# Detailed Summary of Design, Fabrication, and Test Plan

## Design:

## Analysis:

For our design, we performed a stress analysis on the various shafts. Shaft 1 is the shaft that connects to the external motor and receives the input torque. Shaft 2 connects to Shaft 1 through a gear to gear contact with a gear ratio of 2.5. The last shaft (Shaft III) is connected to Shaft II also by a gear to gear contact with a 2.5 gear ratio. The analysis of these shafts are as follows:



