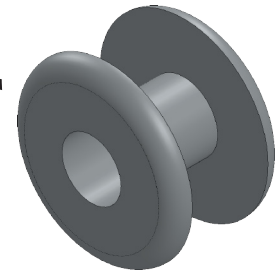



# Rivet for Battery Holder



## A. Rivet.

Step 1. Click File Menu > New, click **Part** and OK.  
 Step 2. Click **Right Plane**  in the Feature Manager and click **Sketch**  on the context toolbar, **Fig. 1**.

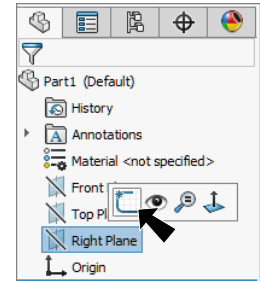






Fig. 1


Step 3. Click **Corner Rectangle**  (S) on the Sketch toolbar.

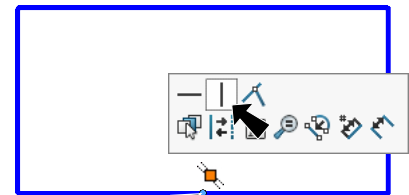
Step 4. Sketch rectangle **above** the Origin  **Fig. 2**.

Step 5. **Right click graphics area and click Select** from menu to unselect Rectangle Tool.



Step 6. **Ctrl click Midpoint**  of **bottom line and Origin**  to select both. Release Ctrl key and click **Make Vertical**  on the context toolbar, **Fig. 3**.



Origin   
Fig. 2



Ctrl click midpoint and Origin   
Fig. 3

Step 7. Click **Centerline**  in the **Line flyout**  on the Sketch toolbar.

Step 8. Sketch **horizontal centerline from the Origin** , **Fig. 4**.

Step 9. Click **Smart Dimension**  (S) on the Sketch toolbar.

Step 10. Add dimensions, **Fig. 5**.



  
Fig. 4

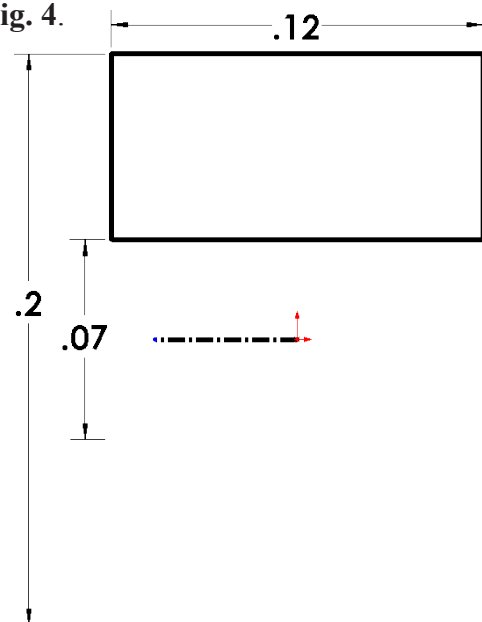
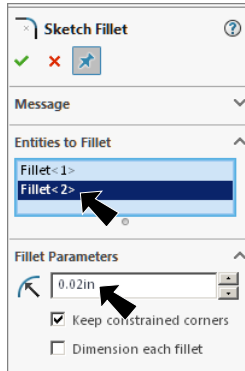


Fig. 5

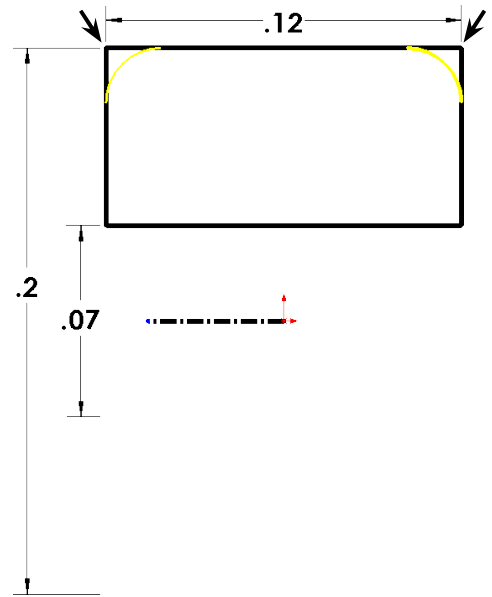
Step 11. Click **Sketch Fillet**  on the Sketch toolbar.

Step 12. In the Sketch Fillet Property Manager set:  
under Fillet Parameters, **Fig. 6**

**Radius**  **.02**  
click top corners, **Fig. 7**  
click OK  **twice.**



**Fig. 6**



**Fig. 7**

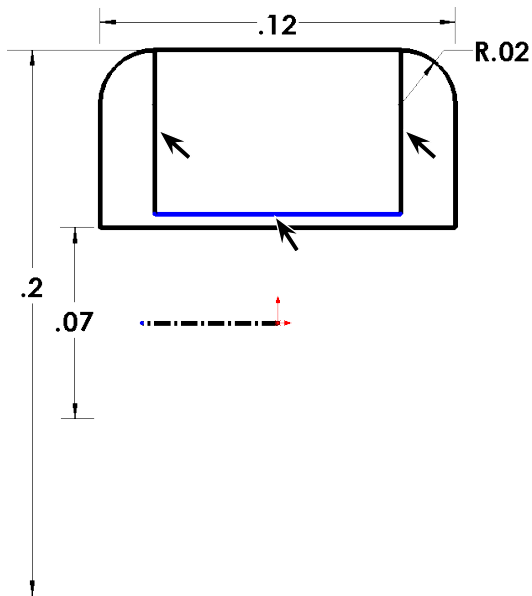
Step 13. Click **Line**  (L) on the Sketch toolbar.

Step 14. Sketch lines from endpoint of fillet and across horizontally, **Fig. 8.**

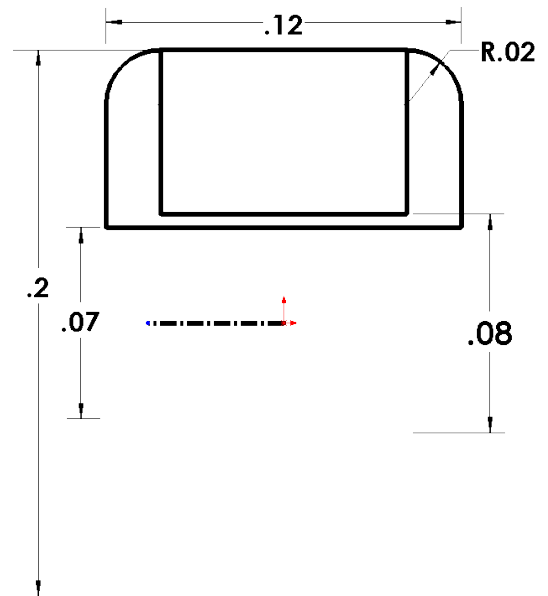


Step 15. Click **Smart Dimension** (S) on the Sketch toolbar.


Step 16. Add **.08** dimension, **Fig. 9.**





**Fig. 8**

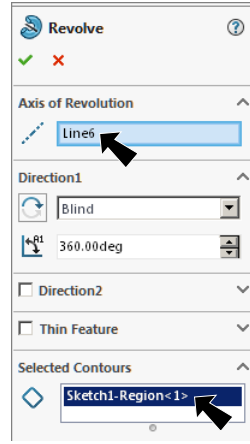


**Fig. 9**

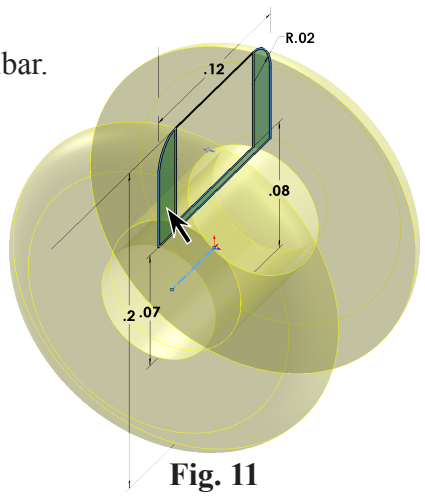
Step 17. Click **Features**  on the Command Manager toolbar.

Step 18. Click **Revolved Boss/Base**  on the Features toolbar.


Step 19. In the Revolve Property Manger set:  
 under Axis of Revolution  centerline should be selected, **Fig. 10**  
 under Selected contours select the contour inside lines, **Fig. 11**  
 click OK .

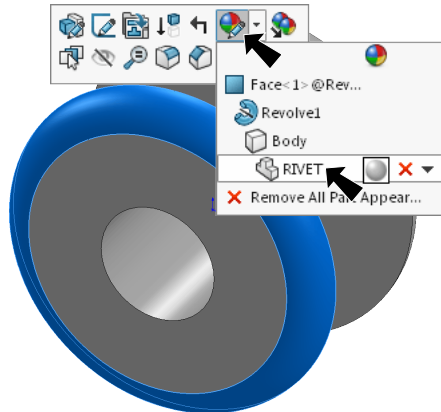


**Fig. 10**



**Fig. 11**

Step 20. Click Zoom to Fit  (F) on the View toolbar.





**Fig. 12**

**B. Save as "RIVET".**

- Step 1. Click File Menu > Save As.
- Step 2. Key-in **RIVET** for the filename and press ENTER.

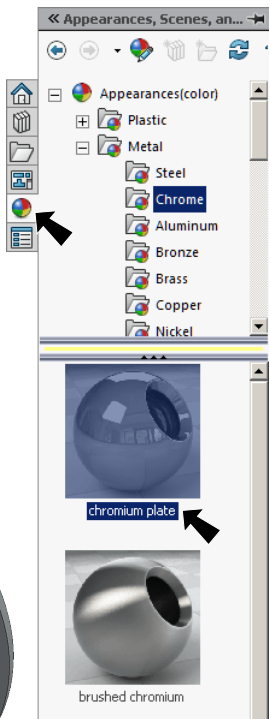
**C. Appearance.**

Step 1. Click part to select, click **Appearance Callout**  on the Context toolbar and click **RIVET** , **Fig. 12**.

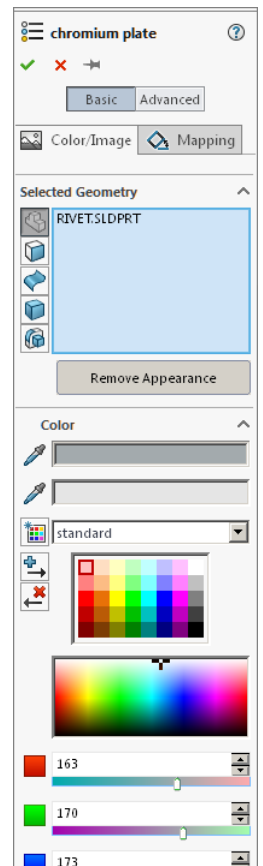
Step 2. In the Appearances Task pane, expand **Metal**, click **Chrome** and in the lower pane select **chromium plate**, **Fig. 13**.

Step 3. Click OK  in the Property Manager.

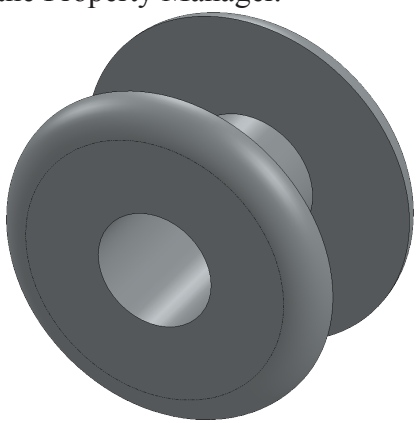
Step 4. Save. Use **Ctrl-S**.



**Fig. 13**



**Fig. 14**



**Fig. 15**