



A. Motor.

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

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

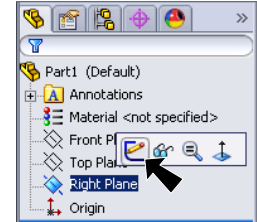



Fig. 1

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

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

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

Step 6. Dimension circle **diameter .9** as shown in **Fig. 2**.

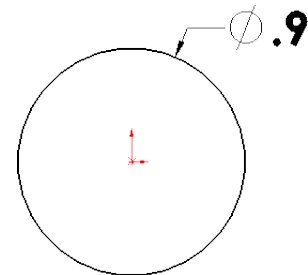


Fig. 2

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:
under Direction 1, **Fig. 3**

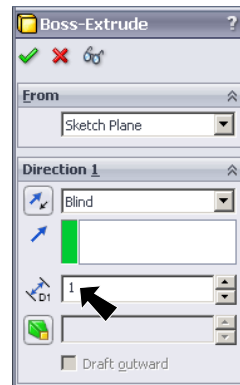


Fig. 3

Depth  **D1** **1**

click OK , **Fig. 4**.

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

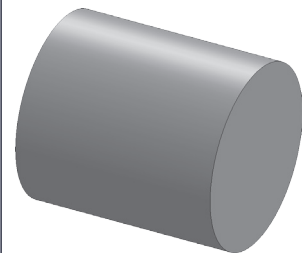


Fig. 4

B. Save as "MOTOR".



Step 1. Click File Menu > Save As.

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

C. Fillets.

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

Step 2. In the Fillet Property Manager set:

Radius  **.03**, **Fig. 5**
click **cylindrical face** of motor, **Fig. 6**
select **Full preview**
click **OK** , **Fig. 7**.

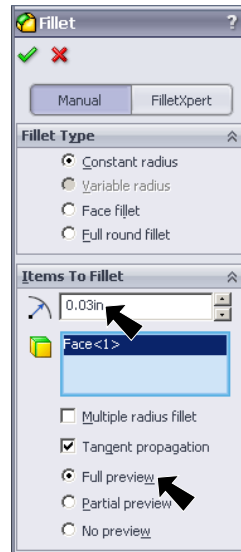


Fig. 5

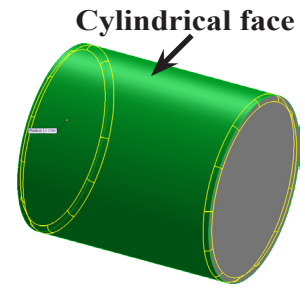



Fig. 6




Fig. 7

D. Shaft.

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

Step 2. Click **Normal To**  on the Views toolbar.

Step 3. Click **Circle**  on the Sketch toolbar.

Step 4. Starting at the Origin , draw a circle for the shaft, **Fig. 8**.

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

Step 6. Dimension the circle **diameter .08** as shown in **Fig. 8**.

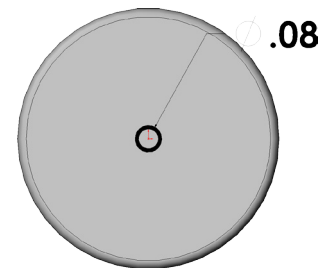
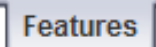
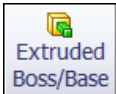


Fig. 8

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

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

Step 9. Click **Isometric**  on the View toolbar.

Step 10. In the Property Manager set:

Depth  **.25**, **Fig. 9**
click **OK** , **Fig. 10**.

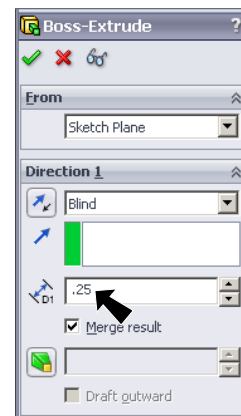


Fig. 9

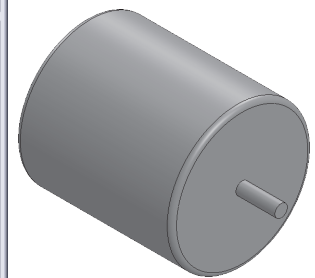


Fig. 10

E. Material Chrome Stainless.

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

Step 2. Expand **Steel** in the material tree and click **Chrome Stainless**. Click **Apply** and **Close**.

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