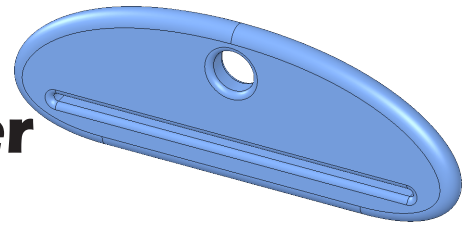



Rings and Things Tube Squeezer



A. Sketch.

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

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

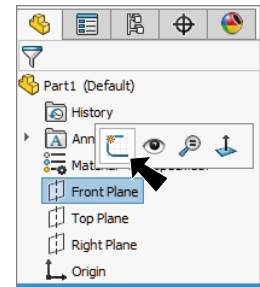




Fig. 1

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

Step 4. Sketch **horizontal line across to Origin**  and **vertical line up**. Right click the vertical line and click **Construction Geometry**  on the context toolbar, **Fig. 2**.

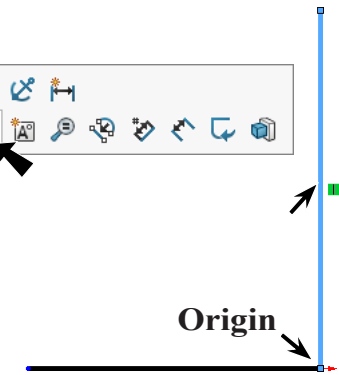


Fig. 2

Step 5. Click **Style Spline**  in the **Spline flyout**  on the Sketch toolbar.

Step 6. Sketch a **4 control vertex point Spline** between end-points of line, **Fig. 3**. Press Escape to end spline.

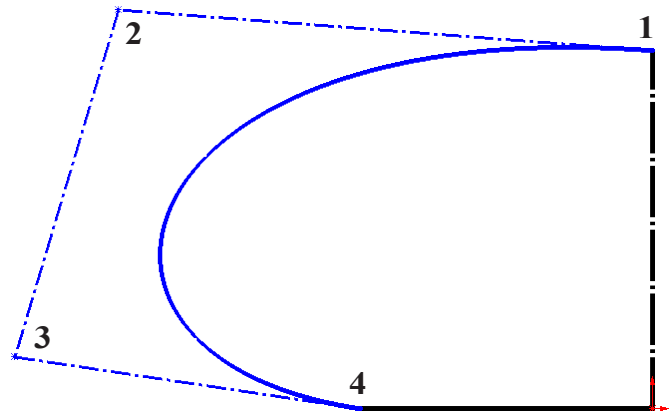



Fig. 3

Step 7. Click **top control polygon segment** and click **Make Horizontal**  on the context toolbar, **Fig. 4**.

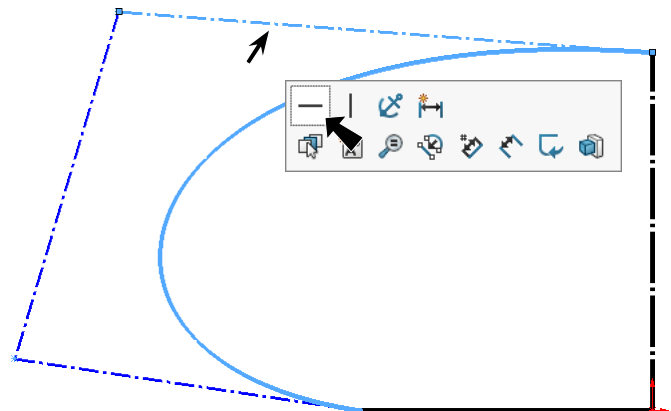




Fig. 4

Step 7. Click **bottom control polygon segment** and click **Make Horizontal**  on the context toolbar, **Fig. 5**.

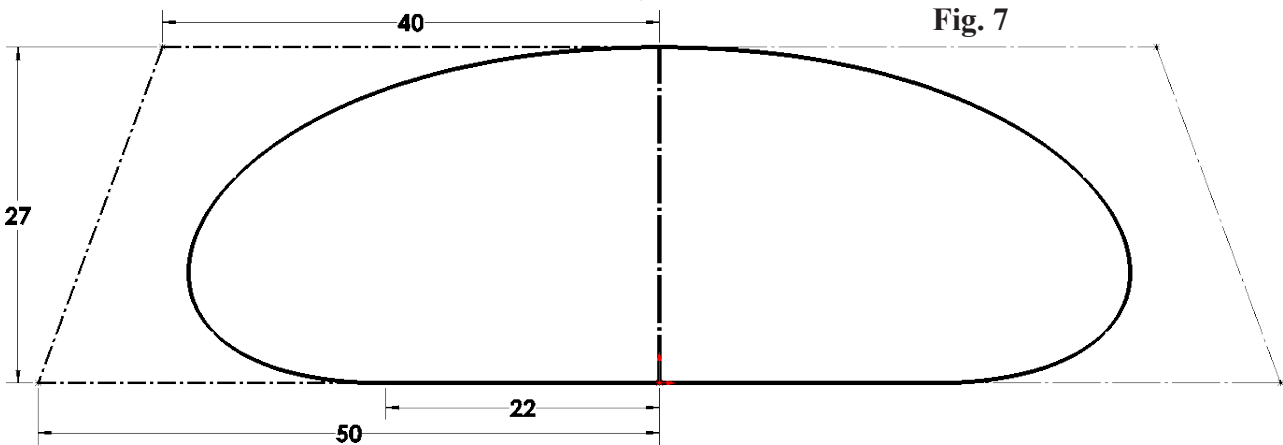
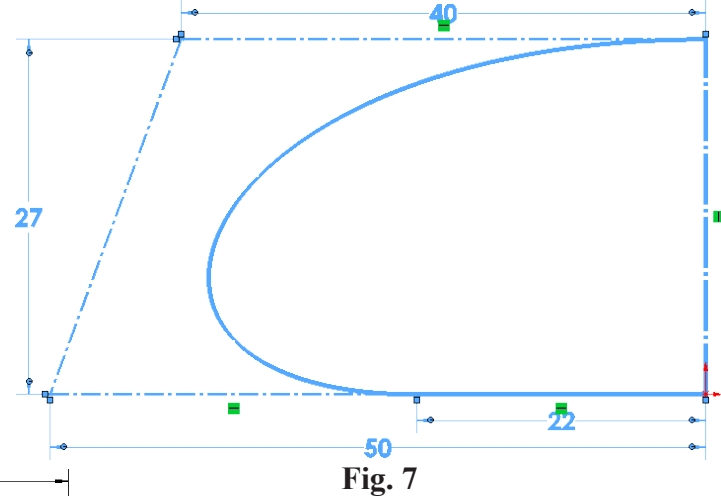
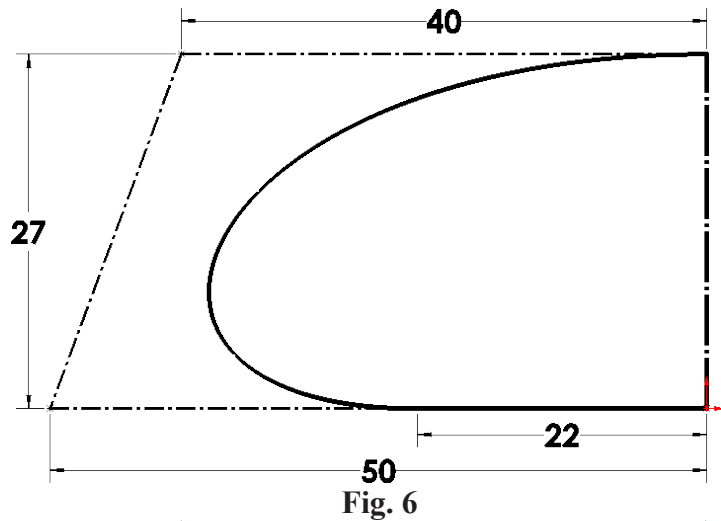
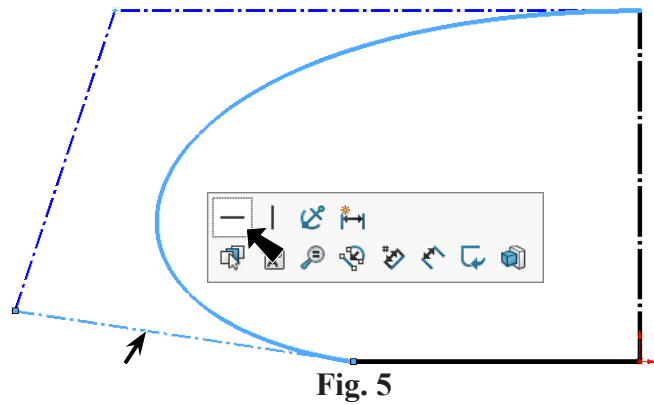
Step 8. Click **Smart Dimension**  (S) on the Sketch toolbar.

Step 9. Add dimensions, **Fig. 6**.



Step 10. **Right click graphics area and click Select** from menu to unselect Smart Dimension.

Step 11. Use **Ctrl-A** to select all, **Fig. 7**.

Step 12. Click **Mirror Entities**  on the Sketch toolbar, **Fig. 8**.



C. Slot and Hole.

Step 1. Click **Centerpoint Straight Slot**  (S) in the **Slot flyout**  on the Sketch toolbar.

Step 2. Starting from centerline sketch a **horizontal straight slot**, Fig. 9.

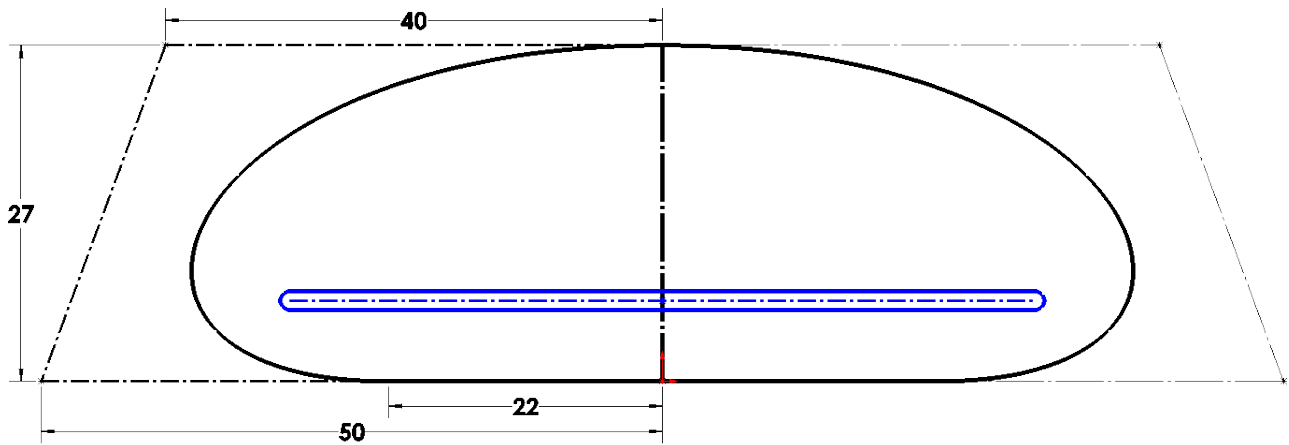


Fig. 9

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

Step 4. Sketch a circle on vertical centerline, Fig. 10.

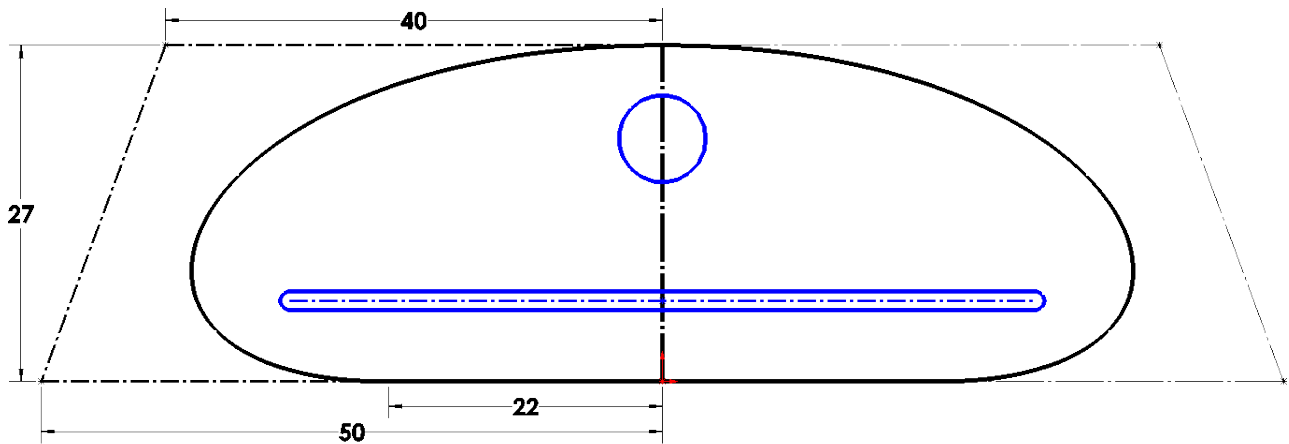
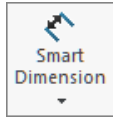
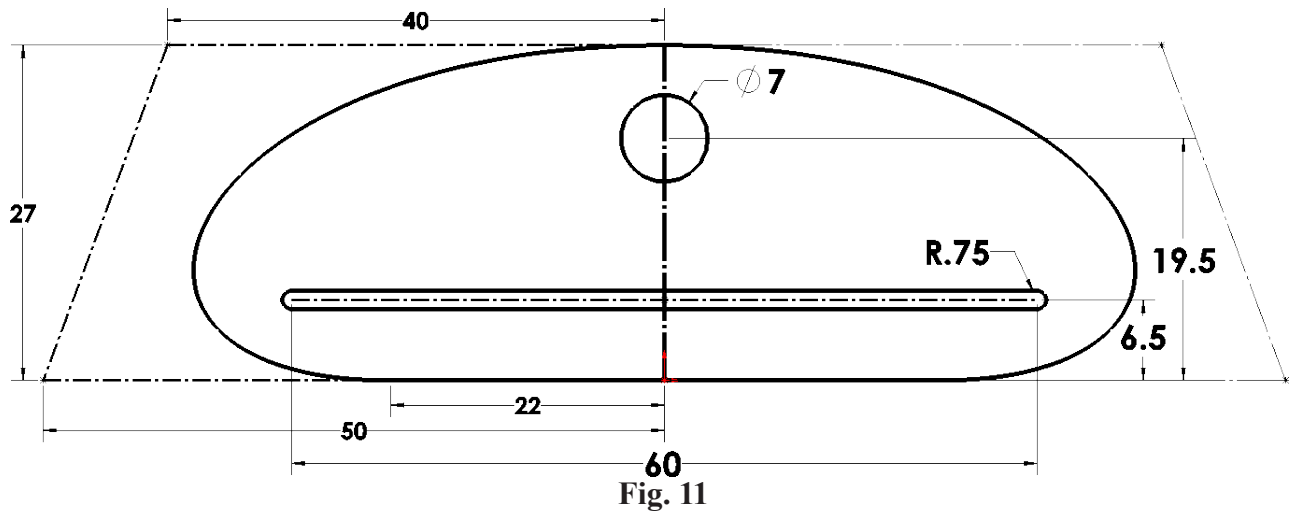


Fig. 10

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



Step 6. Add dimensions, **Fig. 11**.

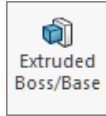


D. Extrude.

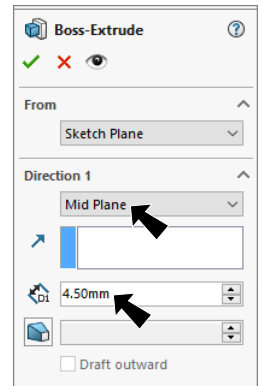
Step 1. Click **Features** on the Command Manager toolbar.



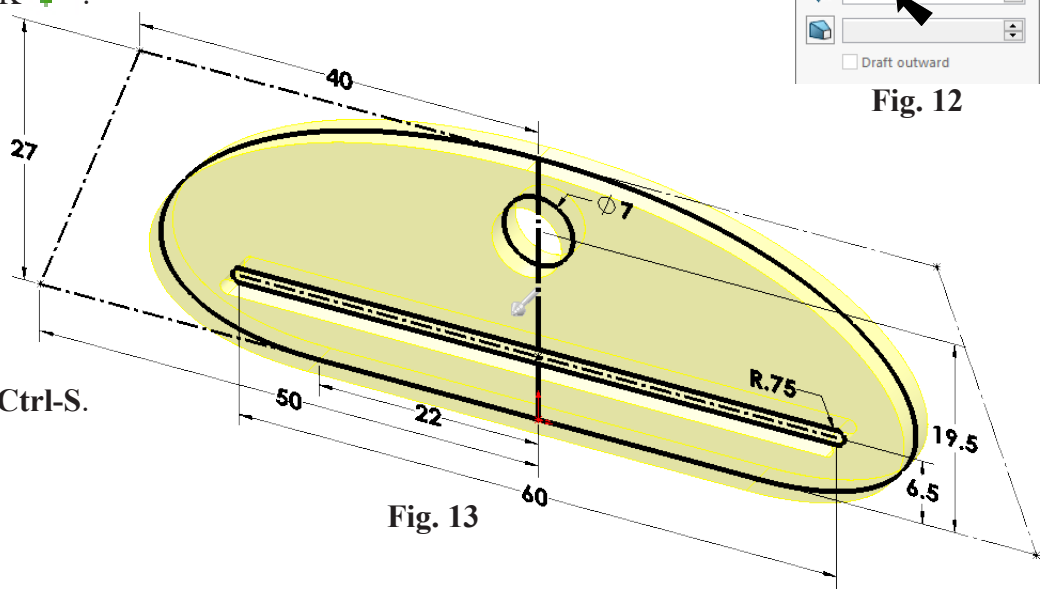
Step 2. Click **Extruded Boss/Base** on the Features toolbar.



Step 3. In the Boss-Extrude Property Manager set:
under Direction 1, **Fig. 12**
End Condition **Mid Plane**



Depth 4.3
click OK



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

E. Fillet Full Round.

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

Step 2. In the Fillet Property Manager:
select **Manual**, **Fig. 14**
under Fillet Type

select **Full Round Fillet** 

in **Face Set 1**  box
click front face of part, **Fig. 15**

Tip: Before moving cursor, right click to move selection to next selection box.

in **Center Face Set**  box
click top two faces, **Fig. 15**

rotate view and click bottom face, **Fig. 16**

in **Face Set 2**  box
click rear face, **Fig. 16**

click OK .

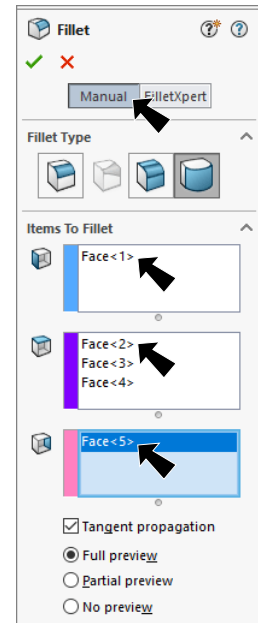


Fig. 14

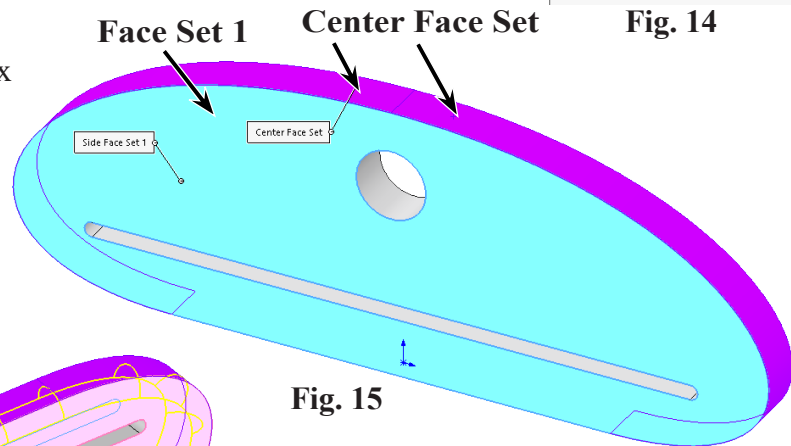


Fig. 15

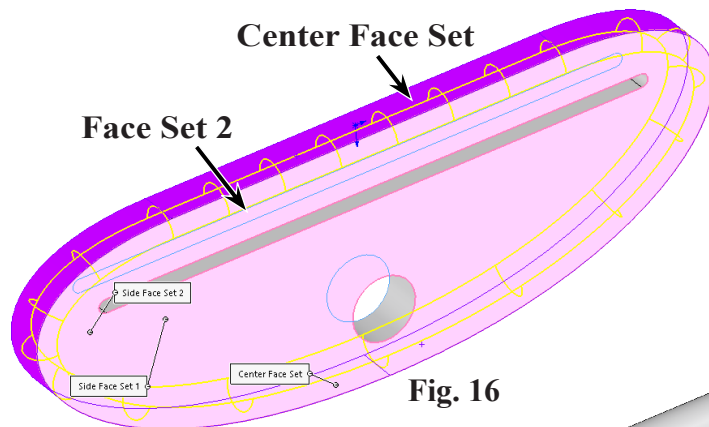


Fig. 16

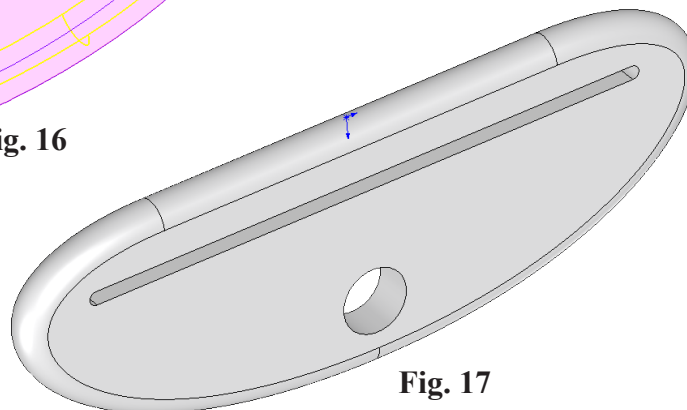


Fig. 17

F. Fillet Edges.

Step 1. Click **Trimetric**  on the Standard Views toolbar.

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

Step 3. In the Fillet Property Manager set:
select **FilletXpert**, **Fig. 18**

Radius  **1**

click a **slot edge**, **Fig. 19**

click **Internal to feature**  **9 edges** on the Fillet pop-up

click **OK** .

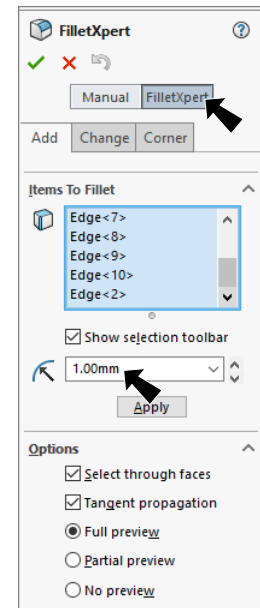




Fig. 18

G. Appearance Color.

Step 1. Click part, click **Appearance Call-**

out  on the context toolbar and click **TUBE SQUEEZER** , **Fig. 20**.

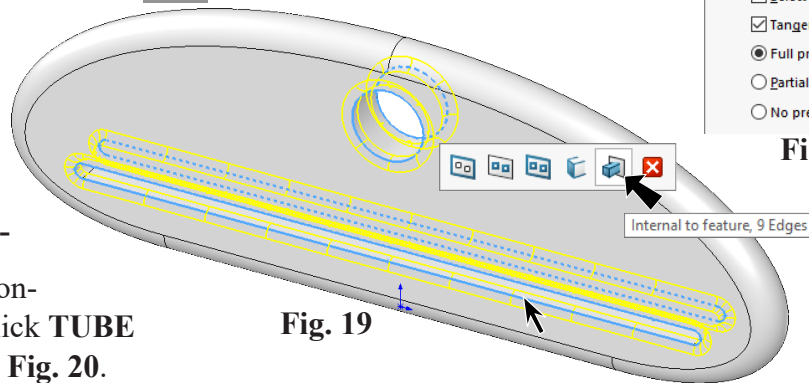


Fig. 19

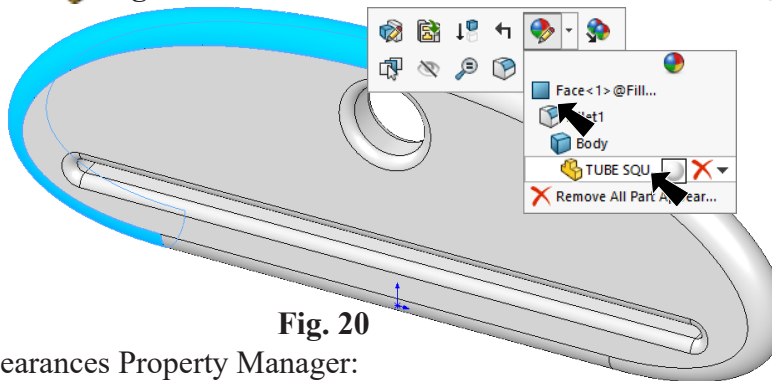


Fig. 20

Step 2. In the Appearances Property Manager:
under **Color**, **Fig. 21**

set **RGB values**

R 135

G 181

B 225

click **OK** .

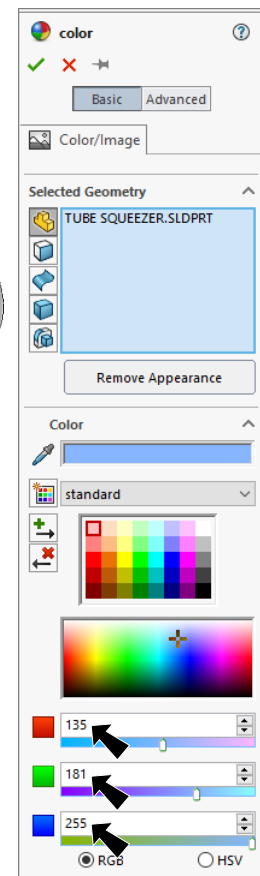


Fig. 21

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

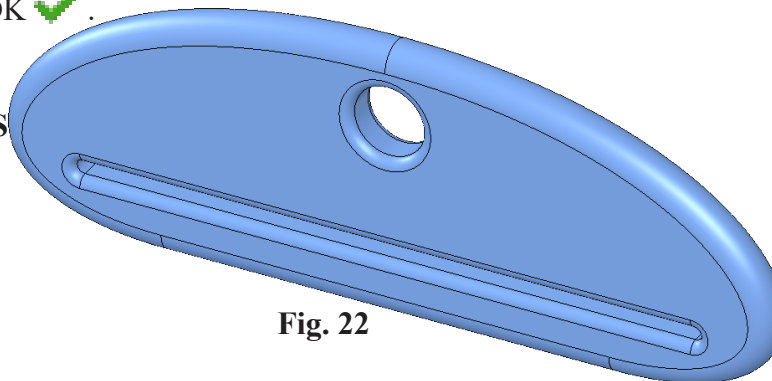


Fig. 22