

SolidWorks, IET-265  
Spring 2011, Week 8,  
*Rib and Draft Evaluation T*, 40 Min

Name: \_\_\_\_\_

Day and date: \_\_\_\_\_

*Rib Feature, Modified Part* 20 points:

- Modify this part from your assignments from Week 8 (1 point)
- ANSI dimensioning standard, units in inches (1 point)
- Front and Right Plane symmetry with fully defined sketches (1 point)
- Proper material, rename your features (1 point)
- Create two configurations of this part one for the original design and one for the new design as described below. (3 points)
- Configure this feature to be 5 inches for the new configuration (3 points).
- Configure the plane angle to be 5 degrees more than the original one for the new configuration (3 points)
- Configure the number of ribs to be 8 for the new configuration (3 points)
- Determine the mass of the modified part, put in your email (4 points)

*Rib and Draft Feature, New Part* 20 points:

- Model this railroad signal per the drawing provided
- ANSI dimensioning standard, units in inches, precision to 3 digits (2 points)
- Material is Wrought Stainless Steel (1 point)
- Rename your features (1 point)
- Location of the origin
- Right Plane symmetry with fully defined sketches (2 points)
- Build the light and battery cover section first, provide a separate draft feature on the back face at the angle indicated (2 points)
- Location of origin
- Back Shell (1 point)
- Install a plane from the front and top interior face install ribs features as shown on the drawing (2 points)
- Linear pattern the rib feature as shown (2 points)
- On the Front Plane sketch the loft profile shown, insert a loft plane in front of the front plane by the distance shown and sketch the circular loft profile on it, loft these two sketches without twists (2 points)
- Cut the circular light hole (1 point)
- Determine the center of mass of the part, put in your email (4 points)
- Errors and Extras (0.5 points each), extras may include a lens cover, a lens, sun shroud, black target shroud plus other similar items
- Hint, it is better to follow the steps above in the order presented