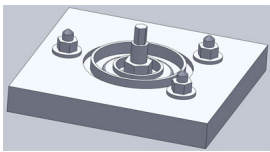# Challenger Strut Caps

Written by Administrator
Wednesday, 02 June 2010 11:41 - Last Updated Wednesday, 02 June 2010 13:29

While adding some detailing items to my Challenger one thing I wanted to change was the plastic caps that cover the front shock struts. Under these caps are three studs/nuts that hold the strut to the shock tower and the center of the shock itself.
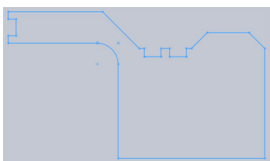
You can buy caps for these nuts from Billet Technologies but I wanted to make them a little unique so decided to make them myself.

The first thing I did was model the bolt layout as it is on the vehicle. This will allow me to make an assembly with the final parts design to check for and interference problems.

I used Solid Works to do all the modeling. The model of the shock layout is as follows.

I then started to work on the caps for the 8mm studs that hold shock in place. I sketched on the profile below
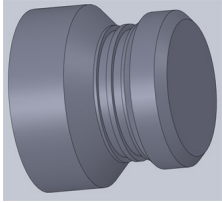
and the performed a sweep operation to come up with the base for the part.

I then added a few details to make it more attractive. I plan on getting these parts anodized in red and then etching the SRT logo into the engraving and also mill out 6 features on the top. These will end up being in natural aluminum. I will also be adding some black o-rings into the two grooves. The final product should look like this.
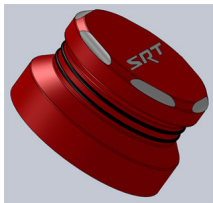

I then copied this part to make the center cap. I simply modified the dimensions of the original sketch to expand the cap to the appropriate size. Here is its final result.
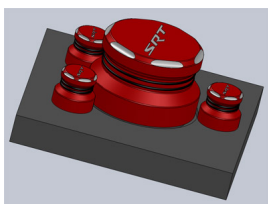
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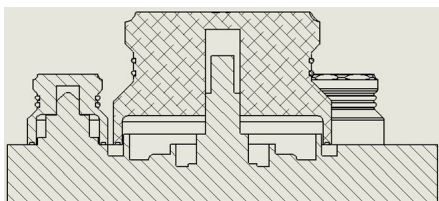

After all the parts were made I created an assembly of how they would all installed on the vehicle

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I then created a section view to make sure there was no clearance issues.

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I am currently working on the CNC programming so stay tuned.

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