

# Skateboard Board Assembly

## A. Insert Deck and Trucks.



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

Step 2. Click **Keep Visible**  in the Property Manager, **Fig. 1**.

Step 3. Confirm **Show Rotate context toolbar** is checked, **Fig. 1**.

Step 4. Click **Browse** in the Property Manager.

Step 5. Select your **DECK** file and click Open.

Step 6. Click OK  in the Property Manager. This will place Deck origin at the assembly origin and fix position of Deck so that it cannot move. This fixed component should have a **(f)** before its name in the Feature Manager  **(f) DECK<1>**.

Step 7. Click **Browse** in the Property Manager, **Fig. 1**.

Step 8. Select your **TRUCK ASSEMBLY** file and click Open.


Step 9. In the Rotate Context toolbar click **Rotate X 90 Deg**  **twice, Fig. 2.**

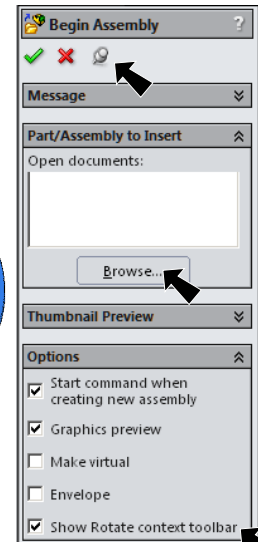
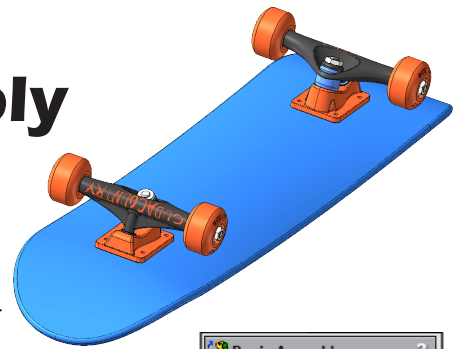
Step 10. Click approximately where Truck Assembly is positioned in **Fig. 3**.

Step 11. In the Rotate Context toolbar click

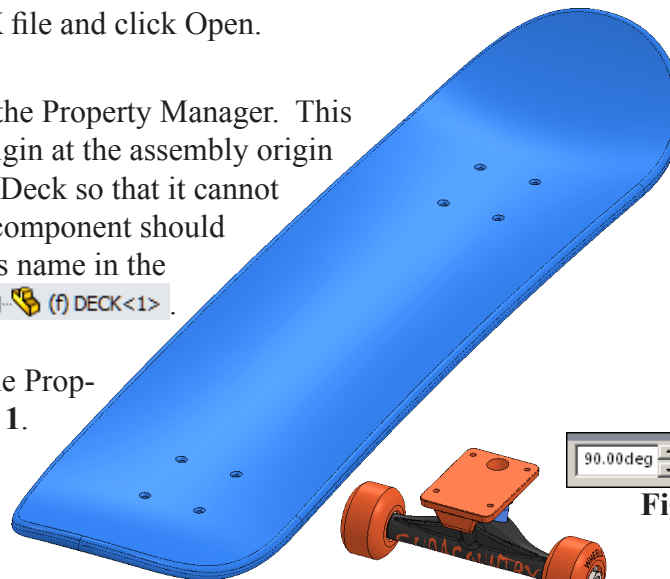
**Rotate X 90 Deg**  **twice and**

**Rotate Y 90 Deg**  **twice, Fig. 4.**

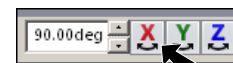
Step 12. Click approximately where Truck Assembly is positioned in **Fig. 5**. Click OK  in the Property Manager when done.



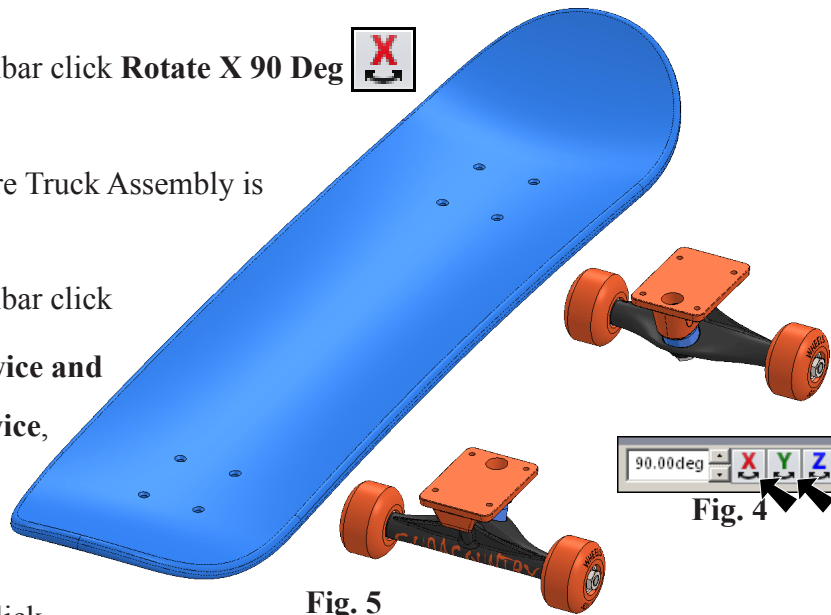
**Fig. 1**



**Fig. 3**



**Fig. 2**



**Fig. 5**



**Fig. 4**

## B. Save as "BOARD ASSEMBLY".


Step 1. Click File Menu > Save As.

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

## C. Mate: Trucks.


Step 1. **Expand Deck** in the Feature Manager tree and **expand Surface-**

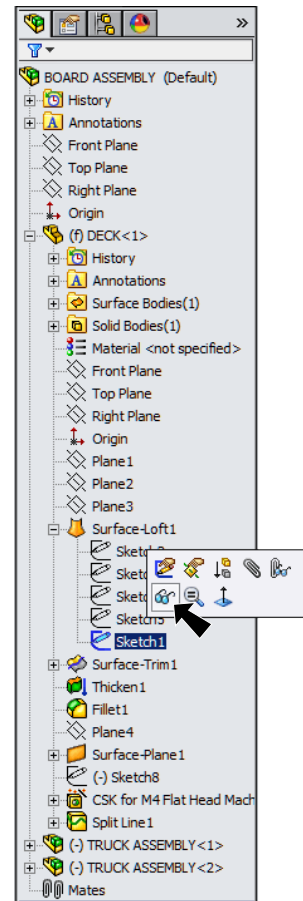
**Loft1**. Click **Sketch1** and click **Show**  on the Context toolbar, **Fig. 6**.

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

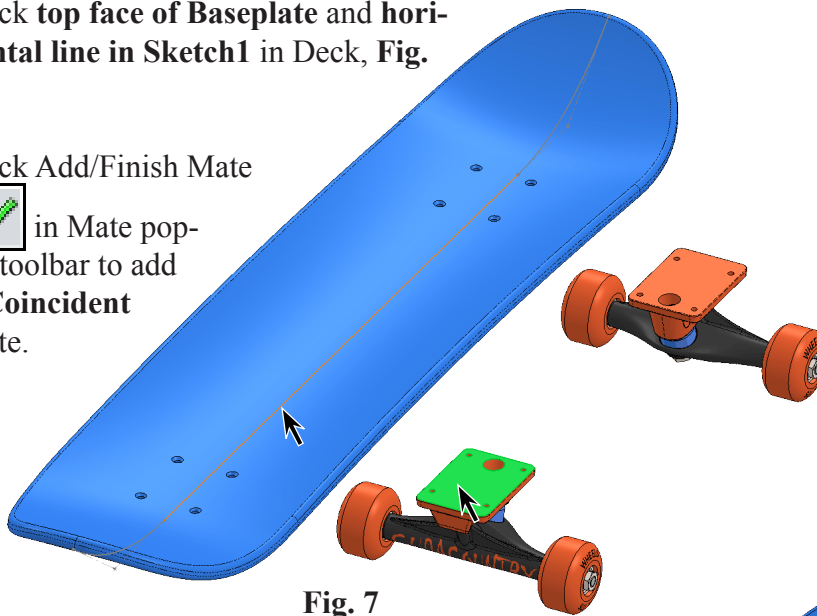
Step 3. Click **top face of Baseplate** and **horizontal line in Sketch1** in Deck, **Fig. 7**.

Step 4. Click Add/Finish Mate

 in Mate pop-up toolbar to add a **Coincident** mate.

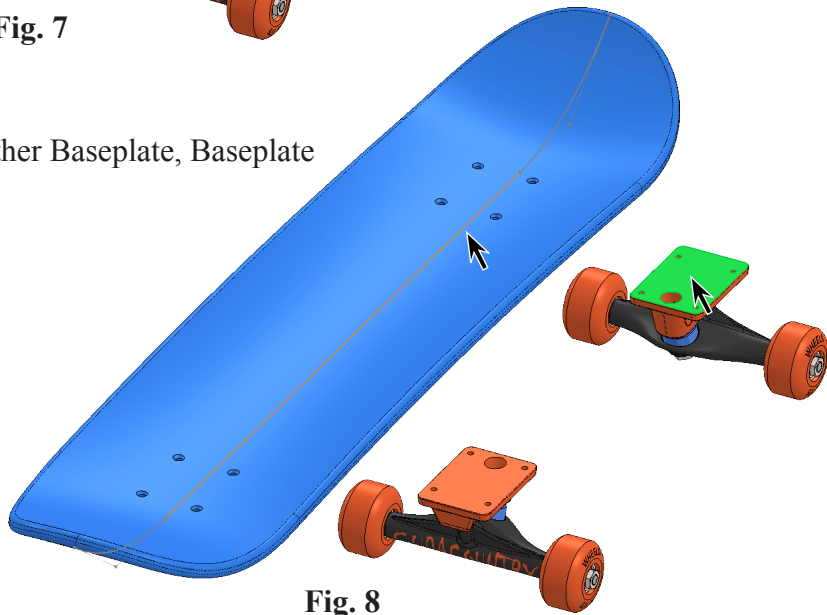


**Fig. 6**




**Fig. 7**

Step 5. Repeat the same mate on other Baseplate, Baseplate face to line, **Fig. 8**.




**Fig. 8**

Step 6. Turn on **Filter Faces**  (X) on the **Selection Filter toolbar** at the bottom of the display, **Fig. 9**. If necessary, use **F5** key to display toolbar.

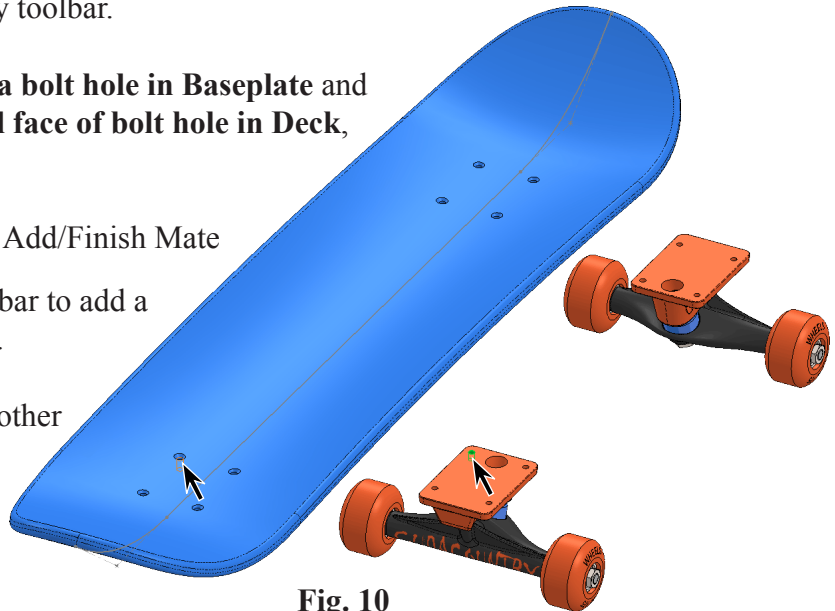


**Fig. 9**

Step 7. Click **cylindrical face of a bolt hole in Baseplate** and corresponding **cylindrical face of bolt hole in Deck**, **Fig. 10**.

Step 8. Click **Lock Rotation** and Add/Finish Mate  in Mate pop-up toolbar to add a **Concentric** mate, **Fig. 11**.

Step 9. Repeat the same mate on other Baseplate, Baseplate hole to hole in Deck, **Fig. 12**. Be sure to Lock Rotation, **Fig. 11**.

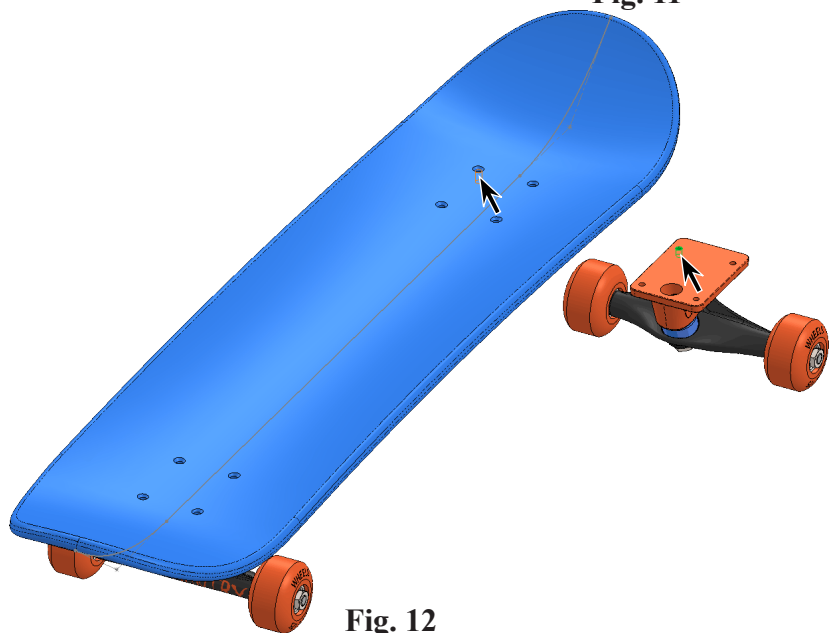


**Fig. 10**


Step 10. Click OK  in the Property Manager when done.

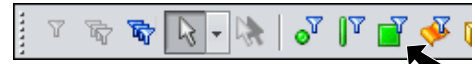


**Fig. 11**



**Fig. 12**

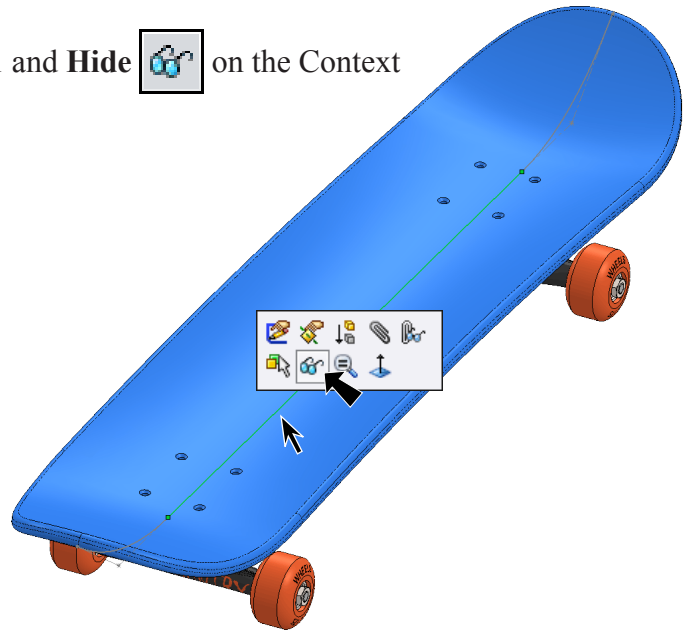
Step 11. Turn **off Filter Faces**  (X) on the **Selection Filter toolbar** at the bottom of the display, **Fig. 13**. If necessary, use **F5** key to display toolbar.



**Fig. 13**

Step 12. Hide **Sketch1**. To hide, click **Sketch1** and **Hide**  on the Context toolbar, **Fig. 14**.

Step 13. Save. Use **Ctrl-S**.



**Fig. 14**