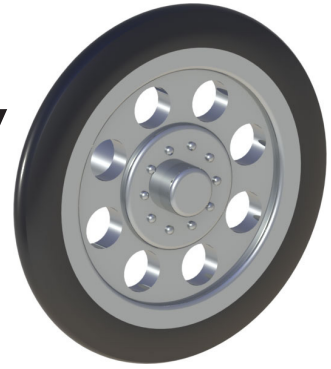


CO₂ Rail Car Wheel Assembly





A. Insert Rim and Tire.

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

Step 2. Select your **RIM** 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 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) FRONT RIM LX<1> .

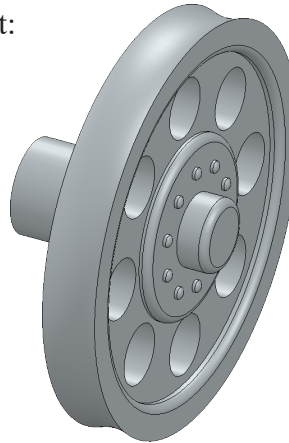
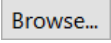


Fig. 2

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

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

Step 6. Back in the Begin Assembly Property Manager: under Part/Assembly in Insert, **Fig. 3** select **FRONT TIRE** to highlight it.

Step 7. Click approximately where Tire is positioned in **Fig. 4**.

Step 8. Click OK  in the Property Manager.

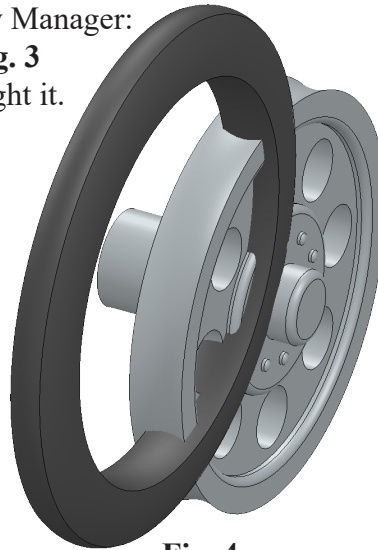


Fig. 4

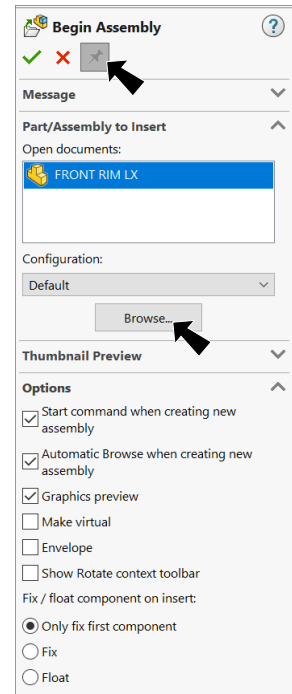


Fig. 1

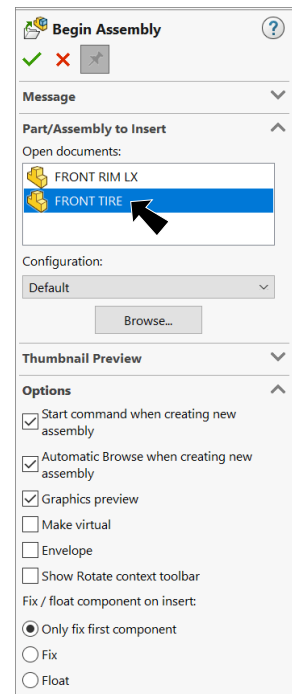


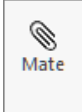
Fig. 3

B. Save as "FRONT WHEEL ASSEMBLY LX".

Step 1. Click File Menu > Save As.

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

C. Mate: Tire to Rim.

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

Step 2. Click **edge of Tire** and **edge of Rim**, **Fig. 5**.

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

Step 4. Click OK  in the Property Manager when done.

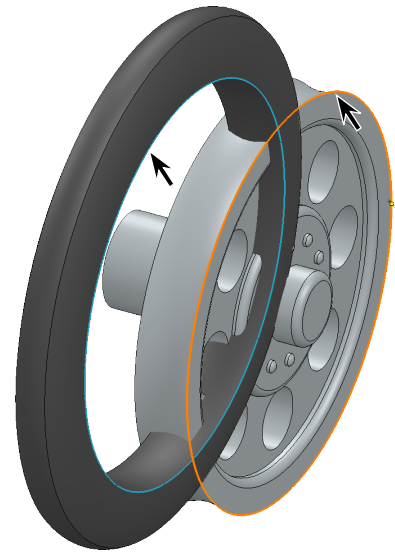
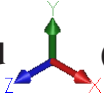
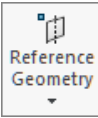


Fig. 5

D. Mate Reference.

Step 1. Rotate view to view **inside of rim hole**, **Fig. 6**. To rotate view, **Shift-Ctrl click the Y axis of the Reference Triad**  (bottom left corner of graphics area).

Step 2. Click the **inside cylindrical face of axle hole** to select it, **Fig. 6**.

Step 3. Click **Reference Geometry**  on the Assembly toolbar and **Mate Reference** from the menu.

Step 4. In the Mate Reference Property Manager click OK  , **Fig. 7**.

Step 5. Save  (Ctrl-S).

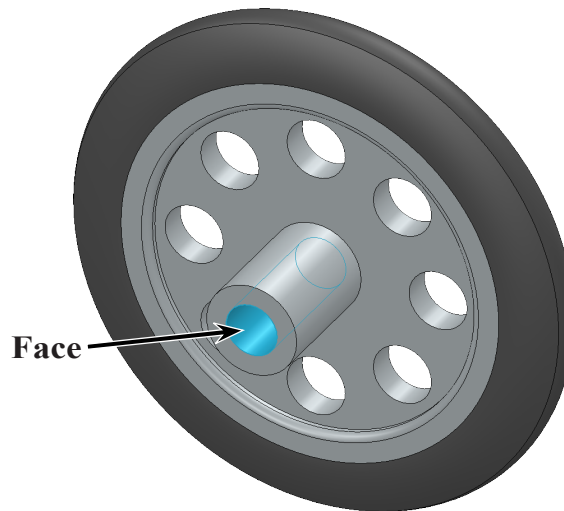


Fig. 6

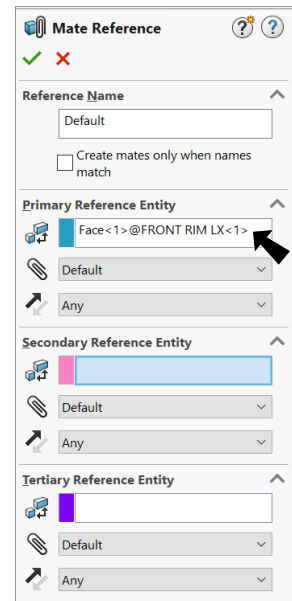


Fig. 7