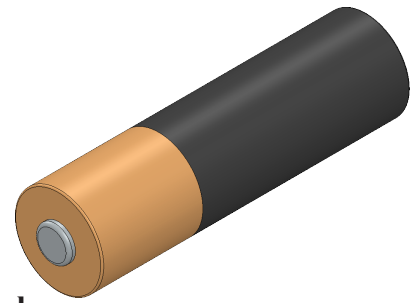




Tank Battery AA



A. Battery.

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

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

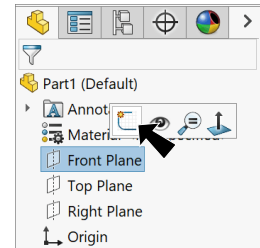


Fig. 1

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

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

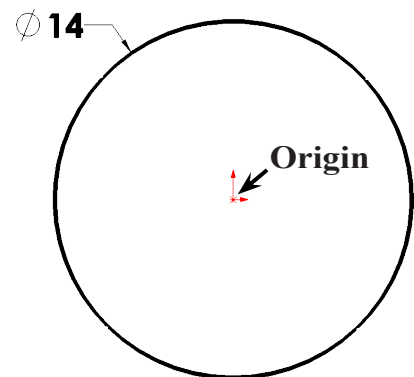



Fig. 2

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

Step 6. Dimension circle diameter 14, **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  **D1** 24.7 (to front)
under Direction 2

Depth  **D2** 24.3 (to rear)
click OK .

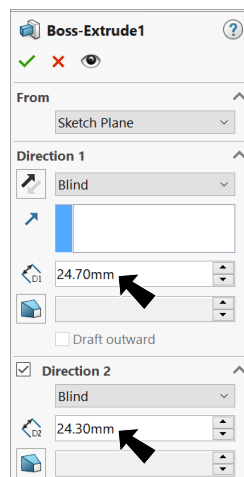


Fig. 3

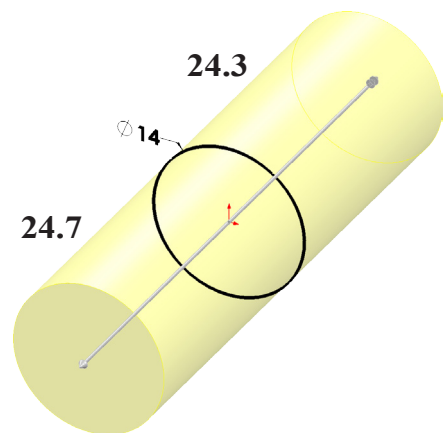


Fig. 4

B. Save as "BATTERY AA".

Step 1. Click File Menu > Save As.


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

C. Terminal.

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




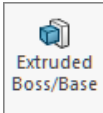
Step 2. Click **Circle**  (S) on the Sketch toolbar.

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 5.5**, **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 Boss-Extrude Property Manager set:
under Direction 1, **Fig. 7**

Depth  **1**
uncheck Merge result
click **OK** .

Step 9. Save  (Ctrl-S).

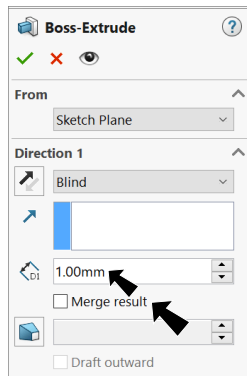


Fig. 7

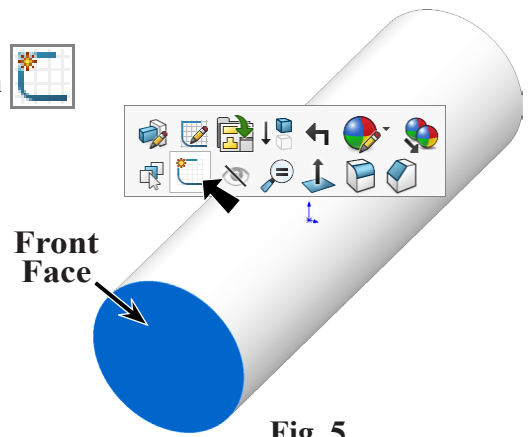


Fig. 5

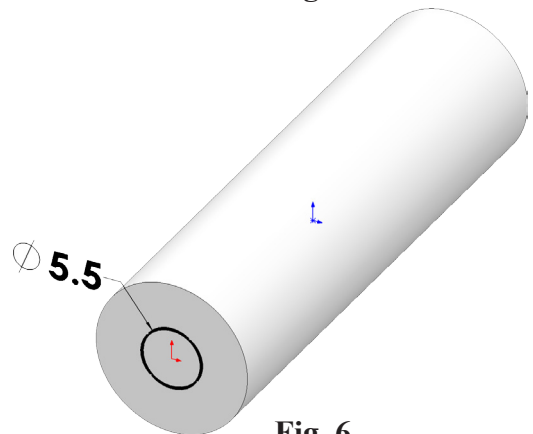


Fig. 6

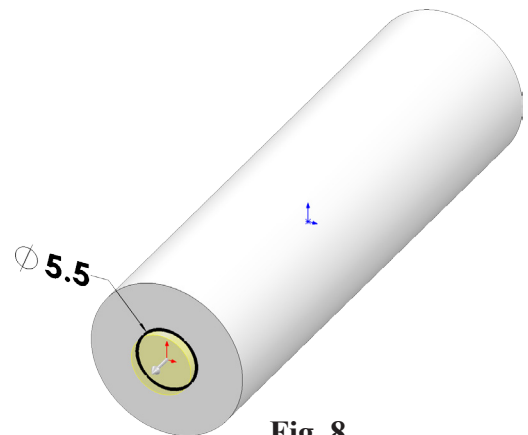




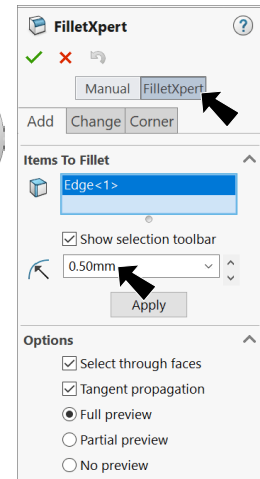
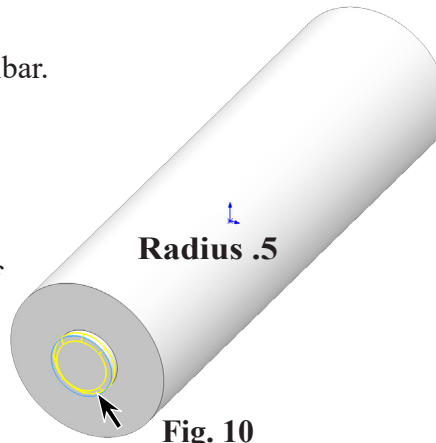
Fig. 8

D. Fillet1.


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

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



Radius  **.5**
click **front cylindrical edge** of
terminal, **Fig. 10**
click **OK** .

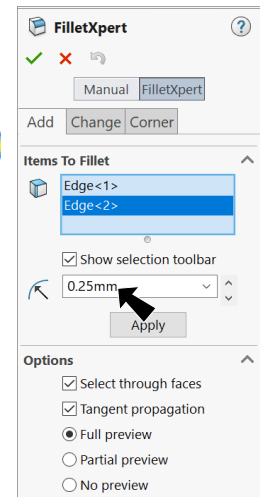
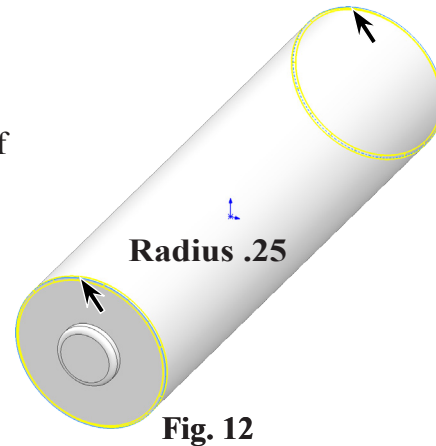


E. Fillet2.

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

Step 2. In the Fillet Property Manager set:

Radius  **.25**, **Fig. 11**
click **both cylindrical edges** of
Battery, **Fig. 12**
click **OK** .



Step 3. Save  (**Ctrl-S**).

F. Split.

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

Step 2. Click **Line**  (L) on the Sketch toolbar.

Step 3. Sketch **horizontal line** across part, **Fig. 14**.

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

Step 5. Dimension **line to Origin 8.7**, **Fig. 14**.

Step 6. Click Insert Menu > Features > Split.

Step 7. In the Split Property Manager:
 under Trim Tools, **Fig. 15**
Sketch3 was preselected
 click **Cut Bodies** button
 under Resulting Bodies

click **Select All** 
 uncheck **Consume cut bodies**
 click OK .

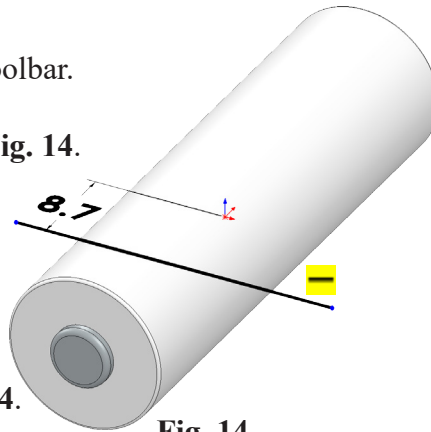


Fig. 14

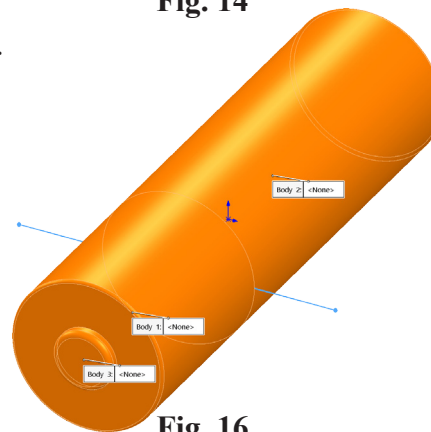


Fig. 16

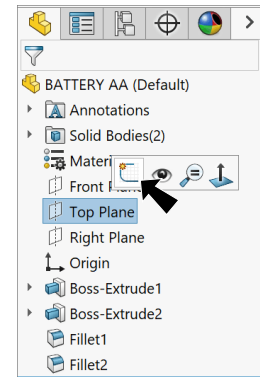


Fig. 13

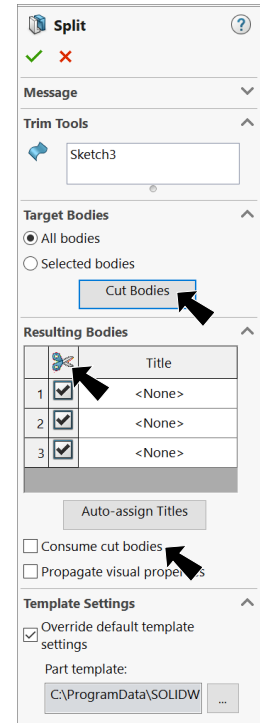



Fig. 15

G. Hide Sketch3.

Step 1. **Hide Sketch3**. To hide, click **Sketch3** in the Feature Manager and **Hide**  on the context toolbar, **Fig. 17**.

Note the **3 Solid Bodies**.

Step 2. Save  (Ctrl-S).

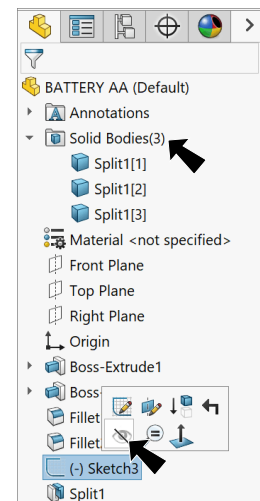


Fig. 17

H. Battery and Terminal Appearance.

Step 1. Click **rear body** to select the body, click **Appearance**

Callout  on the context toolbar and click **rear Body** , Fig. 18.

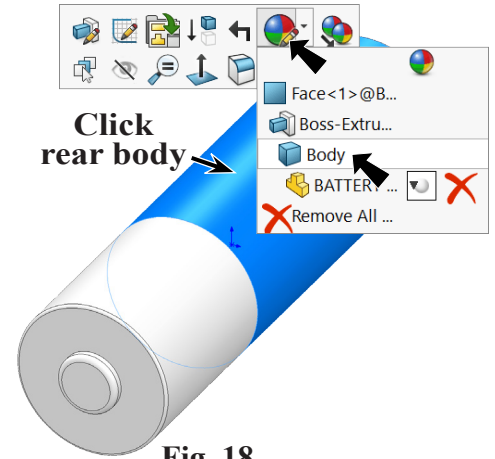


Fig. 18

Step 2. In the Appearances Task pane, expand **Plastic**, click **High Gloss** and in the lower pane select **light gray high gloss plastic**, Fig. 19.

Step 3. Over in the Appearances Property Manager, under Color, Fig. 20


set RGB values

R 64

G 64

B 64

Click **Keep Visible**  and **OK** .

The Push Pin  on allows selection of other appearance.

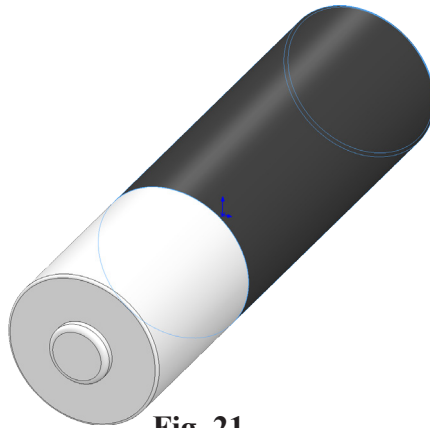


Fig. 21

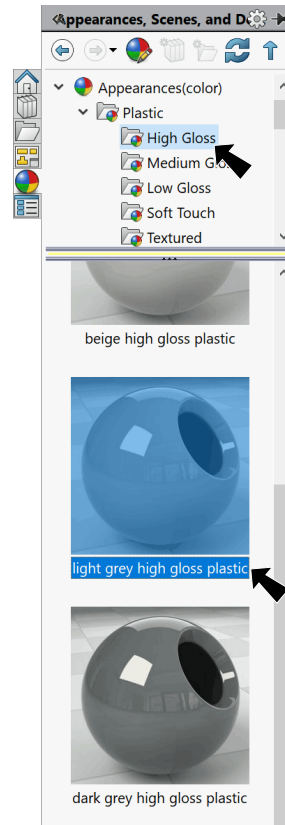


Fig. 19

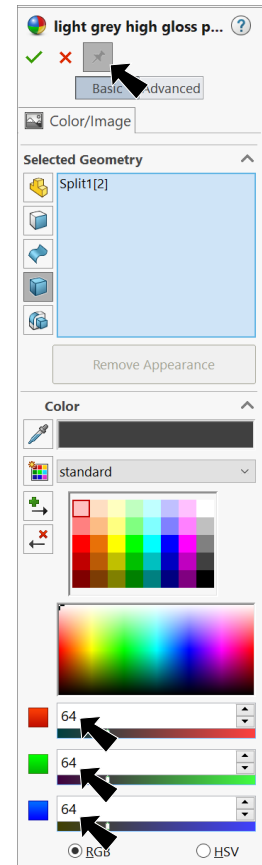


Fig. 20

Step 4. In the Appearances Property Manager, set RGB values, Fig. 22

R 214

G 158

B 97

click front body, Fig. 23

click OK .

Click front body 

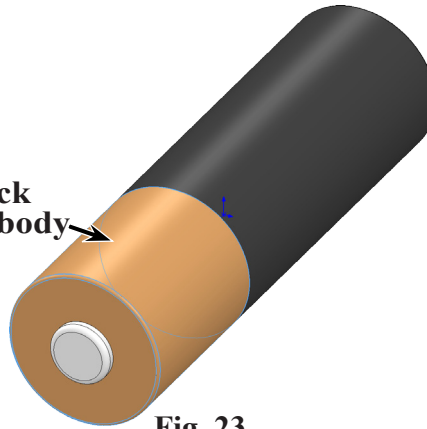


Fig. 23

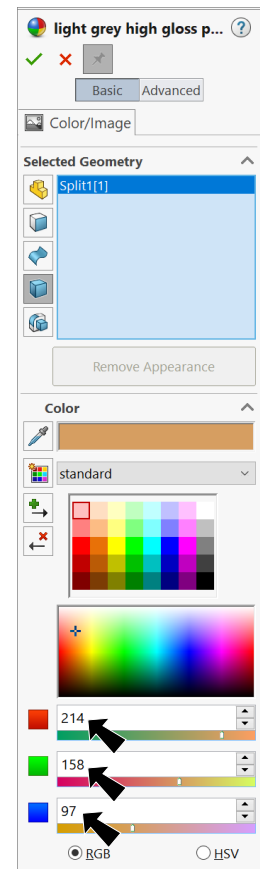




Fig. 22

Step 5. Click **Appearances, Scenes, and Decals**  tab to display the Task pane, Fig. 24.

Step 6. In the Appearances Task pane, expand **Metal** and click **Chrome** and in the lower pane select **chromium plate**, Fig. 25.

Step 7. In the Appearances Property Manager, click the **terminal body**, Fig. 26
click OK  and click Cancel .

Step 8. Save  (Ctrl-S).

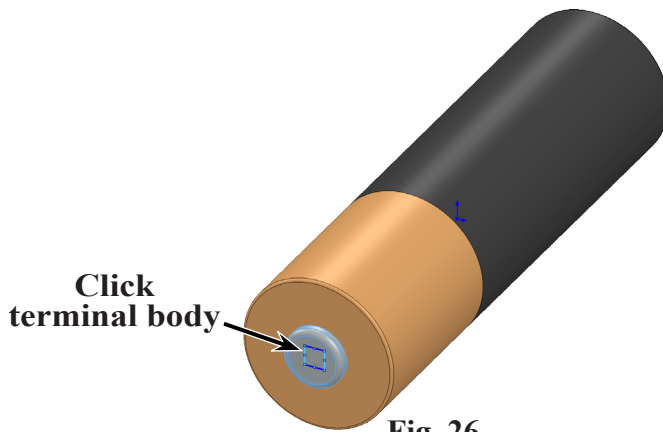


Fig. 26

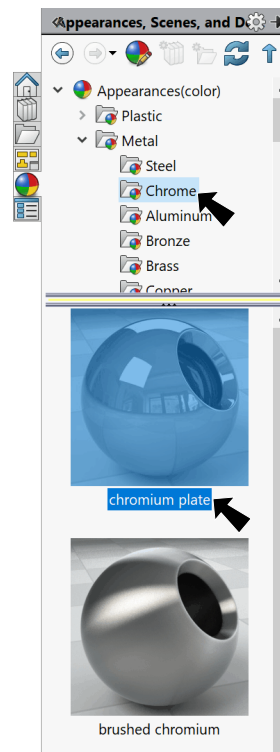


Fig. 24

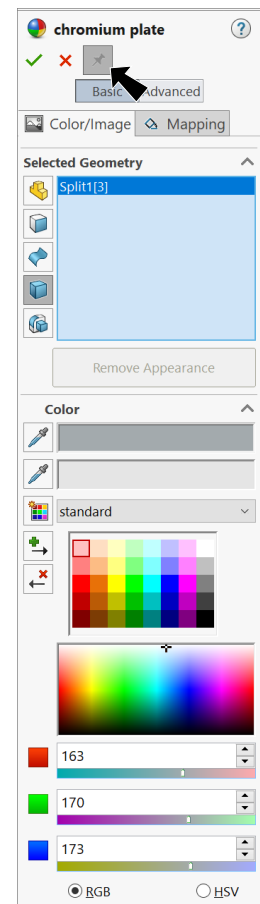


Fig. 25