

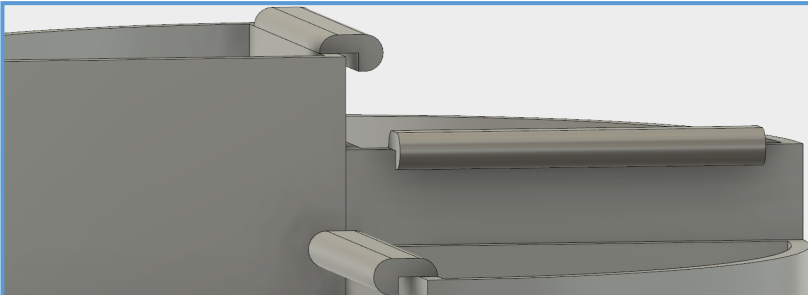
Stationery Pots - Clips and Joints

Fusion 360 Tutorial



Before using these instructions, it is helpful to watch this video screencast of the CAD drawing actually being done in the software. [Click this link for Video instructions](#)

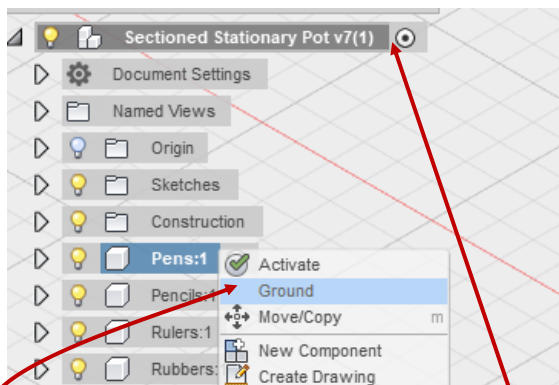
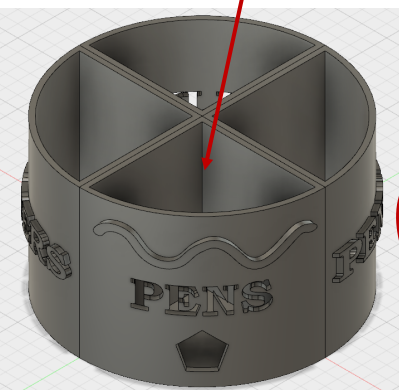
Overview



This is a follow on tutorial from creating the sectioned stationery pot. We will be creating a clip for the pots so that they can be slotted together. Also will look at as-built joints and how they can simulate how the pots would slot together in real life.

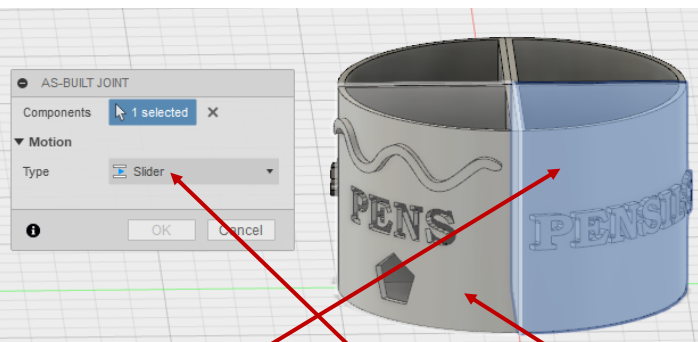
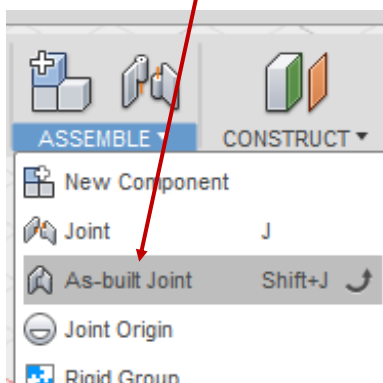
Applying As-Built Joints to the Sections

1) After the previous tutorial you should have a stationery pot made up of 4 sections that you have added your own designs to.

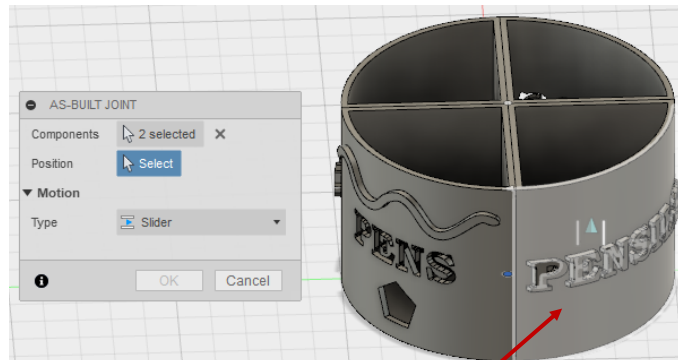


2) Ensure the overall assembly (the first folder) is activated. Then right click on your first component, and select the "Ground" option. This ensures that the components can't move.

3) Initiate the "As-built Joint" in the "ASSEMBLE" menu. Or to use the shortcut press "SHIFT" and "J" on the keyboard.

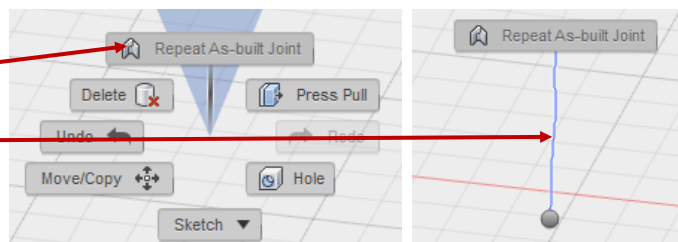


4) Change the "Type" to "Slider". Select your second section then select your first section (this is the one you have grounded).

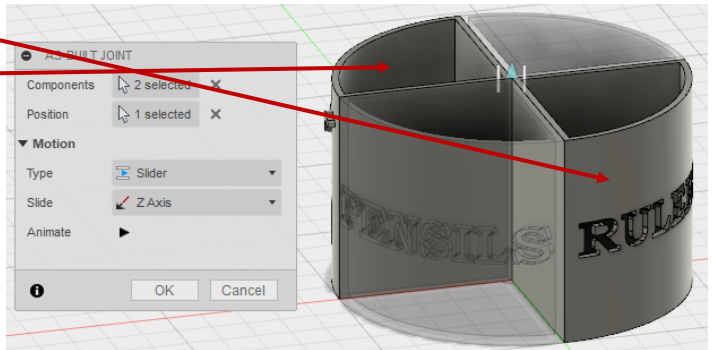


5) Now double click on your second section to set the position of the joint. Click "OK".

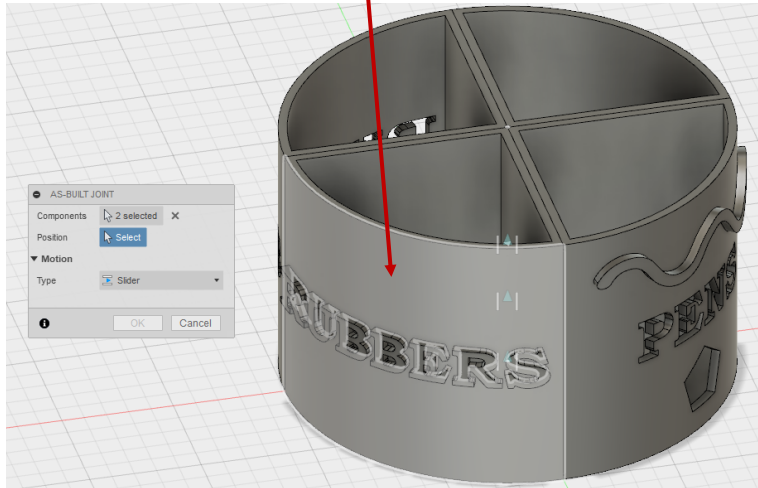
6) Re-activate the as-built joint tool by right clicking in empty space and select the top option. Or hold down your right mouse button and swipe upwards in empty space.



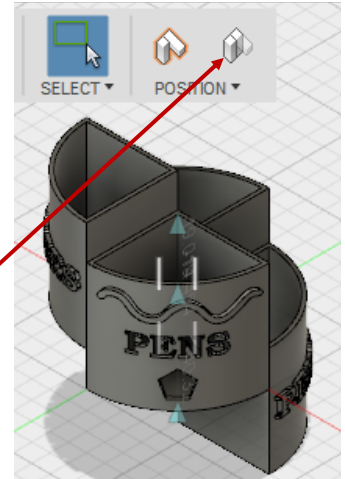
7) Again make the type a slider joint. Then select your third section followed by selecting your first section. Then double click on your third section to position the joint. Click "OK".



8) Re-activate the as built joint again. This time select your fourth sections then your first section. Position the joint on the fourth section. Click "OK".



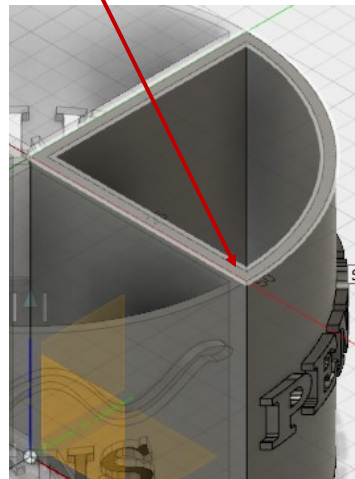
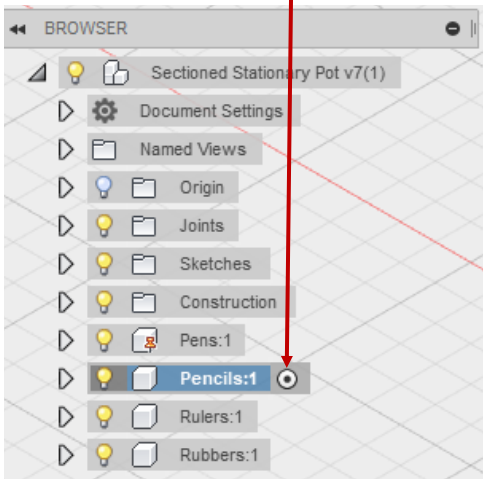
9) Now play around with moving the sections by clicking and dragging them around the screen. Click on the "Revert" button to move them back to their original position.



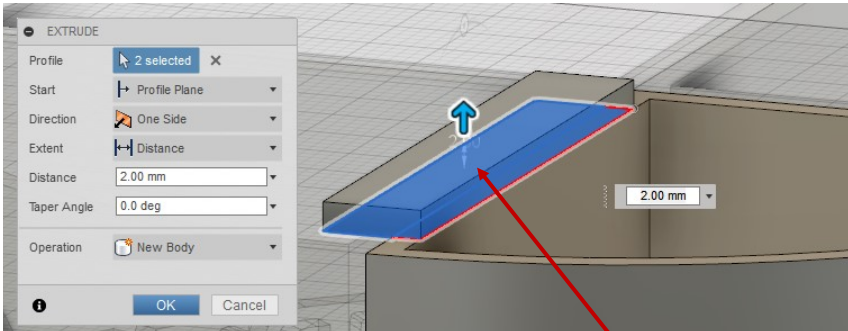
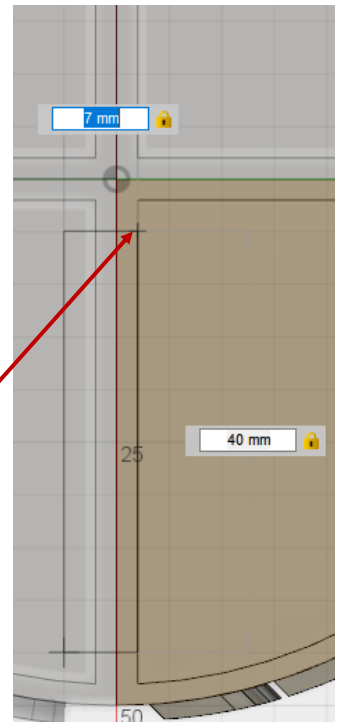
Creating Clips for the Sections

10) Activate your second component in my case this is my "Pencils" section.

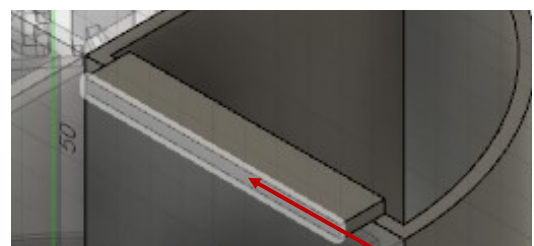
11) Press "R" on your keyboard to activate the 2-point rectangle tool. Then select the top face of your section to sketch on.



12) Draw a 7mm by 40mm rectangle start from the inside edge of your active component about 3mm away from the corner point of the section.

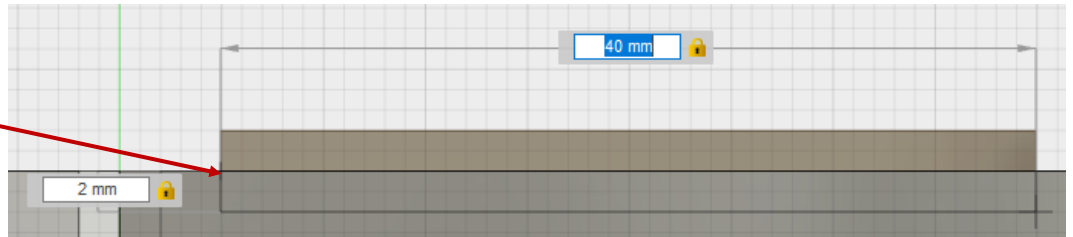


13) Press "E" to extrude. Select your rectangle and extrude it 2mm up. Ensure you make it a new body. Click "OK".

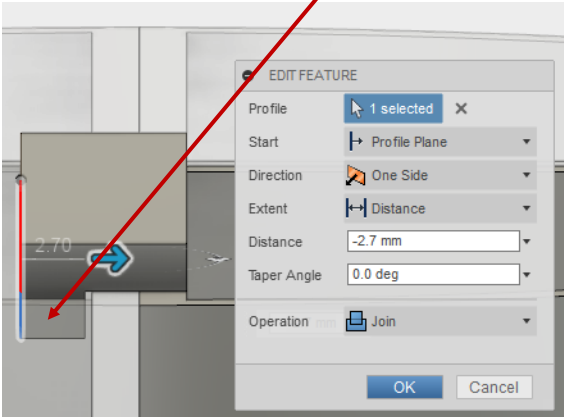


14) Initiate the 2-point rectangle again this time select the side face of your extruded rectangle to sketch on.

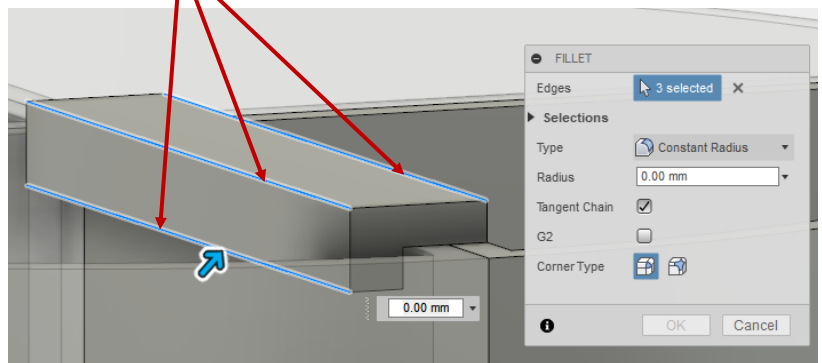
15) Draw a 2mm by 40mm rectangle down starting from the bottom left edge of the extruded rectangle.



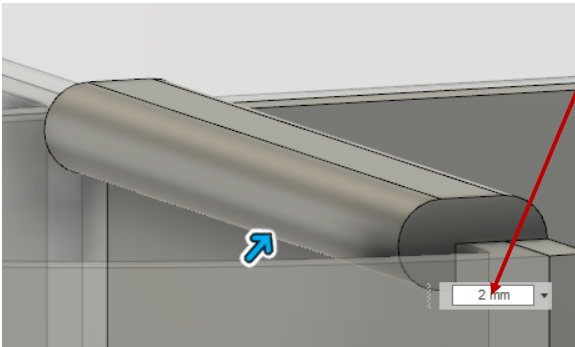
16) Extrude your sketch -2.7mm. Ensure the operation is "Join".



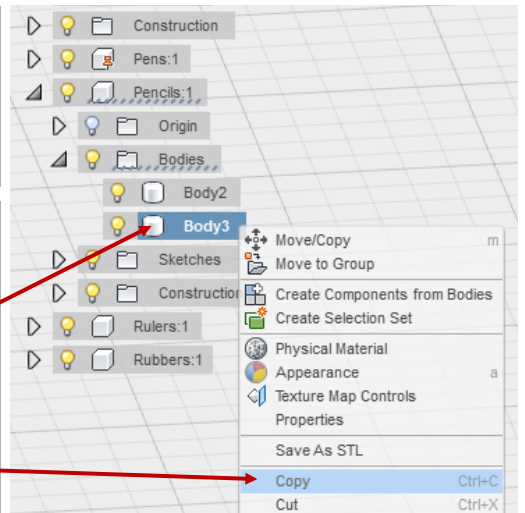
17) Press "F" on your keyboard to initiate the fillet tool. Select the 3 edges show in the picture.



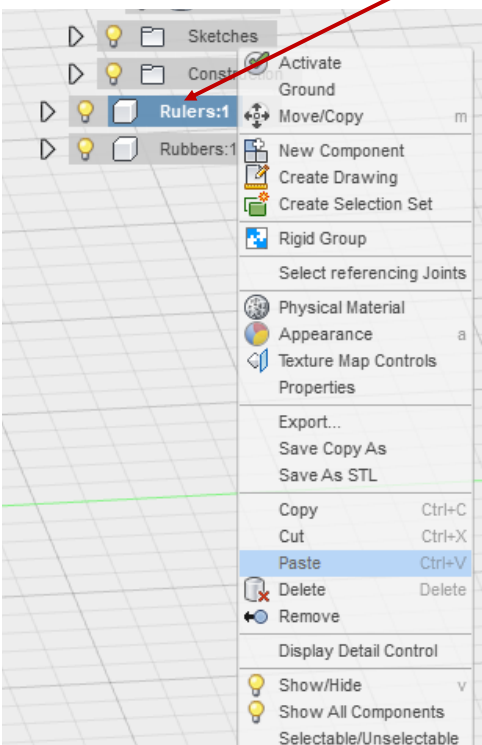
18) Set the radius of the fillets to 2mm. Press "Enter" on your keyboard.



19) Find "Body3" (This is the clip body) in your second components "Bodies" folder. Then right click and select "Copy".

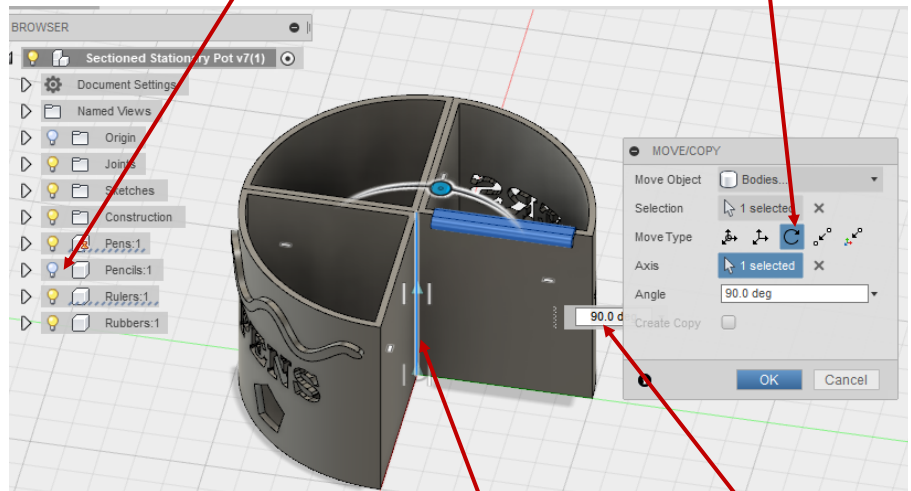


20) Right click on your third component and Paste the clip body into it.



21) Turn the light bulb off on your second component.

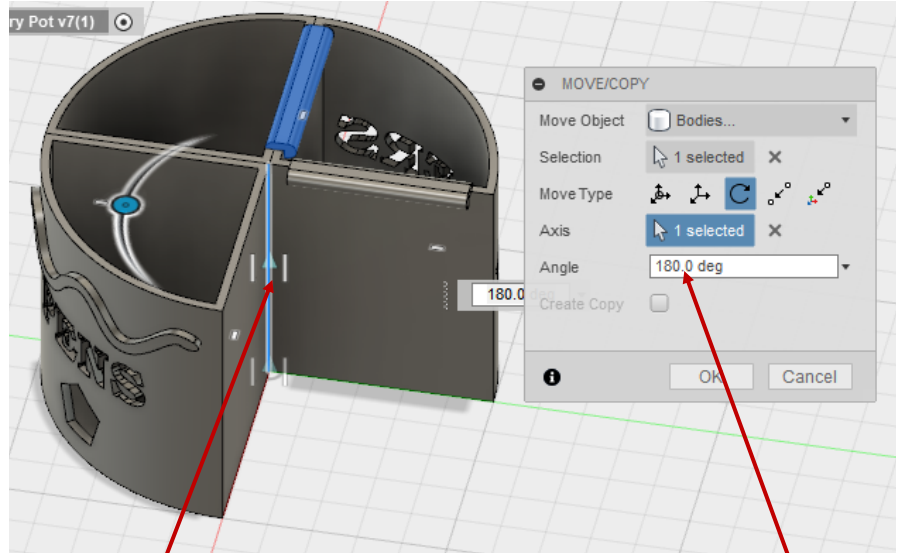
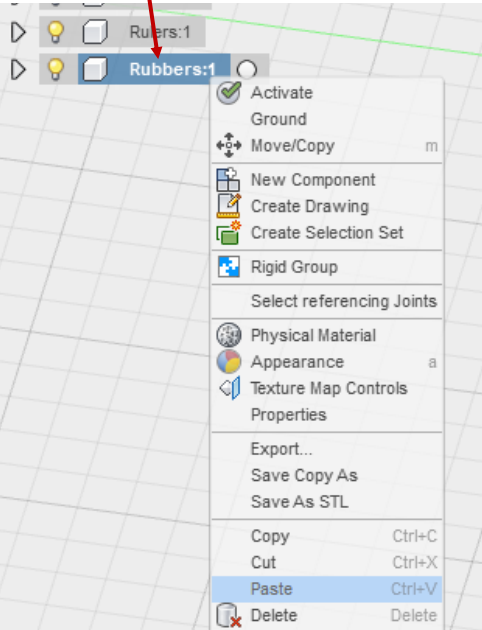
22) Then change the "Move Type" to rotational.



23) Then select the centre vertical edge of one of the other components.

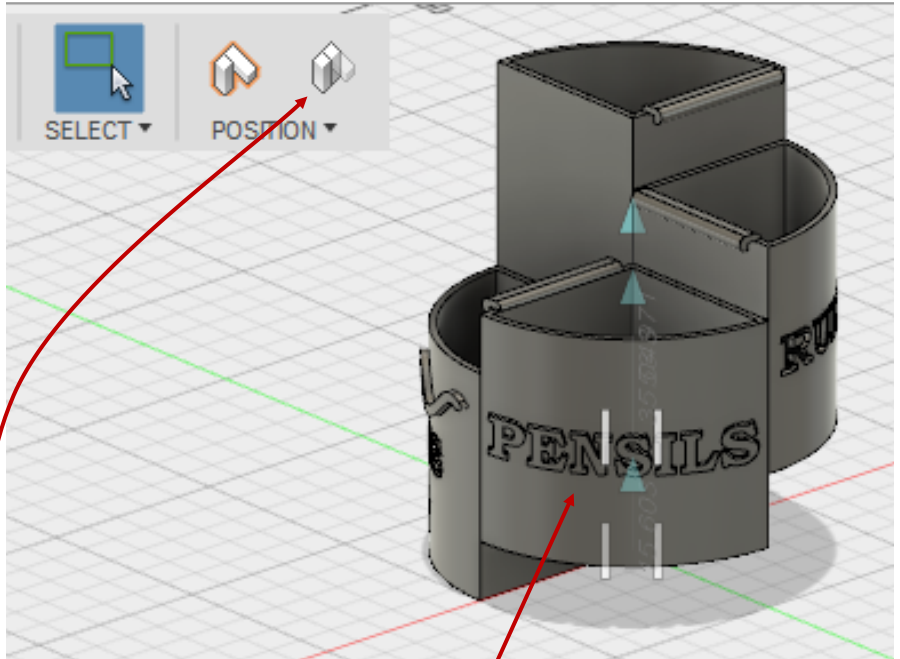
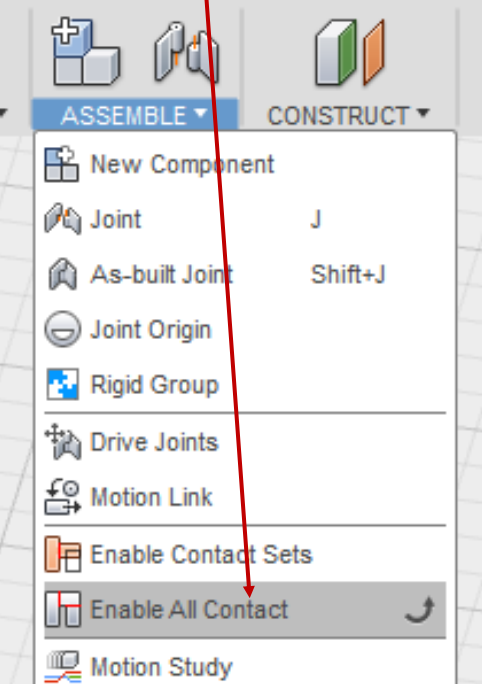
24) Rotate the clip by 90 degrees. Click "OK".

25) Now Paste the clip body into your fourth component.



26) Again change the type to rotational and select the centre vertical edge of a component. This time rotate the body by 180 degrees. Click "OK". Then turn the lightbulb back on of your second component.

27) Go to "ASSEMBLE" then select the "Enable All Contact" option.



28) Now move the sections around and see what happens. You should find they act like they would in real life. Click the revert button to restore them to their original position.