

R000718E Stage 2 spindle assembly

2nd stage of assembly of spindle assemblies

 Difficulty **Medium**

 Duration **4 hour(s)**

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Comments

Introduction

Tools Required

0.05mm feeler gauge

Standard hex key set

Standard spanner set

Rule

6mm punch

Ball pien hammer

Parts Required

D0007990 cylinder anchor x 7

D0007648 end plate x 4

D0007649 Double slide end plate x 4

D0007686 single motor plate x 4

D0007723 Double slide motor mount x 4

D0007687 Motor mount x 4

D0007600 Cylinder anchor x 4

D0015856 hard stop x 4

Step 1 - Unless otherwise stated

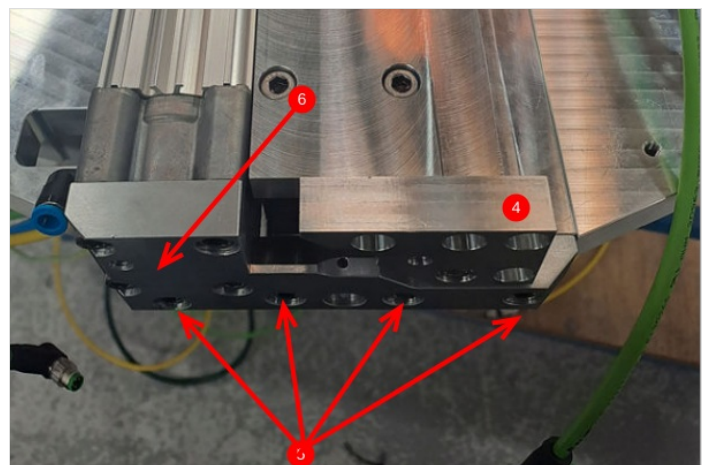
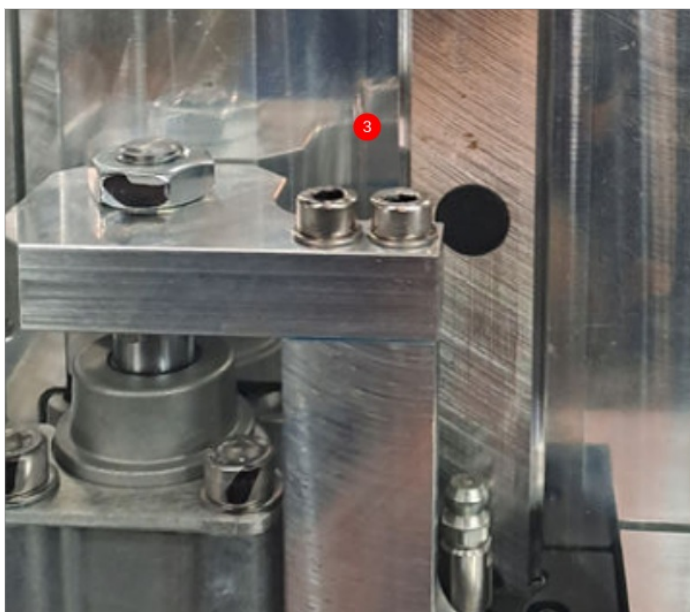
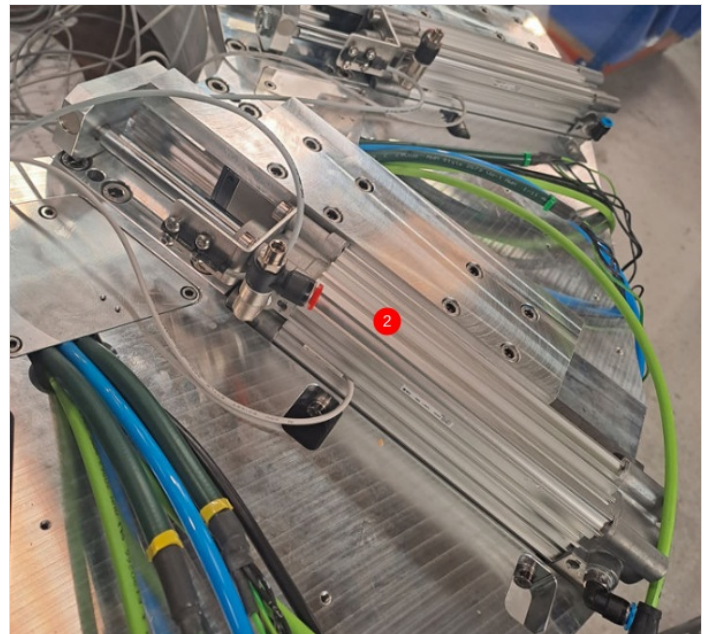
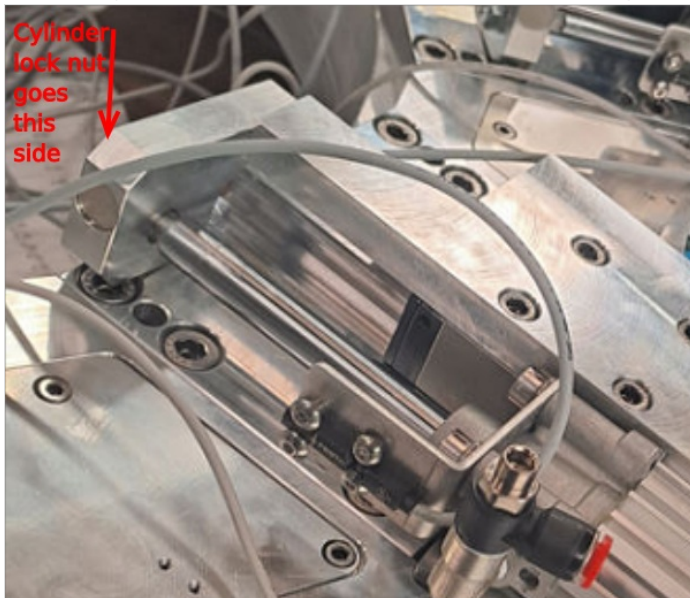
Use Loctite 243 on all fasteners
Pen mark bolts when finalised



Step 2 - Mount single plunge spindle cylinder 2,4,6 and 8

Do not add final tension to bolts until alignment has been achieved

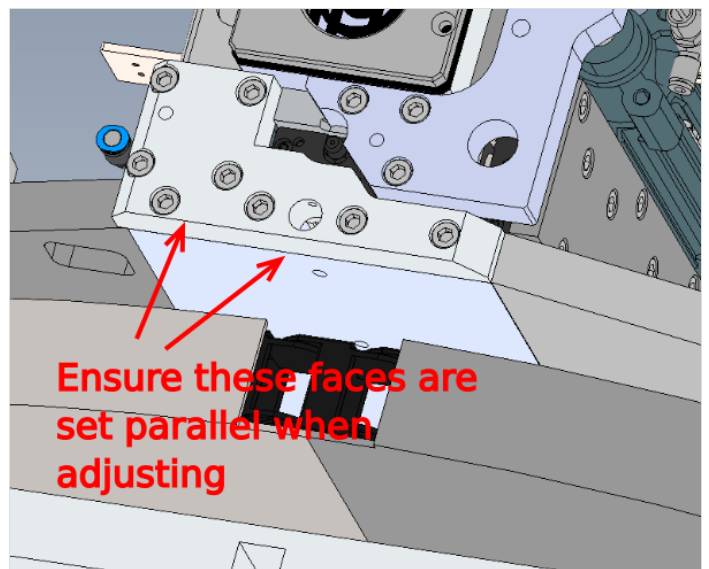
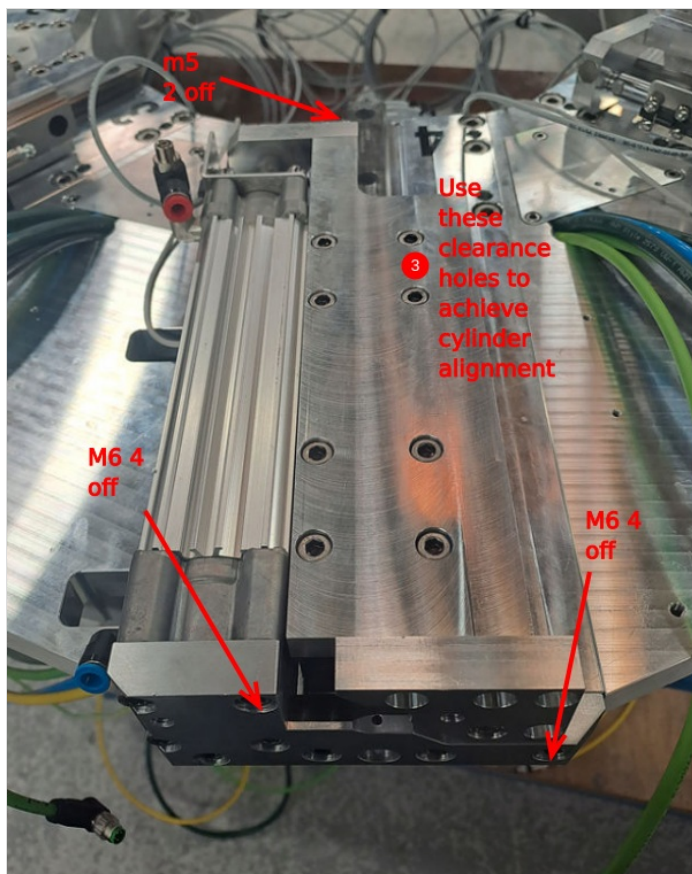
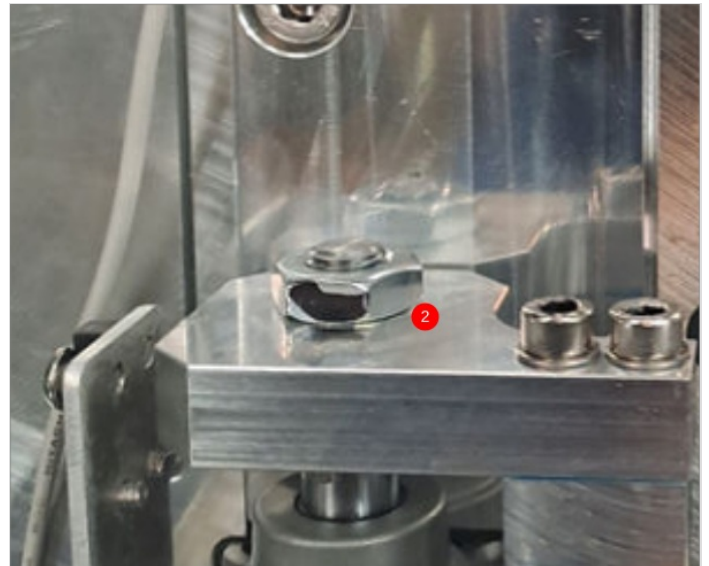
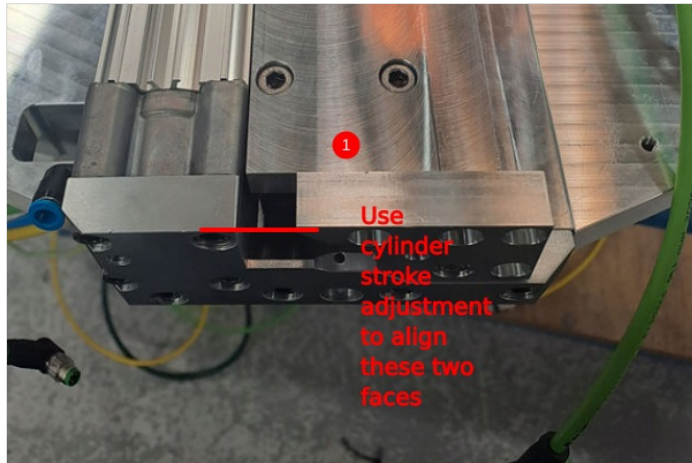
- 1 Attach pre built cylinder anchor to end of cylinder
- 2 Position pre built cylinder on slide base assembly as shown
- 3 Use 2 off m5 x 25 socket caps with A form washers to attach to slide base
- 4 Temporarily mount D0007648 with 1 off m6 x 20 socket cap
- 5 Attach D0007790 cylinder anchor with 4 off M6 x 20 socket caps
- 6 Attach Cylinder base to anchor with 4 off M6x 20 socket caps



Step 3 - Align components and set position

- 1 Use cylinder stroke adjustment to align these two faces
- 2 Apply Loctite 243 to cylinder nut and tighten
- 3 Use clearance in holes for mounting at points indicated to achieve cylinder alignment. Cylinder stroke should be even and free along entire stroke
- 4 Finalise bolts

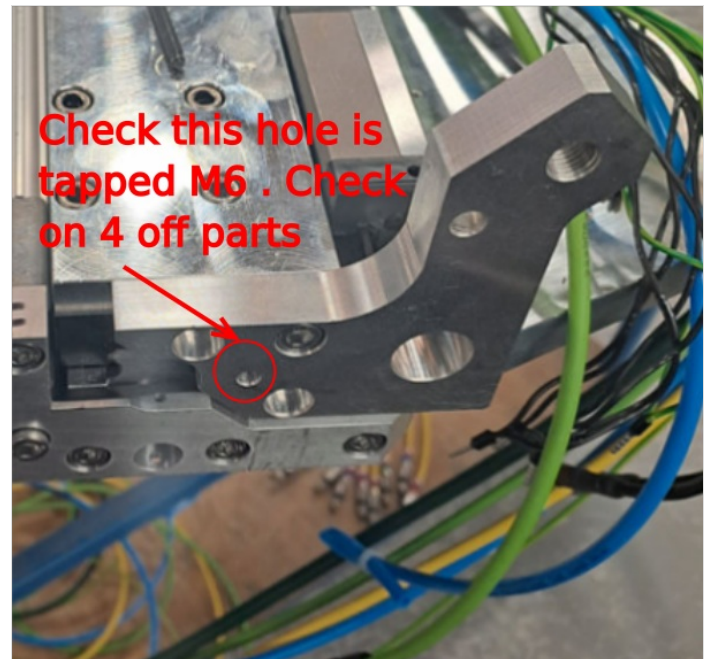
Repeat on all four single spindles (2,4,6 and 8)



Step 4 - Check D0007649

Check that component D0007649 has been manufactured correctly

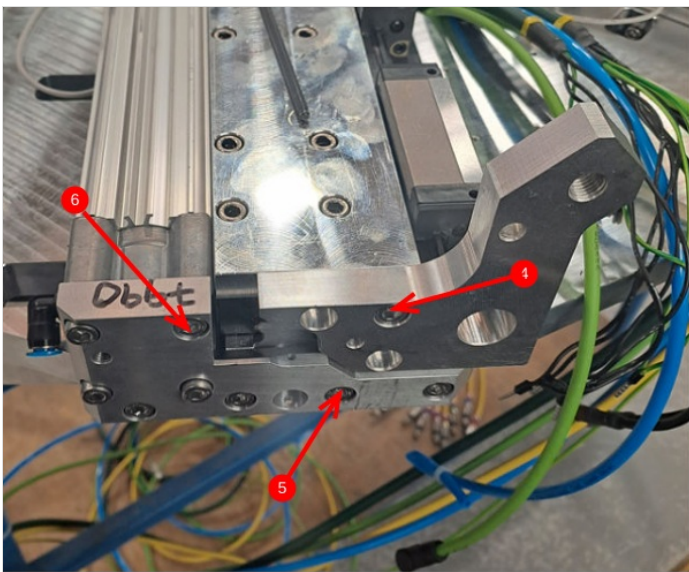
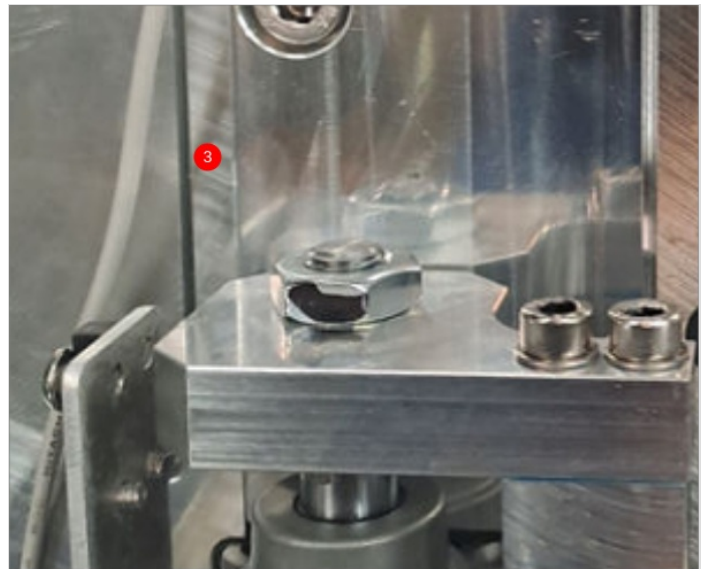
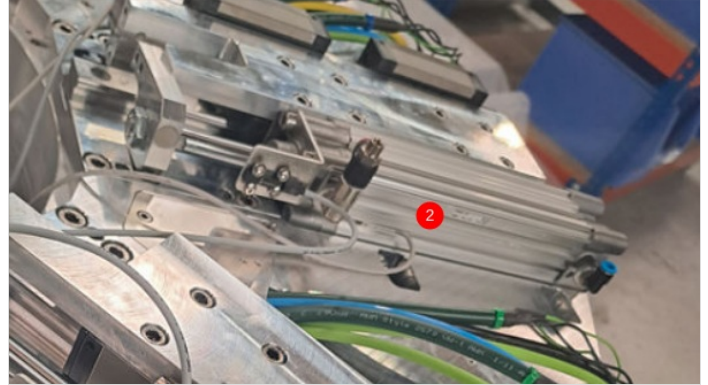
Indicated hole should be tapped M6. Rework and report if not To M6 tapped spec



Step 5 - Mount double plunge spindle cylinder 1,3,5 and 7

Do not add final tension to bolts until alignment has been achieved

- 1 Attach pre built cylinder anchor to end of cylinder
- 2 Position pre built cylinder on slide base assembly as shown
- 3 Use 2 off m5 x 25 socket caps with A form washers to attach to slide base
- 4 Temporarily mount D0007649 with 1 off m6 x 20 socket cap
- 5 Attach D0007790 cylinder anchor with 4 off M6 x 20 socket caps
- 6 Attach Cylinder base to anchor with 4 off M6x 20 socket caps



Step 6 - Align components and set position

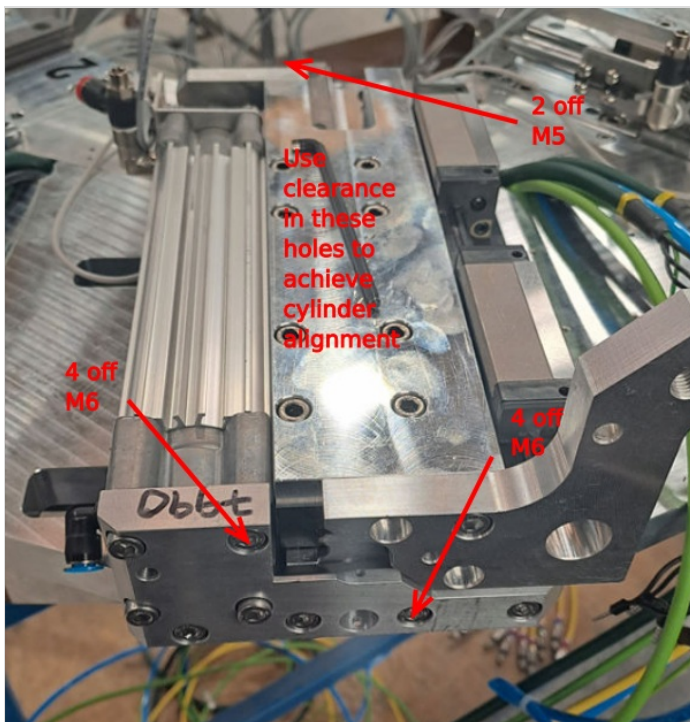
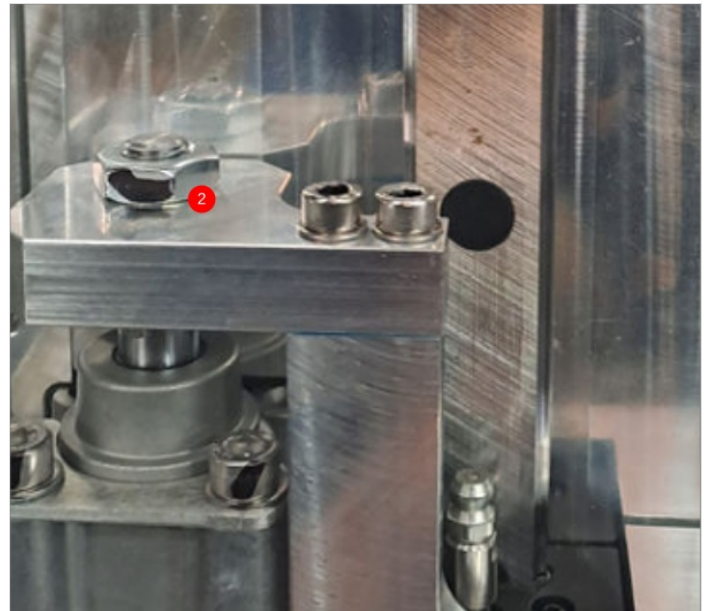
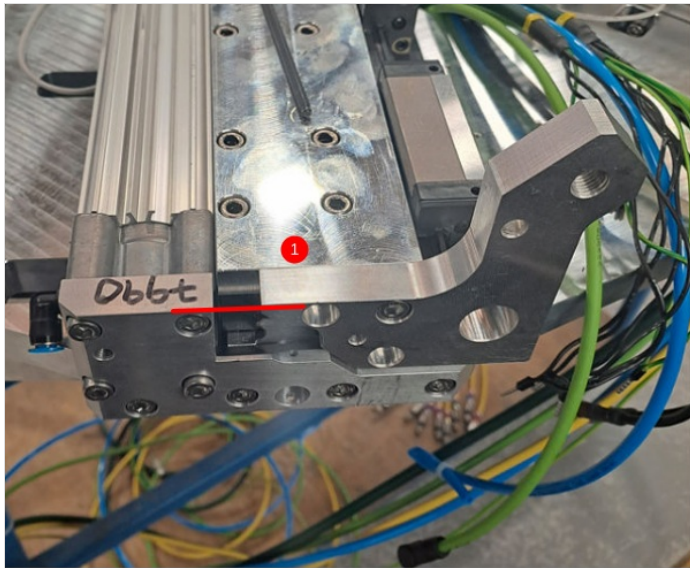
1 Use cylinder stroke adjustment to align these two faces

2 Apply Loctite 243 to cylinder nut and tighten

3 Use clearance in holes for mounting at points indicated to achieve cylinder alignment. Cylinder stroke should be even and free along entire stroke

4 Finalise bolts

Repeat on all four single spindles (1,3,5 and 7))



Step 7 - Attach single plunge motor plate

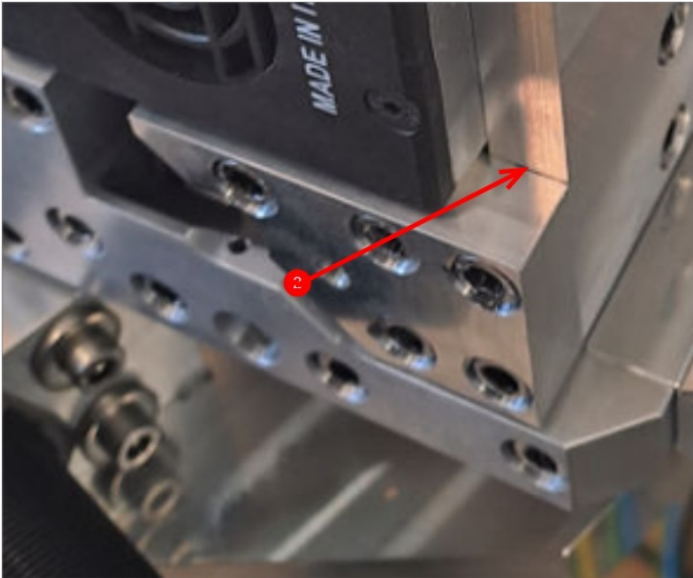
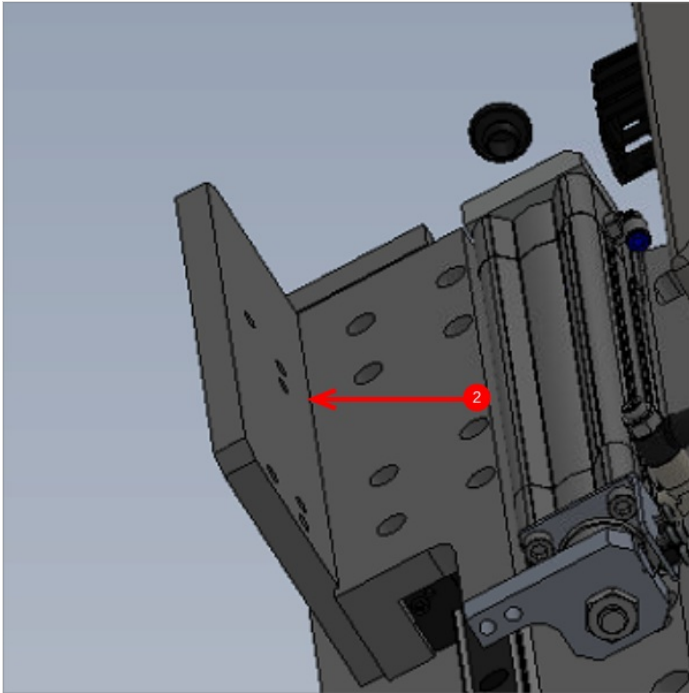
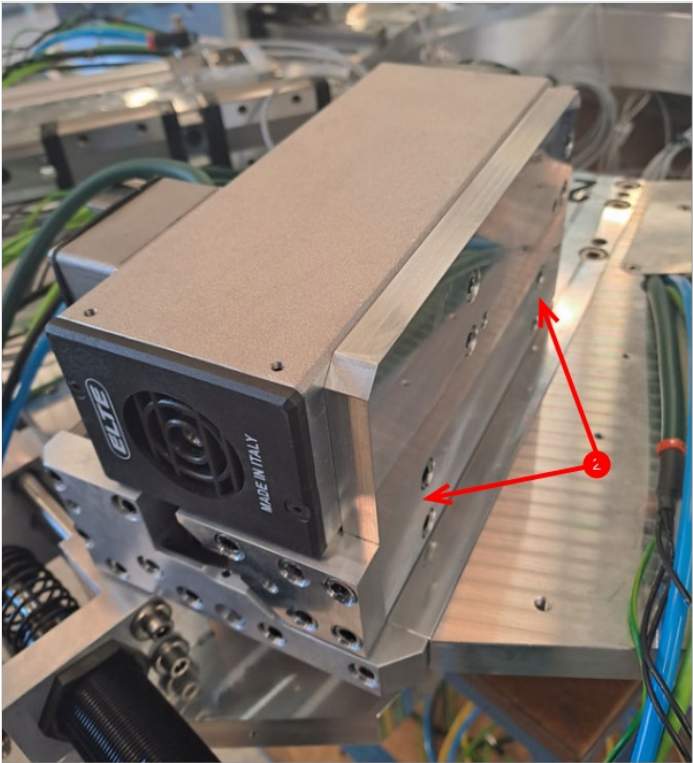
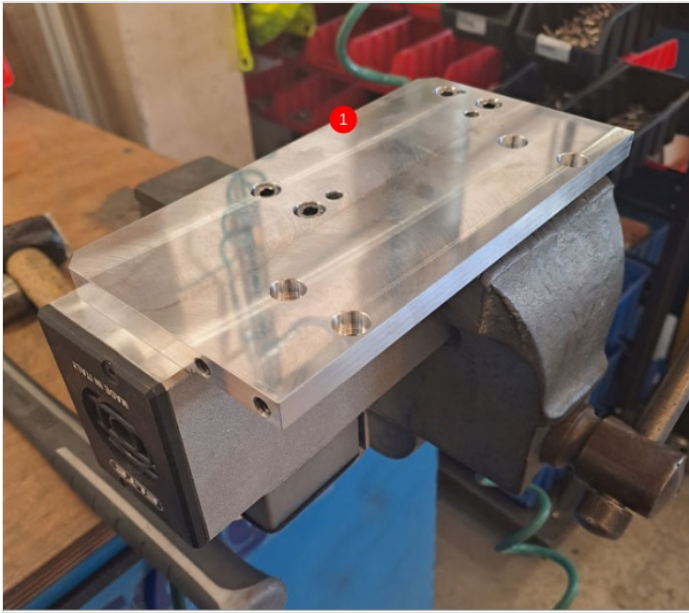
4 off

1 Attach D0007686 motor plate to elte motor using 4 off m6 x 12 socket caps and 2 off 6mmx 20 dowels

2 Attach to single spindle using 4 off m6 x 16 socket caps

Ensure that motor plate butts up to indicated parts and also register is aligned as shown

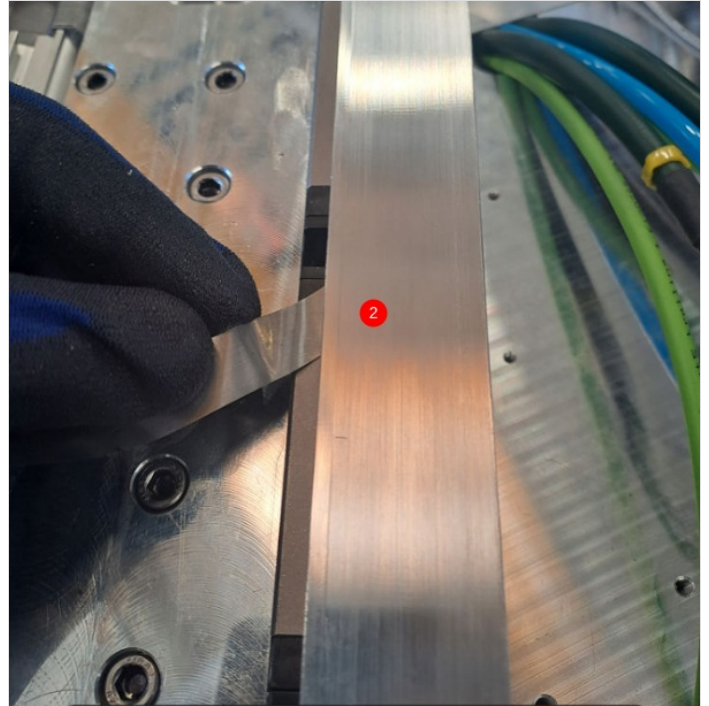
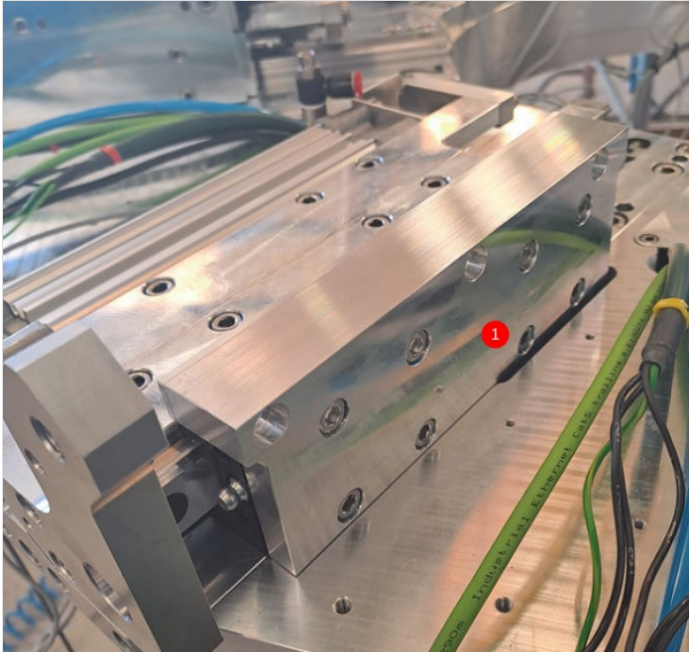
3 use 5 off m6 x 20 socket caps used to finalise end plate . ensure mounting is even to motor plate



Step 8 - Double plunge assembly motor mount

4 off

- 1 Lightly Fix D0007723 motor mount to bearings as shown . Use 8 off M6 x 12 socket caps to fix.
- 2 Use 0.05mm feeler gauge to check datum faces are in contact, if not remove and inspect parts
- 3 Finalise bolts



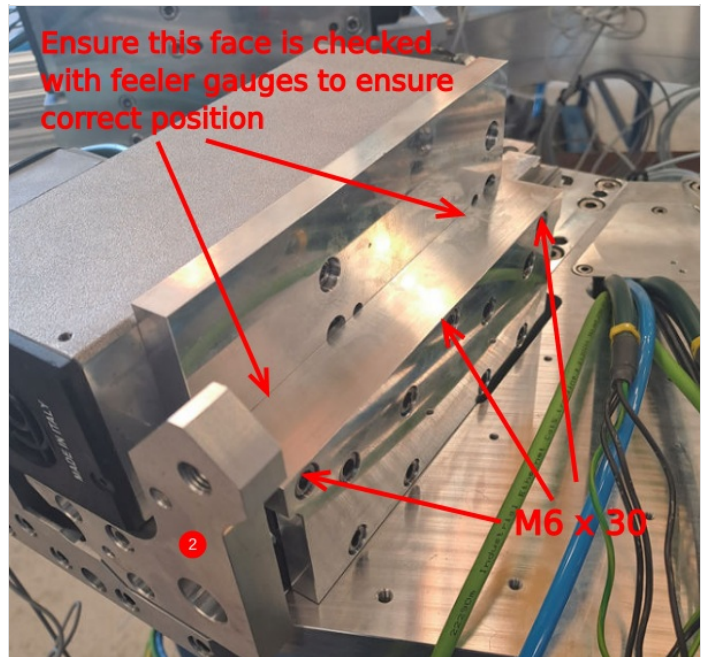
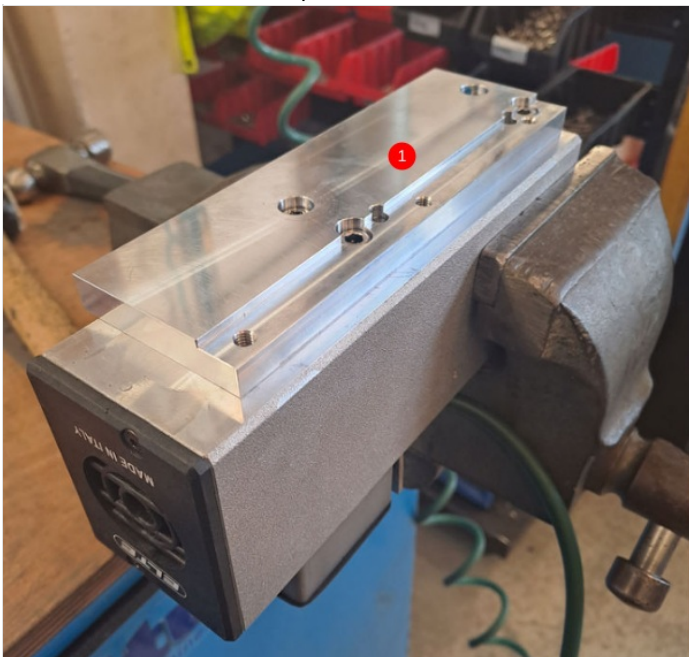
Step 9 - Mounting double plunge motor



...For machine accuracy it is vital the indicated faces butt together. Check with 0.002" feeler gauge to ensure contact

4 off

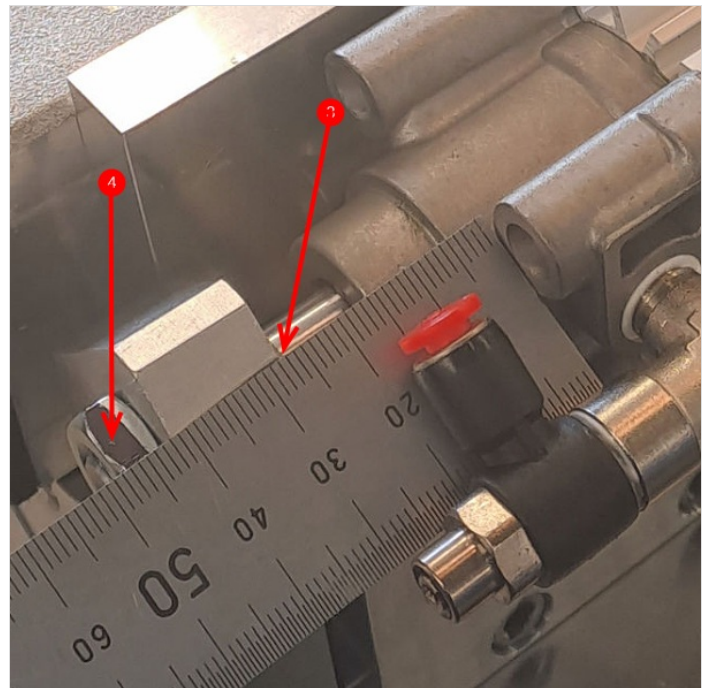
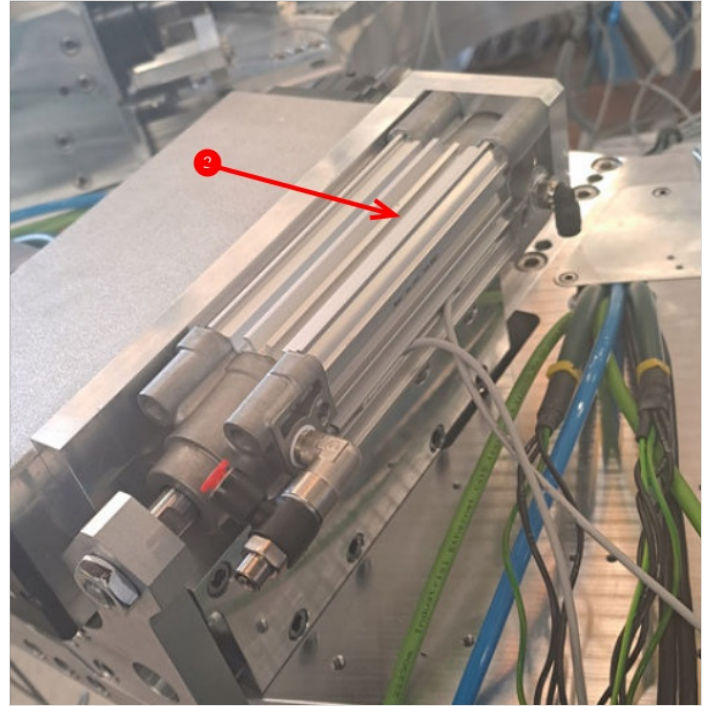
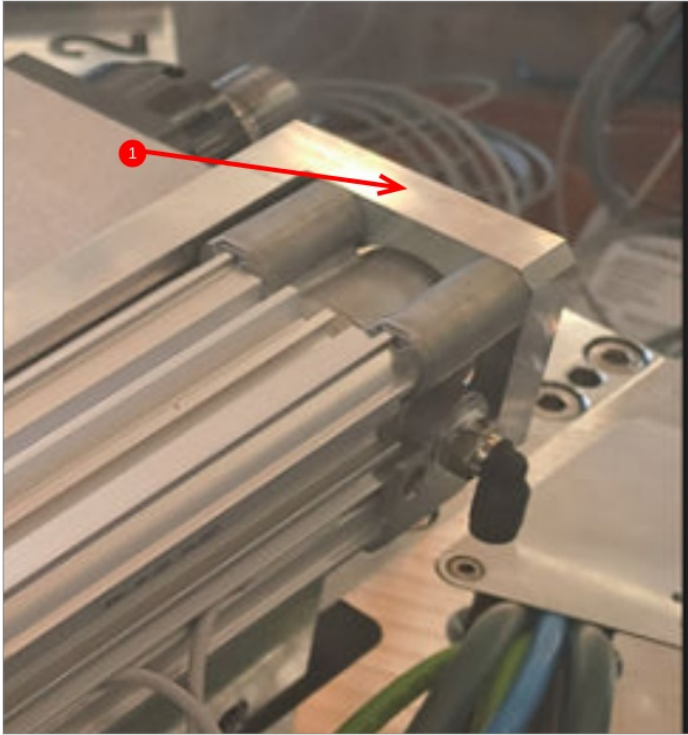
- 1 Mount D0007687 motor plate to elte motor with 4 off M6 x 12 socket caps and 2 off 6mm x 20 dowels
- 2 Use 3 off M6 x 30 socket caps and mount elte motor as shown

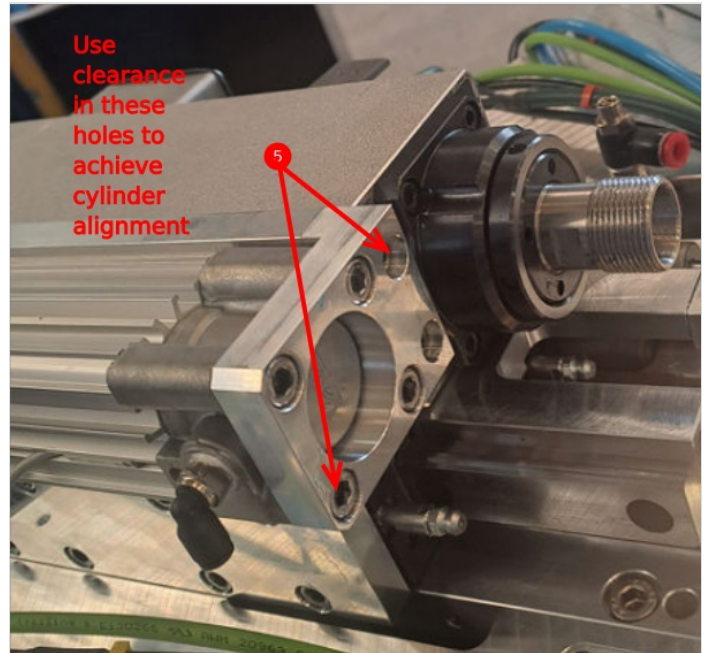
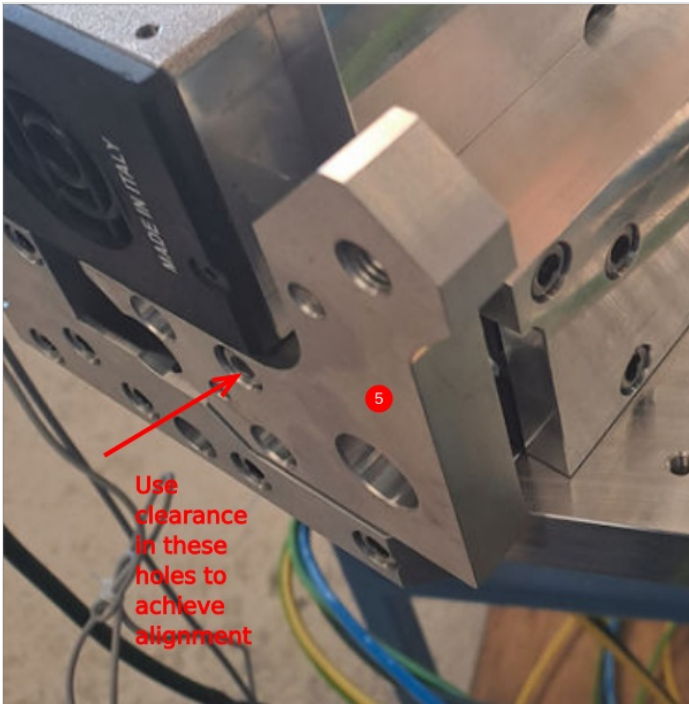


Step 10 - Mount double plunge cylinder

4 off

- 1 Attach D0007600 cylinder mount using 2 off M5 x 20 socket caps
- 2 Attach lighty pre built cylinder assembly using 4 off M6 x 20 socket caps
- 3 Attach cylinder thread and adjust stroke of cylinder to achieve measurement of 28mm
- 4 Adhesive and lock off cylinder nut
- 5 Use clearance in indicated holes to achieve correct cylinder alignment . Stroke of cylinder should be free and consistent
- 6 Finalise all bolts





Step 11 - Mount hard stops

1 Use M5 x 16 socket caps to mount 4 off D00015856 hard stops to double plunge assemblies

2 Use 8 off m4x 12 socket caps and fix to all slide bases as a hard stop

