


# R0015288 Bench Assemble Transfer slider units and Cylinder Rails

bench assembly details for bench assembly of pneumatic transfer rails

 Difficulty **Medium**

 Duration **8 hour(s)**

## Contents

Introduction

Step 1 - Unless otherwise stated

Step 2 - Warning!!

Step 3 - Check D0015573 for rework

Step 4 - Air fittings to cylinders

Step 5 - Attach cylinders

Step 6 - Cut air pipes

Step 7 - Connect Air pipes

Step 8 - Loom pipes

Step 9 - Fit loom support spacer

Step 10 - Assemble and fit concentric journal

Step 11 - Assemble and fit Eccentric journal

Step 12 - Attach to transfer rail

Step 13 - Assemble drive journals concentric

Step 14 - Assemble drive journals eccentric

Step 15 - Attach drive rack

Step 16 - Attach to cylinder rail

Comments

## Introduction

### Tools Required

Standard hex key set  
Standard spanner set

### Parts Required

B0001160 Delrin Dual V Wheel Kit x 48  
B0001161 Spacer: Concentric - Delrin Dual V Wheel x 24  
B0001162 Spacer: Eccentric - Delrin Dual V Wheel x 24  
D0015255 Rack: Mod2 360 Long x 8  
D0015551 Rack Mounting Plate x 8  
D0015572 Slideway Connection Plate (2018) x 8  
D0015573 Transfer Cylinder Bracket x 8  
D0015576 Pneumatics Support Spacer x 8  
D0015599 Transfer Cylinder Bracket Brace x 8

P0000007 Straight Adaptor 6mm - 1/8 BSP tapered thread x 48  
P0001111 Cylinder: Ø25 x 25S Cut Shaft x 48  
R0015093 Bench Assemble Transfer Beam x 8

## Step 1 - Unless otherwise stated

Use Loctite 243 on all fasteners

Use Loctite 570 on all threaded pneumatic connections

Pen mark all bolts when finalised



## Step 2 - Warning!!

**!** ....It is vital the correct bolts are used in this assembly M5 x 30 SET bolts must be used, not socket caps

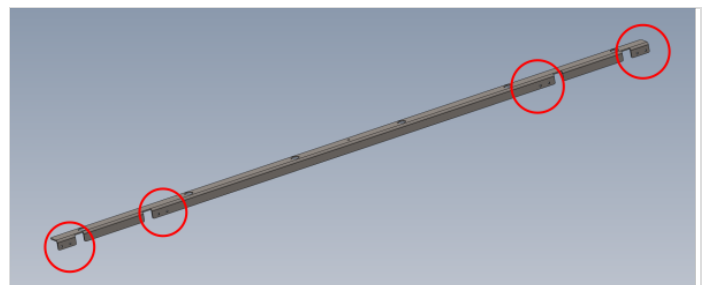
image attached to clarify what a set bolt is



## Step 3 - Check D0015573 for rework

8 off Indicated holes should be 6.5mm clearance not M6 tapped

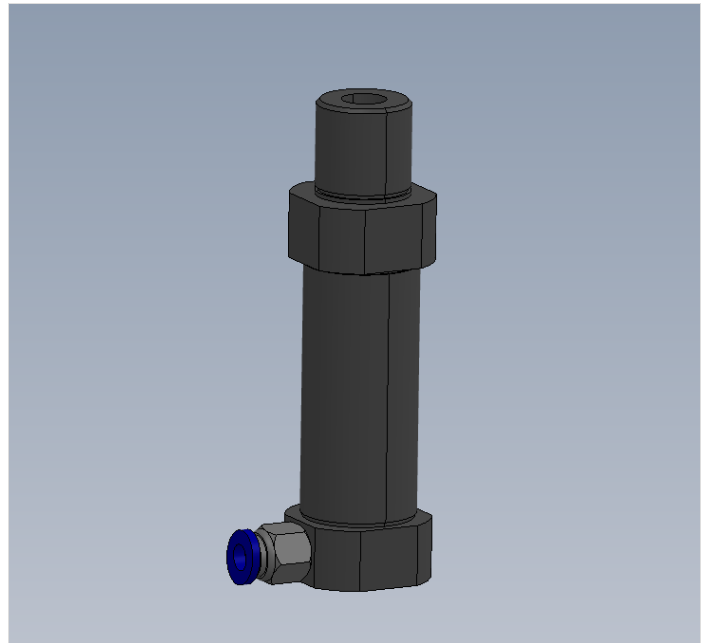
If holes are tapped, rework and drill to 6.5mm



## Step 4 - Air fittings to cylinders

Attach P0000007 Straight Adaptor 6mm - 1/8 BSP tapered thread to P0001111 Cylinder: Ø25 x 25S Cut Shaft as shown

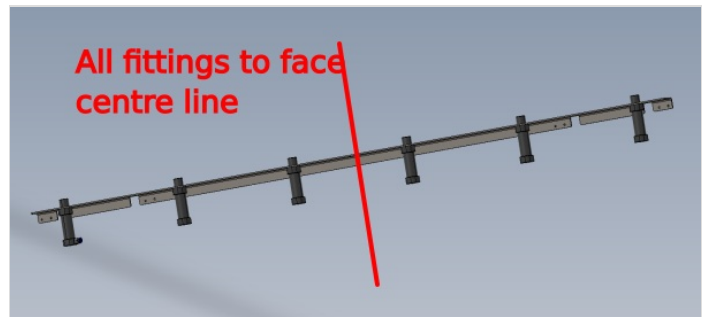
48 in total



## Step 5 - Attach cylinders

Attach cylinders to D0015573 Transfer Cylinder Bracket as shown

Air fittings to face directions shown



## Step 6 - Cut air pipes

cut and label the following pipes

- 8 off 6mm black pipes @ 1050mm labelled as 2349 both ends
- 8 off 6mm black pipes @ 800mm labelled as 2339 both ends
- 8 off 6mm black pipes @ 500mm labelled as 2329 both ends
- 8 off 6mm black pipes @ 500mm labelled as 2319 both ends
- 8 off 6mm black pipes @ 800mm labelled as 2309 both ends
- 8 off 6mm black pipes @ 1050mm labelled as 2299 both ends

## Step 7 - Connect Air pipes

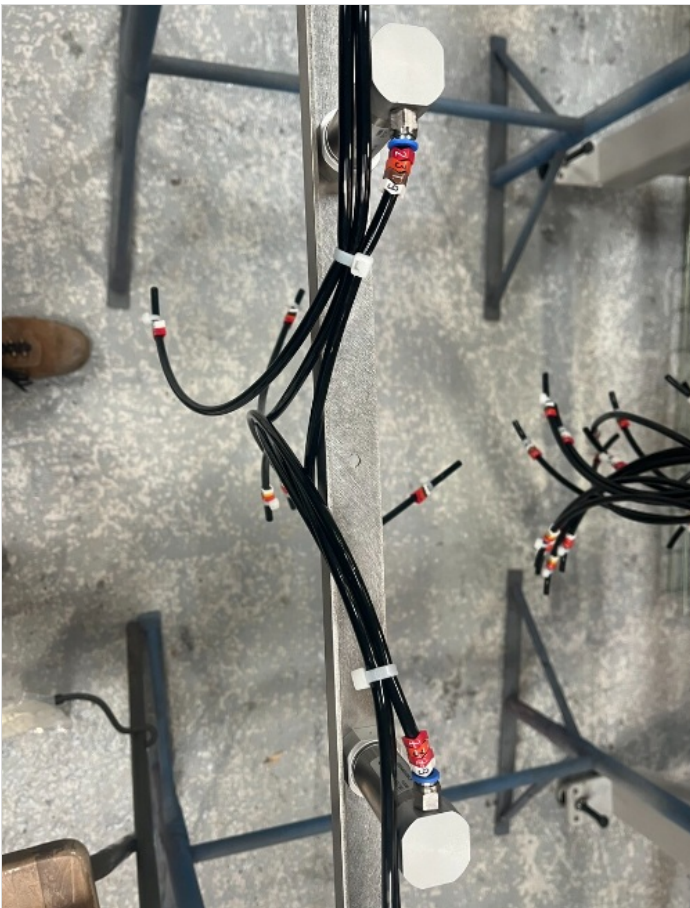
Connect air pipes as shown on each cylinder rail

L-R and R-L connections shown . Connect to suit handing of machine



## Step 8 - Loom pipes

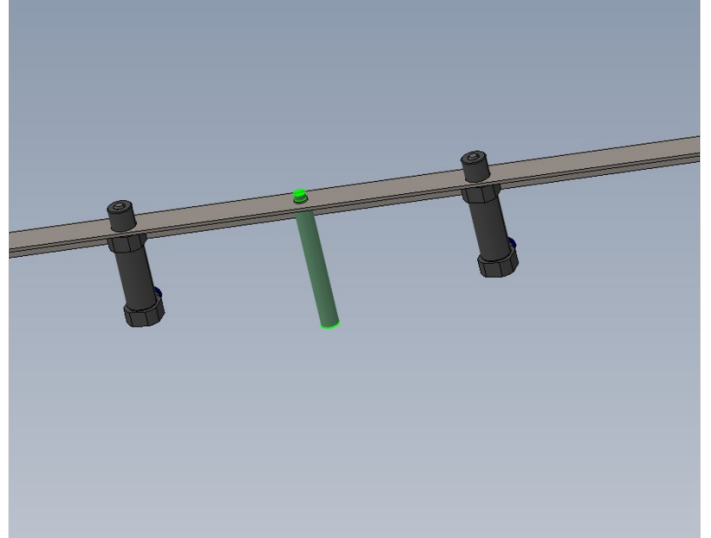
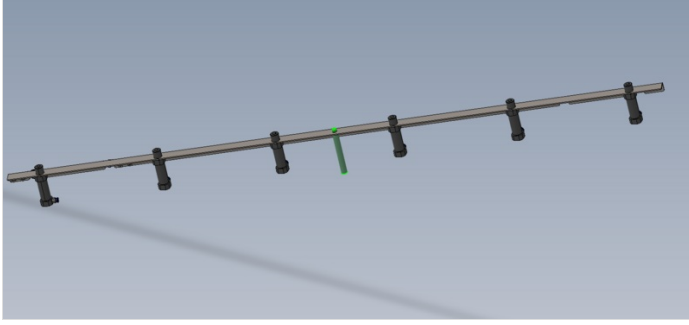
Use white cable ties to loom all pipes neatly as shown





## Step 9 - Fit loom support spacer

Fit D0015576 Pneumatics Support Spacer to each assembled rail using M6 x 16 socket caps and A form washer



---

## Step 10 - Assemble and fit concentric journal

 ...Ensure Set bolts are used

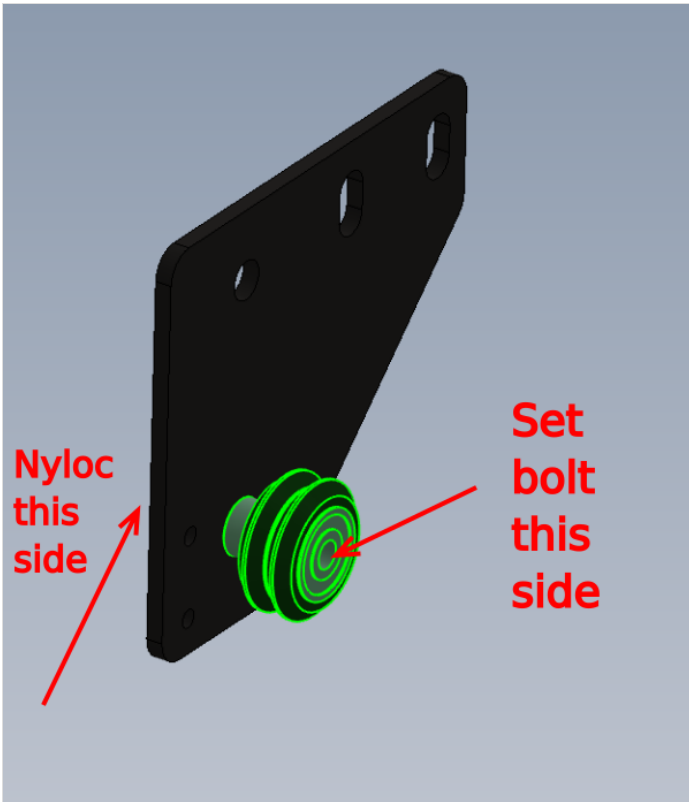
8 off in total

Fit concentric journal as shown to D0015572 Slideway Connection Plate

Assemble in this order

M5 x 30 set bolt- M5 A form washer- Delrin wheel assembly B0001160- spacer B0001161 - Main assembly - A form washer- M5 Nyloc nut



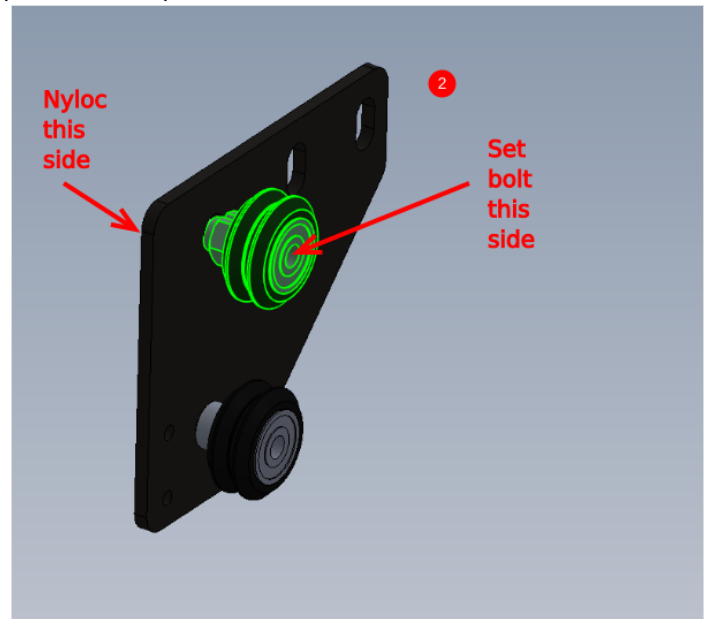
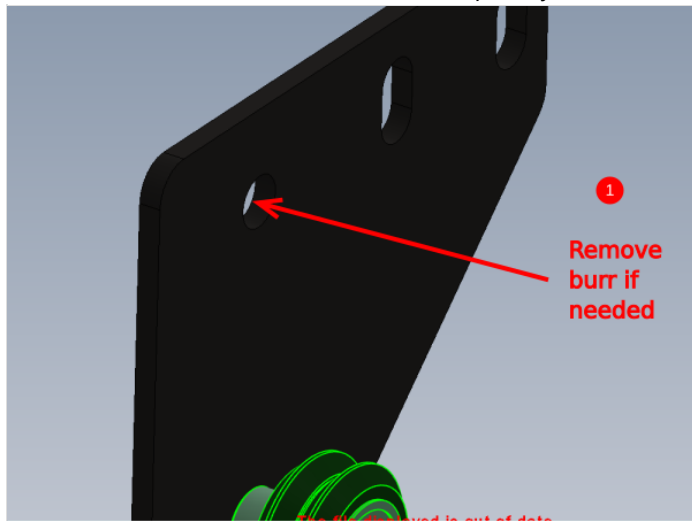


## Step 11 - Assemble and fit Eccentric journal

8 off

1 Check that part B0001162 sits flush into hole on mounting plate. It may be required to remove burrs from manufacture to achieve this  
2 Attach delrin wheel in this order.

M5 x 30 Set bolt-M5 A form washer-Delrin Wheel (B0001160) -Eccentric cam(B0001162)- Assembly - M5 A Form Washer- M5 Nyloc nut  
Do not add final tension to this wheel assembly as adjustment will be required at a later point



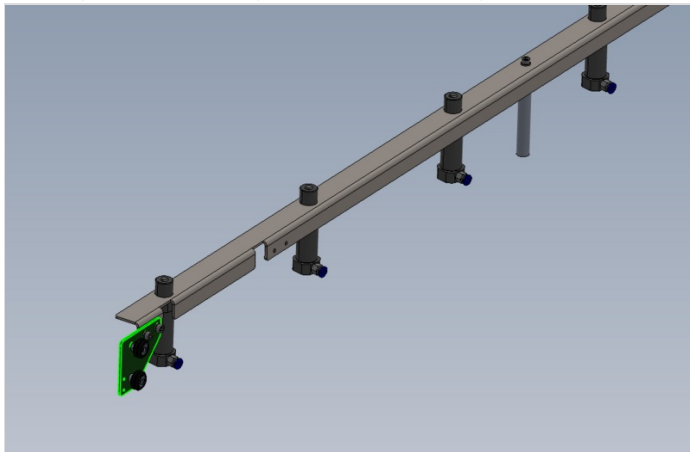
---

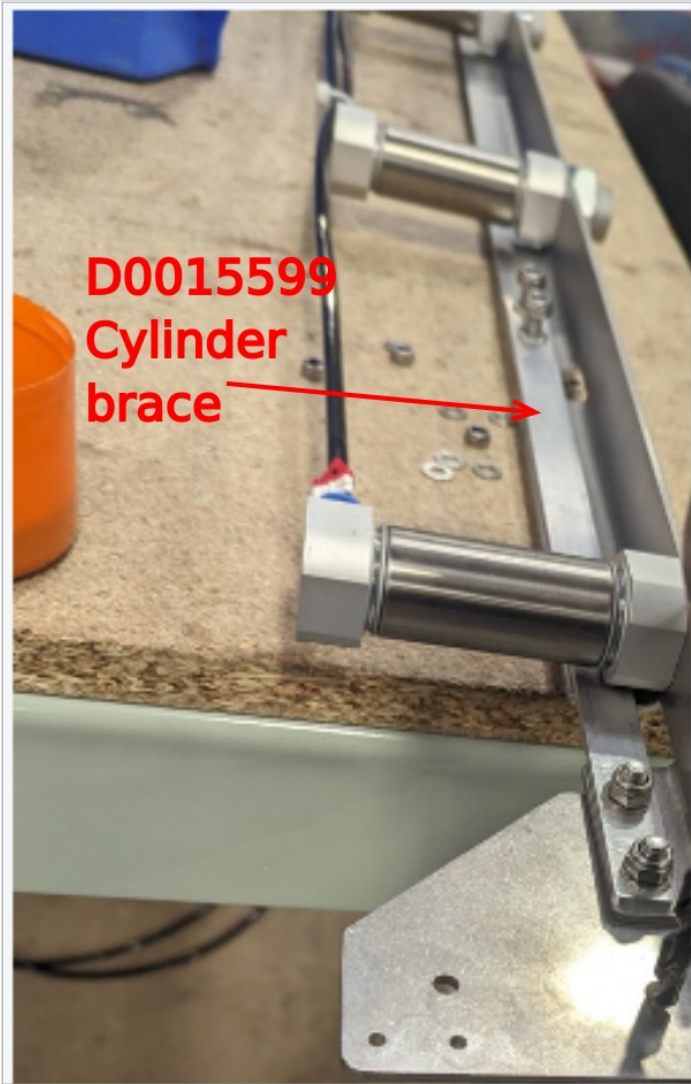
## Step 12 - Attach to transfer rail

Combine D0015599 Transfer Cylinder Bracket Brace as shown

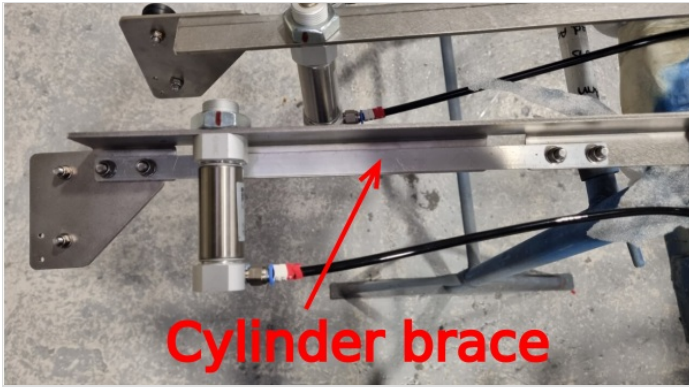
Use M6 x 20 socket caps, M6 a form washers and M6 nylocs to fix journal plate to transfer rail

Ensure plate is mounted parallel and at lowest point in slots









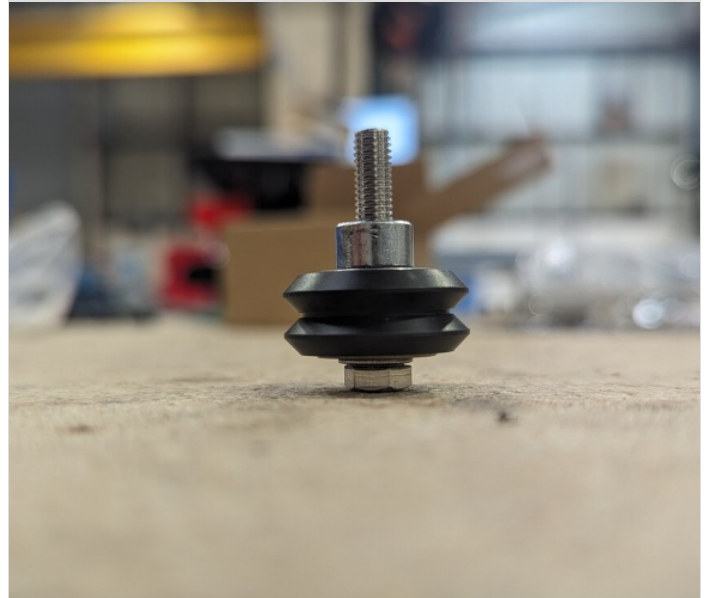
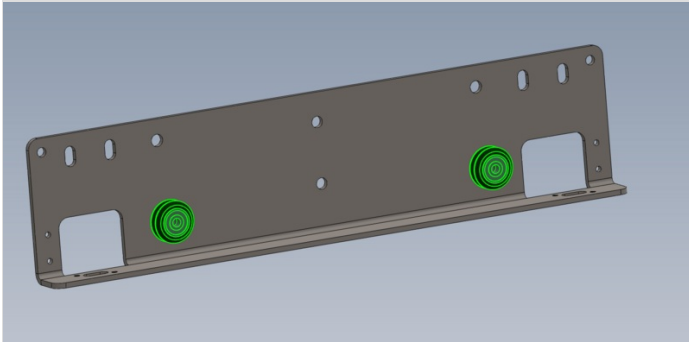
## Step 13 - Assemble drive journals concentric

8 off in total

Fit 2 off concentric journals as shown to D0015551 Rack Mounting Plate

Assemble in this order

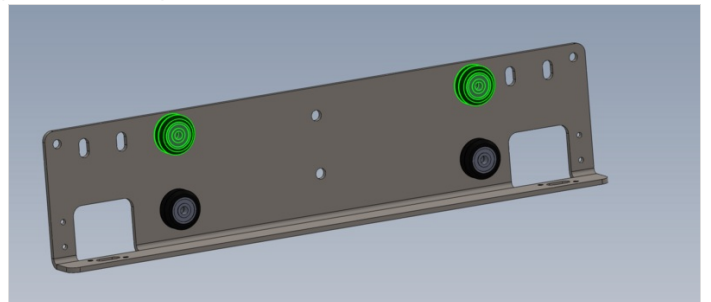
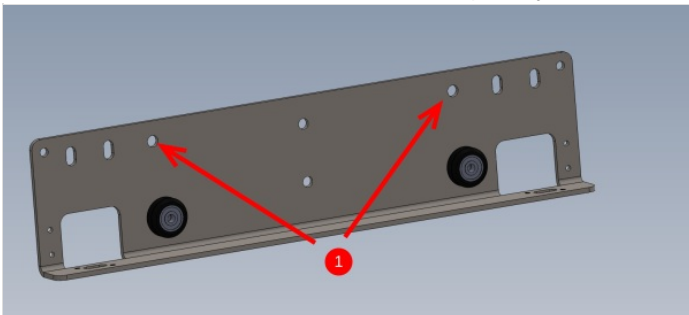
M5 x 30 set bolt- M5 A form washer- Delrin wheel assembly B0001160- spacer B0001161 - Main assembly - A form washer- M5 Nyloc nut



## Step 14 - Assemble drive journals eccentric

1 Check that part B0001162 sits flush into hole on mounting plate. It may be required to remove burrs from manufacture to achieve this  
2 Attach delrin wheel in this order.

M5 x 30 Set bolt-M5 A form washer-Delrin Wheel (B0001160) -Eccentric cam(B0001162)- Assembly - M5 A Form Washer- M5 Nyloc nut  
Do not add final tension to this wheel assembly as adjustment will be required at a later point



## Step 15 - Attach drive rack

Do not apply adhesive to these bolts

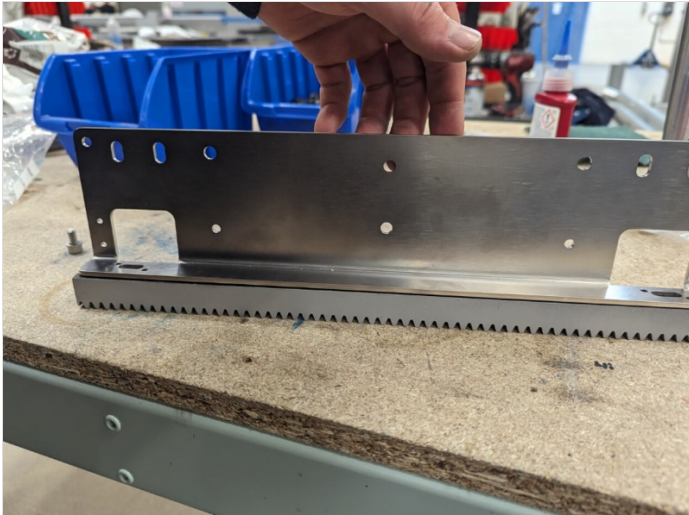
Ensure racks have been treated with ZG-90 galv spray

8 off

Attach D0015255 Rack: Mod2 360 Long as shown.

Fix with M6 x 20 socket caps and A form washers

Once Rack is fixed to mounting plate, add 4 off m4 x 20 socket caps as shown





---

## Step 16 - Attach to cylinder rail

Attach assembly to cylinder rail as shown , using 4 off M6 x 12 socket caps and A Form washers  
Ensure bottom of slot adjustment is used as shown





