Due Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

EGR 110

Engineering Graphics

**Team Project – Step 3**

(Note: This information also appears in the PowerPoint presentation for the Team Project)

**Step 3: Inventor Models for Parts Provided**

As noted earlier, 4 parts will be provided to each team (motor, switch, 9V battery, and 9V battery clip).

1. Decide which team member will draw each part. Each team member must draw and least one part and their name must appear as the author of the part on the drawing file (idw). Use a descriptive name for each part that includes the author’s name. For example: *Motor\_John\_Doe.ipt*
2. Each part should be drawn as accurately as possible. Include all features that could interfere with another object. For example, the electrical tabs on the back of the motor should be included, but holes in the motor casing can be omitted. Extra credit might be awarded for extra detail. Ignore tolerances. Use metric dimensions for all parts.
3. Adjust the density of the part so that its mass is correct.
4. Dimensions for the parts can be found using the links below:
	* Motor - *http://www.jameco.com/Jameco/Products/ProdDS/232040.pdf*
	* Switch - *http://www.jameco.com/Jameco/Products/ProdDS/317287.pdf*
	* 9V Battery - *http://www.jameco.com/Jameco/Products/ProdDS/198731.pdf*
	* 9V Battery Clip - [*http://www.jameco.com/Jameco/Products/ProdDS/216452.pdf*](http://www.jameco.com/Jameco/Products/ProdDS/216452.pdf)
5. For each part both a part file (ipt) and a drawing file (idw) should be produced.
6. Turn in printouts of the drawing files (idw) in to the instructor.
	* Use an A-size portrait sheet.
	* List the author’s name
	* List the part name, team number, team member’s names, scale, etc.
	* List the volume, mass, and density.
	* Use metric dimensions for all parts with default units in mm.
	* Follow good rules for dimensioning.
7. Upload the part file (ipt) to the File Exchange for your group in Blackboard. This is important so that all team members will access to all parts (especially if a student stops attending class for some reason). Each team member must upload their own files (Blackboard will list who uploaded it.)
8. For the 9V battery clip, provide only short red and black wires (perhaps10 mm). Additional wires will not be required for any part of the project.
9. If a team member has dropped from the team then the team must decide who should take over responsibility for that part, and inform the instructor of the loss of team member.

I) More details and instructions may be provided at the time of the assignment.

Example: Motor dimensions are shown from the link above.



