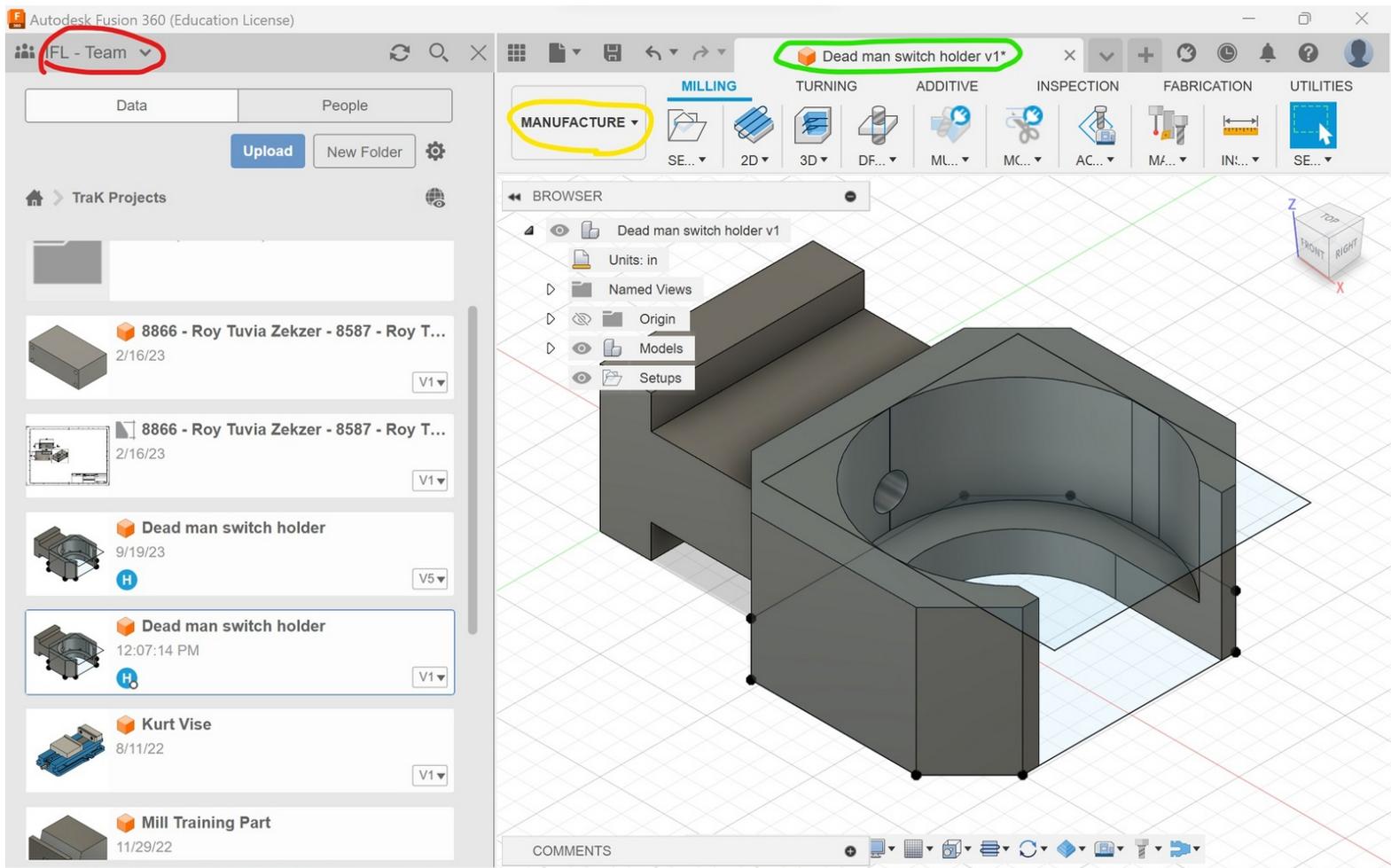




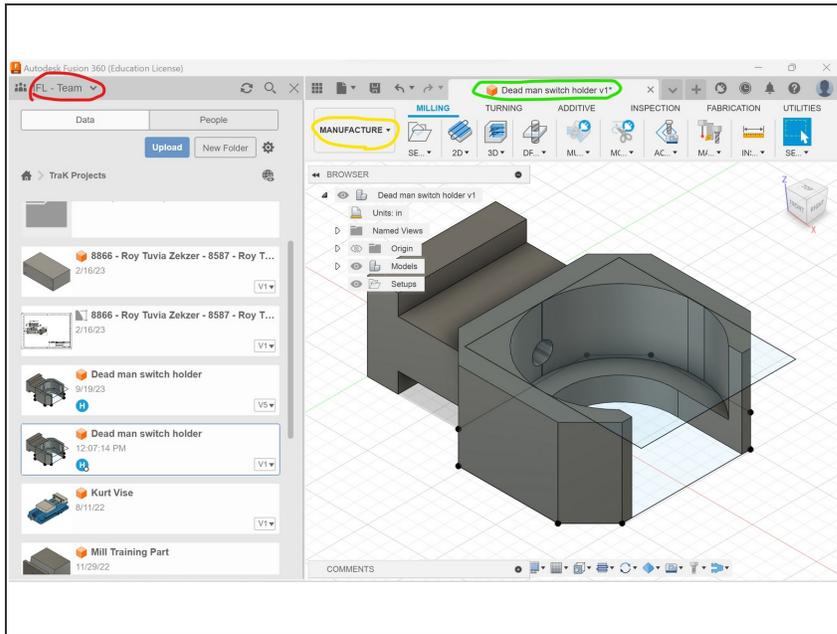
Trak DMP RX2 CAM Guide

A guide for how to program CAM for the trak

Written By: Herman Joseph Moeller

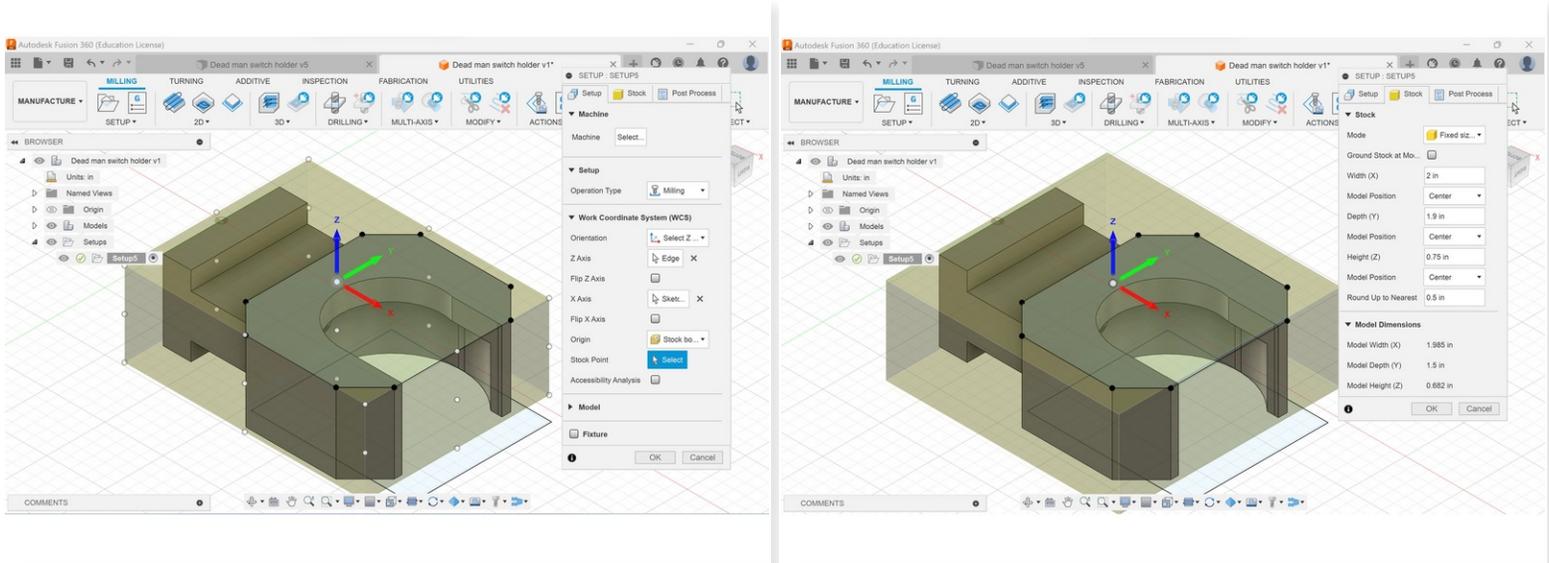


Step 1 — Getting to the CAMing screen



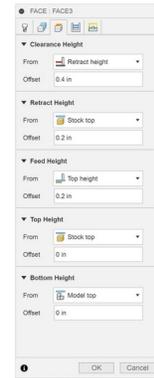
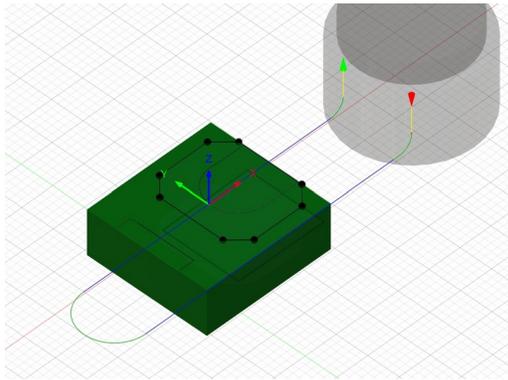
- Open Fusion
- Make sure you are in the IFL fusion Team
- Open part you are going to manufacture
- Change to manufacturing tab
- And remember to mess around with settings and selections as you go to see how they effect the toolpath.

Step 2 — Creating setup 1



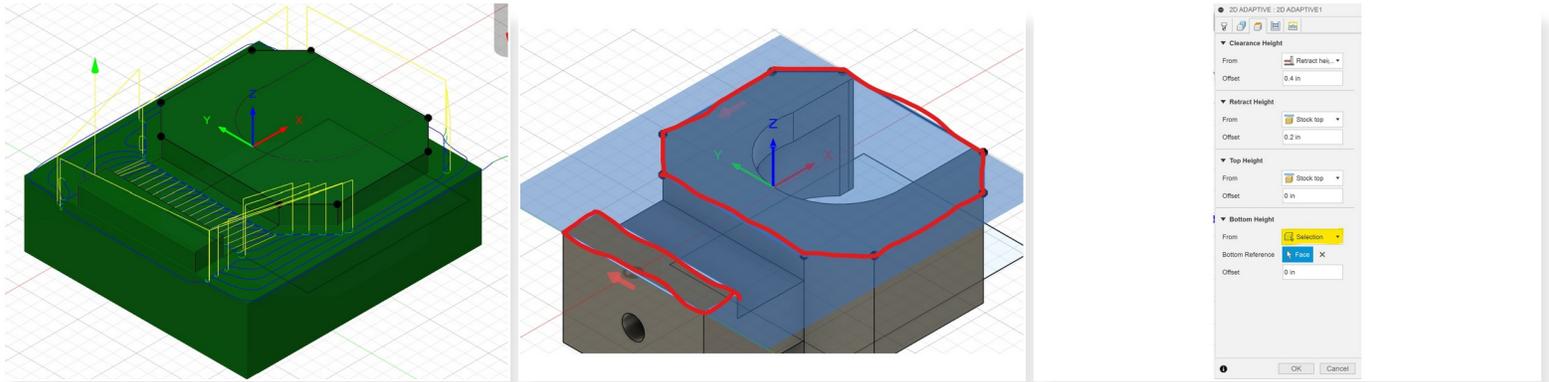
- Set up axis for how you intend to work hold the part. Positive y is towards the back positive x is to the right and positive z is up on the trak
- Set to stock size this should be fairly accurate but is significantly more forgiving then the datron.
- For this part we will need to machine on both sides of the part. We will be starting with the bottom of the part and then flip it.

Step 3 — Setup 1 operation 1 facing



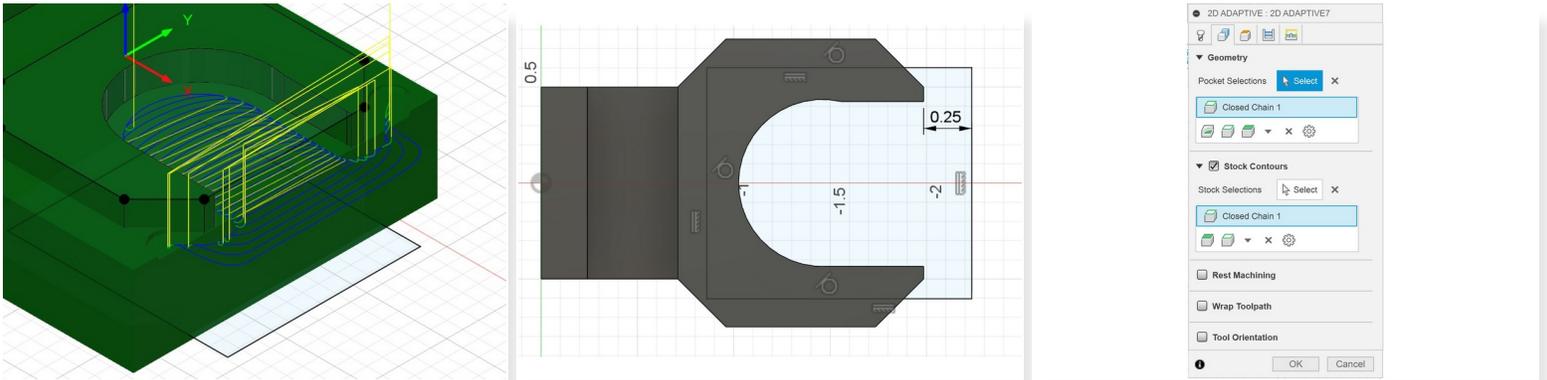
- Parameters should be mostly preset in the tools
- Make sure to turn on multiple depths for the face mill

Step 4 — Setup 1 operation 2 2d adaptive



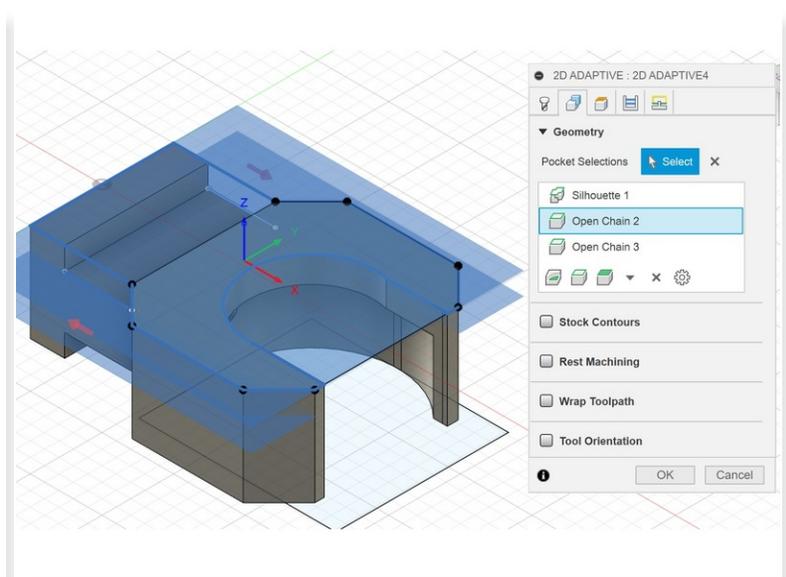
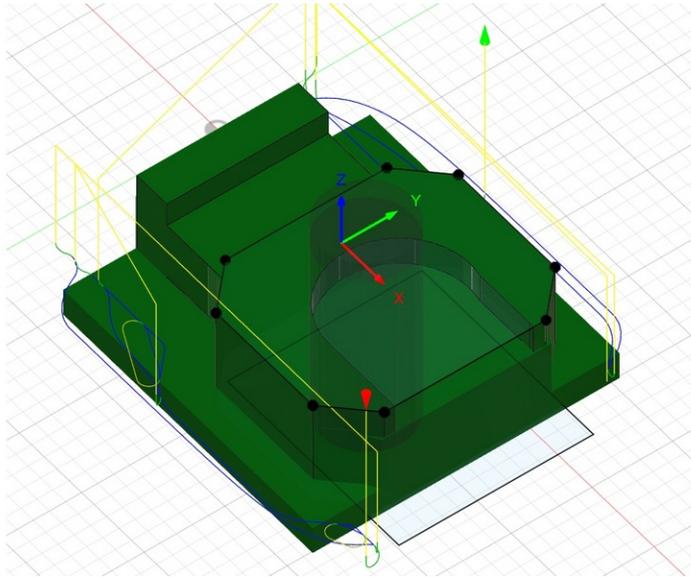
- For this part select the 3/16 endmill and the aluminum for the preset.
- Create a draw of the shape indicated in red for the holder part.
- For pocket selection, select the edge of the back and the drawing created on the edge of the holder part excluding the center. Both are outlined in red.
- Change bottom height to selection and select face in between 2 faced surfaces.
- Turn off stock to leave and turn on smoothing.
- Toolpath should look like main picture.

Step 5 — Setup 1 operation 3 2d adaptive



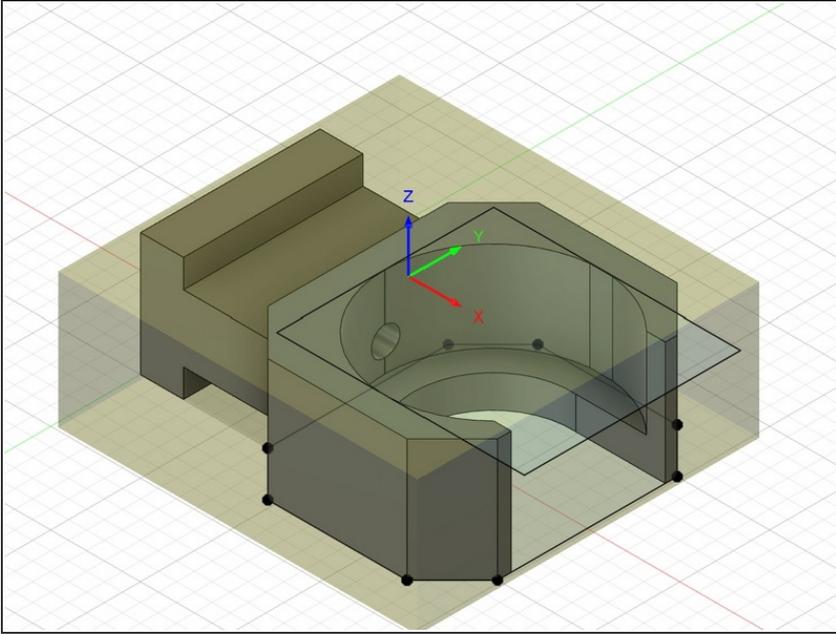
- Tool is 4 flute 3/16 with the aluminum preset.
- Select the outer edge of the underside of the tool holder.
- Create a sketch to confine the tool to just the opening. Similar to sketch in second picture.
- Add the sketch you just created under stock contours.
- Change bottom height to selection and select the bottom of the toolholder slot.

Step 6 — Setup 1 operation 4 2d adaptive



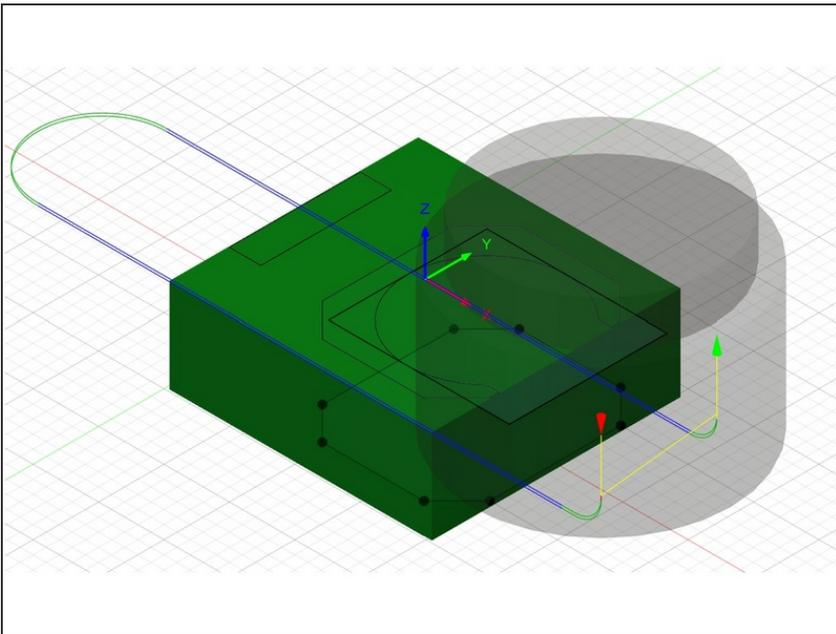
- Tool is 4 flute 9/16 with aluminum preset.
- Then click the down pointing triangle at the bottom of pocket selections and choose silhouette then select so you get a silhouette in the XY plane.
- Then select the 2 edges of the notch that align with the silhouette selection. This is needed to ensure it doesn't cut into the "bridging" part of the piece.
- Select the "top" edge of the bridge for the top height.
- Then for bottom height do stock bottom and set the offset to 0.18.

Step 7 — Setup 2 Creation



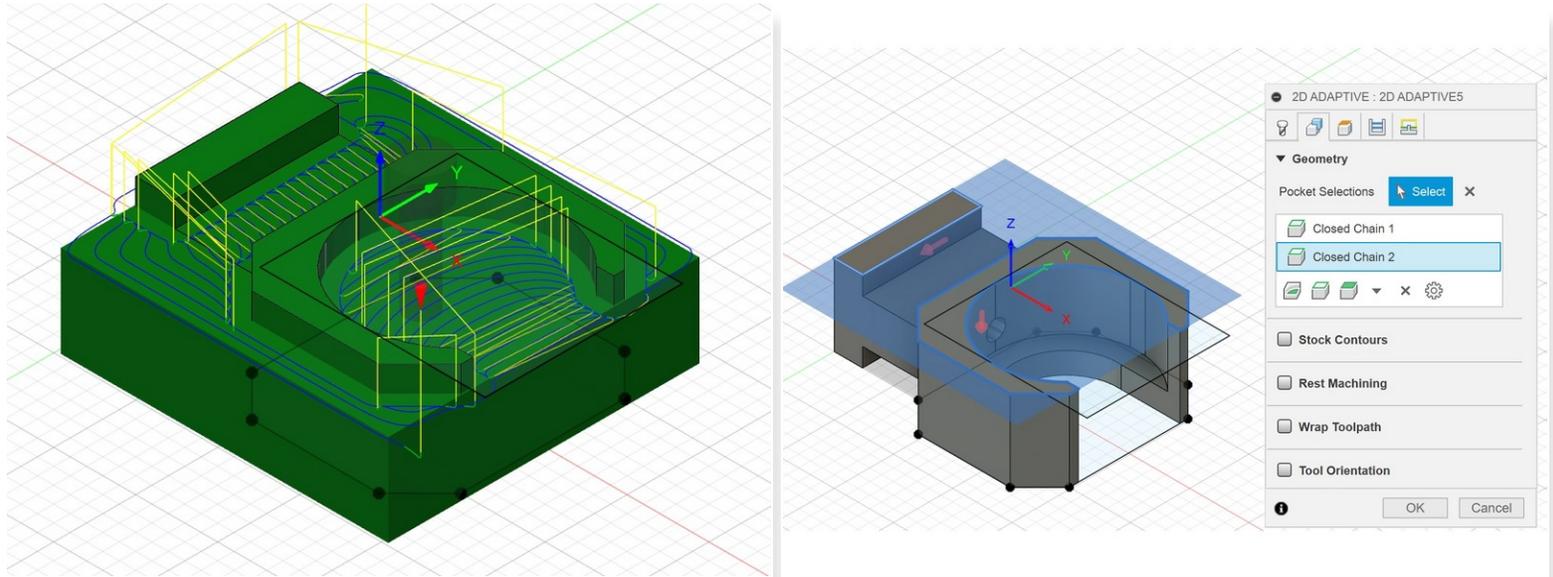
- We cant machine all the details on this part from 1 side so we need to flip the part. This means we need a new setup so we have our new Z axis.
- This process is the same as the previous only now positive Z should be towards the top of the part

Step 8 — Setup 2 Operation 1 Facing



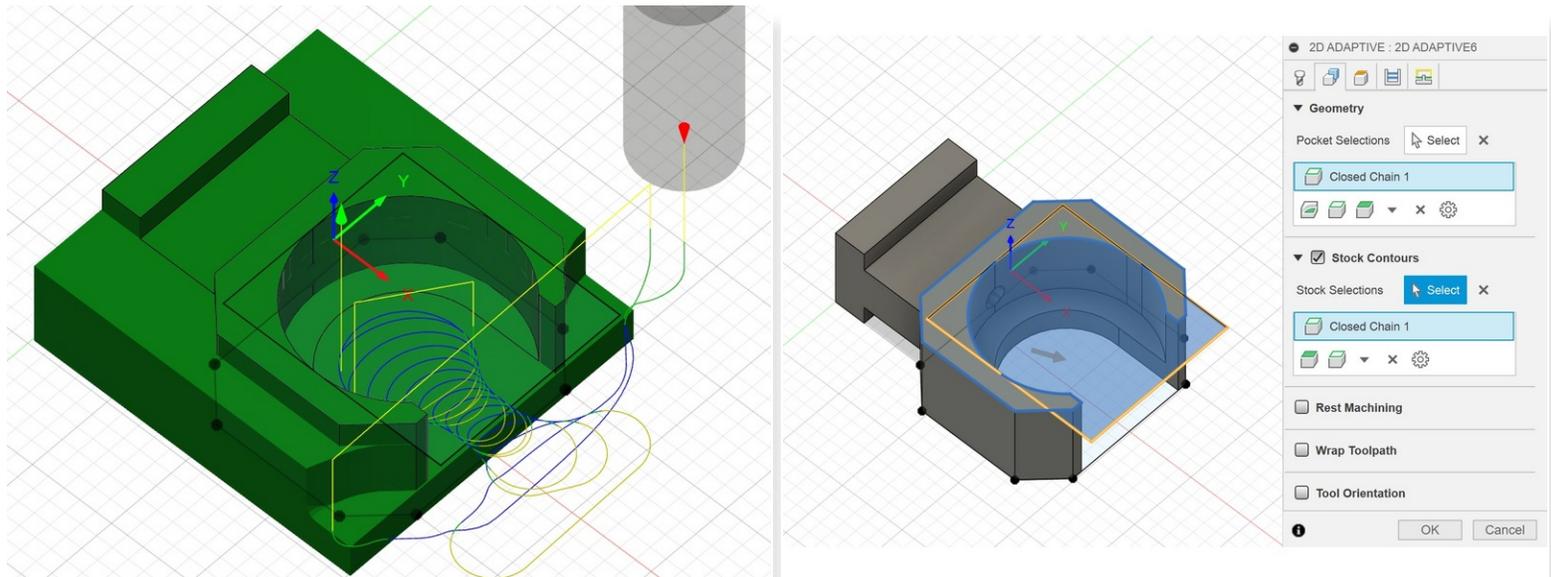
- This should be the same as the previous facing

Step 9 — Setup 2 Operation 2 2d Adaptive



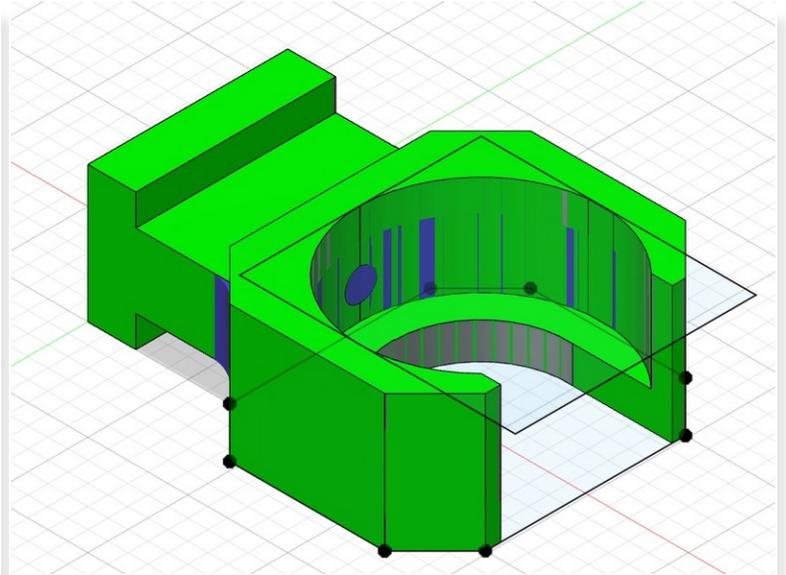
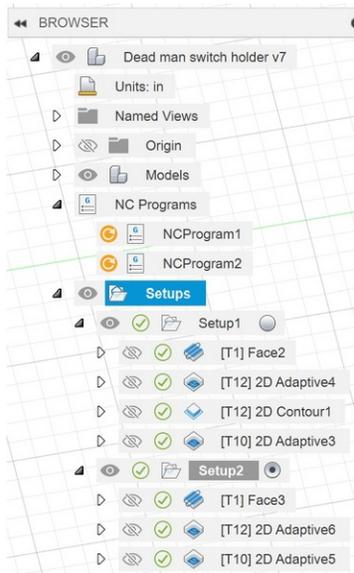
- Use 4 flute 3/16 aluminum preset.
- Select the edges of the 2 top faces of the part.
- For bottom height select the top surface of the bridge section.

Step 10 — Setup 2 Operation 3 2d adaptive



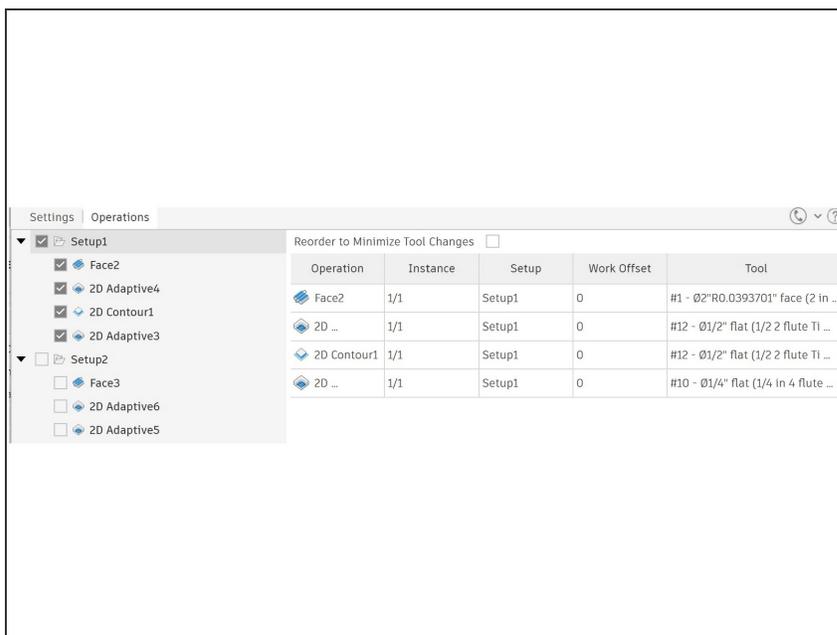
- Use 2 flute 9/16 aluminum preset.
- Select the top edge of the holder for pocket selection.
- Select the same rectangle from before for the stock contours.
- Bottom height should be set to selection and bottom of hole in holder should be selected.

Step 11 — Simulation



- For multiple setups you need to first select setups(selected in first image) then click simulate
- Since you are machining from multiple sides the simulation may start or finish machining on the opposite side from your view.

Step 12 — Posting



- Click NC program to create a file to export to the trak. This process will be the same as previous training.
- Go to the operations tab.
- Select the setup you want for that NC program.
- Repeat for each setup .

