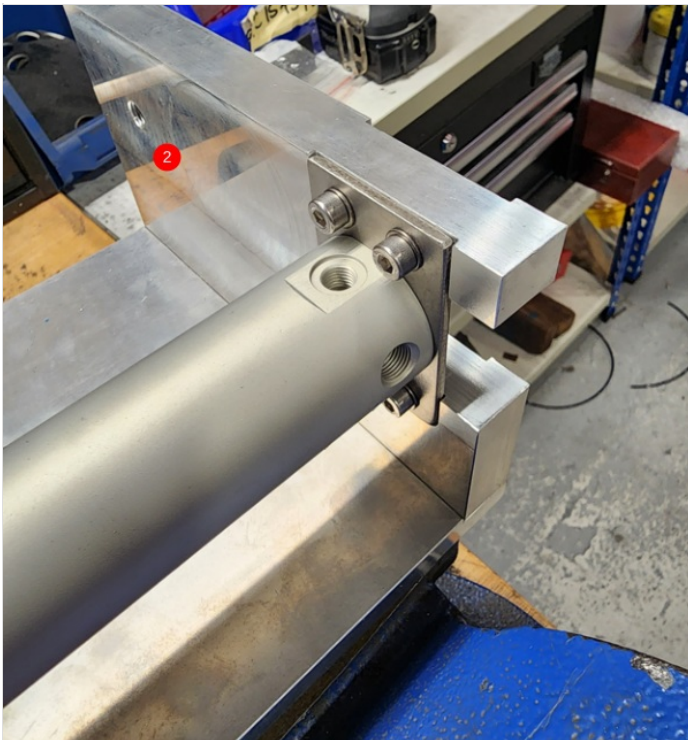
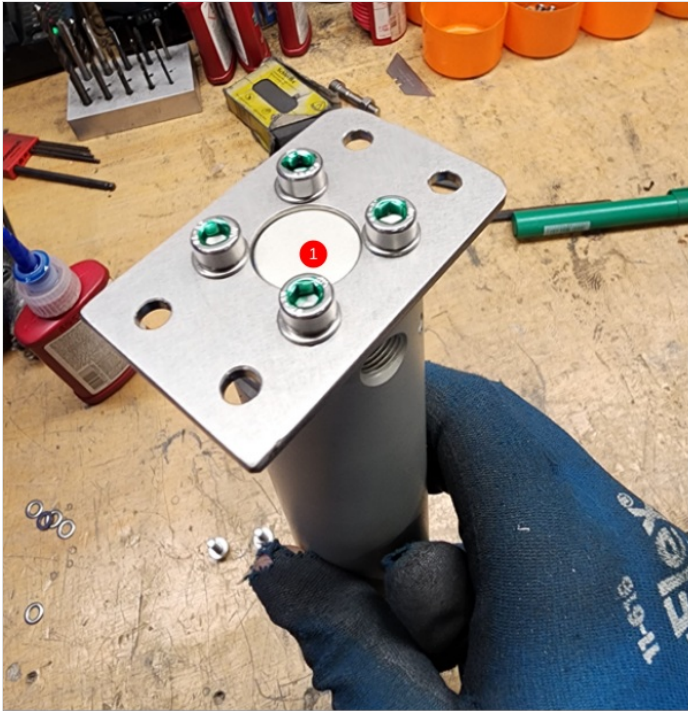
1 Use 4 off M5 x 12 socket caps and A Form washers to mount cylinder P0001044 to bracket D0010611

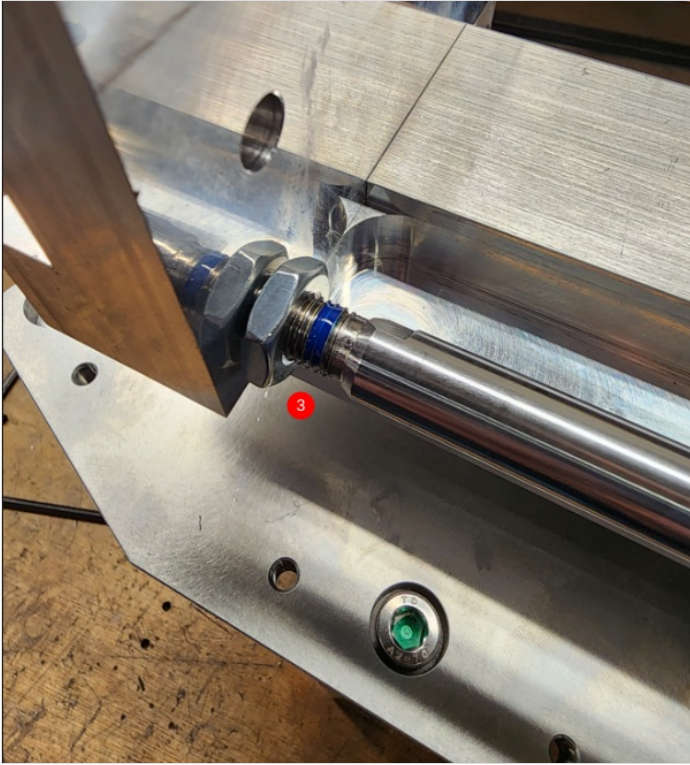
2 Use 4 off M5 x 16 socket caps and A Form washers to mount cylinder bracket to assembly. Leave these bolts loose until next steps are complete

3 Attach cylinder piston. Set to position shown and finalise m10 locking nut

4 Contract assembly to closed position and finalise M5 x 16 socket caps holding top of cylinder. This will centralise cylinder into correct position for alignment .

5 Check cylinder stroke is smooth and consistent



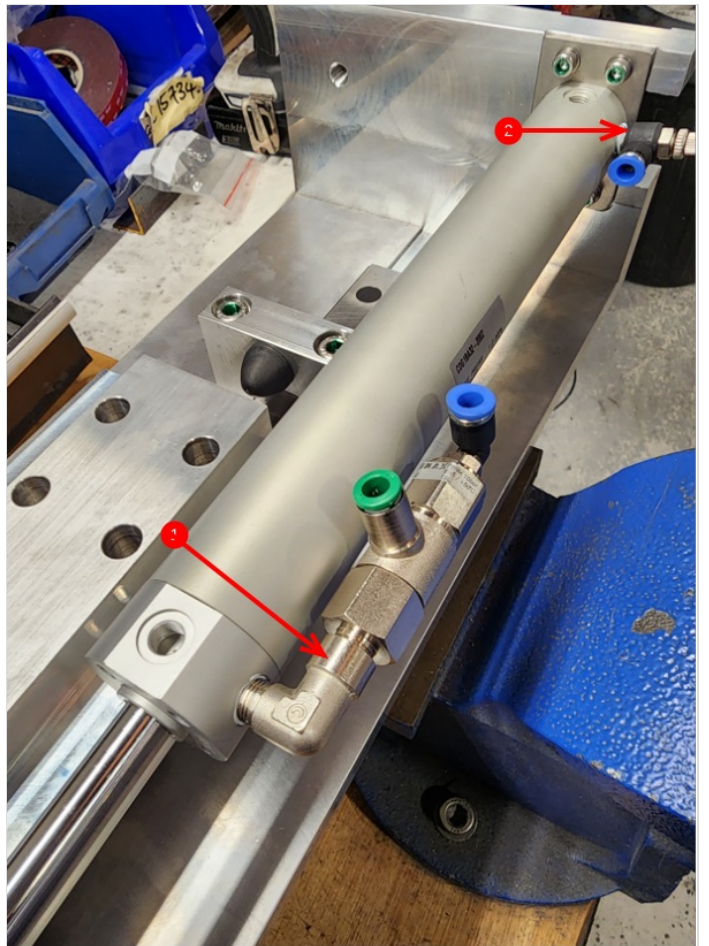
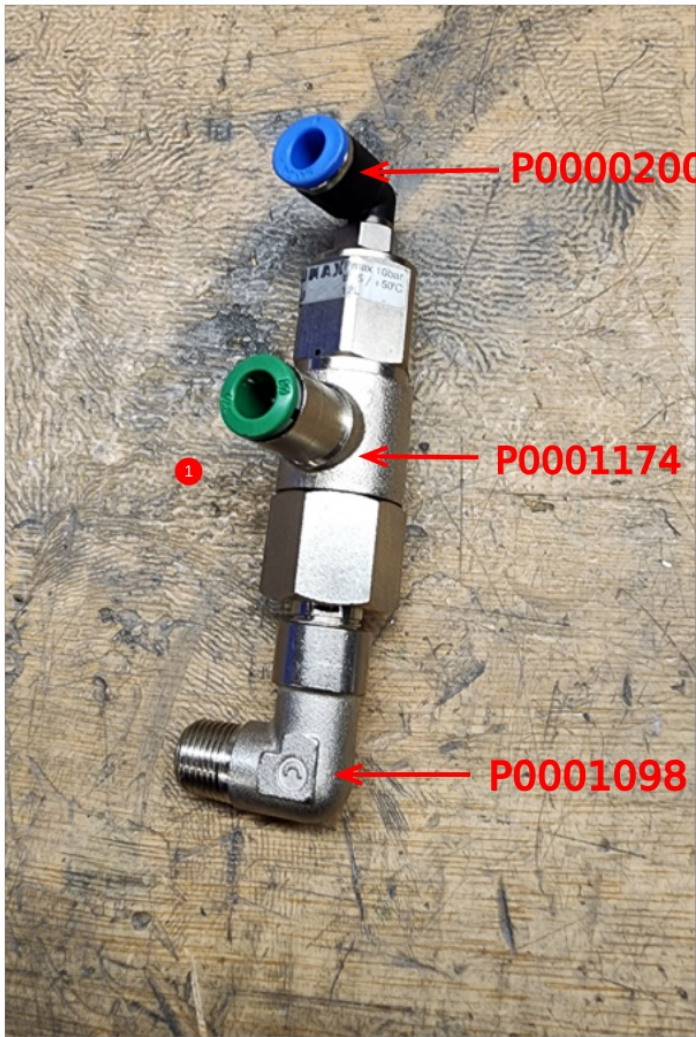


Step 10 - Add Air fittings

1 Combine P0000200, P0001098 and P0001174 as shown and fit to cylinder

2 Fit P0001198 to other port of cylinder

3 Attach P0001041 and P0001042 reed switch mounting set to cylinder as shown. Attach P0001047 reed switch and identify as X304 . Set the reed switch in the home position which is the cylinder fully contracted





Step 11 - Prepare load motor

1 Check load motor B0000240 is assembled correctly. Terminal connection box needs to face the direction shown. If not, disconnect gearbox and rotate to achieve correct orientation

2 Insert 2 off keys B0001100 into D0015435

3 Fit shaft into gearbox bore and captivate with 23mm external circlip

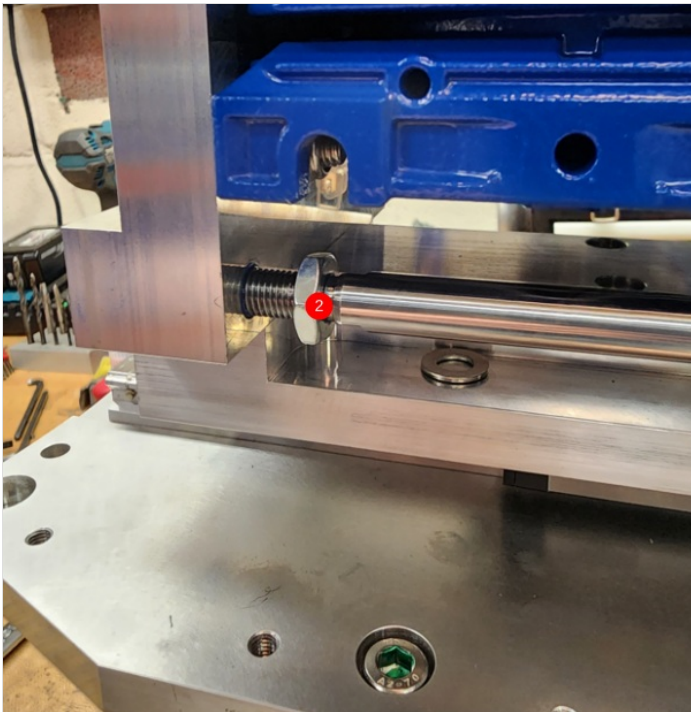
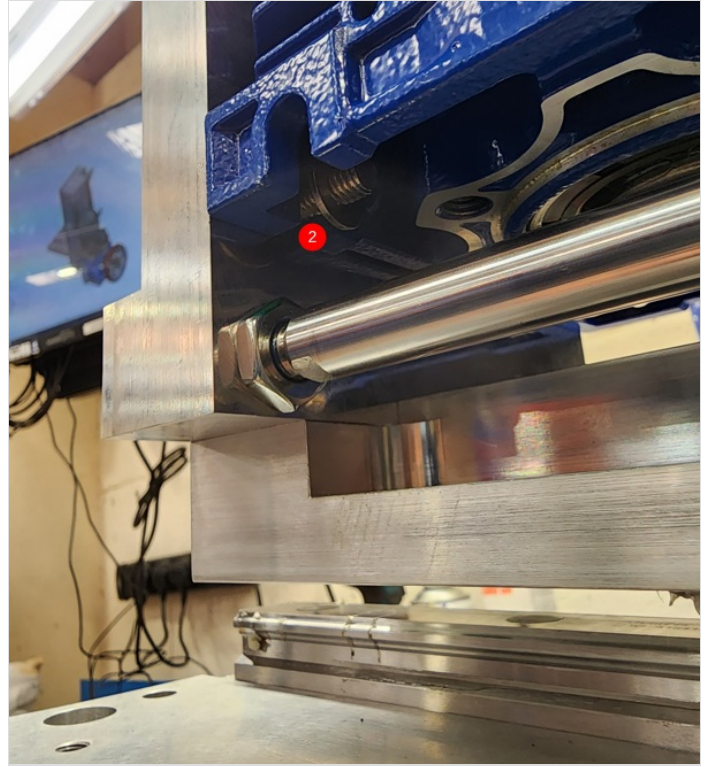
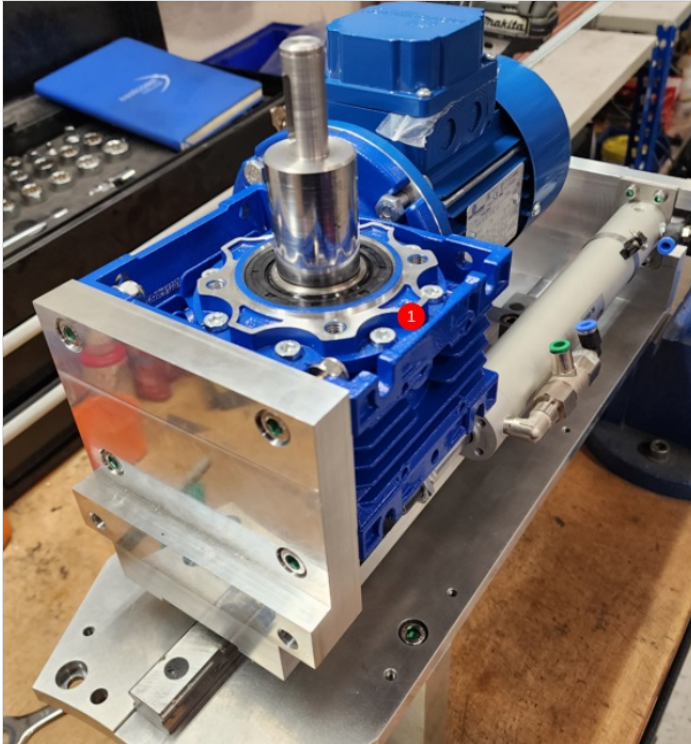




Step 12 - Mount motor to plate

1 Attach motor as shown using M8 x 30 socket caps, a Form washers and M8 nyloc nuts

2 It may be necessary to disconnect cylinder to allow access to final fastener . Ensure cylinder is reconnected correctly as per previous steps if a removal is required .

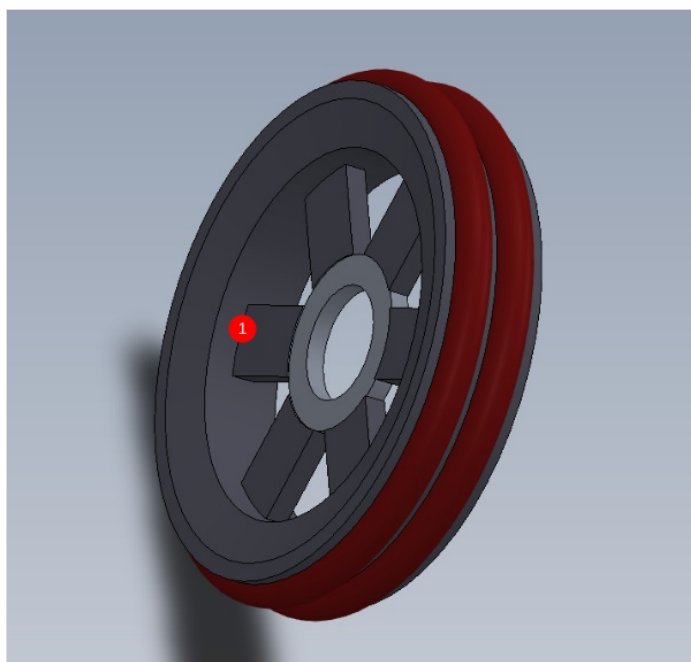
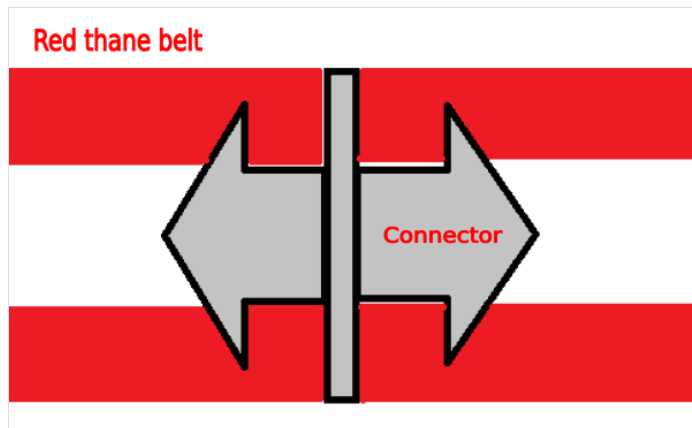
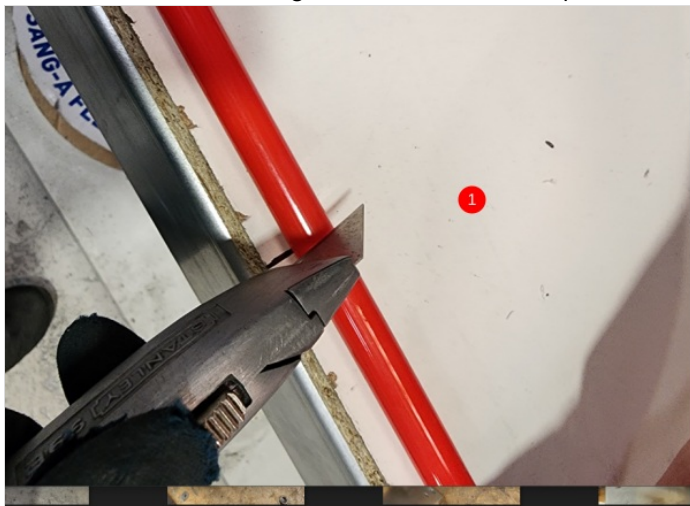


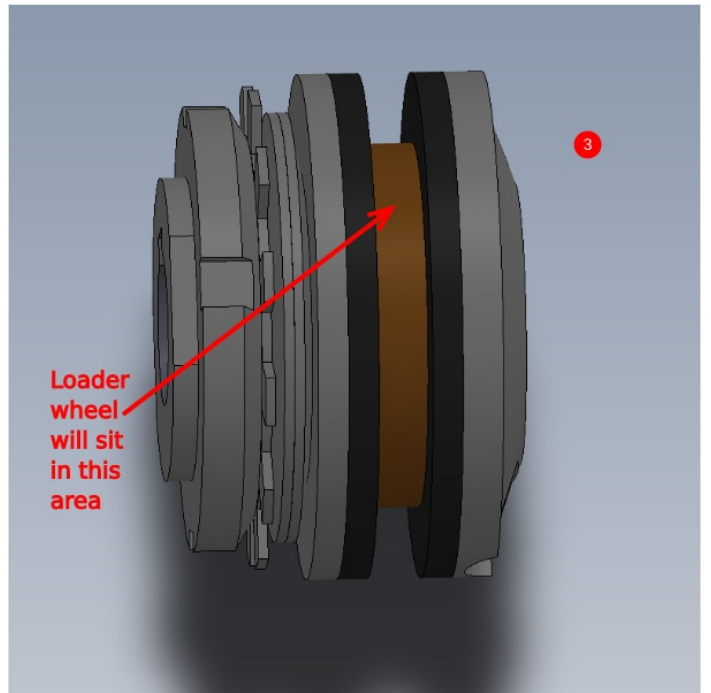
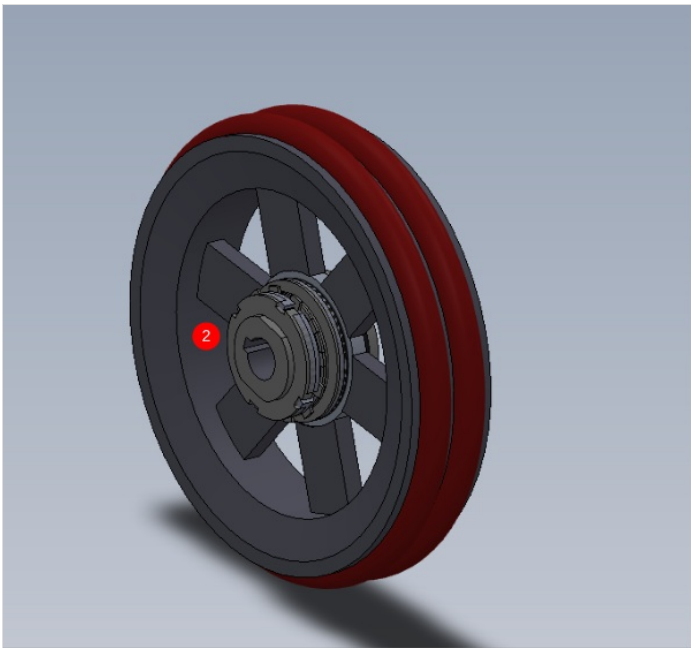
Step 13 - Assemble loader wheel

1 Cut 2 pieces of B0000053 red thane belting at 475mm and join each one together with a B0000054 connector. Push connectors firmly into redthane belting so it reaches the shoulder of the connector. Once assembled, lightly crimp the outer edge of the red thane belting to allow the connector to 'bite' into the internal face of the red thane .Use light pressure and a rounded jaw set of hand pliers
Mount onto D0015434 pulley.

2 Assemble pulley onto B0000189 torque converter as shown

3 view to show correct configuration of B0000189 torque converter

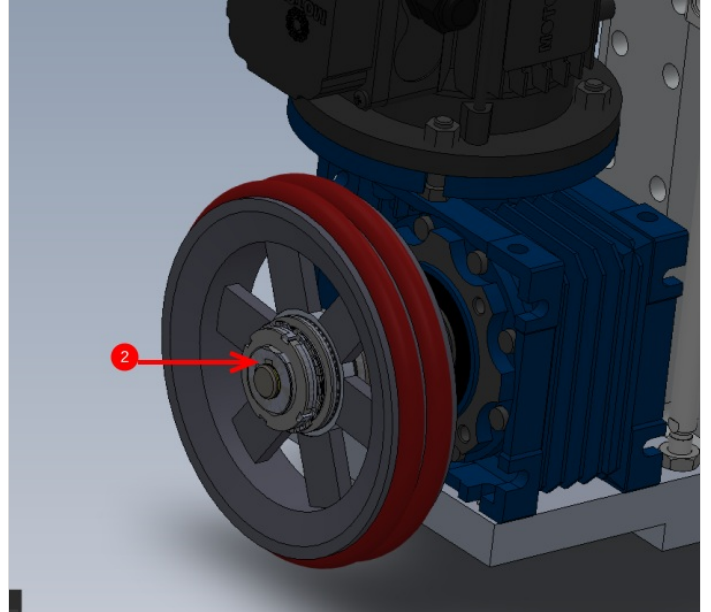
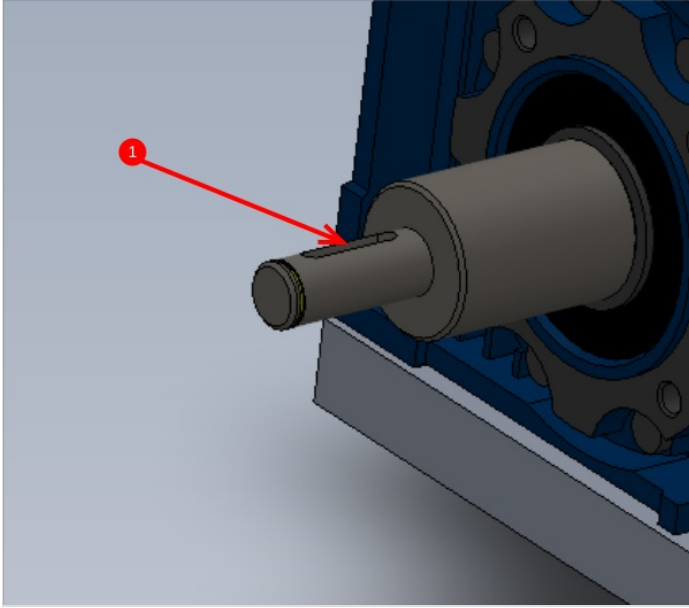




Step 14 - Fit loader wheel to assembly

1 Fit B0000142 key to shaft

2 Slide on loader wheel assembly . Fix with 15mm external circlip.
Grubscrew point in torque converter is not used



Step 15 - Fit Gland to Motor connection box

Supplied cable gland must be fitted to motor connection box once assembled

If gland is not supplied , Use A0000069 from consumable stock

It is vital that the gland is fitted to the correct side of the connection box. Use pictures for reference for correct and incorrect fitting position .
Cable gland must always exit terminal box the same side as the cylinder is attached

