



# Delta Dart Propeller Assembly

## A. Insert Parts.

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

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

Step 3. In the Begin Assembly Property Manager set: click **Keep Visible** , **Fig. 1**

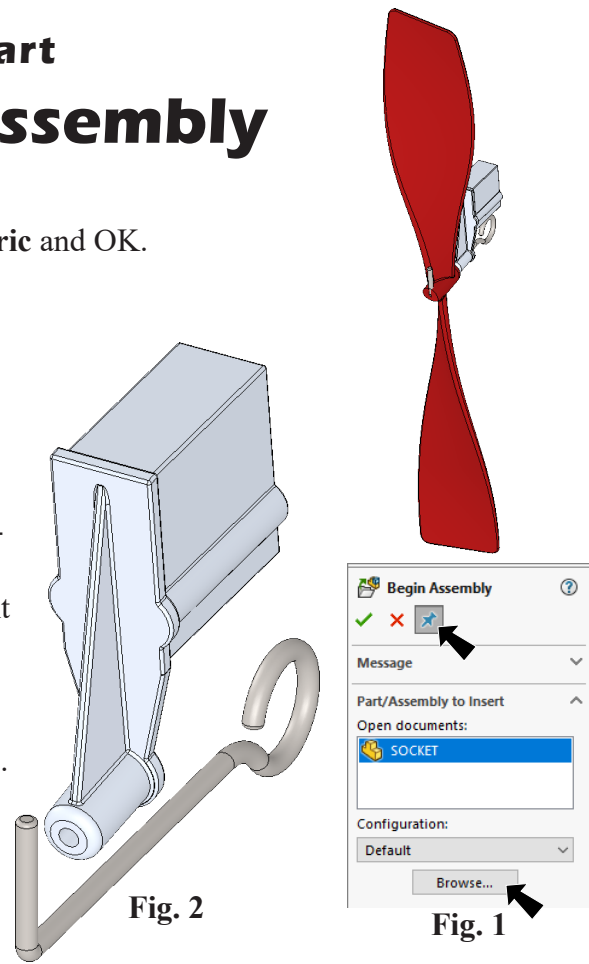
Click OK . This will place Socket origin at the assembly origin and fix the position so Socket cannot move. This fixed component should have a (f) before its name in the Feature Manager  (f) SOCKET<1> .

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

Step 5. Select your **PROP WIRE** file and click Open.

Step 6. Click approximately where the Prop Wire is positioned in **Fig. 2**.

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




## B. Save as "PROPELLER ASSEMBLY".

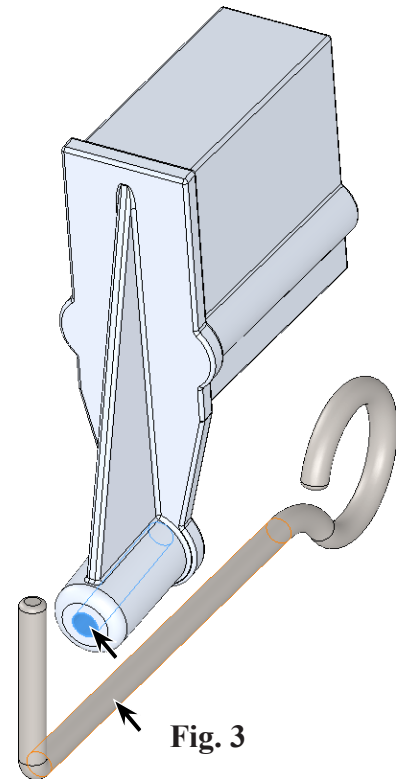
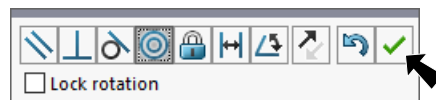
Step 1. Click File Menu > Save As.

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

## C. Mate: Socket and Prop Wire.



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

Step 2. Click **inside cylindrical face of Socket hole** and **cylindrical face of horizontal section of Wire**, **Fig. 3**. Click Add/Finish Mate  to add **Concentric** mate, **Fig. 4**.



Step 3. Expand the flyout Feature Manager design tree (click ) in the top left corner of the graphics area, then expand **SOCKET** and click **Plane1** , **Fig. 5**.

Step 4. Expand **PROP WIRE** and click **Front Plane** , **Fig. 5**.

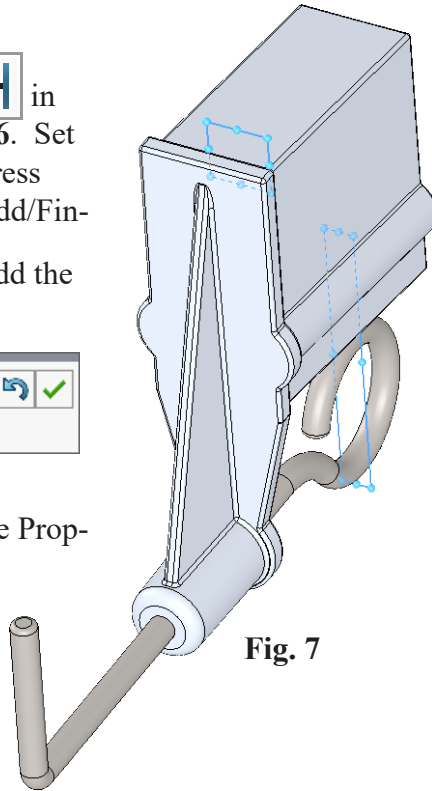
Step 5. Click **Distance**  in Mate pop-up, **Fig. 6**. Set **distance 8.5** and press **ENTER**. click **Add/Finish Mate**  to add the **Distance** mate.



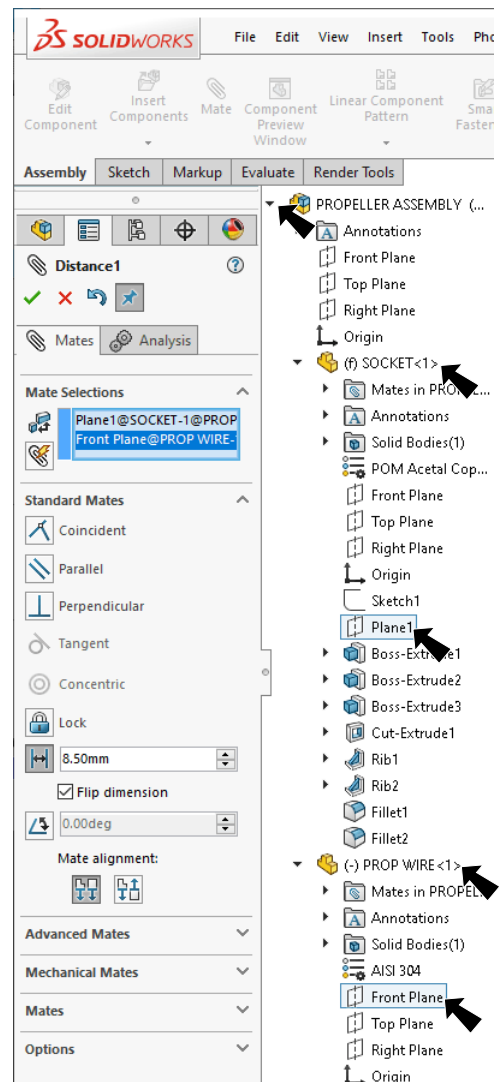
**Fig. 6**

Step 6. Click **OK**  in the Property Manager.

Step 7. Save. Use **Ctrl-S**.



**Fig. 7**



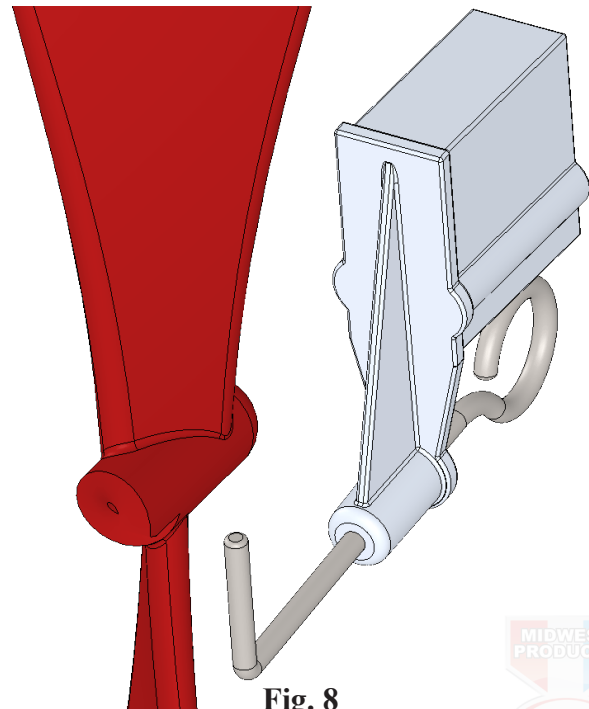
**Fig. 5**

## D. Insert Propeller.

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

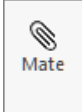
Step 2. Select **PROPELLER** file and click **Open**.


Step 3. Place Propeller as positioned in **Fig. 8**.



**Fig. 8**

## E. Mate: Propeller.

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

Step 2. Click **inside cylindrical face of Propeller hub** and **cylindrical face of horizontal section of Wire**, Fig. 9. Click Add/Finish Mate  to add **Concentric** mate.

Step 3. Click the **front face of Socket hub**, Fig. 10.

Step 4. Expand the Design Tree, expand **PROPELLER** and click **Front Plane** , Fig. 11.

Step 5. Click **Distance**  in Mate pop-up, Fig. 12. Set **distance 5.5** and press ENTER.

Click **Right**  on the Standard Views toolbar (**Ctrl-4**) and confirm position of Propeller, Fig. 13.

click Add/Finish Mate  to add the **Distance** mate.

Step 6. Click OK  in the Property Manager.

Step 7. Save. Use **Ctrl-S**.

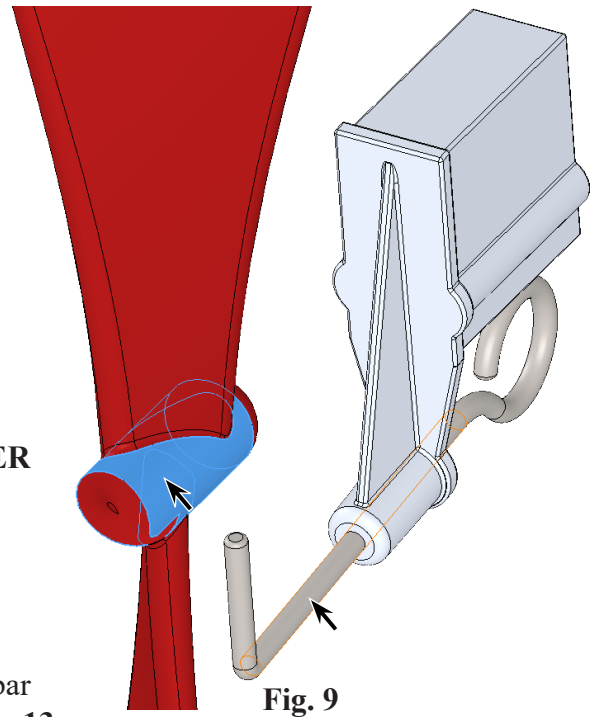


Fig. 9

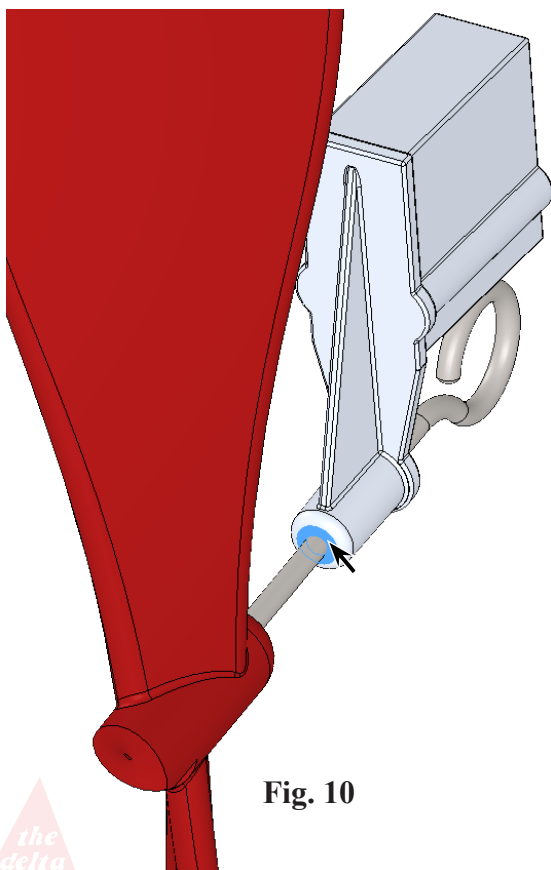


Fig. 10

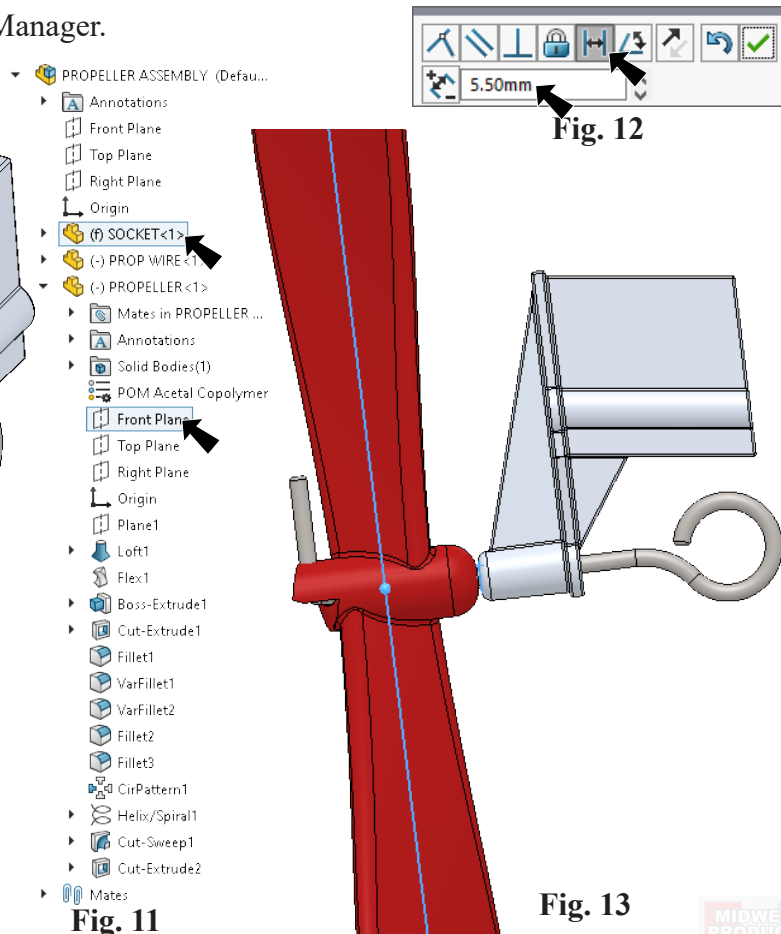


Fig. 11



Fig. 12

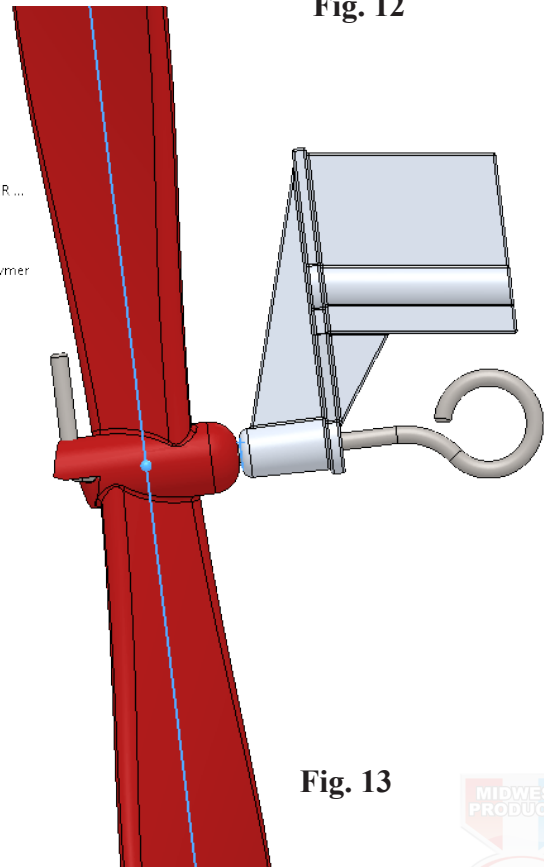


Fig. 13