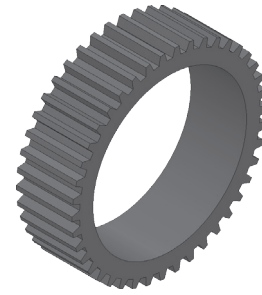






Stake Bed Pickup Truck Tire



A. Extrude.

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

Step 2. Click **Right Plane**  in the Feature Manager and click **Sketch**  on the context toolbar, **Fig. 1**.

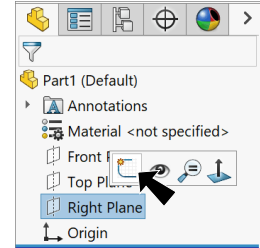


Fig. 1

Step 3. Click **Circle**  (S) on the Sketch toolbar.

Step 4. Sketch two circles at **Origin** , **Fig. 2**.

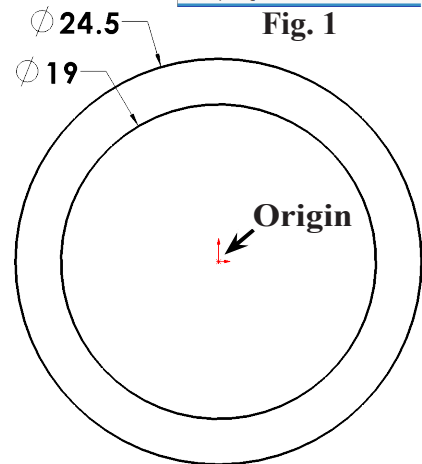
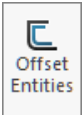


Fig. 2

Step 5. Click **Smart Dimension**  (S) on the Sketch toolbar.

Step 6. Dimension **diameters 25.5 and 19**, **Fig. 2**.

Step 7. Click **Offset Entities**  on the Sketch toolbar.

Step 8. In the Offset Entities Property Manager set:
under Parameters, **Fig. 3**

Distance  **.1 (clearance of Rim)**

under Construction geometry

check **Base geometry**

click **inside circle**, **Fig. 4**

**Yellow offset circle on outside -
base geometry (construction)
on inside**

click OK .

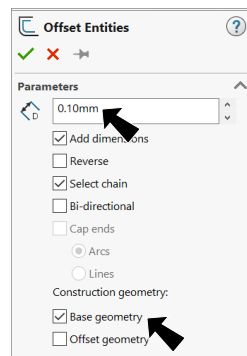


Fig. 3

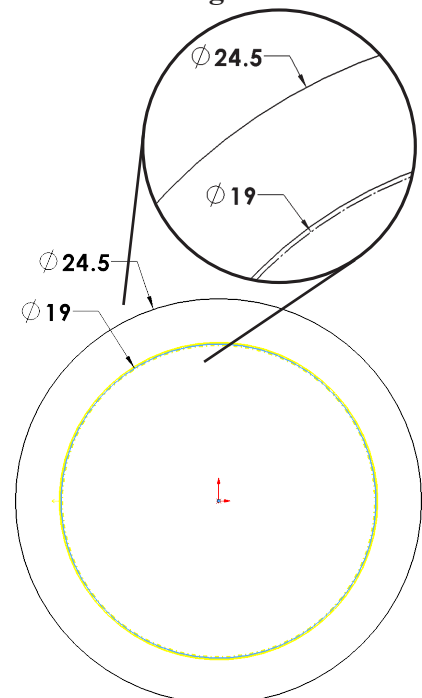




Fig. 4

Step 9. Click **Features**  on the Command Manager toolbar.

Step 10. Click **Extruded Boss/Base**  on the Features toolbar.

Step 11. In the Boss-Extrude Property Manager set:
under Direction 1, **Fig. 5**
End Condition **Blind**
Depth  7
click OK .

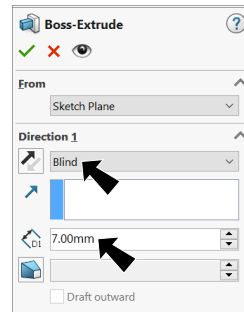


Fig. 5

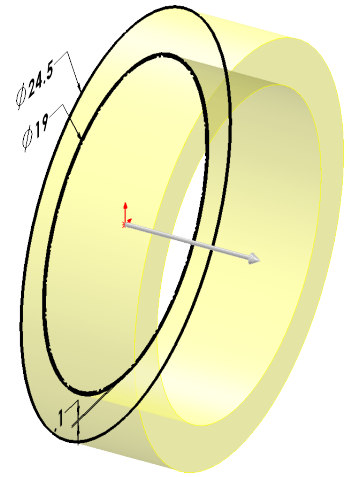


Fig. 6

B. Save as "TIRE".

Step 1. Click File Menu > Save As.

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

C. Tread.

Step 1. Click **Right**  in the Feature Manager and click **Sketch**  on the context toolbar, **Fig. 7**.

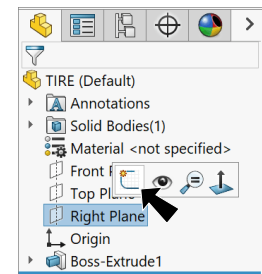




Fig. 7

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

Step 3. Click **Convert Entities**  on the Sketch toolbar.

Step 4. In the Convert Entities Property Manager:
under Entities to Convert, **Fig. 8**
click **outside edge of Tire**, **Fig. 9**
click OK .

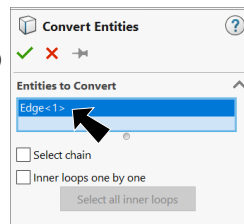


Fig. 8

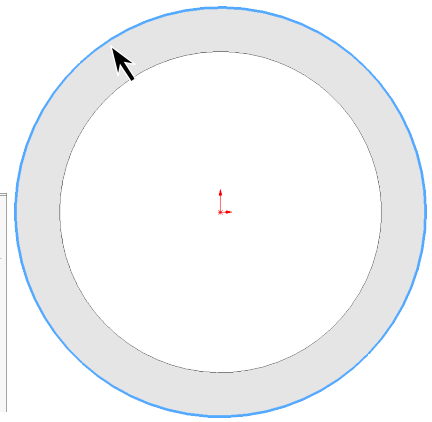


Fig. 9

Step 5. Click **Circle**  (S) on the Sketch toolbar.

Step 6. Sketch circle at Origin , **Fig. 10**.

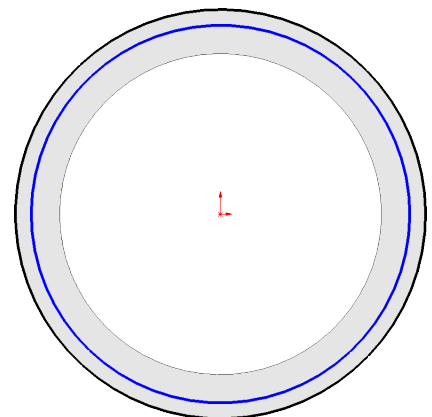




Fig. 10

Step 7. Click **Centerline**  in the **Line flyout**  on the Sketch toolbar.

Step 8. Sketch a **vertical centerline from the Origin**  up to **converted edge**, **Fig. 11**.

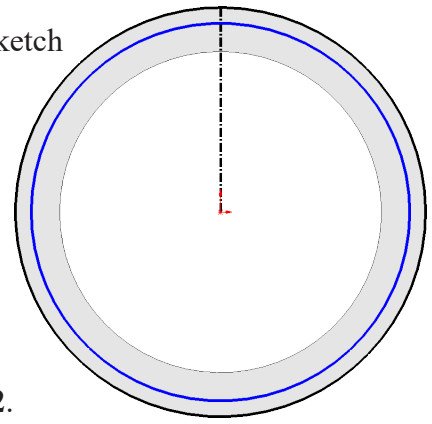



Fig. 11

Step 9. Click **Line**  (L) on the Sketch toolbar.

Step 10. Sketch a **line from outside edge at angle to circle**, **Fig. 12**.

Step 11. **Unselect Line tool**. To unselect, **right click graphics area and click Select**  from menu.

Step 12. **Ctrl click line and centerline** to select both, **Fig. 13**.

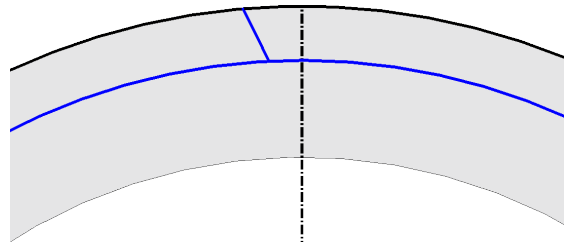


Fig. 12

Step 13. Click **Mirror Entities**  **Mirror Entities** on the Sketch toolbar.

Step 14. Click **Smart Dimension**  (S) on the Sketch toolbar.

Step 15. Add dimensions, **Fig. 14**.

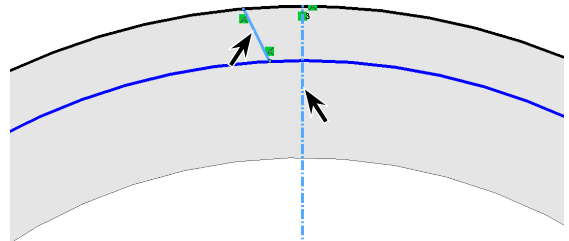


Fig. 13

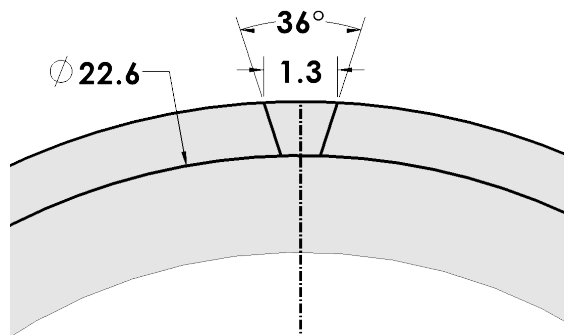



Fig. 14



Step 16. Click **Isometric**  on the Standard Views toolbar. (**Ctrl-7**)

Step 17. Click **Features**  on the Command Manager toolbar.

Step 18. Click **Extruded Cut**  on the Features toolbar.

Step 1. In the Cut-Extrude Property Manager set:

under Direction 1, **Fig. 15**
End Condition **Through All**

Reverse Direction 
under Selected Contours
click **both contours**, **Fig. 16**
click OK .

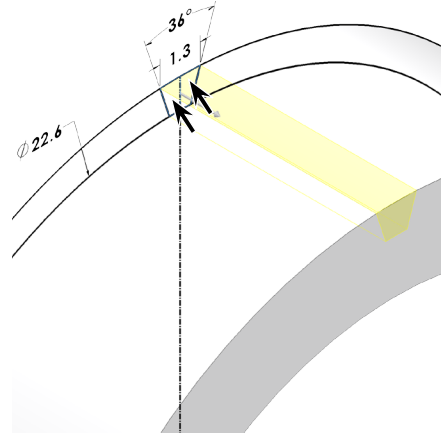
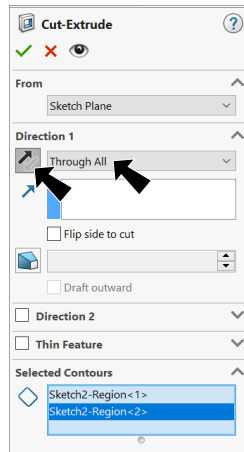
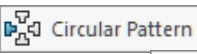





Fig. 16

D. Circular Pattern.

Step 1. Click **Circular Pattern**  in the **Linear Pattern flyout**  on the Features toolbar.

Step 2. In the Circular Pattern Property Manager set:
under Features and Faces, **Fig. 17**
click **Cut-Extrude1** in graphics area, **Fig. 18**
under Direction 1
click in **Pattern Axis** box
click a **cylindrical face**
select **Equal spacing**
Number of Instances  **42**
click OK .

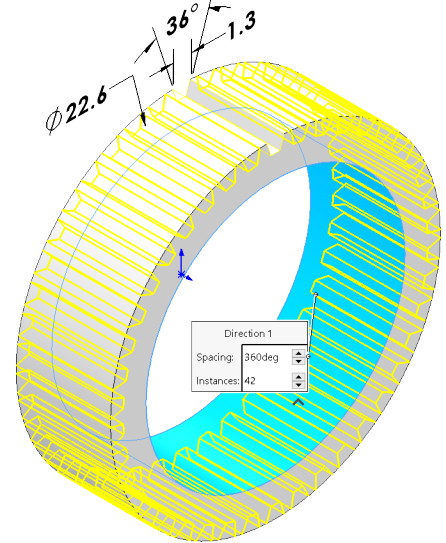
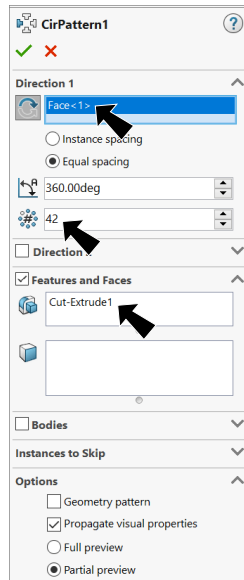


Fig. 18

Step 3. Save  (**Ctrl-S**).

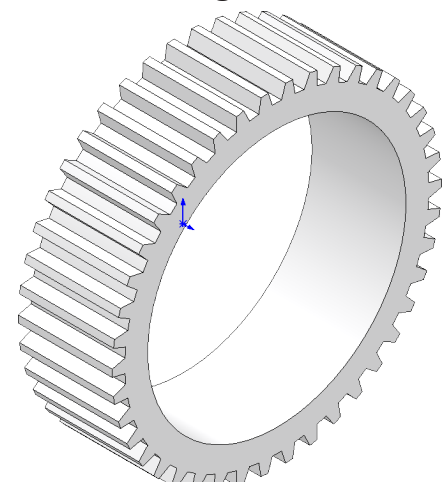


Fig. 19

E. Appearance Rubber.

Step 1. Click part, click **Appearance Callout**  on the context toolbar and click **TIRE** , Fig. 20.

Step 2. In the Appearances Task pane, expand **Rubber**, click **Gloss** and in the lower pane select **glossy rubber**, Fig. 21.

Step 3. In the Appearances Property Manager click OK , Fig. 22.

Step 4. Save  (Ctrl-S).

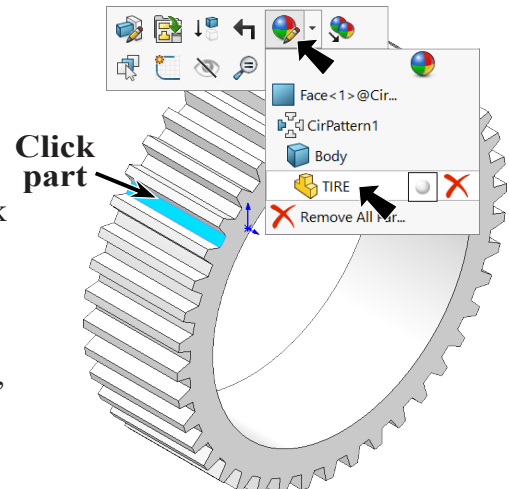


Fig. 20

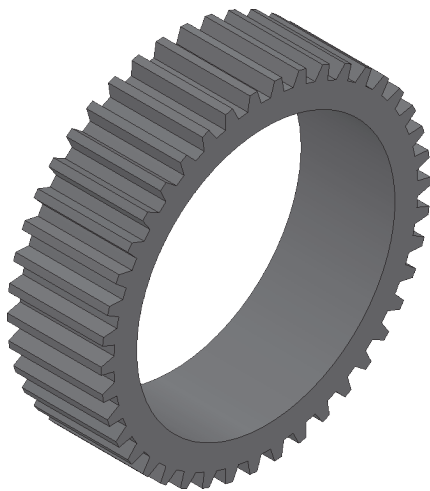


Fig. 23

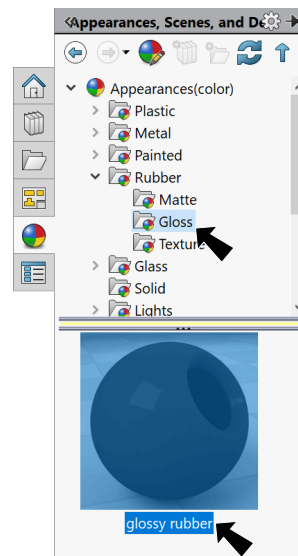


Fig. 21

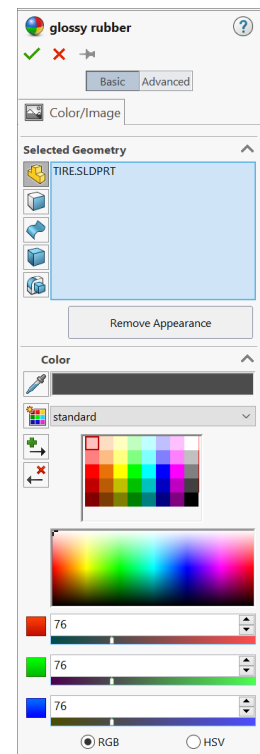


Fig. 22