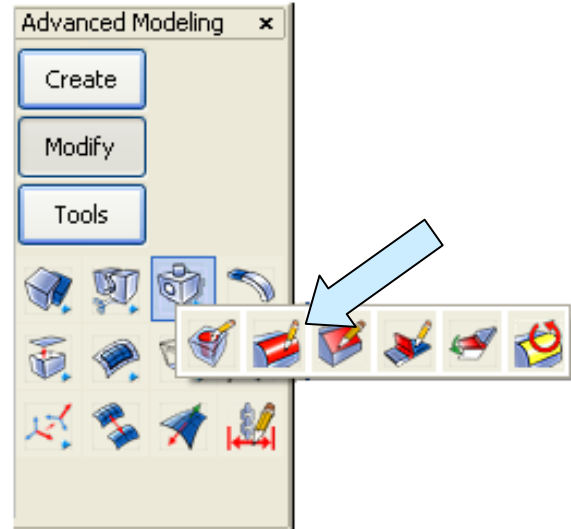


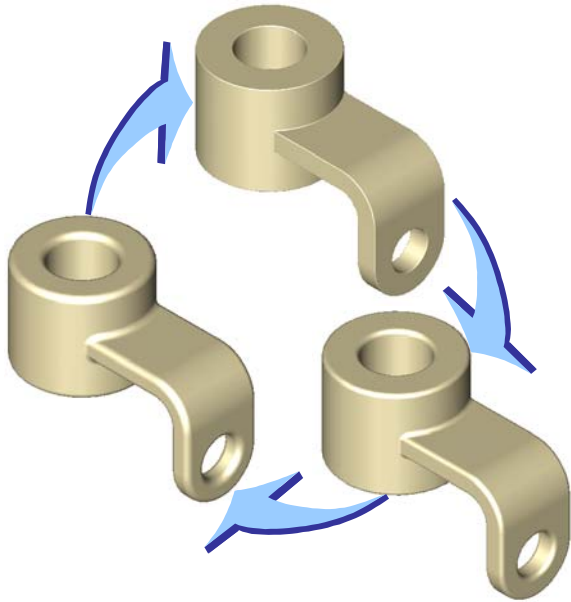
## Edit Blend

Edit Blend is another powerful tool in KEYCREATOR that forms part of what I like to call “Parametrics-on-the-Fly!”

At any time in the course of a project you can select multiple blends on a solid model and quickly rebuild the model with blends of a different value!



You can simply select all of the blends by using ALL DSP/ ALL and then deselect items that you don't want. In the model to the left, the large internal and external radius blend on the “L-shaped” leg were deselected and the full radius at the end of the leg was deselected.

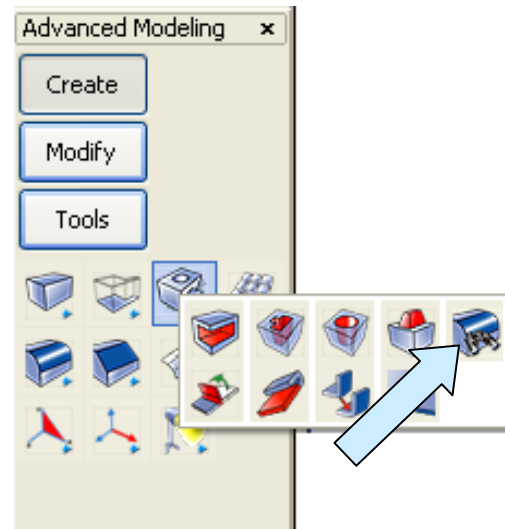


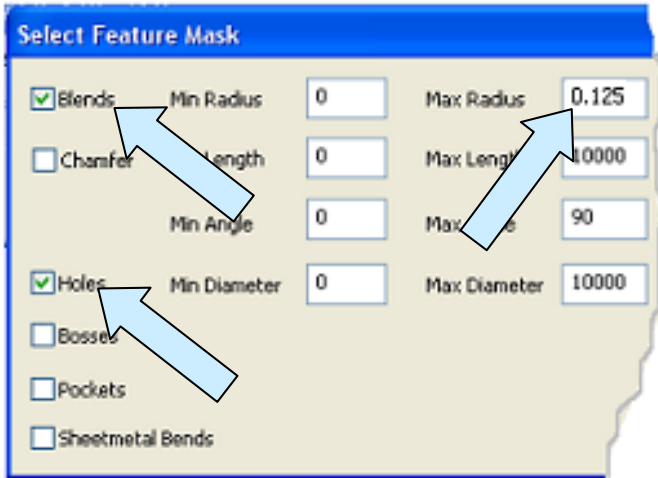
This feature is also useful if you want to sharpen a model to output to a meshing program for FEA.

## Discover Feature

Another “Parametrics-on-the-Fly!” goody is the DISCOVER FEATURE Tool.

With a solid object displayed on your screen, click on this tool.



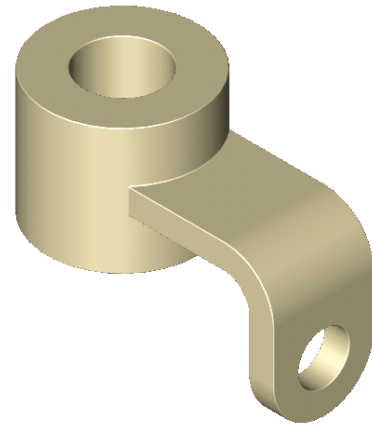


A Feature Masking Dialog Box appears.

In the box shown to the left, I've selected Blends and Holes as the features to discover.

I've also imposed a maximum size limit of 0.125 radius on blends.

Using this tool on the object illustrated to the right, I generate the Feature Tree illustrated below.

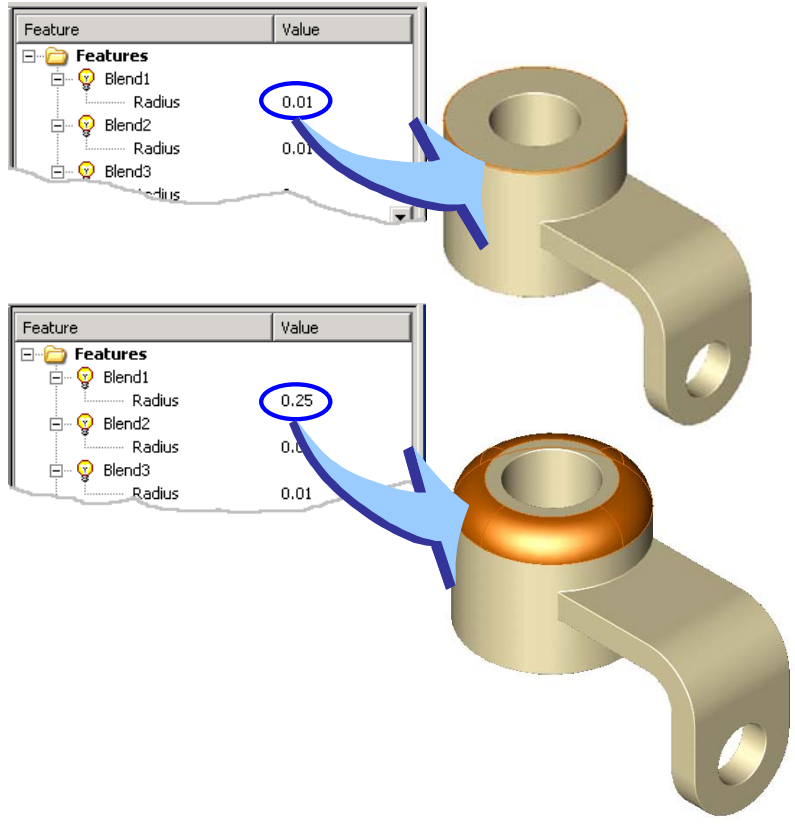


Feature	Value
Features	
Blend1	
Radius	0.01
Blend2	
Radius	0.01
Blend3	
Radius	0.01
Hole1	
Blend4	
Radius	0.01
Blend5	
Radius	0.01
Hole2	
Blend6	
Radius	0.01

If you stop for a second to think about what we've done, you'll realize that you have at your fingertips an all-purpose tool that completely blurs the line between our parametric, feature-based competitors and the unencumbered, freeform modeling environment that you've come to love in CADKEY and KEYCREATOR!

You can build any model using the innate flexibility of KEYCREATOR and at any time create a feature tree for the model if you would like to use parametric modeling tools.

You will also, of course, still have the ability to continue using a freeform approach!

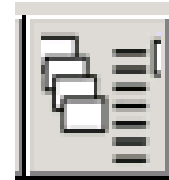


To parametrically modify the part, simply click on the value associated with a feature and type a new value.

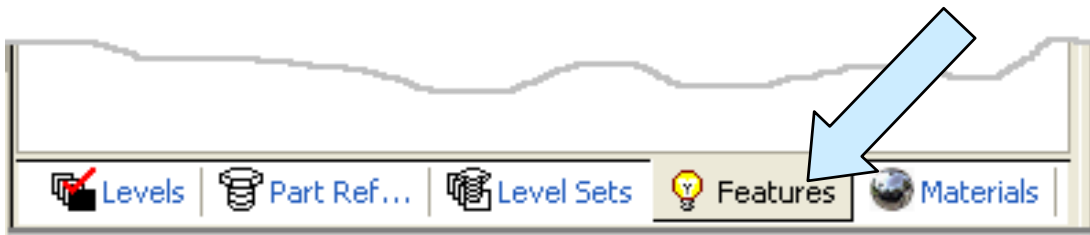
Then, click on the ACCEPT Button on the Conversation Bar.

I've shown a modification of the top radius in the illustration to the left.

To access the Feature Tree at any time, just click on the TOGGLE SPLITTER Icon.



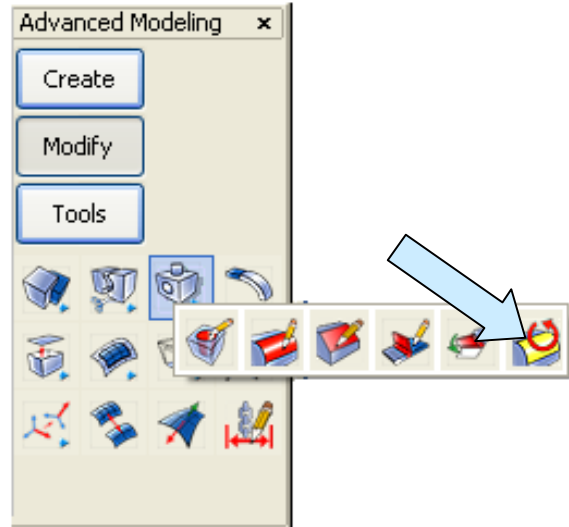
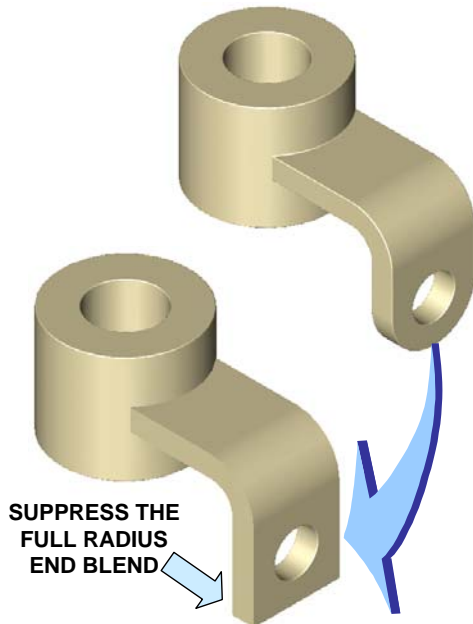
Then, click on the Features Tab at the bottom of the screen.



## Suppress Features

Another “Parametrics-on-the-Fly” goody is the SUPPRESS FEATURE Tool.

Use this tool to temporarily rebuild a model without selected features such as holes or blends.



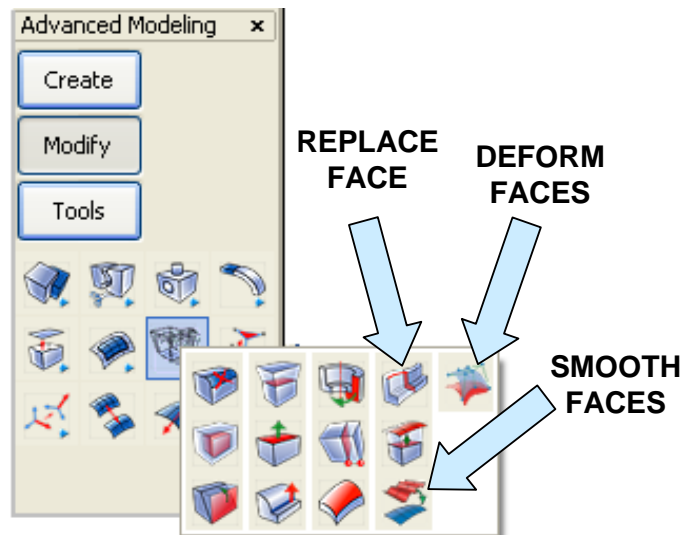
This is great for storing alternate configurations for a part or to document a part that will be produced by a series of different fabrication processes.

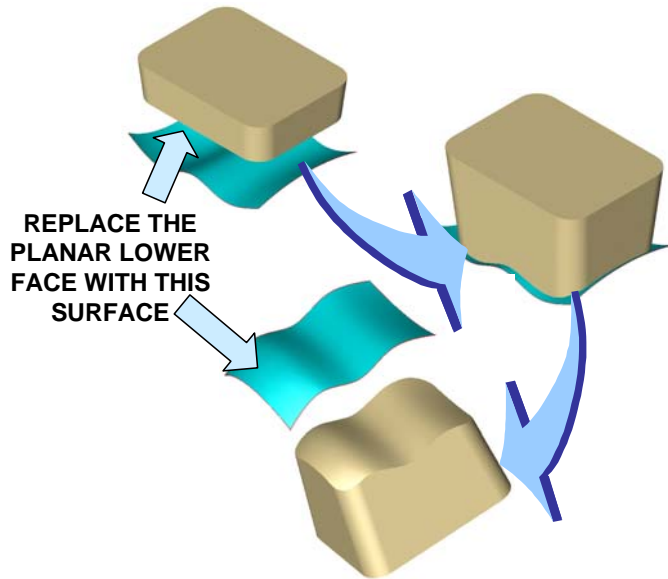
## Replace Face

Several new face tools have been added to KEYCREATOR.

The REPLACE FACE Tool allows you to select a face on a part and replace it with another face in the file.

A typical scenario might be a design situation where you begin with a simple extrusion to a given length.





At a later time, you design a surface in the file or import a surface into the file. You then modify the part by substituting the complex surface for the simple planar end face of the extrusion.

I've illustrated this in the picture to the left.

The DEFORM FACES and SMOOTH FACE Tools provide you with the ability to rework problem faces on existing models.

## PATTERN SOLIDS

You're going to love the entire menu of PATTERN SOLIDS Tools.

With these tools you can quickly select an existing feature, such as a pocket or boss, and then propagate the feature in a pre-selected pattern on the part.

This is great when you want to duplicate a design feature such as a cutout or embossing multiple times after you have constructed and tweaked the original geometry!

The LINEAR PATTERN Tool is labeled in the illustration to the right.

You'll notice that you can also create circular, spherical, and cylindrical patterns and even develop patterns along a curve or along a surface!

