

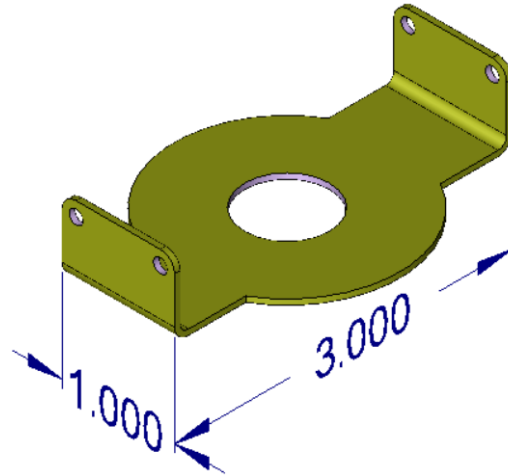
# KEYCREATOR 3D Direct Modeling Software

## KeyCreator Lesson KC3703

### *Dynamite Dynamic Modeling!*

In this lesson we're going to create the metal clip illustrated to the right.

Start with a new file in the Isometric View (View 7.) with a construction plane assigned to the Top View. (View 1.)

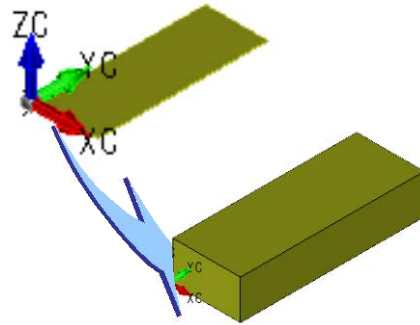


Click on the BLOCK Icon.

A Dialog Box appears.

Click on the Sketch Option and use the current Cplane Axis. Hit the ENTER Key.

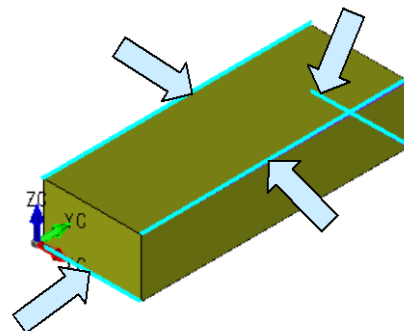
Click near the origin and then move the cursor to the right and up. A dynamic face grows on the screen. With the X value around 1 inch and the Y value around 3 inches click to set the opposite corner. Move the cursor upward and click when the Z value is about 0.5 inches.



Click on the CONSTANT RADIUS BLEND Icon.

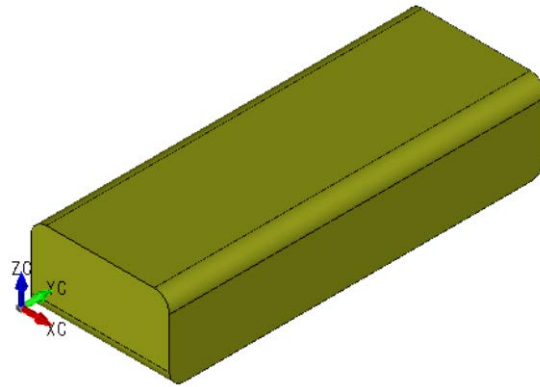
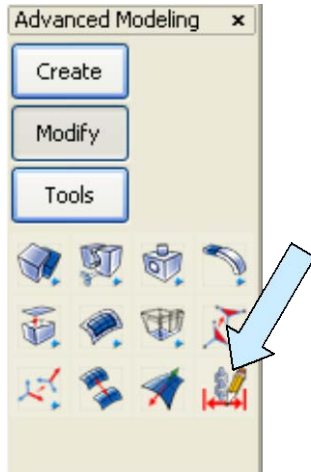
A Dialog Box appears. Type 0.125 for the Radius and hit the ENTER Key.

Click on the two long top edges and two short bottom edges of the block and hit the ENTER Key.



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Your part should now look like this:

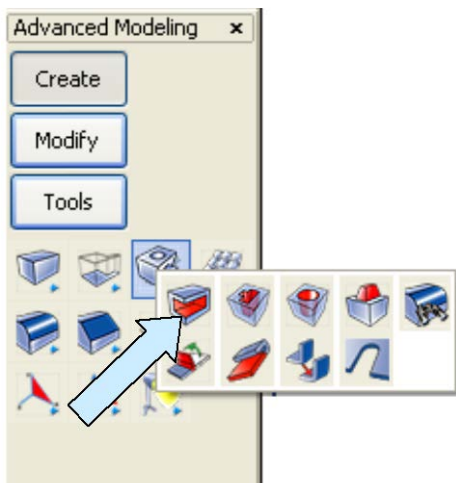
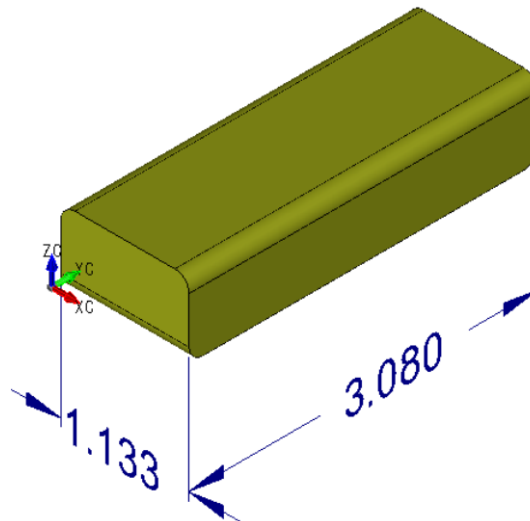


Now, click on the DIMENSION DRIVEN EDITING Icon.

Click on the front, left vertical edge and the front right vertical edge and place the dimension below the part.

Click on the front right vertical edge and the rear right vertical edge and place the dimension below the part.

Your screen should look like this:  
Still using the Dimension Driven Editing Tool, edit the dimensions so they are exactly 1 inch and 3 inches.



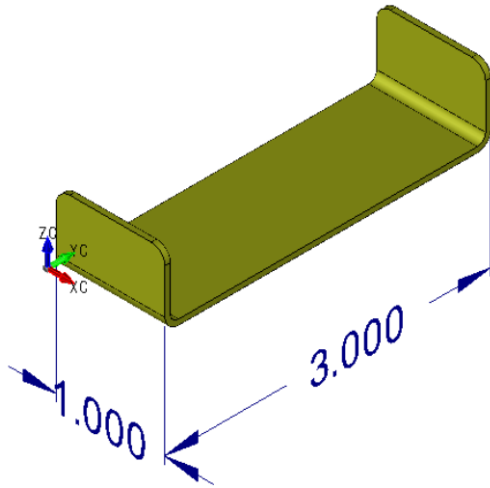
Now, click on the SHELL Icon.

A Dialog Box appears.

Type 0.048 for the Shell Thickness and hit the ENTER Key.

Click on the right side face, the top, right blend face, the top face, the top, left blend face, and the hidden left face. Then, hit the ENTER Key.

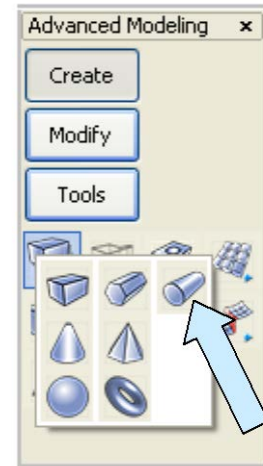
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Your part should look like this:

Now, click on the CYLINDER Icon.  
A Dialog Box appears.

Select the Sketch Option and Use Current Cplane Axis Option  
and hit the ENTER Key.



Click on the Two Pos Option on the Conversation Bar. Using the CtrMid Option, click on  
the bottom left edge and the bottom right edge of the part.

This centers the bottom of the cylinder at the middle of the “U-shaped part.”

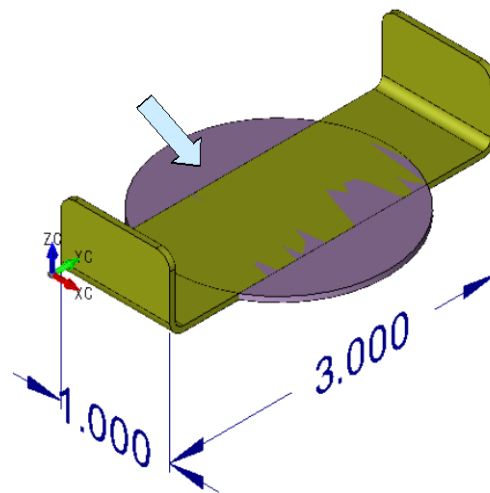
Now, move the cursor to the right.  
Click on the BACKUP Button.

Click on the Offset Option on the  
Conversation Bar.

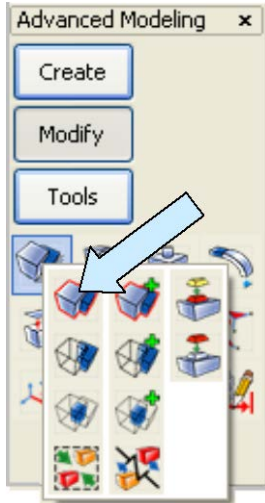
Using the CtrMid Option, click on the  
bottom right edge of the “U-shaped” part to  
indicate the reference position. Type 0.5 and  
hit the ENTER Key three times.

Click on the BACKUP Button.  
Now, move the cursor upward and using the  
CtrMid Option, click on the top, right edge  
of the “U-shaped” part.

You will now have a thin “pancake” cylinder  
centered on the “U-shaped” part.

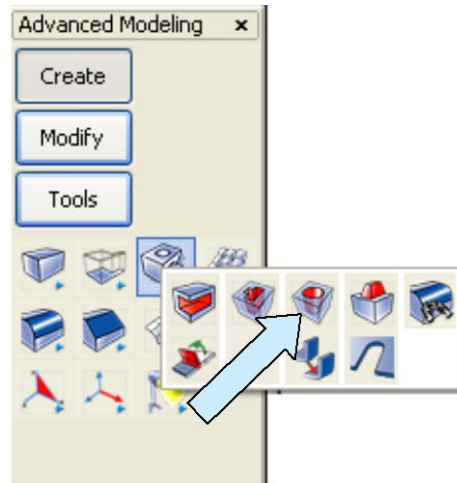


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Click on the BOOLEAN UNION Icon.

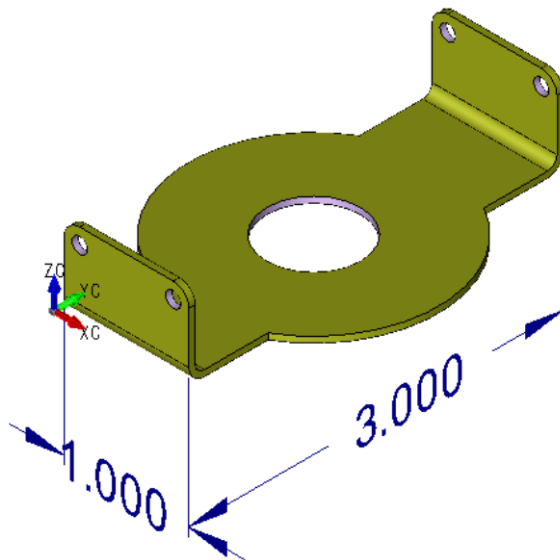
Select the two solids and hit the ENTER Key.  
You now have one part.



Click on the DRILL Icon.  
A Dialog Box appears.

Use the Through Hole Option and type 0.125  
for the hole diameter. Hit the ENTER Key.

Click on the front face of the part and then, using the CtrMid Option, click on the top  
radius at the left and right end.



This creates the four 0.125 holes, two in  
each tab.

Click on the BACKUP Button.

Type 0.75 for the hole diameter and hit  
the ENTER Key.

Click on the broad top face of the part  
and then, using the CtrMid Option, click on  
the large circle edge.

This creates the center hole.

Your finished part should look like this: