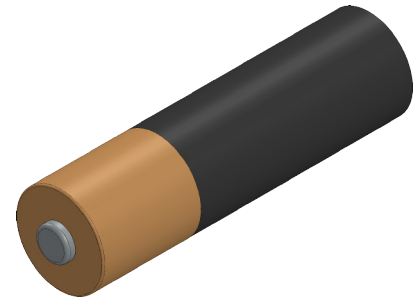




Boat Battery AA



A. Battery.

Step 1. Click File Menu > New, click **Part** and OK.

Step 2. Click **Front Plane**  in the Feature Manager and click **Sketch**  on the context toolbar, **Fig. 1**.

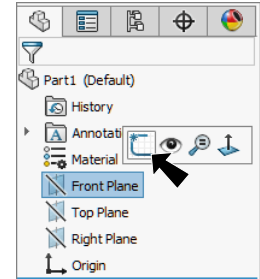


Fig. 1

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

Step 4. Sketch a circle starting at the Origin  **Fig. 2**.

Step 5. Click **Smart Dimension**  (S) on the Sketch toolbar.

Step 6. Dimension circle diameter **.54**, **Fig. 2**.

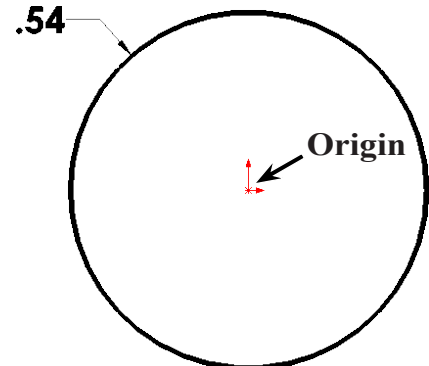



Fig. 2

Step 7. Click **Features**  on the Command Manager toolbar.

Step 8. Click **Extruded Boss/Base**  on the Features toolbar.

Step 9. In the Boss-Extrude Property Manager set:
under Direction 1, **Fig. 3**

Depth  **1.9**
click OK .

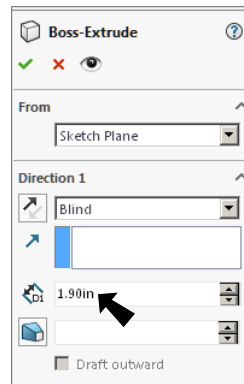



Fig. 3

Step 10. Click Zoom to Fit  (F) on the View toolbar.

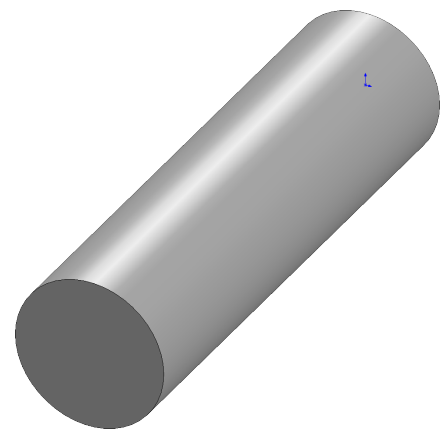


Fig. 4

B. Save as "BATTERY AA".


Step 1. Click File Menu > Save As.

Step 2. Key-in **BATTERY AA** for the filename and press ENTER.

C. Terminal.


Step 1. Click the **front face** of the battery and click **Sketch** on the context toolbar, **Fig. 5**.

Step 2. Click **Circle**  (S) on the Sketch toolbar.

Step 3. Sketch a circle at the Origin , **Fig. 6**.

Step 4. Click **Smart Dimension**  (S) on the Sketch toolbar.

Step 5. Dimension the circle **diameter .2**, **Fig. 6**.

Step 6. Click **Features**  on the Command Manager toolbar.

Step 7. Click **Extruded Boss/Base**  on the Features toolbar.

Step 8. In the Property Manager set:
under Direction 1, **Fig. 7**

Depth  **.05**
click OK .

Step 9. Save. Use **Ctrl-S**.

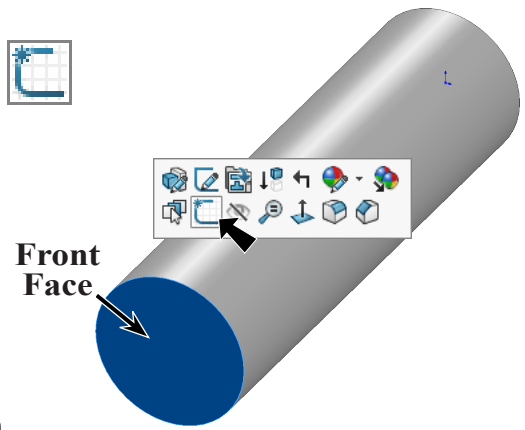


Fig. 5

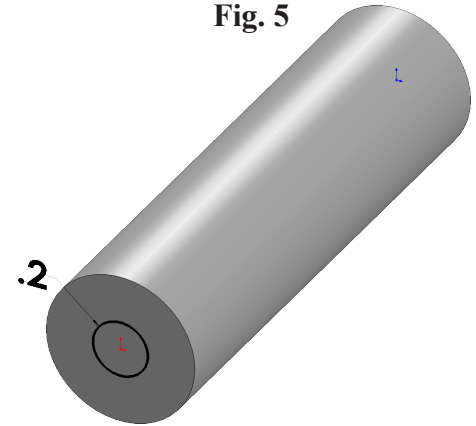


Fig. 6

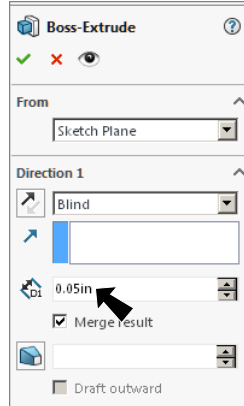


Fig. 7






Fig. 8

D. Fillets.

Step 1. Click **Fillet**  on the Features toolbar.

Step 2. In the Fillet Property Manager set:
select **FilletXpert**, **Fig. 9**

Radius  **.02**
click **front edge** of terminal,
Fig. 10
click **Apply**

Radius  **.01**
click **front edge** of Battery,
Fig. 12
click **OK** .

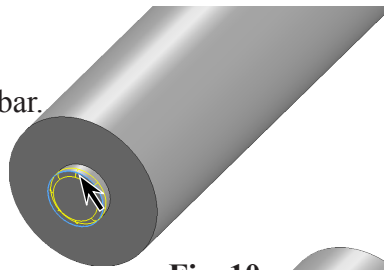


Fig. 10

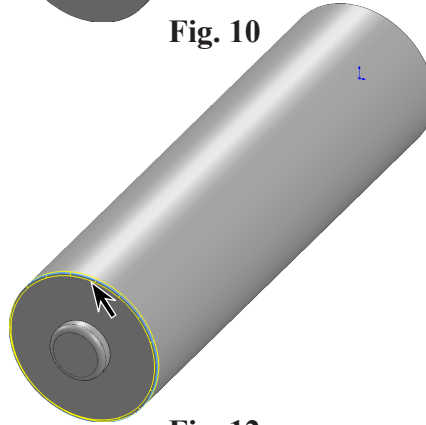


Fig. 12

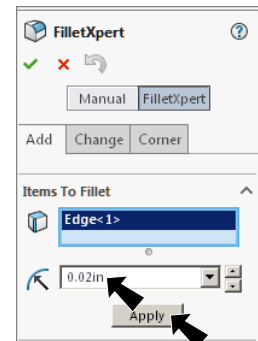


Fig. 9

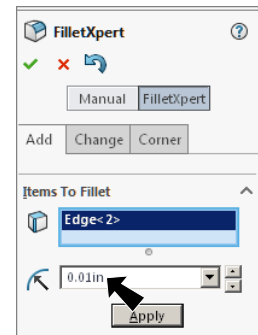



Fig. 11

E. Split Line.

Step 1. Click **Top Plane**  in the Feature Manager and click **Sketch**  on the context toolbar, **Fig. 13**.

Step 2. Click **Normal To**  on the Standard Views toolbar. (**Ctrl-8**)



Step 3. Click **Line**  (**L**) on the Sketch toolbar.

Step 4. Sketch **horizontal line** across part, **Fig. 14**.

Step 5. Click **Smart Dimension**  (**S**) on the Sketch toolbar.

Step 6. Dimension **line to Origin 1.3**, **Fig. 14**.

Step 7. Click Insert Menu > Curve > Split Line.

Step 8. In the Split Line Property Manager:
under Type of Split, **Fig. 15**
select **Projection**
under Selections
Sketch should be selected
in the Faces to Split box 
click **face of Battery body**, **Fig. 16**
click **OK** .

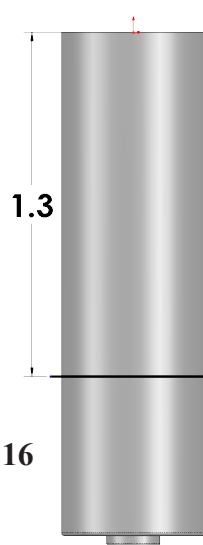


Fig. 14

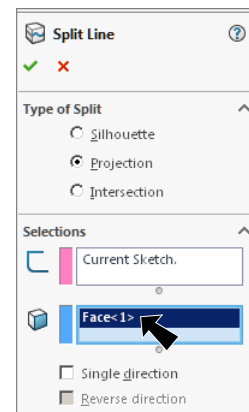


Fig. 15

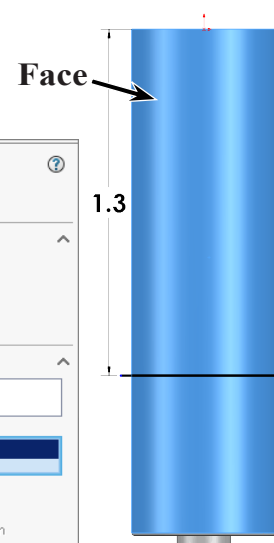


Fig. 16

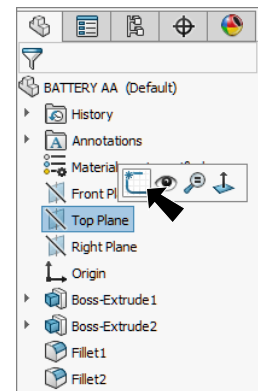




Fig. 13

F. Battery and Terminal Appearance.

Step 1. Click **Trimetric**  on the Standard Views toolbar.

Step 2. Click the battery to select the part, click **Appearance Callout**  on the context toolbar and click **BATTERY AA** , Fig. 17.

Step 3. In the Appearances Task pane, expand **Plastic**, click **High Gloss** and in the lower pane select **white high gloss plastic**, Fig. 18.

Step 4. Over in the Appearances Property Manager, under Color, Fig. 19 set RGB values
R 64
G 64
B 64

Click **Keep Visible**  and OK .


The Push Pin  on allows selection of other appearance for terminal.



Fig. 20

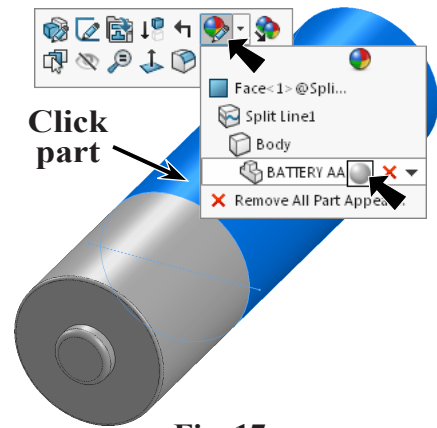


Fig. 17

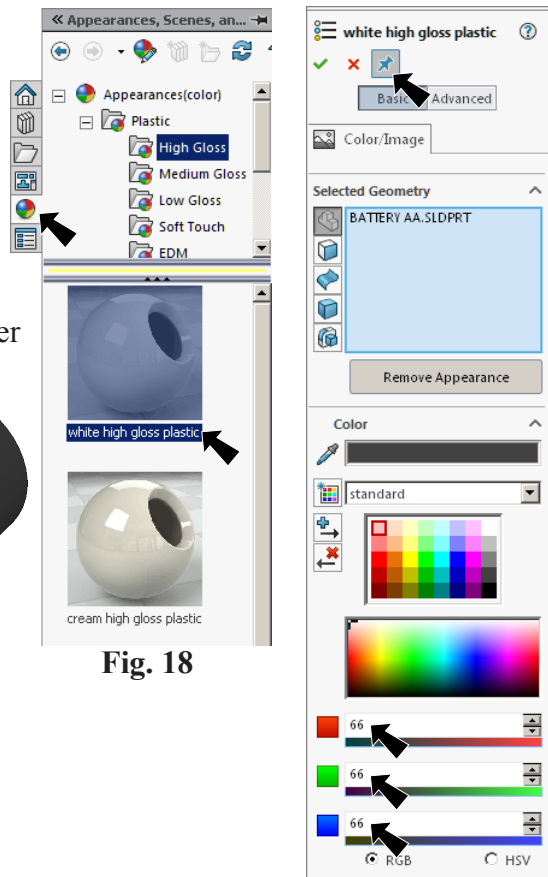


Fig. 18

Fig. 19

Step 5. In the Appearances Property Manager, under Selected Geometry, Fig. 21

click **Select Faces** 

set RGB values

R 214

G 158

B 97

click front split line face, fillet and front face of Battery, Fig. 22

click OK 

Click 3 faces

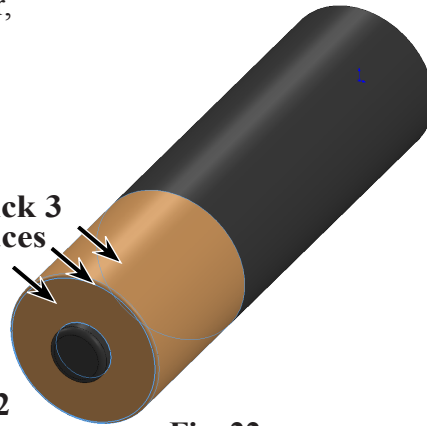


Fig. 22

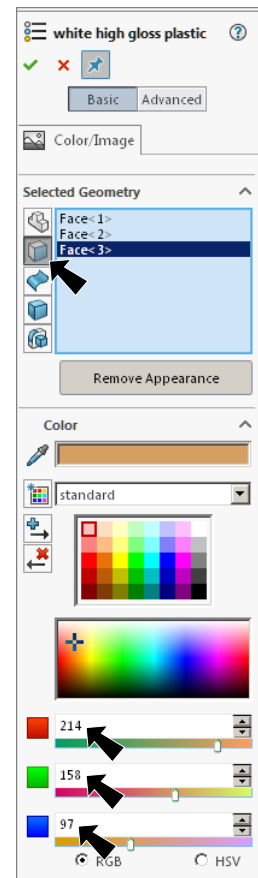


Fig. 21

Step 6. Click **Appearances, Scenes, and Decals**  tab to display the Task pane, Fig. 23.

Step 7. In the Appearances Task pane, expand **Metal** and click **Chrome** and in the lower pane select **chromium plate**, Fig. 23.

Step 8. In the Appearances Property Manager, under Selected Geometry, Fig. 24

Select Faces  should be selected

click the **3 faces of the terminal**, Fig. 25

click OK  and click Cancel .

Step 9. Save. Use **Ctrl-S**

Click the 3 faces of terminal

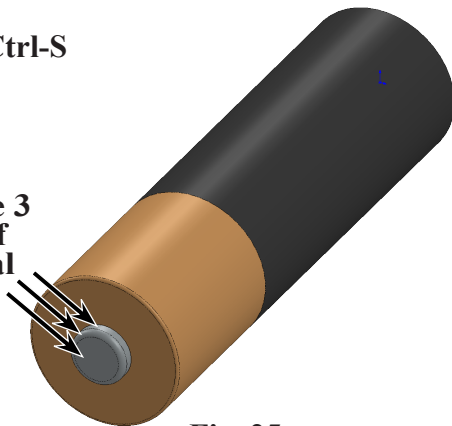


Fig. 25

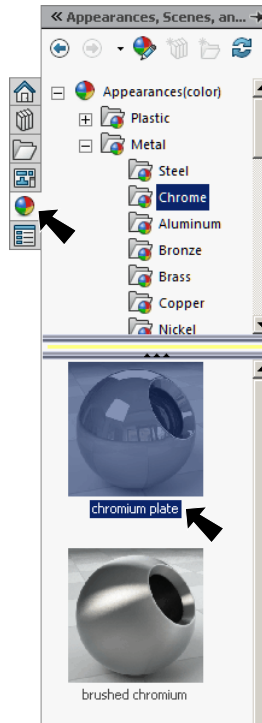


Fig. 23

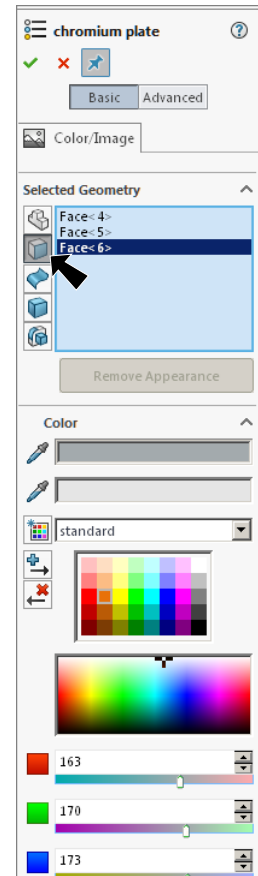


Fig. 24