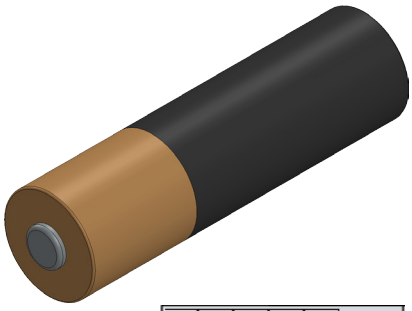
JSS

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** from the Context toolbar, **Fig. 1**.

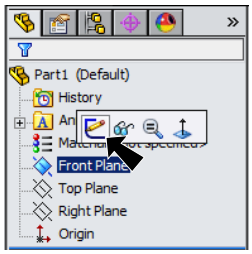


Fig. 1

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 **diameter 14**, **Fig. 2**.

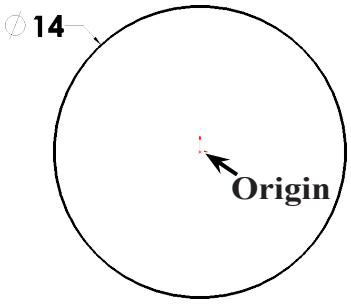


Fig. 2

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:
under Direction 1, **Fig. 3**
Depth 49
click OK .

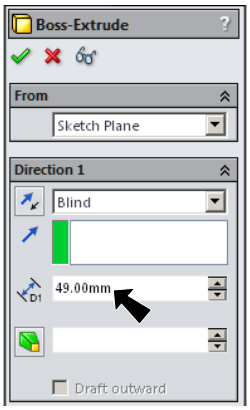


Fig. 3

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

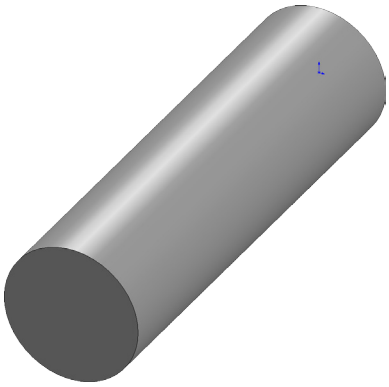


Fig. 4

B. Save as "BATTERY AA".

Step 1. Click File Menu > Save As.

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

© Cudacountry.net Tech Ed
http://www.cudacountry.net email:cudacountry@hotmail.com

C. Terminal.

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

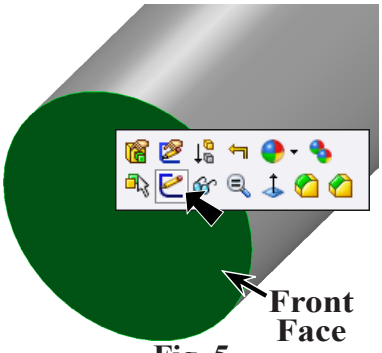


Fig. 5

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

Step 3. Starting at the Origin , draw a circle for the terminal, **Fig. 6**.

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

Step 5. Dimension **diameter 5.5**, **Fig. 6**.

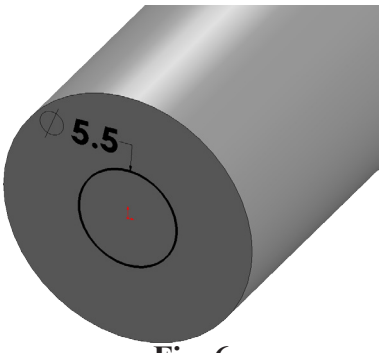


Fig. 6

Step 6. Click **Extruded Boss/Base** on the Features toolbar.

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

Depth **1**

click OK .

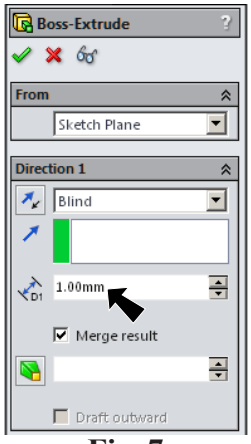


Fig. 7

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

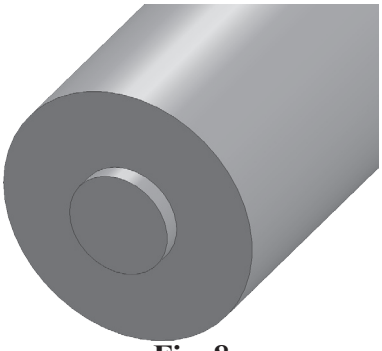


Fig. 8

D. Fillet Battery.

Step 1. Click **Fillet**

on the Features toolbar.

Step 2. In the Fillet Property Manager:
select **FilletXpert**, **Fig**. **9**
Radius .25

click **cylindrical face** of Battery, **Fig. 10**

click **Apply**, **Fig. 9**.

Step 3. Set **Radius** .5 **Fig. 11**

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

click OK .

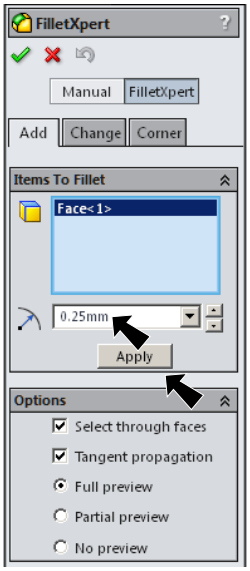


Fig. 9

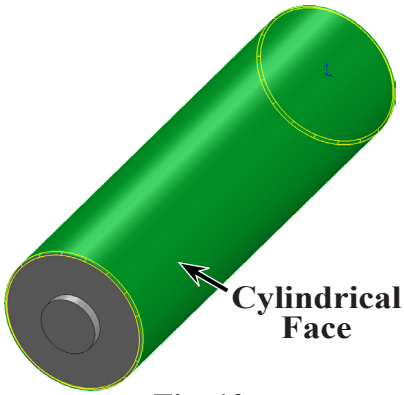


Fig. 10

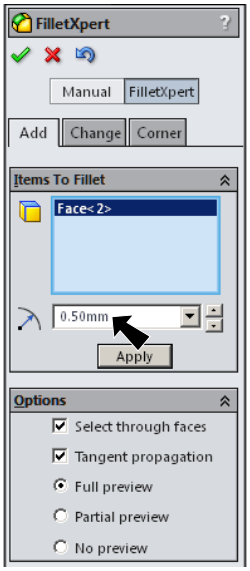


Fig. 11

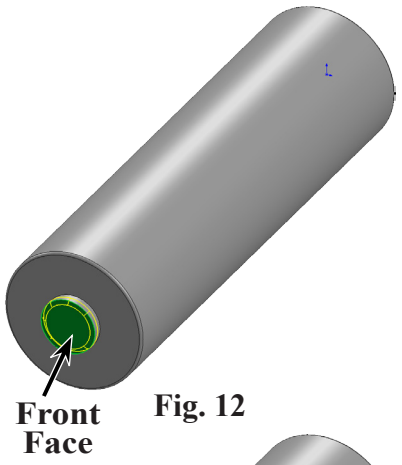


Fig. 12

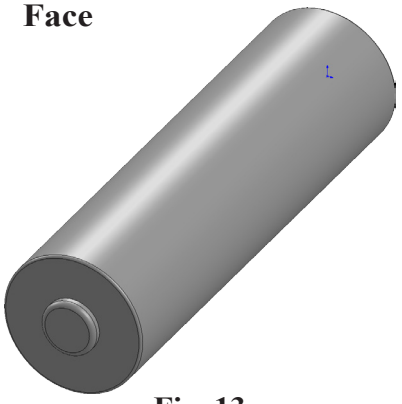


Fig. 13

E. Split Line.

Step 1. Click **Top Plane** in the Feature Manager and click **Sketch** on the Context toolbar, **Fig. 14**.

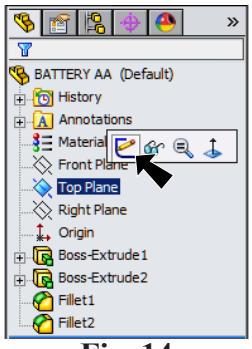


Fig. 14

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

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

Step 4. Draw a horizontal Line across part, **Fig. 15**.

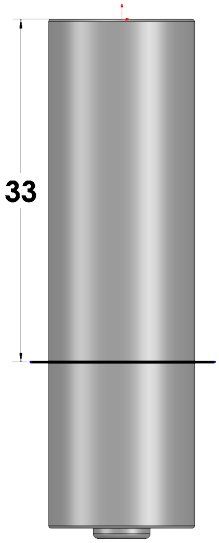


Fig. 15

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

Step 6. Dimension **line to Origin 33**, **Fig. 15**.

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

Step 8. In the Split Line Property Manager:
under Type of Split, **Fig. 16**
select **Projection**
under Selections
Sketch should be selected
in the Faces to Split field
click **face of Battery body**, **Fig. 17**
click OK .

Step 9. You can confirm the split face by selecting the new face, **Fig. 18**.

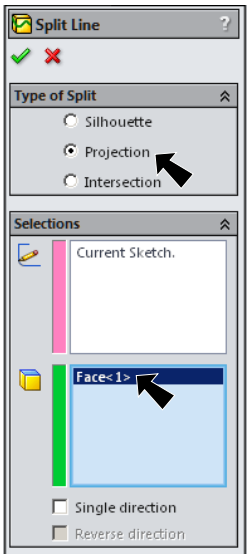


Fig. 16

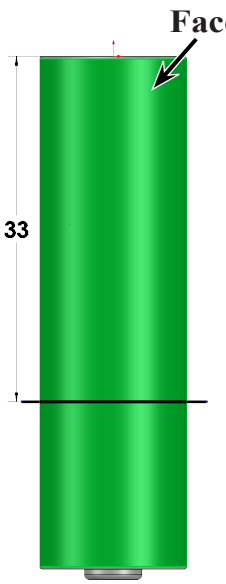


Fig. 17

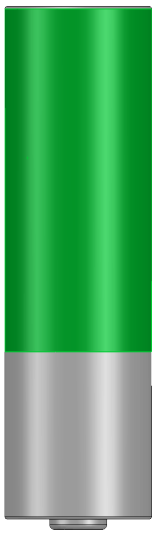


Fig. 18

F. Appearances.

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

Step 2. Click the Battery to select part, click **Appearance Callout** on the Context toolbar and click **BATTERY AA**, **Fig. 19**.

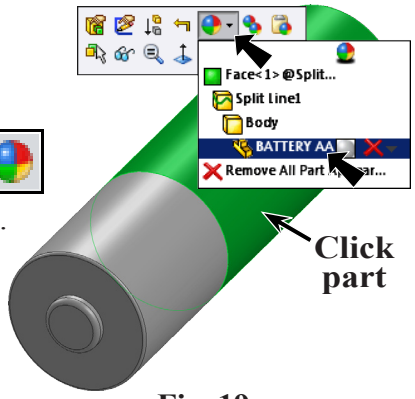


Fig. 19

Step 3. In the Appearances Task pane, expand **Plastic**, click **High Gloss** and in the lower pane select **white high gloss plastic**, **Fig. 20**.

Step 4. Over in the Appearances Property Manager, under Color, **Fig. 21**

set **RGB values**

R 64

G 64

B 64

click **Keep Visible** and OK, **Fig. 21** and **Fig. 22**. The Push Pin on allows selection of other appearances.

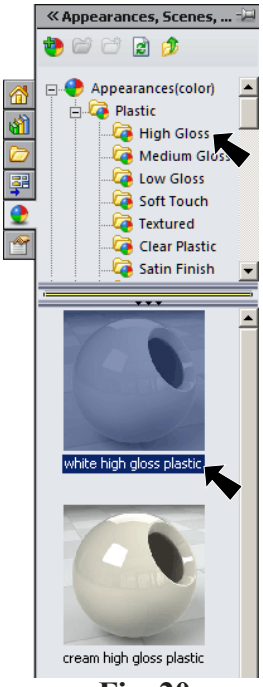


Fig. 20

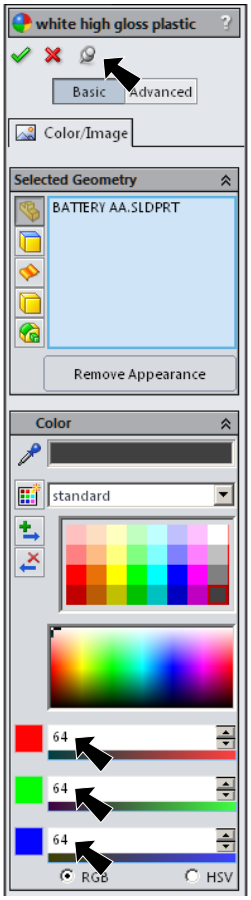


Fig. 21

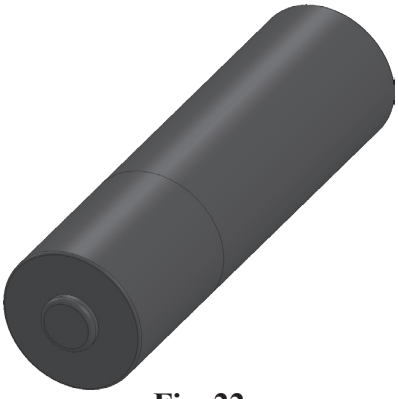


Fig. 22

Step 5. In the Appearances Property Manager, under Selected Geometry, **Fig. 23**

click **Select Faces**

set **RGB values**
R 214
G 158
B 97

click **front split line face, fillet and front face of Battery**, **Fig. 24**

click OK .

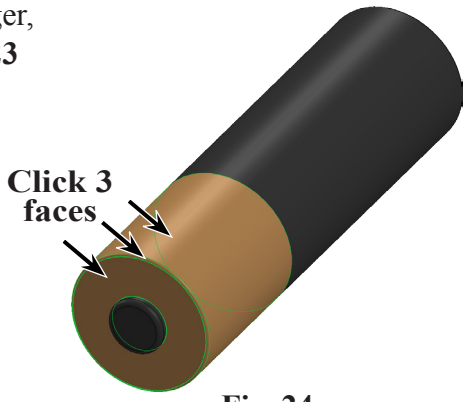


Fig. 24

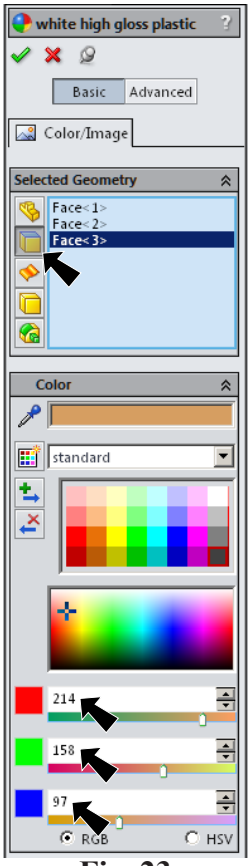


Fig. 23

Step 6. Click **Appearances** tab to display the Task pane, **Fig. 25**.

Step 7. In the Appearances Task pane, expand **Metal** and click **Chrome** and in the lower pane select **chromium plate**, **Fig. 25**.

Step 8. Back over in the Appearances Property Manager, under Selected Geometry, **Fig. 26**

Select Faces should be selected

click the **3 faces of the terminal**, **Fig. 27**

click OK and click Cancel .

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

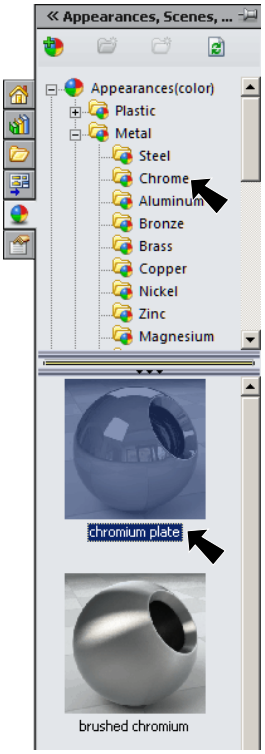


Fig. 25

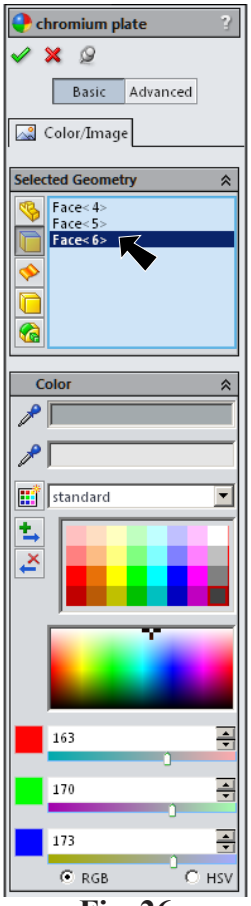


Fig. 26

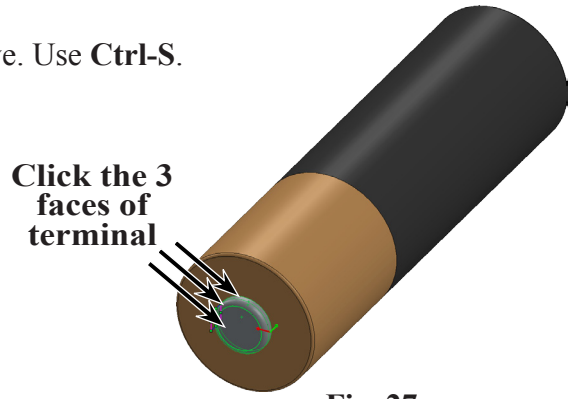


Fig. 27