KeyCreator Lesson KC3702

Dynamite Dynamic Modeling!

In this lesson we're going to create the block 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 2 inches and the Y value around 2.5 inches click to set the opposite corner. Move the cursor upward and click when the Z value is about 1.5 inches.





Now, click on the DIMENSION DRIVEN EDITING Icon.

Click on the bottom, front edge of the block and place a dimension. Then, click on the bottom, right edge of the block and place a dimension.





Your screen should look like this:



Now, click on the CONSTANT RADIUS BLEND Icon. A Dialog Box appears.



Type 0.5 for the Radius and hit the ENTER Key.

Click on the top, front and top rear edges of the block and hit the ENTER Key.

Your block should now look like this:

Click on the CONSTRUCTION PLANE Icon.

Click on the front end of the bottom, right edge of the block.

Then click on the bottom end of the front, right edge of the block.





Now, click on the QUICK DIMENSION Icon.



Using the EndEnt Option, click on the bottom, left, front corner of the block and then on the front end of the top, left edge of the block.

Place the dimension to the left of the block.



Now, using the DIMENSION DRIVEN EDITING Tool, edit the three dimensions so your block is an exact 2 inches wide, 2.5 inches deep, and 1.5 inches high.



Next, click on the DRILL Icon.

A Dialog Box appears. Use the Through Hole Option. Type 0.5 for the Diameter and hit the ENTER Key.

Click on the right face of the part and drill a hole concentric with each top blend.



Finally, let's add the sloped face to the right side of the part.

Click on the DYNAMIC FACE Icon.

This Icon is also present on the default main toolbar at the top of your screen since it is so useful. I show it to the right in the Modify Faces Palette.



Your part should now look like this:



Click on the right face and hit the ENTER Key.

A DynaHandle appears on the face.

Click on the yellow sphere at the origin of the DynaHandle and drag it down to the front, right, bottom corner of the block.

click on the bears. Using bottom corner

Right Mouse Click on the yellow sphere and click on the Indicate Position Option in the Menu that appears. Using the EndEnt Option, click on the front, right, bottom corner of the block.



Now, drag the Green rotation vector and the right face slopes.

Right Mouse Click and click on the Indicate Y Angle Option in the menu that appears.

Type 30 for the Number of Degrees and hit the ENTER Key.

Note: By positioning the DynaHandle at the bottom corner, the rotation took place around that point.

Your completed part should look like this:

