30 LB Combat Robot “Fire Hydrant”

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Context

- Tasked with updating a model for our combat robotics group
- CAD model was needed for participation form
- Robot used a fire extinguisher as the chassis. I don’t know why we called it fire hydrant.

Process

- Used a tape measure + caliper to reverse engineer components, using part numbers and known parts from BOM to import existing models

Takeaways

- I was extremely new to CAD and robotics when I modeled this, so I learned a lot about using Onshape and robot design from reverse engineering this battlebot
- Learnt how to use sheet metal tools in Onshape, changing material types, and component appearances
- Learned how to organize components and assemblies
- Better understanding of Onshape’s public plugins, which I used to model the bent bolts