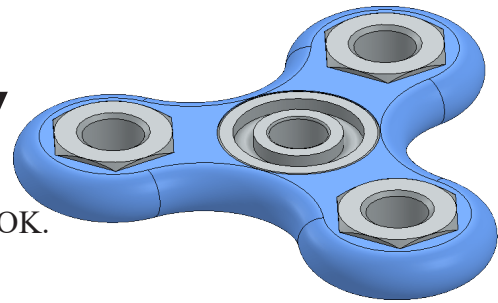


Tri-Spinner Assembly





A. Insert Spinner and Bearing.

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

Step 2. Select your **SPINNER** file and click Open.

Step 3. Click **Keep Visible**  in the Property Manager, **Fig. 1**.

Step 4. Click OK  in the Property Manager. This will place the Spinner origin at the assembly origin and fix the position of the Spinner so that it cannot move. This fixed component should have a **(f)** before its name in the Feature Manager  (f) SPINNER<1> .

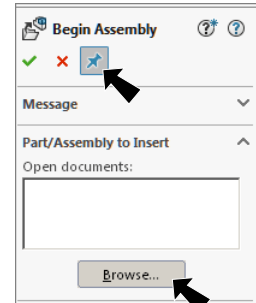


Fig. 1


Step 5. Click **Browse** in the Property Manager, **Fig. 1**.

Step 6. Select your **Bearing 0080-22** file and click Open.

Release Bearing when cursor changes to

Step 7. Position Bearing near Spinner hole, **Fig. 2**.

When Bearing snaps into place and cursor changes to indicate

Concentric mate , click to release Bearing.

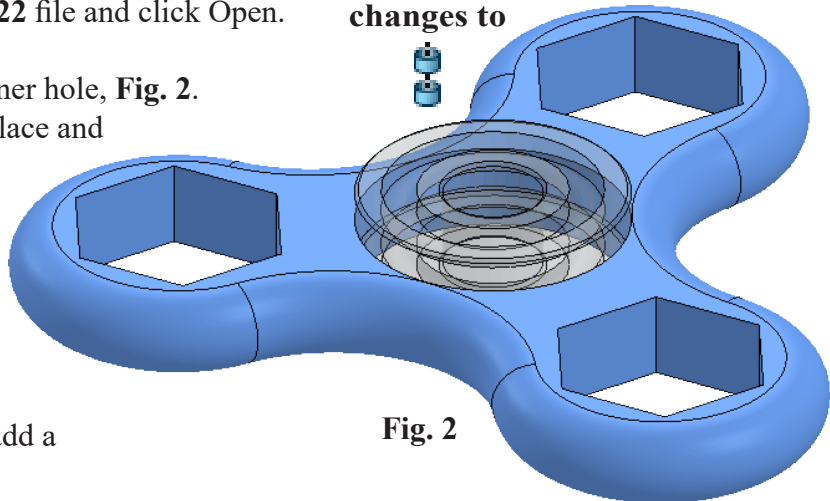



Fig. 2

Step 8. Check **Lock Rotation**

and Add/Finish Mate  in Mate pop-up toolbar to add a **Concentric mate**, **Fig. 3**.

Step 9. Click OK  in the Property Manager.




Fig. 3

B. Save as "SPINNER ASSEMBLY".

Step 1. Click File Menu > Save As.

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

C. Mate: Bearing.

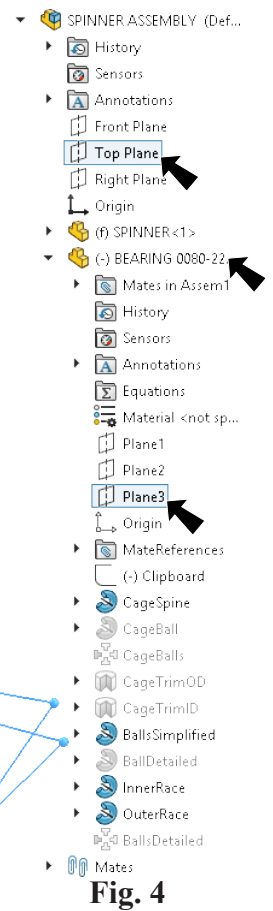
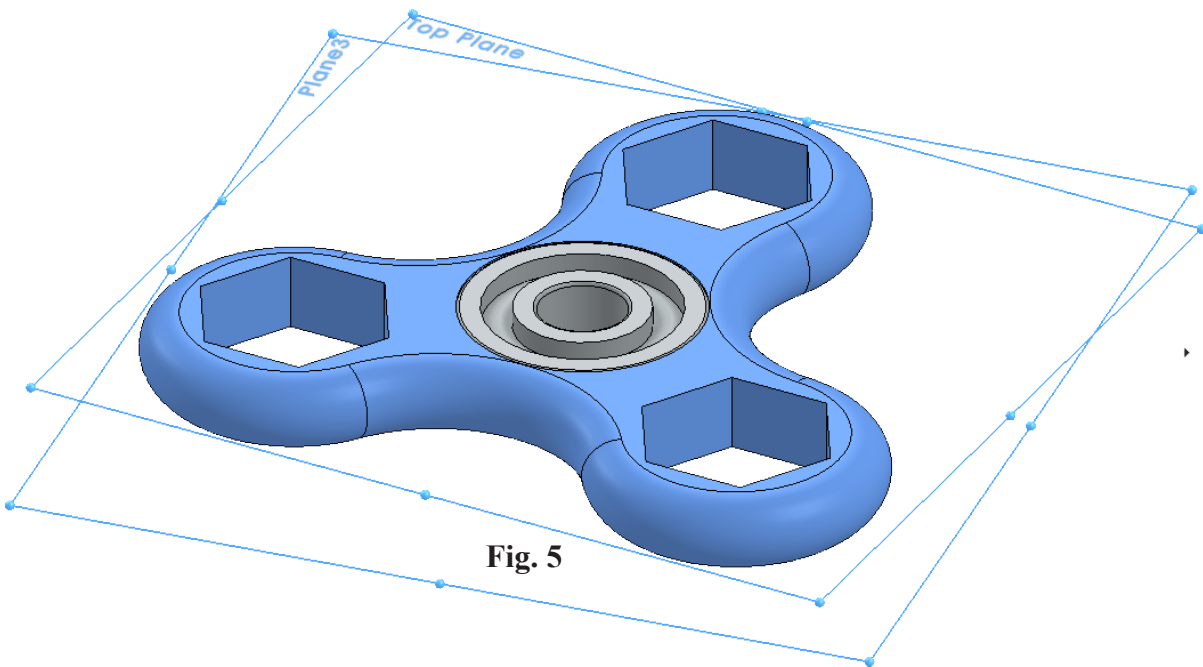
Step 1. Click **Mate**  on the Assembly toolbar.

Step 2. Expand the flyout Feature Manager design tree (click ) in the top left corner of the graphics area and click **Top Plane** , Fig. 4.

Step 3. Expand **Bearing** and click **Plane 3** , Fig. 4.

Step 4. Click Add/Finish Mate  to add **Coincident** mate.

Step 5. Click OK  in the Property Manager.

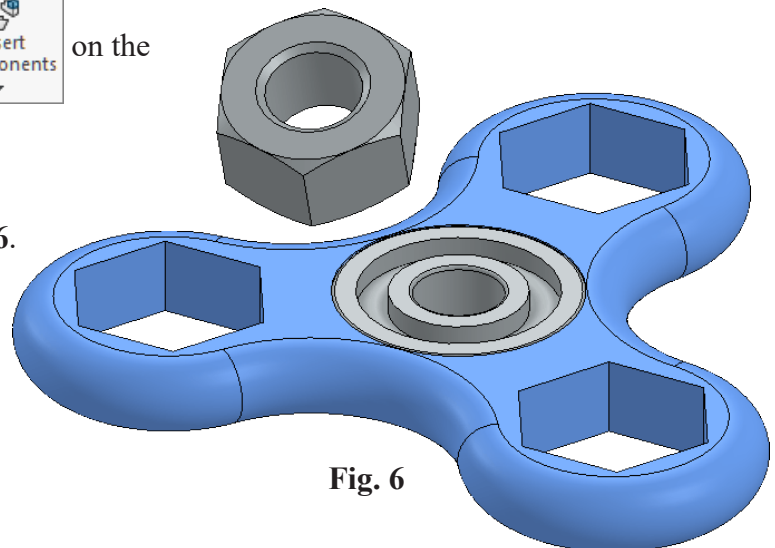


D. Insert Nut.


Step 1. Click **Insert Components**  on the Assembly toolbar.

Step 2. Select **Nut** file and click Open.

Step 3. Place Nut as positioned in Fig. 6.



E. Mate: Nut.

Step 1. Show **Sketch1** in Spinner. To show, expand **Spinner** in the Feature Manager and expand **Boss-Extrude1**, click **Sketch1** and **Show**  on the context toolbar, **Fig. 7**.

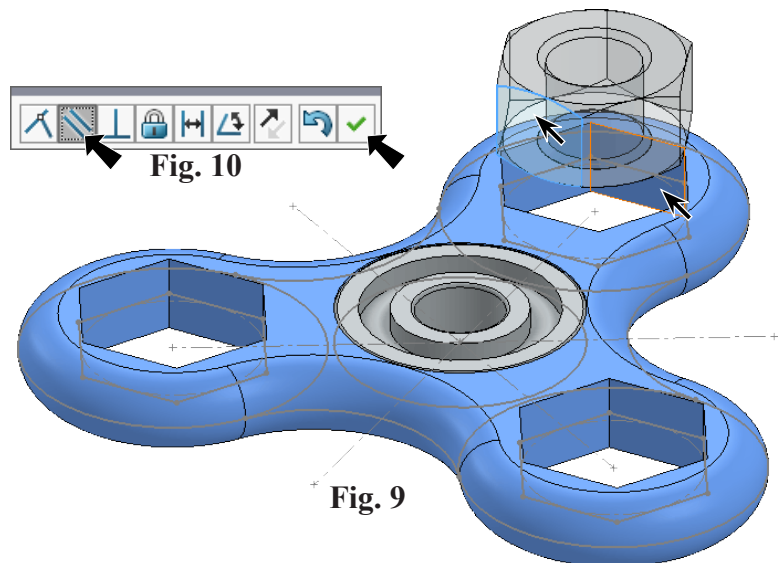
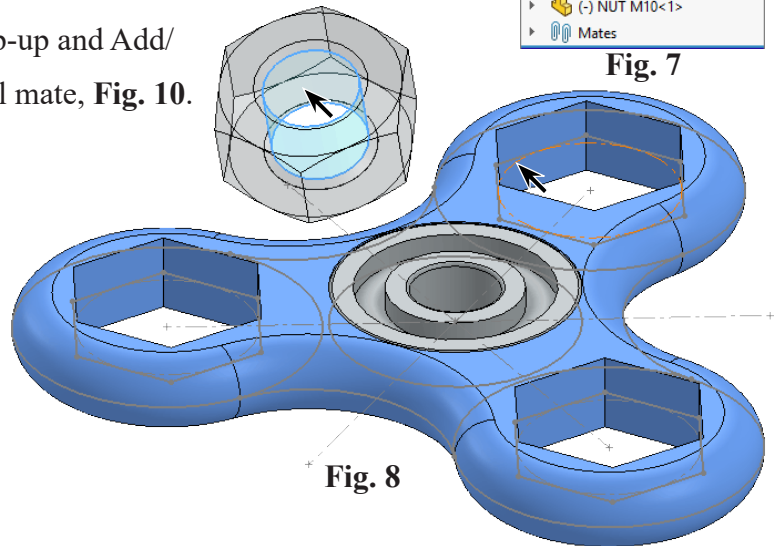
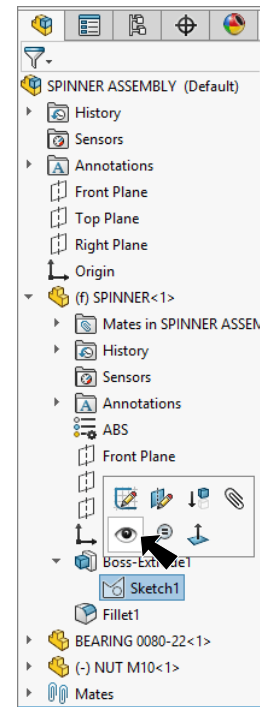
Step 2. Click **Mate**  on the Assembly toolbar.

Step 3. Click **cylindrical face of hole in Nut** and **construction circle of polygon in Sketch1**, **Fig. 8**.

Step 4. Click Add/Finish Mate  to add **Concentric** mate.

Step 5. Click a **side face of Nut** and a **side face of cut polygon in Spinner**, **Fig. 9**.




Step 6. Click **Parallel**  in Mate pop-up and Add/Finish Mate  to add Parallel mate, **Fig. 10**.



Step 7. Click **Right**  on the Standard Views toolbar. (Ctrl-4)

Step 8. Expand the flyout Feature Manager design tree and click **Top Plane** , **Fig. 11**.

Step 9. Expand **Nut** and click **Plane 1** , **Fig. 11**.

Step 10. Click **Distance**  in Mate pop-up, **Fig. 12**. Set distance **4.2** and press ENTER. The Nut should be centered in the Spinner, **Fig. 13**. If positioned in opposite direction, click **Flip Dimension**  in the Mate pop-up, **Fig. 12**. Click Add/Finish Mate  to add Distance mate.

Step 11. Click OK  in the Property Manager.



Fig. 12

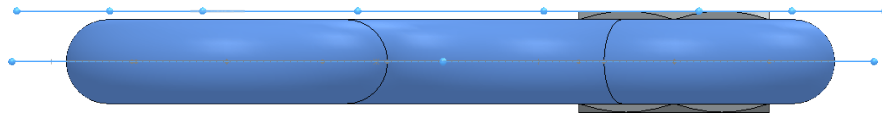


Fig. 13

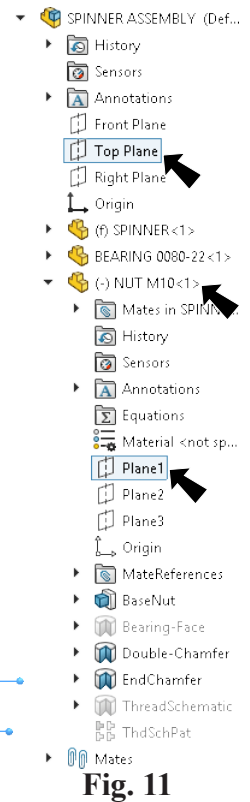



Fig. 11

Step 12. Click **Trimetric**  on the Standard Views toolbar.

Step 13. **Hide Spinner Sketch1**. To hide, click Sketch1 in graphics area and **Hide**  on the context toolbar, **Fig. 14**.

Step 14. Save. Use **Ctrl-S**.

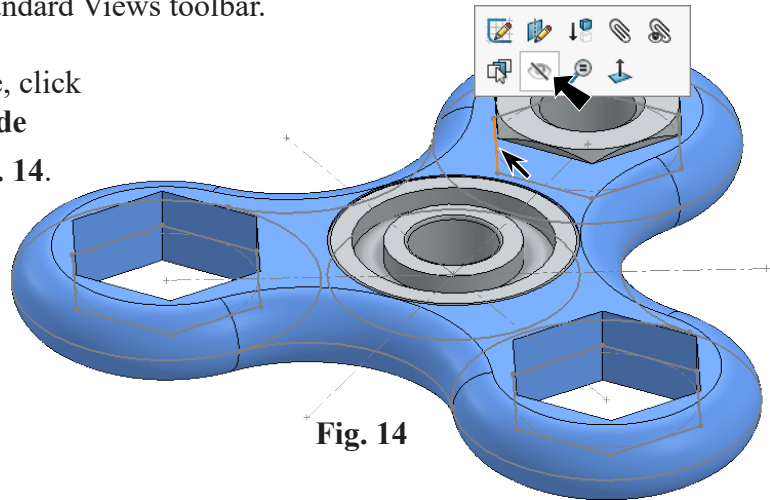


Fig. 14

F. Nut Circular Pattern.

Step 1. Click Insert Menu > Component Pattern > Circular Pattern.

Step 2. In the Circular Pattern Property Manager set:

under Components to Pattern, **Fig. 15**

click **Nut**, **Fig. 16**

under Parameters,

click in Pattern Axis box, **Fig. 15**

click **circular edge of hole in Spinner**

Angle  360

Number of Instances  3

check **Equal spacing**

click OK .

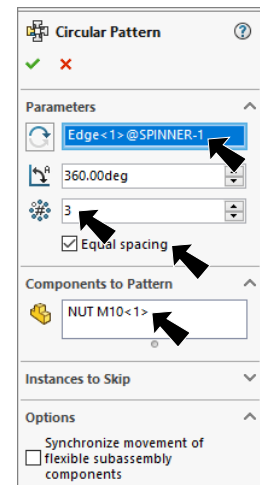


Fig. 15

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

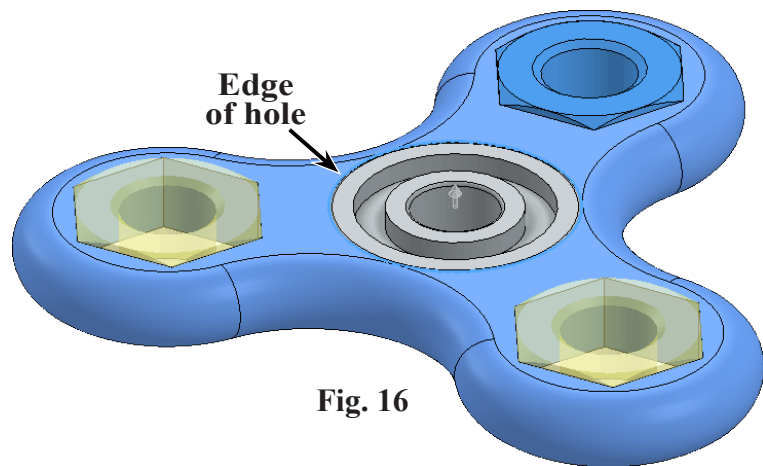


Fig. 16

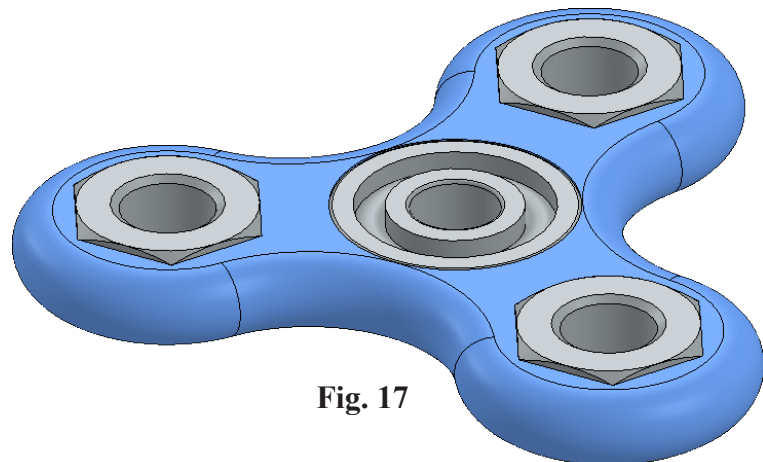


Fig. 17