



Straw bung for a ring pull can

Fusion 360



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

Using the Fusion Insert Canvas Function to get the outline of the hole in the can

Use the ring pull handle to open the can (this will push the metal opening inside the can), then twist the ring pull handle to remove it so the hole looks as below:



Take a photo of the open top of the can. Send the photo to your computer and save it ready to import it into Fusion 360.

Use callipers to measure a section of the can and record the value. Here the width of the widest part of the hole was measured at 22mm. This value will be used to calibrate the image so it is to scale.



Check the diameter of your straw either with callipers or a ruler. Standard supermarket straws are 5mm diameter (like the yellow striped one). The orange straw has a 6mm diameter.

Make the straw hole diameter about 0.2mm bigger than the straw diameter so the hole has adequate room to push the straw in and out, whilst still gripping the straw enough to keep it in place. So, 5.2mm for the standard straw and 6.2mm for the bigger straw like the orange one.

Note, tolerances vary on different 3D printers, so you may need to add a different amount on to your straw diameter for your printer to produce the correct hole size.

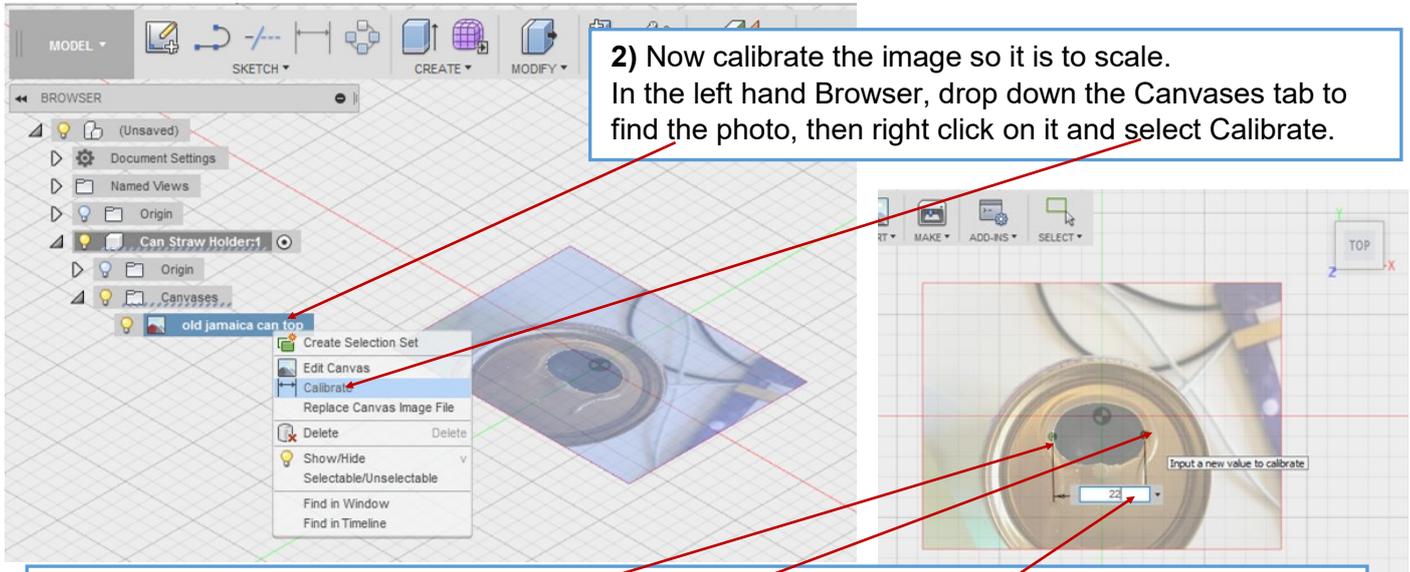
CAD drawing for the straw bung for your ring pull can.

Below are the main steps to complete the drawing—[watch the video tutorial for full instructions](#)

1) Click on Insert Attached Canvas, then select the XY plane.
Click Select Image and find the image on your computer and open it.

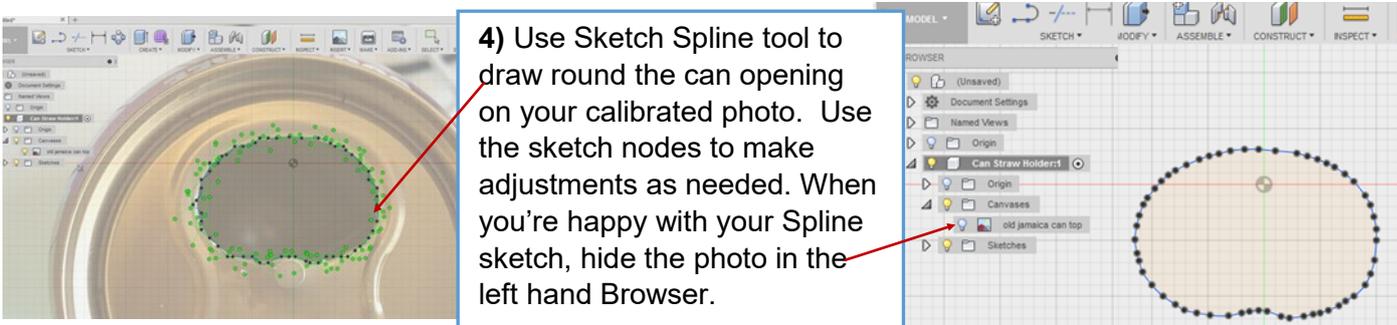
The image will appear on the XY plane as shown here.

Click OK to finish.

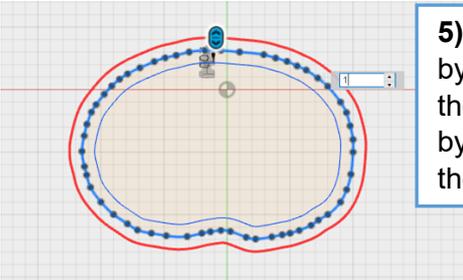


2) Now calibrate the image so it is to scale. In the left hand Browser, drop down the Canvases tab to find the photo, then right click on it and select Calibrate.

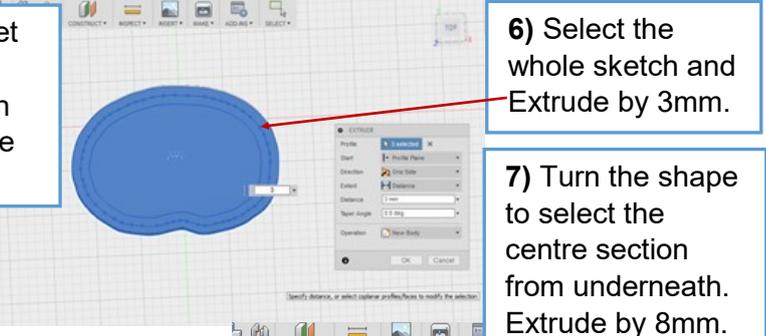
3) Zoom in on the photo and select the first and second points of where you took the calibration measurement on the actual can opening. Put the measurement in the box and press Enter.



4) Use Sketch Spline tool to draw round the can opening on your calibrated photo. Use the sketch nodes to make adjustments as needed. When you're happy with your Spline sketch, hide the photo in the left hand Browser.



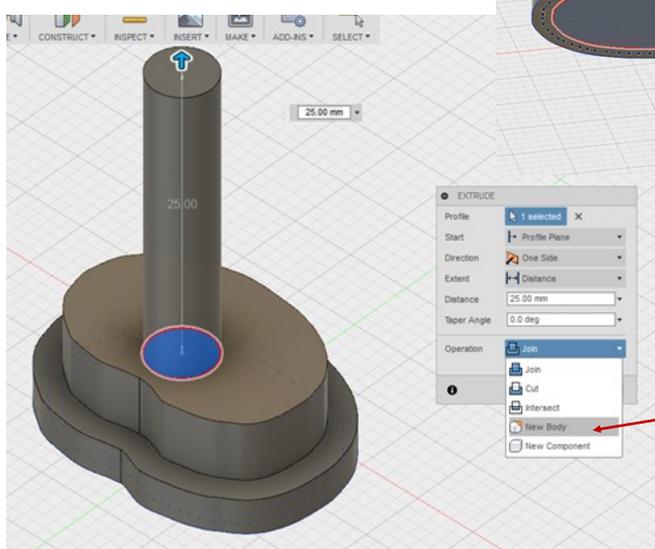
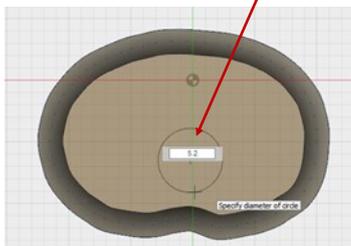
5) Sketch Offset by 1mm inside the shape, then by 1mm outside the shape.



6) Select the whole sketch and Extrude by 3mm.

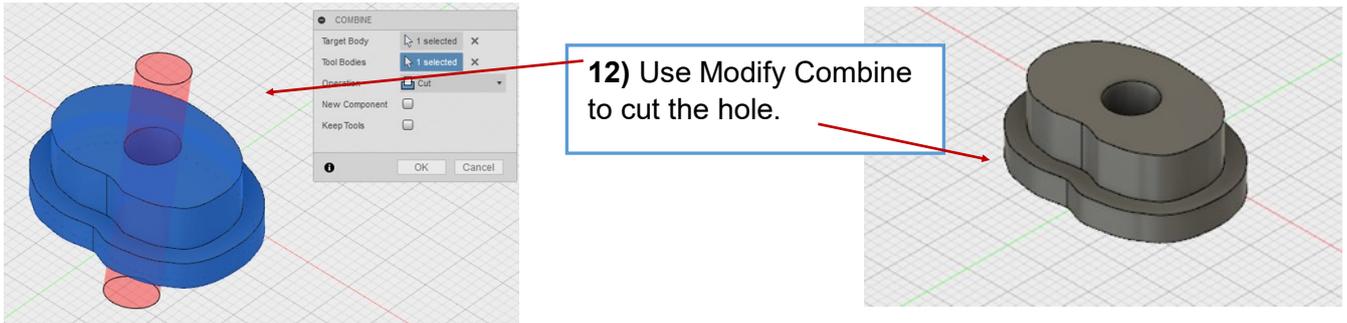
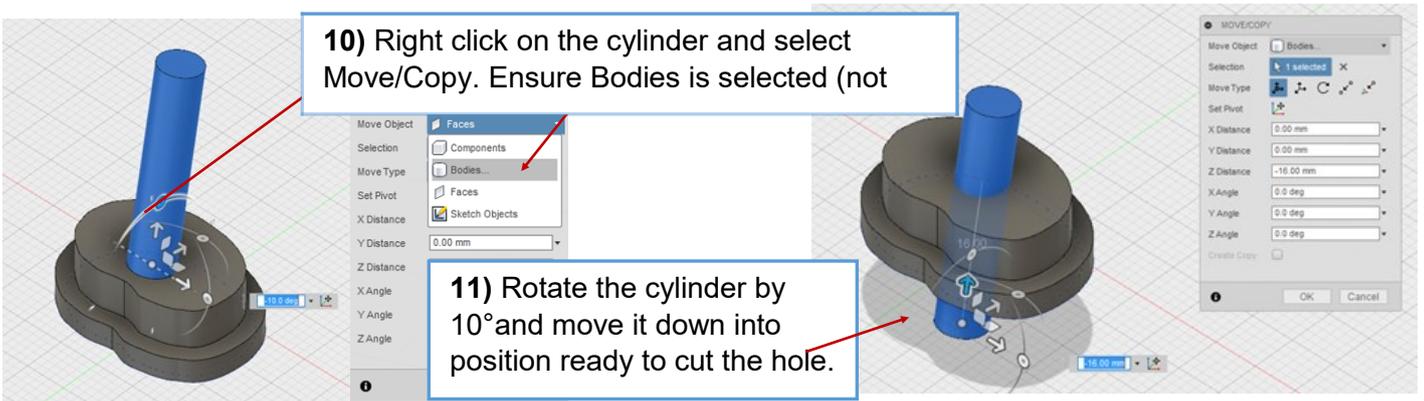
7) Turn the shape to select the centre section from underneath. Extrude by 8mm.

8) Select Centre Diameter Circle tool, click top face of bung to select it—draw a circle with the diameter of the straw hole.

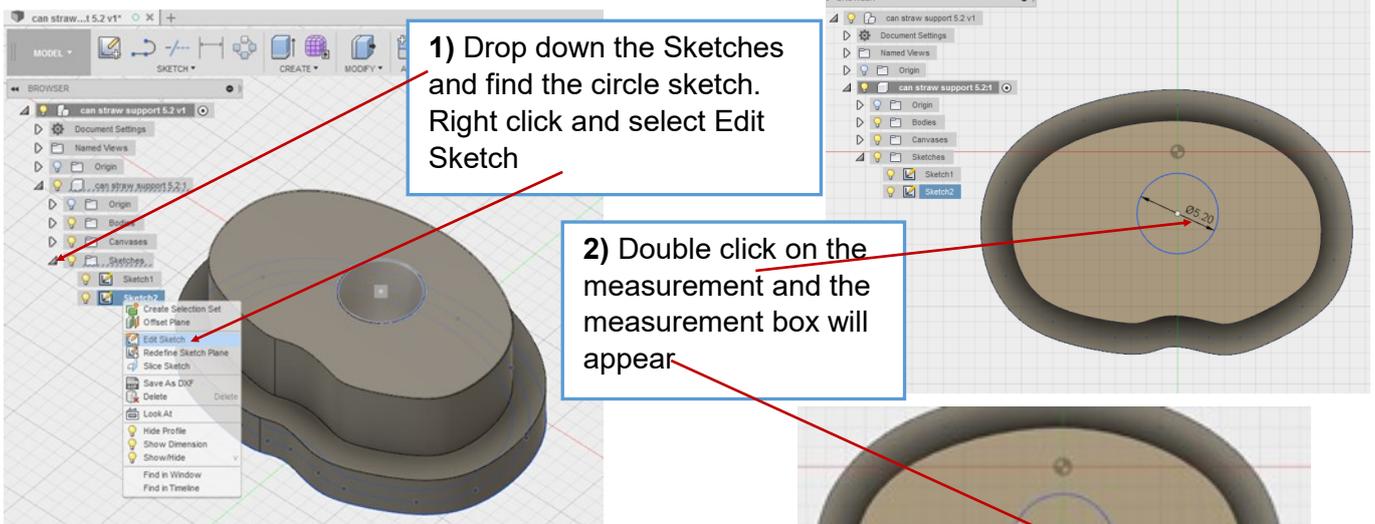


9) Extrude the circle to form a tall cylinder—ensure **New Body** is selected.

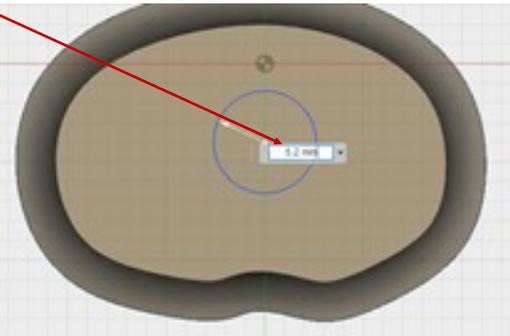
Moving the cylinder to the correct position to cut the hole for the straw



Changing the diameter of the straw hole



3) Type in your new diameter measurement and click Stop Sketch.



4) All subsequent operations change - the cylinder has the new diameter and the straw hole it cuts is the new diameter.

Turn Sketches off here to view your finished drawing.

