


R0015285 Bench Assemble Pneumatic Rail

Instructions to bench assemble pneumatic rail

 Difficulty **Medium**

 Duration **2 hour(s)**

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Comments

Introduction

Tools Required

Standard spanner set

Standard hex key set

Pipe cutters

Standard screwdriver set

Parts Required

D0016300 x 1

P0001074 x 8

P0001101 x 2

P0001102 x 2

P0001071 x 1

P0001186 x 10

P0001068 x 1

P0000470 x 1

P0001040 x 2

P0000010 x 6

P00000007 x 2

P0000142 x 1

P0001008 x 2

D0010167 x 2

C0001018 x 2

P0001022 x 2

P0001009 x 2

P0001108 x 4

P0001166 x 1
P0001106 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 - Handing

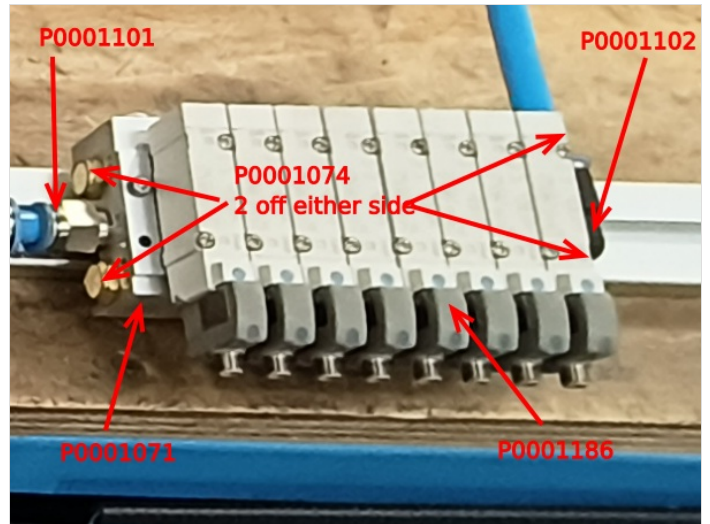
If Machine is R to L build rail as shown

If machine is L to R build rail mirrored to layout shown

Step 3 - Assemble valve bank 1

Assembly valve bank as shown using

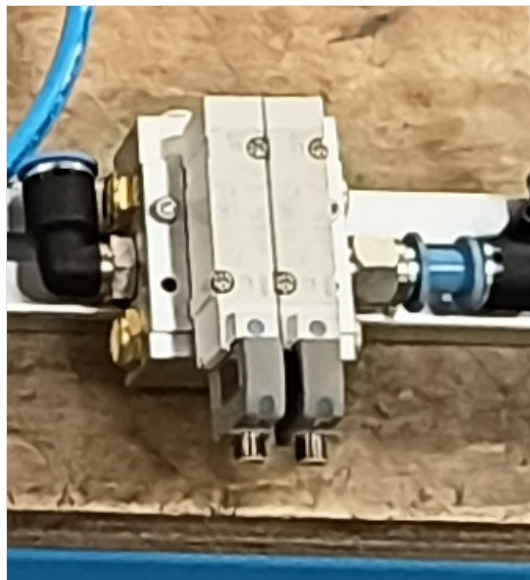
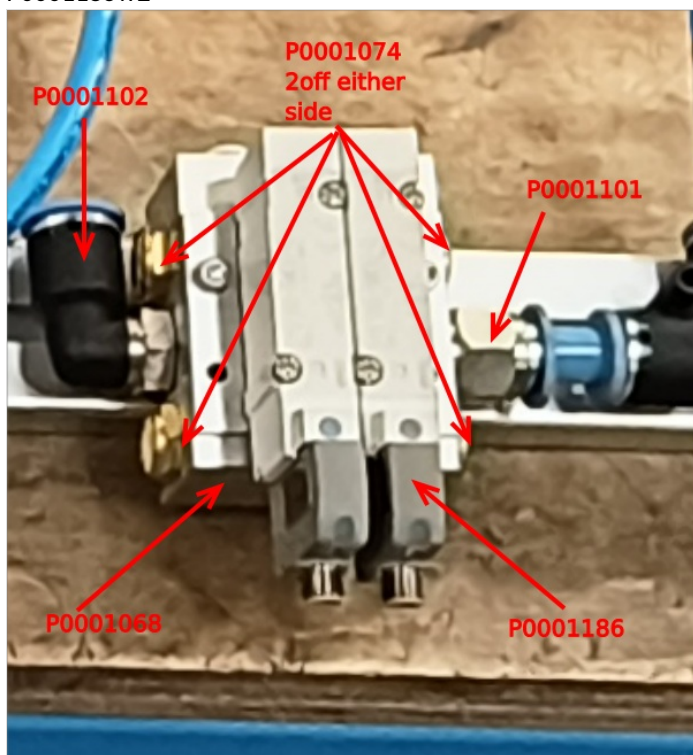
P0001074 x 4
P0001101 x 1
P0001102 x 1
P0001071 x 1
P0001186 x 8



Step 4 - Assemble valve bank 2

Assemble valve bank as shown using

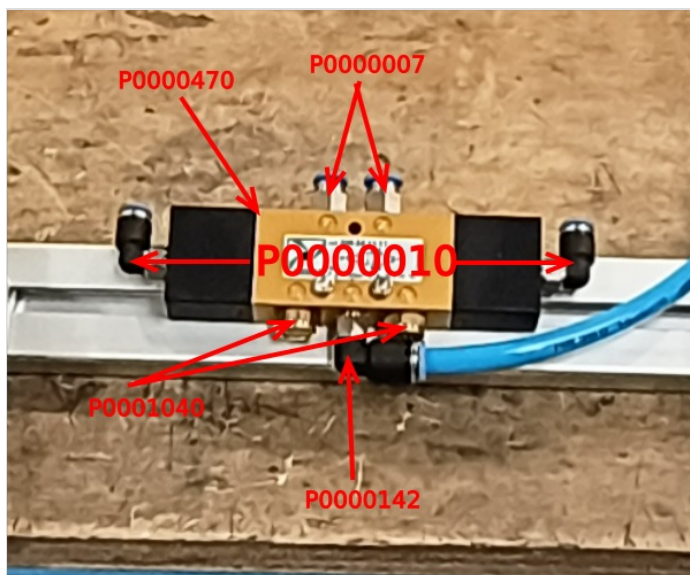
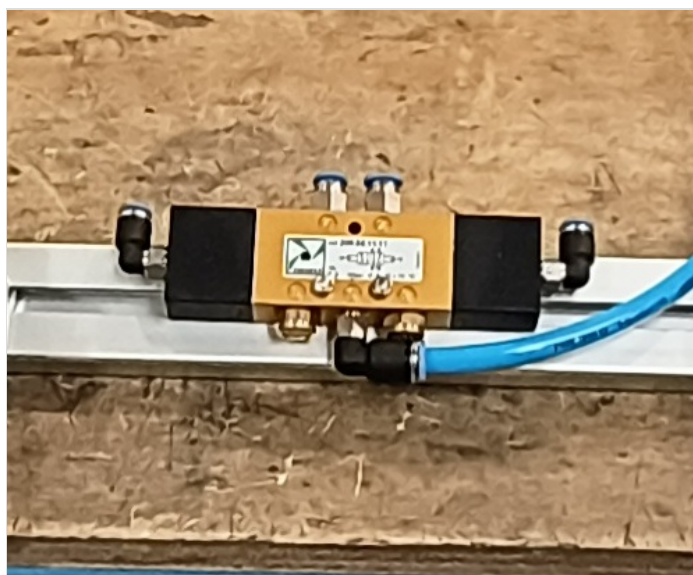
P0001074 x 4
P0001101 x 1
P0001102 x 1
P0001068 x 1
P0001186 x 2



Step 5 - Assemble valve

Assemble fittings onto valve P0000470 using

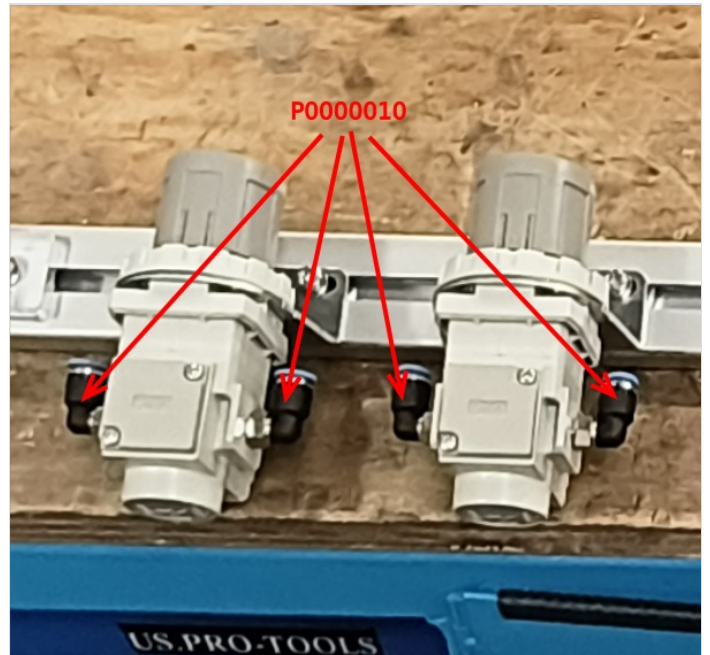
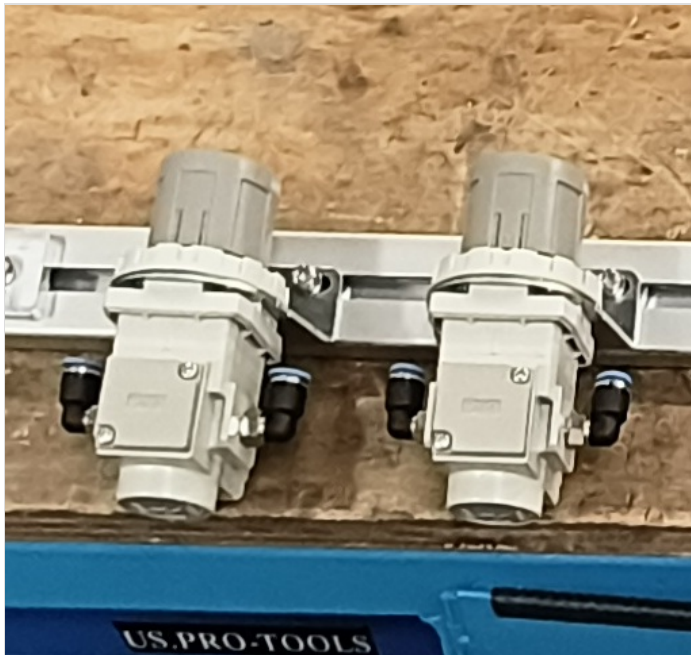
P0001040 x 2
P0000010 x 2
P0000007 x 2
P0000142 x 1



Step 6 - Assemble regulators

Assemble 2 off P0001008 regulators with fittings as listed

P0000010 x 4



Step 7 - Assemble Ethercat boxes

Mount 2 off C0001018 Ethercat boxes to mounting plates
D0010167 2 off using M3 x 20 Pan head fasteners



Step 8 - Attach trunking

Attach a length of 75mm x 25mm trunking @ 1310mm, 120mm from non slotted end to rear of maytec and use M5 x 6 button sockets to secure

Ecr raised to add holes to maytec section on 05/09/23

Holes will required drilling until ecr finalises

1st m5 hole 130mm from non slotted hole end , then spaced at 250mm Drill and tap m5

Step 9 - Mount assembled components

Mount assembled components onto mounting bar D0016300 as shown

Space as follows

Position 1st ethercat box 100mm for end of maytec beam (non slotted hole end)

All mounted components to be spaced 100mm apart

Except for

Ethercat boxes to butt together

Valve to valve bank 1 , set to 70mm

Valve B1 and Valve B2 spaced at 130mm

Use following fixings

Each regulator mounted with P0001022 bracket and P0001009 nut, fastened with M5 x 12 socket caps and washers

Valve bank 1 and 2 secured with M4 x 40 socket caps and M8 motor plate washers, spaced away from maytec rail with 2 M8 washers to enable valve to sit straight

Ethercats Mounted with M6 x 16 socket caps and A form washers.

Valve mounted with M4 x 30 socket caps, and M4 D nuts. (one d nut will require cutting to shorten to allow fitment)

Use D nuts to provide fixing points into rail

Step 10 - Connect Air feed pipes

Additional photo required to show additional 4th 12mm tee connection

Connect 12mm and 8mm blue air lines as shown

Use fittings

P0001108 x 4

P0001166 x 1

p0001106 x 1

