Objective



We intend to shift the drum rotation into an electrical component run by an electric motor which is run by a battery that may be positioned on the truck. The industry already has backup devices to spin the drum in case of failure called a drum jumper. This device is a small 14hp gasoline engine that connects to a hydraulic pump which then hooks up directly to the hydraulic drive that turns the drum. We plan to initially create this device by replacing the gasoline engine with an electric motor. This device will be instrumented heavily in order to gain some feedback and knowledge from the system. If we accomplish this, we will move forward by implementing it directly into the truck in order to completely remove the diesel engine component in order to move the drum.

Timeline

We plan to follow this Gantt chart however we aim to move quickly so the timeline is subject to change.

