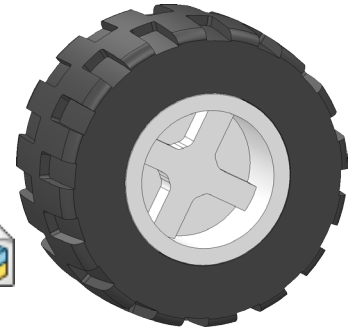




E's Small Car Wheel Assembly




A. Insert Rim and Tire.



Step 1. Click **New**  on the Standard toolbar, click **Assembly Metric**  and OK.

Step 2. **Ctrl click** your **RIM** and **TIRE** and click Open from the Open dialog box.

Step 3. In the Begin Assembly Property Manager set:

click **Keep Visible** , **Fig. 1**
under Part/Assembly in Insert
select **RIM** to highlight it.
under Options

Only fix first component

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

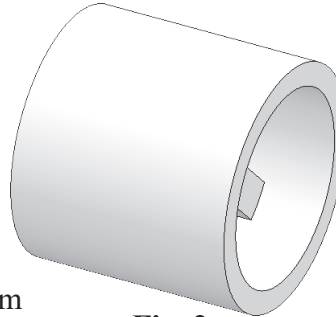


Fig. 2

Step 4. In the Begin Assembly Property Manager:
under Part/Assembly in Insert, **Fig. 3**
select **TIRE** to highlight it.

Step 5. Place the Tire in the graphic area, **Fig. 4**.

Step 6. Click OK  in the Property Manager.

B. Save as "WHEEL ASSEMBLY".

Step 1. Click File Menu > Save As.

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

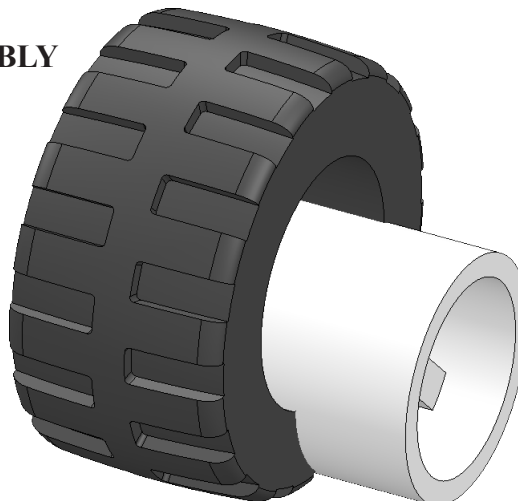


Fig. 4

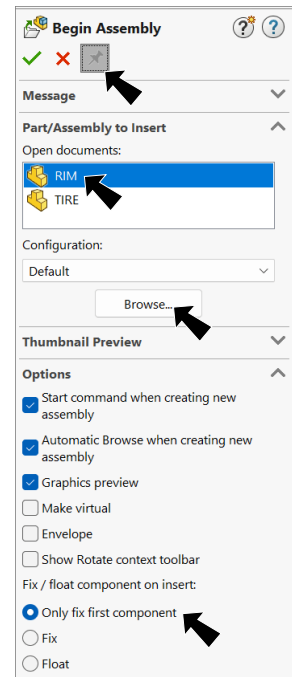


Fig. 1

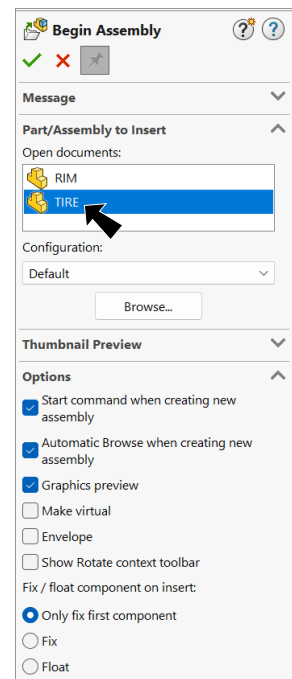


Fig. 3

C. Mate: Tire.

Step 1. Click **Right Plane** in the Feature Manager and **Mate** on the context toolbar, **Fig. 5**.

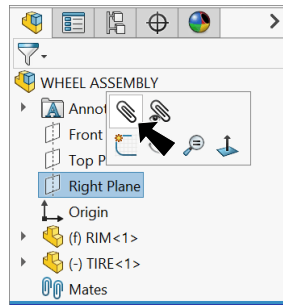


Fig. 5

Step 2. Expand the flyout Feature Manager design tree, expand **TIRE** and click **Right Plane**, **Fig. 6**.

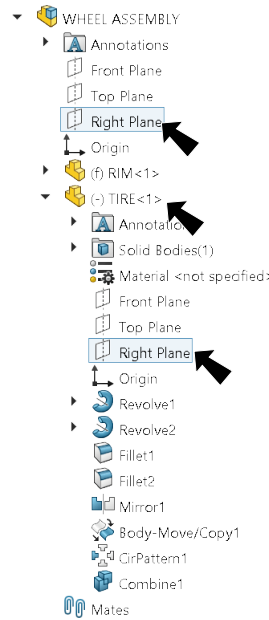


Fig. 6

Step 3. Click Add/Finish Mate to add **Coincident** mate.

Step 4. Click a cylindrical face of in Rim and a cylindrical face of Tire, **Fig. 8**.

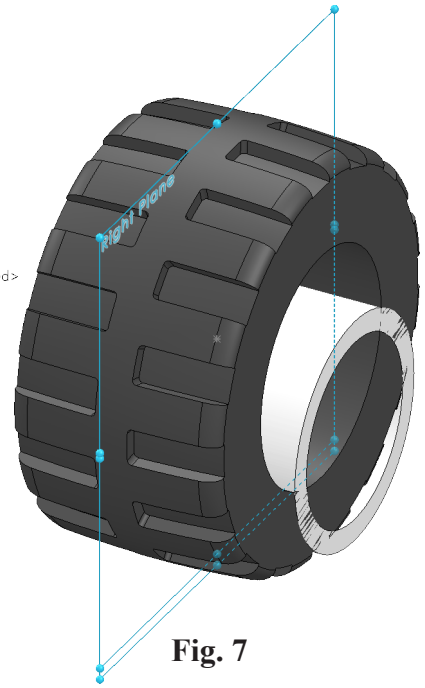


Fig. 7

Step 5. Check **Lock Rotation** and Add/Finish Mate in Mate pop-up toolbar to add a **Concentric** mate, **Fig. 9**.

Step 6. Click OK in the Property Manager.



Fig. 9

Step 7. Save (Ctrl-S).

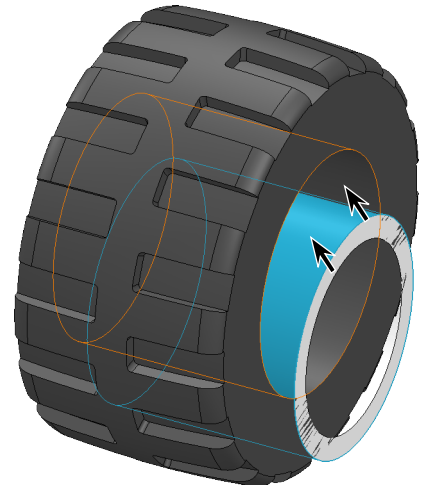
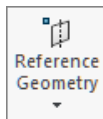


Fig. 8

D. Mate Reference.

Step 1. Click **Reference Geometry** on the Assembly toolbar and **Mate Reference** from the menu.



Step 2. In the Mate Reference Manager set: under **Primary Reference Entity** and click a **cylindrical face**, **Fig. 11**

click OK .

Step 3. Save (Ctrl-S).

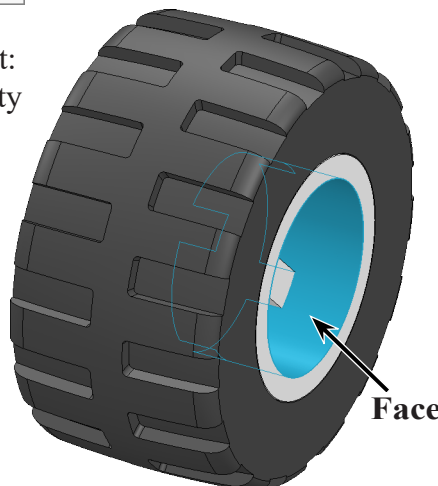


Fig. 11

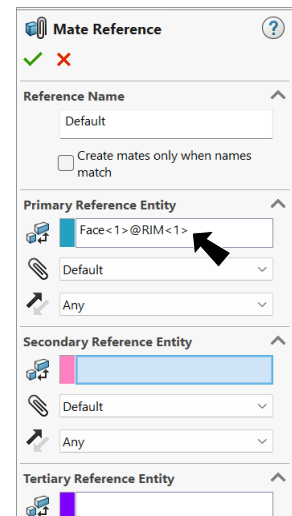


Fig. 10