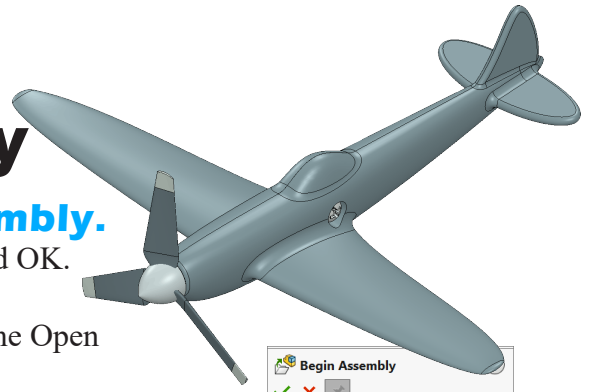


Airmaster Assembly





A. Insert Airplane and Propeller Assembly.

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

Step 2. Select your **AIRPLANE** file and click Open from the Open dialog box.

Step 3. In the Begin Assembly Property Manager set:


click **Keep Visible** , **Fig. 1**

Click OK  in the Property Manager. This will place Airplane origin at the assembly origin and fix the position so Airplane cannot move. This fixed component should have a **(f)** before its name in the Feature Manager >  (f) AIRPLANE<1> .

Step 4. Click **Browse** in the Property Manager, **Fig. 1**.

Step 5. Select your **PROPELLER ASSEMBLY** file and click Open.

Step 6. Click approximately where Propeller Assembly is positioned in **Fig. 2**.

Step 7. Click OK  in the Property Manager when done.

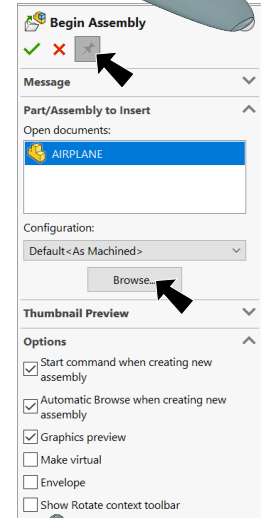


Fig. 1

B. Save as "AIRMMASTER ASSEMBLY".

Step 1. Click File Menu > Save As.

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

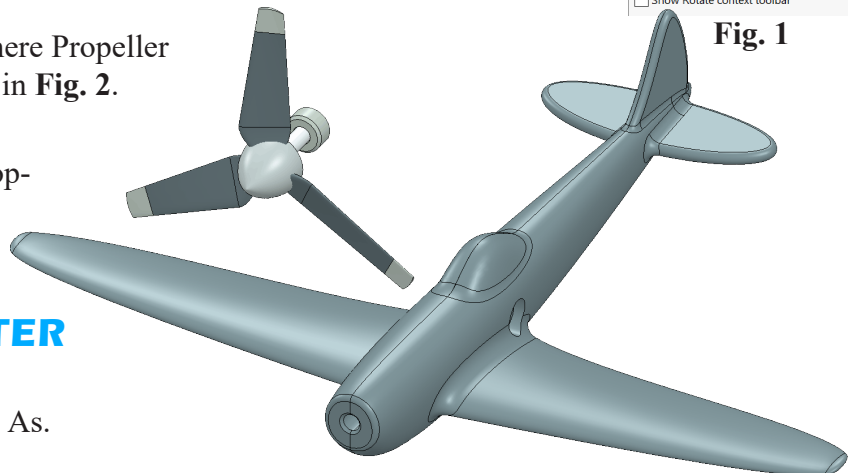
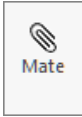


Fig. 2

C. Mate: Propeller Assembly.

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

Step 2. Click **cylindrical face of Shaft** and **cylindrical face of Shaft hole in Airplane**, **Fig. 3**.

Step 3. Check Add/Finish Mate  in Mate pop-up toolbar to add a **Concentric** mate.

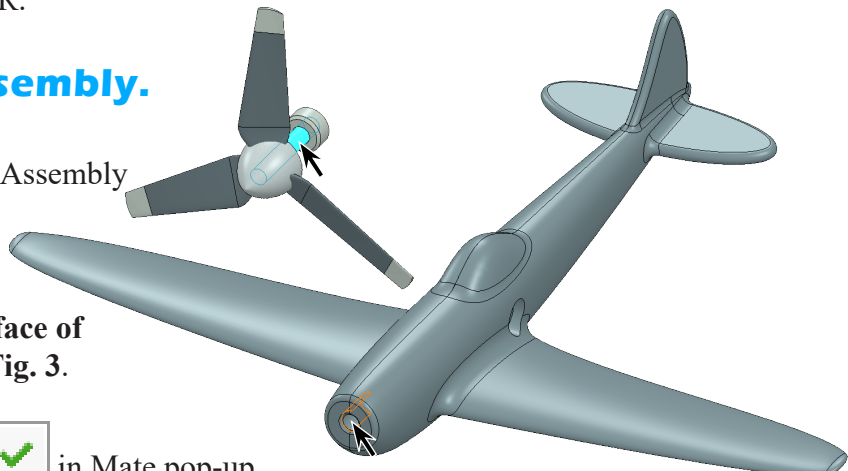





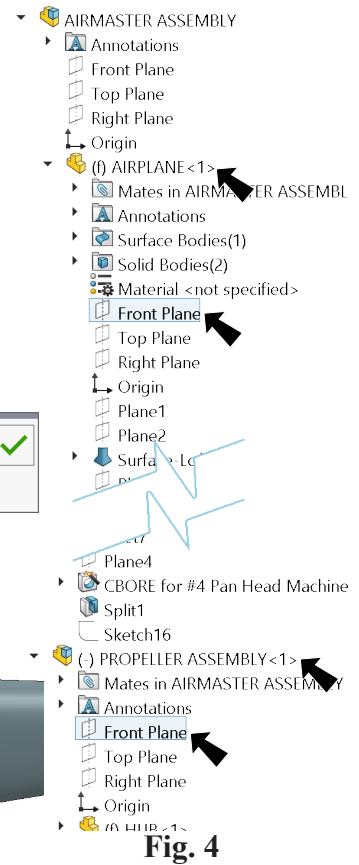
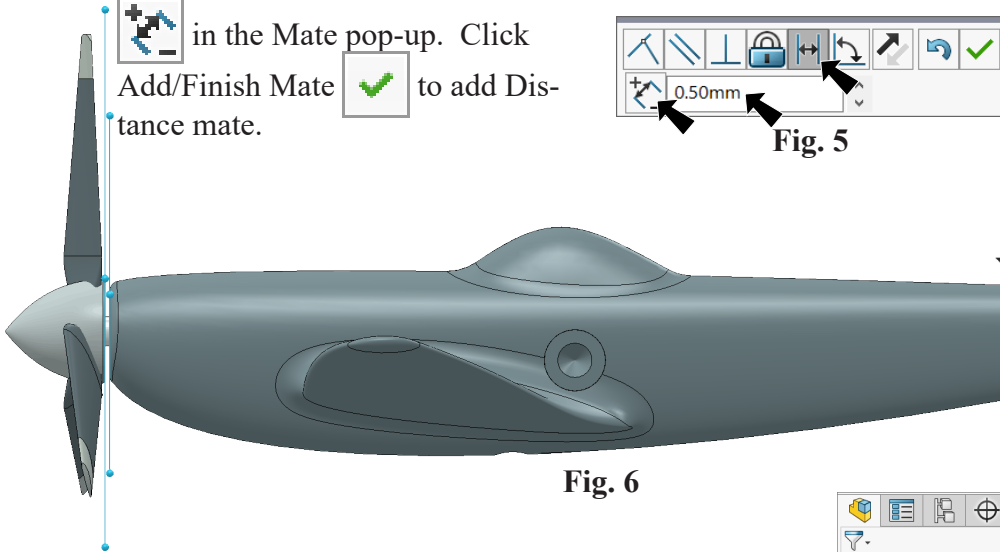
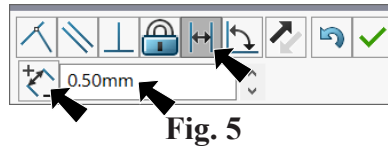
Fig. 3

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

Step 5. Expand the flyout Feature Manager design tree, expand **AIRPLANE** and click **Front Plane** . Expand **PROPELLER ASSEMBLY** and click **Front Plane** , Fig. 4.

Step 6. Click **Distance**  in Mate pop-up, Fig. 5. Set distance .5 and press ENTER. The **Hub** should be forward of fuselage, Fig. 6. If positioned in opposite direction, click **Flip Dimension**


 in the Mate pop-up. Click **Add/Finish Mate**  to add Distance mate.



Step 7. Click OK  in the Property Manager.

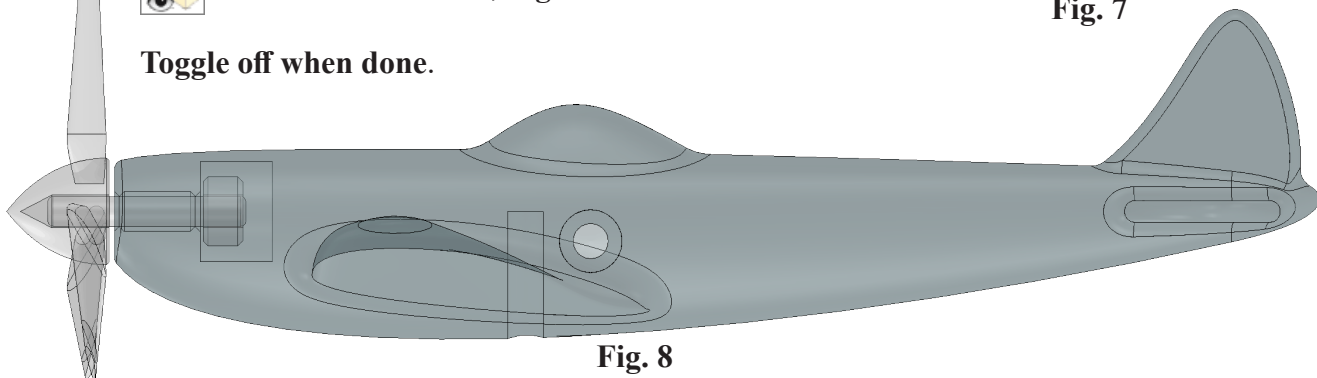
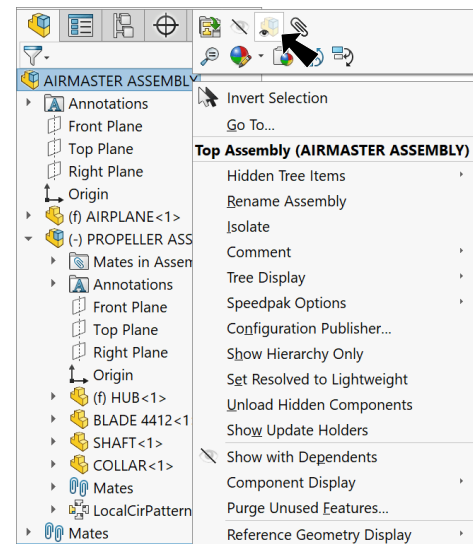
Step 8. Save  (Ctrl-S).

D. Top Level Transparency.


Step 1. Now would be a good time to check how Prop Assembly fits the fuselage. **Toggle on AIRMASTER ASSEMBLY Top Level Transparency.** To toggle, **right click AIRMASTER ASSEMBLY**  at top of Feature Manager and click **Top Level Transparency**

 on the context toolbar, Fig. 7.

Toggle off when done.



E. Insert Screw.

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

Step 2. Click **Insert Components**  on the Assembly toolbar.

Step 3. Click **SCREW** file and click Open from the Open dialog box.

Step 4. Click to place Screw, **Fig. 9**.

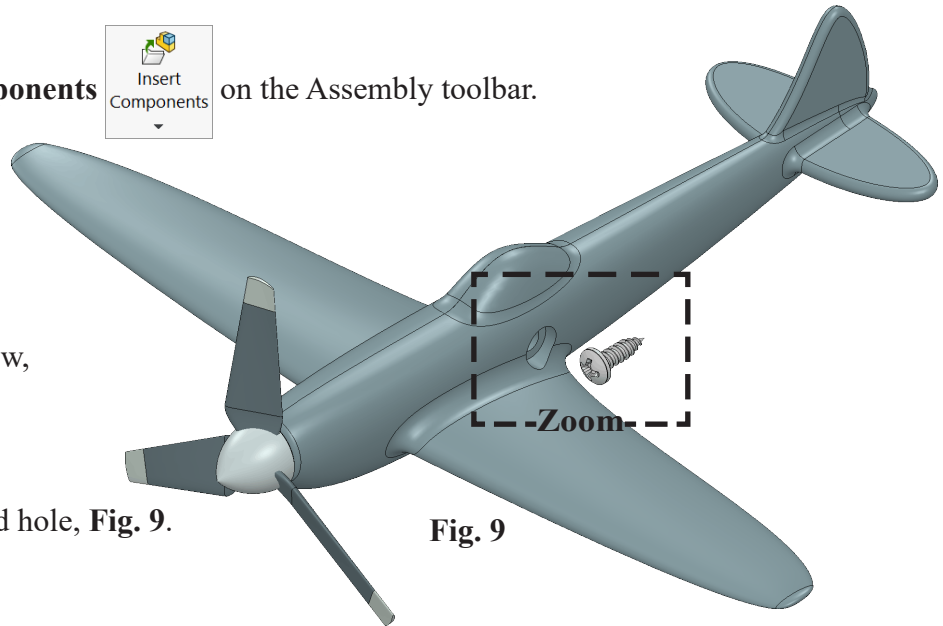




Fig. 9

F. Mate: Screw.

Step 1. Zoom in Screw and hole, **Fig. 9**.

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

Step 3. Click a **cylindrical face of hole in Airplane** and a **cylindrical face of Screw**, **Fig. 10**.

Step 4. If positioned in wrong direction, click **Flip Mate Alignment**  in the Mate pop-up and click **Add/Finish Mate**  to add a **Concentric** mate, **Fig. 11**.

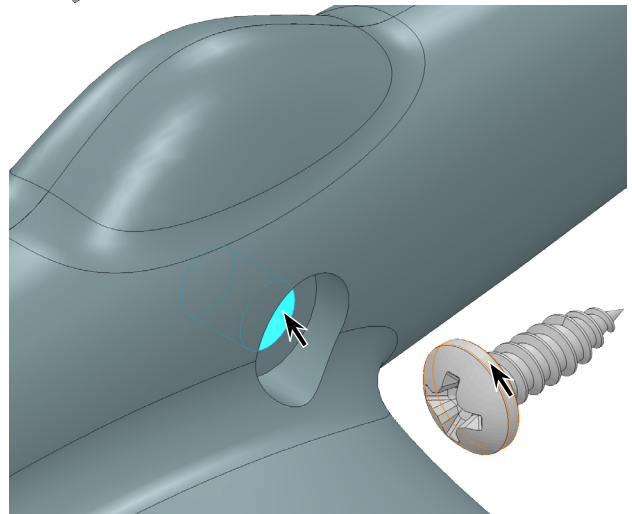


Fig. 10



Fig. 11

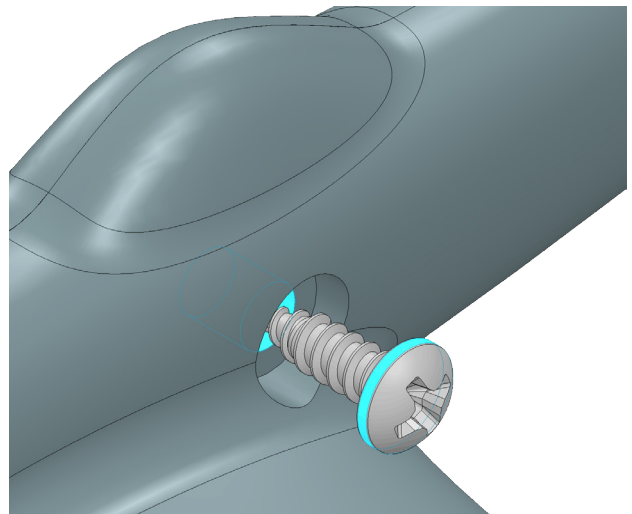




Fig. 12

Step 5. Click **bottom face of counterbore hole in Airplane**, **hide outside cylindrical side face of Screw** and click **bottom face of Screw head**, **Fig. 13**. To hide face, hover cursor over face and press **Alt** key.

Tip: If **Alt** key does not hide face, turn off enhanced graphics performance. Click **Options**  on the Standard toolbar. Under System Options, Performance, **uncheck Enhanced Graphics Performance**.

Step 6. Click Add/Finish Mate  to add a **Coincident** mate.

Step 7. Click OK  in the Property Manager.

Step 8. Save  (**Ctrl-S**).

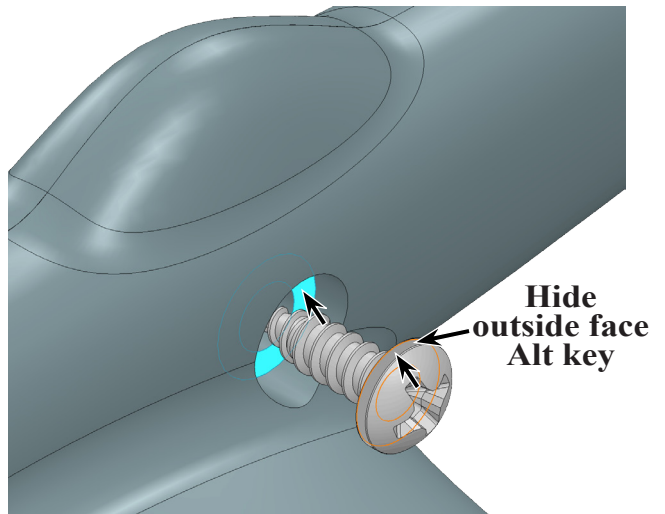


Fig. 13

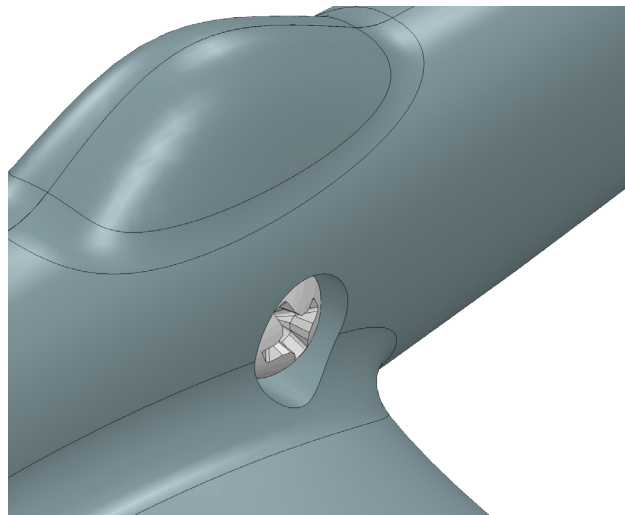


Fig. 14