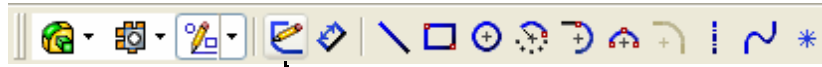


Add a Fill Pattern with a Fill Boundary

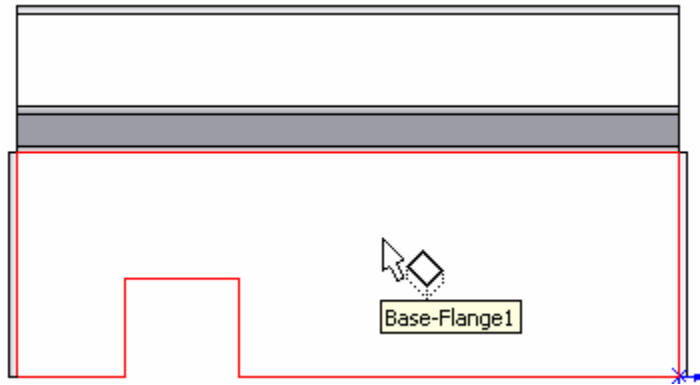


Click the **Sketch** icon in the control area of the CommandManager. Then, click the **Sketch** icon from the CommandManager, or pull down the “Insert” menu and pick **Sketch**.



Sketch
Creates a new sketch, or edits an existing sketch.

Select the top of the part as shown.



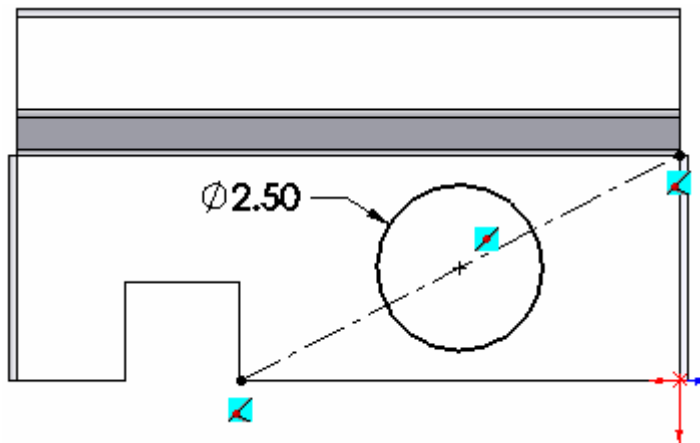
Create a centerline line from the bottom right corner of the notch to the upper right corner of the top of the face as shown using the **Centerline** icon in the CommandManager, or pull down the “Tools” menu and pick **Sketch Entities – Centerline**.



Create a circle at the midpoint of the centerline as shown below using the **Circle** icon in the CommandManager, or pull down the “Tools” menu and pick **Sketch Entities – Circle**.



Add a ‘2.5’ dimension to the circle using the **Smart Dimension** icon in the CommandManager, or pull down the “Tools” menu and pick **Dimensions – Smart**.



Exit the sketch by clicking the **Exit Sketch** icon in the CommandManager or in the upper right corner of the graphics area.

Pull down the “Insert” menu and pick **Pattern/Mirror – Fill Pattern**.

In the upper left hand corner of the graphics area, click on the plus sign next to the document name (Part1) to expand the flyout FeatureManager design tree.

In the **Fill Pattern** PropertyManager, click in the **Fill Boundary** box.

In the graphics area, select **Sketch5**.

In the **Fill Pattern** PropertyManager, under **Pattern Layout**, click the **Circular** button.

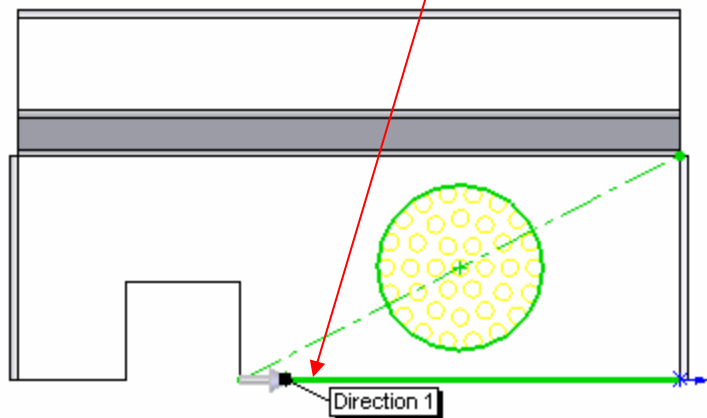
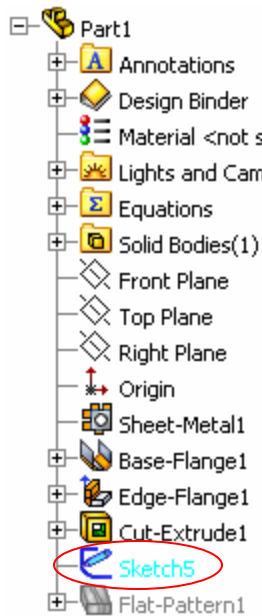
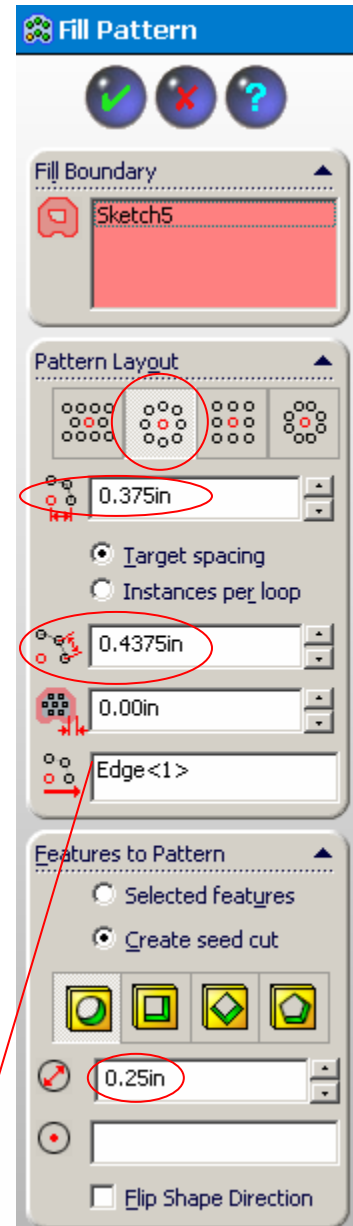
Set the **Loop Spacing** to ‘.375’ and the **Instance Spacing** to ‘.4375’.

Click in the **Pattern Direction** box. Then, in the graphics area, click on the bottom edge of the part.

In the **Fill Pattern** PropertyManager, under **Features to Pattern**, click the **Create seed cut** radio button. Then, set the **Diameter** to ‘.25’.



Click the green check mark button at the top of the **Fill Pattern** PropertyManager to accept the settings.



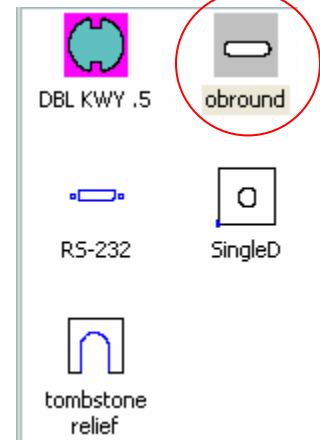
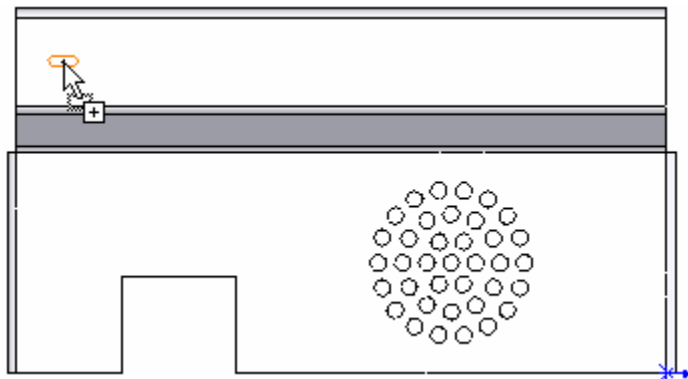
Add a Punching Shape from the Design Library



With the Task Pane shown, click the **Design Library** icon in the Task Pane.

In the **SheetMetalGuy** Design Library, click on your Punching Shapes folder to display the folder contents in the lower pane of the **Design Library** tab.

Drag the **obround** from the lower pane of the **Design Library** tab onto the top left of the part as shown.

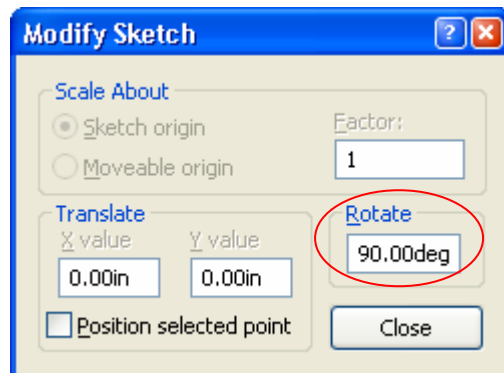


In the **obround** PropertyManager, scroll down the **Configuration** box to the bottom and pick '0.0625 X 0.75' from the list.

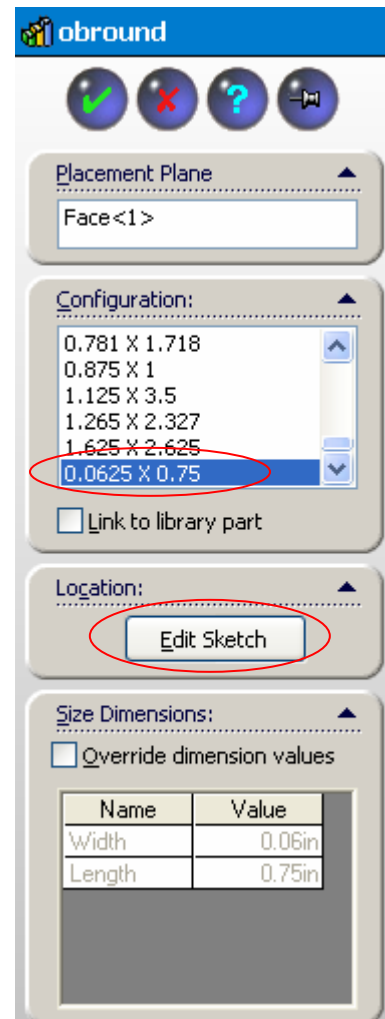
Under **Location**, click the **Edit Sketch** button.

To rotate the sketch, pull down the "Tools" menu and pick **Sketch Tools – Modify**.

In the **Modify Sketch** dialog box, under **Rotate**, enter '90' and press the **Enter** key on the keyboard. The obround sketch should rotate 90 degrees.



In the **Modify Sketch** dialog box, click the **Close** button.

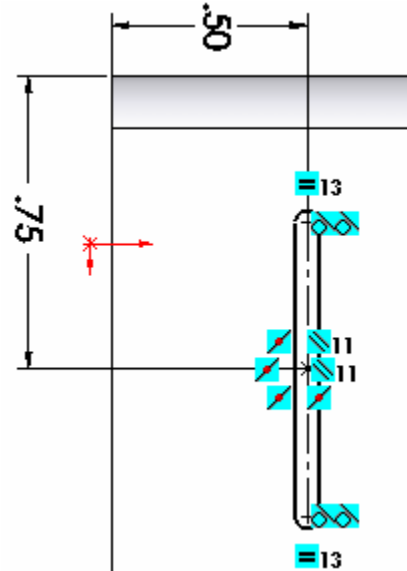




Click the **Smart Dimension** icon in the CommandManager, or pull down the “Tools” menu and pick **Dimensions – Smart**.

Add a **.5** horizontal dimension from the left edge to the centerline of the obround. Then, add a **.75** vertical dimension from the top edge of the part to the midpoint of centerline as shown. You may need to zoom in to select the appropriate entities.

In the **Library Feature Profile** dialog box, click the **Finish** button.



Create a Linear Pattern



Click the **Features** icon in the control area of the CommandManager. Then, click the **Linear Pattern** icon from the CommandManager, or pull down the “Insert” menu and pick **Pattern/Mirror – Linear Pattern**.



Linear Pattern

Patterns Features, faces, and bodies in one or two linear directions.

Select the top horizontal line of the part near the left end to set the direction of the pattern.



In the **Linear Pattern** PropertyManager, set the **Spacing** to **.375**.



Set the **Number of Instances** to **25**.

Click in the **Features to Pattern** box.

In the upper left hand corner of the graphics area, click on the plus sign next to the document name (Part1) to expand the flyout FeatureManager design tree.

In the flyout FeatureManager design tree, select **obround <1> (0.0625 X 0.75)**.



Click the green check mark button at the top of the **Linear Pattern** PropertyManager.

