## **Specifications and Requirements:**

- You will be provided with the lower support platform made of 3/8 inch thick plastic plate (ABS). The platform size is  $12 \times 12$  inch.
- You will be provided a motor which acts as a generator, see the dimensions below.
- The distance between the top of the platform and the center of the motor shaft should be 16.00 in.
- The volume of the material (ABS<sup>+</sup>) used to 3D print your tower should not exceed 17 in<sup>3</sup>. Use SW volume from Properties Window
- You are responsible for the design of the upper platform that holds the generator (motor). A 3/16 in. hole, in line with the motor shaft, should be provided in the back of the housing for the eyebolt.
- The tower must be radially symmetrical with respect to the center of the lower platform with at least three contact points, will be discussed in the class.
- The tower must be made in at least two parts and glued together, printer's footprint is 9x9x9 in..

  So any section of the tower cannot be taller than 9 in.

  Generator

Tower design files (SW part file and .stl of all sections) due Friday 4/4 by 11:59 pm. 5% penalty for late upload/day.

## Include group number in the file name

All group members must be copied on all email communication All group members must contribute to the project. Lack of contribution will effect your project grade. Group evaluation will be done at the end of the semester.

