

A. Plow 1.

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

Step 2. Click **Front** (plane) in the Feature Manager and click **Sketch** from the Content toolbar, **Fig. 1**.

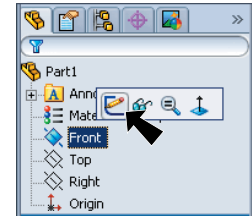


Fig. 1

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



Step 4. Draw a rectangle **not** at the Origin, **Fig. 2**.



Origin
Fig. 2

Step 5. Press the Escape key to unselect Rectangle tool.

Step 6. **Shift click the bottom line of the rectangle and the Origin.** To **Shift click**, click the **bottom line**, hold down **Shift key** and click Origin, **Fig. 3**.

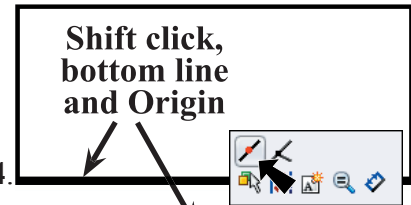


Fig. 3

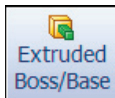
Step 7. Click **Make Midpoint** from the Content menu, **Fig. 3**.



Step 8. **Smart Dimension** (S) rectangle as shown in **Fig. 4**.



Step 9. Click **Extruded Boss/Base** **Depth** to .2, **Fig. 5**.



Step 10. Set **Material to Cedar**, right click Material in the Feature Manager, click Edit Material. Select **Woods/Cedar**.

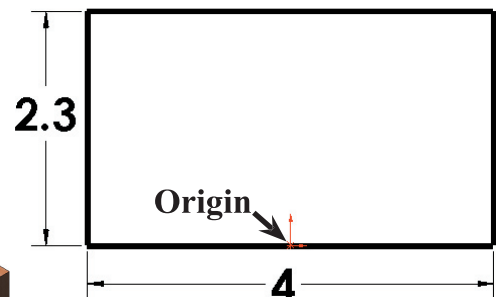
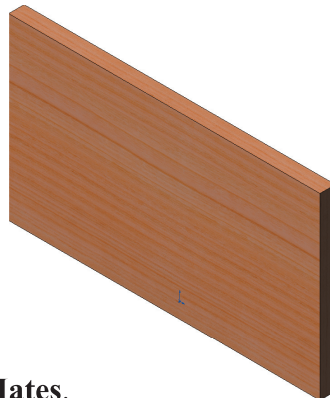
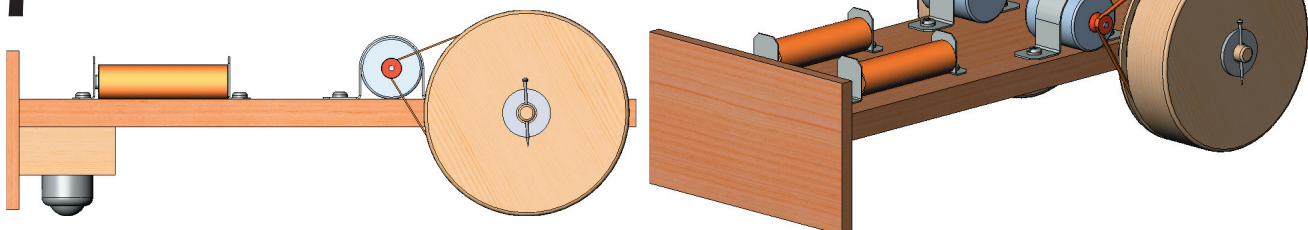


Fig. 4

Step 11. Save. Use **Ctrl-S**.

Step 12. **Insert Components** into your Assembly file and at **Mates**.

1



B. Plow 2 with Braces.

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. 6**.

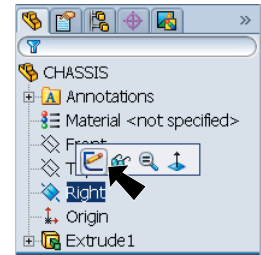


Fig. 6

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

Step 4. Draw lines starting at the Origin, **Fig. 7**. Use the inferencing line, the dotted line that appears when you draw the lines.

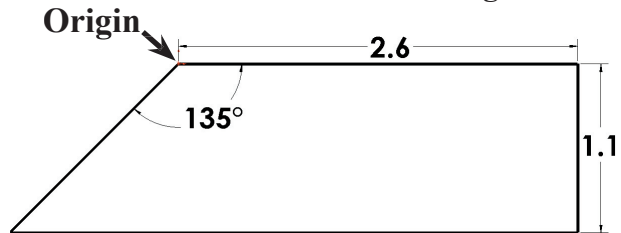


Fig. 7

Step 5. **Smart Dimension** (S) as shown in **Fig. 7**.



Step 6. Click **Extruded Boss/Base** Depth to .2, **Fig. 8**.

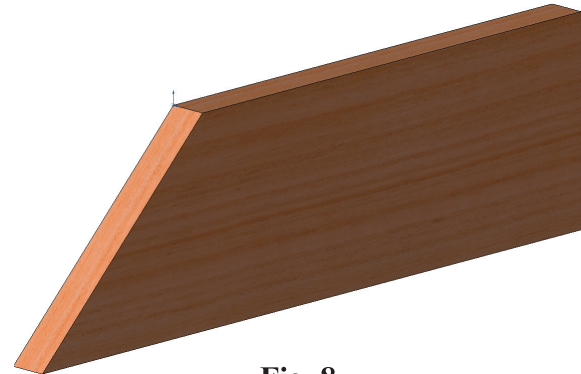
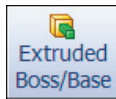
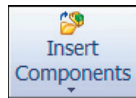


Fig. 8

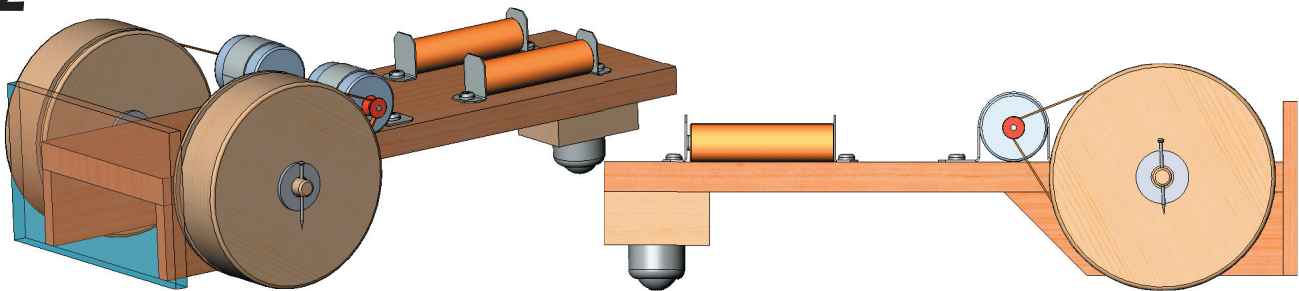
Step 7. Set **Material to Cedar**, right click Material in the Feature Manager, click Edit Material. Select **Woods/Cedar**.

Step 8. Save. Use **Ctrl-S**.

Step 9. **Insert Components** into your Assembly file and at **Mates**.



2



C. Plow 3.

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

Step 2. Click **Front** (plane) in the Feature Manager and click **Sketch** from the Content toolbar, **Fig. 0**.

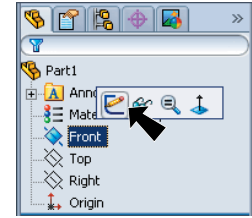


Fig. 9

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

Step 4. Draw a rectangle **not** at the Origin, **Fig. 10**.



Origin

Fig. 10

Step 5. **Shift click** the **bottom line of the rectangle** and the **Origin**. To **Shift click**, click the **bottom line**, hold down **Shift key** and click Origin, **Fig. 11**.

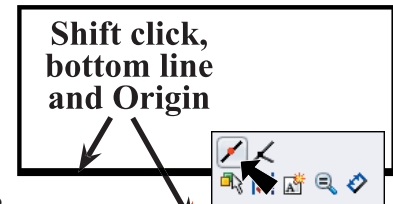
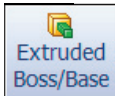


Fig. 11

Step 6. Click **Make Midpoint** from the Content menu, **Fig. 11**.

Step 7. **Smart Dimension** (S) rectangle as shown in **Fig. 12**.

Step 8. Click **Extruded Boss/Base** **Depth** to **.2**, **Fig. 13**.



Depth to .2

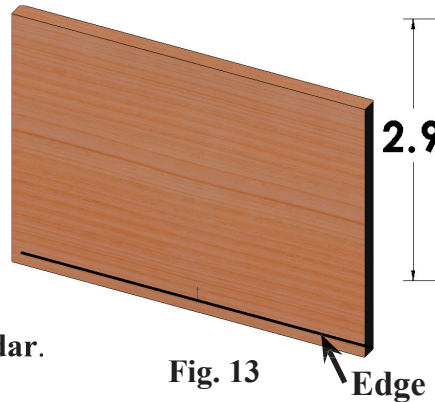


Fig. 13

Edge

Step 9. Set **Material** to **Cedar**, right click **Material** in the **Feature Manager**, click **Edit Material**. Select **Woods/Cedar**.

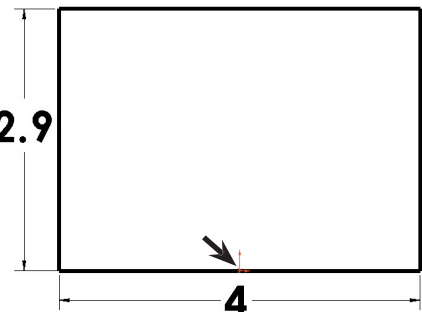


Fig. 12

Step 10. Click **Chamfer** on the **Features toolbar**. Set:

Depth to .2

Angle to 45, **Fig. 15**

click **bottom back corner edge**, **Fig. 13** and click **OK**,

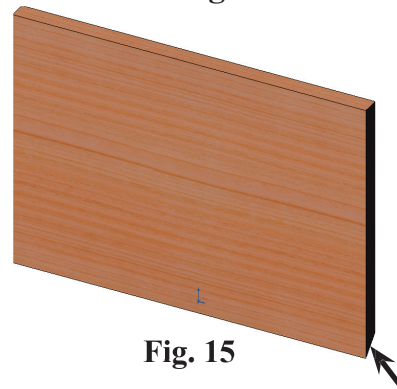


Fig. 15

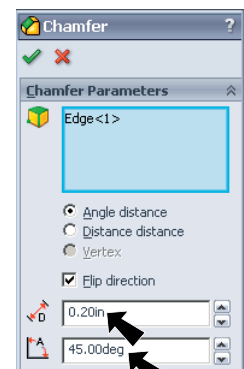
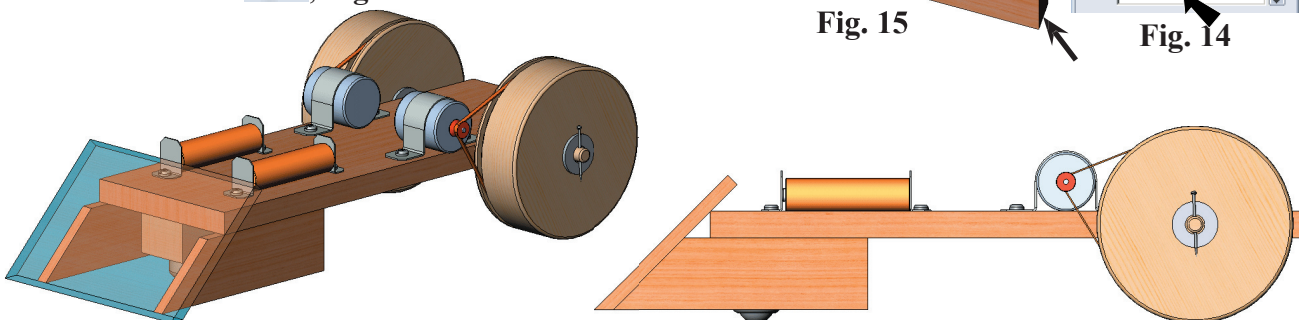
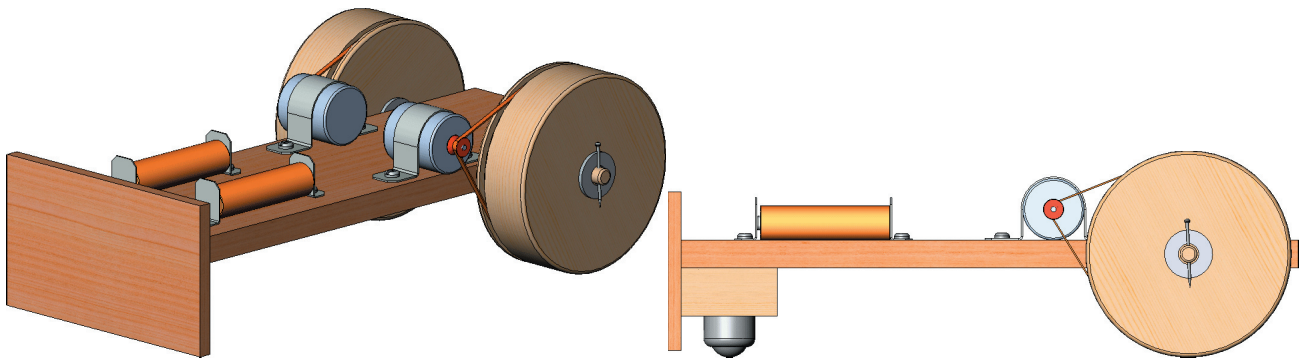


Fig. 14

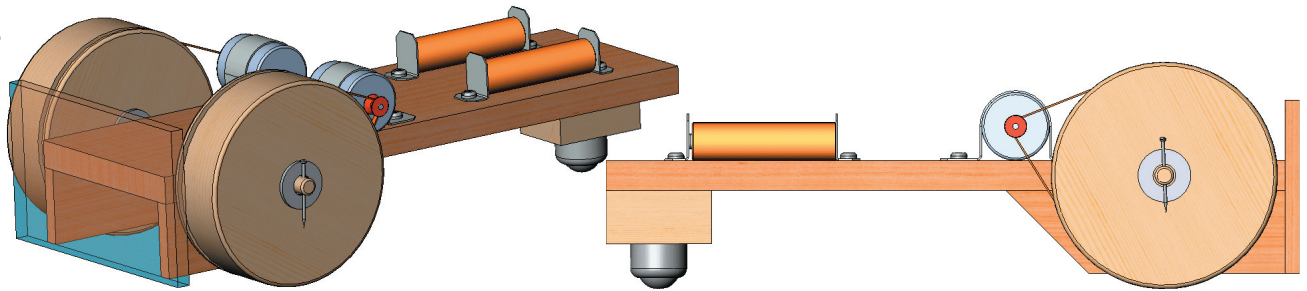
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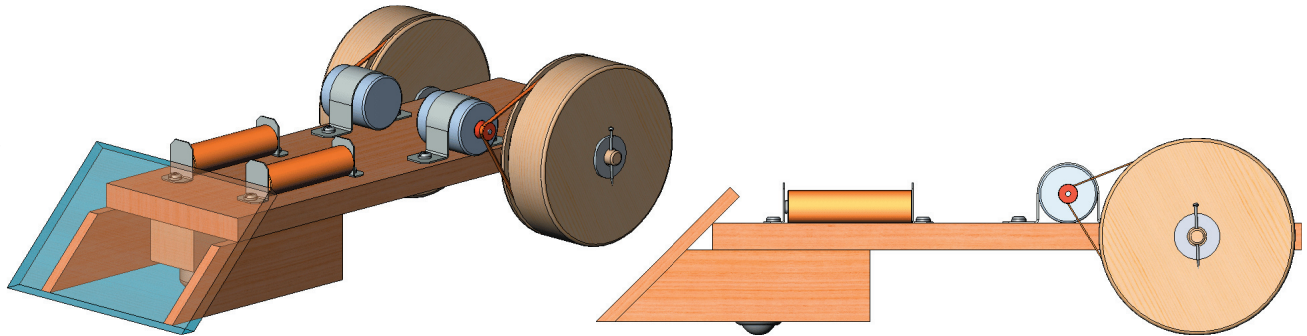
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