
Autodesk Products Tip & Tricks

Product: Autodesk Inventor 2009
Topic: How to use Position Representations in Inventor
Written by: Paul Cetnar, Application Engineer, Manufacturing Solutions Division
Date: June 30, 2009

Hello, and welcome to another edition of our Tips & Tricks.

During our discussion today, we'll be taking a look at the benefit of incorporating Position Representations in Inventor and how to set them up. What these do is allow users to portray components in an assembly at varying angles which can be pre-determined and accessed by performing a simple double click.

To begin, let's take a look at the assembly I'll be using to demonstrate this process, see **Figure 1**.



Figure 1

Now looking at the assembly, maybe we want to illustrate how the scissors look in the closed position as well. This is where a position representation comes into play. To set this up, we are going to access some options in the model browser of our assembly file. The options are under the Representations folder → 'Position.' See **Figure 2**.

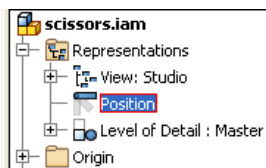


Figure 2

From here, we are simply going to right click on the 'Position' heading and select 'New'. Once we do this, we'll see a new item created at the bottom labeled Position1 (which I highly recommend renaming to something more specific). For mine, I'll call it 'Closed' to go with the closed state we'll create. See **Figure 3**.

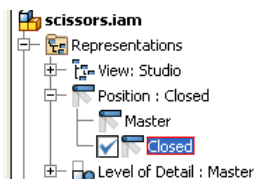


Figure 3

Autodesk Products Tip & Tricks

With our 'Closed' position representation active, all we have to do is override the current angle set in the angular constraint within our assembly. To do this, simply highlight the appropriate driving angular constraint in the model browser→Right Click→Override. See **Figure 4** for the flyout options.

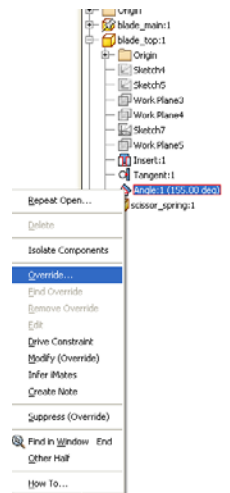


Figure 4

At this point, we're presented with our 'override' dialogue box at which point we'll need to toggle on the 'Value' option and input our desired angle. Since I want this to be closed, I'll enter in 180 degrees. After doing so, we'll see the scissors close into our desired position. Furthermore, we have the ability to double click between our different positions representations whenever we like. See Figure 5 for our closed position.

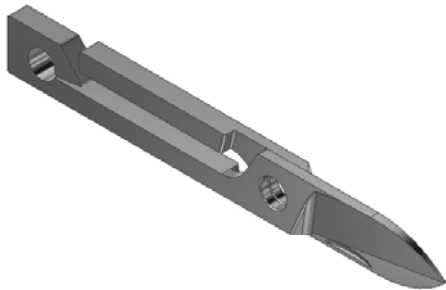


Figure 5

Thanks again for reading this edition of our tips and tricks. I hope this helps provide some insight on how to present your assemblies.