Record Player
Personal CAD Project
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I chose to make a record player for my personal CAD project because music is a large part of people’s everyday lives, and mine. Music inspires people to be creative, think of ideas in a new light, and follow their dreams. Music inspired me to make a record player, and despite any difficulties I knew I would run into making it, I took on the challenge.

Some of the difficulties I had while making my personal CAD project were defining and mating parts. Defining the shapes and parts became difficult where my plans and drawings on paper did not turn out the exact way I wanted on the screen. As I continued defining, I noticed I did not realize some parts interfered with others, and I had to re-dimension shapes in order to make it work or fit. Mating parts seemed to be especially difficult for me, because if the part was not dimensioned correctly, the pieces did not fit into one another. Also, a part of my goal was to have the parts moving in the assembly, since there are a few moving parts on a real record-player. Some of these parts include the record itself, the knobs to control loudness and speed, and the needle. Some of the new features I learned are mating with hinges, restraining an object to move only in the area, and angle selections.

This product relates to my interests because I enjoy music, and often go to concerts, local shows, and am part of Asylum, a Penn State club that puts together concerts and talks about music. I believe a record player has the clearest and best sound out of all music players, including iPods, CD players, boom boxes, and computers, which is why I own and modeled my CAD project after a real-life Audio-Technica Record Player. You can see the similarity in shape, color, and proportions.

My understanding of Solidworks was increased while doing this project because I learned new features and how to build all the parts and the assembly with no tutorial, video, or help.
Real Life Audio-Technica Record Player


My Personal CAD Project Record Player