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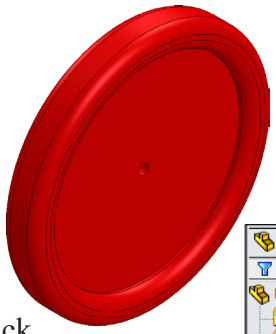
Wheel



A. Sketch.

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**.

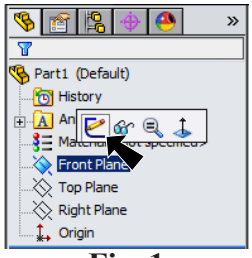


Fig. 1

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

Step 4. Draw lines starting at the Origin, **Fig. 2**. Use the inferencing line, the dotted line that appears when you draw the lines.

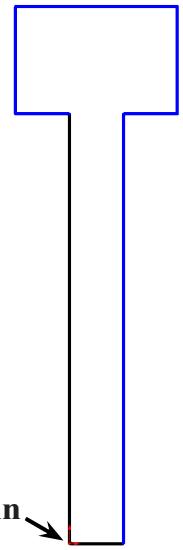


Fig. 2

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

Step 6. Dimension as shown in **Fig. 3**. **Start dimensioning from the smallest dimension and work out** to the largest, dimension .05's, then .01 and .5 last.

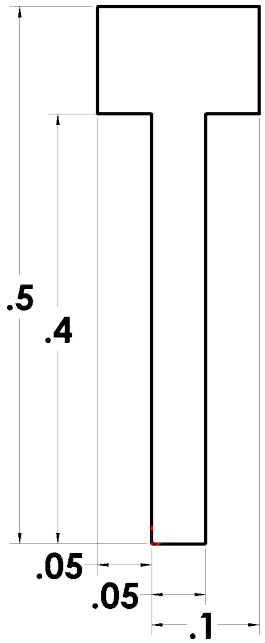


Fig. 3

B. Save as "WHEEL".

Step 1. Click File Menu > Save As.

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

C. Sketch Fillets.

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

Step 2. In the Property Manager set:

under Fillet Params, **Fig. 4**

Radius **.04**

click **4 corners**, **Fig. 5**

click OK **twice**.

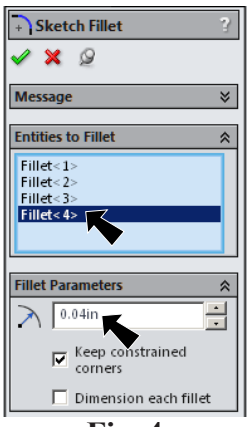


Fig. 4

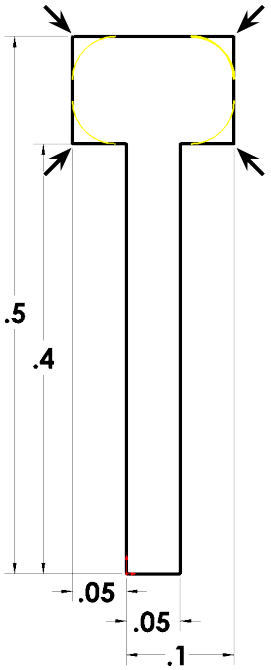


Fig. 5

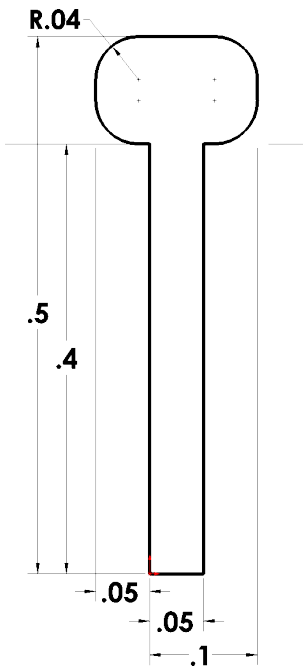


Fig. 6

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D. Revolve.

Step 1. Click **Features** Features on the Command Manager toolbar.

Step 2. Click **Revolved Boss/Base** Revolved Boss/Base on the Features toolbar.

Step 3. In the Revolve Property Manger set:

under Axis of Revolution , **Fig. 7**
click **bottom line of sketch**, **Fig. 8**
click OK .

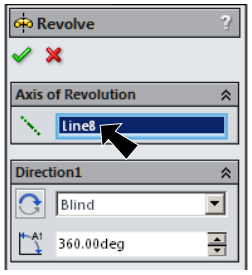

Fig. 7

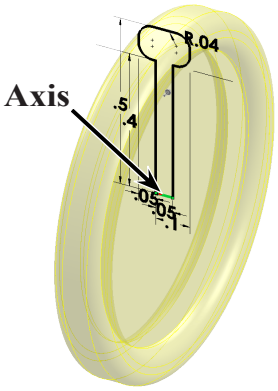

Fig. 8

E. Hole.

Step 1. Click the **side face** and click **Sketch** on the Context toolbar, **Fig. 9**.

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

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

Step 4. Draw **circle at the Origin** , **Fig. 10**.

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

Step 6. Dimension circle **.04 diameter**, **Fig. 10**.

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

Step 8. Click **Extruded Cut** on the Features toolbar.

Step 9. In the Property Manager set:
under Direction 1, **Fig. 11**
End Condition **Through All**
click OK .

Step 10. Save. Use **Ctrl-S**.

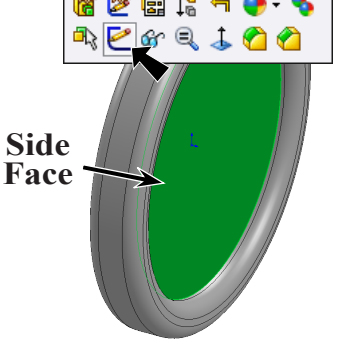

Fig. 9

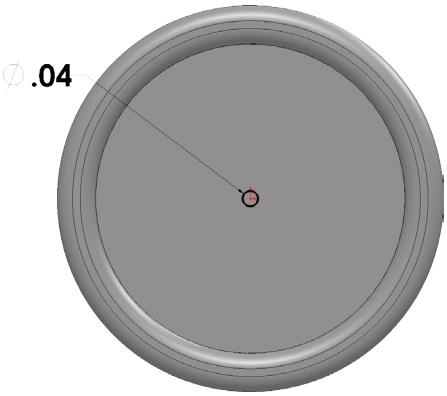

Fig. 10

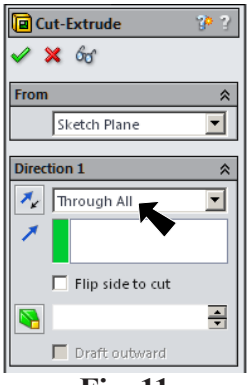

Fig. 11

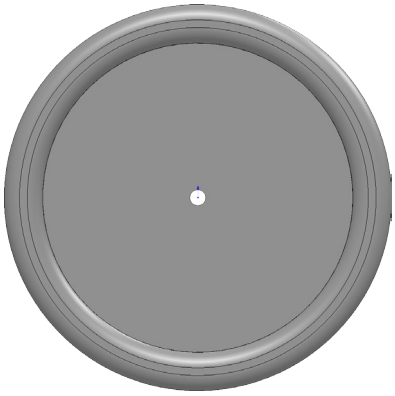
Fig. 12

F. Material ABS Plastic.

Step 1. **Right click Material** in the Feature Manager and click **Edit Material**.

Step 2. **Expand Plastics** in the material tree and select **ABS**. Click **Apply** and **Close**.

G. Appearance Color.

Step 1. Click **Isometric** on the View toolbar. (**Ctrl-7**)

Step 2. Click the part, click **Appearance Callout** on the Context toolbar and click **WHEEL**, **Fig. 13**.

Step 3. In the Appearances Property Manager, under Color:
click **red** swatch, **Fig. 14**
click OK.

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

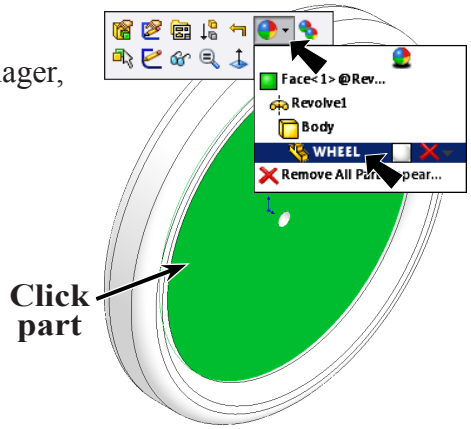

Fig. 13

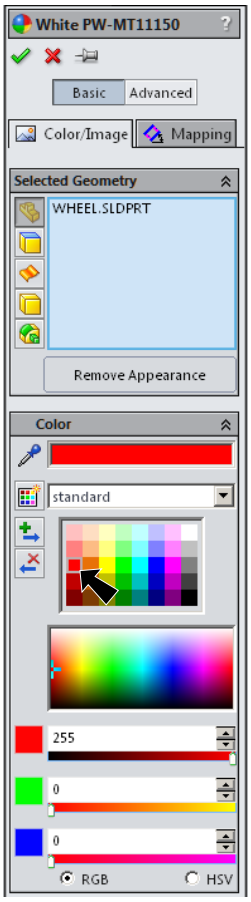

Fig. 14

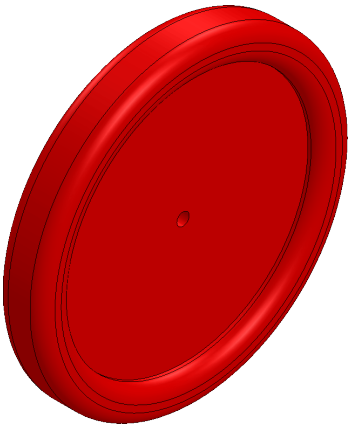

Fig. 15