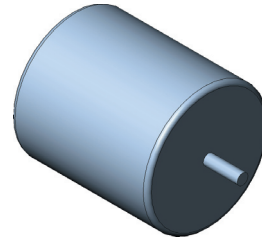


Boat Motor



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**.

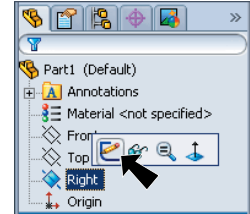


Fig. 1

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



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



Step 5. Click **Fully Defined Sketch** (D) on the Sketch toolbar and OK in the Property Manager.

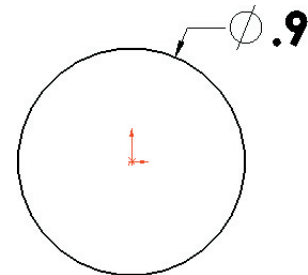
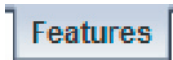


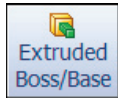
Fig. 2

Step 6. Dimension the circle as shown in **Fig. 2**.

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



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



Step 9. Set **Depth** to **1** in the Extrude Property Manager and click OK.

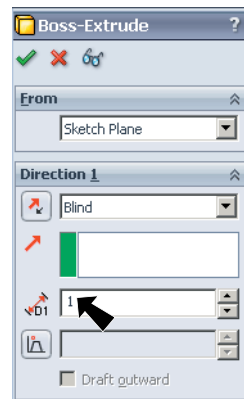


Fig. 3

Step 10. Click Zoom to Fit on the View toolbar.

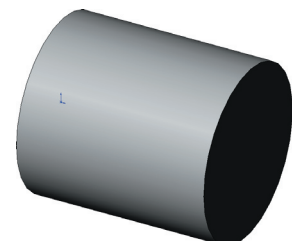





Fig. 4

B. Save as "MOTOR".

Step 1. Click File Menu > Save As.

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

C. Fillet.

- Step 1. Click **Fillet**  on the Features toolbar.
- Step 2. Click the **cylindrical face** of the motor, **Fig. 6**.
- Step 3. Set the **Radius**  to **.03** in the Fillet Property Manager and click OK , **Fig. 5**.

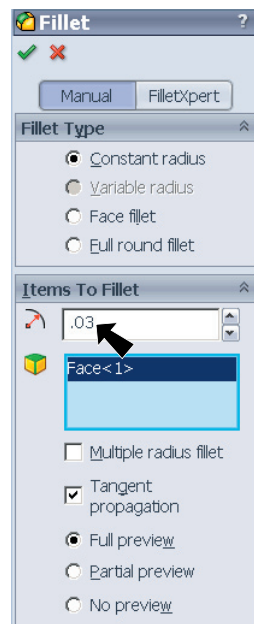


Fig. 5

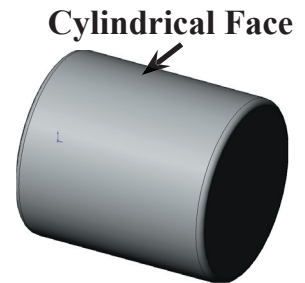






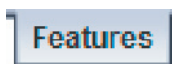


Fig. 6

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 **Fully Defined Sketch**  (D) on the Sketch toolbar and OK  in the Property Manager.
- Step 6. Dimension the circle **diameter .08** as shown in **Fig. 8**.
- Step 7. Click **Features**  on the Command Manager toolbar.

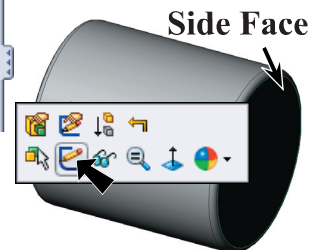


Fig. 7

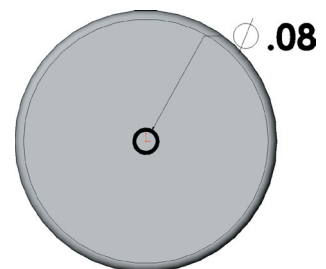
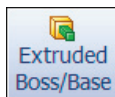





Fig. 8

- Step 8. Click **Extruded Boss/Base**  on the Features toolbar.
- Step 9. Click **Isometric**  on the View toolbar.
- Step 10. Set **Depth**  to **.25** in the Extrude Property Manager and click OK , **Fig. 9** and **Fig. 10**.

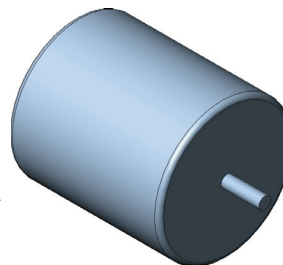


Fig. 10

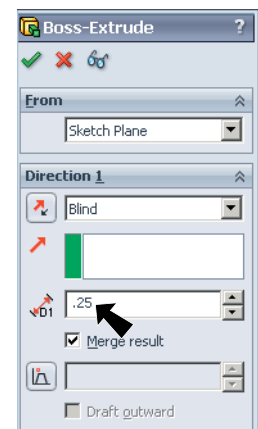



Fig. 9

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**.