

CO₂ Rail Car Front Rim Spokes



A. Save Copy.

Step 1. If necessary, open your **REAR RIM SPOKES** file.

Step 2. Click File Menu > Save As.

Step 3. In the Save As dialog box, **check Save as copy**, Fig. 1. **This is very important.**

Step 4. Key-in **FRONT RIM SPOKES** for filename and click Save, Fig. 1.

Step 5. **Close REAR RIM SPOKES** file. Use File Menu > Close.

Step 6. Open your **FRONT RIM SPOKES** file.

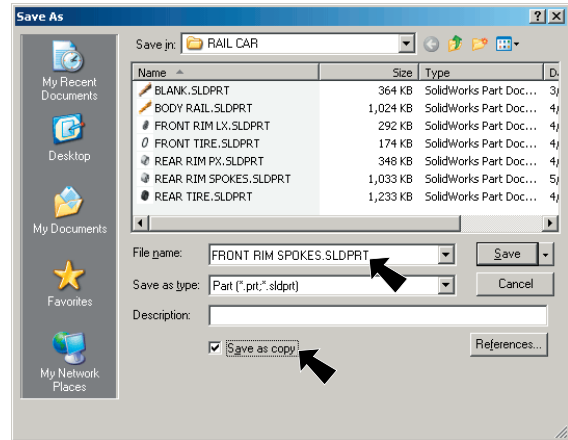


Fig. 1

B. Edit Revolve Sketch.

Step 1. Click **Revolve1** in the Feature Manager and **Edit Sketch** from the Content toolbar, Fig. 2.

Step 2. Click **Normal To** on the Standard Views toolbar. (Ctrl-8)

Step 3. Change dimensions: **top 16.8 to 3.6**
bottom 16.8 to 10.8

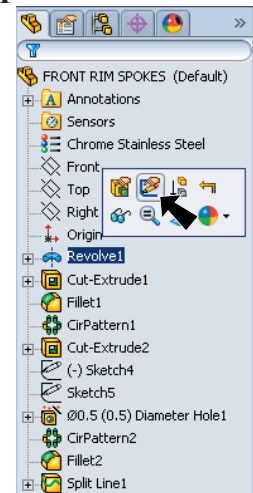


Fig. 2

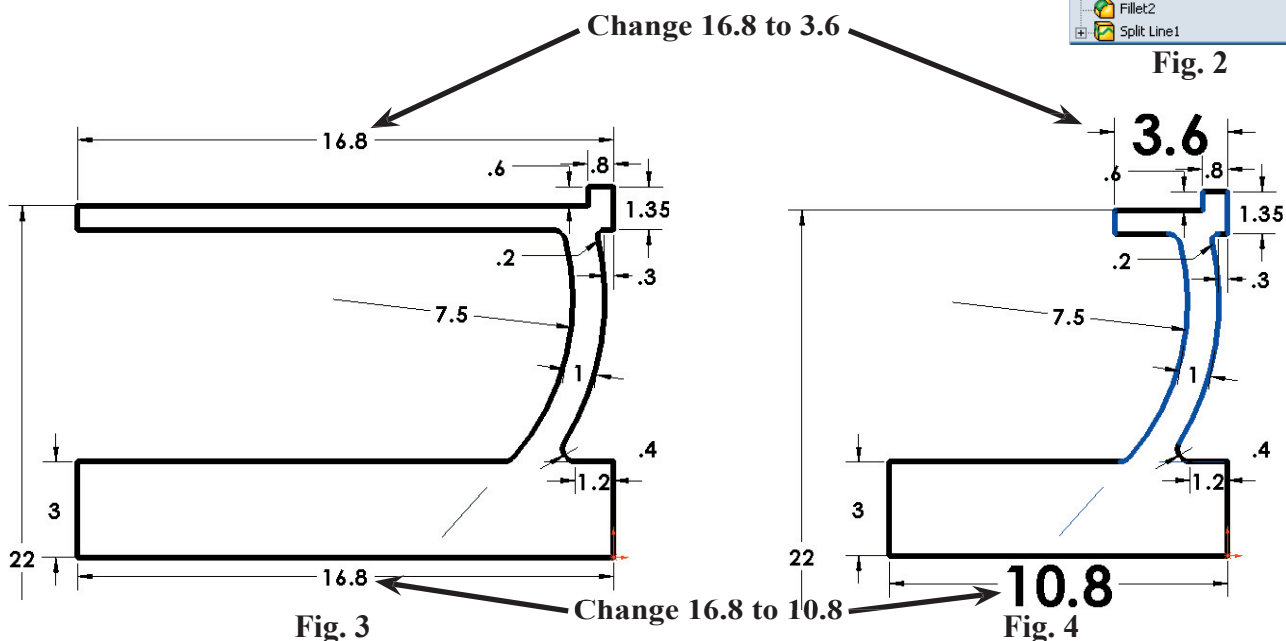
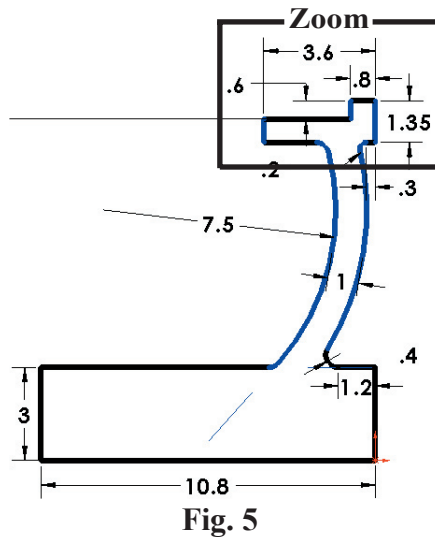


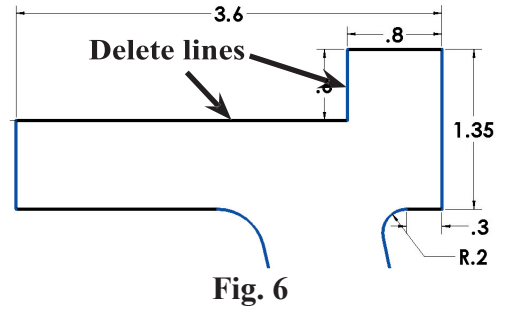
Fig. 3

Fig. 4


Step 4. Zoom in around **top of rim**, **Fig. 5**. To **zoom**, hold down **Shift key** and drag with middle mouse button (wheel). To **pan**, hold down **Ctrl key** and drag with middle mouse button (wheel).

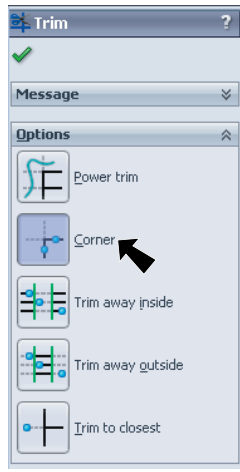


Step 5. **Delete two lines**, **Fig. 6** To delete, Ctrl click the two lines and press Delete key. Click Yes to delete.




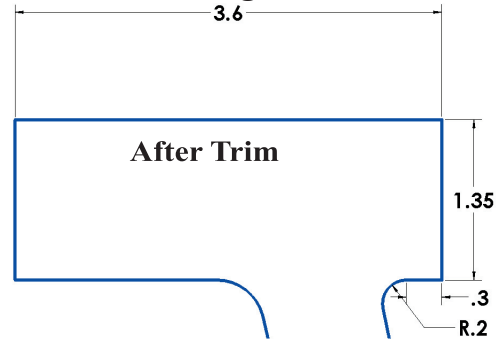
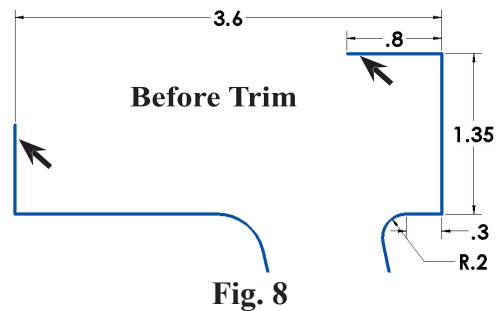
Step 6. Click **Trim Entities**  (S) on the Sketch toolbar.


Step 7. In the Property Manger select: **Corner** , **Fig. 7**

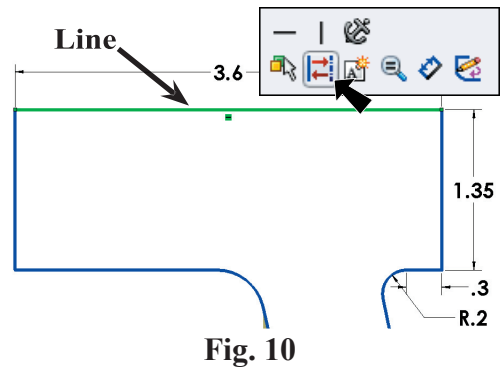


Click vertical line and horizontal to close gap, **Fig. 8**.

Results shown in **Fig. 9**. Click OK  in the Property Manager.



Step 8. Click **top horizontal line** and click **Construction Geometry**  on the Content menu, **Fig. 10**.



Step 9. Click **3 Point Arc**  (S) in the **Arc flyout**  on the Sketch toolbar.

Step 10. Draw an arc between the Position 1, Position 2 and Position 3 in **Fig. 11**. To draw the arc, first click Position 1, then Position 2. Swing the arc down to Position 3 and click.

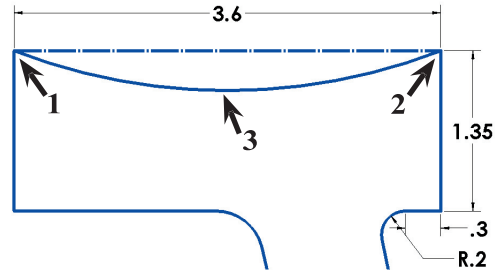


Fig. 11

Step 11. Click **Smart Dimension**  (S) on the Sketch toolbar.

Step 12. Dimension arc **radius 5**, **Fig. 12**.

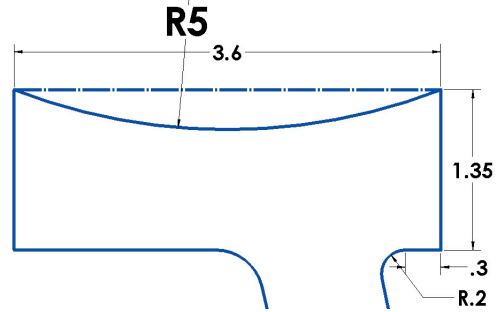


Fig. 12

Step 13. Click **Zoom to Fit**  (F) on the View toolbar.

Step 14. Dimension **radius of rim 13.3**, **Fig. 13**.

Step 15. Click **Exit Sketch**  on the Sketch toolbar.

Step 16. Save. Use **Ctrl-S**.

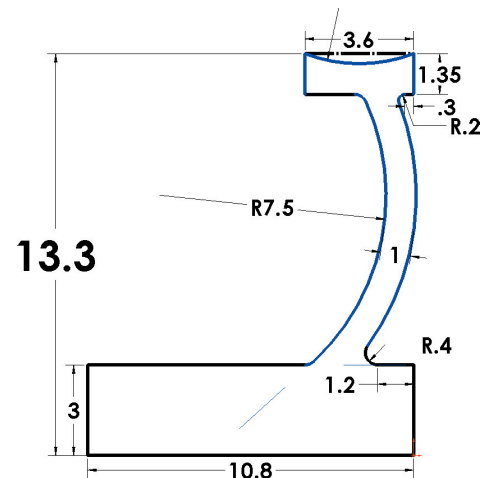


Fig. 13

