Brain Saver

Introduction

Brain Saver is a design that will help a lot of people that are having a problem with ports and brain-frying out. We thought of this idea when we had metal shaving going into the brain port and Static electricity going into the brain ports. For this reason, we have lost a lot of money and a lot of your time. We were in the middle of a competition and then one of our robots stopped working and for the whole time we could do anything, but when we went back to look at the brian we saw a lot of metal shaving coming out of the brain ports, for that reason I thought of this idea how can stop metal shaving and static going inside of a brian ports. We also look at VEX Forums and the people are also saying that their ports are dying and the main reason that they say is static and metal shaving going inside of the ports.

Explanation

So how do you use this part? So to us this part you will have to we have used the bottom of the the part you will have 7 holes and in the brain, there are holes on the bottom you will connect the part with the brain like that. So after you connect the part you will use the nubs, so let say you use the ports you want to use but if you're not going to use the port then use the nubs to cover the port so that it will keep your brain ports from frying out.

To make these parts we are using Autodesk Inventor Professional 2018, I love to use this software because it will it gives me so much freedom and the most accessibility and it so easy to work on. In this program, the most thing that helps me is the toolbar and the dimension button that made my part fit every hole with the perfect measurements.

Conclusion

By working on this online challenge “Make It Real” I have learned a lot of stuff and now I can say that I am very good at using Autodesk inventor. I will definitely use 3D modeling in the future because in my dream job will be a 3D modeler and I also love 3d printing new parts and I will also you inventor and other CAD software in my future job. The software has helped users in a lot of the way like we can create a prototype of our VEX robot and we can also create a custom part that will help our robot. Yes learning 3D design will help you in the future and it would help you get your future job and it would look good in our resume. After all the experience working on this challenge was very good.

Design Process

Define Problem: So our problem is that we have metal shaving and static going inside of a V5 brain port and for that reason, we have brain-frying out. We also have lost an of money on brains.

Generate Concept: so after the problem, I thought of a lot of ideas but they were all bad but this one idea was the best.

Develop a Solution: so to develop a solution I used Autodesk inventor to create my parts and then we had to get our dimension and then start making the parts.

Construct and Test Prototype: so we have made 5 prototypes and so finally we made a perfect model on our 6th prototype. The nubs or caps took 3 prototypes.

Evalument Solution: so after the prototype and all the testing we came up with the idea that we will finalize the te 6th prototype. So this product will be great to save you V5 brain and its ports. It will stop any small thing going inside of the ports.