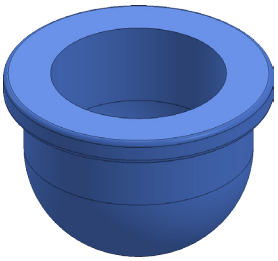
Chapter 9

Skateboard
Pivot Bushing



A. Lines.

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**.

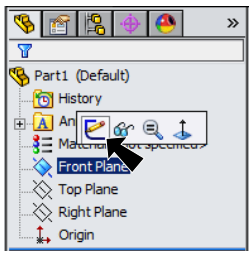


Fig. 1

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

Step 4. Starting at Origin draw lines, **Fig. 2**.

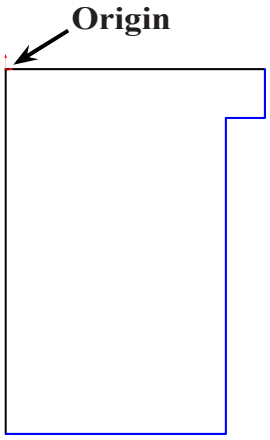


Fig. 2

Step 5. **Right click graphics area and click Select** from menu to unselect Line tool.

Step 6. Click **left vertical line** and click **Construction Geometry** on the Context toolbar, **Fig. 3**.

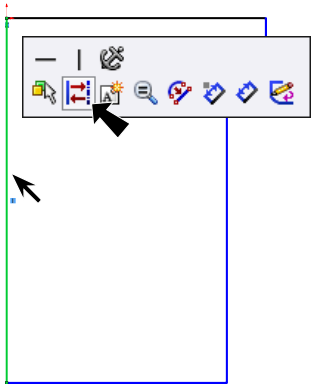


Fig. 3

Step 7. Click **Smart Dimension** (**S**) on the Sketch toolbar.

Step 8. Add dimensions, **Fig. 4**. Dimension **double distance** 13.6 and 16.

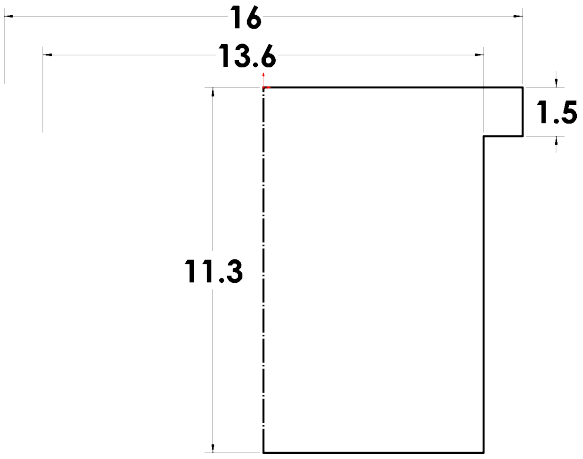


Fig. 4

Step 9. Click Zoom to Fit (**F**) on the View toolbar.

B. Save as "PIVOT BUSHING".

Step 1. Click File Menu > Save As.

Step 2. Key-in **PIVOT BUSHING** for the filename and press ENTER.

http://www.cudacountry.net email:cudacountry@hotmail.com

C. Revolve.

Step 1. Click **Features** 

on the Command Manager toolbar.

Step 2. Click **Revolved Boss/Base** 

on the Features toolbar.

Step 3. In the Revolve Property Manger set:
click **Yes** to close revolve message
under Axis of Revolution 
vertical centerline is selected, **Fig. 5**
click OK  .

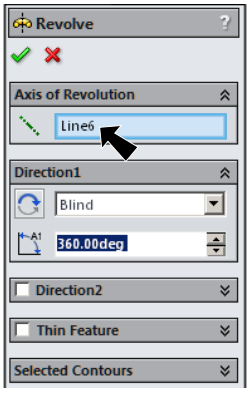


Fig. 5

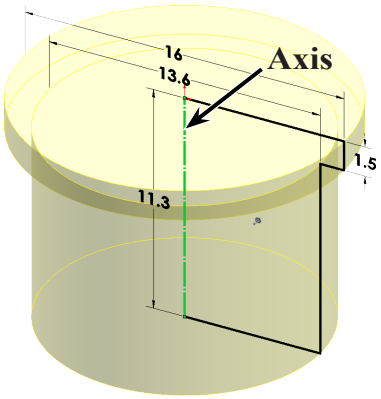


Fig. 6

D. Fillets.

Step 1. Click **Fillet** 

on the Features toolbar.

Step 2. In the Fillet Property Manager:
select **FilletXpert**, **Fig**. **7**
Radius  **6.3**
click **bottom circular edge**, **Fig. 8**

click **Apply**.

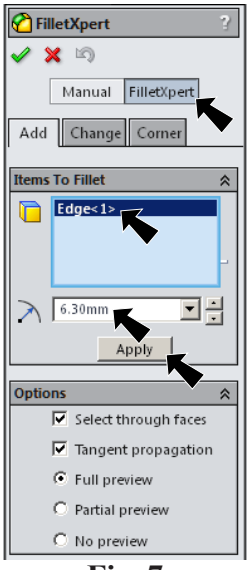


Fig. 7

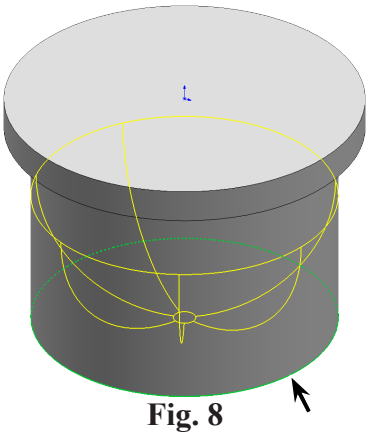


Fig. 8

Step 3. Set **Radius**  **.3 Fig. 9**
click **cylindrical face of lip**, **Fig. 10**
click OK  .

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

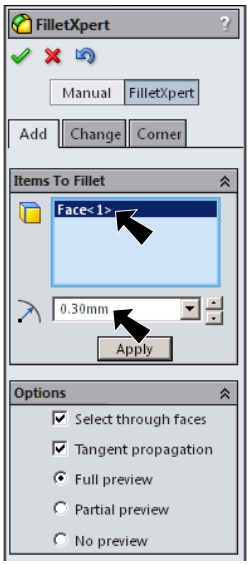


Fig. 9

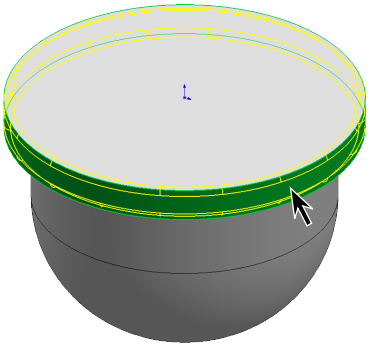


Fig. 10

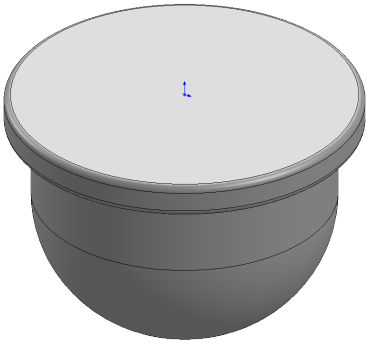


Fig. 11

E. Shell.

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

Step 2. In the Shell Property Manager set:
under Parameters, **Fig. 12**

Distance  **1.6**
check **Show preview**
in the face to remove box
click **top face**, **Fig. 13**
click OK  .

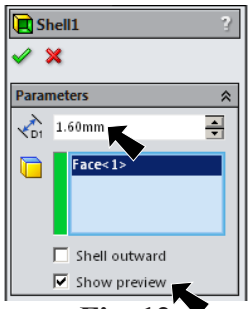


Fig. 12

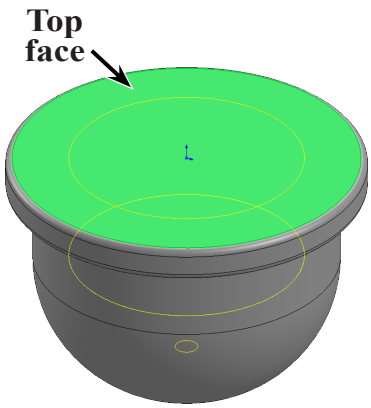


Fig. 13

Step 3. Save. Use **Ctrl-S**.

F. Appearance.

Step 1. Click the part, click **Appearance Callout**  on the Context toolbar and click **PIVOT BUS...**  , **Fig. 14**.

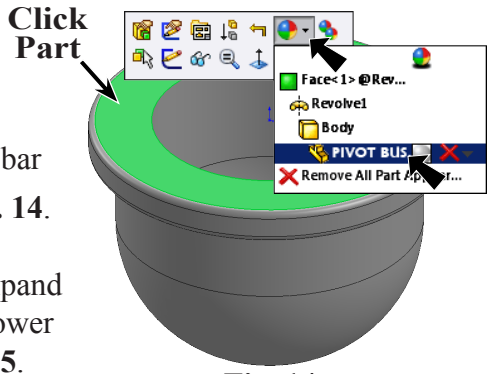


Fig. 14

Step 2. In the Appearances Task pane, expand **Rubber**, click **Gloss** and in the lower pane select **glossy rubber**, **Fig. 15**.

Step 3. In the Appearances Property Manager set:
click **Advanced** button, **Fig. 16**
under Color
set **RGB** values:
R 95
G 146
B 255
click OK  .

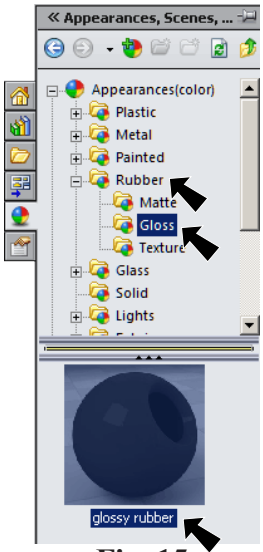


Fig. 15

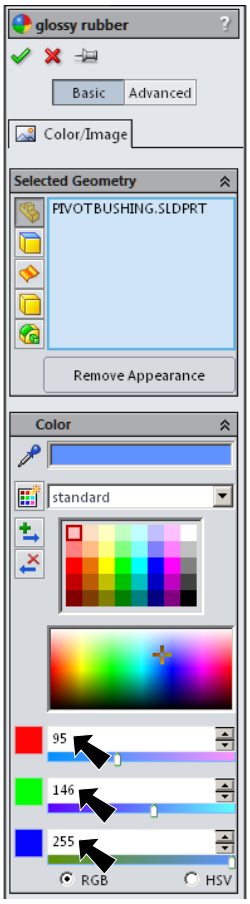


Fig. 16

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

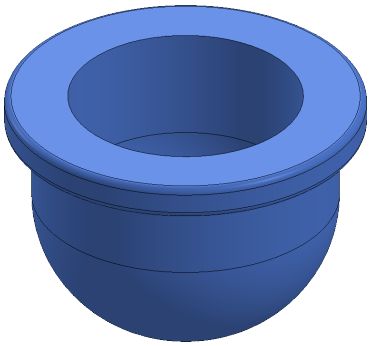


Fig. 17