



A. Sketch.

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. 1**.

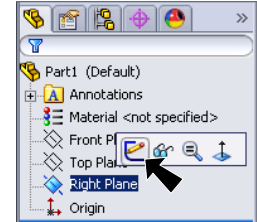




Fig. 1

Step 3. Click **Centerline**  (S) in the **Line flyout**  on the Sketch toolbar.

Step 4. Draw **vertical centerline down** from the Origin , **Fig. 2**.

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

Step 6. Dimension centerline **2.25**, **Fig. 2**.

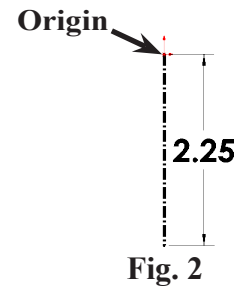


Fig. 2

Step 7. Click **Line**  (L) on the Sketch toolbar.

Step 8. Draw lines as shown, **Fig. 2**. Keep top horizontal line below Origin.

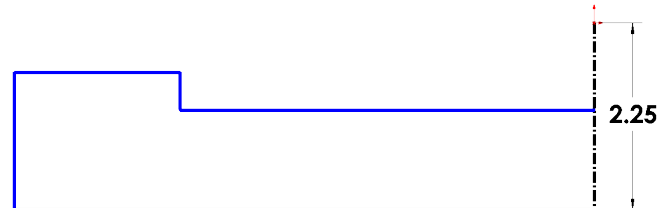




Fig. 3

Step 9. Click **Smart Dimension**  (S) on the Sketch toolbar.

Step 10. Add dimensions, **Fig. 4**. Dimension double distance dimension across horizontal line last. To double distance dimension, click the vertical line and then the centerline, move the cursor to right side of the centerline and click. Key-in 10 and press ENTER.

Step 11. Click **Zoom to Fit**  (F) on the View toolbar.

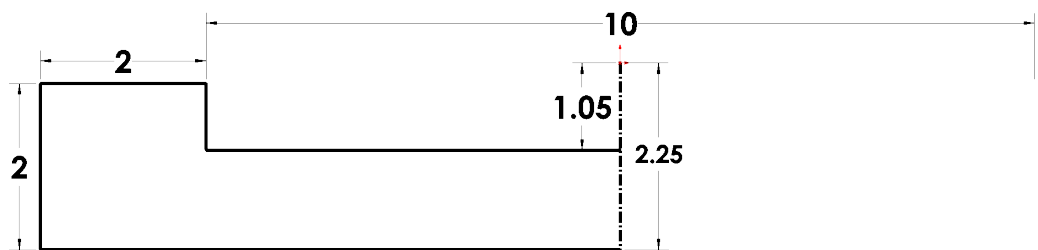


Fig. 4

B. Save as "BASE".

Step 1. Click File Menu > Save As.

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

C. Mirror.

Step 1. Drag selection around the sketch to select all entities, Fig. 5.

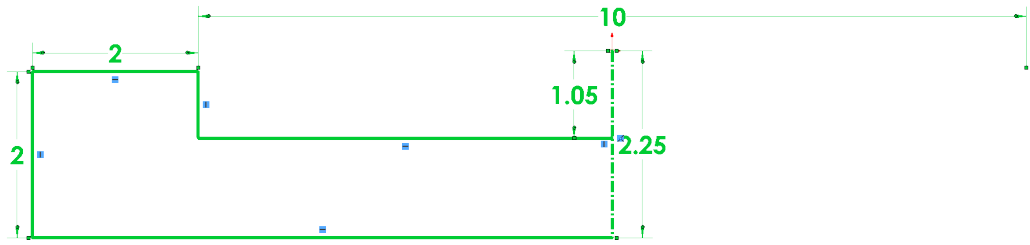


Fig. 5

To drag selection, click above and to left of sketch and drag down and to right to drag around all.

Step 2. Click **Mirror Entities**  on the Sketch toolbar, Fig. 6.

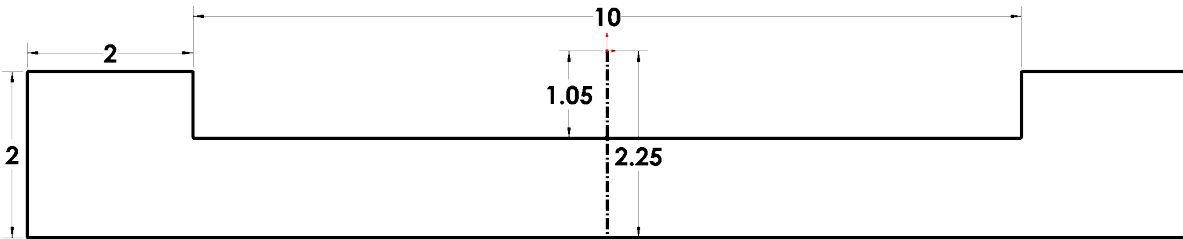
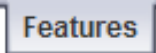


Fig. 6

D. Extrude.

Step 1. Click **Features**  on the Command Manager toolbar.

Step 2. Click **Extruded Boss/Base**  on the Features toolbar.

Step 3. In the Property Manager set:
under Direction 1, Fig. 7
End Condition **Mid Plane**

Depth  **2.95**
click OK 

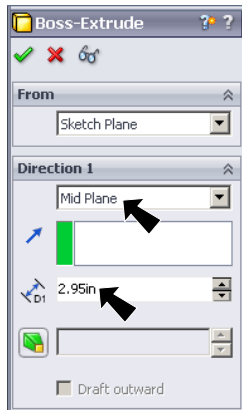


Fig. 7

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

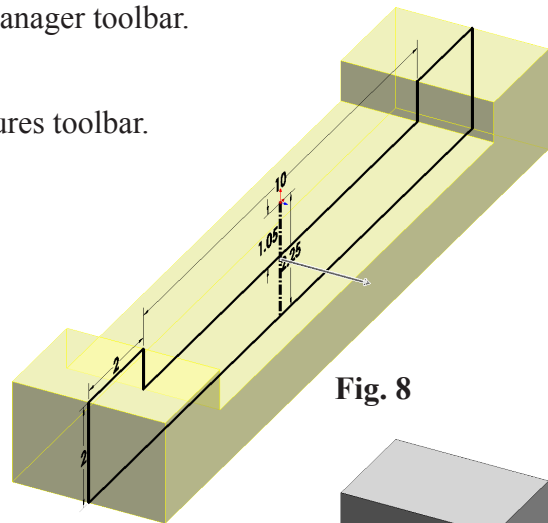


Fig. 8

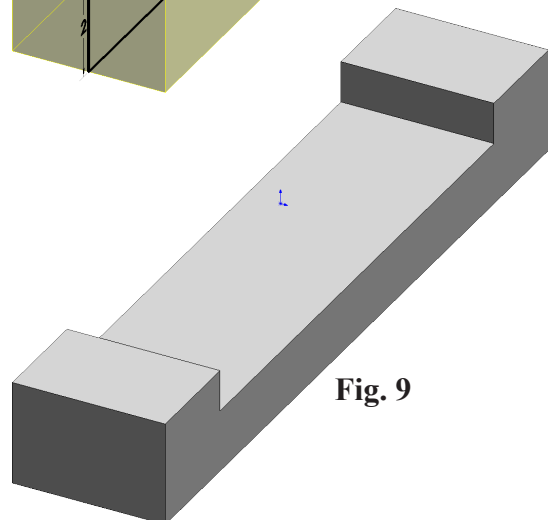



Fig. 9

E. Hole Wizard 33/64" Hole.


Step 1. Click **Top**  on the Standard Views toolbar. (Ctrl-5)

Step 2. Click **Hole Wizard**  on the Features toolbar.

Step 3. In the Property Manager, on the Type tab set:
under Hole Type, **Fig. 10**

click **Hole** 
under Standard:
select **ANSI Inch**
under Type:
select **Fractional Drill Sizes**
under Size:
select **33/64**
under End Condition
End Condition **Through All**

Click **Positions** tab 
at top of the Property Manager.

First, click top face next to Origin
to select face and then click Origin
 to place hole, **Fig. 11**.

Click OK .

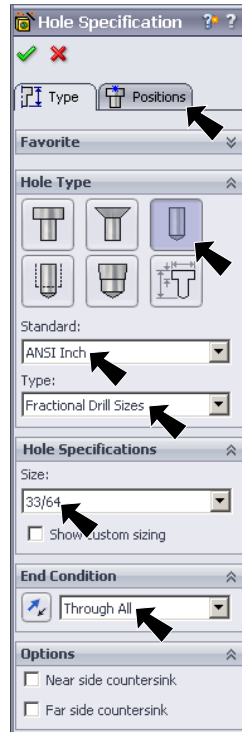


Fig. 10

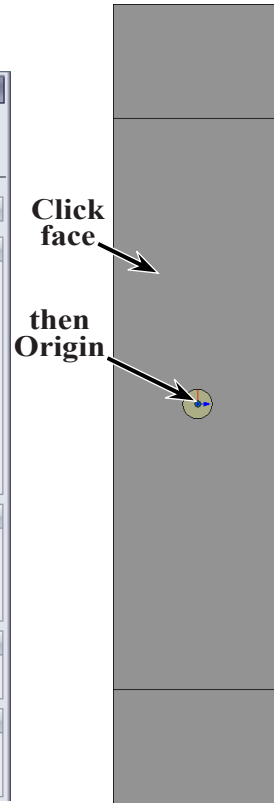


Fig. 11

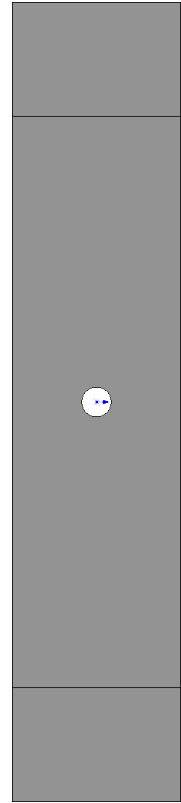


Fig. 12

F. Fillets.


Step 1. Click **Isometric**  on the Standard Views toolbar. (Ctrl-7)

Step 2. Click **Fillet**  on the Features toolbar.

Step 3. In the Fillet Property Manager set:
select **FilletXpert**, **Fig. 13**

Radius  **.05**
select **Full preview**

click **edge**, **Fig. 14**

click **Internal to feature**  on
the Fillet pop-up toolbar

click **OK** .

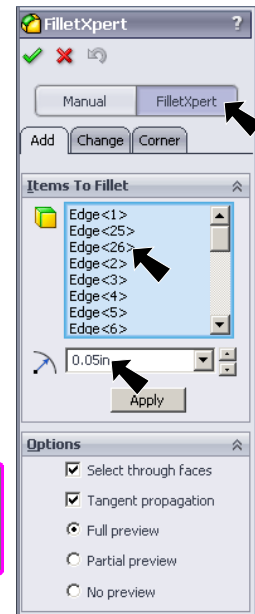


Fig. 13

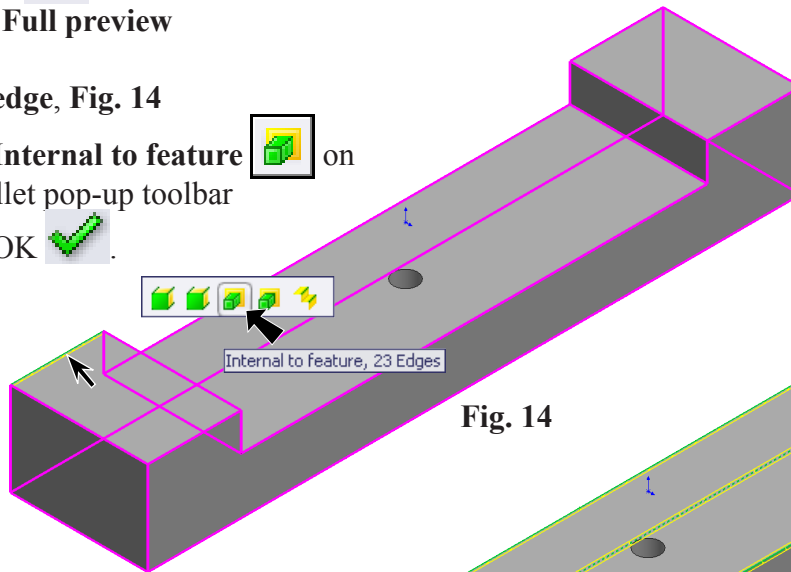


Fig. 14

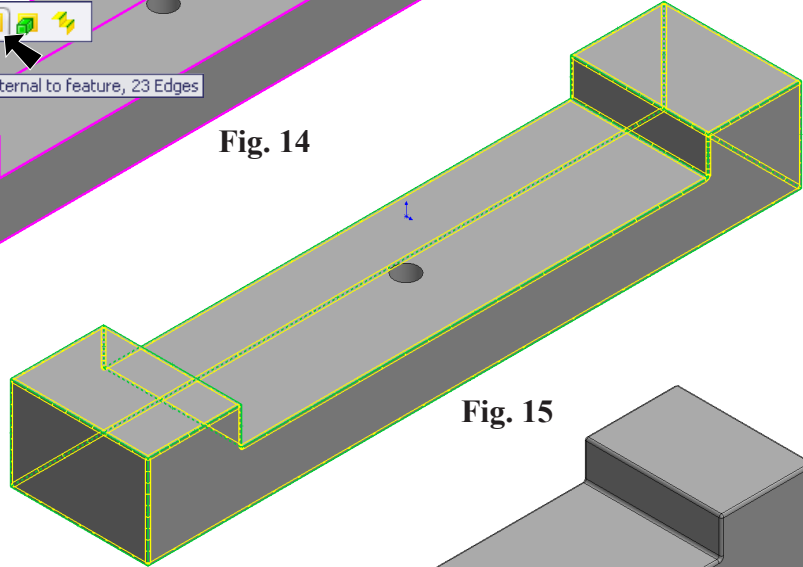


Fig. 15

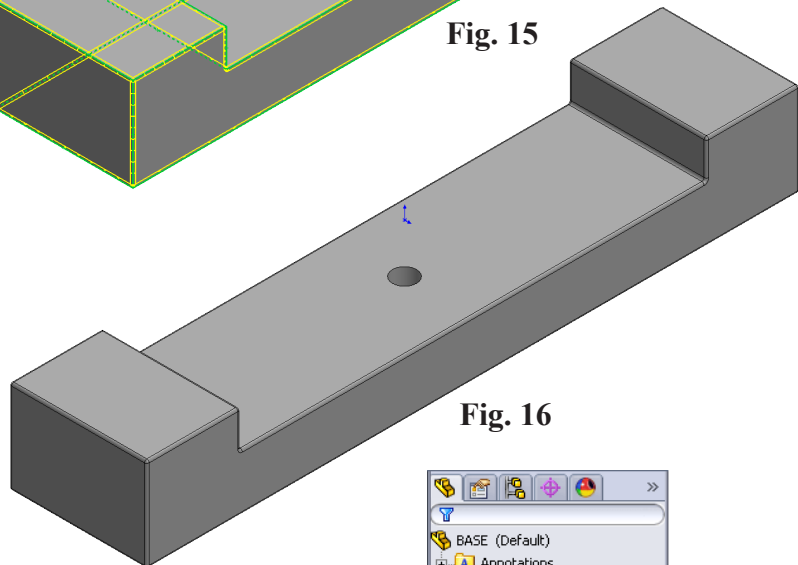


Fig. 16

G. Material Aluminum.

Step 1. **Right click Material**  in the Feature Manager and click **Edit Material**, **Fig. 17**.

Step 2. **Expand Aluminum Alloys** in the material tree and select **1060 Alloy**. Click **Apply** and **Close**.

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

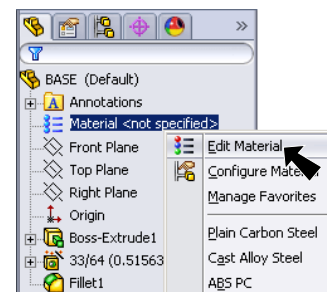


Fig. 17