



R0015342 Bench Assemble Outfeed Parts

Assembly instructions

 Difficulty **Medium**

 Duration **2.5 hour(s)**

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Comments

Introduction

Tools Required

Standard Hex Key set

Standard spanner set

Standard screwdriver set

Bearing press

Test box for cylinder switch function

Parts Required

B0000034 Linear Bearing: Ø16 x 30 Compact (Metal Case Only) x 8

B0000236 90 Deg Grease Nipple M6 ST/ST x 4

D0004311 Side Eject Block x 2

D0004591 Side Eject Housing x 2

D0004592 Eject Housing Plate x 2

D0005200 Safety Dead Stop Block x 1

D0005201 Safety Dead Stop Backer (5357) x 1

D0005202 Safety Dead stop Yoke (5358) x 1

D0005203 Safety Slider Cap x 2

H0004626 Shaft 16mm: 275 Eject Push x 4

M0000101 Compression Spring 11 D 15 D 25 Long x 1

P0000035 Cylinder 25x160 x 2

P0000174 Fitting: Plug 1/4" BSP (Grubscrew Type x 2

P0000201 Flow Controller 6mm x M5 Elbow x 2

P0000367 16mm bore X 125 stroke with rod end clevis x 1
P0000369 Clamp to suit P0000367 x 2
P0000327 Reed Switch: Pneumax 1580U (5.0m Lead) x 2
P0001068 Valve Base: Type 41 2 Position Ø6 x 1
P0001085 Fitting: SMC 1/4" to Ø8 Swivel Elbow x 1
P0001163 1/4 bsp male silencer x 2
P0001186 Valve/ 5/2 smc x 2
P0001198 1/8 bsp 6mm speed controller x 4
P0000394 reed switch holder x 2
P0000444 Reed switch pneumax x 2

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 - Flow regulator setting

All flow regulator fittings should be set to the following

Adjust to the fully closed position (clockwise rotation)
Adjust back 2.5 turns (anti clockwise)

Step 3 - Assemble Valve Bank

Assemble valve bank orientated as shown

Use parts

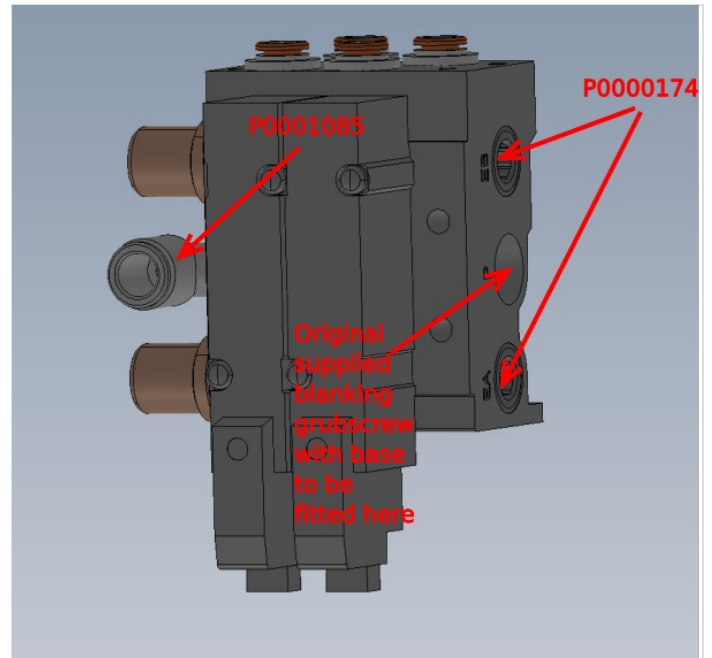
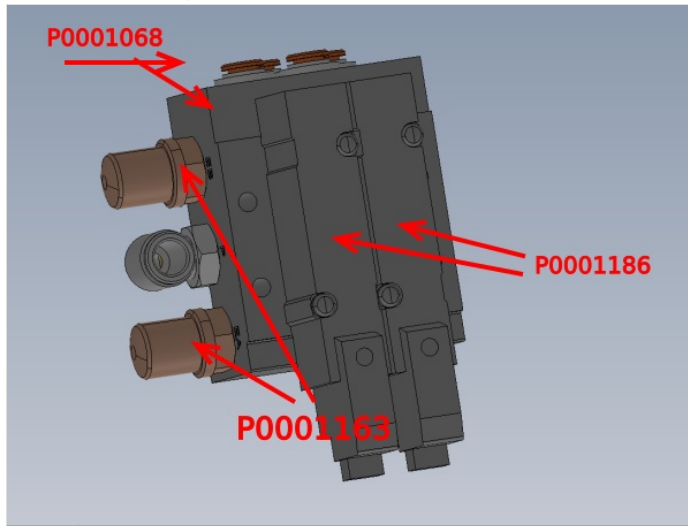
P0001068 Valve Base: Type 41 2 Position $\text{\O}6 \times 1$

P0000174 Fitting: Plug 1/4" BSP (Grubscrew Type x 2

P0001085 Fitting: SMC 1/4" to $\text{\O}8$ Swivel Elbow x 1

P0001186 Valve/ 5/2 smc x 2

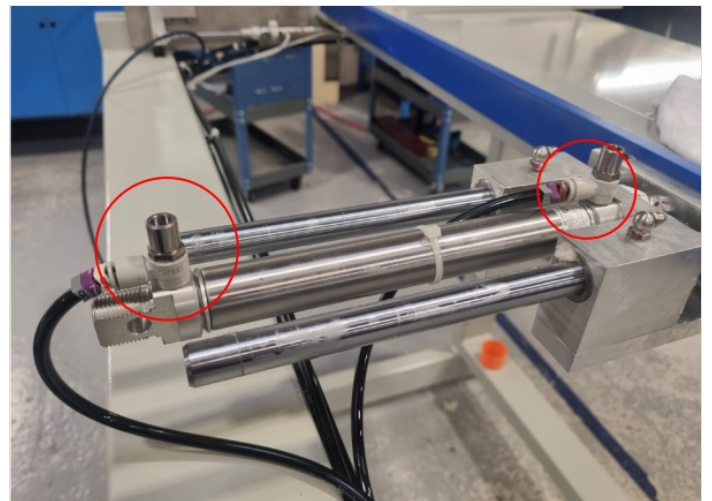
P0001163 1/4 bsp male silencer x 2



Step 4 - Updated position of air fittings on push eject cylinders

Air fitting position has been updated on the push eject assemblies

Air fittings now face the top as shown




Step 5 - Warning

Please note that the area indicated on cylinders is not to be used to tension cylinders when fixing. If this area is used to add rotational force when fitting it will cause the cylinder to fail



Step 6 - Assemble push eject

1 Updated photos for cylinder air fitting required. Ports now face top!

 ...White bearing seal must be removed from B0000034 bearings before fitting, this allows grease to enter bearings correctly when greased from greasing point

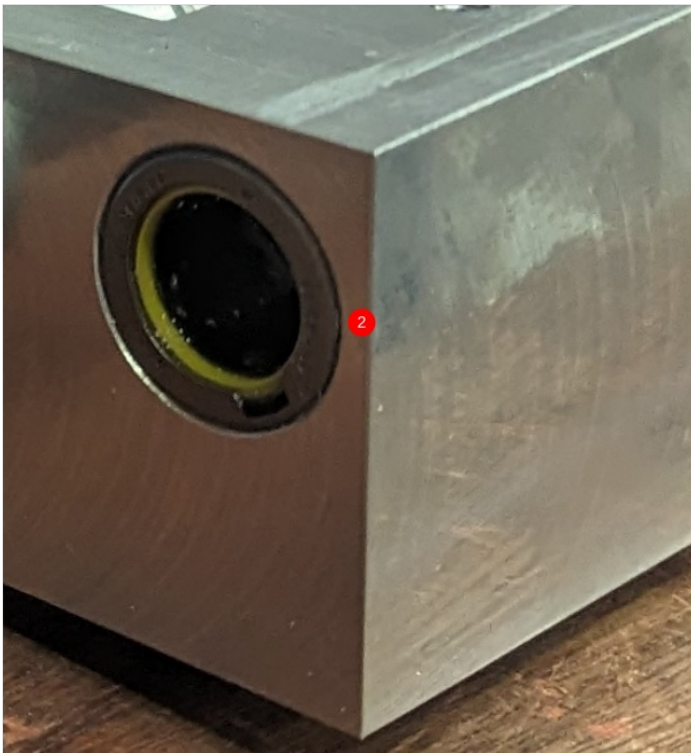
2 Fit B0000034 Linear Bearing 8 off into D0004591 Side Eject Housing using the bearing press. Ensure yellow seal of bearing faces outwards as shown

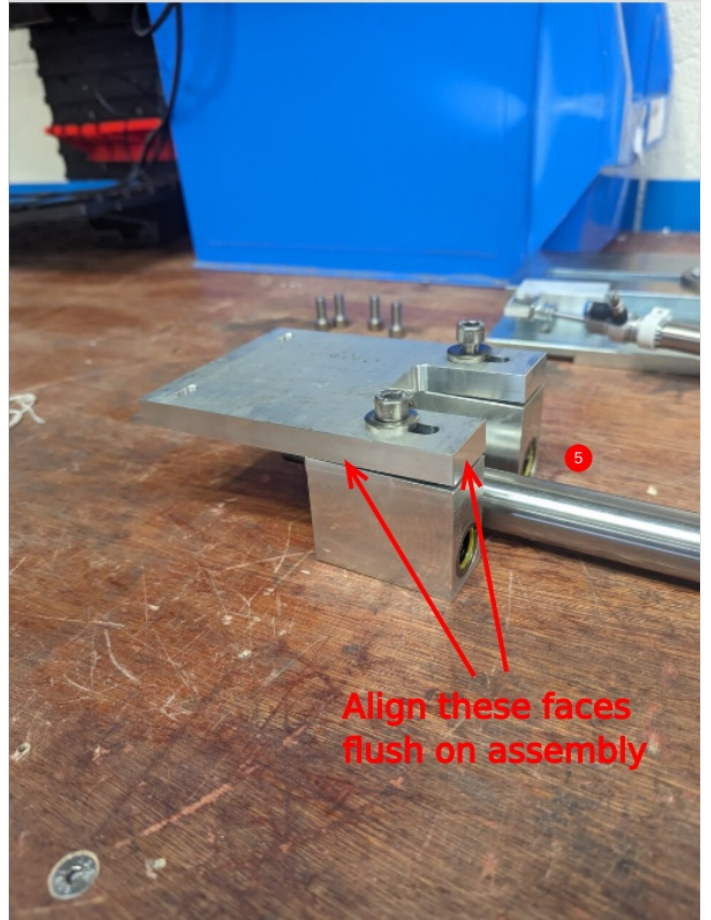
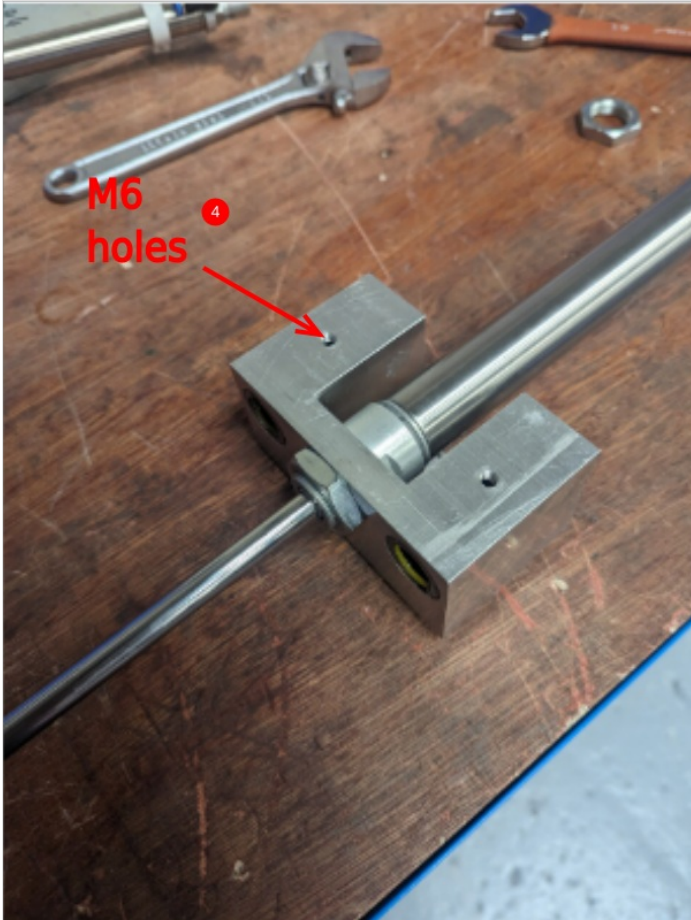
3 Attach 4 off P0001198 1/8 bsp 6mm speed controller to P0000035 Cylinder 25x160 2 off as shown

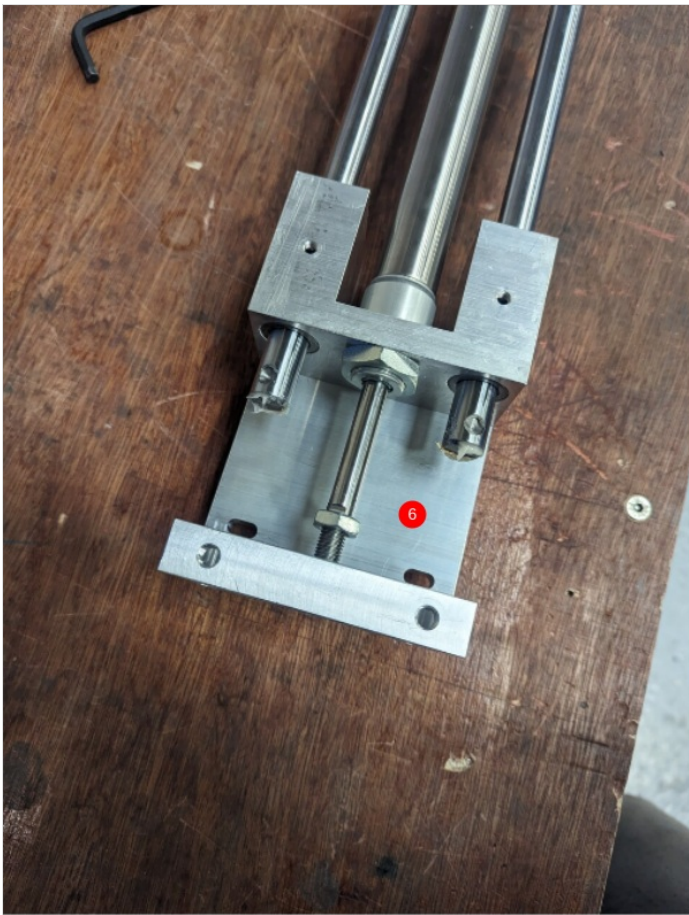
4 Fit assembled cylinder to bearing block orientated as indicated, and apply adhesive to large locking nut but do not tension

5 Fit D0004592 Eject Housing Plate and secure with M8 x 30 socket caps and Heavy M8 washers. Ensure these bolts are glued and tensioned correctly.

6 Insert 4 off H0004626 Shaft 16mm: 275 and fit 2 off D0004311 Side Eject Block orientated as shown. Wind in cylinder piston into eject block, then Secure shafts by aligning dimples and securing with m8 x 12 kcp grub screws







Step 7 - Finalise cylinders

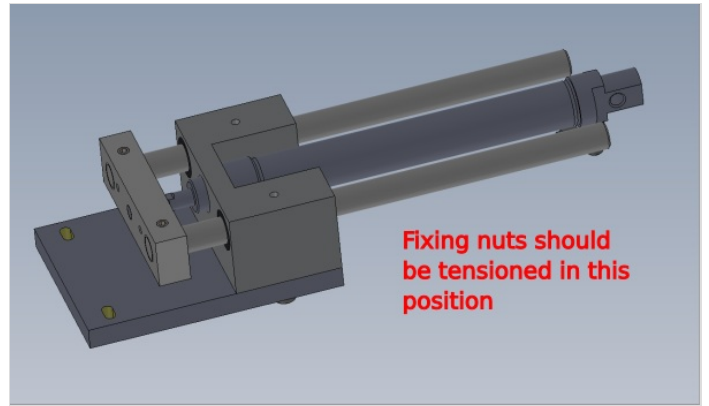
Updated photos for cylinder air fitting required. Ports now face top!

Finalise 32mm nut and 17mm nut on cylinders.

Ensure both nuts are tightened when the cylinder is the closed position, to aid alignment

To apply final tension to 32mm nut, it may be required to remove 1 off hardened shaft to allow correct access for tensioning nut

Once all fixings are tensioned correctly, cylinder stroke travel should be smooth and consistent at all points of travel. No tight spots should be present at any area.

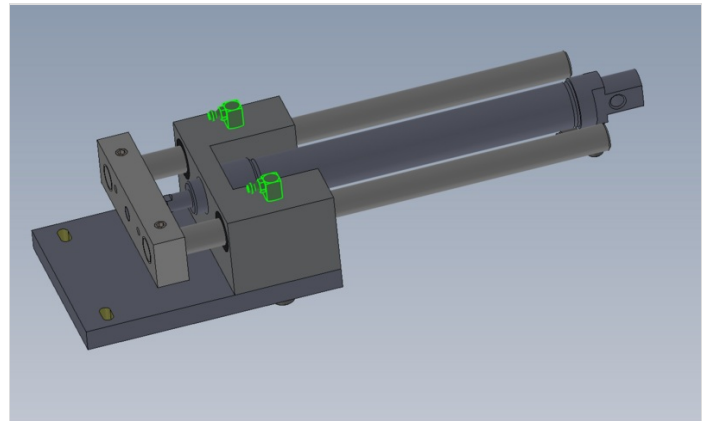


Step 8 - Fit grease points and grease

Updated photos for cylinder air fitting required. Ports now face top!

Fit 4 off B0000236 90 Deg Grease Nipple M6 as indicated (2 per assembly)

Use grease gun to apply grease to assemblies



Step 9 - Fit reed switches to 1 off push eject

Add identification markers to 2 off P0000327 Reed switch pneumax

Label as X134A and X135A

Use P0000394 reed switch holder to secure to cylinder, orientate as shown

Use test box to set switches in correct position

Dokit link for upgrade

[Guide_to_Fitting_Eject_Push_Sensors_on_ZX_Machines](#)



Step 10 - Assemble Safety gate cylinder

1 Fit 2 off P0000201 Flow Controller 6mm x M5 Elbow as shown

2 Remove fixing nut shown as not required

3 Fit 2 off P0000369 reed switch clamp as shown

4 Identify using markers 2 off P0000444 reed switches as X189 and X190

5 Fit P0000444 switches as shown . X190 goes to base, X189 goes to nose of cylinder. Use test box to accurately set and check function of reed switches

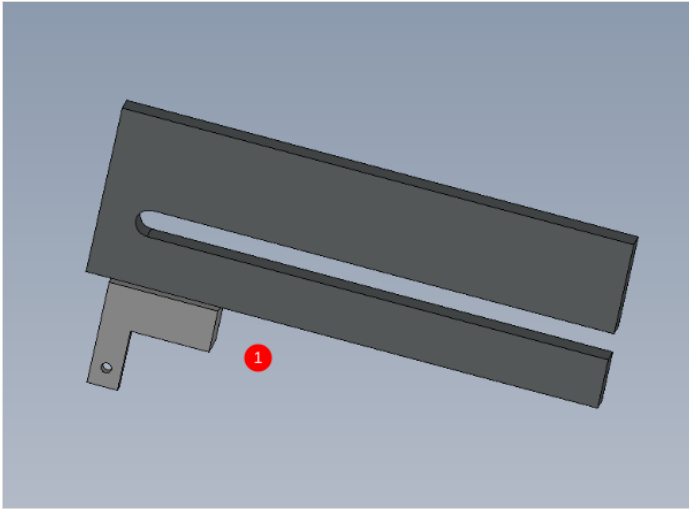


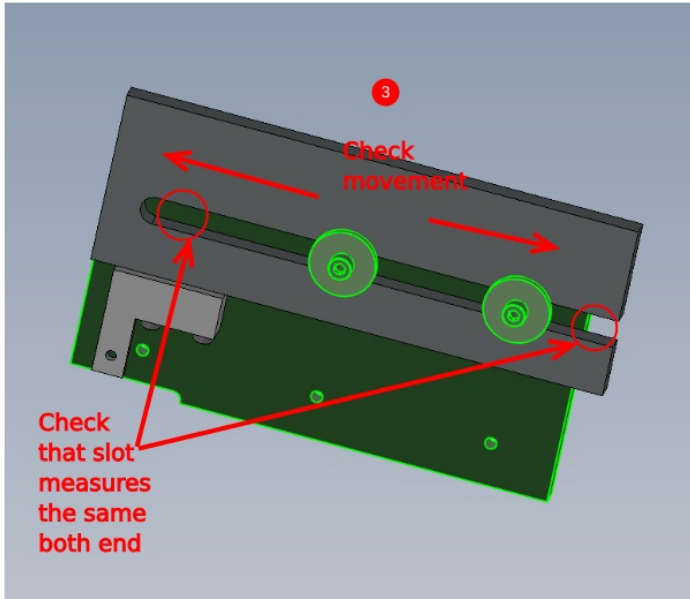
Step 11 - Assemble safety gate

1 Attach D0005202 Safety Dead stop Yoke to D0005200 Safety Dead Stop Block as shown using M6 x 35 cap heads and A form washers

2 Attach dead stop block to D0005201 Safety Dead Stop Backer using D0005203 Safety Slider Cap 2 off. Fix as shown using M8 x 50 socket caps M8 penny washers and backed off with a M8 nyloc nut and M8 washer as shown

3 Ensure part moves freely in the direction shown





Step 12 - Attach cylinder

Attach pre assembled cylinder as shown

Ensure indicated nut is glued and tight

