



*Blackstone TEK*

**TYRE FITMENT PROCEDURE  
FOR 9004 / 9015 WHEEL TYPE**

<b>Created by:</b>	<b>Damien Hawken</b>
<b>Date created:</b>	<b>29 October 2013</b>
<b>Revision:</b>	<b>A</b>

The procedure will be shown in step by step form with images.

## **Method**

Step 1: Place the tyre into the jaws of the tyre fitting machine with the spokes facing upwards, as indicated by the image below, this position is required in order to have the shortest distance from the dip of the rim profile to the edge of the lip.



Figure 1: Wheel in the tyre machine jaws

Dip in rim profile



Figure 2: Dip in the rim profile

Step 2: Apply tyre fitment grease or a soapy solution to the inside and outside of the top lip of the wheel, apply the solution to both the inside and outside of the of the tyre walls.



Figure 3: Applying soapy solution to the lip of the rim.



Figure 4: Applying soapy solution to the tyre walls.

Step 3: After placing the tyre onto the rim, place the foot of the tyre machine arm between 3 - 5 mm away from the lip of the wheel, in both the vertical and radial direction. So that when the bead of the tyre starts applying a force to the foot, all of the force is taken up by the tyre machine arm and not the carbon wheel. The foot must not be in contact with the wheel during the tyre fitment process.

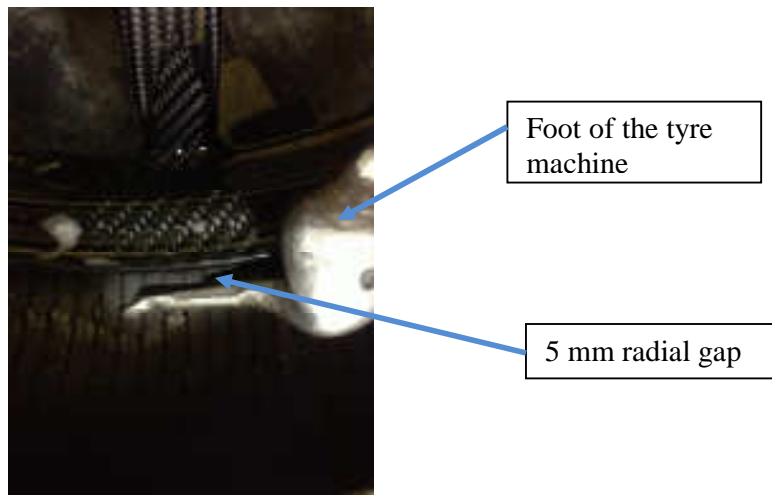


Figure 5: 5 mm radial gap between the rim and the foot

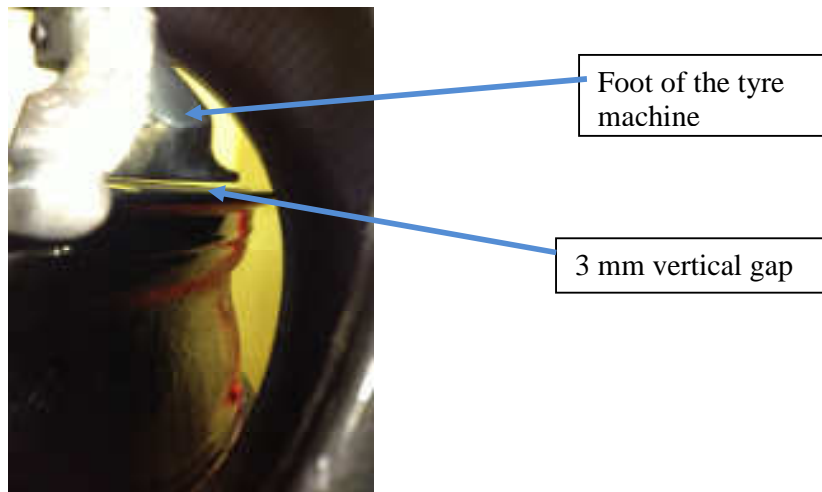


Figure 6: 3 mm vertical gap between the rim and the foot.

- Step 4: Once you have completed step 3, locate the tyre over the foot so that the tyre slide over the foot and over the lip. You can start rotating the tyre machine bed, while keeping majority of the tyre bead as possible in the dip of the rim. If the tyre or the rim begin to slip reverse the direction of the bed and reposition majority of the tyre bead in the dip before rotating the bed to fit the tyre.
- Step 5: Once the first tyre wall is fitted over the lip, you can repeat step 4 to slide the second tyre wall over the foot and the lip. It would prove easier to have two people to complete this step in order to keep majority of the tyre bead in the dip of the rim to make it easier to fit the tyre. As in step 4 if the tyre or the rim begin to slip reverse the direction and reposition the tyre bead in the dip of the rim. If the tyre falls off of the foot reverse the bed rotation and relocate the tyre over the foot of the arm.



Figure 7: Keeping the tyre second tyre bead in the dip of the rim.

Step 6: Once both tyre beads have been fitted over the lip of the rim, the tyre can be inflated to seat the tyre beads in place, average pressure to seat the tyre bead is between 2.8 and 3.2 bar.