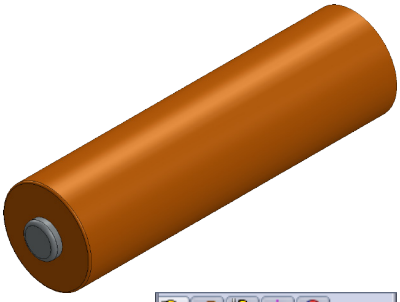
Boat
Battery AA



A. Battery.

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

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

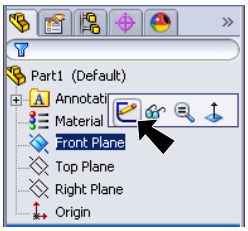


Fig. 1

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

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

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

Step 6. Dimension **circle diameter .54** as shown in **Fig. 2**.

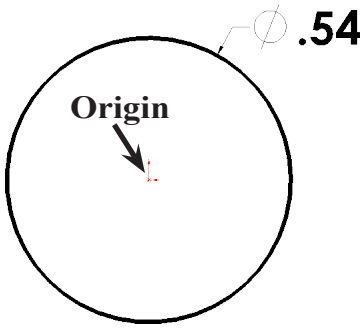


Fig. 2

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

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

Step 9. In the Property Manager set:

Depth to **1.9**

click OK, **Fig. 3** and **Fig. 4**.

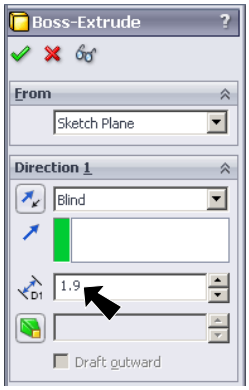


Fig. 3

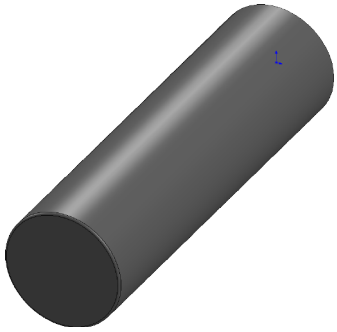


Fig. 4

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

B. Save as "BATTERY AA".

Step 1. Click File Menu > Save As.

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

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C. Fillet Battery.

Step 1. Click **Fillet**

on the Features toolbar.

Step 3. In the Fillet Property Manager set:

Radius to **.01**

click **front face** of the battery, **Fig. 5**.

click OK , **Fig. 6** and **Fig. 7**.

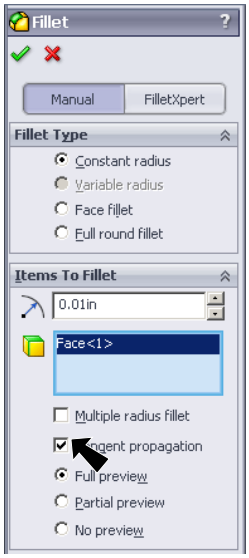


Fig. 6

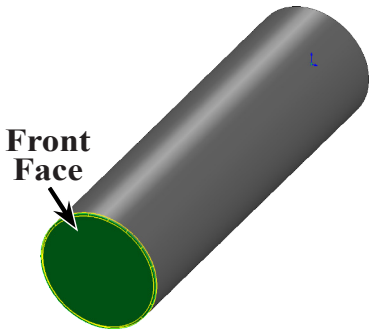


Fig. 5

D. Terminal.

Step 1. Click the **front face** of the battery and click **Sketch** on the Content menu, **Fig. 7**.

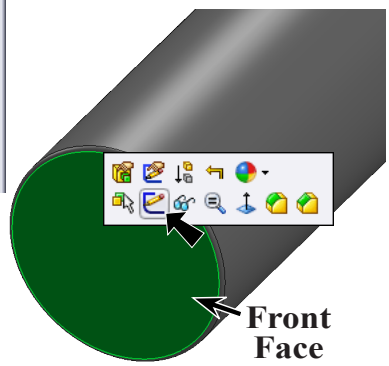


Fig. 7

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

Step 3. Starting at the Origin , draw a circle for the terminal, **Fig. 8**.

Step 4. Click **Smart Dimension**

(S) on the Sketch toolbar.

Step 5. Dimension the circle **diameter .2**, **Fig. 8**.

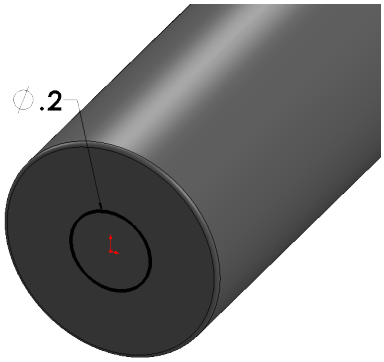
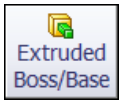


Fig. 8

Step 6. Click **Extruded Boss/Base** 

on the Features toolbar.

Step 7. In the Property Manager set:

Depth to **.05**

click OK , **Fig. 9** and **Fig. 10**.

Step 8. Save. Use **Ctrl-S**.

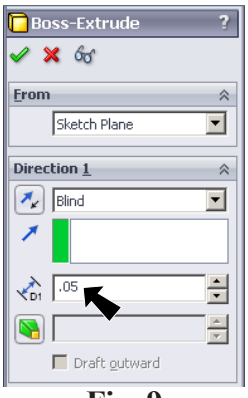


Fig. 9

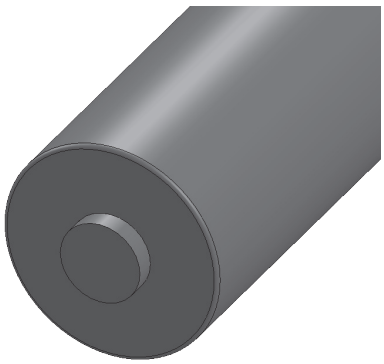


Fig. 10

E. Fillet Terminal.

Step 1. Click **Fillet**

on the Features toolbar.

Step 3. In the Fillet Property Manager set:

Radius to **.02**

click **front face** of terminal, **Fig. 12**

click OK .

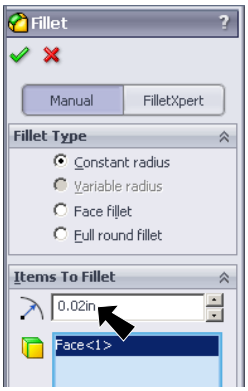


Fig. 11

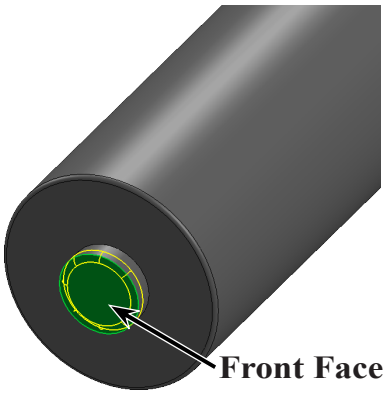


Fig. 12

F. Battery and Terminal Appearance.

Step 1. Click the battery to select the part, click **Appearance Callout** on the Content menu and click **BATTERY AA** , **Fig. 13**.

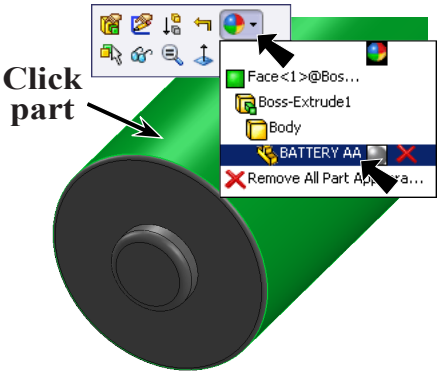


Fig. 13

Step 2. In the Appearances Task pane, expand **Plastic**, click **High Gloss** and in the lower pane select **white high gloss plastic**, **Fig. 14**.

Step 3. Back over in the Appearances Property Manager, under Color:

click **Orange** swatch, **Fig. 15** and **Fig. 16**

click **Keep Visible** and OK , **Fig. 15**. The Push Pin on allows selection of other material for terminal.

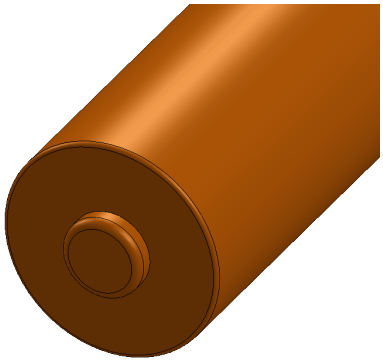


Fig. 16

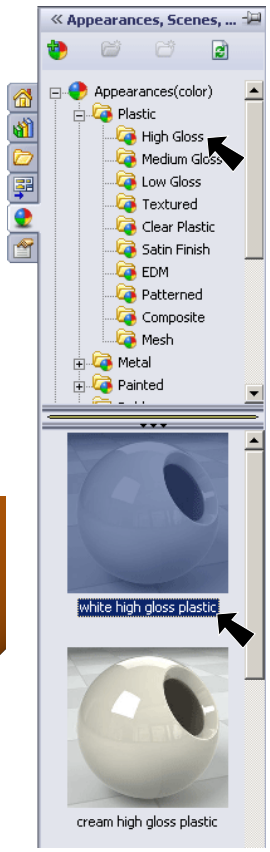


Fig. 14

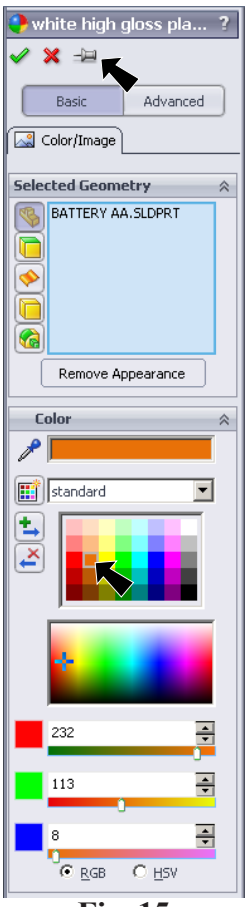


Fig. 15

Step 4. In the Appearances Property Manager, under Selected Geometry

click **Select Features** , **Fig. 17**

click **the extruded terminal and fillet**, **Fig. 18**.

Step 5. Click **Appearances, Scenes, and Decals** tab to display the Task pane, **Fig. 19**.

Step 6. In the Appearances Task pane, expand **Metal** and click **Chrome** and in the lower pane select **chromium plate**, **Fig. 19**

in the Property Manager, click OK and click Cancel .

Step 7. Save. Use **Ctrl-S**.

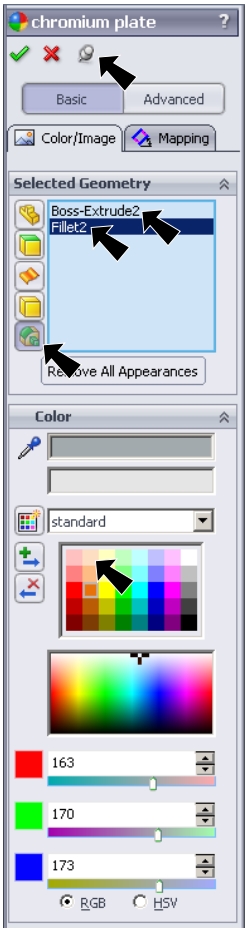


Fig. 17

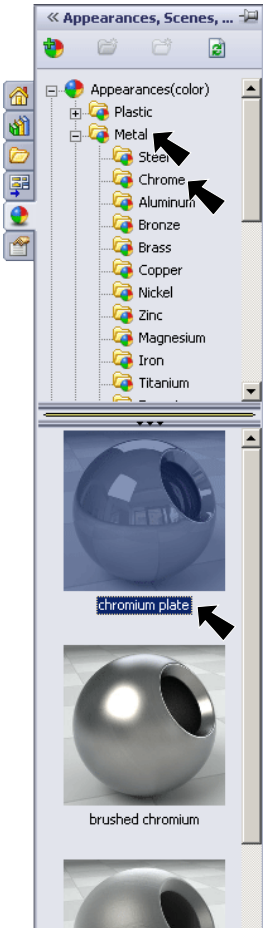


Fig. 19

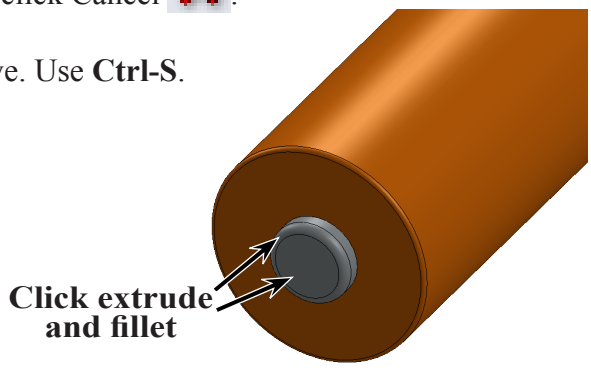
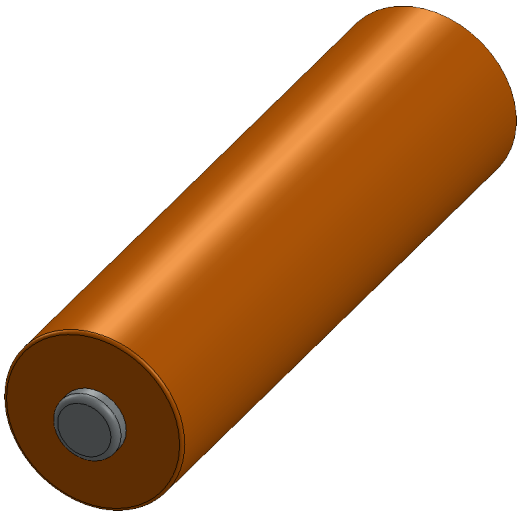



Fig. 18