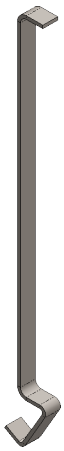
Rocket 3D Print
Engine Hook



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 content toolbar, **Fig. 1**.

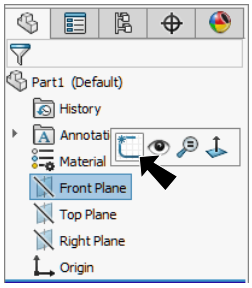


Fig. 1

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

Step 4. Starting from the Origin sketch lines, **Fig. 2**. As you sketch line at bottom of sketch, position cursor to show **Perpendicular** automatic relation.

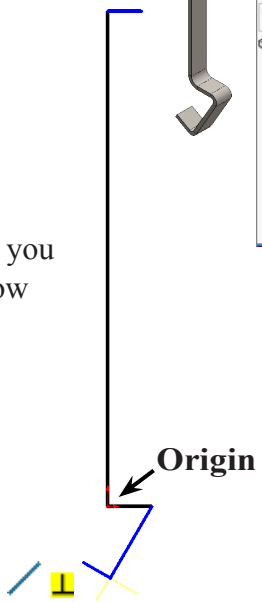


Fig. 2

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

Step 6. Add dimensions, **Fig. 3**.

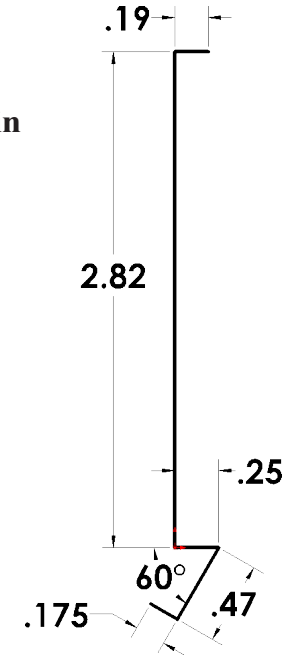


Fig. 3

Step 7. Click **Sketch Fillet** on the Sketch toolbar.

Step 8. In the Sketch Fillet Property Manager set:
under Fillet Parameters, **Fig. 4**

Radius **.05**
click 4 corners, **Fig. 5**
click OK **twice**.

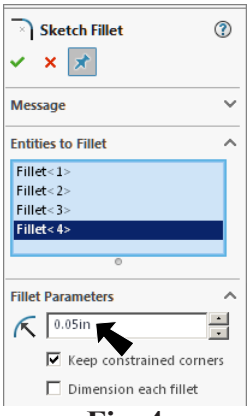


Fig. 4

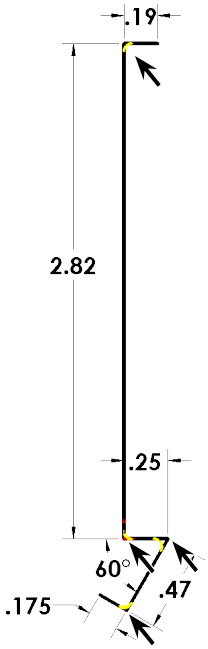


Fig. 5

B. Save as "ENGINE HOOK".

Step 1. Click File Menu > Save As.

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

C. Sheet Metal.

Step 1. Click Insert Menu > Sheet Metal > Base Flange.

Step 2. In the Property Manager set:
under Direction 1
select **Mid Plane**, **Fig. 6**
Depth .12
under Sheet Metal Gauges
check **Use gauge table**
select **Sample Table - Aluminum**
under **Sheet Metal Parameters**
select **Gauge 22**

Click **Front** on the Standard Views toolbar. (**Ctrl-1**)

The **sheet metal** should be position on **left of sketch**, **Fig. 7**. If in opposite direction check **Reverse direction** in the Property Manager, **Fig. 6**.

Sketch (black line) has to be on right of sheet metal (green part)

Click **Isometric** on the Standard Views toolbar. (**Ctrl-7**)

click OK .

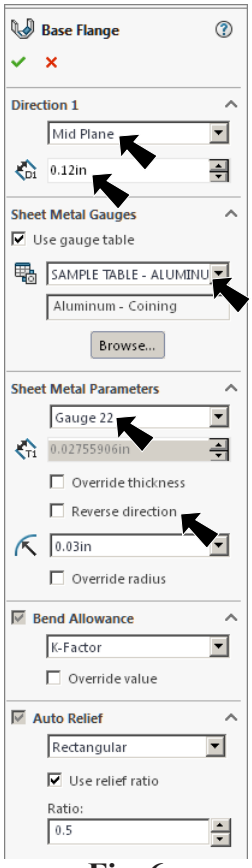


Fig. 6

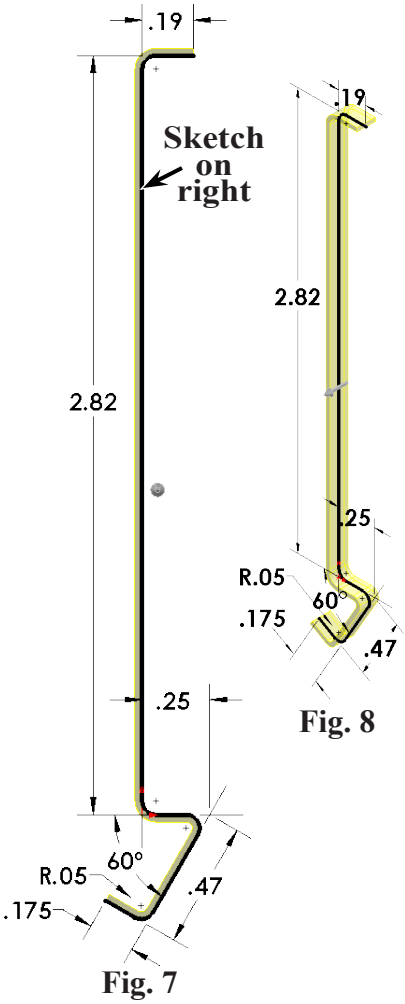


Fig. 7

Fig. 8

D. Material Steel.

Step 1. **Right click Material** in the Feature Manager and click **Edit Material**, **Fig. 9**.

Step 2. Expand **Steel** in the material tree and select **AISI 1010 Steel**. Click **Apply** and **Close**.

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

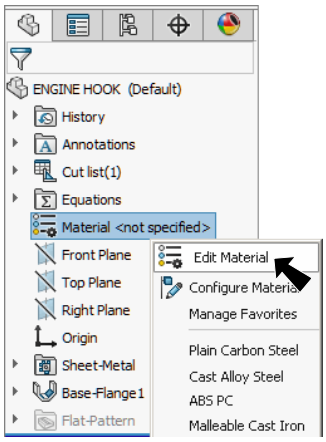


Fig. 9

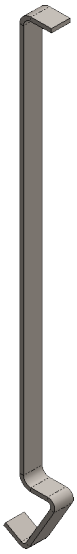


Fig. 10