



Boat Switch

A. Sheet Metal.

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

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

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

Step 4. Starting from the Origin  sketch two lines, **Fig. 2**.


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

Step 6. Dimension lines, **Fig. 3**.

Step 7. Click Insert Menu > Sheet Metal > Base Flange.

Step 8. In the Property Manager:
 under Direction 1, **Fig. 4**
 End Condition **Mid Plane**

Depth  **.5**

under Sheet Metal Gauges
 check **Use gauge table**
 select **Sample Table - Aluminum**
 under Sheet Metal Parameters
 select **Gauge 26**
 click OK .

B. Save as "SWITCH".

Step 1. Click File Menu > Save As.

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

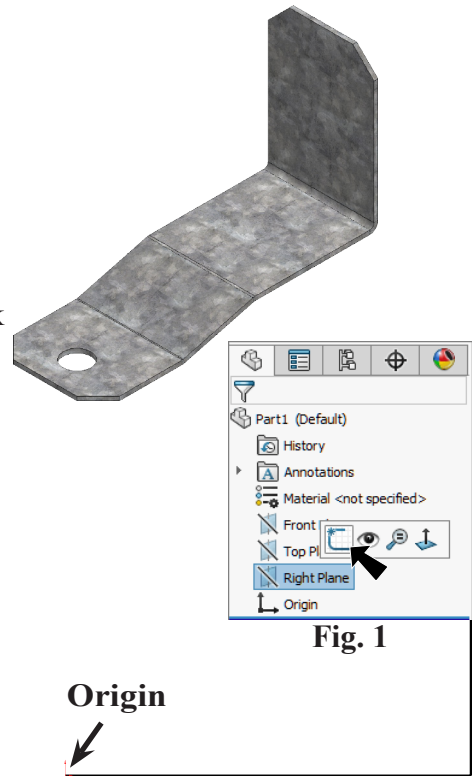


Fig. 1

Origin

Fig. 2



Fig. 3

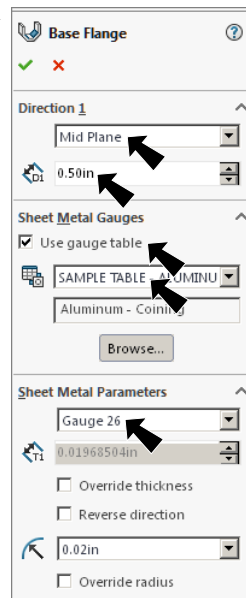


Fig. 4

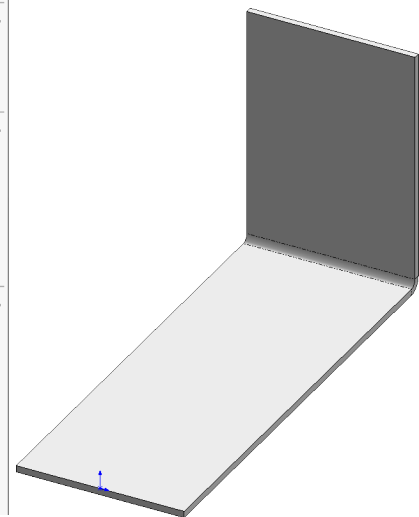



Fig. 5

C. Hole.

Step 1. Click the **top face** and click **Sketch**  on the context toolbar, **Fig. 6**.

Step 2. Click **Normal To**  on the Views toolbar (**Ctrl-8**).

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

Step 4. Draw circle for hole, **Fig. 7**.


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

Step 6. Add dimensions, **Fig. 8**.

Step 7. Click **Isometric**  on the View toolbar.

Step 8. Click **Features**  on the Command Manager toolbar.

Step 9. Click **Extruded Cut**  on the Features toolbar.

Step 10. In the Property Manager:
under Direction 1, **Fig. 9**
End Condition **Through All**
click OK .

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

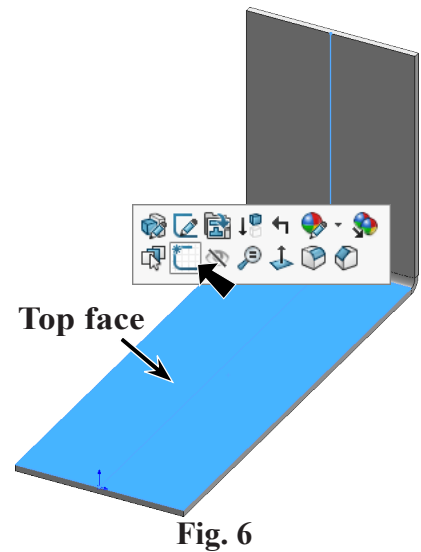


Fig. 6

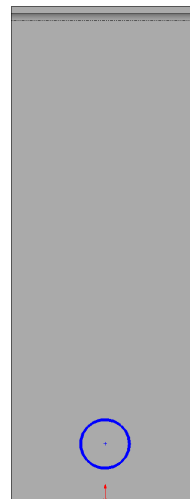


Fig. 7

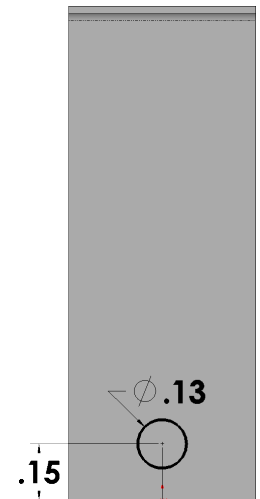


Fig. 8

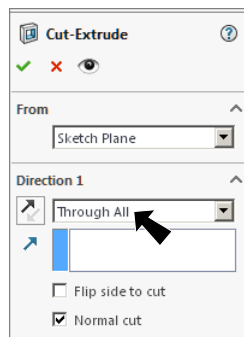


Fig. 9

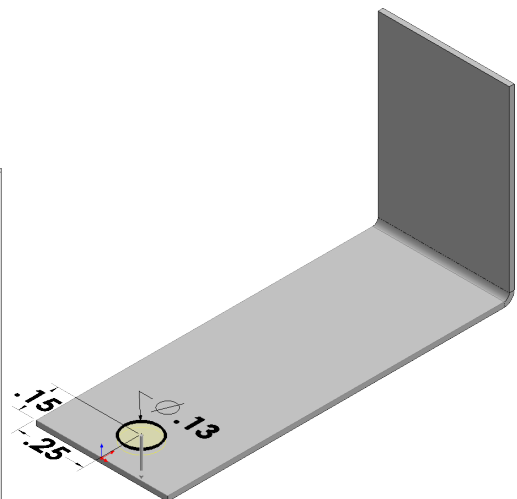


Fig. 10

D. Chamfers.

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

Step 2. In the Chamfer Property Manager set:
under Chamfer Parameters,

Depth  .1

Angle  45°

drag a selection around each corner to select the corner edge, **Fig. 12**

click OK .

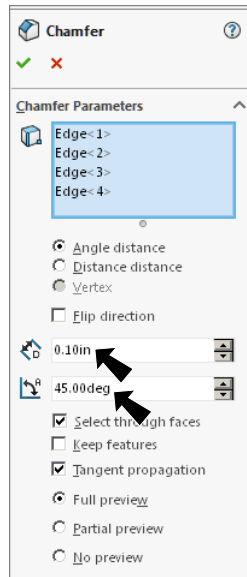


Fig. 11

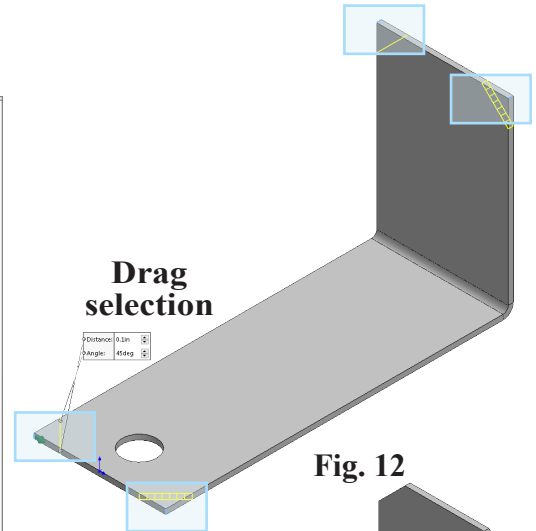


Fig. 12

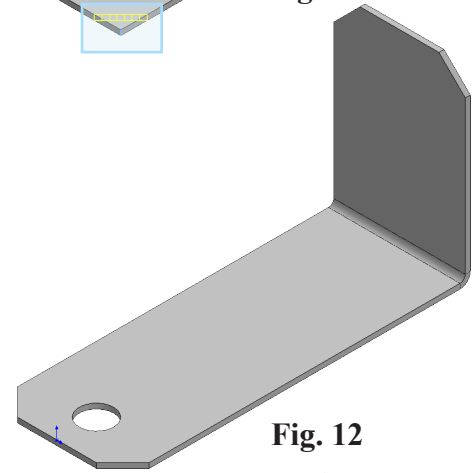




Fig. 12

E. Jog.

Step 1. Rotate view to view **bottom face**, hold down middle mouse button (wheel) and drag to **rotate view**, **Fig. 14**.

Step 2. Click the **bottom face** and click **Sketch**  on the context toolbar, **Fig. 14**.

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

Step 4. Draw line across sheet metal, **Fig. 15**. Keep line horizontal .

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

Step 6. Add .4 dimension, **Fig. 15**.

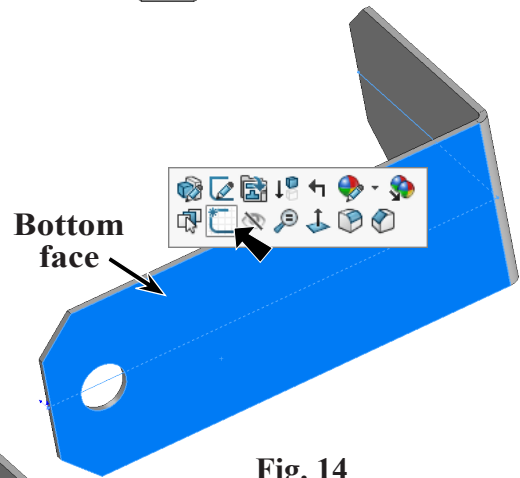


Fig. 14

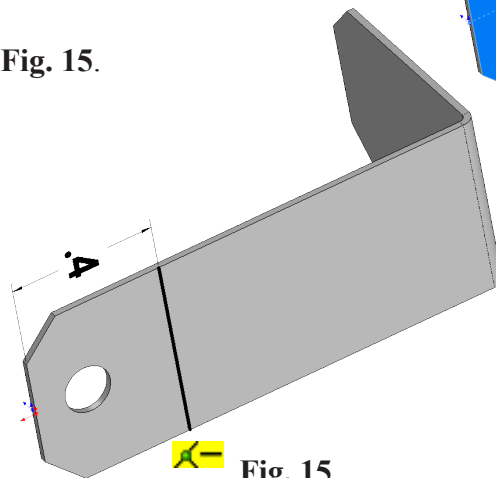


Fig. 15

Step 7. Click Insert Menu > Sheet Metal > Jog.

Step 8. In the Jog Property Manager, under Fixed Face, **Fig. 16** click **bottom face next to hole**

Offset distance  **.09**
under Jog Offset

Jog Angle  **15°**

Sheet metal should jog up from fixed face, **Fig. 17**. If jogs in opposite direction click

Reverse Direction 

click OK .

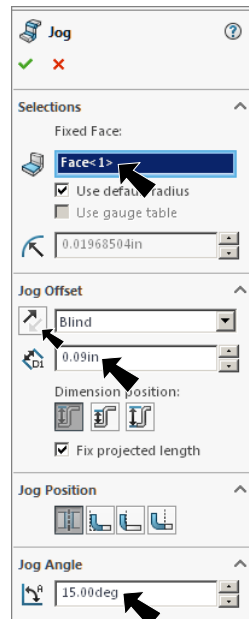


Fig. 16

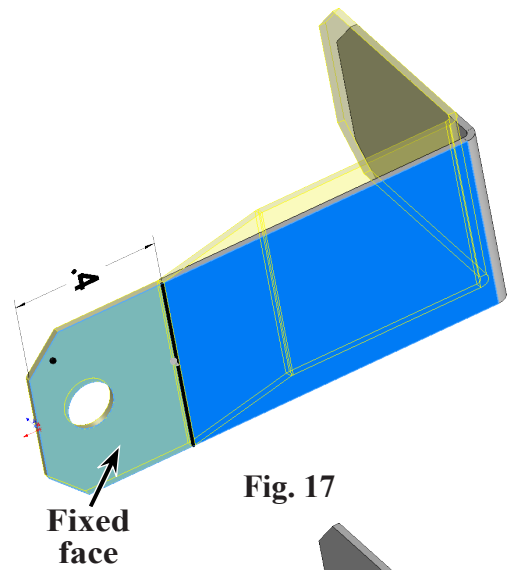



Fig. 17

F. Material Galvanized Steel.

Step 1. Click **Isometric**  on the View toolbar.

Step 2. **Right click Material**  in the Feature Manager and click **Edit Material**.

Step 3. Expand **Steel** in the material tree and click **Galvanized Steel**. Click **Apply** and **Close**.

Step 4. Save. Use **Ctrl-S**.

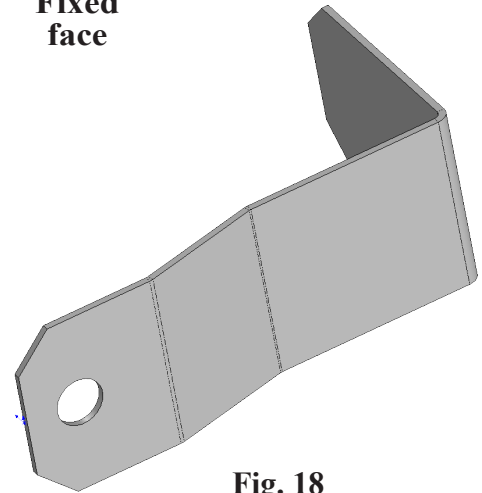


Fig. 18

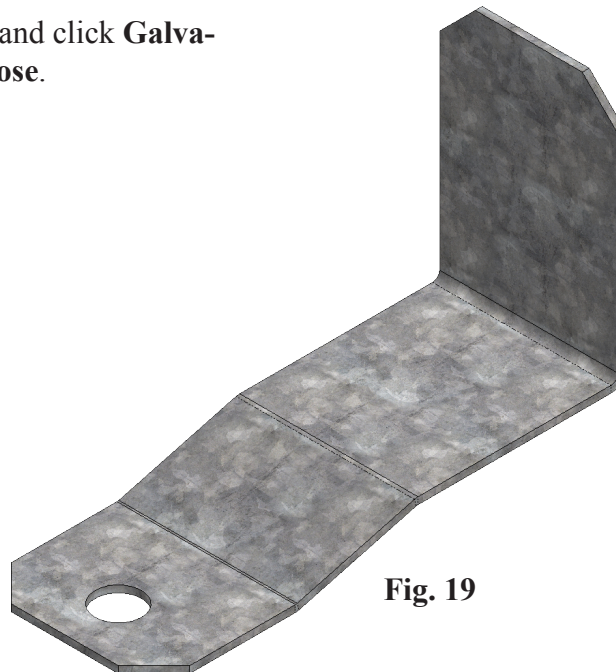


Fig. 19