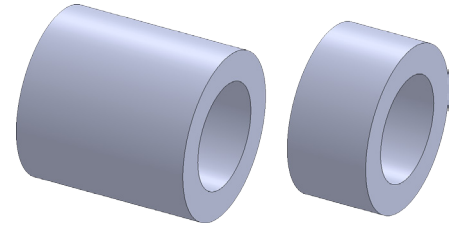




CO2 Shell Car Spacers



A. Spacer.

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

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

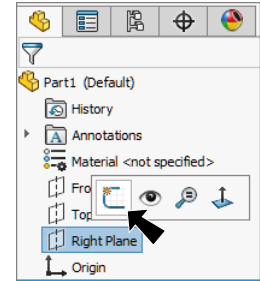


Fig. 1

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

Step 4. Sketch two circles starting at the Origin , **Fig. 2**.

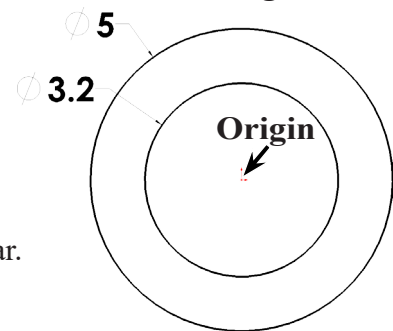


Fig. 2

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

Step 6. Dimension circle **diameters 3.2 and 5**, **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**
End Condition **Mid Plane**
Depth **5.3**
click OK .

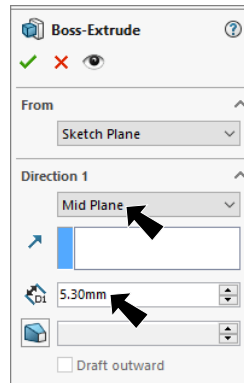


Fig. 3

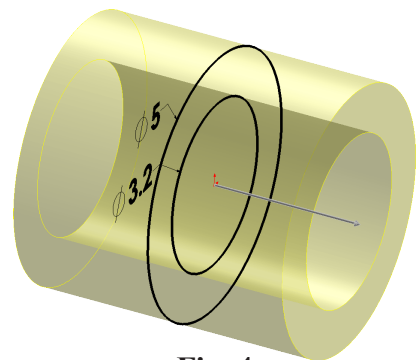


Fig. 4

B. Save as "FRONT SPACER".

Step 1. Click File Menu > Save As.

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

C. Mate References.

Step 1. Click **Right Plane** in the Feature Manager to select Plane, **Fig. 5**.

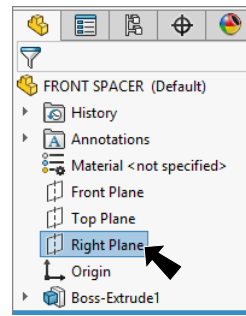
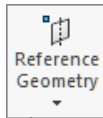


Fig. 5

Step 2. Click **Reference Geometry** on the Features toolbar and **Plane** from the menu.



Step 3. In the Mate Reference Manager:
under **Primary Reference Entity**, **Fig. 6**

Mate Reference Type **Coincident**

under **Secondary Reference Entity**

click in Entity box

and click a **cylindrical face**, **Fig. 7**

click OK.

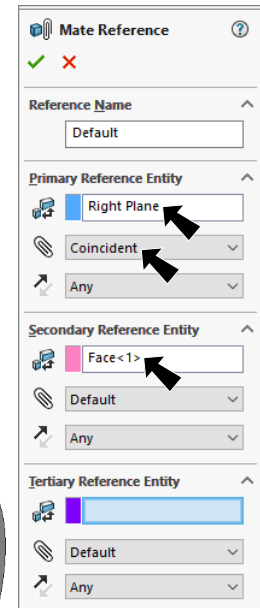


Fig. 6

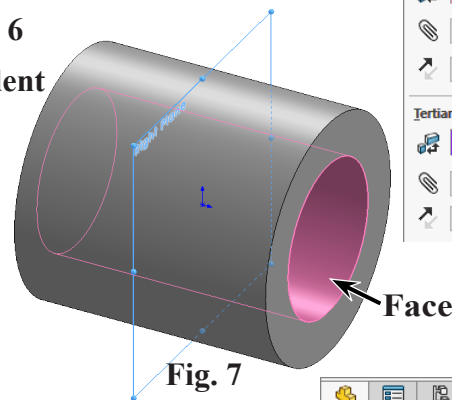


Fig. 7

D. Material Nylon.

Step 1. **Right click Material** in the Feature Manager and click **Edit Material**, **Fig. 8**.

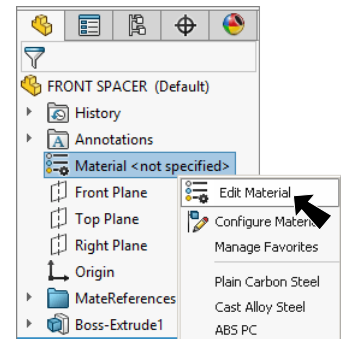


Fig. 8

Step 2. Expand **Plastics** in the material tree and select **Nylon 101**, **Fig. 9**. Click **Apply** and **Close**.

E. Save as "REAR SPACER".

Step 1. Save.
Use **Ctrl-S** to save **FRONT SPACER**.

Step 2. Click File Menu > **Save As**.

Step 3. Key-in **REAR SPACER** for the filename.
You now have two spacers files, **FRONT** and **REAR**. Next, we change length of **REAR SPACER**.

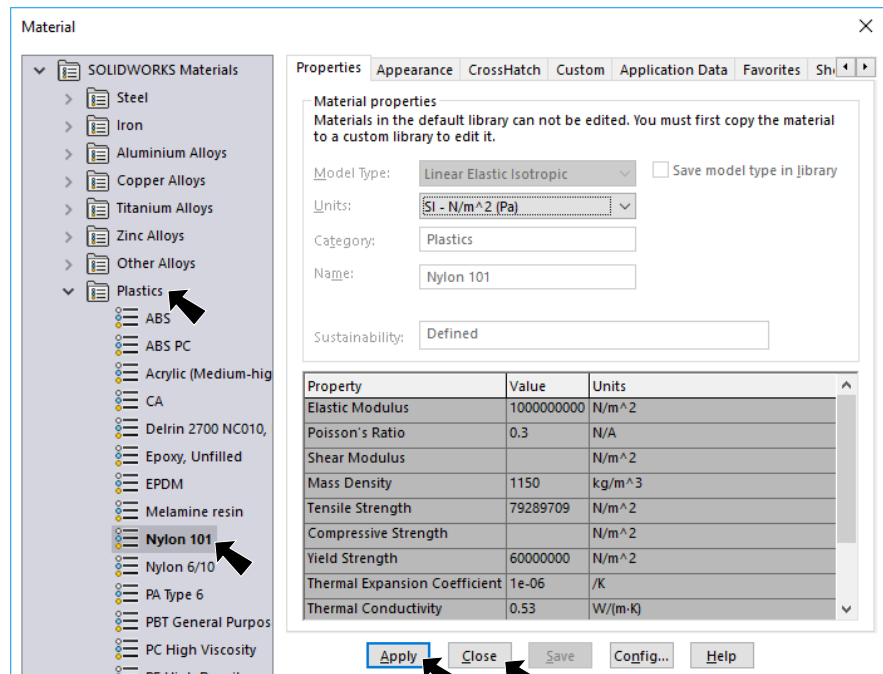



Fig. 9

F. Change Extrude Depth.

Step 1. Click **Boss-Extrude1** in the Feature Manager and click **Edit Feature**  on the context toolbar, **Fig. 10**.

Step 2. In the Boss-Extrude1 Property Manager set: under Direction 1, **Fig. 11**

change **Depth**  to **2.5**
click OK  .

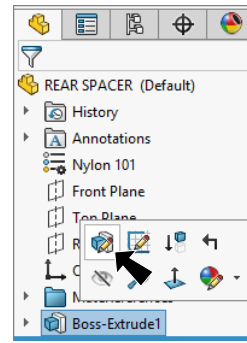


Fig. 10

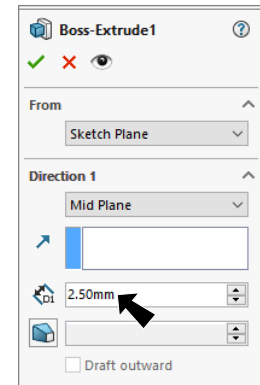


Fig. 11

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

You should have 2 spacers:
FRONT 5.3
REAR 2.5

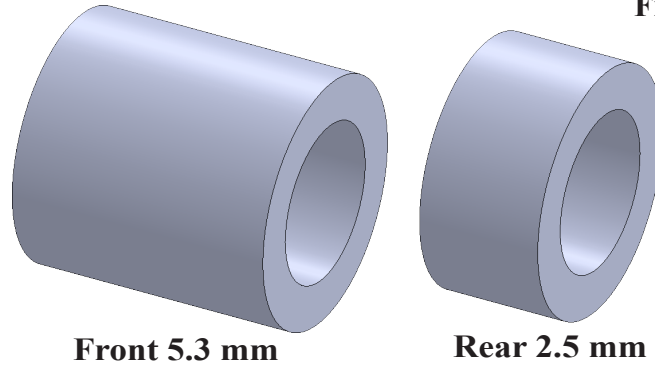


Fig. 12