Why is there a bubble on my tire?

What is a sidewall bubble?

A sidewall bubble is a bulge protruding from the sidewall of the tire. It is caused by air leaking from the inside of the tire into the carcass or body of the tire.

What causes a sidewall bubble?

The vast majority of bubbles are caused by impact damage. When a tire hits a sharp object in the road the force from the weight and speed of the vehicle is focused in the small area of contact. This compresses the tire enough that the inside of the sidewall is pinched and damaged causing a small hole in the inside tire liner layer. The impact can also damage the sidewall cords and significantly weaken the tire. The impact may not have been noticed by the driver.

Some common types of impact are:

- potholes
- railroad crossings
- speed bumps
- curbs
- heavily damaged roads
- road construction areas
- debris in the road

Occasionally a defect in the tire can cause the bubble. Determining the cause is fairly simple. Inspect the outside of the tire for obvious cuts or bruises.

When the tire is removed for replacement:

- Mark the area where the bubble is (it will deflate when the tire is deflated.)
- Inspect the bead area for cuts or abrasions
- Inspect the inner liner for cuts or bruises. The technician will need to press inwards on the area of the bubble to find any breaks in the inner liner.

If no damage is found, a claim will need to be submitted by an authorized dealer to the tire manufacturer. The tire manufacturer may need to inspect the tire as well to make a warranty determination. Each tire manufacturer's procedures differ slightly.

Can they be repaired?

No, unfortunately sidewall bubbles cannot be repaired. Because the area flexes while driving a patch will not stay in place. The bubble also indicates there is structural damage to the tire that cannot be repaired. A tire in this condition could fail without warning and should not be driven on. We recommend the spare tire be used until a replacement can be found. The tire must be replaced.