


# R0015114 Bench Assemble Valve Banks and Regulators

Assembly details for pneumatic components

 Difficulty **Medium**

 Duration **2.5 hour(s)**

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Comments

## Introduction

### Tools Required

Standard hex key set

Standard spanner set

Standard HSS drill set

Standard tap set

### Parts Required

H0007998 Regulator internal mount 5 way x 1

P0000010 Elbow Adaptor 6mm - 1/8 BSPT (Taper thread) x 14

P0000020 Fitting: Plug 1/8" BSP (Grubscrew Type) x 9

P0000021 air gun assembly x 1

P0000024 hex nipple 1/4 x 3

P0000058 Regulator Mounting Kit x 1

P0000074 Elbow Adaptor 8mm - 1/8 BSP (Pneumax not acceptable) x 2

P0000096 Fitting: Brass Reducing Bush 1/2 - 1/4 x 2

P0000142 Elbow Adaptor 8mm - 1/8 BSP x 2

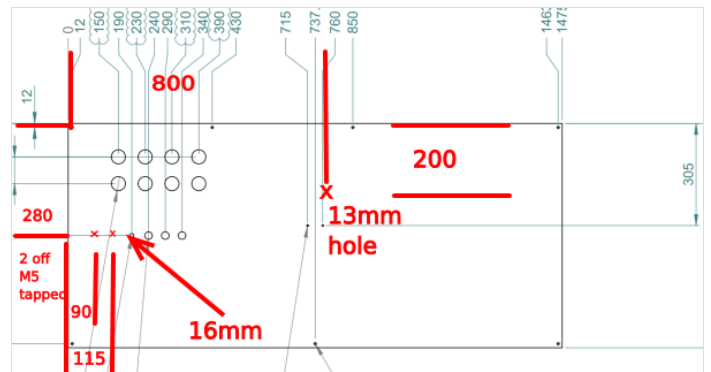
- P0000145 tee equal 1/4 x 3
- P0000159 Fitting: Stem Blanking Plug 6mm x 2
- P0000277 Fitting: Bulkhead Female 8mm x 1/4 BSP x 1
- P0000278 Regulator 0-2 bar x 1
- P0000332 Regulator with Gauge G1/8" 0-8 bar x 8
- P0000361 1/4" Male Probe to suit 1/4" PCL Female coupling x 1
- P0000419 Air Service Unit OH (P0283) x 1
- P0001071 Valve base type41 8 position x 1
- P0001074 Fitting: 1/4" BSP Hex Head Silencer x 4
- P0001101 Male straight 1/4 bsp to 12mm x 2
- P0001102 Fitting male elbow 12mm 1/4 x 4
- P0001105 Bulkhead straight 12mm x 6
- P0001186 Valve. 24v dc smc x 8

## Step 1 - Unless otherwise stated

Use Loctite 243 on all fasteners

Use Loctite 572 on all threaded pneumatic connection

Pen mark all fasteners to show finalised

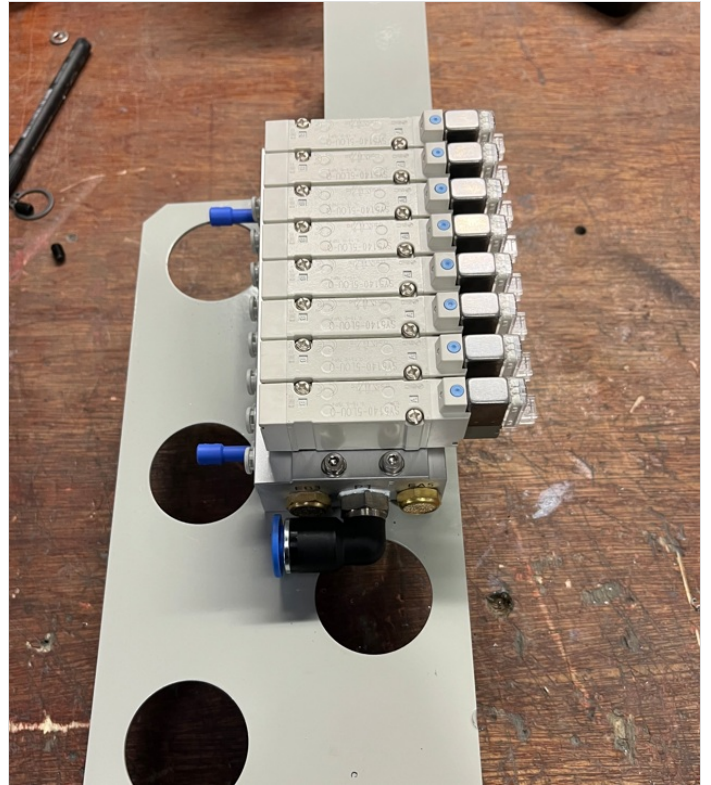
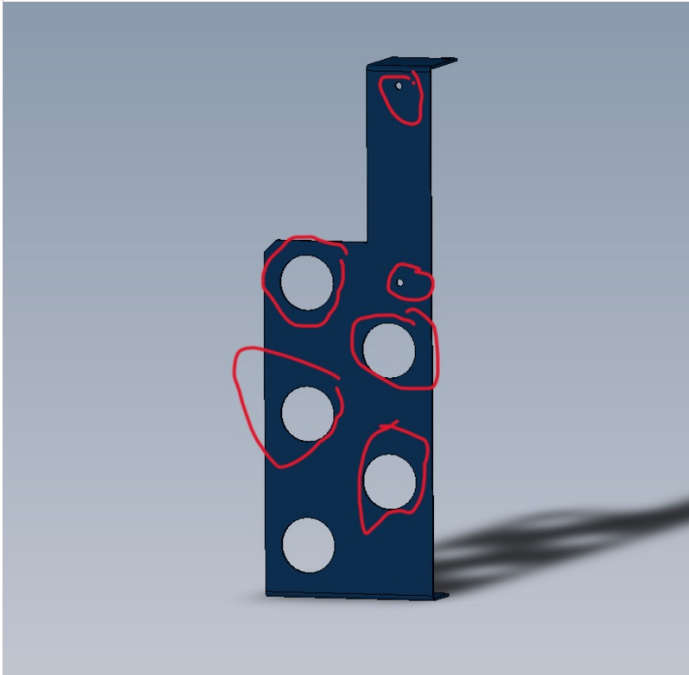


## Step 2 - Ecr raised

Ecr raised to amend regulator bracket to remove redundant holes and add fixing holes for valve bank

Use part as is until process to update is complete

Drill regulator bracket M4 to suit valve base

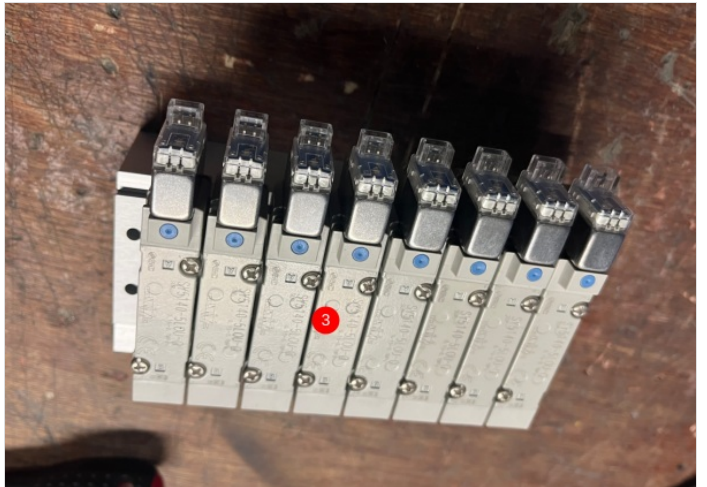
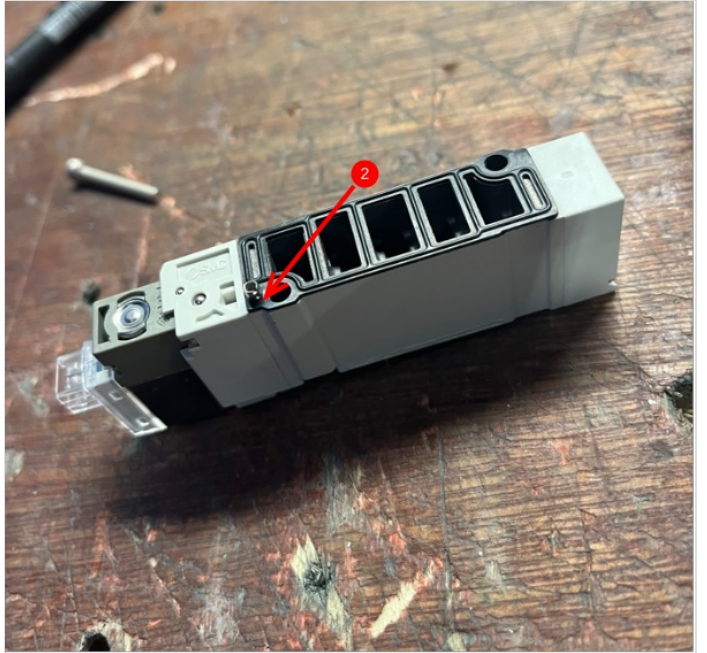
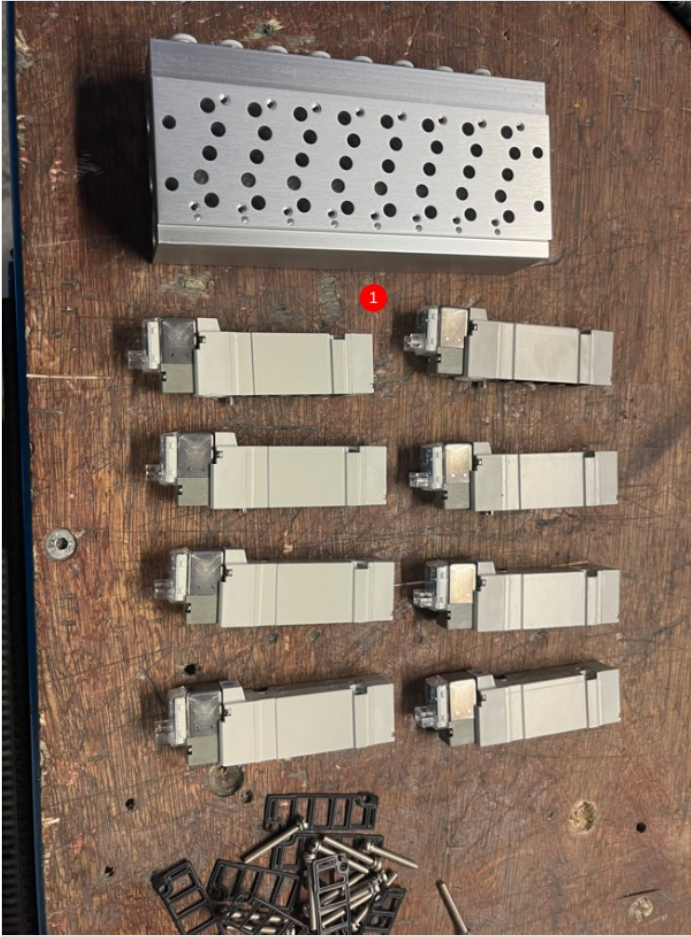


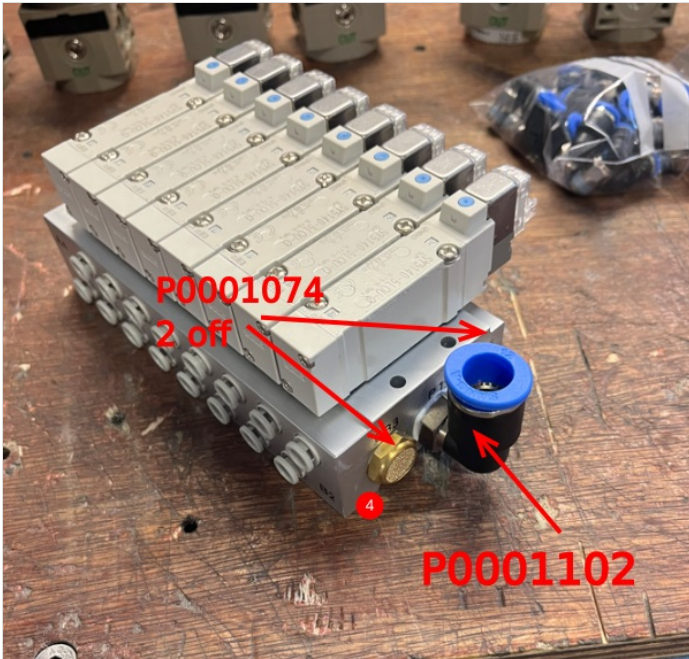
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## Step 3 - Assemble valve bank

Assemble valve bank

- 1 Prepare parts
- 2 Fit gasket to valves . Ensure gasket sits flat and aligned
- 3 Fit valves to valve bank base
- 4 Attach Air feed connection and exhausts
- 5 Add 6mm blanks

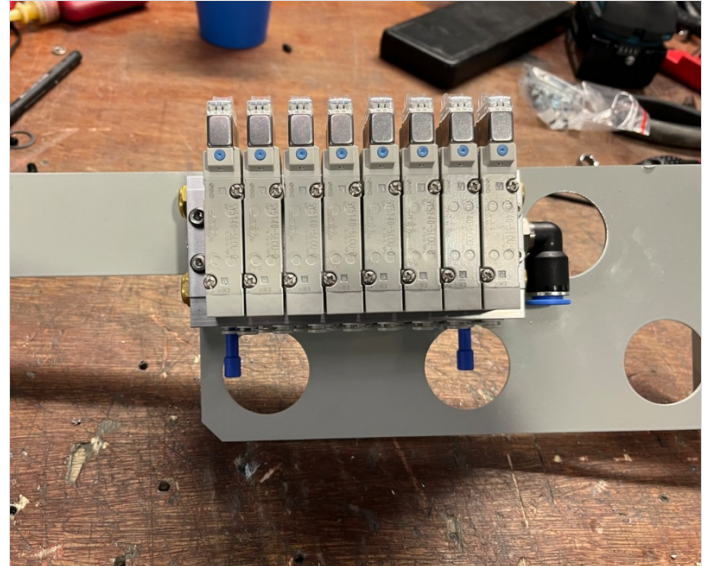
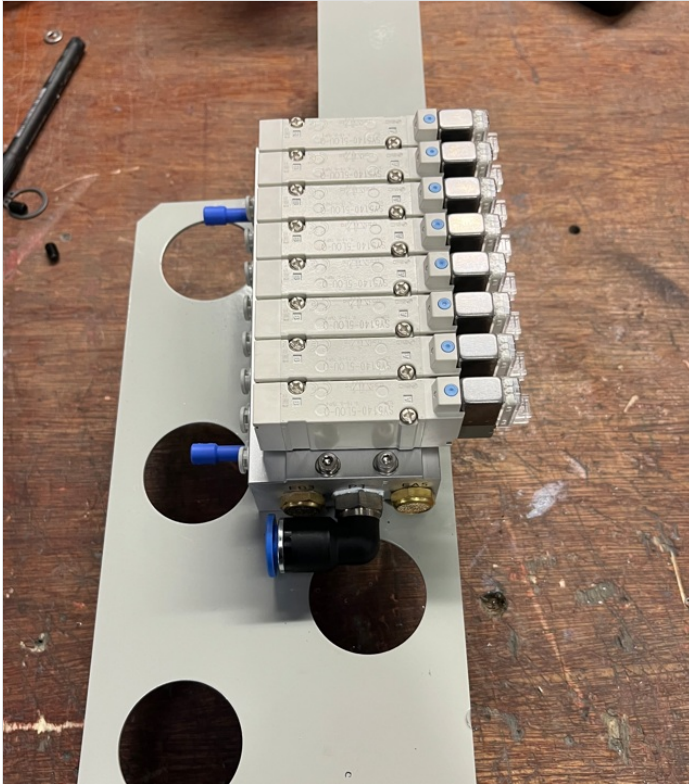




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## Step 4 - Attach valve bank

Attach valve bank to regulator bracket using 4 off M4 x 40 socket caps , M4 washers and M4 nyloc nuts



## Step 5 - Assemble regulators

Ensure in and out ports at 90 degrees to each other are used as shown

1 Assemble 7 off regulators with 6mm elbows and spare port blanked

2 Assemble 1 off regulator with 8mm elbows and spare port blanked

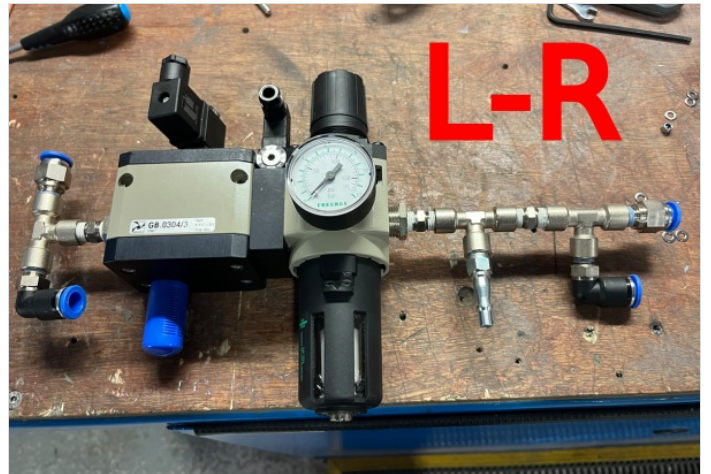
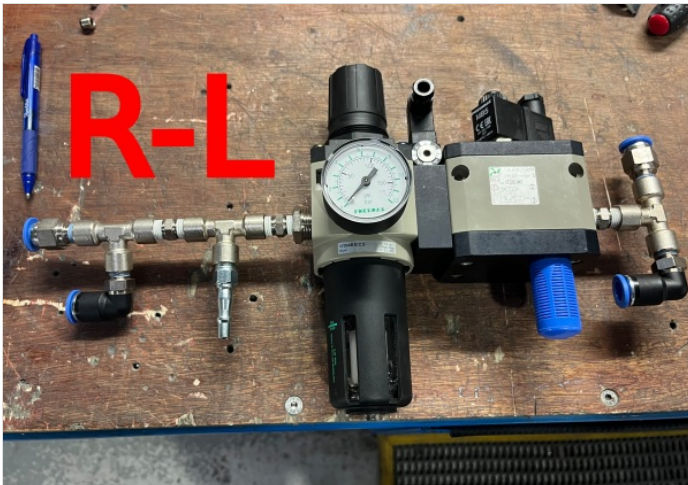


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## Step 6 - Air service unit Handing

Reference for assembly of handed variants

R-L and L-R shown for correct assembly of following steps



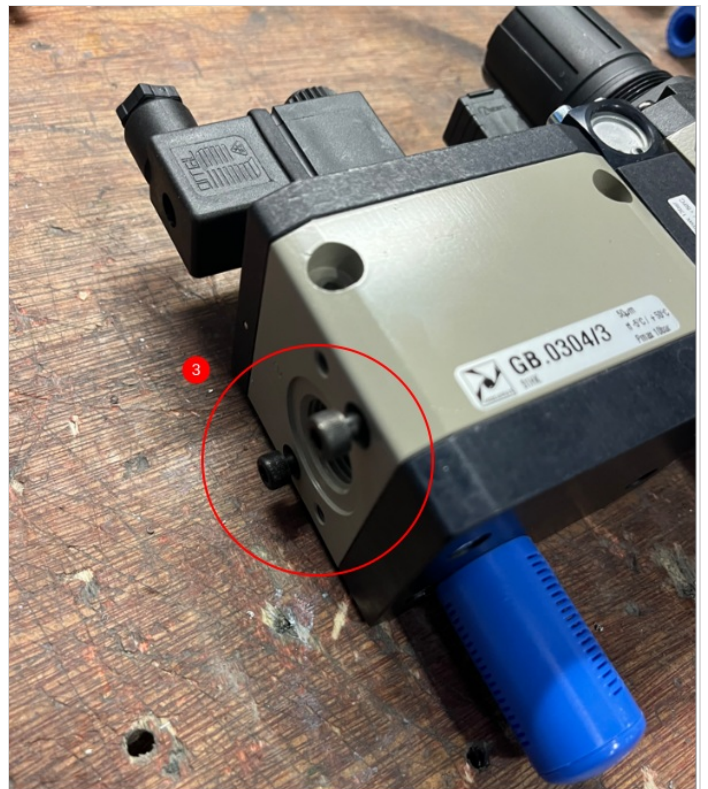
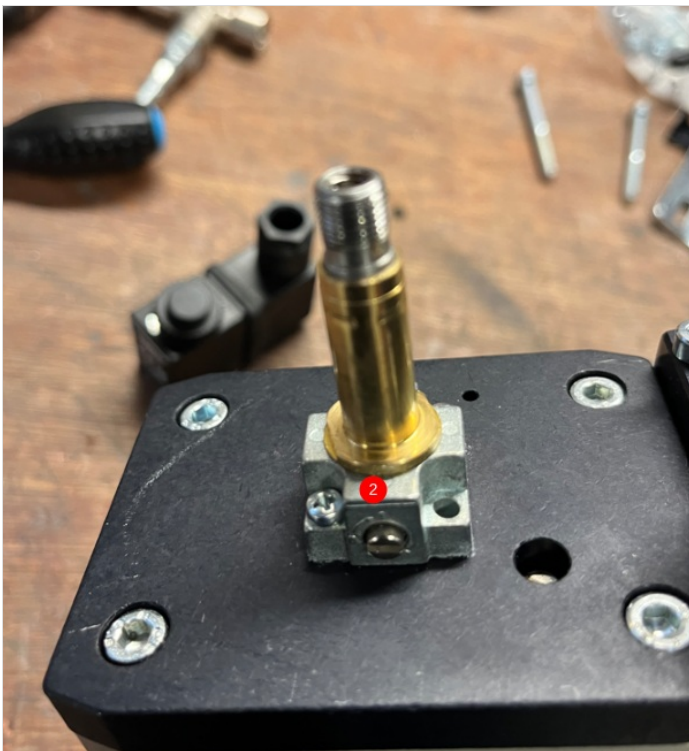
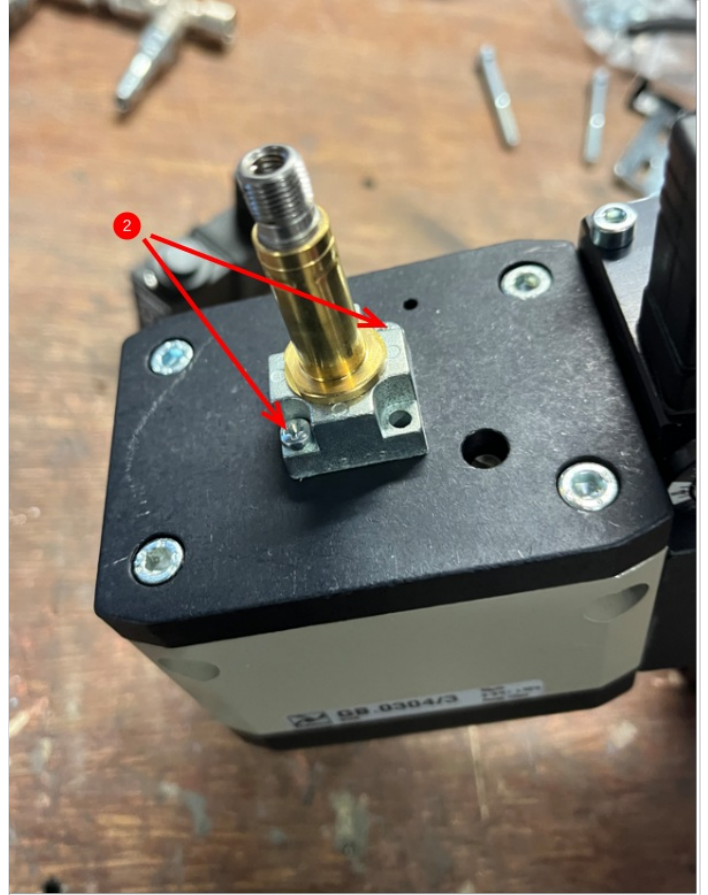
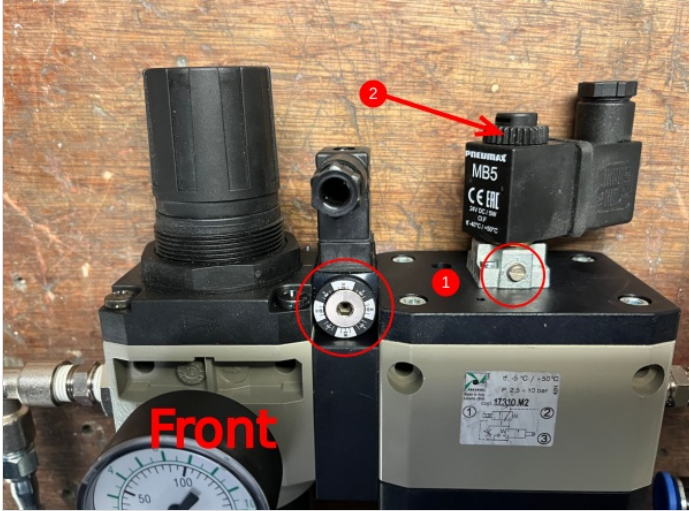
## Step 7 - Air dump over ride and pressure switch

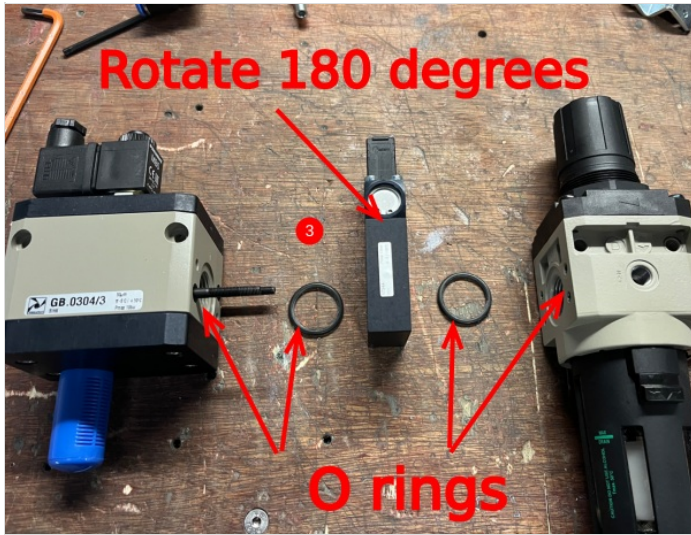
1 It is vital that the air service unit override switch and air pressure sensor are accessible from the front of the unit.

To correct the position, the unit can easily be rebuilt.

2 Remove top plug by unscrewing cap and pulling plug off. Remove 2 off screws indicated and rotate over ride 180 degrees and refix with screws. Replace Cap and plug

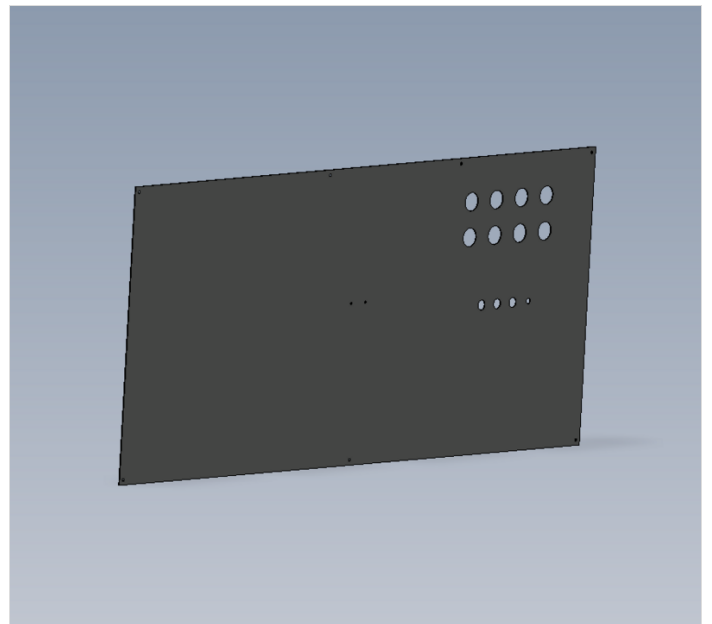
3 Remove 2 off M5 socket caps and dismantle. Rotate pressure switch 180 degrees and reassemble. Ensure O rings shown are correctly seated when rebuilding





## Step 8 - Mount air service unit

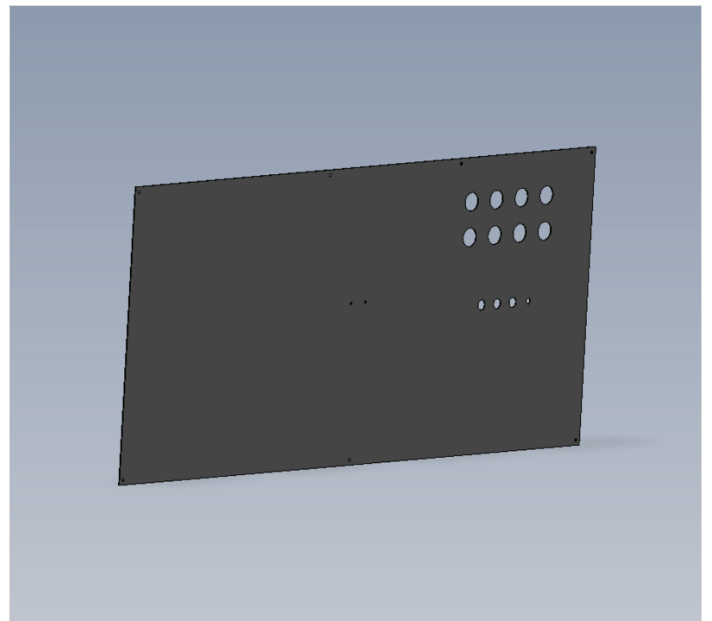
Mount air service unit to front lower panel



## Step 9 - Mount regulators

Mount regulators to front lower panel

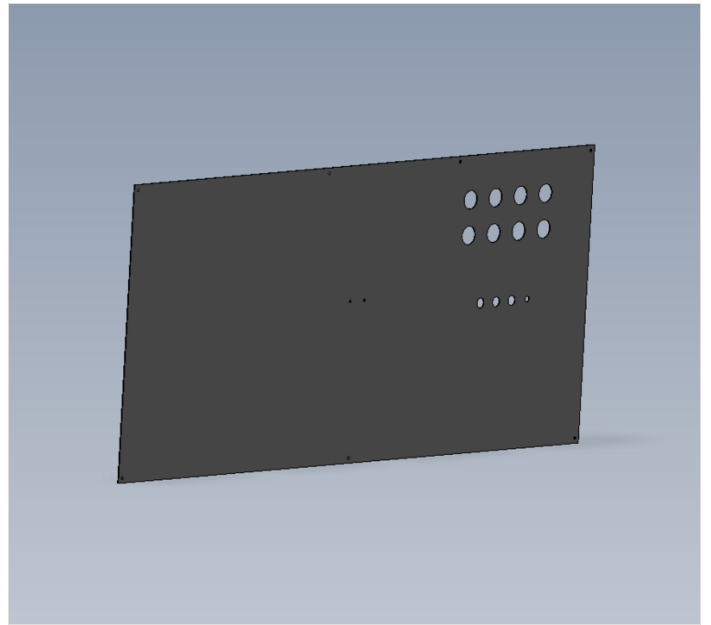
As viewed from front, bottom right regulator should have 8mm fittings





## Step 10 - Mount bulkheads

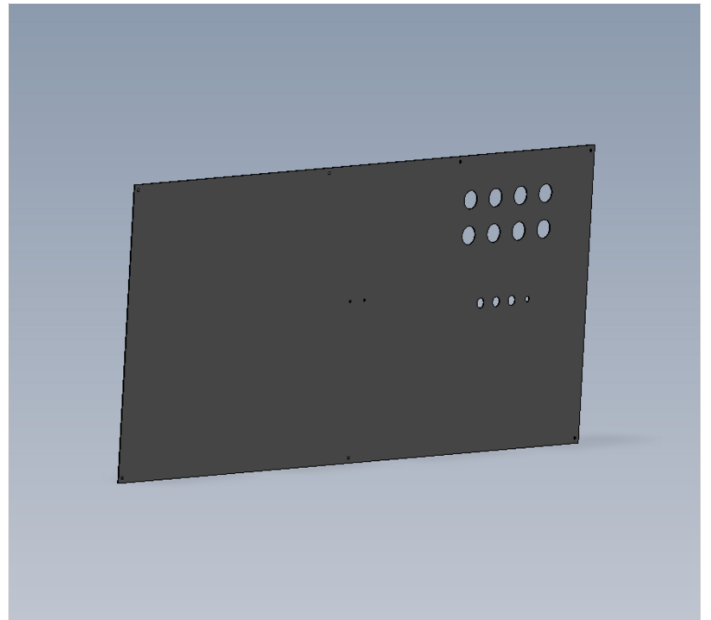
Mount 3 off 12mm bulkheads to lower panel



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## Step 11 - Assemble and mount 0-2bar regulator

Assemble and mount 0-2 bar regulator to lower front panel



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## Step 12 - Fit and connect air gun assembly

Fit 8mm bulkhead to lower front panel

Fit air gun assembly

Connect 8mm red pipe from reg OUT to bulkhead



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## Step 13 - Fit cable gland

Fit cable gland for air service unit



## Step 14 - Fit labels for regulators

Print and Attach labels for regulator's

Labels to be added both sides of panel

From top left to bottom right

Y350 Clamp Infeed Top

Y351 Clamp Infeed Side

Y386 Clamp Middle Top

Y386 Clamp middle Side

Y395 Clamp V Top

Y395 clamp V Side

Z Axis Support

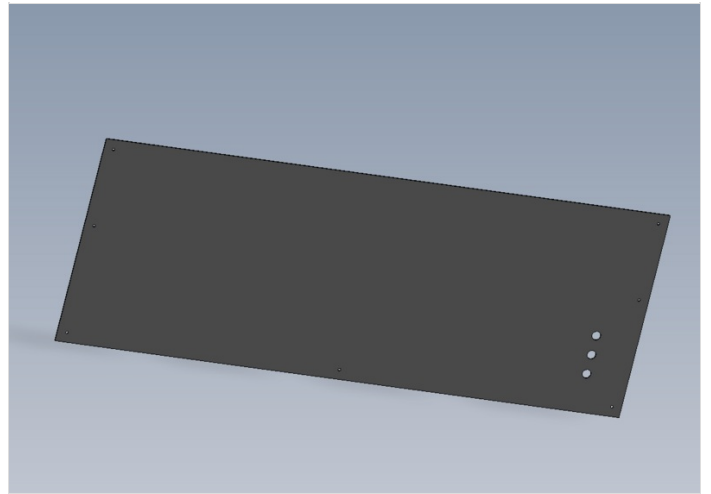
VZ Axis Support



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## Step 15 - Lower rear panel bulkheads

Fit 3 off 12mm bulkheads to rear lower panel



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## Step 16 - Label bulkheads

Print and fit Labels to identify bulkheads as

12mm red 2 off

12mm blue 1 off

